# YP MÜHENDİSLİK

Kalıp Ekipmanları ve Kesici Takımlar

- Kalıp Elemanları
- Bağlantı Elemanları
- Parlatma Malzemeleri
- Ölçü Aletleri
- Takım Tutucular
- Kesici Takımlar
- Tezgah Aksesuarları
- El Aletleri



# ÜRÜN KATALOĞU

www.**ypkalipekipmanlari**.com

# HAKKIMIZDA

YP Mühendislik ve Kalıp Ekipmanları, çözüm sürecinin her aşamasında müşteri memnuniyetini en üst düzeyde tutmayı amaçlamaktadır.2008 yılında Manisa'da kurulan YP Mühendislik ve Kalıp Ekipmanları, bilgi, deneyim, yaratıcılık ve sorumluluk ışığında müşterilerine en gelişmiş teknolojiyi sunma ve en verimli çözümlerle hizmet verme anlayışıyla çalışmalarını sürdürmektedir.

20 yılı aşkın bir süredir kişisel deneyimlerde uzmanlaşmış dinamik ekibimiz, yapılanmasını "dökümde çözüm ortaklığı" odağı üzerine kurmuştur. Ekibimiz, dökümhane ve kalıphanelere simülasyon hizmetlerinin yanı sıra sarf malzemeleri, enjeksiyon elemanları, yüksek basınçlı döküm eğitimleri, teknik danışmanlıklar ve anahtar teslim projeler kapsamında özel ekipman ve çözümler sunmaktadır.

"Prosesin içinden geldiğimiz için sorunları ve ihtiyaçları çok iyi biliyoruz ve Türk döküm sektörüne sürekli daha fazla katkı sağlamanın yollarını arıyoruz.

"Teknolojiyi yakından takip eden firmamız, sektörde uzun yıllar boyunca sağlıklı ve sürdürülebilir bir ivme ile hizmet vermeyi amaçlamaktadır. Bu süreçte, döküm sektörünün gelişimine katkı sağlamak, optimize ve verimli dökümler elde etmeyi bir alışkanlık haline getiren başarılı dökümcülerin yetişmesine destek olmak temel misyonumuzdur.

YP MÜHENDİSLİK
Kalıp Ekipmanları ve Kesici Takımlar





# ÇÖZÜM ORTAKLARIMIZ

| | | | | |
|---|---|---|---|---|
| ELMAS UÇLAR | KARBÜR FREZELER | MAKİNA AKSESUARLARI | KALIP ELEMANLARI | KALIP ELEMANLARI |
| GAZ TAŞLARI | PARLATMA ÜRÜNLERİ | SERAMİK GAZ TAŞLARI | ELMAS PASTALAR | ÖLÇÜ ALETLERİ |
| ÖLÇÜ ALETLERİ | KESİCİ TAKIMLAR | SOĞUTMA SİSTEMLERİ | HAVALI ALETLER | TAKIM TUTUCULAR |
| DAİRE TESTERELER | BAĞLAMA EKİPMANLARI | KESİCİ TAKIMLAR | KALIP ELEMANLARI | GAZLI YAYLAR |
| KALIP ELEMANLARI | ÜNİVERSAL TK. DOLAPLARI | TAKIM TUTUCULAR | KESİCİ VE AŞINDIRICI TAŞLAR | EL ALETLERİ |
| EL ALETLERİ | TORNA AYNALARI | BAĞLANTI ELEMANLARI | ATÖLYE EKİPMANLARI | ÇELİK SANAYİ |
| YEDEK PARÇALAR | YEDEK PARÇALAR | ENDÜSTRİYEL SPREYLER | ENDÜSTRİYEL SPREYLER | ATÖLYE EKİPMANLARI |
| ZIMPARALAR | KALIP YAYLARI | İŞ AYAKKABILARI | ENDÜSTRİYEL SPREYLER | ELMAS UÇLAR |


Sayfa 2 Ö00 - ORTADAN ŞAPKALI KOLON


Sayfa 2 Ö05 - ARKASI KALIN KOLON


Sayfa 3 Ö10 - KOLON


Sayfa 3 Ö11 - KOLON


Sayfa 3 Ö13 - ORTADAN FLANŞLI KOLON


Sayfa 4 Ö12 - KOLON


Sayfa 4 Ö14 - KOLON


Sayfa 5 Ö15 - KOLON


Sayfa 5 KABLO TUTUCU KAPAĞI

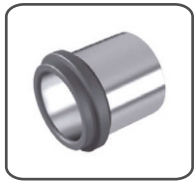

Sayfa 6 Ö23 - ORTADAN ŞAPKALI BURÇ


Sayfa 6 Ö24 - ÜSTTEN ŞAPKALI BURÇ


Sayfa 6 Ö25 - UZUN BRONZ BURÇ


Sayfa 7 Ö26 - KISA BRONZ BURÇ


Sayfa 7 Ö27 - ŞAPKALI BİLYALI BURÇ


Sayfa 7 Ö28 - KISA BİLYALI BURÇ


Sayfa 8 H30.01 GRAFİTLİ BURÇ


Sayfa 8 H30.02 GRAFİTLİ BURÇ


Sayfa 8 H30.03 GRAFİTLİ BURÇ


Sayfa 9 H30.04 GRAFİTLİ BURÇ

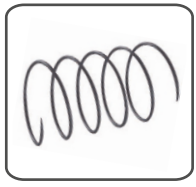

Sayfa 9 H30.05 GRAFİTLİ BURÇ


Sayfa 10 H30.06 GRAFİTLİ BURÇ


Sayfa 10 BRONZ BURÇLAR


Sayfa 11 H26 - H27 GRAFİTLİ BURÇ


Sayfa 12 Ö60 BİLYALI BURÇ


Sayfa 12 Ö60.01 - BİLYALI KAFES TUTUCU


Sayfa 13 H80.01 GRAFİTLİ PLAKA


Sayfa 13 H80.02 GRAFİTLİ PLAKA


Sayfa 14 H81.01 GRAFİTLİ PLAKA


Sayfa 14 H82.01 GRAFİTLİ PLAKA


Sayfa 15 H82.02 GRAFİTLİ PLAKA

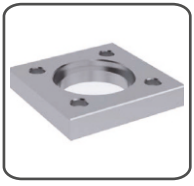

Sayfa 16 H19.01 TAŞIMA MİLİ


Sayfa 16 H19.02 TAŞIMA MİLİ

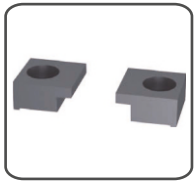

Sayfa 16 H19.03 TAŞIMA MİLİ


Sayfa 16 H12.02 - KOLON TUTUCU FLANŞ


Sayfa 17 H19.50 EMNİYET PİMİ

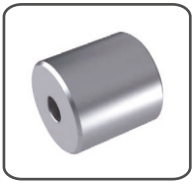

Sayfa 17 H12.01 - KOLON TUTUCU FLANŞ

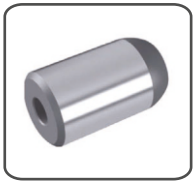

Sayfa 17 H30.03.01 - BURÇ TUTUCU FLANŞ


Sayfa 18 E90.01 BAĞLAMA PAPUCU


Sayfa 18 E90 BAĞLAMA PAPUCU


Sayfa 18 H101 BURÇ TUTUCU

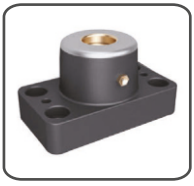

Sayfa 18 H17.01 STOPLAMA BLOĞU

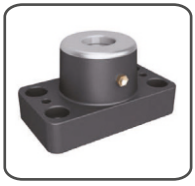

Sayfa 19 H51.01 MERKEZLEME PİMİ

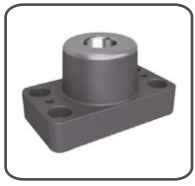

Sayfa 19 H55.01 - KONİK MERKEZLEME

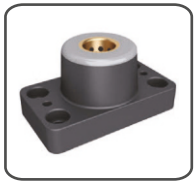

Sayfa 20 H80.16 ÇELİK PLAKALAR

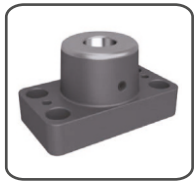

Sayfa 21 H70.01 DÖKÜM BLOK

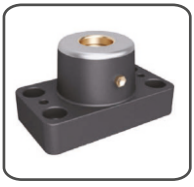

Sayfa 21 H70.02 - BRONZLU DÖKÜM BLOK

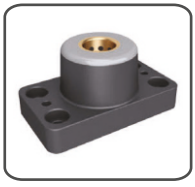

Sayfa 21 H70.03 - ÇELİK KAYM. DÖK. BLOK

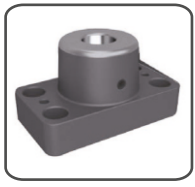

Sayfa 21 H70.04 - BİLYALI DÖKÜM BLOK


Sayfa 22 H70.05 - GRAFİTLİ DÖKÜM BLOK


Sayfa 22 H70.10 - KOLON SABİTLEME BLOĞU


Sayfa 22 H71.02 - BRONZLU DÖKÜM BLOK


Sayfa 22 H71.05 - GRAFİTLİ DÖKÜM BLOK


Sayfa 22 H71.10 - KOLON SABİTLEME BLOĞU


Sayfa 23 H70.011 DÖKÜM SET


Sayfa 23 H70.021 - BRONZ DÖKÜM SET


Sayfa 23 H70.031 - ÇELİK KAYM. DÖKÜM SET


Sayfa 24 H70.041 - BİLYALI DÖKÜM SET


Sayfa 24 H70.051 - GRAFİTLİ DÖKÜM SET


Sayfa 24 H71.021 - BRONZ DÖKÜM SET


Sayfa 24 H71.051 - GRAFİTLİ DÖKÜM SET


Sayfa 25 E02 - ŞAPKALI KADEMELİ KOLON


Sayfa 27 E03 - KUYRUKLU KADEMELİ KOLON


Sayfa 31 E01H ŞAPKALI KOLON


Sayfa 31 E08 - KOLON

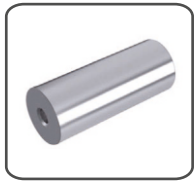

Sayfa 31 E09 - KOLON


Sayfa 32 E01E ŞAPKALI KOLON


Sayfa 32 E50 KONİK KİLİTLEME


Sayfa 32 E100 - BOYNUZ PİM YATAĞI


Sayfa 33 E20 ŞAPKALI BURÇ


Sayfa 33 E40 TESPİT BURCU


Sayfa 34 E21 KUYRUKLU BURÇ


Sayfa 34 E22 FLANŞLI BURÇ

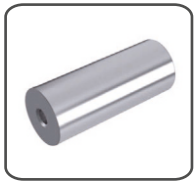

Sayfa 34 E22B - BİLYALI FLANŞLI BURÇ


Sayfa 35 H100 LİNEER BURÇ


Sayfa 35 H74 - ŞAPKALI LİNEER BURÇ


Sayfa 35 H75 - ORT. FLANŞLI LİNEER BURÇ


Sayfa 36 KŞB - YERLİ KUYRUKLU BURÇ


Sayfa 36 TB - YERLİ TESPİT BURCU


Sayfa 36 ŞK - YERLİ ŞAPKALI KOLON


Sayfa 37 KŞK - YERLİ KUYR. KADEMELİ KOLON


Sayfa 38 YY - YEŞİL YAY HAFİF YÜK


Sayfa 40 MY - MAVİ YAY ORTA AĞIR YÜK


Sayfa 42 KY - KIRMIZI YAY AĞIR YÜK


Sayfa 44 SY - SARI YAY ÇOK AĞIR YÜK

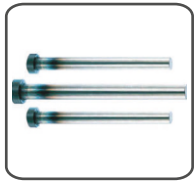

Sayfa 46 POLİÜRETAN YAYLAR

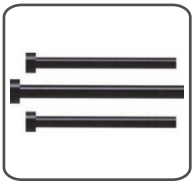

Sayfa 47 GAZLI YAYLAR


Sayfa 59 HAVŞA BAŞLI İTİCİ


Sayfa 60 HAVŞA BAŞLI İTİCİ ONDALIKLI


Sayfa 61 SİLİNDİR BAŞLI İTİCİ


Sayfa 63 SİLİNDİR BAŞLI İTİCİ ONDALIKLI



Sayfa 64 METAL ENJ. SİLİND. BAŞLI İTİCİ



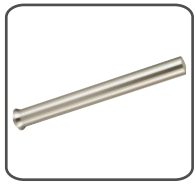
Sayfa 68 SİLİNDİR BAŞLI KAD. İTİCİ



Sayfa 68 SİLİNDİR BAŞLI LAMA İTİCİ



Sayfa 69 PLASTİK METAL ENJ. BORU İTİCİ



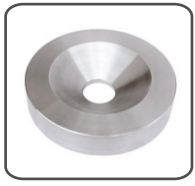
Sayfa 70 YÜKSEK HIZ ÇELİĞİ ZIMBA



Sayfa 72 PLASTİK KALIP YOLLUK MEMELERİ



Sayfa 72 METAL KALIP YOLLUK MEMELERİ



Sayfa 72 KALIP YOLLUK FLANŞI



Sayfa 73 DÜZ TESPİT PİMİ



Sayfa 73 ÇEKTİRMELİ TESPİT PİMİ



Sayfa 74 KÜP BLOK KİTLEME



Sayfa 74 KARE BLOK KİTLEME



Sayfa 74 UZUN KARE BLOK KİTLEME



Sayfa 75 DAYAMA PLAKASI



Sayfa 75 PLASTİK ÇEKTİRME



Sayfa 75 ÇELİK SIKMA PLAKALARI



Sayfa 75 BRONZ GRAFİTLİ DELİKLİ FLANŞ



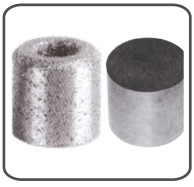
Sayfa 76 OTO. İTİCİ PLAKA BAĞL. SİSTEMLERİ



Sayfa 77 GAZ ATMA FİLTRESİ



Sayfa 77 GAZ ATMA FİLTRESİ KANALLI



Sayfa 77 ÇELİK SİNTERLİ GAZ ATMA FİLTRESİ



Sayfa 77 HAVALI İTİCİ MİNİ TİP



Sayfa 77 HAVALI İTİCİ UZUN TİP



Sayfa 77 HAVALI İTİCİ JET TİP



Sayfa 78 KALIP TAKVİMLERİ GERİ DÖN. MÜHR.



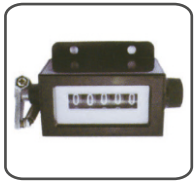
Sayfa 78 CİVA ÇELİKLERİ



Sayfa 79 MEKANİK KALIP SAYACI




Sayfa 79 MEKANİK KALIP SAYACI



Sayfa 79 PRES KALIP SAYACI



Sayfa 79 DİJİTAL ENJ. KALIP SAYACI



Sayfa 80 ÇİFT PLAKALI İTİCİ SİSTEM



Sayfa 80 KADEMELİ AÇMA ÜNİTESİ



Sayfa 81 ESNEK İÇ MAÇA



Sayfa 81 İÇ MAÇA GÖVDE



Sayfa 82 İTİCİ HIZLANDIRICI MODÜLER TUTUCU



Sayfa 83 MAÇA TUTUCU



Sayfa 83 SINIRLI MAÇA TUTUCU



Sayfa 83 KALIP EMNİYET MANDALI



Sayfa 83 KIZAKLI MAÇA



Sayfa 84 STANDART MAÇA KLAVUZU



Sayfa 84 MAÇA KIZAĞI



Sayfa 84 AYARLANABİLİR MAÇA DAYAMASI



Sayfa 85 AÇILI PİM TUTUCU 10° - 15°



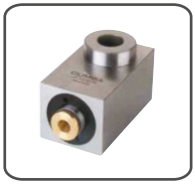
Sayfa 85 AÇILI PİM



Sayfa 85 DELİK MAÇASI PİMİ



Sayfa 86 AÇILI PİM TUTUCU



Sayfa 86 DELİK MAÇASI



Sayfa 87 OTOMATİK MAÇA TUTUCU



Sayfa 87 EMNİYET KİLİDİ



Sayfa 87 4'LÜ OTOMATİK MAÇA



Sayfa 88 2'Lİ ESNEK İÇ MAÇA



Sayfa 88 4'Lİ ESNEK İÇ MAÇA



Sayfa 89 STANDART MEKANİK MAÇA



Sayfa 89 BURÇLU MAÇA



Sayfa 89 ÇİFT PLAKA İTİCİ SİSTEMİ



Sayfa 90 PLAKA HIZLANDIRICI



Sayfa 90 MAÇA KIZAK TUT. YAYLI ÜNİTE



Sayfa 91 MAÇA KIZAK TUT. YAYLI-PİMLİ ÜNİTE



Sayfa 91 MAÇA TUTUCU TİP



Sayfa 91 MAÇA TUTUCU TİP


Sayfa 92 MAÇA TUTUCU PİMLİ


Sayfa 92 PİMLİ-KAPALI YAY. TİP MAÇA TUTUCU


Sayfa 93 MAÇA TUTUCU MANDALLI

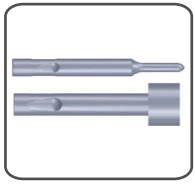

Sayfa 94 YAY AYAR CİVATASI

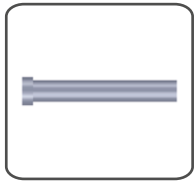

Sayfa 94 BİLYALI SETSKUR

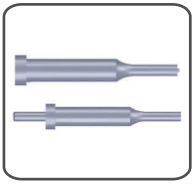

Sayfa 95 HAVŞA BAŞLI CİVATA

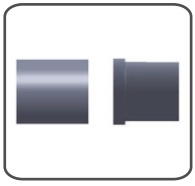

Sayfa 95 İMBUS CİVATA

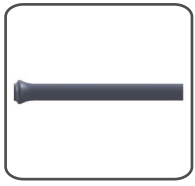

Sayfa 97 SETSKUR CİVATA


Sayfa 97 ÖZEL FORMLU ZIMBALAR


Sayfa 101 SİLİNDİR BAŞLI DÜZ ZIMBA


Sayfa 102 ÖZEL FORMLU PİMLİ ZIMBALAR


Sayfa 105 MATRİSLER


Sayfa 108 RADYUS BAŞLI ZIMBA


Sayfa 109 VİDA YERİ HADDE ZIMBASI


Sayfa 110 MUZ YOLLUK SİSTEMLERİ


Sayfa 112 HORTUM GİRİŞLİ REKORLAR


Sayfa 113 OTOMATİK GİRİŞLİ REKORLAR


Sayfa 114 SEPARATÖR


Sayfa 115 SİRKÜLASYON REGÜLATÖRÜ


Sayfa 115 TIKAÇ


Sayfa 117 ŞAPKALI ORİNGLİ TIKAÇ


Sayfa 115 ORİNGLİ TIKAÇ VE VİTON TIKAÇ


Sayfa 115 PLASTİK SOĞUTMA SPİRALİ


Sayfa 116 HORTUM-DİŞİ GÖVDE REKORLAR


Sayfa 122 UZATMA REKORLAR


Sayfa 125 MANŞON


Sayfa 125 REDÜKSİYON


Sayfa 126 NİPEL GRUPLARI


Sayfa 127 POLİETİLEN HORTUM


Sayfa 127 POLYAMİD HORTUM



Sayfa 128 DÜZ 4 AĞIZ KARBÜR FREZE



Sayfa 128 DÜZ UZUN 4 AĞIZ KARBÜR FREZE



Sayfa 129 KÜRE 2 AĞIZ KARBÜR FREZE



Sayfa 129 KÜRE UZUN 2 AĞIZ KARBÜR FREZE



Sayfa 130 RADİUS 4 AĞIZ KARBÜR FREZE



Sayfa 131 RAD. UZUN 4 AĞIZ KARBÜR FREZE



Sayfa 132 RADİUS 2 AĞIZ RİF MİCRO FREZE



Sayfa 133 RADİUS 2 AĞIZ RİF MİCRO FREZE



Sayfa 133 KÜRE 2 AĞIZ RİF MİCRO FREZE



Sayfa 134 KARBÜR MATKAP UCU STAN. BOY



Sayfa 134 KARBÜR MATKAP UCU UZUN BOY



Sayfa 135 KARBÜR RAYBA



Sayfa 135 KARBÜR PANTORAF KALEMİ



Sayfa 136 DIN 338 HSS MATKAP



Sayfa 137 HSS-E ALTIN SERİ MATKAP



Sayfa 138 HSS-E SİLİNDİRİK SAPLI KAPL. MATK.



Sayfa 139 DIN 340 HSS UZUN MATKAP



Sayfa 139 DIN 333 A HSS PUNTA MATKABI



Sayfa 140 EKSTRA UZUN MATKAP



Sayfa 141 MORS KONİK SAPLI MATKAP



Sayfa 141 HSS 3'LÜ TAKIM KLAVUZ



Sayfa 142 DÜZ KANALLI MAKİNA KLAVUZU



Sayfa 142 HELİS KANALLI MAKİNA KLAVUZU



Sayfa 142 DÜZ KANALLI MAKİNA KLAVUZU



Sayfa 143 HELİS KANALLI MAKİNA KLAVUZU



Sayfa 143 DÜZ İNCE DİŞ MAKİNA KLAVUZU



Sayfa 143 HELİS İNCE DİŞ MAKİNA KLAVUZU



Sayfa 144 UNC - DÜZ MAKİNA KLAVUZU



Sayfa 144 UNF - DÜZ MAKİNA KLAVUZU



Sayfa 144 UNC - HELİS MAKİNA KLAVUZU


Sayfa 144 UNF - HELİS MAKİNA KLAVUZU


Sayfa 145 WHİTWORTH DÜZ MAK. KLAV.


Sayfa 145 WHİTWORTH HELİS MAK. KLAV.


Sayfa 145 BORU VİDALI (G) DÜZ MAK. KLAV.


Sayfa 145 BORU VİDALI (G) HELİS MAK. KLAV.


Sayfa 145 OVALAMA MAKİNA KLAVUZU



Sayfa 146 HSS PAFTA


Sayfa 146 EL RAYBASI


Sayfa 147 SİLİNDİR SAPLI MAKİNA RAYBASI


Sayfa 147 MORS KONİK SAPLI MAK. RAYBASI


Sayfa 147 90° HAVŞA FREZESİ


Sayfa 147 90° DELİKLİ HAVŞA FREZESİ


Sayfa 148 PARMAK FREZE KISA


Sayfa 148 PARMAK FREZE UZUN


Sayfa 148 KABATALAŞ PARM. FREZE KISA TİP


Sayfa 149 KABATALAŞ PARM. FREZE UZUN TİP


Sayfa 149 T YARIK FREZE



Sayfa 149 KONİK FREZE


Sayfa 150 PİM RAYBASI


Sayfa 150 MUSLUKÇU RAYBASI


Sayfa 150 SABİT PİLOTLU HAVŞA FREZESİ


Sayfa 150 KÖŞE YUVARLAMA FREZESİ


Sayfa 151 AYARLI RAYBA DÜZ - KOVANLI


Sayfa 151 PANTORAF KALEMİ

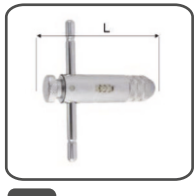

Sayfa 151 TRAPEZ KALEMİ


Sayfa 151 MANYETİK MATKAP UCU


Sayfa 151 TORNA KALEMİ


Sayfa 152 OTO. KLAVUZ ÇEKME APARATI


Sayfa 152 KLAVUZ KOLU



Sayfa 152 CIRCIRLI KLAVUZ KOLU


Sayfa 152 PAFTA KOLU


Sayfa 152 TERS KLAVUZ SETİ


Sayfa 153 RENKLİ HALKALI DÜZ MAK. KLAV.


Sayfa 154 D'ANDREA TRM50 BARA SETİ


Sayfa 155 HSK63 PENS BAŞLIĞI


Sayfa 156 SK PENS BAŞLIKLARI


Sayfa 159 SK VELDON TUTUCU


Sayfa 162 ÇELİK MONTAJ APARATI


Sayfa 163 BT PENS BAŞLIKLARI


Sayfa 167 BT VELDON TUTUCULAR


Sayfa 169 BBT ER SERİSİ PENS BAŞLIKLARI


Sayfa 172 ISO PENS BAŞLIĞI


Sayfa 174 SİLİNDİRİK ŞAFTLI PENS BAŞLIĞI


Sayfa 176 ER TİPİ PENSLER


Sayfa 178 462 / 467 PENSLER


Sayfa 179 RULMANLI TUTUCU PENSİ


Sayfa 179 ANAHTARLI ER SERİSİ TAKIMLAR


Sayfa 180 CNC MARANGOZ TEZG. İÇİN TKM.

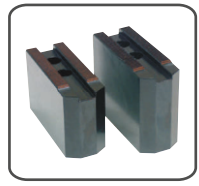

Sayfa 180 AY ANAHTARI

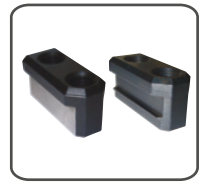

Sayfa 180 ER TİPİ ANAHTARI


Sayfa 181 EMNİYETLİ TİP KILAVUZ TUTUCU


Sayfa 182 PENS KAPAKLARI


Sayfa 183 ÇEKTİRME CİVATALARI


Sayfa 184 YUMUŞAK AYAKLAR


Sayfa 186 T-SOMUNLAR


Sayfa 186 CNC DÖNER PUNTA - 60°


Sayfa 186 2 KAD. CNC DÖNER PUNTA


Sayfa 187 KAD. CNC DÖNER PUNTA


Sayfa 187 TAKMA UÇLU BORU PUNTA


Sayfa 187 TAKMA UÇLU BORU PUNTA



Sayfa 187 ÇOKLU KÖŞE AÇMA APARATI



Sayfa 188 ALTI KÖŞE BROŞ UÇLARI



Sayfa 188 YAYLI KLAVUZ ÇEKME APARATI



Sayfa 188 SİLİNDİR ŞAFTLI PENS TUTUCU



Sayfa 188 YAYLI PAFTA ÇEKME APARATI



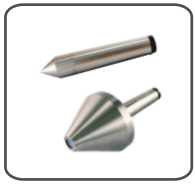
Sayfa 189 MANDRENLER



Sayfa 189 MANDREN KONİĞİ VE MORS KOVANI



Sayfa 189 DÖNER PUNTA



Sayfa 190 SABİT PUNTA VE BORU PUNTASI



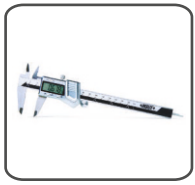
Sayfa 190 TIRNAKLI PUNTA



Sayfa 191 STANDART DİJİTAL KUMPAS



Sayfa 191 DİJİTAL KUMPAS ( IP67 )



Sayfa 191 PASLANMAZ DİJİTAL KUMPAS



Sayfa 191 DİJİTAL KUMPAS



Sayfa 191 DİJİTAL KUMPAS (MİNİ MODEL)



Sayfa 191 STANDART MEKANİK KUMPAS



Sayfa 192 DİJİTAL KUMPAS



Sayfa 192 MEKANİK KUMPAS



Sayfa 192 MEKANİK KUMPAS



Sayfa 193 HASSAS AYARLI MEKANİK KUMPAS



Sayfa 193 SAATLİ KUMPAS



Sayfa 193 DİJİTAL İÇ KANAL KUMPASI



Sayfa 193 DİJ. SERT ÖLÇÜM AĞIZLI KUMPAS



Sayfa 193 İÇ KANAL KUMPASI YUVARLAK UÇLU



Sayfa 193 DİJİTAL DIŞ KANAL KUMPASI



Sayfa 194 DİJİTAL DERİNLİK KUMPASI



Sayfa 194 DERİNLİK KUMPASI



Sayfa 194 KUMPAS DERİNLİK ÖLÇÜM AYAĞI



Sayfa 194 MİNİ DERİNLİK KUMPASI



Sayfa 194 DİJ. MAKARALI YÜKS. MİHENGİRİ



Sayfa 194 SAATLİ ÇİFT SÜTUN YÜK. MİH.



Sayfa 195 MEKANİK YÜKS. MİHENGİRİ



Sayfa 195 DİJİTAL YÜKS. MİHENGİRİ



Sayfa 195 MEKANİK DIŞ ÇAP MİKROMETRESİ



Sayfa 195 DİJİTAL DIŞ ÇAP MİKROMETRESİ



Sayfa 195 NUMARATÖRLÜ DIŞ ÇAP MİKR.



Sayfa 196 HIZLI BESLEME MİKROMETRESİ



Sayfa 196 BIÇAK AĞIZLI MİKROMETRE



Sayfa 196 KÜRESEL UÇLU MİKROMETRE



Sayfa 196 İĞNE UÇLU MİKROMETRE



Sayfa 196 DİJİTAL DIŞ ÇAP MİKROMETRESİ



Sayfa 197 DİJ. DEĞİŞ.UÇLU DIŞ ÇAP MİKR.



Sayfa 197 UZATMALI DELİK MİKROMETRESİ



Sayfa 197 DERİNLİK MİKROMETRESİ



Sayfa 197 DİJİTAL DERİNLİK MİKROMETRESİ



Sayfa 198 İÇ ÇAP MİKROMETRESİ



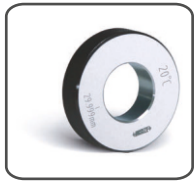
Sayfa 198 DİJİTAL İÇ ÇAP MİKROMETRESİ



Sayfa 198 PASOMETRE



Sayfa 198 MİKROMETRE AYAĞI



Sayfa 198 HALKA MASTAR



Sayfa 198 DİJİTAL KOMPARATÖR



Sayfa 199 DİJ. 3 AYAKLI İÇ ÇAP MİKROMETRE



Sayfa 200 KOMPRATÖR SAATİ



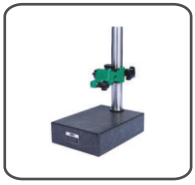
Sayfa 200 KOMPRATÖR SAATİ



Sayfa 200 KOMPRATÖR SAATİ



Sayfa 200 KOMPRATÖR SAATİ



Sayfa 201 KOMPRATÖR AYAĞI



Sayfa 201 KOMPRATÖR AYAĞI



Sayfa 201 SALGI KOMPRATÖRÜ



Sayfa 201 SALGI KOMPRATÖRÜ



Sayfa 201 KALINLIK ÖLÇME KOMPRATÖRÜ



Sayfa 201 KALINLIK ÖLÇME KOMPRATÖRÜ



Sayfa 201 KALINLIK ÖLÇME KOMPRATÖRÜ



Sayfa 202 KALINLIK ÖLÇME KOMPRATÖRÜ



Sayfa 202 SİLİNDİR KOMP. (SET)



Sayfa 202 AÇI ÖLÇER



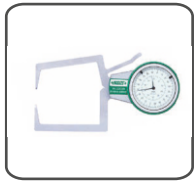
Sayfa 202 ÇELİK KONTROL MASTARLARI



Sayfa 203 DİJİTAL SİLİNDİR KOMPARATÖRÜ



Sayfa 203 SİLİNDİR KOMPARATÖRÜ



Sayfa 203 DIŞ ÇAP KOMPRATÖRÜ



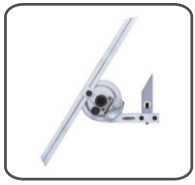
Sayfa 203 İÇ ÇAP KOMPRATÖRÜ



Sayfa 204 DİJİTAL DIŞ ÇAP KOMPRATÖRÜ



Sayfa 204 DİJİTAL İÇ ÇAP KOMPRATÖRÜ



Sayfa 204 MERCEKLİ AÇI ÖLÇER



Sayfa 205 90° KIL GÖNYE



Sayfa 205 90° DÜZ GÖNYE



Sayfa 205 90° DÜZ GÖNYE



Sayfa 205 90° ŞAPKALI GÖNYE



Sayfa 205 KAYNAKÇI KUMPASI



Sayfa 205 KOMB. KAYNAKÇI KUMPASI



Sayfa 205 DİJİTAL AÇI ÖLÇER VE TERAZİ



Sayfa 205 KOMP. SAATLİ FREZE MERK. APR.



Sayfa 206 AYARLI İÇ ÇAP PERGELİ



Sayfa 206 AYARLI DÜZ PERGEL



Sayfa 206 MEKANİK PROB



Sayfa 206 MEKANİK PROB



Sayfa 206 DİJ. TAKILABİLEN KUMPAS



Sayfa 206 DİJ. TAKILABİLEN KUMPAS



Sayfa 206 FİLLER ÇAKISI



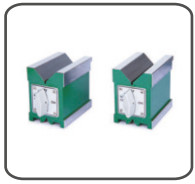
Sayfa 207 RADÜS MASTARI



Sayfa 207 RADÜS MASTARI



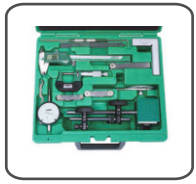
Sayfa 207 LAYNER BANT



Sayfa 208 MANYETİK V BLOK



Sayfa 208 ÇELİK V BLOK



Sayfa 208 PARÇA ÖLÇÜM SETİ



Sayfa 208 ÇELİK MASTAR



Sayfa 208 DİJİTAL KUMPAS



Sayfa 208 IP67 DİJİTAL KUMPAS



Sayfa 209 GENİŞ ÖLÇÜM DİJİTAL KUMPAS



Sayfa 209 DİJİTAL DERİNLİK KUMPAS



Sayfa 209 MEKANİK MİKROMETRE



Sayfa 209 DİJİTAL MİKROMETRE



Sayfa 209 SALGI VE KOMP. SAATİ



Sayfa 209 SİLİNDİR KOMPRATÖR SETİ



Sayfa 210 7 ÇEKMECELİ DOLAP



Sayfa 210 9 ÇEKMECELİ DOLAP



Sayfa 210 CNC SEHPALI ÇEKMECELİ ARABA



Sayfa 211 HAREKETLİ CNC TUTUCU SEHPA



Sayfa 211 CNC SEHPASI



Sayfa 211 6 ÇEKMECELİ TAKIM ARABASI



Sayfa 212 ASKI PANOLU ÇALIŞMA ARABASI



Sayfa 212 ALTIGEN ÇALIŞMA TEZGAHI



Sayfa 212 ASKI PANOLU ÇALIŞMA TEZGAHI



Sayfa 213 ASKI PANOLU ÇALIŞMA TEZGAHI



Sayfa 213 ASKI PANOLU FLORESANLI TEZG.



Sayfa 213 SACLI MALZEME DOLABI



Sayfa 214 CNC TKM. RAFLI CNC TKM. DOLABI



Sayfa 214 TEMİZLİK DOLABI



Sayfa 215 5 HAREKETLİ RAFLI MALZEME DOLABI



Sayfa 215 ASKI SACLI AVAD. KUTULU DOLAP



Sayfa 216 KOMBİNE ANAHTAR



Sayfa 217 İKİ AĞIZ ANAHTAR



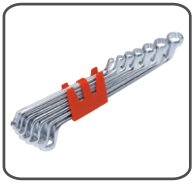
Sayfa 217 KOMBİNE ANAHTAR TAKIMI



Sayfa 218 İKİ AĞIZ ANAHTAR TAKIMI



Sayfa 219 YILDIZ İKİ AĞIZ ANAHTAR



Sayfa 219 YILDIZ İKİ AĞIZ ANAHTAR TAKIMI



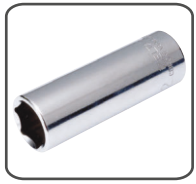
Sayfa 219 KURBAĞACIK ANAHTAR



Sayfa 220 ÇATAL / YILDIZ ÇAKMA ANAHTAR



Sayfa 221 1/4" ALTI KÖŞE LOKMA ANAHTAR



Sayfa 221 1/4" ALTI KÖŞE DERİN LOKMA



Sayfa 221 1/4" LOKMALI ALLEN UÇ



Sayfa 221 1/4" ARA KOL



Sayfa 221 1/4" MAFSAL



Sayfa 221 1/4" CIRCIR KOLU



Sayfa 222 3/8" ALTI KÖŞE LOKMA ANAHTAR



Sayfa 222 3/8" ARA KOL



Sayfa 222 3/8" MAFSAL



Sayfa 222 3/8" T KOL



Sayfa 223 1/2" ALTI KÖŞE LOKMA ANAHTAR



Sayfa 223 1/2" ARA KOL



Sayfa 223 1/2" MAFSAL



Sayfa 223 1/2" CIRCIR KOLU (32 DİŞ)



Sayfa 224 KRAFT SERİ DÜZ UÇLU TORNAVİDA



Sayfa 224 SÜNGÜSÜ UZUN DÜZ UÇLU TORN.



Sayfa 224 TORNAVİDA SETİ (7 PARÇA)



Sayfa 224 DÜZ UÇLU TORN. SETİ (8 PARÇA)



Sayfa 225 KRAFT SERİ YILDIZ UÇLU TORN.



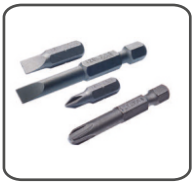
Sayfa 225 KRAFT SERİ TOPAÇ TORN.



Sayfa 226 LOKMA UÇLU TORNAVİDA



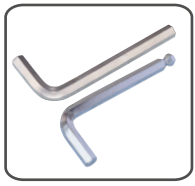
Sayfa 226 TORX® UÇLU TORNAVİDA



Sayfa 227 BİTS UÇLAR




Sayfa 227 BİTS UÇ SETLERİ



Sayfa 228 ALLEN ANAHTARLAR



Sayfa 228 ALLEN ANAHTAR SETLERİ



Sayfa 230 KOMBİNE PENSE



Sayfa 230 KARGABURUN UZUN DÜZ UÇLU



Sayfa 230 YAN KESKİ



Sayfa 230 ÜNİVERSAL FORT PENSE



Sayfa 230 STANDART AYARLI PENSE



Sayfa 230 KUYUMCU MAKASI (EĞRİ)



Sayfa 231 DIŞ SEGMAN PENSE (YAYLI DÜZ)



Sayfa 231 İÇ SEGMAN PENSİ (YAYSIZ DÜZ)



Sayfa 231 DIŞ SEGMEN PENSE (YAYLI EĞRİ)



Sayfa 231 İÇ SEGMAN PENSİ (YAYSIZ EĞRİ)



Sayfa 231 STİLSON BORU ANAHTARI



Sayfa 231 MAŞALI BORU ANAHTARI (45°)



Sayfa 232 KAPORTACI MAKASI (SAĞ)



Sayfa 232 KAPORTACI MAKASI (SOL)



Sayfa 232 TENEKECİ MAKASI (YAYLI)



Sayfa 232 LEVYE OLUKLU



Sayfa 232 PLASTİK ÇEKİÇ



Sayfa 232 TESVİYECİ ÇEKİÇ



Sayfa 233 MADENİ YAĞDANLIK



Sayfa 233 TAKIM ÇANTASI (ÜÇ GÖZLÜ)




Sayfa 233 1/4" KARBÜRATÖR LOKMA TAKIMI




Sayfa 233 1/2" LOKMA TK. ALTIKÖŞE



Sayfa 233 3/8" LOKMA TK. ALTIKÖŞE



Sayfa 234 1/2" HAVALI SÖKME VE SIKMA



Sayfa 234 SET 1/2" HAVALI SÖKME VE SIKMA



Sayfa 234 1" HAVALI SÖKME VE SIKMA



Sayfa 235 1/2" HAV. CIRCIR TİP SÖK. VE SIKMA



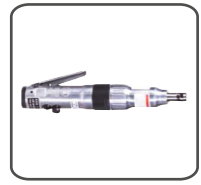
Sayfa 235 10 MM HAVALI MATKAP



Sayfa 236 10 MM HAVALI MATKAP 90°



Sayfa 236 HAVALI TORNAVİDA



Sayfa 236 HAVALI DİKEY TORNAVİDA



Sayfa 237 HAVALI KALIPÇI TAŞLAMA



Sayfa 237 HAVALI KALIPÇI TAŞLAMA



Sayfa 237 UZUN HAVALI KALIPÇI TAŞLAMA



Sayfa 237 90° HAVALI KALIPÇI TAŞLAMA



Sayfa 238 HAVALI TAŞLAMA (MİNİ)



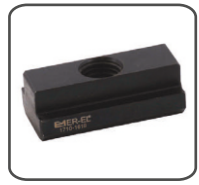
Sayfa 238 MİKRO HAVALI KALIPÇI TAŞLAMA



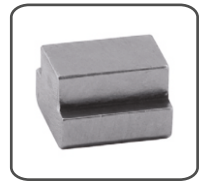
Sayfa 238 HAVALI YAZI YAZMA



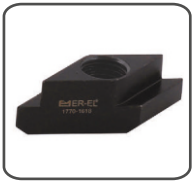
Sayfa 238 HAVALI PERÇİN TABANCASI



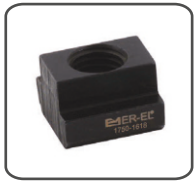
Sayfa 239 UZUN T-PABUÇ



Sayfa 239 DELİKSİZ T - PABUÇ



Sayfa 239 DERECELİ T-PABUÇ



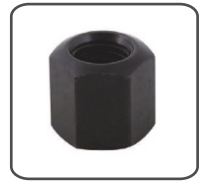
Sayfa 240 T - PABUÇ



Sayfa 240 T-KANAL TEMİZLEYİCİ



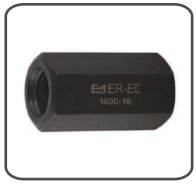
Sayfa 240 MODÜLER T-BLOK



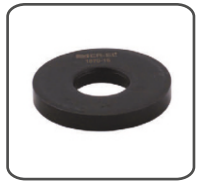
Sayfa 241 TAKVİYELİ SOMUN



Sayfa 241 PULLU SOMUN



Sayfa 241 UZATMA SOMUN



Sayfa 242 PUL



Sayfa 242 DÜZ SAPLAMA



Sayfa 243 SOMUNLU PULLU T - AYAKLI SAPL.



Sayfa 244 T - AYAKLI SAPLAMA



Sayfa 245 DERECELİ T-AYAKLI SAPLAMA



Sayfa 245 ANAHTAR T - AYAKLI SAPLAMA



Sayfa 246 KOMBİNE T-AYAKLI SAPL.



Sayfa 246 AYAR.DEST. CİV. KOMB. BAĞL. PAB.



Sayfa 247 AYAR. DEST. CİV. KOMB. BAĞL. PAB.



Sayfa 247 DESTEK DELİKLİ DÜZ PABUÇ



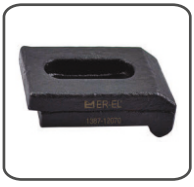
Sayfa 248 DÜZ PABUÇ



Sayfa 248 KAD. DEST. DELİKLİ DÜZ PAB.



Sayfa 249 ÇATAL PABUÇ



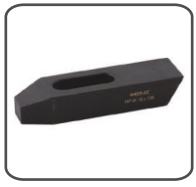
Sayfa 249 PLAKA BAĞL. PABUCU



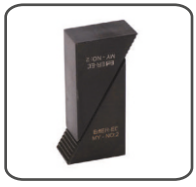
Sayfa 250 KAD.DEST.DELİKLİ ÇATAL PAB.



Sayfa 250 DESTEK DELİKLİ ÇATAL PABUÇ



Sayfa 250 MERDİVEN DİŞ BAĞL. PABUCU



Sayfa 250 MERDİVEN DİŞ DESTEK



Sayfa 250 MERDİVEN DİŞ KOMBİNE DESTEK



Sayfa 250 SİLİNDİR BAŞLI ÇATAL PABUÇ



Sayfa 250 BASAMAKLI KOMBİNE PABUÇ



Sayfa 252 DESTEK DELİKLİ Z - BAĞL. PABUCU



Sayfa 252 KADEMELİ BAĞL. PABUCU



Sayfa 253 KOMBİNE BAĞL. PABUCU



Sayfa 253 ÇİFT TARAFLI BAĞL. PABUCU



Sayfa 253 KADEMELİ BAĞL. PABUCU



Sayfa 254 DESTEKSİZ ASKI PABUÇ



Sayfa 254 KOMBİNE BURÇLU PABUÇ



Sayfa 255 PABUÇ DESTEK CİVATASI



Sayfa 255 TRAPEZ DİŞ YÜKS. DESTEK



Sayfa 255 MANYETİK VİDALI YÜKSELTİCİ



Sayfa 256 BLOK DESTEK



Sayfa 256 OYNAR BAŞLI BASKI PABUCU



Sayfa 257 YÜKSELTME KOVANI



Sayfa 257 BASAMAKLI DESTEK



Sayfa 257 PABUÇ KALDIRMA YAYLI PUL



Sayfa 258 5 EKSEN BLOK BAĞL. ÇEKT. CİV.



Sayfa 258 5 EKSEN BLOK BAĞL. ÇEKT. CİV.


Sayfa 258 5 EKSEN BLOK BAĞL. ÇEKT. CİV.


Sayfa 259 HİDROLİK İŞ PARÇASI DESTEĞİ


Sayfa 259 HİDROLİK İŞ PARÇASI DESTEĞİ


Sayfa 260 PAB. KALD. CİVATA VE SOMUNU


Sayfa 260 SABİTLEME İMBUS CİVATASI


Sayfa 260 DP ÖN BASKI PABUCU


Sayfa 261 SABİT. İMB. CİVATA VE T-PABUÇ


Sayfa 261 DESTEKLER


Sayfa 262 TRAPEZ DİŞ YÜKS. DESTEK / V YATAK


Sayfa 263 PNÖMATİK ÜSTTEN BAĞLAMA


Sayfa 264 PNÖ. DÖNMELİ BAĞLAMA


Sayfa 265 PNÖ. DÖNMELİ BAĞLAMA


Sayfa 266 MERDİVEN YÜKSEL. BAĞL. SETİ


Sayfa 266 VİDALI YÜKS. BAĞLAMA SETİ


Sayfa 267 DERECELİ YANDAN BAĞLAMA SETİ

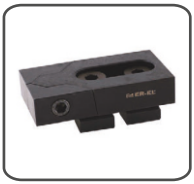

Sayfa 267 KIZAKLI YANDAN BAĞLAMA SETİ


Sayfa 268 KOLLU YANDAN BAĞLAMA SETİ


Sayfa 268 KIZAKLI YANDAN BAĞLAMA SETİ


Sayfa 269 BLOK YANDAN BAĞLAMA

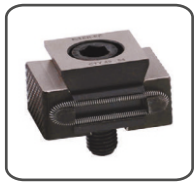

Sayfa 269 BLOK YANDAN BAĞL. DAYAMASI


Sayfa 270 ÇİFT ÇENELİ YAN. BAĞL.PAB.


Sayfa 270 DAYAMA


Sayfa 271 KANAL İÇİ YANDAN BAĞL.


Sayfa 271 YANDAN BAĞL. PENÇE PABUÇ


Sayfa 272 ÇİFT AÇILIR YANDAN BAĞL.


Sayfa 272 HİDROLİK PABUÇ MODEL


Sayfa 273 KIZAKLI KOMBİNE BAĞLAMA PABUCU


Sayfa 273 KIZAKLI KOMBİNE BAĞLAMA PABUCU


Sayfa 274 KIZAKLI KOMBİNE BAĞLAMA PABUCU


Sayfa 274 ÜST KIZAK GRUBU



Sayfa 275 PARALEL SET



Sayfa 275 V-YATAK



Sayfa 275 XV YATAK



Sayfa 276 CNC 5 EKSEN PARÇA BAĞL.APR.



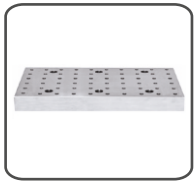
Sayfa 276 DİVİZÖR KULESİ



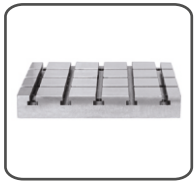
Sayfa 277 CNC YATAY İŞL. TABLASI T-KANALLI



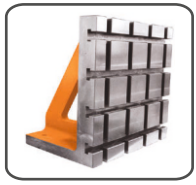
Sayfa 278 CNC YATAY İŞLEME TABLASI



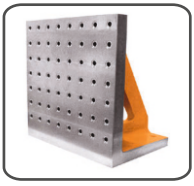
Sayfa 279 CNC DİK İŞLEME PLEYTİ



Sayfa 280 CNC DİK İŞLEME PLEYTİ T-KANALLI



Sayfa 280 L GÖNYE



Sayfa 281 L GÖNYE (ÇELİK BURÇLU)



Sayfa 281 CNC YATAY İŞLEME KULESİ



Sayfa 283 KALIP TAŞIMA MAPASI



Sayfa 284 YUMUŞAK AYAKLAR



Sayfa 285 FREZE TARAMA BAŞL. TUTUCUSU



Sayfa 285 FREZE TARAMA BAŞLIĞI



Sayfa 285 FREZE TARAMA BAŞLIĞI



Sayfa 286 DELİK İŞLEME APARTI



Sayfa 286 HASSAS DELİK İŞLEME APARATI



Sayfa 288 ÇİFT AÇILIR ÇELİK MENGENE



Sayfa 289 MEKANİK ÇELİK MENGENE



Sayfa 289 ÇİFT AÇILIR 5-EKSEN MENG.



Sayfa 290 MODÜLER MEK. ÇELİK MENGENE



Sayfa 291 ÇOK ÇENELİ SERİ MENGENE



Sayfa 292 SERİ MENGENE



Sayfa 292 SERİ MENGENE DAYAMASI



Sayfa 293 ÇATAL KULE



Sayfa 294 HİDR. ÇOK ÇENELİ SERİ MENGENE



Sayfa 295 HİDR. ÇOK ÇENELİ MENG. ALT GÖVDE



Sayfa 295 MANYETİK GEZER DAYAMA



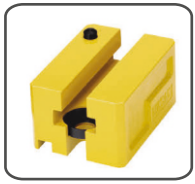
Sayfa 296 MANYETİK HAREKETLİ ÇENE



Sayfa 296 HİDR. SERİ MENG. YUMUŞAK ÇENE



Sayfa 296 KOMB. BAĞL. PAB. ALT DESTEK



Sayfa 296 KOMB. BAĞL. PAB. ALT DESTEK



Sayfa 297 KOMB. BAĞLAMA PABUCU



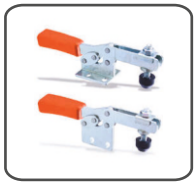
Sayfa 297 KOMB. BAĞLAMA PAB. ALT DESTEK



Sayfa 297 KOMB. BAĞLAMA PABUCU



Sayfa 298 DİK BAĞLAMA ELEMANI



Sayfa 298 YATAY BAĞLAMA ELEMANI



Sayfa 298 İTME ÇEKME TİPİ BAĞL. ELEMANI



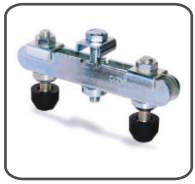
Sayfa 299 KANCALI BAĞL. ELEMANI



Sayfa 299 KANCALI BAĞL. ELEMANI



Sayfa 299 MAFSALLI BASKI CİVATASI



Sayfa 299 ÇAPRAZ KOL



Sayfa 299 KORUYUCU LASTİK



Sayfa 299 DİK PNÖMATİK BAĞL. ELEMANI



Sayfa 299 DİK PNÖMATİK BAĞL. ELEMANI



Sayfa 299 DİK PNÖMATİK BAĞL. ELEMANI



Sayfa 300 ELEKTRO MANY. TABLALAR




Sayfa 300 MANYETİK KALDIRAÇLAR



Sayfa 301 KARBÜR FREZE BİLEME MAKİNASI



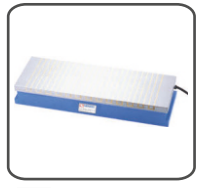
Sayfa 301 MATKAP UCU BİLEME MAKİNASI



Sayfa 302 MANYETİK TABLA



Sayfa 302 MANYETİK TABLA



Sayfa 303 ELEKTRİKLİ MANY. TABLA 450 GAUSS



Sayfa 303 YUVARLAK TİP MANYETİK TABLA



Sayfa 303 MANYETİK ALMALAR



Sayfa 304 ÜNİVERSAL AÇILI TABLA



Sayfa 304 TAKIM 'Z' SIFIRLAMA APAR.




Sayfa 304 TAKIM 'Z' SIFIRLAMA APAR.


Sayfa 304 TAKIM 'Z' SIFIRLAMA APAR.


Sayfa 305 DERECELİ MANYETİK TABLA


Sayfa 305 DERECELİ MANYETİK TABLA


Sayfa 306 FREZE MENGENESİ


Sayfa 306 TAŞLANMIŞ TEZG. MENGENESİ


Sayfa 306 UZUN TİP SÜPER AÇILIR MENGENE


Sayfa 306 3 AÇILI FREZE MENGENESİ


Sayfa 307 2 AÇILI FREZE MENGENESİ


Sayfa 307 2 AÇILI MAKİNA MENGENESİ


Sayfa 307 2 AÇILI HİDROLİK MAK. MENGENESİ


Sayfa 308 PNÖMATİK MENGENE

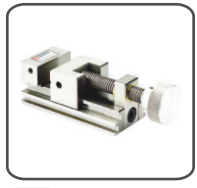

Sayfa 308 KADEMELİ HİDR. MENGENE


Sayfa 308 KADEMELİ HİDR. MENGENE


Sayfa 309 PİMLİ HASSAS TAŞL. MENGENE


Sayfa 309 PİMLİ DERECELİ TAŞL. MENG.


Sayfa 309 VİDALI DERECELİ TAŞL. MENG.


Sayfa 310 VİDALI HASSAS TAŞL. MENGENE


Sayfa 310 UNİ. AÇILI HASSAS TAŞL. MENG.


Sayfa 310 VİDALI HASSAS TAŞL. MENG.


Sayfa 310 EDM ELEKTROD MENGENESİ


Sayfa 311 DÖNER TABLA


Sayfa 311 AÇILI AYARLI DÖNER TABLA


Sayfa 311 DERECELİ TABLA DİVİZÖR


Sayfa 312 SİNÜS DERECELİ TABLALAR


Sayfa 312 DERECELİ TABLALAR


Sayfa 312 ÜNİVERSAL DİVİZÖR


Sayfa 313 ÜNİVERSAL DİVİZÖR


Sayfa 313 YATAY DİKEY DİVİZÖR


Sayfa 314 YATAY DİKEY DİVİZÖR


Sayfa 314 MEKANİK PROPLAR



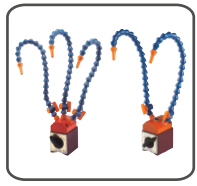
Sayfa 314 IŞIKLI - SESLİ PROPLAR



Sayfa 314 MANYETİK SEPERATÖR



Sayfa 315 MANYETİK AYAKLAR



Sayfa 316 MANYETİK AYAKLAR



Sayfa 317 MAKİNA TAMPONLARI



Sayfa 317 KAUÇUK BLOKLAR



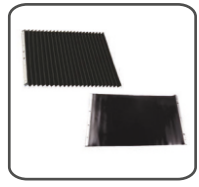
Sayfa 317 KOLLU GRES POMPASI



Sayfa 317 İNCE YAĞ POMPASI



Sayfa 317 VARİL POMPASI



Sayfa 317 FREZE KORUMA KÖRÜKLERİ



Sayfa 317 SPİRAL HORTUM



Sayfa 317 İŞ AYAKKABILARI



Sayfa 318 ÜNİVERSAL FREZE BAŞLIKLARI



Sayfa 318 TEZGAH GÖNYESİ 90°



Sayfa 318 MANYETİK V YATAK



Sayfa 319 18 PARÇALI PARALEL SET



Sayfa 319 28 PARÇALI PARALEL SET



Sayfa 319 U2 PANTOGRAF TAKIM BİLEME



Sayfa 320 FORM VERME APARATI



Sayfa 320 TAŞLAMA TAŞINA FORM VERME APR.



Sayfa 320 ZIMBA KADEME VE FORM VERME APR.



Sayfa 320 DİJ. KOORDİNAT OKUMA SİSTEMİ



Sayfa 320 FREZE OTOMATİĞİ



Sayfa 320 MANUEL YAĞLAMA POMPASI



Sayfa 321 PİM KESME MAKİNASI



Sayfa 321 PAH KIRMA MAKİNASI



Sayfa 321 PAH KIRMA MAKİNASI



Sayfa 321 EL TİPİ PAH KIRMA MAKİNASI



Sayfa 322 FREZE MENGENELERİ



Sayfa 322 FREZE MENGENELERİ



Sayfa 322 FREZE MENGENELERİ



Sayfa 322 FREZE MENGENELERİ



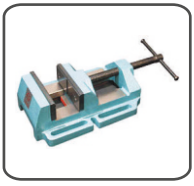
Sayfa 322 FREZE MENGENELERİ



Sayfa 322 FREZE MENGENELERİ



Sayfa 322 FREZE MENGENELERİ



Sayfa 322 MATKAP MENGENELERİ



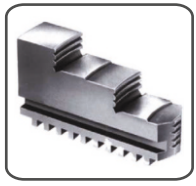
Sayfa 322 MASA MENGENELERİ



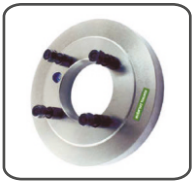
Sayfa 323 TEZGAH SPORTLARI



Sayfa 324 TORNA AYNASI DÜZ AYAK TAKIMI



Sayfa 324 TORNA AYNASI TERS AYAK TAKIMI



Sayfa 324 AYNA FLANŞI



Sayfa 324 TORNA AYNASI İÇİN ANAHTAR



Sayfa 325 3 AYAKLI AYNALAR



Sayfa 325 4 AYAKLI AYNALAR



Sayfa 325 KEPENKLİ AYNALAR



Sayfa 326 ÖNDEN BAĞL. DİVİZ. AYNALARI



Sayfa 327 AÇIK MERKEZLİ HİDROLİK AYNA



Sayfa 329 HAVALI KLAVUZ ÇEKME MAKİNASI



Sayfa 330 TARAMA BAŞLIKLARI



Sayfa 331 TARAMA BAŞLIKLARI



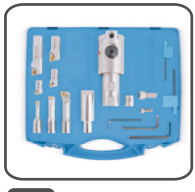
Sayfa 332 TARAMA BAŞLIKLARI



Sayfa 333 TARAMA BAŞLIKLARI



Sayfa 338 TARAMA BAŞLIKLARI



Sayfa 339 9 - 130 MM HASSAS BARA SETİ



Sayfa 340 16 - 130 MM KABA BARA



Sayfa 341 HELİS FREZE APKT 1604



Sayfa 341 HELİS FREZE APKT 1604



Sayfa 341 DİSK FREZE CCMT



Sayfa 342 SAPLI TARAMALAR



Sayfa 345 VİDALI TAKIMLAR



Sayfa 347 İÇ VE DIŞ ÇAP DİŞ KATERLERİ



Sayfa 348 KANAL KATERLERİ



Sayfa 351 YEDEK PARÇALAR



Sayfa 355 CCMT TAKMA UÇLAR



Sayfa 355 CNMG TAKMA UÇLAR



Sayfa 355 CNMM TAKMA UÇLAR



Sayfa 355 CPMT TAKMA UÇLAR



Sayfa 355 DCMT TAKMA UÇLAR



Sayfa 355 DNMG TAKMA UÇLAR



Sayfa 355 DNUX TAKMA UÇLAR



Sayfa 355 KNUX TAKMA UÇLAR



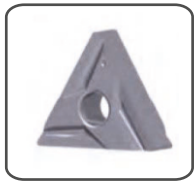
Sayfa 355 RCMT TAKMA UÇLAR



Sayfa 355 TNMG TAKMA UÇLAR



Sayfa 356 TNMP TAKMA UÇLAR



Sayfa 356 TNUX TAKMA UÇLAR



Sayfa 356 TPMR TAKMA UÇLAR



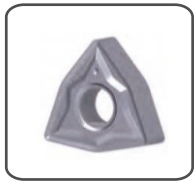
Sayfa 356 VBMT TAKMA UÇLAR



Sayfa 356 VCMT TAKMA UÇLAR



Sayfa 356 VNMG TAKMA UÇLAR



Sayfa 356 WNMG TAKMA UÇLAR



Sayfa 356 WNMP TAKMA UÇLAR



Sayfa 356 SCMT TAKMA UÇLAR



Sayfa 356 SNMG TAKMA UÇLAR



Sayfa 357 TCMT TAKMA UÇLAR



Sayfa 357 CCGT ALU TAKMA UÇLAR



Sayfa 357 CNGG ALU TAKMA UÇLAR



Sayfa 357 DCGT ALU TAKMA UÇLAR



Sayfa 357 DNGG ALU TAKMA UÇLAR



Sayfa 357 TNGG ALU TAKMA UÇLAR



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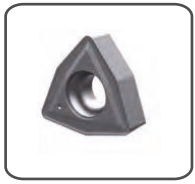
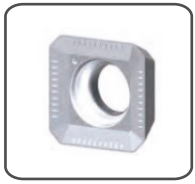
Sayfa 357 WNGG ALU TAKMA UÇLAR



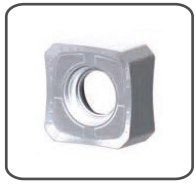
Sayfa 357 SPMG TAKMA UÇLAR



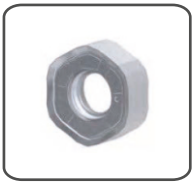
Sayfa 357 WCMX TAKMA UÇLAR



Sayfa 358 SEKT TAKMA UÇLAR



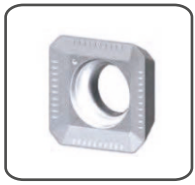
Sayfa 358 SNKX TAKMA UÇLAR



Sayfa 358 HNKX TAKMA UÇLAR



Sayfa 358 ONKX TAKMA UÇLAR



Sayfa 358 SDKT TAKMA UÇLAR



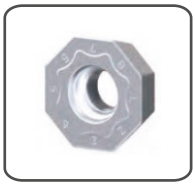
Sayfa 358 SPKN TAKMA UÇLAR



Sayfa 358 SEKN TAKMA UÇLAR



Sayfa 358 ODMT TAKMA UÇLAR



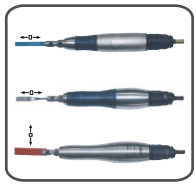
Sayfa 358 ODMW TAKMA UÇLAR



Sayfa 358 RDMT - TPKN - APKT TAKMA UÇLAR




Sayfa 359 BNMX - LNMU - WNMX XNKT - TAKMA UÇLAR SPİRAL MOTORLAR



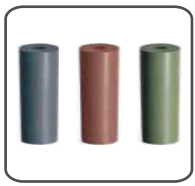
Sayfa 360 HAVALI DİPROFİLLER



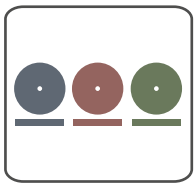
Sayfa 360 HAVALI SPİRALLER



Sayfa 360 HAVALI MİNİ PAH KIRMA MAKİNASI



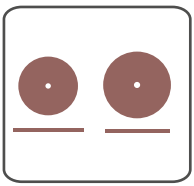
Sayfa 361 PARLATMA LASTİKLERİ



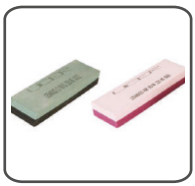
Sayfa 361 DAİRE PARLATMA LASTİKLERİ



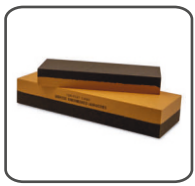
Sayfa 361 SAPLI PARLATMA LASTİKLERİ



Sayfa 361 SEPARE KESME TAŞLARI



Sayfa 362 KOMBİNE YAĞ TAŞI



Sayfa 362 KOMBİNE YAĞ TAŞI



Sayfa 362 GAZ TAŞI TUTUCUSU



Sayfa 363 GAZ TAŞLARI ORANGE EDM



Sayfa 363 SERAMİK GAZ TAŞLARI



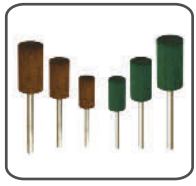
Sayfa 364 ELMAS PARL. MACUNU



Sayfa 364 GAZTAŞI SIVISI



Sayfa 364 SPİRO BANT ZIMP. & TUTUCUSU



Sayfa 364 ELASTİK PARLATMA LASTİĞİ



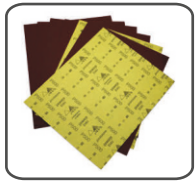
Sayfa 365 MOP ELYAF DİSK



Sayfa 365 MOP KEÇE DİSK



Sayfa 365 BEZ ZIMPARA



Sayfa 365 PLAKA SU ZIMPARASI



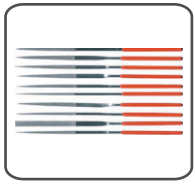
Sayfa 365 MOP ELYAF



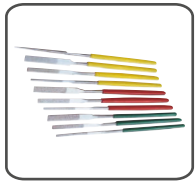
Sayfa 366 SAPLI MOP ZIMPARA



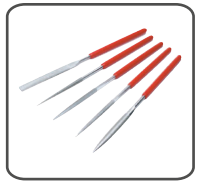
Sayfa 366 MOP KEÇE



Sayfa 367 10'LU ELMAS EĞE SETİ



Sayfa 367 10'LU ELMAS EĞE SETİ



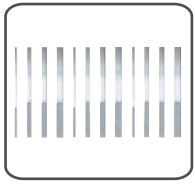
Sayfa 367 5'Lİ ELMAS EĞE SETİ



Sayfa 368 10'LU ELMAS EĞE SETİ



Sayfa 368 5'Lİ ELMAS EĞE SETİ



Sayfa 370 12'Lİ ELMAS EĞE SETİ



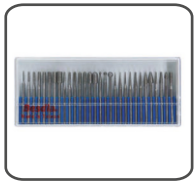
Sayfa 371 10'LU ELMAS EĞE SETİ



Sayfa 371 12'Lİ ELMAS EĞE SETİ



Sayfa 372 5'Lİ ELMAS EĞE SETİ



Sayfa 373 PÜSK. SPİRAL ELMAS UÇLAR



Sayfa 374 PARLATMA KEÇELERİ



Sayfa 376 PEMBE SPİRAL TAŞLAR



Sayfa 377 KALIPÇI FREZELER



Sayfa 381 TORNA VE MİL EĞELERİ



Sayfa 381 SAATÇİ EĞELERİ




Sayfa 382 KARBOSAN NK ZIMPARA TAŞI




Sayfa 382 KARBOSAN EKR TAŞLAMA TAŞI




Sayfa 382 KARBOSAN SCG ELMAS TAŞ



Sayfa 382 KARBOSAN FORM D EKR ÇANAK TAŞ



Sayfa 382 KARBOSAN FORM E EKR ÇANAK TAŞ




Sayfa 383 KARBOSAN KESİCİ DİSKLER




Sayfa 383 KARBOSAN FLAP DİSK ZIMPARA



Sayfa 384 FİBER DİSK ZIMPARA



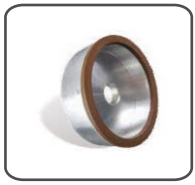
Sayfa 384 TAŞ DÜZELTME ELMASI



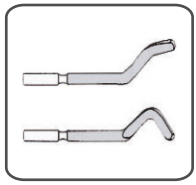
Sayfa 384 ELMAS ÇANAK TAŞ



Sayfa 384 ELMAS DİSK TAŞ



Sayfa 384 ELMAS DİK TAŞ



Sayfa 385 ÇAPAK ALMA RASPA UÇLARI



Sayfa 385 ÇOK AMAÇLI RASPA BIÇAĞI



Sayfa 385 ÇİFT KÖŞELİ KESME RASPA BIÇAĞI



Sayfa 385 METAL GÖVDELİ RASPA BIÇAĞI



Sayfa 385 ÇAPAK ALMA RASPA BIÇAĞI




Sayfa 385 ÇAPAK ALMA RASPA SETİ



Sayfa 385 YOLLUK KESME MAKASLARI




Sayfa 386 400°C YÜKSEK ISI GRESİ




Sayfa 386 700°C YÜKSEK ISI GRESİ




Sayfa 386 BAKIRLI GRES




Sayfa 386 SERAMİK GRES




Sayfa 387 ANTİ SEİZE METAL GRES PASTA



Sayfa 387 GENEL TEMİZLEME SPREY



Sayfa 387 WW 3000 SIVI GRES SPREY



Sayfa 387 KALIP KORUYUCU SPREY



Sayfa 388 KORUYUCU BALMUMU SPREY



Sayfa 388 GIDA ONAYLI YAĞLAMA SPREY



Sayfa 388 KUVVETLİ PAS SÖKÜCÜ SPREY



Sayfa 388 MULTİ SİGNUM SPREY



Sayfa 389 EL TEMİZLEME KREMİ



Sayfa 389 SENTETİK SOĞUTMA SIVISI



Sayfa 389 EROZYON YAĞI



Sayfa 389 TAŞLAMA SIVISI




Sayfa 390 KALIP KORUYUCU




Sayfa 390 ÇOK AMAÇLI YAĞ. KORUYUCU




Sayfa 390 KALIP AYIRICI SİLİKON



Sayfa 390 KALIP AYIRICI SİLİKONSUZ



Sayfa 390 KESME YAĞI




Sayfa 390 WD- 40 SPREY



Sayfa 391 KALIP ALIŞIRMA & MARKA BOYASI




Sayfa 391 TAKILON TAMİR SETİ




Sayfa 391 404 SIVI CONTA




Sayfa 391 KALIP ALIŞTIRMA MACUNU




Sayfa 391 ALIŞTIRMA MACUNU



Sayfa 392 TOZ SÜLYEN BOYA




Sayfa 392 SUN-FIX MACUN KAYNAK




Sayfa 392 METAL CİLASI




Sayfa 392 WİNOL GLANZ (METAL PARLATICI)




Sayfa 392 SÜPER YAPIŞTIRICI




Sayfa 392 ÇOK YÖNLÜ YAĞLAYICI



Sayfa 393 FORCE - SÜPER YAPIŞTIRICI



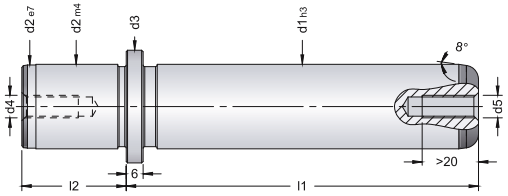
Sayfa 393 FORCE - CİVATA SABİTLEYİCİLER



Sayfa 394 FORCE - RULMAN KENETLEYİCİLERİ

## Ö00 - Ortadan Şapkalı Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




| Sipariş | d1 | L1 | L2 | d3 | M |
|---|---|---|---|---|---|
| 0001510020 | 15 | 100 | 20 | 22 | 1x8 |
| 0001511220 | | 112 | | | |
| 0001512520 | | 125 | | | |
| 0001514020 | | 140 | | | |
| 0001515020 | | 160 | | | |
| 0001518020 | | 180 | | | |
| 0001520020 | | 200 | | | |
| 0001610020 | 16 | 100 | 20 | 22 | 1x8 |
| 0001611220 | | 112 | | | |
| 0001612520 | | 125 | | | |
| 0001614020 | | 140 | | | |
| 0001616020 | | 160 | | | |
| 0001618020 | | 180 | | | |
| 0001620020 | | 200 | | | |
| 0001910023 | 19 | 100 | 23 | 25 | 8 |
| 0001911223 | | 112 | | | |
| 0001912523 | | 125 | | | |
| 0001914023 | | 140 | | | |
| 0001916023 | | 160 | | | |
| 0001918023 | | 180 | | | |
| 0001920023 | | 200 | | | |
| 000-2010023 | 20 | 100 | 23 | 25 | 8 |
| 000-2011223 | | 112 | | | |
| 000-2012523 | | 125 | | | |
| 000-2014023 | | 140 | | | |
| 000-2016023 | | 160 | | | |
| 000-2018023 | | 180 | | | |
| 000-2020023 | | 200 | | | |
| 000-2410030 | 24 | 100 | 30 | 32 | 8 |
| 000-2411230 | | 112 | | | |
| 000-2412430 | | 125 | | | |
| 000-2414030 | | 140 | | | |
| 000-2416030 | | 160 | | | |

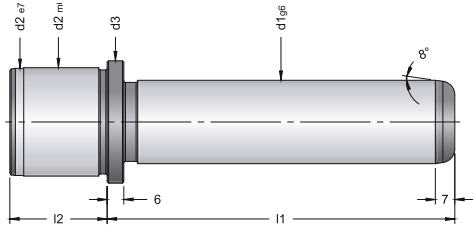
| Sipariş | d1 | L1 | L2 | d3 | M |
|---|---|---|---|---|---|
| 0002418030 | 24 | 180 | 30 | 32 | 8 |
| 0002420030 | | 200 | | | |
| 0002422430 | | 224 | | | |
| 0002424030 | | 250 | | | |
| 0002510030 | 25 | 100 | 30 | 32 | 8 |
| 0002511230 | | 112 | | | |
| 0002512530 | | 125 | | | |
| 0002514030 | | 140 | | | |
| 0002516030 | | 160 | | | |
| 0002518030 | | 180 | | | |
| 0002520030 | | 200 | | | |
| 0002522430 | | 224 | | | |
| 0002525030 | | 250 | | | |
| 0003011237 | 30 | 112 | 37 | 40 | 8 |
| 0003012537 | | 125 | | | |
| 0003014037 | | 140 | | | |
| 0003016037 | | 160 | | | |
| 0003018037 | | 180 | | | |
| 0003020037 | | 200 | | | |
| 0003022437 | | 224 | | | |
| 0003025037 | | 250 | | | |
| 000-3028037 | | 280 | | | |
| 000-3031537 | | 315 | | | |
| 000-3211237 | 32 | 112 | 37 | 40 | 8 |
| 000-3212537 | | 125 | | | |
| 000-3214037 | | 140 | | | |
| 000-3216037 | | 160 | | | |
| 000-3218037 | | 180 | | | |
| 000-3220037 | | 200 | | | |
| 000-3222437 | | 224 | | | |
| 000-3225037 | | 250 | | | |
| 000-3228037 | | 280 | | | |
| 000-3231537 | | 315 | | | |

| Sipariş | d1 | L1 | L2 | d3 | M |
|---|---|---|---|---|---|
| 0003812537 | 38 | 125 | 37 | 50 | 8 |
| 0003813837 | | 140 | | | |
| 0003816037 | | 160 | | | |
| 0003818037 | | 180 | | | |
| 0003820037 | | 200 | | | |
| 0003822437 | | 224 | | | |
| 0003825037 | | 250 | | | |
| 0003828037 | | 280 | | | |
| 0003831537 | | 315 | | | |
| 0003835537 | | 355 | | | |
| 0004012537 | 40 | 125 | 37 | 50 | 8 |
| 0004014037 | | 140 | | | |
| 0004016037 | | 160 | | | |
| 0004018037 | | 180 | | | |
| 0004020037 | | 200 | | | |
| 0004022437 | | 224 | | | |
| 0004025037 | | 250 | | | |
| 0004028037 | | 280 | | | |
| 0004031537 | | 315 | | | |
| 0004035537 | | 355 | | | |
| 0004812537 | 48 | 140 | 47 | 63 | 8 |
| 000-4814837 | | 160 | | | |
| 000-4816037 | | 180 | | | |
| 000-4818037 | | 200 | | | |
| 000-4820037 | | 224 | | | |
| 000-4822437 | | 250 | | | |
| 000-4825037 | | 280 | | | |
| 000-4828037 | | 315 | | | |
| 000-4831537 | | 355 | | | |
| 000-4835537 | | 400 | | | |
| 000-5014047 | 50 | 140 | 47 | 63 | 8 |
| 000-5016047 | | 160 | | | |
| 000-5018047 | | 180 | | | |

| Sipariş | d1 | L1 | L2 | d3 | M |
|---|---|---|---|---|---|
| 0005020047 | 50 | 200 | 47 | 63 | 8 |
| 0005022447 | | 224 | | | |
| 0005025047 | | 250 | | | |
| 0005028047 | | 280 | | | |
| 0005031547 | | 315 | | | |
| 0005035547 | | 355 | | | |
| 0005040047 | | 400 | | | |
| 0006016047 | 60 | 160 | 47 | 80 | 8 |
| 0006018047 | | 180 | | | |
| 0006020047 | | 200 | | | |
| 0006022447 | | 224 | | | |
| 0006025047 | | 250 | | | |
| 0006028047 | | 280 | | | |
| 0006031547 | | 315 | | | |
| 0006035547 | | 355 | | | |
| 0006040047 | | 400 | | | |
| 0006316047 | 63 | 160 | 47 | 80 | 8 |
| 0006318047 | | 180 | | | |
| 0006320047 | | 200 | | | |
| 0006322447 | | 224 | | | |
| 0006325047 | | 250 | | | |
| 000-6328047 | | 280 | | | |
| 000-6331547 | | 315 | | | |
| 000-6335547 | | 355 | | | |
| 000-6340047 | | 400 | | | |
| 000-8020060 | 80 | 200 | 60 | 95 | 12 |
| 000-8022460 | | 224 | | | |
| 000-8025060 | | 250 | | | |
| 000-8028060 | | 280 | | | |
| 000-8031560 | | 315 | | | |
| 000-8035560 | | 355 | | | |
| 000-8040060 | | 400 | | | |

## Ö05 - Arkası Şapkalı Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




| Sipariş | d1 | L1 | L2 | d2 | d3 |
|---|---|---|---|---|---|
| 0005-2010025 | 20 | 100 | 25 | 28 | 34 |
| 0005-2010035 | | | 35 | | |
| 0005-2012525 | | 125 | 25 | | |
| 0005-2012535 | | | 35 | | |
| 0005-2014025 | | 140 | 25 | | |
| 0005-2014035 | | | 35 | | |
| 0005-2016025 | | 160 | 25 | | |
| 0005-2016035 | | | 35 | | |
| 0005-2018025 | | 180 | 25 | | |
| 0005-2018035 | | | 35 | | |
| 0005-2510025 | 25 | 100 | 25 | 34 | 39 |
| 0005-2510035 | | | 35 | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 |
|---|---|---|---|---|---|
| 0005-2512525 | 25 | 125 | 25 | 34 | 39 |
| 0005-2512535 | | | 35 | | |
| 0005-2514025 | | 140 | 25 | | |
| 0005-2514035 | | | 35 | | |
| 0005-2516025 | | 160 | 25 | | |
| 0005-2516035 | | | 35 | | |
| 0005-2518025 | | 180 | 25 | | |
| 0005-2518035 | | | 35 | | |
| 0005-2520025 | | 200 | 25 | | |
| 0005-2520035 | | | 35 | | |
| 0005-2522025 | | 220 | 25 | | |
| 0005-2522035 | | | 35 | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 |
|---|---|---|---|---|---|
| 0005-2524025 | 25 | 240 | 25 | 34 | 39 |
| 0005-2524035 | | | 35 | | |
| 0005-3012535 | 30 | 125 | 35 | 39 | 44 |
| 0005-3012545 | | | 45 | | |
| 0005-3014035 | | 140 | 35 | | |
| 0005-3014045 | | | 45 | | |
| 0005-3016035 | | 160 | 35 | | |
| 0005-3016045 | | | 45 | | |
| 0005-3018035 | | 180 | 35 | | |
| 0005-3018045 | | | 45 | | |
| 0005-3020035 | | 200 | 35 | | |
| 0005-3020045 | | | 45 | | |

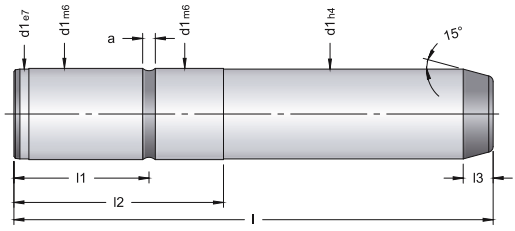
| Sipariş | d1 | L1 | L2 | d2 | d3 |
|---|---|---|---|---|---|
| 0005-3022035 | 30 | 220 | 35 | 39 | 44 |
| 0005-3022045 | | | 45 | | |
| 0005-3024035 | | 240 | 35 | | |
| 0005-3024045 | | | 45 | | |
| 0005-3026035 | | 260 | 35 | | |
| 0005-3026045 | | | 45 | | |
| 0005-3028035 | | 280 | 35 | | |
| 0005-3028045 | | | 45 | | |
| 0005-3031535 | | 315 | 35 | | |
| 0005-3031545 | | | 45 | | |



Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

## Ö10 - Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




**Döküm setler ile kullanılır.**

| Sipariş | d1 | L | L1 | L2 | a | L3 |
|---|---|---|---|---|---|---|
| Ö10-40180 | 40 | 180 | 37 | 77 | 8 | 10 |
| Ö10-40220 | | 220 | | | | |
| Ö10-40260 | | 260 | | | | |
| Ö10-40300 | | 300 | | | | |
| Ö10-40355 | | 355 | | | | |
| Ö10-40400 | | 400 | | | | |

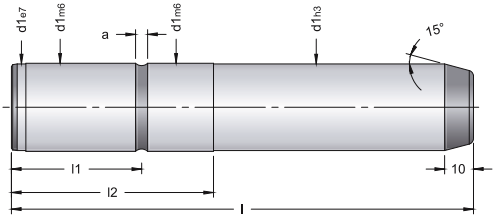
| Sipariş | d1 | L | L1 | L2 | a | L3 |
|---|---|---|---|---|---|---|
| Ö10-50200 | 50 | 200 | 47 | 95 | 8 | 10 |
| Ö10-50240 | | 240 | | | | |
| Ö10-50280 | | 280 | | | | |
| Ö10-50315 | | 315 | | | | |
| Ö10-50355 | | 355 | | | | |
| Ö10-50400 | | 400 | | | | |
| Ö10-50450 | | 450 | | | | |

| Sipariş | d1 | L | L1 | L2 | a | L3 |
|---|---|---|---|---|---|---|
| Ö10-63240 | 63 | 240 | 60 | 120 | 8 | 10 |
| Ö10-63280 | | 280 | | | | |
| Ö10-63315 | | 315 | | | | |
| Ö10-63355 | | 355 | | | | |
| Ö10-63400 | | 400 | | | | |
| Ö10-63450 | | 450 | | | | |

| Sipariş | d1 | L | L1 | L2 | a | L3 |
|---|---|---|---|---|---|---|
| Ö10-80240 | 80 | 240 | 60 | 120 | 8 | 16 |
| Ö10-80280 | | 280 | | | | |
| Ö10-80315 | | 315 | | | | |
| Ö10-80355 | | 355 | | | | |
| Ö10-80400 | | 400 | | | | |
| Ö10-80450 | | 450 | | | | |
| Ö10-80500 | | 500 | | | | |

## Ö11 - Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




**Döküm setler ile kullanılır.**

| Sipariş | d1 | L | L1 | L2 | a |
|---|---|---|---|---|---|
| Ö11-40160 | 40 | 160 | 25 | 50 | 8 |
| Ö11-40180 | | 180 | | | |
| Ö11-40200 | | 200 | | | |

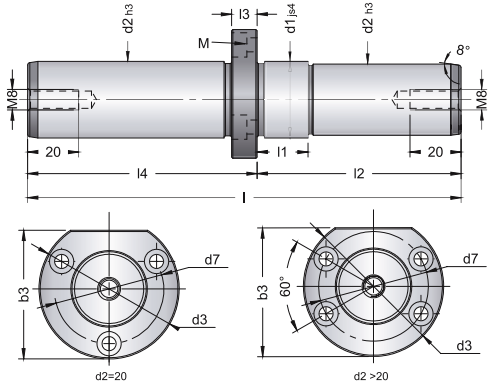
| Sipariş | d1 | L | L1 | L2 | a |
|---|---|---|---|---|---|
| Ö11-40225 | 40 | 225 | 25 | 50 | 8 |
| Ö11-40250 | | 250 | | | |
| Ö11-40280 | | 280 | | | |

| Sipariş | d1 | L | L1 | L2 | a |
|---|---|---|---|---|---|
| Ö11-50160 | 50 | 160 | 35 | 70 | 8 |
| Ö11-50180 | | 180 | | | |
| Ö11-50200 | | 200 | | | |

| Sipariş | d1 | L | L1 | L2 | a |
|---|---|---|---|---|---|
| Ö11-50225 | 50 | 225 | 35 | 70 | 8 |
| Ö11-50250 | | 250 | | | |
| Ö11-50280 | | 280 | | | |
| Ö11-50315 | | 315 | | | |

## Ö13 - Ortadan Flanşlı Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




| Sipariş | b3 | d1 | d3 | d7 | l | l1 | l3 | M | d2 | l4 | l2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ö13-207080 | 39 | 22 | 44 | 33 | 150 | 22 | 10 | M5 | 20 | 70 | 80 |
| Ö13-207090 | | | | | 160 | | | | | 70 | 90 |
| Ö13-209090 | | | | | 180 | | | | | 90 | 90 |
| Ö13-2011090 | | | | | 200 | | | | | 110 | 90 |
| Ö13-258090 | 45 | 26 | 50 | 38 | 170 | 22 | 10 | M5 | 25 | 80 | 90 |
| Ö13-2580110 | | | | | 190 | | | | | 80 | 110 |
| Ö13-2590120 | | | | | 210 | | | | | 90 | 120 |
| Ö13-2510090 | | | | | 190 | | | | | 100 | 90 |
| Ö13-25100160 | | | | | 260 | | | | | 100 | 160 |
| Ö13-25120100 | | | | | 220 | | | | | 120 | 100 |
| Ö13-3290100 | 55 | 34 | 60 | 48 | 190 | 27 | 10 | M5 | 32 | 90 | 100 |
| Ö13-3290110 | | | | | 200 | | | | | 90 | 110 |
| Ö13-32100160 | | | | | 260 | | | | | 100 | 160 |
| Ö13-32110110 | | | | | 220 | | | | | 110 | 110 |
| Ö13-32110120 | | | | | 230 | | | | | 110 | 120 |
| Ö13-32130120 | | | | | 250 | | | | | 130 | 120 |
| Ö13-32130130 | | | | | 260 | | | | | 130 | 130 |

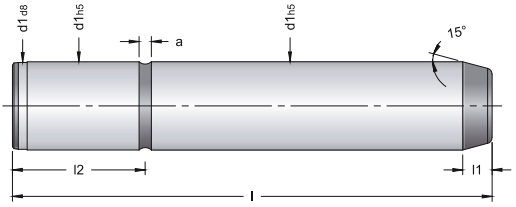
| Sipariş | b3 | d1 | d3 | d7 | l | l1 | l3 | M | d2 | l4 | l2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ö13-40100110 | 65 | 42 | 70 | 56 | 210 | 27 | 12 | M6 | 40 | 100 | 110 |
| Ö13-40100120 | | | | | 220 | | | | | 100 | 120 |
| Ö13-40120120 | | | | | 240 | | | | | 120 | 120 |
| Ö13-40120130 | | | | | 250 | | | | | 120 | 130 |
| Ö13-40140130 | | | | | 270 | | | | | 140 | 130 |
| Ö13-50130120 | 75 | 52 | 80 | 66 | 250 | 36 | 15 | M6 | 50 | 130 | 120 |
| Ö13-50150110 | | | | | 260 | | | | | 150 | 110 |
| Ö13-50150120 | | | | | 270 | | | | | 150 | 120 |



Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

## Ö12 - Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon

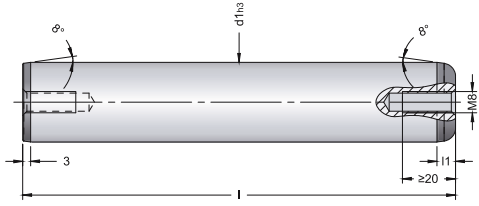



| Sipariş | PSA MABEC | RENAULT MABEC | d1 | L | L1 | L2 | a |
|---|---|---|---|---|---|---|---|
| Ö12-25100 | | | 25 | 100 | 8 | 25 | 2.5 |
| Ö12-25125 | | R100 018 363 | | 125 | | | |
| Ö12-25140 | | | | 140 | | | |
| Ö12-25160 | | | | 160 | | | |
| Ö12-25180 | | | | 180 | | | |
| Ö12-25200 | | | | 200 | | | |
| Ö12-25220 | | | | 220 | | | |
| Ö12-32125 | | | 32 | 125 | 10 | 32 | 4.2 |
| Ö12-32140 | | P446 116 817 | | 140 | | | |
| Ö12-32160 | | P446 116 815 | | 160 | | | |
| Ö12-32180 | | | | 180 | | | |
| Ö12-32200 | | P446 116 816 | | 200 | | | |
| Ö12-32220 | | | | 220 | | | |
| Ö12-32250 | | | | 250 | | | |
| Ö12-40180 | P446 117 470 | | 40 | 180 | 12 | 63 | 4.2 |
| Ö12-40200 | P446 117 401 | | | 200 | | | |
| Ö12-40220 | P446 117 476 | | | 220 | | | |
| Ö12-40250 | | | | 250 | | | |
| Ö12-40280 | | | | 280 | | | |
| Ö12-40315 | | | | 315 | | | |

| Sipariş | PSA MABEC | RENAULT MABEC | d1 | L | L1 | L2 | a |
|---|---|---|---|---|---|---|---|
| Ö12-50200 | | | 50 | 200 | 16 | 80 | 4.2 |
| Ö12-50220 | P446 118 170 | | | 220 | | | |
| Ö12-50224 | | P446 118 100 | | 224 | | | |
| Ö12-50250 | P446 118 174 | | | 250 | | | |
| Ö12-50280 | P446 118 101 | P446 118 101 | | 280 | | | |
| Ö12-50315 | | | | 315 | | | |
| Ö12-50355 | | | | 355 | | | |
| Ö12-50400 | | | | 400 | | | |
| Ö12-63250 | P446 118 701 | P446 118 701 | 63 | 250 | 16 | 100 | 6.2 |
| Ö12-63280 | | P446 118 707 | | 280 | | | |
| Ö12-63315 | P446 118 702 | P446 118 702 | | 315 | | | |
| Ö12-63355 | | | | 355 | | | |
| Ö12-63400 | | | | 400 | | | |
| Ö12-80315 | P446 119 200 | P446 119 200 | 80 | 315 | 16 | 125 | 6.2 |
| Ö12-80355 | P446 119 270 | P446 119 201 | | 355 | | | |
| Ö12-80400 | | R100 221 692 | | 400 | | | |
| Ö12-80450 | | | | 450 | | | |
| Ö12-100355 | | | 100 | 355 | 16 | 160 | 6.2 |
| Ö12-100400 | | P446 119 800 | | 400 | | | |
| Ö12-100450 | | P446 119 801 | | 450 | | | |
| Ö12-100500 | | | | 500 | | | |

## E14 - Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC **≈DIN 9825**
**Isıl İşlem** : İndüksiyon **≈ISO 9182-2**




| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E14-1590 | 15 | 90 | 4 |
| E14-15100 | | 100 | |
| E14-15112 | | 112 | |
| E14-15125 | | 125 | |
| E14-15140 | | 140 | |
| E14-15160 | | 160 | |
| E14-15180 | | 180 | |
| E14-15200 | | 200 | |
| E14-15224 | | 224 | |
| E14-1690 | 16 | 90 | 4 |
| E14-16100 | | 100 | |
| E14-16112 | | 112 | |
| E14-16125 | | 125 | |
| E14-16140 | | 140 | |
| E14-16160 | | 160 | |
| E14-16180 | | 180 | |
| E14-16200 | | 200 | |
| E14-16224 | | 224 | |
| E14-19100 | 19 | 100 | 4 |
| E14-19112 | | 112 | |
| E14-19125 | | 125 | |
| E14-19140 | | 140 | |
| E14-19160 | | 160 | |

| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E14-19180 | 19 | 180 | 4 |
| E14-19200 | | 200 | |
| E14-19224 | | 224 | |
| E14-19250 | | 250 | |
| E14-20100 | 20 | 100 | 4 |
| E14-20112 | | 112 | |
| E14-20125 | | 125 | |
| E14-20140 | | 140 | |
| E14-20160 | | 160 | |
| E14-20180 | | 180 | |
| E14-20200 | | 200 | |
| E14-20224 | | 224 | |
| E14-20250 | | 250 | |
| E14-24100 | 24 | 100 | 6 |
| E14-24112 | | 112 | |
| E14-24125 | | 125 | |
| E14-24140 | | 140 | |
| E14-24160 | | 160 | |
| E14-24180 | | 180 | |
| E14-24200 | | 200 | |
| E14-24224 | | 224 | |
| E14-24250 | | 250 | |
| E14-24280 | | 280 | |

| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E14-25100 | 25 | 100 | 6 |
| E14-25112 | | 112 | |
| E14-25125 | | 125 | |
| E14-25140 | | 140 | |
| E14-25160 | | 160 | |
| E14-25180 | | 180 | |
| E14-25200 | | 200 | |
| E14-25224 | | 224 | |
| E14-25250 | | 250 | |
| E14-25280 | | 280 | |
| E14-30125 | 30 | 125 | 6 |
| E14-30140 | | 140 | |
| E14-30160 | | 160 | |
| E14-30180 | | 180 | |
| E14-30200 | | 200 | |
| E14-30224 | | 224 | |
| E14-30250 | | 250 | |
| E14-30280 | | 280 | |
| E14-30315 | | 315 | |
| E14-32125 | 32 | 125 | |
| E14-32140 | | 140 | |
| E14-32160 | | 160 | |
| E14-32180 | | 180 | |

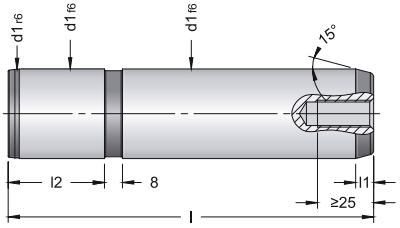
| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E14-32200 | 32 | 200 | 6 |
| E14-32224 | | 224 | |
| E14-32250 | | 250 | |
| E14-32280 | | 280 | |
| E14-32315 | | 315 | |
| E14-38160 | 38 | 160 | 6 |
| E14-38180 | | 180 | |
| E14-38200 | | 200 | |
| E14-38224 | | 224 | |
| E14-38250 | | 250 | |
| E14-38280 | | 280 | |
| E14-38315 | | 315 | |
| E14-38355 | | 355 | |
| E14-38400 | | 400 | |
| E14-40160 | 40 | 160 | 6 |
| E14-40180 | | 180 | |
| E14-40200 | | 200 | |
| E14-40224 | | 224 | |
| E14-40250 | | 250 | |
| E14-40280 | | 280 | |
| E14-40315 | | 315 | |
| E14-40355 | | 355 | |
| E14-40400 | | 400 | |

| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E14-48180 | 48 | 180 | 8 |
| E14-48200 | | 200 | |
| E14-48224 | | 224 | |
| E14-48250 | | 250 | |
| E14-48280 | | 280 | |
| E14-48315 | | 315 | |
| E14-48355 | | 355 | |
| E14-48400 | | 400 | |
| E14-48450 | | 450 | |
| E14-50180 | 50 | 180 | 8 |
| E14-50200 | | 200 | |
| E14-50224 | | 224 | |
| E14-50250 | | 250 | |
| E14-50280 | | 280 | |
| E14-50315 | | 315 | |
| E14-50355 | | 355 | |
| E14-50400 | | 400 | |
| E14-50450 | | 450 | |
| E14-60250 | 60 | 250 | 8 |
| E14-60280 | | 280 | |
| E14-60315 | | 315 | |
| E14-60355 | | 355 | |
| E14-60400 | | 400 | |

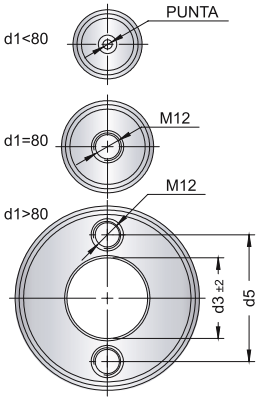
| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E14-60450 | 60 | 450 | 8 |
| E14-60500 | | 500 | |
| E14-63250 | 63 | 250 | 8 |
| E14-63280 | | 280 | |
| E14-63315 | | 315 | |
| E14-63355 | | 355 | |
| E14-63400 | | 400 | |
| E14-63450 | | 450 | |
| E14-63500 | | 500 | |
| E14-80280 | 80 | 280 | 8 |
| E14-80315 | | 315 | |
| E14-80355 | | 355 | |
| E14-80400 | | 400 | |
| E14-80450 | | 450 | |
| E14-80500 | | 500 | |

## Ö15 - Kolon

**Malzeme** : Çelik
**Sertlik** : 60 ± 2 HRC ≈DIN 9825
**Isıl İşlem** : İndüksiyon ≈ISO 9182-3



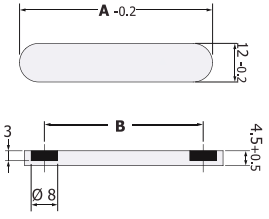

Ød1 = 80'e Kadar Merkez Deliksiz
Ød1 = 80 Merkezde 1xM12 Diş
Ød1 = 100'den Sonra
Merkez Deliği ve 2xM12 Diş

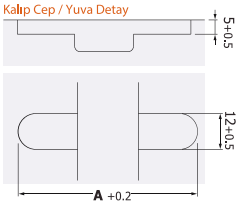



| Sipariş | d1 | L | d3 | d5 | L1 | L2 |
|---|---|---|---|---|---|---|
| Ö15-25125 | 25 | 125 | | | 8 | 40 |
| Ö15-25140 | | 140 | | | | |
| Ö15-25160 | | 160 | | | | |
| Ö15-25180 | | 180 | | | | |
| Ö15-25200 | | 200 | | | | |
| Ö15-25224 | | 224 | | | | |
| Ö15-32125 | 32 | 125 | | | 8 | 45 |
| Ö15-32140 | | 140 | | | | |
| Ö15-32160 | | 160 | | | | |
| Ö15-32180 | | 180 | | | | |
| Ö15-32200 | | 200 | | | | |
| Ö15-32224 | | 224 | | | | |
| Ö15-32250 | | 250 | | | | |
| Ö15-40140 | 40 | 140 | | | 8 | 56 |
| Ö15-40160 | | 160 | | | | |
| Ö15-40180 | | 180 | | | | |
| Ö15-40200 | | 200 | | | | |
| Ö15-40224 | | 224 | | | | |
| Ö15-40250 | | 250 | | | | |
| Ö15-40280 | | 280 | | | | |
| Ö15-50160 | 50 | 160 | | | 10 | 70 |
| Ö15-50180 | | 180 | | | | |
| Ö15-50200 | | 200 | | | | |
| Ö15-50224 | | 224 | | | | |
| Ö15-50250 | | 250 | | | | |
| Ö15-50280 | | 280 | | | | |
| Ö15-50315 | | 315 | | | | |
| Ö15-50355 | | 355 | | | | |

| Sipariş | PSA MABEC | d1 | L | d3 | d5 | L1 | L2 |
|---|---|---|---|---|---|---|---|
| Ö15-63180 | | 63 | 180 | | | 10 | 80 |
| Ö15-63200 | | | 200 | | | | |
| Ö15-63224 | | | 224 | | | | |
| Ö15-63250 | | | 250 | | | | |
| Ö15-63280 | | | 280 | | | | |
| Ö15-63315 | | | 315 | | | | |
| Ö15-63355 | | | 355 | | | | |
| Ö15-63400 | | | 400 | | | | |
| Ö15-80224 | | 80 | 224 | | | 10 | 100 |
| Ö15-80250 | | | 250 | | | | |
| Ö15-80280 | | | 280 | | | | |
| Ö15-80315 | | | 315 | | | | |
| Ö15-80355 | | | 355 | | | | |
| Ö15-80400 | | | 400 | | | | |
| Ö15-80450 | | | 450 | | | | |
| Ö15-80500 | | | 500 | | | | |
| Ö15-100250 | | 100 | 250 | 50 | 72 | 10 | 125 |
| Ö15-100280 | | | 280 | | | | |
| Ö15-100315 | | | 315 | | | | |
| Ö15-100355 | Z000499647 | | 355 | | | | |
| Ö15-100400 | | | 400 | | | | |
| Ö15-100450 | | | 450 | | | | |
| Ö15-100500 | | | 500 | | | | |
| Ö15-125315 | | 125 | 315 | 65 | 90 | 12 | 140 |
| Ö15-125355 | | | 355 | | | | |
| Ö15-125400 | Z000499648 | | 400 | | | | |
| Ö15-125450 | | | 450 | | | | |
| Ö15-125500 | | | 500 | | | | |
| Ö15-160400 | | 160 | 400 | 95 | 132 | 12 | 180 |
| Ö15-160450 | | | 450 | | | | |
| Ö15-160500 | | | 500 | | | | |
| Ö15-160560 | | | 560 | | | | |



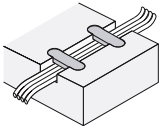



## Kablo Tutucu Kapağı

**Manyetik Ürün**
**Ekstra Delik Gerektirmez.**

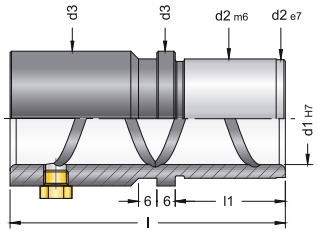
| Sipariş | A | B | Malzeme | SW |
|---|---|---|---|---|
| KABLO-40 | 40 | 28 | ABS + NfFeB | 80°C |
| KABLO-60 | 60 | 28 | ABS + NfFeB | 80°C |



Kablo tutucu 40 x 12 özellikle sıcak yolluklu kalıplardaki dağınık kabloların kanal içinde temiz ve düzgün durmasını sağlar.Ürün manyetik malzemedir, kendiliğinden yapışır ekstra delik delmeye gerek yoktur. Max. Kalıp sıcaklığını 80 °c'nin altında kalmasını tavsiye ediyoruz. Çünkü plastik hatta mıknatıslar yüksek ısıdan etkilenip bozulabilir.

## Ö23 - Ortadan Şapkalı Burç

**Malzeme** : 1.7131 (16MnCr5)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon




| Sipariş | d1 | L | L1 | d2 | d3 |
|---|---|---|---|---|---|
| Ö23-165923 | 16 | 59 | 23 | 30 | 32 |
| Ö23-207026 | 20 | 70 | 26 | 28 | 34 |
| Ö23-207036 | | | 36 | | |
| Ö23-258026 | 25 | 80 | 26 | 34 | 39 |
| Ö23-258036 | | | 36 | | |

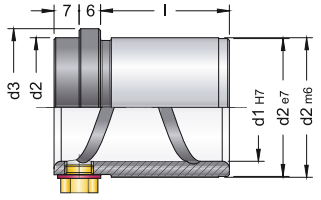
| Sipariş | d1 | L | L1 | d2 | d3 |
|---|---|---|---|---|---|
| Ö23-309036 | 30 | 90 | 36 | 39 | 44 |
| Ö23-309046 | | | 46 | | |
| Ö23-4010036 | 40 | 100 | 36 | 50 | 54 |
| Ö23-4010836 | | 108 | 36 | 58 | 65 |
| Ö23-4010046 | | 100 | 46 | 50 | 54 |

| Sipariş | d1 | L | L1 | d2 | d3 |
|---|---|---|---|---|---|
| Ö23-5012046 | 50 | 120 | 46 | 60 | 64 |
| Ö23-5012056 | | | 56 | | |
| Ö23-5012756 | | 127 | 56 | 70 | 75 |

| Sipariş | d1 | L | L1 | d2 | d3 |
|---|---|---|---|---|---|
| Ö23-6313056 | 63 | 130 | 56 | 80 | 87 |
| Ö23-6315056 | | 150 | 56 | 85 | 95 |
| Ö23-8015060 | 80 | 150 | 60 | 105 | 115 |

## Ö24 - Üstten Şapkalı Burç

**Malzeme** : 1.7131 (16MnCr5)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon




| Sipariş | d1 | d2 | L | d3 |
|---|---|---|---|---|
| Ö24-163023 | 16 | 30 | 23 | 34 |
| Ö24-202826 | 20 | 28 | 26 | 34 |
| Ö24-253426 | 25 | 34 | 26 | 39 |
| Ö24-303926 | 30 | 39 | 26 | 44 |
| Ö24-303936 | | | 36 | |

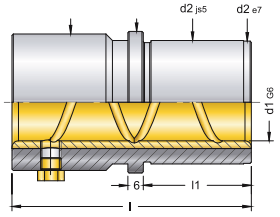
| Sipariş | d1 | d2 | L | d3 |
|---|---|---|---|---|
| Ö24-405036 | 40 | 50 | 36 | 54 |
| Ö24-405046 | | | 46 | |
| Ö24-405846 | | 58 | | 65 |
| Ö24-506046 | 50 | 60 | 46 | 64 |
| Ö24-507046 | | 70 | | 75 |

| Sipariş | d1 | d2 | L | d3 |
|---|---|---|---|---|
| Ö24-638546 | 63 | 85 | 46 | 95 |
| Ö24-638556 | | | 56 | |
| Ö24-8010560 | 80 | 105 | 60 | 115 |

## Ö25 - Uzun Bronz Burç

**Malzeme** : Çelik + Bronz
**Sertlik** : 52 ± 2 HRC / HB ≤ 180

**ISO-9448**




| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö25-165923 | 16 | 59 | 23 | 30 | 34 | 32 |
| Ö25-194323 | 19 | 43 | 23 | 32 | 40 | 39 |
| Ö25-195923 | | 59 | | | | |
| Ö25-195933 | | | 33 | | | |
| Ö25-204323 | 20 | 43 | 23 | 32 | 40 | 39 |
| Ö25-205923 | | 59 | | | | |
| Ö25-205933 | | | 33 | | | |
| Ö25-245923 | 24 | 59 | 23 | 40 | 48 | 46 |
| Ö25-247923 | | 79 | | | | |
| Ö25-247933 | | | 33 | | | |

| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö25-255923 | 25 | 59 | 23 | 40 | 48 | 46 |
| Ö25-257923 | | 79 | | | | |
| Ö25-257933 | | | 33 | | | |
| Ö25-307530 | 30 | 75 | 30 | 48 | 56 | 53 |
| Ö25-309330 | | 93 | | | | |
| Ö25-309340 | | | 40 | | | |
| Ö25-327530 | 32 | 75 | 30 | 48 | 56 | 53 |
| Ö25-329330 | | 93 | | | | |
| Ö25-329340 | | | 40 | | | |

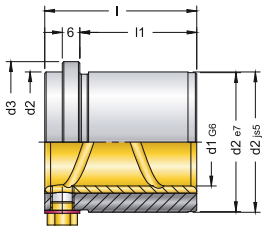
| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö25-388237 | 38 | 82 | 37 | 58 | 66 | 63 |
| Ö25-3810837 | | 108 | | | | |
| Ö25-3810847 | | | 47 | | | |
| Ö25-408237 | 40 | 82 | 37 | 58 | 66 | 63 |
| Ö25-4010837 | | 108 | | | | |
| Ö25-4010847 | | | 47 | | | |
| Ö25-489747 | 48 | 97 | 47 | 70 | 80 | 77 |
| Ö25-4812747 | | 127 | | | | |
| Ö25-4812757 | | | 57 | | | |

| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö25-509747 | 50 | 97 | 47 | 70 | 80 | 77 |
| Ö25-5012747 | | 127 | | | | |
| Ö25-5012757 | | | 57 | | | |
| Ö25-6011660 | 60 | 116 | 60 | 85 | 95 | 92 |
| Ö25-6015060 | | 150 | | | | |
| Ö25-6311660 | 63 | 116 | 60 | 85 | 95 | 92 |
| Ö25-6315060 | | 150 | | | | |
| Ö25-8012060 | 80 | 120 | 60 | 105 | 118 | 115 |
| Ö25-8015060 | | 150 | | | | |

## Ö26 - Kısa Bronz Burç

**Malzeme** : Çelik + Bronz
**Sertlik** : 52 ± 2 HRC / HB ≤ 180

**ISO-9448**




| Sipariş | d1 | L | L1 | d2 | d4 |
|---|---|---|---|---|---|
| Ö26-163523 | 16 | 35 | 23 | 30 | 34 |
| Ö26-193523 | 19 | 35 | 23 | 32 | 40 |
| Ö26-194533 | | 45 | 33 | | |
| Ö26-203523 | 20 | 35 | 23 | 32 | 40 |
| Ö26-204533 | | 45 | 33 | | |
| Ö26-243523 | 24 | 35 | 23 | 40 | 48 |
| Ö26-244533 | | 45 | 33 | | |

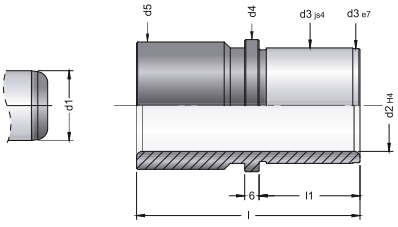
| Sipariş | d1 | L | L1 | d2 | d4 |
|---|---|---|---|---|---|
| Ö26-253523 | 25 | 35 | 23 | 40 | 48 |
| Ö26-254533 | | 45 | 33 | | |
| Ö26-304230 | 30 | 42 | 30 | 48 | 56 |
| Ö26-305240 | | 52 | 40 | | |
| Ö26-324230 | 32 | 42 | 30 | 48 | 56 |
| Ö26-325240 | | 52 | 40 | | |

| Sipariş | d1 | L | L1 | d2 | d4 |
|---|---|---|---|---|---|
| Ö26-385237 | 38 | 52 | 37 | 58 | 66 |
| Ö26-386247 | | 62 | 47 | | |
| Ö26-405237 | 40 | 52 | 37 | 58 | 66 |
| Ö26-406247 | | 62 | 47 | | |
| Ö26-486547 | 48 | 65 | 47 | 70 | 80 |
| Ö26-487557 | | 75 | 57 | | |

| Sipariş | d1 | L | L1 | d2 | d4 |
|---|---|---|---|---|---|
| Ö26-506547 | 50 | 65 | 47 | 70 | 80 |
| Ö26-507557 | | 75 | 57 | | |
| Ö26-608060 | 60 | 80 | 60 | 85 | 95 |
| Ö26-638060 | 63 | 80 | 60 | 85 | 95 |
| Ö26-808060 | 80 | 80 | 60 | 105 | 118 |

## Ö27 - Şapkalı Bilyalı Burç

**Malzeme** : 1.3505 (100Cr6)
**Sertlik** : 62 ± 2 HRC **DIN 9831**
**Isıl İşlem** : Sertleştirme **ISO-9448-7**




| Sipariş | d1 | L | L1 | d2 | d3 | d4 | d5 |
|---|---|---|---|---|---|---|---|
| Ö27-154323 | 15 | 43 | 23 | 21 | 30 | 34 | 32 |
| Ö27-155923 | | 59 | | | | | |
| Ö27-155933 | | | 33 | | | | |
| Ö27-164323 | 16 | 43 | 23 | 22 | 30 | 34 | 32 |
| Ö27-165923 | | 59 | | | | | |
| Ö27-165933 | | | 33 | | | | |
| Ö27-194323 | 19 | 43 | 23 | 25 | 32 | 40 | 39 |
| Ö27-195923 | | 59 | | | | | |
| Ö27-195933 | | | 33 | | | | |
| Ö27-204323 | 20 | 43 | 23 | 26 | 32 | 40 | 39 |

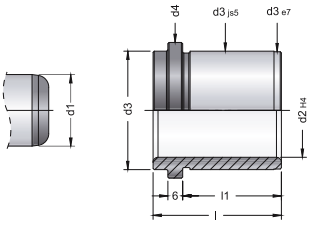
| Sipariş | d1 | L | L1 | d2 | d3 | d4 | d5 |
|---|---|---|---|---|---|---|---|
| Ö27-205923 | 20 | 59 | 23 | 26 | 32 | 40 | 39 |
| Ö27-205933 | | | 33 | | | | |
| Ö27-245923 | 24 | 59 | 23 | 30 | 40 | 48 | 46 |
| Ö27-247923 | | 79 | | | | | |
| Ö27-247933 | | | 33 | | | | |
| Ö27-255923 | 25 | 59 | 23 | 31 | 40 | 48 | 46 |
| Ö27-257923 | | 79 | | | | | |
| Ö27-257933 | | | 33 | | | | |
| Ö27-307530 | 30 | 75 | 30 | 38 | 48 | 55 | 53 |
| Ö27-309330 | | 93 | | | | | |

| Sipariş | d1 | L | L1 | d2 | d3 | d4 | d5 |
|---|---|---|---|---|---|---|---|
| Ö27-309340 | 30 | 93 | 40 | 38 | 48 | 55 | 53 |
| Ö27-327530 | 32 | 75 | 30 | 40 | 48 | 55 | 53 |
| Ö27-329330 | | 93 | | | | | |
| Ö27-329340 | | | 40 | | | | |
| Ö27-388237 | 38 | 82 | 37 | 46 | 58 | 66 | 63 |
| Ö27-3810837 | | 108 | | | | | |
| Ö27-3810847 | | | 47 | | | | |
| Ö27-408237 | 40 | 82 | 37 | 48 | 58 | 66 | 63 |
| Ö27-4010837 | | 108 | | | | | |
| Ö27-4010847 | | | 47 | | | | |

| Sipariş | d1 | L | L1 | d2 | d3 | d4 | d5 |
|---|---|---|---|---|---|---|---|
| Ö27-489747 | 48 | 97 | 47 | 56 | 70 | 80 | 77 |
| Ö27-4812747 | | 127 | | | | | |
| Ö27-4812757 | | | 57 | | | | |
| Ö27-509747 | 50 | 97 | 47 | 58 | 70 | 80 | 77 |
| Ö27-5012747 | | 127 | | | | | |
| Ö27-5012757 | | | 57 | | | | |
| Ö27-6011660 | 60 | 116 | 60 | 68 | 85 | 95 | 92 |
| Ö27-6015060 | | 150 | | | | | |
| Ö27-6311660 | 63 | 116 | 60 | 71 | 85 | 95 | 92 |
| Ö27-6315060 | | 150 | | | | | |
| Ö27-8012060 | 80 | 120 | 60 | 92 | 105 | 115 | 112 |
| Ö27-8015060 | | 150 | | | | | |

## Ö28 - Kısa Bilyalı Burç

**Malzeme** : 1.3505 (100Cr6)
**Sertlik** : 62 ± 2 HRC **DIN 9831**
**Isıl İşlem** : Sertleştirme **ISO-9448-7**




| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö28-153523 | 15 | 35 | 23 | 21 | 30 | 34 |
| Ö28-154533 | | 45 | 33 | | | |
| Ö28-163523 | 16 | 35 | 23 | 22 | 30 | 34 |
| Ö28-164533 | | 45 | 33 | | | |
| Ö28-193523 | 19 | 35 | 23 | 25 | 32 | 40 |
| Ö28-194533 | | 45 | 33 | | | |
| Ö28-203523 | 20 | 35 | 23 | 26 | 32 | 40 |
| Ö28-204533 | | 45 | 33 | | | |

| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö28-243523 | 24 | 35 | 23 | 30 | 40 | 48 |
| Ö28-244533 | | 45 | 33 | | | |
| Ö28-253523 | 25 | 35 | 23 | 31 | 40 | 48 |
| Ö28-254533 | | 45 | 33 | | | |
| Ö28-304230 | 30 | 42 | 30 | 38 | 48 | 56 |
| Ö28-305240 | | 52 | 40 | | | |
| Ö28-324230 | 32 | 42 | 30 | 40 | 48 | 56 |
| Ö28-325240 | | 52 | 40 | | | |

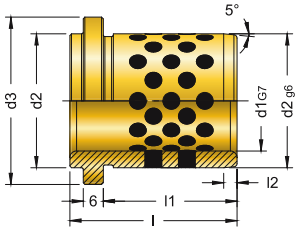
| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö28-385237 | 38 | 52 | 37 | 46 | 58 | 66 |
| Ö28-386247 | | 62 | 47 | | | |
| Ö28-405237 | 40 | 52 | 37 | 48 | 58 | 66 |
| Ö28-406247 | | 62 | 47 | | | |
| Ö28-486547 | 48 | 65 | 47 | 56 | 70 | 80 |
| Ö28-487557 | | 75 | 57 | | | |
| Ö28-506547 | 50 | 65 | 47 | 58 | 70 | 80 |
| Ö28-507557 | | 75 | 57 | | | |

| Sipariş | d1 | L | L1 | d2 | d3 | d4 |
|---|---|---|---|---|---|---|
| Ö28-608060 | 60 | 80 | 60 | 68 | 85 | 95 |
| Ö28-638060 | 63 | 80 | 60 | 71 | 85 | 95 |
| Ö28-808060 | 80 | 80 | 60 | 92 | 105 | 115 |

★ HAAF ★

## H30.01 - Grafitli Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180 **≈DIN 9832**



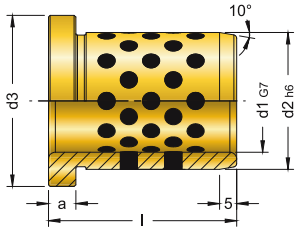

| Sipariş | FORD WDX1360 | NAAMS G61 | OPEL U2802-99(A) | d1 | L | d2 | d3 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|
| H3001-2040 | | | | 20 | 40 | 28 | 34 | 30 | 4 |
| H3001-2540 | 08025 | 2540 | F33020019 | 25 | 40 | 32 | 40 | 30 | 4 |
| H3001-3050 | | | | 30 | 50 | 40 | 50 | 40 | 4 |
| H3001-3250 | 08032 | 3250 | F33020020 | 32 | 50 | 40 | 50 | 40 | 4 |
| H3001-4063 | 08040 | 4063 | F330200021 | 40 | 63 | 50 | 63 | 50 | 5 |

| Sipariş | FORD WDX1360 | NAAMS G61 | OPEL U2802-99(A) | d1 | L | d2 | d3 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|
| H3001-5071 | 08050 | 5071 | F33020022 | 50 | 71 | 63 | 71 | 56 | 6 |
| H3001-6380 | 08063 | 6300 | F33020023 | 63 | 80 | 80 | 90 | 63 | 8 |
| H3001-80100 | 08080 | 8010 | F33020024 | 80 | 100 | 100 | 112 | 80 | 10 |
| H3001-100125 | 08100 | 1012 | F33020025 | 100 | 125 | 125 | 140 | 106 | 12 |
| H3001-125160 | 08125 | 1216 | F33020026 | 125 | 160 | 160 | 180 | 132 | 12 |

★ HAAF ★

## H30.02 - Grafitli Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180




| Sipariş | FORD WDX1360 | FORD WSA 003 | d1 | L | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| H3002-2035 | 05020 | 11020 | 20 | 35 | 28 | 36 | 8 |
| H3002-2540 | | | 25 | 40 | 32 | 40 | 8 |
| H3002-3055 | | | 30 | 55 | 40 | 50 | 8 |
| H3002-3255 | 05032 | | 32 | 55 | 40 | 50 | 8 |

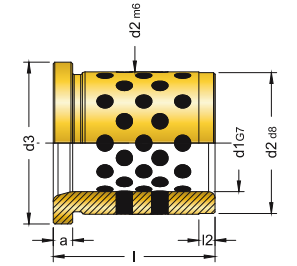
| Sipariş | FORD WDX1360 | FORD WSA 003 | d1 | L | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| H3002-4070 | 05040 | | 40 | 70 | 50 | 60 | 8 |
| H3002-4270 | 05042 | 11042 | 42 | 70 | 50 | 60 | 8 |
| H3002-5075 | 05050 | | 50 | 75 | 63 | 75 | 12 |
| H3002-5275 | 05052 | 11052 | 52 | 75 | 63 | 75 | 12 |

| Sipariş | FORD WDX1360 | d1 | L | d2 | d3 | a |
|---|---|---|---|---|---|---|
| H3002-6380 | 05063 | 63 | 80 | 80 | 90 | 12 |
| H3002-80100 | 05080 | 80 | 100 | 100 | 110 | 12 |
| H3002-100125 | 05100 | 100 | 125 | 125 | 135 | 12 |

★ HAAF ★

## H30.03 - Grafitli Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180



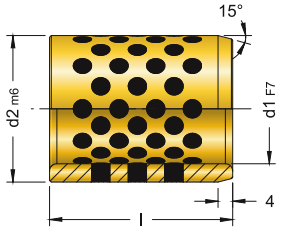

| Sipariş | PSA MABEC CODE | RENAULT MABEC CODE | d1 | L | d2 | d3 | a | L2 |
|---|---|---|---|---|---|---|---|---|
| H3003-2540 | | | 25 | 40 | 35 | 40 | 5 | 5 |
| H3003-3250 | | | 32 | 50 | 44 | 50 | 6 | 5 |
| H3003-4063 | X345 274 670 | M764 539 401 | 40 | 63 | 52 | 60 | 8 | 8 |
| H3003-5080 | X345 281 970 | M764 544 501 | 50 | 80 | 63 | 71 | 10 | 8 |

| Sipariş | PSA MABEC CODE | RENAULT MABEC CODE | d1 | L | d2 | d3 | a | L2 |
|---|---|---|---|---|---|---|---|---|
| H3003-63100 | X345 287 270 | M764 549 501 | 63 | 100 | 80 | 90 | 12 | 10 |
| H3003-80125 | X345 292 370 | M764 554 601 | 80 | 125 | 100 | 112 | 16 | 10 |
| H3003-100160 | | X345 298 500 | 100 | 160 | 125 | 140 | 20 | 10 |

★ HAAF ★

## H30.04 - Grafitli Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180




| Sipariş | d1 | L | d2 | L1 |
|---|---|---|---|---|
| H3004-162022 | 16 | 20 | 22 | 2 |
| H3004-162522 | | 25 | | |
| H3004-163022 | | 30 | | |
| H3004-163522 | | 35 | | |
| H3004-164022 | | 40 | | |
| H3004-201528 | 20 | 15 | 28 | 4 |
| H3004-201628 | | 16 | 28 | |
| H3004-201630 | | 16 | 30 | |
| H3004-202028 | | 20 | 28 | |
| H3004-202030 | | 20 | 30 | |
| H3004-202528 | | 25 | 28 | |
| H3004-202530 | | 25 | 30 | |
| H3004-203028 | | 30 | 28 | |
| H3004-203030 | | 30 | 30 | |
| H3004-203528 | | 35 | 28 | |
| H3004-203530 | | 35 | 30 | |
| H3004-203728 | | 37 | 28 | |
| H3004-204026 | | 40 | 26 | |
| H3004-204028 | | 40 | 28 | |
| H3004-204030 | | 40 | 30 | |
| H3004-205028 | | 50 | 28 | |
| H3004-251633 | 25 | 16 | 33 | 4 |
| H3004-251635 | | 16 | 35 | |
| H3004-252033 | | 20 | 33 | |
| H3004-252035 | | 20 | 35 | |
| H3004-252533 | | 25 | 33 | |
| H3004-252535 | | 25 | 35 | |
| H3004-253033 | | 30 | 33 | |
| H3004-253035 | | 30 | 35 | |
| H3004-253533 | | 35 | 33 | |

| Sipariş | d1 | L | d2 | L1 |
|---|---|---|---|---|
| H3004-253535 | 25 | 35 | 35 | 4 |
| H3004-254033 | | 40 | 33 | |
| H3004-254035 | | 40 | 35 | |
| H3004-254733 | | 47 | 33 | |
| H3004-255032 | | 50 | 32 | |
| H3004-255033 | | 50 | 33 | |
| H3004-255035 | | 50 | 35 | |
| H3004-256033 | | 60 | 33 | |
| H3004-302038 | 30 | 20 | 38 | 4 |
| H3004-302040 | | 20 | 40 | |
| H3004-302538 | | 25 | 38 | |
| H3004-302540 | | 25 | 40 | |
| H3004-303038 | | 30 | 38 | |
| H3004-303040 | | 30 | 40 | |
| H3004-303538 | | 35 | 38 | |
| H3004-303540 | | 35 | 40 | |
| H3004-304038 | | 40 | 38 | |
| H3004-304040 | | 40 | 40 | |
| H3004-305038 | | 50 | 38 | |
| H3004-305040 | | 50 | 40 | |
| H3004-306038 | | 60 | 38 | |
| H3004-306040 | | 60 | 40 | |
| H3004-306042 | | 60 | 42 | |
| H3004-352045 | 35 | 20 | 45 | 4 |
| H3004-352544 | | 25 | 44 | |
| H3004-352545 | | 25 | 45 | |
| H3004-353044 | | 30 | 44 | |
| H3004-353045 | | 30 | 45 | |
| H3004-353544 | | 35 | 44 | |
| H3004-353545 | | 35 | 45 | |

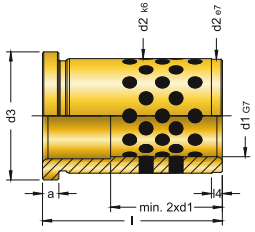
| Sipariş | d1 | L | d2 | L1 |
|---|---|---|---|---|
| H3004-354044 | 35 | 40 | 44 | 4 |
| H3004-354045 | | 40 | 45 | |
| H3004-355044 | | 50 | 44 | |
| H3004-355045 | | 50 | 45 | |
| H3004-356044 | | 60 | 44 | |
| H3004-356045 | | 60 | 45 | |
| H3004-402050 | 40 | 20 | 50 | 4 |
| H3004-402550 | | 25 | 50 | |
| H3004-402555 | | 25 | 55 | |
| H3004-403050 | | 30 | 50 | |
| H3004-403055 | | 30 | 55 | |
| H3004-403550 | | 35 | 50 | |
| H3004-403555 | | 35 | 55 | |
| H3004-404050 | | 40 | 50 | |
| H3004-404055 | | 40 | 55 | |
| H3004-405050 | | 50 | 50 | |
| H3004-405055 | | 50 | 55 | |
| H3004-406050 | | 60 | 50 | |
| H3004-406055 | | 60 | 55 | |
| H3004-407050 | | 70 | 50 | |
| H3004-407750 | | 77 | 50 | |
| H3004-408050 | | 80 | 50 | |
| H3004-503060 | 50 | 30 | 60 | 4 |
| H3004-503062 | | 30 | 62 | |
| H3004-503065 | | 30 | 65 | |
| H3004-503560 | | 35 | 60 | |
| H3004-503562 | | 35 | 62 | |
| H3004-504060 | | 40 | 60 | |
| H3004-504062 | | 40 | 62 | |
| H3004-504065 | | 40 | 65 | |

| Sipariş | d1 | L | d2 | L1 |
|---|---|---|---|---|
| H3004-505060 | 50 | 50 | 60 | 4 |
| H3004-505062 | | 50 | 62 | |
| H3004-505065 | | 50 | 65 | |
| H3004-506060 | | 60 | 60 | |
| H3004-506062 | | 60 | 62 | |
| H3004-506065 | | 60 | 65 | |
| H3004-507060 | | 70 | 60 | |
| H3004-507062 | | 70 | 62 | |
| H3004-507065 | | 70 | 65 | |
| H3004-508060 | | 80 | 60 | |
| H3004-508065 | | 80 | 65 | |
| H3004-509560 | | 95 | 60 | |
| H3004-5010065 | | 100 | 65 | |
| H3004-633074 | 63 | 30 | 74 | 4 |
| H3004-633075 | | 30 | 75 | |
| H3004-633574 | | 35 | 74 | |
| H3004-633575 | | 35 | 75 | |
| H3004-634074 | | 40 | 74 | |
| H3004-634075 | | 40 | 75 | |
| H3004-635074 | | 50 | 74 | |
| H3004-635075 | | 50 | 75 | |
| H3004-636074 | | 60 | 74 | |
| H3004-636075 | | 60 | 75 | |
| H3004-637074 | | 70 | 74 | |
| H3004-637075 | | 70 | 75 | |
| H3004-638074 | | 80 | 74 | |
| H3004-638075 | | 80 | 75 | |
| H3004-6310075 | | 100 | 75 | |

★ HAAF ★

## H30.05 - Grafitli Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180




| Sipariş | d1 | L | d2 | d3 | a | L4 |
|---|---|---|---|---|---|---|
| H3005-1627 | 16 | 27 | 22 | 27 | 6 | 2 |
| H3005-1636 | | 36 | | | | |
| H3005-1646 | | 46 | | | | |
| H3005-1656 | | 56 | | | | |
| H3005-2017 | 20 | 17 | 26 | 31 | 6 | 2 |
| H3005-2022 | | 22 | | | | |
| H3005-2027 | | 27 | | | | |
| H3005-2036 | | 36 | | | | |
| H3005-2046 | | 46 | | | | |
| H3005-2056 | | 56 | | | | |
| H3005-2066 | | 66 | | | | |
| H3005-2076 | | 76 | | | | |
| H3005-2546 | 25 | 46 | 32 | 38 | 6 | 3 |
| H3005-2556 | | 56 | | | | |

| Sipariş | d1 | L | d2 | d3 | a | L4 |
|---|---|---|---|---|---|---|
| H3005-2566 | 25 | 66 | 32 | 38 | 6 | 3 |
| H3005-2576 | | 76 | | | | |
| H3005-2586 | | 86 | | | | |
| H3005-3027 | 30 | 27 | 42 | 47 | 6 | 4 |
| H3005-3036 | | 36 | | | | |
| H3005-3046 | | 46 | | | | |
| H3005-3056 | | 56 | | | | |
| H3005-3066 | | 66 | | | | |
| H3005-3076 | | 76 | | | | |
| H3005-3086 | | 86 | | | | |
| H3005-3096 | | 96 | | | | |
| H3005-30116 | | 116 | | | | |
| H3005-4046 | 40 | 46 | 54 | 60 | 10 | 5 |
| H3005-4056 | | 56 | | | | |

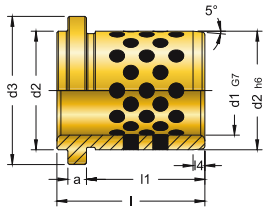
| Sipariş | d1 | L | d2 | d3 | a | L4 |
|---|---|---|---|---|---|---|
| H3005-4066 | 40 | 66 | 54 | 60 | 10 | 5 |
| H3005-4076 | | 76 | | | | |
| H3005-4086 | | 86 | | | | |
| H3005-4096 | | 96 | | | | |
| H3005-40116 | | 116 | | | | |
| H3005-40136 | | 136 | | | | |
| H3005-40156 | | 156 | | | | |
| H3005-5076 | 50 | 76 | 66 | 72 | 10 | 5 |
| H3005-5086 | | 86 | | | | |
| H3005-5096 | | 96 | | | | |
| H3005-50116 | | 116 | | | | |
| H3005-50136 | | 136 | | | | |

| Sipariş | d1 | L | d2 | d3 | a | L4 |
|---|---|---|---|---|---|---|
| H3005-50156 | 50 | 156 | 66 | 72 | 10 | 5 |
| H3005-50196 | | 196 | | | | |
| H3005-6096 | 60 | 96 | 80 | 86 | 20 | 5 |
| H3005-60116 | | 116 | | | | |
| H3005-60136 | | 136 | | | | |
| H3005-60156 | | 156 | | | | |
| H3005-60196 | | 196 | | | | |
| H3005-6396 | 63 | 96 | 80 | 86 | 20 | 5 |
| H3005-63116 | | 116 | | | | |
| H3005-63136 | | 136 | | | | |
| H3005-63156 | | 156 | | | | |
| H3005-63196 | | 196 | | | | |

★ HAAF ★

## H3006 - Grafitli Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180



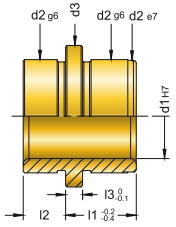

| Sipariş | BMW CODE BMW 2933 1 | PSA MABEC | d1 | L | d2 | d3 | D6 | L1 | a | L4 |
|---|---|---|---|---|---|---|---|---|---|---|
| H3006-2540 | 2168699 | | 25 | 40 | 32 | 40 | 58 | 30 | 6.3 | 3 |
| H3006-3250 | 2168700 | | 32 | 50 | 40 | 50 | 66 | 40 | 6.3 | 4 |
| H3006-4063 | 2168701 | | 40 | 63 | 50 | 63 | 79 | 50 | 6.3 | 5 |
| H3006-5071 | 2168702 | | 50 | 71 | 63 | 71 | 89 | 56 | 6.3 | 6.3 |
| H3006-6380 | 2168703 | | 63 | 80 | 80 | 90 | 123 | 63 | 10 | 8 |

| Sipariş | BMW CODE BMW 2933 1 | PSA MABEC | d1 | L | d2 | d3 | D6 | L1 | a | L4 |
|---|---|---|---|---|---|---|---|---|---|---|
| H3006-80100 | 2168704 | | 80 | 100 | 100 | 112 | 143 | 80 | 10 | 10 |
| H3006-100125 | 2168705 | Z000499644 | 100 | 125 | 125 | 140 | 168 | 106 | 10 | 12.5 |
| H3006-125160 | 2168706 | Z000499646 | 125 | 160 | 160 | 180 | 203 | 132 | 10 | 16 |
| H3006-160200 | 2168707 | | 160 | 200 | 200 | 220 | 243 | 170 | 10 | 16 |

★ HAAF ★

## H300701 - Bronz Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180




| Sipariş | l3 | d2 | d3 | d1 | l2 | l1 |
|---|---|---|---|---|---|---|
| H300701-100510 | 3 | 14 | 16 | 10 | 5 | 10 |
| H300701-100912 | 6 | | 17 | 10 | 9 | 12 |
| H300701-100917 | | | | 10 | 9 | 17 |
| H300701-101010 | 3 | | 16 | 10 | 10 | 10 |
| H300701-120917 | 6 | 16 | 19 | 12 | 9 | 17 |
| H300701-121217 | | | | 12 | 12 | 17 |
| H300701-141217 | | 18 | 21 | 14 | 12 | 17 |
| H300701-141222 | | | | 14 | 12 | 22 |
| H300701-141722 | | | | 14 | 17 | 22 |

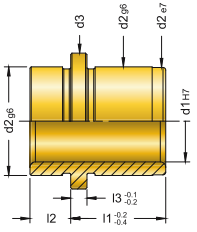
| Sipariş | l3 | d2 | d3 | d1 | l2 | l1 |
|---|---|---|---|---|---|---|
| H300701-181217 | 6 | 24 | 27 | 18 | 12 | 17 |
| H300701-181222 | | | | 18 | 12 | 22 |
| H300701-181722 | | | | 18 | 17 | 22 |
| H300701-181727 | | | | 18 | 17 | 27 |
| H300701-182227 | | | | 18 | 22 | 27 |
| H300701-201722 | | 26 | 29 | 20 | 17 | 22 |
| H300701-202227 | | | | 20 | 22 | 27 |
| H300701-221722 | | 28 | 31 | 22 | 17 | 22 |
| H300701-222227 | | | | 22 | 22 | 27 |

| Sipariş | l3 | d2 | d3 | d1 | l2 | l1 |
|---|---|---|---|---|---|---|
| H300701-241722 | 6 | 30 | 33 | 24 | 17 | 22 |
| H300701-241727 | | | | 24 | 17 | 27 |
| H300701-242227 | | | | 24 | 22 | 27 |
| H300701-242736 | | | | 24 | 27 | 36 |
| H300701-302227 | | 38 | 41 | 30 | 22 | 27 |
| H300701-302736 | | | | 30 | 27 | 36 |
| H300701-302746 | | | | 30 | 27 | 46 |
| H300701-303646 | | | | 30 | 36 | 46 |
| H300701-403646 | | 45 | 51 | 40 | 36 | 46 |

★ HAAF ★

## H300702 - Bronz Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180



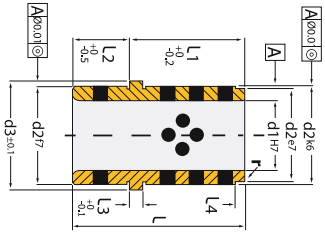

| Sipariş | l3 | d2 | d3 | d1 | l2 | l1 |
|---|---|---|---|---|---|---|
| H300702-240917 | 5 | 32 | 36 | 24 | 9 | 17 |
| H300702-241217 | | | | | 12 | 17 |
| H300702-240620 | | | | | 6 | 20 |
| H300702-361217 | 5 | 44 | 48 | 36 | 12 | 17 |
| H300702-361222 | | | | | 12 | 22 |

| Sipariş | l3 | d2 | d3 | d1 | l2 | l1 |
|---|---|---|---|---|---|---|
| H300702-361722 | 5 | 44 | 48 | 36 | 17 | 22 |
| H300702-360624 | | | | | 6 | 24 |
| H300702-481722 | 6 | 58 | 62 | 48 | 17 | 22 |
| H300702-481727 | | | | | 17 | 27 |
| H300702-481030 | | | | | 10 | 30 |

★ HAAF ★

## H26 - Grafitli Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180



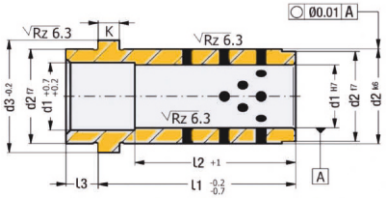

| Sipariş | d1 | l | d2 | d3 | l1 | l2 | l3 | l4 | r |
|---|---|---|---|---|---|---|---|---|---|
| H26-1426 | 14 | 26 | 20 | 25 | 17 | 9 | 6 | 2 | 1 |
| H26-1626 | 16 | 26 | 20 | 25 | 17 | 9 | | 2 | 1 |
| H26-2039 | 20 | 39 | 26 | 31 | 22 | 17 | | 2 | 1.5 |
| H26-2249 | 22 | 49 | 30 | 35 | 27 | 22 | | 4 | 1.5 |

| Sipariş | d1 | l | d2 | d3 | l1 | l2 | l3 | l4 | r |
|---|---|---|---|---|---|---|---|---|---|
| H26-2549 | 25 | 49 | 30 | 35 | 27 | 22 | 6 | 2 | 2 |
| H26-3063 | 30 | 63 | 42 | 47 | 36 | 27 | | 2 | 5 |
| H26-4063 | 40 | 63 | 50 | 60 | 36 | 27 | 8 | 8 | 5 |
| H26-5092 | 50 | 92 | 63 | 72 | 55 | 37 | | 8 | 5 |

★ HAAF ★

## H27 - Grafitli Kuyruklu Bronz Burç

**Malzeme** : SAE 430B
**Sertlik** : HB ≥180




| Sipariş | d1 | l1 | d2 | d3 | K | l3 |
|---|---|---|---|---|---|---|
| H27-1417 | 14 | 17 | 20 | 25 | 6 | 6 |
| H27-1422 | | 22 | | | | |
| H27-1427 | | 27 | | | | |
| H27-1436 | | 36 | | | | |
| H27-1446 | | 46 | | | | |
| H27-1456 | | 56 | | l2 > 2-3 x d1 | | |
| H27-1517 | 15 | 17 | 20 | 25 | 6 | 6 |
| H27-1522 | | 22 | | | | |
| H27-1527 | | 27 | | | | |
| H27-1536 | | 36 | | | | |
| H27-1546 | | 46 | | | | |
| H27-1556 | | 56 | | l2 > 2-3 x d1 | | |
| H27-1617 | 16 | 17 | 20 | 25 | 6 | 8 |
| H27-1622 | | 22 | | | | |
| H27-1627 | | 27 | | | | |
| H27-1636 | | 36 | | | | |
| H27-1646 | | 46 | | | | |
| H27-1656 | | 56 | | | | |
| H27-1666 | | 66 | | | | |
| H27-1676 | | 76 | | l2 > 2-3 x d1 | | |
| H27-1822 | 18 | 22 | 26 | 31 | 6 | 8 |
| H27-1827 | | 27 | | | | |
| H27-1836 | | 36 | | | | |
| H27-1846 | | 46 | | | | |
| H27-1856 | | 56 | | | | |
| H27-1866 | | 66 | | | | |
| H27-1876 | | 76 | | | | |
| H27-1886 | | 86 | | | | |
| H27-1896 | | 96 | | l2 > 2-3 x d1 | | |
| H27-2022 | 20 | 22 | 26 | 31 | 6 | 8 |
| H27-2027 | | 27 | | | | |
| H27-2036 | | 36 | | | | |
| H27-2046 | | 46 | | | | |
| H27-2056 | | 56 | | l2 > 2-3 x d1 | | |

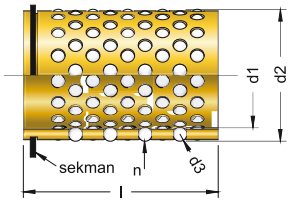
| Sipariş | d1 | l1 | d2 | d3 | K | l3 |
|---|---|---|---|---|---|---|
| H27-2066 | 20 | 66 | 26 | 31 | 6 | 8 |
| H27-2076 | | 76 | | | | |
| H27-2086 | | 86 | | | | |
| H27-2096 | | 96 | | l2 > 2-3 x d1 | | |
| H27-2227 | 22 | 27 | 30 | 35 | 6 | 8 |
| H27-2236 | | 36 | | | | |
| H27-2246 | | 46 | | | | |
| H27-2256 | | 56 | | | | |
| H27-2266 | | 66 | | | | |
| H27-2276 | | 76 | | | | |
| H27-2286 | | 86 | | | | |
| H27-2296 | | 96 | | l2 > 2-3 x d1 | | |
| H27-2427 | 24 | 27 | 30 | 35 | 6 | 8 |
| H27-2436 | | 36 | | | | |
| H27-2446 | | 46 | | | | |
| H27-2456 | | 56 | | | | |
| H27-2466 | | 66 | | | | |
| H27-2476 | | 76 | | | | |
| H27-2486 | | 86 | | | | |
| H27-2496 | | 96 | | l2 > 2-3 x d1 | | |
| H27-2527 | 25 | 27 | 30 | 35 | 6 | 8 |
| H27-2536 | | 36 | | | | |
| H27-2546 | | 46 | | | | |
| H27-2556 | | 56 | | | | |
| H27-2566 | | 66 | | | | |
| H27-2576 | | 76 | | | | |
| H27-2586 | | 86 | | | | |
| H27-2596 | | 96 | | l2 > 2-3 x d1 | | |
| H27-3027 | 30 | 27 | 42 | 47 | 6 | 8 |
| H27-3036 | | 36 | | | | |
| H27-3046 | | 46 | | | | |
| H27-3056 | | 56 | | | | |
| H27-3066 | | 66 | | | | |
| H27-3076 | | 76 | | l2 > 2-3 x d1 | | |

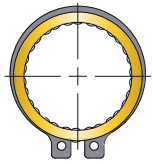
| Sipariş | d1 | l1 | d2 | d3 | K | l3 |
|---|---|---|---|---|---|---|
| H27-3086 | 30 | 86 | 42 | 47 | 6 | 8 |
| H27-3096 | | 96 | | | | |
| H27-30116 | | 116 | | | | |
| H27-30136 | | 136 | | l2 > 2-3 x d1 | | |
| H27-3227 | 32 | 27 | 42 | 47 | 6 | 8 |
| H27-3236 | | 36 | | | | |
| H27-3246 | | 46 | | | | |
| H27-3256 | | 56 | | | | |
| H27-3266 | | 66 | | | | |
| H27-3276 | | 76 | | | | |
| H27-3286 | | 86 | | | | |
| H27-3296 | | 96 | | | | |
| H27-32116 | | 116 | | | | |
| H27-32136 | | 136 | | l2 > 2-3 x d1 | | |
| H27-4046 | 40 | 46 | 54 | 60 | 10 | 12 |
| H27-4056 | | 56 | | | | |
| H27-4066 | | 66 | | | | |
| H27-4076 | | 76 | | | | |
| H27-4086 | | 86 | | | | |
| H27-4096 | | 96 | | | | |
| H27-40116 | | 116 | | | | |
| H27-40136 | | 136 | | | | |
| H27-40156 | | 156 | | | | |
| H27-40196 | | 196 | | l2 > 2-3 x d1 | | |
| H27-4246 | 42 | 46 | 54 | 60 | 10 | 12 |
| H27-4256 | | 56 | | | | |
| H27-4266 | | 66 | | | | |
| H27-4276 | | 76 | | | | |
| H27-4286 | | 86 | | | | |
| H27-4296 | | 96 | | | | |
| H27-42116 | | 116 | | | | |
| H27-42136 | | 136 | | | | |
| H27-42156 | | 156 | | | | |
| H27-42196 | | 196 | | l2 > 2-3 x d1 | | |

## Ö60 - Bilyalı Burç

**Malzeme** : Ms58
**Bilya Malzemesi** : 100Cr6 (1.3505)

**DIN 471**
**DIN 5401**



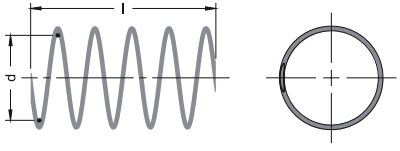



| Sipariş | d1 | L | d2 | d3 | n |
|---|---|---|---|---|---|
| Ö60-1240 | 12 | 40 | 16 | 2 | 176 |
| Ö60-1256 | | 56 | | | 272 |
| Ö60-1545 | 15 | 45 | 21 | 3 | 140 |
| Ö60-1556 | | 56 | | | 196 |
| Ö60-1571 | | 71 | | | 238 |
| Ö60-1645 | 16 | 45 | 22 | 3 | 140 |
| Ö60-1656 | | 56 | | | 196 |
| Ö60-1671 | | 71 | | | 238 |
| Ö60-1845 | 18 | 45 | 24 | 3 | 176 |
| Ö60-1856 | | 56 | | | 240 |
| Ö60-1871 | | 71 | | | 272 |
| Ö60-1945 | 19 | 45 | 25 | 3 | 180 |
| Ö60-1956 | | 56 | | | 234 |
| Ö60-1971 | | 71 | | | 306 |
| Ö60-1980 | | 80 | | | 342 |
| Ö60-1995 | | 95 | | | 414 |
| Ö60-2045 | 20 | 45 | 26 | 3 | 180 |
| Ö60-2056 | | 56 | | | 234 |
| Ö60-2071 | | 71 | | | 306 |
| Ö60-2080 | | 80 | | | 342 |
| Ö60-2095 | | 95 | | | 414 |
| Ö60-2445 | 24 | 45 | 30 | 3 | 180 |
| Ö60-2456 | | 56 | | | 240 |
| Ö60-2471 | | 71 | | | 280 |
| Ö60-2480 | | 80 | | | 320 |
| Ö60-2495 | | 95 | | | 440 |
| Ö60-24105 | | 105 | | | 480 |
| Ö60-24120 | | 120 | | | 560 |
| Ö60-2545 | 25 | 45 | 31 | 3 | 180 |
| Ö60-2556 | | 56 | | | 240 |
| Ö60-2571 | | 71 | | | 280 |
| Ö60-2580 | | 80 | | | 320 |
| Ö60-2595 | | 95 | | | 440 |
| Ö60-25105 | | 105 | | | 480 |
| Ö60-25120 | | 120 | | | 560 |

| Sipariş | d1 | L | d2 | d3 | n |
|---|---|---|---|---|---|
| Ö60-3045 | 30 | 45 | 38 | 4 | 140 |
| Ö60-3056 | | 56 | | | 180 |
| Ö60-3075 | | 75 | | | 240 |
| Ö60-3080 | | 80 | | | 280 |
| Ö60-3095 | | 95 | | | 340 |
| Ö60-30105 | | 105 | | | 380 |
| Ö60-30120 | | 120 | | | 420 |
| Ö60-30140 | | 140 | | | 500 |
| Ö60-3245 | 32 | 45 | 40 | 4 | 140 |
| Ö60-3256 | | 56 | | | 180 |
| Ö60-3275 | | 75 | | | 240 |
| Ö60-3280 | | 80 | | | 280 |
| Ö60-3295 | | 95 | | | 340 |
| Ö60-32105 | | 105 | | | 380 |
| Ö60-32120 | | 120 | | | 420 |
| Ö60-32140 | | 140 | | | 500 |
| Ö60-3856 | 38 | 56 | 46 | 4 | 216 |
| Ö60-3871 | | 71 | | | 288 |
| Ö60-3880 | | 80 | | | 336 |
| Ö60-3895 | | 95 | | | 408 |
| Ö60-38105 | | 105 | | | 456 |
| Ö60-38120 | | 120 | | | 528 |
| Ö60-38140 | | 140 | | | 624 |
| Ö60-38160 | | 160 | | | 720 |
| Ö60-4056 | 40 | 56 | 48 | 4 | 216 |
| Ö60-4071 | | 71 | | | 288 |
| Ö60-4080 | | 80 | | | 336 |
| Ö60-4095 | | 95 | | | 408 |
| Ö60-40105 | | 105 | | | 456 |
| Ö60-40120 | | 120 | | | 528 |
| Ö60-40140 | | 140 | | | 624 |
| Ö60-40160 | | 160 | | | 720 |
| Ö60-4871 | 48 | 71 | 56 | 4 | 360 |
| Ö60-4880 | | 80 | | | 390 |
| Ö60-4895 | | 95 | | | 480 |

| Sipariş | d1 | L | d2 | d3 | n |
|---|---|---|---|---|---|
| Ö60-48105 | 48 | 105 | 56 | 4 | 540 |
| Ö60-48120 | | 120 | | | 600 |
| Ö60-48140 | | 140 | | | 720 |
| Ö60-48160 | | 160 | | | 840 |
| Ö60-5071 | 50 | 71 | 58 | 4 | 360 |
| Ö60-5080 | | 80 | | | 390 |
| Ö60-5095 | | 95 | | | 480 |
| Ö60-50105 | | 105 | | | 540 |
| Ö60-50120 | | 120 | | | 600 |
| Ö60-50140 | | 140 | | | 720 |
| Ö60-50160 | | 160 | | | 840 |
| Ö60-6085 | 60 | 85 | 68 | 4 | 504 |
| Ö60-6095 | | 95 | | | 558 |
| Ö60-60105 | | 105 | | | 612 |

| Sipariş | d1 | L | d2 | d3 | n |
|---|---|---|---|---|---|
| Ö60-60120 | 60 | 120 | 68 | 4 | 720 |
| Ö60-60140 | | 140 | | | 828 |
| Ö60-60160 | | 160 | | | 972 |
| Ö60-6385 | 63 | 85 | 71 | 4 | 504 |
| Ö60-6395 | | 95 | | | 558 |
| Ö60-63105 | | 105 | | | 612 |
| Ö60-63120 | | 120 | | | 720 |
| Ö60-63140 | | 140 | | | 828 |
| Ö60-63160 | | 160 | | | 972 |
| Ö60-80120 | 80 | 120 | 92 | 6 | 286 |
| Ö60-80140 | | 140 | | | 330 |
| Ö60-80160 | | 160 | | | 374 |
| Ö60-80180 | | 180 | | | 462 |
| Ö60-80200 | | 200 | | | 506 |




## Ö60.01 - Bilyalı Kafes Tutucu

**Malzeme** : Yay Çeliği

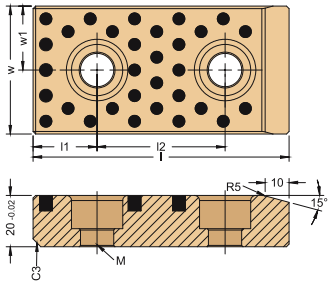
| d | L | Not |
|---|---|---|
| 19 | 040 - 140 | L 10 mm Aralıklarla |
| 20 | 040 - 140 | |
| 24 | 040 - 180 | |
| 25 | 040 - 180 | |
| 30 | 050 - 230 | |
| 32 | 050 - 230 | |

| d | L | Not |
|---|---|---|
| 38 | 060 - 230 | L 10 mm Aralıklarla |
| 40 | 060 - 230 | |
| 48 | 070 - 280 | |
| 50 | 070 - 280 | |
| 60 | 080 - 250 | |
| 63 | 080 - 250 | |

★ HAAF ★

## H80.01 - Grafitli Sürtünme Plakası

**Malzeme** : SAE 430B / Grafit
**Sertlik** : HB ≥180
**VDI 3357**

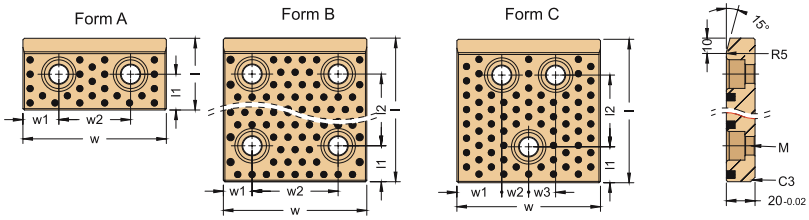



| Sipariş | VW/AUDI 39D863 | FORD WDX 1365 | OPEL 3425 | W | L | w1 | L1 | L2 | M |
|---|---|---|---|---|---|---|---|---|---|
| H8001-050080 | 12 | | | | 80 | | | 30 | M8 |
| H8001-050100 | 13 | 01050100-Y | F33 04 0000 | | 100 | | | 50 | |
| H8001-050125 | 14 | | F33 04 0001 | 50 | 125 | 25 | 25 | 75 | M12 |
| H8001-050160 | 15 | 01050160-Y | F33 04 0002 | | 160 | | | 110 | |
| H8001-050200 | 16 | 01050200-Y | F33 04 0003 | | 200 | | | 150 | |
| H8001-080080 | 22 | | | | 80 | | | 30 | |
| H8001-080100 | 23 | 01080100-Y | F33 04 0004 | | 100 | | | 50 | |
| H8001-080125 | 24 | | F33 04 0005 | | 125 | | 25 | 75 | |
| H8001-080160 | 25 | 01080160-Y | F33 04 0006 | 80 | 160 | 40 | | 110 | M12 |
| H8001-080200 | 26 | 01080200-Y | F33 04 0007 | | 200 | | | 150 | |
| H8001-080250 | | 01080250-Y | | | 250 | | 40 | 170 | |
| H8001-080315 | | 01080315-Y | | | 315 | | | 235 | |
| H8001-100100 | 33 | 01100100-Y | F33 04 0010 | | 100 | | | 50 | |
| H8001-100125 | 34 | 01100125-Y | F33 04 0011 | | 125 | | 25 | 75 | |
| H8001-100160 | 35 | 01100160-Y | F33 04 0012 | 100 | 160 | 50 | | 110 | M12 |
| H8001-100200 | 36 | 01100200-Y | F33 04 0013 | | 200 | | | 150 | |
| H8001-100250 | | 01100250-Y | | | 250 | | 40 | 170 | |
| H8001-100315 | | 01100315-Y | | | 315 | | | 235 | |

★ HAAF ★

## H80.02 - Grafitli Sürtünme Plakası

**Malzeme** : SAE 430B / Grafit
**Sertlik** : HB ≥180
**VDI 3357**

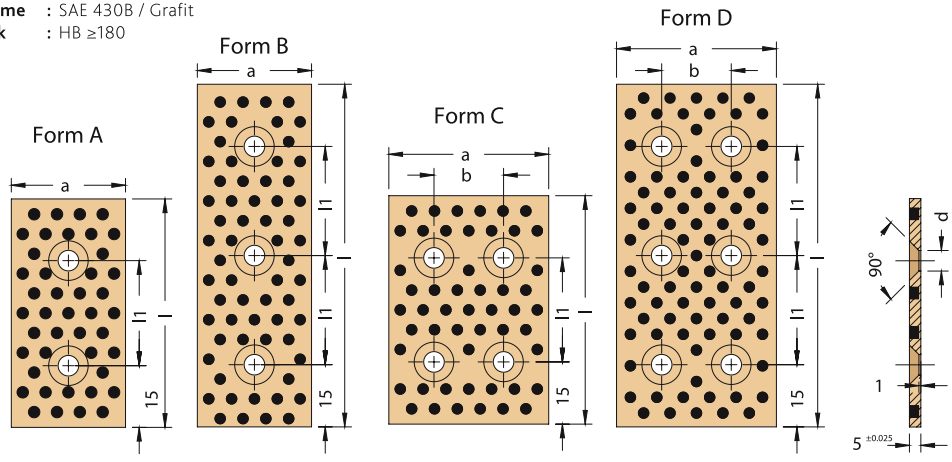



| Sipariş | VW/AUDI 39D863 | FORD WDX 1365 | OPEL 3425 | W | L | w1 | w2 | w3 | L1 | L2 | M | Form |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| H8002-080050 | 21 | | | 80 | 50 | 25 | 30 | | 25 | | M8 | A |
| H8002-100050 | 31 | 01100050-Y | F33 04 0008 | 100 | 50 | 25 | 50 | | 25 | | M12 | A |
| H8002-100080 | 32 | | F33 04 0009 | 100 | 80 | | | | 40 | | | |
| H8002-125050 | 41 | | | 125 | 50 | | 75 | | 25 | | | A |
| H8002-125080 | 42 | | F33 04 0014 | 125 | 80 | | | | 40 | | | |
| H8002-125100 | 43 | 01125100-Y | F33 04 0015 | 125 | 100 | | | | | 50 | | |
| H8002-125125 | 44 | | F33 04 0016 | 125 | 125 | | | | | 75 | | |
| H8002-125160 | 45 | 01125160-Y | F33 04 0017 | 125 | 160 | 25 | 37.5 | 37.5 | 25 | 110 | M12 | C |
| H8002-125200 | 46 | 01125200-Y | | 125 | 200 | | | | | 150 | | |
| H8002-125250 | | 01125250-Y | | 125 | 250 | | | | | 170 | | |
| H8002-125315 | | 01125315-Y | | 125 | 315 | | | | 40 | 235 | | |
| H8002-160050 | 51 | | | 160 | 50 | | | | 25 | | | A |
| H8002-160080 | 52 | | | 160 | 80 | | 110 | | 40 | | | |
| H8002-160100 | 53 | 01160100-Y | F33 04 0018 | 160 | 100 | | | | | 50 | | |
| H8002-160125 | 54 | | F33 04 0019 | 160 | 125 | | | | | 75 | | |
| H8002-160160 | 55 | 01160160-Y | F33 04 0020 | 160 | 160 | 25 | 55 | 55 | 25 | 110 | M12 | C |
| H8002-160200 | 56 | 01160200-Y | | 160 | 200 | | | | | 150 | | |
| H8002-160250 | | 01160250-Y | | 160 | 250 | | 110 | | | 170 | | B |
| H8002-160315 | | 01160315-Y | | 160 | 315 | | | | 40 | 235 | | |
| H8002-16025001 | | 01160250-Y | | 160 | 250 | | 55 | 55 | | 170 | | C |
| H8002-16031501 | | 01160315-Y | | 160 | 315 | | | | | 235 | | |

## ★ HAAF ★

### H81.01 - Grafitli Sürtünme Plakası

**Malzeme** : SAE 430B / Grafit
**Sertlik** : HB ≥180



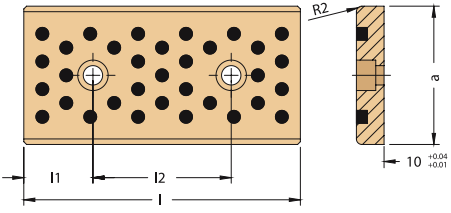

| Sipariş | a | l | l1 | b | d | Form | Civata |
|---|---|---|---|---|---|---|---|
| H8101-018050 | 18 | 50 | 20 | - | 6.5 | A | 2*M6x10 |
| H8101-018075 | 18 | 75 | 45 | | | | |
| H8101-018100 | 18 | 100 | 70 | | | | |
| H8101-018150 | 18 | 150 | 60 | | | B | 3*M6x16 |
| H8101-028050 | 28 | 50 | 20 | | 9 | A | 2*M8x10 |
| H8101-028075 | 28 | 75 | 45 | | | | |
| H8101-028100 | 28 | 100 | 70 | | | | |
| H8101-028150 | 28 | 150 | 60 | | | B | 3*M8x16 |
| H8101-038050 | 38 | 50 | 20 | | | A | 2*M8x16 |
| H8101-038075 | 38 | 75 | 45 | | | | |
| H8101-038100 | 38 | 100 | 70 | | | | |
| H8101-038150 | 38 | 150 | 60 | | | B | 3*M8x16 |

| Sipariş | a | l | l1 | b | d | Form | Civata |
|---|---|---|---|---|---|---|---|
| H8101-048075 | 48 | 75 | 45 | - | 9 | A | 2*M8x16 |
| H8101-048100 | 48 | 100 | 70 | | | | |
| H8101-048125 | 48 | 125 | 95 | | | | |
| H8101-048150 | 48 | 150 | 60 | | | B | 3*M8x16 |
| H8101-075075 | 75 | 75 | 45 | 45 | | C | 4*M8x16 |
| H8101-075100 | 75 | 100 | 70 | | | | |
| H8101-075125 | 75 | 125 | 95 | | | | |
| H8101-075150 | 75 | 150 | 60 | | | D | 6*M8x16 |
| H8101-100100 | 100 | 100 | 70 | 70 | | C | 4*M8x16 |
| H8101-100125 | 100 | 125 | 95 | | | | |
| H8101-100150 | 100 | 150 | 60 | | | D | 6*M8x16 |

## ★ HAAF ★

### H82.01 - Grafitli Sürtünme Plakası

**Malzeme** : SAE 430B / Grafit
**Sertlik** : HB ≥180




| Sipariş | a | l | l1 | l2 | Civata |
|---|---|---|---|---|---|
| H8201-018075 | 18 | 75 | 15 | 45 | 2 x M6 |
| H8201-018100 | 18 | 100 | 25 | 50 | |
| H8201-018125 | 18 | 125 | | 75 | |
| H8201-018150 | 18 | 150 | | 100 | |
| H8201-028075 | 28 | 75 | 15 | 45 | |
| H8201-028100 | 28 | 100 | 25 | 50 | |
| H8201-028125 | 28 | 125 | | 75 | |
| H8201-028150 | 28 | 150 | | 100 | |

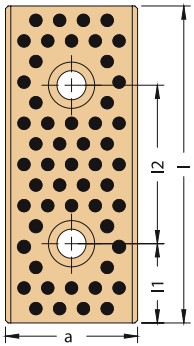
| Sipariş | a | l | l1 | l2 | Civata |
|---|---|---|---|---|---|
| H8201-038075 | 38 | 75 | 15 | 45 | 2 x M6 |
| H8201-038100 | 38 | 100 | 25 | 50 | |
| H8201-038125 | 38 | 125 | | 75 | |
| H8201-038150 | 38 | 150 | | 100 | |
| H8201-048075 | 48 | 75 | 15 | 45 | |
| H8201-048100 | 48 | 100 | 25 | 50 | |
| H8201-048125 | 48 | 125 | | 75 | |
| H8201-048150 | 48 | 150 | | 100 | |

★ HAAF ★

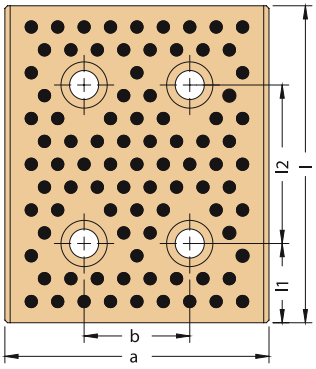
## H82.02 - Grafitli Sürtünme Plakası

**Malzeme** : SAE 430B / Grafit
**Sertlik** : HB ≥180

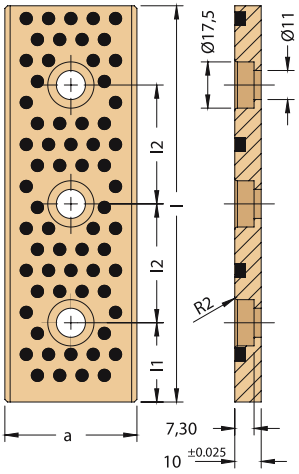
Form A




Form B




Form C

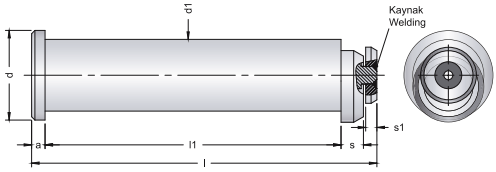



| Sipariş | a | l | b | l1 | l2 | Form |
|---|---|---|---|---|---|---|
| H8202-028075 | 28 | 75 | | 15 | 45 | |
| H8202-028100 | 28 | 100 | | | 50 | |
| H8202-028125 | 28 | 125 | | 25 | 75 | |
| H8202-028150 | 28 | 150 | | | 100 | |
| H8202-038075 | 38 | 75 | | 15 | 45 | |
| H8202-038100 | 38 | 100 | | | 50 | |
| H8202-038125 | 38 | 125 | | 25 | 75 | |
| H8202-038150 | 38 | 150 | | | 100 | |
| H8202-048075 | 48 | 75 | | 15 | 45 | A |
| H8202-048100 | 48 | 100 | | | 50 | |
| H8202-048125 | 48 | 125 | | 25 | 75 | |
| H8202-048150 | 48 | 150 | | | 100 | |
| H8202-048200 | 48 | 200 | | 50 | | |
| H8202-058075 | 58 | 75 | | 15 | 45 | |
| H8202-058100 | 58 | 100 | | | 50 | |
| H8202-058125 | 58 | 125 | | 25 | 75 | |
| H8202-058150 | 58 | 150 | | | 100 | |

| Sipariş | a | l | b | l1 | l2 | Form |
|---|---|---|---|---|---|---|
| H8202-058200 | 58 | 200 | | 50 | 100 | |
| H8202-075075 | 75 | 75 | | 15 | 45 | |
| H8202-075100 | 75 | 100 | | | 50 | A |
| H8202-075125 | 75 | 125 | | 25 | 75 | |
| H8202-075150 | 75 | 150 | | | 100 | |
| H8202-075200 | 75 | 200 | | | 75 | C |
| H8202-100100 | 100 | 100 | | | 50 | |
| H8202-100125 | 100 | 125 | | | 75 | |
| H8202-100150 | 100 | 150 | | | 100 | |
| H8202-100200 | 100 | 200 | 50 | | 150 | |
| H8202-100250 | 100 | 250 | | | 200 | |
| H8202-125150 | 125 | 150 | | 25 | 100 | B |
| H8202-125200 | 125 | 200 | | | 150 | |
| H8202-125250 | 125 | 250 | | | 200 | |
| H8202-150150 | 150 | 150 | | | 100 | |
| H8202-150200 | 150 | 200 | 100 | | 150 | |

## H19.01 - Taşıma Mili

**Malzeme** : Çelik



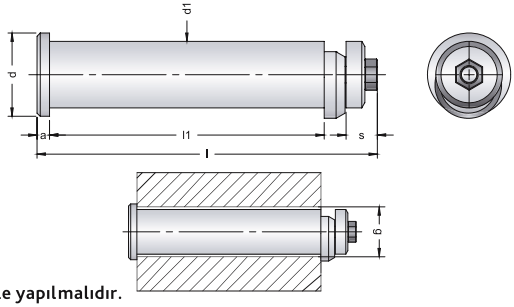

**DİKKAT! Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.**

| Sipariş | d1 | PSA MABEC CODE | Taşıma 2 Adet | d | L | L1 | a | S | s1 |
|---|---|---|---|---|---|---|---|---|---|
| H1901-32 | 32 | P953254770 | 6400 kg | 40 | 154 | 132 | 6 | 10 | 5 |
| H1901-40 | 40 | P953255870 | 10000 kg | 50 | 197.75 | 170 | 8 | 12.5 | 6 |

| Sipariş | d1 | PSA MABEC CODE | Taşıma 2 Adet | d | L | L1 | a | S | s1 |
|---|---|---|---|---|---|---|---|---|---|
| H1901-50 | 50 | P953256670 | 16000 kg | 63 | 247.6 | 212 | 10 | 16 | 8 |
| H1901-63 | 63 | P953257470 | 25000 kg | 80 | 309 | 265 | 12 | 20 | 10 |

## H19.02 - Taşıma Mili

**Malzeme** : Çelik



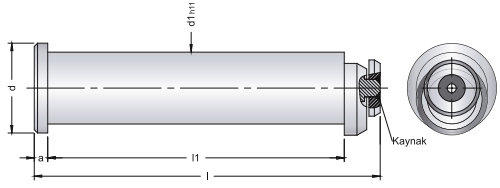

**DİKKAT! Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.**

| Sipariş | g | Taşıma Kapasitesi (kg) 2 Adet | d | L | L1 | d1 | a | s |
|---|---|---|---|---|---|---|---|---|
| H1902-16 | 16 | 1200 | 25 | 102.5 | 77 | 15.6 | 6 | 11.5 |
| H1902-21 | 21 | 2000 | 30 | 113.5 | 86 | 20.6 | 6 | 13.5 |
| H1902-26 | 26 | 4000 | 35 | 128.5 | 100 | 25.6 | 6 | 13.5 |

| Sipariş | g | Taşıma Kapasitesi (kg) 2 Adet | d | L | L1 | d1 | a | s |
|---|---|---|---|---|---|---|---|---|
| H1902-34 | 34 | 8000 | 43 | 166.5 | 135 | 33 | 6 | 15.5 |
| H1902-44 | 44 | 14000 | 53 | 215.5 | 175 | 43 | 8 | 20.5 |

## H19.03 - Taşıma Mili

**Malzeme** : Çelik



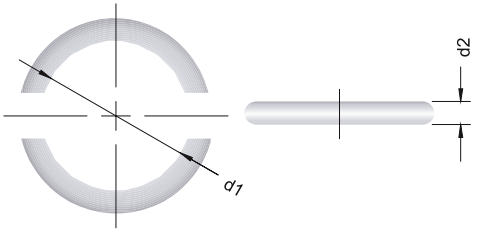

**DİKKAT! Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.**

| Sipariş | FORD CODE WDX2260 | d1 | Taşıma Kapasitesi 2 Adet | d | a | L | L1 |
|---|---|---|---|---|---|---|---|
| H1903-35 | 0135 | 35 | 3200 kg | 45 | 12 | 162.5 | 125 |
| H1903-50 | 0150 | 50 | 8000 kg | 63 | 12 | 227.5 | 190 |

| Sipariş | FORD CODE WDX2260 | d1 | Taşıma Kapasitesi 2 Adet | d | a | L | L1 |
|---|---|---|---|---|---|---|---|
| H1903-63 | 0163 | 63 | 12500 kg | 75 | 12 | 317.5 | 280 |
| H1903-80 | 0180 | 80 | 31500 kg | 95 | 12 | 357.5 | 320 |

## H12.02 - Kolon Tutucu Flanş

**Malzeme** : 1040

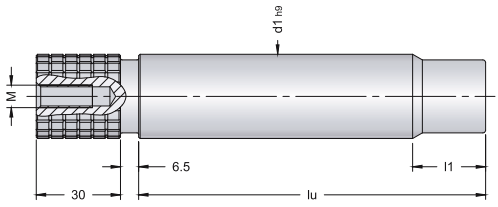



| Sipariş | RENAULT MABEC CODE | A | D1 | D2 |
|---|---|---|---|---|
| H1202-25 | P446 180 200 | 25 | 22.5 | 2.5 |
| H1202-32 | P446 180 300 | 32 | 28 | 4 |
| H1202-40 | P446 180 400 | 40 | 36 | 4 |
| H1202-50 | P446 180 500 | 50 | 46 | 4 |

| Sipariş | RENAULT MABEC CODE | A | D1 | D2 |
|---|---|---|---|---|
| H1202-63 | P446 180 600 | 63 | 57 | 6 |
| H1202-80 | P446 180 700 | 80 | 74 | 6 |
| H1202-100 | P446 180 800 | 100 | 94 | 6 |

## H19.50 - Emniyet Pimi

**Malzeme** : Çelik

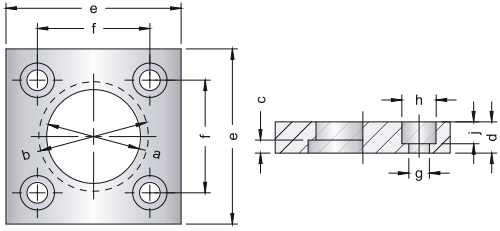



| Sipariş | d1 | LU | PSA MABEC CODE | RENAULT MABEC CODE | L1 | M |
|---|---|---|---|---|---|---|
| H1950-2081 | 20 | 81 | Z000 400 337 | R100 306 188 | 19 | M8 |
| H1950-2581 | 25 | 81 | Z000 400 338 | R100 306 190 | 19 | M8 |
| H1950-2598 | 25 | 98 | Z000 400 339 | R100 306 191 | 19 | M8 |
| H1950-32103 | 32 | 103 | Z000 400 487 | R100 306 194 | 26 | M8 |
| H1950-32148 | 32 | 148 | Z000 400 342 | R100 306 198 | 26 | M8 |
| H1950-40132 | 40 | 132 | Z000 400 345 | R100 306 201 | 33 | M10 |

| Sipariş | d1 | LU | PSA MABEC CODE | RENAULT MABEC CODE | L1 | M |
|---|---|---|---|---|---|---|
| H1950-40192 | 40 | 192 | Z000 400 346 | R100 306 204 | 33 | M10 |
| H1950-50165 | 50 | 165 | Z000 400 349 | R100 306 207 | 41 | M10 |
| H1950-50220 | 50 | 220 | Z000 400 350 | R100 306 209 | 41 | M10 |
| H1950-63210 | 63 | 210 | Z000 400 353 | R100 306 210 | 51 | M12 |
| H1950-63250 | 63 | 250 | Z000 400 354 | R100 306 213 | 51 | M12 |
| H1950-80210 | 80 | 210 | Z000 400 846 | R100 357 232 | 51 | M12 |

## H12.01 - Kolon Tutucu Flanş

**Malzeme** : Ck 45

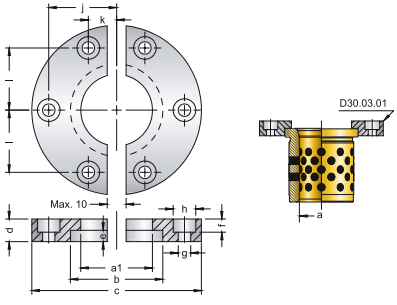



| Sipariş | PSA MABEC CODE | RENAULT MABEC CODE | A | B | G | H | J | D | C | E | F |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H1201-25 | Z000 248 844 | P483 784 100 | 25 | 28 | 6.6 | 11 | 7 | 10 | 2.7 | 45 | 31 |
| H1201-32 | P446 932 711 | P483 784 600 | 32 | 37 | 6.6 | 11 | 7 | 10 | 4.2 | 56 | 36 |
| H1201-40 | P446 932 701 | P483 795 100 | 40 | 45 | 6.6 | 11 | 7 | 12 | 4.2 | 70 | 50 |
| H1201-50 | P446 932 702 | P483 795 401 | 50 | 55 | 9 | 16 | 9 | 14 | 4.2 | 80 | 55 |

| Sipariş | PSA MABEC CODE | RENAULT MABEC CODE | A | B | G | H | J | D | C | E | F |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H1201-63 | P446 932 703 | P483 795 801 | 63 | 70 | 11 | 18 | 11 | 18 | 6.2 | 100 | 70 |
| H1201-80 | P446 932 704 | P483 796 001 | 80 | 87 | 13 | 22 | 14 | 20 | 6.2 | 110 | 80 |
| H1201-100 | | P483 796 401 | 100 | 107 | 13 | 22 | 14 | 20 | 6.2 | 140 | 100 |

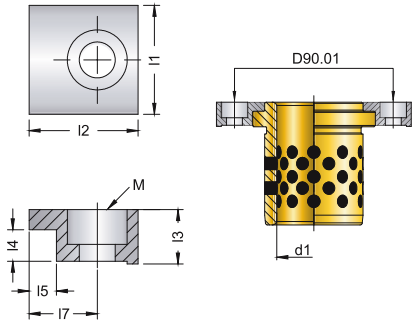
## H30.03.01 - Burç Tutucu Flanş

**Malzeme** : Ck 45




| Sipariş | PSA MABEC CODE | RENAULT MABEC CODE | A | A1 | B | C | D | E | F | G | H | K | J | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D3003.01-25 | | M321 534 500 | 25 | 32 | 41 | 72 | 10 | 5 | 7 | 6.6 | 12 | 20 | | 20 |
| D3003.01-32 | P446 932 717 | M321 544 501 | 32 | 40 | 51 | 80 | 12 | 6 | 7 | 6.6 | 12 | 21 | | 25 |
| D3003.01-40 | P446 932 712 | M321 548 501 | 40 | 50 | 61 | 100 | 12 | 8 | 7 | 6.6 | 12 | 14 | 41 | 38.5 |
| D3003.01-50 | P446 932 713 | M321 552 601 | 50 | 63 | 72 | 125 | 16 | 10 | 9 | 9 | 16 | 17 | 49 | 46 |
| D3003.01-63 | P446 932 714 | M321 556 601 | 63 | 80 | 91 | 140 | 20 | 12 | 11 | 11 | 18 | 17 | 57.5 | 55 |
| D3003.01-80 | P446 932 715 | M321 560 601 | 80 | 100 | 113 | 180 | 25 | 16 | 13 | 14 | 22 | 20 | 72 | 70 |
| D3003.01-100 | | M321 562 700 | 100 | 125 | 141 | 200 | 32 | 20 | 13 | 14 | 22 | 25 | 85 | 81 |

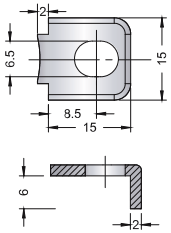
## E90.01 - Bağlama Papucu




| Sipariş | FORD CODE | BMW CODE | PSA MABEC | D1 | L1 | L2 | L3 | L4 | L5 | L6 | L7 | D2 | D3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D9001-01 | WDX 1360 0901 | B2 978 11 2168834 | | 25<br>32<br>40<br>50 | 20 | 20 | 10 | 6.3 | 5 | 7 | 12.5 | 11 | 7 |
| D9001-02 | WDX 1360 0902 | B2 2978 11 2168842 | Z000 263005 | 63<br>80<br>100<br>125<br>160 | 32 | 32 | 16 | 10 | 10 | 11.5 | 21 | 17 | 11 |
| D9001-03 | WDX 1360 1001 | | | 25<br>32<br>40<br>50<br>63<br>80<br>100<br>125 | 32 | 32 | 16 | 6 | 10 | 11.5 | 21 | 17 | 11 |

## E90 - Bağlama Papucu

| Sipariş |
|---|
| E90 |




**Sertlik** : 40 - 42 HRC

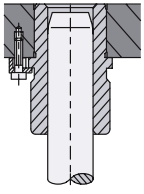


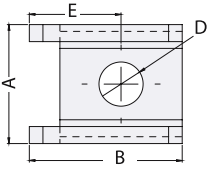
## E-B06 - Burç Tutucu



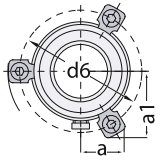
## E-B08 - Burç Tutucu

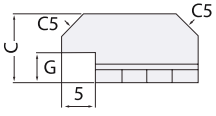
Montaj Örneği

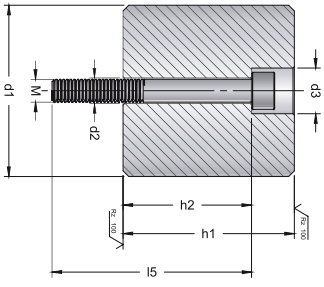





Kalıp Plaka Konum




## H17.01
## Stoplama Bloğu

**Malzeme** : Çelik

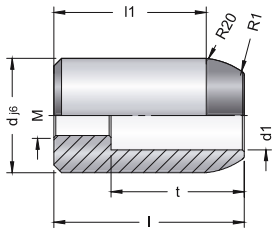
| Sipariş | VW/AUDI CODE | d1 | d2 | d3 | h1 | Taşıma Yükü | Adet |
|---|---|---|---|---|---|---|---|
| H1701-060XXX | 39V1162/14 | 60 | 14 | 20 | 1) | < 1800 kN | 4 |
| H1701-080XXX | 39V1162/15 | 80 | | | | ≥ 1800 - 3400 kN | |
| H1701-100XXX | 39V1162/25 | 100 | 18 | 26 | | > 3400 - 5300 kN | |
| H1701-120XXX | 39V1162/17 | 120 | 22 | 33 | | > 5300 - 10000 kN | |
| H1701-150XXX | 39V1162/18 | 150 | | | | > 10000 - 25000 kN | 8 |

| DIN EN ISO 4762 | M12 | | M16 | | M20 | |
|---|---|---|---|---|---|---|
| h1 1) | h2 | L5 | h2 | L5 | h2 | L5 |
| > 040 - 060 | 22 | 40 | 20 | 40 | 15 | 50 |
| > 060 - 080 | 42 | 60 | 36 | 60 | 30 | 60 |
| > 080 - 100 | 62 | 80 | 56 | 80 | 50 | 80 |
| > 100 - 120 | 82 | 100 | 76 | 100 | 70 | 100 |
| > 120 - 160 | 102 | 120 | 96 | 120 | 90 | 120 |
| > 140 - 160 | 122 | 140 | 116 | 140 | 110 | 140 |

| Sipariş | d (Burç) | A | B | C | D | E | G | Form |
|---|---|---|---|---|---|---|---|---|
| TIRNAKB6 | 32 / 40<br>50 / 63<br>63 / 80<br>100<br>115 | 17.5 | 22.5 | 12 | 6.5 | 13.5 | 6 | Form A<br>M6 x 20 |
| TIRNAKB8 | 32 / 40<br>50 / 63<br>63 / 80<br>100<br>115<br>125 | 21 | 25.5 | 13.5 | 8.5 | 15 | 5.5 | Form B<br>M8 x 20 |

## H51.01 - Merkezleme Pimi

**Malzeme** : Çelik (16MnCr5)
**Sertlik** : 58 - 62 HRC

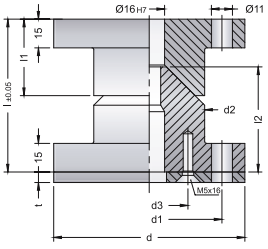


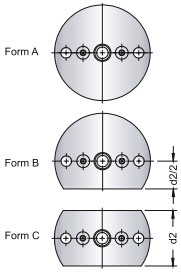

| Sipariş | d | l | l1 | d1 | t | M | r |
|---|---|---|---|---|---|---|---|
| H5101-2245 | 22 | 45 | 37.5 | 14 | 25 | M10 | 20 |
| H5101-3250 | 32 | 50 | 40 | 18 | 35 | M12 | 20 |

| Sipariş | d | l | l1 | d1 | t | M | r |
|---|---|---|---|---|---|---|---|
| H5101-4055 | 40 | 55 | 40 | 18 | 35 | M12 | 20 |
| H5101-5055 | 50 | 55 | 40 | 18 | 35 | M12 | 20 |

## H55.01 - Konik Merkezleme

**Malzeme** : Çelik (16MnCr5)
**Sertlik** : 60 - 64 HRC
**Ayar Plakası**: Ck45



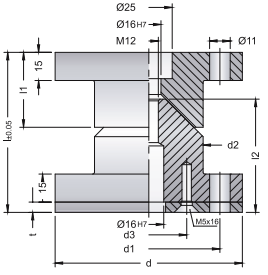



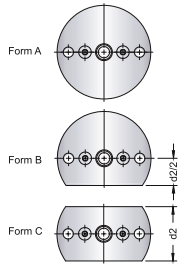

| Sipariş | VW/AUDI CODE | d | l | d1 | d2 | d3 | l1 | l2 | t | Form |
|---|---|---|---|---|---|---|---|---|---|---|
| H5501-100005 | | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 5.5 | A |
| H5501-120005 | | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 5.5 | A |
| H5501-100105 | | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 5.5 | B |
| H5501-120105 | | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 5.5 | B |
| H5501-100205 | | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 5.5 | C |
| H5501-120205 | | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 5.5 | C |

| Sipariş | VW/AUDI CODE | d | l | d1 | d2 | d3 | l1 | l2 | t | Form |
|---|---|---|---|---|---|---|---|---|---|---|
| H5501-100010 | 39V1168/10 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 10 | A |
| H5501-120010 | 39V1168/12 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 10 | A |
| H5501-100110 | 39V1168/14 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 10 | B |
| H5501-120110 | 39V1168/16 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 10 | B |
| H5501-100210 | 39V1168/18 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 10 | C |
| H5501-120210 | 39V1168/20 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 10 | C |

## H55.02 - Konik Merkezleme

**Malzeme** : Çelik (16MnCr5)
**Sertlik** : 60 - 64 HRC
**Ayar Plakası**: Ck45



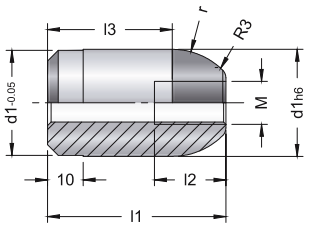




| Sipariş | d | l | d1 | d2 | d3 | l1 | l2 | t | Form |
|---|---|---|---|---|---|---|---|---|---|
| H5502-100005 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 5.5 | A |
| H5502-120005 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 5.5 | A |
| H5502-100105 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 5.5 | B |
| H5502-120105 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 5.5 | B |
| H5502-100205 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 5.5 | C |
| H5502-120205 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 5.5 | C |
| H5502-100010 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 10 | A |

| Sipariş | d | l | d1 | d2 | d3 | l1 | l2 | t | Form |
|---|---|---|---|---|---|---|---|---|---|
| H5502-120010 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 10 | A |
| H5502-100110 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 10 | B |
| H5502-120110 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 10 | B |
| H5502-100210 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 10 | C |
| H5502-120210 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 10 | C |
| H5502-100215 | 100 | 80 | 76 | 58 | 40.5 | 40 | 55 | 10.5 | C |
| H5502-120215 | 120 | 90 | 96 | 78 | 50.5 | 50 | 65 | 10.5 | C |

## H51.02 - Merkezleme Pimi

**Malzeme** : Çelik (16MnCr5)
**Sertlik** : 58 - 62 HRC

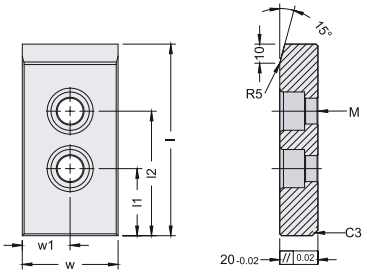



| Sipariş | VW/AUDI CODE | d1 | l1 | l2 | l3 | d2 | M | r |
|---|---|---|---|---|---|---|---|---|
| H5102-2245 | 39V1205/1 | 22 | 45 | 16 | 35 | 21.95 | M8 | 15 |
| H5102-2255 | 39V1205/2 | 22 | 55 | 16 | 45 | 21.95 | M8 | 15 |
| H5102-3250 | | 32 | 50 | 20 | 35 | 31.95 | M10 | 20 |
| H5102-4055 | 39V1205/3 | 40 | 55 | 20 | 35 | 39.95 | M10 | 25 |

| Sipariş | VW/AUDI CODE | d1 | l1 | l2 | l3 | d2 | M | r |
|---|---|---|---|---|---|---|---|---|
| H5102-4065 | 39V1205/4 | 40 | 65 | 20 | 45 | 39.95 | M10 | 25 |
| H5102-4085 | 39V1205/5 | 40 | 85 | 20 | 65 | 39.95 | M10 | 25 |
| H5102-5055 | | 50 | 55 | 20 | 35 | 49.95 | M10 | 25 |

## H80.16 - Çelik Sürtünme Plakası

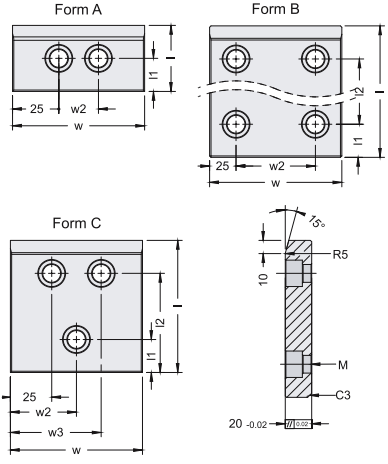
**Malzeme** : Çelik
**Sertlik** : 60 - 64 HRC




| Sipariş | VW/AUDI 39D863 | FORD WDX 13-65 | W | L | w1 | L1 | L2 | Civata |
|---|---|---|---|---|---|---|---|---|
| H8016-5080 | 62 | 01050100-X | 50 | 80 | 25 | 25 | 30 | M8 x 25 |
| H8016-50100 | 63 | 01050125-X | | 100 | | | 50 | M12 x 25 |
| H8016-50125 | 64 | 01050160-X | | 125 | | | 75 | |
| H8016-50160 | 65 | 01050200-X | | 160 | | | 110 | |
| H8016-50200 | 66 | | | 200 | | | 150 | |
| H8016-8080 | 72 | 01080100-X | 80 | 80 | 40 | 25 | 30 | |
| H8016-80100 | 73 | 01080125-X | | 100 | | | 50 | |
| H8016-80125 | 74 | 01080160-X | | 125 | | | 75 | |
| H8016-80160 | 75 | 01080200-X | | 160 | | | 110 | |

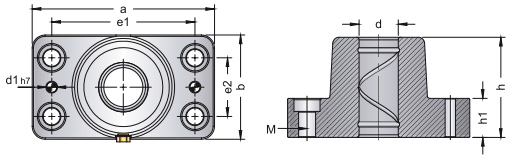
| Sipariş | VW/AUDI 39D863 | FORD WDX 13-65 | W | L | w1 | L1 | L2 | Civata |
|---|---|---|---|---|---|---|---|---|
| H8016-80200 | 76 | 01080250-X | 100 | 200 | 50 | 40 | 150 | M12 x 25 |
| H8016-80250 | | 01080315-X | | 250 | | | 170 | |
| H8016-80315 | | 01100100-X | | 315 | | | 235 | |
| H8016-100100 | 83 | 01100125-X | | 100 | | 25 | 50 | |
| H8016-100125 | 84 | 01100160-X | | 125 | | | 75 | |
| H8016-100160 | 85 | 01100200-X | | 160 | | | 110 | |
| H8016-100200 | 86 | 01100250-X | | 200 | | | 150 | |
| H8016-100250 | | 01100315-X | | 250 | | 40 | 170 | |
| H8016-100315 | | | | 315 | | | 235 | |

| Sipariş | VW/AUDI 39D863 | FORD WDX 13-65 | W | L | w1 | w2 | w3 | L1 | L2 | Form | Civata |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H8016-8050 | 71 | | 80 | 50 | 25 | 30 | | 25 | | A | M8 x 25 |
| H8016-10050 | 81 | 01100050-X | 100 | 50 | 25 | 50 | | 25 | | A | M12 x 25 |
| H8016-10080 | 82 | | 100 | 80 | | | | 40 | | | |
| H8016-12550 | 91 | | 125 | 50 | 25 | 75 | | 25 | | A | |
| H8016-12580 | 92 | | 125 | 80 | | | | 40 | | | |
| H8016-125100 | 93 | 01125100-X | 125 | 100 | 25 | 37.5 | 37.5 | 25 | 50 | C | |
| H8016-125125 | 94 | 01125125-X | 125 | 125 | | | | | 75 | | |
| H8016-125160 | 95 | 01125160-X | 125 | 160 | | | | | 110 | | |
| H8016-125200 | 96 | 01125200-X | 125 | 200 | | | | | 150 | | |
| H8016-125250 | | 01125250-X | 125 | 250 | | | | 40 | 170 | | |
| H8016-125315 | | 01125315-X | 125 | 315 | | | | | 235 | | |
| H8016-16050 | 101 | | 160 | 50 | 25 | 110 | | 25 | | A | |
| H8016-16080 | 102 | | 160 | 80 | | | | 40 | | | |
| H8016-160100 | 103 | 01160100-X | 160 | 100 | | 55 | 55 | 25 | 50 | C | |
| H8016-160125 | 104 | 01160125-X | 160 | 125 | | | | | 75 | | |
| H8016-160160 | 105 | 01160160-X | 160 | 160 | | | | | 110 | | |
| H8016-160200 | 106 | 01160200-X | 160 | 200 | | | | | 150 | | |
| H8016-160250 | | | 160 | 250 | | 110 | | 40 | 170 | B | |
| H8016-160315 | | | 160 | 315 | | | | | 235 | | |
| H8016-160250.01 | | 01160250-X | 160 | 250 | | 55 | 55 | | 170 | C | |
| H8016-160315.01 | | 01160315-X | 160 | 315 | | | | | 235 | | |



## H70.01 - Döküm Blok

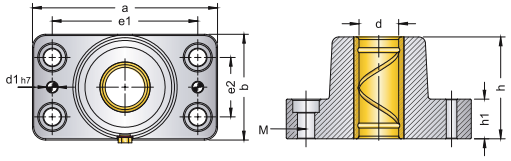
**Malzeme :** GG25




| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| H7001-40 | 40 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H7001-50 | 50 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H7001-63 | 63 | 12 | 120 | 35 | 180 | 110 | 132 | 62 | 16 |
| H7001-80 | 80 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |

## H70.02 - Bronzlu Döküm Blok

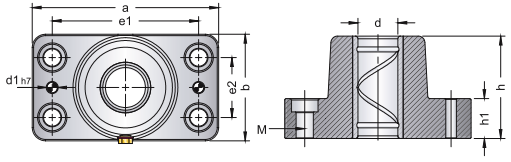
**Malzeme :** GG25 - Bronz




| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| H7002-40 | 40 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H7002-50 | 50 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H7002-63 | 63 | 12 | 120 | 35 | 180 | 110 | 132 | 62 | 16 |
| H7002-80 | 80 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |

## H70.03 - Çelik Kaymalı Döküm Blok

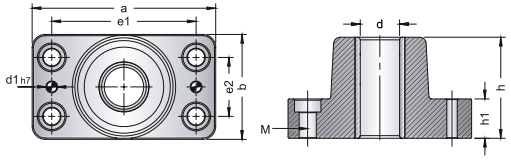
**Malzeme :** GG25 - 1.7131 (16MnCr5)
**Sertlik :** 62±2 HRC
**Isıl İşlem :** Sementasyon




| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| H7003-40 | 40 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H7003-50 | 50 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H7003-63 | 63 | 12 | 120 | 35 | 180 | 110 | 132 | 62 | 16 |
| H7003-80 | 80 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |

## H70.04 - Bilyalı Döküm Blok

**Malzeme :** GG25 - 1.3505 (100Cr6)
**Sertlik :** 62±2 HRC
**Isıl İşlem :** Sementasyon

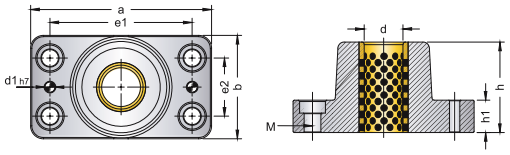



| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| H7004-40 | 40 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H7004-50 | 50 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H7004-63 | 63 | 12 | 120 | 35 | 180 | 110 | 132 | 62 | 16 |
| H7004-80 | 80 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |

## H70.05 - Grafitli Döküm Blok

**Malzeme** : GG25 - SAE 430B
**Sertlik** : HB≥180

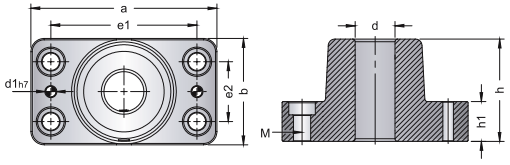
| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| H7005-40 | 40 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H7005-50 | 50 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H7005-63 | 63 | 12 | 120 | 35 | 180 | 110 | 132 | 62 | 16 |
| H7005-80 | 80 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |




## H70.10 - Kolon Sabitleme Bloğu

**Malzeme** : GG25

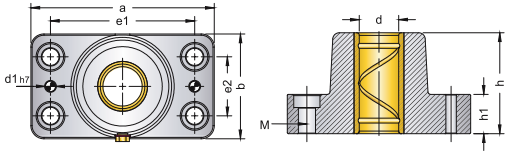
| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| D7010-40 | 40 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| D7010-50 | 50 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| D7010-63 | 63 | 12 | 120 | 35 | 180 | 110 | 132 | 62 | 16 |
| D7010-80 | 80 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |




## H71.02 - Bronzlu Döküm Blok

**Malzeme** : GG25 - 1.7131 (16MnCr5)
**Sertlik** : 62±2 HRC
**Isıl İşlem** : Sementasyon

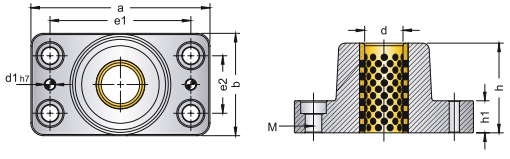
| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| D7102-40 | 40 | 10 | 70 | 25 | 130 | 75 | 100 | 44 | 12 |
| D7102-50 | 50 | 10 | 85 | 25 | 155 | 90 | 125 | 60 | 12 |




## H71.05 - Grafitli Döküm Blok

**Malzeme** : GG25 - SAE 430B
**Sertlik** : HB≥180

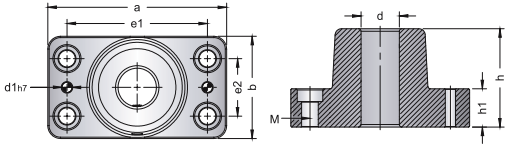
| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| D7105-40 | 40 | 10 | 70 | 25 | 130 | 75 | 100 | 44 | 12 |
| D7105-50 | 50 | 10 | 85 | 25 | 155 | 90 | 125 | 60 | 12 |




## H71.10 - Kolon Sabitleme Bloğu

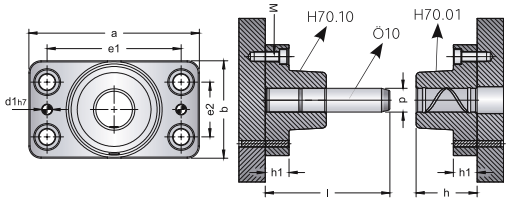
**Malzeme** : GG25

| Sipariş | d | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|
| H7110-40 | 40 | 10 | 70 | 25 | 130 | 75 | 100 | 44 | 12 |
| H7110-50 | 50 | 10 | 85 | 25 | 155 | 90 | 125 | 60 | 12 |



## H70.011 - Döküm Set

**Malzeme :** GG25 - 1.1213 (Cf53)
**Sertlik :** 62 ± 2 HRC
**Isıl İşlem :** İndüksiyon



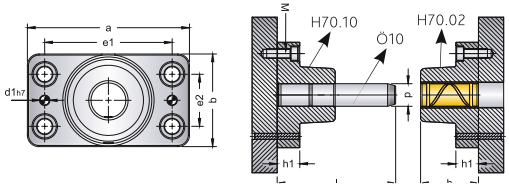

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70021-40180 | 40 | 180 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H70021-40220 | | 220 | | | | | | | | |
| H70021-40260 | | 260 | | | | | | | | |
| H70021-40300 | | 300 | | | | | | | | |
| H70021-40355 | | 355 | | | | | | | | |
| H70021-40400 | | 400 | | | | | | | | |
| H70021-50200 | 50 | 200 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70021-50240 | | 240 | | | | | | | | |
| H70021-50280 | | 280 | | | | | | | | |
| H70021-50315 | | 315 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70021-50355 | 50 | 355 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70021-50400 | | 400 | | | | | | | | |
| H70021-50450 | | 450 | | | | | | | | |
| H70021-63240 | 63 | 240 | 12 | 125 | 35 | 180 | 110 | 132 | 62 | 16 |
| H70021-63280 | | 280 | | | | | | | | |
| H70021-63315 | | 315 | | | | | | | | |
| H70021-63355 | | 355 | | | | | | | | |
| H70021-63400 | | 400 | | | | | | | | |
| H70021-63450 | | 450 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70021-80240 | 80 | 240 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |
| H70021-80280 | | 280 | | | | | | | | |
| H70021-80315 | | 315 | | | | | | | | |
| H70021-80355 | | 355 | | | | | | | | |
| H70021-80400 | | 400 | | | | | | | | |
| H70021-80450 | | 450 | | | | | | | | |
| H70021-80500 | | 500 | | | | | | | | |

## H70.021 - Bronz Döküm Set

**Malzeme :** GG25 - 1.1213 (Cf53)
**Sertlik :** 62 ± 2 HRC
**Isıl İşlem :** İndüksiyon



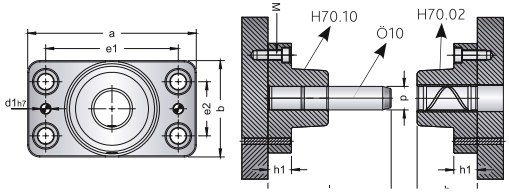

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70021-40180 | 40 | 180 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H70021-40220 | | 220 | | | | | | | | |
| H70021-40260 | | 260 | | | | | | | | |
| H70021-40300 | | 300 | | | | | | | | |
| H70021-40355 | | 355 | | | | | | | | |
| H70021-40400 | | 400 | | | | | | | | |
| H70021-50200 | 50 | 200 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70021-50240 | | 240 | | | | | | | | |
| H70021-50280 | | 280 | | | | | | | | |
| H70021-50315 | | 315 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70021-50355 | 50 | 355 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70021-50400 | | 400 | | | | | | | | |
| H70021-50450 | | 450 | | | | | | | | |
| H70021-63240 | 63 | 240 | 12 | 125 | 35 | 180 | 110 | 132 | 62 | 16 |
| H70021-63280 | | 280 | | | | | | | | |
| H70021-63315 | | 315 | | | | | | | | |
| H70021-63355 | | 355 | | | | | | | | |
| H70021-63400 | | 400 | | | | | | | | |
| H70021-63450 | | 450 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70021-80240 | 80 | 240 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |
| H70021-80280 | | 280 | | | | | | | | |
| H70021-80315 | | 315 | | | | | | | | |
| H70021-80355 | | 355 | | | | | | | | |
| H70021-80400 | | 400 | | | | | | | | |
| H70021-80450 | | 450 | | | | | | | | |
| H70021-80500 | | 500 | | | | | | | | |

## H70.031 - Çelik Kaymalı Döküm Set

**Malzeme :** GG25 - 1.1213 (Cf53)
**Sertlik :** 62 ± 2 HRC
**Isıl İşlem :** İndüksiyon



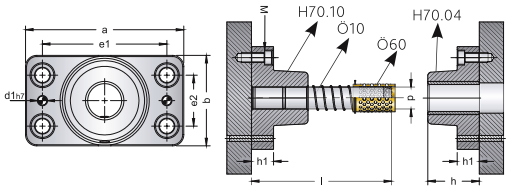

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70031-40180 | 40 | 180 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H70031-40220 | | 220 | | | | | | | | |
| H70031-40260 | | 260 | | | | | | | | |
| H70031-40300 | | 300 | | | | | | | | |
| H70031-40355 | | 355 | | | | | | | | |
| H70031-40400 | | 400 | | | | | | | | |
| H70031-50200 | 50 | 200 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70031-50240 | | 240 | | | | | | | | |
| H70031-50280 | | 280 | | | | | | | | |
| H70031-50315 | | 315 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70031-50355 | 50 | 355 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70031-50400 | | 400 | | | | | | | | |
| H70031-50450 | | 450 | | | | | | | | |
| H70031-63240 | 63 | 240 | 12 | 125 | 35 | 180 | 110 | 132 | 62 | 16 |
| H70031-63280 | | 280 | | | | | | | | |
| H70031-63315 | | 315 | | | | | | | | |
| H70031-63355 | | 355 | | | | | | | | |
| H70031-63400 | | 400 | | | | | | | | |
| H70031-63450 | | 450 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70031-80240 | 80 | 240 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |
| H70031-80280 | | 280 | | | | | | | | |
| H70031-80315 | | 315 | | | | | | | | |
| H70031-80355 | | 355 | | | | | | | | |
| H70031-80400 | | 400 | | | | | | | | |
| H70031-80450 | | 450 | | | | | | | | |
| H70031-80500 | | 500 | | | | | | | | |

## H70.041 - Bilyalı Döküm Set

**Malzeme :** GG25 - 1.3505 (100Cr6) - 1.1213 (Cf53)
**Sertlik :** 62 ± 2 HRC
**Isıl İşlem :** Sementasyon - İndüksiyon



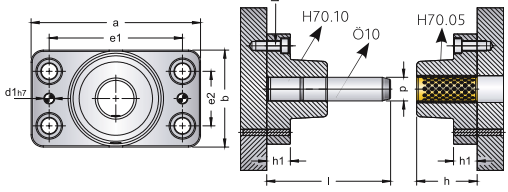

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70041-40180 | 40 | 180 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H70041-40220 | | 220 | | | | | | | | |
| H70041-40260 | | 260 | | | | | | | | |
| H70041-40300 | | 300 | | | | | | | | |
| H70041-40355 | | 355 | | | | | | | | |
| H70041-40400 | | 400 | | | | | | | | |
| H70041-50200 | 50 | 200 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70041-50240 | | 240 | | | | | | | | |
| H70041-50280 | | 280 | | | | | | | | |
| H70041-50315 | | 315 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70041-50355 | 50 | 355 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70041-50400 | | 400 | | | | | | | | |
| H70041-50450 | | 450 | | | | | | | | |
| H70041-63240 | 63 | 240 | 12 | 125 | 35 | 180 | 110 | 132 | 62 | 16 |
| H70041-63280 | | 280 | | | | | | | | |
| H70041-63315 | | 315 | | | | | | | | |
| H70041-63355 | | 355 | | | | | | | | |
| H70041-63400 | | 400 | | | | | | | | |
| H70041-63450 | | 450 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70041-80240 | 80 | 240 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |
| H70041-80280 | | 280 | | | | | | | | |
| H70041-80315 | | 315 | | | | | | | | |
| H70041-80355 | | 355 | | | | | | | | |
| H70041-80400 | | 400 | | | | | | | | |
| H70041-80450 | | 450 | | | | | | | | |
| H70041-80500 | | 500 | | | | | | | | |

## H70.051 - Grafitli Döküm Set

**Malzeme :** GG25 - SAE 430B - 1.1213 (Cf53)
**Sertlik :** HB≥180 - 62 ± 2 HRC
**Isıl İşlem :** Sementasyon - İndüksiyon




| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70051-40180 | 40 | 180 | 10 | 77 | 30 | 130 | 80 | 95 | 45 | 12 |
| H70051-40220 | | 220 | | | | | | | | |
| H70051-40260 | | 260 | | | | | | | | |
| H70051-40300 | | 300 | | | | | | | | |
| H70051-40355 | | 355 | | | | | | | | |
| H70051-40400 | | 400 | | | | | | | | |
| H70051-50200 | 50 | 200 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70051-50240 | | 240 | | | | | | | | |
| H70051-50280 | | 280 | | | | | | | | |
| H70051-50315 | | 315 | | | | | | | | |

| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70051-50355 | 50 | 355 | 10 | 95 | 35 | 160 | 96 | 118 | 55 | 14 |
| H70051-50400 | | 400 | | | | | | | | |
| H70051-50450 | | 450 | | | | | | | | |
| H70051-63240 | 63 | 240 | 12 | 125 | 35 | 180 | 110 | 132 | 62 | 16 |
| H70051-63280 | | 280 | | | | | | | | |
| H70051-63315 | | 315 | | | | | | | | |
| H70051-63355 | | 355 | | | | | | | | |
| H70051-63400 | | 400 | | | | | | | | |
| H70051-63450 | | 450 | | | | | | | | |

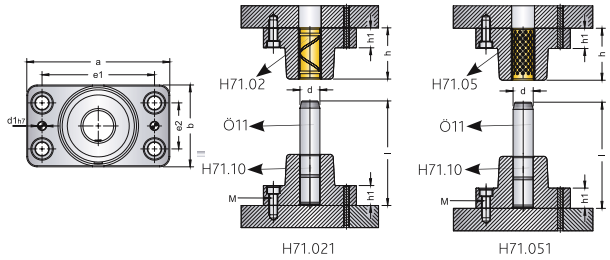
| Sipariş | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|
| H70051-80240 | 80 | 240 | 14 | 120 | 40 | 215 | 130 | 160 | 75 | 20 |
| H70051-80280 | | 280 | | | | | | | | |
| H70051-80315 | | 315 | | | | | | | | |
| H70051-80355 | | 355 | | | | | | | | |
| H70051-80400 | | 400 | | | | | | | | |
| H70051-80450 | | 450 | | | | | | | | |
| H70051-80500 | | 500 | | | | | | | | |

## H71.021 - Bronz Döküm Set

**Malzeme :** GG25 - Bronz - 1.1213 (Cf53)
**Sertlik :** 62 ± 2 HRC
**Isıl İşlem :** İndüksiyon

## H71.051 - Grafitli Döküm Set

**Malzeme :** GG25 - SAE 430B - 1.1213 (Cf53)
**Sertlik :** 62 ± 2 HRC
**Isıl İşlem :** İndüksiyon

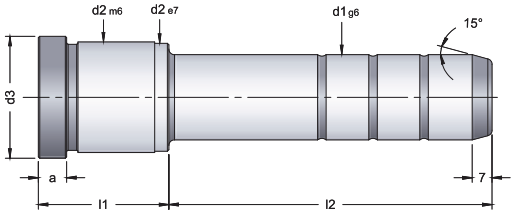



| Sipariş H71.021 | Sipariş H71.051 | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H71021-40160 | H71051-40160 | 40 | 160 | 10 | 70 | 25 | 130 | 75 | 100 | 44 | 12 |
| H71021-40180 | H71051-40180 | | 180 | | | | | | | | |
| H71021-40200 | H71051-40200 | | 200 | | | | | | | | |
| H71021-40225 | H71051-40225 | | 225 | | | | | | | | |
| H71021-40250 | H71051-40250 | | 250 | | | | | | | | |
| H71021-40280 | H71051-40280 | | 280 | | | | | | | | |

| Sipariş H71.021 | Sipariş H71.051 | d | L | d1 | h | h1 | a | b | e1 | e2 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| H71021-50160 | H71051-50160 | 50 | 160 | 10 | 85 | 25 | 155 | 90 | 125 | 60 | 12 |
| H71021-50180 | H71051-50180 | | 180 | | | | | | | | |
| H71021-50200 | H71051-50200 | | 200 | | | | | | | | |
| H71021-50225 | H71051-50225 | | 225 | | | | | | | | |
| H71021-50250 | H71051-50250 | | 250 | | | | | | | | |
| H71021-50280 | H71051-50280 | | 280 | | | | | | | | |
| H71021-50315 | H71051-50315 | | 315 | | | | | | | | |

## E02 - Şapkalı Kademeli Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-122626 | 12 | 26 | 26 | 16 | 19 | 4 |
| E02-122636 | | | 36 | | | |
| E02-122646 | | | 46 | | | |
| E02-122656 | | | 56 | | | |
| E02-123626 | 12 | 36 | 26 | 16 | 19 | 4 |
| E02-123636 | | | 36 | | | |
| E02-123646 | | | 46 | | | |
| E02-123656 | | | 56 | | | |
| E02-124626 | 12 | 46 | 26 | 16 | 19 | 4 |
| E02-124636 | | | 36 | | | |
| E02-124646 | | | 46 | | | |
| E02-124656 | | | 56 | | | |
| E02-124666 | | | 66 | | | |
| E02-142626 | 14 | 26 | 26 | 20 | 25 | 6 |
| E02-142636 | | | 36 | | | |
| E02-142646 | | | 46 | | | |
| E02-142656 | | | 56 | | | |
| E02-142666 | | | 66 | | | |
| E02-142676 | | | 76 | | | |
| E02-143626 | 14 | 36 | 26 | 20 | 25 | 6 |
| E02-143636 | | | 36 | | | |
| E02-143646 | | | 46 | | | |
| E02-143656 | | | 56 | | | |
| E02-143666 | | | 66 | | | |
| E02-143686 | | | 86 | | | |
| E02-144626 | 14 | 46 | 26 | 20 | 25 | 6 |
| E02-144636 | | | 36 | | | |
| E02-144646 | | | 46 | | | |
| E02-144656 | | | 56 | | | |
| E02-144676 | | | 76 | | | |
| E02-144696 | | | 96 | | | |
| E02-145626 | 14 | 56 | 26 | 20 | 25 | 6 |
| E02-145636 | | | 36 | | | |
| E02-145646 | | | 46 | | | |
| E02-145666 | | | 66 | | | |
| E02-145686 | | | 86 | | | |
| E02-1456106 | | | 106 | | | |
| E02-162626 | 16 | 26 | 26 | 24 | 28 | 6 |
| E02-162636 | | | 36 | | | |
| E02-162646 | | | 46 | | | |
| E02-162656 | | | 56 | | | |
| E02-162676 | | | 76 | | | |
| E02-162696 | | | 96 | | | |
| E02-163626 | 16 | 36 | 26 | 24 | 28 | 6 |
| E02-163636 | | | 36 | | | |
| E02-163646 | | | 46 | | | |
| E02-163656 | | | 56 | | | |
| E02-163666 | | | 66 | | | |
| E02-163686 | | | 86 | | | |
| E02-1636106 | | | 106 | | | |
| E02-164626 | 16 | 46 | 26 | 24 | 28 | 6 |
| E02-164636 | | | 36 | | | |
| E02-164646 | | | 46 | | | |

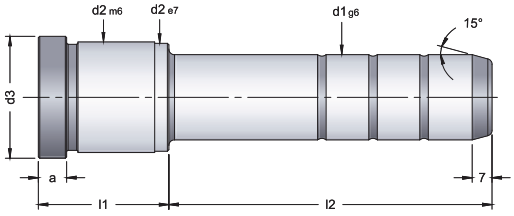
| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-164656 | 16 | 46 | 56 | 24 | 28 | 6 |
| E02-164666 | | | 66 | | | |
| E02-164676 | | | 76 | | | |
| E02-164696 | | | 96 | | | |
| E02-1646116 | | | 116 | | | |
| E02-165626 | 16 | 56 | 26 | 24 | 28 | 6 |
| E02-165636 | | | 36 | | | |
| E02-165646 | | | 46 | | | |
| E02-165656 | | | 56 | | | |
| E02-165666 | | | 66 | | | |
| E02-165676 | | | 76 | | | |
| E02-165696 | | | 96 | | | |
| E02-1656116 | | | 116 | | | |
| E02-166626 | 16 | 66 | 26 | 24 | 28 | 6 |
| E02-166636 | | | 36 | | | |
| E02-166646 | | | 46 | | | |
| E02-166656 | | | 56 | | | |
| E02-166666 | | | 66 | | | |
| E02-166676 | | | 76 | | | |
| E02-166686 | | | 86 | | | |
| E02-1666106 | | | 106 | | | |
| E02-1666116 | | | 116 | | | |
| E02-167626 | 16 | 76 | 26 | 24 | 28 | 6 |
| E02-167636 | | | 36 | | | |
| E02-167646 | | | 46 | | | |
| E02-167656 | | | 56 | | | |
| E02-167666 | | | 66 | | | |
| E02-167676 | | | 76 | | | |
| E02-167696 | | | 96 | | | |
| E02-1676116 | | | 116 | | | |
| E02-168626 | 16 | 86 | 26 | 24 | 28 | 6 |
| E02-168636 | | | 36 | | | |
| E02-168646 | | | 46 | | | |
| E02-168656 | | | 56 | | | |
| E02-168666 | | | 66 | | | |
| E02-168676 | | | 76 | | | |
| E02-168696 | | | 96 | | | |
| E02-1686116 | | | 116 | | | |
| E02-182626 | 18 | 26 | 26 | 26 | 31 | 6 |
| E02-182636 | | | 36 | | | |
| E02-182646 | | | 46 | | | |
| E02-182656 | | | 56 | | | |
| E02-182666 | | | 66 | | | |
| E02-182686 | | | 86 | | | |
| E02-183626 | 18 | 36 | 26 | 26 | 31 | 6 |
| E02-183636 | | | 36 | | | |
| E02-183646 | | | 46 | | | |
| E02-183656 | | | 56 | | | |
| E02-183666 | | | 66 | | | |
| E02-183686 | | | 86 | | | |
| E02-1836106 | | | 106 | | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-184626 | 18 | 46 | 26 | 26 | 31 | 6 |
| E02-184636 | | | 36 | | | |
| E02-184646 | | | 46 | | | |
| E02-184656 | | | 56 | | | |
| E02-184666 | | | 66 | | | |
| E02-184686 | | | 86 | | | |
| E02-1846106 | | | 106 | | | |
| E02-1846126 | | | 126 | | | |
| E02-185626 | 18 | 56 | 26 | 26 | 31 | 6 |
| E02-185636 | | | 36 | | | |
| E02-185646 | | | 46 | | | |
| E02-185656 | | | 56 | | | |
| E02-185666 | | | 66 | | | |
| E02-185686 | | | 86 | | | |
| E02-1856106 | | | 106 | | | |
| E02-1856126 | | | 126 | | | |
| E02-186626 | 18 | 66 | 26 | 26 | 31 | 6 |
| E02-186636 | | | 36 | | | |
| E02-186656 | | | 56 | | | |
| E02-186676 | | | 76 | | | |
| E02-186696 | | | 96 | | | |
| E02-1866116 | | | 116 | | | |
| E02-187626 | 18 | 76 | 26 | 26 | 31 | 6 |
| E02-187646 | | | 46 | | | |
| E02-187666 | | | 66 | | | |
| E02-187686 | | | 86 | | | |
| E02-1876106 | | | 106 | | | |
| E02-1876126 | | | 126 | | | |
| E02-188626 | 18 | 86 | 26 | 26 | 31 | 6 |
| E02-188646 | | | 46 | | | |
| E02-188666 | | | 66 | | | |
| E02-188686 | | | 86 | | | |
| E02-1886106 | | | 106 | | | |
| E02-1886126 | | | 126 | | | |
| E02-202626 | 20 | 26 | 26 | 28 | 32 | 6 |
| E02-202636 | | | 36 | | | |
| E02-202646 | | | 46 | | | |
| E02-202656 | | | 56 | | | |
| E02-202666 | | | 66 | | | |
| E02-202686 | | | 86 | | | |
| E02-203626 | 20 | 36 | 26 | 28 | 32 | 6 |
| E02-203636 | | | 36 | | | |
| E02-203646 | | | 46 | | | |
| E02-203656 | | | 56 | | | |
| E02-203666 | | | 66 | | | |
| E02-203676 | | | 76 | | | |
| E02-203696 | | | 96 | | | |
| E02-204626 | 20 | 46 | 26 | 28 | 32 | 6 |
| E02-204636 | | | 36 | | | |
| E02-204646 | | | 46 | | | |
| E02-204656 | | | 56 | | | |
| E02-204666 | | | 66 | | | |
| E02-204676 | | | 76 | | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-204686 | 20 | 46 | 86 | 28 | 32 | 6 |
| E02-2046106 | | | 106 | | | |
| E02-205626 | 20 | 56 | 26 | 28 | 32 | 6 |
| E02-205636 | | | 36 | | | |
| E02-205646 | | | 46 | | | |
| E02-205656 | | | 56 | | | |
| E02-205666 | | | 66 | | | |
| E02-205676 | | | 76 | | | |
| E02-205696 | | | 96 | | | |
| E02-2056116 | | | 116 | | | |
| E02-206626 | 20 | 66 | 66 | 28 | 32 | 6 |
| E02-206636 | | | 36 | | | |
| E02-206646 | | | 46 | | | |
| E02-206656 | | | 56 | | | |
| E02-206666 | | | 66 | | | |
| E02-206676 | | | 76 | | | |
| E02-206696 | | | 96 | | | |
| E02-2066116 | | | 116 | | | |
| E02-207626 | 20 | 76 | 26 | 28 | 32 | 6 |
| E02-207636 | | | 36 | | | |
| E02-207646 | | | 46 | | | |
| E02-207656 | | | 56 | | | |
| E02-207666 | | | 66 | | | |
| E02-207676 | | | 76 | | | |
| E02-207686 | | | 86 | | | |
| E02-2076106 | | | 106 | | | |
| E02-2076126 | | | 126 | | | |
| E02-208626 | 20 | 86 | 26 | 28 | 32 | 6 |
| E02-208636 | | | 36 | | | |
| E02-208646 | | | 46 | | | |
| E02-208656 | | | 56 | | | |
| E02-208666 | | | 66 | | | |
| E02-208676 | | | 76 | | | |
| E02-208686 | | | 86 | | | |
| E02-2086106 | | | 106 | | | |
| E02-2086126 | | | 126 | | | |
| E02-209626 | 20 | 96 | 26 | 28 | 32 | 6 |
| E02-209636 | | | 36 | | | |
| E02-209646 | | | 46 | | | |
| E02-209656 | | | 56 | | | |
| E02-209666 | | | 66 | | | |
| E02-209676 | | | 76 | | | |
| E02-209686 | | | 86 | | | |
| E02-2096106 | | | 106 | | | |
| E02-2096126 | | | 126 | | | |

## E02 - Şapkalı Kademeli Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-252626 | 25 | 26 | 26 | 34 | 38 | 8 |
| E02-252636 | | | 36 | | | |
| E02-252646 | | | 46 | | | |
| E02-252656 | | | 56 | | | |
| E02-252666 | | | 66 | | | |
| E02-252676 | | | 76 | | | |
| E02-252696 | | | 96 | | | |
| E02-253626 | 25 | 36 | 26 | 34 | 38 | 8 |
| E02-253636 | | | 36 | | | |
| E02-253646 | | | 46 | | | |
| E02-253656 | | | 56 | | | |
| E02-253666 | | | 66 | | | |
| E02-253676 | | | 76 | | | |
| E02-253686 | | | 86 | | | |
| E02-2536106 | | | 106 | | | |
| E02-254626 | 25 | 46 | 26 | 34 | 38 | 8 |
| E02-254636 | | | 36 | | | |
| E02-254646 | | | 46 | | | |
| E02-254656 | | | 56 | | | |
| E02-254666 | | | 66 | | | |
| E02-254676 | | | 76 | | | |
| E02-254696 | | | 96 | | | |
| E02-2546116 | | | 116 | | | |
| E02-255626 | 25 | 56 | 26 | 34 | 38 | 8 |
| E02-255636 | | | 36 | | | |
| E02-255646 | | | 46 | | | |
| E02-255656 | | | 56 | | | |
| E02-255666 | | | 66 | | | |
| E02-255676 | | | 76 | | | |
| E02-255696 | | | 96 | | | |
| E02-2556116 | | | 116 | | | |
| E02-256626 | 25 | 66 | 26 | 34 | 38 | 8 |
| E02-256636 | | | 36 | | | |
| E02-256646 | | | 46 | | | |
| E02-256656 | | | 56 | | | |
| E02-256666 | | | 66 | | | |
| E02-256676 | | | 76 | | | |
| E02-256686 | | | 86 | | | |
| E02-2566106 | | | 106 | | | |
| E02-2566126 | | | 126 | | | |
| E02-257626 | 25 | 76 | 26 | 34 | 38 | 8 |
| E02-257636 | | | 36 | | | |
| E02-257646 | | | 46 | | | |
| E02-257656 | | | 56 | | | |
| E02-257666 | | | 66 | | | |
| E02-257676 | | | 76 | | | |
| E02-257686 | | | 86 | | | |
| E02-2576106 | | | 106 | | | |
| E02-2576126 | | | 126 | | | |
| E02-258636 | 25 | 86 | 36 | 34 | 38 | 8 |
| E02-258646 | | | 46 | | | |
| E02-258656 | | | 56 | | | |
| E02-258666 | | | 66 | | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-258676 | 25 | 86 | 76 | 34 | 38 | 8 |
| E02-258686 | | | 86 | | | |
| E02-258696 | | | 96 | | | |
| E02-2586116 | | | 116 | | | |
| E02-2586136 | | | 136 | | | |
| E02-259636 | 25 | 96 | 36 | 34 | 38 | 8 |
| E02-259646 | | | 46 | | | |
| E02-259656 | | | 56 | | | |
| E02-259666 | | | 66 | | | |
| E02-259676 | | | 76 | | | |
| E02-259686 | | | 86 | | | |
| E02-259696 | | | 96 | | | |
| E02-2596116 | | | 116 | | | |
| E02-2596136 | | | 136 | | | |
| E02-2510646 | 25 | 106 | 46 | 34 | 38 | 8 |
| E02-2510656 | | | 56 | | | |
| E02-2510666 | | | 66 | | | |
| E02-2510676 | | | 76 | | | |
| E02-2510686 | | | 86 | | | |
| E02-2510696 | | | 96 | | | |
| E02-25106116 | | | 116 | | | |
| E02-25106136 | | | 136 | | | |
| E02-303636 | 30 | 36 | 36 | 39 | 43 | 10 |
| E02-303646 | | | 46 | | | |
| E02-303656 | | | 56 | | | |
| E02-303666 | | | 66 | | | |
| E02-303686 | | | 86 | | | |
| E02-3036106 | | | 106 | | | |
| E02-304636 | 30 | 46 | 36 | 39 | 43 | 10 |
| E02-304646 | | | 46 | | | |
| E02-304656 | | | 56 | | | |
| E02-304666 | | | 66 | | | |
| E02-304676 | | | 76 | | | |
| E02-304696 | | | 96 | | | |
| E02-3046116 | | | 116 | | | |
| E02-305636 | 30 | 56 | 36 | 39 | 43 | 10 |
| E02-305646 | | | 46 | | | |
| E02-305656 | | | 56 | | | |
| E02-305666 | | | 66 | | | |
| E02-305676 | | | 76 | | | |
| E02-305686 | | | 86 | | | |
| E02-3056106 | | | 106 | | | |
| E02-3056126 | | | 126 | | | |
| E02-306636 | 30 | 66 | 36 | 39 | 43 | 10 |
| E02-306646 | | | 46 | | | |
| E02-306656 | | | 56 | | | |
| E02-306666 | | | 66 | | | |
| E02-306676 | | | 76 | | | |
| E02-306686 | | | 86 | | | |
| E02-306696 | | | 96 | | | |
| E02-3066116 | | | 116 | | | |
| E02-3066136 | | | 136 | | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-307636 | 30 | 76 | 36 | 39 | 43 | 10 |
| E02-307646 | | | 46 | | | |
| E02-307656 | | | 56 | | | |
| E02-307676 | | | 76 | | | |
| E02-307696 | | | 96 | | | |
| E02-3076116 | | | 116 | | | |
| E02-3076136 | | | 136 | | | |
| E02-308636 | 30 | 86 | 36 | 39 | 43 | 10 |
| E02-308646 | | | 46 | | | |
| E02-308666 | | | 66 | | | |
| E02-308686 | | | 86 | | | |
| E02-3086106 | | | 106 | | | |
| E02-3086126 | | | 126 | | | |
| E02-3086146 | | | 146 | | | |
| E02-309646 | 30 | 96 | 46 | 39 | 43 | 10 |
| E02-309666 | | | 66 | | | |
| E02-309686 | | | 86 | | | |
| E02-3096106 | | | 106 | | | |
| E02-3096126 | | | 126 | | | |
| E02-3096146 | | | 146 | | | |
| E02-3010656 | 30 | 106 | 56 | 39 | 43 | 10 |
| E02-3010676 | | | 76 | | | |
| E02-3010696 | | | 96 | | | |
| E02-30106116 | | | 116 | | | |
| E02-30106136 | | | 136 | | | |
| E02-3011656 | 30 | 116 | 56 | 39 | 43 | 10 |
| E02-3011676 | | | 76 | | | |
| E02-3011696 | | | 96 | | | |
| E02-30116116 | | | 116 | | | |
| E02-30116136 | | | 136 | | | |
| E02-405656 | 40 | 56 | 56 | 54 | 58 | 10 |
| E02-405686 | | | 86 | | | |
| E02-4056106 | | | 106 | | | |
| E02-4056126 | | | 126 | | | |
| E02-4056156 | | | 156 | | | |
| E02-4056186 | | | 186 | | | |
| E02-406666 | 40 | 66 | 66 | 54 | 58 | 10 |
| E02-406696 | | | 96 | | | |
| E02-4066116 | | | 116 | | | |
| E02-4066136 | | | 136 | | | |
| E02-4066166 | | | 166 | | | |
| E02-4066196 | | | 196 | | | |
| E02-407676 | 40 | 76 | 76 | 54 | 58 | 10 |
| E02-4076106 | | | 106 | | | |
| E02-4076126 | | | 126 | | | |
| E02-4076146 | | | 146 | | | |
| E02-4076166 | | | 166 | | | |
| E02-4076196 | | | 196 | | | |
| E02-4076216 | | | 216 | | | |

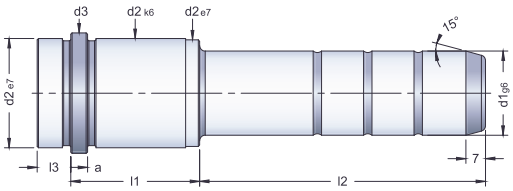
| Sipariş | d1 | L1 | L2 | d2 | d3 | a |
|---|---|---|---|---|---|---|
| E02-408686 | 40 | 86 | 86 | 54 | 58 | 10 |
| E02-4086126 | | | 126 | | | |
| E02-4086146 | | | 146 | | | |
| E02-4086176 | | | 176 | | | |
| E02-4086206 | | | 206 | | | |
| E02-4086226 | | | 226 | | | |
| E02-409696 | 40 | 96 | 96 | 54 | 58 | 10 |
| E02-4096136 | | | 136 | | | |
| E02-4096156 | | | 156 | | | |
| E02-4096186 | | | 186 | | | |
| E02-4096216 | | | 216 | | | |
| E02-4096236 | | | 236 | | | |
| E02-40106106 | 40 | 106 | 106 | 54 | 58 | 10 |
| E02-40106126 | | | 126 | | | |
| E02-40106156 | | | 156 | | | |
| E02-40106186 | | | 186 | | | |
| E02-40106226 | | | 226 | | | |
| E02-40106246 | | | 246 | | | |
| E02-40116116 | 40 | 116 | 116 | 54 | 58 | 10 |
| E02-40116136 | | | 136 | | | |
| E02-40116166 | | | 166 | | | |
| E02-40116196 | | | 196 | | | |
| E02-40116236 | | | 236 | | | |
| E02-40116256 | | | 256 | | | |
| E02-40126126 | 40 | 126 | 126 | 54 | 58 | 10 |
| E02-40126166 | | | 166 | | | |
| E02-40126196 | | | 196 | | | |
| E02-40126236 | | | 236 | | | |
| E02-40126266 | | | 266 | | | |
| E02-40136136 | 40 | 136 | 136 | 54 | 58 | 10 |
| E02-40136196 | | | 196 | | | |
| E02-40136226 | | | 226 | | | |
| E02-40136266 | | | 266 | | | |



Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

## E03H - Kuyruklu Kademeli Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon
**≈DIN 16761 - A**



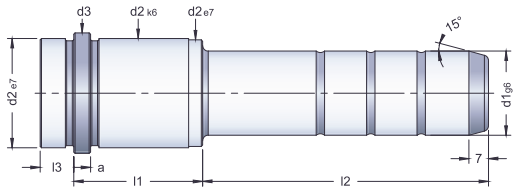

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-141735 | 14 | 17 | 35 | 9 | 20 | 25 | 6 |
| E03H-141755 | | | 55 | | | | |
| E03H-141775 | | | 75 | | | | |
| E03H-141795 | | | 95 | | | | |
| E03H-142230 | 14 | 22 | 30 | 9 | 20 | 25 | 6 |
| E03H-142250 | | | 50 | | | | |
| E03H-142270 | | | 70 | | | | |
| E03H-142290 | | | 90 | | | | |
| E03H-1422110 | | | 110 | | | | |
| E03H-1422125 | | | 125 | | | | |
| E03H-1422150 | | | 150 | | | | |
| E03H-142730 | 14 | 27 | 30 | 9 | 20 | 25 | 6 |
| E03H-142745 | | | 45 | | | | |
| E03H-142765 | | | 65 | | | | |
| E03H-142785 | | | 85 | | | | |
| E03H-1427105 | | | 105 | | | | |
| E03H-1427125 | | | 125 | | | | |
| E03H-1427145 | | | 145 | | | | |
| E03H-1427165 | | | 165 | | | | |
| E03H-143635 | 14 | 36 | 35 | 9 | 20 | 25 | 6 |
| E03H-143655 | | | 55 | | | | |
| E03H-143675 | | | 75 | | | | |
| E03H-143695 | | | 95 | | | | |
| E03H-1436115 | | | 115 | | | | |
| E03H-1436125 | | | 125 | | | | |
| E03H-1436145 | | | 145 | | | | |
| E03H-1436155 | | | 155 | | | | |
| E03H-144635 | 14 | 46 | 35 | 9 | 20 | 25 | 6 |
| E03H-144645 | | | 45 | | | | |
| E03H-144665 | | | 65 | | | | |
| E03H-144685 | | | 85 | | | | |
| E03H-1446105 | | | 105 | | | | |
| E03H-1446125 | | | 125 | | | | |
| E03H-1446145 | | | 145 | | | | |
| E03H-145635 | 14 | 56 | 35 | 9 | 20 | 25 | 6 |
| E03H-145655 | | | 55 | | | | |
| E03H-145675 | | | 75 | | | | |
| E03H-145695 | | | 95 | | | | |
| E03H-1456135 | | | 135 | | | | |
| E03H-146655 | 14 | 66 | 55 | 9 | 20 | 25 | 6 |
| E03H-146665 | | | 65 | | | | |
| E03H-146685 | | | 85 | | | | |
| E03H-146695 | | | 95 | | | | |
| E03H-1466105 | | | 105 | | | | |
| E03H-1466125 | | | 125 | | | | |
| E03H-147635 | 14 | 76 | 35 | 9 | 20 | 25 | 6 |
| E03H-147655 | | | 55 | | | | |
| E03H-147675 | | | 75 | | | | |
| E03H-147695 | | | 95 | | | | |
| E03H-1476125 | | | 125 | | | | |
| E03H-148655 | 14 | 86 | 55 | 9 | 20 | 25 | 6 |
| E03H-148675 | | | 75 | | | | |
| E03H-148695 | | | 95 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-149655 | 14 | 96 | 55 | 9 | 20 | 25 | 6 |
| E03H-149675 | | | 75 | | | | |
| E03H-149695 | | | 95 | | | | |
| E03H-151735 | 15 | 17 | 35 | 9 | 20 | 25 | 6 |
| E03H-151755 | | | 55 | | | | |
| E03H-151775 | | | 75 | | | | |
| E03H-151795 | | | 95 | | | | |
| E03H-152230 | 15 | 22 | 30 | 9 | 20 | 25 | 6 |
| E03H-152250 | | | 50 | | | | |
| E03H-152270 | | | 70 | | | | |
| E03H-152290 | | | 90 | | | | |
| E03H-1522110 | | | 110 | | | | |
| E03H-1522125 | | | 125 | | | | |
| E03H-1522150 | | | 150 | | | | |
| E03H-152730 | 15 | 27 | 30 | 9 | 20 | 25 | 6 |
| E03H-152745 | | | 45 | | | | |
| E03H-152765 | | | 65 | | | | |
| E03H-152785 | | | 85 | | | | |
| E03H-1527105 | | | 105 | | | | |
| E03H-1527125 | | | 125 | | | | |
| E03H-1527145 | | | 145 | | | | |
| E03H-1527165 | | | 165 | | | | |
| E03H-153635 | 15 | 36 | 35 | 9 | 20 | 25 | 6 |
| E03H-153655 | | | 55 | | | | |
| E03H-153675 | | | 75 | | | | |
| E03H-153695 | | | 95 | | | | |
| E03H-1536115 | | | 115 | | | | |
| E03H-1536125 | | | 125 | | | | |
| E03H-1536145 | | | 145 | | | | |
| E03H-1536155 | | | 155 | | | | |
| E03H-154635 | 15 | 46 | 35 | 9 | 20 | 25 | 6 |
| E03H-154645 | | | 45 | | | | |
| E03H-154665 | | | 65 | | | | |
| E03H-154685 | | | 85 | | | | |
| E03H-1546105 | | | 105 | | | | |
| E03H-1546125 | | | 125 | | | | |
| E03H-1546145 | | | 145 | | | | |
| E03H-155635 | 15 | 56 | 35 | 9 | 20 | 25 | 6 |
| E03H-155655 | | | 55 | | | | |
| E03H-155675 | | | 75 | | | | |
| E03H-155695 | | | 95 | | | | |
| E03H-1556135 | | | 135 | | | | |
| E03H-156655 | 15 | 66 | 55 | 9 | 20 | 25 | 6 |
| E03H-156665 | | | 65 | | | | |
| E03H-156685 | | | 85 | | | | |
| E03H-156695 | | | 95 | | | | |
| E03H-1566105 | | | 105 | | | | |
| E03H-1566125 | | | 125 | | | | |
| E03H-157635 | 15 | 76 | 35 | 9 | 20 | 25 | 6 |
| E03H-157655 | | | 55 | | | | |
| E03H-157675 | | | 75 | | | | |
| E03H-157695 | | | 95 | | | | |
| E03H-1576125 | | | 125 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-158655 | 15 | 86 | 55 | 9 | 20 | 25 | 6 |
| E03H-158675 | | | 75 | | | | |
| E03H-158695 | | | 95 | | | | |
| E03H-159655 | 15 | 96 | 55 | 9 | 20 | 25 | 6 |
| E03H-159675 | | | 75 | | | | |
| E03H-159695 | | | 95 | | | | |
| E03H-1511675 | 15 | 116 | 75 | 9 | 20 | 25 | 6 |
| E03H-181735 | 18 | 17 | 35 | 9 | 26 | 31 | 6 |
| E03H-181755 | | | 55 | | | | |
| E03H-181775 | | | 75 | | | | |
| E03H-1817120 | | | 120 | | | | |
| E03H-182235 | 18 | 22 | 35 | 9 | 26 | 31 | 6 |
| E03H-182245 | | | 45 | | | | |
| E03H-182265 | | | 65 | | | | |
| E03H-182285 | | | 85 | | | | |
| E03H-182295 | | | 95 | | | | |
| E03H-1822115 | | | 115 | | | | |
| E03H-182735 | 18 | 27 | 35 | 9 | 26 | 31 | 6 |
| E03H-182745 | | | 45 | | | | |
| E03H-182765 | | | 65 | | | | |
| E03H-182785 | | | 85 | | | | |
| E03H-1827105 | | | 105 | | | | |
| E03H-1827125 | | | 125 | | | | |
| E03H-1827165 | | | 165 | | | | |
| E03H-1827225 | | | 225 | | | | |
| E03H-1827245 | | | 245 | | | | |
| E03H-183635 | 18 | 36 | 35 | 9 | 26 | 31 | 6 |
| E03H-183655 | | | 55 | | | | |
| E03H-183675 | | | 75 | | | | |
| E03H-183695 | | | 95 | | | | |
| E03H-1836115 | | | 115 | | | | |
| E03H-1836135 | | | 135 | | | | |
| E03H-1836165 | | | 165 | | | | |
| E03H-1836225 | | | 225 | | | | |
| E03H-1836255 | | | 255 | | | | |
| E03H-184635 | 18 | 46 | 35 | 9 | 26 | 31 | 6 |
| E03H-184645 | | | 45 | | | | |
| E03H-184665 | | | 65 | | | | |
| E03H-184685 | | | 85 | | | | |
| E03H-1846105 | | | 105 | | | | |
| E03H-1846135 | | | 135 | | | | |
| E03H-1846165 | | | 165 | | | | |
| E03H-1846245 | | | 245 | | | | |
| E03H-185635 | 18 | 56 | 35 | 9 | 26 | 31 | 6 |
| E03H-185655 | | | 55 | | | | |
| E03H-185675 | | | 75 | | | | |
| E03H-185695 | | | 95 | | | | |
| E03H-1856115 | | | 115 | | | | |
| E03H-1856135 | | | 135 | | | | |
| E03H-1856155 | | | 155 | | | | |
| E03H-186635 | 18 | 66 | 35 | 9 | 26 | 31 | 6 |
| E03H-186655 | | | 55 | | | | |
| E03H-186675 | | | 75 | | | | |

## E03H - Kuyruklu Kademeli Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon
**≈DIN 16761 - A**



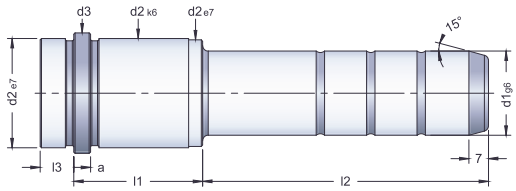

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-186695 | 18 | 66 | 95 | 9 | 26 | 31 | 6 |
| E03H-1866115 | | | 115 | | | | |
| E03H-1866135 | | | 135 | | | | |
| E03H-1866145 | | | 145 | | | | |
| E03H-187635 | 18 | 76 | 35 | 9 | 26 | 31 | 6 |
| E03H-187655 | | | 55 | | | | |
| E03H-187675 | | | 75 | | | | |
| E03H-187695 | | | 95 | | | | |
| E03H-1876115 | | | 115 | | | | |
| E03H-1876135 | | | 135 | | | | |
| E03H-188655 | 18 | 86 | 55 | 9 | 26 | 31 | 6 |
| E03H-188675 | | | 75 | | | | |
| E03H-188695 | | | 95 | | | | |
| E03H-1886125 | | | 125 | | | | |
| E03H-1886135 | | | 135 | | | | |
| E03H-189655 | 18 | 96 | 55 | 9 | 26 | 31 | 6 |
| E03H-189675 | | | 75 | | | | |
| E03H-189695 | | | 95 | | | | |
| E03H-1811675 | 18 | 116 | 75 | 9 | 26 | 31 | 6 |
| E03H-18116115 | | | 115 | | | | |
| E03H-18136135 | 18 | 136 | 135 | 9 | 26 | 31 | 6 |
| E03H-201735 | 20 | 17 | 35 | 9 | 26 | 31 | 6 |
| E03H-201755 | | | 55 | | | | |
| E03H-201775 | | | 75 | | | | |
| E03H-2017120 | | | 120 | | | | |
| E03H-202235 | 20 | 22 | 35 | 9 | 26 | 31 | 6 |
| E03H-202245 | | | 45 | | | | |
| E03H-202265 | | | 65 | | | | |
| E03H-202285 | | | 85 | | | | |
| E03H-202295 | | | 95 | | | | |
| E03H-2022115 | | | 115 | | | | |
| E03H-202735 | 20 | 27 | 35 | 9 | 26 | 31 | 6 |
| E03H-202745 | | | 45 | | | | |
| E03H-202765 | | | 65 | | | | |
| E03H-202785 | | | 85 | | | | |
| E03H-2027105 | | | 105 | | | | |
| E03H-2027125 | | | 125 | | | | |
| E03H-2027165 | | | 165 | | | | |
| E03H-2027225 | | | 225 | | | | |
| E03H-2027245 | | | 245 | | | | |
| E03H-203635 | 20 | 36 | 35 | 9 | 26 | 31 | 6 |
| E03H-203655 | | | 55 | | | | |
| E03H-203675 | | | 75 | | | | |
| E03H-203695 | | | 95 | | | | |
| E03H-2036115 | | | 115 | | | | |
| E03H-2036135 | | | 135 | | | | |
| E03H-2036165 | | | 165 | | | | |
| E03H-2036225 | | | 225 | | | | |
| E03H-2036255 | | | 255 | | | | |
| E03H-204635 | 20 | 46 | 35 | 9 | 26 | 31 | 6 |
| E03H-204645 | | | 45 | | | | |
| E03H-204665 | | | 65 | | | | |
| E03H-204685 | | | 85 | | | | |
| E03H-2046105 | | | 105 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-2046135 | 20 | 46 | 135 | 9 | 26 | 31 | 6 |
| E03H-2046165 | | | 165 | | | | |
| E03H-2046245 | | | 245 | | | | |
| E03H-205635 | 20 | 56 | 35 | 9 | 26 | 31 | 6 |
| E03H-205655 | | | 55 | | | | |
| E03H-205675 | | | 75 | | | | |
| E03H-205695 | | | 95 | | | | |
| E03H-2056115 | | | 115 | | | | |
| E03H-2056135 | | | 135 | | | | |
| E03H-2056155 | | | 155 | | | | |
| E03H-206635 | 20 | 66 | 35 | 9 | 26 | 31 | 6 |
| E03H-206655 | | | 55 | | | | |
| E03H-206675 | | | 75 | | | | |
| E03H-206695 | | | 95 | | | | |
| E03H-2066115 | | | 115 | | | | |
| E03H-2066135 | | | 135 | | | | |
| E03H-2066145 | | | 145 | | | | |
| E03H-207635 | 20 | 76 | 35 | 9 | 26 | 31 | 6 |
| E03H-207655 | | | 55 | | | | |
| E03H-207675 | | | 75 | | | | |
| E03H-207695 | | | 95 | | | | |
| E03H-2076115 | | | 115 | | | | |
| E03H-2076135 | | | 135 | | | | |
| E03H-208655 | 20 | 86 | 55 | 9 | 26 | 31 | 6 |
| E03H-208675 | | | 75 | | | | |
| E03H-208695 | | | 95 | | | | |
| E03H-2086125 | | | 125 | | | | |
| E03H-2086135 | | | 135 | | | | |
| E03H-209655 | 20 | 96 | 55 | 9 | 26 | 31 | 6 |
| E03H-209675 | | | 75 | | | | |
| E03H-209695 | | | 95 | | | | |
| E03H-2011675 | 20 | 116 | 75 | 9 | 26 | 31 | 6 |
| E03H-20116115 | | | 115 | | | | |
| E03H-20136135 | 20 | 136 | 135 | 9 | 26 | 31 | 6 |
| E03H-221735 | 22 | 17 | 35 | 9 | 30 | 35 | 6 |
| E03H-221755 | | | 55 | | | | |
| E03H-221775 | | | 75 | | | | |
| E03H-222235 | 22 | 22 | 35 | 9 | 30 | 35 | 6 |
| E03H-222255 | | | 55 | | | | |
| E03H-222275 | | | 75 | | | | |
| E03H-222295 | | | 95 | | | | |
| E03H-2222105 | | | 105 | | | | |
| E03H-2222130 | | | 130 | | | | |
| E03H-222735 | 22 | 27 | 35 | 9 | 30 | 35 | 6 |
| E03H-222745 | | | 45 | | | | |
| E03H-222765 | | | 65 | | | | |
| E03H-222785 | | | 85 | | | | |
| E03H-2227105 | | | 105 | | | | |
| E03H-2227125 | | | 125 | | | | |
| E03H-2227165 | | | 165 | | | | |
| E03H-2227205 | | | 205 | | | | |
| E03H-2227245 | | | 245 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-223635 | 22 | 36 | 35 | 9 | 30 | 35 | 6 |
| E03H-223655 | | | 55 | | | | |
| E03H-223675 | | | 75 | | | | |
| E03H-223695 | | | 95 | | | | |
| E03H-2236115 | | | 115 | | | | |
| E03H-2236135 | | | 135 | | | | |
| E03H-2236165 | | | 165 | | | | |
| E03H-2236205 | | | 205 | | | | |
| E03H-2236245 | | | 245 | | | | |
| E03H-2236285 | | | 285 | | | | |
| E03H-224635 | 22 | 46 | 35 | 9 | 30 | 35 | 6 |
| E03H-224645 | | | 45 | | | | |
| E03H-224665 | | | 65 | | | | |
| E03H-224685 | | | 85 | | | | |
| E03H-2246105 | | | 105 | | | | |
| E03H-2246125 | | | 125 | | | | |
| E03H-2246165 | | | 165 | | | | |
| E03H-2246205 | | | 205 | | | | |
| E03H-225635 | 22 | 56 | 35 | 9 | 30 | 35 | 6 |
| E03H-225655 | | | 55 | | | | |
| E03H-225675 | | | 75 | | | | |
| E03H-225695 | | | 95 | | | | |
| E03H-2256115 | | | 115 | | | | |
| E03H-2256135 | | | 135 | | | | |
| E03H-2256165 | | | 165 | | | | |
| E03H-2256205 | | | 205 | | | | |
| E03H-226635 | 22 | 66 | 35 | 9 | 30 | 35 | 6 |
| E03H-226655 | | | 55 | | | | |
| E03H-226675 | | | 75 | | | | |
| E03H-226695 | | | 95 | | | | |
| E03H-2266115 | | | 115 | | | | |
| E03H-2266135 | | | 135 | | | | |
| E03H-2266155 | | | 155 | | | | |
| E03H-227635 | 22 | 76 | 35 | 9 | 30 | 35 | 6 |
| E03H-227655 | | | 55 | | | | |
| E03H-227675 | | | 75 | | | | |
| E03H-227695 | | | 95 | | | | |
| E03H-2276115 | | | 115 | | | | |
| E03H-2276145 | | | 145 | | | | |
| E03H-228655 | 22 | 86 | 55 | 9 | 30 | 35 | 6 |
| E03H-228675 | | | 75 | | | | |
| E03H-228695 | | | 95 | | | | |
| E03H-2286125 | | | 125 | | | | |
| E03H-2286135 | | | 135 | | | | |
| E03H-229655 | 22 | 96 | 55 | 9 | 30 | 35 | 6 |
| E03H-229675 | | | 75 | | | | |
| E03H-229695 | | | 95 | | | | |
| E03H-2296125 | | | 125 | | | | |
| E03H-2210655 | 22 | 106 | 55 | 9 | 30 | 35 | 6 |
| E03H-2210675 | | | 75 | | | | |
| E03H-2210695 | | | 95 | | | | |
| E03H-22106115 | | | 115 | | | | |

## E03H - Kuyruklu Kademeli Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon
**≈DIN 16761 - A**



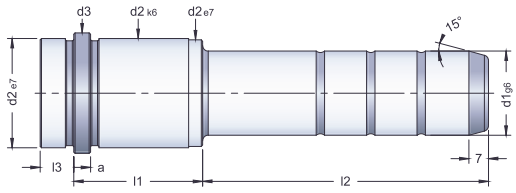

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-2211675 | 22 | 116 | 75 | 9 | 30 | 35 | 6 |
| E03H-22116115 | | | 115 | | | | |
| E03H-22116155 | | | 155 | | | | |
| E03H-2213695 | 22 | 136 | 95 | 9 | 30 | 35 | 6 |
| E03H-22136135 | | | 135 | | | | |
| E03H-241735 | 24 | 17 | 35 | 9 | 30 | 35 | 6 |
| E03H-241755 | | | 55 | | | | |
| E03H-241775 | | | 75 | | | | |
| E03H-242235 | 24 | 22 | 35 | 9 | 30 | 35 | 6 |
| E03H-242255 | | | 55 | | | | |
| E03H-242275 | | | 75 | | | | |
| E03H-242295 | | | 95 | | | | |
| E03H-2422105 | | | 105 | | | | |
| E03H-2422130 | | | 130 | | | | |
| E03H-242735 | 24 | 27 | 35 | 9 | 30 | 35 | 6 |
| E03H-242745 | | | 45 | | | | |
| E03H-242765 | | | 65 | | | | |
| E03H-242785 | | | 85 | | | | |
| E03H-2427105 | | | 105 | | | | |
| E03H-2427125 | | | 125 | | | | |
| E03H-2427165 | | | 165 | | | | |
| E03H-2427205 | | | 205 | | | | |
| E03H-2427245 | | | 245 | | | | |
| E03H-243635 | 24 | 36 | 35 | 9 | 30 | 35 | 6 |
| E03H-243655 | | | 55 | | | | |
| E03H-243675 | | | 75 | | | | |
| E03H-243695 | | | 95 | | | | |
| E03H-2436115 | | | 115 | | | | |
| E03H-2436135 | | | 135 | | | | |
| E03H-2436165 | | | 165 | | | | |
| E03H-2436205 | | | 205 | | | | |
| E03H-2436245 | | | 245 | | | | |
| E03H-2436285 | | | 285 | | | | |
| E03H-244635 | 24 | 46 | 35 | 9 | 30 | 35 | 6 |
| E03H-244645 | | | 45 | | | | |
| E03H-244665 | | | 65 | | | | |
| E03H-244685 | | | 85 | | | | |
| E03H-2446105 | | | 105 | | | | |
| E03H-2446125 | | | 125 | | | | |
| E03H-2446165 | | | 165 | | | | |
| E03H-2446205 | | | 205 | | | | |
| E03H-245635 | 24 | 56 | 35 | 9 | 30 | 35 | 6 |
| E03H-245655 | | | 55 | | | | |
| E03H-245675 | | | 75 | | | | |
| E03H-245695 | | | 95 | | | | |
| E03H-2456115 | | | 115 | | | | |
| E03H-2456135 | | | 135 | | | | |
| E03H-2456165 | | | 165 | | | | |
| E03H-2456205 | | | 205 | | | | |
| E03H-246635 | 24 | 66 | 35 | 9 | 30 | 35 | 6 |
| E03H-246655 | | | 55 | | | | |
| E03H-246675 | | | 75 | | | | |
| E03H-246695 | | | 95 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-2466115 | 24 | 66 | 115 | 9 | 30 | 35 | 6 |
| E03H-2466135 | | | 135 | | | | |
| E03H-2466155 | | | 155 | | | | |
| E03H-247635 | 24 | 76 | 35 | 9 | 30 | 35 | 6 |
| E03H-247655 | | | 55 | | | | |
| E03H-247675 | | | 75 | | | | |
| E03H-247695 | | | 95 | | | | |
| E03H-2476115 | | | 115 | | | | |
| E03H-2476145 | | | 145 | | | | |
| E03H-248655 | 24 | 86 | 55 | 9 | 30 | 35 | 6 |
| E03H-248675 | | | 75 | | | | |
| E03H-248695 | | | 95 | | | | |
| E03H-2486125 | | | 125 | | | | |
| E03H-2486135 | | | 135 | | | | |
| E03H-249655 | 24 | 96 | 55 | 9 | 30 | 35 | 6 |
| E03H-249675 | | | 75 | | | | |
| E03H-249695 | | | 95 | | | | |
| E03H-2496125 | | | 125 | | | | |
| E03H-2410655 | 24 | 106 | 55 | 9 | 30 | 35 | 6 |
| E03H-2410675 | | | 75 | | | | |
| E03H-2410695 | | | 95 | | | | |
| E03H-24106115 | | | 115 | | | | |
| E03H-2411675 | 24 | 116 | 75 | 9 | 30 | 35 | 6 |
| E03H-24116115 | | | 115 | | | | |
| E03H-24116155 | | | 155 | | | | |
| E03H-2413695 | 24 | 136 | 95 | 9 | 30 | 35 | 6 |
| E03H-24136135 | | | 135 | | | | |
| E03H-302735 | 30 | 27 | 35 | 9 | 42 | 47 | 6 |
| E03H-302745 | | | 45 | | | | |
| E03H-302765 | | | 65 | | | | |
| E03H-302785 | | | 85 | | | | |
| E03H-3027105 | | | 105 | | | | |
| E03H-3027125 | | | 125 | | | | |
| E03H-3027145 | | | 145 | | | | |
| E03H-3027165 | | | 165 | | | | |
| E03H-3027185 | | | 185 | | | | |
| E03H-3027245 | | | 245 | | | | |
| E03H-3027285 | | | 285 | | | | |
| E03H-303635 | 30 | 36 | 35 | 9 | 42 | 47 | 6 |
| E03H-303655 | | | 55 | | | | |
| E03H-303675 | | | 75 | | | | |
| E03H-303695 | | | 95 | | | | |
| E03H-3036115 | | | 115 | | | | |
| E03H-3036135 | | | 135 | | | | |
| E03H-3036155 | | | 155 | | | | |
| E03H-3036245 | | | 245 | | | | |
| E03H-3036285 | | | 285 | | | | |
| E03H-304645 | 36 | 46 | 45 | 9 | 42 | 47 | 6 |
| E03H-304665 | | | 65 | | | | |
| E03H-304685 | | | 85 | | | | |
| E03H-3046105 | | | 105 | | | | |
| E03H-3046125 | | | 125 | | | | |
| E03H-3046145 | | | 145 | | | | |
| E03H-3046165 | | | 165 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-3046245 | 30 | 46 | 245 | 9 | 42 | 47 | 6 |
| E03H-3046285 | | | 285 | | | | |
| E03H-305645 | 30 | 56 | 45 | 9 | 42 | 47 | 6 |
| E03H-305655 | | | 55 | | | | |
| E03H-305675 | | | 75 | | | | |
| E03H-305695 | | | 95 | | | | |
| E03H-3056115 | | | 115 | | | | |
| E03H-3056135 | | | 135 | | | | |
| E03H-3056155 | | | 155 | | | | |
| E03H-3056175 | | | 175 | | | | |
| E03H-3056245 | | | 245 | | | | |
| E03H-3056295 | | | 295 | | | | |
| E03H-306645 | 30 | 66 | 45 | 9 | 42 | 47 | 6 |
| E03H-306655 | | | 55 | | | | |
| E03H-306675 | | | 75 | | | | |
| E03H-306695 | | | 95 | | | | |
| E03H-3066115 | | | 115 | | | | |
| E03H-3066135 | | | 135 | | | | |
| E03H-3066155 | | | 155 | | | | |
| E03H-3066175 | | | 175 | | | | |
| E03H-3066245 | | | 245 | | | | |
| E03H-3066295 | | | 295 | | | | |
| E03H-307655 | 30 | 76 | 55 | 9 | 42 | 47 | 6 |
| E03H-307675 | | | 75 | | | | |
| E03H-307695 | | | 95 | | | | |
| E03H-3076115 | | | 115 | | | | |
| E03H-3076135 | | | 135 | | | | |
| E03H-3076155 | | | 155 | | | | |
| E03H-3076225 | | | 225 | | | | |
| E03H-308655 | 30 | 86 | 55 | 9 | 42 | 47 | 6 |
| E03H-308675 | | | 75 | | | | |
| E03H-308695 | | | 95 | | | | |
| E03H-3086115 | | | 115 | | | | |
| E03H-3086135 | | | 135 | | | | |
| E03H-3086155 | | | 155 | | | | |
| E03H-3086225 | | | 225 | | | | |
| E03H-309655 | 30 | 96 | 55 | 9 | 42 | 47 | 6 |
| E03H-309675 | | | 75 | | | | |
| E03H-309695 | | | 95 | | | | |
| E03H-3096115 | | | 115 | | | | |
| E03H-3096135 | | | 135 | | | | |
| E03H-3096155 | | | 155 | | | | |
| E03H-3096205 | | | 205 | | | | |
| E03H-3010675 | 30 | 106 | 75 | 9 | 42 | 47 | 6 |
| E03H-3010695 | | | 95 | | | | |
| E03H-30106115 | | | 115 | | | | |
| E03H-30106125 | | | 125 | | | | |
| E03H-30106145 | | | 145 | | | | |
| E03H-30106165 | | | 165 | | | | |
| E03H-3011675 | 30 | 116 | 75 | 9 | 42 | 47 | 6 |
| E03H-3011695 | | | 95 | | | | |
| E03H-30116115 | | | 115 | | | | |
| E03H-30116135 | | | 135 | | | | |
| E03H-30116155 | | | 155 | | | | |

## E03H - Kuyruklu Kademeli Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon
**≈DIN 16761 - A**



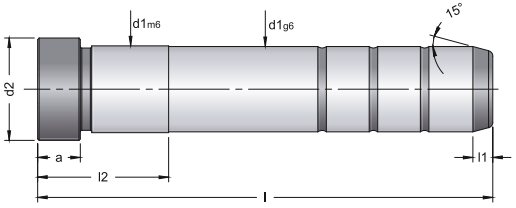

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-3013695 | 30 | 136 | 95 | 9 | 42 | 47 | 6 |
| E03H-30136115 | | | 115 | | | | |
| E03H-30136135 | | | 135 | | | | |
| E03H-30136155 | | | 155 | | | | |
| E03H-30156115 | 30 | 156 | 115 | 9 | 42 | 47 | 6 |
| E03H-30156155 | | | 155 | | | | |
| E03H-30196155 | 30 | 196 | 155 | 9 | 42 | 47 | 6 |
| E03H-30196195 | | | 195 | | | | |
| E03H-322735 | 32 | 27 | 35 | 9 | 42 | 47 | 6 |
| E03H-322745 | | | 45 | | | | |
| E03H-322765 | | | 65 | | | | |
| E03H-322785 | | | 85 | | | | |
| E03H-3227105 | | | 105 | | | | |
| E03H-3227125 | | | 125 | | | | |
| E03H-3227145 | | | 145 | | | | |
| E03H-3227165 | | | 165 | | | | |
| E03H-3227185 | | | 185 | | | | |
| E03H-3227245 | | | 245 | | | | |
| E03H-3227285 | | | 285 | | | | |
| E03H-323635 | 32 | 36 | 35 | 9 | 42 | 47 | 6 |
| E03H-323655 | | | 55 | | | | |
| E03H-323675 | | | 75 | | | | |
| E03H-323695 | | | 95 | | | | |
| E03H-3236115 | | | 115 | | | | |
| E03H-3236135 | | | 135 | | | | |
| E03H-3236155 | | | 155 | | | | |
| E03H-3236245 | | | 245 | | | | |
| E03H-3236285 | | | 285 | | | | |
| E03H-324645 | 32 | 46 | 45 | 9 | 42 | 47 | 6 |
| E03H-324665 | | | 65 | | | | |
| E03H-324685 | | | 85 | | | | |
| E03H-3246105 | | | 105 | | | | |
| E03H-3246125 | | | 125 | | | | |
| E03H-3246145 | | | 145 | | | | |
| E03H-3246165 | | | 165 | | | | |
| E03H-3246245 | | | 245 | | | | |
| E03H-3246285 | | | 285 | | | | |
| E03H-325645 | 32 | 56 | 45 | 9 | 42 | 47 | 6 |
| E03H-325655 | | | 55 | | | | |
| E03H-325675 | | | 75 | | | | |
| E03H-325695 | | | 95 | | | | |
| E03H-3256115 | | | 115 | | | | |
| E03H-3256135 | | | 135 | | | | |
| E03H-3256155 | | | 155 | | | | |
| E03H-3256175 | | | 175 | | | | |
| E03H-3256245 | | | 245 | | | | |
| E03H-3256295 | | | 295 | | | | |
| E03H-326645 | 32 | 66 | 45 | 9 | 42 | 47 | 6 |
| E03H-326655 | | | 55 | | | | |
| E03H-326675 | | | 75 | | | | |
| E03H-326695 | | | 95 | | | | |
| E03H-3266115 | | | 115 | | | | |
| E03H-3266135 | | | 135 | | | | |
| E03H-3266155 | | | 155 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-3266175 | 32 | 66 | 175 | 9 | 42 | 47 | 6 |
| E03H-3266245 | | | 245 | | | | |
| E03H-3266295 | | | 295 | | | | |
| E03H-327655 | 32 | 76 | 55 | 9 | 42 | 47 | 6 |
| E03H-327675 | | | 75 | | | | |
| E03H-327695 | | | 95 | | | | |
| E03H-3276115 | | | 115 | | | | |
| E03H-3276135 | | | 135 | | | | |
| E03H-3276155 | | | 155 | | | | |
| E03H-3276225 | | | 225 | | | | |
| E03H-328655 | 32 | 86 | 55 | 9 | 42 | 47 | 6 |
| E03H-328675 | | | 75 | | | | |
| E03H-328695 | | | 95 | | | | |
| E03H-3286115 | | | 115 | | | | |
| E03H-3286135 | | | 135 | | | | |
| E03H-3286155 | | | 155 | | | | |
| E03H-3286225 | | | 225 | | | | |
| E03H-329655 | 32 | 96 | 55 | 9 | 42 | 47 | 6 |
| E03H-329675 | | | 75 | | | | |
| E03H-329695 | | | 95 | | | | |
| E03H-3296115 | | | 115 | | | | |
| E03H-3296135 | | | 135 | | | | |
| E03H-3296155 | | | 155 | | | | |
| E03H-3296205 | | | 205 | | | | |
| E03H-3210675 | 32 | 106 | 75 | 9 | 42 | 47 | 6 |
| E03H-3210695 | | | 95 | | | | |
| E03H-32106115 | | | 115 | | | | |
| E03H-32106125 | | | 125 | | | | |
| E03H-32106145 | | | 145 | | | | |
| E03H-32106165 | | | 165 | | | | |
| E03H-3211675 | 32 | 116 | 75 | 9 | 42 | 47 | 6 |
| E03H-3211695 | | | 95 | | | | |
| E03H-32116115 | | | 115 | | | | |
| E03H-32116135 | | | 135 | | | | |
| E03H-32116155 | | | 155 | | | | |
| E03H-3213695 | 32 | 136 | 95 | 9 | 42 | 47 | 6 |
| E03H-32136115 | | | 115 | | | | |
| E03H-32136135 | | | 135 | | | | |
| E03H-32136155 | | | 155 | | | | |
| E03H-32156115 | 32 | 156 | 115 | 9 | 42 | 47 | 6 |
| E03H-32156155 | | | 155 | | | | |
| E03H-32196155 | 32 | 196 | 155 | 9 | 42 | 47 | 6 |
| E03H-32196195 | | | 195 | | | | |
| E03H-404695 | 40 | 46 | 95 | 12 | 54 | 60 | 10 |
| E03H-4046165 | | | 165 | | | | |
| E03H-405675 | 40 | 56 | 75 | 12 | 54 | 60 | 10 |
| E03H-4056115 | | | 115 | | | | |
| E03H-4056155 | | | 155 | | | | |
| E03H-4056195 | | | 195 | | | | |
| E03H-406675 | 40 | 66 | 75 | 12 | 54 | 60 | 10 |
| E03H-4066135 | | | 135 | | | | |

| Sipariş | d1 | L1 | L2 | L3 | d2 | d3 | a |
|---|---|---|---|---|---|---|---|
| E03H-407675 | 40 | 76 | 75 | 12 | 54 | 60 | 10 |
| E03H-4076115 | | | 115 | | | | |
| E03H-4076175 | | | 175 | | | | |
| E03H-408675 | 40 | 86 | 75 | 12 | 54 | 60 | 10 |
| E03H-4086135 | | | 135 | | | | |
| E03H-409675 | 40 | 96 | 75 | 12 | 54 | 60 | 10 |
| E03H-4096115 | | | 115 | | | | |
| E03H-4096155 | | | 155 | | | | |
| E03H-4011695 | 40 | 116 | 95 | 12 | 54 | 60 | 10 |
| E03H-40116135 | | | 135 | | | | |
| E03H-40116195 | | | 195 | | | | |
| E03H-4013695 | 40 | 136 | 95 | 12 | 54 | 60 | 10 |
| E03H-40136135 | | | 135 | | | | |
| E03H-40136215 | | | 215 | | | | |
| E03H-40156115 | 40 | 156 | 115 | 12 | 54 | 60 | 10 |
| E03H-40156155 | | | 155 | | | | |
| E03H-40156215 | | | 215 | | | | |
| E03H-40196155 | 40 | 196 | 155 | 12 | 54 | 60 | 10 |
| E03H-40196195 | | | 195 | | | | |
| E03H-40196235 | | | 235 | | | | |
| E03H-40246165 | 40 | 246 | 165 | 12 | 54 | 60 | 10 |
| E03H-40246245 | | | 245 | | | | |
| E03H-424695 | 42 | 46 | 95 | 12 | 54 | 60 | 10 |
| E03H-4246165 | | | 165 | | | | |
| E03H-425675 | 42 | 56 | 75 | 12 | 54 | 60 | 10 |
| E03H-4256115 | | | 115 | | | | |
| E03H-4256155 | | | 155 | | | | |
| E03H-4256195 | | | 195 | | | | |
| E03H-426675 | 42 | 66 | 75 | 12 | 54 | 60 | 10 |
| E03H-4266135 | | | 135 | | | | |
| E03H-427675 | 42 | 76 | 75 | 12 | 54 | 60 | 10 |
| E03H-4276115 | | | 115 | | | | |
| E03H-4276175 | | | 175 | | | | |
| E03H-428675 | 42 | 86 | 75 | 12 | 54 | 60 | 10 |
| E03H-4286135 | | | 135 | | | | |
| E03H-429675 | 42 | 96 | 75 | 12 | 54 | 60 | 10 |
| E03H-4296115 | | | 115 | | | | |
| E03H-4296155 | | | 155 | | | | |
| E03H-4211695 | 42 | 116 | 95 | 12 | 54 | 60 | 10 |
| E03H-42116135 | | | 135 | | | | |
| E03H-42116195 | | | 195 | | | | |
| E03H-4213695 | 42 | 136 | 95 | 12 | 54 | 60 | 10 |
| E03H-42136135 | | | 135 | | | | |
| E03H-42136215 | | | 215 | | | | |
| E03H-42156115 | 42 | 156 | 115 | 12 | 54 | 60 | 10 |
| E03H-42156155 | | | 155 | | | | |
| E03H-42156215 | | | 215 | | | | |
| E03H-42196155 | 42 | 196 | 155 | 12 | 54 | 60 | 10 |
| E03H-42196195 | | | 195 | | | | |
| E03H-42196235 | | | 235 | | | | |
| E03H-42246165 | 42 | 246 | 165 | 12 | 54 | 60 | 10 |
| E03H-42246245 | | | 245 | | | | |

## E01H - Şapkalı Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon




| Sipariş | d1 | L | L1 | L2 | d2 | a |
|---|---|---|---|---|---|---|
| E01H-1040 | 10 | 40 | 4 | 17 | 12 | 3 |
| E01H-1060 | | 60 | | | | |
| E01H-1080 | | 80 | | 22 | | |
| E01H-10100 | | 100 | | 27 | | |
| E01H-10120 | | 120 | | | | |
| E01H-1240 | 12 | 40 | 4 | 17 | 16 | 6 |
| E01H-1260 | | 60 | | 22 | | |
| E01H-1280 | | 80 | | 27 | | |
| E01H-12100 | | 100 | | | | |
| E01H-12120 | | 120 | | | | |
| E01H-12140 | | 140 | | 36 | | |
| E01H-12160 | | 160 | | | | |
| E01H-1460 | 14 | 60 | 7 | 17 | 18 | 8 |
| E01H-1480 | | 80 | | 22 | | |
| E01H-14100 | | 100 | | 27 | | |
| E01H-14120 | | 120 | | | | |
| E01H-14140 | | 140 | | 36 | | |
| E01H-14160 | | 160 | | | | |
| E01H-14180 | | 180 | | 46 | | |
| E01H-1640 | 16 | 40 | 7 | 22 | 20 | 8 |
| E01H-1660 | | 60 | | 27 | | |

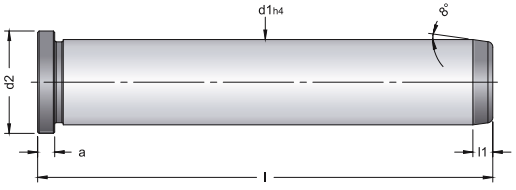
| Sipariş | d1 | L | L1 | L2 | d2 | a |
|---|---|---|---|---|---|---|
| E01H-1680 | 16 | 80 | 7 | 27 | 20 | 8 |
| E01H-16100 | | 100 | | 36 | | |
| E01H-16120 | | 120 | | | | |
| E01H-16140 | | 140 | | | | |
| E01H-16160 | | 160 | | 46 | | |
| E01H-16180 | | 180 | | | | |
| E01H-16200 | | 200 | | 56 | | |
| E01H-1860 | 18 | 60 | 7 | 27 | 22 | 8 |
| E01H-1880 | | 80 | | | | |
| E01H-18100 | | 100 | | | | |
| E01H-18120 | | 120 | | 36 | | |
| E01H-18140 | | 140 | | | | |
| E01H-18160 | | 160 | | 46 | | |
| E01H-18180 | | 180 | | | | |
| E01H-18200 | | 200 | | 56 | | |
| E01H-18240 | | 240 | | | | |
| E01H-2060 | 20 | 60 | 7 | 27 | 24 | 8 |
| E01H-2080 | | 80 | | | | |
| E01H-20100 | | 100 | | 36 | | |
| E01H-20120 | | 120 | | | | |
| E01H-20140 | | 140 | | | | |

| Sipariş | d1 | L | L1 | L2 | d2 | a |
|---|---|---|---|---|---|---|
| E01H-20160 | 20 | 160 | 7 | 46 | 24 | 8 |
| E01H-20180 | | 180 | | | | |
| E01H-20200 | | 200 | | 56 | | |
| E01H-20240 | | 240 | | 76 | | |
| E01H-2280 | 22 | 80 | 7 | 36 | 26 | 15 |
| E01H-22100 | | 100 | | | | |
| E01H-22120 | | 120 | | | | |
| E01H-22140 | | 140 | | | | |
| E01H-22160 | | 160 | | 46 | | |
| E01H-22180 | | 180 | | | | |
| E01H-22200 | | 200 | | 56 | | |
| E01H-22220 | | 220 | | | | |
| E01H-22240 | | 240 | | 66 | | |
| E01H-22300 | | 300 | | | | |
| E01H-2480 | 24 | 80 | 7 | 36 | 28 | 15 |
| E01H-24100 | | 100 | | | | |
| E01H-24120 | | 120 | | | | |
| E01H-24140 | | 140 | | | | |
| E01H-24160 | | 160 | | 46 | | |
| E01H-24180 | | 180 | | | | |
| E01H-24200 | | 200 | | 56 | | |

| Sipariş | d1 | L | L1 | L2 | d2 | a |
|---|---|---|---|---|---|---|
| E01H-24220 | 24 | 220 | 7 | 56 | 28 | 15 |
| E01H-24240 | | 240 | | 66 | | |
| E01H-24300 | | 300 | | | | |
| E01H-25100 | 25 | 100 | 7 | 35 | 29 | 10 |
| E01H-25120 | | 120 | | | | |
| E01H-25140 | | 140 | | | | |
| E01H-25160 | | 160 | | | | |
| E01H-25180 | | 180 | | | | |
| E01H-25200 | | 200 | | | | |
| E01H-25220 | | 220 | | | | |
| E01H-25250 | | 250 | | | | |
| E01H-30100 | 30 | 100 | 7 | 36 | 36 | 15 |
| E01H-30120 | | 120 | | | | |
| E01H-30140 | | 140 | | | | |
| E01H-30160 | | 160 | | 40 | | |
| E01H-30180 | | 180 | | 56 | | |
| E01H-30200 | | 200 | | | | |
| E01H-30220 | | 220 | | 66 | | |
| E01H-30240 | | 240 | | | | |
| E01H-30300 | | 300 | | 76 | | |
| E01H-30360 | | 360 | | | | |

## E08 - Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon



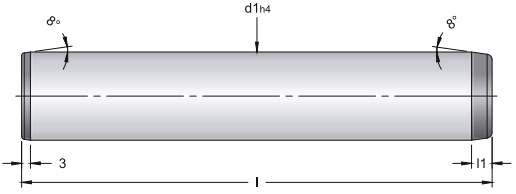

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E08-1280 | 12 | 80 | 4 | 16 | 4 |
| E08-12100 | | 100 | | | |
| E08-12120 | | 120 | | | |

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E08-18120 | 18 | 120 | 7 | 22 | 6 |
| E08-18140 | | 140 | | | |
| E08-18160 | | 160 | | | |

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E08-30160 | 30 | 160 | 7 | 36 | 6 |
| E08-30200 | | 200 | | | |
| E08-30240 | | 240 | | | |

## E09 - Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon
**≈DIN 9825 - 2**




| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E09-12100 | 12 | 100 | 6 |
| E09-12125 | | 125 | |

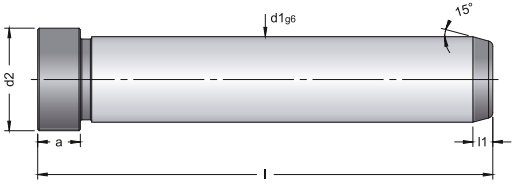
| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E09-18125 | 18 | 125 | 6 |
| E09-18160 | | 160 | |

| Sipariş | d1 | L | L1 |
|---|---|---|---|
| E09-30160 | 30 | 160 | 7 |
| E09-30240 | | 240 | |

## E01E - Şapkalı Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : İndüksiyon

**≈DIN ISO 8404 - A**




| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01E-1040 | 10 | 40 | 4 | 12 | 3 |
| E01E-1060 | | 60 | | | |
| E01E-1080 | | 80 | | | |
| E01E-10100 | | 100 | | | |
| E01E-10120 | | 120 | | | |
| E01E-1240 | 12 | 40 | 4 | 16 | 6 |
| E01E-1260 | | 60 | | | |
| E01E-1280 | | 80 | | | |
| E01E-12100 | | 100 | | | |
| E01E-12120 | | 120 | | | |
| E01E-12140 | | 140 | | | |
| E01E-12160 | | 160 | | | |
| E01E-1460 | 14 | 60 | 7 | 18 | 8 |
| E01E-1480 | | 80 | | | |
| E01E-14100 | | 100 | | | |
| E01E-14120 | | 120 | | | |
| E01E-14140 | | 140 | | | |
| E01E-14160 | | 160 | | | |
| E01E-14180 | | 180 | | | |
| E01E-1640 | 16 | 40 | 7 | 20 | 8 |
| E01E-1660 | | 60 | | | |
| E01E-1680 | | 80 | | | |
| E01E-16100 | | 100 | | | |

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01E-16120 | 16 | 120 | 7 | 20 | 8 |
| E01E-16140 | | 140 | | | |
| E01E-16160 | | 160 | | | |
| E01E-16180 | | 180 | | | |
| E01E-16200 | | 200 | | | |
| E01E-1860 | 18 | 60 | 7 | 22 | 8 |
| E01E-1880 | | 80 | | | |
| E01E-18100 | | 100 | | | |
| E01E-18120 | | 120 | | | |
| E01E-18140 | | 140 | | | |
| E01E-18160 | | 160 | | | |
| E01E-18180 | | 180 | | | |
| E01E-18200 | | 200 | | | |
| E01E-18240 | | 240 | | | |
| E01E-2060 | 20 | 60 | 7 | 24 | 8 |
| E01E-2080 | | 80 | | | |
| E01E-20100 | | 100 | | | |
| E01E-20120 | | 120 | | | |
| E01E-20140 | | 140 | | | |
| E01E-20160 | | 160 | | | |
| E01E-20180 | | 180 | | | |
| E01E-20200 | | 200 | | | |
| E01E-20240 | | 240 | | | |

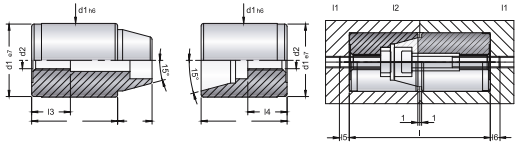
| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01E-2280 | 22 | 80 | 7 | 26 | 15 |
| E01E-22100 | | 100 | | | |
| E01E-22120 | | 120 | | | |
| E01E-22140 | | 140 | | | |
| E01E-22160 | | 160 | | | |
| E01E-22180 | | 180 | | | |
| E01E-22200 | | 200 | | | |
| E01E-22220 | | 220 | | | |
| E01E-22240 | | 240 | | | |
| E01E-22300 | | 300 | | | |
| E01E-2480 | 24 | 80 | 7 | 28 | 15 |
| E01E-24100 | | 100 | | | |
| E01E-24120 | | 120 | | | |
| E01E-24140 | | 140 | | | |
| E01E-24160 | | 160 | | | |
| E01E-24180 | | 180 | | | |
| E01E-24200 | | 200 | | | |
| E01E-24220 | | 220 | | | |
| E01E-24240 | | 240 | | | |
| E01E-24300 | | 300 | | | |
| E01E-30100 | 30 | 100 | 7 | 36 | 15 |
| E01E-30120 | | 120 | | | |
| E01E-30140 | | 140 | | | |

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01E-30160 | 30 | 160 | 7 | 36 | 15 |
| E01E-30180 | | 180 | | | |
| E01E-30200 | | 200 | | | |
| E01E-30220 | | 220 | | | |
| E01E-30240 | | 240 | | | |
| E01E-30300 | | 300 | | | |
| E01E-30360 | | 360 | | | |
| E01E-40160 | 40 | 160 | 10 | 48 | 15 |
| E01E-40180 | | 180 | | | |
| E01E-40200 | | 200 | | | |
| E01E-40220 | | 220 | | | |
| E01E-40240 | | 240 | | | |
| E01E-40280 | | 280 | | | |
| E01E-40300 | | 300 | | | |
| E01E-40320 | | 320 | | | |
| E01E-40360 | | 360 | | | |
| E01E-50160 | 50 | 160 | 10 | 58 | 15 |
| E01E-50200 | | 200 | | | |
| E01E-50240 | | 240 | | | |
| E01E-50300 | | 300 | | | |
| E01E-50360 | | 360 | | | |

**≈DIN ISO 8406**

## E50 - Konik Kilitleme

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon

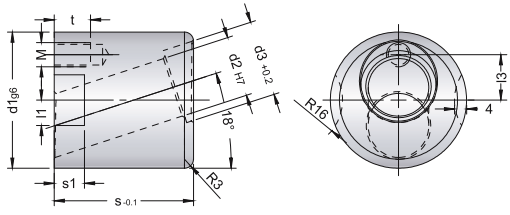



| Sipariş | d1 | L | L1 | L2 | L3 | L4 | L5 | L6 | d2 |
|---|---|---|---|---|---|---|---|---|---|
| E50-12 | 12 | 34 | 16 | 4.5 | 9.6 | 8.6 | 8 | 7.5 | M4 |
| E50-14 | 14 | 34 | 16 | 6 | 12.4 | 6 | 7.5 | 8 | M5 |
| E50-16 | 16 | 34 | 16 | 6 | 12.4 | 5.8 | 7.5 | 8 | M5 |
| E50-20 | 20 | 54 | 26 | 9 | 19.7 | 10.6 | 12 | 9.5 | M8 |
| E50-25 | 25 | 54 | 26 | 10 | 19.7 | 9.2 | 11 | 11 | M8 |
| E50-30 | 30 | 72 | 35 | 14 | 25 | 12.2 | 15 | 13 | M10 |
| E50-32 | 32 | 72 | 35 | 14 | 25 | 12.2 | 15 | 13 | M10 |
| E50-42 | 42 | 92 | 45 | 18 | 27 | 16.8 | 16 | 13 | M10 |

**≈DIN 16-716 - C**

## E100 - Boynuz Pim Yatağı

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon



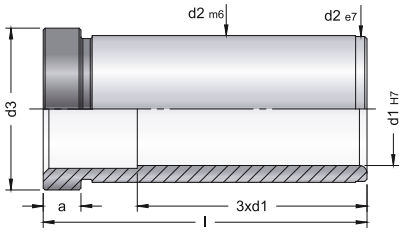

| Sipariş | d1 | S | d2 | d3 | d5 | L1 | L3 | T1 | T2 |
|---|---|---|---|---|---|---|---|---|---|
| E100-12 | 32 | 36 | 12 | 16 | M6 | 7 | 10 | 10 | 12 |
| E100-14 | 36 | 36 | 14 | 18 | M8 | 7 | 12 | 10 | 16 |
| E100-16 | 40 | 46 | 16 | 20 | M8 | 8.5 | 13.5 | 10 | 16 |
| E100-20 | 45 | 46 | 20 | 25 | M8 | 8.5 | 15 | 10 | 16 |
| E100-25 | 50 | 56 | 25 | 29 | M8 | 10 | 16 | 12 | 16 |
| E100-30 | 63 | 66 | 30 | 34 | M10 | 12 | 21 | 15 | 20 |



Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

## E20 - Şapkalı Burç

**Malzeme** : 1.7131 (16MnCr5)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon




| Sipariş | d1 | L | d2 | d3 | a |
|---|---|---|---|---|---|
| E20-1226 | 12 | 26 | 16 | 19 | 4 |
| E20-1236 | | 36 | | | |
| E20-1246 | | 46 | | | |
| E20-1256 | | 56 | | | |
| E20-1266 | | 66 | | | |
| E20-1426 | 14 | 26 | 20 | 25 | 6 |
| E20-1436 | | 36 | | | |
| E20-1446 | | 46 | | | |
| E20-1456 | | 56 | | | |
| E20-1466 | | 66 | | | |
| E20-1626 | 16 | 26 | 24 | 28 | 6 |
| E20-1636 | | 36 | | | |
| E20-1646 | | 46 | | | |
| E20-1656 | | 56 | | | |
| E20-1666 | | 66 | | | |
| E20-1676 | | 76 | | | |

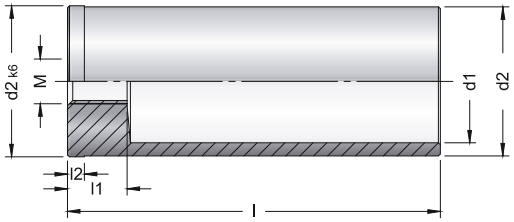
| Sipariş | d1 | L | d2 | d3 | a |
|---|---|---|---|---|---|
| E20-1686 | 16 | 86 | 24 | 28 | 6 |
| E20-1826 | 18 | 26 | 26 | 31 | 6 |
| E20-1836 | | 36 | | | |
| E20-1846 | | 46 | | | |
| E20-1856 | | 56 | | | |
| E20-1866 | | 66 | | | |
| E20-1876 | | 76 | | | |
| E20-1886 | | 86 | | | |
| E20-2026 | 20 | 26 | 28 | 32 | 6 |
| E20-2036 | | 36 | | | |
| E20-2046 | | 46 | | | |
| E20-2056 | | 56 | | | |
| E20-2066 | | 66 | | | |
| E20-2076 | | 76 | | | |
| E20-2086 | | 86 | | | |
| E20-2096 | | 96 | | | |

| Sipariş | d1 | L | d2 | d3 | a |
|---|---|---|---|---|---|
| E20-2526 | 25 | 26 | 34 | 38 | 8 |
| E20-2536 | | 36 | | | |
| E20-2546 | | 46 | | | |
| E20-2556 | | 56 | | | |
| E20-2566 | | 66 | | | |
| E20-2576 | | 76 | | | |
| E20-2586 | | 86 | | | |
| E20-2596 | | 96 | | | |
| E20-25106 | | 106 | | | |
| E20-3036 | 30 | 36 | 39 | 43 | 10 |
| E20-3046 | | 46 | | | |
| E20-3056 | | 56 | | | |
| E20-3066 | | 66 | | | |
| E20-3076 | | 76 | | | |
| E20-3086 | | 86 | | | |
| E20-3096 | | 96 | | | |

| Sipariş | d1 | L | d2 | d3 | a |
|---|---|---|---|---|---|
| E20-30106 | 30 | 106 | 39 | 43 | 10 |
| E20-30116 | | 116 | | | |
| E20-4046 | 40 | 46 | 54 | 58 | 10 |
| E20-4056 | | 56 | | | |
| E20-4066 | | 66 | | | |
| E20-4076 | | 76 | | | |
| E20-4086 | | 86 | | | |
| E20-4096 | | 96 | | | |
| E20-40106 | | 106 | | | |
| E20-40116 | | 116 | | | |
| E20-40126 | | 126 | | | |
| E20-40136 | | 136 | | | |
| E20-40146 | | 146 | | | |

## E40H - Tespit Burcu

**Malzeme** : 1.7131 (16MnCr5)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon
**≈DIN 16759**



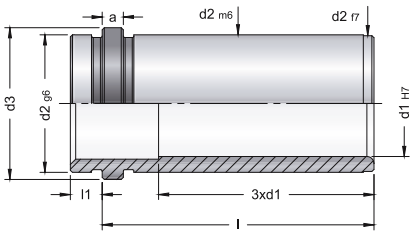

| Sipariş | d1 | L | d2 | M | L1 | L2 | d2 |
|---|---|---|---|---|---|---|---|
| E40H-2030 | 16 | 30 | 20 | 12 | 10 | 2 | g6 |
| E40H-2040 | | 40 | | | | | |
| E40H-2060 | | 60 | | | | | |
| E40H-2080 | | 80 | | | | | |
| E40H-20100 | | 100 | | | | | |
| E40H-20120 | | 120 | | | | | |
| E40H-20140 | | 140 | | | | | |
| E40H-20160 | | 160 | | | | | |
| E40H-2630 | 21 | 30 | 26 | 12 | 13 | 2.5 | g6 |
| E40H-2640 | | 40 | | | | | |
| E40H-2660 | | 60 | | | | | |
| E40H-2680 | | 80 | | | | | |
| E40H-26100 | | 100 | | | | | |
| E40H-26120 | | 120 | | | | | |
| E40H-26140 | | 140 | | | | | |
| E40H-26160 | | 160 | | | | | |
| E40H-26180 | | 180 | | | | | |

| Sipariş | d1 | L | d2 | M | L1 | L2 | d2 |
|---|---|---|---|---|---|---|---|
| E40H-3040 | 25 | 40 | 30 | 12 | 13 | 2.5 | g6 |
| E40H-3060 | | 60 | | | | | |
| E40H-3080 | | 80 | | | | | |
| E40H-30100 | | 100 | | | | | |
| E40H-30120 | | 120 | | | | | |
| E40H-30140 | | 140 | | | | | |
| E40H-30160 | | 160 | | | | | |
| E40H-30180 | | 180 | | | | | |
| E40H-30200 | | 200 | | | | | |
| E40H-30240 | | 240 | | | | | |
| E40H-4240 | 33 | 40 | 42 | 12 | 16 | 4.5 | g6 |
| E40H-4260 | | 60 | | | | | |
| E40H-4280 | | 80 | | | | | |
| E40H-42100 | | 100 | | | | | |
| E40H-42120 | | 120 | | | | | |
| E40H-42140 | | 140 | | | | | |
| E40H-42160 | | 160 | | | | | |

| Sipariş | d1 | L | d2 | M | L1 | L2 | d2 |
|---|---|---|---|---|---|---|---|
| E40H-42180 | 33 | 180 | 42 | 12 | 16 | 4.5 | g6 |
| E40H-42200 | | 200 | | | | | |
| E40H-42220 | | 220 | | | | | |
| E40H-42260 | | 260 | | | | | |
| E40H-42300 | | 300 | | | | | |
| E40H-5460 | 43 | 60 | 54 | 12 | 16 | 4.5 | f6 |
| E40H-5480 | | 80 | | | | | |
| E40H-54120 | | 120 | | | | | |
| E40H-54160 | | 160 | | | | | |
| E40H-54200 | | 200 | | | | | |
| E40H-54240 | | 240 | | | | | |
| E40H-54280 | | 280 | | | | | |

## E21H - Kuyruklu Burç

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon
**≈DIN 16716 - C**




| Sipariş | d1 | L | d2 | d3 | a | L1 |
|---|---|---|---|---|---|---|
| E21H-1417 | 14 | 17 | 20 | 25 | 6 | 9 |
| E21H-1422 | | 22 | | | | |
| E21H-1427 | | 27 | | | | |
| E21H-1436 | | 36 | | | | |
| E21H-1446 | | 46 | | | | |
| E21H-1456 | | 56 | | | | |
| E21H-1466 | | 66 | | | | |
| E21H-1476 | | 76 | | | | |
| E21H-1486 | | 86 | | | | |
| E21H-1496 | | 96 | | | | |
| E21H-14116 | | 116 | | | | |
| E21H-1517 | 15 | 17 | 20 | 25 | 6 | 9 |
| E21H-1522 | | 22 | | | | |
| E21H-1527 | | 27 | | | | |
| E21H-1536 | | 36 | | | | |
| E21H-1546 | | 46 | | | | |
| E21H-1556 | | 56 | | | | |
| E21H-1566 | | 66 | | | | |
| E21H-1576 | | 76 | | | | |
| E21H-1586 | | 86 | | | | |
| E21H-1596 | | 96 | | | | |
| E21H-15116 | | 116 | | | | |
| E21H-1817 | 18 | 17 | 26 | 31 | 6 | 9 |
| E21H-1822 | | 22 | | | | |
| E21H-1827 | | 27 | | | | |
| E21H-1836 | | 36 | | | | |
| E21H-1846 | | 46 | | | | |
| E21H-1856 | | 56 | | | | |
| E21H-1866 | | 66 | | | | |
| E21H-1876 | | 76 | | | | |
| E21H-1886 | | 86 | | | | |
| E21H-1896 | | 96 | | | | |

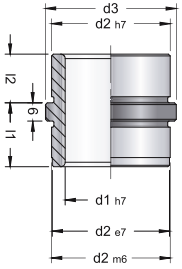
| Sipariş | d1 | L | d2 | d3 | a | L1 |
|---|---|---|---|---|---|---|
| E21H-18106 | 18 | 106 | 26 | 31 | 6 | 9 |
| E21H-18116 | | 116 | | | | |
| E21H-18136 | | 136 | | | | |
| E21H-2017 | 20 | 17 | 26 | 31 | 6 | 9 |
| E21H-2022 | | 22 | | | | |
| E21H-2027 | | 27 | | | | |
| E21H-2036 | | 36 | | | | |
| E21H-2046 | | 46 | | | | |
| E21H-2056 | | 56 | | | | |
| E21H-2066 | | 66 | | | | |
| E21H-2076 | | 76 | | | | |
| E21H-2086 | 20 | 86 | 26 | 31 | 6 | 9 |
| E21H-2096 | | 96 | | | | |
| E21H-20106 | | 106 | | | | |
| E21H-20116 | | 116 | | | | |
| E21H-20136 | | 136 | | | | |
| E21H-2217 | 22 | 17 | 30 | 35 | 6 | 9 |
| E21H-2222 | | 22 | | | | |
| E21H-2227 | | 27 | | | | |
| E21H-2236 | | 36 | | | | |
| E21H-2246 | | 46 | | | | |
| E21H-2256 | | 56 | | | | |
| E21H-2266 | | 66 | | | | |
| E21H-2276 | | 76 | | | | |
| E21H-2286 | | 86 | | | | |
| E21H-2296 | | 96 | | | | |
| E21H-22106 | | 106 | | | | |
| E21H-22116 | | 116 | | | | |
| E21H-22136 | | 136 | | | | |
| E21H-22156 | | 156 | | | | |
| E21H-2417 | 24 | 17 | 30 | 35 | 6 | 9 |
| E21H-2422 | | 22 | | | | |

| Sipariş | d1 | L | d2 | d3 | a | L1 |
|---|---|---|---|---|---|---|
| E21H-2427 | 24 | 27 | 30 | 35 | 6 | 9 |
| E21H-2436 | | 36 | | | | |
| E21H-2446 | | 46 | | | | |
| E21H-2456 | | 56 | | | | |
| E21H-2466 | | 66 | | | | |
| E21H-2476 | | 76 | | | | |
| E21H-2486 | | 86 | | | | |
| E21H-2496 | | 96 | | | | |
| E21H-24106 | | 106 | | | | |
| E21H-24116 | | 116 | | | | |
| E21H-24136 | | 136 | | | | |
| E21H-24156 | | 156 | | | | |
| E21H-3027 | 30 | 27 | 42 | 47 | 6 | 9 |
| E21H-3036 | | 36 | | | | |
| E21H-3046 | | 46 | | | | |
| E21H-3056 | 30 | 56 | 42 | 47 | 6 | 9 |
| E21H-3066 | | 66 | | | | |
| E21H-3076 | | 76 | | | | |
| E21H-3086 | | 86 | | | | |
| E21H-3096 | | 96 | | | | |
| E21H-30106 | | 106 | | | | |
| E21H-30116 | | 116 | | | | |
| E21H-30126 | | 126 | | | | |
| E21H-30136 | | 136 | | | | |
| E21H-30156 | | 156 | | | | |
| E21H-30196 | | 196 | | | | |
| E21H-3227 | 32 | 27 | 42 | 47 | 6 | 9 |
| E21H-3236 | | 36 | | | | |
| E21H-3246 | | 46 | | | | |
| E21H-3256 | | 56 | | | | |
| E21H-3266 | | 66 | | | | |
| E21H-3276 | | 76 | | | | |

| Sipariş | d1 | L | d2 | d3 | a | L1 |
|---|---|---|---|---|---|---|
| E21H-3286 | 32 | 86 | 42 | 47 | 6 | 9 |
| E21H-3296 | | 96 | | | | |
| E21H-32106 | | 106 | | | | |
| E21H-32116 | | 116 | | | | |
| E21H-32126 | | 126 | | | | |
| E21H-32136 | | 136 | | | | |
| E21H-32156 | | 156 | | | | |
| E21H-32196 | | 196 | | | | |
| E21H-4046 | 40 | 46 | 54 | 60 | 10 | 12 |
| E21H-4056 | | 56 | | | | |
| E21H-4066 | | 66 | | | | |
| E21H-4076 | | 76 | | | | |
| E21H-4086 | | 86 | | | | |
| E21H-4096 | | 96 | | | | |
| E21H-40116 | | 116 | | | | |
| E21H-40136 | | 136 | | | | |
| E21H-40156 | | 156 | | | | |
| E21H-40196 | | 196 | | | | |
| E21H-40246 | | 246 | | | | |
| E21H-4246 | 42 | 46 | 54 | 60 | 10 | 12 |
| E21H-4256 | | 56 | | | | |
| E21H-4266 | | 66 | | | | |
| E21H-4276 | | 76 | | | | |
| E21H-4286 | | 86 | | | | |
| E21H-4296 | | 96 | | | | |
| E21H-42116 | | 116 | | | | |
| E21H-42136 | | 136 | | | | |
| E21H-42156 | | 156 | | | | |
| E21H-42196 | | 196 | | | | |
| E21H-42246 | | 246 | | | | |

## E22 - Flanşlı Burç

**Malzeme** : 1.7131 (16MnCr5)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon

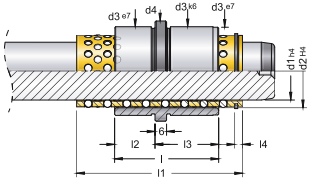



| Sipariş | d1 | L1 | d2 | d3 | L2 |
|---|---|---|---|---|---|
| E22-1216 | 12 | 16 | 16 | 19 | 12 |
| E22-1416 | 14 | 16 | 20 | 25 | 12 |
| E22-1616 | 16 | 16 | 24 | 28 | 12 |
| E22-1816 | 18 | 16 | 26 | 31 | 12 |

| Sipariş | d1 | L1 | d2 | d3 | L2 |
|---|---|---|---|---|---|
| E22-2016 | 20 | 16 | 28 | 32 | 12 |
| E22-2421 | 24 | 21 | 34 | 38 | 16 |
| E22-2521 | 25 | 21 | 34 | 38 | 16 |
| E22-3021 | 30 | 21 | 39 | 43 | 16 |

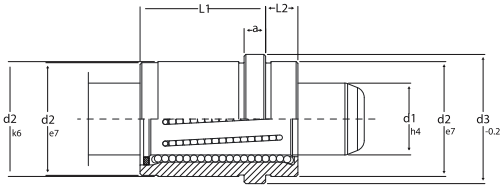
## E22B - Bilyalı Flanşlı Burç

**Malzeme** : 1.3505 (100Cr6)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon
**Malzeme** : Ms58
**Bilya Malzemesi** : 1.3505 (100Cr6)




| Sipariş | d1 | L1 | H max. | L4 | L | L2 | d2 | d3 | d4 | L3 |
|---|---|---|---|---|---|---|---|---|---|---|
| E22B-1240 | 12 | 40 | 50 | 2.1 | 24 | 6 | 16 | 22 | 26 | 18 |
| E22B-1256 | | 56 | 82 | | | | | | | |
| E22B-1845 | 18 | 45 | 44 | 3 | 34 | 11 | 24 | 30 | 35 | 23 |
| E22B-1856 | | 56 | 66 | | | | | | | |
| E22B-1871 | | 71 | 96 | | | | | | | |
| E22B-3056 | 30 | 56 | 32 | 4.8 | 54 | 21 | 38 | 46 | 52 | 33 |
| E22B-3075 | | 75 | 70 | | | | | | | |
| E22B-3095 | | 95 | 110 | | | | | | | |





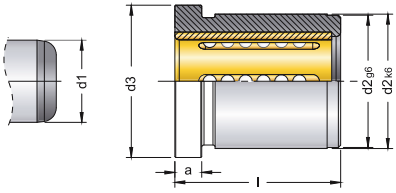

★ HAAF ★

## H100 - Lineer Burç

**Malzeme :** 1.3505 (100Cr6) + Bronze Misket 1.3505 (100Cr6)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sertleştirme

| Sipariş | d1 | d2 | d3 | L1 | a | L2 |
|---|---|---|---|---|---|---|
| H100-12 | 12 | 22 | 26 | 20 | 6 | 8 |
| H100-18 | 18 | 30 | 35 | 24 | 6 | 9 |
| H100-30 | 30 | 46 | 52 | 34 | 6 | 12 |





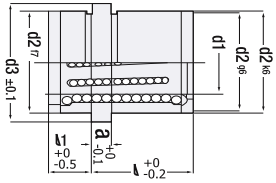

★ HAAF ★

## H74 - Şapkalı Lineer Burç

**Malzeme** : 1.3505 (100Cr6) + Bronze
**Sertlik** : 62 ± 2 HRC / HB ≥ 180
**Isıl İşlem** : Sementasyon

| Sipariş | d1 | l | d2 | d3 | a | Bilya Çapı |
|---|---|---|---|---|---|---|
| H74-1835 | 18 | 35 | 30 | 34 | 6 | 3 |
| H74-2035 | 20 | 35 | 32 | 36 | | |
| H74-2045 | | 45 | | | | |
| H74-2055 | | 55 | | | | |
| H74-3045 | 30 | 45 | 48 | 54 | 8 | 4 |
| H74-3063 | | 63 | | | | |
| H74-4045 | 40 | 45 | 60 | 66 | | |
| H74-4063 | | 63 | | | | |






★ HAAF ★

## H75 - Ortadan Flanşlı Lineer Burç

**Malzeme :** 1.3505 (100Cr6) + Bronze Misket 1.3505 (100Cr6)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sertleştirme

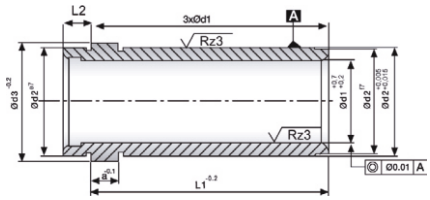
| Sipariş | d1 | L | d2 | d3 | a | l1 | Bilya Çapı |
|---|---|---|---|---|---|---|---|
| H75-1222 | 12 | 22 | 24 | 28 | 6 | 8 | 3 |
| H75-1826 | 18 | 26 | 30 | 34 | 6 | 9 | 3 |
| H75-2026 | 20 | 26 | 32 | 36 | 6 | 9 | 3 |
| H75-2036 | | 36 | | | | | |
| H75-2526 | 25 | 26 | 40 | 45 | 6 | 10 | 3 |
| H75-2536 | | 36 | | | | | |
| H75-2546 | | 46 | | | | | |
| H75-3046 | 30 | 46 | 48 | 54 | 8 | 12 | 4 |
| H75-4046 | 40 | 46 | 60 | 66 | 8 | 12 | 4 |

## YERLİ TİP

### E21 - Yerli Kuyruklu Burç

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon

≈DIN 16716 - C




| Sipariş | d1 | d2 | d3 | a | L2 | L1 |
|---|---|---|---|---|---|---|
| E21-1626 | 16 | 24 | 28 | 6 | 10 | 26 |
| E21-1636 | | | | | | 36 |
| E21-1646 | | | | | | 46 |
| E21-1656 | | | | | | 56 |
| E21-1666 | | | | | | 66 |
| E21-1676 | | | | | | 76 |
| E21-1686 | | | | | | 86 |
| E21-2026 | 20 | 28 | 32 | 6 | 10 | 26 |
| E21-2036 | | | | | | 36 |
| E21-2046 | | | | | | 46 |
| E21-2056 | | | | | | 56 |

| Sipariş | d1 | d2 | d3 | a | L2 | L1 |
|---|---|---|---|---|---|---|
| E21-2066 | 20 | 28 | 32 | 6 | 10 | 66 |
| E21-2076 | | | | | | 76 |
| E21-2086 | | | | | | 86 |
| E21-2096 | | | | | | 96 |
| E21-2526 | 25 | 34 | 38 | 8 | 10 | 26 |
| E21-2536 | | | | | | 36 |
| E21-2546 | | | | | | 46 |
| E21-2556 | | | | | | 56 |
| E21-2566 | | | | | | 66 |
| E21-2576 | | | | | | 76 |
| E21-2586 | | | | | | 86 |

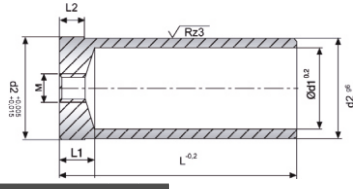
| Sipariş | d1 | d2 | d3 | a | L2 | L1 |
|---|---|---|---|---|---|---|
| E21-2596 | 25 | 34 | 38 | 8 | 10 | 96 |
| E21-25106 | | | | | | 106 |
| E21-3036 | 30 | 39 | 43 | 10 | 10 | 36 |
| E21-3046 | | | | | | 46 |
| E21-3056 | | | | | | 56 |
| E21-3066 | | | | | | 66 |
| E21-3076 | | | | | | 76 |
| E21-3086 | | | | | | 86 |
| E21-3096 | | | | | | 96 |
| E21-30106 | | | | | | 106 |
| E21-30116 | | | | | | 116 |

## YERLİ TİP

### E40 - Yerli Tespit Burcu

**Malzeme** : 1.7131 (16MnCr5)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Sementasyon

≈DIN 16759




| Sipariş | d2 | d1 | M | L1 | L2 | L |
|---|---|---|---|---|---|---|
| E40-1660 | 24 | 16 | M8 | 15 | 5 | 60 |
| E40-1680 | | | | | | 80 |
| E40-16100 | | | | | | 100 |
| E40-16120 | | | | | | 120 |
| E40-16140 | | | | | | 140 |

| Sipariş | d2 | d1 | M | L1 | L2 | L |
|---|---|---|---|---|---|---|
| E40-2060 | 28 | 20 | M8 | 15 | 5 | 60 |
| E40-2080 | | | | | | 80 |
| E40-20100 | | | | | | 100 |
| E40-20120 | | | | | | 120 |
| E40-20140 | | | | | | 140 |

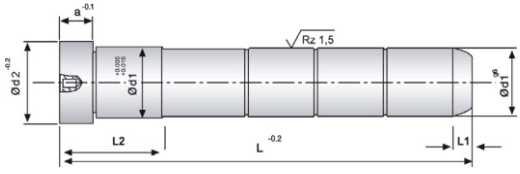
| Sipariş | d2 | d1 | M | L1 | L2 | L |
|---|---|---|---|---|---|---|
| E40-2560 | 34 | 25 | M10 | 15 | 5 | 60 |
| E40-2580 | | | | | | 80 |
| E40-25100 | | | | | | 100 |
| E40-25120 | | | | | | 120 |
| E40-25140 | | | | | | 140 |
| E40-25160 | | | | | | 160 |

| Sipariş | d2 | d1 | M | L1 | L2 | L |
|---|---|---|---|---|---|---|
| E40-3080 | 39 | 30 | M10 | 15 | 5 | 80 |
| E40-30100 | | | | | | 100 |
| E40-30120 | | | | | | 120 |
| E40-30140 | | | | | | 140 |
| E40-30160 | | | | | | 160 |

## YERLİ TİP

### E01 - Yerli Şapkalı Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Islah + İndüksiyon




| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01-1260 | 12 | 60 | 7 | 16 | 10 |
| E01-1280 | | 80 | | | |
| E01-12100 | | 100 | | | |
| E01-12120 | | 120 | | | |
| E01-12140 | | 140 | | | |
| E01-12160 | | 160 | | | |
| E01-12180 | | 180 | | | |
| E01-1460 | 14 | 60 | 7 | 18 | 10 |
| E01-1480 | | 80 | | | |
| E01-14100 | | 100 | | | |
| E01-14120 | | 120 | | | |
| E01-14140 | | 140 | | | |
| E01-14160 | | 160 | | | |
| E01-14180 | | 180 | | | |
| E01-1660 | 16 | 60 | 7 | 20 | 10 |
| E01-1680 | | 80 | | | |
| E01-16100 | | 100 | | | |
| E01-16120 | | 120 | | | |

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01-16140 | 16 | 140 | 7 | 20 | 10 |
| E01-16160 | | 160 | | | |
| E01-16180 | | 180 | | | |
| E01-16200 | | 200 | | | |
| E01-16250 | | 250 | | | |
| E01-1860 | 18 | 60 | 7 | 22 | 10 |
| E01-1880 | | 80 | | | |
| E01-18100 | | 100 | | | |
| E01-18120 | | 120 | | | |
| E01-18140 | | 140 | | | |
| E01-18160 | | 160 | | | |
| E01-18180 | | 180 | | | |
| E01-18200 | | 200 | | | |
| E01-18220 | | 220 | | | |
| E01-2060 | 20 | 60 | 7 | 24 | 10 |
| E01-2080 | | 80 | | | |
| E01-20100 | | 100 | | | |
| E01-20120 | | 120 | | | |
| E01-20140 | | 140 | | | |

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01-20160 | 20 | 160 | 7 | 24 | 10 |
| E01-20180 | | 180 | | | |
| E01-20200 | | 200 | | | |
| E01-20220 | | 220 | | | |
| E01-20240 | | 240 | | | |
| E01-20250 | | 250 | | | |
| E01-20280 | | 280 | | | |
| E01-20300 | | 300 | | | |
| E01-20315 | | 315 | | | |
| E01-20320 | | 320 | | | |
| E01-20350 | | 350 | | | |
| E01-25100 | 25 | 100 | 7 | 29 | 10 |
| E01-25120 | | 120 | | | |
| E01-25140 | | 140 | | | |
| E01-25160 | | 160 | | | |
| E01-25180 | | 180 | | | |
| E01-25200 | | 200 | | | |
| E01-25220 | | 220 | | | |
| E01-25250 | | 250 | | | |

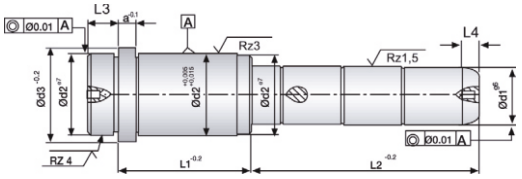
| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01-25280 | 25 | 280 | 7 | 29 | 10 |
| E01-25300 | | 300 | | | |
| E01-25315 | | 315 | | | |
| E01-25320 | | 320 | | | |
| E01-25350 | | 350 | | | |
| E01-30100 | 30 | 100 | 7 | 34 | 12 |
| E01-30120 | | 120 | | | |
| E01-30140 | | 140 | | | |
| E01-30160 | | 160 | | | |
| E01-30180 | | 180 | | | |
| E01-30200 | | 200 | | | |
| E01-30220 | | 220 | | | |
| E01-30250 | | 250 | | | |
| E01-30280 | | 280 | | | |
| E01-30300 | | 300 | | | |
| E01-30320 | | 320 | | | |
| E01-30350 | | 350 | | | |
| E01-30400 | | 400 | | | |

| Sipariş | d1 | L | L1 | d2 | a |
|---|---|---|---|---|---|
| E01-40160 | 40 | 160 | 10 | 48 | 15 |
| E01-40180 | | 180 | | | |
| E01-40200 | | 200 | | | |
| E01-40220 | | 220 | | | |
| E01-40240 | | 240 | | | |
| E01-40280 | | 280 | | | |
| E01-40300 | | 300 | | | |
| E01-40320 | | 320 | | | |
| E01-40360 | | 360 | | | |
| E01-40400 | | 400 | | | |
| E01-50160 | 50 | 160 | 10 | 58 | 15 |
| E01-50200 | | 200 | | | |
| E01-50240 | | 240 | | | |
| E01-50300 | | 300 | | | |
| E01-50360 | | 360 | | | |

## YERLİ TİP

### E03 - Yerli Kuyruklu Kademeli Kolon

**Malzeme** : 1.1213 (Cf 53)
**Sertlik** : 62 ± 2 HRC
**Isıl İşlem** : Islah + İndüksiyon




| Sipariş | d1 | L1 | L2 | d2 | d3 | a | L3 |
|---|---|---|---|---|---|---|---|
| E03-162626 | 16 | 26 | 26 | 24 | 28 | 6 | 10 |
| E03-162636 | | | 36 | | | | |
| E03-162646 | | | 46 | | | | |
| E03-162656 | | | 56 | | | | |
| E03-162666 | | | 66 | | | | |
| E03-162676 | | | 76 | | | | |
| E03-162696 | | | 96 | | | | |
| E03-163626 | | 36 | 26 | | | | |
| E03-163636 | | | 36 | | | | |
| E03-163646 | | | 46 | | | | |
| E03-163656 | | | 56 | | | | |
| E03-163666 | | | 66 | | | | |
| E03-163686 | | | 86 | | | | |
| E03-164626 | | 46 | 26 | | | | |
| E03-164636 | | | 36 | | | | |
| E03-164646 | | | 46 | | | | |
| E03-164656 | | | 56 | | | | |
| E03-164666 | | | 66 | | | | |
| E03-164676 | | | 76 | | | | |
| E03-164696 | | | 96 | | | | |
| E03-1646116 | | | 116 | | | | |
| E03-165636 | | 56 | 36 | | | | |
| E03-165646 | | | 46 | | | | |
| E03-165666 | | | 66 | | | | |
| E03-165686 | | | 86 | | | | |
| E03-1656106 | | | 106 | | | | |
| E03-1656126 | | | 126 | | | | |
| E03-1656146 | | | 146 | | | | |
| E03-166636 | | 66 | 36 | | | | |
| E03-166656 | | | 56 | | | | |
| E03-166676 | | | 76 | | | | |
| E03-166696 | | | 96 | | | | |
| E03-1666116 | | 66 | 116 | 24 | 28 | 6 | 10 |
| E03-1666136 | | | 136 | | | | |
| E03-167646 | | 76 | 46 | | | | |
| E03-167666 | | | 66 | | | | |
| E03-167686 | | | 86 | | | | |
| E03-1676106 | | | 106 | | | | |
| E03-1676126 | | | 126 | | | | |
| E03-168646 | | 86 | 46 | | | | |
| E03-168666 | | | 66 | | | | |
| E03-168686 | | | 86 | | | | |
| E03-1686106 | | | 106 | | | | |
| E03-1686126 | | | 126 | | | | |
| E03-202626 | 20 | 26 | 26 | 28 | 32 | 6 | 10 |
| E03-202636 | | | 36 | | | | |
| E03-202646 | | | 46 | | | | |
| E03-202656 | | | 56 | | | | |
| E03-202666 | | | 66 | | | | |
| E03-202676 | | | 76 | | | | |
| E03-202696 | | | 96 | | | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 | a | L3 |
|---|---|---|---|---|---|---|---|
| E03-203626 | 20 | 36 | 26 | 28 | 32 | 6 | 10 |
| E03-203636 | | | 36 | | | | |
| E03-203646 | | | 46 | | | | |
| E03-203656 | | | 56 | | | | |
| E03-203666 | | | 66 | | | | |
| E03-203686 | | | 86 | | | | |
| E03-2036106 | | | 106 | | | | |
| E03-2036126 | | | 126 | | | | |
| E03-204626 | | 46 | 26 | | | | |
| E03-204636 | | | 36 | | | | |
| E03-204646 | | | 46 | | | | |
| E03-204656 | | | 56 | | | | |
| E03-204676 | | | 76 | | | | |
| E03-204696 | | | 96 | | | | |
| E03-2046116 | | | 116 | | | | |
| E03-205626 | | 56 | 26 | | | | |
| E03-205636 | | | 36 | | | | |
| E03-205646 | | | 46 | | | | |
| E03-205666 | | | 66 | | | | |
| E03-205686 | | | 86 | | | | |
| E03-2056106 | | | 106 | | | | |
| E03-2056126 | | | 126 | | | | |
| E03-206636 | | 66 | 36 | | | | |
| E03-206656 | | | 56 | | | | |
| E03-206676 | | | 76 | | | | |
| E03-206696 | | | 96 | | | | |
| E03-2066116 | | | 116 | | | | |
| E03-2066136 | | | 136 | | | | |
| E03-207646 | | 76 | 46 | | | | |
| E03-207666 | | | 66 | | | | |
| E03-207686 | | | 86 | | | | |
| E03-2076106 | | | 106 | | | | |
| E03-2076126 | | | 126 | | | | |
| E03-208656 | | 86 | 56 | | | | |
| E03-208676 | | | 76 | | | | |
| E03-208696 | | | 96 | | | | |
| E03-2086116 | | | 116 | | | | |
| E03-209646 | | 96 | 46 | 28 | 32 | 6 | 10 |
| E03-209666 | | | 66 | | | | |
| E03-209686 | | | 86 | | | | |
| E03-2096106 | | | 106 | | | | |
| E03-2096126 | | | 126 | | | | |
| E03-252656 | 25 | 26 | 56 | 34 | 38 | 8 | 10 |
| E03-252666 | | | 66 | | | | |
| E03-252676 | | | 76 | | | | |

| Sipariş | d1 | L1 | L2 | d2 | d3 | a | L3 |
|---|---|---|---|---|---|---|---|
| E03-253636 | 25 | 36 | 36 | 34 | 38 | 8 | 10 |
| E03-253646 | | | 46 | | | | |
| E03-253656 | | | 56 | | | | |
| E03-253666 | | | 66 | | | | |
| E03-253686 | | | 86 | | | | |
| E03-2536106 | | | 106 | | | | |
| E03-2536126 | | | 126 | | | | |
| E03-2536146 | | | 146 | | | | |
| E03-254636 | | 46 | 36 | | | | |
| E03-254646 | | | 46 | | | | |
| E03-254656 | | | 56 | | | | |
| E03-254676 | | | 76 | | | | |
| E03-254696 | | | 96 | | | | |
| E03-2546116 | | | 116 | | | | |
| E03-2546136 | | | 136 | | | | |
| E03-255636 | | 56 | 36 | | | | |
| E03-255646 | | | 46 | | | | |
| E03-255666 | | | 66 | | | | |
| E03-255686 | | | 86 | | | | |
| E03-2556106 | | | 106 | | | | |
| E03-2556126 | | | 126 | | | | |
| E03-2556146 | | | 146 | | | | |
| E03-256636 | | 66 | 36 | | | | |
| E03-256656 | | | 56 | | | | |
| E03-256676 | | | 76 | | | | |
| E03-256696 | | | 96 | | | | |
| E03-2566116 | | | 116 | | | | |
| E03-2566136 | | | 136 | | | | |
| E03-257646 | | 76 | 46 | | | | |
| E03-257666 | | | 66 | | | | |
| E03-257686 | | | 86 | | | | |
| E03-2576106 | | | 106 | | | | |
| E03-2576126 | | | 126 | | | | |
| E03-258656 | | 86 | 56 | | | | |
| E03-258676 | | | 76 | | | | |
| E03-258696 | | | 96 | | | | |
| E03-2586116 | | 86 | 116 | 34 | 38 | 8 | 10 |
| E03-2586136 | | | 136 | | | | |
| E03-259656 | | 96 | 56 | | | | |
| E03-259676 | | | 76 | | | | |
| E03-259696 | | | 96 | | | | |
| E03-2596116 | | | 116 | | | | |
| E03-2596136 | | | 136 | | | | |
| E03-2510666 | | 106 | 66 | | | | |
| E03-2510686 | | | 86 | | | | |
| E03-25106106 | | | 106 | | | | |
| E03-25106126 | | | 126 | | | | |

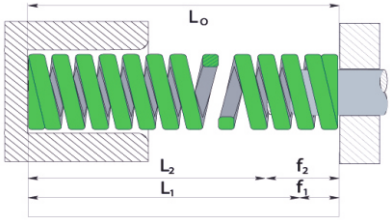
| Sipariş | d1 | L1 | L2 | d2 | d3 | a | L3 |
|---|---|---|---|---|---|---|---|
| E03-303636 | 30 | 36 | 36 | 39 | 43 | 10 | 10 |
| E03-303646 | | | 46 | | | | |
| E03-303656 | | | 56 | | | | |
| E03-303666 | | | 66 | | | | |
| E03-303686 | | | 86 | | | | |
| E03-3036106 | | | 106 | | | | |
| E03-304636 | | 46 | 36 | | | | |
| E03-304646 | | | 46 | | | | |
| E03-304656 | | | 56 | | | | |
| E03-304676 | | | 76 | | | | |
| E03-304696 | | | 96 | | | | |
| E03-3046116 | | | 116 | | | | |
| E03-305636 | | 56 | 36 | | | | |
| E03-305646 | | | 46 | | | | |
| E03-305666 | | | 66 | | | | |
| E03-305686 | | | 86 | | | | |
| E03-3056106 | | | 106 | | | | |
| E03-3056126 | | | 126 | | | | |
| E03-306636 | | 66 | 36 | | | | |
| E03-306656 | | | 56 | | | | |
| E03-306676 | | | 76 | | | | |
| E03-306696 | | | 96 | | | | |
| E03-3066116 | | | 116 | | | | |
| E03-3066136 | | | 136 | | | | |
| E03-307646 | | 76 | 46 | | | | |
| E03-307666 | | | 66 | | | | |
| E03-307686 | | | 86 | | | | |
| E03-3076106 | | | 106 | | | | |
| E03-3076126 | | | 126 | | | | |
| E03-308656 | | 86 | 56 | | | | |
| E03-308676 | | | 76 | | | | |
| E03-308696 | | | 96 | | | | |
| E03-3086116 | | | 116 | | | | |
| E03-3086136 | | | 136 | | | | |
| E03-309646 | | 96 | 46 | | | | |
| E03-309666 | | | 66 | | | | |
| E03-309686 | | | 86 | | | | |
| E03-3096106 | | | 106 | | | | |
| E03-3096126 | | | 126 | | | | |
| E03-3010656 | | 106 | 56 | | | | |
| E03-3010666 | | | 66 | | | | |
| E03-3010686 | | | 86 | | | | |
| E03-30106106 | | | 106 | | | | |
| E03-30106126 | | | 126 | | | | |
| E03-3011666 | | 116 | 66 | | | | |
| E03-3011686 | | | 86 | | | | |
| E03-30116106 | | | 106 | | | | |
| E03-30116126 | | | 126 | | | | |

PSE

## YY - Yeşil Yay - Hafif Yük

ISO 10243 | YEŞİL RAL 6002 | 80%

MADE IN ITALY



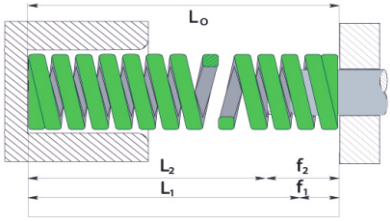

| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| YY-1025 | 10 | 5 | 25 | 10 | 13 | 1.7 | 17 | 3.9 | 39 | 5.8 | 58 | 8.0 | 80 | 10.3 | 103 |
| YY-1032 | | | 32 | 8.5 | 16 | 2.1 | 18 | 4.9 | 42 | 7.4 | 63 | 10.2 | 86 | 13.1 | 111 |
| YY-1038 | | | 38 | 6.8 | 20 | 2.5 | 17 | 5.9 | 40 | 8.8 | 60 | 12.1 | 82 | 15.6 | 106 |
| YY-1044 | | | 44 | 6 | 23 | 2.9 | 18 | 6.8 | 41 | 10.1 | 61 | 14.0 | 84 | 18.0 | 108 |
| YY-1051 | | | 51 | 5 | 26 | 3.4 | 17 | 7.8 | 39 | 11.8 | 59 | 16.2 | 81 | 20.9 | 105 |
| YY-1064 | | | 64 | 4.3 | 33 | 4.2 | 18 | 9.8 | 42 | 14.6 | 63 | 20.2 | 87 | 26.0 | 112 |
| YY-1076 | | | 76 | 3.2 | 39 | 5.1 | 16 | 11.7 | 37 | 17.6 | 56 | 24.2 | 77 | 31.2 | 100 |
| YY-10305 | | | 305 | 1.1 | 156 | 20.3 | 22 | 46.9 | 52 | 70.3 | 77 | 96.9 | 107 | 125.0 | 138 |
| YY-1325 | 12.5 | 6.3 | 25 | 17.9 | 13 | 1.7 | 30 | 3.9 | 69 | 5.8 | 104 | 8.0 | 143 | 10.3 | 184 |
| YY-1332 | | | 32 | 16.4 | 16 | 2.1 | 35 | 4.9 | 81 | 7.4 | 121 | 10.2 | 167 | 13.1 | 215 |
| YY-1338 | | | 38 | 13.6 | 20 | 2.5 | 34 | 5.9 | 80 | 8.8 | 119 | 12.1 | 164 | 15.6 | 212 |
| YY-1344 | | | 44 | 12.1 | 23 | 2.9 | 35 | 6.8 | 82 | 10.1 | 123 | 14.0 | 169 | 18.0 | 218 |
| YY-1351 | | | 51 | 11.4 | 26 | 3.4 | 39 | 7.8 | 89 | 11.8 | 134 | 16.2 | 185 | 20.9 | 238 |
| YY-1364 | | | 64 | 9.3 | 33 | 4.3 | 40 | 9.9 | 92 | 14.8 | 138 | 20.4 | 190 | 26.3 | 245 |
| YY-1376 | | | 76 | 7.1 | 39 | 5.1 | 36 | 11.7 | 83 | 17.6 | 125 | 24.2 | 172 | 31.2 | 222 |
| YY-1389 | | | 89 | 5.4 | 46 | 5.9 | 32 | 13.7 | 74 | 20.5 | 111 | 28.3 | 153 | 36.5 | 197 |
| YY-13102 | | | 102 | 12.5 | 31 | 4 | 50 | 9.3 | 116 | 13.9 | 174 | 19.2 | 240 | 24.8 | 310 |
| YY-13305 | | | 305 | 1.4 | 156 | 20.3 | 28 | 46.9 | 66 | 70.3 | 98 | 96.9 | 136 | 125.0 | 175 |
| YY-1625 | 16 | 8 | 25 | 23.4 | 13 | 1.7 | 39 | 3.9 | 90 | 5.8 | 136 | 8.0 | 187 | 10.3 | 241 |
| YY-1632 | | | 32 | 22.9 | 16 | 2.1 | 49 | 4.9 | 112 | 7.4 | 169 | 10.2 | 232 | 13.1 | 300 |
| YY-1638 | | | 38 | 19.3 | 20 | 2.5 | 49 | 5.9 | 113 | 8.8 | 169 | 12.1 | 233 | 15.6 | 301 |
| YY-1644 | | | 44 | 17.1 | 23 | 2.9 | 50 | 6.8 | 115 | 10.1 | 173 | 14.0 | 239 | 18.0 | 308 |
| YY-1651 | | | 51 | 15.7 | 26 | 3.4 | 53 | 7.8 | 123 | 11.8 | 185 | 16.2 | 254 | 20.9 | 328 |
| YY-1664 | | | 64 | 10.7 | 33 | 4.3 | 46 | 9.9 | 106 | 14.8 | 158 | 20.4 | 218 | 26.3 | 281 |
| YY-1676 | | | 76 | 10 | 39 | 5.1 | 51 | 11.7 | 117 | 17.6 | 176 | 24.2 | 242 | 31.2 | 312 |
| YY-1689 | | | 89 | 8.6 | 46 | 5.9 | 51 | 13.7 | 118 | 20.5 | 177 | 28.3 | 243 | 36.5 | 314 |
| YY-16102 | | | 102 | 7.8 | 52 | 6.8 | 53 | 15.7 | 122 | 23.5 | 183 | 32.4 | 253 | 41.8 | 326 |
| YY-16115 | | | 115 | 6.6 | 57 | 7 | 49 | 17 | 113 | 26 | 169 | 35 | 233 | 46 | 301 |
| YY-16305 | | | 305 | 2.5 | 156 | 20.3 | 51 | 46.9 | 117 | 70.3 | 176 | 96.9 | 242 | 125.0 | 313 |
| YY-2025 | 20 | 10 | 25 | 55.8 | 13 | 1.7 | 92 | 3.8 | 213 | 5.7 | 320 | 7.9 | 441 | 10.2 | 569 |
| YY-2032 | | | 32 | 45 | 16 | 2.0 | 91 | 4.7 | 211 | 7.0 | 316 | 9.7 | 436 | 12.5 | 563 |
| YY-2038 | | | 38 | 33.3 | 19 | 2.4 | 81 | 5.6 | 187 | 8.4 | 281 | 11.6 | 387 | 15.0 | 500 |
| YY-2044 | | | 44 | 30 | 22 | 2.9 | 86 | 6.6 | 198 | 9.9 | 297 | 13.6 | 409 | 18.0 | 540 |
| YY-2051 | | | 51 | 24.5 | 25 | 3.3 | 80 | 7.5 | 184 | 11.3 | 276 | 15.5 | 380 | 20.0 | 490 |
| YY-2064 | | | 64 | 20 | 31 | 4.1 | 81 | 9.4 | 188 | 14.1 | 281 | 19.4 | 388 | 25.0 | 500 |
| YY-2076 | | | 76 | 16 | 37 | 4.8 | 77 | 11.1 | 178 | 16.7 | 266 | 22.9 | 367 | 30.0 | 480 |
| YY-2089 | | | 89 | 14 | 44 | 5.7 | 80 | 13.1 | 184 | 19.7 | 276 | 27.1 | 380 | 35.0 | 490 |
| YY-20102 | | | 102 | 12 | 51 | 6.7 | 80 | 15.4 | 185 | 23.1 | 277 | 31.8 | 381 | 41.0 | 492 |
| YY-20115 | | | 115 | 10.9 | 58 | 7.5 | 81 | 17.3 | 188 | 25.9 | 282 | 35.7 | 389 | 46.0 | 501 |
| YY-20127 | | | 127 | 9.5 | 64 | 8.3 | 79 | 19.1 | 182 | 28.7 | 273 | 39.5 | 375 | 51.0 | 485 |
| YY-20140 | | | 139 | 8.4 | 70 | 9.1 | 76 | 21.0 | 176 | 31.5 | 265 | 43.4 | 365 | 56.0 | 470 |
| YY-20152 | | | 152 | 7.5 | 76 | 9.9 | 74 | 22.9 | 172 | 34.3 | 257 | 47.3 | 355 | 61.0 | 458 |
| YY-20305 | | | 305 | 4 | 153 | 19.8 | 79 | 45.8 | 183 | 68.6 | 275 | 94.6 | 378 | 122.0 | 488 |
| YY-2525 | 25 | 12.5 | 25 | 100 | 13 | 1.7 | 166 | 3.8 | 383 | 5.7 | 574 | 7.9 | 791 | 10.2 | 1020 |
| YY-2532 | | | 32 | 80.3 | 16 | 2.0 | 163 | 4.7 | 376 | 7.0 | 565 | 9.7 | 778 | 12.5 | 1004 |
| YY-2538 | | | 38 | 62 | 19 | 2.4 | 151 | 5.6 | 349 | 8.4 | 523 | 11.6 | 721 | 15.0 | 930 |
| YY-2544 | | | 44 | 52.9 | 22 | 2.9 | 151 | 6.6 | 349 | 9.9 | 524 | 13.6 | 722 | 18.0 | 952 |
| YY-2551 | | | 51 | 44 | 25 | 3.3 | 143 | 7.5 | 330 | 11.3 | 495 | 15.5 | 682 | 20.0 | 880 |
| YY-2564 | | | 64 | 35.2 | 31 | 4.1 | 143 | 9.4 | 330 | 14.1 | 495 | 19.4 | 682 | 25.0 | 880 |
| YY-2576 | | | 76 | 28 | 37 | 4.8 | 135 | 11.1 | 311 | 16.7 | 466 | 22.9 | 642 | 30.0 | 840 |
| YY-2589 | | | 89 | 24 | 44 | 5.7 | 137 | 13.1 | 315 | 19.7 | 473 | 27.1 | 651 | 35.0 | 840 |
| YY-25102 | | | 102 | 21.1 | 51 | 6.7 | 141 | 15.4 | 324 | 23.1 | 487 | 31.8 | 670 | 41.0 | 865 |
| YY-25115 | | | 115 | 18.7 | 58 | 7.5 | 140 | 17.3 | 323 | 25.9 | 484 | 35.7 | 667 | 46.0 | 860 |
| YY-25127 | | | 127 | 16.7 | 64 | 8.3 | 138 | 19.1 | 319 | 28.7 | 479 | 39.5 | 660 | 51.0 | 852 |
| YY-25140 | | | 139 | 15.3 | 70 | 9.1 | 139 | 21.0 | 321 | 31.5 | 482 | 43.4 | 664 | 56.0 | 857 |

PSE

## YY - Yeşil Yay - Hafif Yük

ISO 10243 | YEŞİL RAL 6002 | 80%

MADE IN ITALY



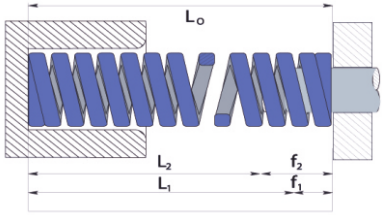

| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| YY-25152 | 25 | 12.5 | 152 | 14 | 76 | 9.9 | 139 | 22.9 | 320 | 34.3 | 480 | 47.3 | 662 | 61.0 | 854 |
| YY-25178 | | | 178 | 12.5 | 89 | 11.5 | 144 | 26.6 | 333 | 39.9 | 499 | 55.0 | 688 | 71.0 | 888 |
| YY-25203 | | | 203 | 10.4 | 101 | 13.2 | 137 | 30.4 | 316 | 45.6 | 474 | 62.8 | 653 | 81.0 | 842 |
| YY-25305 | | | 305 | 7.0 | 153 | 19.8 | 139 | 45.8 | 320 | 68.6 | 480 | 94.6 | 662 | 122.0 | 854 |
| YY-3238 | 32 | 16 | 38 | 94.0 | 19 | 2.4 | 229 | 5.6 | 529 | 8.4 | 793 | 11.6 | 1093 | 15.0 | 1410 |
| YY-3244 | | | 44 | 79.5 | 23 | 2.9 | 233 | 6.8 | 537 | 10.1 | 805 | 14.0 | 1109 | 18.0 | 1431 |
| YY-3251 | | | 51 | 67.0 | 25 | 3.3 | 218 | 7.5 | 503 | 11.3 | 754 | 15.5 | 1039 | 20.0 | 1340 |
| YY-3264 | | | 64 | 53.0 | 31 | 4.1 | 215 | 9.4 | 497 | 14.1 | 745 | 19.4 | 1027 | 25.0 | 1325 |
| YY-3276 | | | 76 | 44.0 | 38 | 4.9 | 215 | 11.3 | 495 | 16.9 | 743 | 23.3 | 1023 | 30.0 | 1320 |
| YY-3289 | | | 89 | 37.2 | 44 | 5.7 | 212 | 13.1 | 488 | 19.7 | 732 | 27.1 | 1009 | 35.0 | 1302 |
| YY-32115 | | | 102 | 32.0 | 51 | 6.7 | 213 | 15.4 | 492 | 23.1 | 738 | 31.8 | 1017 | 41.0 | 1312 |
| YY-32127 | | | 115 | 29.0 | 58 | 7.5 | 217 | 17.3 | 500 | 25.9 | 750 | 35.7 | 1034 | 46.0 | 1334 |
| YY-32140 | | | 127 | 25.0 | 64 | 8.3 | 207 | 19.1 | 478 | 28.7 | 717 | 39.5 | 988 | 51.0 | 1275 |
| YY-32152 | | | 139 | 23.0 | 70 | 9.1 | 209 | 21.0 | 483 | 31.5 | 725 | 43.4 | 998 | 56.0 | 1288 |
| YY-32178 | | | 152 | 21.5 | 76 | 9.9 | 213 | 22.9 | 492 | 34.3 | 738 | 47.3 | 1016 | 61.0 | 1312 |
| YY-32203 | | | 178 | 18.2 | 89 | 11.5 | 210 | 26.6 | 485 | 39.9 | 727 | 55.0 | 1001 | 71.0 | 1292 |
| YY-32254 | | | 203 | 15.8 | 101 | 13.2 | 208 | 30.4 | 480 | 45.6 | 720 | 62.8 | 992 | 81.0 | 1280 |
| YY-32305 | | | 254 | 12.5 | 128 | 16.6 | 207 | 38.3 | 478 | 57.4 | 717 | 79.1 | 988 | 102.0 | 1275 |
| YY-4051 | | | 305 | 10.3 | 153 | 19.8 | 204 | 45.8 | 471 | 68.6 | 707 | 94.6 | 974 | 122.0 | 1257 |
| YY-4064 | 40 | 20 | 51 | 92.0 | 25 | 3.3 | 299 | 7.5 | 690 | 11.3 | 1035 | 15.5 | 1426 | 20.0 | 1840 |
| YY-4076 | | | 64 | 73.0 | 31 | 4.1 | 297 | 9.4 | 684 | 14.1 | 1027 | 19.4 | 1414 | 25.0 | 1825 |
| YY-4089 | | | 76 | 63.0 | 38 | 4.9 | 307 | 11.3 | 709 | 16.9 | 1063 | 23.3 | 1465 | 30.0 | 1890 |
| YY-40102 | | | 89 | 51.0 | 44 | 5.7 | 290 | 13.1 | 669 | 19.7 | 1004 | 27.1 | 1383 | 35.0 | 1785 |
| YY-40115 | | | 102 | 43.0 | 51 | 6.7 | 286 | 15.4 | 661 | 23.1 | 992 | 31.8 | 1366 | 41.0 | 1763 |
| YY-40127 | | | 115 | 39.6 | 58 | 7.5 | 296 | 17.3 | 683 | 25.9 | 1025 | 35.7 | 1412 | 46.0 | 1822 |
| YY-40140 | | | 127 | 37.0 | 64 | 8.3 | 307 | 19.1 | 708 | 28.7 | 1061 | 39.5 | 1462 | 51.0 | 1887 |
| YY-40152 | | | 139 | 32.0 | 70 | 9.1 | 291 | 21.0 | 672 | 31.5 | 1008 | 43.4 | 1389 | 56.0 | 1792 |
| YY-40178 | | | 152 | 28.0 | 76 | 9.9 | 278 | 22.9 | 641 | 34.3 | 961 | 47.3 | 1324 | 61.0 | 1708 |
| YY-40203 | | | 178 | 25.2 | 89 | 11.5 | 291 | 26.6 | 671 | 39.9 | 1006 | 55.0 | 1387 | 71.0 | 1789 |
| YY-40254 | | | 203 | 22.7 | 101 | 13.2 | 299 | 30.4 | 690 | 45.6 | 1034 | 62.8 | 1425 | 81.0 | 1839 |
| YY-40305 | | | 254 | 17.0 | 128 | 16.6 | 282 | 38.3 | 650 | 57.4 | 975 | 79.1 | 1344 | 102.0 | 1734 |
| YY-5064 | | | 305 | 14.8 | 153 | 19.8 | 293 | 45.8 | 677 | 68.6 | 1016 | 94.6 | 1399 | 122.0 | 1806 |
| YY-5076 | 50 | 25 | 64 | 156.0 | 31 | 4.1 | 634 | 9.4 | 1463 | 14.1 | 2194 | 19.4 | 3023 | 25.0 | 3900 |
| YY-5089 | | | 76 | 125.0 | 38 | 4.9 | 609 | 11.3 | 1406 | 16.9 | 2109 | 23.3 | 2906 | 30.0 | 3750 |
| YY-50102 | | | 89 | 109.0 | 44 | 5.7 | 620 | 13.1 | 1431 | 19.7 | 2146 | 27.1 | 2957 | 35.0 | 3815 |
| YY-50115 | | | 102 | 94.0 | 51 | 6.7 | 626 | 15.4 | 1445 | 23.1 | 2168 | 31.8 | 2987 | 41.0 | 3854 |
| YY-50127 | | | 115 | 81.0 | 58 | 7.5 | 605 | 17.3 | 1397 | 25.9 | 2096 | 35.7 | 2888 | 46.0 | 3726 |
| YY-50140 | | | 127 | 71.0 | 64 | 8.3 | 588 | 19.1 | 1358 | 28.7 | 2037 | 39.5 | 2806 | 51.0 | 3621 |
| YY-50152 | | | 139 | 66.5 | 70 | 9.1 | 605 | 21.0 | 1397 | 31.5 | 2095 | 43.4 | 2886 | 56.0 | 3724 |
| YY-50178 | | | 152 | 60.0 | 76 | 9.9 | 595 | 22.9 | 1373 | 34.3 | 2059 | 47.3 | 2837 | 61.0 | 3660 |
| YY-50203 | | | 178 | 52.0 | 89 | 11.5 | 600 | 26.6 | 1385 | 39.9 | 2077 | 55.0 | 2861 | 71.0 | 3692 |
| YY-50229 | | | 203 | 44.0 | 101 | 13.2 | 579 | 30.4 | 1337 | 45.6 | 2005 | 62.8 | 2762 | 81.0 | 3564 |
| YY-50254 | | | 254 | 35.0 | 128 | 16.6 | 580 | 38.3 | 1339 | 57.4 | 2008 | 79.1 | 2767 | 102.0 | 3570 |
| YY-50305 | | | 305 | 28.5 | 153 | 19.8 | 565 | 45.8 | 1304 | 68.6 | 1956 | 94.6 | 2695 | 122.0 | 3477 |
| YY-6376 | 63 | 38 | 76 | 189.0 | 38 | 4.9 | 921 | 11.3 | 2126 | 16.9 | 3189 | 23.3 | 4394 | 30.0 | 5670 |
| YY-6389 | | | 89 | 158.0 | 44 | 5.7 | 899 | 13.1 | 2074 | 19.7 | 3111 | 27.1 | 4286 | 35.0 | 5530 |
| YY-63102 | | | 102 | 131.0 | 51 | 6.7 | 873 | 15.4 | 2014 | 23.1 | 3021 | 31.8 | 4163 | 41.0 | 5371 |
| YY-63115 | | | 115 | 116.0 | 58 | 7.5 | 867 | 17.3 | 2001 | 25.9 | 3002 | 35.7 | 4135 | 46.0 | 5336 |
| YY-63127 | | | 127 | 103.0 | 64 | 8.3 | 854 | 19.1 | 1970 | 28.7 | 2955 | 39.5 | 4071 | 51.0 | 5253 |
| YY-63152 | | | 152 | 84.3 | 76 | 9.9 | 836 | 22.9 | 1928 | 34.3 | 2893 | 47.3 | 3985 | 61.0 | 5142 |
| YY-63178 | | | 178 | 71.5 | 89 | 11.5 | 825 | 26.6 | 1904 | 39.9 | 2856 | 55.0 | 3934 | 71.0 | 5077 |
| YY-63203 | | | 203 | 61.7 | 101 | 13.2 | 812 | 30.4 | 1874 | 45.6 | 2811 | 62.8 | 3873 | 81.0 | 4998 |
| YY-63254 | | | 254 | 47.0 | 128 | 16.6 | 779 | 38.3 | 1798 | 57.4 | 2697 | 79.1 | 3715 | 102.0 | 4794 |
| YY-63305 | | | 305 | 38.2 | 153 | 19.8 | 757 | 45.8 | 1748 | 68.6 | 2621 | 94.6 | 3612 | 122.0 | 4660 |

PSE

## MY - Mavi Yay - Orta Ağır Yük

ISO 10243 | MAVİ RAL 5003 | 80%

MADE IN ITALY



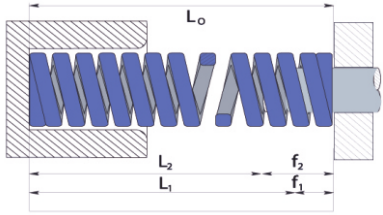

| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| MY-1025 | 10 | 5 | 25 | 16.0 | 12 | 1.5 | 25 | 3.6 | 57 | 5.3 | 86 | 7.4 | 118 | 9.5 | 152 |
| MY-1032 | | | 32 | 13.0 | 15 | 2.0 | 26 | 4.6 | 59 | 6.9 | 89 | 9.5 | 123 | 12.2 | 159 |
| MY-1038 | | | 38 | 11.9 | 18 | 2.3 | 28 | 5.4 | 64 | 8.1 | 96 | 11.2 | 133 | 14.4 | 171 |
| MY-1044 | | | 44 | 10.3 | 21 | 2.7 | 28 | 6.3 | 65 | 9.4 | 97 | 12.9 | 133 | 16.7 | 172 |
| MY-1051 | | | 51 | 8.9 | 24 | 3.2 | 28 | 7.3 | 65 | 10.9 | 97 | 15.0 | 134 | 19.4 | 173 |
| MY-1064 | | | 64 | 7.5 | 30 | 3.9 | 30 | 9.1 | 68 | 13.7 | 103 | 18.8 | 141 | 24.3 | 182 |
| MY-1076 | | | 76 | 5.3 | 36 | 4.7 | 25 | 10.8 | 57 | 16.3 | 86 | 22.4 | 119 | 28.9 | 153 |
| MY-10305 | | | 305 | 1.6 | 145 | 18.9 | 30 | 43.5 | 70 | 65.3 | 104 | 89.9 | 144 | 116.0 | 186 |
| MY-1325 | 12.5 | 6.3 | 25 | 30.0 | 12 | 1.5 | 46 | 3.6 | 107 | 5.3 | 160 | 7.4 | 221 | 9.5 | 285 |
| MY-1332 | | | 32 | 24.8 | 15 | 2.0 | 49 | 4.6 | 113 | 6.9 | 170 | 9.5 | 234 | 12.2 | 303 |
| MY-1338 | | | 38 | 21.4 | 18 | 2.3 | 50 | 5.4 | 116 | 8.1 | 173 | 11.2 | 239 | 14.4 | 308 |
| MY-1344 | | | 44 | 18.5 | 21 | 2.7 | 50 | 6.3 | 116 | 9.4 | 174 | 12.9 | 239 | 16.7 | 309 |
| MY-1351 | | | 51 | 15.5 | 24 | 3.2 | 49 | 7.3 | 113 | 10.9 | 169 | 15.0 | 233 | 19.4 | 301 |
| MY-1364 | | | 64 | 12.1 | 30 | 3.9 | 48 | 9.1 | 110 | 13.7 | 165 | 18.8 | 228 | 24.3 | 294 |
| MY-1376 | | | 76 | 10.2 | 36 | 4.7 | 48 | 10.8 | 111 | 16.3 | 166 | 22.4 | 228 | 28.9 | 295 |
| MY-1389 | | | 89 | 8.4 | 42 | 5.5 | 46 | 12.7 | 106 | 19.0 | 160 | 26.2 | 220 | 33.8 | 284 |
| MY-13102 | | | 102 | 6.5 | 47 | 6.1 | 39 | 14.1 | 92 | 21.1 | 137 | 29.1 | 189 | 24.8 | 310 |
| MY-13305 | | | 305 | 2.1 | 145 | 18.9 | 40 | 43.5 | 91 | 65.3 | 137 | 89.9 | 189 | 116.0 | 244 |
| MY-1625 | 16 | 8 | 25 | 49.4 | 12 | 1.5 | 76 | 3.6 | 176 | 5.3 | 264 | 7.4 | 364 | 9.5 | 469 |
| MY-1632 | | | 32 | 37.1 | 15 | 2.0 | 74 | 4.6 | 170 | 6.9 | 255 | 9.5 | 351 | 12.2 | 453 |
| MY-1638 | | | 38 | 33.9 | 18 | 2.3 | 79 | 5.4 | 183 | 8.1 | 275 | 11.2 | 378 | 14.4 | 488 |
| MY-1644 | | | 44 | 30.0 | 21 | 2.7 | 81 | 6.3 | 188 | 9.4 | 282 | 12.9 | 388 | 16.7 | 501 |
| MY-1651 | | | 51 | 26.4 | 24 | 3.2 | 83 | 7.3 | 192 | 10.9 | 288 | 15.0 | 397 | 19.4 | 512 |
| MY-1664 | | | 64 | 20.5 | 30 | 3.9 | 81 | 9.1 | 187 | 13.7 | 280 | 18.8 | 386 | 24.3 | 498 |
| MY-1676 | | | 76 | 17.8 | 36 | 4.7 | 84 | 10.8 | 193 | 16.3 | 289 | 22.4 | 399 | 28.9 | 514 |
| MY-1689 | | | 89 | 15.2 | 42 | 5.5 | 83 | 12.7 | 193 | 19.0 | 289 | 26.2 | 398 | 33.8 | 514 |
| MY-16102 | | | 102 | 13.5 | 49 | 6.3 | 85 | 14.6 | 196 | 21.8 | 295 | 30.1 | 406 | 38.8 | 524 |
| MY-16115 | | | 115 | 11.9 | 53 | 7 | 82 | 16 | 189 | 24 | 284 | 33 | 391 | 46 | 301 |
| MY-16305 | | | 305 | 4.8 | 145 | 18.9 | 90 | 43.5 | 209 | 65.3 | 313 | 89.9 | 432 | 116.0 | 557 |
| MY-2025 | 20 | 10 | 25 | 98.0 | 12 | 1.5 | 150 | 3.5 | 345 | 5.3 | 518 | 7.3 | 714 | 9.4 | 921 |
| MY-2032 | | | 32 | 72.6 | 15 | 2.0 | 142 | 4.5 | 327 | 6.8 | 490 | 9.3 | 675 | 12.0 | 871 |
| MY-2038 | | | 38 | 54.0 | 18 | 2.3 | 127 | 5.3 | 294 | 7.9 | 441 | 10.9 | 608 | 14.0 | 784 |
| MY-2044 | | | 44 | 47.5 | 21 | 2.7 | 127 | 6.2 | 294 | 9.3 | 441 | 12.8 | 607 | 16.5 | 784 |
| MY-2051 | | | 51 | 41.7 | 24 | 3.1 | 129 | 7.1 | 297 | 10.7 | 446 | 14.7 | 614 | 19.0 | 792 |
| MY-2064 | | | 64 | 32.3 | 30 | 3.9 | 126 | 9.0 | 291 | 13.5 | 436 | 18.6 | 601 | 24.0 | 775 |
| MY-2076 | | | 76 | 25.1 | 35 | 4.6 | 114 | 10.5 | 264 | 15.8 | 395 | 21.7 | 545 | 28.0 | 703 |
| MY-2089 | | | 89 | 22.0 | 41 | 5.4 | 118 | 12.4 | 272 | 18.6 | 408 | 25.6 | 563 | 33.0 | 726 |
| MY-20102 | | | 102 | 19.8 | 48 | 6.2 | 122 | 14.3 | 282 | 21.4 | 423 | 29.5 | 583 | 38.0 | 752 |
| MY-20115 | | | 115 | 18.1 | 54 | 7.0 | 126 | 16.1 | 292 | 24.2 | 438 | 33.3 | 603 | 43.0 | 778 |
| MY-20127 | | | 127 | 16.6 | 60 | 7.8 | 129 | 18.0 | 299 | 27.0 | 448 | 37.2 | 618 | 48.0 | 797 |
| MY-20140 | | | 139 | 15.1 | 65 | 8.5 | 128 | 19.5 | 294 | 29.3 | 442 | 40.3 | 609 | 52.0 | 785 |
| MY-20152 | | | 152 | 13.2 | 71 | 9.3 | 122 | 21.4 | 282 | 32.1 | 423 | 44.2 | 583 | 57.0 | 752 |
| MY-20305 | | | 305 | 6.1 | 143 | 18.5 | 113 | 42.8 | 261 | 64.1 | 391 | 88.4 | 539 | 114.0 | 695 |
| MY-2525 | 25 | 12.5 | 25 | 147.0 | 12 | 1.5 | 225 | 3.5 | 518 | 5.3 | 777 | 7.3 | 1071 | 9.4 | 1382 |
| MY-2532 | | | 32 | 118.0 | 15 | 2.0 | 230 | 4.5 | 531 | 6.8 | 797 | 9.3 | 1097 | 12.0 | 1416 |
| MY-2538 | | | 38 | 93.0 | 18 | 2.3 | 212 | 5.3 | 488 | 7.9 | 732 | 10.9 | 1009 | 14.0 | 1302 |
| MY-2544 | | | 44 | 80.8 | 21 | 2.7 | 217 | 6.2 | 500 | 9.3 | 750 | 12.8 | 1033 | 16.5 | 1333 |
| MY-2551 | | | 51 | 68.6 | 24 | 3.1 | 212 | 7.1 | 489 | 10.7 | 733 | 14.7 | 1010 | 19.0 | 1303 |
| MY-2564 | | | 64 | 53.0 | 30 | 3.9 | 207 | 9.0 | 477 | 13.5 | 716 | 18.6 | 986 | 24.0 | 1272 |
| MY-2576 | | | 76 | 43.2 | 35 | 4.6 | 197 | 10.5 | 454 | 15.8 | 680 | 21.7 | 937 | 28.0 | 1210 |
| MY-2589 | | | 89 | 38.2 | 41 | 5.4 | 205 | 12.4 | 473 | 18.6 | 709 | 25.6 | 977 | 33.0 | 1261 |
| MY-25102 | | | 102 | 33.0 | 48 | 6.2 | 204 | 14.3 | 470 | 21.4 | 705 | 29.5 | 972 | 38.0 | 1254 |
| MY-25115 | | | 115 | 28.0 | 54 | 7.0 | 196 | 16.1 | 452 | 24.2 | 677 | 33.3 | 933 | 43.0 | 1204 |
| MY-25127 | | | 127 | 25.9 | 60 | 7.8 | 202 | 18.0 | 466 | 27.0 | 699 | 37.2 | 963 | 48.0 | 1243 |
| MY-25140 | | | 139 | 23.2 | 65 | 8.5 | 196 | 19.5 | 452 | 29.3 | 679 | 40.3 | 935 | 52.0 | 1206 |
| MY-25152 | | | 152 | 20.8 | 71 | 9.3 | 193 | 21.4 | 445 | 32.1 | 667 | 44.2 | 919 | 57.0 | 1186 |

PSE

## MY - Mavi Yay - Orta Ağır Yük

ISO 10243 | MAVİ RAL 5003 | 80%

MADE IN ITALY



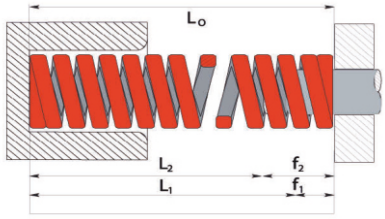

| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| MY-25178 | 25 | 12.5 | 178 | 17.8 | 84 | 10.9 | 194 | 25.1 | 447 | 37.7 | 671 | 51.9 | 924 | 67.0 | 1193 |
| MY-25203 | | | 203 | 15.8 | 95 | 12.4 | 195 | 28.5 | 450 | 42.8 | 675 | 58.9 | 931 | 76.0 | 1201 |
| MY-25305 | | | 305 | 10.2 | 143 | 18.5 | 189 | 42.8 | 436 | 64.1 | 654 | 88.4 | 901 | 114.0 | 1163 |
| MY-3238 | 32 | 16 | 38 | 185.0 | 18 | 2.3 | 421 | 5.3 | 971 | 7.9 | 1457 | 10.9 | 2007 | 14.0 | 2590 |
| MY-3244 | | | 44 | 158.0 | 21 | 2.7 | 424 | 6.2 | 978 | 9.3 | 1466 | 12.8 | 2020 | 16.5 | 2607 |
| MY-3251 | | | 51 | 134.0 | 24 | 3.1 | 414 | 7.1 | 955 | 10.7 | 1432 | 14.7 | 1973 | 19.0 | 2546 |
| MY-3264 | | | 64 | 99.0 | 30 | 3.9 | 386 | 9.0 | 891 | 13.5 | 1337 | 18.6 | 1841 | 24.0 | 2376 |
| MY-3276 | | | 76 | 80.5 | 35 | 4.6 | 366 | 10.5 | 845 | 15.8 | 1268 | 21.7 | 1747 | 28.0 | 2254 |
| MY-3289 | | | 89 | 69.1 | 41 | 5.4 | 371 | 12.4 | 855 | 18.6 | 1283 | 25.6 | 1767 | 33.0 | 2280 |
| MY-32102 | | | 102 | 58.8 | 48 | 6.2 | 363 | 14.3 | 838 | 21.4 | 1257 | 29.5 | 1732 | 38.0 | 2234 |
| MY-32115 | | | 115 | 51.5 | 54 | 7.0 | 360 | 16.1 | 830 | 24.2 | 1246 | 33.3 | 1716 | 43.0 | 2215 |
| MY-32127 | | | 127 | 44.8 | 60 | 7.8 | 349 | 18.0 | 806 | 27.0 | 1210 | 37.2 | 1667 | 48.0 | 2150 |
| MY-32140 | | | 139 | 42.3 | 65 | 8.5 | 357 | 19.5 | 825 | 29.3 | 1237 | 40.3 | 1705 | 52.0 | 2200 |
| MY-32152 | | | 152 | 37.8 | 71 | 9.3 | 350 | 21.4 | 808 | 32.1 | 1212 | 44.2 | 1670 | 57.0 | 2155 |
| MY-32178 | | | 178 | 32.5 | 84 | 10.9 | 354 | 25.1 | 817 | 37.7 | 1225 | 51.9 | 1688 | 67.0 | 2178 |
| MY-32203 | | | 203 | 28.9 | 95 | 12.4 | 357 | 28.5 | 824 | 42.8 | 1235 | 58.9 | 1702 | 76.0 | 2196 |
| MY-32254 | | | 254 | 21.4 | 119 | 15.4 | 330 | 35.6 | 762 | 53.4 | 1144 | 73.6 | 1576 | 95.0 | 2033 |
| MY-32305 | | | 305 | 18.3 | 143 | 18.5 | 339 | 42.8 | 782 | 64.1 | 1173 | 88.4 | 1617 | 114.0 | 2086 |
| MY-4051 | 40 | 20 | 51 | 181.6 | 24 | 3.1 | 561 | 7.1 | 1294 | 10.7 | 1941 | 14.7 | 2674 | 19.0 | 3450 |
| MY-4064 | | | 64 | 140.0 | 30 | 3.9 | 546 | 9.0 | 1260 | 13.5 | 1890 | 18.6 | 2604 | 24.0 | 3360 |
| MY-4076 | | | 76 | 108.0 | 35 | 4.6 | 491 | 10.5 | 1134 | 15.8 | 1701 | 21.7 | 2344 | 28.0 | 3024 |
| MY-4089 | | | 89 | 90.7 | 41 | 5.4 | 486 | 12.4 | 1122 | 18.6 | 1684 | 25.6 | 2320 | 33.0 | 2993 |
| MY-40102 | | | 102 | 81.0 | 48 | 6.2 | 500 | 14.3 | 1154 | 21.4 | 1731 | 29.5 | 2385 | 38.0 | 3078 |
| MY-40115 | | | 115 | 71.8 | 54 | 7.0 | 502 | 16.1 | 1158 | 24.2 | 1737 | 33.3 | 2393 | 43.0 | 3087 |
| MY-40127 | | | 127 | 62.7 | 60 | 7.8 | 489 | 18.0 | 1129 | 27.0 | 1693 | 37.2 | 2332 | 48.0 | 3010 |
| MY-40140 | | | 139 | 57.5 | 65 | 8.5 | 486 | 19.5 | 1121 | 29.3 | 1682 | 40.3 | 2317 | 52.0 | 2990 |
| MY-40152 | | | 152 | 51.6 | 71 | 9.3 | 478 | 21.4 | 1103 | 32.1 | 1654 | 44.2 | 2279 | 57.0 | 2941 |
| MY-40178 | | | 178 | 44.1 | 84 | 10.9 | 480 | 25.1 | 1108 | 37.7 | 1662 | 51.9 | 2290 | 67.0 | 2955 |
| MY-40203 | | | 203 | 36.7 | 95 | 12.4 | 453 | 28.5 | 1046 | 42.8 | 1569 | 58.9 | 2162 | 76.0 | 2789 |
| MY-40254 | | | 254 | 30.1 | 119 | 15.4 | 465 | 35.6 | 1072 | 53.4 | 1608 | 73.6 | 2216 | 95.0 | 2860 |
| MY-40305 | | | 305 | 24.6 | 143 | 18.5 | 456 | 42.8 | 1052 | 64.1 | 1577 | 88.4 | 2173 | 114.0 | 2804 |
| MY-5064 | 50 | 25 | 64 | 209.0 | 30 | 3.9 | 815 | 9.0 | 1881 | 13.5 | 2822 | 18.6 | 3887 | 24.0 | 5016 |
| MY-5076 | | | 76 | 168.0 | 35 | 4.6 | 764 | 10.5 | 1764 | 15.8 | 2646 | 21.7 | 3646 | 28.0 | 4704 |
| MY-5089 | | | 89 | 140.0 | 41 | 5.4 | 751 | 12.4 | 1733 | 18.6 | 2599 | 25.6 | 3581 | 33.0 | 4620 |
| MY-50102 | | | 102 | 119.0 | 48 | 6.2 | 735 | 14.3 | 1696 | 21.4 | 2544 | 29.5 | 3505 | 38.0 | 4522 |
| MY-50115 | | | 115 | 106.0 | 54 | 7.0 | 741 | 16.1 | 1709 | 24.2 | 2564 | 33.3 | 3532 | 43.0 | 4558 |
| MY-50127 | | | 127 | 97.0 | 60 | 7.8 | 757 | 18.0 | 1746 | 27.0 | 2619 | 37.2 | 3608 | 48.0 | 4656 |
| MY-50140 | | | 139 | 87.0 | 65 | 8.5 | 735 | 19.5 | 1697 | 29.3 | 2545 | 40.3 | 3506 | 52.0 | 4524 |
| MY-50152 | | | 152 | 80.0 | 71 | 9.3 | 741 | 21.4 | 1710 | 32.1 | 2565 | 44.2 | 3534 | 57.0 | 4560 |
| MY-50178 | | | 178 | 69.5 | 84 | 10.9 | 757 | 25.1 | 1746 | 37.7 | 2619 | 51.9 | 3609 | 67.0 | 4657 |
| MY-50203 | | | 203 | 59.8 | 95 | 12.4 | 739 | 28.5 | 1704 | 42.8 | 2556 | 58.9 | 3522 | 76.0 | 4545 |
| MY-50229 | | | 229 | 50.9 | 108 | 14.0 | 711 | 32.3 | 1642 | 48.4 | 2462 | 66.7 | 3392 | 86.0 | 4377 |
| MY-50254 | | | 254 | 43.9 | 119 | 15.4 | 678 | 35.6 | 1564 | 53.4 | 2346 | 73.6 | 3232 | 95.0 | 4171 |
| MY-50305 | | | 305 | 38.6 | 143 | 18.5 | 715 | 42.8 | 1650 | 64.1 | 2475 | 88.4 | 3410 | 114.0 | 4400 |
| MY-6376 | 63 | 38 | 76 | 312.0 | 35 | 4.6 | 1420 | 10.5 | 3276 | 15.8 | 4914 | 21.7 | 6770 | 28.0 | 8736 |
| MY-6389 | | | 89 | 260.0 | 41 | 5.4 | 1394 | 12.4 | 3218 | 18.6 | 4826 | 25.6 | 6650 | 33.0 | 8580 |
| MY-63102 | | | 102 | 221.0 | 48 | 6.2 | 1365 | 14.3 | 3149 | 21.4 | 4724 | 29.5 | 6508 | 38.0 | 8398 |
| MY-63115 | | | 115 | 187.0 | 54 | 7.0 | 1307 | 16.1 | 3015 | 24.2 | 4523 | 33.3 | 6232 | 43.0 | 8041 |
| MY-63127 | | | 127 | 168.0 | 60 | 7.8 | 1310 | 18.0 | 3024 | 27.0 | 4536 | 37.2 | 6250 | 48.0 | 8064 |
| MY-63152 | | | 152 | 136.0 | 71 | 9.3 | 1260 | 21.4 | 2907 | 32.1 | 4361 | 44.2 | 6008 | 57.0 | 7752 |
| MY-63178 | | | 178 | 114.0 | 84 | 10.9 | 1241 | 25.1 | 2864 | 37.7 | 4296 | 51.9 | 5919 | 67.0 | 7638 |
| MY-63203 | | | 203 | 100.0 | 95 | 12.4 | 1235 | 28.5 | 2850 | 42.8 | 4275 | 58.9 | 5890 | 76.0 | 7600 |
| MY-63229 | | | 229 | 89.2 | 108 | 14.0 | 1247 | 32.3 | 2877 | 48.4 | 4315 | 66.7 | 5945 | 86.0 | 7671 |
| MY-63254 | | | 254 | 78.4 | 119 | 15.4 | 1210 | 35.6 | 2793 | 53.4 | 4190 | 73.6 | 5772 | 95.0 | 7448 |
| MY-63305 | | | 305 | 64.7 | 143 | 18.5 | 1199 | 42.8 | 2766 | 64.1 | 4149 | 88.4 | 5716 | 114.0 | 7376 |

PSE

## KY - Kırmızı Yay - Ağır Yük

ISO 10243 | KIRMIZI RAL 3000 | 80%

MADE IN ITALY



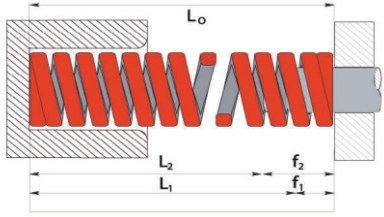

| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| KY-1025 | 10 | 5 | 25 | 22.1 | 9 | 1.2 | 27 | 2.8 | 62 | 4.2 | 93 | 5.8 | 129 | 7.5 | 166 |
| KY-1032 | | | 32 | 17.5 | 12 | 1.6 | 27 | 3.6 | 63 | 5.4 | 95 | 7.4 | 130 | 9.6 | 168 |
| KY-1038 | | | 38 | 17.1 | 14 | 1.9 | 32 | 4.3 | 73 | 6.4 | 110 | 8.8 | 151 | 11.4 | 195 |
| KY-1044 | | | 44 | 15.0 | 17 | 2.1 | 32 | 5.0 | 74 | 7.4 | 111 | 10.2 | 153 | 13.2 | 198 |
| KY-1051 | | | 51 | 12.8 | 19 | 2.5 | 32 | 5.7 | 73 | 8.6 | 110 | 11.9 | 152 | 15.3 | 196 |
| KY-1064 | | | 64 | 10.7 | 24 | 3.1 | 33 | 7.2 | 77 | 10.8 | 116 | 14.9 | 159 | 19.2 | 205 |
| KY-1076 | | | 76 | 7.5 | 29 | 3.7 | 28 | 8.6 | 64 | 12.8 | 96 | 17.7 | 133 | 22.8 | 171 |
| KY-10305 | | | 305 | 2.1 | 114 | 14.9 | 31 | 34.3 | 72 | 51.5 | 108 | 70.9 | 149 | 91.5 | 192 |
| KY-1325 | 12.5 | 6.3 | 25 | 42.1 | 9 | 1.2 | 51 | 2.8 | 118 | 4.2 | 178 | 5.8 | 245 | 7.5 | 316 |
| KY-1332 | | | 32 | 33.2 | 12 | 1.6 | 52 | 3.6 | 120 | 5.4 | 179 | 7.4 | 247 | 9.6 | 319 |
| KY-1338 | | | 38 | 29.3 | 14 | 1.9 | 54 | 4.3 | 125 | 6.4 | 188 | 8.8 | 259 | 11.4 | 334 |
| KY-1344 | | | 44 | 24.6 | 17 | 2.1 | 53 | 5.0 | 122 | 7.4 | 183 | 10.2 | 252 | 13.2 | 325 |
| KY-1351 | | | 51 | 19.6 | 19 | 2.5 | 49 | 5.7 | 113 | 8.6 | 169 | 11.9 | 232 | 15.3 | 300 |
| KY-1364 | | | 64 | 15.0 | 24 | 3.1 | 47 | 7.2 | 108 | 10.8 | 162 | 14.9 | 223 | 19.2 | 288 |
| KY-1376 | | | 76 | 13.2 | 29 | 3.7 | 49 | 8.6 | 113 | 12.8 | 169 | 17.7 | 233 | 22.8 | 301 |
| KY-1389 | | | 89 | 11.4 | 33 | 4.3 | 50 | 10.0 | 114 | 15.0 | 171 | 20.7 | 236 | 26.7 | 304 |
| KY-13102 | | | 102 | 8.5 | 38 | 4.9 | 42 | 11.4 | 97 | 17.1 | 145 | 23.5 | 200 | 30.4 | 258 |
| KY-13305 | | | 305 | 2.8 | 114 | 14.9 | 42 | 34.3 | 96 | 51.5 | 144 | 70.9 | 199 | 91.5 | 256 |
| KY-1625 | 16 | 8 | 25 | 75.7 | 9 | 1.2 | 92 | 2.8 | 213 | 4.2 | 319 | 5.8 | 440 | 7.5 | 568 |
| KY-1632 | | | 32 | 52.8 | 12 | 1.6 | 82 | 3.6 | 190 | 5.4 | 285 | 7.4 | 393 | 9.6 | 507 |
| KY-1638 | | | 38 | 48.5 | 14 | 1.9 | 90 | 4.3 | 207 | 6.4 | 311 | 8.8 | 429 | 11.4 | 553 |
| KY-1644 | | | 44 | 42.8 | 17 | 2.1 | 92 | 5.0 | 212 | 7.4 | 318 | 10.2 | 438 | 13.2 | 565 |
| KY-1651 | | | 51 | 37.1 | 19 | 2.5 | 92 | 5.7 | 213 | 8.6 | 319 | 11.9 | 440 | 15.3 | 568 |
| KY-1664 | | | 64 | 30.3 | 24 | 3.1 | 95 | 7.2 | 218 | 10.8 | 327 | 14.9 | 451 | 19.2 | 582 |
| KY-1676 | | | 76 | 25.7 | 29 | 3.7 | 95 | 8.6 | 20 | 12.8 | 330 | 17.7 | 454 | 22.8 | 586 |
| KY-1689 | | | 89 | 21.7 | 33 | 4.3 | 94 | 10.0 | 217 | 15.0 | 326 | 20.7 | 449 | 26.7 | 579 |
| KY-16102 | | | 102 | 19.3 | 38 | 5.0 | 96 | 11.5 | 222 | 17.2 | 332 | 23.7 | 458 | 30.6 | 591 |
| KY-16115 | | | 115 | 16 | 42 | 5 | 87 | 13 | 202 | 19 | 302 | 26 | 417 | 34 | 538 |
| KY-16305 | | | 305 | 7.1 | 114 | 14.9 | 106 | 34.3 | 244 | 51.5 | 365 | 70.9 | 504 | 91.5 | 650 |
| KY-2025 | 20 | 10 | 25 | 216.0 | 9 | 1.2 | 263 | 2.8 | 608 | 4.2 | 911 | 5.8 | 1256 | 7.5 | 1620 |
| KY-2032 | | | 32 | 168.0 | 12 | 1.6 | 262 | 3.6 | 605 | 5.4 | 907 | 7.4 | 1250 | 9.6 | 1612 |
| KY-2038 | | | 38 | 129.0 | 14 | 1.8 | 231 | 4.1 | 532 | 6.2 | 798 | 8.5 | 1100 | 11.0 | 1419 |
| KY-2044 | | | 44 | 112.0 | 16 | 2.1 | 237 | 4.9 | 546 | 7.3 | 819 | 10.1 | 1128 | 13.0 | 1456 |
| KY-2051 | | | 51 | 94.0 | 19 | 2.4 | 229 | 5.6 | 529 | 8.4 | 793 | 11.6 | 1093 | 15.0 | 1410 |
| KY-2064 | | | 64 | 72.1 | 24 | 3.1 | 223 | 7.1 | 514 | 10.7 | 771 | 14.7 | 1062 | 19.0 | 1370 |
| KY-2076 | | | 76 | 59.7 | 29 | 3.7 | 223 | 8.6 | 515 | 12.9 | 772 | 17.8 | 1064 | 23.0 | 1373 |
| KY-2089 | | | 89 | 50.5 | 34 | 4.4 | 222 | 10.1 | 511 | 15.2 | 767 | 20.9 | 1057 | 27.0 | 1364 |
| KY-20102 | | | 102 | 44.2 | 39 | 5.0 | 223 | 11.6 | 514 | 17.4 | 771 | 24.0 | 1062 | 31.0 | 1370 |
| KY-20115 | | | 115 | 38.4 | 44 | 5.7 | 218 | 13.1 | 504 | 19.7 | 756 | 27.1 | 1042 | 35.0 | 1344 |
| KY-20127 | | | 127 | 34.1 | 48 | 6.2 | 211 | 14.3 | 486 | 21.4 | 729 | 29.4 | 1004 | 38.0 | 1296 |
| KY-20140 | | | 139 | 31.0 | 53 | 6.8 | 212 | 15.8 | 488 | 23.6 | 732 | 32.5 | 1009 | 42.0 | 1302 |
| KY-20152 | | | 152 | 28.2 | 58 | 7.5 | 211 | 17.2 | 486 | 25.9 | 730 | 35.6 | 1005 | 46.0 | 1297 |
| KY-20305 | | | 305 | 15.0 | 114 | 14.8 | 222 | 34.1 | 512 | 51.2 | 768 | 70.5 | 1058 | 91.0 | 1365 |
| KY-2525 | 25 | 12.5 | 25 | 375.0 | 9 | 1.2 | 457 | 2.8 | 1055 | 4.2 | 1582 | 5.8 | 2180 | 7.5 | 2813 |
| KY-2532 | | | 32 | 297.0 | 12 | 1.6 | 463 | 3.6 | 1069 | 5.4 | 1604 | 7.4 | 2210 | 9.6 | 2851 |
| KY-2538 | | | 38 | 219.0 | 14 | 1.8 | 392 | 4.1 | 903 | 6.2 | 1355 | 8.5 | 1867 | 11.0 | 2409 |
| KY-2544 | | | 44 | 187.0 | 16 | 2.1 | 395 | 4.9 | 312 | 7.3 | 1367 | 10.1 | 1884 | 13.0 | 2431 |
| KY-2551 | | | 51 | 156.0 | 19 | 2.4 | 380 | 5.6 | 878 | 8.4 | 1316 | 11.6 | 1814 | 15.0 | 2340 |
| KY-2564 | | | 64 | 123.0 | 24 | 3.1 | 380 | 7.1 | 876 | 10.7 | 1315 | 14.7 | 1811 | 19.0 | 2337 |
| KY-2576 | | | 76 | 99.0 | 29 | 3.7 | 370 | 8.6 | 854 | 12.9 | 1281 | 17.8 | 1765 | 23.0 | 2277 |
| KY-2589 | | | 89 | 84.0 | 34 | 4.4 | 369 | 10.1 | 851 | 15.2 | 1276 | 20.9 | 1758 | 27.0 | 2268 |
| KY-25102 | | | 102 | 73.0 | 39 | 5.0 | 36 | 11.6 | 849 | 17.4 | 1273 | 24.0 | 1754 | 31.0 | 2263 |
| KY-25115 | | | 115 | 65.0 | 44 | 5.7 | 370 | 13.1 | 853 | 19.7 | 1280 | 27.1 | 1764 | 35.0 | 2276 |
| KY-25127 | | | 127 | 57.7 | 48 | 6.2 | 356 | 14.3 | 822 | 21.4 | 1233 | 29.4 | 1699 | 38.0 | 2193 |
| KY-25140 | | | 139 | 52.7 | 53 | 6.8 | 360 | 15.8 | 830 | 23.6 | 1245 | 32.5 | 1715 | 42.0 | 2213 |

PSE

## KY - Kırmızı Yay - Ağır Yük

ISO 10243 | KIRMIZI RAL 3000 | 80%

MADE IN ITALY



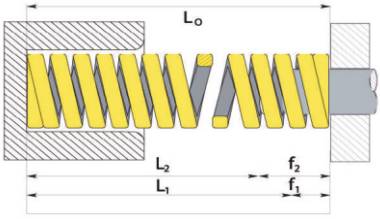

| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| KY-25152 | 25 | 12.5 | 152 | 47.8 | 58 | 7.5 | 357 | 17.2 | 825 | 25.9 | 1237 | 35.6 | 1704 | 46.0 | 2199 |
| KY-25178 | | | 178 | 41.0 | 66 | 8.6 | 353 | 19.9 | 815 | 29.8 | 1222 | 41.1 | 1684 | 53.0 | 2173 |
| KY-25203 | | | 203 | 35.8 | 76 | 9.9 | 355 | 22.9 | 819 | 34.3 | 1228 | 47.3 | 1692 | 61.0 | 2184 |
| KY-25305 | | | 305 | 22.9 | 114 | 14.8 | 339 | 34.1 | 782 | 51.2 | 1172 | 70.5 | 1615 | 91.0 | 2084 |
| KY-3238 | 32 | 16 | 38 | 388.0 | 14 | 1.8 | 694 | 4.1 | 1601 | 6.2 | 2401 | 8.5 | 3308 | 11.0 | 4268 |
| KY-3244 | | | 44 | 324.0 | 16 | 2.1 | 685 | 4.9 | 1580 | 7.3 | 2369 | 10.1 | 3264 | 13.0 | 4212 |
| KY-3251 | | | 51 | 272.0 | 19 | 2.4 | 663 | 5.6 | 1530 | 8.4 | 2295 | 11.6 | 3162 | 15.0 | 4080 |
| KY-3264 | | | 64 | 212.0 | 24 | 3.1 | 655 | 7.1 | 1511 | 10.7 | 2266 | 14.7 | 3122 | 19.0 | 4028 |
| KY-3276 | | | 76 | 172.0 | 29 | 3.7 | 643 | 8.6 | 1484 | 12.9 | 2225 | 17.8 | 3066 | 23.0 | 3956 |
| KY-3289 | | | 89 | 141.0 | 34 | 4.4 | 619 | 10.1 | 1428 | 15.2 | 2141 | 20.9 | 2950 | 27.0 | 3807 |
| KY-32102 | | | 102 | 122.0 | 39 | 5.0 | 615 | 11.6 | 1418 | 17.4 | 2127 | 24.0 | 2931 | 31.0 | 3782 |
| KY-32115 | | | 115 | 107.0 | 44 | 5.7 | 609 | 13.1 | 1404 | 19.7 | 2107 | 27.1 | 2902 | 35.0 | 3745 |
| KY-32127 | | | 127 | 93.0 | 48 | 6.2 | 574 | 14.3 | 1325 | 21.4 | 1988 | 29.4 | 2739 | 38.0 | 3534 |
| KY-32140 | | | 139 | 86.0 | 53 | 6.8 | 587 | 15.8 | 1355 | 23.6 | 2032 | 32.5 | 2799 | 42.0 | 3612 |
| KY-32152 | | | 152 | 78.0 | 58 | 7.5 | 583 | 17.2 | 1346 | 25.9 | 2018 | 35.6 | 2781 | 46.0 | 3588 |
| KY-32178 | | | 178 | 67.2 | 66 | 8.6 | 579 | 19.9 | 1336 | 29.8 | 2003 | 41.1 | 2760 | 53.0 | 3562 |
| KY-32203 | | | 203 | 59.1 | 76 | 9.9 | 586 | 22.9 | 1352 | 34.3 | 2028 | 47.3 | 2794 | 61.0 | 3605 |
| KY-32254 | | | 254 | 46.4 | 95 | 12.4 | 573 | 28.5 | 1322 | 42.8 | 1984 | 58.9 | 2733 | 76.0 | 3526 |
| KY-32305 | | | 305 | 38.0 | 114 | 14.8 | 562 | 34.1 | 1297 | 51.2 | 1945 | 70.5 | 2680 | 91.0 | 3458 |
| KY-4051 | 40 | 20 | 51 | 350.0 | 19 | 2.4 | 853 | 5.6 | 1969 | 8.4 | 2953 | 11.6 | 4069 | 15.0 | 5250 |
| KY-4064 | | | 64 | 269.0 | 24 | 3.1 | 831 | 7.1 | 1917 | 10.7 | 2875 | 14.7 | 3961 | 19.0 | 5111 |
| KY-4076 | | | 76 | 219.0 | 29 | 3.7 | 819 | 8.6 | 1889 | 12.9 | 2833 | 17.8 | 3904 | 23.0 | 5037 |
| KY-4089 | | | 89 | 190.0 | 34 | 4.4 | 834 | 10.1 | 1924 | 15.2 | 2886 | 20.9 | 3976 | 27.0 | 5130 |
| KY-40102 | | | 102 | 163.0 | 39 | 5.0 | 821 | 11.6 | 1895 | 17.4 | 2842 | 24.0 | 3916 | 31.0 | 5053 |
| KY-40115 | | | 115 | 142.0 | 44 | 5.7 | 808 | 13.1 | 1864 | 19.7 | 2796 | 27.1 | 3852 | 35.0 | 4970 |
| KY-40127 | | | 127 | 128.0 | 48 | 6.2 | 790 | 14.3 | 1824 | 21.4 | 2736 | 29.4 | 3770 | 38.0 | 4864 |
| KY-40140 | | | 139 | 115.0 | 53 | 6.8 | 785 | 15.8 | 1811 | 23.6 | 2717 | 32.5 | 3743 | 42.0 | 4830 |
| KY-40152 | | | 152 | 105.0 | 58 | 7.5 | 785 | 17.2 | 1811 | 25.9 | 2717 | 35.6 | 3743 | 46.0 | 4830 |
| KY-40178 | | | 178 | 89.0 | 66 | 8.6 | 767 | 19.9 | 1769 | 29.8 | 2653 | 41.1 | 3656 | 53.0 | 4717 |
| KY-40203 | | | 203 | 77.0 | 76 | 9.9 | 763 | 22.9 | 1761 | 34.3 | 2642 | 47.3 | 3640 | 61.0 | 4697 |
| KY-40254 | | | 254 | 61.0 | 95 | 12.4 | 753 | 28.5 | 1739 | 42.8 | 2608 | 58.9 | 3593 | 76.0 | 4636 |
| KY-40305 | | | 305 | 51.0 | 114 | 14.8 | 754 | 34.1 | 1740 | 51.2 | 2611 | 70.5 | 3597 | 91.0 | 4641 |
| KY-5064 | 50 | 25 | 64 | 413.0 | 24 | 3.1 | 1275 | 7.1 | 2943 | 10.7 | 4414 | 14.7 | 6081 | 19.0 | 7847 |
| KY-5076 | | | 76 | 339.0 | 29 | 3.7 | 1267 | 8.6 | 2924 | 12.9 | 4386 | 17.8 | 6043 | 23.0 | 7797 |
| KY-5089 | | | 89 | 288.0 | 34 | 4.4 | 1264 | 10.1 | 2916 | 15.2 | 4374 | 20.9 | 6026 | 27.0 | 7776 |
| KY-50102 | | | 102 | 245.0 | 39 | 5.0 | 1234 | 11.6 | 2848 | 17.4 | 4272 | 24.0 | 5886 | 31.0 | 7595 |
| KY-50115 | | | 115 | 215.0 | 44 | 5.7 | 1223 | 13.1 | 2822 | 19.7 | 4233 | 27.1 | 5832 | 35.0 | 7525 |
| KY-50127 | | | 127 | 192.0 | 48 | 6.2 | 1186 | 14.3 | 2736 | 21.4 | 4104 | 29.4 | 5654 | 38.0 | 7296 |
| KY-50140 | | | 139 | 168.0 | 53 | 6.8 | 1147 | 15.8 | 2646 | 23.6 | 3969 | 32.5 | 5468 | 42.0 | 7056 |
| KY-50152 | | | 152 | 154.0 | 58 | 7.5 | 1151 | 17.2 | 2657 | 25.9 | 3985 | 35.6 | 5490 | 46.0 | 7084 |
| KY-50178 | | | 178 | 134.0 | 66 | 8.6 | 1154 | 19.9 | 2663 | 29.8 | 3995 | 41.1 | 5504 | 53.0 | 7102 |
| KY-50203 | | | 203 | 117.0 | 76 | 9.9 | 1160 | 22.9 | 2676 | 34.3 | 4015 | 47.3 | 5531 | 61.0 | 7137 |
| KY-50254 | | | 254 | 89.0 | 95 | 12.4 | 1099 | 28.5 | 2537 | 42.8 | 3805 | 58.9 | 5242 | 76.0 | 6764 |
| KY-50305 | | | 305 | 73.0 | 114 | 14.8 | 1080 | 34.1 | 2491 | 51.2 | 3737 | 70.5 | 5148 | 91.0 | 6643 |
| KY-6376 | 63 | 38 | 76 | 618.0 | 29 | 3.7 | 2310 | 8.6 | 5330 | 12.9 | 7995 | 17.8 | 11016 | 23.0 | 14214 |
| KY-6389 | | | 89 | 515.0 | 34 | 4.4 | 2260 | 10.1 | 5214 | 15.2 | 7822 | 20.9 | 10776 | 27.0 | 13905 |
| KY-63102 | | | 102 | 438.0 | 39 | 5.0 | 2206 | 11.6 | 5092 | 17.4 | 7638 | 24.0 | 10523 | 31.0 | 13578 |
| KY-63115 | | | 115 | 370.0 | 44 | 5.7 | 2104 | 13.1 | 4856 | 19.7 | 7284 | 27.1 | 10036 | 35.0 | 12950 |
| KY-63127 | | | 127 | 333.0 | 48 | 6.2 | 2056 | 14.3 | 4745 | 21.4 | 7118 | 29.4 | 9807 | 38.0 | 12654 |
| KY-63152 | | | 152 | 269.0 | 58 | 7.5 | 2011 | 17.2 | 4640 | 25.9 | 6960 | 35.6 | 9590 | 46.0 | 12374 |
| KY-63178 | | | 178 | 226.0 | 66 | 8.6 | 1946 | 19.9 | 4492 | 29.8 | 6738 | 41.1 | 9283 | 53.0 | 11978 |
| KY-63203 | | | 203 | 198.0 | 76 | 9.9 | 1963 | 22.9 | 4529 | 34.3 | 6794 | 47.3 | 9361 | 61.0 | 12078 |
| KY-63254 | | | 254 | 155.0 | 95 | 12.4 | 1914 | 28.5 | 4418 | 42.8 | 6626 | 58.9 | 9130 | 76.0 | 11780 |
| KY-63305 | | | 305 | 128.0 | 114 | 14.8 | 1893 | 34.1 | 4368 | 51.2 | 6552 | 70.5 | 9027 | 91.0 | 11648 |

PSE

## SY - Sarı Yay - Çok Ağır Yük

ISO 10243 | SARI | 80%

MADE IN ITALY



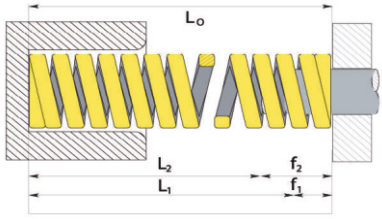

| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| SY-1025 | 10 | 5 | 25 | 36.8 | 8 | 1.0 | 37 | 2.3 | 86 | 3.5 | 128 | 4.8 | 177 | 6.2 | 228 |
| SY-1032 | | | 32 | 27.9 | 10 | 1.3 | 36 | 3.0 | 84 | 4.5 | 126 | 6.2 | 173 | 8.0 | 223 |
| SY-1038 | | | 38 | 23.7 | 12 | 1.5 | 37 | 3.6 | 84 | 5.3 | 127 | 7.4 | 175 | 9.5 | 225 |
| SY-1044 | | | 44 | 19.2 | 14 | 1.8 | 34 | 4.1 | 79 | 6.2 | 119 | 8.5 | 164 | 11.0 | 211 |
| SY-1051 | | | 51 | 16.5 | 16 | 2.1 | 35 | 4.9 | 80 | 7.3 | 121 | 10.1 | 166 | 13.0 | 215 |
| SY-1064 | | | 64 | 13.2 | 20 | 2.6 | 34 | 6.0 | 79 | 9.0 | 119 | 12.4 | 164 | 16.0 | 211 |
| SY-1076 | | | 76 | 10.9 | 24 | 3.1 | 34 | 7.1 | 78 | 10.7 | 117 | 14.7 | 161 | 19.0 | 207 |
| SY-10305 | | | 305 | 2.6 | 95 | 12.4 | 32 | 28.5 | 74 | 42.8 | 111 | 58.9 | 153 | 76.0 | 198 |
| SY-1325 | 12.5 | 6.3 | 25 | 58.5 | 8 | 1.0 | 59 | 2.3 | 136 | 3.5 | 204 | 4.8 | 281 | 6.2 | 363 |
| SY-1332 | | | 32 | 43.9 | 10 | 1.3 | 57 | 3.0 | 132 | 4.5 | 198 | 6.2 | 272 | 8.0 | 351 |
| SY-1338 | | | 38 | 36.0 | 12 | 1.5 | 56 | 3.6 | 128 | 5.3 | 192 | 7.4 | 265 | 9.5 | 342 |
| SY-1344 | | | 44 | 30.3 | 14 | 1.8 | 54 | 4.1 | 125 | 6.2 | 188 | 8.5 | 258 | 11.0 | 333 |
| SY-1351 | | | 51 | 26.2 | 16 | 2.1 | 55 | 4.9 | 128 | 7.3 | 192 | 10.1 | 264 | 13.0 | 341 |
| SY-1364 | | | 64 | 21.2 | 20 | 2.6 | 55 | 6.0 | 127 | 9.0 | 191 | 12.4 | 263 | 16.0 | 339 |
| SY-1376 | | | 76 | 17.1 | 24 | 3.1 | 53 | 7.1 | 122 | 10.7 | 183 | 14.7 | 252 | 19.0 | 325 |
| SY-1389 | | | 89 | 14.5 | 28 | 3.6 | 52 | 8.3 | 120 | 12.4 | 179 | 17.1 | 247 | 22.0 | 319 |
| SY-13102 | | | 102 | 12.5 | 31 | 4 | 50 | 9.3 | 116 | 13.9 | 174 | 19.2 | 240 | 24.8 | 310 |
| SY-13305 | | | 305 | 4.3 | 95 | 12.4 | 53 | 28.5 | 123 | 42.8 | 184 | 58.9 | 253 | 76.0 | 327 |
| SY-1625 | 16 | 8 | 25 | 118.0 | 8 | 1.0 | 119 | 2.3 | 274 | 3.5 | 412 | 4.8 | 567 | 6.2 | 732 |
| SY-1632 | | | 32 | 89.0 | 10 | 1.3 | 116 | 3.0 | 267 | 4.5 | 401 | 6.2 | 552 | 8.0 | 712 |
| SY-1638 | | | 38 | 72.1 | 12 | 1.5 | 111 | 3.6 | 257 | 5.3 | 385 | 7.4 | 531 | 9.5 | 685 |
| SY-1644 | | | 44 | 60.9 | 14 | 1.8 | 109 | 4.1 | 251 | 6.2 | 377 | 8.5 | 519 | 11.0 | 670 |
| SY-1651 | | | 51 | 52.3 | 16 | 2.1 | 111 | 4.9 | 255 | 7.3 | 382 | 10.1 | 527 | 13.0 | 680 |
| SY-1664 | | | 64 | 41.2 | 20 | 2.6 | 107 | 6.0 | 247 | 9.0 | 371 | 12.4 | 511 | 16.0 | 659 |
| SY-1676 | | | 76 | 34.1 | 24 | 3.1 | 105 | 7.1 | 243 | 10.7 | 364 | 14.7 | 502 | 19.0 | 648 |
| SY-1689 | | | 89 | 29.5 | 28 | 3.6 | 106 | 8.3 | 243 | 12.4 | 365 | 17.1 | 503 | 22.0 | 649 |
| SY-16102 | | | 102 | 25.6 | 33 | 4.2 | 108 | 9.8 | 250 | 14.6 | 374 | 20.1 | 516 | 26.0 | 666 |
| SY-16115 | | | 115 | 22.5 | 35 | 5 | 102 | 11 | 236 | 16 | 354 | 22 | 488 | 28 | 630 |
| SY-16305 | | | 305 | 8.4 | 95 | 12.4 | 104 | 28.5 | 239 | 42.8 | 359 | 58.9 | 495 | 76.0 | 638 |
| SY-2025 | 20 | 10 | 25 | 229.0 | 8 | 1.0 | 295 | 2.3 | 681 | 3.5 | 1022 | 4.8 | 1408 | 6.2 | 1817 |
| SY-2032 | | | 32 | 224.0 | 10 | 1.3 | 291 | 3.0 | 672 | 4.5 | 1008 | 6.2 | 1389 | 8.0 | 1792 |
| SY-2038 | | | 38 | 117.0 | 12 | 1.5 | 273 | 3.6 | 631 | 5.3 | 946 | 7.4 | 1303 | 9.5 | 1682 |
| SY-2044 | | | 44 | 149.0 | 14 | 1.8 | 266 | 4.1 | 615 | 6.2 | 922 | 8.5 | 1270 | 11.0 | 1639 |
| SY-2051 | | | 51 | 128.0 | 16 | 2.1 | 270 | 4.9 | 624 | 7.3 | 936 | 10.1 | 1290 | 13.0 | 1664 |
| SY-2064 | | | 64 | 99.0 | 20 | 2.6 | 257 | 6.0 | 594 | 9.0 | 891 | 12.4 | 1228 | 16.0 | 1584 |
| SY-2076 | | | 76 | 81.7 | 24 | 3.1 | 252 | 7.1 | 582 | 10.7 | 873 | 14.7 | 1203 | 19.0 | 1552 |
| SY-2089 | | | 89 | 69.5 | 28 | 3.6 | 249 | 8.3 | 573 | 12.4 | 860 | 17.1 | 1185 | 22.0 | 1529 |
| SY-20102 | | | 102 | 60.6 | 33 | 4.2 | 256 | 9.8 | 591 | 14.6 | 886 | 20.1 | 1221 | 26.0 | 1576 |
| SY-20115 | | | 115 | 53.0 | 36 | 4.7 | 250 | 10.9 | 576 | 16.3 | 865 | 22.5 | 1191 | 29.0 | 1537 |
| SY-20127 | | | 127 | 47.5 | 40 | 5.2 | 247 | 12.0 | 570 | 18.0 | 855 | 24.8 | 1178 | 32.0 | 1520 |
| SY-20140 | | | 139 | 43.0 | 44 | 5.7 | 245 | 13.1 | 564 | 19.7 | 847 | 27.1 | 1166 | 35.0 | 1505 |
| SY-20152 | | | 152 | 39.0 | 48 | 6.2 | 241 | 14.3 | 556 | 21.4 | 834 | 29.4 | 1149 | 38.0 | 1482 |
| SY-20305 | | | 305 | 21.2 | 95 | 12.4 | 262 | 28.5 | 604 | 42.8 | 906 | 58.9 | 1249 | 76.0 | 1611 |
| SY-2525 | 25 | 12.5 | 25 | 459.0 | 8 | 1.0 | 462 | 2.3 | 1067 | 3.5 | 1601 | 4.8 | 2206 | 6.2 | 2846 |
| SY-2532 | | | 32 | 374.4 | 10 | 1.3 | 487 | 3.0 | 1123 | 4.5 | 1685 | 6.2 | 2321 | 8.0 | 2995 |
| SY-2538 | | | 38 | 346.0 | 12 | 1.5 | 534 | 3.6 | 1233 | 5.3 | 1849 | 7.4 | 2547 | 9.5 | 3287 |
| SY-2544 | | | 44 | 244.0 | 14 | 1.8 | 436 | 4.1 | 1007 | 6.2 | 1510 | 8.5 | 2080 | 11.0 | 2684 |
| SY-2551 | | | 51 | 207.5 | 16 | 2.1 | 438 | 4.9 | 1012 | 7.3 | 1517 | 10.1 | 2091 | 13.0 | 2698 |
| SY-2564 | | | 64 | 161.0 | 20 | 2.6 | 419 | 6.0 | 966 | 9.0 | 1449 | 12.4 | 1996 | 16.0 | 2576 |
| SY-2576 | | | 76 | 130.8 | 24 | 3.1 | 404 | 7.1 | 932 | 10.7 | 1398 | 14.7 | 1926 | 19.0 | 2485 |
| SY-2589 | | | 89 | 110.5 | 28 | 3.6 | 395 | 8.3 | 912 | 12.4 | 1367 | 17.1 | 1884 | 22.0 | 2431 |
| SY-25102 | | | 102 | 96.3 | 33 | 4.2 | 407 | 9.8 | 939 | 14.6 | 1408 | 20.1 | 1940 | 26.0 | 2504 |
| SY-25115 | | | 115 | 85.7 | 36 | 4.7 | 404 | 10.9 | 932 | 16.3 | 1398 | 22.5 | 1926 | 29.0 | 2485 |
| SY-25127 | | | 127 | 76.3 | 40 | 5.2 | 397 | 12.0 | 916 | 18.0 | 1373 | 24.8 | 1892 | 32.0 | 2442 |
| SY-25140 | | | 139 | 68.9 | 44 | 5.7 | 392 | 13.1 | 904 | 19.7 | 1357 | 27.1 | 1869 | 35.0 | 2412 |

PSE

## SY - Sarı Yay - Çok Ağır Yük

ISO 10243 | SARI | 80%

MADE IN ITALY

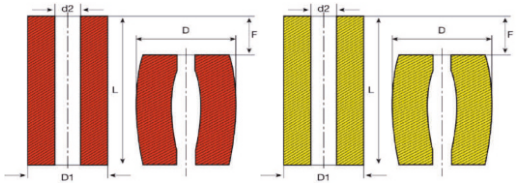



| Sipariş | DH Dış Çap | DS İç Çap | L0 Serbest Uzunluk | RG Yük Katsayısı | fBL Maks. Esneme | A 13%fBL | | B 30%fBL | | C 45%fBL | | D 62%fBL | | E 80%fBL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mm | mm | mm | N/mm | mm | mm | N | mm | N | mm | N | mm | N | mm | N |
| SY-25152 | 25 | 12.5 | 152 | 63.5 | 48 | 6.2 | 392 | 14.3 | 905 | 21.4 | 1357 | 29.4 | 1870 | 38.0 | 2413 |
| SY-25178 | | | 178 | 53.9 | 55 | 7.2 | 385 | 16.5 | 889 | 24.8 | 1334 | 34.1 | 1838 | 44.0 | 2372 |
| SY-25203 | | | 203 | 47.0 | 64 | 8.3 | 390 | 19.1 | 899 | 28.7 | 1348 | 39.5 | 1858 | 51.0 | 2397 |
| SY-25305 | | | 305 | 30.9 | 95 | 12.4 | 382 | 28.5 | 881 | 42.8 | 1321 | 58.9 | 1820 | 76.0 | 2348 |
| SY-3238 | 32 | 16 | 38 | 528.2 | 12 | 1.5 | 815 | 3.6 | 1882 | 5.3 | 2823 | 7.4 | 3889 | 9.5 | 5018 |
| SY-3244 | | | 44 | 424.4 | 14 | 1.8 | 759 | 4.1 | 1751 | 6.2 | 2626 | 8.5 | 3618 | 11.0 | 4668 |
| SY-3251 | | | 51 | 353.0 | 16 | 2.1 | 746 | 4.9 | 1721 | 7.3 | 2581 | 10.1 | 3557 | 13.0 | 4589 |
| SY-3264 | | | 64 | 269.2 | 20 | 2.6 | 700 | 6.0 | 1615 | 9.0 | 2423 | 12.4 | 3338 | 16.0 | 4307 |
| SY-3276 | | | 76 | 218.5 | 24 | 3.1 | 675 | 7.1 | 1557 | 10.7 | 2335 | 14.7 | 3217 | 19.0 | 4152 |
| SY-3289 | | | 89 | 180.3 | 28 | 3.6 | 645 | 8.3 | 1488 | 12.4 | 2231 | 17.1 | 3074 | 22.0 | 3967 |
| SY-32102 | | | 102 | 155.0 | 33 | 4.2 | 655 | 9.8 | 1511 | 14.6 | 2267 | 20.1 | 3123 | 26.0 | 4030 |
| SY-32115 | | | 115 | 140.0 | 36 | 4.7 | 660 | 10.9 | 1523 | 16.3 | 2284 | 22.5 | 3147 | 29.0 | 4060 |
| SY-32127 | | | 127 | 124.0 | 40 | 5.2 | 645 | 12.0 | 1488 | 18.0 | 2232 | 24.8 | 3075 | 32.0 | 3968 |
| SY-32140 | | | 139 | 112.3 | 44 | 5.7 | 639 | 13.1 | 1474 | 19.7 | 2211 | 27.1 | 3046 | 35.0 | 3931 |
| SY-32152 | | | 152 | 102.0 | 48 | 6.2 | 630 | 14.3 | 1454 | 21.4 | 2180 | 29.4 | 3004 | 38.0 | 3876 |
| SY-32178 | | | 178 | 88.2 | 55 | 7.2 | 631 | 16.5 | 1455 | 24.8 | 2183 | 34.1 | 3008 | 44.0 | 3881 |
| SY-32203 | | | 203 | 76.0 | 64 | 8.3 | 630 | 19.1 | 1454 | 28.7 | 2180 | 39.5 | 3004 | 51.0 | 3876 |
| SY-32254 | | | 254 | 60.8 | 80 | 10.4 | 632 | 24.0 | 1459 | 36.0 | 2189 | 49.6 | 3016 | 64.0 | 3891 |
| SY-32305 | | | 305 | 49.0 | 95 | 12.4 | 605 | 28.5 | 1397 | 42.8 | 2095 | 58.9 | 2886 | 76.0 | 3724 |
| SY-4051 | 40 | 20 | 51 | 628.0 | 16 | 2.1 | 1327 | 4.9 | 3062 | 7.3 | 4592 | 10.1 | 6327 | 13.0 | 8164 |
| SY-4064 | | | 64 | 487.0 | 20 | 2.6 | 1266 | 6.0 | 2922 | 9.0 | 4383 | 12.4 | 6039 | 16.0 | 7792 |
| SY-4076 | | | 76 | 379.0 | 24 | 3.1 | 1170 | 7.1 | 2700 | 10.7 | 4051 | 14.7 | 5581 | 19.0 | 7201 |
| SY-4089 | | | 89 | 321.0 | 28 | 3.6 | 1148 | 8.3 | 2648 | 12.4 | 3972 | 17.1 | 5473 | 22.0 | 7062 |
| SY-40102 | | | 102 | 281.0 | 33 | 4.2 | 1187 | 9.8 | 2740 | 14.6 | 4110 | 20.1 | 5662 | 26.0 | 7306 |
| SY-40115 | | | 115 | 245.0 | 36 | 4.7 | 1155 | 10.9 | 2664 | 16.3 | 3997 | 22.5 | 5506 | 29.0 | 7105 |
| SY-40127 | | | 127 | 221.0 | 40 | 5.2 | 1149 | 12.0 | 2652 | 18.0 | 3978 | 24.8 | 5481 | 32.0 | 7072 |
| SY-40140 | | | 139 | 190.0 | 44 | 5.7 | 1081 | 13.1 | 2494 | 19.7 | 3741 | 27.1 | 5154 | 35.0 | 650 |
| SY-40152 | | | 152 | 168.0 | 48 | 6.2 | 1037 | 14.3 | 2394 | 21.4 | 3591 | 29.4 | 4948 | 38.0 | 6384 |
| SY-40178 | | | 178 | 146.0 | 55 | 7.2 | 1044 | 16.5 | 2409 | 24.8 | 3614 | 34.1 | 4979 | 44.0 | 6424 |
| SY-40203 | | | 203 | 132.0 | 64 | 8.3 | 1094 | 19.1 | 2525 | 28.7 | 3787 | 39.5 | 5217 | 51.0 | 6732 |
| SY-40254 | | | 254 | 107.0 | 80 | 10.4 | 1113 | 24.0 | 2568 | 36.0 | 3852 | 49.6 | 5307 | 64.0 | 6848 |
| SY-40305 | | | 305 | 87.8 | 95 | 12.4 | 1084 | 28.5 | 2502 | 42.8 | 3753 | 58.9 | 5171 | 76.0 | 6673 |
| SY-5064 | 50 | 25 | 64 | 709.0 | 20 | 2.6 | 1843 | 6.0 | 4254 | 9.0 | 6381 | 12.4 | 8792 | 16.0 | 13344 |
| SY-5076 | | | 76 | 572.0 | 24 | 3.1 | 1766 | 7.1 | 4076 | 10.7 | 6113 | 14.7 | 8423 | 19.0 | 10868 |
| SY-5089 | | | 89 | 475.0 | 28 | 3.6 | 1698 | 8.3 | 3919 | 12.4 | 5878 | 17.1 | 8099 | 22.0 | 10450 |
| SY-50102 | | | 102 | 405.0 | 33 | 4.2 | 1711 | 9.8 | 3949 | 14.6 | 5923 | 20.1 | 8161 | 26.0 | 10530 |
| SY-50115 | | | 115 | 352.0 | 36 | 4.7 | 1659 | 10.9 | 3828 | 16.3 | 5742 | 22.5 | 7911 | 29.0 | 10208 |
| SY-50127 | | | 127 | 316.0 | 40 | 5.2 | 1643 | 12.0 | 3792 | 18.0 | 5688 | 24.8 | 7837 | 32.0 | 10112 |
| SY-50140 | | | 139 | 274.0 | 44 | 5.7 | 1558 | 13.1 | 3596 | 19.7 | 5394 | 27.1 | 7432 | 35.0 | 9590 |
| SY-50152 | | | 152 | 239.0 | 48 | 6.2 | 1476 | 14.3 | 3406 | 21.4 | 5109 | 29.4 | 7039 | 38.0 | 9082 |
| SY-50178 | | | 178 | 215.0 | 55 | 7.2 | 1537 | 16.5 | 3548 | 24.8 | 5321 | 34.1 | 7332 | 44.0 | 9460 |
| SY-50203 | | | 203 | 187.0 | 64 | 8.3 | 1550 | 19.1 | 3576 | 28.7 | 5365 | 39.5 | 7391 | 51.0 | 9537 |
| SY-50254 | | | 254 | 153.0 | 80 | 10.4 | 1591 | 24.0 | 3672 | 36.0 | 5508 | 49.6 | 7589 | 64.0 | 9792 |
| SY-50305 | | | 305 | 127.0 | 95 | 12.4 | 1569 | 28.5 | 3620 | 42.8 | 5429 | 58.9 | 7480 | 76.0 | 9652 |
| SY-6376 | 63 | 38 | 76 | 952.0 | 24 | 3.1 | 2939 | 7.1 | 6783 | 10.7 | 10175 | 14.7 | 14018 | 19.0 | 18088 |
| SY-6389 | | | 89 | 819.0 | 28 | 3.6 | 2928 | 8.3 | 6757 | 12.4 | 10135 | 17.1 | 13964 | 22.0 | 18018 |
| SY-63102 | | | 102 | 700.0 | 33 | 4.2 | 2958 | 9.8 | 6825 | 14.6 | 10238 | 20.1 | 14105 | 26.0 | 18200 |
| SY-63115 | | | 115 | 620.0 | 36 | 4.7 | 2922 | 10.9 | 6743 | 16.3 | 10114 | 22.5 | 13935 | 29.0 | 17980 |
| SY-63127 | | | 127 | 565.0 | 40 | 5.2 | 2938 | 12.0 | 6780 | 18.0 | 10170 | 24.8 | 14012 | 32.0 | 18080 |
| SY-63152 | | | 152 | 458.0 | 48 | 6.2 | 2828 | 14.3 | 6527 | 21.4 | 9790 | 29.4 | 13488 | 38.0 | 17404 |
| SY-63178 | | | 178 | 384.0 | 55 | 7.2 | 2746 | 16.5 | 6336 | 24.8 | 9504 | 34.1 | 13094 | 44.0 | 16896 |
| SY-63203 | | | 203 | 337.0 | 64 | 8.3 | 2793 | 19.1 | 6445 | 28.7 | 9668 | 39.5 | 13320 | 51.0 | 17187 |
| SY-63254 | | | 254 | 263.0 | 80 | 10.4 | 2735 | 24.0 | 6312 | 36.0 | 9468 | 49.6 | 13045 | 64.0 | 16832 |
| SY-63305 | | | 305 | 218.0 | 95 | 12.4 | 2692 | 28.5 | 6213 | 42.8 | 9320 | 58.9 | 12840 | 76.0 | 16568 |

## Vulkolon - Poliüretan Yaylar

**80 Shore** *Maksimum esneme payı %30*

**90 Shore** *Maksimum esneme payı %25*

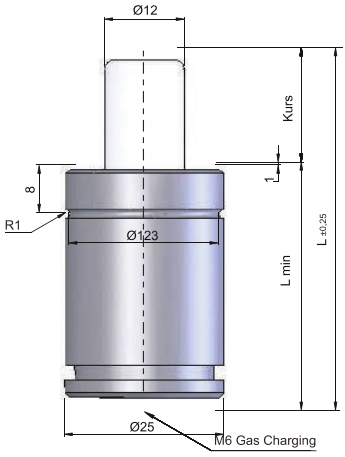



* Vulkolonlar dolu olarakta mevcuttur.

Vulkolon boyları standart 310 mm'dir. İstediğiniz kapanma ve genişleme payları aşağıdaki tabloda belirtilmiştir.

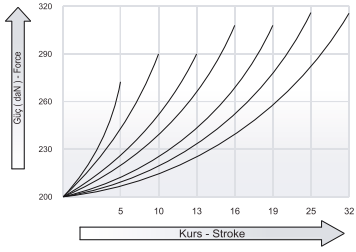
| D1 | d2 | L | Sarı (80 Shore) | | | Kırmızı (90 Shore) | | |
|---|---|---|---|---|---|---|---|---|
| | | | P | D | F | P | D | F |
| 16 | – | 12 | 179 | 21 | 3.6 | 226 | 20 | 3 |
| | | 16 | 173 | | 4.8 | 218 | | 5 |
| | | 20 | 170 | | 6 | 212 | | 5 |
| | | 25 | 165 | | 7.5 | 208 | | 6.25 |
| | | 32 | 160 | | 9.6 | 200 | | 8 |
| 20 | 8.5 | 12 | 274 | 26 | 3.6 | 334 | 25 | 3 |
| | | 16 | 270 | | 4.8 | 330 | | 5 |
| | | 20 | 260 | | 6 | 324 | | 5 |
| | | 25 | 254 | | 7.5 | 320 | | 6.25 |
| | | 32 | 250 | | 9.6 | 308 | | 8 |
| 25 | 10.5 | 16 | 437 | 33 | 4.8 | 540 | 31 | 4 |
| | | 20 | 425 | | 6 | 530 | | 5 |
| | | 25 | 412 | | 7.5 | 520 | | 6.25 |
| | | 32 | 40 | | 9.6 | 510 | | 8 |
| | | 40 | 380 | | 12 | 50 | | 10 |
| | | 50 | 365 | | 15 | 480 | | 12.5 |
| 32 | 13.5 | 16 | 730 | 42 | 4.8 | 930 | 40 | 4 |
| | | 20 | 720 | | 6 | 900 | | 5 |
| | | 25 | 690 | | 7.5 | 880 | | 6.25 |
| | | 32 | 670 | | 9.6 | 850 | | 8 |
| | | 40 | 650 | | 12 | 820 | | 10 |
| | | 50 | 635 | | 15 | 810 | | 12.5 |
| 40 | 13.5 | 20 | 1280 | 52 | 6 | 1620 | 50 | 5 |
| | | 25 | 1260 | | 7.5 | 1550 | | 6.25 |
| | | 32 | 1180 | | 9.6 | 1500 | | 8 |
| | | 40 | 1170 | | 12 | 1450 | | 10 |
| | | 50 | 1120 | | 15 | 1410 | | 12.5 |
| | | 69 | 1100 | | 18.9 | 1380 | | 15.75 |
| 50 | 17 | 25 | 1980 | 65 | 7.5 | 2500 | 62 | 6.25 |
| | | 32 | 1910 | | 9.6 | 2400 | | 8 |
| | | 40 | 1850 | | 12 | 2300 | | 10 |
| | | 50 | 1810 | | 15 | 2250 | | 12.5 |
| | | 63 | 1760 | | 18.9 | 2200 | | 15.75 |
| | | 80 | 1730 | | 24 | 2150 | | 20 |

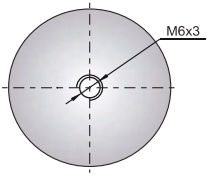
| D1 | d2 | L | Sarı (80 Shore) | | | Kırmızı (90 Shore) | | |
|---|---|---|---|---|---|---|---|---|
| | | | P | D | F | P | D | F |
| 63 | 17 | 32 | 3400 | 82 | 9.6 | 4200 | 78 | 9 |
| | | 40 | 3200 | | 12 | 4050 | | 10 |
| | | 50 | 3100 | | 15 | 3900 | | 12.5 |
| | | 63 | 3000 | | 18.9 | 3800 | | 15.75 |
| | | 80 | 2900 | | 24 | 3700 | | 20 |
| | | 100 | 2800 | | 30 | 3600 | | 25 |
| 80 | 21 | 40 | 5500 | 104 | 12 | 6900 | 99 | 10 |
| | | 50 | 5250 | | 15 | 6600 | | 12.5 |
| | | 63 | 5050 | | 18.9 | 6400 | | 15.75 |
| | | 80 | 4900 | | 24 | 6200 | | 20 |
| | | 100 | 4750 | | 30 | 6000 | | 25 |
| | | 125 | 4650 | | 37.5 | 5800 | | 31.25 |
| 100 | 21 | 50 | 9000 | 130 | 15 | 1300 | 125 | 12.5 |
| | | 63 | 8600 | | 18.9 | 10800 | | 15.75 |
| | | 80 | 8250 | | 24 | 10400 | | 20 |
| | | 100 | 8000 | | 30 | 10000 | | 25 |
| | | 125 | 7600 | | 37.5 | 9700 | | 31.25 |
| | | 160 | 7500 | | 48 | 9500 | | 40 |
| 125 | 27 | 63 | 14200 | 160 | 18.9 | 17600 | 156 | 15.75 |
| | | 80 | 13200 | | 24 | 16800 | | 20 |
| | | 100 | 12800 | | 30 | 16000 | | 25 |
| | | 125 | 12400 | | 37.5 | 15300 | | 31.25 |
| | | 160 | 12000 | | 48 | 15000 | | 40 |



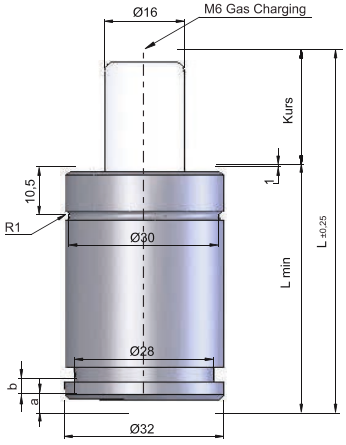

## YO 200 - Gazlı Yay

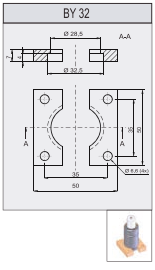
**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s

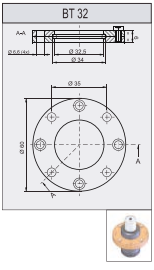



| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-2005 | 5 | 40 | 35 | 200 | ~ 0,09 |  |
| YO-20010 | 10 | 50 | 40 | | ~ 0,10 | |
| YO-20013 | 13 | 56 | 43 | | ~ 0,10 | |
| YO-20016 | 16 | 62 | 46 | | ~ 0,11 | |
| YO-20019 | 19 | 68 | 49 | | ~ 0,12 | |
| YO-20025 | 25 | 80 | 55 | | ~ 0,13 | |
| YO-20032 | 32 | 94 | 62 | | ~ 0,16 | |



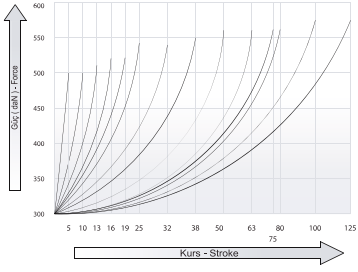


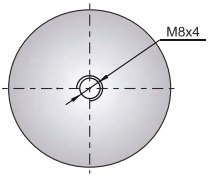



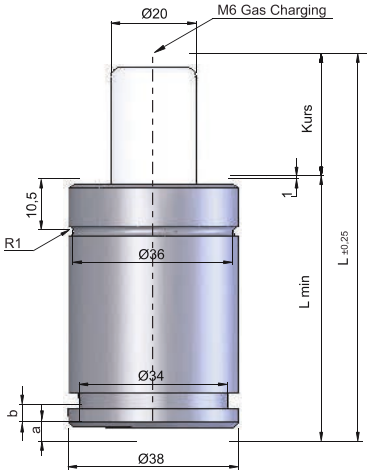



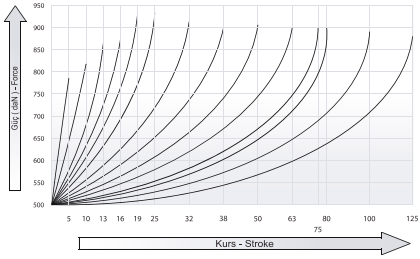

## YO 300 - Gazlı Yay

**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s



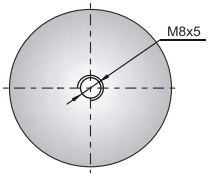

| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-3005 | 5 | 40 | 35 | 300 | ~ 0,17 |  |
| YO-30010 | 10 | 50 | 40 | | ~ 0,18 | |
| YO-30013 | 13 | 56 | 43 | | ~ 0,19 | |
| YO-30016 | 16 | 62 | 46 | | ~ 0,20 | |
| YO-30019 | 19 | 68 | 49 | | ~ 0,22 | |
| YO-30025 | 25 | 80 | 55 | | ~ 0,25 | |
| YO-30032 | 32 | 94 | 62 | | ~ 0,27 | |
| YO-30038 | 38 | 106 | 68 | | ~ 0,29 | |
| YO-30050 | 50 | 130 | 80 | | ~ 0,34 | |
| YO-30063 | 63 | 156 | 93 | | ~ 0,39 | |
| YO-30075 | 75 | 180 | 105 | | ~ 0,42 | |
| YO-30080 | 80 | 190 | 110 | | ~ 0,45 | |
| YO-300100 | 100 | 230 | 130 | | ~ 0,53 | |
| YO-300125 | 125 | 280 | 150 | | ~ 0,68 | |



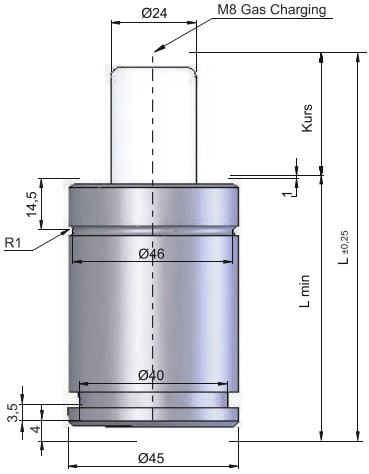



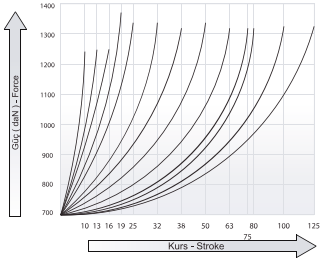

## YO 500 - Gazlı Yay

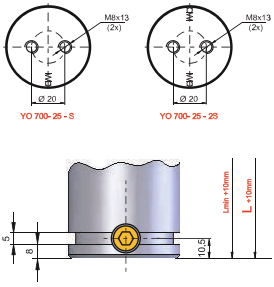
**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s

| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-5005 | 5 | 40 | 35 | 500 | ~ 0,25 |  |
| YO-50010 | 10 | 50 | 40 | | ~ 0,27 | |
| YO-50013 | 13 | 56 | 43 | | ~ 0,29 | |
| YO-50016 | 16 | 62 | 46 | | ~ 0,31 | |
| YO-50019 | 19 | 68 | 49 | | ~ 0,33 | |
| YO-50025 | 25 | 80 | 55 | | ~ 0,36 | |
| YO-50032 | 32 | 94 | 62 | | ~ 0,40 | |
| YO-50038 | 38 | 106 | 68 | | ~ ,044 | |
| YO-50050 | 50 | 130 | 80 | | ~ 0,50 | |
| YO-50063 | 63 | 156 | 93 | | ~ 0,57 | |
| YO-50075 | 75 | 180 | 105 | | ~ 0,61 | |
| YO-50080 | 80 | 190 | 110 | | ~ 0,66 | |
| YO-500100 | 100 | 230 | 130 | | ~ 0,77 | |
| YO-500125 | 125 | 250 | 155 | | ~ 0,90 | |



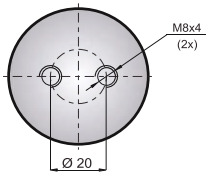


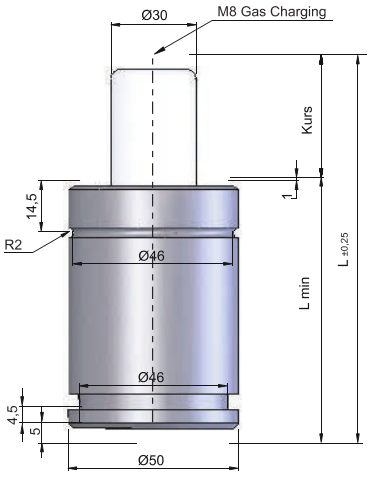



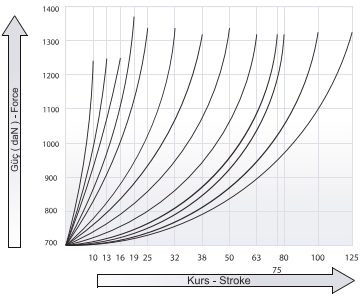




## YO 700 - Gazlı Yay

**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s

| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-70010 | 10 | 52 | 42 | 700 | ~ 0,39 |  |
| YO-70013 | 13 | 58 | 45 | | ~0,42 | |
| YO-70016 | 16 | 64 | 48 | | ~0,45 | |
| YO-70019 | 19 | 70 | 51 | | ~0,48 | |
| YO-70025 | 25 | 82 | 57 | | ~0,53 | |
| YO-70032 | 32 | 96 | 64 | | ~0,58 | |
| YO-70038 | 38 | 108 | 70 | | ~0,62 | |
| YO-70050 | 50 | 132 | 82 | | ~0,71 | |
| YO-70063 | 63 | 158 | 95 | | ~0,81 | |
| YO-70075 | 75 | 182 | 107 | | ~0,85 | |
| YO-70080 | 80 | 192 | 112 | | ~0,93 | |
| YO-700100 | 100 | 232 | 132 | | ~1,04 | |
| YO-700125 | 125 | 125 | 157 | | ~1,28 | |

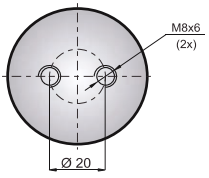


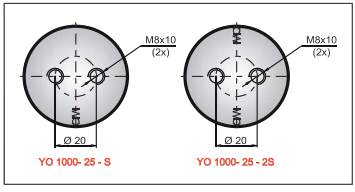

## YO 1000 - Gazlı Yay

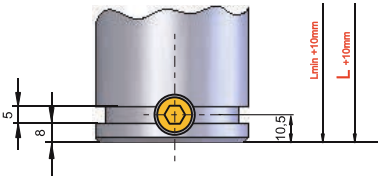
İRA Gas Springs

**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s

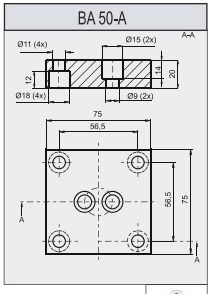
| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-100010 | 10 | 58 | 48 | 1000 | ~ 0,57 |  |
| YO-100013 | 13 | 64 | 51 | | ~ 0,59 | |
| YO-100016 | 16 | 70 | 54 | | ~ 0,62 | |
| YO-100019 | 19 | 76 | 57 | | ~ 0,65 | |
| YO-100025 | 25 | 88 | 63 | | ~ 0,70 | |
| YO-100032 | 32 | 102 | 70 | | ~ 0,77 | |
| YO-100038 | 38 | 114 | 76 | | ~ 0,83 | |
| YO-100050 | 50 | 138 | 88 | | ~ 0,94 | |
| YO-100063 | 63 | 164 | 101 | | ~ 1,07 | |
| YO-100075 | 75 | 188 | 113 | | ~ 1,16 | |
| YO-100080 | 80 | 198 | 118 | | ~ 1,21 | |
| YO-1000100 | 100 | 238 | 138 | | ~ 1,43 | |
| YO-1000125 | 125 | 288 | 163 | | ~ 1,70 | |





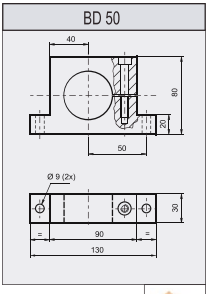




BA 50-A



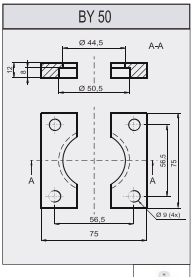



BD 50



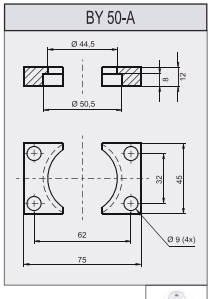



BY 50



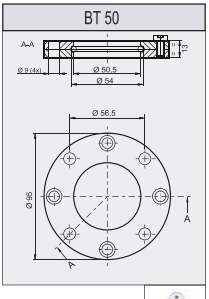



BY 50-A

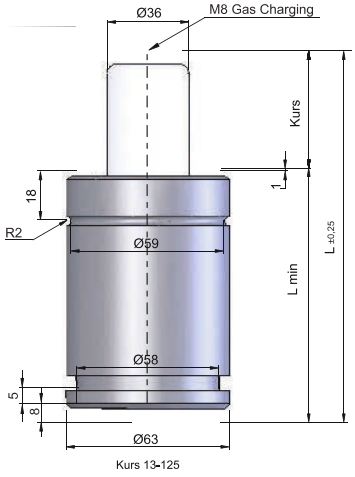


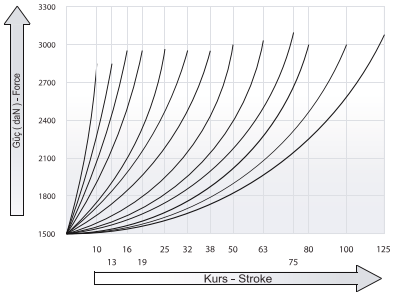



BT 50





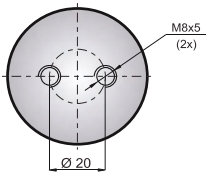



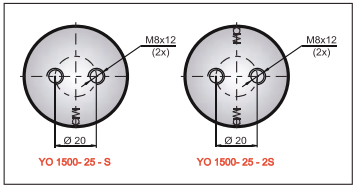

## YO 1500 - Gazlı Yay

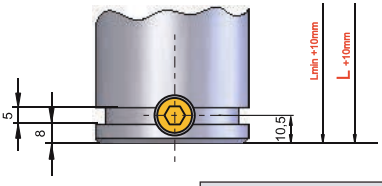
İRA Gas Springs

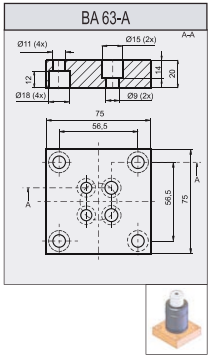
| | | |
|---|---|---|
| **Basınç Gazı** | : | Nitrogen N2 |
| **Max. Basınç** | : | 150 bar |
| **Min. Basınç** | : | 25 bar |
| **Çalışma Sıcaklığı** | : | 0°C ve +80°CMax |
| **Çalışma Hızı** | : | 1,8 m / s |

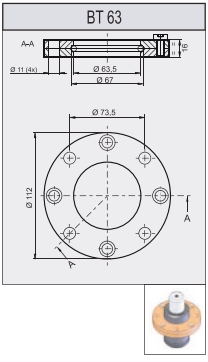
| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-150010 | 10 | 64 | 54 | 1500 | ~ 1,02 |  |
| YO-150013 | 13 | 70 | 57 | | ~ 1,05 | |
| YO-150016 | 16 | 76 | 60 | | ~ 1,10 | |
| YO-150019 | 19 | 82 | 63 | | ~ 1,15 | |
| YO-150025 | 25 | 94 | 69 | | ~ 1,25 | |
| YO-150032 | 32 | 108 | 76 | | ~ 1,35 | |
| YO-150038 | 38 | 120 | 82 | | ~ 1,44 | |
| YO-150050 | 50 | 144 | 94 | | ~ 1,61 | |
| YO-150063 | 63 | 170 | 107 | | ~ 1,81 | |
| YO-150075 | 75 | 194 | 119 | | ~ 1,90 | |
| YO-150080 | 80 | 204 | 124 | | ~ 2,06 | |
| YO-1500100 | 100 | 244 | 144 | | ~ 2,38 | |
| YO-1500125 | 125 | 294 | 169 | | ~ 2,86 | |

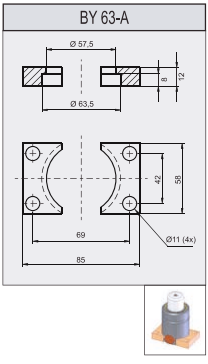


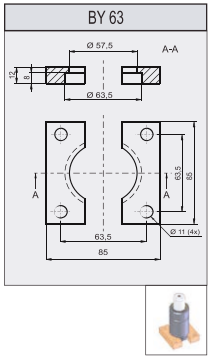


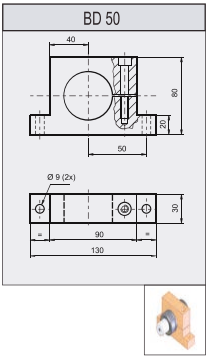



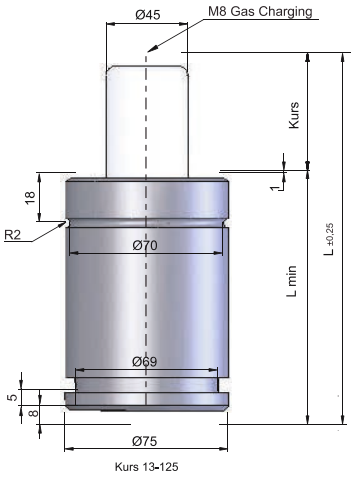



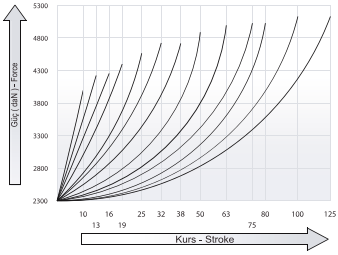



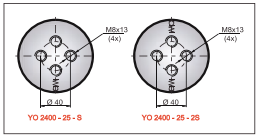



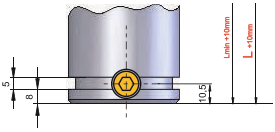





Kurs 13-125

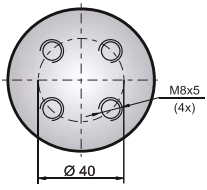


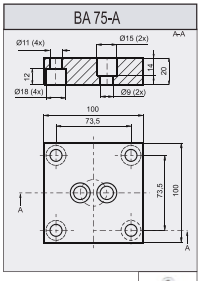



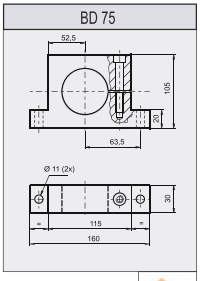

## YO 2400 - Gazlı Yay

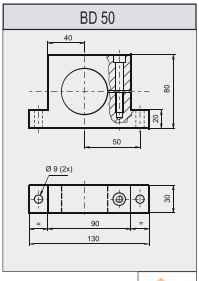
**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s

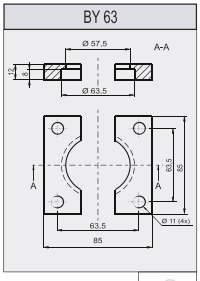
| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-240010 | 10 | 65 | 55 | 2400 | ~ 1,47 |  |
| YO-240013 | 13 | 71 | 58 | | ~ 1,52 | |
| YO-240016 | 16 | 77 | 61 | | ~ 1,58 | |
| YO-240019 | 19 | 83 | 64 | | ~ 1,65 | |
| YO-240025 | 25 | 95 | 70 | | ~ 1,77 | |
| YO-240032 | 32 | 109 | 77 | | ~ 1,93 | |
| YO-240038 | 38 | 121 | 83 | | ~ 2,05 | |
| YO-240050 | 50 | 145 | 95 | | ~ 2,30 | |
| YO-240063 | 63 | 171 | 108 | | ~ 2,55 | |
| YO-240075 | 75 | 195 | 120 | | ~ 2,75 | |
| YO-240080 | 80 | 205 | 125 | | ~ 2,85 | |
| YO-2400100 | 100 | 245 | 145 | | ~ 3,28 | |
| YO-2400125 | 125 | 295 | 170 | | ~ 3,93 | |

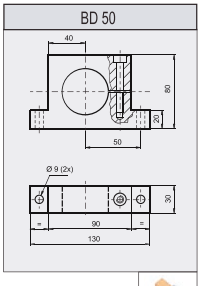


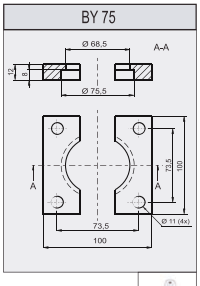


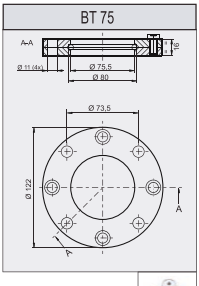



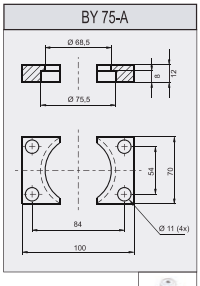



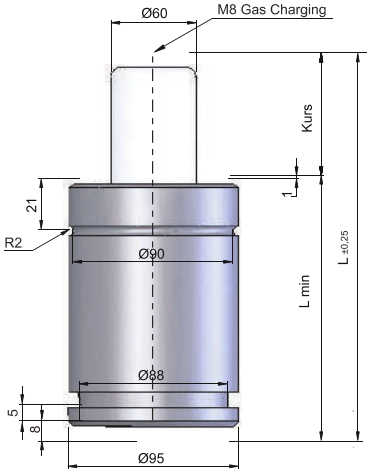



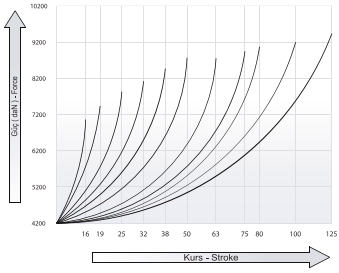



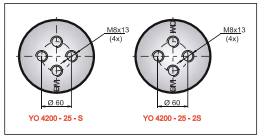



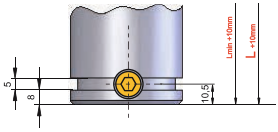





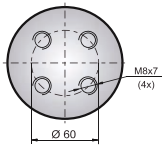



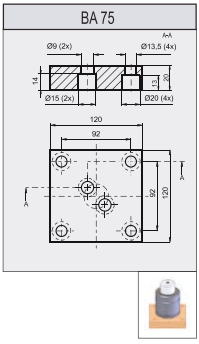



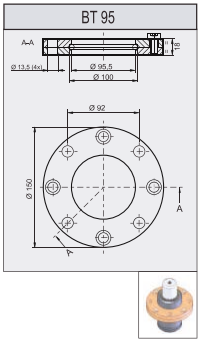

## YO 4200 - Gazlı Yay

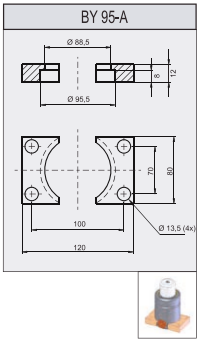
**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s

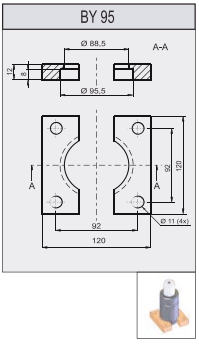
| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-420016 | 16 | 97 | 81 | 4200 | ~ 3,40 |  |
| YO-420019 | 19 | 103 | 84 | | ~ 3,45 | |
| YO-420025 | 25 | 115 | 90 | | ~ 3,65 | |
| YO-420032 | 32 | 129 | 97 | | ~ 3,82 | |
| YO-420038 | 38 | 141 | 103 | | ~ 4,00 | |
| YO-420050 | 50 | 165 | 115 | | ~ 4,44 | |
| YO-420063 | 63 | 191 | 128 | | ~ 4,95 | |
| YO-420075 | 75 | 215 | 140 | | ~ 5,20 | |
| YO-420080 | 80 | 225 | 145 | | ~ 5,41 | |
| YO-4200100 | 100 | 265 | 165 | | ~ 6,00 | |
| YO-4200125 | 125 | 315 | 190 | | ~ 6,70 | |

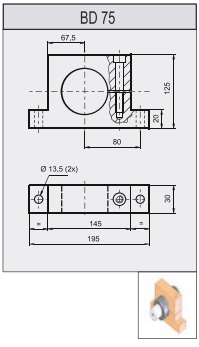


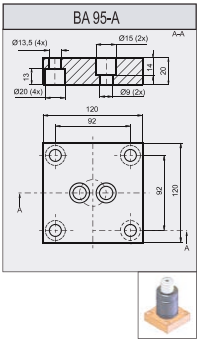


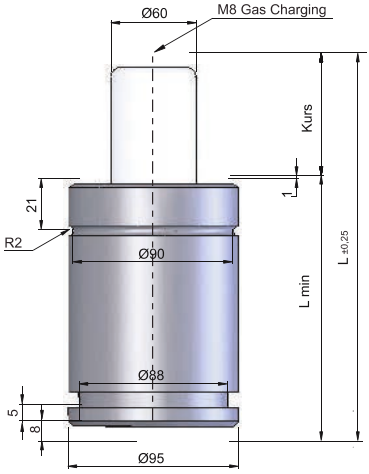



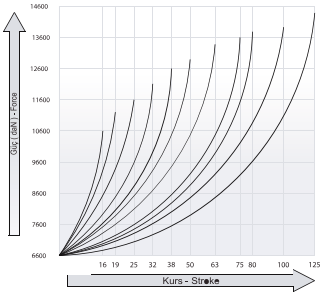



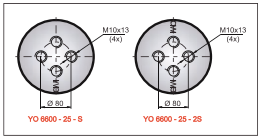



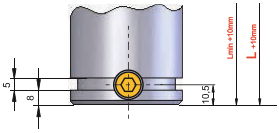





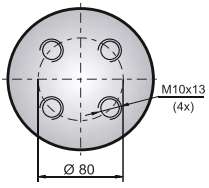



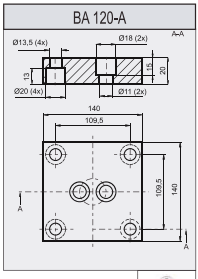



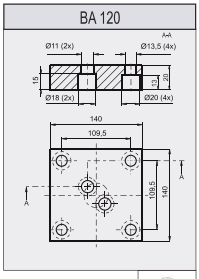

## YO 6600 - Gazlı Yay

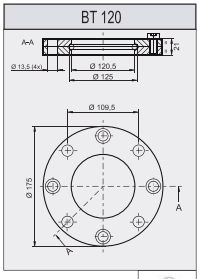
**Basınç Gazı** : Nitrogen N2
**Max. Basınç** : 150 bar
**Min. Basınç** : 25 bar
**Çalışma Sıcaklığı** : 0°C ve +80°CMax
**Çalışma Hızı** : 1,8 m / s

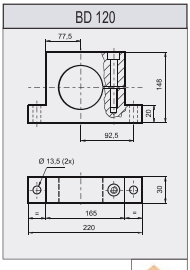
| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-660016 | 16 | 107 | 91 | 6600 | ~ 6,60 |  |
| YO-660019 | 19 | 113 | 94 | | ~ 6,65 | |
| YO-660025 | 25 | 125 | 100 | | ~ 6,82 | |
| YO-660032 | 32 | 139 | 107 | | ~ 7,18 | |
| YO-660038 | 38 | 151 | 113 | | ~ 7,57 | |
| YO-660050 | 50 | 175 | 125 | | ~ 8,18 | |
| YO-660063 | 63 | 201 | 138 | | ~ 8,81 | |
| YO-660075 | 75 | 225 | 150 | | ~ 8,95 | |
| YO-660080 | 80 | 235 | 155 | | ~ 9,10 | |
| YO-6600100 | 100 | 275 | 175 | | ~ 10,7 | |
| YO-6600125 | 125 | 325 | 200 | | ~ 12,5 | |

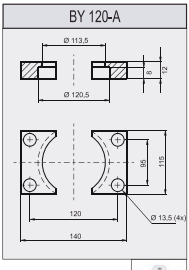


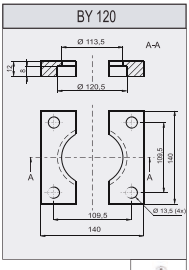


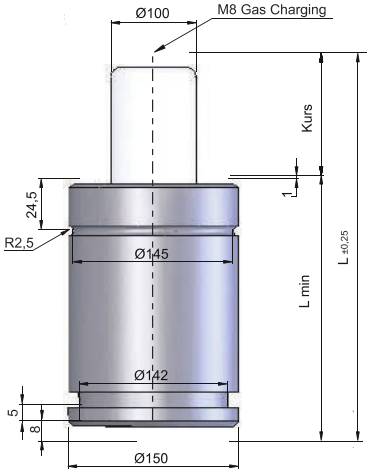



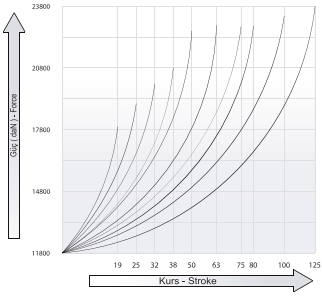



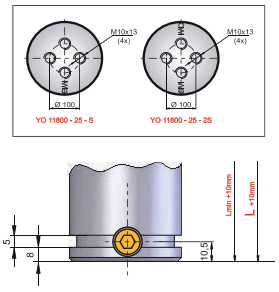



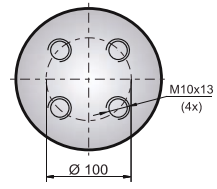


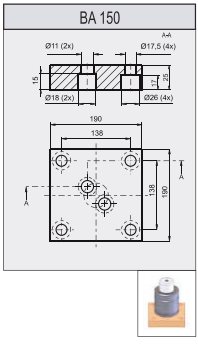



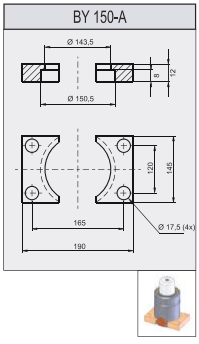

## YO 11800 - Gazlı Yay

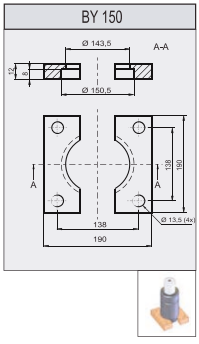
| | | |
|---|---|---|
| **Basınç Gazı** | : | Nitrogen N2 |
| **Max. Basınç** | : | 150 bar |
| **Min. Basınç** | : | 25 bar |
| **Çalışma Sıcaklığı** | : | 0°C ve +80°CMax |
| **Çalışma Hızı** | : | 1,8 m / s |

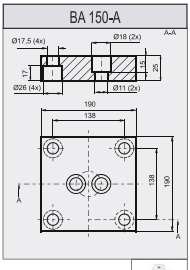
| Sipariş | Kurs | L | Lmin | daN | Kg | Alt Görünüm |
|---|---|---|---|---|---|---|
| YO-1180019 | 19 | 116 | 97 | 11800 | ~ 9,57 |  |
| YO-1180025 | 25 | 128 | 103 | | ~ 9,96 | |
| YO-1180032 | 32 | 142 | 110 | | ~ 10,41 | |
| YO-1180038 | 38 | 154 | 116 | | ~ 10,81 | |
| YO-1180050 | 50 | 178 | 128 | | ~ 11,59 | |
| YO-1180063 | 63 | 204 | 141 | | ~ 11,88 | |
| YO-1180075 | 75 | 228 | 153 | | ~ 12,21 | |
| YO-1180080 | 80 | 238 | 158 | | ~ 12,43 | |
| YO-11800100 | 100 | 278 | 178 | | ~ 13,51 | |
| YO-11800125 | 125 | 328 | 203 | | ~ 15,14 | |

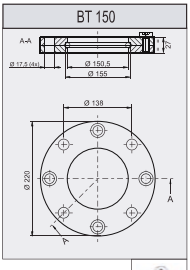


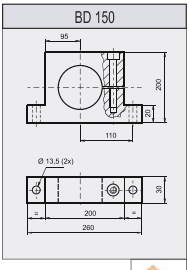


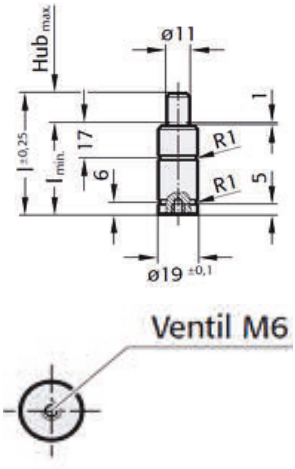



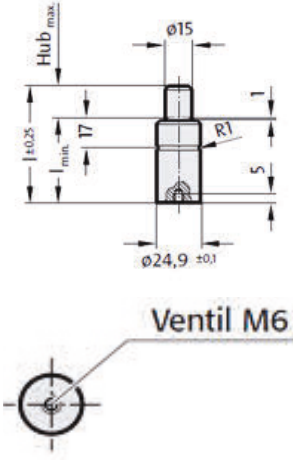





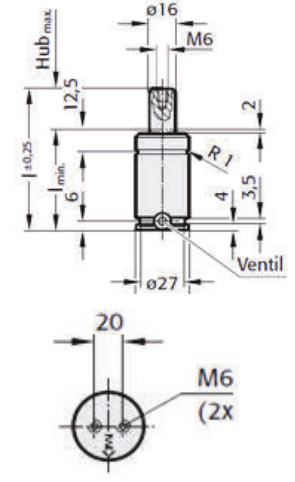

## MG 170 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-1707 | 7 | 37 | 44 | 170 KG | 280 KG | 0,06 |
| MG-17010 | 10 | 40 | 50 | | | 0,06 |
| MG-17015 | 15 | 45 | 60 | | | 0,07 |
| MG-17019 | 19 | 49 | 68 | | | 0,07 |
| MG-17025 | 25 | 55 | 80 | | | 0,08 |
| MG-17038 | 38 | 68 | 106 | | | 0,09 |
| MG-17050 | 50 | 80 | 130 | | | 0,10 |
| MG-17063 | 63 | 93 | 156 | | | 0,12 |
| MG-17075 | 75 | 110 | 185 | | | 0,14 |
| MG-17080 | 80 | 115 | 195 | | | 0,14 |
| MG-170100 | 100 | 135 | 235 | | | 0,17 |
| MG-170125 | 125 | 160 | 285 | | | 0,19 |



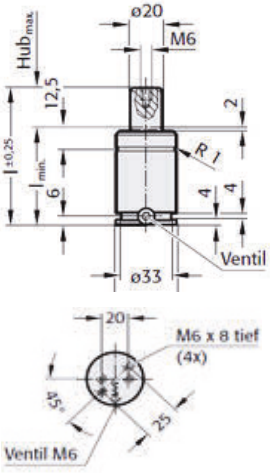

## MG 320 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-3207 | 7 | 37 | 44 | 320 KG | 520 KG | 0,10 |
| MG-32010 | 10 | 40 | 50 | | | 0,10 |
| MG-32015 | 15 | 45 | 60 | | | 0,11 |
| MG-32019 | 19 | 49 | 68 | | | 0,12 |
| MG-32025 | 25 | 55 | 80 | | | 0,13 |
| MG-32032 | 32 | 62 | 94 | | | 0,14 |
| MG-32038 | 38 | 68 | 106 | | | 0,15 |
| MG-32050 | 50 | 80 | 130 | | | 0,17 |
| MG-32063 | 63 | 93 | 156 | | | 0,19 |
| MG-32075 | 75 | 110 | 185 | | | 0,22 |
| MG-32080 | 80 | 115 | 195 | | | 0,23 |
| MG-320100 | 100 | 135 | 235 | | | 0,26 |
| MG-320125 | 125 | 160 | 285 | | | 0,30 |



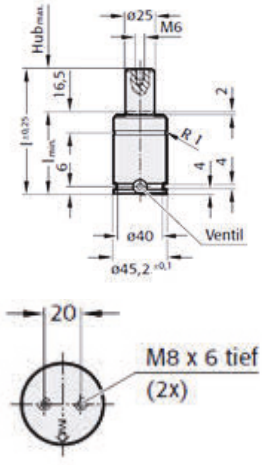

## MG 350 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-35010 | 10 | 40 | 50 | 350 KG | 540 KG | 0,16 |
| MG-35013 | 13 | 43 | 56 | | | 0,17 |
| MG-35016 | 16 | 46 | 62 | | | 0,18 |
| MG-35019 | 19 | 49 | 68 | | | 0,19 |
| MG-35025 | 25 | 55 | 80 | | | 0,21 |
| MG-35032 | 32 | 62 | 94 | | | 0,23 |
| MG-35038 | 38 | 68 | 106 | | | 0,25 |
| MG-35050 | 50 | 80 | 130 | | | 0,29 |
| MG-35063 | 63 | 93 | 156 | | | 0,33 |
| MG-35075 | 75 | 105 | 180 | | | 0,36 |
| MG-35080 | 80 | 110 | 190 | | | 0,38 |
| MG-350100 | 100 | 130 | 230 | | | 0,44 |
| MG-350125 | 125 | 155 | 280 | | | 0,51 |



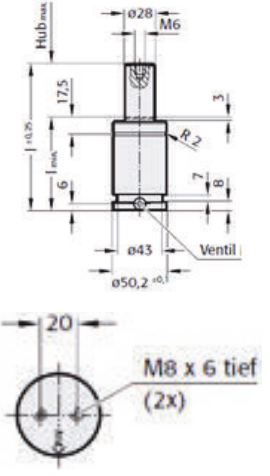

## MG 500 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-50010 | 10 | 40 | 50 | 500 KG | 770 KG | 0,24 |
| MG-50013 | 13 | 43 | 56 | | | 0,25 |
| MG-50016 | 16 | 46 | 62 | | | 0,26 |
| MG-50019 | 19 | 49 | 68 | | | 0,28 |
| MG-50025 | 25 | 55 | 80 | | | 0,31 |
| MG-50032 | 32 | 62 | 94 | | | 0,34 |
| MG-50038 | 38 | 68 | 106 | | | 0,37 |
| MG-50050 | 50 | 80 | 130 | | | 0,42 |
| MG-50063 | 63 | 93 | 156 | | | 0,48 |
| MG-50075 | 75 | 105 | 180 | | | 0,54 |
| MG-50080 | 80 | 110 | 190 | | | 0,56 |
| MG-500100 | 100 | 130 | 230 | | | 0,66 |
| MG-500125 | 125 | 155 | 280 | | | 0,77 |



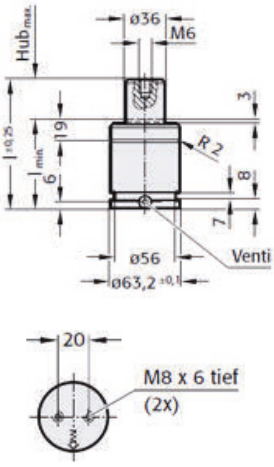

## MG 750 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-75010 | 10 | 42 | 52 | 750 KG | 1200 KG | 0,36 |
| MG-75013 | 13 | 45 | 58 | | | 0,38 |
| MG-75016 | 16 | 48 | 64 | | | 0,39 |
| MG-75019 | 19 | 51 | 70 | | | 0,41 |
| MG-75025 | 25 | 57 | 82 | | | 0,45 |
| MG-75032 | 32 | 64 | 96 | | | 0,50 |
| MG-75038 | 38 | 70 | 108 | | | 0,54 |
| MG-75050 | 50 | 82 | 132 | | | 0,61 |
| MG-75063 | 63 | 95 | 158 | | | 0,70 |
| MG-75075 | 75 | 107 | 182 | | | 0,77 |
| MG-75080 | 80 | 112 | 192 | | | 0,81 |
| MG-750100 | 100 | 132 | 232 | | | 0,93 |
| MG-750125 | 125 | 157 | 282 | | | 1,10 |



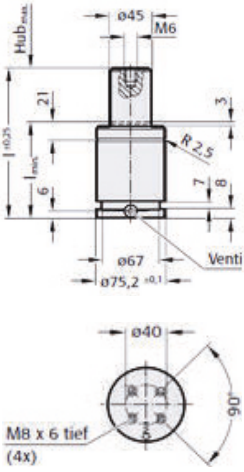

## MG 1000 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-100013 | 13 | 51 | 64 | 1000 KG | 1550 KG | 0,51 |
| MG-100016 | 16 | 54 | 70 | | | 0,54 |
| MG-100019 | 19 | 57 | 76 | | | 0,56 |
| MG-100025 | 25 | 63 | 88 | | | 0,61 |
| MG-100032 | 32 | 70 | 102 | | | 0,67 |
| MG-100038 | 38 | 76 | 114 | | | 0,71 |
| MG-100050 | 50 | 88 | 138 | | | 0,81 |
| MG-100063 | 63 | 101 | 164 | | | 0,91 |
| MG-100075 | 75 | 113 | 188 | | | 1,05 |
| MG-100080 | 80 | 118 | 198 | | | 1,09 |
| MG-1000100 | 100 | 138 | 238 | | | 1,21 |
| MG-1000125 | 125 | 163 | 288 | | | 1,41 |



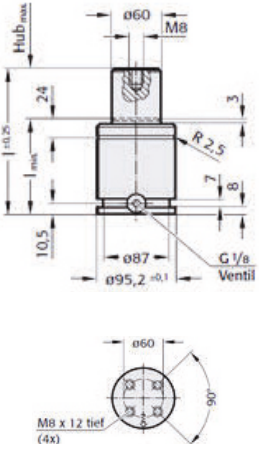

## MG 1500 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-150013 | 13 | 57 | 70 | 1500 KG | 2400 KG | 0,92 |
| MG-150016 | 16 | 60 | 76 | | | 0,96 |
| MG-150019 | 19 | 63 | 82 | | | 0,99 |
| MG-150025 | 25 | 69 | 94 | | | 1,06 |
| MG-150032 | 32 | 76 | 108 | | | 1,14 |
| MG-150038 | 38 | 82 | 120 | | | 1,21 |
| MG-150050 | 50 | 94 | 144 | | | 1,35 |
| MG-150063 | 63 | 107 | 170 | | | 1,51 |
| MG-150075 | 75 | 119 | 194 | | | 1,65 |
| MG-150080 | 80 | 124 | 204 | | | 1,71 |
| MG-1500100 | 100 | 144 | 244 | | | 1,94 |
| MG-1500125 | 125 | 169 | 294 | | | 2,23 |



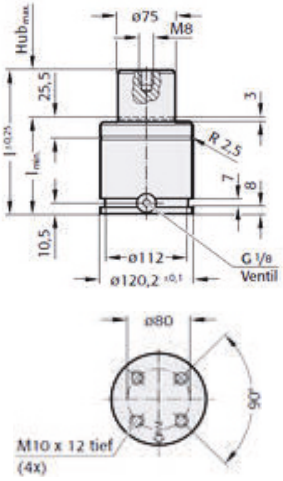

## MG 2400 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-240016 | 16 | 61 | 77 | 2400 KG | 3840 KG | 1,36 |
| MG-240019 | 19 | 64 | 83 | | | 1,40 |
| MG-240025 | 25 | 70 | 95 | | | 1,50 |
| MG-240032 | 32 | 77 | 109 | | | 1,61 |
| MG-240038 | 38 | 83 | 121 | | | 1,70 |
| MG-240050 | 50 | 95 | 145 | | | 1,89 |
| MG-240063 | 63 | 108 | 171 | | | 2,09 |
| MG-240075 | 75 | 120 | 195 | | | 2,28 |
| MG-240080 | 80 | 125 | 205 | | | 2,36 |
| MG-2400100 | 100 | 145 | 245 | | | 2,67 |
| MG-2400125 | 125 | 170 | 295 | | | 3,07 |



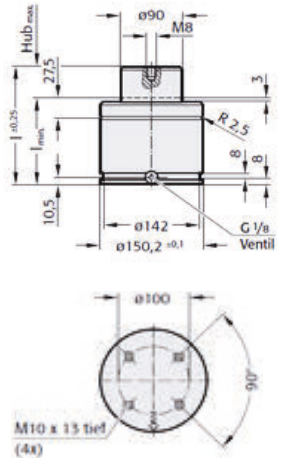

## MG 4200 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-420016 | 16 | 74 | 90 | 4200 KG | 6700 KG | 2,76 |
| MG-420019 | 19 | 77 | 96 | | | 2,83 |
| MG-420025 | 25 | 83 | 108 | | | 2,98 |
| MG-420032 | 32 | 90 | 122 | | | 3,16 |
| MG-420038 | 38 | 96 | 134 | | | 3,30 |
| MG-420050 | 50 | 108 | 158 | | | 3,60 |
| MG-420063 | 63 | 121 | 184 | | | 3,93 |
| MG-420075 | 75 | 133 | 208 | | | 4,20 |
| MG-420080 | 80 | 138 | 218 | | | 4,35 |
| MG-4200100 | 100 | 158 | 258 | | | 4,85 |
| MG-4200125 | 125 | 183 | 308 | | | 5,47 |



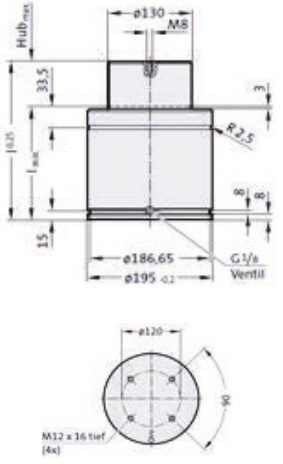

## MG 6600 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-660016 | 16 | 84 | 100 | 6600 KG | 9900 KG | 5,06 |
| MG-660019 | 19 | 87 | 106 | | | 5,17 |
| MG-660025 | 25 | 93 | 118 | | | 5,42 |
| MG-660032 | 32 | 100 | 132 | | | 5,69 |
| MG-660038 | 38 | 106 | 144 | | | 5,93 |
| MG-660050 | 50 | 118 | 168 | | | 6,40 |
| MG-660063 | 63 | 131 | 194 | | | 6,90 |
| MG-660075 | 75 | 143 | 218 | | | 7,40 |
| MG-660080 | 80 | 148 | 228 | | | 7,60 |
| MG-6600100 | 100 | 168 | 268 | | | 8,40 |
| MG-6600125 | 125 | 193 | 318 | | | 9,40 |




## MG 9500 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-950019 | 19 | 97 | 116 | 9500 KG | 14250 KG | 9,51 |
| MG-950025 | 25 | 103 | 128 | | | 9,90 |
| MG-950032 | 32 | 110 | 142 | | | 10,30 |
| MG-950038 | 38 | 116 | 154 | | | 10,70 |
| MG-950050 | 50 | 128 | 178 | | | 11,40 |
| MG-950063 | 63 | 141 | 204 | | | 12,20 |
| MG-950075 | 75 | 153 | 228 | | | 13,00 |
| MG-950080 | 80 | 158 | 238 | | | 13,30 |
| MG-9500100 | 100 | 178 | 278 | | | 14,60 |
| MG-9500125 | 125 | 203 | 328 | | | 16,10 |



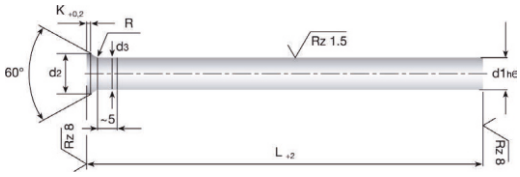

## MG 20000 - Gazlı Yay

| Sipariş | Kurs | Kurs | L | İlk Kuvvet | Son Kuvvet | kg |
|---|---|---|---|---|---|---|
| MG-2000019 | 19 | 129 | 148 | 2000 KG | 3000 KG | 21,60 |
| MG-2000025 | 25 | 135 | 160 | | | 22,30 |
| MG-2000032 | 32 | 142 | 174 | | | 23,10 |
| MG-2000038 | 38 | 148 | 186 | | | 23,90 |
| MG-2000050 | 50 | 160 | 210 | | | 25,30 |
| MG-2000063 | 63 | 173 | 236 | | | 26,80 |
| MG-2000075 | 75 | 185 | 260 | | | 28,40 |
| MG-2000080 | 80 | 190 | 270 | | | 28,80 |
| MG-20000100 | 100 | 210 | 310 | | | 31,20 |
| MG-20000125 | 125 | 235 | 360 | | | 34,20 |

JBT

## HBİ - Havşa Başlı İtici

**Malzeme** : Çelik 1.2516
**Sertlik** : Gövde 60/62 - Kafa 45 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBİ-180 | 1 | 1.8 | d1 +0.03 | 0.5 | 80 |
| HBİ-1100 | | | | | 100 |
| HBİ-1125 | | | | | 125 |
| HBİ-1160 | | | | | 160 |
| HBİ-1200 | | | | | 200 |
| HBİ-1.580 | 1.5 | 2.2 | | | 80 |
| HBİ-1.5100 | | | | | 100 |
| HBİ-1.5125 | | | | | 125 |
| HBİ-1.5160 | | | | | 160 |
| HBİ-1.5200 | | | | | 200 |
| HBİ-1.5250 | | | | | 250 |
| HBİ-280 | 2 | 3 | | | 80 |
| HBİ-2100 | | | | | 100 |
| HBİ-2125 | | | | | 125 |
| HBİ-2160 | | | | | 160 |
| HBİ-2200 | | | | | 200 |
| HBİ-2250 | | | | | 250 |
| HBİ-2315 | | | | | 315 |
| HBİ-2.580 | 2.5 | 3.5 | | | 80 |
| HBİ-2.5100 | | | | | 100 |
| HBİ-2.5125 | | | | | 125 |
| HBİ-2.5160 | | | | | 160 |
| HBİ-2.5200 | | | | | 200 |
| HBİ-2.5250 | | | | | 250 |
| HBİ-2.5315 | | | | | 315 |
| HBİ-380 | 3 | 4.5 | | | 80 |
| HBİ-3100 | | | | | 100 |
| HBİ-3125 | | | | | 125 |
| HBİ-3160 | | | | | 160 |
| HBİ-3200 | | | | | 200 |
| HBİ-3250 | | | | | 250 |
| HBİ-3315 | | | | | 315 |
| HBİ-3.580 | 3.5 | 5 | | | 80 |
| HBİ-3.5100 | | | | | 100 |
| HBİ-3.5125 | | | | | 125 |
| HBİ-3.5160 | | | | | 160 |
| HBİ-3.5200 | | | | | 200 |
| HBİ-3.5250 | | | | | 250 |
| HBİ-3.5315 | | | | | 315 |
| HBİ-480 | 4 | 5.5 | | | 80 |
| HBİ-4100 | | | | | 100 |
| HBİ-4125 | | | | | 125 |
| HBİ-4160 | | | | | 160 |
| HBİ-4200 | | | | | 200 |
| HBİ-4250 | | | | | 250 |
| HBİ-4315 | | | | | 315 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBİ-4.580 | 4.5 | 6 | d1 +0.03 | 0.5 | 80 |
| HBİ-4.5100 | | | | | 100 |
| HBİ-4.5125 | | | | | 125 |
| HBİ-4.5160 | | | | | 160 |
| HBİ-4.5200 | | | | | 200 |
| HBİ-4.5250 | | | | | 250 |
| HBİ-4.5315 | | | | | 315 |
| HBİ-580 | 5 | 6.5 | | | 80 |
| HBİ-5100 | | | | | 100 |
| HBİ-5125 | | | | | 125 |
| HBİ-5160 | | | | | 160 |
| HBİ-5200 | | | | | 200 |
| HBİ-5250 | | | | | 250 |
| HBİ-5315 | | | | | 315 |
| HBİ-5.580 | 5.5 | 7 | | | 80 |
| HBİ-5.5100 | | | | | 100 |
| HBİ-5.5125 | | | | | 125 |
| HBİ-5.5160 | | | | | 160 |
| HBİ-5.5200 | | | | | 200 |
| HBİ-5.5250 | | | | | 250 |
| HBİ-5.5315 | | | | | 315 |
| HBİ-680 | 6 | 8 | | | 80 |
| HBİ-6100 | | | | | 100 |
| HBİ-6125 | | | | | 125 |
| HBİ-6160 | | | | | 160 |
| HBİ-6200 | | | | | 200 |
| HBİ-6250 | | | | | 250 |
| HBİ-6315 | | | | | 315 |
| HBİ-6.580 | 6.5 | 9 | | 1 | 80 |
| HBİ-6.5100 | | | | | 100 |
| HBİ-6.5125 | | | | | 125 |
| HBİ-6.5160 | | | | | 160 |
| HBİ-6.5200 | | | | | 200 |
| HBİ-6.5250 | | | | | 250 |
| HBİ-6.5315 | | | | | 315 |
| HBİ-780 | 7 | | | | 80 |
| HBİ-7100 | | | | | 100 |
| HBİ-7125 | | | | | 125 |
| HBİ-7160 | | | | | 160 |
| HBİ-7200 | | | | | 200 |
| HBİ-7250 | | | | | 250 |
| HBİ-7315 | | | | | 315 |
| HBİ-7.580 | 7.5 | 10 | | | 80 |
| HBİ-7.5100 | | | | | 100 |
| HBİ-7.5125 | | | | | 125 |
| HBİ-7.5160 | | | | | 160 |

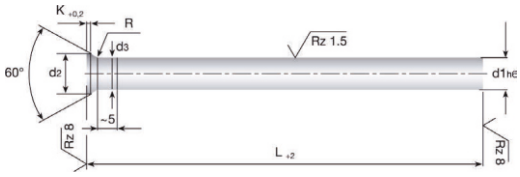
| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBİ-7.5200 | 7.5 | 10 | d1 +0.03 | 1 | 200 |
| HBİ-7.5250 | | | | | 250 |
| HBİ-7.5315 | | | | | 315 |
| HBİ-880 | 8 | | | | 80 |
| HBİ-8100 | | | | | 100 |
| HBİ-8125 | | | | | 125 |
| HBİ-8160 | | | | | 160 |
| HBİ-8200 | | | | | 200 |
| HBİ-8250 | | | | | 250 |
| HBİ-8315 | | | | | 315 |
| HBİ-8.580 | 8.5 | 11 | | | 80 |
| HBİ-8.5100 | | | | | 100 |
| HBİ-8.5125 | | | | | 125 |
| HBİ-8.5160 | | | | | 160 |
| HBİ-8.5200 | | | | | 200 |
| HBİ-8.5250 | | | | | 250 |
| HBİ-8.5315 | | | | | 315 |
| HBİ-980 | 9 | | | | 80 |
| HBİ-9100 | | | | | 100 |
| HBİ-9125 | | | | | 125 |
| HBİ-9160 | | | | | 160 |
| HBİ-9200 | | | | | 200 |
| HBİ-9250 | | | | | 250 |
| HBİ-9315 | | | | | 315 |
| HBİ-9.580 | 9.5 | 12 | | | 80 |
| HBİ-9.5100 | | | | | 100 |
| HBİ-9.5125 | | | | | 125 |
| HBİ-9.5160 | | | | | 160 |
| HBİ-9.5200 | | | | | 200 |
| HBİ-9.5250 | | | | | 250 |
| HBİ-9.5315 | | | | | 315 |
| HBİ-1080 | 10 | | | | 80 |
| HBİ-10100 | | | | | 100 |
| HBİ-10125 | | | | | 125 |
| HBİ-10160 | | | | | 160 |
| HBİ-10200 | | | | | 200 |
| HBİ-10250 | | | | | 250 |
| HBİ-10315 | | | | | 315 |
| HBİ-10.580 | 10.5 | 13 | | | 80 |
| HBİ-10.5100 | | | | | 100 |
| HBİ-10.5125 | | | | | 125 |
| HBİ-10.5160 | | | | | 160 |
| HBİ-10.5200 | | | | | 200 |
| HBİ-10.5250 | | | | | 250 |
| HBİ-10.5315 | | | | | 315 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBİ-1180 | 11 | 13 | d1 +0.03 | 1 | 80 |
| HBİ-11100 | | | | | 100 |
| HBİ-11125 | | | | | 125 |
| HBİ-11160 | | | | | 160 |
| HBİ-11200 | | | | | 200 |
| HBİ-11250 | | | | | 250 |
| HBİ-11315 | | | | | 315 |
| HBİ-11.580 | 11.5 | | | | 80 |
| HBİ-11.5100 | | | | | 100 |
| HBİ-11.5125 | | | | | 125 |
| HBİ-11.5160 | | | | | 160 |
| HBİ-11.5200 | | | | | 200 |
| HBİ-11.5250 | | | | | 250 |
| HBİ-11.5315 | | | | | 315 |
| HBİ-1280 | 12 | 14 | | | 80 |
| HBİ-12100 | | | | | 100 |
| HBİ-12125 | | | | | 125 |
| HBİ-12160 | | | | | 160 |
| HBİ-12200 | | | | | 200 |
| HBİ-12250 | | | | | 250 |
| HBİ-12315 | | | | | 315 |
| HBİ-12.580 | 12.5 | 15 | | | 80 |
| HBİ-12.5100 | | | | | 100 |
| HBİ-12.5125 | | | | | 125 |
| HBİ-12.5160 | | | | | 160 |
| HBİ-12.5200 | | | | | 200 |
| HBİ-12.5250 | | | | | 250 |
| HBİ-12.5315 | | | | | 315 |
| HBİ-1380 | 13 | | | | 80 |
| HBİ-13100 | | | | | 100 |
| HBİ-13125 | | | | | 125 |
| HBİ-13160 | | | | | 160 |
| HBİ-13200 | | | | | 200 |
| HBİ-13250 | | | | | 250 |
| HBİ-13315 | | | | | 315 |
| HBİ-1480 | 14 | 16 | | 1.5 | 80 |
| HBİ-14100 | | | | | 100 |
| HBİ-14125 | | | | | 125 |
| HBİ-14160 | | | | | 160 |
| HBİ-14200 | | | | | 200 |
| HBİ-14250 | | | | | 250 |
| HBİ-14315 | | | | | 315 |
| HBİ-1680 | 16 | 18 | | | 80 |
| HBİ-16100 | | | | | 100 |
| HBİ-16125 | | | | | 125 |
| HBİ-16160 | | | | | 160 |
| HBİ-16200 | | | | | 200 |
| HBİ-16250 | | | | | 250 |
| HBİ-16315 | | | | | 315 |

JBT

## HBO - Havşa Başlı İtici Ondalıklı

**Malzeme** : Çelik 1.2516
**Sertlik** : Gövde 60/62 - Kafa 45 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-1.1100 | | | | | 100 |
| HBO-1.1125 | | | | | 125 |
| HBO-1.1160 | 1.1 | 1.8 | | | 160 |
| HBO-1.1200 | | | | | 200 |
| HBO-1.1250 | | | | | 250 |
| HBO-1.2100 | | | | | 100 |
| HBO-1.2125 | | | | | 125 |
| HBO-1.2160 | 1.2 | 2 | | | 160 |
| HBO-1.2200 | | | | | 200 |
| HBO-1.2250 | | | | | 250 |
| HBO-1.3100 | | | | | 100 |
| HBO-1.3125 | | | | | 125 |
| HBO-1.3160 | 1.3 | | | | 160 |
| HBO-1.3200 | | | | | 200 |
| HBO-1.3250 | | | | | 250 |
| HBO-1.4100 | | | | | 100 |
| HBO-1.4125 | | | | | 125 |
| HBO-1.4160 | 1.4 | 2.2 | d1 +0.03 | 0.5 | 160 |
| HBO-1.4200 | | | | | 200 |
| HBO-1.4250 | | | | | 250 |
| HBO-1.6100 | | | | | 100 |
| HBO-1.6125 | | | | | 125 |
| HBO-1.6160 | 1.6 | | | | 160 |
| HBO-1.6200 | | | | | 200 |
| HBO-1.6250 | | 2.5 | | | 250 |
| HBO-1.7100 | | | | | 100 |
| HBO-1.7125 | | | | | 125 |
| HBO-1.7160 | 1.7 | | | | 160 |
| HBO-1.7200 | | | | | 200 |
| HBO-1.7250 | | | | | 250 |
| HBO-1.8100 | | | | | 100 |
| HBO-1.8125 | | | | | 125 |
| HBO-1.8160 | 1.8 | 2.8 | | | 160 |
| HBO-1.8200 | | | | | 200 |
| HBO-1.8250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-1.9100 | | | | | 100 |
| HBO-1.9125 | | | | | 125 |
| HBO-1.9160 | 1.9 | 2.8 | | | 160 |
| HBO-1.9200 | | | | | 200 |
| HBO-1.9250 | | | | | 250 |
| HBO-2.1100 | | | | | 100 |
| HBO-2.1125 | | | | | 125 |
| HBO-2.1160 | 2.1 | | | | 160 |
| HBO-2.1200 | | | | | 200 |
| HBO-2.1250 | | | | | 250 |
| HBO-2.2100 | | | | | 100 |
| HBO-2.2125 | | | | | 125 |
| HBO-2.2160 | 2.2 | | | | 160 |
| HBO-2.2200 | | | | | 200 |
| HBO-2.2250 | | | | | 250 |
| HBO-2.3100 | | | | | 100 |
| HBO-2.3125 | | | | | 125 |
| HBO-2.3160 | 2.3 | | | | 160 |
| HBO-2.3200 | | | | | 200 |
| HBO-2.3250 | | | | | 250 |
| HBO-2.4100 | | | | | 100 |
| HBO-2.4125 | | | | | 125 |
| HBO-2.4160 | 2.4 | | | | 160 |
| HBO-2.4200 | | | | | 200 |
| HBO-2.4250 | | | | | 250 |
| HBO-2.6100 | | | | | 100 |
| HBO-2.6125 | | | | | 125 |
| HBO-2.6160 | 2.6 | | | | 160 |
| HBO-2.6200 | | | | | 200 |
| HBO-2.6250 | | | | | 250 |
| HBO-2.7100 | | | | | 100 |
| HBO-2.7125 | | | | | 125 |
| HBO-2.7160 | 2.7 | | | | 160 |
| HBO-2.7200 | | | | | 200 |
| HBO-2.7250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-2.8100 | | | | | 100 |
| HBO-2.8125 | | | | | 125 |
| HBO-2.8160 | 2.8 | | | | 160 |
| HBO-2.8200 | | | | | 200 |
| HBO-2.8250 | | | | | 250 |
| HBO-2.9100 | | | | | 100 |
| HBO-2.9125 | | | | | 125 |
| HBO-2.9160 | 2.9 | | | | 160 |
| HBO-2.9200 | | | | | 200 |
| HBO-2.9250 | | | | | 250 |
| HBO-3.1100 | | | | | 100 |
| HBO-3.1125 | | | | | 125 |
| HBO-3.1160 | 3.1 | | | | 160 |
| HBO-3.1200 | | | | | 200 |
| HBO-3.1250 | | | | | 250 |
| HBO-3.2100 | | | | | 100 |
| HBO-3.2125 | | | | | 125 |
| HBO-3.2160 | 3.2 | 4.5 | d1 +0.03 | 0.5 | 160 |
| HBO-3.2200 | | | | | 200 |
| HBO-3.2250 | | | | | 250 |
| HBO-3.3100 | | | | | 100 |
| HBO-3.3125 | | | | | 125 |
| HBO-3.3160 | 3.3 | | | | 160 |
| HBO-3.3200 | | | | | 200 |
| HBO-3.3250 | | | | | 250 |
| HBO-3.4100 | | | | | 100 |
| HBO-3.4125 | | | | | 125 |
| HBO-3.4160 | 3.4 | 4.5 | | | 160 |
| HBO-3.4200 | | | | | 200 |
| HBO-3.4250 | | | | | 250 |
| HBO-3.6100 | | | | | 100 |
| HBO-3.6125 | | | | | 125 |
| HBO-3.6160 | 3.6 | 5 | | | 160 |
| HBO-3.6200 | | | | | 200 |
| HBO-3.6250 | | | | | 250 |

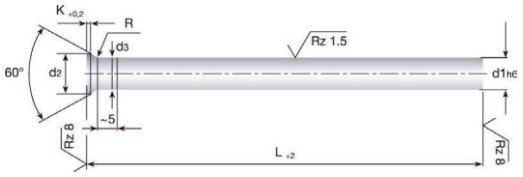
| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-3.7100 | | | | | 100 |
| HBO-3.7125 | | | | | 125 |
| HBO-3.7160 | 3.7 | | | | 160 |
| HBO-3.7200 | | | | | 200 |
| HBO-3.7250 | | | | | 250 |
| HBO-3.8100 | | | | | 100 |
| HBO-3.8125 | | | | | 125 |
| HBO-3.8160 | 3.8 | 5 | | | 160 |
| HBO-3.8200 | | | | | 200 |
| HBO-3.8250 | | | | | 250 |
| HBO-3.9100 | | | | | 100 |
| HBO-3.9125 | | | | | 125 |
| HBO-3.9160 | 3.9 | | | | 160 |
| HBO-3.9200 | | | | | 200 |
| HBO-3.9250 | | | | | 250 |
| HBO-4.1100 | | | | | 100 |
| HBO-4.1125 | | | | | 125 |
| HBO-4.1160 | 4.1 | | d1 +0.03 | 0.5 | 160 |
| HBO-4.1200 | | | | | 200 |
| HBO-4.1250 | | | | | 250 |
| HBO-4.2100 | | | | | 100 |
| HBO-4.2125 | | | | | 125 |
| HBO-4.2160 | 4.2 | | | | 160 |
| HBO-4.2200 | | | | | 200 |
| HBO-4.2250 | | 5.5 | | | 250 |
| HBO-4.3100 | | | | | 100 |
| HBO-4.3125 | | | | | 125 |
| HBO-4.3160 | 4.3 | | | | 160 |
| HBO-4.3200 | | | | | 200 |
| HBO-4.3250 | | | | | 250 |
| HBO-4.4100 | | | | | 100 |
| HBO-4.4125 | | | | | 125 |
| HBO-4.4160 | 4.4 | | | | 160 |
| HBO-4.4200 | | | | | 200 |
| HBO-4.4250 | | | | | 250 |

Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

JBT

## HBO - Havşa Başlı İtici Ondalıklı

**Malzeme** : Çelik 1.2516
**Sertlik** : Gövde 60/62 - Kafa 45 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-4.6100 | 4.6 | 6 | d1 +0.03 | 0.5 | 100 |
| HBO-4.6125 | | | | | 125 |
| HBO-4.6160 | | | | | 160 |
| HBO-4.6200 | | | | | 200 |
| HBO-4.6250 | | | | | 250 |
| HBO-4.7100 | 4.7 | | | | 100 |
| HBO-4.7125 | | | | | 125 |
| HBO-4.7160 | | | | | 160 |
| HBO-4.7200 | | | | | 200 |
| HBO-4.7250 | | | | | 250 |
| HBO-4.8100 | 4.8 | | | | 100 |
| HBO-4.8125 | | | | | 125 |
| HBO-4.8160 | | | | | 160 |
| HBO-4.8200 | | | | | 200 |
| HBO-4.8250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-4.9100 | 4.9 | 6 | d1 +0.03 | 0.5 | 100 |
| HBO-4.9125 | | | | | 125 |
| HBO-4.9160 | | | | | 160 |
| HBO-4.9200 | | | | | 200 |
| HBO-4.9250 | | | | | 250 |
| HBO-5.1100 | 5.1 | 6.5 | | | 100 |
| HBO-5.1125 | | | | | 125 |
| HBO-5.1160 | | | | | 160 |
| HBO-5.1200 | | | | | 200 |
| HBO-5.1250 | | | | | 250 |
| HBO-5.2100 | 5.2 | | | | 100 |
| HBO-5.2125 | | | | | 125 |
| HBO-5.2160 | | | | | 160 |
| HBO-5.2200 | | | | | 200 |
| HBO-5.2250 | | | | | 250 |

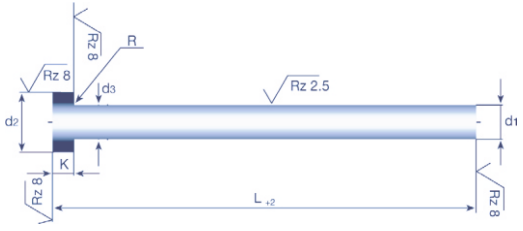
| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-5.3100 | 5.3 | 6.5 | d1 +0.03 | 0.5 | 100 |
| HBO-5.3125 | | | | | 125 |
| HBO-5.3160 | | | | | 160 |
| HBO-5.3200 | | | | | 200 |
| HBO-5.3250 | | | | | 250 |
| HBO-5.4100 | 5.4 | | | | 100 |
| HBO-5.4125 | | | | | 125 |
| HBO-5.4160 | | | | | 160 |
| HBO-5.4200 | | | | | 200 |
| HBO-5.4250 | | 7 | | | 250 |
| HBO-5.6100 | 5.6 | | | | 100 |
| HBO-5.6125 | | | | | 125 |
| HBO-5.6160 | | | | | 160 |
| HBO-5.6200 | | | | | 200 |
| HBO-5.6250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| HBO-5.7100 | 5.7 | 7 | d1 +0.03 | 0.5 | 100 |
| HBO-5.7125 | | | | | 125 |
| HBO-5.7160 | | | | | 160 |
| HBO-5.7200 | | | | | 200 |
| HBO-5.7250 | | | | | 250 |
| HBO-5.8100 | 5.8 | | | | 100 |
| HBO-5.8125 | | | | | 125 |
| HBO-5.8160 | | | | | 160 |
| HBO-5.8200 | | | | | 200 |
| HBO-5.8250 | | | | | 250 |
| HBO-5.9100 | 5.9 | | | | 100 |
| HBO-5.9125 | | | | | 125 |
| HBO-5.9160 | | | | | 160 |
| HBO-5.9200 | | | | | 200 |
| HBO-5.9250 | | | | | 250 |

JBT

## SBİ - Silindir Başlı İtici

**Malzeme** : Çelik 1.2516
**Sertlik** : 60+2 - Kafa 45+5 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-1100 | 1 | 2.5 | 1.2 | 0.2 | d1 +0.03 | 100 |
| SBİ-1125 | | | | | | 125 |
| SBİ-1160 | | | | | | 160 |
| SBİ-1200 | | | | | | 200 |
| SBİ-1250 | | | | | | 250 |
| SBİ-1.5100 | 1.5 | 3 | 1.5 | | | 100 |
| SBİ-1.5125 | | | | | | 125 |
| SBİ-1.5160 | | | | | | 160 |
| SBİ-1.5200 | | | | | | 200 |
| SBİ-1.5250 | | | | | | 250 |
| SBİ-2100 | 2 | 4 | 2 | | | 100 |
| SBİ-2125 | | | | | | 125 |
| SBİ-2160 | | | | | | 160 |
| SBİ-2200 | | | | | | 200 |
| SBİ-2250 | | | | | | 250 |
| SBİ-2315 | | | | | | 315 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-2400 | 2 | 4 | 2 | 0.2 | d1 +0.03 | 400 |
| SBİ-2500 | | | | | | 500 |
| SBİ-2.5100 | 2.5 | 5 | | 0.3 | | 100 |
| SBİ-2.5125 | | | | | | 125 |
| SBİ-2.5160 | | | | | | 160 |
| SBİ-2.5200 | | | | | | 200 |
| SBİ-2.5250 | | | | | | 250 |
| SBİ-2.5315 | | | | | | 315 |
| SBİ-2.5400 | | | | | | 400 |
| SBİ-2.5500 | | | | | | 500 |
| SBİ-3100 | 3 | 6 | 3 | | | 100 |
| SBİ-3125 | | | | | | 125 |
| SBİ-3160 | | | | | | 160 |
| SBİ-3200 | | | | | | 200 |
| SBİ-3250 | | | | | | 250 |
| SBİ-3315 | | | | | | 315 |

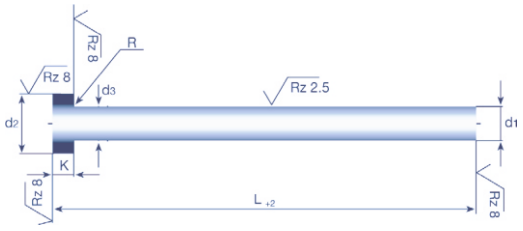
| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-3400 | 3 | 6 | 3 | 0.3 | d1 +0.03 | 400 |
| SBİ-3500 | | | | | | 500 |
| SBİ-3630 | | | | | | 630 |
| SBİ-3.5100 | 3.5 | 7 | | | | 100 |
| SBİ-3.5125 | | | | | | 125 |
| SBİ-3.5160 | | | | | | 160 |
| SBİ-3.5200 | | | | | | 200 |
| SBİ-3.5250 | | | | | | 250 |
| SBİ-3.5315 | | | | | | 315 |
| SBİ-3.5400 | | | | | | 400 |
| SBİ-3.5500 | | | | | | 500 |
| SBİ-3.5630 | | | | | | 630 |
| SBİ-4100 | 4 | 8 | | | | 100 |
| SBİ-4125 | | | | | | 125 |
| SBİ-4160 | | | | | | 160 |
| SBİ-4200 | | | | | | 200 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-4250 | 4 | 8 | 3 | 0.3 | d1 +0.03 | 250 |
| SBİ-4315 | | | | | | 315 |
| SBİ-4400 | | | | | | 400 |
| SBİ-4500 | | | | | | 500 |
| SBİ-4630 | | | | | | 630 |
| SBİ-4800 | | | | | | 800 |
| SBİ-41000 | | | | | | 1000 |
| SBİ-4.5100 | 4.5 | | | | | 100 |
| SBİ-4.5125 | | | | | | 125 |
| SBİ-4.5160 | | | | | | 160 |
| SBİ-4.5200 | | | | | | 200 |
| SBİ-4.5250 | | | | | | 250 |
| SBİ-4.5315 | | | | | | 315 |
| SBİ-4.5400 | | | | | | 400 |
| SBİ-4.5500 | | | | | | 500 |
| SBİ-4.5630 | | | | | | 630 |
| SBİ-4.5800 | | | | | | 800 |
| SBİ-4.51000 | | | | | | 1000 |
| SBİ-5100 | 5 | 10 | | | | 100 |
| SBİ-5125 | | | | | | 125 |

JBT

## SBİ - Silindir Başlı İtici

**Malzeme** : Çelik 1.2516
**Sertlik** : 60+2 - Kafa 45+5 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-5160 | 5 | 10 | 3 | 0.3 | d1 +0.03 | 160 |
| SBİ-5200 | | | | | | 200 |
| SBİ-5250 | | | | | | 250 |
| SBİ-5315 | | | | | | 315 |
| SBİ-5400 | | | | | | 400 |
| SBİ-5500 | | | | | | 500 |
| SBİ-5630 | | | | | | 630 |
| SBİ-5800 | | | | | | 800 |
| SBİ-51000 | | | | | | 1000 |
| SBİ-5.5100 | 5.5 | | | | | 100 |
| SBİ-5.5125 | | | | | | 125 |
| SBİ-5.5160 | | | | | | 160 |
| SBİ-5.5200 | | | | | | 200 |
| SBİ-5.5250 | | | | | | 250 |
| SBİ-5.5315 | | | | | | 315 |
| SBİ-5.5400 | | | | | | 400 |
| SBİ-5.5500 | | | | | | 500 |
| SBİ-5.5630 | | | | | | 630 |
| SBİ-5.5800 | | | | | | 800 |
| SBİ-5.51000 | | | | | | 1000 |
| SBİ-6100 | 6 | 12 | 5 | 0.5 | | 100 |
| SBİ-6125 | | | | | | 125 |
| SBİ-6160 | | | | | | 160 |
| SBİ-6200 | | | | | | 200 |
| SBİ-6250 | | | | | | 250 |
| SBİ-6315 | | | | | | 315 |
| SBİ-6400 | | | | | | 400 |
| SBİ-6500 | | | | | | 500 |
| SBİ-6630 | | | | | | 630 |
| SBİ-6800 | | | | | | 800 |
| SBİ-61000 | | | | | | 1000 |
| SBİ-6.5100 | 6.5 | | | | | 100 |
| SBİ-6.5125 | | | | | | 125 |
| SBİ-6.5160 | | | | | | 160 |
| SBİ-6.5200 | | | | | | 200 |
| SBİ-6.5250 | | | | | | 250 |
| SBİ-6.5315 | | | | | | 315 |
| SBİ-6.5400 | | | | | | 400 |
| SBİ-6.5500 | | | | | | 500 |
| SBİ-6.5630 | | | | | | 630 |
| SBİ-6.5800 | | | | | | 800 |
| SBİ-6.51000 | | | | | | 1000 |
| SBİ-7100 | 7 | | | | | 100 |
| SBİ-7125 | | | | | | 125 |
| SBİ-7160 | | | | | | 160 |
| SBİ-7200 | | | | | | 200 |
| SBİ-7250 | | | | | | 250 |
| SBİ-7315 | | | | | | 315 |
| SBİ-7400 | | | | | | 400 |
| SBİ-7500 | | | | | | 500 |
| SBİ-7630 | | | | | | 630 |
| SBİ-7800 | | | | | | 800 |
| SBİ-71000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-7.5100 | 7.5 | 12 | 5 | 0.5 | d1 +0.03 | 100 |
| SBİ-7.5125 | | | | | | 125 |
| SBİ-7.5160 | | | | | | 160 |
| SBİ-7.5200 | | | | | | 200 |
| SBİ-7.5250 | | | | | | 250 |
| SBİ-7.5315 | | | | | | 315 |
| SBİ-7.5400 | | | | | | 400 |
| SBİ-7.5500 | | | | | | 500 |
| SBİ-7.5630 | | | | | | 630 |
| SBİ-7.5800 | | | | | | 800 |
| SBİ-7.51000 | | | | | | 1000 |
| SBİ-8100 | 8 | | | | | 100 |
| SBİ-8125 | | | | | | 125 |
| SBİ-8160 | | | | | | 160 |
| SBİ-8200 | | | | | | 200 |
| SBİ-8250 | | | | | | 250 |
| SBİ-8315 | | | | | | 315 |
| SBİ-8400 | | | | | | 400 |
| SBİ-8500 | | | | | | 500 |
| SBİ-8630 | | | | | | 630 |
| SBİ-8800 | | | | | | 800 |
| SBİ-81000 | | | | | | 1000 |
| SBİ-8.5100 | 8.5 | 14 | 5 | 0.5 | d1 +0.04 | 100 |
| SBİ-8.5125 | | | | | | 125 |
| SBİ-8.5160 | | | | | | 160 |
| SBİ-8.5200 | | | | | | 200 |
| SBİ-8.5250 | | | | | | 250 |
| SBİ-8.5315 | | | | | | 315 |
| SBİ-8.5400 | | | | | | 400 |
| SBİ-8.5500 | | | | | | 500 |
| SBİ-8.5630 | | | | | | 630 |
| SBİ-8.5800 | | | | | | 800 |
| SBİ-8.51000 | | | | | | 1000 |
| SBİ-9100 | 9 | | | | | 100 |
| SBİ-9125 | | | | | | 125 |
| SBİ-9160 | | | | | | 160 |
| SBİ-9200 | | | | | | 200 |
| SBİ-9250 | | | | | | 250 |
| SBİ-9315 | | | | | | 315 |
| SBİ-9400 | | | | | | 400 |
| SBİ-9500 | | | | | | 500 |
| SBİ-9630 | | | | | | 630 |
| SBİ-9800 | | | | | | 800 |
| SBİ-91000 | | | | | | 1000 |
| SBİ-10100 | 10 | 16 | | | | 100 |
| SBİ-10125 | | | | | | 125 |
| SBİ-10160 | | | | | | 160 |
| SBİ-10200 | | | | | | 200 |
| SBİ-10250 | | | | | | 250 |
| SBİ-10315 | | | | | | 315 |
| SBİ-10400 | | | | | | 400 |
| SBİ-10500 | | | | | | 500 |
| SBİ-10630 | | | | | | 630 |
| SBİ-10800 | | | | | | 800 |
| SBİ-101000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-10.5100 | 10.5 | 16 | 5 | 0.5 | d1 +0.04 | 100 |
| SBİ-10.5125 | | | | | | 125 |
| SBİ-10.5160 | | | | | | 160 |
| SBİ-10.5200 | | | | | | 200 |
| SBİ-10.5250 | | | | | | 250 |
| SBİ-10.5315 | | | | | | 315 |
| SBİ-10.5400 | | | | | | 400 |
| SBİ-10.5500 | | | | | | 500 |
| SBİ-10.5630 | | | | | | 630 |
| SBİ-10.5800 | | | | | | 800 |
| SBİ-10.51000 | | | | | | 1000 |
| SBİ-11100 | 11 | | | | | 100 |
| SBİ-11125 | | | | | | 125 |
| SBİ-11160 | | | | | | 160 |
| SBİ-11200 | | | | | | 200 |
| SBİ-11250 | | | | | | 250 |
| SBİ-11315 | | | | | | 315 |
| SBİ-11400 | | | | | | 400 |
| SBİ-11500 | | | | | | 500 |
| SBİ-11630 | | | | | | 630 |
| SBİ-11800 | | | | | | 800 |
| SBİ-111000 | | | | | | 1000 |
| SBİ-12100 | 12 | 18 | 7 | 0.8 | | 100 |
| SBİ-12125 | | | | | | 125 |
| SBİ-12160 | | | | | | 160 |
| SBİ-12200 | | | | | | 200 |
| SBİ-12250 | | | | | | 250 |
| SBİ-12315 | | | | | | 315 |
| SBİ-12400 | | | | | | 400 |
| SBİ-12500 | | | | | | 500 |
| SBİ-12630 | | | | | | 630 |
| SBİ-12800 | | | | | | 800 |
| SBİ-121000 | | | | | | 1000 |
| SBİ-12.5100 | 12.5 | | | | | 100 |
| SBİ-12.5125 | | | | | | 125 |
| SBİ-12.5160 | | | | | | 160 |
| SBİ-12.5200 | | | | | | 200 |
| SBİ-12.5250 | | | | | | 250 |
| SBİ-12.5315 | | | | | | 315 |
| SBİ-12.5400 | | | | | | 400 |
| SBİ-12.5500 | | | | | | 500 |
| SBİ-12.5630 | | | | | | 630 |
| SBİ-12.5800 | | | | | | 800 |
| SBİ-12.51000 | | | | | | 1000 |
| SBİ-13100 | 13 | 18 | 7 | 0.8 | | 100 |
| SBİ-13125 | | | | | | 125 |
| SBİ-13160 | | | | | | 160 |
| SBİ-13200 | | | | | | 200 |
| SBİ-13250 | | | | | | 250 |
| SBİ-13315 | | | | | | 315 |
| SBİ-13400 | | | | | | 400 |
| SBİ-13500 | | | | | | 500 |
| SBİ-13630 | | | | | | 630 |
| SBİ-13800 | | | | | | 800 |
| SBİ-131000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİ-14100 | 14 | 22 | 7 | 0.8 | d1 +0.04 | 100 |
| SBİ-14125 | | | | | | 125 |
| SBİ-14160 | | | | | | 160 |
| SBİ-14200 | | | | | | 200 |
| SBİ-14250 | | | | | | 250 |
| SBİ-14315 | | | | | | 315 |
| SBİ-14400 | | | | | | 400 |
| SBİ-14500 | | | | | | 500 |
| SBİ-14630 | | | | | | 630 |
| SBİ-14800 | | | | | | 800 |
| SBİ-141000 | | | | | | 1000 |
| SBİ-16100 | 16 | 24 | | | | 100 |
| SBİ-16125 | | | | | | 125 |
| SBİ-16160 | | | | | | 160 |
| SBİ-16200 | | | | | | 200 |
| SBİ-16250 | | | | | | 250 |
| SBİ-16315 | | | | | | 315 |
| SBİ-16400 | | | | | | 400 |
| SBİ-16500 | | | | | | 500 |
| SBİ-16630 | | | | | | 630 |
| SBİ-16800 | | | | | | 800 |
| SBİ-161000 | | | | | | 1000 |
| SBİ-18100 | 18 | 26 | 8 | 1 | | 100 |
| SBİ-18125 | | | | | | 125 |
| SBİ-18160 | | | | | | 160 |
| SBİ-18200 | | | | | | 200 |
| SBİ-18250 | | | | | | 250 |
| SBİ-18315 | | | | | | 315 |
| SBİ-18400 | | | | | | 400 |
| SBİ-18500 | | | | | | 500 |
| SBİ-18630 | | | | | | 630 |
| SBİ-18800 | | | | | | 800 |
| SBİ-181000 | | | | | | 1000 |
| SBİ-20100 | 20 | 32 | 10 | | | 100 |
| SBİ-20125 | | | | | | 125 |
| SBİ-20160 | | | | | | 160 |
| SBİ-20200 | | | | | | 200 |
| SBİ-20250 | | | | | | 250 |
| SBİ-20315 | | | | | | 315 |
| SBİ-20400 | | | | | | 400 |
| SBİ-20500 | | | | | | 500 |
| SBİ-20630 | | | | | | 630 |
| SBİ-20800 | | | | | | 800 |
| SBİ-201000 | | | | | | 1000 |
| SBİ-25100 | 25 | 40 | 12 | | | 100 |
| SBİ-25125 | | | | | | 125 |
| SBİ-25160 | | | | | | 160 |
| SBİ-25200 | | | | | | 200 |
| SBİ-25250 | | | | | | 250 |
| SBİ-25315 | | | | | | 315 |
| SBİ-25400 | | | | | | 400 |
| SBİ-25500 | | | | | | 500 |
| SBİ-25630 | | | | | | 630 |
| SBİ-25800 | | | | | | 800 |
| SBİ-251000 | | | | | | 1000 |

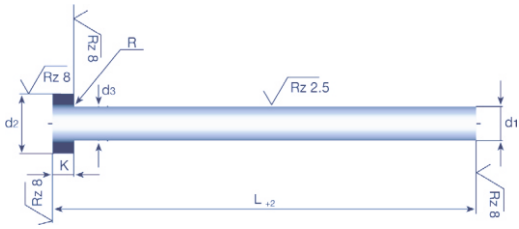


Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

JBT

## SBO - Silindir Başlı İtici Ondalıklı

**Malzeme** : Çelik 1.2516
**Sertlik** : 60+2 - Kafa 45+5 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-1.1100 | | | | | 100 |
| SBO-1.1125 | | | | | 125 |
| SBO-1.1160 | 1.1 | | | | 160 |
| SBO-1.1200 | | | | | 200 |
| SBO-1.1250 | | 2.5 | | 1.2 | 250 |
| SBO-1.2100 | | | | | 100 |
| SBO-1.2125 | | | | | 125 |
| SBO-1.2160 | 1.2 | | | | 160 |
| SBO-1.2200 | | | | | 200 |
| SBO-1.2250 | | | | | 250 |
| SBO-1.3100 | | | | | 100 |
| SBO-1.3125 | | | | | 125 |
| SBO-1.3160 | 1.3 | | | | 160 |
| SBO-1.3200 | | | | | 200 |
| SBO-1.3250 | | | | | 250 |
| SBO-1.4100 | | | | | 100 |
| SBO-1.4125 | | | | | 125 |
| SBO-1.4160 | 1.4 | | | | 160 |
| SBO-1.4200 | | | | | 200 |
| SBO-1.4250 | | | | | 250 |
| SBO-1.6100 | | | d1 +0.03 | | 100 |
| SBO-1.6125 | | | | | 125 |
| SBO-1.6160 | 1.6 | | | | 160 |
| SBO-1.6200 | | | | | 200 |
| SBO-1.6250 | | 3 | | 1.5 | 250 |
| SBO-1.7100 | | | | | 100 |
| SBO-1.7125 | | | | | 125 |
| SBO-1.7160 | 1.7 | | | | 160 |
| SBO-1.7200 | | | | | 200 |
| SBO-1.7250 | | | | | 250 |
| SBO-1.8100 | | | | | 100 |
| SBO-1.8125 | | | | | 125 |
| SBO-1.8160 | 1.8 | | | | 160 |
| SBO-1.8200 | | | | | 200 |
| SBO-1.8250 | | | | | 250 |
| SBO-1.9100 | | | | | 100 |
| SBO-1.9125 | | | | | 125 |
| SBO-1.9160 | 1.9 | | | | 160 |
| SBO-1.9200 | | | | | 200 |
| SBO-1.9250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-2.1100 | | | | | 100 |
| SBO-2.1125 | | | | | 125 |
| SBO-2.1160 | 2.1 | | | | 160 |
| SBO-2.1200 | | | | | 200 |
| SBO-2.1250 | | 4 | | 2 | 250 |
| SBO-2.2100 | | | | | 100 |
| SBO-2.2125 | | | | | 125 |
| SBO-2.2160 | 2.2 | | | | 160 |
| SBO-2.2200 | | | | | 200 |
| SBO-2.2250 | | | | | 250 |
| SBO-2.3100 | | | | | 100 |
| SBO-2.3125 | | | | | 125 |
| SBO-2.3160 | 2.3 | | | | 160 |
| SBO-2.3200 | | | | | 200 |
| SBO-2.3250 | | | | | 250 |
| SBO-2.4100 | | | | | 100 |
| SBO-2.4125 | | | | | 125 |
| SBO-2.4160 | 2.4 | | | | 160 |
| SBO-2.4200 | | | | | 200 |
| SBO-2.4250 | | | | | 250 |
| SBO-2.6100 | | | d1 +0.03 | | 100 |
| SBO-2.6125 | | | | | 125 |
| SBO-2.6160 | 2.6 | | | 2 | 160 |
| SBO-2.6200 | | | | | 200 |
| SBO-2.6250 | | | | | 250 |
| SBO-2.7100 | | | | | 100 |
| SBO-2.7125 | | | | | 125 |
| SBO-2.7160 | 2.7 | 5 | | | 160 |
| SBO-2.7200 | | | | | 200 |
| SBO-2.7250 | | | | | 250 |
| SBO-2.8100 | | | | | 100 |
| SBO-2.8125 | | | | | 125 |
| SBO-2.8160 | 2.8 | | | | 160 |
| SBO-2.8200 | | | | | 200 |
| SBO-2.8250 | | | | | 250 |
| SBO-2.9100 | | | | | 100 |
| SBO-2.9125 | | | | | 125 |
| SBO-2.9160 | 2.9 | 5 | | 2 | 160 |
| SBO-2.9200 | | | | | 200 |
| SBO-2.9250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-3.1100 | | | | | 100 |
| SBO-3.1125 | | | | | 125 |
| SBO-3.1160 | 3.1 | | | | 160 |
| SBO-3.1200 | | | | | 200 |
| SBO-3.1250 | | | | | 250 |
| SBO-3.2100 | | | | | 100 |
| SBO-3.2125 | | | | | 125 |
| SBO-3.2160 | 3.2 | | | | 160 |
| SBO-3.2200 | | | | | 200 |
| SBO-3.2250 | | 6 | | | 250 |
| SBO-3.3100 | | | | | 100 |
| SBO-3.3125 | | | | | 125 |
| SBO-3.3160 | 3.3 | | | | 160 |
| SBO-3.3200 | | | | | 200 |
| SBO-3.3250 | | | | | 250 |
| SBO-3.4100 | | | | | 100 |
| SBO-3.4125 | | | | | 125 |
| SBO-3.4160 | 3.4 | | | | 160 |
| SBO-3.4200 | | | | | 200 |
| SBO-3.4250 | | | d1 +0.03 | 3 | 250 |
| SBO-3.6100 | | | | | 100 |
| SBO-3.6125 | | | | | 125 |
| SBO-3.6160 | 3.6 | | | | 160 |
| SBO-3.6200 | | | | | 200 |
| SBO-3.6250 | | | | | 250 |
| SBO-3.7100 | | | | | 100 |
| SBO-3.7125 | | | | | 125 |
| SBO-3.7160 | 3.7 | | | | 160 |
| SBO-3.7200 | | | | | 200 |
| SBO-3.7250 | | 7 | | | 250 |
| SBO-3.8100 | | | | | 100 |
| SBO-3.8125 | | | | | 125 |
| SBO-3.8160 | 3.8 | | | | 160 |
| SBO-3.8200 | | | | | 200 |
| SBO-3.8250 | | | | | 250 |
| SBO-3.9100 | | | | | 100 |
| SBO-3.9125 | | | | | 125 |
| SBO-3.9160 | 3.9 | | | | 160 |
| SBO-3.9200 | | | | | 200 |
| SBO-3.9250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-4.1100 | | | | | 100 |
| SBO-4.1125 | | | | | 125 |
| SBO-4.1160 | 4.1 | | | | 160 |
| SBO-4.1200 | | | | | 200 |
| SBO-4.1250 | | | | | 250 |
| SBO-4.2100 | | | | | 100 |
| SBO-4.2125 | | | | | 125 |
| SBO-4.2160 | 4.2 | | | | 160 |
| SBO-4.2200 | | | | | 200 |
| SBO-4.2250 | | | | | 250 |
| SBO-4.3100 | | | | | 100 |
| SBO-4.3125 | | | | | 125 |
| SBO-4.3160 | 4.3 | | | | 160 |
| SBO-4.3200 | | | | | 200 |
| SBO-4.3250 | | | | | 250 |
| SBO-4.4100 | | | | | 100 |
| SBO-4.4125 | | | | | 125 |
| SBO-4.4160 | 4.4 | | | | 160 |
| SBO-4.4200 | | | | | 200 |
| SBO-4.4250 | | | d1 +0.03 | 3 | 250 |
| SBO-4.6100 | | | | | 100 |
| SBO-4.6125 | | | | | 125 |
| SBO-4.6160 | 4.6 | | | | 160 |
| SBO-4.6200 | | | | | 200 |
| SBO-4.6250 | | | | | 250 |
| SBO-4.7100 | | | | | 100 |
| SBO-4.7125 | | | | | 125 |
| SBO-4.7160 | 4.7 | | | | 160 |
| SBO-4.7200 | | | | | 200 |
| SBO-4.7250 | | | | | 250 |
| SBO-4.8100 | | | | | 100 |
| SBO-4.8125 | | | | | 125 |
| SBO-4.8160 | 4.8 | | | | 160 |
| SBO-4.8200 | | | | | 200 |
| SBO-4.8250 | | | | | 250 |
| SBO-4.9100 | | | | | 100 |
| SBO-4.9125 | | | | | 125 |
| SBO-4.9160 | 4.9 | | | | 160 |
| SBO-4.9200 | | | | | 200 |
| SBO-4.9250 | | | | | 250 |

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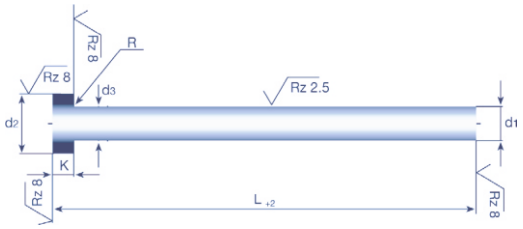
## SBO -Silindir Başlı İtici Ondalıklı

**Malzeme** : Çelik 1.2516
**Sertlik** : 60+2 - Kafa 45+5 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-5.1100 | 5.1 | 10 | d1 +0.03 | 3 | 100 |
| SBO-5.1125 | | | | | 125 |
| SBO-5.1160 | | | | | 160 |
| SBO-5.1200 | | | | | 200 |
| SBO-5.1250 | | | | | 250 |
| SBO-5.2100 | 5.2 | | | | 100 |
| SBO-5.2125 | | | | | 125 |
| SBO-5.2160 | | | | | 160 |
| SBO-5.2200 | | | | | 200 |
| SBO-5.2250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-5.3100 | 5.3 | 10 | d1 +0.03 | 3 | 100 |
| SBO-5.3125 | | | | | 125 |
| SBO-5.3160 | | | | | 160 |
| SBO-5.3200 | | | | | 200 |
| SBO-5.3250 | | | | | 250 |
| SBO-5.4100 | 5.4 | | | | 100 |
| SBO-5.4125 | | | | | 125 |
| SBO-5.4160 | | | | | 160 |
| SBO-5.4200 | | | | | 200 |
| SBO-5.4250 | | | | | 250 |

| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-5.6100 | 5.6 | 10 | d1 +0.03 | 3 | 100 |
| SBO-5.6125 | | | | | 125 |
| SBO-5.6160 | | | | | 160 |
| SBO-5.6200 | | | | | 200 |
| SBO-5.6250 | | | | | 250 |
| SBO-5.7100 | 5.7 | | | | 100 |
| SBO-5.7125 | | | | | 125 |
| SBO-5.7160 | | | | | 160 |
| SBO-5.7200 | | | | | 200 |
| SBO-5.7250 | | | | | 250 |

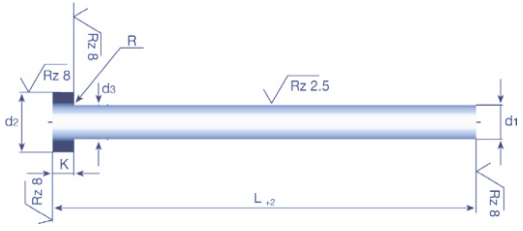
| Sipariş | d1 | d2 | d3 | K | L |
|---|---|---|---|---|---|
| SBO-5.8100 | 5.8 | 10 | d1 +0.03 | 3 | 100 |
| SBO-5.8125 | | | | | 125 |
| SBO-5.8160 | | | | | 160 |
| SBO-5.8200 | | | | | 200 |
| SBO-5.8250 | | | | | 250 |
| SBO-5.9100 | 5.9 | | | | 100 |
| SBO-5.9125 | | | | | 125 |
| SBO-5.9160 | | | | | 160 |
| SBO-5.9200 | | | | | 200 |
| SBO-5.9250 | | | | | 250 |
| SBO-6.2160 | 6.2 | | | | 160 |
| SBO-6.2315 | | | | | 315 |
| SBO-8.2160 | 8.2 | | | | 160 |
| SBO-8.2315 | | | | | 315 |

JBT

## SBİMS - Metal Enj. Silindir Başlı İtici

**Malzeme** : Sıcak İş Çeliği 1.2344
**Sertlik** : 65+2 - Kafa 45+5 HRC
**Yüzey** : Nitritli, Taşlanmış






| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-1100 | 1 | 2.5 | 1.2 | 0.2 | d1 +0.04 | 100 |
| SBİMS-1125 | | | | | | 125 |
| SBİMS-1160 | | | | | | 160 |
| SBİMS-1200 | | | | | | 200 |
| SBİMS-1250 | | | | | | 250 |
| SBİMS-1.5100 | 1.5 | 3 | 1.5 | | | 100 |
| SBİMS-1.5125 | | | | | | 125 |
| SBİMS-1.5160 | | | | | | 160 |
| SBİMS-1.5200 | | | | | | 200 |
| SBİMS-1.5250 | | | | | | 250 |
| SBİMS-2100 | 2 | 4 | 2 | | | 100 |
| SBİMS-2125 | | | | | | 125 |
| SBİMS-2160 | | | | | | 160 |
| SBİMS-2200 | | | | | | 200 |
| SBİMS-2250 | | | | | | 250 |
| SBİMS-2315 | | | | | | 315 |
| SBİMS-3100 | 3 | 6 | 3 | 0.3 | | 100 |
| SBİMS-3125 | | | | | | 125 |
| SBİMS-3160 | | | | | | 160 |
| SBİMS-3200 | | | | | | 200 |
| SBİMS-3250 | | | | | | 250 |
| SBİMS-3315 | | | | | | 315 |
| SBİMS-3400 | | | | | | 400 |
| SBİMS-3500 | | | | | | 500 |
| SBİMS-3630 | | | | | | 630 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-3.5100 | 3.5 | 7 | 3 | 0.3 | d1 +0.04 | 100 |
| SBİMS-3.5125 | | | | | | 125 |
| SBİMS-3.5160 | | | | | | 160 |
| SBİMS-3.5200 | | | | | | 200 |
| SBİMS-3.5250 | | | | | | 250 |
| SBİMS-3.5315 | | | | | | 315 |
| SBİMS-3.5400 | | | | | | 400 |
| SBİMS-3.5500 | | | | | | 500 |
| SBİMS-3.5630 | | | | | | 630 |
| SBİMS-4100 | 4 | 8 | | | | 100 |
| SBİMS-4125 | | | | | | 125 |
| SBİMS-4160 | | | | | | 160 |
| SBİMS-4200 | | | | | | 200 |
| SBİMS-4250 | | | | | | 250 |
| SBİMS-4315 | | | | | | 315 |
| SBİMS-4400 | | | | | | 400 |
| SBİMS-4500 | | | | | | 500 |
| SBİMS-4630 | | | | | | 630 |
| SBİMS-4800 | | | | | | 800 |
| SBİMS-41000 | | | | | | 1000 |
| SBİMS-4.5100 | 4.5 | | | | | 100 |
| SBİMS-4.5125 | | | | | | 125 |
| SBİMS-4.5160 | | | | | | 160 |
| SBİMS-4.5200 | | | | | | 200 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-4.5250 | 4.5 | 8 | 3 | 0.3 | d1 +0.04 | 250 |
| SBİMS-4.5315 | | | | | | 315 |
| SBİMS-4.5400 | | | | | | 400 |
| SBİMS-4.5500 | | | | | | 500 |
| SBİMS-4.5630 | | | | | | 630 |
| SBİMS-4.5800 | | | | | | 800 |
| SBİMS-4.51000 | | | | | | 1000 |
| SBİMS-5100 | 5 | 10 | | | | 100 |
| SBİMS-5125 | | | | | | 125 |
| SBİMS-5160 | | | | | | 160 |
| SBİMS-5200 | | | | | | 200 |
| SBİMS-5250 | | | | | | 250 |
| SBİMS-5315 | | | | | | 315 |
| SBİMS-5400 | | | | | | 400 |
| SBİMS-5500 | | | | | | 500 |
| SBİMS-5630 | | | | | | 630 |
| SBİMS-5800 | | | | | | 800 |
| SBİMS-51000 | | | | | | 1000 |
| SBİMS-5.5100 | 5.5 | | | | | 100 |
| SBİMS-5.5125 | | | | | | 125 |
| SBİMS-5.5160 | | | | | | 160 |
| SBİMS-5.5200 | | | | | | 200 |
| SBİMS-5.5250 | | | | | | 250 |
| SBİMS-5.5315 | | | | | | 315 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-5.5400 | 5.5 | 10 | 3 | 0.3 | d1 +0.04 | 400 |
| SBİMS-5.5500 | | | | | | 500 |
| SBİMS-5.5630 | | | | | | 630 |
| SBİMS-5.5800 | | | | | | 800 |
| SBİMS-5.51000 | | | | | | 1000 |
| SBİMS-6100 | 6 | 12 | 5 | 0.5 | | 100 |
| SBİMS-6125 | | | | | | 125 |
| SBİMS-6160 | | | | | | 160 |
| SBİMS-6200 | | | | | | 200 |
| SBİMS-6250 | | | | | | 250 |
| SBİMS-6315 | | | | | | 315 |
| SBİMS-6400 | | | | | | 400 |
| SBİMS-6500 | | | | | | 500 |
| SBİMS-6630 | | | | | | 630 |
| SBİMS-6800 | | | | | | 800 |
| SBİMS-61000 | | | | | | 1000 |
| SBİMS-6.5100 | 6.5 | | | | | 100 |
| SBİMS-6.5125 | | | | | | 125 |
| SBİMS-6.5160 | | | | | | 160 |
| SBİMS-6.5200 | | | | | | 200 |
| SBİMS-6.5250 | | | | | | 250 |
| SBİMS-6.5315 | | | | | | 315 |
| SBİMS-6.5400 | | | | | | 400 |
| SBİMS-6.5500 | | | | | | 500 |
| SBİMS-6.5630 | | | | | | 630 |
| SBİMS-6.5800 | | | | | | 800 |
| SBİMS-6.51000 | | | | | | 1000 |



Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

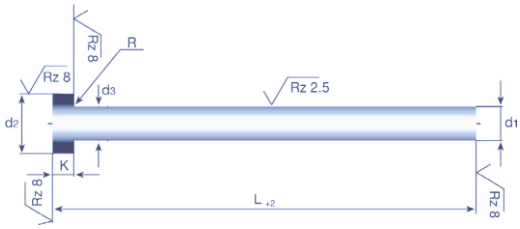
JBT

## SBİMS - Metal Enj. Silindir Başlı İtici

**Malzeme** : Sıcak İş Çeliği 1.2344
**Sertlik** : 65+2 - Kafa 45+5 HRC
**Yüzey** : Nitritli, Taşlanmış

**SBİMS -** Siyah Kaplama






| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-7100 | 7 | 12 | 5 | 0.5 | d1 +0.04 | 100 |
| SBİMS-7125 | | | | | | 125 |
| SBİMS-7160 | | | | | | 160 |
| SBİMS-7200 | | | | | | 200 |
| SBİMS-7250 | | | | | | 250 |
| SBİMS-7315 | | | | | | 315 |
| SBİMS-7400 | | | | | | 400 |
| SBİMS-7500 | | | | | | 500 |
| SBİMS-7630 | | | | | | 630 |
| SBİMS-7800 | | | | | | 800 |
| SBİMS-71000 | | | | | | 1000 |
| SBİMS-7.5100 | 7.5 | | | | | 100 |
| SBİMS-7.5125 | | | | | | 125 |
| SBİMS-7.5160 | | | | | | 160 |
| SBİMS-7.5200 | | | | | | 200 |
| SBİMS-7.5250 | | | | | | 250 |
| SBİMS-7.5315 | | | | | | 315 |
| SBİMS-7.5400 | | | | | | 400 |
| SBİMS-7.5500 | | | | | | 500 |
| SBİMS-7.5630 | | | | | | 630 |
| SBİMS-7.5800 | | | | | | 800 |
| SBİMS-7.51000 | | | | | | 1000 |
| SBİMS-8100 | 8 | 14 | | | | 100 |
| SBİMS-8125 | | | | | | 125 |
| SBİMS-8160 | | | | | | 160 |
| SBİMS-8200 | | | | | | 200 |
| SBİMS-8250 | | | | | | 250 |
| SBİMS-8315 | | | | | | 315 |
| SBİMS-8400 | | | | | | 400 |
| SBİMS-8500 | | | | | | 500 |
| SBİMS-8630 | | | | | | 630 |
| SBİMS-8800 | | | | | | 800 |
| SBİMS-81000 | | | | | | 1000 |
| SBİMS-8.5100 | 8.5 | | | | | 100 |
| SBİMS-8.5125 | | | | | | 125 |
| SBİMS-8.5160 | | | | | | 160 |
| SBİMS-8.5200 | | | | | | 200 |
| SBİMS-8.5250 | | | | | | 250 |
| SBİMS-8.5315 | | | | | | 315 |
| SBİMS-8.5400 | | | | | | 400 |
| SBİMS-8.5500 | | | | | | 500 |
| SBİMS-8.5630 | | | | | | 630 |
| SBİMS-8.5800 | | | | | | 800 |
| SBİMS-8.51000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-9100 | 9 | 14 | 5 | 0.5 | d1 +0.04 | 100 |
| SBİMS-9125 | | | | | | 125 |
| SBİMS-9160 | | | | | | 160 |
| SBİMS-9200 | | | | | | 200 |
| SBİMS-9250 | | | | | | 250 |
| SBİMS-9315 | | | | | | 315 |
| SBİMS-9400 | | | | | | 400 |
| SBİMS-9500 | | | | | | 500 |
| SBİMS-9630 | | | | | | 630 |
| SBİMS-9800 | | | | | | 800 |
| SBİMS-91000 | | | | | | 1000 |
| SBİMS-10100 | 10 | | | | | 100 |
| SBİMS-10125 | | | | | | 125 |
| SBİMS-10160 | | | | | | 160 |
| SBİMS-10200 | | | | | | 200 |
| SBİMS-10250 | | | | | | 250 |
| SBİMS-10315 | | | | | | 315 |
| SBİMS-10400 | | | | | | 400 |
| SBİMS-10500 | | | | | | 500 |
| SBİMS-10630 | | | | | | 630 |
| SBİMS-10800 | | | | | | 800 |
| SBİMS-101000 | | | | | | 1000 |
| SBİMS-10.5100 | 10.5 | | | | | 100 |
| SBİMS-10.5125 | | | | | | 125 |
| SBİMS-10.5160 | | | | | | 160 |
| SBİMS-10.5200 | | | | | | 200 |
| SBİMS-10.5250 | | | | | | 250 |
| SBİMS-10.5315 | | | | | | 315 |
| SBİMS-10.5400 | | | | | | 400 |
| SBİMS-10.5500 | | | | | | 500 |
| SBİMS-10.5630 | | | | | | 630 |
| SBİMS-10.5800 | | | | | | 800 |
| SBİMS-10.51000 | | | | | | 1000 |
| SBİMS-11100 | 11 | 16 | | | | 100 |
| SBİMS-11125 | | | | | | 125 |
| SBİMS-11160 | | | | | | 160 |
| SBİMS-11200 | | | | | | 200 |
| SBİMS-11250 | | | | | | 250 |
| SBİMS-11315 | | | | | | 315 |
| SBİMS-11400 | | | | | | 400 |
| SBİMS-11500 | | | | | | 500 |
| SBİMS-11630 | | | | | | 630 |
| SBİMS-11800 | | | | | | 800 |
| SBİMS-111000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-12100 | 12 | 18 | 7 | 0.8 | d1 +0.04 | 100 |
| SBİMS-12125 | | | | | | 125 |
| SBİMS-12160 | | | | | | 160 |
| SBİMS-12200 | | | | | | 200 |
| SBİMS-12250 | | | | | | 250 |
| SBİMS-12315 | | | | | | 315 |
| SBİMS-12400 | | | | | | 400 |
| SBİMS-12500 | | | | | | 500 |
| SBİMS-12630 | | | | | | 630 |
| SBİMS-12800 | | | | | | 800 |
| SBİMS-121000 | | | | | | 1000 |
| SBİMS-12.5100 | 12.5 | | | | | 100 |
| SBİMS-12.5125 | | | | | | 125 |
| SBİMS-12.5160 | | | | | | 160 |
| SBİMS-12.5200 | | | | | | 200 |
| SBİMS-12.5250 | | | | | | 250 |
| SBİMS-12.5315 | | | | | | 315 |
| SBİMS-12.5400 | | | | | | 400 |
| SBİMS-12.5500 | | | | | | 500 |
| SBİMS-12.5630 | | | | | | 630 |
| SBİMS-12.5800 | | | | | | 800 |
| SBİMS-12.51000 | | | | | | 1000 |
| SBİMS-13100 | 13 | 18 | | | | 100 |
| SBİMS-13125 | | | | | | 125 |
| SBİMS-13160 | | | | | | 160 |
| SBİMS-13200 | | | | | | 200 |
| SBİMS-13250 | | | | | | 250 |
| SBİMS-13315 | | | | | | 315 |
| SBİMS-13400 | | | | | | 400 |
| SBİMS-13500 | | | | | | 500 |
| SBİMS-13630 | | | | | | 630 |
| SBİMS-13800 | | | | | | 800 |
| SBİMS-131000 | | | | | | 1000 |
| SBİMS-14100 | 14 | | | | | 100 |
| SBİMS-14125 | | | | | | 125 |
| SBİMS-14160 | | | | | | 160 |
| SBİMS-14200 | | | | | | 200 |
| SBİMS-14250 | | | | | | 250 |
| SBİMS-14315 | | | | | | 315 |
| SBİMS-14400 | | | | | | 400 |
| SBİMS-14500 | | | | | | 500 |
| SBİMS-14630 | | | | | | 630 |
| SBİMS-14800 | | | | | | 800 |
| SBİMS-141000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMS-16100 | 16 | 22 | 7 | 0.8 | d1 +0.04 | 100 |
| SBİMS-16125 | | | | | | 125 |
| SBİMS-16160 | | | | | | 160 |
| SBİMS-16200 | | | | | | 200 |
| SBİMS-16250 | | | | | | 250 |
| SBİMS-16315 | | | | | | 315 |
| SBİMS-16400 | | | | | | 400 |
| SBİMS-16500 | | | | | | 500 |
| SBİMS-16630 | | | | | | 630 |
| SBİMS-16800 | | | | | | 800 |
| SBİMS-161000 | | | | | | 1000 |
| SBİMS-18100 | 18 | 24 | 8 | 1 | d1 +0.1 | 100 |
| SBİMS-18125 | | | | | | 125 |
| SBİMS-18160 | | | | | | 160 |
| SBİMS-18200 | | | | | | 200 |
| SBİMS-18250 | | | | | | 250 |
| SBİMS-18315 | | | | | | 315 |
| SBİMS-18400 | | | | | | 400 |
| SBİMS-18500 | | | | | | 500 |
| SBİMS-18630 | | | | | | 630 |
| SBİMS-18800 | | | | | | 800 |
| SBİMS-181000 | | | | | | 1000 |
| SBİMS-20100 | 20 | 26 | 8 | 1 | d1 +0.1 | 100 |
| SBİMS-20125 | | | | | | 125 |
| SBİMS-20160 | | | | | | 160 |
| SBİMS-20200 | | | | | | 200 |
| SBİMS-20250 | | | | | | 250 |
| SBİMS-20315 | | | | | | 315 |
| SBİMS-20400 | | | | | | 400 |
| SBİMS-20500 | | | | | | 500 |
| SBİMS-20630 | | | | | | 630 |
| SBİMS-20800 | | | | | | 800 |
| SBİMS-201000 | | | | | | 1000 |
| SBİMS-25100 | 25 | 32 | 10 | 1 | d1 +0.1 | 100 |
| SBİMS-25125 | | | | | | 125 |
| SBİMS-25160 | | | | | | 160 |
| SBİMS-25200 | | | | | | 200 |
| SBİMS-25250 | | | | | | 250 |
| SBİMS-25315 | | | | | | 315 |
| SBİMS-25400 | | | | | | 400 |
| SBİMS-25500 | | | | | | 500 |
| SBİMS-25630 | | | | | | 630 |
| SBİMS-25800 | | | | | | 800 |
| SBİMS-251000 | | | | | | 1000 |

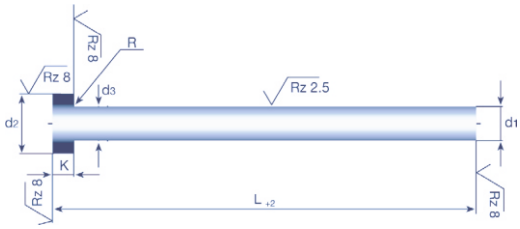
JBT

## SBİMB - Metal Enj. Silindir Başlı İtici

**Malzeme** : Sıcak İş Çeliği 1.2344
**Sertlik** : 65+2 - Kafa 45+5 HRC
**Yüzey** : Nitritli, Taşlanmış

**SBİMB -** Beyaz Kaplama






| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-1100 | 1 | 2.5 | 1.2 | 0.2 | d1 +0.04 | 100 |
| SBİMB-1125 | | | | | | 125 |
| SBİMB-1160 | | | | | | 160 |
| SBİMB-1200 | | | | | | 200 |
| SBİMB-1250 | | | | | | 250 |
| SBİMB-1.5100 | 1.5 | 3 | 1.5 | | | 100 |
| SBİMB-1.5125 | | | | | | 125 |
| SBİMB-1.5160 | | | | | | 160 |
| SBİMB-1.5200 | | | | | | 200 |
| SBİMB-1.5250 | | | | | | 250 |
| SBİMB-2100 | 2 | 4 | 2 | | | 100 |
| SBİMB-2125 | | | | | | 125 |
| SBİMB-2160 | | | | | | 160 |
| SBİMB-2200 | | | | | | 200 |
| SBİMB-2250 | | | | | | 250 |
| SBİMB-2315 | | | | | | 315 |
| SBİMB-2400 | | | | | | 400 |
| SBİMB-2.5100 | 2.5 | | | | | 100 |
| SBİMB-2.5125 | | | | | | 125 |
| SBİMB-2.5160 | | | | | | 160 |
| SBİMB-2.5200 | | | | | | 200 |
| SBİMB-2.5250 | | | | | | 250 |
| SBİMB-2.5315 | | | | | | 315 |
| SBİMB-2.5400 | | | | | | 400 |
| SBİMB-2.5500 | | | | | | 500 |
| SBİMB-3100 | 3 | 6 | 3 | 0.3 | | 100 |
| SBİMB-3125 | | | | | | 125 |
| SBİMB-3160 | | | | | | 160 |
| SBİMB-3200 | | | | | | 200 |
| SBİMB-3250 | | | | | | 250 |
| SBİMB-3315 | | | | | | 315 |
| SBİMB-3400 | | | | | | 400 |
| SBİMB-3500 | | | | | | 500 |
| SBİMB-3630 | | | | | | 630 |
| SBİMB-3.5100 | 3.5 | 7 | | | | 100 |
| SBİMB-3.5125 | | | | | | 125 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-3.5160 | 3.5 | 7 | 4 | 0.3 | d1 +0.04 | 160 |
| SBİMB-3.5200 | | | | | | 200 |
| SBİMB-3.5250 | | | | | | 250 |
| SBİMB-3.5315 | | | | | | 315 |
| SBİMB-3.5400 | | | | | | 400 |
| SBİMB-3.5500 | | | | | | 500 |
| SBİMB-3.5630 | | | | | | 630 |
| SBİMB-4100 | 4 | 8 | | | | 100 |
| SBİMB-4125 | | | | | | 125 |
| SBİMB-4160 | | | | | | 160 |
| SBİMB-4200 | | | | | | 200 |
| SBİMB-4250 | | | | | | 250 |
| SBİMB-4315 | | | | | | 315 |
| SBİMB-4400 | | | | | | 400 |
| SBİMB-4500 | | | | | | 500 |
| SBİMB-4630 | | | | | | 630 |
| SBİMB-4800 | | | | | | 800 |
| SBİMB-41000 | | | | | | 1000 |
| SBİMB-4.5100 | 4.5 | | | | | 100 |
| SBİMB-4.5125 | | | | | | 125 |
| SBİMB-4.5160 | | | | | | 160 |
| SBİMB-4.5200 | | | | | | 200 |
| SBİMB-4.5250 | | | | | | 250 |
| SBİMB-4.5315 | | | | | | 315 |
| SBİMB-4.5400 | | | | | | 400 |
| SBİMB-4.5500 | | | | | | 500 |
| SBİMB-4.5630 | | | | | | 630 |
| SBİMB-4.5800 | | | | | | 800 |
| SBİMB-4.51000 | | | | | | 1000 |
| SBİMB-5100 | 5 | 10 | | | | 100 |
| SBİMB-5125 | | | | | | 125 |
| SBİMB-5160 | | | | | | 160 |
| SBİMB-5200 | | | | | | 200 |
| SBİMB-5250 | | | | | | 250 |
| SBİMB-5315 | | | | | | 315 |
| SBİMB-5400 | | | | | | 400 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-5500 | 5 | 10 | 3 | 0.3 | d1 +0.04 | 500 |
| SBİMB-5630 | | | | | | 630 |
| SBİMB-5800 | | | | | | 800 |
| SBİMB-51000 | | | | | | 1000 |
| SBİMB-5.5100 | 5.5 | | | | | 100 |
| SBİMB-5.5125 | | | | | | 125 |
| SBİMB-5.5160 | | | | | | 160 |
| SBİMB-5.5200 | | | | | | 200 |
| SBİMB-5.5250 | | | | | | 250 |
| SBİMB-5.5315 | | | | | | 315 |
| SBİMB-5.5400 | | | | | | 400 |
| SBİMB-5.5500 | | | | | | 500 |
| SBİMB-5.5630 | | | | | | 630 |
| SBİMB-5.5800 | | | | | | 800 |
| SBİMB-5.51000 | | | | | | 1000 |
| SBİMB-6100 | 6 | 12 | 5 | 0.5 | | 100 |
| SBİMB-6125 | | | | | | 125 |
| SBİMB-6160 | | | | | | 160 |
| SBİMB-6200 | | | | | | 200 |
| SBİMB-6250 | | | | | | 250 |
| SBİMB-6315 | | | | | | 315 |
| SBİMB-6400 | | | | | | 400 |
| SBİMB-6500 | | | | | | 500 |
| SBİMB-6630 | | | | | | 630 |
| SBİMB-6800 | | | | | | 800 |
| SBİMB-61000 | | | | | | 1000 |
| SBİMB-6.5100 | 6.5 | | | | | 100 |
| SBİMB-6.5125 | | | | | | 125 |
| SBİMB-6.5160 | | | | | | 160 |
| SBİMB-6.5200 | | | | | | 200 |
| SBİMB-6.5250 | | | | | | 250 |
| SBİMB-6.5315 | | | | | | 315 |
| SBİMB-6.5400 | | | | | | 400 |
| SBİMB-6.5500 | | | | | | 500 |
| SBİMB-6.5630 | | | | | | 630 |
| SBİMB-6.5800 | | | | | | 800 |
| SBİMB-6.51000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-7100 | 7 | 12 | 5 | 0.5 | d1 +0.04 | 100 |
| SBİMB-7125 | | | | | | 125 |
| SBİMB-7160 | | | | | | 160 |
| SBİMB-7200 | | | | | | 200 |
| SBİMB-7250 | | | | | | 250 |
| SBİMB-7315 | | | | | | 315 |
| SBİMB-7400 | | | | | | 400 |
| SBİMB-7500 | | | | | | 500 |
| SBİMB-7630 | | | | | | 630 |
| SBİMB-7800 | | | | | | 800 |
| SBİMB-71000 | | | | | | 1000 |
| SBİMB-7.5100 | 7.5 | | | | | 100 |
| SBİMB-7.5125 | | | | | | 125 |
| SBİMB-7.5160 | | | | | | 160 |
| SBİMB-7.5200 | | | | | | 200 |
| SBİMB-7.5250 | | | | | | 250 |
| SBİMB-7.5315 | | | | | | 315 |
| SBİMB-7.5400 | | | | | | 400 |
| SBİMB-7.5500 | | | | | | 500 |
| SBİMB-7.5630 | | | | | | 630 |
| SBİMB-7.5800 | | | | | | 800 |
| SBİMB-7.51000 | | | | | | 1000 |
| SBİMB-8100 | 8 | 14 | | | | 100 |
| SBİMB-8125 | | | | | | 125 |
| SBİMB-8160 | | | | | | 160 |
| SBİMB-8200 | | | | | | 200 |
| SBİMB-8250 | | | | | | 250 |
| SBİMB-8315 | | | | | | 315 |
| SBİMB-8400 | | | | | | 400 |
| SBİMB-8500 | | | | | | 500 |
| SBİMB-8630 | | | | | | 630 |
| SBİMB-8800 | | | | | | 800 |
| SBİMB-81000 | | | | | | 1000 |
| SBİMB-8.5100 | 8.5 | | | | | 100 |
| SBİMB-8.5125 | | | | | | 125 |
| SBİMB-8.5160 | | | | | | 160 |



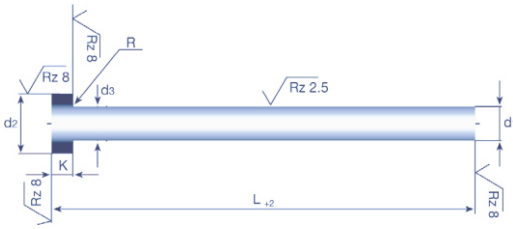
Standart dışı özel ölçüler sipariş üzerine temin edilebilir.

JBT

## SBİMB - Metal Enj. Silindir Başlı İtici

**Malzeme** : Sıcak İş Çeliği 1.2344
**Sertlik** : 65+2 - Kafa 45+5 HRC
**Yüzey** : Nitritli, Taşlanmış






| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-8.5200 | 8.5 | 14 | 5 | 0.5 | d1 +0.04 | 200 |
| SBİMB-8.5250 | | | | | | 250 |
| SBİMB-8.5315 | | | | | | 315 |
| SBİMB-8.5400 | | | | | | 400 |
| SBİMB-8.5500 | | | | | | 500 |
| SBİMB-8.5630 | | | | | | 630 |
| SBİMB-8.5800 | | | | | | 800 |
| SBİMB-8.51000 | | | | | | 1000 |
| SBİMB-9100 | 9 | | | | | 100 |
| SBİMB-9125 | | | | | | 125 |
| SBİMB-9160 | | | | | | 160 |
| SBİMB-9200 | | | | | | 200 |
| SBİMB-9250 | | | | | | 250 |
| SBİMB-9315 | | | | | | 315 |
| SBİMB-9400 | | | | | | 400 |
| SBİMB-9500 | | | | | | 500 |
| SBİMB-9630 | | | | | | 630 |
| SBİMB-9800 | | | | | | 800 |
| SBİMB-91000 | | | | | | 1000 |
| SBİMB-10100 | 10 | 16 | | | | 100 |
| SBİMB-10125 | | | | | | 125 |
| SBİMB-10160 | | | | | | 160 |
| SBİMB-10200 | | | | | | 200 |
| SBİMB-10250 | | | | | | 250 |
| SBİMB-10315 | | | | | | 315 |
| SBİMB-10400 | | | | | | 400 |
| SBİMB-10500 | | | | | | 500 |
| SBİMB-10630 | | | | | | 630 |
| SBİMB-10800 | | | | | | 800 |
| SBİMB-101000 | | | | | | 1000 |
| SBİMB-10.5100 | 10.5 | | | | | 100 |
| SBİMB-10.5125 | | | | | | 125 |
| SBİMB-10.5160 | | | | | | 160 |
| SBİMB-10.5200 | | | | | | 200 |
| SBİMB-10.5250 | | | | | | 250 |
| SBİMB-10.5315 | | | | | | 315 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-10.5400 | 10.5 | 16 | 5 | 0.5 | d1 +0.04 | 400 |
| SBİMB-10.5500 | | | | | | 500 |
| SBİMB-10.5630 | | | | | | 630 |
| SBİMB-10.5800 | | | | | | 800 |
| SBİMB-10.51000 | | | | | | 1000 |
| SBİMB-11100 | 11 | 16 | | | | 100 |
| SBİMB-11125 | | | | | | 125 |
| SBİMB-11160 | | | | | | 160 |
| SBİMB-11200 | | | | | | 200 |
| SBİMB-11250 | | | | | | 250 |
| SBİMB-11315 | | | | | | 315 |
| SBİMB-11400 | | | | | | 400 |
| SBİMB-11500 | | | | | | 500 |
| SBİMB-11630 | | | | | | 630 |
| SBİMB-11800 | | | | | | 800 |
| SBİMB-111000 | | | | | | 1000 |
| SBİMB-12100 | 12 | 18 | 7 | 0.8 | | 100 |
| SBİMB-12125 | | | | | | 125 |
| SBİMB-12160 | | | | | | 160 |
| SBİMB-12200 | | | | | | 200 |
| SBİMB-12250 | | | | | | 250 |
| SBİMB-12315 | | | | | | 315 |
| SBİMB-12400 | | | | | | 400 |
| SBİMB-12500 | | | | | | 500 |
| SBİMB-12630 | | | | | | 630 |
| SBİMB-12800 | | | | | | 800 |
| SBİMB-121000 | | | | | | 1000 |
| SBİMB-12.5100 | 12.5 | | | | | 100 |
| SBİMB-12.5125 | | | | | | 125 |
| SBİMB-12.5160 | | | | | | 160 |
| SBİMB-12.5200 | | | | | | 200 |
| SBİMB-12.5250 | | | | | | 250 |
| SBİMB-12.5315 | | | | | | 315 |
| SBİMB-12.5400 | | | | | | 400 |
| SBİMB-12.5500 | | | | | | 500 |
| SBİMB-12.5630 | | | | | | 630 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-12.5800 | 12.5 | 22 | 7 | 0.8 | d1 +0.04 | 800 |
| SBİMB-12.51000 | | | | | | 1000 |
| SBİMB-13100 | 13 | | | | | 100 |
| SBİMB-13125 | | | | | | 125 |
| SBİMB-13160 | | | | | | 160 |
| SBİMB-13200 | | | | | | 200 |
| SBİMB-13250 | | | | | | 250 |
| SBİMB-13315 | | | | | | 315 |
| SBİMB-13400 | | | | | | 400 |
| SBİMB-13500 | | | | | | 500 |
| SBİMB-13630 | | | | | | 630 |
| SBİMB-13800 | | | | | | 800 |
| SBİMB-131000 | | | | | | 1000 |
| SBİMB-14100 | 14 | | | | | 100 |
| SBİMB-14125 | | | | | | 125 |
| SBİMB-14160 | | | | | | 160 |
| SBİMB-14200 | | | | | | 200 |
| SBİMB-14250 | | | | | | 250 |
| SBİMB-14315 | | | | | | 315 |
| SBİMB-14400 | | | | | | 400 |
| SBİMB-14500 | | | | | | 500 |
| SBİMB-14630 | | | | | | 630 |
| SBİMB-14800 | | | | | | 800 |
| SBİMB-141000 | | | | | | 1000 |
| SBİMB-16100 | 16 | 22 | | | | 100 |
| SBİMB-16125 | | | | | | 125 |
| SBİMB-16160 | | | | | | 160 |
| SBİMB-16200 | | | | | | 200 |
| SBİMB-16250 | | | | | | 250 |
| SBİMB-16315 | | | | | | 315 |
| SBİMB-16400 | | | | | | 400 |
| SBİMB-16500 | | | | | | 500 |
| SBİMB-16630 | | | | | | 630 |
| SBİMB-16800 | | | | | | 800 |
| SBİMB-161000 | | | | | | 1000 |

| Sipariş | d1 | d2 | K | R | d3 | L |
|---|---|---|---|---|---|---|
| SBİMB-18100 | 18 | 24 | 7 | 0.8 | d1 +0.04 | 100 |
| SBİMB-18125 | | | | | | 125 |
| SBİMB-18160 | | | | | | 160 |
| SBİMB-18200 | | | | | | 200 |
| SBİMB-18250 | | | | | | 250 |
| SBİMB-18315 | | | | | | 315 |
| SBİMB-18400 | | | | | | 400 |
| SBİMB-18500 | | | | | | 500 |
| SBİMB-18630 | | | | | | 630 |
| SBİMB-18800 | | | | | | 800 |
| SBİMB-181000 | | | | | | 1000 |
| SBİMB-20100 | 20 | 26 | 8 | 1 | | 100 |
| SBİMB-20125 | | | | | | 125 |
| SBİMB-20160 | | | | | | 160 |
| SBİMB-20200 | | | | | | 200 |
| SBİMB-20250 | | | | | | 250 |
| SBİMB-20315 | | | | | | 315 |
| SBİMB-20400 | | | | | | 400 |
| SBİMB-20500 | | | | | | 500 |
| SBİMB-20630 | | | | | | 630 |
| SBİMB-20800 | | | | | | 800 |
| SBİMB-201000 | | | | | | 1000 |
| SBİMB-25100 | 25 | 32 | 10 | | d1 +0.1 | 100 |
| SBİMB-25125 | | | | | | 125 |
| SBİMB-25160 | | | | | | 160 |
| SBİMB-25200 | | | | | | 200 |
| SBİMB-25250 | | | | | | 250 |
| SBİMB-25315 | | | | | | 315 |
| SBİMB-25400 | | | | | | 400 |
| SBİMB-25500 | | | | | | 500 |
| SBİMB-25630 | | | | | | 630 |
| SBİMB-25800 | | | | | | 800 |
| SBİMB-251000 | | | | | | 1000 |



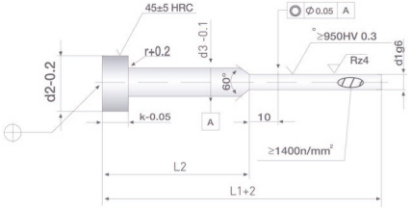
## Silindir Başlı Kademeli İtici

### Metal Enjeksiyon Kalıpları İçin

**Malzeme** : Sıcak İş Çeliği 1.2344 (Nitrirli)
**Sertlik** : Gövde - 65 ± 2 HRC
Kafa - 45 ± 5 HRC

### Plastik Enjeksiyon Kalıpları İçin

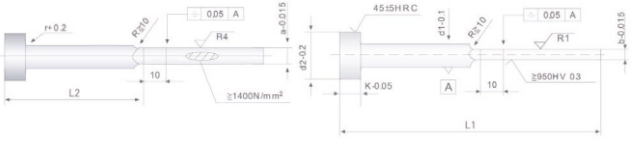
**Malzeme** : Özel Alaşımlı Çelik 1.2516
**Sertlik** : Gövde - 60 ± 2 HRC
Kafa - 45 ± 5 HRC




**Sipariş Örneği;** d1 x L1 / L2

| $d1_{g6}$ | $d2_{0-0.2}$ | $d3_{0-0.1}$ | $K_{0-0.05}$ | L1 / L2 80 / 35 | 100 /50 | 125 / 50 | 160 / 75 | 200 / 100 |
|---|---|---|---|---|---|---|---|---|
| 0.8 | 4 | 2.0 | 2 | ∘ | ∘ | ∘ | ∘ | ∘ |
| 0.9 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.0 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.1 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.2 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.3 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.4 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.5 | 6 | 3.0 | 3 | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.6 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.7 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.8 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 1.9 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.0 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.1 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.2 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.3 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.4 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.5 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.6 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.7 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.8 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |
| 2.9 | | | | ∘ | ∘ | ∘ | ∘ | ∘ |





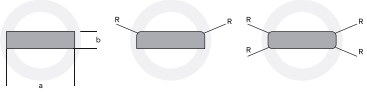

## Silindir Başlı Lama İtici

### Metal Enjeksiyon Kalıpları İçin

**Malzeme** : Sıcak İş Çeliği 1.2344 (Nitrirli)
**Sertlik** : Gövde - 65 ± 2 HRC
Kafa - 45 ± 5 HRC

### Plastik Enjeksiyon Kalıpları İçin

**Malzeme** : Özel Alaşımlı Çelik 1.2516
**Sertlik** : Gövde - 60 ± 2 HRC
Kafa - 45 ± 5 HRC




**Düz Köşeli Form - A** | **İki Köşeli Radyüs Form - B** | **Dört Köşeli Radyüs Form - C**

**Sipariş Örneği;** a x b x d1 x L1 / L2

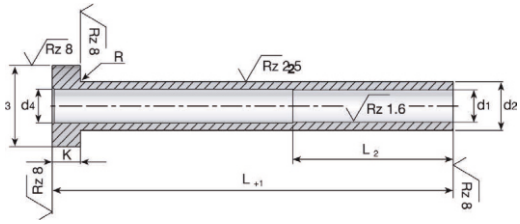
**Not :** Stoklarımızda mevcut boylar bulunmaktadır. Lütfen bilgi alınız.

| $a_{0.015}$ | $b_{0.015}$ | $d1_{-0.1}$ | $d2_{-0.2}$ | $K_{0.05}$ | R | L1 / L2 80/40 | 100/50 | 125/60 | 160/80 | 200/100 | 250/125 | 315/160 | 400/200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.8 | 0.8 | 4.2 | 8 | 3 | 0.3 | ∘ | ∘ | ∘ | ∘ | ∘ | | | |
| | 1 | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | | | |
| | 1.2 | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | | | |
| 4.5 | 1 | 5 | 10 | | | ∘ | ∘ | ∘ | ∘ | ∘ | | | |
| | 1.2 | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | | | |
| | 1.5 | | | | | | ∘ | ∘ | ∘ | ∘ | | | |
| 5.5 | 1 | 6 | 12 | 5 | 0.5 | | ∘ | ∘ | ∘ | ∘ | | | |
| | 1.2 | | | | | | ∘ | ∘ | ∘ | ∘ | | | |
| | 1.5 | | | | | | ∘ | ∘ | ∘ | ∘ | | | |
| | 2 | | | | | | ∘ | ∘ | ∘ | ∘ | | | |
| 7.5 | 1.2 | 8 | 14 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| | 1.5 | | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| | 2 | | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 9.5 | 1.5 | 10 | 16 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | 2 | | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 11.5 | 2 | 12 | 20 | 7 | 0.8 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | 2.5 | | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 15.5 | 2 | 16 | 22 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | 2.5 | | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |

JBT

## BİP - Plastik Metal Enj. Boru İtici

**Malzeme** : Özel Alaşımlı Çelik 1.2344
**Sertlik** : 65+2 - Kafa 45+5 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | d4 | d3 | K | R | L2 | L |
|---|---|---|---|---|---|---|---|---|
| BİP-2475 | 2 | 4 | 2.4 | 8 | 3 | 0.3 | 35 | 75 |
| BİP-24100 | | | | | | | | 100 |
| BİP-24125 | | | | | | | | 125 |
| BİP-24150 | | | | | | | | 150 |
| BİP-24160 | | | | | | | | 160 |
| BİP-24175 | | | | | | | | 175 |
| BİP-24200 | | | | | | | | 200 |
| BİP-24225 | | | | | | | | 225 |
| BİP-24250 | | | | | | | | 250 |
| BİP-24275 | | | | | | | | 275 |
| BİP-24300 | | | | | | | | 300 |
| BİP-2.5575 | 2.5 | | 2.9 | | | | | 75 |
| BİP-2.55100 | | | | | | | | 100 |
| BİP-2.55125 | | | | | | | | 125 |
| BİP-2.55150 | | | | | | | | 150 |
| BİP-2.55160 | | | | | | | | 160 |
| BİP-2.55175 | | | | | | | | 175 |
| BİP-2.55200 | | | | | | | | 200 |
| BİP-2.55225 | | | | | | | | 225 |
| BİP-2.55250 | | | | | | | | 250 |
| BİP-2.55275 | | | | | | | | 275 |
| BİP-2.55300 | | | | | | | | 300 |
| BİP-3575 | 3 | 5 | 3.4 | 10 | | | 45 | 75 |
| BİP-35100 | | | | | | | | 100 |
| BİP-35125 | | | | | | | | 125 |
| BİP-35150 | | | | | | | | 150 |
| BİP-35160 | | | | | | | | 160 |
| BİP-35175 | | | | | | | | 175 |
| BİP-35200 | | | | | | | | 200 |
| BİP-35225 | | | | | | | | 225 |
| BİP-35250 | | | | | | | | 250 |
| BİP-35275 | | | | | | | | 275 |
| BİP-35300 | | | | | | | | 300 |
| BİP-3.25100 | 3.2 | | | | | | | 100 |
| BİP-3.25125 | | | | | | | | 125 |
| BİP-3.25150 | | | | | | | | 150 |
| BİP-3.25175 | | | | | | | | 175 |
| BİP-3.25200 | | | | | | | | 200 |
| BİP-3.25225 | | | | | | | | 225 |
| BİP-3.25250 | | | | | | | | 250 |
| BİP-3.25275 | | | | | | | | 275 |
| BİP-3.25300 | | | | | | | | 300 |
| BİP-3.5675 | 3.5 | 6 | 3.9 | 12 | 5 | 0.5 | 45 | 75 |
| BİP-3.56100 | | | | | | | | 100 |
| BİP-3.56125 | | | | | | | | 125 |
| BİP-3.56150 | | | | | | | | 150 |
| BİP-3.56160 | | | | | | | | 160 |
| BİP-3.56175 | | | | | | | | 175 |
| BİP-3.56200 | | | | | | | | 200 |
| BİP-3.56225 | | | | | | | | 225 |
| BİP-3.56250 | | | | | | | | 250 |
| BİP-3.56275 | | | | | | | | 275 |
| BİP-3.56300 | | | | | | | | 300 |
| BİP-3.5775 | | 7 | | | | | | 75 |
| BİP-3.57100 | | | | | | | | 100 |
| BİP-3.57125 | | | | | | | | 125 |
| BİP-3.57150 | | | | | | | | 150 |
| BİP-3.57160 | | | | | | | | 160 |
| BİP-3.57175 | | | | | | | | 175 |
| BİP-3.57200 | | | | | | | | 200 |

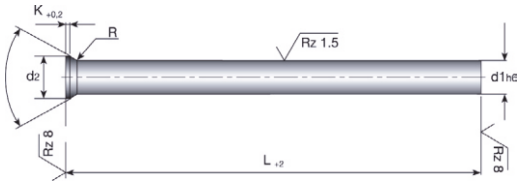
| Sipariş | d1 | d2 | d4 | d3 | K | R | L2 | L |
|---|---|---|---|---|---|---|---|---|
| BİP-4675 | 4 | 6 | 4.4 | 12 | 5 | 0.5 | 45 | 75 |
| BİP-46100 | | | | | | | | 100 |
| BİP-46125 | | | | | | | | 125 |
| BİP-46160 | | | | | | | | 160 |
| BİP-46175 | | | | | | | | 175 |
| BİP-46200 | | | | | | | | 200 |
| BİP-46225 | | | | | | | | 225 |
| BİP-46250 | | | | | | | | 250 |
| BİP-46275 | | | | | | | | 275 |
| BİP-46300 | | | | | | | | 300 |
| BİP-46350 | | | | | | | | 350 |
| BİP-46400 | | | | | | | | 40 |
| BİP-46450 | | | | | | | | 450 |
| BİP-46500 | | | | | | | | 500 |
| BİP-4.2875 | 4.2 | | 4.6 | | | | | 75 |
| BİP-4.28100 | | | | | | | | 100 |
| BİP-4.28125 | | | | | | | | 125 |
| BİP-4.28150 | | | | | | | | 150 |
| BİP-4.28175 | | | | | | | | 175 |
| BİP-4.28200 | | | | | | | | 200 |
| BİP-4.28225 | | | | | | | | 225 |
| BİP-4.28250 | | | | | | | | 250 |
| BİP-4.28300 | | | | | | | | 300 |
| BİP-5875 | 5 | 8 | 5.4 | 14 | | | | 75 |
| BİP-58100 | | | | | | | | 100 |
| BİP-58125 | | | | | | | | 125 |
| BİP-58150 | | | | | | | | 150 |
| BİP-58160 | | | | | | | | 160 |
| BİP-58175 | | | | | | | | 175 |
| BİP-58200 | | | | | | | | 200 |
| BİP-58225 | | | | | | | | 225 |
| BİP-58250 | | | | | | | | 250 |
| BİP-58275 | | | | | | | | 275 |
| BİP-58300 | | | | | | | | 300 |
| BİP-58350 | | | | | | | | 350 |
| BİP-58400 | | | | | | | | 400 |
| BİP-58450 | | | | | | | | 450 |
| BİP-58500 | | | | | | | | 500 |
| BİP-5.28100 | 5.2 | | | | | | | 100 |
| BİP-5.28125 | | | | | | | | 125 |
| BİP-5.28150 | | | | | | | | 150 |
| BİP-5.28175 | | | | | | | | 175 |
| BİP-5.28200 | | | | | | | | 200 |
| BİP-5.28225 | | | | | | | | 225 |
| BİP-5.28250 | | | | | | | | 250 |
| BİP-5.28275 | | | | | | | | 275 |
| BİP-5.28300 | | | | | | | | 300 |
| BİP-61075 | 6 | 10 | 6.4 | 16 | 7 | 0.7 | 45 | 75 |
| BİP-610100 | | | | | | | | 100 |
| BİP-610125 | | | | | | | | 125 |
| BİP-610150 | | | | | | | | 150 |
| BİP-610160 | | | | | | | | 160 |
| BİP-610175 | | | | | | | | 175 |
| BİP-610200 | | | | | | | | 200 |
| BİP-610225 | | | | | | | | 225 |
| BİP-610250 | | | | | | | | 250 |
| BİP-610275 | | | | | | | | 275 |
| BİP-610300 | | | | | | | | 300 |
| BİP-610350 | | | | | | | | 350 |
| BİP-610400 | | | | | | | | 400 |
| BİP-610450 | | | | | | | | 450 |
| BİP-610500 | | | | | | | | 500 |

| Sipariş | d1 | d2 | d4 | d3 | K | R | L2 | L |
|---|---|---|---|---|---|---|---|---|
| BİP-6.210100 | 6.2 | 10 | 6.4 | 16 | 5 | 0.5 | | 100 |
| BİP-6.210125 | | | | | | | | 125 |
| BİP-6.210150 | | | | | | | | 150 |
| BİP-6.210175 | | | | | | | | 175 |
| BİP-6.210200 | | | | | | | | 200 |
| BİP-6.210225 | | | | | | | | 225 |
| BİP-6.210250 | | | | | | | | 250 |
| BİP-6.210275 | | | | | | | | 275 |
| BİP-6.210300 | | | | | | | | 300 |
| BİP-81275 | 8 | 12 | 8.4 | 20 | 7 | 0.7 | 45 | 75 |
| BİP-812100 | | | | | | | | 100 |
| BİP-812125 | | | | | | | | 125 |
| BİP-812150 | | | | | | | | 150 |
| BİP-812160 | | | | | | | | 160 |
| BİP-812175 | | | | | | | | 175 |
| BİP-812200 | | | | | | | | 200 |
| BİP-812225 | | | | | | | | 225 |
| BİP-812250 | | | | | | | | 250 |
| BİP-812275 | | | | | | | | 275 |
| BİP-812300 | | | | | | | | 300 |
| BİP-812350 | | | | | | | | 350 |
| BİP-812400 | | | | | | | | 400 |
| BİP-812450 | | | | | | | | 450 |
| BİP-812500 | | | | | | | | 500 |
| BİP-8.212100 | 8.2 | | | | | | | 100 |
| BİP-8.212125 | | | | | | | | 125 |
| BİP-8.212150 | | | | | | | | 150 |
| BİP-8.212175 | | | | | | | | 175 |
| BİP-8.212200 | | | | | | | | 200 |
| BİP-8.212225 | | | | | | | | 225 |
| BİP-8.212250 | | | | | | | | 250 |
| BİP-8.212275 | | | | | | | | 275 |
| BİP-8.212300 | | | | | | | | 300 |
| BİP-101475 | 10 | 14 | 10.4 | 22 | | | | 75 |
| BİP-1014100 | | | | | | | | 100 |
| BİP-1014125 | | | | | | | | 125 |
| BİP-1014150 | | | | | | | | 150 |
| BİP-1014160 | | | | | | | | 160 |
| BİP-1014175 | | | | | | | | 175 |
| BİP-1014200 | | | | | | | | 200 |
| BİP-1014225 | | | | | | | | 225 |
| BİP-1014250 | | | | | | | | 250 |
| BİP-1014275 | | | | | | | | 275 |
| BİP-1014300 | | | | | | | | 300 |
| BİP-1014350 | | | | | | | | 350 |
| BİP-1014400 | | | | | | | | 400 |
| BİP-1014450 | | | | | | | | 450 |
| BİP-1014500 | | | | | | | | 500 |
| BİP-121675 | 12 | 16 | 12.4 | | | | | 75 |
| BİP-1216100 | | | | | | | | 100 |
| BİP-1216125 | | | | | | | | 125 |
| BİP-1216150 | | | | | | | | 150 |
| BİP-1216160 | | | | | | | | 160 |
| BİP-1216175 | | | | | | | | 175 |
| BİP-1216200 | | | | | | | | 200 |
| BİP-1216225 | | | | | | | | 225 |
| BİP-1216250 | | | | | | | | 250 |
| BİP-1216275 | | | | | | | | 275 |
| BİP-1216300 | | | | | | | | 300 |
| BİP-1216350 | | | | | | | | 350 |
| BİP-1216400 | | | | | | | | 400 |
| BİP-1216450 | | | | | | | | 450 |
| BİP-1216500 | | | | | | | | 500 |

JBT

## HSS - Yüksek Hız Çeliği Zımba

**Malzeme** : Yüksek Hız Çeliği 1.3343
**Sertlik** : 60/62 HRC - Kafa 45+5 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-0.571 | 0.5 | 0.9 | 0.2 | 71 |
| ZIM-0.580 | | | | 80 |
| ZIM-0.5100 | | | | 100 |
| ZIM-0.671 | 0.6 | 1.1 | 0.2 | 71 |
| ZIM-0.680 | | | | 80 |
| ZIM-0.6100 | | | | 100 |
| ZIM-0.771 | 0.7 | 1.3 | 0.2 | 71 |
| ZIM-0.780 | | | | 80 |
| ZIM-0.7100 | | | | 100 |
| ZIM-0.871 | 0.8 | 1.4 | 0.4 | 71 |
| ZIM-0.880 | | | | 80 |
| ZIM-0.8100 | | | | 100 |
| ZIM-0.971 | 0.9 | 1.6 | 0.4 | 71 |
| ZIM-0.980 | | | | 80 |
| ZIM-0.9100 | | | | 100 |
| ZIM-171 | 1 | 1.8 | 0.5 | 71 |
| ZIM-180 | | | | 80 |
| ZIM-1100 | | | | 100 |
| ZIM-1.171 | 1.1 | 1.8 | 0.5 | 71 |
| ZIM-1.180 | | | | 80 |
| ZIM-1.1100 | | | | 100 |
| ZIM-1.271 | 1.2 | 2.0 | 0.5 | 71 |
| ZIM-1.280 | | | | 80 |
| ZIM-1.2100 | | | | 100 |
| ZIM-1.371 | 1.3 | 2.0 | 0.5 | 71 |
| ZIM-1.380 | | | | 80 |
| ZIM-1.3100 | | | | 100 |
| ZIM-1.471 | 1.4 | 2.2 | 0.5 | 71 |
| ZIM-1.480 | | | | 80 |
| ZIM-1.4100 | | | | 100 |
| ZIM-1.571 | 1.5 | 2.2 | 0.5 | 71 |
| ZIM-1.580 | | | | 80 |
| ZIM-1.5100 | | | | 100 |
| ZIM-1.671 | 1.6 | 2.5 | 0.5 | 71 |
| ZIM-1.680 | | | | 80 |
| ZIM-1.6100 | | | | 100 |
| ZIM-1.771 | 1.7 | 2.5 | 0.5 | 71 |
| ZIM-1.780 | | | | 80 |
| ZIM-1.7100 | | | | 100 |
| ZIM-1.871 | 1.8 | 2.8 | 0.5 | 71 |
| ZIM-1.880 | | | | 80 |
| ZIM-1.8100 | | | | 100 |
| ZIM-1.971 | 1.9 | 2.8 | 0.5 | 71 |
| ZIM-1.980 | | | | 80 |
| ZIM-1.9100 | | | | 100 |
| ZIM-271 | 2 | 3.0 | 0.5 | 71 |
| ZIM-280 | | | | 80 |
| ZIM-2100 | | | | 100 |
| ZIM-2125 | | | | 125 |
| ZIM-2160 | | | | 160 |

| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-2.171 | 2.1 | 3.2 | 0.5 | 71 |
| ZIM-2.180 | | | | 80 |
| ZIM-2.1100 | | | | 100 |
| ZIM-2.271 | 2.2 | 3.2 | 0.5 | 71 |
| ZIM-2.280 | | | | 80 |
| ZIM-2.2100 | | | | 100 |
| ZIM-2.371 | 2.3 | 3.5 | 0.5 | 71 |
| ZIM-2.380 | | | | 80 |
| ZIM-2.3100 | | | | 100 |
| ZIM-2.471 | 2.4 | 3.5 | 0.5 | 71 |
| ZIM-2.480 | | | | 80 |
| ZIM-2.4100 | | | | 100 |
| ZIM-2.571 | 2.5 | 3.5 | 0.5 | 71 |
| ZIM-2.580 | | | | 80 |
| ZIM-2.5100 | | | | 100 |
| ZIM-2.5125 | | | | 125 |
| ZIM-2.5160 | | | | 160 |
| ZIM-2.671 | 2.6 | 4.0 | 0.5 | 71 |
| ZIM-2.680 | | | | 80 |
| ZIM-2.6100 | | | | 100 |
| ZIM-2.771 | 2.7 | 4.0 | 0.5 | 71 |
| ZIM-2.780 | | | | 80 |
| ZIM-2.7100 | | | | 100 |
| ZIM-2.871 | 2.8 | 4.0 | 0.5 | 71 |
| ZIM-2.880 | | | | 80 |
| ZIM-2.8100 | | | | 100 |
| ZIM-2.971 | 2.9 | 4.0 | 0.5 | 71 |
| ZIM-2.980 | | | | 80 |
| ZIM-2.9100 | | | | 100 |
| ZIM-371 | 3 | 4.5 | 0.5 | 71 |
| ZIM-380 | | | | 80 |
| ZIM-3100 | | | | 100 |
| ZIM-3125 | | | | 125 |
| ZIM-3160 | | | | 160 |
| ZIM-3.171 | 3.1 | 4.5 | 0.5 | 71 |
| ZIM-3.180 | | | | 80 |
| ZIM-3.1100 | | | | 100 |
| ZIM-3.271 | 3.2 | 4.5 | 0.5 | 71 |
| ZIM-3.280 | | | | 80 |
| ZIM-3.2100 | | | | 100 |
| ZIM-3.371 | 3.3 | 4.5 | 0.5 | 71 |
| ZIM-3.380 | | | | 80 |
| ZIM-3.3100 | | | | 100 |
| ZIM-3.471 | 3.4 | 4.5 | 0.5 | 71 |
| ZIM-3.480 | | | | 80 |
| ZIM-3.4100 | | | | 100 |
| ZIM-3.571 | 3.5 | 5.0 | 0.5 | 71 |
| ZIM-3.580 | | | | 80 |
| ZIM-3.5100 | | | | 100 |
| ZIM-3.5125 | | | | 125 |
| ZIM-3.5160 | | | | 160 |

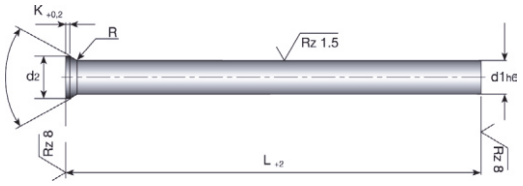
| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-3.671 | 3.6 | 5.0 | 0.5 | 71 |
| ZIM-3.680 | | | | 80 |
| ZIM-3.6100 | | | | 100 |
| ZIM-3.771 | 3.7 | 5.0 | 0.5 | 71 |
| ZIM-3.780 | | | | 80 |
| ZIM-3.7100 | | | | 100 |
| ZIM-3.871 | 3.8 | 5.0 | 0.5 | 71 |
| ZIM-3.880 | | | | 80 |
| ZIM-3.8100 | | | | 100 |
| ZIM-3.971 | 3.9 | 5.0 | 0.5 | 71 |
| ZIM-3.980 | | | | 80 |
| ZIM-3.9100 | | | | 100 |
| ZIM-471 | 4 | 5.5 | 0.5 | 71 |
| ZIM-480 | | | | 80 |
| ZIM-4100 | | | | 100 |
| ZIM-4125 | | | | 125 |
| ZIM-4160 | | | | 160 |
| ZIM-4.171 | 4.1 | 5.5 | 0.5 | 71 |
| ZIM-4.180 | | | | 80 |
| ZIM-4.1100 | | | | 100 |
| ZIM-4.271 | 4.2 | 5.5 | 0.5 | 71 |
| ZIM-4.280 | | | | 80 |
| ZIM-4.2100 | | | | 100 |
| ZIM-4.371 | 4.3 | 5.5 | 0.5 | 71 |
| ZIM-4.380 | | | | 80 |
| ZIM-4.3100 | | | | 100 |
| ZIM-4.471 | 4.4 | 5.5 | 0.5 | 71 |
| ZIM-4.480 | | | | 80 |
| ZIM-4.4100 | | | | 100 |
| ZIM-4.571 | 4.5 | 6.0 | 0.5 | 71 |
| ZIM-4.580 | | | | 80 |
| ZIM-4.5100 | | | | 100 |
| ZIM-4.5125 | | | | 125 |
| ZIM-4.5160 | | | | 160 |
| ZIM-4.671 | 4.6 | 6.0 | 0.5 | 71 |
| ZIM-4.680 | | | | 80 |
| ZIM-4.6100 | | | | 100 |
| ZIM-4.771 | 4.7 | 6.0 | 0.5 | 71 |
| ZIM-4.780 | | | | 80 |
| ZIM-4.7100 | | | | 100 |
| ZIM-4.871 | 4.8 | 6.0 | 0.5 | 71 |
| ZIM-4.880 | | | | 80 |
| ZIM-4.8100 | | | | 100 |
| ZIM-4.971 | 4.9 | 6.0 | 0.5 | 71 |
| ZIM-4.980 | | | | 80 |
| ZIM-4.9100 | | | | 100 |
| ZIM-571 | 5 | 6.5 | 0.5 | 71 |
| ZIM-580 | | | | 80 |
| ZIM-5100 | | | | 100 |
| ZIM-5125 | | | | 125 |
| ZIM-5160 | | | | 160 |

| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-5.171 | 5.1 | 6.5 | 0.5 | 71 |
| ZIM-5.180 | | | | 80 |
| ZIM-5.1100 | | | | 100 |
| ZIM-5.271 | 5.2 | 6.5 | 0.5 | 71 |
| ZIM-5.280 | | | | 80 |
| ZIM-5.2100 | | | | 100 |
| ZIM-5.371 | 5.3 | 6.5 | 0.5 | 71 |
| ZIM-5.380 | | | | 80 |
| ZIM-5.3100 | | | | 100 |
| ZIM-5.471 | 5.4 | 6.5 | 0.5 | 71 |
| ZIM-5.480 | | | | 80 |
| ZIM-5.4100 | | | | 100 |
| ZIM-5.571 | 5.5 | 7.0 | 0.5 | 71 |
| ZIM-5.580 | | | | 80 |
| ZIM-5.5100 | | | | 100 |
| ZIM-5.5125 | | | | 125 |
| ZIM-5.5160 | | | | 160 |
| ZIM-5.671 | 5.6 | 7.0 | 0.5 | 71 |
| ZIM-5.680 | | | | 80 |
| ZIM-5.6100 | | | | 100 |
| ZIM-5.771 | 5.7 | 7.0 | 0.5 | 71 |
| ZIM-5.780 | | | | 80 |
| ZIM-5.7100 | | | | 100 |
| ZIM-5.871 | 5.8 | 7.0 | 0.5 | 71 |
| ZIM-5.880 | | | | 80 |
| ZIM-5.8100 | | | | 100 |
| ZIM-5.971 | 5.9 | 7.0 | 0.5 | 71 |
| ZIM-5.980 | | | | 80 |
| ZIM-5.9100 | | | | 100 |
| ZIM-671 | 6 | 8.0 | 0.5 | 71 |
| ZIM-680 | | | | 80 |
| ZIM-6100 | | | | 100 |
| ZIM-6125 | | | | 125 |
| ZIM-6160 | | | | 160 |
| ZIM-6.171 | 6.1 | 8.0 | 0.5 | 71 |
| ZIM-6.180 | | | | 80 |
| ZIM-6.1100 | | | | 100 |
| ZIM-6.271 | 6.2 | 8.0 | 0.5 | 71 |
| ZIM-6.280 | | | | 80 |
| ZIM-6.2100 | | | | 100 |
| ZIM-6.371 | 6.3 | 8.0 | 0.5 | 71 |
| ZIM-6.380 | | | | 80 |
| ZIM-6.3100 | | | | 100 |
| ZIM-6.471 | 6.4 | 8.0 | 0.5 | 71 |
| ZIM-6.480 | | | | 80 |
| ZIM-6.4100 | | | | 100 |
| ZIM-6.571 | 6.5 | 9.0 | 1.0 | 71 |
| ZIM-6.580 | | | | 80 |
| ZIM-6.5100 | | | | 100 |
| ZIM-6.5125 | | | | 125 |
| ZIM-6.5160 | | | | 160 |

JBT

## HSS - Yüksek Hız Çeliği Zımba

**Malzeme** : Yüksek Hız Çeliği 1.3343
**Sertlik** : 60/62 HRC - Kafa 45+5 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-6.671 | 6.6 | 9.0 | 1.0 | 71 |
| ZIM-6.680 | | | | 80 |
| ZIM-6.6100 | | | | 100 |
| ZIM-6.771 | 6.7 | 9.0 | 1.0 | 71 |
| ZIM-6.780 | | | | 80 |
| ZIM-6.7100 | | | | 100 |
| ZIM-6.871 | 6.8 | 9.0 | 1.0 | 71 |
| ZIM-6.880 | | | | 80 |
| ZIM-6.8100 | | | | 100 |
| ZIM-6.971 | 6.9 | 9.0 | 1.0 | 71 |
| ZIM-6.980 | | | | 80 |
| ZIM-6.9100 | | | | 100 |
| ZIM-771 | 7 | 9.0 | 1.0 | 71 |
| ZIM-780 | | | | 80 |
| ZIM-7100 | | | | 100 |
| ZIM-7125 | | | | 125 |
| ZIM-7160 | | | | 160 |
| ZIM-7.171 | 7.1 | 9.0 | 1.0 | 71 |
| ZIM-7.180 | | | | 80 |
| ZIM-7.1100 | | | | 100 |
| ZIM-7.271 | 7.2 | 9.0 | 1.0 | 71 |
| ZIM-7.280 | | | | 80 |
| ZIM-7.2100 | | | | 100 |
| ZIM-7.371 | 7.3 | 9.0 | 1.0 | 71 |
| ZIM-7.380 | | | | 80 |
| ZIM-7.3100 | | | | 100 |
| ZIM-7.471 | 7.4 | 9.0 | 1.0 | 71 |
| ZIM-7.480 | | | | 80 |
| ZIM-7.4100 | | | | 100 |
| ZIM-7.571 | 7.5 | 10 | 1.0 | 71 |
| ZIM-7.580 | | | | 80 |
| ZIM-7.5100 | | | | 100 |
| ZIM-7.5125 | | | | 125 |
| ZIM-7.5160 | | | | 160 |
| ZIM-7.671 | 7.6 | 10 | 1.0 | 71 |
| ZIM-7.680 | | | | 80 |
| ZIM-7.6100 | | | | 100 |
| ZIM-7.771 | 7.7 | 10 | 1.0 | 71 |
| ZIM-7.780 | | | | 80 |
| ZIM-7.7100 | | | | 100 |
| ZIM-7.871 | 7.8 | 10 | 1.0 | 71 |
| ZIM-7.880 | | | | 80 |
| ZIM-7.8100 | | | | 100 |
| ZIM-7.971 | 7.9 | 10 | 1.0 | 71 |
| ZIM-7.980 | | | | 80 |
| ZIM-7.9100 | | | | 100 |

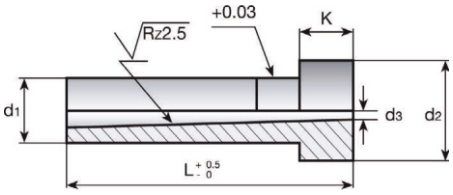
| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-871 | 8 | 10 | 1.0 | 71 |
| ZIM-880 | | | | 80 |
| ZIM-8100 | | | | 100 |
| ZIM-8125 | | | | 125 |
| ZIM-8160 | | | | 160 |
| ZIM-8.171 | 8.1 | 10 | 1.0 | 71 |
| ZIM-8.180 | | | | 80 |
| ZIM-8.1100 | | | | 100 |
| ZIM-8.271 | 8.2 | 10 | 1.0 | 71 |
| ZIM-8.280 | | | | 80 |
| ZIM-8.2100 | | | | 100 |
| ZIM-8.371 | 8.3 | 10 | 1.0 | 71 |
| ZIM-8.380 | | | | 80 |
| ZIM-8.3100 | | | | 100 |
| ZIM-8.471 | 8.4 | 10 | 1.0 | 71 |
| ZIM-8.480 | | | | 80 |
| ZIM-8.4100 | | | | 100 |
| ZIM-8.571 | 8.5 | 11 | 1.0 | 71 |
| ZIM-8.580 | | | | 80 |
| ZIM-8.5100 | | | | 100 |
| ZIM-8.5125 | | | | 125 |
| ZIM-8.5160 | | | | 160 |
| ZIM-8.671 | 8.6 | 11 | 1.0 | 71 |
| ZIM-8.680 | | | | 80 |
| ZIM-8.6100 | | | | 100 |
| ZIM-8.771 | 8.7 | 11 | 1.0 | 71 |
| ZIM-8.780 | | | | 80 |
| ZIM-8.7100 | | | | 100 |
| ZIM-8.871 | 8.8 | 11 | 1.0 | 71 |
| ZIM-8.880 | | | | 80 |
| ZIM-8.8100 | | | | 100 |
| ZIM-8.971 | 8.9 | 11 | 1.0 | 71 |
| ZIM-8.980 | | | | 80 |
| ZIM-8.9100 | | | | 100 |
| ZIM-971 | 9 | 11 | 1.0 | 71 |
| ZIM-980 | | | | 80 |
| ZIM-9100 | | | | 100 |
| ZIM-9125 | | | | 125 |
| ZIM-9160 | | | | 160 |
| ZIM-9.571 | 9.5 | 12 | 1.0 | 71 |
| ZIM-9.580 | | | | 80 |
| ZIM-9.5100 | | | | 100 |
| ZIM-9.5125 | | | | 125 |
| ZIM-9.5160 | | | | 160 |
| ZIM-1071 | 10 | 12 | 1.0 | 71 |
| ZIM-1080 | | | | 80 |
| ZIM-10100 | | | | 100 |
| ZIM-10125 | | | | 125 |
| ZIM-10160 | | | | 160 |

| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-10.171 | 10.1 | 12 | 1.0 | 71 |
| ZIM-10.180 | | | | 80 |
| ZIM-10.1100 | | | | 100 |
| ZIM-10.271 | 10.2 | 12 | 1.0 | 71 |
| ZIM-10.280 | | | | 80 |
| ZIM-10.2100 | | | | 100 |
| ZIM-10.371 | 10.3 | 12 | 1.0 | 71 |
| ZIM-10.380 | | | | 80 |
| ZIM-10.3100 | | | | 100 |
| ZIM-10.471 | 10.4 | 12 | 1.0 | 71 |
| ZIM-10.480 | | | | 80 |
| ZIM-10.4100 | | | | 100 |
| ZIM-10.571 | 10.5 | 13 | 1.0 | 71 |
| ZIM-10.580 | | | | 80 |
| ZIM-10.5100 | | | | 100 |
| ZIM-10.5125 | | | | 125 |
| ZIM-10.5160 | | | | 160 |
| ZIM-1171 | 11 | 13 | 1.0 | 71 |
| ZIM-1180 | | | | 80 |
| ZIM-11100 | | | | 100 |
| ZIM-11125 | | | | 125 |
| ZIM-11160 | | | | 160 |
| ZIM-11.571 | 11.5 | 14 | 1.0 | 71 |
| ZIM-11.580 | | | | 80 |
| ZIM-11.5100 | | | | 100 |
| ZIM-11.5125 | | | | 125 |
| ZIM-11.5160 | | | | 160 |
| ZIM-1271 | 12 | 14 | 1.0 | 71 |
| ZIM-1280 | | | | 80 |
| ZIM-12100 | | | | 100 |
| ZIM-12125 | | | | 125 |
| ZIM-12160 | | | | 160 |
| ZIM-12.571 | 12.5 | 15 | 1.5 | 71 |
| ZIM-12.580 | | | | 80 |
| ZIM-12.5100 | | | | 100 |
| ZIM-12.5125 | | | | 125 |
| ZIM-12.5160 | | | | 160 |
| ZIM-1371 | 13 | 15 | 1.5 | 71 |
| ZIM-1380 | | | | 80 |
| ZIM-13100 | | | | 100 |
| ZIM-13125 | | | | 125 |
| ZIM-13160 | | | | 160 |
| ZIM-13.571 | 13.5 | 16 | 1.5 | 71 |
| ZIM-13.580 | | | | 80 |
| ZIM-13.5100 | | | | 100 |
| ZIM-13.5125 | | | | 125 |
| ZIM-13.5160 | | | | 160 |

| Sipariş | d1 | d2 | K | L |
|---|---|---|---|---|
| ZIM-1471 | 14 | 16 | 1.5 | 71 |
| ZIM-1480 | | | | 80 |
| ZIM-14100 | | | | 100 |
| ZIM-14125 | | | | 125 |
| ZIM-14160 | | | | 160 |
| ZIM-14.571 | 14.5 | 17 | 1.5 | 71 |
| ZIM-14.580 | | | | 80 |
| ZIM-14.5100 | | | | 100 |
| ZIM-14.5125 | | | | 125 |
| ZIM-14.5160 | | | | 160 |
| ZIM-1571 | 15 | 17 | 1.5 | 71 |
| ZIM-1580 | | | | 80 |
| ZIM-15100 | | | | 100 |
| ZIM-15125 | | | | 125 |
| ZIM-15160 | | | | 160 |
| ZIM-1671 | 16 | 18 | 1.5 | 71 |
| ZIM-1680 | | | | 80 |
| ZIM-16100 | | | | 100 |
| ZIM-16125 | | | | 125 |
| ZIM-16160 | | | | 160 |
| ZIM-16.571 | 16.5 | 19 | 1.5 | 71 |
| ZIM-16.580 | | | | 80 |
| ZIM-16.5100 | | | | 100 |
| ZIM-16.5125 | | | | 125 |
| ZIM-16.5160 | | | | 160 |
| ZIM-1771 | 17 | 19 | 1.5 | 71 |
| ZIM-1780 | | | | 80 |
| ZIM-17100 | | | | 100 |
| ZIM-17125 | | | | 125 |
| ZIM-17160 | | | | 160 |
| ZIM-1871 | 18 | 20 | 1.5 | 71 |
| ZIM-1880 | | | | 80 |
| ZIM-18100 | | | | 100 |
| ZIM-18125 | | | | 125 |
| ZIM-18160 | | | | 160 |
| ZIM-1971 | 19 | 21 | 1.5 | 71 |
| ZIM-1980 | | | | 80 |
| ZIM-19100 | | | | 100 |
| ZIM-19125 | | | | 125 |
| ZIM-19160 | | | | 160 |
| ZIM-2071 | 20 | 22 | 1.5 | 71 |
| ZIM-2080 | | | | 80 |
| ZIM-20100 | | | | 100 |
| ZIM-20125 | | | | 125 |
| ZIM-20160 | | | | 160 |

## MP - Plastik Kalıp Yolluk Memeleri

**Malzeme** : Özel Alaşımlı Çelik
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MPK-1250 | 12 | 28 | 20 | 3.3 | 50 |
| MPK-1265 | | | | | 65 |
| MPK-1275 | | | | | 75 |
| MPK-1285 | | | | | 85 |
| MPK-1295 | | | | | 95 |
| MPK-12105 | | | | | 105 |
| MPK-12115 | | | | | 115 |
| MPK-12125 | | | | | 125 |
| MPK-12135 | | | | | 135 |
| MPK-12150 | | | | | 150 |
| MPK-12200 | | | | | 200 |
| MPK-1450 | 14 | | | | 50 |
| MPK-1465 | | | | | 65 |
| MPK-1475 | | | | | 75 |
| MPK-1485 | | | | | 85 |
| MPK-1495 | | | | | 95 |
| MPK-14105 | | | | | 105 |
| MPK-14115 | | | | | 115 |
| MPK-14125 | | | | | 125 |
| MPK-14135 | | | | | 135 |
| MPK-14150 | | | | | 150 |
| MPK-14200 | | | | | 200 |

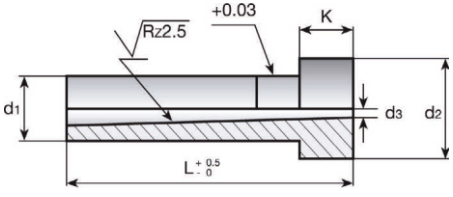
| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MP-1250 | 12 | 28 | 20 | 4.3 | 50 |
| MP-1265 | | | | | 65 |
| MP-1275 | | | | | 75 |
| MP-1285 | | | | | 85 |
| MP-1295 | | | | | 95 |
| MP-12105 | | | | | 105 |
| MP-12115 | | | | | 115 |
| MP-12125 | | | | | 125 |
| MP-12135 | | | | | 135 |
| MP-12150 | | | | | 150 |
| MP-12200 | | | | | 200 |
| MP-1450 | 14 | | | | 50 |
| MP-1465 | | | | | 65 |
| MP-1475 | | | | | 75 |
| MP-1485 | | | | | 85 |
| MP-1495 | | | | | 95 |
| MP-14105 | | | | | 105 |
| MP-14115 | | | | | 115 |
| MP-14125 | | | | | 125 |
| MP-14135 | | | | | 135 |
| MP-14150 | | | | | 150 |
| MP-14200 | | | | | 200 |

| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MP-1650 | 16 | 28 | 20 | 4.3 | 50 |
| MP-1665 | | | | | 65 |
| MP-1675 | | | | | 75 |
| MP-1685 | | | | | 85 |
| MP-1695 | | | | | 95 |
| MP-16105 | | | | | 105 |
| MP-16115 | | | | | 115 |
| MP-16125 | | | | | 125 |
| MP-16135 | | | | | 135 |
| MP-16150 | | | | | 150 |
| MP-16200 | | | | | 200 |
| MP-1850 | 18 | | | | 50 |
| MP-1865 | | | | | 65 |
| MP-1875 | | | | | 75 |
| MP-1885 | | | | | 85 |
| MP-1895 | | | | | 95 |
| MP-18105 | | | | | 105 |
| MP-18115 | | | | | 115 |
| MP-18125 | | | | | 125 |
| MP-18135 | | | | | 135 |
| MP-18150 | | | | | 150 |
| MP-18200 | | | | | 200 |

| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MP-2050 | 20 | 28 | 20 | 4.3 | 50 |
| MP-2065 | | | | | 65 |
| MP-2075 | | | | | 75 |
| MP-2085 | | | | | 85 |
| MP-2095 | | | | | 95 |
| MP-20105 | | | | | 105 |
| MP-20115 | | | | | 115 |
| MP-20125 | | | | | 125 |
| MP-20135 | | | | | 135 |
| MP-20150 | | | | | 150 |
| MP-20200 | | | | | 200 |

## MZ - Metal Kalıp Yolluk Memeleri

**Malzeme** : Sıcak İş Çeliği 1.2344
**Yüzey** : Sertleştirilmiş, Taşlanmış



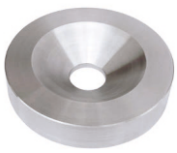

| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MZ-1250 | 12 | 28 | 25 | 5,6 | 50 |
| MZ-1265 | | | | | 65 |
| MZ-1275 | | | | | 75 |
| MZ-1285 | | | | | 85 |
| MZ-1295 | | | | | 95 |
| MZ-12105 | | | | | 105 |
| MZ-12115 | | | | | 115 |
| MZ-12125 | | | | | 125 |
| MZ-12135 | | | | | 135 |

| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MZ-1450 | 14 | 28 | 25 | 5,6 | 50 |
| MZ-1465 | | | | | 65 |
| MZ-1475 | | | | | 75 |
| MZ-1485 | | | | | 85 |
| MZ-1495 | | | | | 95 |
| MZ-14105 | | | | | 105 |
| MZ-14115 | | | | | 115 |
| MZ-14125 | | | | | 125 |
| MZ-14135 | | | | | 135 |

| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MZ-1650 | 16 | 28 | 25 | 5,6 | 50 |
| MZ-1665 | | | | | 65 |
| MZ-1675 | | | | | 75 |
| MZ-1685 | | | | | 85 |
| MZ-1695 | | | | | 95 |
| MZ-16105 | | | | | 105 |
| MZ-16115 | | | | | 115 |
| MZ-16125 | | | | | 125 |
| MZ-16135 | | | | | 135 |

| Sipariş | d1 | d2 | K | d3 | L |
|---|---|---|---|---|---|
| MZ-1850 | 18 | 28 | 25 | 5,6 | 50 |
| MZ-1865 | | | | | 65 |
| MZ-1875 | | | | | 75 |
| MZ-1885 | | | | | 85 |
| MZ-1895 | | | | | 95 |
| MZ-18105 | | | | | 105 |
| MZ-18115 | | | | | 115 |
| MZ-18125 | | | | | 125 |
| MZ-18135 | | | | | 135 |
| MZ-2050 | 20 | 28 | 25 | 5,6 | 50 |
| MZ-2065 | | | | | 65 |
| MZ-2075 | | | | | 75 |
| MZ-2085 | | | | | 85 |
| MZ-2095 | | | | | 95 |
| MZ-20105 | | | | | 105 |
| MZ-20115 | | | | | 115 |
| MZ-20125 | | | | | 125 |
| MZ-20135 | | | | | 135 |
| MZ-20150 | | | | | 150 |
| MZ-20200 | | | | | 200 |

## MFY - Kalıp Yolluk Flanşı



**Malzeme** : Sıcak İş Çeliği 1.2344
**Yüzey** : Sertleştirilmiş, Taşlanmış

| Sipariş | Flanş Çapı | Kalınlık | Delik Çapı |
|---|---|---|---|
| MFY-80 | 80 | 25 | 28 |
| MFY-100 | 100 | | |
| MFY-125 | 125 | | |

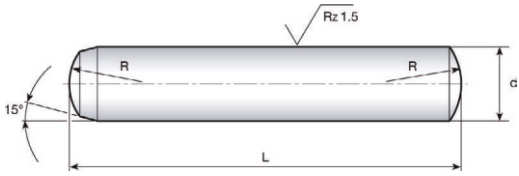
| Sipariş | Flanş Çapı | Kalınlık | Delik Çapı |
|---|---|---|---|
| MFY-150 | 150 | 25 | 28 |
| MFY-160 | 160 | | |
| MFY-200 | 200 | | |

**Standart dışı özel ölçüler sipariş üzerine temin edilebilir.**

JBT

## DTP - Düz Tespit Pimi

**Sertlik** : 60 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış
**Standart** : h6 / m6 Toleranslı




| Sipariş | d | L |
|---|---|---|
| DTP-410 | 4 | 10 |
| DTP-415 | | 16 |
| DTP-420 | | 20 |
| DTP-425 | | 24 |
| DTP-430 | | 30 |
| DTP-435 | | 36 |
| DTP-440 | | 40 |
| DTP-445 | | 45 |
| DTP-450 | | 50 |
| DTP-455 | | 55 |
| DTP-460 | | 60 |
| DTP-510 | 5 | 10 |
| DTP-515 | | 16 |
| DTP-520 | | 20 |
| DTP-525 | | 24 |
| DTP-530 | | 30 |
| DTP-535 | | 36 |
| DTP-540 | | 40 |
| DTP-545 | | 45 |
| DTP-550 | | 50 |

| Sipariş | d | L |
|---|---|---|
| DTP-555 | 5 | 55 |
| DTP-560 | | 60 |
| DTP-565 | | 65 |
| DTP-570 | | 70 |
| DTP-580 | | 80 |
| DTP-610 | 6 | 10 |
| DTP-615 | | 16 |
| DTP-620 | | 20 |
| DTP-625 | | 24 |
| DTP-630 | | 30 |
| DTP-635 | | 36 |
| DTP-640 | | 40 |
| DTP-645 | | 45 |
| DTP-650 | | 50 |
| DTP-655 | | 55 |
| DTP-660 | | 60 |
| DTP-670 | | 70 |
| DTP-680 | | 80 |
| DTP-690 | | 90 |
| DTP-6100 | | 100 |

| Sipariş | d | L |
|---|---|---|
| DTP-810 | 8 | 10 |
| DTP-815 | | 16 |
| DTP-820 | | 20 |
| DTP-825 | | 24 |
| DTP-830 | | 30 |
| DTP-835 | | 36 |
| DTP-840 | | 40 |
| DTP-845 | | 45 |
| DTP-850 | | 50 |
| DTP-855 | | 55 |
| DTP-860 | | 60 |
| DTP-870 | | 70 |
| DTP-880 | | 80 |
| DTP-890 | | 90 |
| DTP-8100 | | 100 |
| DTP-8120 | | 120 |
| DTP-1015 | 10 | 16 |
| DTP-1020 | | 20 |
| DTP-1025 | | 24 |
| DTP-1030 | | 30 |

| Sipariş | d | L |
|---|---|---|
| DTP-1035 | 10 | 36 |
| DTP-1040 | | 40 |
| DTP-1045 | | 45 |
| DTP-1050 | | 50 |
| DTP-1055 | | 55 |
| DTP-1060 | | 60 |
| DTP-1065 | | 65 |
| DTP-1070 | | 70 |
| DTP-1080 | | 80 |
| DTP-1090 | | 90 |
| DTP-10100 | | 100 |
| DTP-10120 | | 120 |
| DTP-1220 | 12 | 20 |
| DTP-1225 | | 24 |
| DTP-1230 | | 30 |
| DTP-1235 | | 36 |
| DTP-1240 | | 40 |
| DTP-1245 | | 45 |
| DTP-1250 | | 50 |
| DTP-1255 | | 55 |

| Sipariş | d | L |
|---|---|---|
| DTP-1260 | 12 | 60 |
| DTP-1265 | | 65 |
| DTP-1270 | | 70 |
| DTP-1280 | | 80 |
| DTP-1290 | | 90 |
| DTP-12100 | | 100 |
| DTP-12120 | | 120 |
| DTP-12140 | | 140 |
| DTP-12150 | | 150 |
| DTP-12160 | | 160 |
| DTP-1420 | 14 | 20 |
| DTP-1425 | | 25 |
| DTP-1430 | | 30 |
| DTP-1435 | | 36 |
| DTP-1440 | | 40 |
| DTP-1445 | | 45 |
| DTP-1450 | | 50 |
| DTP-1455 | | 55 |
| DTP-1460 | | 60 |
| DTP-1470 | | 70 |

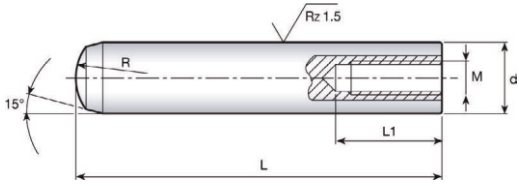
| Sipariş | d | L |
|---|---|---|
| DTP-1480 | 14 | 80 |
| DTP-1490 | | 90 |
| DTP-14100 | | 100 |
| DTP-14120 | | 120 |
| DTP-14140 | | 140 |
| DTP-14150 | | 150 |
| DTP-14160 | | 160 |
| DTP-1630 | 16 | 30 |
| DTP-1635 | | 36 |
| DTP-1640 | | 40 |
| DTP-1645 | | 45 |
| DTP-1650 | | 50 |
| DTP-1655 | | 55 |
| DTP-1660 | | 60 |
| DTP-1670 | | 70 |
| DTP-1680 | | 80 |
| DTP-1690 | | 90 |
| DTP-16100 | | 100 |
| DTP-16120 | | 120 |
| DTP-16140 | | 140 |

| Sipariş | d | L |
|---|---|---|
| DTP-16150 | 16 | 150 |
| DTP-16160 | | 160 |
| DTP-2030 | 20 | 30 |
| DTP-2035 | | 35 |
| DTP-2040 | | 40 |
| DTP-2045 | | 45 |
| DTP-2050 | | 50 |
| DTP-2055 | | 55 |
| DTP-2060 | | 60 |
| DTP-2070 | | 70 |
| DTP-2080 | | 80 |
| DTP-2090 | | 90 |
| DTP-20100 | | 100 |
| DTP-20120 | | 120 |
| DTP-20140 | | 140 |
| DTP-20150 | | 150 |
| DTP-20160 | | 160 |

JBT

## ÇTP - Çektirmeli Tespit Pimi

**Sertlik** : 60 HRC
**Yüzey** : Sertleştirilmiş, Taşlanmış
**Standart** : h6 / m6 Toleranslı



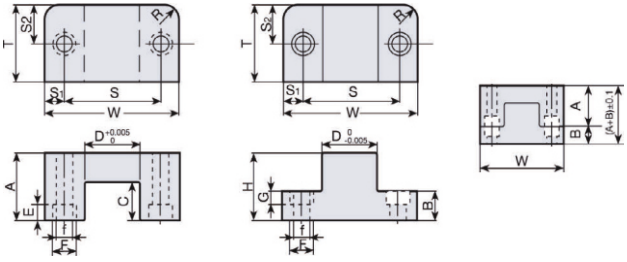

| Sipariş | d | M | L1 | L |
|---|---|---|---|---|
| ÇTP-510 | 5 | M3 | 6 | 10 |
| ÇTP-515 | | | | 16 |
| ÇTP-520 | | | | 20 |
| ÇTP-525 | | | | 24 |
| ÇTP-530 | | | | 30 |
| ÇTP-535 | | | | 36 |
| ÇTP-540 | | | | 40 |
| ÇTP-545 | | | | 45 |
| ÇTP-550 | | | | 50 |
| ÇTP-555 | | | | 55 |
| ÇTP-560 | | | | 60 |
| ÇTP-570 | | | | 70 |
| ÇTP-580 | | | | 80 |
| ÇTP-590 | | | | 90 |
| ÇTP-5100 | | | | 100 |
| ÇTP-615 | 6 | M4 | 10 | 16 |
| ÇTP-620 | | | | 20 |
| ÇTP-625 | | | | 24 |
| ÇTP-630 | | | | 30 |
| ÇTP-635 | | | | 36 |
| ÇTP-640 | | | | 40 |
| ÇTP-645 | | | | 45 |
| ÇTP-650 | | | | 50 |
| ÇTP-655 | | | | 55 |
| ÇTP-660 | | | | 60 |
| ÇTP-670 | | | | 70 |
| ÇTP-680 | | | | 80 |
| ÇTP-690 | | | | 90 |
| ÇTP-6100 | | | | 100 |
| ÇTP-6120 | | | | 120 |
| ÇTP-815 | 8 | M5 | 12 | 16 |
| ÇTP-820 | | | | 20 |

| Sipariş | d | M | L1 | L |
|---|---|---|---|---|
| ÇTP-825 | 8 | M5 | 12 | 24 |
| ÇTP-830 | | | | 30 |
| ÇTP-835 | | | | 36 |
| ÇTP-840 | | | | 40 |
| ÇTP-845 | | | | 45 |
| ÇTP-850 | | | | 50 |
| ÇTP-855 | | | | 55 |
| ÇTP-860 | | | | 60 |
| ÇTP-865 | | | | 65 |
| ÇTP-870 | | | | 70 |
| ÇTP-880 | | | | 80 |
| ÇTP-890 | | | | 90 |
| ÇTP-8100 | | | | 100 |
| ÇTP-8120 | | | | 120 |
| ÇTP-1020 | 10 | M6 | 16 | 20 |
| ÇTP-1025 | | | | 24 |
| ÇTP-1030 | | | | 30 |
| ÇTP-1035 | | | | 36 |
| ÇTP-1040 | | | | 40 |
| ÇTP-1045 | | | | 45 |
| ÇTP-1050 | | | | 50 |
| ÇTP-1055 | | | | 55 |
| ÇTP-1060 | | | | 60 |
| ÇTP-1070 | | | | 70 |
| ÇTP-1080 | | | | 80 |
| ÇTP-1090 | | | | 90 |
| ÇTP-10100 | | | | 100 |
| ÇTP-10120 | | | | 120 |
| ÇTP-10140 | | | | 140 |
| ÇTP-10150 | | | | 150 |
| ÇTP-10160 | | | | 160 |

| Sipariş | d | M | L1 | L |
|---|---|---|---|---|
| ÇTP-1220 | 12 | M6 | 16 | 20 |
| ÇTP-1225 | | | | 24 |
| ÇTP-1230 | | | | 30 |
| ÇTP-1235 | | | | 36 |
| ÇTP-1240 | | | | 40 |
| ÇTP-1245 | | | | 45 |
| ÇTP-1250 | | | | 50 |
| ÇTP-1255 | | | | 55 |
| ÇTP-1260 | | | | 60 |
| ÇTP-1270 | | | | 70 |
| ÇTP-1280 | | | | 80 |
| ÇTP-1290 | | | | 90 |
| ÇTP-12100 | | | | 100 |
| ÇTP-12120 | | | | 120 |
| ÇTP-12140 | | | | 140 |
| ÇTP-12150 | | | | 150 |
| ÇTP-12160 | | | | 160 |
| ÇTP-1425 | 14 | M8 | 20 | 24 |
| ÇTP-1430 | | | | 30 |
| ÇTP-1435 | | | | 36 |
| ÇTP-1440 | | | | 40 |
| ÇTP-1445 | | | | 45 |
| ÇTP-1450 | | | | 50 |
| ÇTP-1455 | | | | 55 |
| ÇTP-1460 | | | | 60 |
| ÇTP-1470 | | | | 70 |
| ÇTP-1480 | | | | 80 |
| ÇTP-1490 | | | | 90 |
| ÇTP-14100 | | | | 100 |
| ÇTP-14120 | | | | 120 |
| ÇTP-14140 | | | | 140 |
| ÇTP-14150 | | | | 150 |
| ÇTP-14160 | | | | 160 |

| Sipariş | d | M | L1 | L |
|---|---|---|---|---|
| ÇTP-1630 | 16 | M8 | 20 | 30 |
| ÇTP-1635 | | | | 36 |
| ÇTP-1640 | | | | 40 |
| ÇTP-1645 | | | | 45 |
| ÇTP-1650 | | | | 50 |
| ÇTP-1655 | | | | 55 |
| ÇTP-1660 | | | | 60 |
| ÇTP-1670 | | | | 70 |
| ÇTP-1680 | | | | 80 |
| ÇTP-1690 | | | | 90 |
| ÇTP-16100 | | | | 100 |
| ÇTP-16120 | | | | 120 |
| ÇTP-16130 | | | | 130 |
| ÇTP-16140 | | | | 140 |
| ÇTP-16150 | | | | 150 |
| ÇTP-16160 | | | | 160 |
| ÇTP-2030 | 20 | M10 | 25 | 30 |
| ÇTP-2035 | | | | 36 |
| ÇTP-2040 | | | | 40 |
| ÇTP-2045 | | | | 45 |
| ÇTP-2050 | | | | 50 |
| ÇTP-2055 | | | | 55 |
| ÇTP-2060 | | | | 60 |
| ÇTP-2070 | | | | 70 |
| ÇTP-2080 | | | | 80 |
| ÇTP-2090 | | | | 90 |
| ÇTP-20100 | | | | 100 |
| ÇTP-20120 | | | | 120 |
| ÇTP-20130 | | | | 130 |
| ÇTP-20140 | | | | 140 |
| ÇTP-20150 | | | | 150 |
| ÇTP-20160 | | | | 160 |



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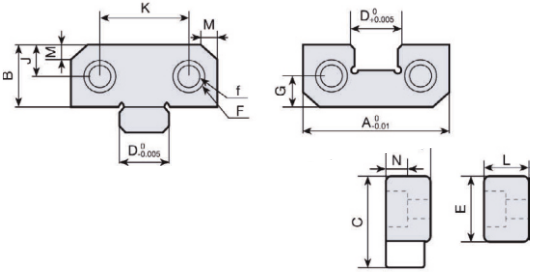
## KBK / LK - Küp Blok Kitleme

| Sipariş | W | T | A | B | C | D | E | M | F | f | G | H | R | S | S1 | S2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LK15 | 38,1 | 25,4 | 22,17 | 9,47 | 13,13 | 12,7 | 7 | M5 | 10,5 | 6 | 7 | 22,1 | 7 | 25,4 | 6,35 | 12,7 |
| LK25 | 63,5 | 38,1 | 34,87 | 15,82 | 19,48 | 25,4 | 8 | M6 | 12 | 7,2 | 8 | 34,8 | 8,5 | 44,45 | 9,53 | 19,05 |
| LK35 | 88,9 | 50,8 | 44,4 | 19 | 25,7 | 36,58 | 11 | M8 | 15,5 | 10,5 | 11 | 44,2 | 9,5 | 63,5 | 12,7 | 25,4 |



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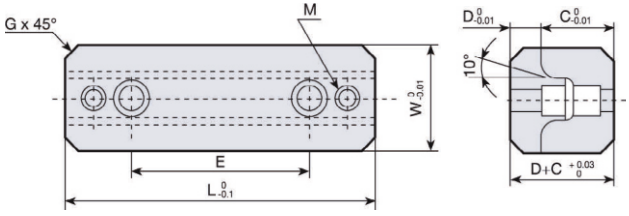
## KKB / PL - Kare Blok Kitleme

| Sipariş | A | B | C | D | E | F | f | G | J | K | L | M | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PL38 | 38 | 22 | 30 | 12 | 22 | 10,5 | 6,5 | 7 | 11 | 22 | 13 | 5 | 8 |
| PL50 | 50 | 21,5 | 30 | 17 | 21,5 | 10,5 | 6,5 | 11 | 11 | 34 | 16 | 5 | 8 |
| PL75 | 75 | 36 | 50 | 25 | 36 | 16,5 | 10,5 | 18 | 18 | 50 | 19 | 8 | 12 |
| PL100 | 100 | 45 | 65 | 35 | 45 | 16,5 | 10,5 | 22 | 22 | 70 | 19 | 10 | 12 |
| PL125 | 125 | 45 | 65 | 45 | 45 | 16,5 | 10,5 | 22 | 22 | 84 | 25 | 10 | 12 |



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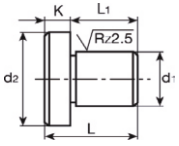
## UKK / KY - Uzun Kare Blok Kitleme

| Sipariş | L | W | C | D | E | G | M |
|---|---|---|---|---|---|---|---|
| KY50 | 50 | 25 | 17,5 | 8 | - | 5 | M5 |
| KY100 | 100 | 30 | 22 | 10 | 60 | 5 | M6 |
| KY150 | 150 | 40 | 25 | 13 | 100 | 5 | M6 |

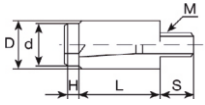





| d1 | d2 | K | L | L1 |
|---|---|---|---|---|
| 8 | 16 | 5 | 17 | 12 |
| 14 | 24 | 6 | 21 | 15 |

**DP - Dayama Plakası**



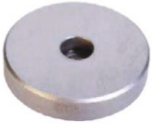


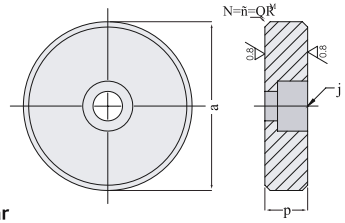




| D | d | M | B | H | L | S |
|---|---|---|---|---|---|---|
| 10 | 11,5 | M6 | 5 | 4,5 | 18 | 8 |
| 12 | 11,5 | M6 | 5 | 4,5 | 18 | 8 |
| 13 | 11,5 | M6 | 5 | 4,5 | 20 | 8 |
| 16 | 14 | M8 | 6 | 4,5 | 25 | 10 |
| 20 | 16 | M10 | 6 | 5,5 | 30 | 10 |

**ÇEKTİRME - Plastik Çektirme**

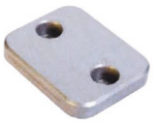


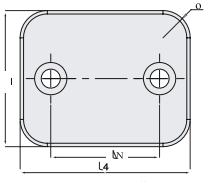


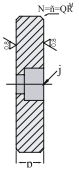

Maça Altlıkları–Hareketli veya Sabit Yüzeylerde

| D -0.4 | S ±0.03 | M |
|---|---|---|
| 20 | 8.1 | M5 |
| 32 | 8.1 | M5 |
| 40 | 10.1 | M6 |
| 50 | 10.1 | M6 |
| 64 | 12.1 | M6 |

**YP - Yuvarlak, Çelik Sıkma Plakalar**





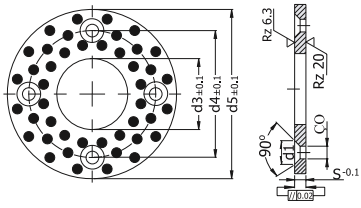




| $B_{-0.5}$ | $L_{-0.5}$ | $S^{+0.02}_{0}$ | L1 | R | M |
|---|---|---|---|---|---|
| 32 | 40 | 8.1 | 24 | 8 | M5 |
| | 64 | | 40 | | M5 |
| | 100 | 10.1 | 64 | | M5 |
| 40 | 50 | 8.1 | 32 | 8 | M5 |
| | 80 | 10.1 | 52 | | M6 |
| | 100 | 12.1 | 64 | | |
| 50 | 64 | 10.1 | 40 | 8 | M6 |
| | 100 | 12.1 | 64 | | |
| | 125 | | 80 | | |
| 64 | 80 | 10.1 | 52 | 8 | M6 |
| | 100 | 12.1 | 64 | | |
| | 125 | | 80 | | |
| | 160 | | 100 | | |

**DP - Dikdörtgen, Çelik Sıkma Plakalar**

Maça Altlıkları–Hareketli veya Sabit Yüzeylerde

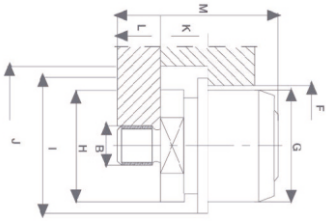


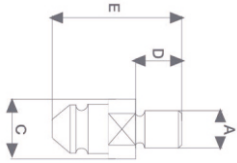



| d3 | d5 | d4 | s | d1 | d2 | Delik |
|---|---|---|---|---|---|---|
| 12.2 | 40 | 28 | 3 | - | - | - |
| 16.2 | 50 | 28 | 3 | - | - | - |
| 20.2 | 50 | 35 | 5 | 11.5 | 5.5 | 2 |
| 25.2 | 55 | 40 | 5 | 11.5 | 5.5 | 2 |
| 30.2 | 60 | 45 | 5 | 11.5 | 5.5 | 2 |
| 35.2 | 70 | 50 | 5 | 11.5 | 5.5 | 2 |
| 40.2 | 80 | 60 | 7 | 13.8 | 6.6 | 2 |
| 45.3 | 90 | 67.5 | 7 | 13.8 | 6.6 | 2 |
| 50.3 | 100 | 75 | 8 | 13.8 | 6.6 | 4 |
| 60.3 | 120 | 90 | 8 | 18.3 | 8.4 | 4 |
| 70.3 | 130 | 100 | 10 | 18.3 | 8.4 | 4 |
| 80.3 | 150 | 120 | 10 | 18.3 | 8.4 | 4 |

**Bronz Grafitli Delikli Flanş**

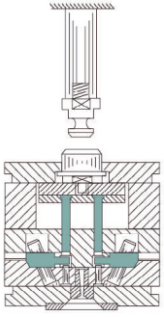




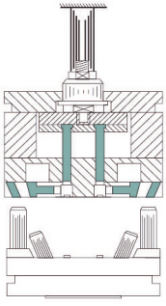

## OPC - Otomatik İtici Plaka Bağlantı Sistemleri

**1. Pozisyon**



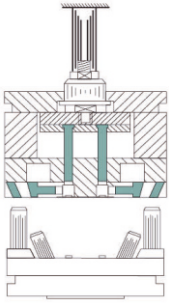
**1. Pozisyon:**
Kalıp kapalıyken hammadde kalıba enjekte edilir.

**2. Pozisyon**



**2. Pozisyon:**
Kalıp ile birlikte maçalardan açılır. Sistemin makina itici grubunun uç kısmına monte edilen hareketli pim, yuvasına girer ve kitlenir. Hareket devam eder, itici pimler mamülü kalıptan çıkarır ve tekrar geriye çekerek itici pim olası maça temasına karşı korur.

**3. Pozisyon**



**3. Pozisyon:**
Kalıp kapanır.
Sistem görevini tamamlamıştır.

Kullanım ve avantajları; bu sistem özellikle maçalı kalıplar için ideal olup maçaların altında kalan iticileri kalıp kapanmadan önce geri çekmeyi sağlayan sistemdir. Otomatik çalışması istenen kalıplarda yay vs. Kullanmadan defalarca itici vuruşu sağlanabilir. Kalıp üzerindeki uygulamalarında iticiyi maça bindirmelerine karşı koruma sağlar. Bakım–onarım masraflarından ve zamandan tasarruf sağlar.

| Ürün Kodu | d | G | d1 | d2 | d3 | d4 | L2 | L1 | L | SW | kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OPC-01 EG 12 | M12 x 1.75 | 34 | 32 | 32 | 39 | 44 | 10 | 15 | 42.5 | 30 | 1500 |
| OPC-01 EG 16 | M16 x 1.5 | 34 | 32 | 32 | 39 | 44 | 10 | 15 | 42.5 | 30 | 1500 |
| OPC-02 EG 16 | M16 x 1.5 | 40 | 38 | 38 | 48 | 53 | 13 | 15 | 52 | 32 | 2400 |
| OPC-02 EG 16-2 | M16 x 2.0 | 40 | 38 | 38 | 48 | 70 | 13 | 15 | 52 | 32 | 2400 |
| OPC-03 EG 16 | M16 x 1.5 | 58 | 56 | 52 | 65 | 70 | 17 | 18 | 68 | 46 | 3200 |
| OPC-03 EG 18 | M18 x 1.5 | 58 | 56 | 52 | 65 | 70 | 17 | 18 | 68 | 46 | 3200 |
| OPC-03 EG 20 | M20 x 1.5 | 58 | 56 | 52 | 65 | 70 | 17 | 18 | 68 | 46 | 3200 |
| OPC-03 EG 24 | M24 x 1.5 | 58 | 56 | 52 | 65 | 70 | 17 | 18 | 68 | 46 | 3200 |
| OPC-03 EG 27 | M27 x 1.5 | 58 | 56 | 52 | 65 | 70 | 17 | 18 | 68 | 46 | 3200 |
| OPC-03 EG 30 | M30 x 1.5 | 58 | 56 | 52 | 65 | 70 | 17 | 18 | 68 | 46 | 3200 |

| Ürün Kodu | d | SW | d1 | L1 | L | kg |
|---|---|---|---|---|---|---|
| OPC-01 EU 10 | M10 x 1.50 | 19 | 22.8 | 20 | 45.5 | 1500 |
| OPC-01 EU 12 | M12 x 1.75 | 19 | 22.8 | 20 | 45.5 | 1500 |
| OPC-01 EU 14 | M14 x 2.0 | 19 | 22.8 | 20 | 45.5 | 1500 |
| OPC-01 EU 16 | M16 x 2.0 | 19 | 22.8 | 20 | 45.5 | 1500 |

| Ürün Kodu | d | SW | d1 | L1 | L | kg |
|---|---|---|---|---|---|---|
| OPC-02 EU 10 | M10 x 1.50 | 22 | 25.8 | 20 | 55 | 2400 |
| OPC-02 EU 12 | M12 x 1.75 | 22 | 25.8 | 20 | 55 | 2400 |
| OPC-02 EU 14 | M14 x 2.0 | 22 | 25.8 | 20 | 55 | 2400 |
| OPC-02 EU 16 | M16 x 2.0 | 22 | 25.8 | 20 | 55 | 2400 |

| Ürün Kodu | d | SW | d1 | L1 | L | kg |
|---|---|---|---|---|---|---|
| OPC-03 EU 16 | M16 x 2.0 | 32 | 35 | 25 | 68 | 3200 |
| OPC-03 EU 18 | M18 x 2.5 | 32 | 35 | 25 | 68 | 3200 |
| OPC-03 EU 20 | M20 x 2.5 | 32 | 35 | 25 | 68 | 3200 |
| OPC-03 EU 24 | M24 x 3.0 | 32 | 35 | 25 | 68 | 3200 |
| OPC-03 EU 27 | M27 x 3.0 | 32 | 35 | 25 | 68 | 3200 |
| OPC-03 EU 30 | M30 x 3.5 | 32 | 35 | 25 | 68 | 3200 |



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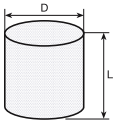
## GAF - Gaz Atma Filtresi




| D | L |
|---|---|
| 2 | 5 |
| 3 | 8 |
| 4 | 10 |
| 5 | 10 |
| 6 | 10 |

| D | L |
|---|---|
| 8 | 10 |
| 10 | 10 |
| 12 | 15 |
| 15 | 10 |
| 16 | 10 |



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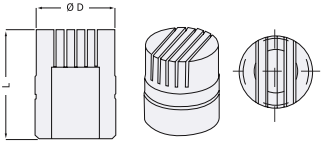
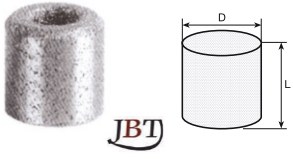
## Gaz Atma Filtresi Kanallı




| D | L |
|---|---|
| 6 | 10 |
| 8 | 10 |
| 10 | 10 |
| 12 | 10.5 |

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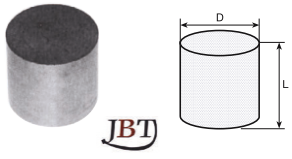
## HFGAZ - Sinterli Gaz Atma Filtresi

| Sipariş | D | L |
|---|---|---|
| HFGAZ-3 | 3 | 10 |
| HFGAZ-4 | 4 | 10 |
| HFGAZ-5 | 5 | 10 |
| HFGAZ-6 | 6 | 10 |

| Sipariş | D | L |
|---|---|---|
| HFGAZ-8 | 8 | 10 |
| HFGAZ-10 | 10 | 10 |
| HFGAZ-12 | 12 | 12 |

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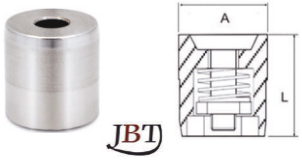
## Çelik Sinterli Gaz Atma Filtresi

| Sipariş | D | L |
|---|---|---|
| HFGAZÇ-4 | 4 | 10 |
| HFGAZÇ-6 | 6 | 10 |
| HFGAZÇ-8 | 8 | 10 |

| Sipariş | D | L |
|---|---|---|
| HFGAZÇ-10 | 10 | 12 |
| HFGAZÇ-12 | 12 | 12 |
| HFGAZÇ-16 | 16 | 14 |

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## HİM - Havalı İtici Mini Tip

| Sipariş | A | L |
|---|---|---|
| HİM-0612 | 6 | 12 |
| HİM-0812 | 8 | 12 |
| HİM-1012 | 10 | 12 |

| Sipariş | A | L |
|---|---|---|
| HİM-1212 | 12 | 12 |
| HİM-1620 | 16 | 20 |
| HİM-2020 | 20 | 20 |



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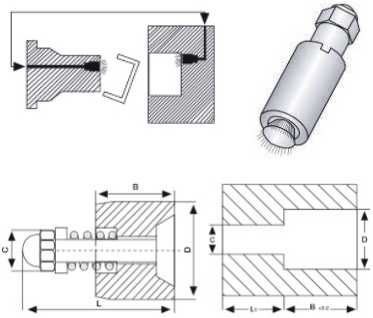
## HİV - Havalı İtici Uzun Tip




| Sipariş | D | B | C | L |
|---|---|---|---|---|
| HİV-8 | 8 | 11 | 7 | 28 |
| HİV-10 | 10 | 11 | 7 | 30 |
| HİV-12 | 12 | 18 | 9 | 30 |
| HİV-16 | 16 | 20 | 10 | 43 |
| HİV-18 | 18 | 22 | 12 | 43 |
| HİV-20 | 20 | 20 | 12 | 46 |
| HİV-25 | 25 | 20 | 12 | 63 |



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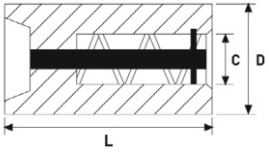
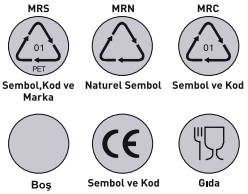
## HİJ - Havalı İtici Jet Tip




| Sipariş | D | C | L |
|---|---|---|---|
| HİJ-6 | 6 | 4.2 | 12 |
| HİJ-8 | 8 | 4.5 | 15 |
| HİJ-10 | 10 | 6 | 20 |
| HİJ-12 | 12 | 8 | 25 |
| HİJ-16 | 16 | 10 | 30 |
| HİJ-18 | 18 | 12 | 30 |
| HİJ-20 | 20 | 12 | 30 |
| HİJ-25 | 25 | 15 | 30 |



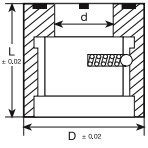



## Geri Dönüşüm Mühürleri

| Sembol | Madde Cinsi |
|---|---|
| PET | Tereflete Polietilen |
| PE – HD | Yükselen Yogunluklu Polietilen |
| PVC | Vinil Poliklorid |
| PE – HD | Alçak Yogunluklu Polietilen |
| PP | Poli Propilen |
| PS | Polyester |
| ABS | Termopolimer Akrilonitril Budatadin Stren |
| | Gıda |
| PA | Naylon |
| POM | Poli Asetat |
| POM | Polifenil Oksit |
| PC | Polikarbonat |

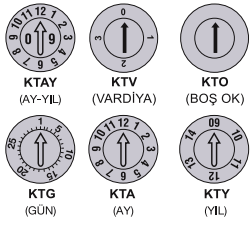
JBT






| ØD | L |
|---|---|
| 6 | 8 |
| 8 | 10 |
| 10 | 10 |
| 12 | 12 |
| 16 | 14 |
| 20 | 14 |

## Kalıp Takvimleri




**Göbek :** Değişken değildir, her zaman sabit eksende döner.

| D | L | d | KALIP TAKVİMİ OK | KALIP TAKVİMİ GÜN | KALIP TAKVİMİ AY | KALIP TAKVİMİ YIL | KALIP TAKVİMİ AY - YIL |
|---|---|---|---|---|---|---|---|
| 4 | 6 | 2.2 | | | | | |
| 5 | 6 | 2.5 | | | | | |
| 6 | 8 | 3 | | | 8 - 10 | | |
| 8 | 8 | 4 | | | | | |
| 10 | 10 | 4.7 | | | 10 - 12 | | |
| 12 | 10 | 6 | | | 12 - 14 | | |
| 16 | 12 | 7 | | | | | |
| 20 | 14 | 10 | | | | | |



## CİV - Civa Çelikleri

BÖHLER

**DIN17006**

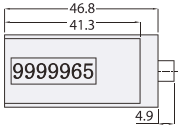
| | |
|---|---|
| **Dövme Tava** | : 1050–800 °C |
| **Yumuşatma Tavı** | 700 °C |
| **Tav Sertliği** | : 280 HB (Azami) |
| **Gerilim Gerdirme / Tavlama** | 600 °C |
| **Sertleştirme için Ön Isı** | 650 °C |
| **Meneviş** | : 180–200 °C (1 saat / 25mm) |
| **Sertleştirme** | : Ø 12 ye kadar 800 °C yağda<br>Ø 12–20 kadar 820 °C suda<br>Ø 20–40 kadar 820 °C suda |

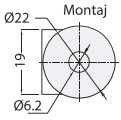
Su ile sertleştirilmiş Takım Çeliği Sıcak Şekil Verme–Isıl İşlem

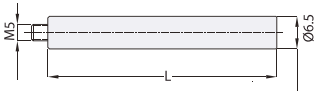
| Sipariş | Ø ÇAP | kg / m |
|---|---|---|
| CİV-2 | 2 mm | 0.040 kg |
| CİV-2.5 | 2.5 mm | 0.050 kg |
| CİV-3 | 3 mm | 0.056 kg |
| CİV-3.5 | 3.5 mm | 0.076 kg |
| CİV-4 | 4 mm | 0.100 kg |
| CİV-4.5 | 4.5 mm | 0.126 kg |
| CİV-5 | 5 mm | 0.154 kg |
| CİV-5.5 | 5.5 mm | 0.187 kg |
| CİV-6 | 6 mm | 0.222 kg |
| CİV-6.5 | 6.5 mm | 0.261 kg |
| CİV-7 | 7 mm | 0.302 kg |
| CİV-7.5 | 7.5 mm | 0.350 kg |
| CİV-8 | 8 mm | 0.396 kg |
| CİV-8.5 | 8.5 mm | 0.445 kg |
| CİV-9 | 9 mm | 0.500 kg |
| CİV-9.5 | 9.5 mm | 0.556 kg |
| CİV-10 | 10 mm | 0.617 kg |
| CİV-10.5 | 10.5 mm | 0.680 kg |
| CİV-11 | 11 mm | 0.750 kg |
| CİV-11.5 | 11.5 mm | 0.815 kg |
| CİV-12 | 12 mm | 0.888 kg |
| CİV-12.5 | 12.5 mm | 0.963 kg |

| Sipariş | Ø ÇAP | kg / m |
|---|---|---|
| CİV-13 | 13 mm | 1.002 kg |
| CİV-13.5 | 13.5 mm | 1.124 kg |
| CİV-14 | 14 mm | 1.208 kg |
| CİV-15 | 15 mm | 1.387 kg |
| CİV-16 | 16 mm | 1.578 kg |
| CİV-17 | 17 mm | 1.782 kg |
| CİV-18 | 18 mm | 1.998 kg |
| CİV-19 | 19 mm | 2.226 kg |
| CİV-20 | 20 mm | 2.466 kg |
| CİV-21 | 21 mm | 2.719 kg |
| CİV-22 | 22 mm | 2.984 kg |
| CİV-23 | 23 mm | 3.262 kg |
| CİV-24 | 24 mm | 3.550 kg |
| CİV-25 | 25 mm | 3.853 kg |
| CİV-26 | 26 mm | 4.168 kg |
| CİV-27 | 27 mm | 4.495 kg |
| CİV-28 | 28 mm | 4.824 kg |
| CİV-30 | 30 mm | 5.550 kg |
| CİV-32 | 32 mm | 6.313 kg |
| CİV-35 | 35 mm | 7.550 kg |
| CİV-40 | 40 mm | 9.000 kg |

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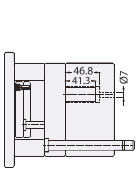
## SAYAÇY - 7 Haneli Mekanik Yuvarlak Kalıp Sayacı

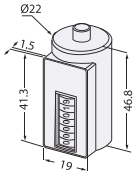
| Özellik |
|---|
| 7 Haneli Yuvarlak |

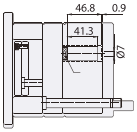
**Yuvarlak Üretim Sayar:**
Kalıp hamilinin içine alttaki resimlere göre montaj edilebilir (kalıp hamiliniz uygun pozisyondaysa). Kalıp hamiliniz yüksek / uzun Pozisyondaysa uzatma parçası ile çalıştırma sağlanılabilir.

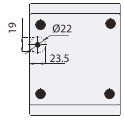
**İşleme Avantajı:**
Yuvarlak üretim sayar kalıba montaj esnasında sadece matkap (22.5 mm) ile montaj yuvası açılır. 42 X 17 pencere oluşturulur. Standart modellere göre uygulamada montaj pratikliği sağlar.

*** Sıfırlanamaz, 7- haneli mekanik sayaç.**
*** 9.999.999 baskıya kadar kayıt tutabilir.**



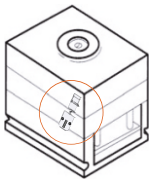



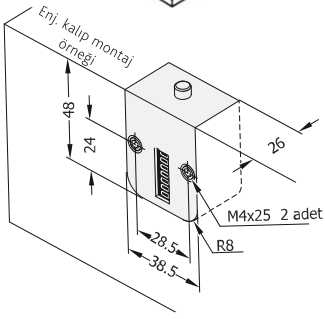



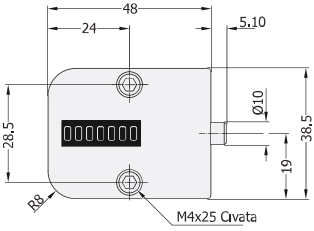



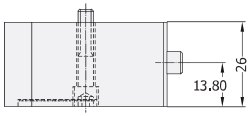






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## SAYAÇK - 7 Haneli Mekanik Kare Kalıp Sayacı

| Özellik |
|---|
| 7 Haneli Mekanik |

Max. çalışma sıcaklığı 1200°C
Korozyon ve sıçrama korumalı
Montaj civataları M4x25




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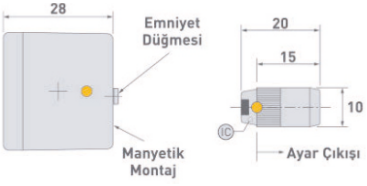
## SAYAÇ - 5 Haneli Turmetre

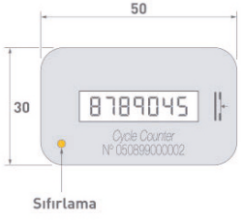
| Özellik |
|---|
| 5 Haneli |



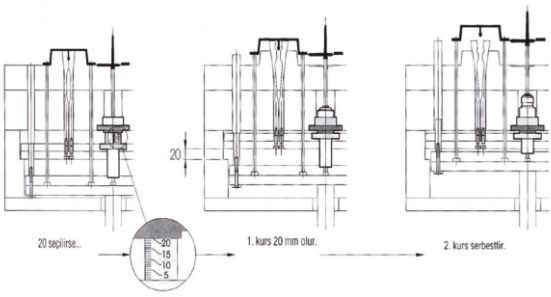



## SAYAÇD - Dijital Enjeksiyon Kalıp Sayacı

| Özellik |
|---|
| Dijital Enjeksiyon Kalıp Sayacı |







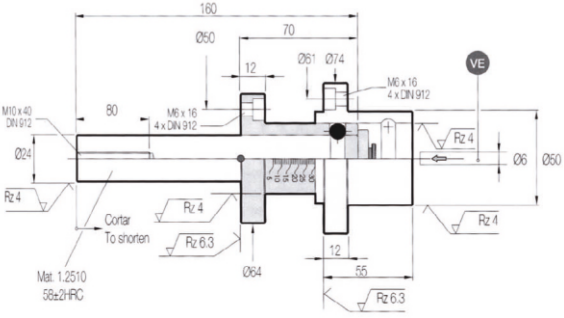

## DE - Çift Plakalı İtici Sistem ★HAAF★

Bu ünite önceden belirlenen iki adımlı hareketi gerçekleştirir. Esnek iç maçalı kalıpla kademeli itmeyi elde etmek için çok kullanışlıdır.

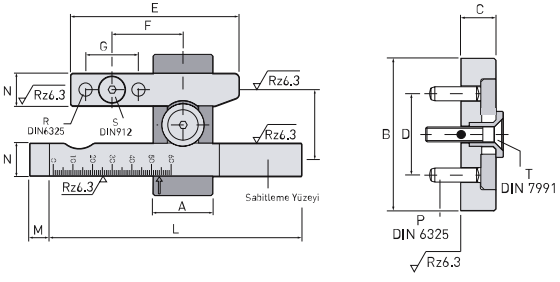
**NOT:** Montaj ölçülerini belirlemek için ilk kursu seçmede 0 - 30 mm cetvelini kullanınız.

**Malzeme:** 1.7264 Sertleştirilmiş 52 ± 2HRC

| Sipariş |
|---|
| DE 243648 |





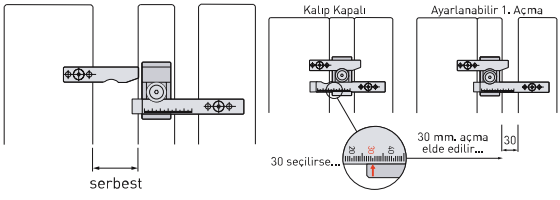




## GS - Kademeli Açma Ünitesi ★HAAF★

**Malzeme:** 0503 Sertleştirilmiş 55 ± 3HRC (Sürtünen Bölge)

**Kademeli Açma Ünitesi:**
İki adımlı kalıplar için tasarlanmıştır.
Cetvel ile ilk açma değeri belirlenebilir.
Plakaların açılma önceliği ünitenin montaj yönüne bağlıdır.

**NOT:** İstenen kursu seçtikten sonra cetveli ölçeksiz kısmından sabitleyiniz.




| Sipariş | A | B | C | D | E | F | G | H | L | M | N | P (x2) | R (x4) | S (x2) | T | Esc. Sca |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GS.226616 | 22 | 66 | 16 | 38 | 75 | 30 | 25 | 32 | 105 | 10 | 15 | 6 x 20 | 6 x 30 | M6 x 30 | M6 x 35 | 40 |
| GS.366619 | 36 | 86 | 19 | 46 | 102 | 43 | 32 | 42,7 | 153 | 12 | 20 | 8 x 24 | 8 x 36 | M8 x 5 | M8 x 40 | 60 |
| GS.421024 | 42 | 106 | 24 | 56 | 124 | 51 | 40 | 50,2 | 190 | 15 | 24,5 | 10 x 30 | 10 x 40 | M10 x 40 | M10 x 45 | 80 |

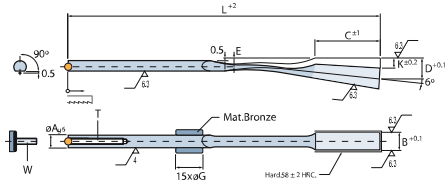


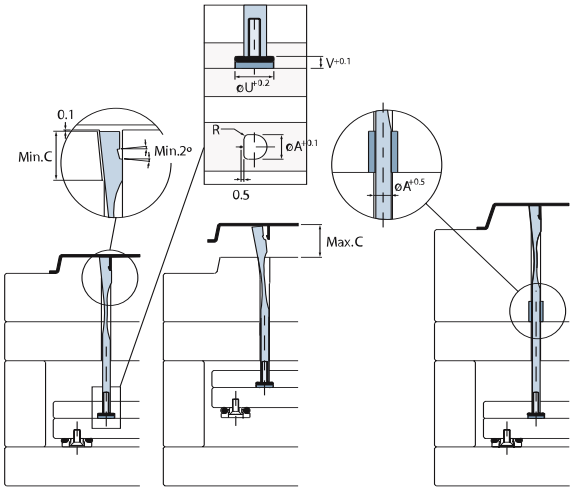
## PW - Esnek İç Maça

★ HAAF ★

**Esnek İç Maça:** Yay çeliğinden imal edilmiştir. Küçük tırnakların çıkarılmasında kullanılır. Diüer iticiler gibi plakasıyla birlikte çalışır.

**Malzeme:** 8159 Templado 45 ± 3HRC



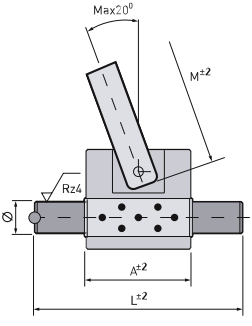



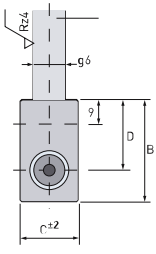

| Sipariş | A | B | C | D | E | G | K | L | M | N | R | T | U | V | W | CS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PW.060622 | 6 | 6.2 | 22 | 9 | 3.5 | - | 3.5 | 125 | 16 | 18 | 1.25 | M4 x 36 | 12 | 5 | M4 x 16 (DIN7991) | - |
| PW.060630 | 6 | 6.2 | 30 | 10 | 3.5 | 12 | 4.5 | 175 | 20 | 26 | 1.25 | M4 x 36 | 12 | 5 | M4 x 16 (DIN7991) | * |
| PW.060822 | 6 | 8.2 | 22 | 9 | 3.5 | - | 3.5 | 125 | 16 | 18 | 1.25 | M4 x 36 | 12 | 5 | M4 x 16 (DIN7991) | - |
| PW.060830 | 6 | 8.2 | 30 | 10 | 3.5 | 12 | 4.5 | 175 | 20 | 26 | 1.25 | M4 x 36 | 12 | 5 | M4 x 16 (DIN7991) | * |
| PW.080825 | 8 | 8.2 | 25 | 11.5 | 4.5 | - | 4.5 | 140 | 18 | 21 | 2 | M5 x 36 | 14 | 6 | M5 x 16 (DIN7984) | - |
| PW.081025 | 8 | 10.2 | 25 | 11.5 | 4.5 | - | 4.5 | 140 | 18 | 21 | 2 | M5 x 36 | 14 | 6 | M5 x 16 (DIN7984) | - |
| PW.081030 | 8 | 10.2 | 30 | 11.2 | 4.5 | 12 | 4.5 | 175 | 20 | 16 | 2 | M5 x 36 | 14 | 6 | M5 x 16 (DIN7984) | * |
| PW.081225 | 8 | 12.2 | 25 | 11.5 | 4.5 | - | 4.5 | 140 | 18 | 21 | 2 | M5 x 36 | 14 | 6 | M5 x 16 (DIN7984) | - |
| PW.081230 | 8 | 12.2 | 30 | 11.2 | 4.5 | 12 | 4.5 | 175 | 20 | 26 | 2 | M5 x 36 | 14 | 6 | M5 x 16 (DIN7984) | * |
| PW.101430 | 10 | 14.2 | 30 | 13.6 | 5.5 | 16 | 5.5 | 175 | 20 | 26 | 2.5 | M6 x 36 | 18 | 8 | M6 x 16 (DIN7984) | * |
| PW.101630 | 10 | 16.2 | 30 | 13.6 | 5.5 | 16 | 5.5 | 175 | 20 | 26 | 2.5 | M6 x 36 | 18 | 8 | M6 x 16 (DIN7984) | * |
| PW.101830 | 10 | 18.2 | 30 | 13.6 | 5.5 | 16 | 5.5 | 175 | 20 | 26 | 2.5 | M6 x 36 | 18 | 8 | M6 x 16 (DIN7984) | * |



## SD - İç Maça Gövde

★ HAAF ★



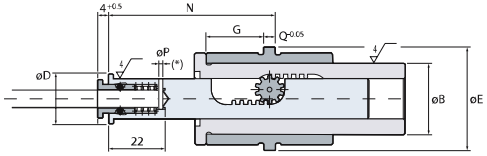




**İç Maça Gövdesi:**
Farklı açılarda itme gerektiren iç hareketlerde kullanılır. Grafitli bronz burç çalışmayı kolaylaştırır.

**Malzeme:** 1.3212 = 1080 N/mm²

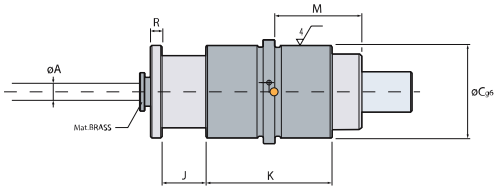
| Sipariş | A | B | C | D | L | M | Ø |
|---|---|---|---|---|---|---|---|
| SD.3220 GR | 32 | 37 | 20 | 27 | 80 | 180 | 10 |
| SD.3824 GR | 38 | 40 | 24 | 28 | 80 | 210 | 12 |
| SD.4528 GR | 45 | 44 | 28 | 30 | 100 | 250 | 16 |





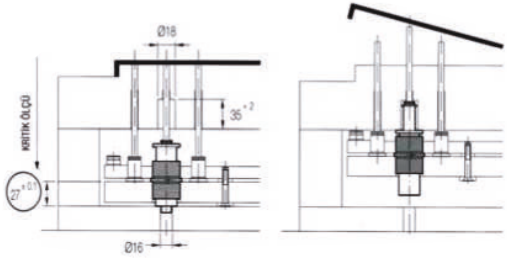

## AE - İtici Hızlandırıcı

★ HAAF ★




**İtici Hızlandırıcı:**
Kalıp içinde istenen iticinin kursunu arttırır.
Silindirik şekli nedeni ile montajı kolaydır.
Tüm kalıplara uygulanabilir.

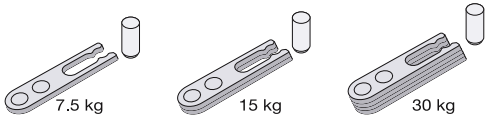
**Malzeme:**
7242 Sertleştirilmiş 52 / 54 HRC




| Sipariş | A | B | C | D | E | F | G | J | K | L | M | N | P | Q | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AE.031620 | 3 | 16 | 20 | 12.5 | 22 | 13 | 14 | 8 | 32 | 22 | 17 | 37 | - | 4 | 3 |
| AE.041620 | 4 | 16 | 20 | 12.5 | 22 | 13 | 14 | 8 | 32 | 22 | 17 | 37 | - | 4 | 3 |
| AE.052430 | 5 | 24 | 30 | 16 | 34 | 16 | 20 | 15 | 44 | 36 | 27 | 57 | 2 | 4 | 3 |
| AE.062430 | 6 | 24 | 30 | 16 | 34 | 16 | 20 | 15 | 44 | 36 | 27 | 57 | 2 | 4 | 3 |
| AE.082430 | 8 | 24 | 30 | 17 | 34 | 17 | 20 | 15 | 44 | 36 | 27 | 57 | 2 | 4 | 3 |
| AE.103036 | 10 | 30 | 36 | 21.5 | 40 | 21 | 28 | 20 | 62 | 46 | 34 | 78 | 2 | 6 | 4 |
| AE.123036 | 12 | 30 | 36 | 21.5 | 40 | 21 | 28 | 20 | 62 | 46 | 34 | 78 | 2 | 6 | 4 |

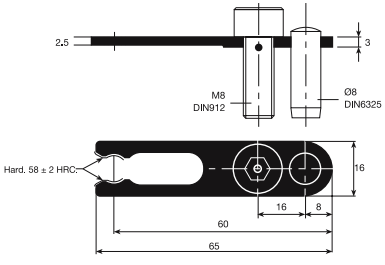


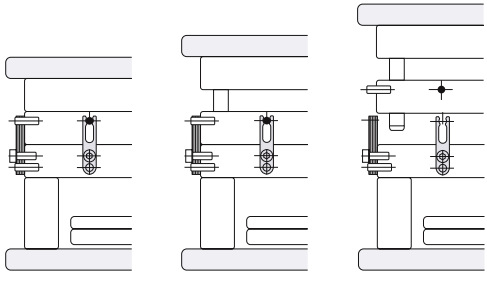
★ HAAF ★



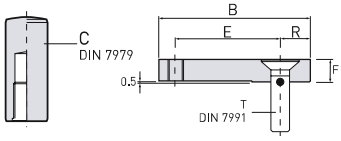

## Modüler Tutucu

Kalıbın kademeli açılımını sağlar. Tutucu eklenerek direnç katılabilir.
Her parça direnci 7.5 kg dır.



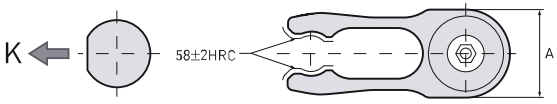





★ HAAF ★

**Maça Tutucu:** K değeri tutucudan kurtulmak için gereken yaklaşık yük değeridir.

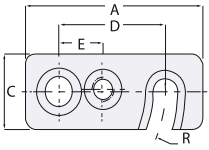
**Malzeme:** 8159 Sertleştirilmiş 45 ± 3HRC

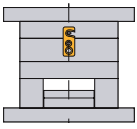



| Sipariş | A | B | C | E | F | G | H | R | T | K (kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| RC.123006 | 12 | 30 | 6 x 20 | 21 | 5 | 4 | 16 | 6 | M5 x 16 | 4 |
| RC.164008 | 16 | 40 | 8 x 20 | 28 | 6 | 5 | 15 | 8 | M6 x 25 | 6 |
| RC.205010 | 20 | 50 | 10 x 24 | 34 | 8 | 6 | 17 | 10 | M8 x 30 | 12 |
| RC.246012 | 24 | 60 | 12 x 32 | 42 | 10 | 7 | 23 | 12 | M10 x 40 | 18 |
| RC.328012 | 32 | 80 | 16 x 40 | 56 | 12 | 9 | 27 | 16 | M12 x 50 | 25 |
| RC.328016 | 32 | 80 | 16 x 40 | 56 | 16 | 9 | 25 | 16 | M12 x 50 | 32 |

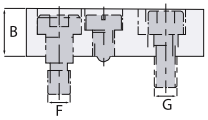


Güvenli Taşıma Pozisyonu

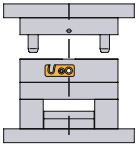


★ HAAF ★




Çalışır Pozisyon



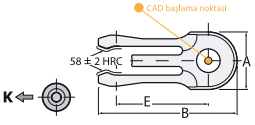
## Kalıp Emniyet Mandalı

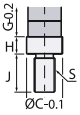
| Sipariş | A | B | C | D | E | F | G | R |
|---|---|---|---|---|---|---|---|---|
| HFKİLİT-12 | 50 | 12 | 20 | 30 | 14 | M6 | M6 | 30 |
| HFKİLİT-16 | 63 | 16 | 25 | 38 | 17 | M8 | M8 | 38 |
| HFKİLİT-20 | 80 | 20 | 32 | 48 | 20 | M10 | M10 | 48 |

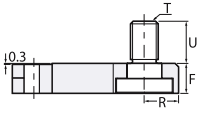


★ HAAF ★

## RCM - Sınırlı Maça Tutucu



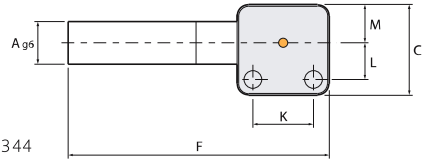



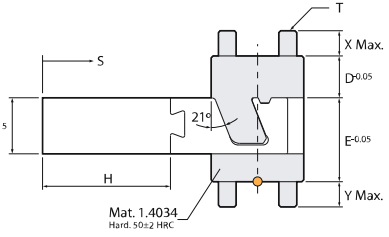




| Sipariş | A | B | C | E | F | G | H | J | K | N | R | S | T | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HFRCM-163808 | 16 | 38 | 8 | 25 | 7.6 | 7.6 | 4 | 10 | 8 kg | 7 | 8 | M5 | M6 | 9 |
| HFRCM-204810 | 20 | 48 | 10 | 32 | 8.7 | 8.6 | 5 | 11 | 14 kg | 8 | 10 | M6 | M8 | 12 |
| HFRCM-245712 | 24 | 57 | 12 | 37.5 | 9.6 | 9.6 | 6 | 12 | 18 kg | 9 | 12 | M8 | M10 | 15 |



★ HAAF ★ **Malzeme:** 1.2344



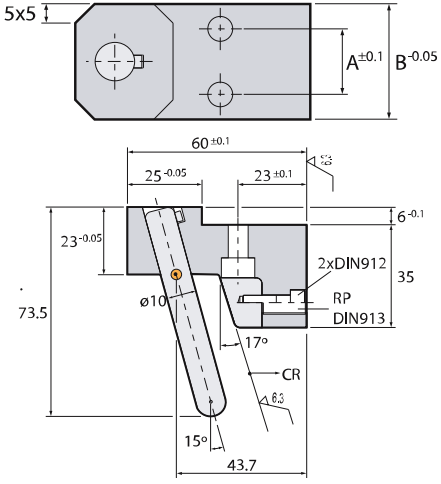




## SU - Kızaklı Maça

| Sipariş | A | B | C | E | F | G | H | K | L | M | R | S | T | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SU.081220 | 8.2 | 12 | 20 | 10 | 18 | 60 | 32 | 12.5 | 8.25 | 8 | 3.75 | 3 | M4 | 7 | 8 |
| SU.121626 | 12.2 | 16 | 26 | 12 | 24 | 73.5 | 36 | 17 | 10.5 | 11 | 4.5 | 4 | M5 | 9 | 7 |
| SU.162032 | 16.2 | 20 | 32 | 16 | 30 | 86.5 | 40 | 22 | 13 | 14 | 5 | 5 | M6 | 10 | 11 |



İşlemiş açılı pim deliği ve ayarlanabilir maça bloğundan oluşur.
Dıştaki 2 vida dayama bloğunu sabitler, ortadaki vida ise pozisyonu belirler.

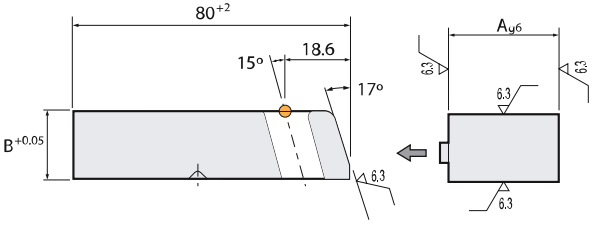



## CG - Standart Maça Klavuzu ★HAAF★

**Malzeme:** 1.2312

| Sipariş | A | B | CR (N) | RP | Includes |
|---|---|---|---|---|---|
| CG.603075 | 17 | 30 | 180.000 | 081015 | GI.010075 |
| CG.604075 | 22 | 40 | 320.000 | 101015 | GI.010075 |



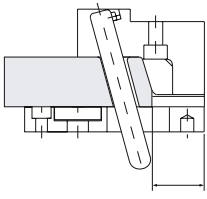



## CA - Maça Kızağı ★HAAF★

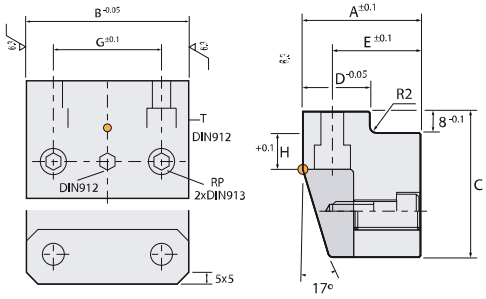
Değiştirilebilir ve alıştırması yapılmıştır, tek gereken parça formunun işlenmesidir.
Dikdörtgen formu nedeni ile işlenmesi basittir.

**Malzeme:** 1.2344

| Sipariş | A | B |
|---|---|---|
| CA.322080 | 32 | 20 |
| CA.322480 | 32 | 24 |
| CA.422080 | 42 | 20 |
| CA.422480 | 42 | 24 |








## CR - Ayarlanabilir Maça Dayaması ★HAAF★

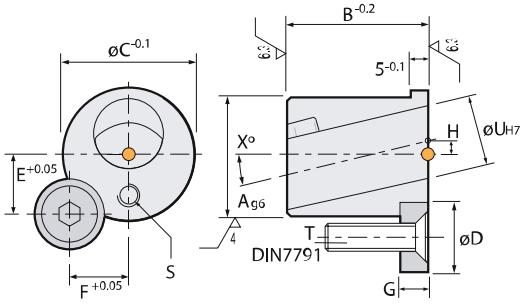
Kalıp kapalı iken maça kızağını ayarlama imkanı sağlar.
Dıştaki 2 vida dayama bloğunu sabitler, ortadaki vida ise pozisyon belirler.

**Malzeme:** 1.2312

| Sipariş | A | B | C | D | E | G | H | T | RP | CR (N) |
|---|---|---|---|---|---|---|---|---|---|---|
| CR.403840 | 40 | 38 | 40 | 25 | 30 | 22 | 12 | M8 x 30 | 101020 | 320.000 |
| CR.454849 | 45 | 48 | 49 | 28 | 35 | 28 | 16 | M10 x 35 | 121025 | 480.000 |
| CR.526052 | 52 | 60 | 52 | 32 | 40 | 35 | 16 | M10 x 35 | 141030 | 750.000 |
| CR.526852 | 52 | 68 | 52 | 32 | 40 | 45 | 16 | M10 x 35 | 141030 | 750.000 |
| CR.527556 | 52 | 75 | 56 | 32 | 40 | 50 | 16 | M10 x 35 | 141030 | 750.000 |



## GR - Açılı Pim Tutucu 10° - 15° ★HAAF★




Bu ünite kalıp üzerinde açılı delik delme ihtiyacını ortadan kaldırır.

Üniteyi oturtmak için kalıbın ön tarafından bir delik delinir.

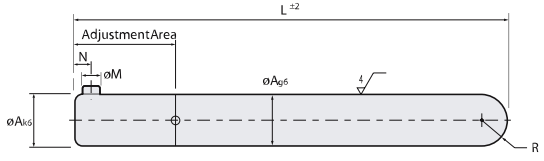
10° - 15° olarak temin edilir.

**Malzeme:** 1.7242

| Sipariş | A | B | C | D | E | F | G | H | S | T | U | X° |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GR.182622-10 | 18 | 26 | 22 | 12 | 10.8 | 7.5 | 6 | 3.8 | M5 x 5 | M5 x 16 | 10 | 10 |
| GR.222826-10 | 22 | 28 | 26 | 16 | 11 | 11 | 6 | 4 | M6 x 6 | M6 x 16 | 12 | 10 |
| GR.283432-10 | 28 | 34 | 32 | 16 | 13 | 13 | 6 | 5 | M6 x 6 | M6 x 16 | 16 | 10 |
| GR.344038-10 | 34 | 40 | 38 | 20 | 17 | 17 | 8 | 5.5 | M8 x 6 | M8 x 20 | 20 | 10 |
| GR.424546-10 | 42 | 45 | 46 | 20 | 19.5 | 19.5 | 8 | 6 | M8 x 6 | M8 x 20 | 24 | 10 |
| GR.465050-10 | 46 | 50 | 50 | 20 | 21 | 21 | 8 | 7 | M8 x 6 | M8 x 20 | 28 | 10 |
| GR.182622-15 | 18 | 26 | 22 | 12 | 10.8 | 7.5 | 6 | 3.8 | M5 x 5 | M5 x 16 | 10 | 15 |
| GR.222826-15 | 22 | 28 | 26 | 16 | 11 | 11 | 6 | 4 | M6 x 6 | M6 x 16 | 12 | 15 |
| GR.283432-15 | 28 | 34 | 32 | 16 | 13 | 13 | 6 | 5 | M6 x 6 | M6 x 16 | 16 | 15 |
| GR.344038-15 | 34 | 40 | 38 | 20 | 17 | 17 | 8 | 5.5 | M8 x 6 | M8 x 20 | 20 | 15 |
| GR.424546-15 | 42 | 45 | 46 | 20 | 19.5 | 19.5 | 8 | 6 | M8 x 6 | M8 x 20 | 24 | 15 |
| GR.465050-15 | 46 | 50 | 50 | 20 | 21 | 21 | 8 | 7 | M8 x 6 | M8 x 20 | 28 | 15 |



## GI - Açılı Pim ★HAAF★

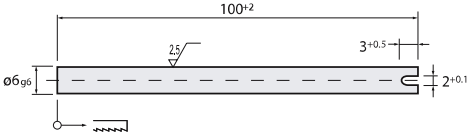



75 - 90 - 105 boylar temin edilir.

**Malzeme:** 1.7242

| Sipariş | A | Adjustament Area | M | N | L | | | R |
|---|---|---|---|---|---|---|---|---|
| GI.010 | 10 | 25 | 4 | 4 | 075 | 090 | 105 | 5 |
| GI.012 | 12 | 30 | 4 | 4 | 095 | 110 | 130 | 6 |
| GI.016 | 16 | 35 | 4 | 4 | 115 | 135 | 160 | 8 |
| GI.020 | 20 | 40 | 6 | 6 | 140 | 165 | 190 | 10 |
| GI.024 | 24 | 45 | 6 | 6 | 170 | 195 | 220 | 12 |
| GI.028 | 28 | 50 | 6 | 6 | 200 | 225 | 250 | 14 |



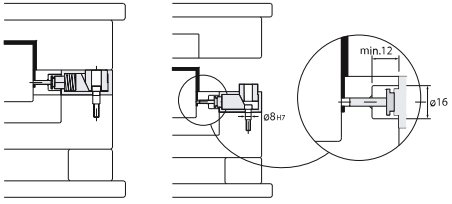



★HAAF★

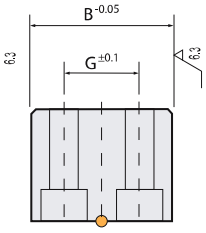
## VF - Delik Maçası Pimi

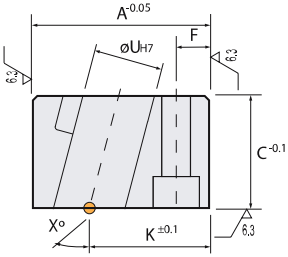
İstenilen şekli işlemek için hazırdır.

**Malzeme:** 1.2510







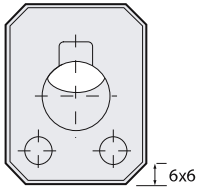




## BG - Açılı Pim Tutucu

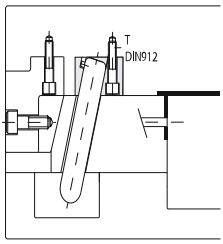
★ HAAF ★

Bu ünite kalıp üzerinde açılı delik delme ihtiyacını ortadan kaldırır.
Üniteyi oturtmak için kalıbın ön tarafından bir delik delinir. 10 ° - 15° olarak temin edilir.

**Malzeme:** 1.2312



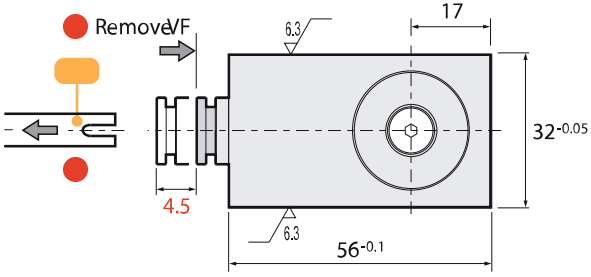

| Sipariş | A | B | C | F | G | K | T | U | X |
|---|---|---|---|---|---|---|---|---|---|
| BG.423016-15 | 42 | 30 | 30 | 7.5 | 15 | 28 | M6 x 35 | 16 | 15 |
| BG.504020-15 | 50 | 40 | 36 | 9 | 22 | 34 | M8 x 40 | 20 | 15 |
| BG.554024-15 | 55 | 40 | 40 | 9 | 22 | 38 | M8 x 45 | 24 | 15 |
| BG.655028-15 | 65 | 50 | 45 | 12 | 26 | 45 | M10 x 50 | 28 | 15 |
| BG.423016-20 | 42 | 30 | 30 | 7.5 | 15 | 28 | M6 x 35 | 16 | 20 |
| BG.504020-20 | 50 | 40 | 36 | 9 | 22 | 34 | M8 x 40 | 20 | 20 |
| BG.554024-20 | 55 | 40 | 40 | 9 | 22 | 38 | M8 x 45 | 24 | 20 |
| BG.655028-20 | 65 | 50 | 45 | 12 | 26 | 45 | M10 x 50 | 28 | 20 |





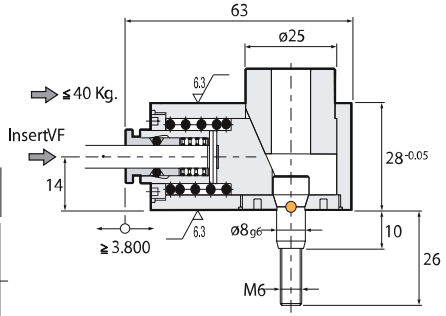

## UP - Delik Maçası

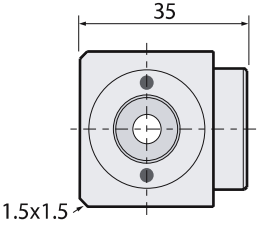
★ HAAF ★



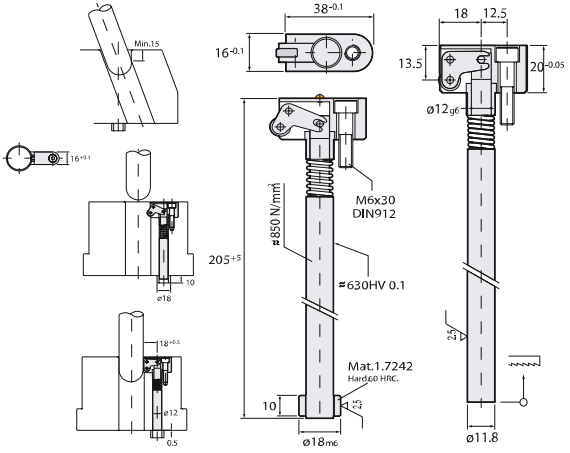

Yan delikleri oluşturmak için kullanılır.
Maça pimi otomatik kilitleme sistemi ile tutulur.
Montaj için ihtiyaç duyulan alan oldukça küçüktür.

**Malzeme:** 1.7264





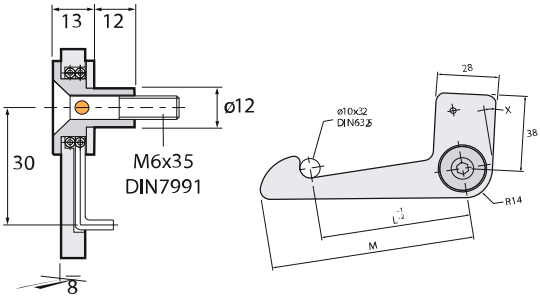



## RA - Otomatik Maça Tutucu ★ HAAF ★

Açılı pimle çalışan büyük maçalarda kullanılır.
Büyük yüklere gerek duymadan kolay ve pürürzsüz çalışır.

**Malzeme:** 1.2510





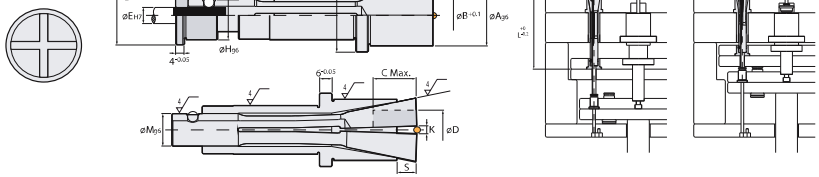

## BS - Emniyet Kilidi ★ HAAF ★

Enjeksiyon makinasına bağlı olmayan kalıbı kapalı tutar.
Kalıp enjeksiyon makinasına bağlanırken kilit otomatik olarak açılır.

**Malzeme:** 1.0503

| Sipariş | L | M | N | X |
|---|---|---|---|---|
| BS.050075 | 50 | 75 | 8.7 | 15° |
| BS.075100 | 75 | 100 | 7 | 12° |
| BS.100125 | 100 | 125 | 6 | 10° |
| BS.125150 | 125 | 150 | 4.8 | 8° |





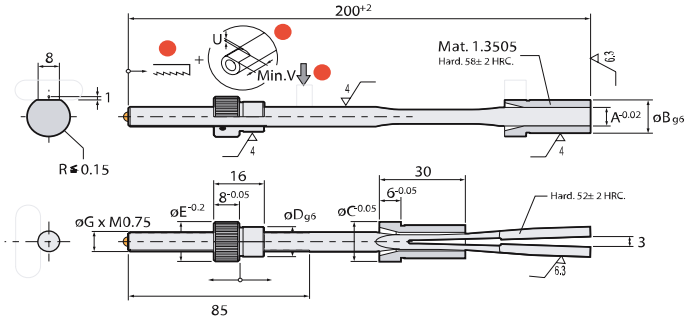

Esnek maça üzerinde 4 farklı hareket imkanı sağlar. Montaj alanı minimum düzeyde olup gerektirdiği alan bir itici kadardır. Özel form işçiliğinin dışında frezeleme, taşlama veya sertleştirme gibi işlemler gerektirmez. Kalıp ayrım yüzeyine 90° yuva açılır.

**Malzeme:** 1.2101

## PE - 4'lü Otomatik Maça ★ HAAF ★

| Sipariş | A | B | C | D | E | F | G | H | J | K | L | M | N | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PE.201208 | 20 | 18 | 12 | 8 | 6 | 63 | 27 | 18 | 17 | 2 | 88 | 12 | 22 | 26 | 8 |
| PE.302214 | 30 | 27.5 | 22 | 14 | 8 | 93 | 37 | 24 | 20 | 2.5 | 122.5 | 16 | 29 | 36 | 9.5 |
| PE.403220 | 40 | 37 | 32 | 20 | 12 | 117 | 51 | 34 | 25 | 4 | 158 | 22 | 39 | 46 | 16 |





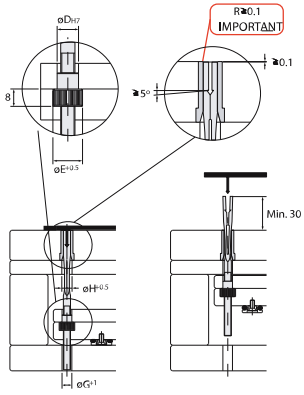

## ED - 2'li Esnek İç Maça

★ HAAF ★

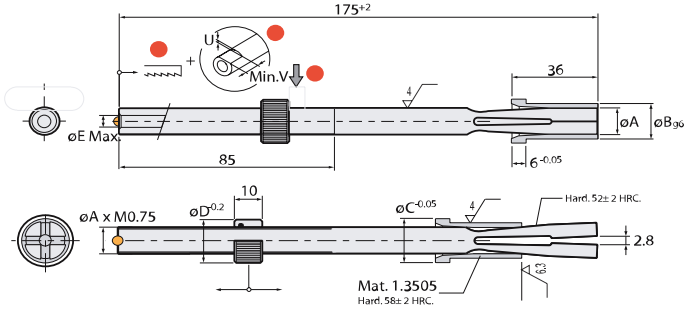
Küçük tırnaklar için oldukça kullanışlıdır.
Alıştırması yapılmış ve boy ayarı kolaylıkla yapılır.

**Malzeme:** 1.2101

| Sipariş | A | B | C | D | E | G | H | U | V |
|---|---|---|---|---|---|---|---|---|---|
| ED.068200 | 6 | 12 | 14 | 10 | 14 | 6 | 10 | 0.5 | 10 |
| ED.088200 | 8 | 14 | 16 | 12 | 16 | 8 | 12 | 0.5 | 10 |
| ED.108200 | 10 | 16 | 18 | 14 | 18 | 8 | 14 | 0.5 | 15 |
| ED.128200 | 12 | 16 | 18 | 16 | 20 | 8 | 15 | 0.5 | 15 |





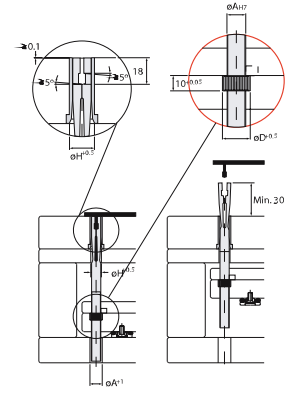

## EE - 4'li Esnek İç Maça

★ HAAF ★

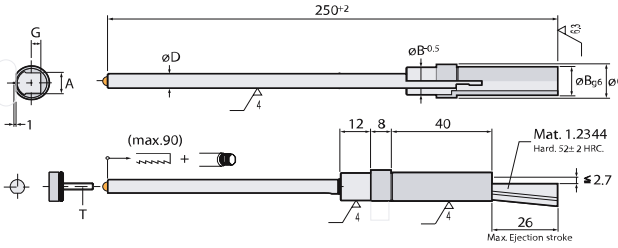
Küçük tırnaklar için oldukça kullanışlıdır.
Alıştırması yapılmış ve boy ayarı kolaylıkla yapılır.

**Malzeme:** 1.2101

| Sipariş | A | B | C | D | E | H | U | V |
|---|---|---|---|---|---|---|---|---|
| EE.060175 | 6 | 10 | 12 | 12 | - | 9 | 0.5 | 10 |
| EE.082175 | 8 | 12 | 14 | 14 | 2 | 1 | 0.5 | 10 |
| EE.103175 | 10 | 14 | 16 | 16 | 3 | 13 | 0.5 | 15 |
| EE.124175 | 12 | 16 | 18 | 18 | 4 | 13 | 0.5 | 15 |
| EE.168175 | 16 | 20 | 22 | 22 | 8 | 19 | 1 | 20 |







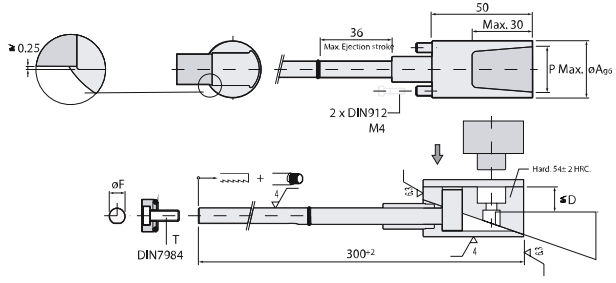

**Malzeme:** 1.4034

## PS - Standart Mekanik Maça ★ HAAF ★

Küçük tırnakların çıkarılması için oldukça kullanışlıdır. Alıştırması yapılmış ve montaj kolaylıkla yapılır. İtici plakaya dik hareket etmesi sebebi ile montaj için gereken alan çok küçüktür.

| Sipariş | A | B | C | D | G | R | T | U | V |
|---|---|---|---|---|---|---|---|---|---|
| PS.062250 | 6.2 | 10 | 12 | 6 | 3.4 | 1.25 | M4 x 16 (DIN7991) | 12 | 5 |
| PS.082250 | 8.2 | 12 | 14 | 6 | 4 | 1.25 | M4 x 16 (DIN7991) | 12 | 5 |
| PS.102250 | 10.2 | 14 | 16 | 8 | 4.2 | 2 | M5 x 16 (DIN7984) | 14 | 6 |
| PS.122250 | 12.2 | 16 | 18 | 8 | 4.2 | 2 | M5 x 16 (DIN7984) | 14 | 6 |





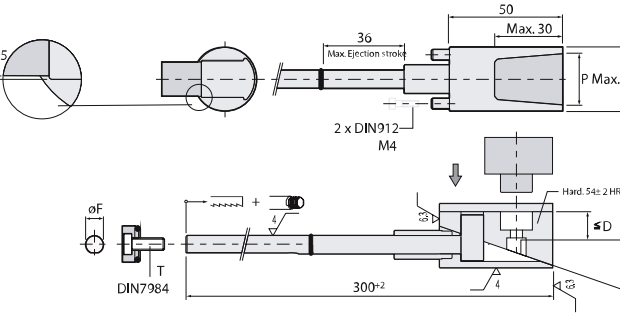

## PC - Burçlu Maça ★ HAAF ★

| Sipariş | A | B | F | J | K | P | R | T | U | V |
|---|---|---|---|---|---|---|---|---|---|---|
| PC.285016 | 28 | 12 | 8 | 14 | 20 | 15.5 | 2 | M5x16 | 14 | 6 |
| PC.365022 | 36 | 16 | 10 | 15 | 27.5 | 21.5 | 2.5 | M6x16 | 18 | 8 |

**Malzeme:** 1.4034

Minimum itici plaka kursundan küçük tırnaklar (16 mm'ye kadar) için kullanılır. Montaj kolaylığı için gövde ve kızağın alıştırması yapılmıştır, detay işlemleri gerektirir. Maçanın yataklaması diktir.



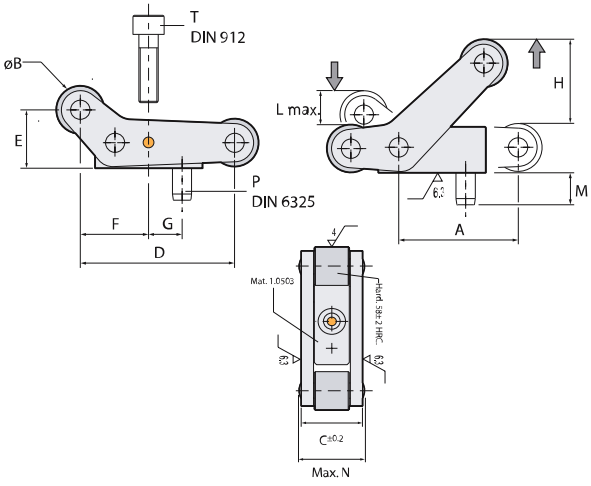



**Malzeme:** 1.7264

## DX - Çift Plaka İtici Sistemi ★ HAAF ★

| Sipariş | A | B | C | D | E | F | G | H | J | K | L | M | N | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DX.142622 | 14 | 26 | 22 | 30 | 34 | 20 | 16 | 4 | 125 | 7.2 | 243 | M6 | 21 | 42 | 48 |
| DX.163027 | 16 | 30 | 27 | 34 | 44 | 23 | 18 | 6 | 152 | 8 | 314 | M8 | 24 | 54 | 80 |






★ HAAF ★

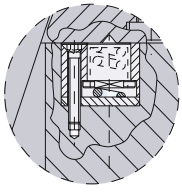
**EP - Plaka Hızlandırıcı**

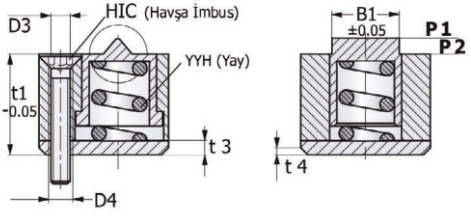
Bu ürün normal itici kursuna ilave olarak 2. plakaya fazladan bir hareket kazandırır.
2'li veya 4'lü kullanılır.

**Malzeme:** 1.2510

| Sipariş | A | B | C | D | E | F | G | H | L | M | N | P | T | Max. İtme |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EP.200813 | 20 | 8 | 13.2 | 25.8 | 9.4 | 11.4 | 6 | 13.6 | 5.5 | 5 | 15 | Ø2.5 x 10 | M3 x 12 | 125 kg |
| EP.251016 | 25 | 10 | 16 | 32.3 | 11.8 | 14.3 | 7 | 17 | 6.8 | 6 | 18.5 | Ø3 x 12 | M4 x 16 | 250 kg |
| EP.371522 | 37.5 | 15 | 22 | 48.5 | 17.7 | 21.5 | 10.5 | 25.5 | 10.2 | 8 | 25 | Ø4 x 16 | M6 x 25 | 350 kg |
| EP.502030 | 50 | 20 | 29.6 | 64.6 | 23.6 | 28.6 | 14 | 34 | 13.6 | 10 | 34 | Ø5 x 20 | M8 x 30 | 800 kg |





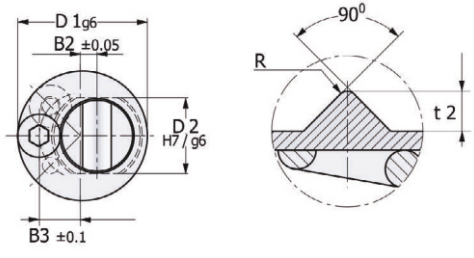



★ HAAF ★

**MTY - Maça Kızak Tutucu Yaylı Ünite**

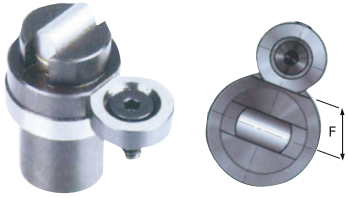
Enjeksiyon kalıplarında maça sistemlerinde slayt tutucu yuvarlak maça tutucular tespit pimsiz çalışır, maça tutucu olmadan da maçayı kaldırabilir. Yuvarlak şekli montajı kolaylaştırır.

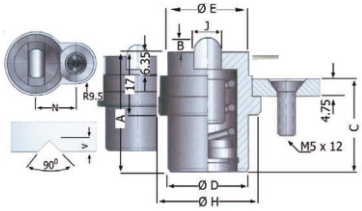
**Maksimum Sıcaklık:** 100°C
**Malzeme:** 1.4034

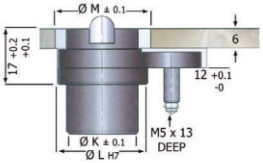



Kolay kullanım yüklemeye göre dizayn edilmiştir. Maça sistemi bağımsız kendi kendine çalışır.

| Sipariş | D1 | B1 | B2 | B3 | t1 | t2 | t3 | t4 | D2 | D3 | D4 | R | P1 | P2 | HIC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTY.13 | 13 | 6.6 | 1.4 | 4.3 | 10 | 1.0 | 1.6 | 0.35 | 7 | 2.2 | M3 | 0.35 | 28 Nw | 34 Nw | M2-16 |
| MTY.18 | 18 | 9.6 | 2.0 | 6.0 | 14 | 1.8 | 2.0 | 0.50 | 10 | 3.2 | M4 | 0.50 | 38 Nw | 42 Nw | M3-50 |
| MTY.27 | 27 | 14.4 | 3.0 | 9.0 | 21 | 2.8 | 3.0 | 0.50 | 15 | 4.3 | M5 | 0.75 | 38 Nw | 92 Nw | M4-25 |




★ HAAF ★

**MTYP - Maça Kızak Tutucu**
**Yaylı - Pimli Ünite**

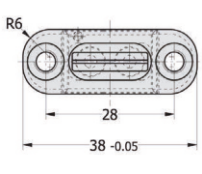
Sağlam boyut olarak küçük ve yuvarlak oluşu kalıba montaj kolaylığı sağlar.

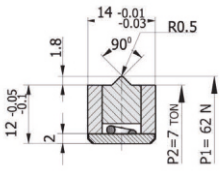
**Maksimum Sıcaklık:** 120°C
**Malzeme:** 1.2767
**Sertlik:** 52 HRC

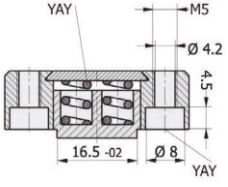
Küçük, yuvarlak, montajı kolay, bağımsız, temas bağlantılı kolay kullanım, yüklemeye göre dizayn edilmiştir. 3 mm tutma oranı ile tiplere göre 48 / 88 / 176 Nw kuvvet gereksinimleri sunar. Tespit pimi maçanın içine tam olarak kilitlenir. Kalıp kapama işlemi yaparken boşa çıkana kadar, tutucu açıldığında hizasızlık olduğunda dahi pim içeri girer.

| Sipariş | A | B | C | D | E | F | H | J | V | K | L | M | N | Kgf |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTYP.100 | 27.43 | 1.83 | 20.2 | 15.75 | 16 | 9.52 | 22 | 4.8 | 2.3 | 15.87 | 22 | 24 | 17 | 4.5 |
| MTYP.200 | 33.53 | 3.07 | 26.29 | 18.8 | 19 | 10.67 | 25 | 6.35 | 3.9 | 19.05 | 25 | 27 | 18.2 | 9 |
| MTYP.400 | 32 | 3.78 | 24.76 | 22.1 | 22 | 11.86 | 28 | 7.92 | 4.9 | 22.23 | 28 | 30 | 19.4 | 18 |






★ HAAF ★

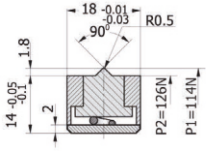
**MTT1 - Maça Tutucu Tip**

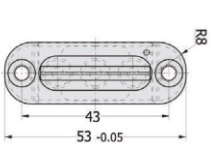
**Maksimum Sıcaklık:** 100°C
**Malzeme:** 1.2343
**Sertlik:** 54 ± 2 HRC

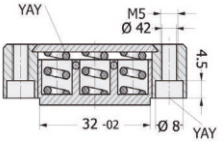
Maça Sistemlerinde Temas Bağlantılı Hat

| Sipariş |
|---|
| MTT1 |






★ HAAF ★

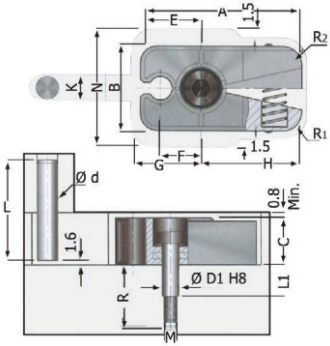
**MTT2 - Maça Tutucu Tip**

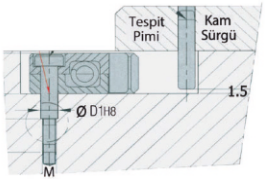
**Maksimum Sıcaklık:** 100°C
**Malzeme:** 1.4034
**Sertlik:** 54 ± 2 HRC

Maça Sistemlerinde Temas Bağlantılı Hat

| Sipariş |
|---|
| MTT2 |






★ HAAF ★

## MTP - Maça Tutucu Pimli

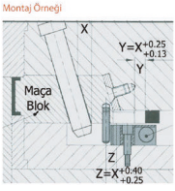
Hassas - Kilitlemeli ve Hizalamalı, Pimli

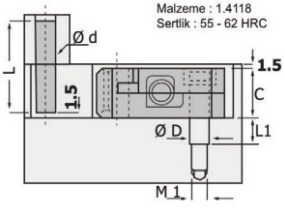
**K Değeri:** Maça bloğunun, maça tutucudan kurtulması için gereken max. yük değeridir.
Maça açılırken, pim tutucunun içine girer. Küçük çaplı yanlış hatalar (hizasızlıklar) olsa bile işlem devam eder.

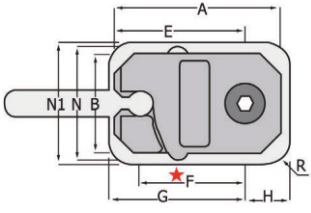
**Montaj Talimatı:**
1. Maça tutucunun gövdesini tekrar yuvadan çıkarmak için kalıp üzerinde çıkarıcı pim deliği açmak gereklidir.
2. Maça tutucu üzerindeki pimin merkezi ile montaj esnasında maça tutucu üzerindeki merkezi arasındaki mesafe hassastır (F) iyi hesaplanıp ayarlanmalıdır.
3. Kalıbınıza uygun olan (Maça Tutucu Pimli veya Maça Tutucu Kapalı Yaylı Pimli Tip) gerekli olan taşıma yükünün daha üzerinde bir kuvvette olan modeli tercih ediniz (Emniyet için önemlidir).

| Sipariş | A | B | C | D | E | F | H | N | K | D1 | L1 | R | R1 | R2 | M | Maça Blok |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTP 10M | 38 | 19 | 16 | 16 | 9.1 | 19 | 26 | 25 | 8 | 6 | 6 | 15.5 | 8 | 5 | M5 | 10 Kgf. |
| MTP 20M | 54 | 32 | 20 | 21 | 12.7 | 24 | 36 | 36 | 10 | 8 | 8.5 | 20.5 | 10 | 6 | M6 | 20 Kgf. |
| MTP 40M | 86 | 45 | 30 | 53 | 20.3 | 36 | 56 | 56 | 12 | 10 | 10 | 25 | 13 | 10 | M8 | 40 Kgf. |






★ HAAF ★

## MTPY - Pimli - Kapalı Yaylı Tip Maça Tutucu

Hassas - Kilitlemeli ve Hizalamalı, Pimli

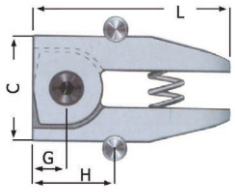
Hassas, kilitlemeli ve hizalamalı, pimli, yaylı tip maça tutucusu gövde maça civataları ile çıkamaz. Montaj esnasında bazı yedek delik veya boşluklara ihtiyaç olabilir. Bu ünite limitsiz hareketler içindir. Tespit pimi 90 ile monte edilebilir, pimin yerleşimi ve maça bloğunun açılma yönü ile aynı olmalıdır. Kalıp kapanışında farklı bir değişiklik yoksa; sistemde bu ürün maça kilidi olarak kullanılabilir.

**Uygulama:** Maça tutucu açılırken pim tutucunun içine girer, küçük çaplı yanlış hatalamalar (hizasızlıklar) bile olsa işlem devam eder.

**Önemli:** Yıldızlı (F ölçüsü) önemlidir. Merkezinden olan mesafe ürünün civatasının merkezine kadar olması çok önemlidir. Tespit piminin maçaya tam sıkı olarak tutucunun içine kilitlenmesi gerekir, kalıp kapanma işleminde serbest kalana kadar verimli dizayn olarak uygulanmıştır.

| Sipariş | A | B | C | E | *F | N | G | H | N1 | R | D | L1 | M1 | d/L | Maça Blok |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MTPY.38 | 38 | 19 | 16 | 31.5 | 24.89 | 24 | 34.5 | 10 | 25.5 | 8 | 6 | 8.5 | M5 x 11 | 6 x 30 | 10 kg |
| MTPY.54 | 54 | 32 | 20 | 43 | 34.93 | 36.5 | 46 | 14.5 | 38 | 10 | 8 | 10.5 | M6 x 14 | 8 x 40 | 20 kg |
| MTPY.86 | 86 | 45 | 30 | 67 | 53.98 | 49.5 | 70 | 22.5 | 51 | 12 | 10 | 17 | M8 x 18 | 10 x 60 | 40 kg |

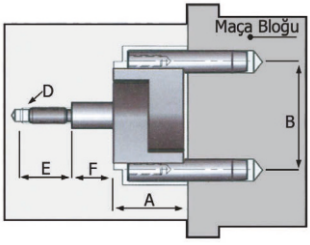





★ HAAF ★

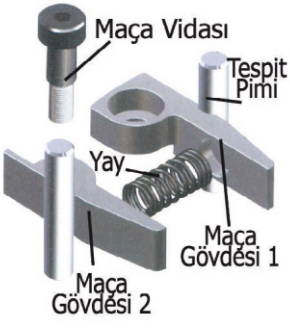
## MTM - Maça Tutucu Mandallı

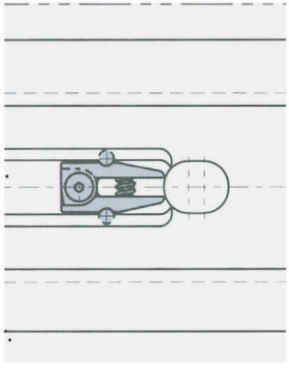
Tespit pim montajı, dengeli / hassas maça kilitleme ünitesi



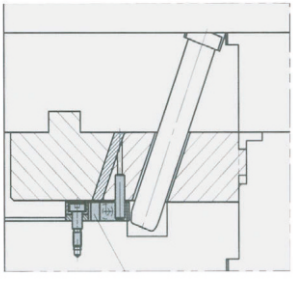

**Malzeme:** 1.2757
**Sertlik:** 55 - 62 HRC
**Maksimum Sıcaklık:** 100°C
Özellikle alaşımlı malzemeli kalıplarda tercih edilebilir.

**Maça Tutucu Mandalı:**
Deliklere eklenen maça civatası (F) çok derinden olmamalıdır. Maça gövdesi kendini kilitledikten sonra düzgünce ve pürüssüzce çalışması gerekir. Bu yüzden civata çok sıkılmamalıdır. Tespit pimi maçanın üstündeyken, maça gövdesi kalıbın üstüne tutturulur. Ayrıca maça kaydırma mesajesi tam olarak hesaplanıp montajı yapılmalıdır.



Montaj Örneği

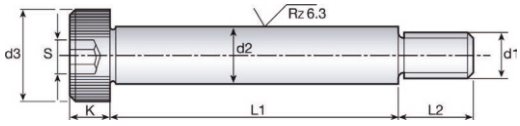


| Sipariş | A | B | C | E | F | G | H | L | D | Max. Tutma | Tespit Pimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MTM 1040 | 10 | 21.5 | 18 | 9.5 | 5.1 | 7 | 17.5 | 40 | M5 | Ø 6 - 30 | 10 |
| MTM 1243 | 12 | 25.5 | 22 | 11 | 6.1 | 7.5 | 18 | 43 | M6 | | 15 |
| MTM 1650 | 16 | 31.5 | 28 | 11 | 8.1 | 9.5 | 20.5 | 0 | M6 | | 25 |

JBT

## YAC - Yay Ayar Civatası

**Malzeme** : Özel Alaşımlı Çelik
**Yüzey** : Sertleştirilmiş, Taşlanmış




| Sipariş | d1 | d2 | d3 | K | S | L2 | L1 |
|---|---|---|---|---|---|---|---|
| YAC-510 | M5 | 6 | 10 | 5 | 3 | 9,5 | 10 |
| YAC-512 | | | | | | | 12 |
| YAC-516 | | | | | | | 16 |
| YAC-520 | | | | | | | 20 |
| YAC-525 | | | | | | | 25 |
| YAC-530 | | | | | | | 30 |
| YAC-535 | | | | | | | 35 |
| YAC-540 | | | | | | | 40 |
| YAC-545 | | | | | | | 45 |
| YAC-550 | | | | | | | 50 |
| YAC-555 | | | | | | | 55 |
| YAC-560 | | | | | | | 60 |
| YAC-610 | M6 | 8 | 13 | 6 | 4 | 11 | 10 |
| YAC-612 | | | | | | | 12 |
| YAC-616 | | | | | | | 16 |
| YAC-620 | | | | | | | 20 |
| YAC-625 | | | | | | | 25 |
| YAC-630 | | | | | | | 30 |
| YAC-635 | | | | | | | 35 |
| YAC-640 | | | | | | | 40 |
| YAC-645 | | | | | | | 45 |
| YAC-650 | | | | | | | 50 |
| YAC-655 | | | | | | | 55 |
| YAC-660 | | | | | | | 60 |
| YAC-665 | | | | | | | 65 |
| YAC-670 | | | | | | | 70 |
| YAC-680 | | | | | | | 80 |
| YAC-690 | | | | | | | 90 |
| YAC-6100 | | | | | | | 100 |
| YAC-816 | M8 | 10 | 16 | 7,5 | 5 | 13 | 16 |
| YAC-820 | | | | | | | 20 |
| YAC-825 | | | | | | | 25 |
| YAC-830 | | | | | | | 30 |

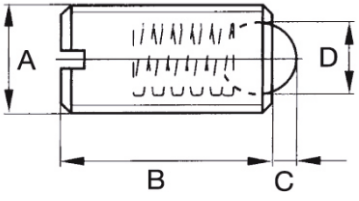
| Sipariş | d1 | d2 | d3 | K | S | L2 | L1 |
|---|---|---|---|---|---|---|---|
| YAC-835 | M8 | 10 | 16 | 7,5 | 5 | 13 | 35 |
| YAC-840 | | | | | | | 40 |
| YAC-845 | | | | | | | 45 |
| YAC-850 | | | | | | | 50 |
| YAC-855 | | | | | | | 55 |
| YAC-860 | | | | | | | 60 |
| YAC-865 | | | | | | | 65 |
| YAC-870 | | | | | | | 70 |
| YAC-880 | | | | | | | 80 |
| YAC-890 | | | | | | | 90 |
| YAC-8100 | | | | | | | 100 |
| YAC-1016 | M10 | 12 | 18 | 9 | 6 | 16 | 16 |
| YAC-1020 | | | | | | | 20 |
| YAC-1025 | | | | | | | 25 |
| YAC-1030 | | | | | | | 30 |
| YAC-1035 | | | | | | | 35 |
| YAC-1040 | | | | | | | 40 |
| YAC-1045 | | | | | | | 45 |
| YAC-1050 | | | | | | | 50 |
| YAC-1055 | | | | | | | 55 |
| YAC-1060 | | | | | | | 60 |
| YAC-1065 | | | | | | | 65 |
| YAC-1070 | | | | | | | 70 |
| YAC-1080 | | | | | | | 80 |
| YAC-1090 | | | | | | | 90 |
| YAC-10100 | | | | | | | 100 |
| YAC-10120 | | | | | | | 120 |
| YAC-1230 | M12 | 16 | 24 | 11 | 8 | 18 | 30 |
| YAC-1235 | | | | | | | 35 |
| YAC-1240 | | | | | | | 40 |
| YAC-1245 | | | | | | | 45 |

| Sipariş | d1 | d2 | d3 | K | S | L2 | L1 |
|---|---|---|---|---|---|---|---|
| YAC-1250 | M12 | 16 | 24 | 11 | 8 | 18 | 50 |
| YAC-1255 | | | | | | | 55 |
| YAC-1260 | | | | | | | 60 |
| YAC-1265 | | | | | | | 65 |
| YAC-1270 | | | | | | | 70 |
| YAC-1280 | | | | | | | 80 |
| YAC-1290 | | | | | | | 90 |
| YAC-12100 | | | | | | | 100 |
| YAC-12120 | | | | | | | 120 |
| YAC-1640 | M16 | 20 | 30 | 14 | 10 | 22 | 40 |
| YAC-1645 | | | | | | | 45 |
| YAC-1650 | | | | | | | 50 |
| YAC-1655 | | | | | | | 55 |
| YAC-1660 | | | | | | | 60 |
| YAC-1665 | | | | | | | 65 |
| YAC-1670 | | | | | | | 70 |
| YAC-1680 | | | | | | | 80 |
| YAC-1690 | | | | | | | 90 |
| YAC-16100 | | | | | | | 100 |
| YAC-16120 | | | | | | | 120 |
| YAC-2050 | M20 | 24 | 35 | 16 | 12 | 27 | 50 |
| YAC-2055 | | | | | | | 55 |
| YAC-2060 | | | | | | | 60 |
| YAC-2065 | | | | | | | 65 |
| YAC-2070 | | | | | | | 70 |
| YAC-2075 | | | | | | | 75 |
| YAC-2080 | | | | | | | 80 |
| YAC-2090 | | | | | | | 90 |
| YAC-20100 | | | | | | | 100 |
| YAC-20120 | | | | | | | 120 |

JBT

## BS - Bilyalı Setskur

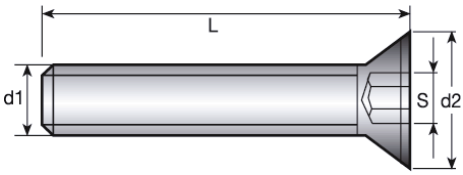
**Malzeme** : Özel Alaşımlı Çelik




| Sipariş | A | B | C | D | N - İlk Basınç Newton | N1 - Nihai Basınç Newton |
|---|---|---|---|---|---|---|
| BSET-4 | M4 | 9 | 0,8 | 2,5 | 6 | 12 |
| BSET-5 | M5 | 12 | 0,9 | 3 | 7 | 13 |
| BSET-6 | M6 | 14 | 1 | 3,5 | 9 | 15 |
| BSET-8 | M8 | 16 | 1,5 | 5 | 20 | 35 |
| BSET-10 | M10 | 19 | 2 | 6 | 25 | 45 |
| BSET-12 | M12 | 22 | 2,5 | 8 | 35 | 60 |
| BSET-16 | M16 | 24 | 3,5 | 10 | 65 | 110 |

## HİC - Havşa Başlı Civata

**Kalite** : 10.9




| Sipariş | d1 | d2 | S | L |
|---|---|---|---|---|
| HİC-310 | M3 | 6 | 2 | 10 |
| HİC-315 | | | | 15 |
| HİC-320 | | | | 20 |
| HİC-410 | M4 | 8 | 2,5 | 10 |
| HİC-415 | | | | 15 |
| HİC-420 | | | | 20 |
| HİC-425 | | | | 25 |
| HİC-430 | | | | 30 |
| HİC-510 | M5 | 10 | 3 | 10 |
| HİC-515 | | | | 15 |
| HİC-520 | | | | 20 |
| HİC-525 | | | | 25 |
| HİC-530 | | | | 30 |

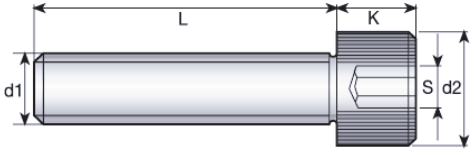
| Sipariş | d1 | d2 | S | L |
|---|---|---|---|---|
| HİC-535 | M5 | 10 | 3 | 35 |
| HİC-540 | | | | 40 |
| HİC-610 | M6 | 12 | 4 | 10 |
| HİC-615 | | | | 15 |
| HİC-620 | | | | 20 |
| HİC-625 | | | | 25 |
| HİC-630 | | | | 30 |
| HİC-635 | | | | 35 |
| HİC-640 | | | | 40 |
| HİC-810 | M8 | 16 | 5 | 10 |
| HİC-815 | | | | 15 |
| HİC-820 | | | | 20 |
| HİC-825 | | | | 25 |

| Sipariş | d1 | d2 | S | L |
|---|---|---|---|---|
| HİC-830 | M8 | 16 | 5 | 30 |
| HİC-835 | | | | 35 |
| HİC-840 | | | | 40 |
| HİC-850 | | | | 50 |
| HİC-1015 | M10 | 20 | 6 | 15 |
| HİC-1020 | | | | 20 |
| HİC-1025 | | | | 25 |
| HİC-1030 | | | | 30 |
| HİC-1035 | | | | 35 |
| HİC-1040 | | | | 40 |
| HİC-1050 | | | | 50 |
| HİC-1060 | | | | 60 |

| Sipariş | d1 | d2 | S | L |
|---|---|---|---|---|
| HİC-1220 | M12 | 24 | 8 | 20 |
| HİC-1225 | | | | 25 |
| HİC-1230 | | | | 30 |
| HİC-1235 | | | | 35 |
| HİC-1240 | | | | 40 |
| HİC-1250 | | | | 50 |
| HİC-1260 | | | | 60 |
| HİC-1630 | M16 | 30 | 10 | 30 |
| HİC-1635 | | | | 35 |
| HİC-1640 | | | | 40 |
| HİC-1650 | | | | 50 |
| HİC-1660 | | | | 60 |

## İCX - İmbus Civata

**Kalite** : 12.9




| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-310 | M3 | 5,5 | 3 | 2,5 | 10 |
| İCX-315 | | | | | 15 |
| İCX-320 | | | | | 20 |
| İCX-325 | | | | | 25 |
| İCX-330 | | | | | 30 |
| İCX-335 | | | | | 35 |
| İCX-340 | | | | | 40 |
| İCX-345 | | | | | 45 |
| İCX-350 | | | | | 50 |
| İCX-48 | M4 | 7 | 4 | 3 | 8 |
| İCX-410 | | | | | 10 |
| İCX-412 | | | | | 12 |
| İCX-415 | | | | | 15 |
| İCX-420 | | | | | 20 |
| İCX-425 | | | | | 25 |
| İCX-430 | | | | | 30 |
| İCX-435 | | | | | 35 |
| İCX-440 | | | | | 40 |
| İCX-450 | | | | | 50 |
| İCX-460 | | | | | 60 |
| İCX-470 | | | | | 70 |
| İCX-480 | | | | | 80 |
| İCX-490 | | | | | 90 |
| İCX-4100 | | | | | 100 |

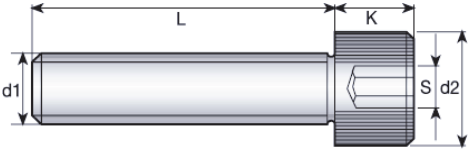
| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-510 | M5 | 8,5 | 5 | 4 | 10 |
| İCX-512 | | | | | 12 |
| İCX-515 | | | | | 15 |
| İCX-520 | | | | | 20 |
| İCX-525 | | | | | 25 |
| İCX-530 | | | | | 30 |
| İCX-535 | | | | | 35 |
| İCX-540 | | | | | 40 |
| İCX-545 | | | | | 45 |
| İCX-550 | | | | | 50 |
| İCX-560 | | | | | 60 |
| İCX-570 | | | | | 70 |
| İCX-580 | | | | | 80 |
| İCX-590 | | | | | 90 |
| İCX-5100 | | | | | 100 |
| İCX-5110 | | | | | 110 |
| İCX-5120 | | | | | 120 |
| İCX-5130 | | | | | 130 |
| İCX-5140 | | | | | 140 |
| İCX-5150 | | | | | 150 |
| İCX-610 | M6 | 10 | 6 | 5 | 10 |
| İCX-612 | | | | | 12 |
| İCX-615 | | | | | 15 |
| İCX-620 | | | | | 20 |
| İCX-625 | | | | | 25 |

| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-630 | M6 | 10 | 6 | 5 | 30 |
| İCX-635 | | | | | 35 |
| İCX-640 | | | | | 40 |
| İCX-645 | | | | | 45 |
| İCX-650 | | | | | 50 |
| İCX-655 | | | | | 55 |
| İCX-660 | | | | | 60 |
| İCX-670 | | | | | 70 |
| İCX-680 | | | | | 80 |
| İCX-690 | | | | | 90 |
| İCX-6100 | | | | | 100 |
| İCX-6110 | | | | | 110 |
| İCX-6120 | | | | | 120 |
| İCX-6130 | | | | | 130 |
| İCX-6140 | | | | | 140 |
| İCX-6150 | | | | | 150 |
| İCX-810 | M8 | 13 | 8 | 6 | 10 |
| İCX-812 | | | | | 12 |
| İCX-815 | | | | | 15 |
| İCX-820 | | | | | 20 |
| İCX-825 | | | | | 25 |
| İCX-830 | | | | | 30 |
| İCX-835 | | | | | 35 |
| İCX-840 | | | | | 40 |
| İCX-845 | | | | | 45 |

| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-850 | M8 | 13 | 8 | 6 | 50 |
| İCX-855 | | | | | 55 |
| İCX-860 | | | | | 60 |
| İCX-865 | | | | | 65 |
| İCX-870 | | | | | 70 |
| İCX-880 | | | | | 80 |
| İCX-890 | | | | | 90 |
| İCX-8100 | | | | | 100 |
| İCX-8110 | | | | | 110 |
| İCX-8120 | | | | | 120 |
| İCX-8130 | | | | | 130 |
| İCX-8140 | | | | | 140 |
| İCX-8150 | | | | | 150 |
| İCX-8160 | | | | | 160 |
| İCX-8170 | | | | | 170 |
| İCX-8180 | | | | | 180 |
| İCX-8190 | | | | | 190 |
| İCX-8200 | | | | | 200 |
| İCX-1015 | M10 | 16 | 10 | 8 | 15 |
| İCX-1020 | | | | | 20 |
| İCX-1030 | | | | | 30 |
| İCX-1035 | | | | | 35 |
| İCX-1040 | | | | | 40 |
| İCX-1045 | | | | | 45 |
| İCX-1050 | | | | | 50 |
| İCX-1055 | | | | | 55 |

## İCX - İmbus Civata

**Kalite** : 12.9




| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-1060 | M10 | 16 | 10 | 8 | 60 |
| İCX-1065 | | | | | 65 |
| İCX-1070 | | | | | 70 |
| İCX-1080 | | | | | 80 |
| İCX-1090 | | | | | 90 |
| İCX-10100 | | | | | 100 |
| İCX-10110 | | | | | 110 |
| İCX-10120 | | | | | 120 |
| İCX-10130 | | | | | 130 |
| İCX-10140 | | | | | 140 |
| İCX-10150 | | | | | 150 |
| İCX-10160 | | | | | 160 |
| İCX-10170 | | | | | 170 |
| İCX-10180 | | | | | 180 |
| İCX-10190 | | | | | 190 |
| İCX-10200 | | | | | 200 |
| İCX-10220 | | | | | 220 |
| İCX-10240 | | | | | 240 |
| İCX-10260 | | | | | 260 |
| İCX-10280 | | | | | 280 |
| İCX-10300 | | | | | 300 |
| İCX-1220 | M12 | 18 | 12 | 10 | 20 |
| İCX-1225 | | | | | 25 |
| İCX-1230 | | | | | 30 |
| İCX-1235 | | | | | 35 |
| İCX-1240 | | | | | 40 |
| İCX-1245 | | | | | 45 |
| İCX-1250 | | | | | 50 |
| İCX-1255 | | | | | 55 |
| İCX-1260 | | | | | 60 |
| İCX-1265 | | | | | 65 |
| İCX-1270 | | | | | 70 |
| İCX-1280 | | | | | 80 |
| İCX-1290 | | | | | 90 |
| İCX-12100 | | | | | 100 |
| İCX-12110 | | | | | 110 |
| İCX-12120 | | | | | 120 |
| İCX-12130 | | | | | 130 |
| İCX-12140 | | | | | 140 |
| İCX-12150 | | | | | 150 |
| İCX-12160 | | | | | 160 |
| İCX-12170 | | | | | 170 |
| İCX-12180 | | | | | 180 |
| İCX-12190 | | | | | 190 |
| İCX-12200 | | | | | 200 |
| İCX-12220 | | | | | 220 |
| İCX-12240 | | | | | 240 |
| İCX-12260 | | | | | 260 |
| İCX-12280 | | | | | 280 |
| İCX-12300 | | | | | 300 |

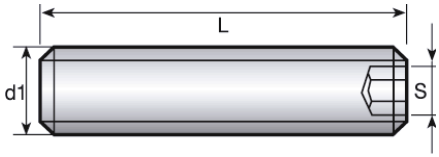
| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-1425 | M14 | 21 | 14 | 12 | 25 |
| İCX-1430 | | | | | 30 |
| İCX-1435 | | | | | 35 |
| İCX-1440 | | | | | 40 |
| İCX-1445 | | | | | 45 |
| İCX-1450 | | | | | 50 |
| İCX-1455 | | | | | 55 |
| İCX-1460 | | | | | 60 |
| İCX-1470 | | | | | 70 |
| İCX-1480 | | | | | 80 |
| İCX-1490 | | | | | 90 |
| İCX-14100 | | | | | 100 |
| İCX-14110 | | | | | 110 |
| İCX-14120 | | | | | 120 |
| İCX-14130 | | | | | 130 |
| İCX-14140 | | | | | 140 |
| İCX-14150 | | | | | 150 |
| İCX-14160 | | | | | 160 |
| İCX-14170 | | | | | 170 |
| İCX-14180 | | | | | 180 |
| İCX-14190 | | | | | 190 |
| İCX-14200 | | | | | 200 |
| İCX-14220 | | | | | 220 |
| İCX-14240 | | | | | 240 |
| İCX-1625 | M16 | 24 | 16 | 14 | 25 |
| İCX-1630 | | | | | 30 |
| İCX-1635 | | | | | 35 |
| İCX-1640 | | | | | 40 |
| İCX-1645 | | | | | 45 |
| İCX-1650 | | | | | 50 |
| İCX-1655 | | | | | 55 |
| İCX-1660 | | | | | 60 |
| İCX-1665 | | | | | 65 |
| İCX-1670 | | | | | 70 |
| İCX-1680 | | | | | 80 |
| İCX-1690 | | | | | 90 |
| İCX-16100 | | | | | 100 |
| İCX-16110 | | | | | 110 |
| İCX-16120 | | | | | 120 |
| İCX-16130 | | | | | 130 |
| İCX-16140 | | | | | 140 |
| İCX-16150 | | | | | 150 |
| İCX-16160 | | | | | 160 |
| İCX-16170 | | | | | 170 |
| İCX-16180 | | | | | 180 |
| İCX-16190 | | | | | 190 |
| İCX-16200 | | | | | 200 |
| İCX-16220 | | | | | 220 |
| İCX-16240 | | | | | 240 |
| İCX-16260 | | | | | 260 |
| İCX-16280 | | | | | 280 |
| İCX-16300 | | | | | 300 |
| İCX-16320 | | | | | 320 |
| İCX-16340 | | | | | 340 |
| İCX-16360 | | | | | 360 |
| İCX-16380 | | | | | 380 |

| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-1840 | M18 | 27 | 18 | 14 | 40 |
| İCX-1850 | | | | | 50 |
| İCX-1860 | | | | | 60 |
| İCX-1870 | | | | | 70 |
| İCX-1880 | | | | | 80 |
| İCX-1890 | | | | | 90 |
| İCX-18100 | | | | | 100 |
| İCX-18120 | | | | | 120 |
| İCX-18130 | | | | | 130 |
| İCX-18140 | | | | | 140 |
| İCX-18150 | | | | | 150 |
| İCX-18160 | | | | | 160 |
| İCX-18180 | | | | | 180 |
| İCX-18200 | | | | | 200 |
| İCX-2040 | M20 | 30 | 20 | 17 | 40 |
| İCX-2045 | | | | | 45 |
| İCX-2050 | | | | | 50 |
| İCX-2055 | | | | | 55 |
| İCX-2060 | | | | | 60 |
| İCX-2070 | | | | | 70 |
| İCX-2080 | | | | | 80 |
| İCX-2090 | | | | | 90 |
| İCX-20100 | | | | | 100 |
| İCX-20110 | | | | | 110 |
| İCX-20120 | | | | | 120 |
| İCX-20130 | | | | | 130 |
| İCX-20140 | | | | | 140 |
| İCX-20150 | | | | | 150 |
| İCX-20160 | | | | | 160 |
| İCX-20170 | | | | | 170 |
| İCX-20180 | | | | | 180 |
| İCX-20190 | | | | | 190 |
| İCX-20200 | | | | | 200 |
| İCX-20220 | | | | | 220 |
| İCX-20240 | | | | | 240 |
| İCX-20260 | | | | | 260 |
| İCX-20280 | | | | | 280 |
| İCX-20300 | | | | | 300 |
| İCX-20320 | | | | | 320 |
| İCX-20340 | | | | | 340 |
| İCX-20360 | | | | | 360 |
| İCX-20380 | | | | | 380 |
| İCX-20400 | | | | | 400 |
| İCX-2450 | M24 | 36 | 24 | 19 | 50 |
| İCX-2460 | | | | | 60 |
| İCX-2470 | | | | | 70 |
| İCX-2480 | | | | | 80 |

| Sipariş | d1 | d2 | K | S | L |
|---|---|---|---|---|---|
| İCX-2490 | M24 | 36 | 24 | 19 | 90 |
| İCX-24100 | | | | | 100 |
| İCX-24110 | | | | | 110 |
| İCX-24120 | | | | | 120 |
| İCX-24130 | | | | | 130 |
| İCX-24140 | | | | | 140 |
| İCX-24150 | | | | | 150 |
| İCX-24160 | | | | | 160 |
| İCX-24180 | | | | | 180 |
| İCX-24200 | | | | | 200 |
| İCX-24220 | | | | | 220 |
| İCX-24240 | | | | | 240 |
| İCX-24260 | | | | | 260 |
| İCX-24280 | | | | | 280 |
| İCX-24300 | | | | | 300 |
| İCX-24320 | | | | | 320 |
| İCX-24340 | | | | | 340 |
| İCX-24360 | | | | | 360 |
| İCX-24380 | | | | | 380 |
| İCX-24400 | | | | | 400 |
| İCX-3060 | M30 | 45 | 30 | 22 | 60 |
| İCX-3070 | | | | | 70 |
| İCX-3080 | | | | | 80 |
| İCX-3090 | | | | | 90 |
| İCX-30100 | | | | | 100 |
| İCX-30120 | | | | | 120 |
| İCX-30140 | | | | | 140 |
| İCX-30160 | | | | | 160 |
| İCX-30180 | | | | | 180 |
| İCX-30200 | | | | | 200 |
| İCX-30220 | | | | | 220 |
| İCX-30240 | | | | | 240 |
| İCX-30260 | | | | | 260 |
| İCX-30280 | | | | | 280 |
| İCX-30300 | | | | | 300 |
| İCX-30320 | | | | | 320 |
| İCX-30340 | | | | | 340 |
| İCX-30360 | | | | | 360 |
| İCX-30380 | | | | | 380 |
| İCX-36100 | M36 | 54 | 36 | 28 | 100 |
| İCX-36120 | | | | | 120 |
| İCX-36140 | | | | | 140 |
| İCX-36160 | | | | | 160 |
| İCX-36180 | | | | | 180 |
| İCX-36200 | | | | | 200 |
| İCX-36220 | | | | | 220 |
| İCX-36240 | | | | | 240 |
| İCX-36260 | | | | | 260 |
| İCX-36280 | | | | | 280 |
| İCX-36300 | | | | | 300 |

## SET - Setskur Civata

**Kalite** : 12.9




| Sipariş | d1 | S | L |
|---|---|---|---|
| SET-310 | M3 | 1,2 | 10 |
| SET-316 | | | 15 |
| SET-320 | | | 20 |
| SET-410 | M4 | 2 | 10 |
| SET-416 | | | 15 |
| SET-420 | | | 20 |
| SET-425 | | | 25 |
| SET-430 | | | 30 |
| SET-510 | M5 | 2,5 | 10 |
| SET-516 | | | 15 |
| SET-520 | | | 20 |
| SET-525 | | | 25 |
| SET-530 | | | 30 |
| SET-535 | | | 35 |
| SET-540 | | | 40 |

| Sipariş | d1 | S | L |
|---|---|---|---|
| SET-610 | M6 | 3 | 10 |
| SET-616 | | | 15 |
| SET-620 | | | 20 |
| SET-625 | | | 25 |
| SET-630 | | | 30 |
| SET-635 | | | 35 |
| SET-640 | | | 40 |
| SET-810 | M8 | 4 | 10 |
| SET-816 | | | 15 |
| SET-820 | | | 20 |
| SET-825 | | | 25 |
| SET-830 | | | 30 |
| SET-835 | | | 35 |
| SET-840 | | | 40 |
| SET-850 | | | 50 |

| Sipariş | d1 | S | L |
|---|---|---|---|
| SET-1010 | M10 | 5 | 10 |
| SET-1016 | | | 15 |
| SET-1020 | | | 20 |
| SET-1025 | | | 25 |
| SET-1030 | | | 30 |
| SET-1035 | | | 35 |
| SET-1040 | | | 40 |
| SET-1050 | | | 50 |
| SET-1060 | | | 60 |
| SET-1210 | M12 | 6 | 10 |
| SET-1216 | | | 15 |
| SET-1220 | | | 20 |
| SET-1225 | | | 25 |
| SET-1230 | | | 30 |

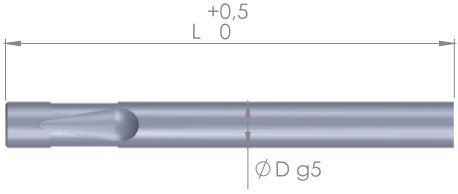
| Sipariş | d1 | S | L |
|---|---|---|---|
| SET-1235 | M12 | 6 | 35 |
| SET-1240 | | | 40 |
| SET-1250 | | | 50 |
| SET-1416 | M14 | 6 | 15 |
| SET-1420 | | | 20 |
| SET-1425 | | | 25 |
| SET-1430 | M14 | 6 | 30 |
| SET-1435 | | | 35 |
| SET-1440 | | | 40 |
| SET-1450 | | | 50 |
| SET-1460 | | | 60 |
| SET-1616 | M16 | 8 | 16 |
| SET-1620 | | | 20 |
| SET-1625 | | | 25 |

| Sipariş | d1 | S | L |
|---|---|---|---|
| SET-1630 | M16 | 8 | 30 |
| SET-1635 | | | 35 |
| SET-1640 | | | 40 |
| SET-1650 | | | 50 |
| SET-2020 | M20 | 10 | 20 |
| SET-2025 | | | 25 |
| SET-2030 | | | 30 |
| SET-2040 | | | 40 |
| SET-2050 | | | 50 |
| SET-2060 | | | 60 |

## Bilyalı Düz Zımba

**DBD**
**UBD**

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC




Özel üretim zımbalar için sipariş esnasında termin sorunuz.

**DBD -** Hafif Yükler **UBD -** Ağır Yükler

| D | L | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 125 |
| 10 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 13 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |

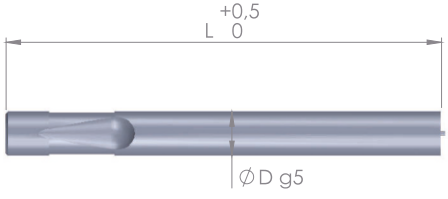
| D | L | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 125 |
| 16 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 20 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |

| D | L | | | | | | |
|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 125 |
| 25 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 32 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 40 | | | ◦ | ◦ | ◦ | ◦ | ◦ |

## Bilyalı Fırlatıcılı Düz Zımba

**DBF**
**UBF**

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC




Özel üretim zımbalar için sipariş esnasında termin sorunuz.

**DBF -** Hafif Yükler **UBF -** Ağır Yükler

| D | L | | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 125 | |
| 10 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | J4M |
| 13 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | J6M |

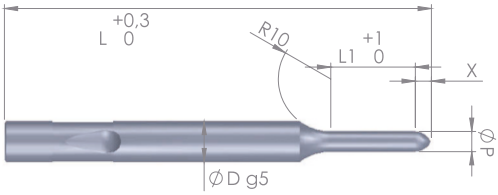
| D | L | | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 125 | |
| 16 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | J6M |
| 20 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | J9M |

| D | L | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 125 | |
| 25 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | J9M |
| 32 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | J12M |
| 40 | | | ◦ | ◦ | ◦ | ◦ | ◦ | J12M |

## Bilyalı Kademeli Pilot Zımba

**DBPP**
**UBPP**

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC




Özel üretim zımbalar için sipariş esnasında termin sorunuz.

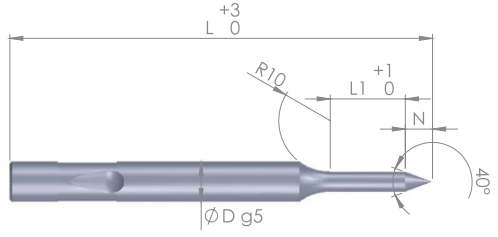
**DBPP -** Hafif Yükler **UBPP -** Ağır Yükler

| D | L1 | | | Kademe P | L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | Alt. | | 65 | 73 | 82 | 92 | 102 | 112 | 127 |
| 10.0 | 21 | 12* | - | 2.05 ~ 10.0 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 13.0 | | 15 | 27 | 4.95 ~ 13.0 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 16.0 | | | | 7.95 ~ 16.0 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 20.0 | | | | 11.95 ~ 20.0 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 25.0 | | | | 15.95 ~ 25.0 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 32.0 | | | | 23.95 ~ 32.0 | | | | ◦ | ◦ | ◦ | ◦ |
| 40.0 | 27 | 21 | 32 | 29.95 ~ 40.0 | | | | | | ◦ | ◦ |

## Bilyalı Kademeli Pilot Zımba

**DBPS**
**UBPS**

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC




Özel üretim zımbalar için sipariş esnasında termin sorunuz.

**DBPS -** Hafif Yükler **UBPS -** Ağır Yükler

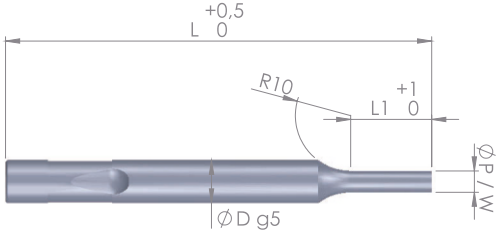
| D | L1 | | Kademe P | N | L | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | | 71 | 80 | 90 | 100 | 110 | 125 | 140 | 150 |
| 10.0 | 19 | 32 | 5.00 ~ 10.0 | 10.0 | ◦ | ◦ | ◦ | ◦ | ◦ | | | |
| 13.0 | | | 9.00 ~ 13.0 | 13.0 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | |
| 16.0 | 25 | 38 | 12.0 ~ 16.0 | 16.0 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 20.0 | | | 15.0 ~ 20.0 | 20.0 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 25.0 | | | 19.0 ~ 25.0 | 25.0 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 32.0 | | | 24.0 ~ 32.0 | 32.0 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 38.0 | 30 | 45 | 30.0 ~ 38.0 | 38.0 | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |

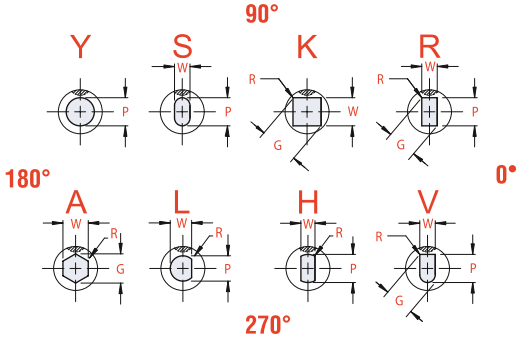


## Bilyalı Kademeli Zımba

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

**DBD**
**UBD**




**DBD -** Hafif Yükler **UBD -** Ağır Yükler

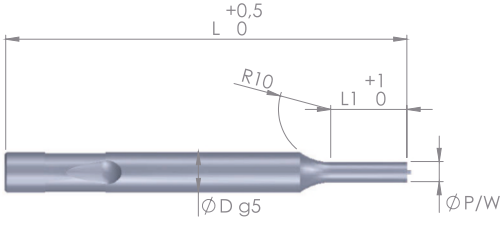
Sipariş esnasında uç form tipi seçiniz.
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

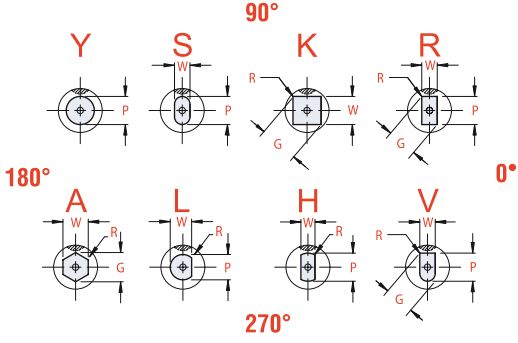
| D | L1 | | | Kademe P | FORM MİN. | FORM MAX. | L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | Alt. | | W | P/G | 63 | 71 | 80 | 90 | 100 | 110 | 125 |
| 10.0 | 19 | 10* | - | 2.10 ~ 9.97 | 2.10 | 9.97 | • | • | • | • | • | | |
| 13.0 | | 13 | 25 | 5.00 ~ 12.97 | 4.50 | 12.97 | • | • | • | • | • | • | • |
| 16.0 | | | | 8.00 ~ 15.97 | 6.00 | 15.97 | • | • | • | • | • | • | • |
| 20.0 | | | | 12.0 ~ 19.97 | 8.00 | 19.97 | • | • | • | • | • | • | • |
| 25.0 | | | | 16.0 ~ 24.97 | 10.0 | 24.97 | | • | • | • | • | • | • |
| 32.0 | | | | 24.0 ~ 31.97 | 12.5 | 31.97 | | • | • | • | • | • | • |
| 40.0 | 25 | 19 | 30 | 30.0 ~ 39.97 | 14.0 | 39.97 | | | • | • | • | • | • |

## Bilyalı Kademeli Zımba Fırlatıcılı

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

**DBF**
**UBF**




**DBF -** Hafif Yükler **UBF -** Ağır Yükler

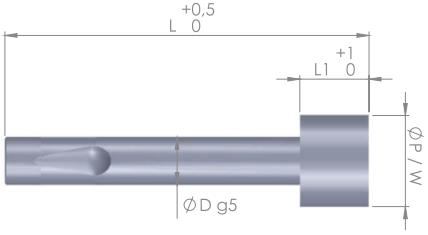
Sipariş esnasında uç form tipi seçiniz.
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

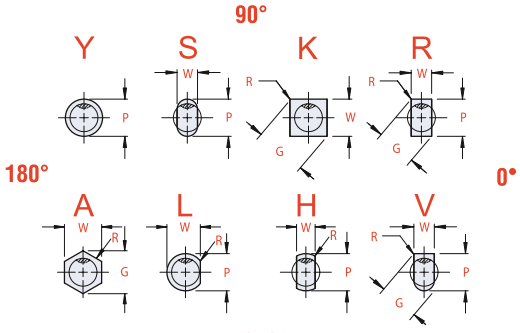
| D | L1 | | | Kademe P | FORM MİN. | FORM MAX. | L | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | Alt. | | W | P/G | 63 | 71 | 80 | 90 | 100 | 110 | 125 | |
| 10.0 | 19 | 10* | - | 2.10 ~ 9.97 | 2.10 | 9.97 | • | • | • | • | • | | | J4M |
| 13.0 | | 13 | 25 | 5.00 ~ 12.97 | 4.50 | 12.97 | • | • | • | • | • | • | • | J6M |
| 16.0 | | | | 8.00 ~ 15.97 | 6.00 | 15.97 | • | • | • | • | • | • | • | J6M |
| 20.0 | | | | 12.0 ~ 19.97 | 8.00 | 19.97 | • | • | • | • | • | • | • | J9M |
| 25.0 | | | | 16.0 ~ 24.97 | 10.0 | 24.97 | | • | • | • | • | • | • | J9M |
| 32.0 | | | | 24.0 ~ 31.97 | 12.5 | 31.97 | | • | • | • | • | • | • | J12M |
| 40.0 | 25 | 19 | 30 | 30.0 ~ 39.97 | 14.0 | 39.97 | | | • | • | • | • | • | J12M |

## Ucu Kalın Bilyalı Zımba

**DBKD**
**UBKD**

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC




**DBKD -** Hafif Yükler **UBKD -** Ağır Yükler

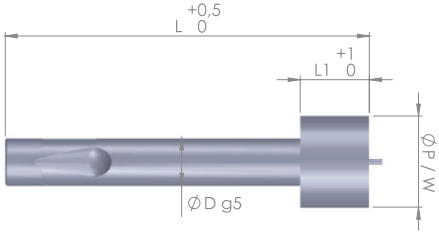
Sipariş esnasında uç form tipi seçiniz.
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

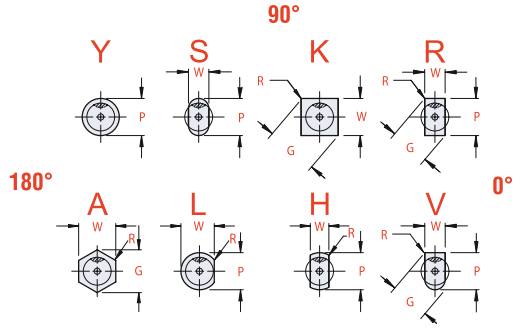
| D | L1 | | Kademe P | ŞEKİL | | L | | |
|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | W | P/G | 80 | 90 | 100 |
| 13 | 19 | 30 | 13.1 ~ 32.0 | 5 | 32 | • | • | • |
| 16 | | | 16.1 ~ 38.0 | 6 | 38 | • | • | • |
| 20 | | | 20.1 ~ 40.0 | 8 | 40 | • | • | • |
| 25 | | | 25.1 ~ 44.0 | 10 | 44 | • | • | • |
| 32 | | | 32.1 ~ 50.0 | 11.5 | 50 | • | • | • |
| 40 | | | 40.1 ~ 56.0 | 14 | 56 | • | • | • |

## Ucu Kalın Bilyalı Zımba Fırlatıcılı

**DBKF**
**UBKF**

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC



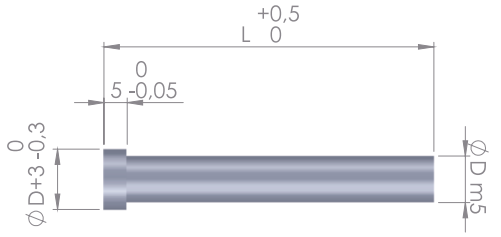

**DBF -** Hafif Yükler **UBF -** Ağır Yükler

Sipariş esnasında uç form tipi seçiniz.
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | L1 | | Kademe P | ŞEKİL | | L | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | W | P/G | 80 | 90 | 100 | |
| 13 | 19 | 30 | 13.1 ~ 32.0 | 5 | 32 | • | • | • | J6M |
| 16 | | | 16.1 ~ 38.0 | 6 | 38 | • | • | • | J6M |
| 20 | | | 20.1 ~ 40.0 | 8 | 40 | • | • | • | J9M |
| 25 | | | 25.1 ~ 44.0 | 10 | 44 | • | • | • | J9M |
| 32 | | | 32.1 ~ 50.0 | 11.5 | 50 | • | • | • | J12M |
| 40 | | | 40.1 ~ 56.0 | 14 | 56 | • | • | • | J12M |

## DSZ - Silindir Başlı Düz Zımba

**Malzeme :** A2 / M2
**A2 Sertlik :** 58 - 60 HRC
**M2 Sertlik :** 60 - 63 HRC




Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | L |
|---|---|
| 4.00 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |
| 5.00 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |
| 6.00 | 63 |
| | 71 |
| | 80 |
| | 90 |

| D | L |
|---|---|
| 6.00 | 100 |
| | 110 |
| 8.00 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |
| | 110 |
| | 120 |
| 10.0 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |

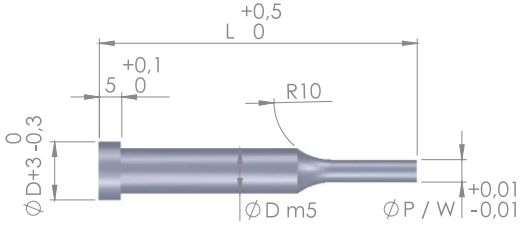
| D | L |
|---|---|
| 10.0 | 110 |
| | 120 |
| 13.0 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |
| | 110 |
| | 120 |
| | 130 |
| 16.0 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |

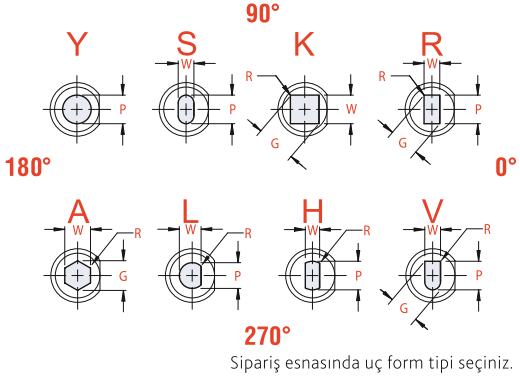
| D | L |
|---|---|
| 16.0 | 100 |
| | 110 |
| | 120 |
| | 130 |
| 20.0 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |
| | 110 |
| | 120 |
| | 130 |
| 25.0 | 63 |
| | 71 |

| D | L |
|---|---|
| 25.0 | 80 |
| | 90 |
| | 100 |
| | 110 |
| | 120 |
| | 130 |
| 30.0 | 63 |
| | 71 |
| | 80 |
| | 90 |
| | 100 |
| | 110 |
| | 120 |
| | 130 |

## DKK - Silindir Başlı Kademeli Zımba

**Malzeme :** A2 / M2
**A2 Sertlik :** 58 - 60 HRC
**M2 Sertlik :** 60 - 63 HRC



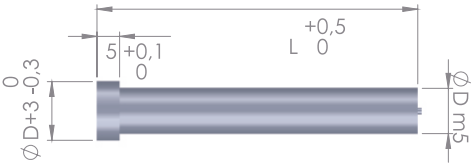

Sipariş esnasında uç form tipi seçiniz.
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | L1 | | Kademe P | ŞEKİL | | L | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | W | P/G | 63 | 71 | 80 | 90 | 100 |
| 4.00 | 8 | 13 | 1.60 ~ 3.95 | 1.60 | 3.95 | • | • | • | • | • |
| 5.00 | 13 | 19 | 1.60 ~ 4.95 | 1.60 | 4.95 | • | • | • | • | • |
| 6.00 | | | 1.60 ~ 5.95 | 1.60 | 5.95 | • | • | • | • | • |
| 8.00 | 19 | 25 | 2.50 ~ 7.95 | 2.50 | 7.95 | • | • | • | • | • |
| 10.0 | | | 3.20 ~ 9.95 | 3.20 | 9.95 | • | • | • | • | • |
| 13.0 | | | 5.00 ~ 12.95 | 5.00 | 12.95 | • | • | • | • | • |
| 16.0 | | | 8.00 ~ 15.95 | 8.00 | 15.95 | • | • | • | • | • |
| 20.0 | | | 10.0 ~ 19.95 | 10.0 | 19.95 | • | • | • | • | • |
| 25.0 | | | 12.0 ~ 24.95 | 12.0 | 24.95 | • | • | • | • | • |
| 32.0 | 25 | 30 | 16.0 ~ 31.95 | 16.0 | 31.95 | • | • | • | • | • |

## DSF - Silindir Başlı Zımba Fırlatıcılı

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

Özel üretim zımbalar için sipariş esnasında termin sorunuz.

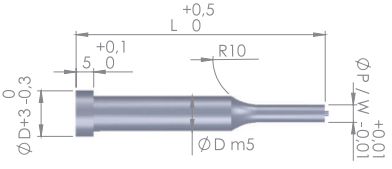



| D | L | | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 120 | 130 | |
| 4.00 | ∘ | ∘ | ∘ | ∘ | ∘ | | | | J2M |
| 5.00 | ∘ | ∘ | ∘ | ∘ | ∘ | | | | J3M |
| 6.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | | | J4M |
| 8.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | | J6M |
| 10.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | | J6M |
| 13.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | J9M |
| 16.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | J9M |
| 20.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | J9M |
| 25.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | J12M |
| 32.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | J12M |

## DSF - SB Kademeli Zımba Fırlatıcılı

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

Özel üretim zımbalar için sipariş esnasında termin sorunuz.

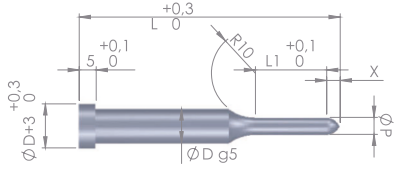



| D | L1 | | Kademe P | ŞEKİL | | L | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | W | P/G | 63 | 71 | 80 | 90 | 100 | |
| 5.00 | 13 | 19 | 1.60 ~ 4.95 | 1.60 | 4.95 | ∘ | ∘ | ∘ | | | J2M |
| 6.00 | | | 2.40 ~ 5.95 | 2.40 | 5.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J3M |
| 8.00 | 19 | 25 | 3.20 ~ 7.95 | 3.20 | 7.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J4M |
| 10.0 | | | 4.50 ~ 9.95 | 4.50 | 9.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J6M |
| 13.0 | | | 6.00 ~ 12.95 | 6.00 | 12.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J6M |
| 16.0 | | | 8.00 ~ 15.95 | 8.00 | 15.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J9M |
| 20.0 | | | 10.0 ~ 19.95 | 10.0 | 19.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J9M |
| 25.0 | | | 12.0 ~ 24.95 | 12.0 | 24.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J9M |
| 32.0 | 25 | 30 | 16.0 ~ 31.95 | 16.0 | 31.95 | ∘ | ∘ | ∘ | ∘ | ∘ | J12M |

## DSP - Silindir Başlı Pilot Zımba

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

Özel üretim zımbalar için sipariş esnasında termin sorunuz.

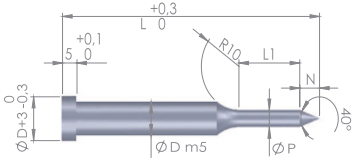



| D | L1 | | Kademe P | L | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | 42 | 52 | 58 | 62 | 65 | 72 | 73 | 82 | 92 | 102 |
| 4.00 | 10 | 15 | 1.55 ~ 4.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | | |
| 5.00 | 15 | 21 | 1.55 ~ 5.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | | |
| 6.00 | | | 1.55 ~ 6.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 8.00 | 21 | 27 | 2.45 ~ 8.00 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 10.0 | | | 3.15 ~ 10.0 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 13.0 | | | 4.95 ~ 13.0 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 16.0 | | | 7.95 ~ 16.0 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 20.0 | | | 9.95 ~ 20.0 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 25.0 | | | 11.95 ~ 25.0 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 32.0 | 27 | 32 | 15.95 ~ 32.0 | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |

## DKK - Silindir Başlı Pilot Zımba

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

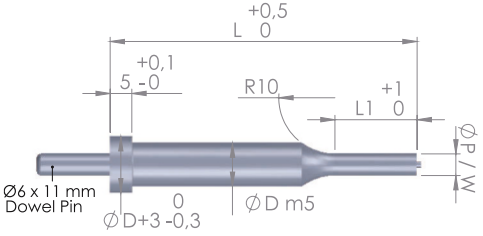
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

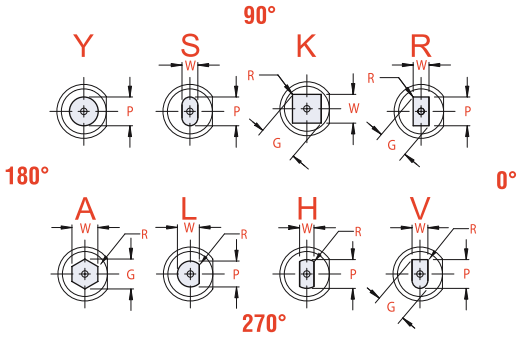



| D | L1 | | Kademe P | L | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | 42 | 52 | 58 | 62 | 65 | 72 | 73 | 82 | 92 | 102 |
| 4.00 | 10 | 15 | 1.55 ~ 4.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | | |
| 5.00 | 15 | 21 | 1.55 ~ 5.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | | |
| 6.00 | | | 1.55 ~ 6.00 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 8.00 | 21 | 27 | 2.45 ~ 8.00 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 10.0 | | | 3.15 ~ 10.0 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 13.0 | | | 4.95 ~ 13.0 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 16.0 | | | 7.95 ~ 16.0 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 20.0 | | | 9.95 ~ 20.0 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 25.0 | | | 11.95 ~ 25.0 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 32.0 | 27 | 32 | 15.95 ~ 32.0 | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |

## DPF - SB Kademeli Zımba Merkez Pimli

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC



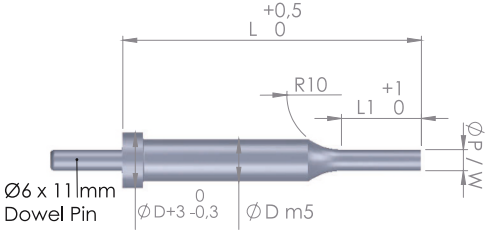



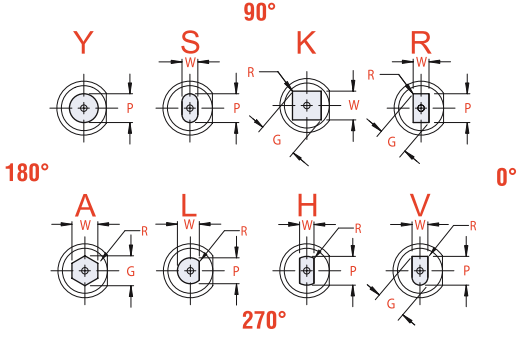

Sipariş esnasında uç form tipi seçiniz.
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | L1 | | Kademe P | ŞEKİL | | L | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | W | P/G | 71 | 80 | 90 | 100 | 110 | 120 | 130 | |
| 10.0 | 19 | 25 | 4.50 ~ 9.95 | 4.50 | 9.95 | • | • | • | • | • | • | • | J6M |
| 13.0 | | | 6.00 ~ 12.95 | 6.00 | 12.95 | • | • | • | • | • | • | • | J6M |
| 16.0 | | | 8.00 ~ 15.95 | 8.00 | 15.95 | • | • | • | • | • | • | • | J9M |
| 20.0 | | | 10.0 ~ 19.95 | 10.0 | 19.95 | • | • | • | • | • | • | • | J9M |
| 25.0 | | | 12.0 ~ 24.95 | 12.0 | 24.95 | • | • | • | • | • | • | • | J9M |
| 32.0 | 25 | 30 | 16.0 ~ 31.95 | 16.0 | 31.95 | • | • | • | • | • | • | • | J9M |

## DPS - SB Kademeli Zımba Merkez Pimli

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC



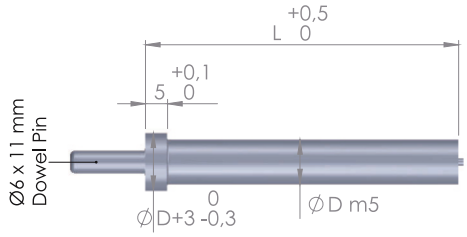




Sipariş esnasında uç form tipi seçiniz.
Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | L1 | | Kademe P | ŞEKİL | | L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | W | P/G | 71 | 80 | 90 | 100 | 110 | 120 | 130 |
| 10.0 | 19 | 25 | 4.50 ~ 9.95 | 4.50 | 9.95 | • | • | • | • | • | • | • |
| 13.0 | | | 6.00 ~ 12.95 | 6.00 | 12.95 | • | • | • | • | • | • | • |
| 16.0 | | | 8.00 ~ 15.95 | 8.00 | 15.95 | • | • | • | • | • | • | • |
| 20.0 | | | 10.0 ~ 19.95 | 10.0 | 19.95 | • | • | • | • | • | • | • |
| 25.0 | | | 12.0 ~ 24.95 | 12.0 | 24.95 | • | • | • | • | • | • | • |
| 32.0 | 25 | 30 | 16.0 ~ 31.95 | 16.0 | 31.95 | • | • | • | • | • | • | • |

## DSF - SB Zımba Merkez Pimli

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC



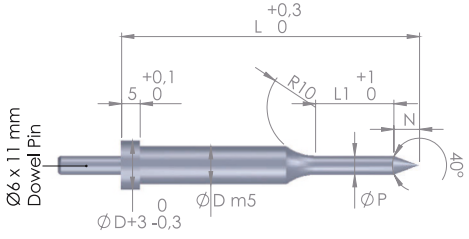

Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | L | | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 120 | 130 | |
| 10.0 | • | • | • | • | • | • | • | • | J6M |
| 13.0 | • | • | • | • | • | • | • | • | J6M |
| 16.0 | • | • | • | • | • | • | • | • | J9M |

| D | L | | | | | | | | İtici Pim |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 71 | 80 | 90 | 100 | 110 | 120 | 130 | |
| 20.0 | • | • | • | • | • | • | • | • | J9M |
| 25.0 | • | • | • | • | • | • | • | • | J9M |
| 32.0 | • | • | • | • | • | • | • | • | J12M |

## DSP - SB Zımba Merkez Pimli

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC



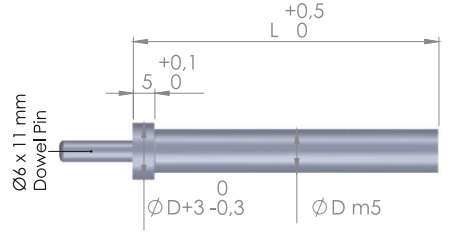

Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | L1 | | Kademe P | Açı Boyu N | L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | | 71 | 80 | 90 | 100 | 110 | 120 | 130 |
| 10.0 | 21 | 27 | 4.85 ~ 9.95 | 8 | • | • | • | • | • | • | • |
| 13.0 | | | 6.30 ~ 12.95 | 10 | • | • | • | • | • | • | • |
| 16.0 | | | 9.95 ~ 16.00 | 15 | • | • | • | • | • | • | • |

| D | L1 | | Kademe P | Açı Boyu N | L | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std. | Alt. | | | 71 | 80 | 90 | 100 | 110 | 120 | 130 |
| 20.0 | 21 | 27 | 13.60 ~ 20.0 | 20 | • | • | • | • | • | • | • |
| 25.0 | | | 17.25 ~ 25.0 | 25 | • | • | • | • | • | • | • |
| 32.0 | 27 | 32 | 20.85 ~ 32.0 | 30 | • | • | • | • | • | • | • |

## DPP - SB Zımba Merkez Pimli

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC




Özel üretim zımbalar için sipariş esnasında termin sorunuz.

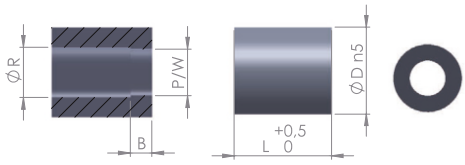
| D | L | | | | | | |
|---|---|---|---|---|---|---|---|
| | 71 | 80 | 90 | 100 | 110 | 120 | 130 |
| 10.0 | • | • | • | • | • | • | • |
| 13.0 | • | • | • | • | • | • | • |
| 16.0 | • | • | • | • | • | • | • |

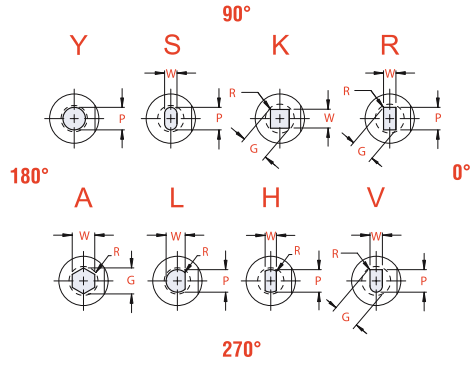
| D | L | | | | | | |
|---|---|---|---|---|---|---|---|
| | 71 | 80 | 90 | 100 | 110 | 120 | 130 |
| 20.0 | • | • | • | • | • | • | • |
| 25.0 | • | • | • | • | • | • | • |
| 32.0 | • | • | • | • | • | • | • |

## DDM - Düz Matris

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

Sipariş esnasında uç form tipi seçiniz.
Özel üretim matrisler için sipariş esnasında termin sorunuz.



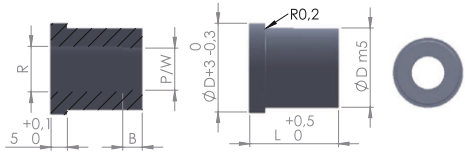



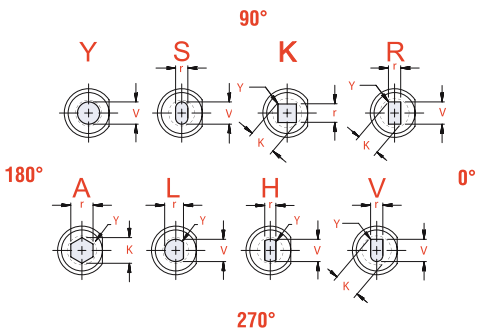

| D | Std. S | B Alt. A | B Alt. B | KADEME P | FORM Min. W | FORM Max. P/G | R | L 20 | 22 | 25 | 28 | 30 | 32 | 35 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.00 | 4 | – | – | 1.50 ~ 2.40 | – | – | 3.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 2.41 ~ 3.00 | | | 4.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | 8 | | 3.01 ~ 3.20 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 10.0 | 4 | – | – | 1.50 ~ 2.40 | – | – | 3.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 2.41 ~ 3.00 | | | 4.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | 8 | | 3.01 ~ 3.20 | 1.20 | 3.20 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 3.21 ~ 5.00 | | 5.00 | 6.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 13.0 | 5 | – | – | 1.50 ~ 2.40 | – | – | 3.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 2.41 ~ 3.00 | | | 4.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | 8 | | 3.01 ~ 3.20 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 3.21 ~ 5.00 | 2.00 | 5.00 | 6.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 5.01 ~ 7.20 | | 7.20 | 8.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 16.0 | 5 | 8 | – | 5.00 ~ 7.20 | 2.40 | 7.20 | 8.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 7.21 ~ 8.80 | | 8.80 | 9.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 20.0 | 5 | 12 | 20 | 7.00 ~ 8.00 | 3.20 | 8.80 | 9.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 8.81 ~ 11.00 | | 11.00 | 12.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 22.0 | 6 | 12 | 20 | 9.00 ~ 14.00 | 4.00 | 14.00 | 15.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 25.0 | 6 | 12 | 20 | 11.00 ~ 14.00 | 4.80 | 14.00 | 15.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 14.01 ~ 16.50 | | 16.50 | 17.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 32.0 | 6 | 12 | 20 | 13.00 ~ 16.50 | 5.50 | 16.50 | 17.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 16.51 ~ 20.00 | | 20.00 | 21.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 38.0 | 8 | 12 | 20 | 16.00 ~ 20.00 | 6.40 | 20.00 | 21.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 20.01 ~ 26.00 | | 26.00 | 27.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 40.0 | 8 | 12 | 20 | 16.00 ~ 20.00 | 6.40 | 20.00 | 21.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 20.01 ~ 26.00 | | 26.00 | 27.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |

## DSM - Şapkalı Matris

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

Sipariş esnasında uç form tipi seçiniz.
Özel üretim matrisler için sipariş esnasında termin sorunuz.



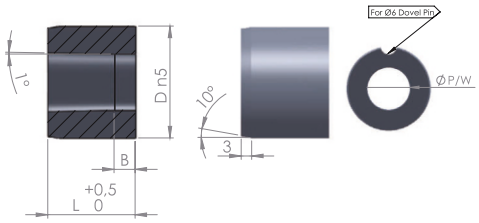



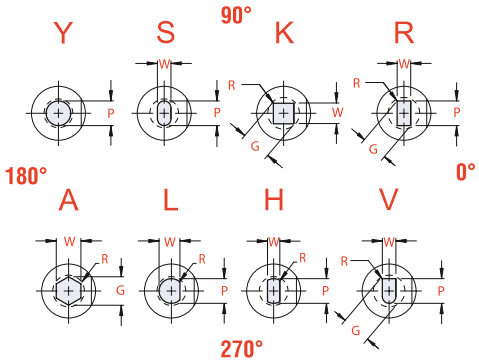

| D | Std. S | B Alt. A | B Alt. B | KADEME P | FORM Min. W | FORM Max. P/G | R | L 20 | 22 | 25 | 28 | 30 | 32 | 35 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.00 | 4 | – | – | 1.50 ~ 2.40 | – | – | 3.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 2.41 ~ 3.00 | | | 4.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | 8 | | 3.01 ~ 3.20 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 10.0 | 4 | – | – | 1.50 ~ 2.40 | – | – | 3.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 2.41 ~ 3.00 | | | 4.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | 8 | | 3.01 ~ 3.20 | 1.20 | 3.20 | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 3.21 ~ 5.00 | | 5.00 | 6.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 13.0 | 5 | – | – | 1.50 ~ 2.40 | – | – | 3.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 2.41 ~ 3.00 | | | 4.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | 8 | | 3.01 ~ 3.20 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 3.21 ~ 5.00 | 2.00 | 5.00 | 6.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 5.01 ~ 7.20 | | 7.20 | 8.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 16.0 | 5 | 8 | – | 5.00 ~ 7.20 | 2.40 | 7.20 | 8.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 7.21 ~ 8.80 | | 8.80 | 9.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 20.0 | 5 | 12 | 20 | 7.00 ~ 8.00 | 3.20 | 8.80 | 9.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 8.81 ~ 11.00 | | 11.00 | 12.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 22.0 | 6 | 12 | 20 | 9.00 ~ 14.00 | 4.00 | 14.00 | 15.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 25.0 | 6 | 12 | 20 | 11.00 ~ 14.00 | 4.80 | 14.00 | 15.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 14.01 ~ 16.50 | | 16.50 | 17.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 32.0 | 6 | 12 | 20 | 13.00 ~ 16.50 | 5.50 | 16.50 | 17.5 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 16.51 ~ 20.00 | | 20.00 | 21.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 38.0 | 8 | 12 | 20 | 16.00 ~ 20.00 | 6.40 | 20.00 | 21.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 20.01 ~ 26.00 | | 26.00 | 27.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 40.0 | 8 | 12 | 20 | 16.00 ~ 20.00 | 6.40 | 20.00 | 21.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| | | | | 20.01 ~ 26.00 | | 26.00 | 27.0 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |

## DKM - Düz Bilyalı Matris

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC

Sipariş esnasında uç form tipi seçiniz.
Özel üretim matrisler için sipariş esnasında termin sorunuz.

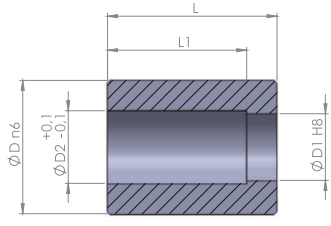


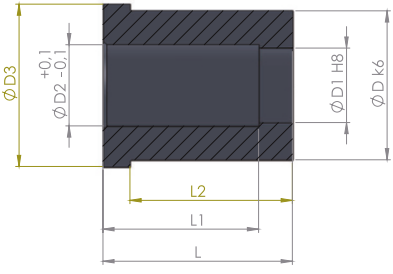




| D | B Std. S | B Alt. A | B Alt. B | KADEME P | FORM MİN. W | FORM MAX. P/G | L 13 | 16 | 20 | 22 | 25 | 28 | 30 | 32 | 35 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 4 | 5 | 3 | 1.60 ~ 6.80 | 1.30 | 6.80 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 13 | 5 | 8 | | 3.00 ~ 8.00 | 1.90 | 8.80 | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 16 | | | | 7.40 ~ 10.80 | | 10.80 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 20 | | 10 | | 9.50 ~ 13.60 | | 13.60 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 22 | 6 | | | 10.50 ~ 15.00 | | 15.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 25 | | | | 12.00 ~ 17.00 | | 17.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 32 | | 12 | | 16.00 ~ 22.00 | | 22.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 38 | 8 | | | 18.00 ~ 27.00 | | 27.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 40 | | | | 18.00 ~ 27.00 | | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | |
| 45 | | | | 18.00 ~ 35.00 | 2.40 | 35.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 50 | | | | 18.00 ~ 40.00 | 4.00 | 40.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 56 | | | | 18.00 ~ 45.00 | | 45.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 63 | | | | 18.00 ~ 50.00 | | 50.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 71 | | | | 18.00 ~ 56.00 | | 56.00 | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 76 | | | | 25.00 ~ 60.00 | 5.60 | 60.00 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 85 | | | | 25.00 ~ 66.00 | | 66.00 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 90 | | | | 32.70 ~ 70.00 | | 70.00 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |
| 100 | | | | 32.00 ~ 78.00 | | 78.00 | | | | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ | ∘ |

## DKM - Düz ve Şapkalı Matris

**Malzeme** : Çelik - HSS / HWS
**Sertlik** : 60 - 62 HRC



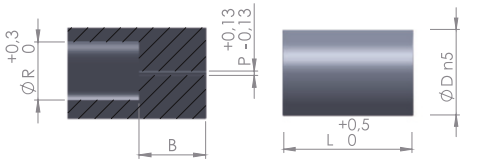

| D1 | D | D2 | D3 | L | L1 | L2 |
|---|---|---|---|---|---|---|
| 1.1 - 1.8 | 6 | D1 + 06 | 8 | 20 | 17 | 16 |
| 1.1. - 1.8 | 6 | D1 + 06 | 8 | 28 | 25 | 24 |
| 1.9 - 2.6 | 7 | D1 + 06 | 9 | 20 | 17 | 16 |
| 1.9 - 2.6 | 7 | D1 + 06 | 9 | 28 | 25 | 24 |
| 2.7 - 3.3 | 7 | D1 + 06 | 9 | 20 | 17 | 16 |
| 2.7 - 3.3 | 7 | D1 + 06 | 9 | 28 | 25 | 24 |
| 3.4 - 4 | 8 | D1 + 06 | 10 | 20 | 17 | 16 |
| 3.4 - 4 | 8 | D1 + 06 | 10 | 28 | 25 | 24 |
| 4.1 - 5 | 10 | D1 + 06 | 12 | 20 | 16 | 16 |
| 4.1 - 5 | 10 | D1 + 1 | 12 | 28 | 24 | 24 |
| 5.1 - 6 | 12 | D1 + 1 | 14 | 20 | 16 | 16 |
| 5.1 - 6 | 12 | D1 + 1 | 14 | 28 | 24 | 24 |
| 6.1 - 8 | 15 | D1 + 1 | 17 | 20 | 16 | 16 |
| 6.1 - 8 | 15 | D1 + 1 | 17 | 28 | 24 | 24 |
| 8.1 - 10 | 18 | D1 + 1 | 20 | 20 | 16 | 16 |
| 8.1 - 10 | 18 | D1 + 1 | 20 | 28 | 24 | 24 |
| 10.1 - 12 | 22 | D1 + 1 | 24 | 20 | 15 | 16 |
| 10.1 - 12 | 22 | D1 + 1 | 24 | 28 | 23 | 24 |
| 12.1 - 15 | 26 | D1 + 1 | 28 | 20 | 15 | 16 |
| 12.1 - 15 | 26 | D1 + 1 | 28 | 28 | 23 | 24 |
| 15.5 - 18 | 30 | D1 + 1 | 32 | 28 | 23 | 24 |
| 18.5 - 22 | 35 | D1 + 1 | 37 | 28 | 23 | 24 |
| 22.5 - 26 | 42 | D1 + 1 | 44 | 28 | 23 | 24 |
| 26.5 - 30 | 48 | D1 + 1 | 50 | 28 | 23 | 24 |
| 30.5 - 35 | 55 | D1 + 1 | 57 | 28 | 23 | 24 |
| 35.5 - 42 | 62 | D1 + 1 | 64 | 28 | 23 | 23 |
| 42.5 - 48 | 70 | D1 + 1 | 72 | 28 | 23 | 23 |

Özel üretim matrisler için sipariş esnasında termin sorunuz.

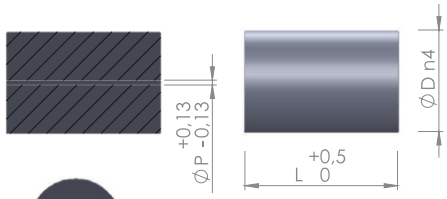
## Düz Matris

DVM
DOV

**Malzeme** : A2 / M2
**A2 Sertlik** : 58 - 60 HRC
**M2 Sertlik** : 60 - 63 HRC




DVM




DOV

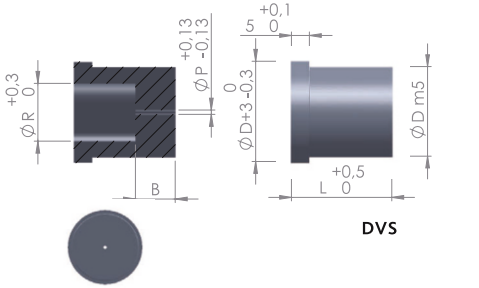
| ØD | KADEME P | B Std S | B Alt. A | B Alt. B | R | L 20 | 22 | 25 | 28 | 30 | 32 | 35 | 40 | 45 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.00 | 0.8 | – | – | – | – | • | • | • | • | • | • | • | • | |
| 10.0 | | 4 | 8 | – | 6.00 | • | • | • | • | • | • | • | • | |
| 13.0 | 1.6 | | | | 8.00 | • | • | • | • | • | • | • | • | |
| 16.0 | | 5 | | | 9.50 | • | • | • | • | • | • | • | • | |
| 20.0 | | | 12 | 20 | 12.0 | • | • | • | • | • | • | • | • | |
| 22.0 | | 6 | | | 15.0 | • | • | • | • | • | • | • | • | |
| 25.0 | | | | | 17.5 | • | • | • | • | • | • | • | • | |
| 32.0 | | | | | 21.0 | • | • | • | • | • | • | • | • | |
| 38.0 | | 8 | | | 27.0 | • | • | • | • | • | • | • | • | |
| 40.0 | | | | | | • | • | • | • | • | • | • | • | |
| 45.0 | 3.2 | | | | 36.0 | | • | • | • | • | • | • | • | • |
| 50.0 | | | 12 | 20 | 41.0 | | • | • | • | • | • | • | • | • |
| 56.0 | | | | | 46.0 | | • | • | • | • | • | • | • | • |
| 63.0 | | | | | 51.0 | | • | • | • | • | • | • | • | • |
| 71.0 | | | | | 57.0 | | • | • | • | • | • | • | • | • |
| 76.0 | | | | | 61.0 | | • | • | • | • | • | • | • | • |
| 85.0 | | | | | 67.0 | | • | • | • | • | • | • | • | • |
| 90.0 | | | | | 71.0 | | • | • | • | • | • | • | • | • |
| 100 | | | | | 79.0 | | • | • | • | • | • | • | • | • |

Özel üretim matrisler için sipariş esnasında termin sorunuz.

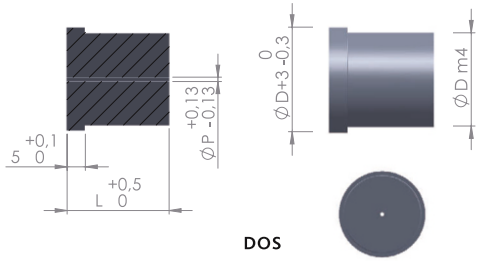
## Şapkalı Matris

DVS
DOS

**Malzeme** : Çelik - HSS / HWS
**Sertlik** : 60 - 62 HRC




DVS



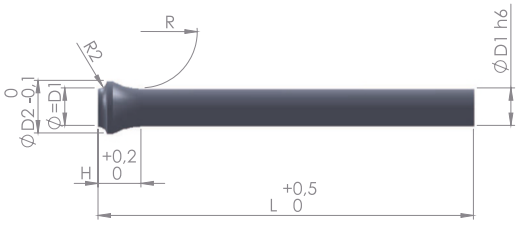

DOS

| ØD | KADEME P | B Std S | B Alt. A | B Alt. B | R | L 20 | 22 | 25 | 28 | 30 | 32 | 35 | 40 | 45 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.00 | 0.8 | – | – | – | – | • | • | • | • | • | • | • | • | |
| 10.0 | | 4 | 8 | – | 6.00 | • | • | • | • | • | • | • | • | |
| 13.0 | 1.6 | | | | 8.00 | • | • | • | • | • | • | • | • | |
| 16.0 | | 5 | | | 9.50 | • | • | • | • | • | • | • | • | |
| 20.0 | | | 12 | 20 | 12.0 | • | • | • | • | • | • | • | • | |
| 22.0 | | 6 | | | 15.0 | • | • | • | • | • | • | • | • | |
| 25.0 | | | | | 17.5 | • | • | • | • | • | • | • | • | |
| 32.0 | | | | | 21.0 | • | • | • | • | • | • | • | • | |
| 38.0 | | 8 | | | 27.0 | • | • | • | • | • | • | • | • | |
| 40.0 | | | | | | • | • | • | • | • | • | • | • | |
| 45.0 | 3.2 | | | | 36.0 | | • | • | • | • | • | • | • | • |
| 50.0 | | | 12 | 20 | 41.0 | | • | • | • | • | • | • | • | • |
| 56.0 | | | | | 46.0 | | • | • | • | • | • | • | • | • |
| 63.0 | | | | | 51.0 | | • | • | • | • | • | • | • | • |
| 71.0 | | | | | 57.0 | | • | • | • | • | • | • | • | • |
| 76.0 | | | | | 61.0 | | • | • | • | • | • | • | • | • |
| 85.0 | | | | | 67.0 | | • | • | • | • | • | • | • | • |
| 90.0 | | | | | 71.0 | | • | • | • | • | • | • | • | • |
| 100 | | | | | 79.0 | | • | • | • | • | • | • | • | • |

Özel üretim matrisler için sipariş esnasında termin sorunuz.

## Radyus Başlı Zımba

**Malzeme** : 1.3343 HSS / 1.2379 HWS
**HSS Sertlik** : 62 - 64 HRC
**HWS Sertlik** : 59 - 61 HRC




Özel üretim zımbalar için sipariş esnasında termin sorunuz.

| D | D2 | H | R | L 71 | L 80 | L 100 | L 110 |
|---|---|---|---|---|---|---|---|
| 2.00 | 3.00 | 4.80 | 3.50 | • | | | |
| 2.10 | 3.20 | 5.28 | 5.00 | • | | | |
| 2.30 | 3.50 | 5.37 | | • | | | |
| 2.60 | 4.00 | 5.93 | 6.50 | • | | | |
| 3.00 | 4.50 | 6.03 | | • | • | • | |
| 3.50 | 5.00 | 6.38 | 8.00 | • | • | • | |
| 4.00 | 5.50 | 7.38 | | • | • | • | • |
| 4.50 | 6.00 | | | • | • | • | • |
| 5.00 | 7.00 | 8.36 | | • | • | • | • |
| 5.50 | 8.00 | 8.84 | 10.0 | • | • | • | • |
| 6.00 | 9.00 | 9.27 | | • | • | • | • |

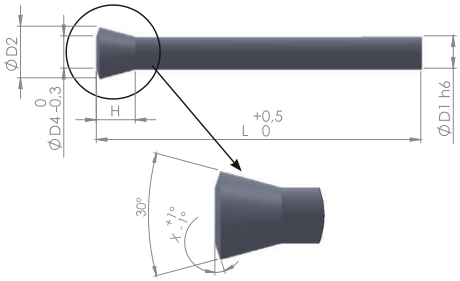
| D | D2 | H | R | L 71 | L 80 | L 100 | L 110 |
|---|---|---|---|---|---|---|---|
| 6.50 | 10.0 | 10.24 | 12.0 | • | • | • | • |
| 7.00 | | 9.81 | | • | • | • | • |
| 7.50 | 11.0 | 10.24 | | • | • | • | • |
| 8.00 | | 9.81 | | • | • | • | • |
| 8.50 | 13.0 | 11.9 | 15.0 | • | • | • | • |
| 9.00 | | 11.48 | | • | • | • | • |
| 9.50 | 14 | 11.9 | 15.0 | • | • | • | • |
| 10.0 | | 11.48 | | • | • | • | • |
| 10.5 | 15 | 11.9 | | • | • | • | • |
| 11.0 | | 11.48 | | • | • | • | • |
| 11.5 | 16 | 11.9 | | • | • | • | • |

| D | D2 | H | R | L 71 | L 80 | L 100 | L 110 |
|---|---|---|---|---|---|---|---|
| 12.0 | 16 | 11.48 | 15.0 | • | • | • | • |
| 12.5 | 17 | 11.9 | | • | • | • | • |
| 13.0 | | 11.48 | | • | • | • | • |
| 13.5 | 18 | 11.9 | | • | • | • | • |
| 14.0 | | 11.48 | | • | • | • | • |
| 14.5 | 19 | 11.9 | | • | • | • | • |
| 15.0 | | 11.48 | | • | • | • | • |
| 15.5 | 20 | 11.9 | | • | • | • | • |
| 16.0 | | 11.48 | | • | • | • | • |
| 17.0 | 21 | 11.48 | | • | • | • | • |
| 18.0 | 22 | 11.48 | | • | • | • | • |
| 19.0 | 23 | 11.48 | | • | • | • | • |
| 20.0 | 25 | 12.99 | | • | • | • | • |

## Zımba 30° - Kafa

**Malzeme** : 1.3343 HSS / 1.2379 HWS
**HSS Sertlik** : 62 - 64 HRC
**HWS Sertlik** : 59 - 61 HRC

Özel üretim zımbalar için sipariş esnasında termin sorunuz.

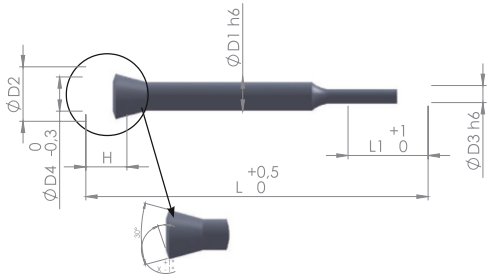



| D1 | D2 | D4 | H | K | X | L 100 | L 120 |
|---|---|---|---|---|---|---|---|
| 5.50 | 8.98 | 5.50 | 7.50 | 1.00 | 30.0 | • | • |
| 6.00 | 9.75 | 6.00 | 8.00 | | 28.0 | • | • |
| 8.00 | 12.8 | 8.00 | 10.0 | | 22.5 | • | • |
| 9.00 | 14.4 | 9.00 | 11.0 | | 20.0 | • | • |
| 10.0 | 15.9 | 10.0 | 12.0 | | 19.0 | • | • |
| 12.0 | 18.7 | 12.0 | 14.0 | 1.50 | 24.0 | | • |
| 14.0 | 21.8 | 14.0 | 16.0 | | 21.0 | | • |
| 16.0 | 24.6 | 16.0 | 18.0 | 2.00 | 25.0 | | • |

## Zımba 30° - Kafa Kademeli

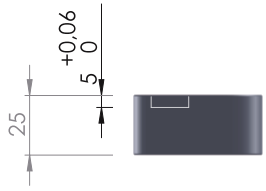
**Malzeme** : 1.3343 HSS / 1.2379 HWS
**HSS Sertlik** : 62 - 64 HRC
**HWS Sertlik** : 59 - 61 HRC

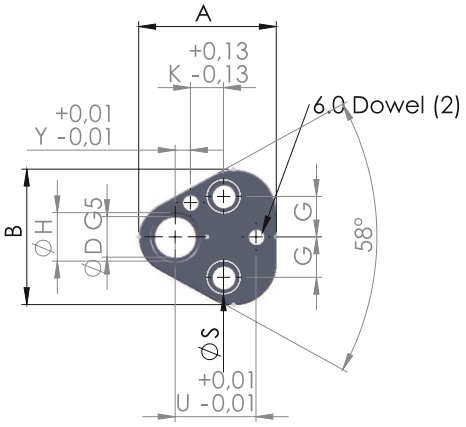
Özel üretim zımbalar için sipariş esnasında termin sorunuz.




| D3 | D1 | D2 | D4 | H | K | X | L 100 | L 120 |
|---|---|---|---|---|---|---|---|---|
| 2.00 ~ 5.00 | 5.50 | 8.98 | 5.50 | 7.50 | 1.00 | 30.0 | • | • |
| 3.00 ~ 5.50 | 6.00 | 9.75 | 6.00 | 8.00 | | 28.0 | • | • |
| 4.00 ~ 7.50 | 8.00 | 12.8 | 8.00 | 10.0 | | 22.5 | • | • |
| 5.00 ~ 8.50 | 9.00 | 14.4 | 9.00 | 11.0 | | 20.0 | • | • |
| 6.00 ~ 9.50 | 10.0 | 15.9 | 10.0 | 12.0 | | 19.0 | • | • |
| 8.00 ~ 11.5 | 12.0 | 18.7 | 12.0 | 14.0 | 1.50 | 24.0 | | • |
| 10.0 ~ 13.5 | 14.0 | 21.8 | 14.0 | 16.0 | | 21.0 | | • |
| 12.0 ~ 15.5 | 16.0 | 24.6 | 16.0 | 18.0 | 2.00 | 25.0 | | • |

## DZT - Düz Zımba Tutucu



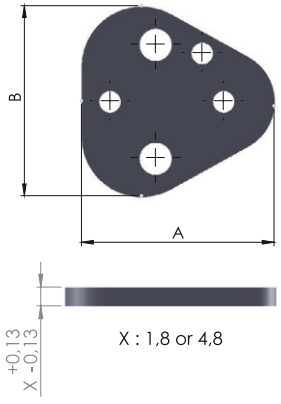




| D | A | B | H | G | K | R | S | U | X |
|---|---|---|---|---|---|---|---|---|---|
| 10.0 | 44.5 | 43.7 | 14.0 | 11.1 | 19.0 | 9.50 | 12.0 | 26.925 | 9.00 |
| 13.0 | 50.8 | 50.0 | 17.0 | 14.3 | 19.0 | 12.7 | 15.2 | 29.97 | 12.0 |
| 16.0 | 54.0 | 53.2 | 20.0 | 15.9 | 19.0 | 14.3 | 16.8 | 32.75 | 13.5 |
| 20.0 | 60.3 | 59.5 | 24.0 | 17.5 | 19.0 | 17.5 | 20.0 | 33.53 | 16.5 |
| 25.0 | 69.9 | 69.1 | 29.0 | 19.8 | 23.8 | 22.2 | 24.7 | 40.64 | 22.0 |
| 32.0 | 69.9 | 69.1 | 36.0 | 19.8 | 23.8 | 22.2 | 24.7 | 40.64 | 22.0 |

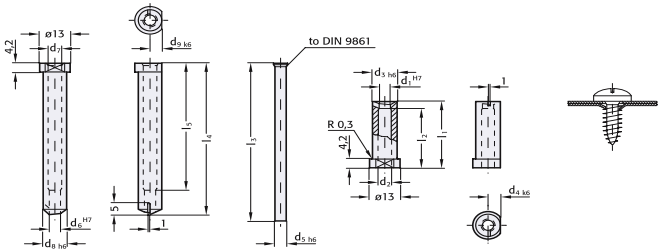
## DID - Zımba Tutucu Kapağı

| X | D |
|---|---|
| 1.8 | 10.0 |
| | 13.0 |
| | 16.0 |
| | 20.0 |
| | 25.0 |
| | 32.0 |

| X | D |
|---|---|
| 4.8 | 10.0 |
| | 13.0 |
| | 16.0 |
| | 20.0 |
| | 25.0 |
| | 32.0 |

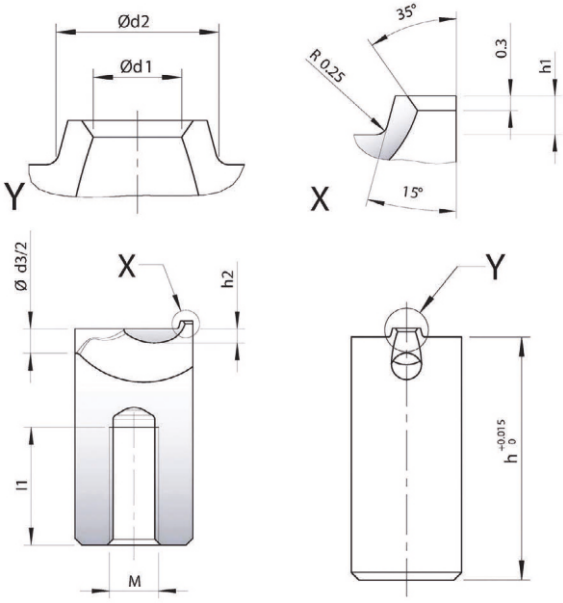



## Vida Yeri Hadde Zımbası



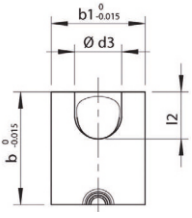

| Vida | d1 | d2 | d3 | d4 | d5 | d6 | d7 | d8 | d9 | l1 | l2 | l3 | l4 | l5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B3.5 | 2.75 | 3.2 | 7.5 | 3.75 | 2.7 | 2.7 | 3.1 | 7.5 | 3.75 | 31.3 | 28 | 74.5 | 71.5 | 60 |
| B3.9 | 3.05 | 3.4 | | | 3.0 | 3.0 | 3.6 | | | | | | | |
| B4.2 | 3.15 | 3.5 | 8.5 | 4.25 | 3.1 | 3.1 | 3.7 | 8.0 | 4.0 | | | | | |
| B4.8 | 3.85 | 4.2 | 9.0 | 4.50 | 3.8 | 3.8 | 4.5 | | | | | | | |
| B5.5 | 4.35 | 4.8 | | | 4.3 | 4.3 | 5.0 | | | | | | | |
| B6.3 | 4.85 | 5.3 | 10.5 | 5.25 | 4.8 | 4.8 | 5.5 | 10.0 | 5.0 | | | | | |

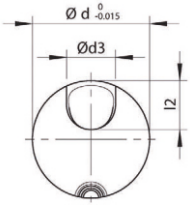




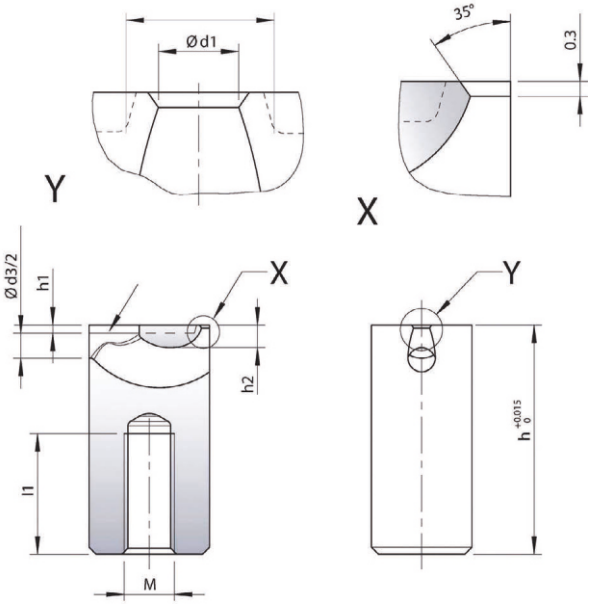

★ HAAF ★

**HGS/ HGR - Muz Yolluk Sistemleri**

| Sipariş | Ürün Kodu | HGS | b | b1 | d1 | d3 | h | h1 | h2 | l1 | l2 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MHGS-8S1-0.6 | HGS8 / S1 |  | 8 | 6 | 0.6 | 3 | 22.6 | 0.6 | 1.7 | 13 | 3.25 | 4 |
| MHGS-8S1-0.8 | | | | | 0.8 | | | | | | | |
| MHGS-10S1-0.8 | HGS10 / S1 | | 10 | 8 | 0.8 | 4 | 22.8 | 0.8 | 2.0 | 12 | 4 | 5 |
| MHGS-10S1-1.2 | | | | | 1.2 | | | | | | | |
| MHGS-10S1-1.6 | | | | | 1.6 | | | | | | | |
| MHGS-12S1-1.2 | HGS12 / S1 | | 12 | 10 | 1.2 | 5 | 22.8 | 0.8 | 2.2 | 11 | 5 | 5 |
| MHGS-12S1-1.6 | | | | | 1.6 | | | | | | | |
| MHGS-12S1-2.0 | | | | | 2.0 | | | | | | | |
| MHGS-14S1-1.6 | HGS14 / S1 | | 14 | 12 | 1.6 | 6 | 22.8 | 0.8 | 2.4 | 10 | 6 | 6 |
| MHGS-14S1-2.0 | | | | | 2.0 | | | | | | | |
| MHGS-14S1-2.4 | | | | | 2.4 | | | | | | | |
| MHGS-14S1-2.8 | | | | | 2.8 | | | | | | | |

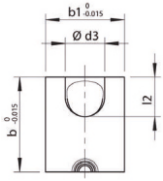
| Sipariş | Ürün Kodu | HGR | d | d1 | d3 | h | h1 | h2 | l1 | l2 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MHGR-6S1-0.6 | HGR6 / S1 |  | 6 | 0.6 | 2.5 | 17.6 | 0.6 | 1.4 | 10 | 2.5 | 4 |
| MHGR-8S1-0.6 | HGR8 / S1 | | 8 | 0.6 | 3 | 22.6 | 0.6 | 1.7 | 13 | 3.25 | 4 |
| MHGR-8S1-0.8 | | | | 0.8 | | | | | | | |
| MHGR-10S1-0.8 | HGR10 / S1 | | 10 | 0.8 | 4 | 22.8 | 0.8 | 2.0 | 12 | 4 | 5 |
| MHGR-10S1-1.2 | | | | 1.2 | | | | | | | |
| MHGR-10S1-1.6 | | | | 1.6 | | | | | | | |
| MHGR-12S1-1.2 | HGR12 / S1 | | 12 | 1.2 | 5 | 22.8 | 0.8 | 2.2 | 11 | 5 | 5 |
| MHGR-12S1-1.6 | | | | 1.6 | | | | | | | |
| MHGR-12S1-2.0 | | | | 2.0 | | | | | | | |
| MHGR-14S1-1.6 | HGR14 / S1 | | 14 | 1.6 | 6 | 22.8 | 0.8 | 2.4 | 10 | 6 | 6 |
| MHGR-14S1-2.0 | | | | 2.0 | | | | | | | |
| MHGR-14S1-2.4 | | | | 2.4 | | | | | | | |
| MHGR-14S1-2.8 | | | | 2.8 | | | | | | | |

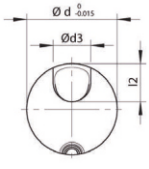





★ HAAF ★

**HGS/ HGR - Muz Yolluk Sistemleri**

| Sipariş | Ürün Kodu | HGS | b | b1 | d1 | d2 | d3 | h | h1 | h2 | l1 | l2 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MHGS8-S2-0.6 | HGS8 / S2 |  | 8 | 6 | 0.6 | 1.9 | 3 | 22.0 | 0.6 | 1.1 | 13 | 3.25 | 4 |
| MHGS8-S2-0.8 | | | | | 0.8 | 2.1 | | | | | | | |
| MHGS-10S2-0.8 | HGS10 / S2 | | 10 | 8 | 0.8 | 2.2 | 4 | 22.0 | 0.8 | 1.2 | 12 | 4 | 5 |
| MHGS-10S2-1.2 | | | | | 1.2 | 2.6 | | | | | | | |
| MHGS-10S2-1.6 | | | | | 1.6 | 3.0 | | | | | | | |
| MHGS-12S2-1.2 | HGS12 / S2 | | 12 | 10 | 1.2 | 2.6 | 5 | 22.0 | 0.8 | 1.40 | 11 | 5 | 5 |
| MHGS-12S2-1.6 | | | | | 1.6 | 3.0 | | | | | | | |
| MHGS-12S2-2.0 | | | | | 2.0 | 3.4 | | | | | | | |
| MHGS-14S2-1.6 | HGS14 / S2 | | 14 | 12 | 1.6 | 3.0 | 6 | 22.0 | 0.8 | 1.6 | 10 | 6 | 6 |
| MHGS-14S2-2.0 | | | | | 2.0 | 3.4 | | | | | | | |
| MHGS-14S2-2.4 | | | | | 2.4 | 3.8 | | | | | | | |
| MHGS-14S2-2.8 | | | | | 2.8 | 4.2 | | | | | | | |

| Sipariş | Ürün Kodu | HGR | d | d1 | d2 | d3 | h | h1 | h2 | l1 | l2 | M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MHGR-6S2-0.6 | HGR6 / S2 |  | 6 | 0.6 | 1.9 | 2.5 | 17.0 | 0.6 | 0.8 | 10 | 2.5 | 4 |
| MHGR-8S2-0.6 | HGR8 / S2 | | 8 | 0.6 | 1.9 | 3 | 22.0 | 0.6 | 1.1 | 13 | 3.25 | 4 |
| MHGR-8S2-0.8 | | | | 0.8 | 2.1 | | | | | | | |
| MHGR-10S2-0.8 | HGR10 / S2 | | 10 | 0.8 | 2.2 | 4 | 22.0 | 0.8 | 1.2 | 12 | 4 | 5 |
| MHGR-10S2-1.2 | | | | 1.2 | 2.6 | | | | | | | |
| MHGR-10S2-1.6 | | | | 1.6 | 3.0 | | | | | | | |
| MHGR-12S2-1.2 | HGR12 / S2 | | 12 | 1.2 | 2.6 | 5 | 22.0 | 0.8 | 1.4 | 11 | 5 | 5 |
| MHGR-12S2-1.6 | | | | 1.6 | 3.0 | | | | | | | |
| MHGR-12S2-2.0 | | | | 2.0 | 3.4 | | | | | | | |
| MHGR-14S2-1.6 | HGR14 / S2 | | 14 | 1.6 | 3.0 | 6 | 22.0 | 0.8 | 1.6 | 10 | 6 | 6 |
| MHGR-14S2-2.0 | | | | 2.0 | 3.4 | | | | | | | |
| MHGR-14S2-2.4 | | | | 2.4 | 3.8 | | | | | | | |
| MHGR-14S2-2.8 | | | | 2.8 | 4.2 | | | | | | | |



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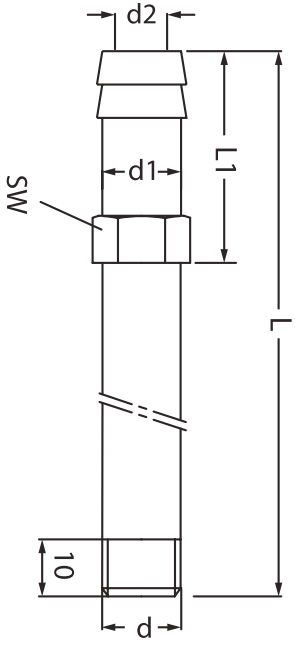
**REK - Hortum Girişli Rekorlar**




| Sipariş | d | ( Valfsiz ) d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|
| SR ER M8 | M8x1.25 | 12 | 7 | 40 | 28 | 13 |
| SR ER M8-60 | M8-60x1.25 | 12 | 7 | 60 | 28 | 13 |
| SR ER M8-80 | M8-80x1.25 | 12 | 7 | 80 | 28 | 13 |
| SR ER M8-100 | M8-100x1.25 | 12 | 7 | 100 | 28 | 13 |
| SR ER M8-120 | M8-120x1.25 | 12 | 7 | 120 | 28 | 13 |
| SR ER M8-150 | M8-150x1.25 | 12 | 7 | 150 | 28 | 13 |
| SR ER M10 | M10x1.5 | 12 | 7 | 40 | 28 | 13 |
| SR ER M10-60 | M10-60x1.5 | 12 | 7 | 60 | 28 | 13 |
| SR ER M10-80 | M10-80x1.5 | 12 | 7 | 80 | 28 | 13 |
| SR ER M10-100 | M10-100x1.5 | 12 | 7 | 100 | 28 | 13 |
| SR ER M10-120 | M10-120x1.5 | 12 | 7 | 120 | 28 | 13 |
| SR ER M10-150 | M10-150x1.5 | 12 | 7 | 150 | 28 | 13 |
| SR ER M12 | M12x1.75 | 12 | 7 | 40 | 28 | 13 |
| SR ER M12-60 | M12-60x1.75 | 12 | 7 | 60 | 28 | 13 |
| SR ER M12-80 | M12-80x1.75 | 12 | 7 | 80 | 28 | 13 |
| SR ER M12-100 | M12-100x1.75 | 12 | 7 | 100 | 28 | 13 |
| SR ER M12-120 | M12-120x1.75 | 12 | 7 | 120 | 28 | 13 |
| SR ER M12-150 | M12-150x1.75 | 12 | 7 | 150 | 28 | 13 |
| SR ER M14 | M14 | 12 | 7 | 40 | 28 | 14 |
| SR ER M14-60 | M14-60 | 12 | 7 | 60 | 28 | 14 |
| SR ER M14-80 | M14-80 | 12 | 7 | 80 | 28 | 14 |
| SR ER M14-100 | M14-100 | 12 | 7 | 100 | 28 | 14 |
| SR ER M14-120 | M14-120 | 12 | 7 | 120 | 28 | 14 |
| SR ER M14-150 | M14-150 | 12 | 7 | 150 | 28 | 14 |
| SR ER M16 | M16 | 12 | 7 | 40 | 28 | 16 |
| SR ER M16-60 | M16-60 | 12 | 7 | 60 | 28 | 16 |
| SR ER M16-80 | M16-80 | 12 | 7 | 80 | 28 | 16 |
| SR ER M16-100 | M16-100 | 12 | 7 | 100 | 28 | 16 |
| SR ER M16-120 | M16-120 | 12 | 7 | 120 | 28 | 16 |
| SR ER M16-150 | M16-150 | 12 | 7 | 150 | 28 | 16 |
| SR ER 10 | G 1/8" | 12 | 7 | 40 | 28 | 13 |
| SR ER 10-60 | G 1/8" | 12 | 7 | 60 | 28 | 13 |
| SR ER 10-80 | G 1/8" | 12 | 7 | 80 | 28 | 13 |
| SR ER 10-100 | G 1/8" | 12 | 7 | 100 | 28 | 13 |
| SR ER 10-120 | G 1/8" | 12 | 7 | 120 | 28 | 13 |
| SR ER 10-150 | G 1/8" | 12 | 7 | 150 | 28 | 13 |
| SR ER 13 | G 1/4" | 12 | 7 | 40 | 28 | 14 |
| SR ER 13-60 | G 1/4" | 12 | 7 | 60 | 28 | 14 |
| SR ER 13-80 | G 1/4" | 12 | 7 | 80 | 28 | 14 |
| SR ER 13-100 | G 1/4" | 12 | 7 | 100 | 28 | 14 |
| SR ER 13-120 | G 1/4" | 12 | 7 | 120 | 28 | 14 |
| SR ER 13-150 | G 1/4" | 12 | 7 | 150 | 28 | 14 |
| SR ER 17 | G 3/8" | 12 | 7 | 40 | 28 | 17 |
| SR ER 17-60 | G 3/8" | 12 | 7 | 60 | 28 | 17 |
| SR ER 17-80 | G 3/8" | 12 | 7 | 80 | 28 | 17 |
| SR ER 17-100 | G 3/8" | 12 | 7 | 100 | 28 | 17 |
| SR ER 17-120 | G 3/8" | 12 | 7 | 120 | 28 | 17 |
| SR ER 17-150 | G 3/8" | 12 | 7 | 150 | 28 | 17 |



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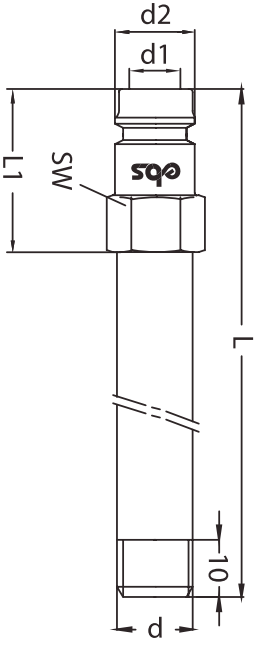
**Otomatik Girişli Rekorlar**

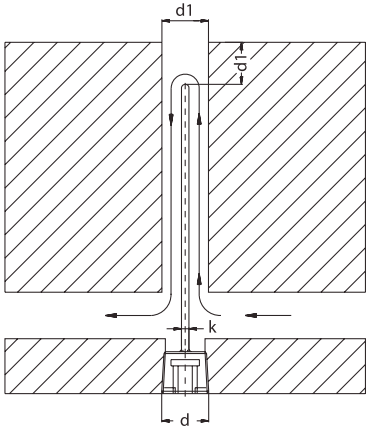



| Sipariş | d | ( Valfsiz ) d1 | d2 | SW | L | L1 |
|---|---|---|---|---|---|---|
| 590 ER 10 | BSP 1/8'' | 9 | 13 | 14 | 29 | 10 |
| 590 ER 13 | BSP 1/4'' | 9 | 13 | 14 | 29 | 10 |
| 590 ER 17 | BSP 3/8'' | 9 | 13 | 17 | 29 | 10 |
| 590 ER 21 | BSP 1/2'' | 9 | 13 | 21 | 29 | 10 |
| 590 ER M8 | M8X1.25 | 9 | 13 | 14 | 29 | 10 |
| 590 ER M10-1 | M10X1.5 | 9 | 13 | 14 | 29 | 10 |
| 590 ER M10 | M10X1.0 | 9 | 13 | 14 | 29 | 10 |
| 590 ER M12 | M12X1.75 | 9 | 13 | 14 | 29 | 10 |
| 590 ER M14 | M14X1.5 | 9 | 13 | 21 | 29 | 10 |
| 590 ER M16 | M16X1.5 | 9 | 13 | 21 | 29 | 10 |
| 590 ER 10-60 | BSP 1/8'' | 9 | 13 | 14 | 60 | 20 |
| 590 ER 10-80 | BSP 1/8'' | 9 | 13 | 14 | 80 | 20 |
| 590 ER 10-100 | BSP 1/8'' | 9 | 13 | 14 | 100 | 20 |
| 590 ER 10-120 | BSP 1/8'' | 9 | 13 | 14 | 120 | 20 |
| 590 ER 10-150 | BSP 1/8'' | 9 | 13 | 14 | 150 | 20 |
| 590 ER 13-60 | BSP 1/4'' | 9 | 13 | 14 | 60 | 20 |
| 590 ER 13-80 | BSP 1/4'' | 9 | 13 | 14 | 80 | 20 |
| 590 ER 13-100 | BSP 1/4'' | 9 | 13 | 14 | 100 | 20 |
| 590 ER 13-120 | BSP 1/4'' | 9 | 13 | 14 | 120 | 20 |
| 590 ER 13-150 | BSP 1/4'' | 9 | 13 | 14 | 150 | 20 |
| 590 ER 17-60 | BSP 3/8'' | 9 | 13 | 17 | 60 | 20 |
| 590 ER 17-80 | BSP 3/8'' | 9 | 13 | 17 | 80 | 20 |
| 590 ER 17-100 | BSP 3/8'' | 9 | 13 | 17 | 100 | 20 |
| 590 ER 17-120 | BSP 3/8'' | 9 | 13 | 17 | 120 | 20 |
| 590 ER 17-150 | BSP 3/8'' | 9 | 13 | 17 | 150 | 20 |
| 590 ER M8-60 | M8x1.25 | 9 | 13 | 14 | 60 | 20 |
| 590 ER M8-80 | M8x1.25 | 9 | 13 | 14 | 80 | 20 |
| 590 ER M8-100 | M8x1.25 | 9 | 13 | 14 | 100 | 20 |
| 590 ER M8-120 | M8x1.25 | 9 | 13 | 14 | 120 | 20 |
| 590 ER M8-150 | M8x1.25 | 9 | 13 | 14 | 150 | 20 |
| 590 ER M10-60 | M10x1.5 | 9 | 13 | 14 | 60 | 20 |
| 590 ER M10-80 | M10x1.5 | 9 | 13 | 14 | 80 | 20 |
| 590 ER M10-100 | M10x1.5 | 9 | 13 | 14 | 100 | 20 |
| 590 ER M10-120 | M10x1.5 | 9 | 13 | 14 | 120 | 20 |
| 590 ER M10-150 | M10x1.5 | 9 | 13 | 14 | 150 | 20 |
| 590 ER M12-60 | M12x1.75 | 9 | 13 | 14 | 60 | 20 |
| 590 ER M12-80 | M12x1.75 | 9 | 13 | 14 | 80 | 20 |
| 590 ER M12-100 | M12x1.75 | 9 | 13 | 14 | 100 | 20 |
| 590 ER M12-120 | M12x1.75 | 9 | 13 | 14 | 120 | 20 |
| 590 ER M12-150 | M12x1.75 | 9 | 13 | 14 | 150 | 20 |
| 590 ER M14-60 | M14x2 | 9 | 13 | 14 | 60 | 20 |
| 590 ER M14-80 | M14x2 | 9 | 13 | 14 | 80 | 20 |
| 590 ER M14-100 | M14x2 | 9 | 13 | 14 | 100 | 20 |
| 590 ER M14-120 | M14x2 | 9 | 13 | 14 | 120 | 20 |
| 590 ER M14-150 | M14x2 | 9 | 13 | 14 | 150 | 20 |
| 590 ER M16-60 | M16x2 | 9 | 13 | 14 | 60 | 20 |
| 590 ER M16-80 | M16x2 | 9 | 13 | 14 | 80 | 20 |
| 590 ER M16-100 | M16x2 | 9 | 13 | 14 | 100 | 20 |
| 590 ER M16-120 | M16x2 | 9 | 13 | 14 | 120 | 20 |
| 590 ER M16-150 | M16x2 | 9 | 13 | 14 | 150 | 20 |

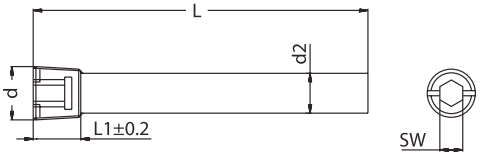


ebs

## SEP - Separatör



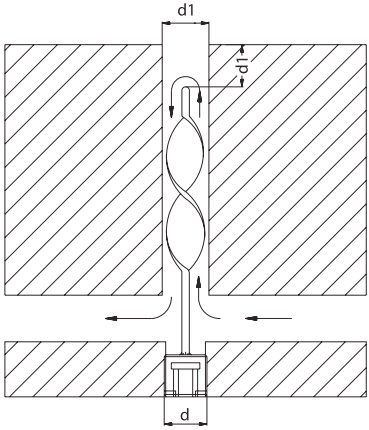

| Sipariş | d | SW | d1 | d2 | L | L1 | k |
|---|---|---|---|---|---|---|---|
| SEP M8.100 | 8x0.75 | 4 | 6 | 5.8 | 100 | 8 | 1.6 |
| SEP M8.200 | 8x0.75 | 4 | 6 | 5.8 | 200 | 8 | 1.6 |
| SEP M10.100 | 10x1.0 | 5 | 8 | 7.8 | 100 | 8 | 1.6 |
| SEP M10.125 | 10x1.5 | 5 | 8 | 7.8 | 125 | 8 | 1.6 |
| SEP M10.200 | 10x1.0 | 5 | 8 | 7.8 | 200 | 8 | 1.6 |
| SEP M10.300 | 10x1.0 | 5 | 8 | 7.8 | 300 | 8 | 1.6 |
| SEP M12.125 | 12x1.5 | 6 | 10 | 9.8 | 125 | 8 | 2.0 |
| SEP M12.250 | 12x1.5 | 6 | 10 | 9.8 | 250 | 8 | 2.0 |
| SEP M16.150 | 16x1.5 | 8 | 14 | 13.8 | 150 | 10 | 2.4 |
| SEP M16.300 | 16x1.5 | 8 | 14 | 13.8 | 300 | 10 | 2.4 |
| SEP M20.150 | 20x1.5 | 10 | 18 | 17.8 | 150 | 10 | 2.4 |
| SEP M20.200 | 20x1.5 | 10 | 18 | 17.8 | 200 | 10 | 2.4 |
| SEP M20.300 | 20x1.5 | 10 | 18 | 17.8 | 300 | 10 | 2.4 |
| SEP M20.400 | 20x1.5 | 10 | 18 | 17.8 | 400 | 10 | 2.4 |
| SEP M24.150 | 24x2.0 | 10 | 20 | 19.8 | 150 | 12 | 2.4 |
| SEP M24.300 | 24x2.0 | 10 | 20 | 19.8 | 300 | 12 | 2.4 |



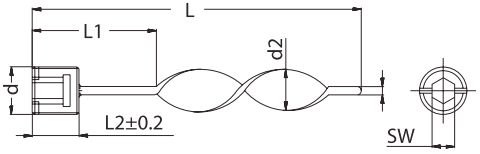


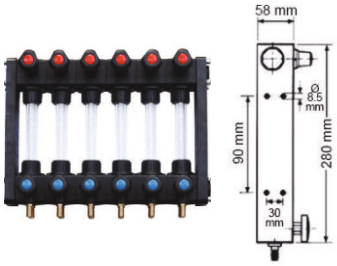

ebs

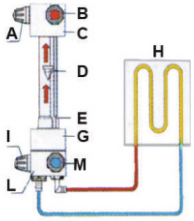
## HSEP - Separatör




| Sipariş | d | SW | d1 | d2 | L | L1 | L2 | k |
|---|---|---|---|---|---|---|---|---|
| HSEP M8.100 | 8x0.75 | 4 | 6 | 5.8 | 100 | 50 | 8 | 1.6 |
| HSEP M8.200 | 8x0.75 | 4 | 6 | 5.8 | 200 | 100 | 8 | 1.6 |
| HSEP M8.300 | 8x0.75 | 4 | 6 | 5.8 | 300 | 150 | 8 | 1.6 |
| HSEP M10.100 | 10x1.0 | 5 | 8 | 7.8 | 100 | 50 | 8 | 1.6 |
| HSEP M10.100.1.5 | 10x1.5 | 5 | 8 | 7.8 | 100 | 50 | 8 | 1.6 |
| HSEP M10.200 | 10x1.0 | 5 | 8 | 7.8 | 200 | 100 | 8 | 1.6 |
| HSEP M10.300 | 10x1.0 | 5 | 8 | 7.8 | 300 | 150 | 8 | 1.6 |
| HSEP M12.125 | 12x1.5 | 6 | 10 | 9.8 | 125 | 50 | 8 | 2.0 |
| HSEP M12.250 | 12x1.5 | 6 | 10 | 9.8 | 250 | 100 | 8 | 2.0 |
| HSEP M16.150 | 16x1.5 | 8 | 14 | 13.8 | 150 | 50 | 10 | 2.4 |
| HSEP M16.300 | 16x1.5 | 8 | 14 | 13.8 | 300 | 100 | 10 | 2.4 |
| HSEP M20.150 | 20x1.5 | 10 | 18 | 17.8 | 150 | 50 | 10 | 2.4 |
| HSEP M20.200 | 20x1.5 | 10 | 18 | 17.8 | 200 | 100 | 10 | 2.4 |
| HSEP M20.300 | 20x1.5 | 10 | 18 | 17.8 | 300 | 50 | 10 | 2.4 |
| HSEP M20.400 | 20x1.5 | 10 | 18 | 17.8 | 400 | 100 | 10 | 2.4 |
| HSEP M24.150 | 24x2.0 | 10 | 20 | 19.8 | 150 | 50 | 12 | 2.4 |
| HSEP M24.300 | 24x2.0 | 10 | 20 | 19.8 | 300 | 100 | 12 | 2.4 |






A : Kontrol Vanası
B : Su Çıkışı
C : Akış Manifoldu
D : Şamandıra
E : Kalibrasyonlu Şeffaf Tip
G : Alıcı Bölüm
H : Kalıp Dağıtım
İ : Kapatma Vanası
L : Besleme Manifoldu
M : Su Girişi

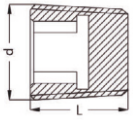
## REG - Sirkülasyon Regülatörü

| Sipariş | Tüp Sayısı | Çıkış Devre | Boyut A |
|---|---|---|---|
| REG-04 | 4'lü | Rekor Uç 1/4" 10 mm Hortum | 240 |
| REG-06 | 6'lı | | 360 |
| REG-08 | 8'li | | 480 |

| Sipariş | Tüp Sayısı | Çıkış Devre | Boyut A |
|---|---|---|---|
| REG-10 | 10'lu | Rekor Uç 1/4" 10 mm Hortum | 600 |
| REG-12 | 12'li | | 720 |





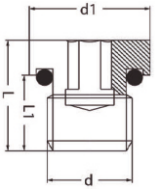

## KTP - Tıkaç

| Sipariş | d | L | SW |
|---|---|---|---|
| KTP 10 | BSP 1/8" | 8 | 5 |
| KTP 13 | BSP 1/4" | 10 | 7 |
| KTP 17 | BSP 3/8" | 10 | 8 |
| KTP 21 | BSP 1/2" | 10 | 10 |

| Sipariş | d | L | SW |
|---|---|---|---|
| KTP 26 | BSP 3/4" | 12 | 12 |
| KTP 33 | BSP 1" | 19 | 17 |
| KTP 42 | BSP 1.1/4" | 22 | 22 |
| KTP 48 | BSP 1.1/2" | 22 | 24 |



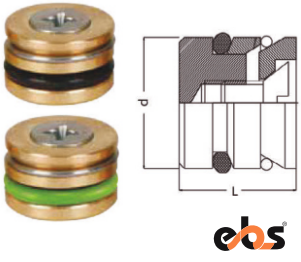



## Şapkalı Oringli Tıkaç

| Sipariş | d | d1 | L | L1 | SW |
|---|---|---|---|---|---|
| OSKTR M10 | M10x1 | 14 | 10 | 7 | 5 |
| OSKTR M12 | M12x1.5 | 17 | 11 | 8 | 6 |
| OSKTR M14 | M14x1.5 | 19 | 12 | 9 | 8 |

| Sipariş | d | d1 | L | L1 | SW |
|---|---|---|---|---|---|
| OSKTR M16 | M16x1.5 | 21 | 12 | 9.5 | 10 |
| OSKTR M22 | M22x1.5 | 27 | 13 | 11.5 | 14 |
| OSKTR M24 | M24x1.5 | 30 | 15 | 11.5 | 14 |



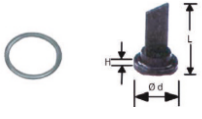

## TIKAÇ - Oringli Tıkaç ve Viton Tıkaç

| Viton Oring Sipariş | NBR Oring Sipariş | d | L |
|---|---|---|---|
| TKV - 06 | TK - 06 | 6 | 10 |
| TKV - 08 | TK - 08 | 8 | 10 |
| TKV - 10 | TK - 10 | 10 | 10 |
| TKV - 12 | TK - 12 | 12 | 10 |
| TKV - 14 | TK - 14 | 14 | 12 |
| TKV - 16 | TK - 16 | 16 | 12 |
| TKV - 20 | TK - 20 | 20 | 12 |



## Plastik Soğutma Spirali

| Sipariş | R | H | D | L |
|---|---|---|---|---|
| GCB | 2 | 2 | 8 | 96-196-296 |
| | 2.5 | 2.5 | 10 | |
| | 3 | 3 | 12 | |
| | 4 | 4 | 16 | |
| | 5 | 5 | 20 | 96-196 |
| | 6 | 6 | 25 | 296-396 |



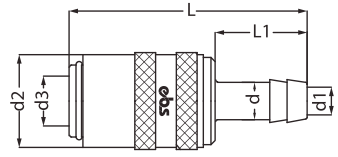

## Plastik Soğutma Spirali

| Sipariş | D1 | D2 | T | D | L |
|---|---|---|---|---|---|
| GCT | 6 | 15 | 1.2 | 8 | 25 30 35 40 |
| | 8 | 18 | 1.5 | 10 | |
| | 10 | 22 | 1.6 | 12 | |
| | 13 | 25 | 2 | 16 | |
| | 17 | 30 | 2 | 20 | |
| | 22 | 35 | 2.4 | 25 | |



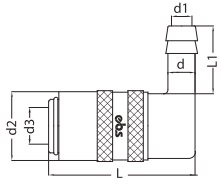
## Plastik Soğutma Spirali

| Sipariş | D1 | D2 | T | R | H | D | L |
|---|---|---|---|---|---|---|---|
| GCA | 8 | 15 | 1.5 | 2 | 2 | 8 | 100 200 300 |
| | 10 | 18 | 1.8 | 2.5 | 2.5 | 10 | |
| | 11 | 22 | 2 | 3 | 3 | 12 | |
| | 15 | 25 | 3 | 4 | 4 | 16 | |
| | 18 | 30 | 3 | 5 | 5 | 20 | 100 200 300 400 |
| | 22 | 35 | 3.5 | 6 | 6 | 25 | |



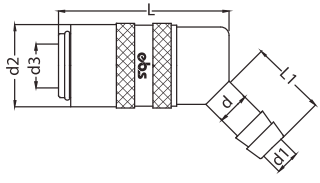

## 590 Serisi (Su)
## Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 590 HGB 10 | 590 HG 10 | 10 | 7.5 | 23 | 13 | 59 | 23 |
| 590 HGB 13 | 590 HG 13 | 13 | 10 | 23 | 13 | 59 | 23 |



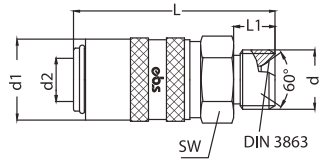

## 590 Serisi (Su)
## 90° Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 590 HGB 10-90 | 590 HG 10-90 | 10 | 7.5 | 23 | 13 | 52 | 29 |
| 590 HGB 13-90 | 590 HG 13-90 | 13 | 10 | 23 | 13 | 52 | 29 |



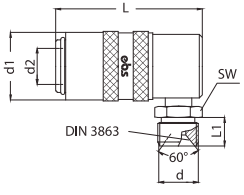

## 590 Serisi (Su)
## 45° Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 590 HGB 10-45 | 590 HG 10-45 | 10 | 7.5 | 23 | 13 | 52 | 26 |
| 590 HGB 13-45 | 590 HG 13-45 | 13 | 10 | 23 | 13 | 52 | 26 |



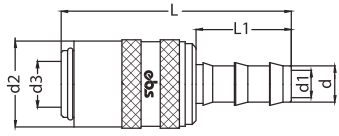

## 590 Serisi (Su)
## Erkek Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|---|
| 590 EGB 13 | 590 EG 13 | BSP 1/4" | 23 | 13 | 52 | 9 | 21 |
| 590 EGB 17 | 590 EG 17 | BSP 3/8" | 23 | 13 | 52 | 9 | 21 |
| 590 EGB 21 | 590 EG 21 | BSP 1/2" | 23 | 13 | 52 | 9 | 21 |
| 590 EGB M16 | 590 EG M16 | M16x1.5 | 23 | 13 | 52 | 10 | 21 |



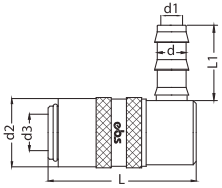

## 590 Serisi (Su)
## 90° Erkek Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|---|
| 590 EGB 13-90 | 590 EG 13-90 | BSP 1/4" | 23 | 13 | 52 | 9 | 15 |
| 590 EGB 17-90 | 590 EG 17-90 | BSP 3/8" | 23 | 13 | 52 | 9 | 19 |
| 590 EGB 21-90 | 590 EG 21-90 | BSP 1/2" | 23 | 13 | 52 | 9 | 21 |
| 590 EGB M16-90 | 590 EG M16-90 | M16x1.5 | 23 | 13 | 52 | 10 | 19 |



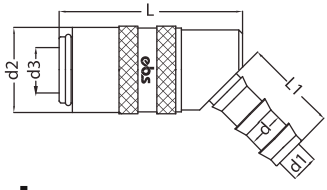

**590 Serisi (Su)**
**Kelepçesiz Hortum Gövde**

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 590 FGB 10 | 590 FG 10 | 10 | 7.5 | 23 | 13 | 64 | 28 |
| 590 FGB 13 | 590 FG 13 | 13 | 10 | 23 | 13 | 64 | 28 |



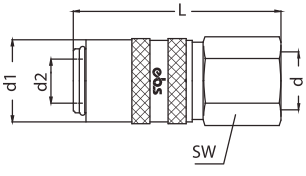

**590 Serisi (Su)**
**90° Kelepçesiz Hortum Gövde**

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 590 FGB 10-90 | 590 FG 10-90 | 10 | 7.5 | 23 | 13 | 52 | 29 |
| 590 FGB 13-90 | 590 FG 13-90 | 13 | 10 | 23 | 13 | 52 | 29 |



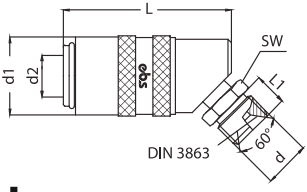

**590 Serisi (Su)**
**45° Kelepçesiz Hortum Gövde**

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 590 FGB 10-45 | 590 FG 10-45 | 10 | 7.5 | 23 | 13 | 52 | 29 |
| 590 FGB 13-45 | 590 FG 13-45 | 13 | 10 | 23 | 13 | 52 | 29 |



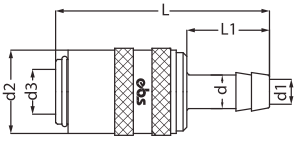

**590 Serisi (Su)**
**Dişi Gövde**

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | SW |
|---|---|---|---|---|---|---|
| 590 DGB 13 | 590 DG 13 | BSP 1/4" | 23 | 13 | 52 | 21 |
| 590 DGB 17 | 590 DG 17 | BSP 3/8" | 23 | 13 | 52 | 21 |
| 590 DGB 21 | 590 DG 21 | BSP 1/2" | 23 | 13 | 52 | 24 |
| 590 DGB M16 | 590 DG M16 | M16x1.5 | 23 | 13 | 52 | 21 |



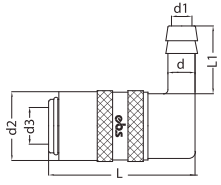

**590 Serisi (Su)**
**45° Erkek Gövde**

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|---|
| 590 EGB 13-45 | 590 EG 13-45 | BSP 1/4" | 23 | 13 | 52 | 9 | 15 |
| 590 EGB 17-45 | 590 EG 17-45 | BSP 3/8" | 23 | 13 | 52 | 9 | 19 |
| 590 EGB 21-45 | 590 EG 21-45 | BSP 1/2" | 23 | 13 | 52 | 9 | 21 |
| 590 EGB M16-45 | 590 EG M16-45 | M16x1.5 | 23 | 13 | 52 | 10 | 19 |



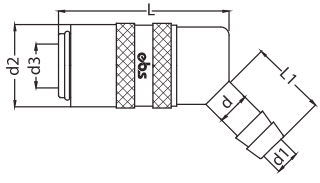

## 560 Serisi (Su)
## Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 560 HGB 06 | 560 HG 06 | 6 | 4.5 | 18 | 9 | 47.5 | 17.5 |
| 560 HGB 08 | 560 HG 08 | 8 | 6 | 18 | 9 | 47.5 | 17.5 |
| 560 HGB 10 | 560 HG 10 | 10 | 7 | 18 | 9 | 47.5 | 17.5 |



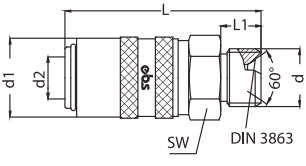

## 560 Serisi (Su)
## 90° Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 560 HGB 06-90 | 560 HG 06 -90 | 6 | 4.5 | 18 | 9 | 42 | 26 |
| 560 HGB 08-90 | 560 HG 08 -90 | 8 | 6 | 18 | 9 | 42 | 26 |
| 560 HGB 10-90 | 560 HG 10 -90 | 10 | 7 | 18 | 9 | 42 | 26 |



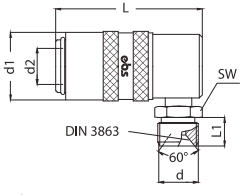

## 560 Serisi (Su)
## 45° Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 560 HGB 06-45 | 560 HG 06 -45 | 6 | 4.5 | 18 | 9 | 42 | 26 |
| 560 HGB 08-45 | 560 HG 08 -45 | 8 | 6 | 18 | 9 | 42 | 26 |
| 560 HGB 10-45 | 560 HG 10 -45 | 10 | 7 | 18 | 9 | 42 | 26 |



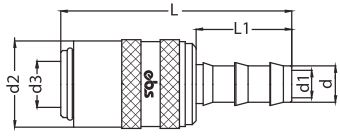

## 560 Serisi (Su)
## Erkek Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|---|
| 560 EGB 13 | 560 EG 13 | BSP 1/4" | 18 | 9 | 47.5 | 9 | 17 |
| 560 EGB 17 | 560 EG 17 | BSP 3/8" | 18 | 9 | 47.5 | 9 | 17 |
| 560 EGB M10 | 560 EG M10 | M10x1.0 | 18 | 9 | 47.5 | 9 | 17 |
| 560 EGB M14 | 560 EG M14 | M16x1.5 | 18 | 9 | 47.5 | 9 | 17 |



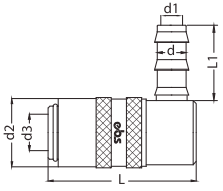

## 560 Serisi (Su)
## 90° Erkek Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|---|
| 560 EGB 13-90 | 560 EG 13-90 | BSP 1/4" | 18 | 9 | 42 | 9 | 14 |
| 560 EGB 17-90 | 560 EG 17-90 | BSP 3/8" | 18 | 9 | 42 | 9 | 17 |
| 560 EGB M14-90 | 560 EG M14-90 | M14x1.5 | 18 | 9 | 42 | 9 | 17 |



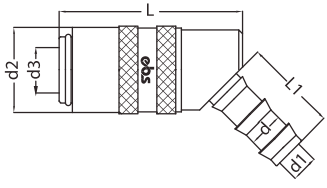

## 560 Serisi (Su)
## Kelepçesiz Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 560 FGB 06 | 560 FG 06 | 6 | 4.5 | 18 | 9 | 48 | 18 |
| 560 FGB 08 | 560 FG 08 | 8 | 6 | 18 | 9 | 48 | 18 |
| 560 FGB 10 | 560 FG 10 | 10 | 7 | 18 | 9 | 48 | 18 |



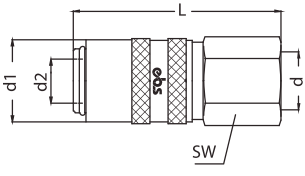

## 560 Serisi (Su)
## 90° Kelepçesiz Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 560 FGB 06-90 | 560 FG 06 -90 | 6 | 4.5 | 18 | 9 | 42 | 26 |
| 560 FGB 08-90 | 560 FG 08 -90 | 8 | 6 | 18 | 9 | 42 | 26 |
| 560 FGB 10-90 | 560 FG 10 -90 | 10 | 7 | 18 | 9 | 42 | 26 |



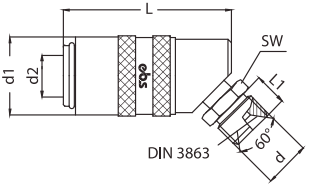

## 560 Serisi (Su)
## 45° Kelepçesiz Hortum Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | d3 | L | L1 |
|---|---|---|---|---|---|---|---|
| 560 FGB 06-45 | 560 FG 06 -45 | 6 | 4.5 | 18 | 9 | 42 | 26 |
| 560 FGB 08-45 | 560 FG 08 -45 | 8 | 6 | 18 | 9 | 42 | 26 |
| 560 FGB 10-45 | 560 FG 10 -45 | 10 | 7 | 18 | 9 | 42 | 26 |



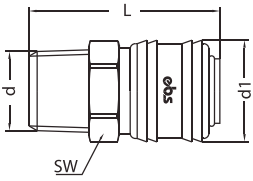

## 560 Serisi (Su)
## Dişi Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|---|
| 560 DGB 13 | 560 DG 13 | BSP 1/4" | 18 | 9 | 47.5 | 9 | 17 |
| 560 DGB 17 | 560 DG 17 | BSP 3/8" | 18 | 9 | 47.5 | 9 | 21 |
| 560 DGB M10 | 560 DG M10 | M10x1.0 | 18 | 9 | 47.5 | 9 | 17 |
| 560 DGB M14 | 560 DG M14 | M14x1.5 | 18 | 9 | 47.5 | 9 | 21 |



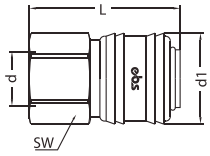

## 560 Serisi (Su)
## 45° Erkek Gövde

| ( Valfli ) Sipariş | ( Valfsiz ) Sipariş | d | d1 | d2 | L | L1 | SW |
|---|---|---|---|---|---|---|---|
| 560 EGB 13-45 | 560 EG 13-45 | BSP 1/4" | 18 | 9 | 42 | 9 | 14 |
| 560 EGB 17-45 | 560 EG 17-45 | BSP 3/8" | 18 | 9 | 42 | 9 | 17 |
| 560 EGB M14-45 | 560 EG M14-45 | M14x1.5 | 18 | 9 | 42 | 9 | 17 |



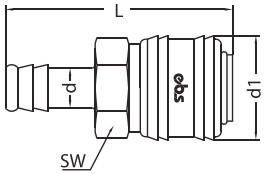

**A26 Serisi (Hava)**
**Erkek Gövde**

| ( Valfli ) Sipariş | d | d1 | L | SW |
|---|---|---|---|---|
| A26 EGB 13 | BSP 1/4" | 25 | 58 | 21 |
| A26 EGB 17 | BSP 3/8" | 25 | 58 | 21 |
| A26 EGB 21 | BSP 1/2" | 25 | 59 | 21 |
| A26 EGB M14 | M14x1.5 | 25 | 58 | 21 |
| A26 EGB M16 | M16x1.5 | 25 | 58 | 21 |
| A26 EGB M18 | M18x1.5 | 25 | 59 | 21 |



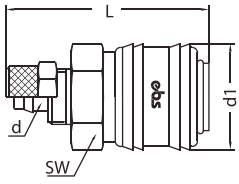

**A26 Serisi (Hava)**
**Dişi Gövde**

| ( Valfli ) Sipariş | d | d1 | L | SW |
|---|---|---|---|---|
| A26 DGB 10 | BSP 1/4" | 25 | 41 | 21 |
| A26 DGB 13 | BSP 1/4" | 25 | 41 | 21 |
| A26 DGB 17 | BSP 3/8" | 25 | 41 | 21 |
| A26 DGB 21 | BSP 1/2" | 25 | 41 | 24 |
| A26 DGB M14 | M14x1.5 | 25 | 41 | 21 |
| A26 DGB M16 | M16x1.5 | 25 | 41 | 21 |
| A26 DGB M18 | M18x1.5 | 25 | 41 | 22 |



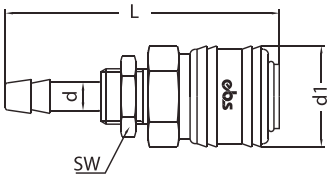

**A26 Serisi (Hava)**
**Hortum Gövde**

| ( Valfli ) Sipariş | d | d1 | L | SW |
|---|---|---|---|---|
| A26 HGB 06 | 6 mm–1/4" | 25 | 55 | 21 |
| A26 HGB 08 | 8 mm–5/16" | 25 | 55 | 21 |
| A26 HGB 09 | 9 mm–5/14" | 25 | 55 | 21 |
| A26 HGB 10 | 10 mm–3/8 " | 25 | 55 | 21 |
| A26 HGB 13 | 13 mm–1/2" | 25 | 55 | 21 |




**A26 Serisi (Hava)**
**Plastik Hortum Gövde**

| ( Valfli ) Sipariş | d | d1 | L | SW |
|---|---|---|---|---|
| A26 PGB 06 | 6 mm–M12x1 | 25 | 50 | 21 |
| A26 PGB 08 | 8 mm–M16x1 | 25 | 54 | 21 |
| A26 PGB 09 | 9 mm–M16x1 | 25 | 63 | 21 |

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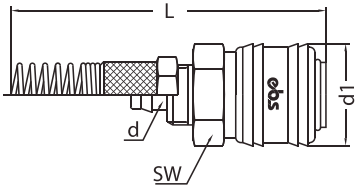
**Panel Plastik Hortum Gövde**

| ( Valfli ) Sipariş | d | d1 | L | SW |
|---|---|---|---|---|
| A26 MGB 06 | 6 mm–M12x1 | 25 | 60 | 21 |
| A26 MGB 08 | 8 mm–M16x1 | 25 | 63 | 21 |
| A26 MGB 10 | 10 mm–M16x1 | 25 | 72 | 21 |

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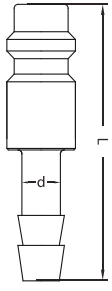
**Panel Plastik Hortum Gövde**

| ( Valfli ) Sipariş | d | d1 | L | SW |
|---|---|---|---|---|
| A26 YGB 06 | 6x8 mm–M12x1 | 25 | 133 | 21 |
| A26 YGB 08 | 8x10 mm–M16x1 | 25 | 148 | 21 |
| A26 YGB 09 | 9x12 mm–M16x1 | 25 | 148 | 21 |

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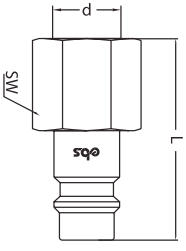
**Hortum Uç**

| ( Valfli ) Sipariş | d | L |
|---|---|---|
| A26 HR 06 | 6 mm–1/4" | 46 |
| A26 HR 08 | 8 mm–5/16" | 46 |
| A26 HR 09 | 9 mm–5/14" | 46 |
| A26 HR 10 | 10 mm–3/8" | 46 |
| A26 HR 13 | 13 mm–1/2" | 46 |

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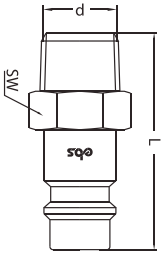
**Dişi Uçlar**

| ( Valfsiz ) Sipariş | d | L | SW |
|---|---|---|---|
| A26 DR 10 | BSP 1/8" | 30 | 14 |
| A26 DR 13 | BSP 1/4" | 33 | 17 |
| A26 DR 17 | BSP 3/8" | 33 | 19 |
| A26 DR 21 | BSP 1/2" | 36 | 24 |
| A26 DR M14-1 | M14x1,25 | 33 | 17 |
| A26 DR M14 | M14x1,5 | 33 | 17 |
| A26 DR M16 | M16x1,5 | 33 | 19 |
| A26 DR M18 | M18x1,5 | 36 | 21 |

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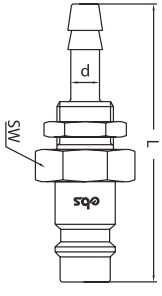
**Erkek Uçlar**

| ( Valfsiz ) Sipariş | d | L | SW |
|---|---|---|---|
| A26 ER 10 | BSP 1/8" | 31 | 13 |
| A26 ER 13 | BSP 1/4" | 33 | 14 |
| A26 ER 17 | BSP 3/8" | 33 | 17 |
| A26 ER 21 | BSP 1/2" | 38 | 22 |
| A26 ER M14 | M14x1.5 | 35 | 17 |
| A26 ER M16 | M16x1.5 | 36 | 17 |
| A26 ER M18 | M18x1.5 | 37 | 19 |

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**Panel Hortum Uç**

| ( Valfsiz ) Sipariş | d | L | SW |
|---|---|---|---|
| A26 MR 06 | 6 mm M12x1 | 56 | 14 |
| A26 MR 08 | 8 mm M12x1 | 56 | 14 |
| A26 MR 10 | 10 mm M14x1 | 56 | 16 |



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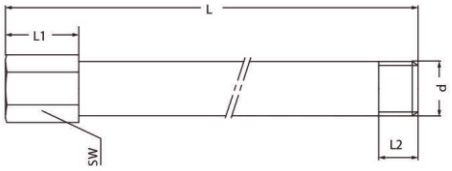
## Uzatma Rekorlar




| Sipariş | ( Valfsiz ) Bağlantı Erkek | Bağlantı Dişi | L | L1 | L2 | SW |
|---|---|---|---|---|---|---|
| UZR 10-60 | G 1/8" | G 1/8" | 60 | 12 | 10 | 14 |
| UZR 10-80 | G 1/8" | G 1/8" | 80 | 12 | 10 | 14 |
| UZR 10-100 | G 1/8" | G 1/8" | 100 | 12 | 10 | 14 |
| UZR 10-120 | G 1/8" | G 1/8" | 120 | 12 | 10 | 14 |
| UZR 10-150 | G 1/8" | G 1/8" | 150 | 12 | 10 | 14 |
| UZR 13-60 | G 1/4" | G 1/4" | 60 | 12 | 10 | 14 |
| UZR 13-80 | G 1/4" | G 1/4" | 80 | 12 | 10 | 14 |
| UZR 13-100 | G 1/4" | G 1/4" | 100 | 12 | 10 | 14 |
| UZR 13-120 | G 1/4" | G 1/4" | 120 | 12 | 10 | 14 |
| UZR 13-150 | G 1/4" | G 1/4" | 150 | 12 | 10 | 14 |
| UZR 17-60 | G 3/8" | G 3/8" | 60 | 12 | 10 | 19 |
| UZR 17-80 | G 3/8" | G 3/8" | 80 | 12 | 10 | 19 |
| UZR 17-100 | G 3/8" | G 3/8" | 100 | 12 | 10 | 19 |
| UZR 17-120 | G 3/8" | G 3/8" | 120 | 12 | 10 | 19 |
| UZR 17-150 | G 3/8" | G 3/8" | 150 | 12 | 10 | 19 |

| Sipariş | ( Valfsiz ) Bağlantı Erkek | Bağlantı Dişi | L | L1 | L2 | SW |
|---|---|---|---|---|---|---|
| UZR 10-13-60 | G 1/8" | G 1/4" | 60 | 12 | 10 | 14 |
| UZR 10-13-80 | G 1/8" | G 1/4" | 80 | 12 | 10 | 14 |
| UZR 10-13-100 | G 1/8" | G 1/4" | 100 | 12 | 10 | 14 |
| UZR 10-13-120 | G 1/8" | G 1/4" | 120 | 12 | 10 | 14 |
| UZR 10-13-150 | G 1/8" | G 1/4" | 150 | 12 | 10 | 14 |
| UZR 13-10-60 | G 1/4" | G 1/8" | 60 | 12 | 10 | 14 |
| UZR 13-10-80 | G 1/4" | G 1/8" | 80 | 12 | 10 | 14 |
| UZR 13-10-100 | G 1/4" | G 1/8" | 100 | 12 | 10 | 14 |
| UZR 13-10-120 | G 1/4" | G 1/8" | 120 | 12 | 10 | 14 |
| UZR 13-10-150 | G 1/4" | G 1/8" | 150 | 12 | 10 | 14 |
| UZR 10-17-60 | G 1/8" | G 3/8" | 60 | 12 | 10 | 19 |
| UZR 10-17-80 | G 1/8" | G 3/8" | 80 | 12 | 10 | 19 |
| UZR 10-17-100 | G 1/8" | G 3/8" | 100 | 12 | 10 | 19 |
| UZR 10-17-120 | G 1/8" | G 3/8" | 120 | 12 | 10 | 19 |
| UZR 10-17-150 | G 1/8" | G 3/8" | 150 | 12 | 10 | 19 |

| Sipariş | ( Valfsiz ) Bağlantı Erkek | Bağlantı Dişi | L | L1 | L2 | SW |
|---|---|---|---|---|---|---|
| UZR 17-10-60 | G 3/8" | G 1/8" | 60 | 12 | 10 | 19 |
| UZR 17-10-80 | G 3/8" | G 1/8" | 80 | 12 | 10 | 19 |
| UZR 17-10-100 | G 3/8" | G 1/8" | 100 | 12 | 10 | 19 |
| UZR 17-10-120 | G 3/8" | G 1/8" | 120 | 12 | 10 | 19 |
| UZR 17-10-150 | G 3/8" | G 1/8" | 150 | 12 | 10 | 19 |
| UZR 13-17-60 | G 1/4" | G 3/8" | 60 | 12 | 10 | 19 |
| UZR 13-17-80 | G 1/4" | G 3/8" | 80 | 12 | 10 | 19 |
| UZR 13-17-100 | G 1/4" | G 3/8" | 100 | 12 | 10 | 19 |
| UZR 13-17-120 | G 1/4" | G 3/8" | 120 | 12 | 10 | 19 |
| UZR 13-17-150 | G 1/4" | G 3/8" | 150 | 12 | 10 | 19 |
| UZR 17-10-60 | G 3/8" | G 1/4" | 60 | 12 | 10 | 19 |
| UZR 17-10-80 | G 3/8" | G 1/4" | 80 | 12 | 10 | 19 |
| UZR 17-10-100 | G 3/8" | G 1/4" | 100 | 12 | 10 | 19 |
| UZR 17-10-120 | G 3/8" | G 1/4" | 120 | 12 | 10 | 19 |
| UZR 17-10-150 | G 3/8" | G 1/4" | 150 | 12 | 10 | 19 |

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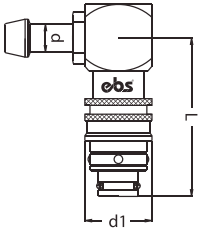
## 600 Serisi
## Hortum Gövde

| ( Valfsiz ) Sipariş | d | d1 | L |
|---|---|---|---|
| 600.08 HG 06 | 1/4"–6 mm | 20 | 62 |
| 600.08 HG 08 | 5/16"–8 mm | 20 | 62 |
| 600.08 HG 10 | 3/8"–10 mm | 20 | 62 |
| 600.08 HG 12 | 15/32"–12 mm | 20 | 62 |
| 600.08 HG 13 | 1/2"–13 mm | 20 | 62 |

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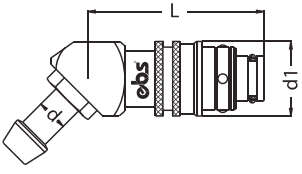
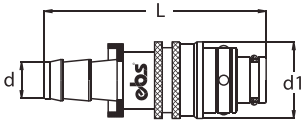
## 600 Serisi
## 90° Hortum Gövde

| ( Valfsiz ) Sipariş | d | d1 | L |
|---|---|---|---|
| 600.08 HG 06-90° | 1/4"–6 mm | 20 | 45,5 |
| 600.08 HG 08-90° | 5/16"–8 mm | 20 | 45,5 |
| 600.08 HG 10-90° | 3/8"–10 mm | 20 | 45,5 |
| 600.08 HG 12-90° | 15/32"–12 mm | 20 | 45,5 |
| 600.08 HG 13-90° | 1/2"–13 mm | 20 | 45,5 |



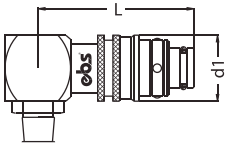

## 45° Hortum Gövde

| ( Valfsiz ) Sipariş | d | d1 | L |
|---|---|---|---|
| 600.08 HG 06-45° | 1/4''–0.6 mm | 20 | 47,5 |
| 600.08 HG 08-45° | 5/16''–0.8 mm | 20 | 47,5 |
| 600.08 HG 10-45° | 3/8''–10 mm | 20 | 47,5 |
| 600.08 HG 12-45° | 15/32''–12 mm | 20 | 47,5 |
| 600.08 HG 13-45° | 1/2''–13 mm | 20 | 47,5 |



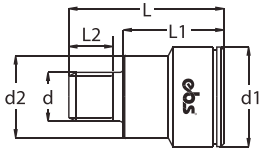

## Kelepçesiz Hortum Gövde

| ( Valfsiz ) Sipariş | d | d1 | L |
|---|---|---|---|
| 600.08 FG 10 | 3/8''–10 mm | 20 | 37 |
| 600.08 FG 13 | 1/2''–13 mm | 20 | 40 |



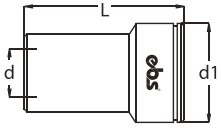

## 90° Kelepçesiz Hortum Gövde

| ( Valfsiz ) Sipariş | d | d1 | L |
|---|---|---|---|
| 600.08 FG 10-90° | 3/8''–10 mm | 20 | 45,5 |
| 600.08 FG 13-90° | 1/2''–13 mm | 20 | 45,5 |



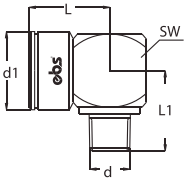

## Erkek Uçlar

| ( Valfsiz ) Sipariş | d | d1 | L1 | L2 | d2 | L | SW |
|---|---|---|---|---|---|---|---|
| 600.08 ER 10 | BSPT 1/8'' | 21 | 21 | 8 | 17,5 | 31 | 6 |
| 600.08 ER 13 | BSPT 1/4'' | 21 | 21 | 10 | 17,5 | 33 | 8 |
| 600.08 ER 17 | BSPT 3/8'' | 21 | 11 | 11 | 17,5 | 24 | 8 |
| 600.08 NR 10 | NPT 1/8'' | 21 | 21 | 7 | 17,5 | 31 | 1/4'' |
| 600.08 NR 13 | NPT 1/4'' | 21 | 21 | 10 | 17,5 | 33 | 5/16'' |
| 600.08 NR 17 | NPT 3/8'' | 21 | 11 | 11 | 17,5 | 24 | 5/16'' |
| 600.08 ER M10-1 | M10x1.0 | 21 | 21 | 10 | 17,5 | 31 | 6 |
| 600.08 ER M10 | M10x1.5 | 21 | 21 | 10 | 17,5 | 31 | 6 |
| 600.08 ER M12 | M14x1.5 | 21 | 21 | 11 | 17,5 | 31 | 8 |
| 600.08 ER M14 | M12x1.75 | 21 | 21 | 11 | 17,5 | 31 | 8 |



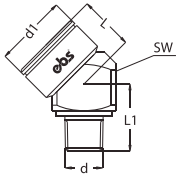

## Dişi Uçlar

| ( Valfsiz ) Sipariş | d | d1 | L | SW |
|---|---|---|---|---|
| 600.08 DR 10 | BSPT 1/8'' | 21 | 39 | 8 |
| 600.08 DR 13 | BSPT 1/4'' | 21 | 39 | 8 |



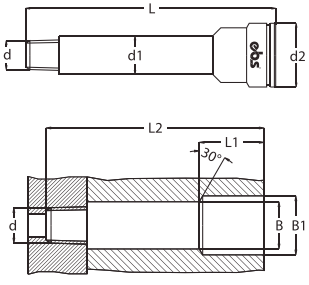

## 90° Erkek Uçlar

| ( Valfsiz ) Sipariş | d | d1 | L | L1 | SW |
|---|---|---|---|---|---|
| 600.08 ER 10-90° | BSPT 1/8'' | 21 | 33 | 23 | 20 |
| 600.08 ER 13-90° | BSPT 1/4'' | 21 | 33 | 25 | 20 |
| 600.08 ER 17-90° | BSPT 3/8'' | 21 | 33 | 26 | 20 |
| 600.08 NR 13-90° | NPT 1/4'' | 21 | 21 | 27 | 20 |



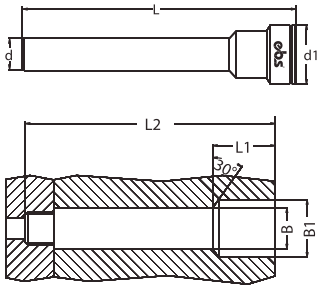

## 45° Erkek Uçlar

| ( Valfsiz ) Sipariş | d | d1 | L | L1 | SW |
|---|---|---|---|---|---|
| 600.08 ER 10-45° | BSPT 1/8'' | 21 | 33 | 16,5 | 20 |
| 600.08 ER 13-45° | BSPT 1/4'' | 21 | 33 | 16,5 | 20 |
| 600.08 ER 17-45° | BSPT 3/8'' | 21 | 33 | 16,5 | 20 |
| 600.08 NR 13-45° | NPT 1/4'' | 21 | 33 | 16,5 | 20 |




## Erkek Uzatma Uçlar

| ( Valfsiz ) Sipariş | d | L min/max | L1 | L2 | d2 | B1 | B | d1 | SW |
|---|---|---|---|---|---|---|---|---|---|
| 600.08 ER10-100 | BSPT 1/8'' | 33/100 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 6 |
| 600.08 ER10-150 | BSPT 1/8'' | 100/150 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 6 |
| 600.08 ER10-200 | BSPT 1/8'' | 150/200 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 6 |
| 600.08 ER10-250 | BSPT 1/8'' | 200/250 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 6 |
| 600.08 NR10-100 | NPT 1/8'' | 33/100 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 1/4'' |
| 600.08 NR10-150 | NPT 1/8'' | 100/150 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 1/4'' |
| 600.08 NR10-200 | NPT 1/8'' | 150/200 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 1/4'' |
| 600.08 NR10-250 | NPT 1/8'' | 200/250 | 23 | L-5.5 | 21 | 22 | 11 | 10,2 | 1/4'' |
| 600.08 ER13-100 | BSPT 1/4'' | 33/100 | 23 | L-7.5 | 21 | 22 | 14 | 13,5 | 8 |
| 600.08 ER13-150 | BSPT 1/4'' | 100/150 | 23 | L-7.5 | 21 | 22 | 14 | 13,5 | 8 |
| 600.08 ER13-200 | BSPT 1/4'' | 150/200 | 23 | L-7.5 | 21 | 22 | 14 | 13,5 | 8 |
| 600.08 ER13-250 | BSPT 1/4'' | 200/250 | 23 | L-7.5 | 21 | 22 | 14 | 13,5 | 8 |
| 600.08 NR13-100 | NPT 1/4'' | 33/100 | 23 | L-5.5 | 21 | 22 | 14 | 13,5 | 1/4'' |
| 600.08 NR13-150 | NPT 1/4'' | 100/150 | 23 | L-5.5 | 21 | 22 | 14 | 13,5 | 1/4'' |
| 600.08 NR13-200 | NPT 1/4'' | 150/200 | 23 | L-5.5 | 21 | 22 | 14 | 13,5 | 1/4'' |
| 600.08 NR13-250 | NPT 1/4'' | 200/250 | 23 | L-5.5 | 21 | 22 | 14 | 13,5 | 1/4'' |

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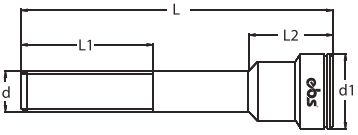
## Erkek Uzatma Uçlar

| ( Valfsiz ) Sipariş | d | L | L1 | L2 | d1 | B1 | B | SW |
|---|---|---|---|---|---|---|---|---|
| 600.08 BU 10-50 | 10,2 | 50 | 23 | L-5.5 | 21 | 22 | 11 | 6 |
| 600.08 BU 10-100 | 10,2 | 100 | 23 | L-5.5 | 21 | 22 | 11 | 6 |
| 600.08 BU 10-150 | 10,2 | 150 | 23 | L-5.5 | 21 | 22 | 11 | 6 |
| 600.08 BU 10-200 | 10,2 | 200 | 23 | L-5.5 | 21 | 22 | 11 | 6 |
| 600.08 BU 13-50 | 13,5 | 50 | 23 | L-7.5 | 21 | 22 | 14 | 8 |
| 600.08 BU 13-100 | 13,5 | 100 | 23 | L-7.5 | 21 | 22 | 14 | 8 |
| 600.08 BU 13-150 | 13,5 | 150 | 23 | L-7.5 | 21 | 22 | 14 | 8 |
| 600.08 BU 13-200 | 13,5 | 200 | 23 | L-7.5 | 21 | 22 | 14 | 8 |
| 600.08 BU 13-250 | 13,5 | 250 | 23 | L-7.5 | 21 | 22 | 14 | 8 |




ebs

## Erkek Uzatma Uçlar

| ( Valfsiz ) Sipariş | d | L | L1 | L2 | d1 | SW |
|---|---|---|---|---|---|---|
| 600.08 UR 10-50 | BSP 1/8" | 50 | 26 | 21 | 21 | 6 |
| 600.08 UR 10-100 | BSP 1/8" | 100 | 60 | 21 | 21 | 6 |
| 600.08 UR 10-150 | BSP 1/8" | 150 | 60 | 21 | 21 | 6 |
| 600.08 UR 13-50 | BSP 1/4" | 50 | 27 | 21 | 21 | 8 |
| 600.08 UR 13-100 | BSP 1/4" | 100 | 60 | 21 | 21 | 8 |
| 600.08 UR 13-150 | BSP 1/4" | 150 | 60 | 21 | 21 | 8 |
| 600.08 UR 13-200 | BSP 1/4" | 200 | 60 | 21 | 21 | 8 |



ebs

## Manşon

| Sipariş | Bağlantı Ölçüleri |
|---|---|
| MN M5 | M5 |
| MN 10 | G 1/8" |
| MN 13 | G 1/4" |
| MN 17 | G 3/8" |

| Sipariş | Bağlantı Ölçüleri |
|---|---|
| MN 21 | G 1/2" |
| MN 26 | G 3/4" |
| MN 30 | G 1" |



ebs

## Redüksiyon

| Sipariş | Bağlantı | |
|---|---|---|
| | Erkek | Dişi |
| RD 05/10 | M5 | G 1/8" |
| RD 05/13 | M5 | G 1/4" |
| RD 10/13 | G 1/8" | G 1/4" |
| RD 17/13 | G 3/8" | G 1/4" |
| RD 10/17 | G 1/8" | G 3/8" |
| RD 10/21 | G 1/8" | G 1/2" |
| RD 13/17 | G 1/4" | G 3/8" |

| Sipariş | Bağlantı | |
|---|---|---|
| | Erkek | Dişi |
| RD 13/21 | G 1/4" | G 1/2" |
| RD 17/21 | G 3/8" | G 1/2" |
| RD 17/26 | G 3/8" | G 3/4" |
| RD 21/26 | G 1/2" | G 3/4" |
| RD 21/33 | G 1/2" | G 1" |
| RD 26/33 | G 3/4" | G 1" |



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## Redüksiyon

| Sipariş | Bağlantı | |
|---|---|---|
| | Erkek | Dişi |
| TD 05/05 | M5 | M5 |
| TD 05/10 | M5 | G 1/8" |
| TD 10/05 | G 1/8" | M5 |
| TD 10/10 | G 1/8" | G 1/8" |
| TD 10/13 | G 1/8" | G 1/4" |
| TD 13/10 | G 1/4" | G 1/8" |
| TD 13/13 | G 1/4" | G 1/4" |

| Sipariş | Bağlantı | |
|---|---|---|
| | Erkek | Dişi |
| TD 13/17 | G 1/4" | G 3/8" |
| TD 17/13 | G 3/8" | G 1/4" |
| TD 17/17 | G 3/8" | G 3/8" |
| TD 17/21 | G 3/8" | G 1/2" |
| TD 21/17 | G 1/2" | G 3/8" |
| TD 21/21 | G 1/2" | G 1/2" |
| TD 21/26 | G 1/2" | G 3/4" |



## Plastik Rekor

| Bağlantı | Bağlantı | Bağlantı |
|---|---|---|
| 1/8-4 | 1/8-8 | 3/8-10 |
| 1/8-6 | 1/4-8 | 1/2-10 |
| 1/4-6 | 3/8-8 | 1/4-12 |
| 3/8 -6 | 1/2-8 | 3/8-12 |
| 1/2-6 | 1/4-10 | 1/2-12 |



## Plastik Düz Nipel

| Bağlantı | Bağlantı | Bağlantı |
|---|---|---|
| 4 | 9 | 12 |
| 5 | 9.5 | 14 |
| 6 | 10 | 15 |
| 8 | 11 | 16 |



## Plastik T Nipel

| Bağlantı | Bağlantı |
|---|---|
| 4 | 10 |
| 6 | 12 |
| 8 | 16 |



## Redüksiyon T

| Bağlantı | Bağlantı |
|---|---|
| 6-6-8 | 10-10-8 |
| 8-8-6 | 10-10-12 |
| 8-8-10 | 12-12-10 |



## Redüksiyon

| Bağlantı |
|---|
| 6-4 |
| 8-6 |
| 10-8 |
| 12-10 |



## Döner Dirsek

| Bağlantı | Bağlantı | Bağlantı |
|---|---|---|
| 1/2-10 | 1/8-8 | 1/2-10 |
| 1/8-4 | 1/4-8 | 1/4-12 |
| 1/8-6 | 3/8-8 | 3/8-12 |
| 1/4-6 | 1/4-10 | 1/2-12 |
| 3/8-6 | 3/8 -10 | |



## Plastik Dirsek

| Bağlantı | Bağlantı |
|---|---|
| 4 | 10 |
| 6 | 12 |
| 8 | 16 |



## Orta Bacak Dişli

| Bağlantı | Bağlantı |
|---|---|
| 1/8-6 | 3/8-8 |
| 1/4-6 | 1/4-10 |
| 3/8-6 | 3/8-10 |
| 1/8-8 | 1/4-12 |
| 1/4-8 | 3/8-12 |



## Yan Bacak Dişli

| Bağlantı | Bağlantı |
|---|---|
| 1/8-6 | 3/8-8 |
| 1/4-6 | 1/4-10 |
| 3/8-6 | 3/8 -10 |
| 1/8-8 | 1/4-12 |
| 1/4-8 | 3/8-12 |



## Plastik Y

| Bağlantı |
|---|
| 4-4-4 |
| 6-6-6 |
| 8-8-8 |
| 10-10-10 |
| 12-12-12 |



## Polietilen Hortum

| Bağlantı | Bağlantı | Bağlantı |
|---|---|---|
| 2 x 4 | 6 x 10 | 12 x 16 |
| 3 x 5 | 8 x 10 | 10 x 16 |
| 4 x 6 | 8 x 12 | 6,5 x 10 |
| 4 x 8 | 9 x 11 | 9 x 12 |
| 5 x 8 | 10 x 12 | |
| 6 x 8 | 10 x 14 | |



## Polyamid 12 Hortum

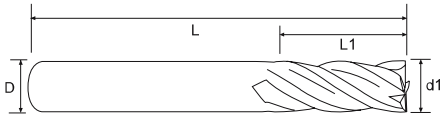
| Bağlantı | Bağlantı | Bağlantı |
|---|---|---|
| 5 x 3.3 | 8 x 4.4 | 9.5 x 7 |
| 6 x 3 | 8 x 5.5 | 10 x 8 |
| 6 x 4 | 8 x 6 | 12 x 9 |
| 7 x 5 | 9 x 6 | |
| 7.5 x 3.5 | 9.5 x 6 | |



DENG TOOLS

## Düz 4 Ağız Karbür Freze

600 Nano | HRC 55 | 35° | TiSiN




| Sipariş | d1 | L1 | L | D |
|---|---|---|---|---|
| MSE0104 - TİSİN | 1 | 3 | 50 | 4 |
| MSE0154 - TİSİN | 1.5 | 4 | 50 | 4 |
| MSE0204 - TİSİN | 2.0 | 6 | 50 | 4 |
| MSE0254 - TİSİN | 2.5 | 8 | 50 | 4 |
| MSE0304 - TİSİN | 3.0 | 8 | 50 | 4 |
| MSE0354 - TİSİN | 3.5 | 10 | 50 | 4 |
| MSE0404 - TİSİN | 4 | 11 | 50 | 4 |
| SE0404 - TİSİN | 4 | 11 | 50 | 6 |
| SE0454 - TİSİN | 4.5 | 13 | 50 | 6 |
| SE0504 - TİSİN | 5 | 13 | 50 | 6 |
| SE0554 - TİSİN | 5.5 | 13 | 50 | 6 |
| SE0604 - TİSİN | 6 | 16 | 50 | 6 |
| SE0654 - TİSİN | 6.5 | 16 | 60 | 8 |

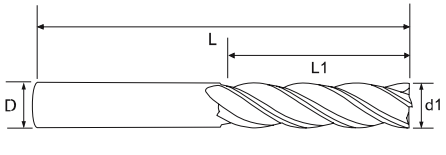
| Sipariş | d1 | L1 | L | D |
|---|---|---|---|---|
| SE0704 - TİSİN | 7 | 16 | 60 | 8 |
| SE0754 - TİSİN | 7.5 | 19 | 60 | 8 |
| SE0804 - TİSİN | 8 | 20 | 60 | 8 |
| SE0854 - TİSİN | 8.5 | 20 | 75 | 10 |
| SE0904 - TİSİN | 9 | 20 | 75 | 10 |
| SE0954 - TİSİN | 9.5 | 25 | 75 | 10 |
| SE1004 - TİSİN | 10 | 30 | 75 | 10 |
| SE1104- TİSİN | 11 | 30 | 75 | 12 |
| SE1204 - TİSİN | 12 | 32 | 75 | 12 |
| SE1404 - TİSİN | 14 | 40 | 100 | 16 |
| SE1604 - TİSİN | 16 | 40 | 100 | 16 |
| SE1804 - TİSİN | 18 | 45 | 100 | 20 |
| SE2004 - TİSİN | 20 | 45 | 100 | 20 |



DENG TOOLS

## Düz Uzun 4 Ağız Karbür Freze

600 Nano | HRC 55 | 35° | TiSiN




| Sipariş | d1 | L1 | L | D |
|---|---|---|---|---|
| LET0104 - TİSİN | 1 | 6 | 50 | 4 |
| LET0154 - TİSİN | 1.5 | 9 | 50 | 4 |
| LET0204 - TİSİN | 2.0 | 12 | 50 | 4 |
| LET0254 - TİSİN | 2.5 | 12 | 50 | 4 |
| LET0304 - TİSİN | 3.0 | 15 | 60 | 6 |
| LET0354 - TİSİN | 3.5 | 15 | 60 | 6 |
| LET0404 - TİSİN | 4 | 20 | 75 | 6 |
| LET0454 - TİSİN | 4.5 | 20 | 75 | 6 |
| LET0504 - TİSİN | 5 | 25 | 75 | 6 |
| LET0554 - TİSİN | 5.5 | 25 | 75 | 6 |

| Sipariş | d1 | L1 | L | D |
|---|---|---|---|---|
| LET0604 - TİSİN | 6 | 30 | 75 | 6 |
| LET0704 - TİSİN | 7 | 30 | 100 | 8 |
| LET0804 - TİSİN | 8 | 40 | 100 | 8 |
| LET0904 - TİSİN | 9 | 40 | 100 | 10 |
| LET1004 - TİSİN | 10 | 40 | 100 | 10 |
| LET1104 - TİSİN | 11 | 40 | 100 | 12 |
| LET1204 - TİSİN | 12 | 50 | 100 | 12 |
| LET1404 - TİSİN | 14 | 50 | 150 | 16 |
| LET1604 - TİSİN | 16 | 60 | 150 | 16 |
| LET2004 - TİSİN | 20 | 90 | 200 | 20 |

Uygulama ◎ Tavsiye ○ Uygun X Tavsiye Edilmez

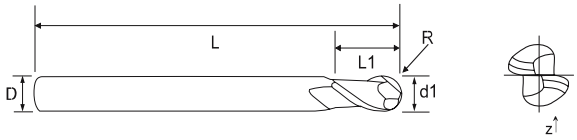
| Karbon Çelik, Alaşımlı Çelik | Önceden Sertleştirilmiş Çelik | Yüksek Sertleştirilmiş | | | | Paslanmaz Çelik | Bakır Alaşım | Alüminyum Alaşım |
|---|---|---|---|---|---|---|---|---|
| | ~45HRC | ~50HRC | ~55HRC | ~60HRC | ~65HRC | | | |
| ○ | ◎ | ◎ | ○ | | | ○ | | |



DENG TOOLS

## Küre 2 Ağız Karbür Freze

600 Nano | HRC 55 | 35° | TiSiN




| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| MSB0102 - TİSİN | 1 | 0.5 | 2 | 50 | 4 |
| MSB0152 - TİSİN | 1.5 | 0.75 | 3 | 50 | 4 |
| MSB0202 - TİSİN | 2 | 1 | 4 | 50 | 4 |
| MSB0252 - TİSİN | 2.5 | 1.25 | 5 | 50 | 4 |
| MSB0302 - TİSİN | 3 | 1.5 | 6 | 50 | 4 |
| MSB0352 - TİSİN | 3.5 | 1.75 | 7 | 50 | 4 |
| MSB0402 - TİSİN | 4 | 2 | 8 | 50 | 4 |
| SB0402 - TİSİN | 4 | 2 | 8 | 50 | 6 |
| SB0452 - TİSİN | 4.5 | 2.25 | 9 | 50 | 6 |
| SB0502 - TİSİN | 5 | 2.5 | 10 | 50 | 6 |
| SB0552 - TİSİN | 5.5 | 2.75 | 11 | 50 | 6 |

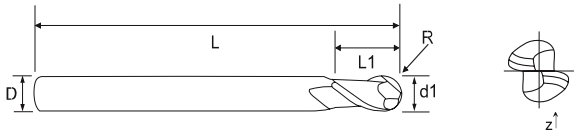
| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| SB0602 - TİSİN | 6 | 3 | 12 | 50 | 6 |
| SB0702 - TİSİN | 7 | 3.5 | 14 | 60 | 8 |
| SB0802 - TİSİN | 8 | 4 | 16 | 60 | 8 |
| SB0902 - TİSİN | 9 | 4.5 | 18 | 75 | 10 |
| SB1002 - TİSİN | 10 | 5 | 20 | 75 | 10 |
| SB1102 - TİSİN | 11 | 5.5 | 22 | 75 | 12 |
| SB1202 - TİSİN | 12 | 6 | 24 | 75 | 12 |
| SB1402 - TİSİN | 14 | 7 | 28 | 100 | 16 |
| SB1602 - TİSİN | 16 | 8 | 32 | 100 | 16 |
| SB1802 - TİSİN | 18 | 9 | 36 | 100 | 20 |
| SB2002 - TİSİN | 20 | 10 | 40 | 100 | 20 |



DENG TOOLS

## Küre Uzun 2 Ağız Karbür Freze

600 Nano | HRC 55 | 35° | TiSiN




| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| SLB0102 - TİSİN | 1 | 0.5 | 2 | 75 | 6 |
| MLB0102 - TİSİN | 1 | 0.5 | 2 | 100 | 6 |
| SLB0152 - TİSİN | 1.5 | 0.75 | 3 | 75 | 6 |
| MLB0152 - TİSİN | 1.5 | 0.75 | 3 | 100 | 6 |
| SLB0202 - TİSİN | 2 | 1 | 4 | 75 | 6 |
| MLB0202 - TİSİN | 2 | 1 | 4 | 100 | 6 |
| SLB0252 - TİSİN | 2.5 | 1.25 | 5 | 75 | 6 |
| MLB0252 - TİSİN | 2.5 | 1.25 | 5 | 100 | 6 |
| SLB0302 - TİSİN | 3 | 1.5 | 6 | 75 | 6 |
| MLB0302 - TİSİN | 3 | 1.5 | 6 | 100 | 6 |
| MLB0352 - TİSİN | 3.5 | 1.75 | 7 | 100 | 6 |
| SLB0402 - TİSİN | 4 | 2 | 8 | 75 | 6 |
| MLB0402 - TİSİN | 4 | 2 | 8 | 100 | 6 |
| SLB0502 - TİSİN | 5 | 2.5 | 10 | 75 | 6 |
| MLB0502 - TİSİN | 5 | 2.5 | 10 | 100 | 6 |

| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| SLB0602 - TİSİN | 6 | 3 | 12 | 75 | 6 |
| MLB0602 - TİSİN | 6 | 3 | 12 | 100 | 6 |
| LLB0602 - TİSİN | 6 | 3 | 12 | 150 | 6 |
| SLB0802 - TİSİN | 8 | 4 | 16 | 75 | 8 |
| MLB0802 - TİSİN | 8 | 4 | 16 | 100 | 8 |
| LLB0802 - TİSİN | 8 | 4 | 16 | 150 | 8 |
| MLB1002 - TİSİN | 10 | 5 | 20 | 100 | 10 |
| LLB1002 - TİSİN | 10 | 5 | 20 | 150 | 10 |
| XLB1002 - TİSİN | 10 | 5 | 20 | 200 | 10 |
| MLB1202 - TİSİN | 12 | 6 | 24 | 100 | 12 |
| LLB1202 - TİSİN | 12 | 6 | 24 | 150 | 12 |
| XLB1202 - TİSİN | 12 | 6 | 24 | 200 | 12 |
| LLB1602 - TİSİN | 16 | 8 | 32 | 150 | 16 |
| XLB1602 - TİSİN | 16 | 8 | 32 | 200 | 16 |

Uygulama ◎ Tavsiye ○ Uygun X Tavsiye Edilmez

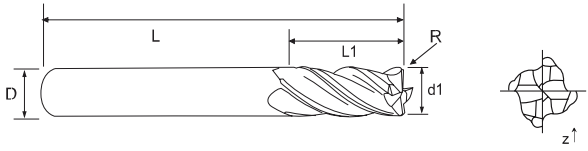
| Karbon Çelik, Alaşımlı Çelik | Önceden Sertleştirilmiş Çelik | Yüksek Sertleştirilmiş | | | | Paslanmaz Çelik | Bakır Alaşım | Alüminyum Alaşım |
|---|---|---|---|---|---|---|---|---|
| | ~45HRC | ~50HRC | ~55HRC | ~60HRC | ~65HRC | | | |
| ○ | ◎ | ◎ | ○ | | | ○ | | |



DENG TOOLS

## Radius 4 Ağız Karbür Freze

600 Nano | HRC 55 | 35° | R | TiSiN




| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| RTA020024 - TİSİN | 2 | 0.2 | 6 | 50 | 4 |
| RTA020034 - TİSİN | 2 | 0.3 | 6 | 50 | 4 |
| RTA020054 - TİSİN | 2 | 0.5 | 6 | 50 | 4 |
| RTA025024 - TİSİN | 2.5 | 0.2 | 8 | 50 | 4 |
| RTA030024 - TİSİN | 3 | 0.2 | 8 | 50 | 3 |
| RTA030034 - TİSİN | 3 | 0.3 | 8 | 50 | 3 |
| RTA030054 - TİSİN | 3 | 0.5 | 8 | 50 | 3 |
| RTA030104 - TİSİN | 3 | 1 | 8 | 50 | 3 |
| RTA430024 - TİSİN | 3 | 0.2 | 8 | 50 | 4 |
| RTA430034 - TİSİN | 3 | 0.3 | 8 | 50 | 4 |
| RTA430054 - TİSİN | 3 | 0.5 | 8 | 50 | 4 |
| RTA430104 - TİSİN | 3 | 1 | 8 | 50 | 4 |
| RTA040024 - TİSİN | 4 | 0.2 | 10 | 50 | 4 |
| RTA040034 - TİSİN | 4 | 0.3 | 10 | 50 | 4 |
| RTA040054 - TİSİN | 4 | 0.5 | 10 | 50 | 4 |
| RTA040104 - TİSİN | 4 | 1 | 10 | 50 | 4 |
| RTA040154 - TİSİN | 4 | 1.5 | 10 | 50 | 4 |
| RTA050024 - TİSİN | 5 | 0.2 | 13 | 50 | 6 |
| RTA050034 - TİSİN | 5 | 0.3 | 13 | 50 | 6 |
| RTA050054 - TİSİN | 5 | 0.5 | 13 | 50 | 6 |
| RTA050104 - TİSİN | 5 | 1 | 13 | 50 | 6 |
| RTA060024 - TİSİN | 6 | 0.2 | 15 | 50 | 6 |
| RTA060034 - TİSİN | 6 | 0.3 | 15 | 50 | 6 |
| RTA060054 - TİSİN | 6 | 0.5 | 15 | 50 | 6 |

| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| RTA060104 - TİSİN | 6 | 1 | 15 | 50 | 6 |
| RTA060154 - TİSİN | 6 | 1.5 | 15 | 50 | 6 |
| RTA060204 - TİSİN | 6 | 2 | 15 | 50 | 6 |
| RTA080034 - TİSİN | 8 | 0.3 | 20 | 60 | 8 |
| RTA080054 - TİSİN | 8 | 0.5 | 20 | 60 | 8 |
| RTA080104 - TİSİN | 8 | 1 | 20 | 60 | 8 |
| RTA080154 - TİSİN | 8 | 1.5 | 20 | 60 | 8 |
| RTA080204 - TİSİN | 8 | 2 | 20 | 60 | 8 |
| RTA080254 - TİSİN | 8 | 2.5 | 20 | 60 | 8 |
| RTA080304 - TİSİN | 8 | 3 | 20 | 60 | 8 |
| RTA100034 - TİSİN | 10 | 0.3 | 25 | 75 | 10 |
| RTA100054 - TİSİN | 10 | 0.5 | 25 | 75 | 10 |
| RTA100104 - TİSİN | 10 | 1 | 25 | 75 | 10 |
| RTA100154 - TİSİN | 10 | 1.5 | 25 | 75 | 10 |
| RTA100204 - TİSİN | 10 | 2 | 25 | 75 | 10 |
| RTA100254 -TİSİN | 10 | 2.5 | 25 | 75 | 10 |
| RTA100304 - TİSİN | 10 | 3 | 25 | 75 | 10 |
| RTA120034 - TİSİN | 12 | 0.3 | 30 | 75 | 12 |
| RTA120054 - TİSİN | 12 | 0.5 | 30 | 75 | 12 |
| RTA120104 - TİSİN | 12 | 1 | 30 | 75 | 12 |
| RTA120154 - TİSİN | 12 | 1.5 | 30 | 75 | 12 |
| RTA120204 - TİSİN | 12 | 2 | 30 | 75 | 12 |
| RTA120254 - TİSİN | 12 | 2.5 | 30 | 75 | 12 |
| RTA120304 - TİSİN | 12 | 3 | 30 | 75 | 12 |

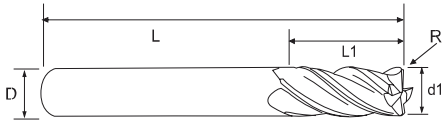




Uygulama ◎ Tavsiye ○ Uygun X Tavsiye Edilmez

| Karbon Çelik, Alaşımlı Çelik | Önceden Sertleştirilmiş Çelik | Yüksek Sertleştirilmiş | | | | Paslanmaz Çelik | Bakır Alaşım | Alüminyum Alaşım |
|---|---|---|---|---|---|---|---|---|
| | ~45HRC | ~50HRC | ~55HRC | ~60HRC | ~65HRC | | | |
| ○ | ◎ | ◎ | ○ | | | ○ | | |






DENG TOOLS

## Radius Uzun 4 Ağız Karbür Freze

600 Nano | HRC 55 | 35° | R | TiSiN

| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| LRTA030034 - TİSİN | 3 | 0.3 | 8 | 75 | 3 |
| LRTA030054 - TİSİN | 3 | 0.5 | 8 | 75 | 3 |
| LRTA030104 - TİSİN | 3 | 1 | 8 | 75 | 3 |
| LRTA040034 - TİSİN | 4 | 0.3 | 10 | 75 | 4 |
| LRTA040054 - TİSİN | 4 | 0.5 | 10 | 75 | 4 |
| LRTA040104 - TİSİN | 4 | 1 | 10 | 75 | 4 |
| LRTA040154 - TİSİN | 4 | 1.5 | 10 | 75 | 4 |
| LRTA060034 - TİSİN | 6 | 0.3 | 15 | 100 | 6 |
| LRTA060054 - TİSİN | 6 | 0.5 | 15 | 100 | 6 |
| LRTA060104 - TİSİN | 6 | 1 | 15 | 100 | 6 |
| LRTA060154 - TİSİN | 6 | 1.5 | 15 | 100 | 6 |
| LRTA060204 - TİSİN | 6 | 2 | 15 | 100 | 6 |
| LRTA080034 - TİSİN | 8 | 0.3 | 20 | 100 | 8 |
| LRTA080054 - TİSİN | 8 | 0.5 | 20 | 100 | 8 |
| LRTA080104 - TİSİN | 8 | 1 | 20 | 100 | 8 |
| LRTA080154 - TİSİN | 8 | 1.5 | 20 | 100 | 8 |
| LRTA080204 - TİSİN | 8 | 2 | 20 | 100 | 8 |

| Sipariş | d1 | R | L1 | L | D |
|---|---|---|---|---|---|
| LRTA080254 - TİSİN | 8 | 2.5 | 20 | 100 | 8 |
| LRTA080304 - TİSİN | 8 | 3 | 20 | 100 | 8 |
| LRTA100034 - TİSİN | 10 | 0.3 | 25 | 100 | 10 |
| LRTA100054 - TİSİN | 10 | 0.5 | 25 | 100 | 10 |
| LRTA100104 - TİSİN | 10 | 1 | 25 | 100 | 10 |
| LRTA100154-TİSİN | 10 | 1.5 | 25 | 100 | 10 |
| LRTA100204-TİSİN | 10 | 2 | 25 | 100 | 10 |
| LRTA100254 - TİSİN | 10 | 2.5 | 25 | 100 | 10 |
| LRTA100304 - TİSİN | 10 | 3 | 25 | 100 | 10 |
| LRTA120034 - TİSİN | 12 | 0.3 | 30 | 100 | 12 |
| LRTA120054 - TİSİN | 12 | 0.5 | 30 | 100 | 12 |
| LRTA120104 - TİSİN | 12 | 1 | 30 | 100 | 12 |
| LRTA120154- TİSİN | 12 | 1.5 | 30 | 100 | 12 |
| LRTA120204 - TİSİN | 12 | 2 | 30 | 100 | 12 |
| LRTA120254 - TİSİN | 12 | 2.5 | 30 | 100 | 12 |
| LRTA120304 - TİSİN | 12 | 3 | 30 | 100 | 12 |



Uygulama ◎ Tavsiye ○ Uygun X Tavsiye Edilmez

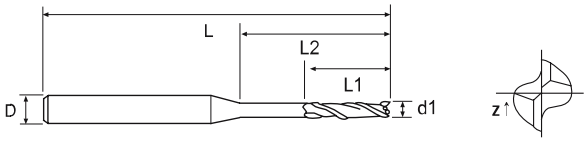
| Karbon Çelik, Alaşımlı Çelik | Önceden Sertleştirilmiş Çelik | Yüksek Sertleştirilmiş | | | | Paslanmaz Çelik | Bakır Alaşım | Alüminyum Alaşım |
|---|---|---|---|---|---|---|---|---|
| | ~45HRC | ~50HRC | ~55HRC | ~60HRC | ~65HRC | | | |
| ○ | ◎ | ◎ | ○ | | | ○ | | |



DENG TOOLS

## Radius 2 Ağız RİF (Kanal) Micro Freze

600 Nano | HRC 55 | 35° | TiSiN

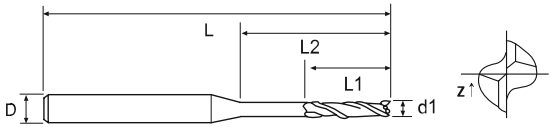



| Sipariş | d1 | R | L1 | L2 | L | D |
|---|---|---|---|---|---|---|
| SFUCR100012 - TİSİN | 1 | 0.1-0.2-0.3 | 1 | 2 | 50 | 4 |
| SFUCR100014 - TİSİN | 1 | 0.1-0.2-0.3 | 1 | 4 | 50 | 4 |
| SFUCR100016 - TİSİN | 1 | 0.1-0.2-0.3 | 1 | 6 | 50 | 4 |
| SFUCR100018 - TİSİN | 1 | 0.1-0.2-0.3 | 1 | 8 | 50 | 4 |
| SFUCR100110- TİSİN | 1 | 0.1-0.2-0.3 | 1 | 10 | 50 | 4 |
| SFUCR100112- TİSİN | 1 | 0.1-0.2-0.3 | 1 | 12 | 60 | 4 |
| SFUCR100116- TİSİN | 1 | 0.1-0.2-0.3 | 1 | 16 | 60 | 4 |
| SFUCR100120 - TİSİN | 1 | 0.1-0.2-0.3 | 1 | 20 | 60 | 4 |
| SFUCR1200126 - TİSİN | 1.2 | 0.2-0.3 | 1.2 | 6 | 50 | 4 |
| SFUCR1200126 - TİSİN | 1.2 | 0.2-0.3 | 1.2 | 12 | 60 | 4 |
| SFUCR1201220- TİSİN | 1.2 | 0.2-0.3 | 1.2 | 20 | 60 | 4 |
| SFUCR1500154- TİSİN | 1.5 | 0.2-0.3-0.5 | 1.5 | 4 | 50 | 4 |
| SFUCR1500156- TİSİN | 1.5 | 0.2-0.3-0.5 | 1.5 | 6 | 50 | 4 |
| SFUCR1500158- TİSİN | 1.5 | 0.2-0.3-0.5 | 1.5 | 8 | 50 | 4 |
| SFUCR1501510- TİSİN | 1.5 | 0.2-0.3-0.5 | 1.5 | 10 | 50 | 4 |
| SFUCR1501512- TİSİN | 1.5 | 0.2-0.3-0.5 | 1.5 | 12 | 60 | 4 |
| SFUCR1501516- TİSİN | 1.5 | 0.2-0.3-0.5 | 1.5 | 16 | 60 | 4 |
| SFUCR1501520- TİSİN | 1.5 | 0.2-0.3-0.5 | 1.5 | 20 | 60 | 4 |
| SFUCR200024 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 4 | 50 | 4 |
| SFUCR200026 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 6 | 50 | 4 |
| SFUCR200028 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 8 | 50 | 4 |
| SFUCR200210 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 10 | 50 | 4 |
| SFUCR200212 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 12 | 60 | 4 |
| SFUCR200216 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 16 | 60 | 4 |
| SFUCR200220 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 20 | 60 | 4 |
| SFUCR200226 - TİSİN | 2.0 | 0.1-0.2-0.3-0.5 | 2.0 | 26 | 75 | 4 |
| SFUCR2502510 - TİSİN | 2.5 | 0.3-0.5 | 2.5 | 10 | 50 | 4 |
| SFUCR2502520 - TİSİN | 2.5 | 0.3-0.5 | 2.5 | 20 | 60 | 4 |
| SFUCR2502530 - TİSİN | 2.5 | 0.3-0.5 | 2.5 | 30 | 75 | 4 |
| SFUCR300036 - TİSİN | 3.0 | 0.1-0.2-0.3-0.5-1 | 3.0 | 6 | 60 | 4 |
| SFUCR300316- TİSİN | 3.0 | 0.1-0.2-0.3-0.5-1 | 3.0 | 16 | 60 | 6 |
| SFUCR300326 - TİSİN | 3.0 | 0.1-0.2-0.3-0.5-1 | 3.0 | 26 | 75 | 6 |
| SFUCR300336 - TİSİN | 3.0 | 0.1-0.2-0.3-0.5-1 | 3.0 | 36 | 75 | 6 |

Uygulama ◎ Tavsiye ○ Uygun X Tavsiye Edilmez

| Karbon Çelik, Alaşımlı Çelik | Önceden Sertleştirilmiş Çelik | Yüksek Sertleştirilmiş | | | | Paslanmaz Çelik | Bakır Alaşım | Alüminyum Alaşım |
|---|---|---|---|---|---|---|---|---|
| | ~45HRC | ~50HRC | ~55HRC | ~60HRC | ~65HRC | | | |
| ○ | ◎ | ◎ | ○ | | | ○ | | |






DENG TOOLS

## Radius 2 Ağız RİF (Kanal) Micro Freze

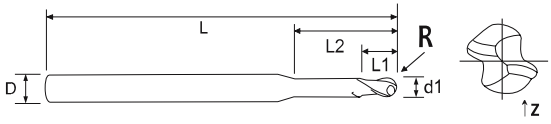
600 Nano | HRC 55 | 35° | TiSiN

| Sipariş | d1 | L1 | L2 | L | D |
|---|---|---|---|---|---|
| LNT05022 - TİSİN | 0.5 | 0.75 | 2 | 50 | 4 |
| LNT05042 - TİSİN | 0.5 | 0.75 | 4 | 50 | 4 |
| LNT05062 - TİSİN | 0.5 | 0.75 | 6 | 50 | 4 |
| LNT06022 - TİSİN | 0.6 | 0.9 | 2 | 50 | 4 |
| LNT06042 - TİSİN | 0.6 | 0.9 | 4 | 50 | 4 |
| LNT06062 - TİSİN | 0.6 | 0.9 | 6 | 50 | 4 |
| LNT08042 - TİSİN | 0.8 | 1.2 | 4 | 50 | 4 |
| LNT08062 - TİSİN | 0.8 | 1.2 | 6 | 50 | 4 |
| LNT08082 - TİSİN | 0.8 | 1.2 | 8 | 50 | 4 |
| LNT10062 - TİSİN | 1 | 1.5 | 6 | 50 | 4 |
| LNT10082 - TİSİN | 1 | 1.5 | 8 | 50 | 4 |
| LNT10102 - TİSİN | 1 | 1.5 | 10 | 50 | 4 |
| LNT10122 - TİSİN | 1 | 1.5 | 12 | 50 | 4 |
| LNT10162 - TİSİN | 1 | 1.5 | 16 | 50 | 4 |

| Sipariş | d1 | L1 | L2 | L | D |
|---|---|---|---|---|---|
| LNT15062 - TİSİN | 1.5 | 2.3 | 6 | 50 | 4 |
| LNT15082 - TİSİN | 1.5 | 2.3 | 8 | 50 | 4 |
| LNT15102 - TİSİN | 1.5 | 2.3 | 10 | 50 | 4 |
| LNT15122 - TİSİN | 1.5 | 2.3 | 12 | 50 | 4 |
| LNT15142 - TİSİN | 1.5 | 2.3 | 14 | 50 | 4 |
| LNT15162 - TİSİN | 1.5 | 2.3 | 16 | 50 | 4 |
| LNT15182 - TİSİN | 1.5 | 2.3 | 18 | 50 | 4 |
| LNT15202 - TİSİN | 1.5 | 2.3 | 20 | 50 | 4 |
| LNT20082 - TİSİN | 2 | 3 | 8 | 50 | 4 |
| LNT20102 - TİSİN | 2 | 3 | 10 | 50 | 4 |
| LNT20122 - TİSİN | 2 | 3 | 12 | 50 | 4 |
| LNT20142 - TİSİN | 2 | 3 | 14 | 50 | 4 |
| LNT20162 - TİSİN | 2 | 3 | 16 | 50 | 4 |
| LNT20182 - TİSİN | 2 | 3 | 18 | 50 | 4 |

| Sipariş | d1 | L1 | L2 | L | D |
|---|---|---|---|---|---|
| LNT20202 - TİSİN | 2 | 3 | 20 | 50 | 4 |
| LNT25082 - TİSİN | 2.5 | 4 | 8 | 50 | 4 |
| LNT25102 - TİSİN | 2.5 | 4 | 10 | 50 | 4 |
| LNT25122 - TİSİN | 2.5 | 4 | 12 | 50 | 4 |
| LNT25142 - TİSİN | 2.5 | 4 | 14 | 50 | 4 |
| LNT25162 - TİSİN | 2.5 | 4 | 16 | 50 | 4 |
| LNT25202 - TİSİN | 2.5 | 4 | 20 | 50 | 4 |
| LNT30102 - TİSİN | 3 | 4.5 | 10 | 50 | 6 |
| LNT30122 - TİSİN | 3 | 4.5 | 12 | 50 | 6 |
| LNT30162 - TİSİN | 3 | 4.5 | 16 | 60 | 6 |
| LNT30202 - TİSİN | 3 | 4.5 | 20 | 60 | 6 |
| LNT30252 - TİSİN | 3 | 4.5 | 25 | 75 | 6 |






DENG TOOLS

## Küre 2 Ağız RİF (Kanal) Micro Freze

600 Nano | HRC 55 | 35° | TiSiN

| Sipariş | d1 | R | L1 | L2 | L | D |
|---|---|---|---|---|---|---|
| LNBT05022 - TİSİN | 0.5 | 0.25 | 0.75 | 2 | 50 | 4 |
| LNBT05042 - TİSİN | 0.5 | 0.25 | 0.75 | 4 | 50 | 4 |
| LNBT05062 - TİSİN | 0.5 | 0.25 | 0.75 | 6 | 50 | 4 |
| LNBT06022 - TİSİN | 0.6 | 0.3 | 0.9 | 2 | 50 | 4 |
| LNBT06042 - TİSİN | 0.6 | 0.3 | 0.9 | 4 | 50 | 4 |
| LNBT06062 - TİSİN | 0.6 | 0.3 | 0.9 | 6 | 50 | 4 |
| LNBT08042 - TİSİN | 0.8 | 0.4 | 1.2 | 4 | 50 | 4 |
| LNBT08062 - TİSİN | 0.8 | 0.4 | 1.2 | 6 | 50 | 4 |
| LNBT08082 - TİSİN | 0.8 | 0.4 | 1.2 | 8 | 50 | 4 |
| LNBT10062 - TİSİN | 1 | 0.5 | 1.5 | 6 | 50 | 4 |
| LNBT10082 - TİSİN | 1 | 0.5 | 1.5 | 8 | 50 | 4 |
| LNBT10102 - TİSİN | 1 | 0.5 | 1.5 | 10 | 50 | 4 |
| LNBT10122 - TİSİN | 1 | 0.5 | 1.5 | 12 | 50 | 4 |

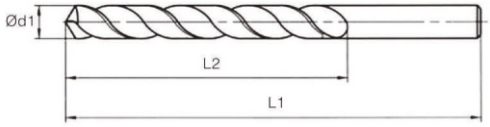
| Sipariş | d1 | R | L1 | L2 | L | D |
|---|---|---|---|---|---|---|
| LNBT15062 - TİSİN | 1.5 | 0.75 | 2.3 | 6 | 50 | 4 |
| LNBT15082 - TİSİN | 1.5 | 0.75 | 2.3 | 8 | 50 | 4 |
| LNBT15102 - TİSİN | 1.5 | 0.75 | 2.3 | 10 | 50 | 4 |
| LNBT15122 - TİSİN | 1.5 | 0.75 | 2.3 | 12 | 50 | 4 |
| LNBT15142 - TİSİN | 1.5 | 0.75 | 2.3 | 14 | 50 | 4 |
| LNBT15162 - TİSİN | 1.5 | 0.75 | 2.3 | 16 | 50 | 4 |
| LNBT15182 - TİSİN | 1.5 | 0.75 | 2.3 | 18 | 50 | 4 |
| LNBT15202 - TİSİN | 1.5 | 0.75 | 2.3 | 20 | 50 | 4 |
| LNBT20082 - TİSİN | 2 | 1 | 3 | 8 | 50 | 4 |
| LNBT20102 - TİSİN | 2 | 1 | 3 | 10 | 50 | 4 |
| LNBT20122 - TİSİN | 2 | 1 | 3 | 12 | 50 | 4 |
| LNBT20142 - TİSİN | 2 | 1 | 3 | 14 | 50 | 4 |
| LNBT20162 - TİSİN | 2 | 1 | 3 | 16 | 50 | 4 |

| Sipariş | d1 | R | L1 | L2 | L | D |
|---|---|---|---|---|---|---|
| LNBT20182 - TİSİN | 2 | 1 | 3 | 18 | 50 | 4 |
| LNBT20202 - TİSİN | 2 | 1 | 3 | 20 | 50 | 4 |
| LNBT25082 - TİSİN | 2.5 | 1.25 | 4 | 8 | 50 | 4 |
| LNBT25122 - TİSİN | 2.5 | 1.25 | 4 | 12 | 50 | 4 |
| LNBT25162 - TİSİN | 2.5 | 1.25 | 4 | 16 | 50 | 4 |
| LNBT25202 - TİSİN | 2.5 | 1.25 | 4 | 20 | 50 | 4 |
| LNBT30102 - TİSİN | 3 | 1.5 | 4.5 | 10 | 50 | 6 |
| LNBT30122 - TİSİN | 3 | 1.5 | 4.5 | 12 | 50 | 6 |
| LNBT30162 - TİSİN | 3 | 1.5 | 4.5 | 16 | 60 | 6 |
| LNBT30202 - TİSİN | 3 | 1.5 | 4.5 | 20 | 60 | 6 |
| LNBT30252 - TİSİN | 3 | 1.5 | 4.5 | 25 | 75 | 6 |

**Uygulama** ◎ Tavsiye ○ Uygun X Tavsiye Edilmez

| Karbon Çelik, Alaşımlı Çelik | Önceden Sertleştirilmiş Çelik | Yüksek Sertleştirilmiş | | | | Paslanmaz Çelik | Bakır Alaşım | Alüminyum Alaşım |
|---|---|---|---|---|---|---|---|---|
| | ~45HRC | ~50HRC | ~55HRC | ~60HRC | ~65HRC | | | |
| ○ | ◎ | ◎ | ○ | | | ○ | | |






## Karbür Matkap Ucu
## Standart Boy

DENG TOOLS

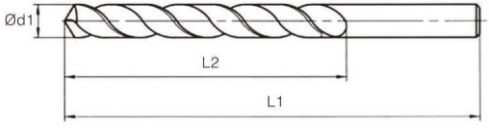
| d1 | L2 | L1 |
|---|---|---|
| 0.5 | 3 | 20 |
| 1.0 | 6 | 26 |
| 1.5 | 9 | 32 |
| 2.0 | 12 | 38 |
| 2.1 | 12 | 38 |
| 2.2 | 13 | 40 |
| 2.3 | 13 | 40 |
| 2.4 | 13 | 40 |
| 2.5 | 13 | 43 |
| 2.6 | 14 | 43 |
| 2.7 | 14 | 46 |
| 2.8 | 16 | 46 |
| 2.9 | 16 | 46 |
| 3.0 | 16 | 46 |
| 3.1 | 18 | 49 |
| 3.2 | 18 | 49 |
| 3.3 | 18 | 49 |
| 3.4 | 20 | 52 |
| 3.5 | 20 | 52 |
| 3.6 | 20 | 52 |
| 3.7 | 20 | 52 |
| 3.8 | 22 | 55 |
| 3.9 | 22 | 55 |
| 4.0 | 22 | 55 |
| 4.1 | 22 | 55 |

| d1 | L2 | L1 |
|---|---|---|
| 4.2 | 22 | 55 |
| 4.3 | 24 | 58 |
| 4.4 | 24 | 58 |
| 4.5 | 24 | 58 |
| 4.6 | 24 | 58 |
| 4.7 | 24 | 58 |
| 4.8 | 24 | 58 |
| 4.9 | 24 | 58 |
| 5.0 | 56 | 62 |
| 5.1 | 26 | 62 |
| 5.2 | 26 | 62 |
| 5.3 | 26 | 62 |
| 5.4 | 26 | 62 |
| 5.5 | 28 | 66 |
| 5.6 | 28 | 66 |
| 5.7 | 28 | 66 |
| 5.8 | 28 | 66 |
| 5.9 | 28 | 66 |
| 6.0 | 28 | 66 |
| 6.1 | 31 | 70 |
| 6.2 | 31 | 70 |
| 6.3 | 31 | 70 |
| 6.4 | 31 | 70 |
| 6.5 | 31 | 70 |
| 6.6 | 31 | 70 |

| d1 | L2 | L1 |
|---|---|---|
| 6.7 | 31 | 70 |
| 6.8 | 31 | 70 |
| 6.9 | 34 | 74 |
| 7.0 | 34 | 74 |
| 7.1 | 34 | 74 |
| 7.2 | 34 | 74 |
| 7.3 | 34 | 74 |
| 7.4 | 34 | 74 |
| 7.5 | 34 | 74 |
| 7.6 | 37 | 79 |
| 7.7 | 37 | 79 |
| 7.8 | 37 | 79 |
| 7.9 | 37 | 79 |
| 8.0 | 37 | 79 |
| 8.1 | 37 | 79 |
| 8.2 | 37 | 79 |
| 8.3 | 37 | 79 |
| 8.4 | 37 | 79 |
| 8.5 | 37 | 79 |
| 8.6 | 37 | 79 |
| 8.7 | 37 | 79 |
| 8.8 | 37 | 79 |
| 8.9 | 37 | 79 |
| 9.0 | 40 | 84 |
| 9.1 | 40 | 84 |

| d1 | L2 | L1 |
|---|---|---|
| 9.2 | 40 | 84 |
| 9.3 | 40 | 84 |
| 9.4 | 40 | 84 |
| 9.5 | 40 | 84 |
| 9.6 | 40 | 84 |
| 9.7 | 43 | 89 |
| 9.8 | 43 | 89 |
| 9.9 | 43 | 89 |
| 10.0 | 43 | 89 |
| 10.2 | 43 | 89 |
| 10.5 | 43 | 89 |
| 11.0 | 47 | 95 |
| 11.5 | 47 | 95 |
| 12.0 | 51 | 102 |
| 12.5 | 51 | 102 |
| 13.0 | 51 | 102 |
| 13.5 | 51 | 102 |
| 14.0 | 54 | 107 |
| 14.5 | 54 | 107 |
| 15.0 | 56 | 111 |
| 15.5 | 56 | 111 |
| 16.0 | 58 | 115 |
| 17.0 | 62 | 123 |
| 18.0 | 62 | 123 |
| 20.0 | 66 | 131 |






## Karbür Matkap Ucu
## Uzun Boy

DENG TOOLS

| d1 | L2 | L1 |
|---|---|---|
| 1 | 12 | 34 |
| 1.5 | 18 | 40 |
| 2 | 24 | 49 |
| 2.5 | 30 | 57 |
| 3 | 33 | 61 |
| 3.5 | 39 | 70 |
| 4. | 43 | 75 |
| 4.5 | 47 | 80 |
| 5 | 52 | 86 |
| 5.5 | 57 | 93 |
| 6. | 57 | 93 |
| 6.5 | 63 | 101 |
| 7 | 69 | 109 |
| 7.5 | 69 | 109 |
| 8 | 75 | 117 |
| 8.5 | 75 | 117 |
| 9 | 81 | 125 |

| d1 | L2 | L1 |
|---|---|---|
| 9.5 | 81 | 125 |
| 10 | 87 | 133 |
| 10.5 | 87 | 133 |
| 11 | 94 | 142 |
| 11.5 | 94 | 142 |
| 12 | 101 | 151 |
| 12.5 | 101 | 151 |
| 13 | 101 | 151 |
| 13.5 | 101 | 151 |
| 14 | 120 | 175 |
| 14.5 | 120 | 175 |
| 15 | 120 | 175 |
| 16 | 120 | 175 |
| 17 | 120 | 175 |
| 18 | 120 | 175 |
| 19 | 120 | 175 |
| 20 | 120 | 175 |




DENG TOOLS

## HJMR - Karbür Rayba

**Tin kaplı mevcuttur.**

| D | Lc | L | Z |
|---|---|---|---|
| 1.0 | 6 | 34 | 4 |
| 1.5 | 8 | 40 | 4 |
| 2.0 | 11 | 49 | 4 |
| 2.5 | 14 | 57 | 4 |
| 3.0 | 15 | 61 | 4 |
| 4.0 | 19 | 75 | 4 |
| 5.0 | 23 | 86 | 6 |
| 6.0 | 26 | 93 | 6 |
| 8.0 | 33 | 117 | 6 |
| 10.0 | 38 | 133 | 6 |
| 12.0 | 44 | 151 | 6 |





























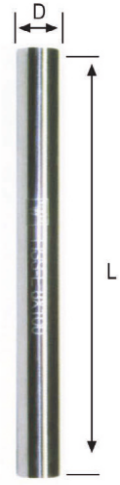












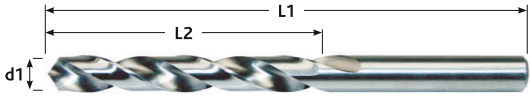

DENG TOOLS

## HJP - Karbür Pantoraf Kalemi

| D | L |
|---|---|
| 1.0 | 100 |
| 1.5 | 100 |
| 2.0 | 100 |
| 2.5 | 100 |
| 3.0 | 100 |
| 4.0 | 100 |
| 5.0 | 100 |
| 6.0 | 100 |
| 8.0 | 100 |
| 10.0 | 100 |
| 12.0 | 100 |

MAKİNA TAKIM

## MUCM - DIN 338 HSS Matkap




| d1 | L1 | L2 |
|---|---|---|
| 0.40 | 20 | 5 |
| 0.50 | 22 | 6 |
| 0.60 | 24 | 7 |
| 0.70 | 28 | 9 |
| 0.80 | 30 | 10 |
| 0.90 | 32 | 11 |
| 1.00 | 34 | 12 |
| 1.10 | 36 | 14 |
| 1.20 | 38 | 16 |
| 1.30 | 38 | 16 |
| 1.40 | 40 | 18 |
| 1.50 | 40 | 18 |
| 1.60 | 43 | 20 |
| 1.70 | 43 | 20 |
| 1.80 | 46 | 22 |
| 1.90 | 46 | 22 |
| 2.00 | 49 | 24 |
| 2.10 | 49 | 24 |
| 2.20 | 53 | 27 |
| 2.30 | 53 | 27 |
| 2.40 | 57 | 30 |
| 2.50 | 57 | 30 |
| 2.60 | 57 | 30 |
| 2.70 | 61 | 33 |
| 2.80 | 61 | 33 |
| 2.90 | 61 | 33 |
| 3.00 | 61 | 33 |
| 3.10 | 65 | 36 |
| 3.20 | 65 | 36 |
| 3.30 | 65 | 36 |
| 3.40 | 70 | 39 |
| 3.50 | 70 | 39 |
| 3.60 | 70 | 39 |
| 3.70 | 70 | 39 |
| 3.80 | 75 | 43 |
| 3.90 | 75 | 43 |
| 4.00 | 75 | 43 |
| 4.10 | 75 | 43 |
| 4.20 | 75 | 43 |
| 4.30 | 80 | 47 |
| 4.40 | 80 | 47 |
| 4.50 | 80 | 47 |

| d1 | L1 | L2 |
|---|---|---|
| 4.60 | 80 | 47 |
| 4.70 | 80 | 47 |
| 4.80 | 86 | 52 |
| 4.90 | 86 | 52 |
| 5.00 | 86 | 52 |
| 5.10 | 86 | 52 |
| 5.20 | 86 | 52 |
| 5.30 | 86 | 52 |
| 5.40 | 93 | 57 |
| 5.50 | 93 | 57 |
| 5.60 | 93 | 57 |
| 5.70 | 93 | 57 |
| 5.80 | 93 | 57 |
| 5.90 | 93 | 57 |
| 6.00 | 93 | 57 |
| 6.10 | 101 | 63 |
| 6.20 | 101 | 63 |
| 6.30 | 101 | 63 |
| 6.40 | 101 | 63 |
| 6.50 | 101 | 63 |
| 6.60 | 101 | 63 |
| 6.70 | 101 | 63 |
| 6.80 | 109 | 69 |
| 6.90 | 109 | 69 |
| 7.00 | 109 | 69 |
| 7.10 | 109 | 69 |
| 7.20 | 109 | 69 |
| 7.30 | 109 | 69 |
| 7.40 | 109 | 69 |
| 7.50 | 109 | 69 |
| 7.60 | 117 | 75 |
| 7.70 | 117 | 75 |
| 7.80 | 117 | 75 |
| 7.90 | 117 | 75 |
| 8.00 | 117 | 75 |
| 8.10 | 117 | 75 |
| 8.20 | 117 | 75 |
| 8.30 | 117 | 75 |
| 8.40 | 117 | 75 |
| 8.50 | 117 | 75 |
| 8.60 | 125 | 81 |
| 8.70 | 125 | 81 |

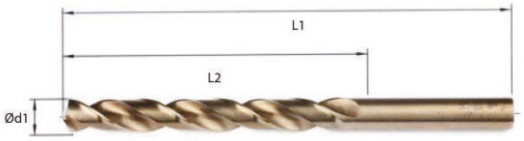
| d1 | L1 | L2 |
|---|---|---|
| 8.80 | 125 | 81 |
| 8.90 | 125 | 81 |
| 9.00 | 125 | 81 |
| 9.10 | 125 | 81 |
| 9.20 | 125 | 81 |
| 9.30 | 125 | 81 |
| 9.40 | 125 | 81 |
| 9.50 | 125 | 81 |
| 9.60 | 133 | 87 |
| 9.70 | 133 | 87 |
| 9.80 | 133 | 87 |
| 9.90 | 133 | 87 |
| 10.00 | 133 | 87 |
| 10.10 | 133 | 87 |
| 10.20 | 133 | 87 |
| 10.30 | 133 | 87 |
| 10.40 | 133 | 87 |
| 10.50 | 133 | 87 |
| 10.60 | 133 | 87 |
| 10.70 | 142 | 94 |
| 10.80 | 142 | 94 |
| 10.90 | 142 | 94 |
| 11.00 | 142 | 94 |
| 11.10 | 142 | 94 |
| 11.20 | 142 | 94 |
| 11.30 | 142 | 94 |
| 11.40 | 142 | 94 |
| 11.50 | 142 | 94 |
| 11.60 | 142 | 94 |
| 11.70 | 142 | 94 |
| 11.80 | 142 | 94 |
| 11.90 | 151 | 101 |
| 12.00 | 151 | 101 |
| 12.10 | 151 | 101 |
| 12.20 | 151 | 101 |
| 12.30 | 151 | 101 |
| 12.40 | 151 | 101 |
| 12.50 | 151 | 101 |
| 12.60 | 151 | 101 |
| 12.70 | 151 | 101 |
| 12.80 | 151 | 101 |
| 12.90 | 151 | 101 |

| d1 | L1 | L2 |
|---|---|---|
| 13.00 | 151 | 101 |
| 13.10 | 151 | 101 |
| 13.20 | 151 | 101 |
| 13.30 | 160 | 108 |
| 13.40 | 160 | 108 |
| 13.50 | 160 | 108 |
| 13.60 | 160 | 108 |
| 13.70 | 160 | 108 |
| 13.80 | 160 | 108 |
| 13.90 | 160 | 108 |
| 14.00 | 160 | 108 |
| 14.10 | 169 | 114 |
| 14.20 | 169 | 114 |
| 14.30 | 169 | 114 |
| 14.40 | 169 | 114 |
| 14.50 | 169 | 114 |
| 14.60 | 169 | 114 |
| 14.70 | 169 | 114 |
| 14.80 | 169 | 114 |
| 14.90 | 169 | 114 |
| 15.00 | 169 | 114 |
| 15.10 | 178 | 120 |
| 15.20 | 178 | 120 |
| 15.30 | 178 | 120 |
| 15.40 | 178 | 120 |
| 15.50 | 178 | 120 |
| 15.60 | 178 | 120 |
| 15.70 | 178 | 120 |
| 15.80 | 178 | 120 |
| 15.90 | 178 | 120 |
| 16.00 | 178 | 120 |
| 16.10 | 184 | 125 |
| 16.20 | 184 | 125 |
| 16.30 | 184 | 125 |
| 16.40 | 184 | 125 |
| 16.50 | 184 | 125 |
| 16.60 | 184 | 125 |
| 16.70 | 184 | 125 |
| 16.80 | 184 | 125 |
| 16.90 | 184 | 125 |
| 17.00 | 184 | 125 |
| 17.10 | 191 | 130 |

| d1 | L1 | L2 |
|---|---|---|
| 17.20 | 191 | 130 |
| 17.30 | 191 | 130 |
| 17.40 | 191 | 130 |
| 17.50 | 191 | 130 |
| 17.60 | 191 | 130 |
| 17.70 | 191 | 130 |
| 17.80 | 191 | 130 |
| 17.90 | 191 | 130 |
| 18.00 | 191 | 130 |
| 18.10 | 198 | 135 |
| 18.20 | 198 | 135 |
| 18.30 | 198 | 135 |
| 18.40 | 198 | 135 |
| 18.50 | 198 | 135 |
| 18.60 | 198 | 135 |
| 18.70 | 198 | 135 |
| 18.80 | 198 | 135 |
| 18.90 | 198 | 135 |
| 19.00 | 198 | 135 |
| 19.10 | 205 | 140 |
| 19.20 | 205 | 140 |
| 19.30 | 205 | 140 |
| 19.40 | 205 | 140 |
| 19.50 | 205 | 140 |
| 19.60 | 205 | 140 |
| 19.70 | 205 | 140 |
| 19.80 | 205 | 140 |
| 19.90 | 205 | 140 |
| 20.00 | 205 | 140 |
| 20.50 | 213 | 145 |
| 21.00 | 213 | 145 |
| 21.50 | 221 | 150 |
| 22.00 | 221 | 150 |
| 22.50 | 229 | 155 |
| 23.00 | 229 | 155 |
| 23.50 | 229 | 155 |
| 24.00 | 236 | 160 |
| 24.50 | 236 | 160 |
| 25.00 | 236 | 160 |

MAKİNA TAKIM

## MUCAM - DIN 338 HSS-E
## Altın Seri Matkap




| d1 | L1 | L2 |
|---|---|---|
| 1.00 | 34 | 12 |
| 1.10 | 36 | 14 |
| 1.20 | 38 | 16 |
| 1.30 | 38 | 16 |
| 1.40 | 40 | 18 |
| 1.50 | 40 | 18 |
| 1.60 | 43 | 20 |
| 1.70 | 43 | 20 |
| 1.80 | 46 | 22 |
| 1.90 | 46 | 22 |
| 2.00 | 49 | 24 |
| 2.10 | 49 | 24 |
| 2.20 | 53 | 27 |
| 2.30 | 53 | 27 |
| 2.40 | 57 | 30 |
| 2.50 | 57 | 30 |
| 2.60 | 57 | 30 |
| 2.70 | 61 | 33 |
| 2.80 | 61 | 33 |
| 2.90 | 61 | 33 |
| 3.00 | 61 | 33 |
| 3.10 | 65 | 36 |
| 3.20 | 65 | 36 |
| 3.30 | 65 | 36 |
| 3.40 | 70 | 39 |
| 3.50 | 70 | 39 |
| 3.60 | 70 | 39 |
| 3.70 | 70 | 39 |
| 3.80 | 75 | 43 |
| 3.90 | 75 | 43 |

| d1 | L1 | L2 |
|---|---|---|
| 4.00 | 75 | 43 |
| 4.10 | 75 | 43 |
| 4.20 | 75 | 43 |
| 4.30 | 80 | 47 |
| 4.40 | 80 | 47 |
| 4.50 | 80 | 47 |
| 4.60 | 80 | 47 |
| 4.70 | 80 | 47 |
| 4.80 | 86 | 52 |
| 4.90 | 86 | 52 |
| 5.00 | 86 | 52 |
| 5.10 | 86 | 52 |
| 5.20 | 86 | 52 |
| 5.30 | 86 | 52 |
| 5.40 | 93 | 57 |
| 5.50 | 93 | 57 |
| 5.60 | 93 | 57 |
| 5.70 | 93 | 57 |
| 5.80 | 93 | 57 |
| 5.90 | 93 | 57 |
| 6.00 | 93 | 57 |
| 6.10 | 101 | 63 |
| 6.20 | 101 | 63 |
| 6.30 | 101 | 63 |
| 6.40 | 101 | 63 |
| 6.50 | 101 | 63 |
| 6.60 | 101 | 63 |
| 6.70 | 101 | 63 |
| 6.80 | 109 | 69 |
| 6.90 | 109 | 69 |

| d1 | L1 | L2 |
|---|---|---|
| 7.00 | 109 | 69 |
| 7.10 | 109 | 69 |
| 7.20 | 109 | 69 |
| 7.30 | 109 | 69 |
| 7.40 | 109 | 69 |
| 7.50 | 109 | 69 |
| 7.60 | 117 | 75 |
| 7.70 | 117 | 75 |
| 7.80 | 117 | 75 |
| 7.90 | 117 | 75 |
| 8.00 | 117 | 75 |
| 8.10 | 117 | 75 |
| 8.20 | 117 | 75 |
| 8.30 | 117 | 75 |
| 8.40 | 117 | 75 |
| 8.50 | 117 | 75 |
| 8.60 | 125 | 81 |
| 8.70 | 125 | 81 |
| 8.80 | 125 | 81 |
| 8.90 | 125 | 81 |
| 9.00 | 125 | 81 |
| 9.10 | 125 | 81 |
| 9.20 | 125 | 81 |
| 9.30 | 125 | 81 |
| 9.40 | 125 | 81 |
| 9.50 | 125 | 81 |
| 9.60 | 133 | 87 |
| 9.70 | 133 | 87 |
| 9.80 | 133 | 87 |
| 9.90 | 133 | 87 |

| d1 | L1 | L2 |
|---|---|---|
| 10.00 | 133 | 87 |
| 10.10 | 133 | 87 |
| 10.20 | 133 | 87 |
| 10.30 | 133 | 87 |
| 10.40 | 133 | 87 |
| 10.50 | 133 | 87 |
| 10.60 | 133 | 87 |
| 10.70 | 142 | 94 |
| 10.80 | 142 | 94 |
| 10.90 | 142 | 94 |
| 11.00 | 142 | 94 |
| 11.10 | 142 | 94 |
| 11.20 | 142 | 94 |
| 11.30 | 142 | 94 |
| 11.40 | 142 | 94 |
| 11.50 | 142 | 94 |
| 11.60 | 142 | 94 |
| 11.70 | 142 | 94 |
| 11.80 | 142 | 94 |
| 11.90 | 151 | 101 |
| 12.00 | 151 | 101 |
| 12.10 | 151 | 101 |
| 12.20 | 151 | 101 |
| 12.30 | 151 | 101 |
| 12.40 | 151 | 101 |
| 12.50 | 151 | 101 |
| 12.60 | 151 | 101 |
| 12.70 | 151 | 101 |
| 12.80 | 151 | 101 |
| 12.90 | 151 | 101 |

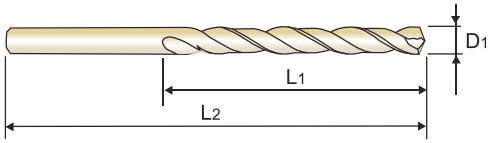
| d1 | L1 | L2 |
|---|---|---|
| 13.00 | 151 | 101 |
| 13.10 | 151 | 101 |
| 13.20 | 151 | 101 |
| 13.50 | 160 | 108 |
| 14.00 | 160 | 108 |
| 14.50 | 169 | 114 |
| 15.00 | 169 | 114 |
| 15.50 | 178 | 120 |
| 16.00 | 178 | 120 |
| 16.50 | 184 | 125 |
| 17.00 | 184 | 125 |
| 17.50 | 191 | 130 |
| 18.00 | 191 | 130 |
| 18.50 | 198 | 135 |
| 19.00 | 198 | 135 |
| 19.50 | 205 | 140 |
| 20.00 | 205 | 140 |
| 20.50 | 213 | 145 |
| 21.00 | 213 | 145 |
| 21.50 | 221 | 150 |
| 22.00 | 221 | 150 |
| 22.50 | 229 | 155 |
| 23.00 | 229 | 155 |
| 23.50 | 229 | 155 |
| 24.00 | 236 | 160 |
| 24.50 | 236 | 160 |
| 25.00 | 236 | 160 |





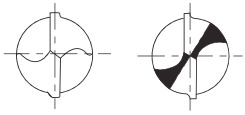
PRO-X

**HSS-E Silindirik Saplı**
**Kaplamalı Matkap Ucu**









1.6 mm altında 1.6 mm ve üzeri

**Kesme Geometrisi** : Sağ yönlü helis
**Uç Açısı** : 135° 1.6 mm altında Normal uç, 1.6 mm ve üzerinde Bölünmüş uç
**Yüzey Uygulaması** : Parlak gövde , sadece çalışan bölgenin TiN kaplaması
**Kullanım Yerleri** : Paslanmaz çelikler , titanyum alaşımları veta inkonel gibi zor işlenen malzemelerde.

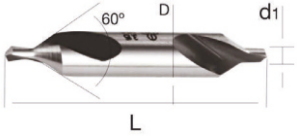
| d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.0 | 12 | 34 | 3,5 | 39 | 70 | 6,0 | 57 | 93 | 8,5 | 75 | 117 | 11,0 | 94 | 142 |
| 1.1 | 14 | 36 | 3,6 | 39 | 70 | 6,1 | 63 | 101 | 8,6 | 81 | 125 | 11,1 | 94 | 142 |
| 1.2 | 16 | 38 | 3,7 | 39 | 70 | 6,2 | 63 | 101 | 8,7 | 81 | 125 | 11,2 | 94 | 142 |
| 1.3 | 16 | 38 | 3,8 | 43 | 75 | 6,3 | 63 | 101 | 8,8 | 81 | 125 | 11,3 | 94 | 142 |
| 1.4 | 18 | 40 | 3.9 | 43 | 75 | 6,4 | 63 | 101 | 8,9 | 81 | 125 | 11,4 | 94 | 142 |
| 1.5 | 18 | 40 | 4,0 | 43 | 75 | 6,5 | 63 | 101 | 9,0 | 81 | 125 | 11,5 | 94 | 142 |
| 1.6 | 20 | 43 | 4,1 | 43 | 75 | 6,6 | 63 | 101 | 9,1 | 81 | 125 | 11,6 | 94 | 142 |
| 1,7 | 20 | 43 | 4,2 | 43 | 75 | 6,7 | 63 | 101 | 9,2 | 81 | 125 | 11,7 | 94 | 142 |
| 1,8 | 22 | 46 | 4,3 | 47 | 80 | 6,8 | 69 | 109 | 9,3 | 81 | 125 | 11,8 | 94 | 142 |
| 1,9 | 22 | 46 | 4,4 | 47 | 80 | 6,9 | 69 | 109 | 9,4 | 81 | 125 | 11,9 | 101 | 151 |
| 2,0 | 24 | 49 | 4,5 | 47 | 80 | 7,0 | 69 | 109 | 9,5 | 81 | 125 | 12,0 | 101 | 151 |
| 2,1 | 24 | 49 | 4,6 | 47 | 80 | 7,1 | 69 | 109 | 9,6 | 87 | 133 | 12,1 | 101 | 151 |
| 2,2 | 27 | 53 | 4,7 | 47 | 80 | 7,2 | 69 | 109 | 9,7 | 87 | 133 | 12,2 | 101 | 151 |
| 2,3 | 27 | 53 | 4,8 | 52 | 86 | 7,3 | 69 | 109 | 9,8 | 87 | 133 | 12,3 | 101 | 151 |
| 2,4 | 30 | 57 | 4,9 | 52 | 86 | 7,4 | 69 | 109 | 9,9 | 87 | 133 | 12,4 | 101 | 151 |
| 2,5 | 30 | 57 | 5,0 | 52 | 86 | 7,5 | 69 | 109 | 10,0 | 87 | 133 | 12,5 | 101 | 151 |
| 2,6 | 30 | 57 | 5,1 | 52 | 86 | 7,6 | 75 | 117 | 10,1 | 87 | 133 | 12,6 | 101 | 151 |
| 2,7 | 33 | 61 | 5,2 | 52 | 86 | 7,7 | 75 | 117 | 10,2 | 87 | 133 | 12,7 | 101 | 151 |
| 2,8 | 33 | 61 | 5,3 | 52 | 86 | 7,8 | 75 | 117 | 10,3 | 87 | 133 | 12,8 | 101 | 151 |
| 2,9 | 33 | 61 | 5,4 | 57 | 93 | 7,9 | 75 | 117 | 10,4 | 87 | 133 | 12,9 | 101 | 151 |
| 3,0 | 33 | 61 | 5,5 | 57 | 93 | 8,0 | 75 | 117 | 10,5 | 87 | 133 | 13,0 | 101 | 151 |
| 3,1 | 36 | 65 | 5,6 | 57 | 93 | 8,1 | 75 | 117 | 10,6 | 87 | 133 | | | |
| 3,2 | 36 | 65 | 5,7 | 57 | 93 | 8,2 | 75 | 117 | 10,7 | 94 | 142 | | | |
| 3.3 | 36 | 65 | 5,8 | 57 | 93 | 8,3 | 75 | 117 | 10,8 | 94 | 142 | | | |
| 3,4 | 39 | 70 | 5,9 | 57 | 93 | 8,4 | 75 | 117 | 10,9 | 94 | 142 | | | |

MAKİNA TAKIM

## MUZM - DIN 340 HSS Uzun Matkap




| d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.00 | 56 | 33 | 3.60 | 112 | 73 | 6.20 | 148 | 97 | 8.80 | 175 | 115 | 11.70 | 195 | 128 |
| 1.10 | 60 | 37 | 3.70 | 112 | 73 | 6.30 | 148 | 97 | 8.90 | 175 | 115 | 11.80 | 195 | 128 |
| 1.20 | 65 | 41 | 3.80 | 119 | 78 | 6.40 | 148 | 97 | 9.00 | 175 | 115 | 11.90 | 205 | 134 |
| 1.30 | 65 | 41 | 3.90 | 119 | 78 | 6.50 | 148 | 97 | 9.10 | 175 | 115 | 12.00 | 205 | 134 |
| 1.40 | 70 | 45 | 4.00 | 119 | 78 | 6.60 | 148 | 97 | 9.20 | 175 | 115 | 12.20 | 205 | 134 |
| 1.50 | 70 | 45 | 4.10 | 119 | 78 | 6.70 | 148 | 97 | 9.30 | 175 | 115 | 12.30 | 205 | 134 |
| 1.60 | 76 | 50 | 4.20 | 119 | 78 | 6.80 | 156 | 102 | 9.40 | 175 | 115 | 12.50 | 205 | 134 |
| 1.70 | 76 | 50 | 4.30 | 126 | 82 | 6.90 | 156 | 102 | 9.50 | 175 | 115 | 12.70 | 205 | 134 |
| 1.80 | 80 | 53 | 4.40 | 126 | 82 | 7.00 | 156 | 102 | 9.60 | 184 | 121 | 12.80 | 205 | 134 |
| 1.90 | 80 | 53 | 4.50 | 126 | 82 | 7.10 | 156 | 102 | 9.70 | 184 | 121 | 13.00 | 205 | 134 |
| 2.00 | 85 | 56 | 4.60 | 126 | 82 | 7.20 | 156 | 102 | 9.80 | 184 | 121 | 13.20 | 205 | 134 |
| 2.10 | 85 | 56 | 4.70 | 126 | 82 | 7.30 | 156 | 102 | 9.90 | 184 | 121 | 13.50 | 214 | 140 |
| 2.20 | 90 | 59 | 4.80 | 132 | 87 | 7.40 | 156 | 102 | 10.00 | 184 | 121 | 14.00 | 214 | 140 |
| 2.30 | 90 | 59 | 4.90 | 132 | 87 | 7.50 | 156 | 102 | 10.10 | 184 | 121 | 14.50 | 220 | 144 |
| 2.40 | 95 | 62 | 5.00 | 132 | 87 | 7.60 | 165 | 109 | 10.20 | 184 | 121 | 15.00 | 220 | 144 |
| 2.50 | 95 | 62 | 5.10 | 132 | 87 | 7.70 | 165 | 109 | 10.30 | 184 | 121 | 15.50 | 227 | 149 |
| 2.60 | 95 | 62 | 5.20 | 132 | 87 | 7.80 | 165 | 109 | 10.40 | 184 | 121 | 16.00 | 227 | 149 |
| 2.70 | 100 | 66 | 5.30 | 132 | 87 | 7.90 | 165 | 109 | 10.50 | 184 | 121 | 16.50 | 235 | 154 |
| 2.80 | 100 | 66 | 5.40 | 139 | 91 | 8.00 | 165 | 109 | 10.60 | 184 | 121 | 17.00 | 235 | 154 |
| 2.90 | 100 | 66 | 5.50 | 139 | 91 | 8.10 | 165 | 109 | 10.70 | 195 | 128 | 17.50 | 241 | 158 |
| 3.00 | 100 | 66 | 5.60 | 139 | 91 | 8.20 | 165 | 109 | 10.80 | 195 | 128 | 18.00 | 241 | 158 |
| 3.10 | 106 | 69 | 5.70 | 139 | 91 | 8.30 | 165 | 109 | 10.90 | 195 | 128 | 18.50 | 247 | 162 |
| 3.20 | 106 | 69 | 5.80 | 139 | 91 | 8.40 | 165 | 109 | 11.00 | 195 | 128 | 19.00 | 247 | 162 |
| 3.30 | 106 | 69 | 5.90 | 139 | 91 | 8.50 | 165 | 109 | 11.30 | 195 | 128 | 19.50 | 254 | 166 |
| 3.40 | 112 | 73 | 6.00 | 139 | 91 | 8.60 | 175 | 115 | 11.40 | 195 | 128 | 20.00 | 254 | 166 |
| 3.50 | 112 | 73 | 6.10 | 148 | 97 | 8.70 | 175 | 115 | 11.50 | 195 | 128 | | | |




MAKİNA TAKIM

## PMM - DIN 333 A HSS Punta Matkabı

**Kısa Tip**

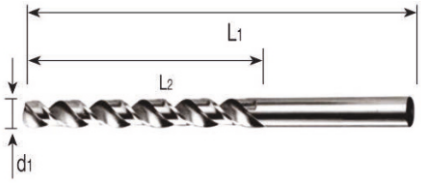
| d1 | D | L |
|---|---|---|
| 1.00 | 3.15 | 31.5 |
| 1.25 | 3.15 | 31.5 |
| 1.60 | 4.00 | 35.5 |
| 2.00 | 5.00 | 40.0 |
| 2.50 | 6.30 | 45.0 |
| 3.15 | 8.00 | 50.0 |
| 4.00 | 10.00 | 56.0 |
| 5.00 | 12.50 | 63.0 |

**Uzun Tip**

| d1 | D | L |
|---|---|---|
| 2.00 | 5.00 | 76 |
| 2.50 | 6.30 | 102 |
| 3.15 | 8.00 | 102 |
| 4.00 | 10.00 | 127 |
| 5.00 | 12.50 | 127 |
| 6.30 | 16.00 | 127 |

MAKİNA TAKIM

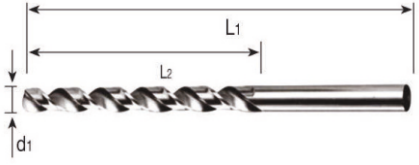
## DIN 1869/1 HSS
## Ekstra Uzun Matkap




| d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.00 | 125 | 85 | 4.50 | 185 | 125 | 7.00 | 225 | 155 | 9.50 | 250 | 175 | 12.00 | 295 | 205 |
| 2.50 | 140 | 95 | 5.00 | 195 | 135 | 7.50 | 225 | 155 | 10.00 | 265 | 185 | 12.50 | 295 | 205 |
| 3.00 | 150 | 100 | 5.50 | 205 | 140 | 8.00 | 240 | 165 | 10.50 | 265 | 185 | 13.00 | 295 | 205 |
| 3.50 | 165 | 115 | 6.00 | 205 | 140 | 8.50 | 240 | 165 | 11.00 | 280 | 195 | | | |
| 4.00 | 175 | 120 | 6.50 | 215 | 150 | 9.00 | 250 | 175 | 11.50 | 280 | 195 | | | |

MAKİNA TAKIM

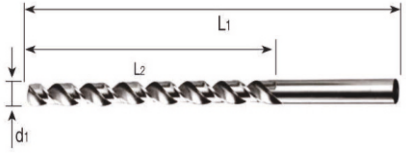
## DIN 1869/2 HSS
## Ekstra Uzun Matkap




| d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.00 | 190 | 130 | 5.50 | 260 | 180 | 8.00 | 305 | 210 | 10.50 | 340 | 235 | 12.00 | 375 | 260 |
| 3.50 | 210 | 145 | 6.00 | 260 | 180 | 8.50 | 305 | 210 | 11.00 | 365 | 250 | 12.50 | 375 | 260 |
| 4.00 | 220 | 150 | 6.50 | 275 | 190 | 9.00 | 320 | 220 | 11.50 | 365 | 250 | 13.00 | 375 | 260 |
| 4.50 | 235 | 160 | 7.00 | 290 | 200 | 9.50 | 320 | 220 | | | | | | |
| 5.00 | 245 | 170 | 7.50 | 290 | 200 | 10.00 | 340 | 235 | | | | | | |

MAKİNA TAKIM

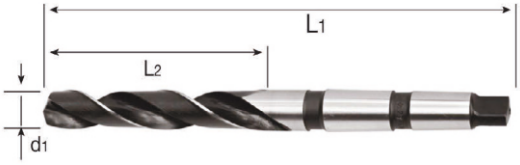
## DIN 1869/3 HSS
## Ekstra Uzun Matkap




| d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.00 | 235 | 160 | 5.50 | 330 | 225 | 8.00 | 390 | 265 | 10.50 | 430 | 295 | 12.00 | 480 | 330 |
| 3.50 | 265 | 180 | 6.00 | 330 | 225 | 8.50 | 390 | 265 | 11.00 | 455 | 310 | 12.50 | 480 | 330 |
| 4.00 | 280 | 190 | 6.50 | 350 | 235 | 9.00 | 410 | 280 | 11.50 | 455 | 310 | 13.00 | 480 | 330 |
| 4.50 | 295 | 200 | 7.00 | 370 | 250 | 9.50 | 410 | 280 | | | | | | |
| 5.00 | 315 | 210 | 7.50 | 370 | 250 | 10.00 | 430 | 295 | | | | | | |

MAKİNA TAKIM

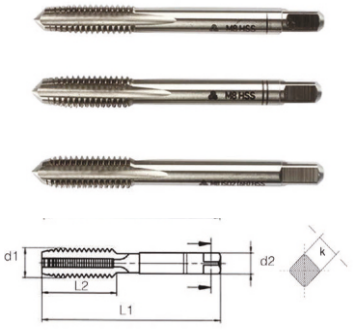
## MRKM - DIN 345 HSS
## Mors Konik Saplı Matkap Ucu




| d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 | d1 | L1 | L2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.00 | 156 | 75 | 16.00 | 218 | 120 | 21.50 | 248 | 150 | 29.50 | 296 | 175 | 37.50 | 344 | 195 |
| 8.50 | 156 | 75 | 16.50 | 223 | 125 | 22.00 | 248 | 150 | 30.00 | 296 | 175 | 38.00 | 349 | 200 |
| 9.00 | 162 | 81 | 17.00 | 223 | 125 | 22.50 | 253 | 155 | 30.50 | 301 | 180 | 38.50 | 349 | 200 |
| 9.50 | 162 | 81 | 17.50 | 228 | 130 | 23.00 | 253 | 155 | 31.00 | 301 | 180 | 39.00 | 349 | 200 |
| 10.00 | 168 | 87 | 18.00 | 228 | 130 | 23.50 | 276 | 155 | 31.50 | 301 | 180 | 39.50 | 349 | 200 |
| 10.50 | 168 | 87 | 18.50 | 233 | 135 | 24.00 | 281 | 160 | 32.00 | 334 | 185 | 40.00 | 349 | 200 |
| 11.00 | 175 | 94 | 19.00 | 233 | 135 | 24.50 | 281 | 160 | 32.50 | 334 | 185 | 41.00 | 354 | 205 |
| 11.50 | 175 | 94 | 19.50 | 238 | 140 | 25.00 | 281 | 160 | 33.00 | 334 | 185 | 42.00 | 354 | 205 |
| 12.00 | 182 | 101 | 20.00 | 238 | 140 | 25.50 | 286 | 165 | 33.50 | 334 | 185 | 43.00 | 359 | 210 |
| 12.50 | 182 | 101 | 20.50 | 243 | 145 | 26.00 | 286 | 165 | 34.00 | 339 | 190 | 44.00 | 359 | 210 |
| 13.00 | 182 | 101 | 21.00 | 243 | 145 | 26.50 | 286 | 165 | 34.50 | 339 | 190 | 45.00 | 359 | 210 |
| 13.50 | 189 | 108 | 21.50 | 248 | 150 | 27.00 | 291 | 170 | 35.00 | 339 | 190 | 46.00 | 364 | 215 |
| 14.00 | 189 | 108 | 22.00 | 248 | 150 | 27.50 | 291 | 170 | 35.50 | 339 | 190 | 47.00 | 364 | 215 |
| 14.50 | 212 | 114 | 22.50 | 253 | 155 | 28.00 | 291 | 170 | 36.00 | 344 | 195 | 48.00 | 369 | 220 |
| 15.00 | 212 | 114 | 20.50 | 243 | 145 | 28.50 | 296 | 175 | 36.50 | 344 | 195 | 49.00 | 369 | 220 |
| 15.50 | 218 | 120 | 21.00 | 243 | 145 | 29.00 | 296 | 175 | 37.00 | 344 | 195 | 50.00 | 369 | 220 |

MAKİNA TAKIM

## KLATM - DIN 352 HSS 3'lü Takım Klavuz



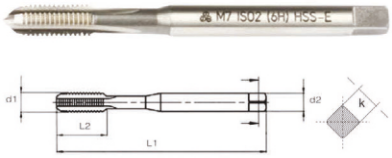

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M2 | 0.4 | 40 | 8 | 2.8 | 2.1 |
| M2.5 | 0.45 | 40 | 9 | 2.8 | 2.1 |
| M3 | 0.5 | 40 | 11 | 3.5 | 2.7 |
| M3.5 | 0.6 | 45 | 13 | 4.0 | 3.0 |
| M4 | 0.7 | 45 | 13 | 4.5 | 3.4 |
| M4.5 | 0.75 | 50 | 16 | 6.0 | 4.9 |
| M5 | 0.8 | 50 | 16 | 6.0 | 4.9 |
| M6 | 1 | 56 | 19 | 6.0 | 4.9 |
| M7 | 1 | 56 | 19 | 6.0 | 4.9 |
| M8 | 1.25 | 63 | 22 | 6.0 | 4.9 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M9 | 1.25 | 63 | 22 | 7.0 | 5.5 |
| M10 | 1.5 | 70 | 24 | 7.0 | 5.5 |
| M11 | 1.5 | 70 | 24 | 8.0 | 6.2 |
| M12 | 1.75 | 75 | 28 | 9.0 | 7.0 |
| M14 | 2 | 80 | 30 | 11.0 | 9.0 |
| M16 | 2 | 80 | 32 | 12.0 | 9.0 |
| M18 | 2.5 | 95 | 34 | 14.0 | 11.0 |
| M20 | 2.5 | 95 | 34 | 16.0 | 12.0 |
| M22 | 2.5 | 100 | 34 | 18.0 | 14.5 |
| M24 | 3 | 110 | 38 | 18.0 | 14.5 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M27 | 3 | 110 | 38 | 20.0 | 16.0 |
| M30 | 3.5 | 125 | 45 | 22.0 | 18.0 |
| M33 | 3.5 | 125 | 50 | 25.0 | 20.0 |
| M36 | 4 | 150 | 56 | 28.0 | 22.0 |
| M39 | 4 | 150 | 32 | 32.0 | 24.0 |
| M42 | 4.5 | 150 | 60 | 32.0 | 24.0 |
| M45 | 4.5 | 160 | 65 | 36.0 | 29.0 |
| M48 | 5 | 180 | 70 | 36.0 | 29.0 |

MAKİNA TAKIM

## KLADM - DIN 371/C HSS-E
## Düz Kanallı Makina Klavuzu

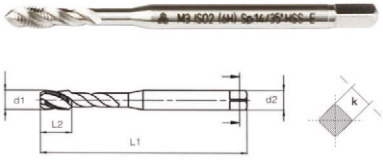



| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M2 | 0.4 | 45 | 8 | 2,8 | 2,1 |
| M2,5 | 0.45 | 50 | 9 | 2,8 | 2,1 |
| M3 | 0.5 | 56 | 10 | 3,5 | 2,7 |
| M3,5 | 0.6 | 56 | 12 | 4,0 | 3,0 |
| M4 | 0.7 | 63 | 12 | 4,5 | 3,4 |
| M4,5 | 0.75 | 70 | 14 | 6,0 | 4,9 |
| M5 | 0.8 | 70 | 14 | 6,0 | 4,9 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M6 | 1 | 80 | 16 | 6,0 | 4,9 |
| M7 | 1 | 80 | 16 | 7,0 | 5,5 |
| M8 | 1.25 | 90 | 18 | 8,0 | 6,2 |
| M9 | 1.25 | 90 | 18 | 9,0 | 7,0 |
| M10 | 1.5 | 100 | 20 | 10,0 | 8,0 |
| M12 | 1.75 | 110 | 24 | 12,0 | 9,0 |

MAKİNA TAKIM

## KLAHM - DIN 371/C HSS-E
## Helis Kanallı Makina Klavuzu

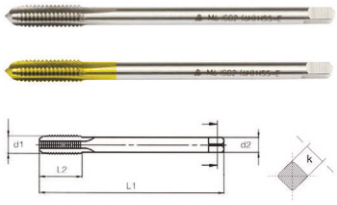



| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M2 | 0.4 | 45 | 8 | 2.8 | 2.1 |
| M2,5 | 0.45 | 50 | 9 | 2.8 | 2.1 |
| M3 | 0.5 | 56 | 6 | 3,5 | 2,7 |
| M4 | 0.7 | 63 | 7 | 4,5 | 3,4 |
| M5 | 0.8 | 70 | 8 | 6,0 | 4,9 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M6 | 1 | 80 | 10 | 6,0 | 4,9 |
| M7 | 1 | 80 | 10 | 7,0 | 5,5 |
| M8 | 1.25 | 90 | 12 | 8,0 | 6,2 |
| M10 | 1.5 | 100 | 14 | 10,0 | 8,0 |
| M12 | 1.75 | 110 | 16 | 12,0 | 9,0 |

MAKİNA TAKIM

## KLADUM - DIN 376/C HSS E
## Düz Kanallı Makina Klavuzu



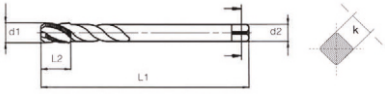

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M3 | 0.5 | 56 | 10 | 2.2 | - |
| M3.5 | 0.6 | 56 | 11 | 2.5 | 2.1 |
| M4 | 0.7 | 63 | 12 | 2.8 | 2.1 |
| M4.5 | 0.75 | 70 | 14 | 3.5 | 2.7 |
| M5 | 0.8 | 70 | 14 | 3.5 | 2.7 |
| M6 | 1 | 80 | 16 | 4.5 | 3.4 |
| M7 | 1 | 80 | 16 | 5.5 | 4.3 |
| M8 | 1.25 | 90 | 18 | 6.0 | 4.9 |
| M9 | 1.25 | 90 | 18 | 7.0 | 5.5 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M10 | 1.5 | 100 | 20 | 7.0 | 5.5 |
| M11 | 1.5 | 100 | 20 | 8.0 | 6.2 |
| M12 | 1.75 | 110 | 24 | 9.0 | 7.0 |
| M14 | 2 | 110 | 26 | 11.0 | 9.0 |
| M16 | 2 | 110 | 28 | 12.0 | 9.0 |
| M18 | 2.5 | 125 | 30 | 14.0 | 11.0 |
| M20 | 2.5 | 140 | 32 | 16.0 | 12.0 |
| M22 | 2.5 | 140 | 32 | 18.0 | 14.5 |
| M24 | 3 | 160 | 34 | 18.0 | 14.5 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M27 | 3 | 160 | 38 | 20.0 | 16.0 |
| M28 | 3 | 160 | 38 | 20.0 | 16.0 |
| M30 | 3.5 | 180 | 45 | 22.0 | 18.0 |
| M33 | 3.5 | 180 | 50 | 25.0 | 20.0 |
| M36 | 4 | 200 | 56 | 28.0 | 22.0 |
| M39 | 4 | 200 | 60 | 32.0 | 24.0 |
| M42 | 4.5 | 200 | 60 | 32.0 | 24.0 |

MAKİNA TAKIM






## KLAHUM - DIN 376/C HSS E
## Helis Kanallı Makina Klavuzu

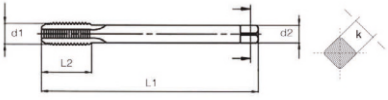
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M3 | 0.5 | 56 | 6 | 2.2 | - |
| M4 | 0.7 | 63 | 7 | 2.8 | 2.1 |
| M5 | 0.8 | 70 | 8 | 3.5 | 2.7 |
| M6 | 1 | 80 | 10 | 4.5 | 3.4 |
| M8 | 1.25 | 90 | 12 | 6.0 | 4.9 |
| M10 | 1.5 | 100 | 14 | 7.0 | 5.5 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M12 | 1.75 | 110 | 16 | 9.0 | 7.0 |
| M14 | 2 | 110 | 18 | 11.0 | 9.0 |
| M16 | 2 | 110 | 20 | 12.0 | 9.0 |
| M18 | 2.5 | 125 | 22 | 14.0 | 11.0 |
| M20 | 2.5 | 140 | 22 | 16.0 | 12.0 |
| M22 | 2.5 | 140 | 24 | 18.0 | 14.5 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M24 | 3 | 160 | 28 | 18.0 | 14.5 |
| M27 | 3 | 160 | 30 | 20.0 | 16.0 |
| M30 | 3.5 | 180 | 35 | 22.0 | 18.0 |
| M33 | 3.5 | 180 | 35 | 25.0 | 20.0 |
| M36 | 4 | 200 | 44 | 28.0 | 22.0 |

MAKİNA TAKIM






## DIN 374/C HSS E
## Düz İnce Diş Makina Klavuzu

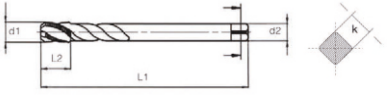
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M4 | 0.5 | 63 | 10 | 2.8 | 2.1 |
| M5 | 0.5 | 70 | 12 | 3.5 | 2.7 |
| M6 | 0.5 | 80 | 14 | 4,5 | 3,4 |
| M6 | 0.75 | 80 | 14 | 4,5 | 3,4 |
| M7 | 0.75 | 80 | 14 | 5.5 | 4.3 |
| M8 | 0.75 | 90 | 22 | 6,0 | 4.9 |
| M8 | 1 | 90 | 22 | 6,0 | 4.9 |
| M9 | 1 | 90 | 22 | 7,0 | 5.5 |
| M10 | 1.25 | 90 | 20 | 7,0 | 5.5 |
| M10 | 0.75 | 90 | 20 | 7,0 | 5.5 |
| M10 | 1 | 90 | 20 | 7,0 | 5.5 |
| M12 | 1.25 | 100 | 22 | 9,0 | 7,0 |
| M12 | 0.75 | 100 | 22 | 9,0 | 7,0 |
| M12 | 1 | 100 | 22 | 9,0 | 7,0 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M12 | 1.5 | 100 | 22 | 9,0 | 7,0 |
| M14 | 1.25 | 100 | 22 | 11,0 | 9,0 |
| M14 | 1 | 100 | 22 | 11,0 | 9,0 |
| M14 | 1.5 | 100 | 22 | 11,0 | 9,0 |
| M16 | 1 | 100 | 22 | 12,0 | 9,0 |
| M16 | 1.5 | 100 | 22 | 12,0 | 9,0 |
| M18 | 1 | 110 | 25 | 14,0 | 11,0 |
| M18 | 1.5 | 110 | 25 | 14,0 | 11,0 |
| M18 | 2 | 125 | 34 | 14,0 | 11,0 |
| M20 | 1 | 125 | 25 | 16,0 | 12,0 |
| M20 | 1.5 | 125 | 25 | 16,0 | 12,0 |
| M20 | 2 | 140 | 34 | 16,0 | 12,0 |
| M22 | 1 | 125 | 25 | 18,0 | 14.5 |
| M22 | 1.5 | 125 | 25 | 18,0 | 14.5 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M22 | 2 | 140 | 34 | 18,0 | 14,5 |
| M24 | 1 | 140 | 28 | 18,0 | 14,5 |
| M24 | 1.5 | 140 | 28 | 18,0 | 14,5 |
| M24 | 2 | 140 | 28 | 18,0 | 14,5 |
| M26 | 1 | 140 | 28 | 18,0 | 14,5 |
| M26 | 1.5 | 140 | 28 | 18,0 | 14,5 |
| M26 | 2 | 140 | 28 | 18,0 | 14,5 |
| M27 | 1.5 | 140 | 28 | 20,0 | 16,0 |
| M27 | 2 | 140 | 28 | 20,0 | 16,0 |
| M28 | 1.5 | 140 | 28 | 20,0 | 16,0 |
| M28 | 2 | 140 | 28 | 20,0 | 16,0 |
| M30 | 1.5 | 150 | 28 | 22,0 | 18,0 |
| M30 | 2 | 150 | 28 | 22,0 | 18,0 |

MAKİNA TAKIM



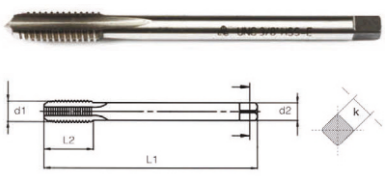



## DIN 374/C HSS E
## Helis İnce Diş Makina Klavuzu

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M6 | 0.75 | 80 | 8 | 4,5 | 3,4 |
| M8 | 0.75 | 80 | 10 | 6,0 | 4.9 |
| M8 | 1 | 90 | 10 | 6,0 | 4,9 |
| M9 | 1 | 90 | 10 | 7,0 | 5,5 |
| M10 | 1 | 90 | 12 | 7,0 | 5,5 |
| M10 | 1.25 | 100 | 12 | 7,0 | 5,5 |
| M12 | 1 | 100 | 14 | 9,0 | 7,0 |
| M12 | 1.25 | 100 | 14 | 9,0 | 7,0 |
| M12 | 1.5 | 100 | 14 | 9,0 | 7,0 |
| M14 | 1 | 100 | 16 | 11,0 | 9,0 |
| M14 | 1.25 | 100 | 16 | 11,0 | 9,0 |
| M14 | 1.5 | 100 | 16 | 11,0 | 9,0 |

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M16 | 1 | 100 | 18 | 12,0 | 9,0 |
| M16 | 1.25 | 100 | 18 | 12,0 | 9,0 |
| M16 | 1.5 | 100 | 18 | 12,0 | 9,0 |
| M18 | 1 | 110 | 20 | 14,0 | 11,0 |
| M18 | 1.5 | 110 | 20 | 14,0 | 11,0 |
| M18 | 2 | 125 | 20 | 14,0 | 11,0 |
| M20 | 1 | 125 | 22 | 16,0 | 12,0 |
| M20 | 1.5 | 125 | 22 | 16,0 | 12,0 |
| M20 | 2 | 140 | 22 | 16,0 | 12,0 |
| M22 | 1 | 125 | 25 | 18,0 | 14,5 |
| M22 | 1.5 | 125 | 25 | 18,0 | 14,5 |
| M22 | 2 | 140 | 25 | 18,0 | 14,5 |

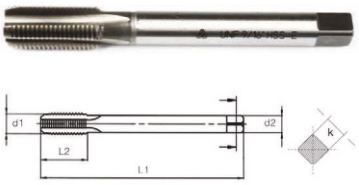
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M24 | 1.5 | 140 | 25 | 18,0 | 14,5 |
| M24 | 2 | 140 | 25 | 18,0 | 14,5 |
| M26 | 1.5 | 140 | 25 | 18,0 | 14,5 |
| M27 | 1.5 | 140 | 25 | 20,0 | 16,0 |
| M27 | 2 | 140 | 25 | 20,0 | 16,0 |
| M28 | 1.5 | 140 | 25 | 20,0 | 16,0 |
| M28 | 2 | 140 | 25 | 20,0 | 16,0 |
| M30 | 1.5 | 150 | 25 | 22,0 | 18,0 |
| M30 | 2 | 150 | 25 | 22,0 | 18,0 |
| M36 | 1.5 | 170 | 30 | 28,0 | 22,0 |




## DIN 2183/C HSS E
## UNC - Düz Makina Klavuzu

MAKINA TAKIM

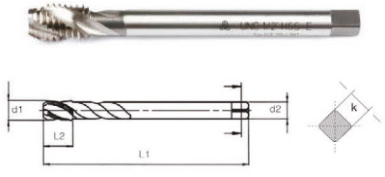
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| 1/4" | 20 | 80 | 19 | 4.5 | 3.4 |
| 5/16" | 18 | 90 | 22 | 6.0 | 4.9 |
| 3/8" | 16 | 100 | 24 | 7.0 | 5.5 |
| 7/16" | 14 | 100 | 24 | 8.0 | 6.2 |
| 1/2" | 13 | 110 | 29 | 9.0 | 7.0 |
| 9/16" | 12 | 110 | 30 | 11.0 | 9.0 |
| 5/8" | 11 | 110 | 32 | 12.0 | 9.0 |
| 3/4" | 10 | 125 | 34 | 14.0 | 11.0 |
| 7/8" | 9 | 140 | 34 | 18.0 | 14.5 |
| 1" | 8 | 160 | 38 | 20 | 16 |




## DIN 2183/C HSS E
## UNF - Düz Makina Klavuzu

MAKINA TAKIM

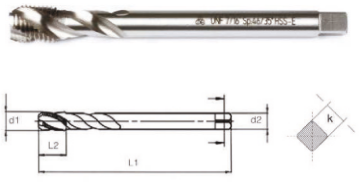
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| 1/4" | 28 | 80 | 19 | 4.5 | 3.4 |
| 5/16" | 24 | 90 | 22 | 6.0 | 4.9 |
| 3/8" | 24 | 100 | 24 | 7.0 | 5.5 |
| 7/16" | 20 | 100 | 24 | 8.0 | 6.2 |
| 1/2" | 20 | 110 | 29 | 9.0 | 7.0 |
| 9/16" | 18 | 110 | 30 | 11.0 | 9.0 |
| 5/8" | 18 | 110 | 32 | 12.0 | 9.0 |
| 3/4" | 16 | 125 | 34 | 14.0 | 11.0 |
| 7/8" | 14 | 140 | 34 | 18.0 | 14.5 |
| 1" | 12 | 160 | 38 | 20 | 16 |




## DIN 2183/C HSS E
## UNC - Helis Makina Klavuzu

MAKINA TAKIM

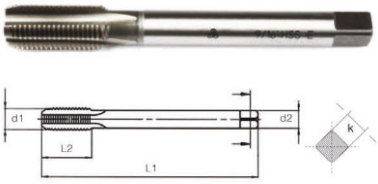
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| 7/16" | 14 | 100 | 16 | 8,0 | 6,2 |
| 1/2" | 13 | 110 | 20 | 9,0 | 7,0 |
| 3/8" | 16 | 100 | 16 | 7,0 | 5,5 |
| 5/16" | 18 | 90 | 14 | 6,0 | 4,9 |
| 9/16" | 12 | 110 | 22 | 11,0 | 9,0 |
| 5/8" | 11 | 110 | 22 | 12,0 | 9,0 |
| 3/4" | 10 | 125 | 28 | 14,0 | 11,0 |
| 1/4" | 20 | 80 | 12 | 4,5 | 3,4 |
| 7/8" | 9 | 140 | 28 | 18 | 14.5 |
| 1" | 8 | 160 | 32 | 20 | 16 |




## DIN 2183/C HSS E
## UNF - Helis Makina Klavuzu

MAKINA TAKIM

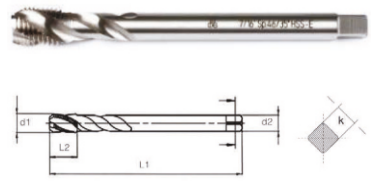
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| 1/4" | 28 | 80 | 12 | 4,5 | 3,4 |
| 3/8" | 24 | 100 | 16 | 7,0 | 5,5 |
| 7/16" | 20 | 100 | 16 | 8,0 | 6,2 |
| 1/2" | 20 | 110 | 20 | 9,0 | 7,0 |
| 9/16" | 18 | 110 | 22 | 11,0 | 9,0 |
| 5/8" | 18 | 110 | 22 | 12,0 | 9,0 |
| 3/4" | 16 | 125 | 22 | 14,0 | 11,0 |
| 5/16" | 24 | 90 | 14 | 6,0 | 4,9 |
| 7/8" | 14 | 140 | 28 | 18 | 14.5 |
| 1" | 12 | 160 | 32 | 20 | 16 |




MAKİNA TAKIM

## DIN 2183/C HSS E
## Whitworth - Düz Makina Klavuzu

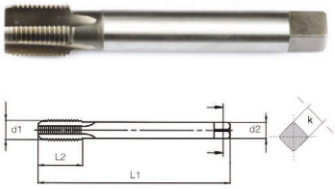
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| W 1/8" | 40 | 56 | 11 | 2.2 | |
| W 5/32" | 32 | 63 | 13 | 2.8 | 2.1 |
| W 3/16" | 24 | 70 | 16 | 3.5 | 2.7 |
| W 7/32" | 24 | 70 | 16 | 3.5 | 2.7 |
| W 1/4" | 20 | 80 | 19 | 4.5 | 3.4 |
| W 5/16" | 18 | 90 | 22 | 6 | 4.9 |
| W 3/8" | 16 | 100 | 24 | 7 | 5.5 |
| W 7/16" | 14 | 100 | 24 | 8 | 6.2 |
| W 1/2" | 12 | 110 | 29 | 9 | 7 |
| W 9/16" | 12 | 110 | 30 | 11 | 9 |
| W 5/8" | 11 | 110 | 32 | 12 | 9 |
| W 3/4" | 10 | 125 | 34 | 14 | 11 |
| W 7/8" | 9 | 140 | 34 | 18 | 14.5 |
| W 1" | 8 | 160 | 38 | 20 | 16 |




MAKİNA TAKIM

## DIN 2183/C HSS E
## Whitworth - Helis Makina Klavuzu

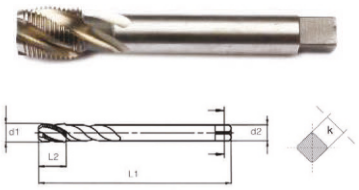
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| W 7/16" | 14 | 100 | 18 | 8 | 6.2 |
| W 1/2" | 12 | 110 | 18 | 9 | 7 |
| W 1/4" | 20 | 80 | 12 | 4.5 | 4.9 |
| W 3/8" | 16 | 100 | 16 | 7 | 6.2 |
| W 5/16" | 18 | 90 | 14 | 6 | 5.5 |
| W 1/8" | 40 | 56 | 6 | 2.2 | 2.7 |
| W 5/32" | 32 | 63 | 7 | 2.8 | 2.1 |
| W 3/16" | 24 | 70 | 10 | 3.5 | 2.7 |
| W 7/32" | 24 | 70 | 10 | 3.5 | 3.4 |




MAKİNA TAKIM

## DIN 5156/C HSS E Boru
## Vidalı (G) Düz Makina Klavuzu

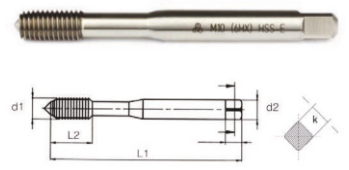
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| G 1/8" | 28 | 90 | 20 | 7,0 | 5,5 |
| G 1/4" | 19 | 100 | 22 | 11,0 | 9,0 |
| G 3/8" | 19 | 100 | 22 | 12,0 | 9,0 |
| G 1/2" | 14 | 125 | 25 | 16,0 | 12,0 |
| G 3/4" | 14 | 140 | 28 | 20,0 | 16,0 |
| G 1" | 11 | 160 | 30 | 25,0 | 16,0 |




MAKİNA TAKIM

## DIN 5156/C HSS E Boru
## Vidalı (G) Helis Makina Klavuzu

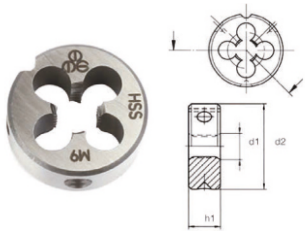
| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| G 1/4" | 19 | 100 | 16 | 11,0 | 9,0 |
| G 3/8" | 19 | 100 | 18 | 12,0 | 9,0 |
| G 3/4" | 14 | 140 | 23 | 20,0 | 16,0 |
| G 1" | 11 | 160 | 28 | 25,0 | 20,0 |
| G 1/2" | 14 | 125 | 22 | 16,0 | 12,0 |
| G 1/8" | 28 | 90 | 12 | 7,0 | 5,5 |




MAKİNA TAKIM

## DIN 371/C HSS E
## Ovalama Makina Klavuzu

| d1 | P | L1 | L2 | d2 | k |
|---|---|---|---|---|---|
| M3 | 0.5 | 56 | 10 | 35 | 2.7 |
| M4 | 0.7 | 63 | 12 | 45 | 3.4 |
| M5 | 0.8 | 70 | 14 | 6.0 | 4.9 |
| M6 | 1 | 80 | 16 | 6.0 | 4.9 |
| M8 | 1.25 | 90 | 18 | 8.0 | 6.2 |
| M10 | 1.5 | 100 | 20 | 10.0 | 8.0 |
| M12 | 1.75 | 110 | 24 | 12.0 | 9.0 |



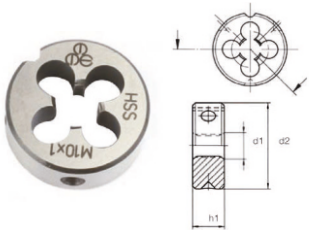

MAKİNA TAKIM

## PAFM - DIN 22568 HSS Pafta

| d1 | P | d2 | h1 |
|---|---|---|---|
| M2 | 0.4 | 16 | 5 |
| M2.5 | 0.45 | 16 | 5 |
| M3 | 0.5 | 20 | 5 |
| M3.5 | 0.6 | 20 | 5 |
| M4 | 0.7 | 20 | 5 |
| M5 | 0.8 | 20 | 7 |
| M6 | 1 | 20 | 7 |
| M7 | 1 | 25 | 9 |
| M8 | 1.25 | 25 | 9 |
| M9 | 1.25 | 25 | 9 |
| M10 | 1.5 | 30 | 11 |

| d1 | P | d2 | h1 |
|---|---|---|---|
| M12 | 1.75 | 38 | 14 |
| M14 | 2 | 38 | 14 |
| M16 | 2 | 45 | 18 |
| M18 | 2.5 | 45 | 18 |
| M20 | 2.5 | 45 | 18 |
| M22 | 2.5 | 55 | 22 |
| M24 | 3 | 55 | 22 |
| M27 | 3 | 65 | 25 |
| M30 | 3.5 | 65 | 25 |
| M33 | 3.5 | 65 | 25 |
| M36 | 4 | 65 | 25 |

| d1 | P | d2 | h1 |
|---|---|---|---|
| M39 | 4 | 75 | 30 |
| M42 | 4.5 | 75 | 30 |
| M45 | 4.5 | 90 | 36 |
| M48 | 5 | 90 | 36 |
| M52 | 5 | 90 | 36 |
| M56 | 5.5 | 105 | 36 |
| M60 | 5.5 | 105 | 36 |
| M64 | 6 | 120 | 36 |
| M68 | 6 | 120 | 36 |

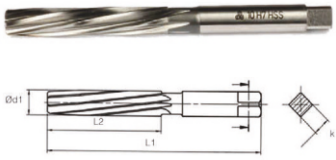



## PAFİM - DIN 22568 HSS Pafta İnce Diş

MAKİNA TAKIM

| d1 | P | d2 | h1 |
|---|---|---|---|
| M6 | 0.75 | 20 | 5 |
| M8 | 1 | 25 | 9 |
| M10 | 1 | 30 | 11 |
| M10 | 1.25 | 30 | 11 |
| M12 | 1 | 38 | 10 |
| M12 | 1.25 | 38 | 10 |
| M12 | 1.5 | 38 | 10 |
| M14 | 1 | 38 | 10 |
| M14 | 1.25 | 38 | 10 |

| d1 | P | d2 | h1 |
|---|---|---|---|
| M14 | 1.5 | 38 | 10 |
| M16 | 1 | 45 | 14 |
| M16 | 1.5 | 45 | 14 |
| M18 | 1.5 | 45 | 14 |
| M20 | 1.5 | 45 | 14 |
| M22 | 1.5 | 55 | 16 |
| M24 | 1.5 | 55 | 16 |
| M30 | 1.5 | 65 | 18 |



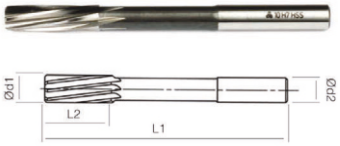

## ERM - DIN 206/B HSS El Raybası H7

MAKİNA TAKIM

| d1 | L1 | L2 | k |
|---|---|---|---|
| 2.0 | 50 | 25 | 1.60 |
| 2.5 | 58 | 29 | 2.10 |
| 3.0 | 62 | 31 | 2.24 |
| 4.0 | 76 | 38 | 3.15 |
| 4.5 | 81 | 41 | 3.55 |
| 5.0 | 87 | 44 | 4 |
| 5.5 | 93 | 47 | 4.5 |
| 6.0 | 93 | 47 | 4.5 |
| 6.5 | 100 | 50 | 5 |
| 7.0 | 107 | 54 | 5.6 |

| d1 | L1 | L2 | k |
|---|---|---|---|
| 8.0 | 115 | 58 | 6.3 |
| 8.5 | 115 | 58 | 6.3 |
| 9.0 | 124 | 62 | 7.1 |
| 10 | 133 | 66 | 8 |
| 11 | 142 | 71 | 9 |
| 12 | 152 | 76 | 10 |
| 13 | 152 | 76 | 10 |
| 14 | 163 | 81 | 11.2 |
| 15 | 163 | 81 | 11.2 |
| 16 | 175 | 87 | 12.5 |

| d1 | L1 | L2 | k |
|---|---|---|---|
| 17 | 175 | 87 | 12.5 |
| 18 | 188 | 93 | 14 |
| 20 | 201 | 100 | 16 |
| 22 | 215 | 107 | 18 |
| 24 | 231 | 115 | 20 |
| 26 | 231 | 115 | 20 |
| 30 | 247 | 124 | 22.4 |
| 32 | 265 | 133 | 25 |
| 35 | 284 | 142 | 28 |
| 40 | 305 | 152 | 31.5 |



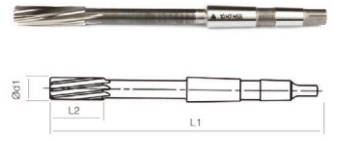

## MRM - DIN 212/D HSS
## Silindir Saplı Makina Raybası H7

MAKİNA TAKIM

| d1 | d2 | L1 | L2 |
|---|---|---|---|
| 2 | 2 | 49 | 11 |
| 2.5 | 2.5 | 57 | 14 |
| 3 | 3 | 61 | 15 |
| 4 | 4 | 75 | 19 |
| 5 | 5 | 86 | 23 |
| 6 | 5.6 | 93 | 26 |
| 7 | 7.1 | 109 | 31 |

| d1 | d2 | L1 | L2 |
|---|---|---|---|
| 8 | 8 | 117 | 33 |
| 10 | 10 | 133 | 38 |
| 12 | 10 | 151 | 44 |
| 12.5 | 10 | 151 | 44 |
| 14 | 12.5 | 160 | 47 |
| 16 | 12.5 | 170 | 52 |
| 18 | 14 | 182 | 56 |

| d1 | d2 | L1 | L2 |
|---|---|---|---|
| 20 | 16 | 195 | 60 |
| 22 | 18 | 225 | 55 |
| 24 | 20 | 240 | 60 |
| 25 | 20 | 245 | 60 |
| 26 | 20 | 250 | 60 |
| 28 | 22 | 270 | 65 |
| 30 | 24 | 280 | 70 |

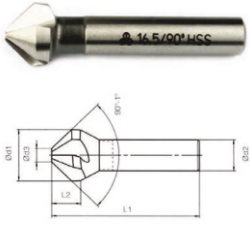



## MRKM - DIN 208/B HSS
## Mors Konik Saplı Makina Raybası H7

MAKİNA TAKIM

| d1 | L1 | L2 | Mors |
|---|---|---|---|
| 8 | 156 | 33 | 1 |
| 10 | 168 | 38 | 1 |
| 11 | 175 | 41 | 1 |
| 12 | 182 | 44 | 1 |
| 13 | 182 | 44 | 1 |
| 14 | 189 | 47 | 1 |
| 15 | 204 | 50 | 2 |
| 16 | 210 | 52 | 2 |
| 17 | 214 | 54 | 2 |
| 18 | 219 | 56 | 2 |
| 19 | 223 | 58 | 2 |

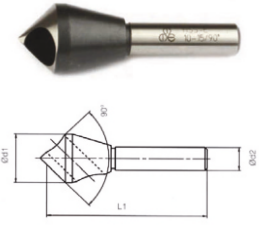
| d1 | L1 | L2 | Mors |
|---|---|---|---|
| 20 | 228 | 60 | 2 |
| 22 | 237 | 64 | 2 |
| 24 | 268 | 68 | 3 |
| 25 | 268 | 68 | 3 |
| 28 | 277 | 71 | 3 |
| 30 | 281 | 73 | 3 |
| 32 | 317 | 77 | 4 |
| 35 | 321 | 78 | 4 |
| 40 | 329 | 81 | 4 |




## HAVM - DIN 335/C HSS
## Havşa Frezesi 90°

MAKİNA TAKIM

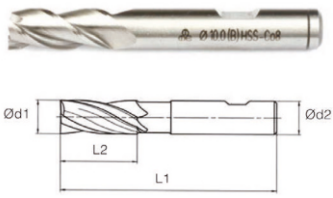
| d1 | d2 | d3 | L1 | L2 |
|---|---|---|---|---|
| 6.3 | 5.0 | 1.5 | 45 | 5.0 |
| 8.3 | 6.0 | 2.0 | 50 | 6.0 |
| 10.4 | 6.0 | 2.5 | 50 | 7.1 |
| 12.4 | 8.0 | 2.8 | 56 | 8.0 |
| 16.5 | 10.0 | 3.2 | 60 | 10.0 |
| 20.5 | 10.0 | 3.5 | 63 | 12.5 |
| 25.0 | 10.0 | 3.8 | 67 | 15.0 |
| 31.5 | 18.0 | 4.2 | 71 | 18.0 |




## DIN 335/C HSS
## Delikli Havşa Frezesi 90°

MAKİNA TAKIM

| Çalışma Aralığı | d1 | d2 | L |
|---|---|---|---|
| 2 - 5 | 10 | 6.0 | 45 |
| 5 - 10 | 14 | 8.0 | 48 |
| 10 - 15 | 21 | 10.0 | 65 |
| 15 - 20 | 28 | 12.0 | 85 |
| 20 - 25 | 35 | 12.7 | 102 |

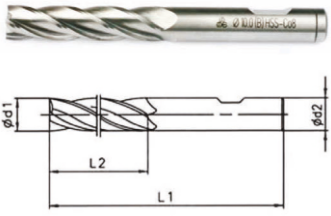



**PFM - DIN 844**
**HSS E Co. %8**
**Parmak Freze Kısa**

MAKİNA TAKIM

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 2.0 | 6 | 51 | 7 | 3 |
| 2.5 | 6 | 52 | 8 | 3 |
| 3.0 | 6 | 52 | 8 | 3 |
| 4.0 | 6 | 55 | 11 | 4 |
| 5.0 | 6 | 57 | 13 | 4 |
| 6.0 | 6 | 57 | 13 | 4 |
| 7.0 | 10 | 66 | 16 | 4 |
| 8.0 | 10 | 69 | 19 | 4 |
| 9.0 | 10 | 69 | 19 | 4 |
| 10.0 | 10 | 72 | 22 | 4 |
| 11.0 | 12 | 79 | 22 | 4 |
| 12.0 | 12 | 83 | 26 | 4 |
| 13.0 | 12 | 83 | 26 | 4 |
| 14.0 | 12 | 83 | 26 | 4 |
| 15.0 | 12 | 83 | 26 | 4 |
| 16.0 | 16 | 92 | 32 | 4 |

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 17.0 | 16 | 92 | 32 | 4 |
| 18.0 | 16 | 92 | 32 | 4 |
| 19.0 | 16 | 92 | 32 | 4 |
| 20.0 | 20 | 104 | 38 | 4 |
| 22.0 | 20 | 104 | 38 | 5 |
| 24.0 | 25 | 121 | 45 | 5 |
| 25.0 | 25 | 121 | 45 | 5 |
| 26.0 | 25 | 121 | 45 | 5 |
| 28.0 | 25 | 121 | 45 | 5 |
| 30.0 | 25 | 121 | 45 | 5 |
| 32.0 | 32 | 133 | 53 | 6 |
| 34.0 | 32 | 133 | 53 | 6 |
| 36.0 | 32 | 133 | 53 | 6 |
| 38.0 | 40 | 155 | 63 | 6 |
| 40.0 | 40 | 155 | 63 | 6 |

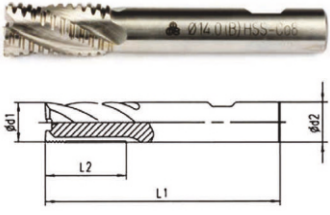



**PFUM - DIN 844**
**HSS E Co. %8**
**Parmak Freze Uzun**

MAKİNA TAKIM

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 2 | 6 | 54 | 10 | 3 |
| 2.5 | 6 | 56 | 12 | 3 |
| 3 | 6 | 56 | 12 | 3 |
| 4 | 6 | 63 | 19 | 4 |
| 5 | 6 | 68 | 24 | 4 |
| 6 | 6 | 68 | 24 | 4 |
| 8 | 10 | 88 | 38 | 4 |
| 10 | 10 | 95 | 45 | 4 |
| 12 | 12 | 110 | 53 | 4 |
| 14 | 12 | 110 | 53 | 4 |
| 16 | 16 | 123 | 63 | 4 |
| 18 | 16 | 123 | 63 | 4 |

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 20 | 20 | 141 | 75 | 4 |
| 22 | 20 | 141 | 75 | 5 |
| 24 | 25 | 166 | 90 | 5 |
| 25 | 25 | 166 | 90 | 5 |
| 26 | 25 | 166 | 90 | 5 |
| 28 | 25 | 166 | 90 | 5 |
| 30 | 25 | 166 | 90 | 5 |
| 32 | 32 | 186 | 106 | 6 |
| 34 | 32 | 186 | 106 | 6 |
| 36 | 32 | 186 | 106 | 6 |
| 38 | 40 | 217 | 125 | 6 |
| 40 | 40 | 217 | 125 | 6 |

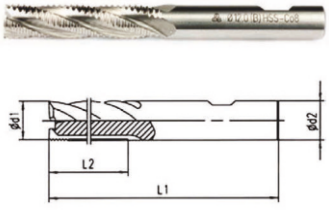



**PFKM - DIN 844**
**HSS E Co. %8**
**Kabatalaş Parmak Freze**
**Kısa Tip**

MAKİNA TAKIM

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 8.0 | 10 | 69 | 19 | 4 |
| 10.0 | 10 | 72 | 22 | 4 |
| 12.0 | 12 | 83 | 26 | 4 |
| 14.0 | 12 | 83 | 26 | 4 |
| 16.0 | 16 | 92 | 32 | 4 |
| 18.0 | 16 | 92 | 32 | 4 |
| 20.0 | 20 | 104 | 38 | 4 |

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 22.0 | 20 | 104 | 38 | 5 |
| 24.0 | 25 | 121 | 45 | 5 |
| 25.0 | 25 | 121 | 45 | 5 |
| 26.0 | 25 | 121 | 45 | 5 |
| 28.0 | 25 | 121 | 45 | 5 |
| 30.0 | 25 | 121 | 45 | 5 |
| 32.0 | 32 | 133 | 53 | 6 |

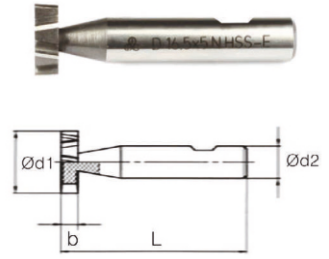



**PFKUM - DIN 844**
**HSS E Co. %8**
**Kabatalaş Parmak Freze**
**Uzun Tip**

MAKİNA TAKIM

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 8 | 10 | 88 | 38 | 4 |
| 10 | 10 | 95 | 45 | 4 |
| 12 | 12 | 110 | 53 | 4 |
| 14 | 12 | 110 | 53 | 4 |
| 16 | 16 | 123 | 63 | 4 |
| 18 | 16 | 123 | 63 | 4 |
| 20 | 20 | 141 | 75 | 4 |

| d1 | d2 | L1 | L2 | Ağız |
|---|---|---|---|---|
| 22 | 20 | 141 | 75 | 5 |
| 24 | 25 | 166 | 90 | 5 |
| 25 | 25 | 166 | 90 | 5 |
| 26 | 25 | 166 | 90 | 5 |
| 28 | 25 | 166 | 90 | 5 |
| 30 | 25 | 166 | 90 | 5 |
| 32 | 32 | 186 | 106 | 6 |

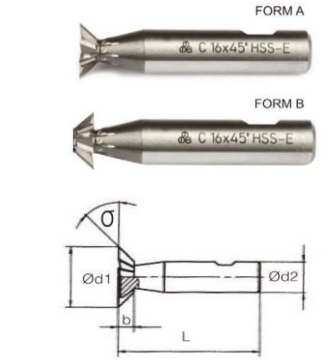



**DIN 850/D HSS E**
**T Yarık Freze**

MAKİNA TAKIM

| d1 | b | d2 | L1 |
|---|---|---|---|
| 13.5 | 3 | 10 | 56 |
| 13.5 | 4 | 10 | 56 |
| 16.5 | 3 | 10 | 56 |
| 16.5 | 4 | 10 | 56 |
| 16.5 | 5 | 10 | 56 |
| 19.5 | 4 | 10 | 63 |
| 19.5 | 5 | 10 | 63 |
| 19.5 | 6 | 10 | 63 |
| 22.5 | 5 | 10 | 63 |

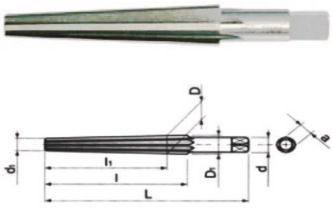
| d1 | b | d2 | L1 |
|---|---|---|---|
| 22.5 | 6 | 10 | 63 |
| 22.5 | 8 | 10 | 63 |
| 25.5 | 6 | 10 | 63 |
| 28.5 | 6 | 10 | 63 |
| 28.5 | 8 | 10 | 63 |
| 28.5 | 10 | 12 | 71 |
| 32.5 | 8 | 12 | 71 |
| 32.5 | 10 | 12 | 71 |
| 45.5 | 10 | 12 | 71 |




**DIN 1833/C HSS E**
**Konik Freze**

MAKİNA TAKIM

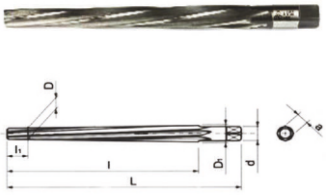
| d1 | b | d2 | L1 |
|---|---|---|---|
| 16 x 45° | 4,0 | 60 | 12 |
| 20 x 45° | 5,0 | 63 | 12 |
| 25 x 45° | 6,3 | 67 | 12 |
| 32 x 45° | 8,0 | 71 | 16 |
| 16 x 60° | 6,3 | 60 | 12 |
| 20 x 60° | 8,0 | 63 | 12 |
| 25 x 60° | 10,0 | 67 | 12 |
| 32 x 60° | 12,5 | 71 | 16 |



| d1 | D | D1 | L | l | d | a |
|---|---|---|---|---|---|---|
| 4 | 10.00 | 11 | 100 | 70 | 10.0 | 8 |
| 9 | 16.00 | 17 | 120 | 80 | 12.5 | 10 |
| 14 | 24.00 | 25 | 160 | 110 | 20.0 | 16 |
| 20 | 32.00 | 34 | 200 | 140 | 25.0 | 20 |

**Pim Raybası 1:10 Konik**

MAKİNA TAKIM

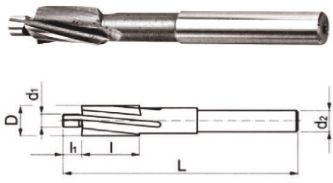


| d1 | d2 | d3 | L1 | L2 | L3 | k |
|---|---|---|---|---|---|---|
| 2 | 1.9 | 2.86 | 68 | 48 | 5 | 2.40 |
| 2.5 | 2.4 | 3.36 | 68 | 48 | 5 | 2.40 |
| 3 | 2.9 | 4.06 | 80 | 58 | 5 | 3.00 |
| 3.5 | 3.4 | 4.66 | 87 | 63 | 5 | 3.40 |
| 4 | 3.9 | 5.26 | 93 | 68 | 5 | 3.80 |
| 4.5 | 4.4 | 5.80 | 97 | 70 | 5 | 4.30 |
| 5 | 4.9 | 6.36 | 100 | 73 | 5 | 4.90 |
| 5.5 | 5.4 | 7.18 | 118 | 89 | 5 | 6.20 |
| 6 | 5.9 | 8.00 | 135 | 105 | 5 | 6.20 |

| d1 | d2 | d3 | L1 | L2 | L3 | k |
|---|---|---|---|---|---|---|
| 6.5 | 6.4 | 8.60 | 140 | 110 | 5 | 6.20 |
| 7 | 6.9 | 9.40 | 160 | 125 | 5 | 7.00 |
| 8 | 7.9 | 10.80 | 180 | 145 | 5 | 8.00 |
| 10 | 9.9 | 13.40 | 215 | 175 | 5 | 10.00 |
| 12 | 11.8 | 16.00 | 255 | 210 | 10 | 11.00 |
| 16 | 15.8 | 20.40 | 280 | 230 | 10 | 14.50 |
| 18 | 17.8 | 22.80 | 310 | 250 | 10 | 14.50 |
| 20 | 19.8 | 24.80 | 310 | 250 | 10 | 18.00 |

**Muslukçu Raybası**
**1:50 Konik**

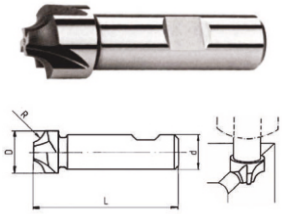
MAKİNA TAKIM



| Civata | D | d1 | d2 | L | l | l1 |
|---|---|---|---|---|---|---|
| M3 | 6 | 3.2 | 5 | 71 | 14 | 4 |
| M4 | 8 | 4.3 | 5 | 71 | 14 | 4 |
| M5 | 10 | 5.3 | 8 | 80 | 18 | 6 |
| M6 | 11 | 6.4 | 8 | 80 | 18 | 6 |
| M8 | 15 | 8.4 | 12.5 | 100 | 22 | 8 |
| M10 | 18 | 10.5 | 12.5 | 100 | 22 | 10 |
| M12 | 20 | 13.0 | 12.5 | 100 | 22 | 12 |
| M14 | 24 | 15.0 | 12.5 | 100 | 22 | 14 |
| M16 | 26 | 17.0 | 12.5 | 100 | 22 | 16 |
| M18 | 30 | 19.0 | 12.5 | 100 | 22 | 18 |
| M20 | 33 | 20.0 | 12.5 | 100 | 22 | 20 |

**Sabit Pilotlu Havşa Frezesi**
**(İmbus Freze)**

MAKİNA TAKIM



JBT

**Köşe Yuvarlama Frezesi**

| $R_{H11}$ | $D_{Js16}$ | L |
|---|---|---|
| 1 | 8 | 60 |
| 1.5 | 10 | 60 |
| 1.6 | 10 | 60 |
| 2 | 10 | 60 |
| 2.5 | 10 | 60 |
| 3 | 12 | 60 |
| 3.5 | 14 | 60 |
| 4 | 14 | 60 |
| 4.5 | 15 | 60 |
| 5 | 16 | 60 |

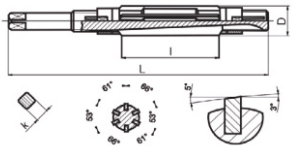
| $R_{H11}$ | $D_{Js16}$ | L |
|---|---|---|
| 5.5 | 21 | 67 |
| 6 | 21 | 67 |
| 6.5 | 24 | 71 |
| 7 | 24 | 71 |
| 7.5 | 24 | 71 |
| 8 | 24 | 71 |
| 8.5 | 28 | 85 |
| 9 | 28 | 85 |
| 9.5 | 28 | 85 |
| 10 | 28 | 85 |

| $R_{H11}$ | $D_{Js16}$ | L |
|---|---|---|
| 10.5 | 35 | 90 |
| 11 | 35 | 90 |
| 12 | 35 | 90 |
| 12.5 | 42 | 100 |
| 13 | 42 | 100 |
| 14 | 42 | 100 |
| 15 | 48 | 100 |
| 16 | 48 | 100 |
| 18 | 54 | 112 |
| 20 | 58 | 112 |

JBT

## Ayarlı Rayba Düz - Kovanlı






| Ölçü | D | L | l | k | Bıçak Adet |
|---|---|---|---|---|---|
| 7.00 - 8.00 | 6 | 91 | 25 | 3 | 4 |
| 8.00 - 8.70 | 7 | 96 | 30 | 3.5 | 4 |
| 8.70 - 9.50 | 8 | 101 | 35 | 4 | 4 |
| 9.50 - 10.25 | 9 | 106 | 40 | 5 | 4 |
| 10.25 - 11.00 | 9.5 | 115 | 40 | 5 | 6 |
| 11.00 - 12.00 | 10 | 118 | 40 | 5 | 6 |
| 12.00 - 13.50 | 11 | 126 | 40 | 5 | 6 |
| 13.50 - 15.00 | 12 | 142 | 45 | 6 | 6 |
| 15.00 - 16.50 | 13 | 150 | 50 | 7 | 6 |
| 16.50 - 18.25 | 15 | 157 | 55 | 8 | 6 |

| Ölçü | D | L | l | k | Bıçak Adet |
|---|---|---|---|---|---|
| 18.25 - 19.75 | 16 | 160 | 57 | 8 | 6 |
| 19.75 - 21.50 | 18 | 162 | 57 | 9 | 6 |
| 21.50 - 23.75 | 20 | 190 | 68 | 10 | 6 |
| 23.75 - 27.00 | 22 | 200 | 68 | 12 | 6 |
| 27.00 - 30.00 | 24 | 210 | 70 | 14 | 6 |
| 30.00 - 34.00 | 28 | 246 | 85 | 16 | 6 |
| 34.00 - 38.75 | 32 | 292 | 100 | 18 | 6 |
| 38.75 - 46.00 | 38 | 311 | 100 | 22 | 6 |
| 46.00 - 56.00 | 42 | 333 | 105 | 24 | 6 |

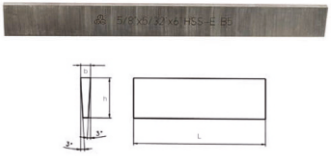



## Pantoraf Kalemi
## HSS E (Co. %10)

MAKİNA TAKIM

| d1 | L |
|---|---|
| 4 | 80 |
| 4 | 100 |
| 5 | 80 |
| 5 | 100 |
| 6 | 80 |
| 6 | 100 |
| 8 | 80 |
| 8 | 100 |
| 8 | 125 |
| 10 | 80 |
| 10 | 100 |
| 10 | 125 |
| 10 | 160 |

| d1 | L |
|---|---|
| 12 | 100 |
| 12 | 125 |
| 14 | 160 |
| 14 | 100 |
| 14 | 125 |
| 14 | 160 |
| 16 | 125 |
| 16 | 160 |
| 16 | 200 |
| 18 | 200 |
| 20 | 160 |
| 20 | 200 |




## Trapez Kalemi
## HSS E (Co. %10)

MAKİNA TAKIM

| h inch | b inch | L inch |
|---|---|---|
| 3/8" | 3/32" | 4" |
| 1/2" | 1/8" | 5" |
| 5/8" | 5/32" | 5" |
| 5/8" | 5/32" | 6" |
| 3/4" | 3/16" | 6" |
| 7/8" | 3/16" | 6" |
| 7/8" | 3/16" | 8" |
| 1" | 7/32" | 6" |
| 1" | 7/32" | 8" |




## Manyetik Matkap Ucu

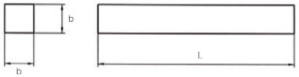
MAKİNA TAKIM

**Boy** :30 - 50 mm
**Sap Çapı** :19 mm

| Çap |
|---|
| 12 mm |
| 13 mm |
| 14 mm |
| 15 mm |
| 16 mm |
| 17 mm |
| 18 mm |
| 19 mm |
| 20 mm |
| 21 mm |
| 22 mm |
| 23 mm |
| 24 mm |
| 25 mm |
| 26 mm |
| 27 mm |
| 28 mm |
| 29 mm |
| 30 mm |
| 31 mm |
| 32 mm |
| 33 mm |
| 34 mm |
| 35 mm |
| 36 mm |

| Çap |
|---|
| 37 mm |
| 38 mm |
| 39 mm |
| 40 mm |
| 41 mm |
| 42 mm |
| 43 mm |
| 44 mm |
| 45 mm |
| 46 mm |
| 47 mm |
| 48 mm |
| 49 mm |
| 50 mm |
| 51 mm |
| 52 mm |
| 53 mm |
| 54 mm |
| 55 mm |
| 56 mm |
| 57 mm |
| 58 mm |
| 59 mm |
| 60 mm |




## Torna Kalemi
## HSS E (Co. %10)

MAKİNA TAKIM

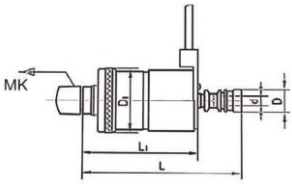
| b | b | L |
|---|---|---|
| 4 | 4 | 63 |
| 4 | 4 | 80 |
| 4 | 4 | 100 |
| 5 | 5 | 63 |
| 5 | 5 | 80 |
| 5 | 5 | 100 |
| 6 | 6 | 63 |
| 6 | 6 | 80 |
| 6 | 6 | 100 |
| 6 | 6 | 125 |

| b | b | L |
|---|---|---|
| 6 | 6 | 160 |
| 8 | 8 | 63 |
| 8 | 8 | 80 |
| 8 | 8 | 100 |
| 8 | 8 | 125 |
| 8 | 8 | 160 |
| 8 | 8 | 200 |
| 10 | 10 | 100 |
| 10 | 10 | 125 |
| 10 | 10 | 160 |

| b | b | L |
|---|---|---|
| 10 | 10 | 200 |
| 12 | 12 | 100 |
| 12 | 12 | 125 |
| 12 | 12 | 160 |
| 12 | 12 | 200 |
| 14 | 14 | 100 |
| 14 | 14 | 125 |
| 14 | 14 | 160 |
| 14 | 14 | 200 |
| 16 | 16 | 125 |

| b | b | L |
|---|---|---|
| 16 | 16 | 160 |
| 16 | 16 | 200 |
| 18 | 18 | 160 |
| 18 | 18 | 200 |
| 20 | 20 | 160 |
| 20 | 20 | 200 |
| 25 | 25 | 200 |






**Otomatik Klavuz Çekme Aparatı**

| Ölçü | d | D | D1 | L | L1 | MK |
|---|---|---|---|---|---|---|
| M2 - M7 | 2.5 - 6.5 | 23 | 55 | 135 | 95 | MK2 - MK3 |
| M5 - M12 | 3.5 - 10 | 28 | 75 | 164 | 114.5 | MK3 - MK4 |
| M8 - M20 | 6.3 - 14 | 38 | 90.5 | 205 | 135 | MK3 - MK4 |

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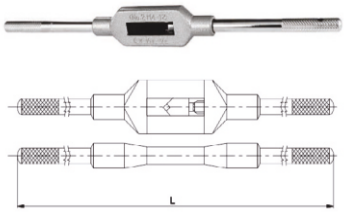


**AK-İŞ**

**Klavuz Kolu**

| Kod | L | Ölçü |
|---|---|---|
| No 0 | 170 | M1 - M8 |
| No 1 | 200 | M1 - M12 |
| No 2 | 255 | M4 - M12 |
| No 3 | 345 | M5 - M20 |
| No 4 | 425 | M9 - M27 |
| No 5 | 765 | M13 - M32 |
| No 6 | 870 | M20 - M40 |

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**AK-İŞ**

**Cırcırlı Klavuz Kolu**

| Kod | L | Ölçü |
|---|---|---|
| No 0 | 85 | 1 (M1 - M8) |
| No 1 | 110 | 2 (M1 - M12) |
| No 2 | 250 | 10 (M4 - M12) |
| No 3 | 310 | 20 (M5 - M20) |

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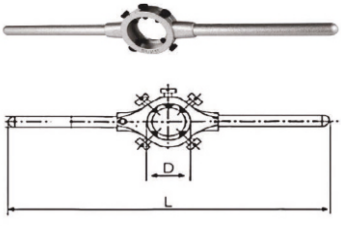


**AK-İŞ**

**Pafta Kolu**

| Ölçü | D x h1 | L |
|---|---|---|
| M2 / M2.5 | 16 x 5 | |
| M3 / M3.5 / M4 | 20 x 5 | 170 |
| M5 / M6 | 20 x 7 | 170 |
| M7 / M8 / M9 | 25 x 9 | 210 |
| M10 | 30 x 11 | 270 |
| M12 / M14 | 38 x 14 | 325 |
| M16 / M18 / M20 | 45 x 18 | 400 |
| M22 / M24 | 55 x 22 | 475 |
| M27 / M30 / M33 / M36 | 65 x 25 | 555 |

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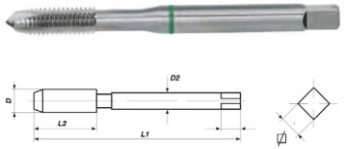
**Ters Klavuz Seti**

JBT

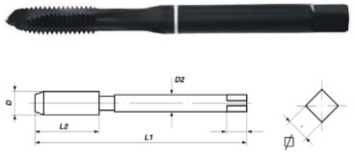
| Adet | Ölçü |
|---|---|
| 5 Parça | M3 - M6 / M6 - M8 / M8 - M11 / M11 - M14 / M14 - M18 |
| 6 Parça | M3 - M6 / M6 - M8 / M8 - M11 / M11 - M14 / M14 - M18 / M18 - M24 |
| 8 Parça | M3 - M6 / M6 - M8 / M8 - M11 / M11 - M14 / M14 - M18<br>M18 - M24 / M24 - M30 / M30 - M40 |



## Yeşil Halkalı
## Düz Makina Klavuzu

Helis klavuzları ve tüm VÖLKEL ürünler tedarik edilir.

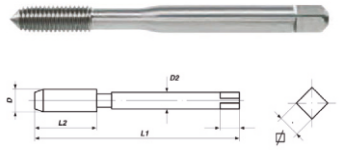
| Sipariş | Ø D | D2 | ⊠ | L1 | L2 |
|---|---|---|---|---|---|
| VÖL-35326 | M3 x 0.5 | 3.5 | 2.7 | 56 | 11 |
| VÖL-35330 | M4 x 0.7 | 4.5 | 3.4 | 63 | 13 |
| VÖL-35334 | M5 x 0.8 | 6 | 4.9 | 70 | 16 |
| VÖL-35338 | M6 x 1 | 6 | 4.9 | 80 | 19 |
| VÖL-35342 | M8 x 1.25 | 8 | 6.2 | 90 | 22 |
| VÖL-35346 | M10 x 1.5 | 10 | 8.0 | 100 | 24 |
| VÖL-35350 | M12 x 1.75 | 9 | 7.0 | 110 | 29 |



## Beyaz Halkalı
## Düz Makina Klavuzu

Helis klavuzları ve tüm VÖLKEL ürünler tedarik edilir.

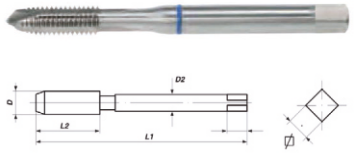
| Sipariş | Ø D | D2 | ⊠ | L1 | L2 |
|---|---|---|---|---|---|
| VÖL-35226 | M3 x 0.5 | 3.5 | 2.7 | 56 | 11 |
| VÖL-35230 | M4 x 0.7 | 4.5 | 3.4 | 63 | 13 |
| VÖL-35234 | M5 x 0.8 | 6 | 4.9 | 70 | 16 |
| VÖL-35238 | M6 x 1 | 6 | 4.9 | 80 | 19 |
| VÖL-35242 | M8 x 1.25 | 8 | 6.2 | 90 | 22 |
| VÖL-35246 | M10 x 1.5 | 10 | 8.0 | 100 | 24 |
| VÖL-35250 | M12 x 1.75 | 9 | 7.0 | 110 | 29 |



## Ovalama Makina Klavuzu

Helis klavuzları ve tüm VÖLKEL ürünler tedarik edilir.

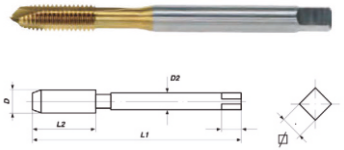
| Sipariş | Ø D | D2 | ⊠ | L1 | L2 |
|---|---|---|---|---|---|
| VÖL-35510 | M3 x 0.5 | 3.5 | 2.7 | 56 | 11 |
| VÖL-35512 | M4 x 0.7 | 4.5 | 3.4 | 63 | 13 |
| VÖL-35513 | M5 x 0.8 | 6 | 4.9 | 70 | 16 |
| VÖL-35514 | M6 x 1 | 6 | 4.9 | 80 | 19 |
| VÖL-35515 | M8 x 1.25 | 8 | 6.2 | 90 | 22 |
| VÖL-35516 | M10 x 1.5 | 10 | 8.0 | 100 | 24 |
| VÖL-35517 | M12 x 1.75 | 9 | 7.0 | 110 | 29 |



## Mavi Halkalı
## Düz Makina Klavuzu

Helis klavuzları ve tüm VÖLKEL ürünler tedarik edilir.

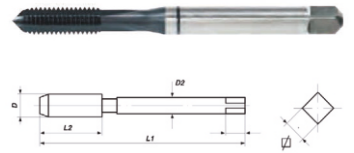
| Sipariş | Ø D | D2 | ⊠ | L1 | L2 |
|---|---|---|---|---|---|
| VÖL-35426 | M3 x 0.5 | 3.5 | 2.7 | 56 | 11 |
| VÖL-35430 | M4 x 0.7 | 4.5 | 3.4 | 63 | 13 |
| VÖL-35434 | M5 x 0.8 | 6 | 4.9 | 70 | 16 |
| VÖL-35438 | M6 x 1 | 6 | 4.9 | 80 | 19 |
| VÖL-35442 | M8 x 1.25 | 8 | 6.2 | 90 | 22 |
| VÖL-35446 | M10 x 1.5 | 10 | 8.0 | 100 | 24 |
| VÖL-35450 | M12 x 1.75 | 9 | 7.0 | 110 | 29 |



## Titanyum Kaplı
## Düz Makina Klavuzu

Helis klavuzları ve tüm VÖLKEL ürünler tedarik edilir.

| Sipariş | Ø D | D2 | ⊠ | L1 | L2 |
|---|---|---|---|---|---|
| VÖL-31526 | M3 x 0.5 | 3.5 | 2.7 | 56 | 11 |
| VÖL-31530 | M4 x 0.7 | 4.5 | 3.4 | 63 | 13 |
| VÖL-31534 | M5 x 0.8 | 6 | 4.9 | 70 | 16 |
| VÖL-31538 | M6 x 1 | 6 | 4.9 | 80 | 19 |
| VÖL-31542 | M8 x 1.25 | 8 | 6.2 | 90 | 22 |
| VÖL-31546 | M10 x 1.5 | 10 | 8.0 | 100 | 24 |
| VÖL-31550 | M12 x 1.75 | 9 | 7.0 | 110 | 29 |

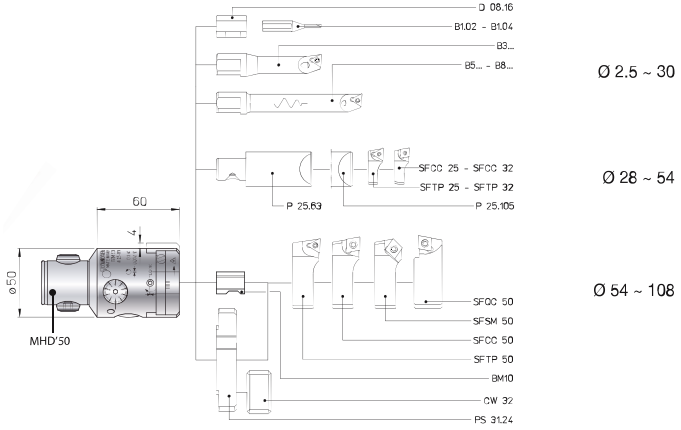


## Siyah Halkalı
## Düz Makina Klavuzu

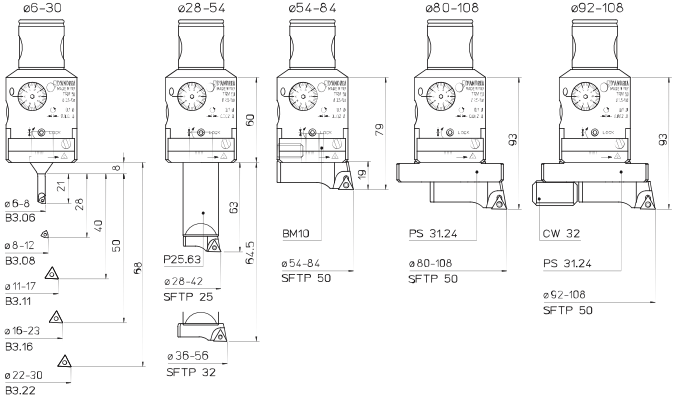
Helis klavuzları ve tüm VÖLKEL ürünler tedarik edilir.

| Sipariş | Ø D | D2 | ⊠ | L1 | L2 |
|---|---|---|---|---|---|
| VÖL-35426 | M3 x 0.5 | 3.5 | 2.7 | 56 | 11 |
| VÖL-35430 | M4 x 0.7 | 4.5 | 3.4 | 63 | 13 |
| VÖL-35434 | M5 x 0.8 | 6 | 4.9 | 70 | 16 |
| VÖL-35438 | M6 x 1 | 6 | 4.9 | 80 | 19 |
| VÖL-35442 | M8 x 1.25 | 8 | 6.2 | 90 | 22 |
| VÖL-35446 | M10 x 1.5 | 10 | 8.0 | 100 | 24 |
| VÖL-35450 | M12 x 1.75 | 9 | 7.0 | 110 | 29 |



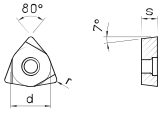
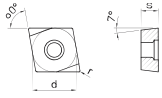
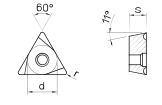




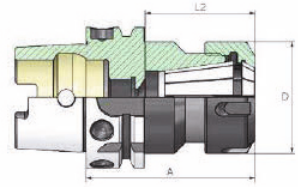




D'ANDREA

**TRM50 - D'ANDREA**
**TRM50 Bara Seti**

| Elmas Uç | Kod | d | s | r | | | DP 300 | DP 100 | DP 100T | DK 100 | D20 MDC | D20 CBN | D25 CBN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | WCGT 020102L | 3.97 | 1.59 | 0.2 | TS 21 | TORX T06 | □ | □ | | □ | | | |
| | WCGT 020104L | | | 0.4 | | | □ | □ | | □ | | | |
|  | CCGT 060200L - 10 | 6.35 | 2.38 | 0 | TS 25 | TORX T08 | □ | □ | □ | □ | | | |
| | CCGT 060202L | | | 0.2 | | | □ | □ | □ | □ | | | |
| | CCGT 060204L | | | 0.4 | | | □ | □ | □ | □ | | | |
| | CCGT 09T302L | 9.53 | 3.97 | 0 | TS 4 | TORX T15 | □ | □ | □ | □ | | | |
| | CCGT 09T304L | | | 0.2 | | | □ | □ | □ | □ | | | |
|  | TPGX 090200L-10 | 5.56 | 2.38 | 0.4 | CS 250T | TORX T08 | □ | □ | □ | □ | | | |
| | TPGX 090202 | | | 0.2 | | | | | | | □ | □ | □ |
| | TPGX 090202L | | | | | | □ | □ | □ | □ | | | |
| | TPGX 090204 | | | 0.4 | | | | | | | □ | □ | □ |
| | TPGX 090204L | | | | | | □ | □ | □ | □ | | | |
| | TPGX 110300L-10 | 6.35 | 3.18 | 0 | CS 300890T | TORX T08 | □ | □ | □ | □ | | | |
| | TPGX 110302 | | | 0.2 | | | | | | | □ | □ | □ |
| | TPGX 110302L | | | | | | □ | □ | □ | □ | | | |
| | TPGX 110304 | | | 0.4 | | | | | | | □ | □ | □ |
| | TPGX 110304L | | | | | | □ | □ | □ | □ | | | |
| ST : Çelik | GG : Döküm | | | AL : Alüminyum | | | ST | | | GG / AA | AL | ST | |



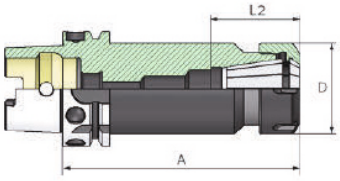



## HSK63 Pens Başlığı

DEĞERLİ

| Sipariş | HSK | Kapasite (d) | D | A | L2 |
|---|---|---|---|---|---|
| 811426 | HSK A63 | ER 16 (2-10) | 28 | 75 | 32 |
| 811430 | HSK A63 | ER 25 (2-16) | 42 | 75 | 42 |
| 811470 | HSK A63 | ER 32 (2-20) | 50 | 75 | 48 |
| 811472 | HSK A63 | ER 40 (2-26) | 63 | 85 | 55 |



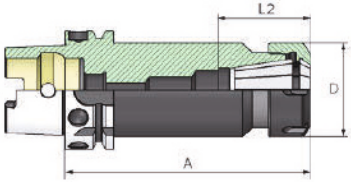



## HSK63 Pens Başlığı

DEĞERLİ

| Sipariş | HSK | Kapasite (d) | D | A | L2 |
|---|---|---|---|---|---|
| 812426 | HSK A63 | ER 16 (2-10) | 28 | 100 | 32 |
| 812426-1 | HSK A63 | ER 16 Mini (2-10) | 22 | 100 | 32 |
| 812428 | HSK A63 | ER 20 (2-13) | 35 | 100 | 39,5 |
| 812430 | HSK A63 | ER 25 (2-16) | 42 | 100 | 42 |
| 812470 | HSK A63 | ER 32 (2-10) | 50 | 100 | 48 |
| 812472 | HSK A63 | ER 40 (2-26) | 63 | 120 | 55 |



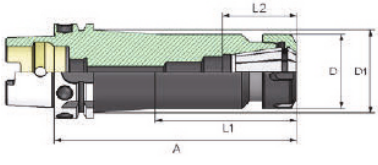



## HSK63 Pens Başlığı

DEĞERLİ

| Sipariş | HSK | Kapasite (d) | D | A | L2 |
|---|---|---|---|---|---|
| 813426 | HSK A63 | ER 16 (2-10) | 28 | 130 | 32 |
| 813426-1 | HSK A63 | ER 16 Mini (2-10) | 22 | 130 | 32 |
| 813428 | HSK A63 | ER 20 (2-13) | 35 | 130 | 39,5 |
| 813430 | HSK A63 | ER 25 (2-16) | 42 | 130 | 42 |
| 813470 | HSK A63 | ER 32 (2-20) | 50 | 130 | 48 |
| 813472 | HSK A63 | ER 40 (2-26) | 63 | 130 | 55 |



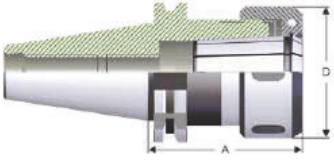



## HSK63 Pens Başlığı

DEĞERLİ

| Sipariş | HSK | Kapasite (d) | D | A | D1 | L1 | L2 |
|---|---|---|---|---|---|---|---|
| 814426 | HSK A63 | ER 16 (82-10) | 28 | 160 | 31,5 | 98 | 32 |
| 814426-1 | HSK A63 | ER 16 Mini (2-10) | 22 | 160 | 25,5 | 98 | 32 |
| 814428 | HSK A63 | ER 20 (2-13) | 35 | 160 | 37,5 | 99,5 | 39,5 |
| 814430 | HSK A63 | ER 25 (2-16) | 42 | 160 | 45,5 | 100 | 42 |
| 814470 | HSK A63 | ER 32 (2-20) | 50 | 160 | - | - | 48 |
| 814472 | HSK A63 | ER 40 (2-26) | 63 | 160 | - | - | 55 |



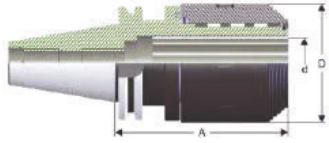



## SK Pens Başlıkları

DEĞERLİ

| Sipariş | SK | Kapasite (d) | D | A |
|---|---|---|---|---|
| 510415 | SK 30 | 415 (2-16) | 43 | 60 |
| 510462 | SK30 | 462 (2-25) | 60 | 80 |
| 511415 | SK 40 | 415 (2-16) | 43 | 70 |
| 511462 | SK 40 | 462 (2-25) | 60 | 70 |
| 511467 | SK 40 | 467 (3-32) | 72 | 90 |
| 515462 | SK 50 | 462 (2-25) | 60 | 70 |
| 515467 | SK 50 | 467 (3-32) | 72 | 80 |
| 515468 | SK 50 | 468 (3-40) | 85 | 95 |



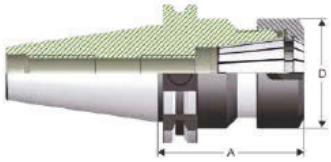



## SK Rulmanlı Pens Başlıkları

DEĞERLİ

| Sipariş | SK | Kapasite (d) | D | A |
|---|---|---|---|---|
| 518420 | SK 40 | 6-20 mm | 90 | 49 |
| 518432 | SK 40 | 6-32 mm | 100 | 68 |
| 519520 | SK 50 | 6-20 mm | 70 | 49 |
| 519532 | SK 50 | 6-32 mm | 95 | 68 |






## SK ER Tipi Pens Başlıkları

DEĞERLİ

| Sipariş | SK | Kapasite (d) | D | A |
|---|---|---|---|---|
| 510426 | SK 30 | ER 16 (2-10) | 32 | 70 |
| 510430 | SK 30 | ER 25 (2-16) | 42 | 70 |
| 510470 | SK 30 | ER 32 (2-20) | 50 | 70 |
| 510472 | SK 30 | ER 40 (2-26) | 63 | 70 |
| 511426 | SK 40 | ER 16 (2-10) | 32 | 63 |
| 511430 | SK 40 | ER 25 (2-16) | 42 | 60 |
| 511470 | SK 40 | ER 32 (2-20) | 50 | 70 |
| 511472 | SK 40 | ER 40 (2-26) | 63 | 80 |
| 515426 | SK 50 | ER 16 (2-10) | 32 | 63 |
| 515430 | SK 50 | ER 25 (2-16) | 42 | 60 |
| 515470 | SK 50 | ER 32 (2-20) | 50 | 70 |
| 515472 | SK 50 | ER 40 (2-26) | 63 | 80 |




## SK ER Tipi Pens Başlıkları

DEĞERLİ

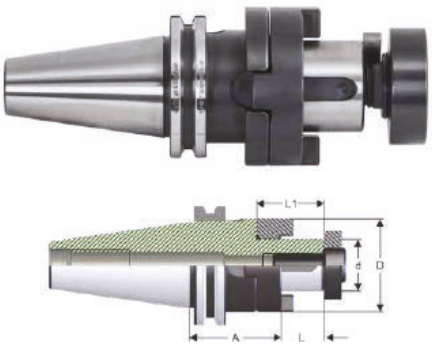
| Sipariş | SK | Kapasite (d) | D | A |
|---|---|---|---|---|
| 510426-1 | SK 30 | ER 16 (2-10) | 32 | 100 |
| 510430-1 | SK 30 | ER 25 (2-16) | 42 | 100 |
| 510470-1 | SK 30 | ER 32 (3-20) | 50 | 100 |
| 512426-1 | SK 40 | ER 16 (2-10) Mini | 22 | 100 |
| 512426 | SK 40 | ER 16 (2-10) | 32 | 100 |
| 512430 | SK 40 | ER 25 (2-16) | 42 | 100 |
| 512470 | SK 40 | ER 32 (2-20) | 50 | 100 |
| 512472 | SK 40 | ER 40 (2-26) | 63 | 100 |
| 516426 | SK 50 | ER 16 (2-10) | 32 | 100 |
| 516426-1 | SK 50 | ER 16 (2-10) Mini | 22 | 100 |
| 516430 | SK 50 | ER 25 (2-16) | 42 | 100 |
| 516470 | SK 50 | ER 32 (2-20) | 50 | 100 |
| 516472 | SK 50 | ER 40 (2-26) | 63 | 100 |




## SK ER Tipi Pens Başlıkları

DEĞERLİ

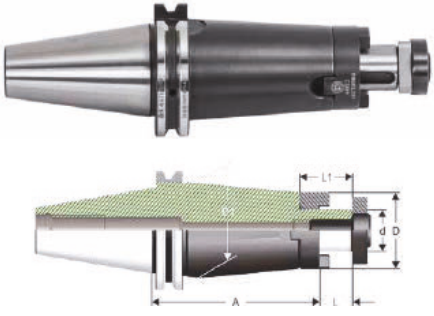
| Sipariş | SK | Kapasite (d) | D | A |
|---|---|---|---|---|
| 513426-1 | SK 40 | ER 16 Mini (2-10) | 22 | 160 |
| 513426 | SK 40 | ER 16 (2-10) | 32 | 160 |
| 513430 | SK 40 | ER 25 (2-16) | 42 | 160 |
| 513470 | SK 40 | ER 32 (2-20) | 50 | 160 |
| 513472 | SK 40 | ER 40 (2-26) | 63 | 160 |
| 517426-1 | SK 50 | ER 16 Mini (2-10) | 22 | 160 |
| 517426 | SK 50 | ER 16 (2-10) | 32 | 160 |
| 517430 | SK 50 | ER 25 (2-16) | 42 | 160 |
| 517470 | SK 50 | ER 32 (2-20) | 50 | 160 |
| 517472 | SK 50 | ER 40 (2-26) | 63 | 160 |




## SK Kombine Tarama Başlıkları

DEĞERLİ

| Sipariş | SK | d h6 | D | A | L | L1 |
|---|---|---|---|---|---|---|
| 523016 | SK 30 | 16 | 32 | 50 | 17 | 27 |
| 523022 | SK 30 | 22 | 40 | 50 | 19 | 31 |
| 523027 | SK 30 | 27 | 48 | 55 | 21 | 33 |
| 523032 | SK 30 | 32 | 58 | 60 | 24 | 38 |
| 524016 | SK 40 | 16 | 32 | 55 | 17 | 27 |
| 524022 | SK 40 | 22 | 40 | 55 | 19 | 31 |
| 524027 | SK 40 | 27 | 48 | 55 | 21 | 33 |
| 524032 | SK 40 | 32 | 58 | 60 | 24 | 38 |
| 524040 | SK 40 | 40 | 70 | 60 | 27 | 41 |
| 525016 | SK 50 | 16 | 32 | 55 | 17 | 27 |
| 525022 | SK 50 | 22 | 40 | 55 | 19 | 31 |
| 525027 | SK 50 | 27 | 48 | 55 | 21 | 33 |
| 525032 | SK 50 | 32 | 58 | 55 | 24 | 38 |
| 525040 | SK 50 | 40 | 70 | 55 | 27 | 41 |



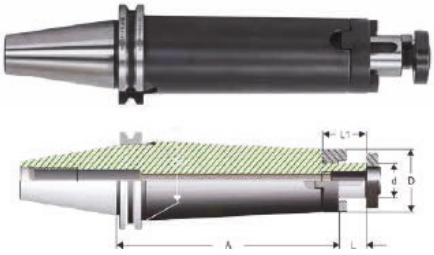

## SK Kombine Tarama Başlıkları

DEĞERLİ

| Sipariş | SK | d h6 | D | A | L | L1 | D1 |
|---|---|---|---|---|---|---|---|
| 524116 | SK 40 | 16 | 32 | 100 | 17 | 27 | 38 |
| 524122 | SK 40 | 22 | 40 | 100 | 19 | 31 | 48 |
| 524127 | SK 40 | 27 | 48 | 100 | 21 | 33 | 50 |
| 524132 | SK 40 | 32 | 58 | 100 | 24 | 38 | 58 |
| 524140 | SK 40 | 40 | 70 | 100 | 27 | 41 | 70 |
| 525116 | SK 50 | 16 | 32 | 100 | 17 | 27 | 38 |
| 525122 | SK 50 | 22 | 40 | 100 | 19 | 31 | 48 |
| 525127 | SK 50 | 27 | 48 | 100 | 21 | 33 | 58 |
| 525132 | SK 50 | 32 | 58 | 100 | 24 | 38 | 68 |
| 525140 | SK 50 | 40 | 70 | 100 | 27 | 41 | 80 |

## SK Kombine Tarama Başlıkları

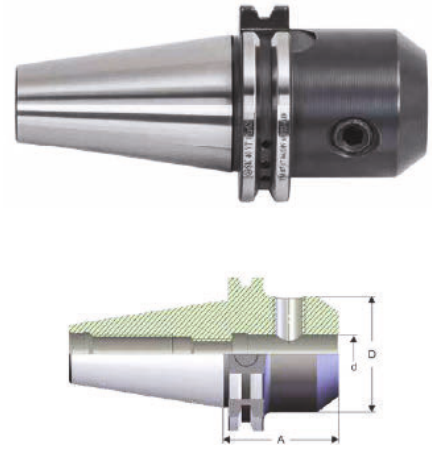
DEĞERLİ



| Sipariş | SK | d h6 | D | A | L | L1 | D1 |
|---|---|---|---|---|---|---|---|
| 524116.1 | SK 40 | 16 | 32 | 160 | 17 | 27 | 38 |
| 524122.1 | SK 40 | 22 | 40 | 160 | 19 | 31 | 48 |
| 524127.1 | SK 40 | 27 | 48 | 160 | 21 | 33 | 50 |
| 524127.1 | SK 40 | 32 | 58 | 160 | 24 | 38 | 58 |
| 524140.1 | SK 40 | 40 | 70 | 160 | 27 | 41 | 70 |
| 525116.1 | SK 50 | 16 | 32 | 160 | 17 | 27 | 38 |
| 525122.1 | SK 50 | 22 | 40 | 160 | 19 | 31 | 48 |
| 525127.1 | SK 50 | 27 | 48 | 160 | 21 | 33 | 58 |
| 525132.1 | SK 50 | 32 | 58 | 160 | 24 | 38 | 68 |
| 525140.1 | SK 50 | 40 | 70 | 160 | 27 | 41 | 80 |

## SK Veldon Tutucu

DEĞERLİ



| Sipariş | SK | d h4 | D | A |
|---|---|---|---|---|
| 543006 | SK 30 | 6 | 25 | 50 |
| 543008 | SK 30 | 8 | 28 | 50 |
| 543010 | SK 30 | 10 | 35 | 50 |
| 543012 | SK 30 | 12 | 42 | 50 |
| 543014 | SK 30 | 14 | 44 | 63 |
| 543016 | SK 30 | 16 | 48 | 63 |
| 543018 | SK 30 | 18 | 50 | 63 |
| 543020 | SK 30 | 20 | 52 | 70 |

## SK Veldon Tutucu

DEĞERLİ



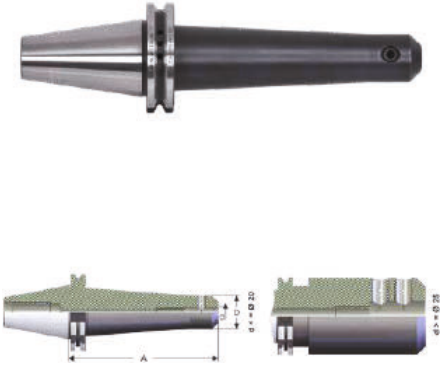
| Sipariş | SK | d h4 | D | A |
|---|---|---|---|---|
| 544006 | SK 40 | 6 | 25 | 50 |
| 544008 | SK 40 | 8 | 28 | 50 |
| 544010 | SK 40 | 10 | 35 | 50 |
| 544012 | SK 40 | 12 | 42 | 50 |
| 541014 | SK 40 | 14 | 44 | 63 |
| 544016 | SK 40 | 16 | 48 | 63 |
| 544018 | SK 40 | 18 | 50 | 63 |
| 544020 | SK 40 | 20 | 52 | 63 |
| 544025 | SK 49 | 25 | 63 | 100 |
| 544032 | SK 40 | 32 | 72 | 100 |
| 544040 | SK 40 | 40 | 79 | 120 |




## SK Veldon Tutucu

DEĞERLİ

| Sipariş | SK | d h4 | D | A |
|---|---|---|---|---|
| 544106.1 | SK 40 | 6 | 25 | 160 |
| 544108.1 | SK 40 | 8 | 28 | 160 |
| 544110.1 | SK 40 | 10 | 35 | 160 |
| 544112.1 | SK 40 | 12 | 42 | 160 |
| 544114.1 | SK 40 | 14 | 44 | 160 |
| 544116.1 | SK 40 | 16 | 48 | 160 |
| 544118.1 | SK 40 | 18 | 50 | 160 |
| 544120.1 | SK 40 | 20 | 52 | 160 |
| 544125.1 | SK 49 | 25 | 63 | 160 |
| 544132.1 | SK 40 | 32 | 72 | 160 |




## SK Veldon Tutucu

DEĞERLİ

| Sipariş | SK | d h4 | D | A |
|---|---|---|---|---|
| 544106 | SK 40 | 6 | 25 | 100 |
| 544108 | SK 40 | 8 | 28 | 100 |
| 544110 | SK 40 | 10 | 35 | 100 |
| 544112 | SK 40 | 12 | 42 | 100 |
| 544114 | SK 40 | 14 | 44 | 100 |
| 544116 | SK 40 | 16 | 48 | 100 |
| 544118 | SK 40 | 18 | 50 | 100 |
| 544120 | SK 40 | 20 | 52 | 100 |



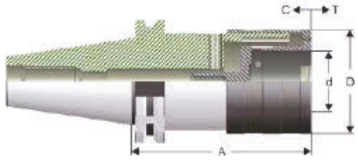



## SK Mandren Başlıkları

DEĞERLİ

| Sipariş | SK | D | A | L |
|---|---|---|---|---|
| 573012 | SK 30 | B12 | 38,5 | 18,5 |
| 573016 | SK 30 | B16 | 40 | 24 |
| 574012 | SK 40 | B12 | 28 | 18,5 |
| 574016 | SK 40 | B16 | 25 | 24 |
| 574018 | SK 40 | B18 | 35 | 32 |
| 575016 | SK 50 | B16 | 25 | 24 |
| 575018 | SK 50 | B18 | 25 | 32 |






## SK Klavuz Çekme Başlıkları

DEĞERLİ

| Sipariş | SK | Kapasite | d | A | D | C | T |
|---|---|---|---|---|---|---|---|
| 576214 | SK 30 | M2 - M14 | 19 | 66 | 38 | 7 | 7 |
| 576524 | SK 30 | M5 - M24 | 31 | 99 | 54 | 12 | 12 |
| 577214 | SK 40 | M2 - M14 | 19 | 64 | 38 | 7 | 7 |
| 577524 | SK 40 | M5 - M24 | 31 | 97 | 54 | 12 | 12 |
| 5771436 | SK 40 | M14 - M36 | 48 | 136 | 78 | 17,5 | 17,5 |

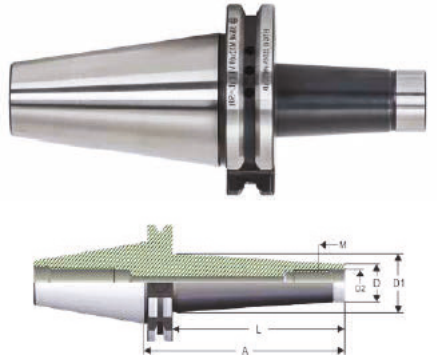





## SK Klavuz Çekme Başlıkları

DEĞERLİ

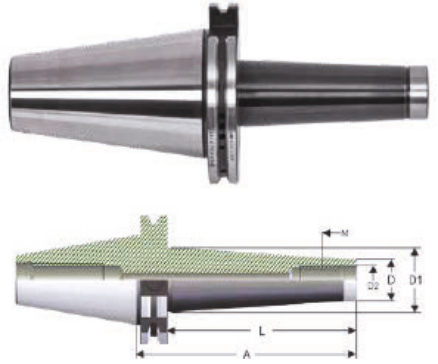
| Sipariş | SK | Kapasite | d | A | D | C | T |
|---|---|---|---|---|---|---|---|
| 578214 | SK 50 | M2 - M14 | 19 | 62 | 38 | 7 | 7 |
| 578524 | SK 50 | M5 - M24 | 31 | 85 | 54 | 12 | 12 |
| 5781436 | SK 50 | M14 - M36 | 48 | 138 | 78 | 17,5 | 17,5 |




## SK Vidalı Takım Tutucular

DEĞERLİ

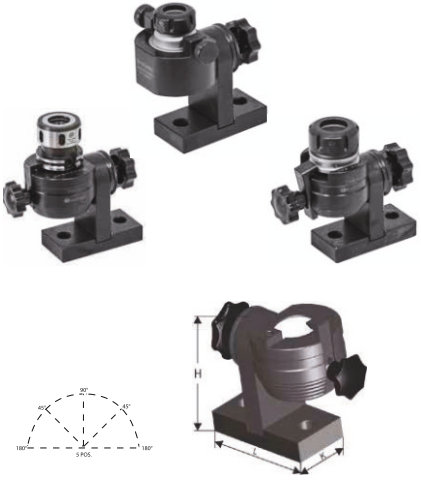
| Sipariş | SK | M | D | D1 | A | L | D2 |
|---|---|---|---|---|---|---|---|
| 584008 | SK 40 | M8 | 13 | 23 | 69 | 50 | 8,5 |
| 584008.1 | SK 40 | M8 | 13 | 25 | 119 | 100 | 8,5 |
| 584008.2 | SK 40 | M8 | 13 | 30 | 169 | 150 | 8,5 |
| 584010 | SK 40 | M10 | 18 | 23 | 69 | 50 | 10,5 |
| 584010.1 | SK 40 | M10 | 18 | 32 | 119 | 100 | 10,5 |
| 584010.2 | SK 40 | M10 | 18 | 36 | 169 | 150 | 10,5 |
| 584012 | SK 40 | M12 | 21 | 24 | 69 | 50 | 12,5 |
| 584012.1 | SK 40 | M12 | 21 | 33 | 119 | 100 | 12,5 |
| 584012.2 | SK 40 | M12 | 21 | 40 | 169 | 150 | 12,5 |
| 584016 | SK 40 | M16 | 29 | 34 | 94 | 75 | 17 |
| 584016.0 | SK 40 | M16 | 29 | 29 | 44 | 25 | 17 |
| 584016.1 | SK 40 | M16 | 29 | 40 | 144 | 125 | 17 |




## SK Vidalı Takım Tutucular

DEĞERLİ

| Sipariş | SK | M | D | D1 | A | L | D2 |
|---|---|---|---|---|---|---|---|
| 585008 | SK 50 | M8 | 13 | 25 | 119 | 100 | 8,5 |
| 584008.1 | SK 50 | M8 | 13 | 30 | 169 | 150 | 8,5 |
| 585010 | SK 50 | M10 | 18 | 32 | 119 | 100 | 10,5 |
| 585010.1 | SK 50 | M10 | 18 | 36 | 169 | 150 | 10,5 |
| 585012 | SK 50 | M12 | 21 | 33 | 119 | 100 | 12,5 |
| 585012.1 | SK 50 | M12 | 21 | 40 | 169 | 150 | 12,5 |
| 585016 | SK 50 | M16 | 29 | 36 | 119 | 100 | 17 |
| 585016.1 | SK 50 | M16 | 29 | 42 | 169 | 150 | 17 |

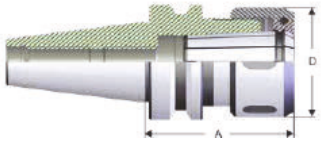



## Çelik Montaj Aparatı

DEĞERLİ

| Sipariş | Cinsi | H | L | K |
|---|---|---|---|---|
| 55030 | ISO 30 / BT 30 / SK 30 | 121 | 100 | 48 |
| 55040 | ISO 40 / BT 40 / SK 40 | 136 | 130 | 64 |
| 55050 | ISO 50 / BT 50 / SK 50 | 170 | 170 | 72 |
| 55063 | HSK – A 63 | 136 | 130 | 64 |
| 55030.MRZ | SK 30 MRZ / WOOD CNC | 121 | 100 | 48 |
| 55063.MRZ | HSK – F 63 MRZ / WOOD CNC | 136 | 130 | 64 |



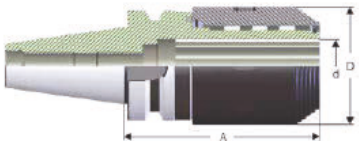



## BT Pens Başlıkları

DEĞERLİ

| Sipariş | BT | Kapasite | D | A |
|---|---|---|---|---|
| 310415 | BT 30 | 415 (2-16) | 43 | 60 |
| 310462 | BT 30 | 462 (2-25) | 60 | 80 |
| 311415 | BT 40 | 415 (2-16) | 43 | 70 |
| 311462 | BT 40 | 462 (2-25) | 60 | 70 |
| 311467 | BT 40 | 467 (3-32) | 72 | 90 |
| 315462 | BT 50 | 462 (2-25) | 60 | 85 |
| 315467 | BT 50 | 467 (3-32) | 72 | 90 |
| 315468 | BT 50 | 468 (3-40) | 85 | 100 |



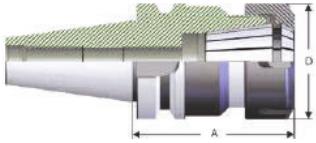



## BT Rulmanlı Pens Başlıkları

DEĞERLİ

| Sipariş | BT | Kapasite | D | A |
|---|---|---|---|---|
| 318420 | BT 40 | 6-20 mm | 75 | 49 |
| 318432 | BT 40 | 6-32 mm | 90 | 68 |
| 319520 | BT 50 | 6-20 mm | 90 | 49 |
| 319532 | BT 50 | 6-32 mm | 95 | 68 |





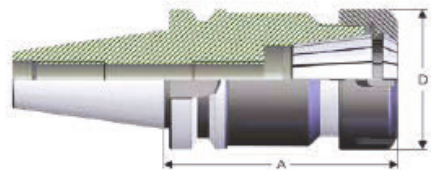

## BT Pens Başlıkları

DEĞERLİ

| Sipariş | BT | Kapasite | D | A |
|---|---|---|---|---|
| 310426 | BT 30 | ER 16 (2-10) | 32 | 70 |
| 310430 | BT 30 | ER 25 (2-16) | 42 | 70 |
| 310470 | BT 30 | ER 32 (2-20) | 50 | 70 |
| 310472 | BT 30 | ER 40 (2-26) | 63 | 70 |
| 311426 | BT 40 | ER 16 (2-10) | 32 | 63 |
| 311430 | BT 40 | ER 25 (2-16) | 42 | 60 |
| 311470 | BT 40 | ER 32 (2-20) | 50 | 70 |
| 311472 | BT 40 | ER 40 (2-26) | 63 | 80 |
| 315426 | BT 50 | ER 16 (2-10) | 32 | 70 |
| 315430 | BT 50 | ER 25 (2-16) | 42 | 70 |
| 315470 | BT 50 | ER 32 (2-20) | 50 | 70 |
| 315472 | BT 50 | ER 40 (2-26) | 63 | 80 |



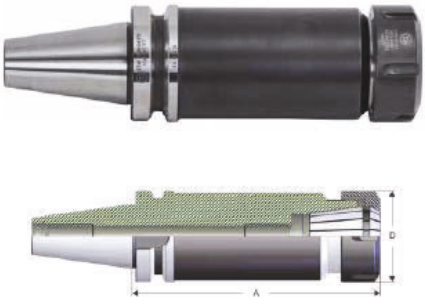





## BT Pens Başlıkları

DEĞERLİ

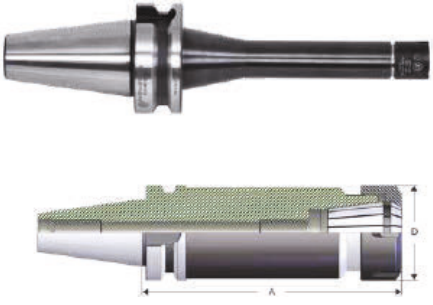
| Sipariş | BT | Kapasite | D | A |
|---|---|---|---|---|
| 310426-1 | BT 30 | ER 16 (2-10) | 32 | 100 |
| 310426-2 | BT 30 | ER 16 (2-10) Mini | 22 | 100 |
| 310430-1 | BT 30 | ER 25 (2-16) | 42 | 100 |
| 310470-1 | BT 30 | ER 32 (2-20) | 50 | 100 |
| 310472-1 | BT 30 | ER 40 (2-26) | 63 | 100 |
| 312426 | BT 40 | ER 16 (2-10) | 32 | 100 |
| 312426-1 | BT 40 | ER 16 (2-10) Mini | 22 | 100 |
| 312430 | BT 40 | ER 25 (2-16) | 42 | 100 |
| 312470 | BT 40 | ER 32 (2-20) | 50 | 100 |
| 312472 | BT 40 | ER 40 (2-26) | 63 | 100 |
| 316426 | BT 50 | ER 16 (2-10) | 32 | 100 |
| 316430 | BT 50 | ER 25 (2-16) | 42 | 100 |
| 316470 | BT 50 | ER 32 (2-20) | 50 | 100 |
| 316472 | BT 50 | ER 40 (2-26) | 63 | 100 |




## BT Pens Başlıkları

DEĞERLİ

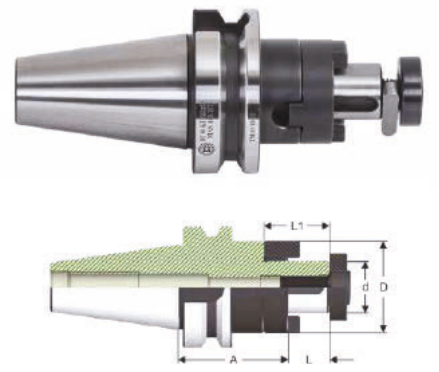
| Sipariş | BT | Kapasite | D | A |
|---|---|---|---|---|
| 310426-3 | BT 30 | ER 16 (2-10) | 32 | 160 |
| 313426 | BT 40 | ER 16 (2-10) | 32 | 160 |
| 313430 | BT 40 | ER 25 (2-16) | 42 | 160 |
| 313470 | BT 40 | ER 32 (2-20) | 50 | 160 |
| 313472 | BT 40 | ER 40 (2-26) | 63 | 160 |
| 317426 | BT 50 | ER 16 (2-10) | 32 | 160 |
| 317430 | BT 50 | ER 25 (2-16) | 42 | 160 |
| 317470 | BT 50 | ER 32 (2-20) | 50 | 160 |
| 317472 | BT 50 | ER 40 (2-26) | 63 | 160 |




## BT Pens Başlıkları

DEĞERLİ

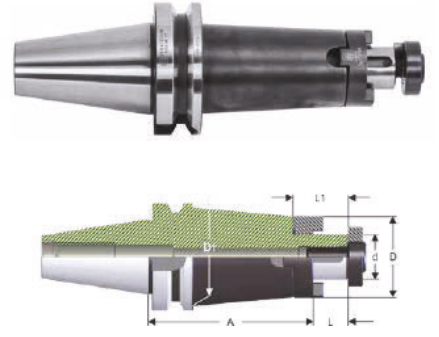
| Sipariş | BT | Kapasite | D | A |
|---|---|---|---|---|
| 313426-1 | BT 40 | ER 16 (2-10) Mini | 32 | 160 |
| 317426-1 | BT 50 | ER 16 (2-10) Mini | 32 | 160 |
| 316472-1 | BT 50 | ER 40 (2-16) | 42 | 130 |
| 317472-1 | BT 50 | ER 40 (2-16) | 50 | 200 |




**BT Kombine Tarama Tutucusu**

DEĞERLİ

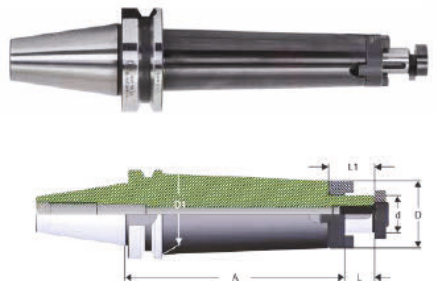
| Sipariş | BT | d h6 | D | A | L | L1 |
|---|---|---|---|---|---|---|
| 323016 | BT 30 | 16 | 32 | 45 | 17 | 27 |
| 323022 | BT 30 | 22 | 40 | 47 | 19 | 31 |
| 323027 | BT 30 | 27 | 48 | 49 | 21 | 33 |
| 324016 | BT 40 | 16 | 32 | 55 | 17 | 27 |
| 324022 | BT 40 | 22 | 40 | 55 | 19 | 31 |
| 324027 | BT 40 | 27 | 48 | 55 | 21 | 33 |
| 324032 | BT 40 | 32 | 58 | 60 | 24 | 38 |
| 324040 | BT 40 | 40 | 70 | 60 | 27 | 41 |
| 325016 | BT 50 | 16 | 32 | 70 | 17 | 27 |
| 325022 | BT 50 | 22 | 40 | 70 | 19 | 31 |
| 325027 | BT 50 | 27 | 48 | 70 | 21 | 33 |
| 325032 | BT 50 | 32 | 58 | 70 | 24 | 38 |
| 325040 | BT 50 | 40 | 70 | 70 | 27 | 41 |




**BT Kombine Tarama Tutucusu**

DEĞERLİ

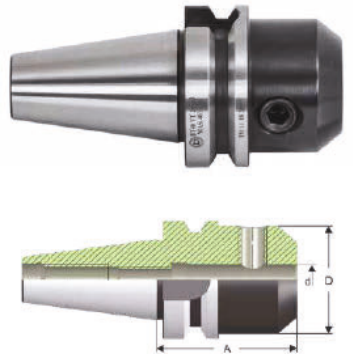
| Sipariş | BT | d h6 | D | A | L | L1 | D1 |
|---|---|---|---|---|---|---|---|
| 324116 | BT 40 | 16 | 32 | 100 | 17 | 27 | 38 |
| 324122 | BT 40 | 22 | 40 | 100 | 19 | 31 | 48 |
| 324127 | BT 40 | 27 | 48 | 100 | 21 | 33 | 58 |
| 324132 | BT 40 | 32 | 58 | 100 | 17 | 38 | 61 |
| 324140 | BT 40 | 40 | 70 | 100 | 19 | 41 | 70 |
| 325116 | BT 50 | 16 | 32 | 100 | 21 | 27 | 38 |
| 325122 | BT 50 | 22 | 40 | 100 | 24 | 31 | 48 |
| 325127 | BT 50 | 27 | 48 | 100 | 27 | 33 | 58 |
| 325132 | BT 50 | 32 | 58 | 100 | 17 | 38 | 68 |
| 325140 | BT 50 | 40 | 70 | 100 | 19 | 41 | 80 |




**BT Kombine Tarama Tutucusu**

DEĞERLİ

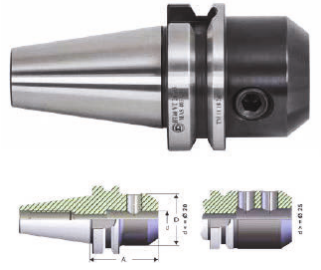
| Sipariş | BT | d h6 | D | A | L | L1 | D1 |
|---|---|---|---|---|---|---|---|
| 324116.1 | BT 40 | 16 | 32 | 160 | 17 | 27 | 38 |
| 324122.1 | BT 40 | 22 | 40 | 160 | 19 | 31 | 48 |
| 324127.1 | BT 40 | 27 | 48 | 160 | 21 | 33 | 58 |
| 324132.1 | BT 40 | 32 | 58 | 160 | 24 | 38 | 61 |
| 324140.1 | BT 40 | 40 | 70 | 160 | 27 | 41 | 70 |
| 325116.1 | BT 50 | 16 | 32 | 160 | 17 | 27 | 38 |
| 325122.1 | BT 50 | 22 | 40 | 160 | 19 | 31 | 48 |
| 325127.1 | BT 50 | 27 | 48 | 160 | 21 | 33 | 58 |
| 325132.1 | BT 50 | 32 | 58 | 160 | 24 | 38 | 68 |
| 325140.1 | BT 50 | 40 | 70 | 160 | 27 | 41 | 80 |




## BT Veldon Tutucular

DEĞERLİ

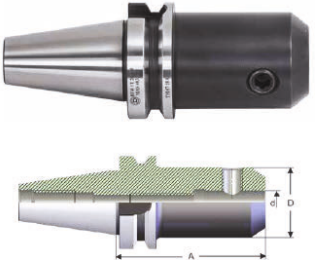
| Sipariş | BT | d h4 | D | A |
|---|---|---|---|---|
| 343006 | BT 30 | 6 | 25 | 50 |
| 343008 | BT 30 | 8 | 28 | 50 |
| 343010 | BT 30 | 10 | 35 | 50 |
| 343012 | BT 30 | 12 | 42 | 50 |
| 343014 | BT 30 | 14 | 44 | 63 |
| 343016 | BT 30 | 16 | 48 | 63 |
| 343018 | BT 30 | 18 | 50 | 63 |
| 343020 | BT 30 | 20 | 52 | 63 |



## BT Veldon Tutucular

DEĞERLİ

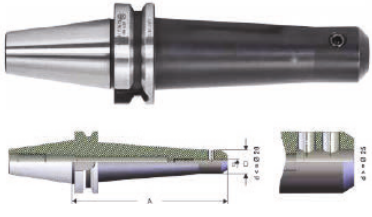
| Sipariş | BT | d h4 | D | A |
|---|---|---|---|---|
| 344006 | BT 40 | 6 | 25 | 50 |
| 344008 | BT 40 | 8 | 28 | 50 |
| 344010 | BT 40 | 10 | 35 | 63 |
| 344012 | BT 40 | 12 | 42 | 63 |
| 344014 | BT 40 | 14 | 44 | 63 |
| 344016 | BT 40 | 16 | 48 | 63 |
| 344018 | BT 40 | 18 | 50 | 63 |
| 344020 | BT 40 | 20 | 52 | 63 |
| 344025 | BT 40 | 25 | 63 | 90 |
| 344032 | BT 40 | 32 | 72 | 100 |
| 344040 | BT 40 | 40 | 79 | 120 |




## BT Veldon Tutucular

DEĞERLİ

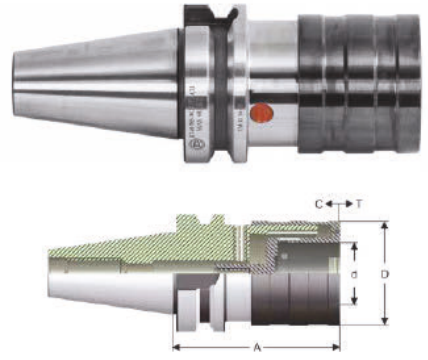
| Sipariş | BT | d h4 | D | A |
|---|---|---|---|---|
| 344106 | BT 40 | 6 | 25 | 100 |
| 344108 | BT 40 | 8 | 28 | 100 |
| 344110 | BT 40 | 10 | 35 | 100 |
| 344112 | BT 40 | 12 | 42 | 100 |
| 344114 | BT 40 | 14 | 44 | 100 |
| 344116 | BT 40 | 16 | 48 | 100 |
| 344118 | BT 40 | 18 | 50 | 100 |
| 344120 | BT 40 | 20 | 52 | 100 |




## BT Veldon Tutucular

DEĞERLİ

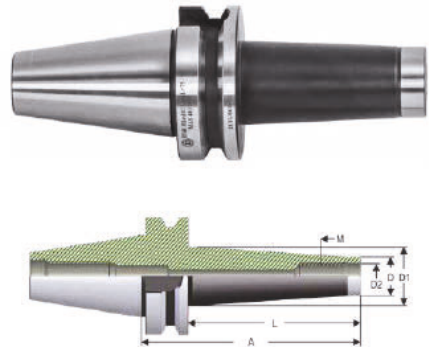
| Sipariş | BT | d h4 | D | A |
|---|---|---|---|---|
| 344106.1 | BT 40 | 6 | 25 | 160 |
| 344108.1 | BT 40 | 8 | 28 | 160 |
| 344110.1 | BT 40 | 10 | 35 | 160 |
| 344112.1 | BT 40 | 12 | 42 | 160 |
| 344114.1 | BT 40 | 14 | 44 | 160 |
| 344116.1 | BT 40 | 16 | 48 | 160 |
| 344118.1 | BT 40 | 18 | 50 | 160 |
| 344120.1 | BT 40 | 20 | 52 | 160 |
| 344125.1 | BT 40 | 25 | 63 | 160 |
| 344132.1 | BT 40 | 32 | 72 | 160 |




| Sipariş | BT | Kapasite | d | A | D | C | T |
|---|---|---|---|---|---|---|---|
| 377214 | BT 40 | M2 - M14 | 19 | 67 | 38 | 7 | 7 |
| 377524 | BT 40 | M5 - M24 | 31 | 93 | 54 | 12 | 12 |
| 3771436 | BT 40 | M14 - M36 | 48 | 136 | 78 | 17,5 | 17,5 |
| 378214 | BT 50 | M2- M14 | 19 | 82 | 38 | 7 | 7 |
| 378524 | BT 50 | M5 - M24 | 31 | 102 | 54 | 12 | 12 |
| 3781436 | BT 50 | M14 - M36 | 48 | 142 | 78 | 17,5 | 17,5 |

**BT Klavuz Çekme**

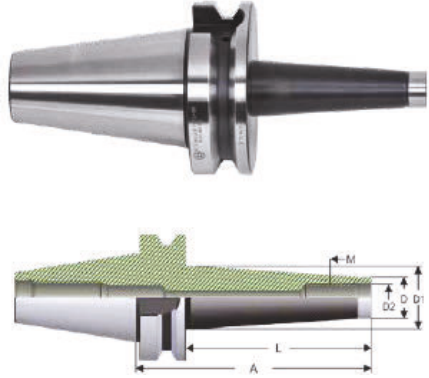
DEĞERLİ




| Sipariş | BT | M | D | D1 | A | L | D2 |
|---|---|---|---|---|---|---|---|
| 384008 | BT 40 | M8 | 13 | 23 | 77 | 50 | 8,5 |
| 384008.1 | BT 40 | M8 | 13 | 25 | 127 | 100 | 8,5 |
| 384008.2 | BT 40 | M8 | 13 | 30 | 177 | 150 | 8,5 |
| 384010 | BT 40 | M10 | 18 | 23 | 77 | 50 | 10,5 |
| 384010.1 | BT 40 | M10 | 18 | 32 | 127 | 100 | 10,5 |
| 384010.2 | BT 40 | M10 | 18 | 36 | 177 | 150 | 10,5 |
| 384012 | BT 40 | M12 | 21 | 25 | 77 | 50 | 12,5 |
| 384012.1 | BT 40 | M12 | 21 | 32 | 127 | 100 | 12,5 |
| 384012.2 | BT 40 | M12 | 21 | 40 | 177 | 150 | 12,5 |
| 384016 | BT 40 | M16 | 29 | 34 | 102 | 75 | 17 |
| 384016.1 | BT 40 | M16 | 29 | - | 52 | 25 | 17 |
| 384016.2 | BT 40 | M16 | 29 | 40 | 152 | 125 | 17 |

**BT Vidalı Takım**

DEĞERLİ

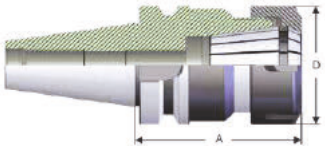



| Sipariş | BT | M | D | D1 | A | L | D2 |
|---|---|---|---|---|---|---|---|
| 385008 | BT 50 | M8 | 13 | 25 | 138 | 100 | 8,5 |
| 385008.1 | BT 50 | M8 | 13 | 30 | 188 | 150 | 8,5 |
| 385010 | BT 50 | M10 | 18 | 32 | 138 | 100 | 10,5 |
| 385010.1 | BT 50 | M10 | 18 | 36 | 188 | 150 | 10,5 |
| 385012 | BT 50 | M12 | 21 | 33 | 138 | 100 | 12,5 |
| 385012.1 | BT 50 | M12 | 21 | 40 | 188 | 150 | 12,5 |
| 385016 | BT 50 | M16 | 29 | 36 | 138 | 100 | 17 |
| 385016.1 | BT 50 | M16 | 29 | 42 | 188 | 150 | 17 |

**BT Vidalı Takım**

DEĞERLİ






## BBT ER Serisi Pens Başlıkları

DEĞERLİ

| Sipariş | BBT | Kapasite | D | A |
|---|---|---|---|---|
| 311426.DGP | BBT 40 | ER 16 (2-10) | 32 | 63 |
| 311430.DGP | BBT 40 | ER 25 (2-16) | 42 | 60 |
| 311470.DGP | BBT 40 | ER 32 (2-20) | 50 | 70 |
| 311472.DGP | BBT 40 | ER 40 (2-26) | 63 | 80 |
| 315426.DGP | BBT 50 | ER 16 (2-10) | 32 | 70 |
| 315430.DGP | BBT 50 | ER 25 (2-16) | 42 | 70 |
| 315470.DGP | BBT 50 | ER 32 (2-20) | 50 | 70 |
| 315472.DGP | BBT 50 | ER 40 (2-26) | 63 | 80 |
| 315467.DGP | BBT 50 | 467 (3-32) | 72 | 90 |



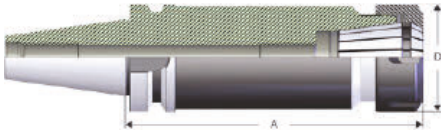

## BBT ER Serisi Pens Başlıkları

DEĞERLİ

| Sipariş | BBT | Kapasite | D | A |
|---|---|---|---|---|
| 312426.DGP | BBT 40 | ER 16 (2-10) | 32 | 100 |
| 312426-1.DGP | BBT 40 | ER 16 Mini (2-10) | 22 | 100 |
| 312430.DGP | BBT 40 | ER 25 (2-16) | 42 | 100 |
| 312470.DGP | BBT 40 | ER 32 (2-20) | 50 | 100 |
| 312472.DGP | BBT 40 | ER 40 (2-26) | 63 | 100 |
| 316426.DGP | BBT 50 | ER 16 (2-10) | 32 | 100 |
| 316430.DGP | BBT 50 | ER 25 (2-16) | 42 | 100 |
| 316470.DGP | BBT 50 | ER 32 (2-20) | 50 | 100 |
| 316472.DGP | BBT 50 | ER 40 (2-26) | 63 | 100 |
| 316467.DGP | BBT 50 | ER 40 (2-26) | 63 | 130 |





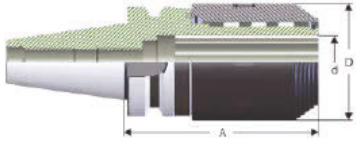



## BBT ER Serisi Pens Başlıkları

DEĞERLİ

| Sipariş | BBT | Kapasite | D | A |
|---|---|---|---|---|
| 313426.DGP | BBT 40 | ER 16 (2-10) | 32 | 160 |
| 313426-1.DGP | BBT 40 | ER 16 Mini (2-10) | 22 | 160 |
| 313430.DGP | BBT 40 | ER 25 (2-16) | 42 | 160 |
| 313470.DGP | BBT 40 | ER 32 (2-20) | 50 | 160 |
| 313472.DGP | BBT 40 | ER 40 (2-26) | 63 | 160 |
| 317426.DGP | BBT 50 | ER 16 (2-10) | 32 | 160 |
| 317426-1.DGP | BBT 50 | ER 16 Mini (2-10) | 22 | 160 |
| 317426-2.DGP | BBT 50 | ER 16 (2-10) | 32 | 200 |
| 317430.DGP | BBT 50 | ER 25 (2-16) | 42 | 160 |
| 317470.DGP | BBT 50 | ER 32 (2-20) | 50 | 160 |
| 317472.DGP | BBT 50 | ER 40 (2-26) | 63 | 160 |
| 317472-1.DGP | BBT 50 | ER 40 (2-26) | 63 | 200 |



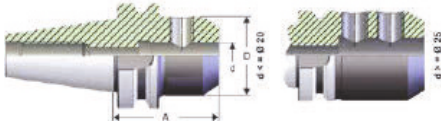



## BBT Rulmanlı Pens Başlıkları

DEĞERLİ

| Sipariş | BBT | Kapasite | D | A |
|---|---|---|---|---|
| 318420.DGP | BBT 40 | 6-20 mm | 75 | 49 |
| 318432.DGP | BBT 40 | 6-32 mm | 90 | 68 |
| 319520.DGP | BBT 50 | 6-20 mm | 90 | 49 |
| 319532.DGP | BBT 50 | 6-32 mm | 95 | 68 |



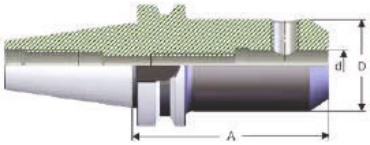



## BBT Veldon Tutucu

DEĞERLİ

| Sipariş | BT | d h4 | D | A |
|---|---|---|---|---|
| 344006.DGP | BBT 40 | 6 | 25 | 50 |
| 344008.DGP | BBT 40 | 8 | 28 | 50 |
| 344010.DGP | BBT 40 | 10 | 35 | 63 |
| 344012.DGP | BBT 40 | 12 | 42 | 63 |
| 344014.DGP | BBT 40 | 14 | 44 | 63 |
| 344016.DGP | BBT 40 | 16 | 48 | 63 |
| 344016.0.DGP | BBT 40 | 16 | 48 | 35 |
| 344018.DGP | BBT 40 | 18 | 50 | 63 |
| 344020.DGP | BBT 40 | 20 | 52 | 63 |
| 344020.0.DGP | BBT 40 | 20 | 52 | 35 |
| 344025.DGP | BBT 40 | 25 | 63 | 90 |
| 344025.0.DGP | BBT 40 | 25 | 63 | 35 |
| 344032.DGP | BBT 40 | 32 | 72 | 100 |
| 344032.0.DGP | BBT 40 | 32 | 72 | 65 |
| 344040.DGP | BBT 40 | 40 | 79 | 120 |



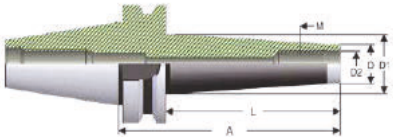



## BBT Veldon Tutucular

DEĞERLİ

| Sipariş | BT | d h4 | D | A |
|---|---|---|---|---|
| 344106.DGP | BBT 40 | 6 | 25 | 100 |
| 344108.DGP | BBT 40 | 8 | 28 | 100 |
| 344110.DGP | BBT 40 | 10 | 35 | 100 |
| 344112.DGP | BBT 40 | 12 | 42 | 100 |
| 344114.DGP | BBT 40 | 14 | 44 | 100 |
| 344116.DGP | BBT 40 | 16 | 48 | 100 |
| 344118.DGP | BBT 40 | 18 | 50 | 100 |
| 344120.DGP | BBT 40 | 20 | 52 | 100 |






## BBT Vidalı Freze Takım Tutucuları

DEĞERLİ

| Sipariş | BT | M | D | D1 | A | L | D2 |
|---|---|---|---|---|---|---|---|
| 384006.DGP | BBT 40 | M6 | 10 | 13 | 52 | 25 | 6,5 |
| 384006.1.DGP | BBT 40 | M6 | 10 | 20 | 77 | 50 | 6,5 |
| 384006.2.DGP | BBT 40 | M6 | 10 | 23 | 102 | 75 | 6,5 |
| 384008.DGP | BBT 40 | M8 | 13 | 15 | 52 | 25 | 8,5 |
| 384008.1.DGP | BBT 40 | M8 | 13 | 23 | 77 | 50 | 8,5 |
| 384008.2.DGP | BBT 40 | M8 | 13 | 23 | 102 | 75 | 8,5 |
| 384008.3.DGP | BBT 40 | M8 | 13 | 25 | 127 | 100 | 8,5 |
| 384010.DGP | BBT 40 | M10 | 18 | 20 | 52 | 25 | 10,5 |
| 384010.1.DGP | BBT 40 | M10 | 18 | 23 | 77 | 50 | 10,5 |
| 384010.2.DGP | BBT 40 | M10 | 18 | 28 | 102 | 75 | 10,5 |
| 384010.3.DGP | BBT 40 | M10 | 18 | 36,5 | 177 | 150 | 10,5 |
| 384012.DGP | BBT 40 | M12 | 21 | 24 | 52 | 25 | 12,5 |
| 384012.1.DGP | BBT 40 | M12 | 21 | 24 | 77 | 50 | 12,5 |
| 384012.2.DGP | BBT 40 | M12 | 21 | 31 | 102 | 75 | 12,5 |
| 384012.3.DGP | BBT 40 | M12 | 21 | 36 | 152 | 125 | 12,5 |
| 384012.4.DGP | BBT 40 | M12 | 21 | 38 | 177 | 150 | 12,5 |
| 384016.DGP | BBT 40 | M16 | 29 | 29 | 52 | 25 | 17 |
| 384016.1.DGP | BBT 40 | M16 | 29 | 34 | 77 | 50 | 17 |
| 384016.2.DGP | BBT 40 | M16 | 29 | 34 | 102 | 75 | 17 |
| 384016.3.DGP | BBT 40 | M16 | 29 | 36 | 127 | 100 | 17 |
| 384016.4.DGP | BBT 40 | M16 | 29 | 40 | 152 | 125 | 17 |
| 384016.5.DGP | BBT 40 | M16 | 29 | 42,5 | 177 | 150 | 17 |




## ISO Pens Başlığı

DEĞERLİ

| Sipariş | ISO | Kapasite | D | A |
|---|---|---|---|---|
| 210415 | ISO 30 | 415 (2-16) | 45 | 50 |
| 210462 | ISO 30 | 462 (2-25) | 60 | 80 |
| 211415 | ISO 40 | 415 (2-16) | 43 | 55 |
| 211462 | ISO 40 | 462 (2-25) | 60 | 66 |
| 211467 | ISO 40 | 467 (3-32) | 72 | 95 |
| 215462 | ISO 50 | 462 (2-25) | 60 | 71 |
| 215467 | ISO 50 | 467 (3-32) | 72 | 73 |
| 215468 | ISO 50 | 468 (3-40) | 85 | 75 |




## ISO ER Serisi Pens Başlığı

DEĞERLİ

| Sipariş | ISO | Kapasite | D | A |
|---|---|---|---|---|
| 210430 | ISO 30 | ER 25 (2-16) | 42 | 50 |
| 210470 | ISO 30 | ER 32 (2-20) | 50 | 50 |
| 210472 | ISO 30 | ER 40 (2-26) | 63 | 65 |
| 211430 | ISO 40 | ER 25 (2-16) | 42 | 50 |
| 211470 | ISO 40 | ER 32 (2-20) | 50 | 50 |
| 211472 | ISO 40 | ER 40 (2-26) | 63 | 80 |
| 215470 | ISO 50 | ER 32 (2-20) | 50 | 63 |
| 215472 | ISO 50 | ER 40 (2-26) | 63 | 63 |




## ISO Veldon Tutucu

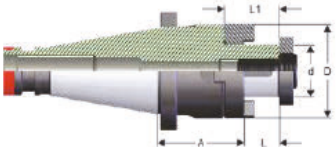
DEĞERLİ

| Sipariş | ISO | d h4 | D | A |
|---|---|---|---|---|
| 244006 | ISO 40 | 6 | 25 | 50 |
| 244008 | ISO 40 | 8 | 28 | 50 |
| 244010 | ISO 40 | 10 | 35 | 50 |
| 244012 | ISO 40 | 12 | 42 | 50 |
| 244014 | ISO 40 | 14 | 44 | 50 |
| 244016 | ISO 40 | 16 | 48 | 63 |
| 244018 | ISO 40 | 18 | 50 | 63 |
| 244020 | ISO 40 | 20 | 52 | 63 |
| 244025 | ISO 40 | 25 | 63 | 80 |
| 244032 | ISO 40 | 32 | 72 | 80 |
| 244040 | ISO 40 | 40 | 79 | 90 |

## ISO Kombine Tarama Tutucusu

DEĞERLİ



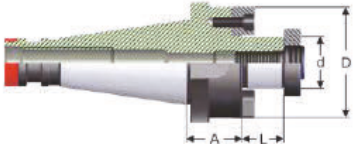



| Sipariş | ISO | d h6 | D | A | L | L1 |
|---|---|---|---|---|---|---|
| 223016 | ISO 30 | 16 | 32 | 35 | 17 | 27 |
| 223022 | ISO 30 | 22 | 40 | 35 | 19 | 31 |
| 223027 | ISO 30 | 27 | 48 | 35 | 21 | 33 |
| 223022 | ISO 30 | 32 | 58 | 50 | 24 | 38 |
| 224016 | ISO 40 | 16 | 32 | 52 | 17 | 27 |
| 224022 | ISO 40 | 22 | 40 | 52 | 19 | 31 |
| 224027 | ISO 40 | 27 | 48 | 52 | 21 | 33 |
| 224032 | ISO 40 | 32 | 58 | 52 | 24 | 38 |
| 224040 | ISO 40 | 40 | 70 | 52 | 27 | 41 |
| 225016 | ISO 50 | 16 | 32 | 55 | 17 | 27 |
| 225022 | ISO 50 | 22 | 40 | 55 | 19 | 31 |
| 225027 | ISO 50 | 27 | 48 | 55 | 21 | 33 |
| 225032 | ISO 50 | 32 | 58 | 55 | 24 | 38 |
| 225040 | ISO 50 | 40 | 70 | 55 | 27 | 41 |

## ISO Alın Kamalı Tarama Tutucusu

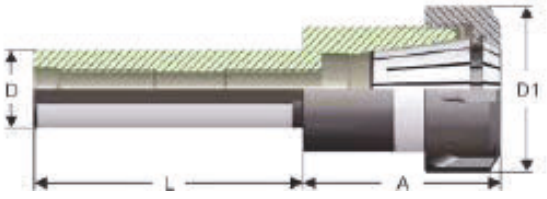
DEĞERLİ






| Sipariş | ISO | d h6 | D | A | L |
|---|---|---|---|---|---|
| 234016 | ISO 40 | 16 | 38 | 30 | 17 |
| 234022 | ISO 40 | 22 | 48 | 30 | 19 |
| 234027 | ISO 40 | 27 | 58 | 30 | 21 |
| 234022 | ISO 40 | 32 | 78 | 30 | 24 |
| 234040 | ISO 40 | 40 | 88 | 30 | 27 |
| 235016 | ISO 50 | 16 | 38 | 35 | 17 |
| 235022 | ISO 50 | 22 | 48 | 35 | 19 |
| 235027 | ISO 50 | 27 | 58 | 35 | 21 |
| 235032 | ISO 50 | 32 | 78 | 40 | 24 |
| 235040 | ISO 50 | 40 | 88 | 40 | 27 |
| 235060 | ISO 50 | 60 | 128 | 55 | 40 |



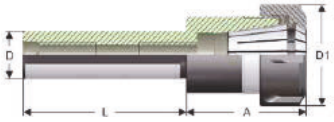



## Ø 20 Silindirik Şaftlı Pens Başlığı

DEĞERLİ

| Sipariş | Ø | Kapasite | D | L | A | D1 |
|---|---|---|---|---|---|---|
| 416426.3 | 16 | ER 16 Mini (2-10) | 16 | 150 | 35 | 22 |
| 420426 | 20 | ER 16 (2-10) | 20 | 70 | 30 | 32 |
| 420426.1 | 20 | ER 16 (2-10) | 20 | 100 | 30 | 32 |
| 420426.2 | 20 | ER 16 Mini (2-10) | 20 | 100 | 30 | 22 |
| 420426.3 | 20 | ER 16 Mini (2-10) | 20 | 150 | 30 | 22 |
| 420426.4 | 20 | ER 16 (2-10) | 20 | 150 | 30 | 32 |
| 420426.5 | 20 | ER 16 Mini (2-10) | 20 | 200 | 30 | 22 |
| 420428 | 20 | ER 20 (2-13) | 20 | 700 | 45 | 34 |
| 420428.1 | 20 | ER 20 (2-13) | 20 | 100 | 45 | 34 |
| 420428.2 | 20 | ER 20 (2-13) | 20 | 150 | 45 | 34 |
| 420430 | 20 | ER 25 (2-16) | 20 | 70 | 52 | 42 |
| 420430.1 | 20 | ER 25 (2-16) | 20 | 150 | 52 | 42 |
| 420470 | 20 | ER 32 (2-20) | 20 | 70 | 55 | 50 |
| 420470.1 | 20 | ER 32 (2-20) | 20 | 150 | 55 | 50 |



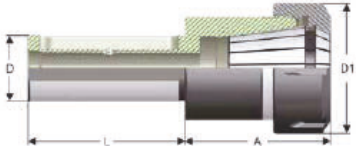



## Ø 25 Silindirik Şaftlı Pens Başlığı

DEĞERLİ

| Sipariş | Ø | Kapasite | D | L | A | D1 |
|---|---|---|---|---|---|---|
| 425426 | 25 | ER 16 (2-10) | 25 | 70 | 32 | 32 |
| 425426.1 | 25 | ER 16 (2-10) | 25 | 150 | 32 | 32 |
| 425428 | 25 | ER 20 (2-13) | 25 | 70 | 35 | 34 |
| 425428.1 | 25 | ER 20 (2-13) | 25 | 150 | 35 | 34 |
| 425430 | 25 | ER 25 (2-16) | 25 | 70 | 50 | 42 |
| 425430.1 | 25 | ER 25 (2-16) | 25 | 150 | 50 | 42 |
| 425470 | 25 | ER 32 (2-20) | 25 | 70 | 55 | 50 |
| 425470.1 | 25 | ER 32 (2-20) | 25 | 150 | 55 | 50 |



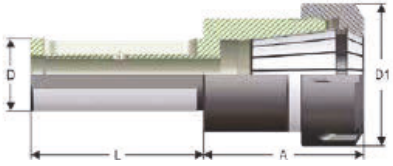



## Ø 32 Silindirik Şaftlı Pens Başlığı

DEĞERLİ

| Sipariş | Ø | Kapasite | D | L | A | D1 |
|---|---|---|---|---|---|---|
| 432426 | 32 | ER 16 (2-10) | 32 | 80 | 32 | 32 |
| 432430 | 32 | ER 25 (2-16) | 32 | 80 | 32 | 42 |
| 432430.1 | 32 | ER 25 (2-16) | 32 | 150 | 32 | 42 |
| 432470 | 32 | ER 32 (2-20) | 32 | 80 | 52 | 50 |
| 432470.1 | 32 | ER 32 (2-20) | 32 | 150 | 52 | 50 |
| 432472 | 32 | ER 40 (2-26) | 32 | 80 | 63 | 63 |
| 432472.1 | 32 | ER 40 (2-26) | 32 | 150 | 63 | 63 |



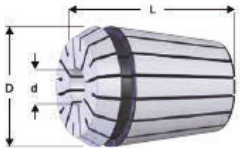



## Ø 40 Silindirik Şaftlı Pens Başlığı

DEĞERLİ

| Sipariş | Ø | Kapasite | D | L | A | D1 |
|---|---|---|---|---|---|---|
| 440430 | 40 | ER 25 (2-16) | 40 | 85 | 32 | 42 |
| 440430.1 | 40 | ER 25 (2-16) | 40 | 150 | 32 | 42 |
| 440470 | 40 | ER 32 (2-20) | 40 | 85 | 35 | 50 |
| 440470.1 | 40 | ER 32 (2-20) | 40 | 150 | 35 | 50 |
| 440472 | 40 | ER 40 (2-26) | 40 | 85 | 45 | 63 |
| 440472.1 | 40 | ER 40 (2-26) | 40 | 150 | 45 | 63 |



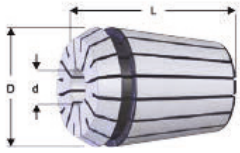



| Sipariş | Pens | Kapasite | D | L |
|---|---|---|---|---|
| 100426.03 | ER 16 - 426 | 3 - 2 mm | 17 | 27,5 |
| 100426.04 | ER 16 - 426 | 4 - 3 mm | 17 | 27,5 |
| 100426.05 | ER 16 - 426 | 5 - 4 mm | 17 | 27,5 |
| 100426.06 | ER 16 - 426 | 6 - 5 mm | 17 | 27,5 |
| 100426.07 | ER 16 - 426 | 7 - 6 mm | 17 | 27,5 |
| 100426.08 | ER 16 - 426 | 8 - 7 mm | 17 | 27,5 |
| 100426.09 | ER 16 - 426 | 9 - 8 mm | 17 | 27,5 |
| 100426.10 | ER 16 - 426 | 10 - 9 mm | 17 | 27,5 |

**ER16 Pensler**

DEĞERLİ



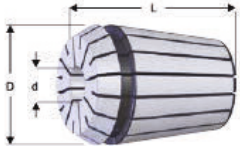



| Sipariş | Pens | Kapasite | D | L |
|---|---|---|---|---|
| 100428.03 | ER 20 - 428 | 3 - 2 mm | 21 | 31,5 |
| 100428.04 | ER 20 - 428 | 4 - 3 mm | 21 | 31,5 |
| 100428.05 | ER 20 - 428 | 5 - 4 mm | 21 | 31,5 |
| 100428.06 | ER 20 - 428 | 6 - 5 mm | 21 | 31,5 |
| 100428.07 | ER 20 - 428 | 7 - 6 mm | 21 | 31,5 |
| 100428.08 | ER 20 - 428 | 8 - 7 mm | 21 | 31,5 |
| 100428.09 | ER 20 - 428 | 9 - 8 mm | 21 | 31,5 |
| 100428.10 | ER 20 - 428 | 10 - 9 mm | 21 | 31,5 |
| 100428.11 | ER 20 - 428 | 11 - 10 mm | 21 | 31,5 |
| 100428.12 | ER 20 - 428 | 12 - 11 mm | 21 | 31,5 |
| 100428.13 | ER 20 - 428 | 13 - 12 mm | 21 | 31,5 |

**ER20 Pensler**

DEĞERLİ



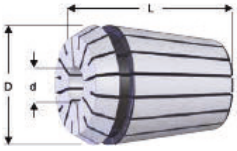



| Sipariş | Pens | Kapasite | D | L |
|---|---|---|---|---|
| 100430.03 | ER 25 - 430 | 3 - 2 mm | 26 | 34 |
| 100430.04 | ER 25 - 430 | 4 - 3 mm | 26 | 34 |
| 100430.05 | ER 25 - 430 | 5 - 4 mm | 26 | 34 |
| 100430.06 | ER 25 - 430 | 6 - 5 mm | 26 | 34 |
| 100430.07 | ER 25 - 430 | 7 - 6 mm | 26 | 34 |
| 100430.08 | ER 25 - 430 | 8 - 7 mm | 26 | 34 |
| 100430.09 | ER 25 - 430 | 9 - 8 mm | 26 | 34 |
| 100430.10 | ER 25 - 430 | 10 - 9 mm | 26 | 34 |
| 100430.11 | ER 25 - 430 | 11 - 10 mm | 26 | 34 |
| 100430.12 | ER 25 - 430 | 12 - 11 mm | 26 | 34 |
| 100430.13 | ER 25 - 430 | 13 - 12 mm | 26 | 34 |
| 100430.14 | ER 25 - 430 | 14 - 13 mm | 26 | 34 |
| 100430.15 | ER 25 - 430 | 15 - 14 mm | 26 | 34 |
| 100430.16 | ER 25 - 430 | 16 - 15 mm | 26 | 34 |

**ER25 Pensler**

DEĞERLİ



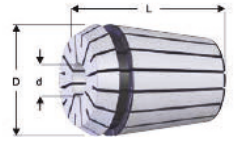



| Sipariş | Pens | Kapasite | D | L |
|---|---|---|---|---|
| 100470.03 | ER 32 - 470 | 3 - 2 mm | 33 | 40 |
| 100470.04 | ER 32 - 470 | 4 - 3 mm | 33 | 40 |
| 100470.05 | ER 32 - 470 | 5 - 4 mm | 33 | 40 |
| 100470.06 | ER 32 - 470 | 6 - 5 mm | 33 | 40 |
| 100470.07 | ER 32 - 470 | 7 - 6 mm | 33 | 40 |
| 100470.08 | ER 32 - 470 | 8 - 7 mm | 33 | 40 |
| 100470.09 | ER 32 - 470 | 9 - 8 mm | 33 | 40 |
| 100470.10 | ER 32 - 470 | 10 - 9 mm | 33 | 40 |
| 100470.11 | ER 32 - 470 | 11 - 10 mm | 33 | 40 |
| 100470.12 | ER 32 - 470 | 12 - 11 mm | 33 | 40 |
| 100470.13 | ER 32 - 470 | 13 - 12 mm | 33 | 40 |
| 100470.14 | ER 32 - 470 | 14 - 13 mm | 33 | 40 |
| 100470.15 | ER 32 - 470 | 15 - 14 mm | 33 | 40 |
| 100470.16 | ER 32 - 470 | 16 - 15 mm | 33 | 40 |
| 100470.17 | ER 32 - 470 | 17 - 16 mm | 33 | 40 |
| 100470.18 | ER 32 - 470 | 18 - 17 mm | 33 | 40 |
| 100470.19 | ER 32 - 470 | 19 - 18 mm | 33 | 40 |
| 100470.20 | ER 32 - 470 | 20 - 19 mm | 33 | 40 |

**ER32 Pensler**

DEĞERLİ

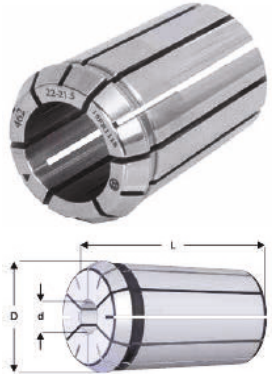





| Sipariş | Pens | Kapasite | D | L |
|---|---|---|---|---|
| 100472.03 | ER 40 - 472 | 3 - 2 mm | 41 | 46 |
| 100472.04 | ER 40 - 472 | 4 - 3 mm | 41 | 46 |
| 100472.05 | ER 40 - 472 | 5 - 4 mm | 41 | 46 |
| 100472.06 | ER 40 - 472 | 6 - 5 mm | 41 | 46 |
| 100472.07 | ER 40 - 472 | 7 - 6 mm | 41 | 46 |
| 100472.08 | ER 40 - 472 | 8 - 7 mm | 41 | 46 |
| 100472.09 | ER 40 - 472 | 9 - 8 mm | 41 | 46 |
| 100472.10 | ER 40 - 472 | 10 - 9 mm | 41 | 46 |
| 100472.11 | ER 40 - 472 | 11 - 10 mm | 41 | 46 |
| 100472.12 | ER 40 - 472 | 12 - 11 mm | 41 | 46 |
| 100472.13 | ER 40 - 472 | 13 - 12 mm | 41 | 46 |
| 100472.14 | ER 40 - 472 | 14 - 13 mm | 41 | 46 |
| 100472.15 | ER 40 - 472 | 15 - 14 mm | 41 | 46 |
| 100472.16 | ER 40 - 472 | 16 - 15 mm | 41 | 46 |
| 100472.17 | ER 40 - 472 | 17 - 16 mm | 41 | 46 |
| 100472.18 | ER 40 - 472 | 18 - 17 mm | 41 | 46 |
| 100472.19 | ER 40 - 472 | 19 - 18 mm | 41 | 46 |
| 100472.20 | ER 40 - 472 | 20 - 19 mm | 41 | 46 |
| 100472.21 | ER 40 - 472 | 21 - 20 mm | 41 | 46 |
| 100472.22 | ER 40 - 472 | 22 - 21 mm | 41 | 46 |
| 100472.23 | ER 40 - 472 | 23 - 22 mm | 41 | 46 |
| 100472.24 | ER 40 - 472 | 24 - 23 mm | 41 | 46 |
| 100472.25 | ER 40 - 472 | 25 - 24 mm | 41 | 46 |
| 100472.26 | ER 40 - 472 | 26 - 25 mm | 41 | 46 |

**ER40 Pensler**

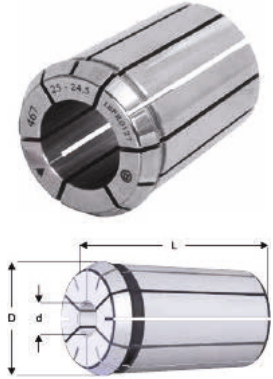
DEĞERLİ




## 462 Pensler

DEĞERLİ

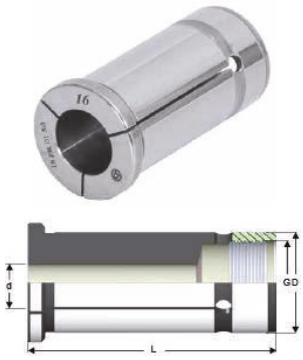
| Sipariş | Pens | Kapasite | D | L |
|---|---|---|---|---|
| 100462.03 | 462 | 3 - 2,5 mm | 35,05 | 52 |
| 100462.04 | 462 | 4 - 3,5 mm | 35,05 | 52 |
| 100462.05 | 462 | 5 - 4,5 mm | 35,05 | 52 |
| 100462.06 | 462 | 6 - 5,5 mm | 35,05 | 52 |
| 100462.07 | 462 | 7 - 6,5 mm | 35,05 | 52 |
| 100462.08 | 462 | 8 - 7,5 mm | 35,05 | 52 |
| 100462.09 | 462 | 9 - 8,5 mm | 35,05 | 52 |
| 100462.10 | 462 | 10 - 9,5 mm | 35,05 | 52 |
| 100462.11 | 462 | 11 - 10,5 mm | 35,05 | 52 |
| 100462.12 | 462 | 12 - 11,5 mm | 35,05 | 52 |
| 100462.13 | 462 | 13 - 12,5 mm | 35,05 | 52 |
| 100462.14 | 462 | 14 - 13,5 mm | 35,05 | 52 |
| 100462.15 | 462 | 15 - 14,5 mm | 35,05 | 52 |
| 100462.16 | 462 | 16 - 15,5 mm | 35,05 | 52 |
| 100462.17 | 462 | 17 - 16,5 mm | 35,05 | 52 |
| 100462.18 | 462 | 18 - 17,5 mm | 35,05 | 52 |
| 100462.19 | 462 | 19 - 18,5 mm | 35,05 | 52 |
| 100462.20 | 462 | 20 - 19,5 mm | 35,05 | 52 |
| 100462.21 | 462 | 21 - 20,5 mm | 35,05 | 52 |
| 100462.22 | 462 | 22 - 21,5 mm | 35,05 | 52 |
| 100462.23 | 462 | 23 - 22,5 mm | 35,05 | 52 |
| 100462.24 | 462 | 24 - 23,5 mm | 35,05 | 52 |
| 100462.25 | 462 | 25 - 24,5 mm | 35,05 | 52 |




## 467 Pensler

DEĞERLİ

| Sipariş | Pens | Kapasite | D | L |
|---|---|---|---|---|
| 100467.03 | 467 | 3 - 2,5 mm | 41,7 | 60 |
| 100467.04 | 467 | 4 - 3,5 mm | 41,7 | 60 |
| 100467.05 | 467 | 5 - 4,5 mm | 41,7 | 60 |
| 100467.06 | 467 | 6 - 5,5 mm | 41,7 | 60 |
| 100467.07 | 467 | 7 - 6,5 mm | 41,7 | 60 |
| 100467.08 | 467 | 8 - 7,5 mm | 41,7 | 60 |
| 100467.09 | 467 | 9 - 8,5 mm | 41,7 | 60 |
| 100467.10 | 467 | 10 - 9,5 mm | 41,7 | 60 |
| 100467.11 | 467 | 11 - 10,5 mm | 41,7 | 60 |
| 100467.12 | 467 | 12 - 11,5 mm | 41,7 | 60 |
| 100467.13 | 467 | 13 - 12,5 mm | 41,7 | 60 |
| 100467.14 | 467 | 14 - 13,5 mm | 41,7 | 60 |
| 100467.15 | 467 | 15 - 14,5 mm | 41,7 | 60 |
| 100467.16 | 467 | 16 - 15,5 mm | 41,7 | 60 |
| 100467.17 | 467 | 17 - 16,5 mm | 41,7 | 60 |
| 100467.18 | 467 | 18 - 17,5 mm | 41,7 | 60 |
| 100467.19 | 467 | 19 - 18,5 mm | 41,7 | 60 |
| 100467.20 | 467 | 20 - 19,5 mm | 41,7 | 60 |
| 100467.21 | 467 | 21 - 20,5 mm | 41,7 | 60 |
| 100467.22 | 467 | 22 - 21,5 mm | 41,7 | 60 |
| 100467.23 | 467 | 23 - 22,5 mm | 41,7 | 60 |
| 100467.24 | 467 | 24 - 23,5 mm | 41,7 | 60 |
| 100467.25 | 467 | 25 - 24,5 mm | 41,7 | 60 |
| 100467.26 | 467 | 26 - 25,5 mm | 41,7 | 60 |
| 100467.27 | 467 | 27 - 26,5 mm | 41,7 | 60 |
| 100467.28 | 467 | 28 - 27,5 mm | 41,7 | 60 |
| 100467.29 | 467 | 29 - 28,5 mm | 41,7 | 60 |
| 100467.30 | 467 | 30 - 29,5 mm | 41,7 | 60 |
| 100467.31 | 467 | 31 - 30,5 mm | 41,7 | 60 |
| 100467.32 | 467 | 32 - 31, mm | 41,7 | 60 |




## Rulmanlı Tutucu Pensi

DEĞERLİ

| Sipariş | Ø | Kapasite (d) | D | L | G |
|---|---|---|---|---|---|
| 150020.XX | 20 | 3-16 | 20 | 60 | M16 x 1 |
| 150025.XX | 25 | 3-20 | 25 | 68 | M21 x 1 |
| 150032.XX | 32 | 3-25 | 32 | 70 | M26 x 1 |



## Başlıksız Anahtarlı E Tipi Takımlar

DEĞERLİ

| Sipariş | Pens | Adet | Ölçüler |
|---|---|---|---|
| 000415 | 415 | 15 | 3-4-5-6-7-8-9-10-11-12-13-14-15-16 - 904042 |
| 000462 | 462 | 17 | 4-5-6-7-8-9-10-11-12-14<br>16-18-20-22-24-25 - 905862 |
| 000467 | 467 | 17 | 5-6-7-8-10-12-14-16-18<br>20-22-24-25-28-30-32 - 906875 |
| 000468 | 468 | 21 | 6-7-8-9-10-12-14-16-18-20-22<br>24-25-28-30-32-34-36-38-40 - 908090 |



## Başlıksız Anahtarlı ER Serisi Takımlar

DEĞERLİ

| Sipariş | Pens | Adet | Ölçüler |
|---|---|---|---|
| 000426 | ER 16 / 426 | 8 | 3-4-5-6-7-8-9-10 |
| 000428 | ER 20 / 428 | 11 | 3-4-5-6-7-8-9-10-11-12-13 |
| 000430-1 | ER 25 / 430 | 14 | 3-4-5-6-7-8-10-11-12-13-14-15-16 |
| 000470-1 | ER 32 / 470 | 18 | 3-4-5-6-7-8-10-11-12<br>13-14-15-16-17-18-19-20 |
| 000472-1 | ER 40 / 472 | 23 | 4-5-6-7-8-10-11-12-13-14-15<br>16-17-18-19-20-21-22-23-24-25-26 |



## Başlıksız Anahtarlı ER Serisi Takımlar

DEĞERLİ

| Sipariş | Pens | Adet | Ölçüler |
|---|---|---|---|
| 000430 | ER 25 / 430 | 13 | 3-4-5-6-7-8-9-10<br>11-12-14-16 - 9042430 |
| 000470 | ER 32 / 470 | 15 | 3-4-5-6-7-8-9-10-11<br>12-14-16-18-20 - 9050470 |
| 000472 | ER 40 / 472 | 17 | 4-5-6-7-8-9-10-11-12<br>14-16-18-20-22-24-26 - 9063472 |



| Sipariş | Ölçüler |
|---|---|
| 000415 | HSK - F 63 / 462 (A - 78) |
| 000462 | HSK - F 63 / ER-32 470 (A - 70) |
| 000467 | HSK - F 63 / ER-40 472 (A - 78) |

**CNC Marangoz Tezgahları İçin Özel Takımlar**

DEĞERLİ



| Sipariş | Cinsi | d | D |
|---|---|---|---|
| 904042 | 415 | 40 | 42 |
| 904550 | 6-20 | 45 | 50 |
| 905862 | 462 | 58 | 62 |
| 906875 | 467 / 6-32 | 68 | 75 |
| 908090 | 468 | 80 | 90 |

**AY Anahtarı**

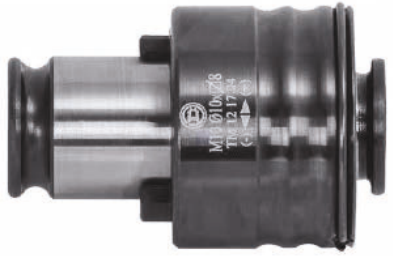
DEĞERLİ



| Sipariş | Cinsi | Kapasite (d) |
|---|---|---|
| 9022426 | 426 ( ER 16 ) Mini | 22 |
| 9028428 | 428 (ER 20 ) Mini | 28 |
| 9032426 | 426 ( ER 16 ) | 32 |
| 9035428 | 428 (ER 20 ) | 35 |
| 9042430 | 430 (ER 25 ) | 42 |
| 9050470 | 470 (ER 32 ) | 50 |
| 9063472 | 472 (ER 40 ) | 63 |

**ER Tipi Anahtarı**

DEĞERLİ






| Sipariş | Ø | D | d | L | Kare |
|---|---|---|---|---|---|
| 8 19 28.M2 | 2,8 | 32 | 19 | 25 | 2,1 |
| 8 19 28.M2,5 | 2,8 | 32 | 19 | 25 | 2,1 |
| 8 19 35.M3 | 3,5 | 32 | 19 | 25 | 2,7 |
| 8 19 40.M3,5 | 4 | 32 | 19 | 25 | 3,0 |
| 8 19 45.M4 | 4,5 | 32 | 19 | 25 | 3,4 |
| 8 19 60.M5 | 6 | 32 | 19 | 25 | 4,9 |
| 8 19 60.M6 | 6 | 32 | 19 | 25 | 4,9 |
| 8 19 80.M8 | 8 | 32 | 19 | 25 | 6,2 |
| 8 19 70.M10 | 7 | 32 | 19 | 25 | 5,5 |
| 8 19 10.M10 | 10 | 32 | 19 | 25 | 8,0 |
| 8 19 90.M12 | 9 | 32 | 19 | 25 | 7,0 |
| 8 19 11.M14 | 11 | 32 | 19 | 25 | 9,0 |

**Ø 19 Emniyetli Tip Kılavuz Tutucu** DEĞERLİ

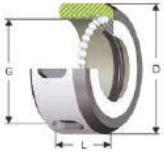





| Sipariş | Ø | D | d | L | Kare |
|---|---|---|---|---|---|
| 8 31 60.M5 | 6 | 50 | 31 | 31 | 4,9 |
| 8 31 60.M6 | 6 | 50 | 31 | 31 | 4,9 |
| 8 31 80.M8 | 8 | 50 | 31 | 31 | 6,2 |
| 8 31 70.M10 | 7 | 50 | 31 | 31 | 5,5 |
| 8 31 10.M10 | 10 | 50 | 31 | 31 | 8,0 |
| 8 31 90.M12 | 9 | 50 | 31 | 31 | 7,0 |
| 8 31 11.M14 | 11 | 50 | 31 | 31 | 9,0 |
| 8 31 12.M16 | 12 | 50 | 31 | 31 | 9,0 |
| 8 31 14.M18 | 14 | 50 | 31 | 31 | 11,0 |
| 8 31 16.M20 | 16 | 50 | 31 | 31 | 12,0 |
| 8 31 18.M22 | 18 | 50 | 31 | 31 | 14,5 |
| 8 31 18.M24 | 18 | 50 | 31 | 31 | 14,5 |

**Ø 31 Emniyetli Tip Kılavuz Tutucu** DEĞERLİ



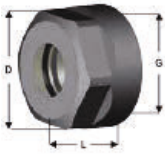



| Sipariş | Cinsi | Kapasite | D | G | L |
|---|---|---|---|---|---|
| 40415 | 415 | 2-16 mm | 43 | M33 x 1,5 | 24 |
| 40462 | 462 | 2-25 mm | 60 | M48 x 2 | 30 |
| 40467 | 467 | 3-32 mm | 72 | M60 x 2,5 | 33,5 |
| 40468 | 468 | 4-40 mm | 85 | M68 x 2,5 | 37 |

**E Serisi Pens Kapağı**

DEĞERLİ

TİP 1






TİP 2






TİP 3



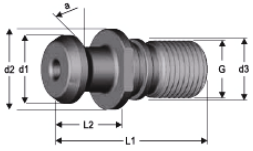



| Sipariş | Cinsi | Kapasite | D | G | L | SW | Tip |
|---|---|---|---|---|---|---|---|
| 40426 | ER 16 - 426 | 2-10 mm | 28 | M22 x 1,5 | 17,5 | 25 | 1 |
| 41426 | ER 16 - 426 Mini | 2-10 mm | 22 | M19 x 1 | 18 | - | 3 |
| 42426 | ER 16 - 426 | 2-10 mm | 32 | M22 x 1,5 | 17,5 | - | 2 |
| 40428 | ER 20 - 428 | 2-13 mm | 34 | M25 x 1,5 | 19 | 30 | 1 |
| 41428 | ER 20 - 428 Mini | 2-13 mm | 28 | M24 x 1 | 19 | - | 3 |
| 42428 | ER 20 - 428 | 2-13 mm | 35 | M25 x 1,5 | 19 | - | 2 |
| 40430 | ER 25 - 430 | 2-16 mm | 42 | M32 x 1,5 | 20 | - | 2 |
| 40470 | ER 32 - 470 | 2-20 mm | 50 | M40 x 1,5 | 22,5 | - | 2 |
| 40472 | ER 40 - 472 | 2-26 mm | 63 | M50 x 1,5 | 25,5 | - | 2 |

**ER Serisi Pens Kapağı**

DEĞERLİ



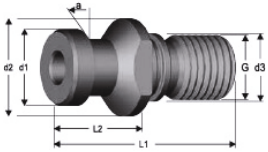



Çektirme Civataları

DEĞERLİ

| Sipariş | Ürün Adı | d1 | d2 | d3 | L1 | L2 | G | a |
|---|---|---|---|---|---|---|---|---|
| 21445 | CAT 40 MAZAK PULLSTUD | 18,80 | 22 | 17 | 41,25 | 16,10 | M16 | 45 ° |
| 21445.1 | BT 40 MAZAK PULLSTUD | 18,80 | 22,5 | 17 | 44,10 | 19,10 | M16 | 45 ° |
| 21545 | ISO 7388 / B 50 PULLSTUD | 28,95 | 37 | 25 | 65,40 | 25,40 | M24 | 45 ° |
| 22445 | ISO 7388 / B 40 PULLSTUD | 18,95 | 22,5 | 17 | 44,50 | 16,40 | M16 | 45 ° |
| 22545 | CAT 50 MAZAK PULLSTUD | 29,10 | 37 | 25 | 65,50 | 25,55 | M24 | 45 ° |
| 24445 | HAAS PULLSTUD | 15 | 23 | 17 | 57 | 32 | M16 | 45 ° |
| 24445.1 | HAAS WITH THROUGH HOLE AND O-RING Ø 3,5 mm | 15 | 23 | 17 | 57 | 32 | M16 | 45 ° |



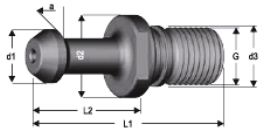



Çektirme Civataları

DEĞERLİ

| Sipariş | Ürün Adı | d1 | d2 | d3 | L1 | L2 | G | a |
|---|---|---|---|---|---|---|---|---|
| 23015 | DIN 69872 SK 30 PULLSTUD | 13 | 17 | 13 | 44 | 24 | M12 | 15 ° |
| 24015 | DIN 69872 SK 40 PULLSTUD | 19 | 23 | 17 | 54 | 26 | M16 | 15 ° |
| 25015 | DIN 69872 SK 50 PULLSTUD | 28 | 36 | 25 | 74 | 34 | M24 | 15 ° |
| 24115 | DIN 69872 SK 40 i.s.v. PULLSTUD | 19 | 23 | 17 | 54 | 26 | M16 | 15 ° |
| 25115 | DIN 69872 SK 50 i.s.v. PULLSTUD | 28 | 36 | 25 | 74 | 34 | M24 | 15 ° |
| 24215 | MAKINO Ø 5 mm WITH THROUGH HOLE | 19 | 23 | 17 | 54 | 29 | M16 | 15 ° |
| 24315 | OKUMA Ø 7 mm WITH THROUGH HOLE AND O-RING | 19 | 23 | 17 | 54 | 29 | M16 | 15 ° |
| 24415 | OKUMA & MAKINO Ø 7 mm WITH THROUGH HOLE | 19 | 23 | 17 | 54 | 29 | M16 | 15 ° |



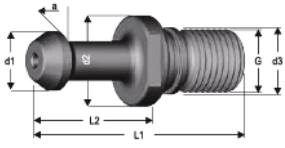



Çektirme Civataları

DEĞERLİ

| Sipariş | Ürün Adı | d1 | d2 | d3 | L1 | L2 | G | a |
|---|---|---|---|---|---|---|---|---|
| 23045 | MAS 403 BT - BBT 30 PULLSTUD | 11 | 16,5 | 12,5 | 43 | 23 | M12 | 45 ° |
| 23045 | MAS 403 BT - BBT 40 PULLSTUD | 15 | 23 | 17 | 60 | 35 | M16 | 45 ° |
| 23045 | MAS 403 BT - BBT 50 PULLSTUD | 23 | 38 | 25 | 85 | 45 | M24 | 45 ° |
| 24060 | MAS 403 BT - BBT 30 PULLSTUD | 11 | 16,5 | 12,5 | 43 | 23 | M12 | 45 ° |
| 24060 | MAS 403 BT - BBT 40 PULLSTUD | 15 | 23 | 17 | 60 | 35 | M16 | 45 ° |
| 24090 | MAS 403 BT - BBT 50 PULLSTUD | 23 | 38 | 25 | 85 | 45 | M24 | 45 ° |
| 24090 | MAS 403 BT - BBT 30 PULLSTUD | 11 | 16,5 | 12,5 | 43 | 23 | M12 | 45 ° |
| 24090 | MAS 403 BT - BBT 40 PULLSTUD | 15 | 23 | 17 | 60 | 35 | M16 | 45 ° |
| 24090 | MAS 403 BT - BBT 50 PULLSTUD | 23 | 38 | 25 | 85 | 45 | M24 | 45 ° |



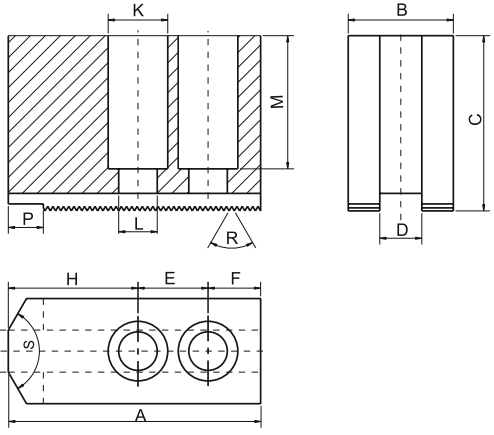



İçten Soğutmalı
Çektirme Civataları

DEĞERLİ

| Sipariş | Ürün Adı | d1 | d2 | d3 | L1 | L2 | G | a |
|---|---|---|---|---|---|---|---|---|
| 23145 | MAS 403 BT - BBT 30 i.s.v. PULLSTUD | 11 | 16,5 | 12,5 | 43 | 23 | M12 | 45 ° |
| 23145 | MAS 403 BT - BBT 40 i.s.v. PULLSTUD | 15 | 23 | 17 | 60 | 35 | M16 | 45 ° |
| 23145 | MAS 403 BT - BBT 50 i.s.v. PULLSTUD | 23 | 38 | 25 | 85 | 45 | M24 | 45 ° |
| 24160 | MAS 403 BT - BBT 40 i.s.v. PULLSTUD | 15 | 23 | 17 | 60 | 35 | M16 | 60 ° |
| 24160 | MAS 403 BT - BBT 50 i.s.v. PULLSTUD | 23 | 38 | 25 | 85 | 45 | M24 | 60 ° |
| 24190 | MAS 403 BT - BBT 40 i.s.v. PULLSTUD | 15 | 23 | 17 | 60 | 35 | M16 | 90 ° |
| 24190 | MAS 403 BT - BBT 50 i.s.v. PULLSTUD | 23 | 38 | 25 | 85 | 45 | M24 | 90 ° |






AK-İŞ

**Standart Tip**
**Yumuşak Ayaklar**

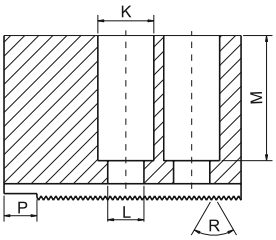
Isıl işlemden sonra malzemenin yüzey sertlik değeri HRC 60° a ulaşabilir.

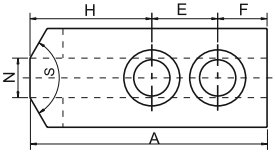
*Tablolarda bulunmayan diğer standart ölçülü yumuşak ayaklar için lütfen bizimle irtibata geçiniz.

| Ayna Tipi | Ayna Çapı | Hatve (P) | A | B | C | $D_{H7}$ | E | F | H | Civata | K | L | M | N | Sº | Rº |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kitagawa Matsumato Strong | 05'' | 1.5 x 60º | 60 | 25 | 30 | 10 | 14 | 16 | 30 | M10 | 13.5 | 8.5 | 15 | 12 | 120º | 60º |
| | 06'' | | 78 | 30 | 30 | 12 | 20 | 18 | 40 | M10 | 17 | 11 | 18 | | | |
| | 08'' | | 98 | 38 | 38 | 14 | 25 | 25 | 48 | M12 | 19 | 13 | 20 | | | |
| Howa AutoBlok | 08'' | | 98 | 38 | 38 | 16 | 25 | 25 | 48 | M12 | 19 | 13 | 20 | | | |
| | | | 98 | 38 | 38 | 17 | 23 | 25 | 50 | M12 | 19 | 13 | 20 | | | |
| Kitagawa Matsumato Strong Howa | 10'' | | 118 | 43 | 43 | 16 | 30 | 30 | 58 | M12 | 19 | 13 | 25 | 15 | | |
| | | | 118 | 43 | 43 | 18 | 30 | 30 | 58 | M14 | 23 | 15 | 25 | | | |
| | 12'' | | 135 | 48 | 48 | 18 | 30 | 30 | 75 | M14 | 23 | 15 | 33 | | | |
| | | | 135 | 48 | 48 | 21 | 30 | 30 | 75 | M16 | 25 | 17 | 33 | | | |
| | 15'' | | 165 | 58 | 58 | 22 | 43 | 37 | 75 | M20 | 32 | 21 | 38 | | | |
| | 18'' | | 165 | 58 | 58 | 25.5 | 43 | 37 | 85 | M20 | 32 | 21 | 38 | | | |
| | 21'' | 3 x 60º | 180 | 68 | 68 | 25 | 60 | 35 | 85 | M20 | 32 | 21 | 48 | | | |

| Ayna Tipi | Ayna Çapı | Hatve (P) | A | B | C | $D_{H7}$ | E | F | H | Civata | K | L | M | N | Sº | Rº |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Autoblok 90° SMW | 06'' | 1/16'' x 90º | 78 | 30 | 30 | 14 | 20 | 18 | 40 | M10 | 17 | 11 | 18 | 15 | 120º | 90º |
| | 08'' | | 98 | 38 | 38 | 17 | 23 | 25 | 50 | M12 | 19 | 13 | 20 | 18 | | |
| | 10'' | | 115 | 43 | 43 | 21 | 30 | 30 | 55 | M16 | 25 | 17 | 25 | 22 | | |
| | 12'' | | 135 | 48 | 48 | 21 | 30 | 30 | 75 | M16 | 25 | 17 | 30 | 22 | | |
| | 15'' | | 140 | 58 | 58 | 21 | 30 | 30 | 80 | M16 | 25 | 17 | 40 | 22 | | |
| | 15'' | 3/32'' x 90º | 140 | 58 | 58 | 25.5 | 38 | 27 | 75 | M20 | 32 | 21 | 38 | - | - | |
| | 18'' | | 170 | 68 | 68 | 25.5 | 38 | 37 | 95 | M20 | 32 | 21 | 48 | - | - | |
| | 21'' | | 180 | 68 | 68 | 28 | 38 | 42 | 100 | M20 | 32 | 21 | 48 | - | - | |





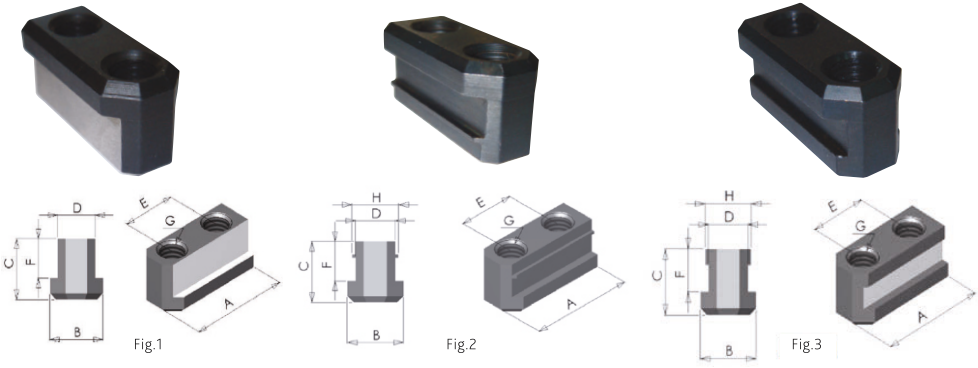

## AK-İŞ

**Yüksek Tip**
**Yumuşak Ayaklar**

Isıl işlemden sonra malzemenin yüzey sertlik değeri HRC 60° a ulaşabilir.

*Tablolarda bulunmayan diğer standart ölçülü yumuşak ayaklar için lütfen bizimle irtibata geçiniz.

| Ayna Tipi | Ayna Çapı | Hatve (P) | A | B | C | $D_{H7}$ | E | F | H | Civata | K | L | M | N | Sº |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kitagawa Matsumoto Strong | 6" | 1,5 x 60° | 78 | 30 | 50 | 12 | 20 | 18 | 35 | 40 | 17 | 11 | M10 | 12 | 120° |
| | | | | | 60 | | | | 45 | | | | | | |
| | | | | | 80 | | | | 60 | | | | | | |
| Kitagawa Matsumoto Strong Autogrip | 8" | 1,5 x 60° | 98 | 38 | 60 | 14 | 25 | 25 | 40 | 48 | 19 | 13 | M12 | 12 | 120° |
| | | | | | 80 | | | | 60 | | | | | | |
| | | | | | 100 | | | | 80 | | | | | | |
| | | | | | 120 | | | | 95 | | | | | | |
| Howa | 8" | 1,5 x 60° | 98 | 38 | 60 | 16 | 25 | 25 | 40 | 48 | 19 | 13 | M12 | 12 | 120° |
| | | | | | 80 | | | | 60 | | | | | | |
| | | | | | 100 | | | | 80 | | | | | | |
| | | | | | 120 | | | | 95 | | | | | | |
| Autoblok | 8" | 1/16" x 90° | 98 | 38 | 60 | 17 | 23 | 25 | 40 | 50 | 19 | 13 | M12 | 12 | 120° |
| | | | | | 80 | | | | 60 | | | | | | |
| | | | | | 100 | | | | 80 | | | | | | |
| | | | | | 120 | | | | 95 | | | | | | |
| Kitagawa Matsumoto Strong Autogrip | 10" | 1,5 x 60° | 115 | 43 | 70 | 16 | 30 | 30 | 50 | 55 | 19 | 13 | M10 | 15 | 120° |
| | | | | | 100 | | | | 80 | | | | | | |
| | | | | | 125 | | | | 100 | | | | | | |
| | | | | | 150 | | | | 120 | | | | | | |
| Autoblok | | 1/16" x 90° | | | 70 | 21 | | | 50 | | 25 | 17 | M16 | | |
| Autoblok | | 1.5 x 60° | | | 70 | 21 | | | 50 | | 25 | 17 | M16 | | |
| Kitagawa Matsumoto Strong Autogrip | 12" | 1,5 x 60° | 135 | 48 | 80 | 18 | 30 | 30 | 60 | 75 | 23 | 15 | M14 | 18 | 120° |
| | | | | | 100 | | | | 80 | | | | | | |
| | | | | | 130 | | | | 100 | | | | | | |
| | | | | | 160 | | | | 120 | | | | | | |
| Kitagawa Matsumoto Strong Autogrip | 12" | 1,5 x 60° | 135 | 48 | 80 | 21 | 30 | 30 | 60 | 75 | 25 | 17 | M16 | 20 | 120° |
| | | | | | 100 | | | | 80 | | | | | | |
| | | | | | 130 | | | | 100 | | | | | | |
| | | | | | 160 | | | | 120 | | | | | | |
| Kitagawa Matsumoto Strong Autogrip | 15" | 1,5 x 60° | 165 | 58 | 100 | 22 | 43 | 37 | 80 | 85 | 32 | 21 | M20 | 22 | 120° |
| | | | | | 130 | | | | 100 | | | | | | |
| | | | | | 160 | | | | 120 | | | | | | |
| | | | | | 200 | | | | 150 | | | | | | |
| Kitagawa Matsumoto Strong Autogrip | 18" | 1,5 x 60° | 165 | 58 | 100 | 25,5 | 43 | 37 | 80 | 85 | 32 | 21 | M20 | 25 | 120° |
| | | | | | 130 | | | | 100 | | | | | | |
| | | | | | 160 | | | | 120 | | | | | | |
| | | | | | 200 | | | | 150 | | | | | | |
| Kitagawa Matsumoto Strong Autogrip | 21" | 3 x 60° | 180 | 68 | 100 | 25 | 60 | 35 | 70 | 85 | 32 | 21 | M20 | 25 | 120° |
| | | | | | 130 | | | | 100 | | | | | | |
| | | | | | 160 | | | | 120 | | | | | | |
| | | | | | 200 | | | | 150 | | | | | | |
| | | | | | 250 | | | | 180 | | | | | | |

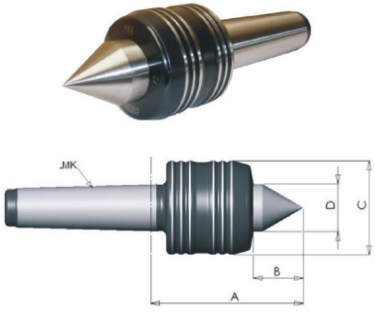



AK-İŞ

HRC 45° ~ 48° ye sertleştirilmiştir. Parçanın yüzeyi siyah oksit kaplamadır.
Bunun yapılmasının amacı, parçayı oksidasyondan korumaktır.
Hidrolik aynalar için uygundur.

## T-Somunlar

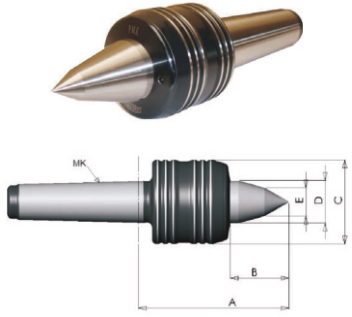
| Marka | Ayna Çapı | Figür | A | B | C | $D_{H7}$ | E | F | G | H | Ağırlık |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Kitagawa Matsumato Strong | 06'' | 1 | 36 | 17 | 18.5 | 12 | 20 | 12 | M10 | - | 0.05 |
| | 08'' | 1 | 46.5 | 20.5 | 20.5 | 14 | 25 | 12 | M12 | - | 0.09 |
| | 08'' | 1 | 48 | 20.5 | 25.5 | 14 | 25 | 16 | M12 | - | 0.12 |
| | 10'' | 1 | 51 | 22.5 | 21.5 | 16 | 30 | 13 | M12 | - | 0.13 |
| | 10'' | 1 | 55 | 22.5 | 25.5 | 16 | 30 | 16.5 | M12 | - | 0.16 |
| | 12'' | 1 | 55.5 | 26.5 | 33.5 | 18 | 30 | 20 | M14 | - | 0.24 |
| | 12'' | 1 | 55.5 | 29.5 | 27.5 | 21 | 30 | 16 | M16 | - | 0.21 |
| Autoblok | 06'' | 2 | 36 | 17 | 18.5 | 12 | 20 | 12 | M10 | 14 | 0.05 |
| | 08'' | 2 | 45 | 19 | 20.5 | 14 | 30 | 13 | M12 | 17 | 0.08 |




AK-İŞ

## CNC Döner Punta - 60°

| MK | A | B | C | D | E | Maksimum Salgı | Maksimum Devir |
|---|---|---|---|---|---|---|---|
| MK3 | 71 | 25 | 48 | 25 | - | 0.005 | 4600 |
| MK4 | 105 | 37 | 63 | 32 | - | 0.005 | 3800 |
| MK5 | 120 | 47 | 73 | 40 | - | 0.005 | 3300 |

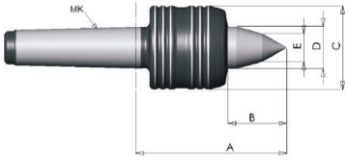



AK-İŞ

## 2 Kademeli CNC Döner Punta

| MK | A | B | C | D | E | Maksimum Salgı | Maksimum Devir |
|---|---|---|---|---|---|---|---|
| MK3 | 80 | 34 | 48 | 25 | 12 | 0.005 | 4600 |
| MK4 | 116 | 46 | 63 | 32 | 16 / 12 | 0.005 | 3800 |
| MK5 | 131 | 58 | 73 | 40 | 18 / 14 | 0.005 | 3300 |



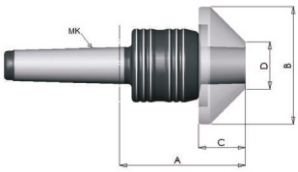


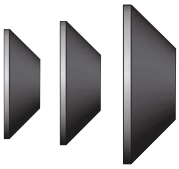

AK-İŞ

**Kademeli**
**CNC Döner Punta**

| MK | A | B | C | D | E | Maksimum Salgı | Maksimum Devir |
|---|---|---|---|---|---|---|---|
| MK3 | 80 | 34 | 48 | 25 | 12 | 0.005 | 4600 |
| MK4 | 112 | 44 | 63 | 32 | 16 / 12 | 0.005 | 3800 |
| MK5 | 131 | 58 | 73 | 40 | 18 / 14 | 0.005 | 3300 |





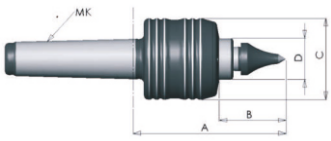



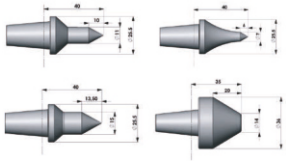
AK-İŞ

**Takma Uçlu Boru Punta**

| MK | A | B | C | D | Maksimum Salgı | Maksimum Devir |
|---|---|---|---|---|---|---|
| MK4 | 110 | 78 | 28 | 34 | 0.01 | 3800 |
| MK4 | 110 | 98 | 32 | 44 | 0.01 | 3300 |
| MK4 | 123 | 148 | 50 | 60 | 0.01 | 3800 |
| MK5 | 123 | 78 | 28 | 34 | 0.01 | 3300 |
| MK5 | 123 | 98 | 32 | 44 | 0.01 | 3800 |
| MK5 | 123 | 148 | 50 | 60 | 0.01 | 3300 |





AK-İŞ

**Takma Uçlu Boru Punta**

| MK | A | B | C | D | Maksimum Salgı | Maksimum Devir |
|---|---|---|---|---|---|---|
| MK3 | 71 | 25 | 48 | 25 | 0.01 | 4600 |
| MK4 | 105 | 37 | 63 | 32 | 0.01 | 3800 |
| MK5 | 120 | 47 | 73 | 40 | 0.01 | 3300 |



AK-İŞ

| Şaft Çapı | Bağladığı Broş Çapı | Punta Gövde Çapı |
|---|---|---|
| 12 | 08 | 39 |
| 16 | 08 | 39 |
| 19 | 08 | 39 |
| 20 | 08 | 39 |
| 22 | 08 | 39 |
| 25 | 08 | 39 |
| 25 | 12 | 54 |
| 32 | 12 | 54 |
| 40 | 12 | 54 |

**Çoklu Köşe Açma Aparatı**

CNC tornalarda tarete bağlanarak kullanılır. Delikli parçalara çoklu köşe (özellikle de imbus yuvası) açmanıza yardımcı olur. Gövde sertleştirilmiş ve taşlanmıştır. Gövde içerisinde yüksek hassasiyetli rulmanlar kullanılmaktadır. Zımbalar yüksek hız çeliğinden (HSS) yapılmıştır. Aşınmaya dayanıklıdır.Yüksek sıcaklıklarda mukavemetlidir. Silindirik ve mors konik olmak üzere 2 çeşit şaft seçeneği mevcuttur. Açılması istenen altı köşeye göre değişik ölçülerde zımbalarımız mevcuttur. Zımbaların max. basma kuvveti 800 daN' dur.



## Altı Köşe Broş Uçları

| Şaft Çapı | Uç Çapı |
|---|---|
| 08 | 1.5 |
| 08 | 2.0 |
| 08 | 2.5 |
| 08 | 3.0 |
| 08 | 3.5 |
| 08 | 4.0 |
| 08 | 5.0 |
| 08 | 6.0 |

| Şaft Çapı | Uç Çapı |
|---|---|
| 08 | 1/8 |
| 08 | 1/4 |
| 12 | 3.0 |
| 12 | 4.0 |
| 12 | 5.0 |
| 12 | 6.0 |
| 12 | 7.0 |
| 12 | 8.0 |

| Şaft Çapı | Uç Çapı |
|---|---|
| 12 | 9.0 |
| 12 | 10.0 |
| 12 | 11.0 |
| 12 | 12.0 |
| 12 | 13.0 |
| 12 | 14.0 |



## Yaylı Klavuz Çekme Aparatı

| Şaft Çapı | Pens |
|---|---|
| 20 | ER 16 |
| 20 | ER 20 |
| 20 | ER 25 |
| 20 | ER 32 |
| 25 | ER 16 |
| 25 | ER 20 |
| 25 | ER 25 |
| 25 | ER 32 |
| 32 | ER 16 |

| Şaft Çapı | Pens |
|---|---|
| 32 | ER 20 |
| 32 | ER 25 |
| 32 | ER 32 |
| 32 | ER 40 |
| 40 | ER 32 |
| 40 | ER 40 |
| 50 | ER 32 |
| 50 | ER 40 |



## Silindir Şaftlı Pens Tutucu

| Çap | Pens | Boy |
|---|---|---|
| 10 | ER 08 | 95 |
| 12 | ER 08 | 95 |
| 12 | ER 11 | 50 |
| 12 | ER 11 | 100 |
| 12 | ER 11 | 150 |
| 16 | ER 11 | 50 |
| 16 | ER 11 | 100 |
| 16 | ER 11 | 150 |
| 16 | ER 16 | 50 |
| 16 | ER 16 | 100 |
| 16 | ER 16 | 150 |

| Çap | Pens | Boy |
|---|---|---|
| 20 | ER 16 | 50 |
| 20 | ER 16 | 100 |
| 20 | ER 16 | 150 |
| 20 | ER 20 | 50 |
| 20 | ER 25 | 50 |
| 20 | ER 32 | 50 |
| 25 | ER 16 | 60 |
| 25 | ER 16 | 100 |
| 25 | ER 16 | 150 |
| 25 | ER 20 | 60 |
| 25 | ER 25 | 60 |

| Çap | Pens | Boy |
|---|---|---|
| 25 | ER 32 | 60 |
| 25 | ER 16 | 150 |
| 32 | ER 20 | 70 |
| 32 | ER 25 | 70 |
| 32 | ER 32 | 70 |
| 32 | ER 40 | 70 |
| 40 | ER 25 | 80 |
| 40 | ER 32 | 80 |
| 40 | ER 40 | 80 |
| 50 | ER 32 | 100 |
| 50 | ER 40 | 100 |
| 50 | ER 50 | 100 |




## Yaylı Pafta Çekme Aparatı

| D | d | L1 | L2 |
|---|---|---|---|
| 20 | 20 | 70 | 65 |
| 20 | 25 | 70 | 65 |
| 20 | 30 | 70 | 65 |
| 20 | 38 | 70 | 68 |
| 20 | 45 | 70 | 75 |
| 20 | 55 | 70 | 76 |
| 25 | 20 | 70 | 65 |
| 25 | 25 | 70 | 65 |
| 25 | 30 | 70 | 65 |
| 25 | 38 | 70 | 68 |

| D | d | L1 | L2 |
|---|---|---|---|
| 25 | 45 | 70 | 76 |
| 25 | 55 | 70 | 75 |
| 25 | 65 | 70 | 80 |
| 32 | 20 | 70 | 65 |
| 32 | 25 | 70 | 65 |
| 32 | 30 | 70 | 65 |
| 32 | 38 | 70 | 68 |
| 32 | 45 | 70 | 76 |
| 32 | 55 | 70 | 76 |
| 32 | 65 | 70 | 80 |



## Elle Sıkma Mandren

| Kapasitesi | Bağlantı |
|---|---|
| 0-10 MM | B12 |
| 0-10 MM | 3/8-24 UNF |
| 0-10 MM | 1/2-20 UNF |
| 1-13 MM | B16 |
| 1-13 MM | 3/8-24 UNF |
| 1-13 MM | 1/2-20 UNF |

| Kapasitesi | Bağlantı |
|---|---|
| 1-16 | B16 |
| 1-16 | B18 |
| 1-16 | 1/2-20 UNF |
| 1-16 | 5/8-16 UNF |
| 5-20 | B22 |



## Anahtarlı Mandren

| Kapasitesi | Bağlantı |
|---|---|
| 1-16 MM | B16 |
| 1-16 MM | B18 |
| 1-20 MM | B22 |
| 1-26 MM | B24 |



## Mandren Koniği

| MK DIN 228-B | Konik |
|---|---|
| MK1 | B10 |
| MK1 | B12 |
| MK1 | B16 |
| MK1 | B18 |
| MK2 | B10 |
| MK2 | B12 |
| MK2 | B16 |

| MK DIN 228-B | Konik |
|---|---|
| MK2 | B18 |
| MK2 | B22 |
| MK3 | B12 |
| MK3 | B16 |
| MK3 | B18 |
| MK3 | B22 |
| MK3 | B24 |

| MK DIN 228-B | Konik |
|---|---|
| MK4 | B16 |
| MK4 | B18 |
| MK4 | B22 |
| MK4 | B24 |
| MK5 | B18 |
| MK5 | B22 |
| MK5 | B24 |



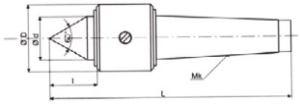
## Mors Kovanı

| Dış Konik | İç Konik |
|---|---|
| MK2 | MK1 |
| MK3 | MK1 |
| MK3 | MK2 |
| MK4 | MK1 |
| MK4 | MK2 |
| MK4 | MK3 |
| MK5 | MK1 |
| MK5 | MK2 |

| Dış Konik | İç Konik |
|---|---|
| MK5 | MK3 |
| MK5 | MK4 |
| MK6 | MK1 |
| MK6 | MK2 |
| MK6 | MK3 |
| MK6 | MK4 |
| MK6 | MK5 |



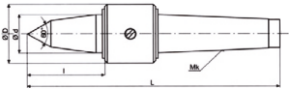
## Döner Punta




| MK | D | d | L | l |
|---|---|---|---|---|
| MK1 | 36 | 16 | 120 | 21,5 |
| MK2 | 42 | 19 | 143 | 25,5 |
| MK3 | 53 | 27 | 177 | 32 |
| MK4 | 68 | 38 | 215 | 37,5 |
| MK5 | 73 | 44 | 268 | 47 |
| MK6 | 97 | 58 | 359 | 62 |

## CNC Döner Punta

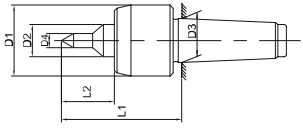




| MK | D | d | L | l | Max. İş Parça Aralığı |
|---|---|---|---|---|---|
| MK2 | 36 | 22 | 128 | 30 | 270 |
| MK3 | 47 | 30 | 167 | 37 | 320 |
| MK4 | 55 | 35 | 207,5 | 51 | 1000 |
| MK5 | 69,5 | 45 | 259 | 66 | 1600 |

## CNC Döner Punta

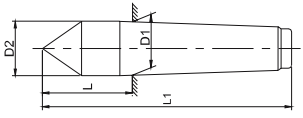





| MK | D1 | D2 | D3 | D4 | L1 | L2 | Parça Aralığı |
|---|---|---|---|---|---|---|---|
| MK4 | 70 | 32 | 31,267 | 12 | 115 | 51 | 300 kg |
| MK5 | 90 | 40 | 44,399 | 15 | 140 | 60 | 600 kg |

## Sabit Punta

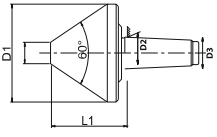





| MK | D1 | D2 | L | L1 |
|---|---|---|---|---|
| MK2 | 17,780 | 18 | 36 | 100 |
| MK3 | 23,825 | 24.1 | 44 | 125 |
| MK4 | 31,267 | 31.6 | 57.5 | 160 |
| MK5 | 44,399 | 44.7 | 70.5 | 200 |
| MK6 | 63,348 | 63.8 | 88 | 270 |

## Boru Puntası

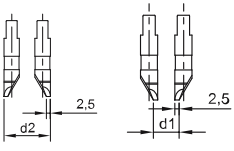


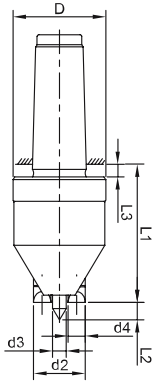



| MK | D1 | D2 | D3 | L1 |
|---|---|---|---|---|
| MK2 | 80 | 18 | 14 | 68 |
| MK3 | 80 | 24.1 | 19 | 68 |
| MK3 | 120 | 24.1 | 19 | 85 |
| MK4 | 120 | 31.6 | 25 | 85 |
| MK4 | 140 | 31.6 | 25 | 82 |
| MK5 | 140 | 44.7 | 36 | 82 |
| MK5 | 170 | 44.7 | 36 | 98 |

| MK | D1 | D2 | D3 | L1 |
|---|---|---|---|---|
| MK5 | 200 | 44.7 | 36 | 105 |
| MK5 | 250 | 44.7 | 36 | 109 |
| MK5 | 300 | 44.7 | 36 | 150 |
| MK6 | 200 | 63.8 | 51 | 105 |
| MK6 | 250 | 63.8 | 51 | 109 |
| MK6 | 300 | 63.8 | 51 | 150 |






## Tırnaklı Punta

3 adet yedek tırnak ile birlikte teslim edilir.
Mil ve tırnaklarda sertlik: 60-63 HRC

| MK | D1 | D2 | D3 | D4 | Tornalama Çapı min | Tornalama Çapı max | D | L1 | L2 | L3 | Tırnak Sayısı |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MK3 | 15 | 30 | 8 | 10 | 16 | 60 | 54 | 80 | 7,5 | 5 | 3+3 |
| MK4 | 15 | 30 | 8 | 10 | 16 | 60 | 54 | 80 | 7,5 | 5 | 3+3 |
| MK5 | 15 | 30 | 8 | 10 | 16 | 60 | 54 | 80 | 7,5 | 5 | 3+3 |



INSIZE

## 1108 - Standart Dijital Kumpas

**DIN862**
**Standart Model**
**Bilgi Çıkışı**
**Hassasiyet** : 0.01 mm / 0.0005"

| Sipariş | Ölçüm Aralığı | Derinlik Çubuğu |
|---|---|---|
| 1112 | 0 - 150 mm / 0 - 6" | Bıçak |
| 1108 | 0 - 150 mm / 0 - 6" | Bıçak |
| 1108 | 0 - 200 mm / 0 - 8" | Bıçak |
| 1108 | 0 - 300 mm / 0 - 12" | Bıçak |



INSIZE

## 1118 - Dijital Kumpas ( IP67 )

**DIN862**
**IP67 Koruma**
**(Suya ve Toza Karşı Dayanıklı)**
**Hassasiyet** : 0.01 mm / 0.0005"

| Sipariş | Ölçüm Aralığı |
|---|---|
| 1115-150 | 0 - 150 mm / 0 - 6" |
| 1115-200 | 0 - 200 mm / 0 - 8" |
| 1115-300 | 0 - 300 mm / 0 - 12" |



INSIZE

## 1114 - Paslanmaz Dijital Kumpas

**DIN862**
**CR2032 Lityum Pil**
**Hassasiyet** :0.01 mm / 0.0005"

Çinko Alaşımlı Dijital Birim Muhafazası Paslanmaz Çelik İmal Edilmiştir

| Sipariş | Ölçüm Aralığı |
|---|---|
| 1114-150A | 0 - 150 mm / 0 - 6" |
| 1114-200A | 0 - 200 mm / 0 - 8" |
| 1114-300A | 0 - 300 mm / 0 - 12" |



INSIZE

## 1106 - Dijital Kumpas

**Bilgi Çıkışı**
**Hassasiyet** : 0.01 mm / 0.0005"

İç Ölçüm Çenelerinin Genişliği 10 mm veya 20 mm

| Sipariş | Ölçüm Aralığı | Standart Çene Uzunluğu |
|---|---|---|
| 1106-451 | 0-450 | 100 mm |
| 1106-501 | 0-500 | 100 mm |
| 1106-601 | 0-600 | 100 mm |
| 1106-1002 | 0-1000 | 150 mm |



INSIZE

## 1111 - Dijital Kumpas (Mini Model)

**DIN862**
**Hassasiyet** : 0.01 mm / 0.0005"

| Sipariş | Ölçüm Aralığı |
|---|---|
| 1111-75 | 0 - 75 mm / 0 - 3" |
| 1111-100 | 0 - 100 mm / 0 - 4" |



INSIZE

## 1205 - Standart Mekanik Kumpas

**DIN862**
**Mono Blok**
**Hassasiyet** : 0.02 mm, 0.02 / 0.001", 0.05 mm

Yuvarlak Uçlu Derinlik Çubuğu Opsiyoneldir.
Titanyum Kaplamalı Skala Opsiyoneldir.

| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 1205-150S | 0 - 150 mm / 0 - 6" | 0.05 mm / 1 / 128" |
| 1205-200S | 0 - 200 mm / 0 - 8" | 0.05 mm / 1 / 128" |
| 1205-300S | 0 - 300 mm / 0 - 12" | 0.05 mm / 1 / 128" |



INSIZE

## 1136 - Dijital Kumpas

**Bilgi Çıkışı**
**Hassasiyet** : 0.01 mm / 0.0005"

**İç Ölçüm Çenelerinin Genişliği 10 mm veya 20 mm**

| Sipariş | Ölçüm Aralığı | Çene Uzunluğu |
|---|---|---|
| 1136-301 | 0 - 300 mm / 0 - 12" | 90 mm / 3.5" |
| 1136-451 | 0 - 450 mm / 0 - 16" | 90 mm / 3.5" |
| 1136-501 | 0 - 500 mm / 0 - 20" | 100 mm / 3.9" |
| 1136-601 | 0 - 600 mm / 0 - 24" | 100 mm / 3.9" |
| 1136-1002 | 0 - 1000 mm / 0 - 40" | 150 mm / 5.9" |
| 1136-1502 | 0 - 1500 mm / 0 - 60" | 150 mm / 5.9" |
| 1136-2002 | 0 - 2000 mm / 0 - 80" | 150 mm / 5.9" |



INSIZE

## 1207 - Mekanik Kumpas

**DIN862**
**Hassas Ayarlanabilir**
**Alternatif Hassasiyet** : 0.02 mm, 0.02 / 0.001", 0.05 mm
**Hassasiyet** : 0.05 mm / 1 / 128"

| Sipariş | Ölçüm Aralığı | Standart Alt Çene Uzunluğu | Üst Çene Uzunluğu |
|---|---|---|---|
| 1207-394 | 0 - 300 mm / 0-12" | 90 mm | 40 mm |
| 1207-514 | 0 - 500 mm / 0-20" | 100 mm / 150 mm | 56 mm |
| 1207-824 | 0 - 800 mm / 0-32" | 150 mm | 67 mm |
| 1207-1024 | 0 - 1000 mm / 0-40" | 150 mm | 67 mm |



INSIZE

## 1208 - Mekanik Kumpas

**DIN862**
**Hassas Ayarlanabilir**
**Alternatif Hassasiyet** : 0.02 mm, 0.02 / 0.001", 0.05 mm
**Hassasiyet** : 0.05 mm / 1 / 128"

| Sipariş | Ölçüm Aralığı | Standart Çene Uzunluğu |
|---|---|---|
| 1208-214 | 0 - 200 mm / 0-8" | 100 mm |
| 1208-324 | 0 - 300 mm / 0-12" | 90 mm / 150 mm |
| 1208-511 | 0 - 500 mm / 0-20" | 150 mm |
| 1208-614 | 0 - 600 mm / 0-24" | 100 mm / 150 mm |
| 1208-824 | 0 - 800 mm / 0-32" | 150 mm |
| 1208-1021 | 0 - 1000 mm / 0-40" | 150 mm |
| 1208-1521 | 0 - 1500 mm / 0-60" | 150 mm |
| 1208-2024 | 0 - 2000 mm / 0-80" | 150 mm |



INSIZE

## 1233 - Hassas Ayarlı Mekanik Kumpas

DIN862
Hassas Ayarlı Paslanmaz Çelik
Hassasiyet : 0.02 / 0.001"

| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 1233-130 | 0 - 130 mm / 0 - 5" | ± 0.03 mm |
| 1233-180 | 0 - 180 mm / 0 - 7" | ± 0.03 mm |
| 1233-280 | 0 - 280 mm / 0 - 11" | ± 0.03 mm |



INSIZE

## 1311 / 1312 - Saatli Kumpas

DIN862
Sertleştirilmiş Paslanmaz Çelik

| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 1311-150 | 0 - 150 mm | 0.01 mm |
| 1311-200 | 0 - 150 mm | 0.02 mm |
| 1311-300 | 0 - 200 mm | 0.01 mm |

| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 1312-150 | 0 - 200 mm | 0.02 mm |
| 1312-200 | 0 - 300 mm | 0.01 mm |
| 1312-300 | 0 - 300 mm | 0.02 mm |



INSIZE

## 1120 - Dijital İç Kanal Kumpası

Dar Kanalların Ölçümü İçin
Hassasiyet : 0.01 mm / 0.0005"

| Sipariş | Ölçüm Aralığı | Ölçüm Derinliği |
|---|---|---|
| 1120-150A | 22 - 150 mm / 0.9 - 6" | 35 mm / 1.4" |
| 1120-200A | 25 - 200 mm / 1 - 8" | 40 mm / 1.6" |
| 1120-300A | 30 - 300 mm / 1.2 - 12" | 50 mm / 2" |



INSIZE

## 1110 - Dijital Sert Ölçüm Ağızlı Kumpas

DIN862
Hassasiyet : 0.01 mm / 0.0005"

İç Çap ve Dış Çap Ölçümleri için Karbür Çeneli

| Sipariş | Ölçüm Aralığı |
|---|---|
| 1110-150A | 0 - 150 mm / 0 - 6" |
| 1110-200A | 0 - 200 mm / 0 - 8" |
| 1110-300A | 0 - 300 mm / 0 - 12" |



INSIZE

## 1121 - Dijital İç Kanal Kumpası Yuvarlak Uçlu

Dar Kanalların Ölçümü İçin
Hassasiyet : 0.01 mm / 0.0005"

| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 1121-150A | 24 - 150 mm | ± 0.04 mm |
| 1121-200A | 25 - 200 mm | ± 0.04 mm |
| 1121-300 1A | 50 - 300 mm | ± 0.06 mm |



INSIZE

## 1187 - Dijital Dış Kanal Kumpası

Dar Oluklar ve Küçük Yerler İçin
Hassasiyet : 0.01 mm / 0.0005"

| Sipariş | Ölçüm Aralığı | Ölçüm Derinliği |
|---|---|---|
| 1187-150A | 0 - 150 mm / 0 - 6" | 40 mm / 1.6" |



INSIZE

## 1141 - Dijital Derinlik Kumpası

**DIN862**
**Hassasiyet** : 0.01 mm / 0.0005"

| Sipariş | Ölçüm Aralığı | Taban Uzunluğu |
|---|---|---|
| 1141-150 | 0 - 150 mm / 0 - 6" | 100 mm |
| 1141-200 | 0 - 200 mm / 0 - 8" | 100 mm |
| 1141-300 | 0 - 300 mm / 0 - 12" | 150 mm |
| 1141-500 | 0 - 500 mm / 0 - 20" | 150 mm |

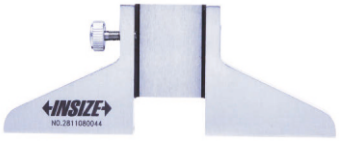


INSIZE

## 1240 - Derinlik Kumpası

**DIN862**
**Standart Model**
**Hassasiyet** : metrik 0.05 mm
(Opsiyonel: 0.02 mm)

| Sipariş | Ölçüm Aralığı | Taban Uzunluğu |
|---|---|---|
| 1240-150 | 0 - 150 mm | 100 mm |
| 1240-200 | 0 - 200 mm | 100 mm |
| 1240-300 | 0 - 300 mm | 100 mm |
| 1240-500 | 0 - 500 mm | 150 mm |



INSIZE

## 6140 - Kumpas Derinlik Ölçüm Ayağı

**Paslanmaz Çelik**

| Sipariş | Taban Uzunluğu |
|---|---|
| 6140 | 76 mm / 3" |

INSIZE

## 1244 - Mini Derinlik Kumpası

**Hassasiyet** : metrik 0.02 mm
**Bilgi Çıkışı** inç 0.001"



| Sipariş | Ölçüm Aralığı | Taban Uzunluğu |
|---|---|---|
| 1244-30 | 0 - 30 mm | 55 mm |

INSIZE

## 1156 - Dijital Makaralı Yükseklik Mihengiri

**Hassasiyet** : 0.01 mm / 0.0005"
**DIN862**



| Sipariş | Ölçüm Aralığı | Doğruluk |
|---|---|---|
| 1156-300 | 0 - 300 mm / 0 - 12" | ± 0.03 mm |
| 1156-600 | 0 - 600 mm / 0 - 24" | ± 0.05 mm |
| 1156-1000 | 0 - 1000 mm / 0 - 40" | ± 0.07 mm |

INSIZE

## 1351 - Saatli Çift Sütunlu Yükseklik Mihengiri

**Hassasiyet** : 0.01 mm
**Sayaç Okuma** : 1 mm
**DIN862**



| Sipariş | Ölçüm Aralığı | Sütun |
|---|---|---|
| 1351-300 | 0 - 300 mm | 2 |
| 1351-450 | 0 - 450 mm | 2 |
| 1351-600 | 0 - 600 mm | 2 |
| 1351-1000 | 0 - 1000 mm | 2 |

INSIZE

## 1250 - Mekanik Yükseklik Mihengiri

**Hassasiyet** : 0.02 mm / 0.001"
**DIN862**



| Sipariş | Ölçüm Aralığı |
|---|---|
| 1250-300 | 0 - 300 mm / 0 - 12" |
| 1250-450 | 0 - 450 mm / 0 - 18" |
| 1250-600 | 0 - 600 mm / 0 - 24" |
| 1250-1000 | 0 - 1000 mm / 0 - 40" |

INSIZE

## 1150 - Dijital Yükseklik Mihengiri

**Hassasiyet** : 0.01 mm / 0.0005"
**DIN862**



| Sipariş | Ölçüm Aralığı |
|---|---|
| 1150-300 | 0 - 300 mm / 0 - 12" |
| 1150-500 | 0 - 500 mm / 0 - 20" |
| 1150-600 | 0 - 600 mm / 0 - 24" |
| 1150-1000 | 0 - 1000 mm / 0 - 40" |
| 1150-1500 | 0 - 1500 mm / 0 - 60" |
| 1150-2000 | 0 - 2000 mm / 0 - 80" |



INSIZE

## 3203 - Mekanik Dış Çap Mikrometresi

**Hassasiyet** : 0.01 mm
**DIN863** (Opsiyonel 0.001 mm)

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3203-25 | 0 - 25 mm |
| 3203-50 | 25 - 50 mm |
| 3203-75 | 50 - 75 mm |
| 3203-100 | 75 - 100 mm |
| 3203-125 | 100 - 125 mm |
| 3203-150 | 125 - 150 mm |
| 3203-175 | 150 - 175 mm |
| 3203-200 | 175 - 200 mm |
| 3203-225 | 200 - 225 mm |
| 3203-250 | 225 - 250 mm |
| 3203-275 | 250 - 275 mm |
| 3203-300 | 275 - 300 mm |

**3203 Set**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3203-753 | 0 - 75 mm ( 3 Parça ) |
| 3203-1004 | 0 - 100 mm ( 4 Parça ) |
| 3203-1506 | 0 - 150 mm ( 6 Parça ) |
| 3203-3006 | 150 - 300 mm ( 6 Parça ) |
| 3203-3012 | 0 - 300 mm ( 12 Parça ) |



INSIZE

## 3109 - Dijital Dış Çap Mikrometresi

**Hassasiyet** : 0.001 mm / 0.00005"
**DIN863**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3109-25A | 0 - 25 mm / 0 - 1" |
| 3109-50A | 25 - 50 mm / 1 - 2" |
| 3109-75A | 50 - 75 mm / 2 - 3" |
| 3109-100A | 75 - 100 mm / 3 - 4" |

**3109 Set**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3109-753A | 0-75 mm / 0-3" ( 3 Parça ) |
| 3109-1004A | 0-100 mm / 0-4" ( 4 Parça ) |
| 3109-1506A | 0-150 mm / 0-6" ( 6 Parça ) |



INSIZE

## 3400 - Numaratörlü Dış Çap Mikrometresi

**Numaratör Hassasiyeti** : metrik 0.01 mm
**Skala Hassasiyeti** : 0.01 mm
**DIN863**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3400-25 | 0 - 25 mm |
| 3400-50 | 25 - 50 mm |
| 3400-75 | 50 - 75 mm |
| 3400-100 | 75 - 100 mm |



INSIZE

## 3208 - Hızlı Besleme Mikrometresi

**Hassasiyeti :** 0.01 mm
**Her tur 1mm besleme**
**Karbür ölçüm ağızları**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3208-25B | 0 - 25 mm |
| 3208-50B | 25 - 50 mm |
| 3208-75B | 50 - 75 mm |
| 3208-100B | 75 - 100 mm |
| 3208-125B | 100 - 125 mm |
| 3208-150B | 125 - 150 mm |
| 3208-175B | 150 - 175 mm |
| 3208-200B | 175 - 200 mm |

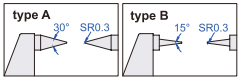


INSIZE

## 3230 - İğne Uçlu Mikrometre

**Hassasiyet** : 0.01 mm
**Ölçüm Ucu** : 30°, SR0.3 mm

| Sipariş | Ölçüm Aralığı | Tip |
|---|---|---|
| 3230-25A | 0 - 25 mm | A |
| 3230-50A | 25 - 50 mm | |
| 3230-75A | 50 - 75 mm | |
| 3230-100A | 75 - 100 mm | |
| 3230-25BA | 0 - 25 mm | B |
| 3230-50BA | 25 - 50 mm | |
| 3230-75BA | 50 - 75 mm | |
| 3230-100BA | 75 - 100 mm | |

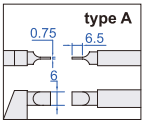


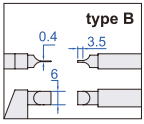



INSIZE

## 3232 - Bıçak Ağızlı Mikrometre

**Numaratör Hassasiyeti** : 0.01 mm
**DIN863**




**Tip A**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3232-25A | 0 - 25 mm |
| 3232-50A | 25 - 50 mm |
| 3232-75A | 50 - 75 mm |
| 3232-100A | 75 - 100 mm |
| 3232-125A | 100 - 125 mm |
| 3232-150A | 125 - 150 mm |
| 3232-175A | 150 - 175 mm |
| 3232-200A | 175 - 200 mm |
| 3232-225A | 200 - 225 mm |
| 3232-250A | 225 - 250 mm |
| 3232-275A | 250 - 275 mm |
| 3232-300A | 275 - 300 mm |

**Tip B**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3232-25BA | 0 - 25 mm |
| 3232-50BA | 25 - 50 mm |
| 3232-75BA | 50 - 75 mm |
| 3232-100BA | 75 - 100 mm |
| 3232-125BA | 100 - 125 mm |
| 3232-150BA | 125 - 150 mm |
| 3232-175BA | 150 - 175 mm |
| 3232-200BA | 175 - 200 mm |
| 3232-225BA | 200 - 225 mm |
| 3232-250BA | 225 - 250 mm |
| 3232-275BA | 250 - 275 mm |
| 3232-300BA | 275 - 300 mm |



INSIZE

## 3260 - Küresel Uçlu Mikrometre

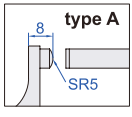
**Hassasiyet** : 0.01 mm / 0.0005"
**Boru Kalınlığı Ölçümü İçin**
**Ölçüm Uçları Küresel**

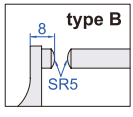
**Tip A**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3260-25A | 0 - 25 mm |
| 3260-50A | 25 - 50 mm |
| 3260-75A | 50 - 75 mm |
| 3260-100A | 75 - 100 mm |

**Tip B**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3260-25SA | 0 - 25 mm |
| 3260-50SA | 25 - 50 mm |
| 3260-75SA | 50 - 75 mm |
| 3260-100SA | 75 - 100 mm |






INSIZE

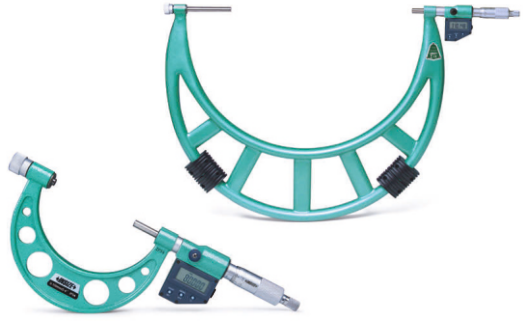
## 3108 - Dijital Dış Çap Mikrometresi

**Hassasiyet** : 0.01 mm
**DIN863**
**IP54 Koruma**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3108-25A | 0 - 25 mm / 0-1" |
| 3108-50A | 25 - 50 mm / 1-2" |
| 3108-75A | 50 - 75 mm / 2-3" |
| 3108-100A | 75 - 100 mm / 3-4" |

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3108-125A | 100 - 125 mm / 4-5" |
| 3108-150A | 125 - 150 mm / 5-6" |
| 3108-175A | 150 - 175 mm / 6-7" |
| 3108-200A | 175 - 200 mm / 7-8" |

| Sipariş | Ölçüm Aralığı | Set İçeriği |
|---|---|---|
| 3108-753A | 0 - 75 mm | 3108-25A / 3108-50A / 3108-75A |
| 3108-1004A | 0 - 100 mm | 3108-25A / 3108-50A / 3108-75A / 3108-100A |
| 3108-1506A | 0 - 150 mm | 3108-25A / 3108-50A / 3108-75A<br>3108-100A / 3108-125A / 3108-150A |



Ölçüm Aralığı 300 mm / 12" 'e Kadar Olan Mikrometreler

Döküm Gövde, 300 mm / 12" Üstü Olanlar İçi Boş Boru Gövde

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3506-100A | 0 - 100 mm / 0 - 4" |
| 3506-150A | 0 - 150 mm / 0 - 6" |
| 3506-300A | 150 - 300 mm / 6 - 12" |
| 3506-301A | 200 - 300 mm / 8 - 12" |
| 3506-400A | 300 - 400 mm / 12 - 16" |
| 3506-500A | 400 - 500 mm / 16 - 20" |
| 3506-600A | 500 - 600 mm / 20 - 24" |
| 3506-700A | 600 - 700 mm / 24 - 28" |
| 3506-800A | 700 - 800 mm / 28 - 32" |
| 3506-900A | 800 - 900 mm / 32 - 36" |
| 3506-1000A | 900 - 1000 mm / 36 - 40" |

### 3506 - Dijital Değiştirilebilir Uçlu Dış Çap Mikrometresi

INSIZE

**Hassasiyet :** 0.01 mm / 0.00005 "
**DIN863**
**IP54 Koruma**



### 3222 - Uzatmalı Delik Mikrometresi

INSIZE

**Hassasiyet** : 0.01 mm
**Mikrometre Kafası** : 50 - 63 mm
**Çubuk Çapı** : 15.5 mm

| Sipariş | Ölçüm Aralığı | Uzatma Çubuğu |
|---|---|---|
| 3222-63 | 50 – 63 mm | Mikrometre Kafası |
| 3222-150 | 50 – 150 mm | 13 mm, 25 mm, 50 mm |
| 3222-300 | 50 – 300 mm | 13 mm, 25 mm, 50 mm (2 Parça), 100 mm |
| 3222-500 | 50 – 500 mm | 13 mm, 25 mm, 50 mm (2 Parça), 100 mm, 200 mm |
| 3222-600 | 50 – 600 mm | 13 mm, 25 mm, 50 mm, 100 mm, 150 mm, 200 mm |
| 3222-1000 | 50 – 1000 mm | 13 mm, 25 mm, 50 mm, 100 mm (2 Parça), 150 mm, 200 mm, 300 mm |
| 3222-1500 | 50 – 1500 mm | 13 mm, 25 mm, 50 mm, 100 mm (2 Parça) 150 mm, 200 mm (2 Parça), 300 mm (2 Parça) |



### 3241 - Derinlik Mikrometresi

INSIZE

**Hassasiyet** : 0.01 mm
Düz Ölçüm Uçlu ( Küresel Uçlu Opsiyonel )
Taban Uzunluğu 101.5 mm ( 63 mm Opsiyonel )

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3241-25 | 0 - 25 mm |
| 3241-50 | 0 - 50 mm |
| 3241-75 | 0 - 75 mm |
| 3241-100 | 0 - 100 mm |

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3241-150 | 0 - 150 mm |
| 3241-200 | 0 - 200 mm |
| 3241-300 | 0 - 300 mm |



### 3540 - Dijital Derinlik Mikrometresi

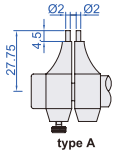
INSIZE

**Hassasiyet** : 0.01 mm
Taban Uzunluğu 101.5 mm (63 mm Opsiyonel)
RS232 Bilgi Çıkışı - IP54 Koruma

Düz Ölçüm Uçlu
( Küresel Uçlu Opsiyonel )

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3540-25 | 0 - 25 mm / 0 - 1" |
| 3540-50 | 0 - 50 mm / 0 - 2" |
| 3540-300 | 0 - 150 mm / 0 - 6" |
| 3540-150 | 0 - 300 mm / 0 - 12" |

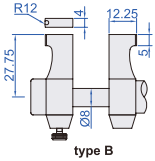




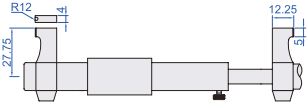

INSIZE

## 3220 - İç Çap Mikrometresi

**Hassasiyet** : 0.01 mm / 0.0005"
Standart Cırcır, Karbür Uç




| Sipariş | Ölçüm Aralığı | Tip |
|---|---|---|
| 3220-30 | 0 - 25 mm | A |
| 3220-50 | 25 - 50 mm | B |
| 3220-75 | 50 - 75 mm | B |
| 3220-100 | 75 - 100 mm | C |




**Sadece 5-30 mm ve 25-50 mm Ölçüler Halka Mastar İçerir.**



INSIZE

## 3520 - Dijital İç Çap Mikrometresi

**Hassasiyet** : 0.01 mm / 0.00005"
**Karbür Uçlu**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3520-30 | 5 - 30 mm / 0.2 - 1.2" |
| 3520-50 | 25 - 50 mm / 1 - 2" |
| 3520-75 | 50 - 75 mm / 2 - 3" |
| 3520-100 | 75 - 100 mm / 3 - 4" |

Sadece
5-30 mm/0.1 - 1.2" ve
25-50 mm/1-2" Ölçüler
Halka Mastar İçerir.



INSIZE

## 3334 - Pasometre

**Hassasiyet** : 0.001 mm
**Gösterge Aralığı** : ±0.04 mm
**IP54**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 3334-25 | 0 - 25 mm |
| 3334-50 | 25 - 50 mm |
| 3334-75 | 50 - 75 mm |
| 3334-100 | 75 - 100 mm |



| Sipariş |
|---|
| 6300 |

INSIZE

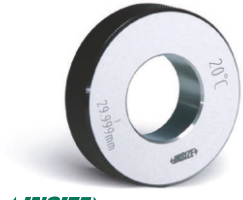
## 6300
## Mikrometre Ayağı



| Sipariş |
|---|
| 6301 |

INSIZE

## 6301
## Mikrometre Ayağı



INSIZE

## 6312 - Halka Mastar

**DIN2250**

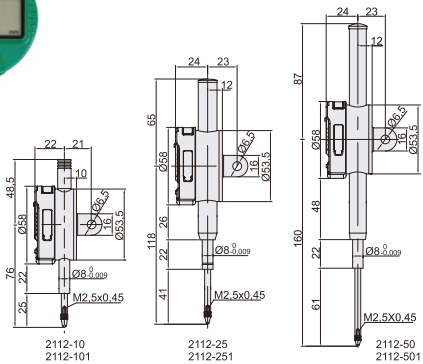
**İç Çap Mikrometreleri**
**3 Ayak Mikrometreleri**
**Silindir Kompratörlerini**
**Sıfırlamak İçin**

| Sipariş | Ölçü |
|---|---|
| 6312-2 | 2 mm |
| 6312-3 | 3 mm |
| 6312-4 | 4 mm |
| 6312-5 | 5 mm |
| 6312-6 | 6 mm |
| 6312-8 | 8 mm |
| 6312-10 | 10 mm |
| 6312-12 | 12 mm |
| 6312-16 | 16 mm |
| 6312-20 | 20 mm |
| 6312-25 | 25 mm |
| 6312-30 | 30 mm |
| 6312-40 | 40 mm |
| 6312-50 | 50 mm |
| 6312-62 | 62 mm |
| 6312-70 | 70 mm |
| 6312-75 | 75 mm |
| 6312-87 | 87 mm |
| 6312-100 | 100 mm |
| 6312-150 | 150 mm |



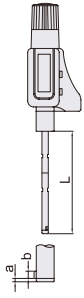
INSIZE

## 2112 - Dijital Komparatör



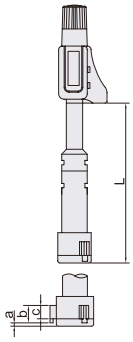

| 0.001 mm 0.00005" Sipariş | 0.01 mm 0.0005" Sipariş | Ölçüm Aralığı | Doğruluk | Histerezi | Açıklama |
|---|---|---|---|---|---|
| 2112-101F | 2112-10F | 12.7 mm/0.5" | 5 µm | 2 µm | Düz Kapak |
| 2112-251F | 2112-25F | 25.4 mm/1" | 5 µm | 3 µm | Düz Kapak |
| 2112-501F | 2112-50F | 50.8 mm/2" | 6 µm | 3 µm | Düz Kapak |
| 2112-101 | 2112-10 | 12.7 mm/0.5" | 5 µm | 2 µm | Kulaklı Kapak |
| 2112-251 | 2112-25 | 25.4 mm/1" | 5 µm | 3 µm | Kulaklı Kapak |
| 2112-501 | 2112-50 | 50.8 mm/2" | 6 µm | 3 µm | Kulaklı Kapak |





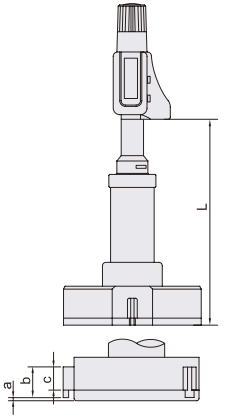

**Tip A**
6-12mm,
çelik ölçme ucu






**Tip B**
12-50mm,
karbür ölçme ucu






**Tip C**
50-300mm,
karbür ölçme ucu

INSIZE

## 3127 - Dijital 3 Ayaklı İç Çap Mikrometre

**Hassasiyet** : 0.001 mm / 0.00005 "
**Ölçüm Derinliği** : 150 mm
**Uzatma Çubuğu** : 150 mm
**Standart Halka Master**
**IP54 Koruma**

**sıfırlama mastarı**



6-100mm: dahil,
100-300mm: **opsiyonel**

**uzatma çubuğu**



dahil

kıskaçlı mikrometre standı
(**opsiyonel**)



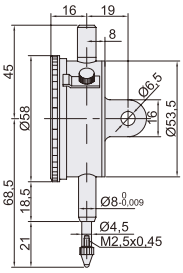
| Sipariş | Ölçüm Aralığı | Tip | Doğruluk | Sıfırlama Mastarı | Uzatma Çubuğu | L | a | b | c |
|---|---|---|---|---|---|---|---|---|---|
| 3127-8* | 6-8mm/0,24-0,31" | A | 4µm | Ø6mm (dahil) | 100mm | 54,5 | 1,5 | 2,5 | - |
| 3127-10* | 8-10mm/0,31-0,39" | A | 4µm | Ø8mm (dahil) | 100mm | 54,5 | 1,5 | 2,5 | - |
| 3127-12* | 10-12mm/0,39-0,47" | A | 4µm | Ø10mm (dahil) | 100mm | 54,5 | 1,5 | 2,5 | - |
| 3127-16* | 12-16mm/0,47-0,63" | B | 4µm | Ø16mm (dahil) | 150mm | 80 | 0,5 | 6 | 4,5 |
| 3127-20* | 16-20mm/0,63-0,79" | B | 4µm | Ø16mm (dahil) | 150mm | 80 | 0,5 | 6 | 4,5 |
| 3127-25* | 20-25mm/0,79-0,98" | B | 4µm | Ø25mm (dahil) | 150mm | 90 | 0,5 | 8 | 6 |
| 3127-30* | 25-30mm/0,98-1,18" | B | 4µm | Ø25mm (dahil) | 150mm | 90 | 0,5 | 8 | 6 |
| 3127-40* | 30-40mm/1,18-1,57" | B | 4µm | Ø40mm (dahil) | 150mm | 97 | 0,5 | 14 | 12 |
| 3127-50* | 40-50mm/1,57-1,97" | B | 5µm | Ø40mm (dahil) | 150mm | 97 | 0,5 | 14 | 12 |
| 3127-63* | 50-63mm/1,97-2,48" | C | 5µm | Ø62mm (dahil) | 150mm | 114 | 0,5 | 17,5 | 14,5 |
| 3127-75* | 62-75mm/2,44-2,95" | C | 5µm | Ø62mm (dahil) | 150mm | 114 | 0,5 | 17,5 | 14,5 |
| 3127-88* | 75-88mm/2,95-3,46" | C | 5µm | Ø87mm (dahil) | 150mm | 114 | 0,5 | 17,5 | 14,5 |
| 3127-100* | 87-100mm/3,43-3,94" | C | 5µm | Ø87mm (dahil) | 150mm | 114 | 0,5 | 17,5 | 14,5 |
| 3127-125* | 100-125mm/3,94-4,92" | C | 5µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |
| 3127-150* | 125-150mm/4,92-5,91" | C | 5µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |
| 3127-175* | 150-175mm/5,91-6,89" | C | 5µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |
| 3127-200* | 175-200mm/6,89-7,87" | C | 5µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |
| 3127-225 | 200-225mm/7,87-8,86" | C | 7µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |
| 3127-250 | 225-250mm/8,86-9,84" | C | 7µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |
| 3127-275 | 250-275mm/9,84-10,83" | C | 7µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |
| 3127-300 | 275-300mm/10,83-11,81" | C | 7µm | opsiyonel | 150mm | 150 | 0,5 | 19,5 | 14,5 |

| Sipariş | Ölçüm Aralığı | Mikrometreler Dahil | Sıfırlama Mastarı Dahil | Uzatma Çubuğu Dahil |
|---|---|---|---|---|
| 3127-123* | 6-12mm/0,24-0,47" | 6-8mm, 8-10mm, 10-12mm | Ø6mm, Ø8mm, Ø10mm | 100 mm |
| 3127-202* | 12-20mm/0,47-0,79" | 12-16mm, 16-20mm | Ø16mm | 150 mm |
| 3127-504* | 20-50mm/0,79-1,97" | 20-25mm, 25-30mm, 30-40mm, 40-50mm | Ø25mm, Ø40mm | 150 mm |
| 3127-1004* | 50-100mm/1,97-3,94" | 50-63mm, 62-75mm, 75-88mm, 87-100mm | Ø62mm, Ø87mm | 150 mm |



**3127-504**



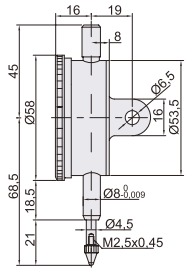



INSIZE

## 2308 - Kompratör Saati

| Sipariş | Ölçüm Aralığı | Hassasiyet | Açıklama |
|---|---|---|---|
| 2308-3FA | 0 – 3 mm | 0.01 mm | Düz Kapak |
| 2308-5FA | 0 – 5 mm | 0.01 mm | Düz Kapak |
| 2308-10FA | 0 – 10 mm | 0.01 mm | Düz Kapak |
| 2308-3A | 0 – 3 mm | 0.01 mm | Kulaklı Kapak |
| 2308-5A | 0 – 5 mm | 0.01 mm | Kulaklı Kapak |
| 2308-10A | 0 – 10 mm | 0.01 mm | Kulaklı Kapak |



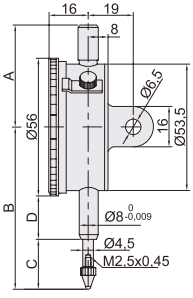



INSIZE

## 2314 - Kompratör Saati Darbe Korumalı

| Sipariş | Ölçüm Aralığı | Hassasiyet | Açıklama |
|---|---|---|---|
| 2314-3FA | 0 – 3 mm | 0.01 mm | Düz Kapak |
| 2314-5FA | 0 – 5 mm | 0.01 mm | Düz Kapak |
| 2314-10FA | 0 – 10 mm | 0.01 mm | Düz Kapak |
| 2314-3A | 0 – 3 mm | 0.01 mm | Kulaklı Kapak |
| 2314-5A | 0 – 5 mm | 0.01 mm | Kulaklı Kapak |
| 2314-10A | 0 – 10 mm | 0.01 mm | Kulaklı Kapak |



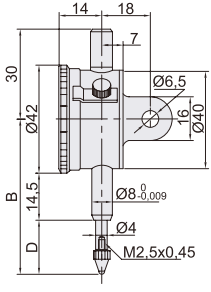



INSIZE

## 2313 - Kompratör Saati Darbe Korumalı

| Sipariş | Ölçüm Aralığı | Hassasiyet | Doğruluk | Açıklama |
|---|---|---|---|---|
| 2313-1FA | 0 – 1 mm | 0.001 mm | 5µm | Düz Kapak |
| 2313-2FA | 0 – 2 mm | 0.001 mm | 8µm | Düz Kapak |
| 2313-1A | 0 – 1 mm | 0.001 mm | 5µm | Kulaklı Kapak |
| 2313-2A | 0 – 2 mm | 0.001 mm | 8µm | Kulaklı Kapak |



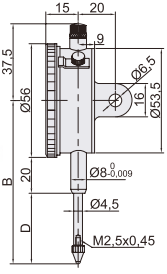



INSIZE

## 2311 - Kompratör Saati

| Sipariş | Ölçüm Aralığı | Hassasiyet | Doğruluk | Açıklama |
|---|---|---|---|---|
| 2311-3FA | 0 – 3 mm | 0.01 mm | 12µm | Düz Kapak |
| 2311-5FA | 0 – 5 mm | 0.01 mm | 14µm | Düz Kapak |
| 2311-3A | 0 – 3 mm | 0.01 mm | 12µm | Kulaklı Kapak |
| 2311-5A | 0 – 5 mm | 0.01 mm | 14µm | Kulaklı Kapak |






INSIZE

## 2310 - Kompratör Saati

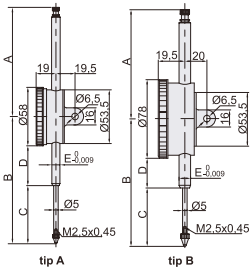
| Sipariş | Ölçüm Aralığı | Hassasiyet | Doğruluk | Açıklama |
|---|---|---|---|---|
| 2310-20FA | 0 – 20 mm | 0.01 mm | 25µm | Düz Kapak |
| 2310-30FA | 0 – 30 mm | 0.01 mm | 35µm | Düz Kapak |
| 2310-20A | 0 – 20 mm | 0.01 mm | 25µm | Kulaklı Kapak |
| 2310-30A | 0 – 30 mm | 0.01 mm | 35µm | Kulaklı Kapak |

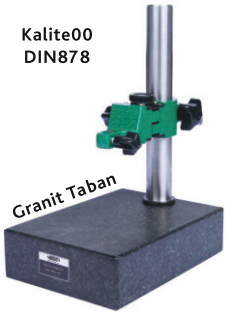


INSIZE

## 2309 - Kompratör Saati

| Sipariş | Ölçüm Aralığı | Tip | Açıklama |
|---|---|---|---|
| 2309-30F | 30 mm | A | Düz Kapak |
| 2309-30 | 30 mm | A | Kulaklı Kapak |
| 2309-50 | 50 mm | A | Yedek Düz Arkalı Kulaklı Kapak |
| 2309-50D | 50 mm | B | |
| 2309-80 | 80 mm | A | |
| 2309-80D | 80 mm | B | |
| 2309-100D | 100 mm | B | |






INSIZE

### 6866 - Kompratör Ayağı

| Sipariş | Taban | Kolon |
|---|---|---|
| 6866 | 200 x 150 x 54 | Ø30x225 |




INSIZE

### 6208 - Kompratör Ayağı

| Sipariş | Manyetik Gücü |
|---|---|
| 6208 | 80 kgf |




INSIZE

### 6201 - Kompratör Ayağı

| Sipariş | Manyetik Gücü |
|---|---|
| 6201 | 60 kgf |




INSIZE

### 6211 - Mini Kompratör Ayağı

| Sipariş | Manyetik Gücü |
|---|---|
| 6211 | 40 kgf |

Darbeye Karşı Dayanıklı



INSIZE

### 2896 - Salgı Kompratörü (Uzun Problu)

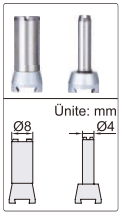
**Karbür Uç** : Ø2 mm
**Prob Uzunluğu** : 36, 23 mm
**İki adet tutucu Aparatı** : Ø4 mm ve Ø8 mm

| Sipariş | Ölçüm Aralığı | Hassasiyet | Ekran Çapı |
|---|---|---|---|
| 2896 | 0 - 0.5 mm | 0.01 mm | 32 mm |

Darbeye Karşı Dayanıklı



kelepçe (dahil)




INSIZE

### 2380 - Salgı Kompratörü

**Karbür Uç** : Ø2 mm
**İki adet tutucu Aparatı** : Ø4 mm ve Ø8 mm
**DIN2270**

| Sipariş | Ölçüm Aralığı | Hassasiyet | Ekran Çapı | Prob Uzunluğu |
|---|---|---|---|---|
| 2380-08 | 0 - 0.8 mm | 0.01 mm | 30 mm | 13.5 mm |
| 2381-08 | 0 - 0.8 mm | 0.01 mm | 37 mm | 13.5 mm |
| 2380-02 | 0 - 0.2 mm | 0.002 mm | 32 mm | 14.7 mm |
| 2381-02 | 0 - 0.2 mm | 0.002 mm | 37 mm | 14.7 mm |



INSIZE

### 2361 - Kalınlık Ölçme Kompratörü

**Ekran Çapı** : 40 mm

| Sipariş | Ölçüm | Hassasiyet |
|---|---|---|
| 2361 | 0-10 mm | 0.1 mm |



INSIZE

### 2861 - Kalınlık Ölçme Kompratörü

**Seramik Ölç. Uçları** : Ø10 mm
**Ekran Çapı** : 55 mm

| Sipariş | Ölçüm | Hassasiyet |
|---|---|---|
| 2861 | 0-10mm | 0.1 mm |




INSIZE

### 2871 - Kalınlık Ölçme Kompratörü

**Hassasiyet** : 0.01mm/0.0005"
**Seramik Ölç. Uçları**: Ø10 mm
**Boğaz Derinliği** : 25 mm

| Sipariş | Ölçüm Aralığı |
|---|---|
| 2871 | 0 - 10 mm/0.5" |



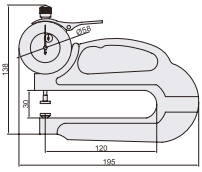
INSIZE

### 2364 - Kalınlık Ölçme Kompratörü

**Düz Seramik Ölç. Uçları** : Ø10 mm
**Boğaz Derinliği** : 30 mm
**Ekran Çapı** : 58 mm

| Sipariş | Ölçüm | Hassasiyet |
|---|---|---|
| 2364 | 0-10mm | 0.01mm |

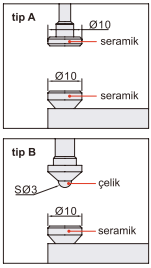





INSIZE

## 2365
## Kalınlık Ölçme Kompratörü

| Sipariş | Ölçüm Aralığı | Doğruluk | Tip |
|---|---|---|---|
| 2365-10 | 0 - 10 mm | ±0.02 mm | A |
| 2365-20 | 0 - 20 mm | ±0.03 mm | A |
| 2365-10B | 0 - 10 mm | ±0.02 mm | B |
| 2365-20B | 0 - 20 mm | ±0.03 mm | B |






INSIZE

## 2824 - Silindir Kompratörü (Set)

**Hassasiyet :** 0.01 mm / 0.0005 "

Sabit ve Hareketli Temas Nokları Seramiktir.
18-35/0.7-1.5" Ölçüsünün Sadece Sabit Uçları Seramiktir.

| Sipariş | Ölçüm Aralığı |
|---|---|
| 2824-S3 | 18-160 mm (3 Parça) |
| 2824-S160 | 35-160 mm (2 Parça) |



INSIZE

## 4799 - Açı Ölçer

**Ölçüm Aralığı** : 1 - 180 °
**Hassasiyet Derecesi** : 1°

| Sipariş | Açı Ölçer Çapı | Bıçak Uzunluğu |
|---|---|---|
| 4799-180 | 80 mm | 120 mm |
| 4799-1120 | 120 mm | 150 mm |
| 4799-1150 | 150 mm | 200 mm |
| 4799-1200 | 200 mm | 300 mm |
| 4799-1300 | 300 mm | 500 mm |



INSIZE

## 4100
## Çelik Kontrol Mastarları

| Sipariş Sınıf 0 | Sipariş Sınıf 1 | Sipariş Sınıf 2 | Set Başına Blok | Boyut | Adım | Adet |
|---|---|---|---|---|---|---|
| 4100-122 | 4100-1122 | 4100-2122 | 122 | 1,0005<br>1,001-1,009<br>1,01-1,49<br>1,6-1,9<br>0,5-24,5<br>30-100<br>25-75 | <br>0,001<br>0,01<br>0,1<br>0,5<br>10<br>50 | 1<br>9<br>49<br>4<br>49<br>8<br>2 |
| 4100-112 | 4100-1112 | 4100-2112 | 112 | 1,0005<br>1,001-1,009<br>1,01-1,49<br>0,5-24,5<br>25-100 | <br>0,001<br>0,01<br>0,5<br>25 | 1<br>9<br>49<br>49<br>4 |
| 4100-103 | 4100-1103 | 4100-2103 | 103 | 1,005<br>1,01-1,49<br>0,5-24,5<br>25-100 | <br>0,01<br>0,5<br>25 | 1<br>49<br>49<br>4 |
| 4100-88 | 4100-188 | 4100-288 | 88 | 1,0005<br>1,001-1,009<br>1,01-1,49<br>0,5-9,5<br>10-100 | <br>0,001<br>0,01<br>0,5<br>10 | 1<br>9<br>49<br>19<br>10 |
| 4100-87 | 4100-187 | 4100-287 | 87 | 1,001-1,009<br>1,01-1,49<br>0,5-9,5<br>10-100 | 0,001<br>0,01<br>0,5<br>10 | 9<br>49<br>19<br>10 |
| 4100-83 | 4100-183 | 4100-283 | 83 | 0,5<br>1<br>1,005<br>1,01-1,49<br>1,5-1,9<br>2-9,5<br>10-100 | <br><br><br>0,01<br>0,1<br>0,5<br>10 | 1<br>1<br>1<br>49<br>5<br>16<br>10 |
| 4100-76 | 4100-176 | 4100-276 | 76 | 1,005<br>1,01-1,49<br>0,5-9,5<br>10-40<br>50-100 | <br>0,01<br>0,5<br>10<br>25 | 1<br>49<br>19<br>4<br>3 |

| Sipariş Sınıf 0 | Sipariş Sınıf 1 | Sipariş Sınıf 2 | Set Başına Blok | Boyut | Adım | Adet |
|---|---|---|---|---|---|---|
| 4100-56 | 4100-156 | 4100-256 | 56 | 0,5<br>1,001-1,009<br>1,01-1,09<br>1,1-1,9<br>1-24<br>25-100 | <br>0,001<br>0,01<br>0,1<br>1<br>25 | 1<br>9<br>9<br>9<br>24<br>4 |
| 4100-47A | 4100-147A | 4100-247A | 47 | 1,0005<br>1,01-1,09<br>1,1-1,9<br>1-24<br>25-100 | <br>0,01<br>0,1<br>1<br>25 | 1<br>9<br>9<br>24<br>4 |
| 4100-47 | 4100-147 | 4100-247 | 47 | 1,0005<br>1,01-1,19<br>1,2-1,9<br>1-9<br>10-100 | <br>0,01<br>0,1<br>1<br>10 | 1<br>19<br>8<br>9<br>10 |
| 4100-46 | 4100-146 | 4100-246 | 46 | 1,001-1,009<br>1,01-1,09<br>1,1-1,9<br>1-9<br>10-100 | 0,001<br>0,01<br>0,1<br>1<br>10 | 9<br>9<br>9<br>9<br>10 |
| 4100-34 | 4100-134 | 4100-234 | 34 | 1,0005<br>1,001-1,009<br>1,01-1,09<br>1,1-1,9<br>1-5<br>10 | <br>0,001<br>0,01<br>0,1<br>1 | 1<br>9<br>9<br>9<br>5<br>1 |
| 4100-32 | 4100-132 | 4100-232 | 32 | 1,005<br>1,01-1,09<br>1,1-1,9<br>1-9<br>10-30<br>50 | <br>0,01<br>0,1<br>1<br>10 | 1<br>9<br>9<br>9<br>3<br>1 |
| 4100-9 | 4100-19 | 4100-29 | 9 | 1,001-1,009 | 0,001 | 9 |
| 4100-9A | 4100-19A | 4100-29A | 9 | 0,991-0,999 | 0,001 | 9 |
| 4100-8 | 4100-18 | 4100-28 | 8 | 125-175<br>200-250<br>300-500 | 25<br>50<br>100 | 3<br>2<br>3 |



INSIZE

## 2122 - Dijital Silindir Kompratörü

**Hassasiyet :** 0.002 mm / 0.00005 "

Sabit ve Hareketli Temas Nokları Seramiktir. Sadece 6 - 10 mm / 0.24 - 0.4 " Ölçüsünün Uçları Seramik Değildir, 10 - 18 mm / 0.4 - 0.7 " ve 18 - 35 / 0.7 - 1.5 " Ölçülerininde Sadece Sabit Uçları Seramiktir.

Döndürülebilir Ekran

| Sipariş | Ölçüm Aralığı | Hassasiyet | Tekrarlanabilirlik |
|---|---|---|---|
| 2122-35A | 18 – 35 mm | ± 0.015 mm | 0.003 mm |
| 2122-60A | 35 – 60 mm | ± 0.018 mm | 0.003 mm |
| 2122-100A | 50 – 100 mm | ± 0.018 mm | 0.003 mm |
| 2122-160A | 50 – 160 mm | ± 0.018 mm | 0.003 mm |
| 2122-161A | 100 – 160 mm | ± 0.018 mm | 0.003 mm |
| 2122-250A | 160 – 250 mm | ± 0.018 mm | 0.003 mm |
| 2122-450A | 250 – 450 mm | ± 0.018 mm | 0.003 mm |




INSIZE

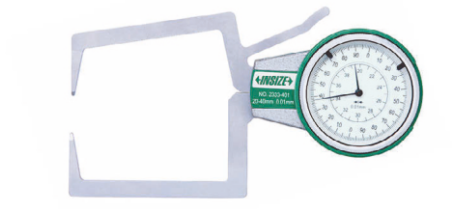
## 2322 - Silindir Kompratörü

**Hassasiyet :** 0.01 mm
(opsiyonel 0.001 mm)

Sabit ve Hareketli Temas Nokları Seramiktir. Sadece 6 - 10 mm / 0.24 - 0.4 " Ölçüsünün Uçları Seramik Değildir, 10 - 18 mm / 0.4 - 0.7 " ve 18 - 35 / 0.7 - 1.5 " Ölçülerininde Sadece Sabit Uçları Seramiktir.




| Sipariş | Ölçüm Aralığı | Hassasiyet | Tekrarlanabilirlik |
|---|---|---|---|
| 2322-35A | 18 – 35 mm | ± 0.015 mm | 0.003 mm |
| 2322-60A | 35 – 60 mm | ± 0.018 mm | 0.003 mm |
| 2322-100A | 50 – 100 mm | ± 0.018 mm | 0.003 mm |
| 2322-160A | 50 – 160 mm | ± 0.018 mm | 0.003 mm |
| 2322-161A | 100 – 160 mm | ± 0.018 mm | 0.003 mm |
| 2322-250A | 160 – 250 mm | ± 0.018 mm | 0.003 mm |
| 2322-450A | 250 – 450 mm | ± 0.018 mm | 0.003 mm |



INSIZE

## 2333 - Dış Çap Kompratörü

**Hassasiyet** : 0.01 mm
**Küresel Uçlu (opsiyonel)** : Ø1.5 mm

| Sipariş | Ölçüm Aralığı | Kol Uzunluğu | Uç Yüksekliği | Uç Radüsü |
|---|---|---|---|---|
| 2333-201 | 0 – 20 mm | 80 mm | 25 mm | 0.75 mm |
| 2333-301 | 10 – 30 mm | 80 mm | 25 mm | 0.75 mm |
| 2333-401 | 20 – 40 mm | 80 mm | 25 mm | 0.75 mm |
| 2333-501 | 30 – 50 mm | 80 mm | 25 mm | 0.75 mm |
| 2333-601 | 40 – 60 mm | 80 mm | 25 mm | 0.75 mm |



INSIZE

## 2222 - İç Çap Kompratörü

**Hassasiyet** : 0.01 mm
**Küresel Uçlu (opsiyonel)** : Ø1.5 mm

| Sipariş | Ölçüm Aralığı | Kol Uzunluğu | Uç Yüksekliği | Uç Radüsü |
|---|---|---|---|---|
| 2222-15 | 5 – 15 mm | 20 mm | 1.5 mm | 0.3 mm |
| 2222-25 | 5 – 25 mm | 25 mm | 1.5 mm | 0.3 mm |
| 2222-301 | 10 – 30 mm | 55 mm | 3.5 mm | 0.5 mm |
| 2222-401 | 20 – 40 mm | 80 mm | 6.5 mm | 0.5 mm |
| 2222-501 | 30 – 50 mm | 80 mm | 8.5 mm | 0.5 mm |
| 2222-60 | 40 – 60 mm | 80 mm | 8.5 mm | 0.5 mm |



INSIZE

## 2131 - Dijital Dış Çap Kompratörü

**Hassasiyet** : 0.01 mm / 0.0005 "
**Küresel Uçlu (opsiyonel)** : Ø1.5 mm

| Sipariş | Ölçüm Aralığı | Kol Uzunluğu | Uç Yüksekliği | Uç Radüsü |
|---|---|---|---|---|
| 2131-21 | 0-20 mm / 0-0.8" | 80 mm | 25 mm | 0.75 mm |
| 2131-31 | 10-30 mm / 0.4-1.2" | 80 mm | 25 mm | 0.75 mm |
| 2131-41 | 20-40 mm / 0.8-1.6" | 80 mm | 25 mm | 0.75 mm |
| 2131-51 | 30-50 mm / 1.2-2.0" | 80 mm | 25 mm | 0.75 mm |
| 2131-61 | 40-60 mm / 1.6-2.4" | 80 mm | 25 mm | 0.75 mm |



INSIZE

## 2121 - Dijital İç Çap Kompratörü

**Hassasiyet** : 0.01 mm / 0.0005 "
**Küresel Uçlu (opsiyonel)** : Ø1.5 mm

| Sipariş | Ölçüm Aralığı | Kol Uzunluğu | Uç Yüksekliği | Uç Radüsü |
|---|---|---|---|---|
| 2121-15 | 5-15 mm / 0.2-0.6" | 20 mm | 1.5 mm | 0.3 mm |
| 2121-25 | 5-25 mm / 0.2-1.0" | 25 mm | 1.5 mm | 0.3 mm |
| 2121-31 | 10-30 mm / 0.4-1.8" | 55 mm | 3.5 mm | 0.5 mm |
| 2121-41 | 20-40 mm / 0.8-1.6" | 80 mm | 6.5 mm | 0.5 mm |
| 2121-51 | 30-50 mm / 1.2-2.0" | 80 mm | 8.5 mm | 0.5 mm |
| 2121-61 | 40-60 mm / 1.6-2.4" | 80 mm | 8.5 mm | 0.5 mm |

INSIZE

## 2372 - Mercekli Açı Ölçer

**Hassasiyet** : 5'
**Paralaksız Okuma Kolaylığı**
**İki Adet Ölçüm Cetveli** : 150 mm ve 300 mm
**Mercekli ve Bağlantı Aparatlı**
**Yükseklik Mihengirleri İçin Tutucu Opsiyonel**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 2372-360 | 0 - 360° |



INSIZE

## 2373 - Saatli Açı Ölçer

**Hassasiyet** : 5'
**Paralaksız Okuma Kolaylığı**
**İki Adet Ölçüm Cetveli** : 150 mm ve 300 mm
**Yükseklik Mihengirleri İçin Tutucu Opsiyonel**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 2373-360 | 0 - 360° |



INSIZE

## 4790 - 90° Kıl Gönye

Paslanmaz Sert Çelik Malzeme
Krom Kaplama
DIN875 Kalite 00 (Kalite 0 ve 1 opsiyonel)



| Sipariş | Ölçüm Aralığı |
|---|---|
| 4790-500 | 50 x 40 mm |
| 4790-750 | 75 x 50 mm |
| 4790-0100 | 100 x 70 mm |
| 4790-0150 | 150 x 100 mm |
| 4790-0200 | 200 x 130 mm |
| 4790-0250 | 250 x 165 mm |
| 4790-0300 | 300 x 200 mm |

INSIZE

## 4791 - 90° Düz Gönye

Paslanmaz Sert Çelik Malzeme
DIN875 Kalite 0



| Sipariş | Ölçüm Aralığı |
|---|---|
| 4791-50 | 50 x 40 mm |
| 4791-75 | 75 x 50 mm |
| 4791-100 | 100 x 70 mm |
| 4791-150 | 150 x 100 mm |
| 4791-200 | 200 x 130 mm |
| 4791-300 | 300 x 200 mm |

INSIZE

## 4792 - 90° Düz Gönye

Paslanmaz Sert Çelik Malzeme
Geniş Taban
DIN875 Kalite 0



| Sipariş | Ölçüm Aralığı |
|---|---|
| 4792-50 | 50 x 40 mm |
| 4792-75 | 75 x 50 mm |
| 4792-100 | 100 x 70 mm |
| 4792-150 | 150 x 100 mm |
| 4792-200 | 200 x 130 mm |

INSIZE

## 4793 - 90° Şapkalı Gönye

Paslanmaz Sert Çelik Malzeme
Geniş Taban
DIN875 Kalite 0



| Sipariş | Ölçüm Aralığı |
|---|---|
| 4793-50 | 50 x 40 mm |
| 4793-75 | 75 x 50 mm |
| 4793-100 | 100 x 70 mm |
| 4793-150 | 150 x 100 mm |
| 4793-200 | 200 x 130 mm |
| 4793-250 | 250 x 165 mm |
| 4793-300 | 300 x 200 mm |

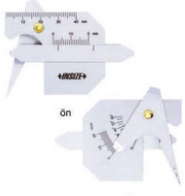


INSIZE

## 4830 - Kaynakçı Kumpası

Hassasiyet : 0.1 mm / 1 / 128 "
Açılar : 60°, 70°, 80°, 90°

| Sipariş | Ölçüm Aralığı |
|---|---|
| 4830 | 0 - 20 mm |




INSIZE

## 6832 - Kombinasyonlu Kaynakçı Kumpası

| Sipariş |
|---|
| 6832-1 |



INSIZE

## 2179 - Dijital Açı Ölçer ve Terazi

| Sipariş | Ölçüm | Hassasiyet |
|---|---|---|
| 2179-360 | 0 - 360° (4x90°) | 0.1° |



INSIZE

## 2385 - Kompratör Saatli Freze Merkezleme Aparatı

| Sipariş | Ölçüm | Hassasiyet |
|---|---|---|
| 2385-3 | 0 - 3 mm | 0.01 mm |



INSIZE

### 7261 - Ayarlı İç Çap Pergeli

| Sipariş | Ölçüm Aralığı |
|---|---|
| 7261-150 | 20 - 170 mm |
| 7261-200 | 22 - 220 mm |
| 7261-250 | 30 - 270 mm |
| 7261-300 | 30 - 320 mm |



INSIZE

### 7260 - Ayarlı Düz Pergel

| Sipariş | Ölçüm Aralığı |
|---|---|
| 7260-150 | 0 - 150 mm |
| 7260-200 | 0 - 210 mm |
| 7260-250 | 0 - 250 mm |
| 7260-300 | 0 - 300 mm |

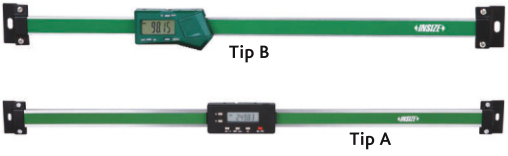


INSIZE

### 6562 - Mekanik Prob

**Hassasiyet** : 0.005 mm

| Sipariş | Şaft | Temas Noktası |
|---|---|---|
| 6562-3 | Ø10 mm | Ø10 mm |
| 6562-4 | Ø10 mm | Ø4 mm |




### 7101 - Dijital Takılabilen Kumpas (Yatay Tip)

**Hassasiyet** : 0.01 mm / 0.0005"
**İki Taraftan Monte Edilebilir, Bilgi Çıkışı**

INSIZE

| Sipariş | Ölçüm Aralığı | Tipi |
|---|---|---|
| 7101-100A | 100 mm / 4" | A |
| 7101-150A | 150 mm / 6" | A |
| 7101-200A | 200 mm / 8" | A |
| 7101-300A | 300 mm / 12" | A |
| 7101-400A | 400 mm / 16" | B |

| Sipariş | Ölçüm Aralığı | Tipi |
|---|---|---|
| 7101-500A | 500 mm / 20" | B |
| 7101-600A | 600 mm / 24" | B |
| 7101-800A | 800 mm / 32" | B |
| 7101-1000A | 1000 mm / 40" | B |



INSIZE

### 7102 - Dijital Takılabilen Kumpas (Dikey Tip)

**Hassasiyet** : 0.01 mm / 0.0005"
**İki Taraftan Monte Edilebilir, Bilgi Çıkışı**

| Sipariş | Ölçüm Aralığı |
|---|---|
| 7102-100 | 100 mm / 4" |
| 7102-150 | 150 mm / 6" |
| 7102-200 | 200 mm / 8" |
| 7102-300 | 300 mm / 12" |
| 7102-400 | 400 mm / 16" |

| Sipariş | Ölçüm Aralığı |
|---|---|
| 7102-500 | 500 mm / 20" |
| 7102-600 | 600 mm / 24" |
| 7102-800 | 800 mm / 32" |
| 7102-1000 | 1000 mm / 40" |



INSIZE

### 4602 - Filler Çakısı

**Yaprak Uzunluğu :** 100 mm

| Sipariş | Yaprak Sayısı | Yaprak Ölçüsü |
|---|---|---|
| 4602-13 | 13 | 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.40, 0.50, 0.60, 0.70 0.80, 0.90, 1.00 mm |
| 4602-17 | 17 | 0.02, 0.03, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.15, 0.20 0.25, 0.30, 0.40, 0.50, 0.75, 1.00 mm |
| 4602-20 | 20 | 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35, 0.40, 0.45, 0.50 0.55, 0.60, 0.70, 0.75, 0.80, 0.85, 0.90, 0.95, 1.00 mm |
| 4602-32 | 32 | 0.03,0.05,0.06,0.07,0.08,0.09,0.10,0.13,0.15,0.18,0.20 0.23,0.25,0.28,0.30,0.33,0.35,0.38,0.40,0.45,0.50,0.55 0.60,0.63,0.65,0.70,0.75,0.80,0.85,0.90, 1.00mm |



## 4801 - Radüs Mastarı

INSIZE

**Yaprak Uzunluğu :** 100 mm

| Sipariş | Yaprak Sayısı | Yaprak Ölçüsü |
|---|---|---|
| 4801-17 | 17 konkav yaprak<br>17 konveks yaprak | 1, 1.25, 1.5, 1.75, 2, 2.25, 2.5,2.75, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7 mm |
| 4801-16 | 16 konkav yaprak<br>16 konveks yaprak | 7.5, 8, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 13.5, 14, 14.5, 15 mm |
| 4801-15 | 15 konkav yaprak<br>15 konveks yaprak | 15.5, 16, 16.5, 17, 17.5, 18, 18.5, 19, 19.5, 20, 21, 22, 23, 24, 25 mm |



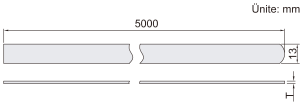
INSIZE

## 4820 - Diş Mastarı

**Yaprak Uzunluğu :** 100 mm

| Sipariş | Ölçüm Aralığı | Yaprak dişleri dahildir (mm) | Yaprak Adedi |
|---|---|---|---|
| **Metrik 60° vida** | | | |
| 4820-122 | 0,4 – 7,0mm | 0,4; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7 | 22 |
| 4820-124 | 0,25 – 7,0mm | 0,25; 0,3; 0,35; 0,4; 0,5; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7 | 24 |
| 4820-1241 | 0,25 – 6,0mm | 0,25; 0,3; 0,35; 0,4; 0,45; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6 | 24 |
| **Birleşik 60° vida** | | | |
| 4820-230 | 4 – 42TPI | 4; 4-1/2; 5; 5-1/2; 6; 7; 8; 9; 10; 11; 11-1/2; 12; 13; 14; 15; 16; 18; 20; 22; 24; 26; 27; 28; 30; 32; 34; 36; 38; 40; 42TPI | 30 |
| **Whitworth 55° vida** | | | |
| 4820-330 | 4 – 42TPI | 4; 4-1/2; 5; 5-1/2; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16; 18; 19; 20; 22; 24; 26; 27; 28; 30; 32; 34; 36; 38; 40; 42TPI | 30 |
| 4820-328 | 4 – 62TPI | 4; 4-1/2; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 16; 18; 19; 20; 22; 24; 25; 26; 28; 30; 32; 36; 40; 48; 60; 62TPI | 28 |
| **Metrik 60° ve Whitworth 55° vida** | | | |
| 4820-452 | 0,25 – 6,0mm | 0,25; 0,3; 0,35; 0,4; 0,45; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6mm | 52 |
| | 4 – 62TPI | 4; 4-1/2; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 16; 18; 19; 20; 22; 24; 25; 26; 28; 30; 32; 36; 40; 48; 60; 62TPI | |
| 4820-450 | 0,4 – 7,0mm | 0,4; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7mm | 50 |
| | 4 – 62TP | 4; 4-1/2; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 16; 18; 19; 20; 22; 24; 25; 26; 28; 30; 32; 36; 40; 48; 60; 62TPI | |
| **Metrik 60° ve Birleşik 60° vida** | | | |
| 4820-552 | 0,4 – 7,0mm | 0,4; 0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 1,75; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7mm | 52 |
| | 4 – 42TPI | 4; 4-1/2; 5; 5-1/2; 6; 7; 8; 9; 10; 11; 11-1/2; 12; 13; 14; 15; 16; 18; 20; 22; 24; 26; 27; 28; 30; 32; 34; 36; 38; 40; 42TPI | |






INSIZE

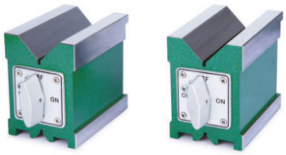
## 4621 - Layner Bant

**Bant Uzunluğu :** 5.000 mm

| Sipariş | Kalınlık (T) |
|---|---|
| 4621-02 | 0.02 |
| 4621-03 | 0.03 |
| 4621-04 | 0.04 |
| 4621-05 | 0.05 |
| 4621-06 | 0.06 |
| 4621-07 | 0.07 |
| 4621-08 | 0.08 |
| 4621-09 | 0.09 |
| 4621-10 | 0.10 |
| 4621-12 | 0.12 |

| Sipariş | Kalınlık (T) |
|---|---|
| 4621-15 | 0.15 |
| 4621-18 | 0.18 |
| 4621-20 | 0.20 |
| 4621-25 | 0.25 |
| 4621-30 | 0.30 |
| 4621-35 | 0.35 |
| 4621-40 | 0.40 |
| 4621-45 | 0.45 |
| 4621-50 | 0.50 |
| 4621-55 | 0.55 |

| Sipariş | Kalınlık (T) |
|---|---|
| 4621-60 | 0.60 |
| 4621-65 | 0.65 |
| 4621-70 | 0.70 |
| 4621-75 | 0.75 |
| 4621-80 | 0.80 |
| 4621-85 | 0.85 |
| 4621-90 | 0.90 |
| 4621-95 | 0.95 |
| 4621-100 | 1.00 |



INSIZE

## 6889 - Manyetik V Blok

**Manyetik Kuvveti** : 100 mm
**Hassasiyet** : 0.02mm/100mm

| Sipariş | Metrik Ölçü | Kapasite ( Çap ) |
|---|---|---|
| 6889-1 | 75 x 56 x 75 mm | 5 - 40 mm |
| 6889-2 | 100 x 70 x 95 mm | 5 - 65 mm |
| 6889-3 | 150 x 75 x 100 mm | 5 - 70 mm |
| 6889-4 | 200 x 124 x 150 mm | 10 - 140 mm |



INSIZE

## 6896 - Çelik V Blok

**Çift Olarak Tedarik Edilir**

| Sipariş | Boyut | Mil Aralığı | Hassasiyet |
|---|---|---|---|
| 6896-10 | 25 x 20 x 20 | 3-20 mm | 3µm |
| 6896-11 | 50 x 40 x 40 | 5-30 mm | 5µm |
| 6896-12 | 80 x 63 x 63 | 7-63 mm | 5µm |
| 6896-13 | 100 x 80 x 80 | 7-80 mm | 5µm |
| 6896-14 | 70 x 140 x 140 | 9-140 mm | 5µm |



INSIZE

## 7111 - Çelik Mastar

| Sipariş | Ölçü | Ebat |
|---|---|---|
| 7111-300A | 300 mm | 40 x 5 mm |
| 7111-500A | 500 mm | 40 x 5 mm |
| 7111-1000A | 1000 mm | 40 x 5 mm |



INSIZE

## 5013-13 - Parça Ölçüm Seti

**İçindekiler**

* Dijital Kumpas, Ölçüm Aralığı 0-150 mm/0.6 , Hassasiyeti 0.01 mm /0.005", Kodu 1112-150
* Dış Çap Mikrometresi, Ölçüm Aralığı 0-25 mm, hassasiyeti 0.01 mm, Kodu 3202-25
* Komparatör Saati, Ölçüm Aralığı 0-10 mm, Hassasiyeti 0.01, Kodu 2308-10
* Manyetik Kompratör Ayağı, Manyetik Gücü 60 kgf, Kodu 6201-60
*Açı Ölçer, Ölçüm Aralığı 0-180°, Hassasiyet Derecesi 1°, Kodu 4799-180
* Diş Mastarı, Ölçüm Aralığı 0.25-7 mm, 24 Parça, Metrik 60°, Kodu 4820-124
* Radüs Mastarı, Ölçüm Aralığı 1-7 mm, Kodu 4801-17
* Filler Çakısı, Ölçüm Aralığı 0.05-1.00 mm 20 Yaprak, Kodu 4602-20
* 90° Kıl Gönye, 100 x 70 mm, Kodu 4790-0100
* Metal Çizecek, Uzunluk 230 mm/9.1", Kodu 7230
* Derinlik Ölçüm Ayağı, Kodu 6140
* Sıfırlama Mastarı
* Çelik Cetvel, 0-150 mm/0-6", Kodu 7110-150

| Sipariş |
|---|
| 5013-W |



Mitutoyo

## Dijital Kumpas

| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 500 - 181 - 20 | 0 - 150 | 0.01 |
| 500 - 184 - 30 | 0 - 150 (Ø1.9 Silindir milli derinlik ölçüm çubugu) | 0.01 |
| 500 - 182 - 30 | 0 - 200 | 0.01 |
| 500 - 205 - 30 | 0 - 300 | 0.01 |



Mitutoyo

## IP67 Dijital Kumpas

| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 500 - 706 - 20 | 0 - 150 | 0.01 |
| 500 - 707 - 20 | 0 - 200 | 0.01 |
| 500 - 708 - 20 | 0 - 300 | 0.01 |



Mitutoyo

## Geniş Ölçüm Dijital Kumpas

| Sipariş | Ölçüm Aralığı | Hassasiyet | Tolerans |
|---|---|---|---|
| 500 - 500 - 10 | 0 – 450 | 0.01 | 0.05 |
| 500 - 501 - 10 | 0 – 600 | 0.01 | 0.05 |
| 500 - 502 - 10 | 0 – 1000 | 0.01 | 0.07 |



Mitutoyo

## Dijital Derinlik Kumpas

| Sipariş | Ölçüm Aralığı | Hassasiyet | Tolerans |
|---|---|---|---|
| 571 - 201 - 30 | 0 – 150 | 0.01 | 0.3 |
| 571 - 202 - 30 | 0 – 200 | 0.01 | 0.3 |
| 571 - 203 - 30 | 0 – 300 | 0.01 | 0.4 |



## Mekanik Mikrometre

Mitutoyo

| Sipariş | Ölçüm | Hass. |
|---|---|---|
| 103 - 137 | 0 – 25 | 0.01 |
| 103 - 129 | 0 – 25 | 0.001 |
| 103 - 138 | 25 – 50 | 0.01 |
| 103 - 130 | 25 – 50 | 0.001 |
| 103 - 139 - 10 | 50 – 75 | 0.01 |
| 103 - 140 - 10 | 75 – 100 | 0.01 |
| 103 - 141 - 10 | 100 – 125 | 0.01 |
| 103 - 142 - 10 | 125 – 150 | 0.01 |



## Dijital Mikrometre

Mitutoyo

| Sipariş | Ölçüm Aralığı | Hassasiyet | Tolerans |
|---|---|---|---|
| 293 - 821 - 30 | 0 – 25 | 0.001 | 3 µm |
| 293 - 230 - 30 | 0 – 25 | 0.001 | 2 µm |
| 293 - 231 - 30 | 25 – 50 | 0.001 | 2 µm |
| 293 - 232 - 30 | 50 – 75 | 0.001 | 2 µm |
| 293 - 233 - 30 | 75 – 100 | 0.001 | 3 µm |



Mitutoyo

## Salgı ve Kompratör Saati



| Sipariş | Ölçüm | Hass. |
|---|---|---|
| 513-404-10E | 0.8 | 0.01 |
| 513-415-10E | 1.0 | 0.01 |
| 513-405-10E | 0.2 | 0.002 |
| 513-908-10E | 0.8 | 0.01 |
| 2046SA | 10.0 | 0.01 |



Mitutoyo

## Silindir Kompratör Seti

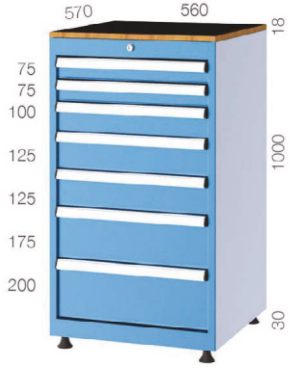
| Sipariş | Ölçüm Aralığı | Hassasiyet |
|---|---|---|
| 511 - 921 - 20 | 18 – 150 | 0.01 |
| 511 - 922 - 20 | 18 – 150 | 0.001 |




KOCEL

**1080 - 7 Çekmeceli Dolap**

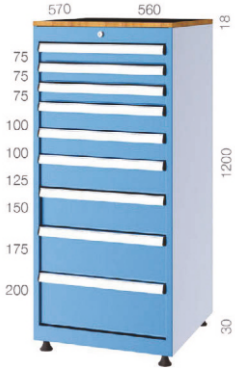
Sipariş: 1080




KOCEL

**5100 - 7 Çekmeceli Dolap**

Sipariş: 5100




KOCEL

**5200 - 9 Çekmeceli Dolap**

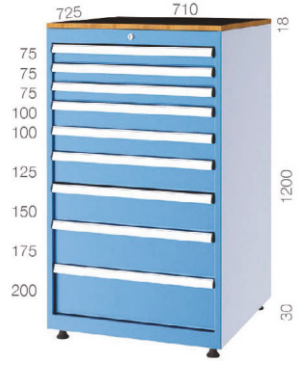
Sipariş: 5200




KOCEL

**7100 - 7 Çekmeceli Dolap**

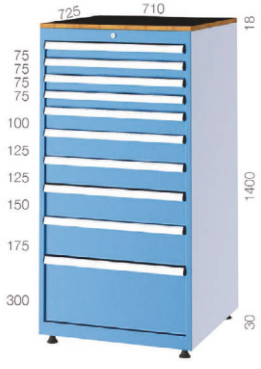
Sipariş: 7100




KOCEL

**7200 - 9 Çekmeceli Dolap**

Sipariş: 7200




KOCEL

**7400 - 10 Çekmeceli Dolap**

Sipariş: 7400




KOCEL

**2650 - 4 Çekmeceli 1 Ad. CNC Çekm. Dolap**

Sipariş: 2650




KOCEL

**2740 - 3 Çekmeceli 1 Ad. CNC Çekm. Araba**

Sipariş: 2740




KOCEL

**2600 - CNC Sehpalı Raflı, 3 Çekm. Araba**

Sipariş: 2600




KOÇEL

2750 - CNC Çekmeceli 3 Ad. Çekm. CNC Sehpalı

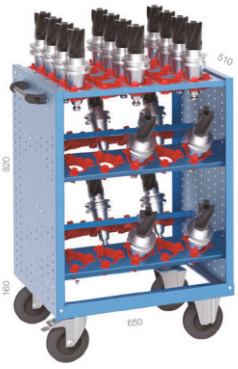
Sipariş 2750




KOÇEL

2700 - 5 Çekmeceli CNC Sehpalı Takım Dolabı

Sipariş 2700




KOÇEL

2200 - Hareketli CNC Tutucu Sehpa

Sipariş 2200



KOÇEL

2755 - CNC Sehpası

Sipariş 2755




KOÇEL

8060 - Üzeri Raflı 4 Çekm. Takım Arabası

Sipariş 8060




KOÇEL

8075 - 5 Çekmeceli Takım Arabası

Sipariş 8075




KOÇEL

8074 - 4 Çekmeceli Takım Arabası

Sipariş 8074




KOÇEL

8076 - 6 Çekmeceli Takım Arabası

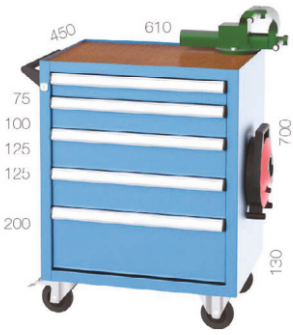
Sipariş 8076




KOÇEL

8077 - 7 Çekmeceli Takım Arabası

Sipariş 8077




KOÇEL

8085 - Mengene ve Uzatma Kalbolu Bakımcı Arabası

Sipariş 8085




KOÇEL

4040 - 3 Çekmeceli ve Raflı Servis Arabası

Sipariş 4040




4 Çekmeceli, 2 Sabit Raflı

KOÇEL

2325 - CNC Dolabı ve Çalışma Masası

Sipariş 2325




5 Çekmeceli Yanda 3 Açık Raflı

KOÇEL

8027 - Askı Panolu Çalışma Arabası

Sipariş 8027




4 Çekmece, 2 Sabit Raf

KOÇEL

2350 - CNC Dolabı Çalışma Masası

Sipariş 2350




3 Dolaplı, 9 Çekmeceli

KOÇEL

3805 - Altıgen Çalışma Tezgahı

Sipariş 3805




5 Çekmeceli

KOÇEL

2176 - Cnc Dolabı ve Çalışma Masası

Sipariş 2176




3'er Çekmeceli

KOÇEL

3350 - Çift Yönlü Çalışma Tezgahı

Sipariş 3350

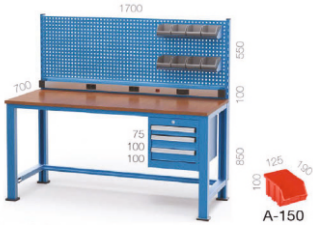



2 Çekmeceli

KOÇEL

3315 - Askı Panolu Çalışma Tezgahı

Sipariş 3315




3 Çekmeceli

KOCEL

3135 - Askı Panolu Rafsız Çalışma Tezgahı

Sipariş 3135




1 Çekmeceli

KOCEL

3755 - Askı Panolu Çalışma Tezgahı

Sipariş 3755




2 Çekmeceli

KOCEL

3700 - Askı Panolu Çalışma Tezgahı

Sipariş 3700




3 Çekmeceli

KOCEL

3740- Askı Panolu Çalışma Tezgahı

Sipariş 3740




2 Çekmeceli

KOCEL

3715 - Askı Panolu Çalışma Tezgahı

Sipariş 3715




5 Çekmeceli

KOCEL

3650 - Askı Panolu Çalışma Tezgahı

Sipariş 3650




3 Çekmeceli

KOCEL

3775 - Askı Panolu Floresanlı Masa

Sipariş 3775




3 Çekmeceli

KOCEL

6180 - İçi Askı Saclı Malzeme Dolabı

Sipariş 6180




2 Çekmeceli

KOCEL

6185 - İçi Askı Saclı Malzeme Dolabı

Sipariş 6185




4 Çekmeceli

KOÇEL

6190 - İçi Askı Saclı Malzeme Dolabı

Sipariş 6190




KOÇEL

2150 - 5 Adet Hareketli CNC Takım Raflı Dolap

Sipariş 2150




KOÇEL

2170 - Malzeme Dolabı

Sipariş 2170




3 Çekmeceli

KOÇEL

6214 - 3 Sabit Raflı Kapılı Dolap

Sipariş 6214




KOÇEL

6054 - Dörtlü Soyunma Dolabı

Sipariş 6054




KOÇEL

6067 - Temizlik Dolabı

Sipariş 6067




KOÇEL

6233 - 5 Gözlü Dosya Dolabı

Sipariş 6233




KOÇEL

6520 - 4 Raflı Sac Sürgü Kapılı Dolap

Sipariş 6520




KOÇEL

6550 - 4 Raflı Pleksi Sürgü Kapılı Dolap

Sipariş 6550




KOCEL

6195 - İçi Askı Saclı Malzeme Dolabı

Sipariş 6195




KOCEL

6250 - 5 Hareketli Raflı Malzeme Dolabı

Sipariş 6250




KOCEL

6150 - 3 Raflı Kısa Malzeme Dolabı

Sipariş 6150




KOCEL

6211 - 5 Sabit Raflı Takım Dolabı

Sipariş 6211




KOCEL

6212 - 2 Çekmeceli ve 4 Raflı Takım Dolabı

Sipariş 6212




KOCEL

6225 - 7 Raflı Malzeme Dolabı

Sipariş 6225




KOCEL

6230 - Askı Saclı Avadanlık Kutulu Malz. Dolabı

Sipariş 6230




KOCEL

6240 - 3 Çekm. 5 Raflı Malzeme Dolabı

Sipariş 6240

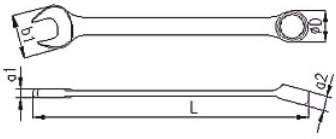



KOCEL

6285 - Askı Saclı Avadanlık Kutulu Malz. Dolabı

Sipariş 6285





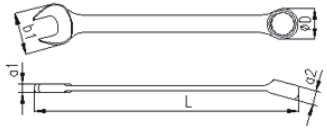

IZELTAS

## 0320 - Kombine Anahtar Kısa Boy (mm)

| Sipariş | mm | L mm | a1 mm | a2 mm | b1 mm | Ød mm |
|---|---|---|---|---|---|---|
| 0320 02 0005 | 5 | 100 | 3.4 | 5.1 | 14 | 10 |
| 0320 02 0055 | 5.5 | 100 | 3.4 | 5.1 | 14 | 10 |
| 0320 02 0006 | 6 | 100 | 3.4 | 5.1 | 14 | 10 |
| 0320 02 0007 | 7 | 110 | 3.6 | 5.5 | 16 | 11 |
| 0320 02 0008 | 8 | 120 | 3.8 | 5.9 | 18 | 13 |
| 0320 02 0009 | 9 | 130 | 4 | 6.3 | 20 | 14 |
| 0320 02 0010 | 10 | 140 | 4.3 | 6.9 | 22 | 15.5 |
| 0320 02 0011 | 11 | 150 | 4.5 | 7.3 | 24 | 17 |
| 0320 02 0012 | 12 | 160 | 4.9 | 7.7 | 26 | 18,5 |
| 0320 02 0013 | 13 | 170 | 5.2 | 7,9 | 28 | 19.5 |
| 0320 02 0014 | 14 | 180 | 5.5 | 8.7 | 30 | 21.5 |
| 0320 02 0015 | 15 | 190 | 5.8 | 9.1 | 32 | 22,5 |
| 0320 02 0016 | 16 | 200 | 6.1 | 9,6 | 34 | 24 |

| Sipariş | mm | L mm | a1 mm | a2 mm | b1 mm | Ød mm |
|---|---|---|---|---|---|---|
| 0320 02 0017 | 17 | 210 | 6.4 | 9.8 | 36 | 25,5 |
| 0320 02 0018 | 18 | 220 | 6.8 | 10.4 | 38 | 27 |
| 0320 02 0019 | 19 | 232 | 7 | 11 | 40 | 28,5 |
| 0320 02 0020 | 20 | 240 | 7.2 | 11.4 | 42 | 30 |
| 0320 02 0021 | 21 | 250 | 7.4 | 12 | 44 | 31,5 |
| 0320 02 0022 | 22 | 260 | 8.2 | 12.6 | 46 | 33 |
| 0320 02 0023 | 23 | 270 | 8.3 | 13 | 48 | 35 |
| 0320 02 0024 | 24 | 280 | 8.5 | 13.6 | 50 | 36.5 |
| 0320 02 0025 | 25 | 290 | 8.8 | 14 | 52 | 39 |
| 0320 02 0026 | 26 | 300 | 9 | 14.8 | 54 | 41 |
| 0320 02 0027 | 27 | 310 | 9.3 | 15 | 56 | 41,5 |
| 0320 02 0028 | 28 | 320 | 9.4 | 15,4 | 57.5 | 42,5 |
| 0320 02 0029 | 29 | 330 | 10 | 15.6 | 59 | 43,5 |
| 0320 02 0030 | 30 | 340 | 10.3 | 16 | 61.5 | 44 |
| 0320 02 0032 | 32 | 370 | 10.5 | 16.2 | 65.5 | 47 |
| 0320 02 0034 | 34 | 400 | 10,7 | 16.8 | 71 | 50 |





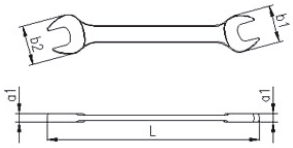

IZELTAS

## 0330 - Kombine Anahtar Uzun Boy (mm)

| Sipariş | mm | L mm | a1 mm | a2 mm | b1 mm | Ød mm |
|---|---|---|---|---|---|---|
| 0330 02 0005 | 5 | 95 | 3.2 | 5.2 | 12.5 | 9 |
| 0330 02 0055 | 5.5 | 100 | 3.4 | 5.4 | 13.5 | 9.5 |
| 0330 02 0006 | 6 | 105 | 3.8 | 5.6 | 14 | 10.5 |
| 0330 02 0007 | 7 | 117 | 4 | 6.1 | 16 | 12 |
| 0330 02 0008 | 8 | 130 | 4.2 | 6.6 | 18 | 13.5 |
| 0330 02 0009 | 9 | 141 | 4.5 | 7 | 20 | 15 |
| 0330 02 0010 | 10 | 154 | 4.7 | 7,6 | 22 | 16 |
| 0330 02 0011 | 11 | 166 | 5 | 8.2 | 24 | 17.5 |
| 0330 02 0012 | 12 | 178 | 5.2 | 8,7 | 26 | 19 |
| 0330 02 0013 | 13 | 190 | 5.6 | 9.2 | 28 | 20.5 |
| 0330 02 0014 | 14 | 203 | 5.8 | 9.7 | 30 | 22 |
| 0330 02 0015 | 15 | 215 | 6,4 | 10.1 | 32 | 23.5 |
| 0330 02 0016 | 16 | 227 | 6.4 | 10.8 | 34 | 25 |
| 0330 02 0017 | 17 | 239 | 6.6 | 11.4 | 36 | 26.5 |
| 0330 02 0018 | 18 | 250 | 7 | 12 | 38 | 28 |
| 0330 02 0019 | 19 | 263 | 7.3 | 12.7 | 40 | 29.5 |
| 0330 02 0020 | 20 | 275 | 7.7 | 13.2 | 42 | 31 |

| Sipariş | mm | L mm | a1 mm | a2 mm | b1 mm | Ød mm |
|---|---|---|---|---|---|---|
| 0330 02 0021 | 21 | 288 | 8.1 | 13.3 | 44 | 31.5 |
| 0330 02 0022 | 22 | 300 | 8.5 | 13.7 | 46 | 34 |
| 0330 02 0023 | 23 | 315 | 8.8 | 14.2 | 48 | 35.5 |
| 0330 02 0024 | 24 | 330 | 9 | 14.2 | 50 | 37 |
| 0330 02 0025 | 25 | 340 | 9.3 | 14.7 | 52 | 38.5 |
| 0330 02 0026 | 26 | 350 | 9.7 | 14.7 | 54 | 40 |
| 0330 02 0027 | 27 | 360 | 10 | 15.2 | 56 | 41 |
| 0330 02 0028 | 28 | 370 | 10.4 | 15.7 | 57.5 | 43 |
| 0330 02 0029 | 29 | 390 | 10.8 | 16.2 | 59 | 44 |
| 0330 02 0030 | 30 | 410 | 11.2 | 16.6 | 61.5 | 45 |
| 0330 02 0032 | 32 | 420 | 11.5 | 17.1 | 65.5 | 48 |
| 0330 02 0034 | 34 | 430 | 11.8 | 17.4 | 71 | 51 |
| 0330 02 0036 | 36 | 440 | 12.2 | 17.7 | 76 | 53 |
| 0330 02 0038 | 38 | 450 | 12.5 | 18.7 | 80 | 56 |
| 0330 02 0041 | 41 | 480 | 13.5 | 19.7 | 87 | 61 |
| 0330 02 0046 | 46 | 505 | 14.7 | 20.7 | 95 | 67.5 |
| 0330 02 0050 | 50 | 540 | 15.9 | 22.7 | 104 | 73.5 |



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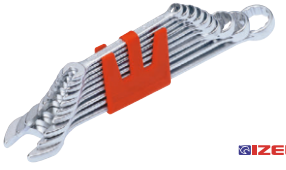
## 0100 - İki Ağız Anahtar Kısa Boy (mm)

| Sipariş | mm | L mm | a1 mm | b1 mm | b2 mm |
|---|---|---|---|---|---|
| 0100 01 0405 | 4x5 | 97 | 3.5 | 11 | 12.5 |
| 0100 01 0607 | 6x7 | 97 | 3.5 | 14 | 16 |
| 0100 01 0608 | 6x8 | 108 | 3.5 | 14 | 18 |
| 0100 01 0708 | 7x8 | 108 | 3.5 | 16 | 18 |
| 0100 01 0709 | 7x9 | 108 | 4 | 16 | 20 |
| 0100 01 0809 | 8x9 | 108 | 4 | 18 | 20 |
| 0100 01 0810 | 8x10 | 117 | 4.6 | 18 | 22 |
| 0100 01 0910 | 9x10 | 120 | 4.6 | 20 | 22 |
| 0100 01 0911 | 9x11 | 120 | 4.6 | 20 | 24 |
| 0100 01 1011 | 10x11 | 120 | 4.6 | 22 | 24 |
| 0100 01 1012 | 10x12 | 120 | 4.6 | 22 | 26 |
| 0100 01 1013 | 10x13 | 120 | 4.6 | 22 | 28 |
| 0100 01 1014 | 10x14 | 133 | 5.2 | 22 | 30 |
| 0100 01 1113 | 11x13 | 133 | 5.2 | 26 | 28 |
| 0100 01 1114 | 11x14 | 133 | 5.2 | 24 | 30 |
| 0100 01 1213 | 12x13 | 133 | 5.2 | 26 | 28 |
| 0100 01 1214 | 12x14 | 147 | 5.2 | 26 | 30 |
| 0100 01 1314 | 13x14 | 147 | 5.2 | 28 | 30 |
| 0100 01 1315 | 13x15 | 147 | 5.8 | 28 | 32 |
| 0100 01 1415 | 14x15 | 147 | 5.8 | 30 | 32 |
| 0100 01 1317 | 13x17 | 162 | 6.2 | 28 | 36 |

| Sipariş | mm | L mm | a1 mm | b1 mm | b2 mm |
|---|---|---|---|---|---|
| 0100 01 1417 | 14x17 | 162 | 6.2 | 30 | 36 |
| 0100 01 1617 | 16x17 | 162 | 6.2 | 34 | 36 |
| 0100 01 1719 | 17x19 | 178 | 7 | 36 | 40 |
| 0100 01 1819 | 18x19 | 178 | 7 | 38 | 40 |
| 0100 01 1820 | 18x20 | 178 | 7 | 38 | 42 |
| 0100 01 1822 | 18x22 | 195 | 7.4 | 38 | 46 |
| 0100 01 1722 | 17x22 | 195 | 7.4 | 36 | 46 |
| 0100 01 1922 | 19x22 | 195 | 7.4 | 40 | 46 |
| 0100 01 2022 | 20x22 | 195 | 7.4 | 42 | 46 |
| 0100 01 1924 | 19x24 | 213 | 7.7 | 40 | 50 |
| 0100 01 2123 | 21x23 | 213 | 7.7 | 44 | 48 |
| 0100 01 2224 | 22x24 | 213 | 8 | 46 | 50 |
| 0100 01 2226 | 22x26 | 232 | 8 | 46 | 54 |
| 0100 01 2227 | 22x27 | 232 | 8.2 | 46 | 56 |
| 0100 01 2426 | 24x26 | 232 | 8.2 | 50 | 54 |
| 0100 01 2427 | 24x27 | 232 | 8.2 | 50 | 56 |
| 0100 01 2528 | 25x28 | 248 | 8.6 | 52 | 57.5 |
| 0100 01 2430 | 24x30 | 265 | 9 | 50 | 62 |
| 0100 01 2730 | 27x30 | 265 | 9 | 56 | 62 |
| 0100 01 2732 | 27x32 | 265 | 9 | 56 | 66 |
| 0100 01 3032 | 30x32 | 265 | 9 | 62 | 66 |



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## 0320 - Kombine Anahtar Takımı Kısa Boy

| Sipariş | mm |
|---|---|
| 0320 00 2106 | 8-9 -11-13-17-19 |
| 0320 00 2108 | 6-7-8-9-10-13-17-19 |
| 0320 00 2110 | 8-9-10 -11-12-13-14-17-19-22 |
| 0320 00 2112 | 8-9-10 -11-12-13-14-15-16-17-19-22 |
| 0320 00 2117 | 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22 |
| 0320 00 2121 | 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-24-27-30-32 |



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## 0330 - Kombine Anahtar Takımı Uzun Boy

| Sipariş | mm |
|---|---|
| 0330 00 2106 | 8-9 -11-13-17-19 |
| 0330 00 2108 | 6-7-8-9-10-13-17-19 |
| 0330 00 2110 | 8-9-10 -11-12-13-14-17-19-22 |
| 0330 00 2112 | 8-9-10 -11-12-13-14-15-16-17-19-22 |
| 0330 00 2117 | 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22 |
| 0330 00 2121 | 6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-24-27-30-32 |



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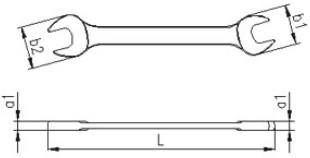
## 0100 - İki Ağız Anahtar Takımı Kısa Boy

| Sipariş | mm |
|---|---|
| 0100 00 2106 | 6x7-8x9-10x11-12x13-14x15-16x17 |
| 0100 00 2108 | 6x7-8x9-10x11-12x13-14x15-16x17-18x19-20x22 |
| 0100 00 2110 | 6x7-8x9-10x11-12x13-14x15-16x17-18x19-20x22-21x23-24x26 |
| 0100 00 2112 | 6x7-8x9-10x11-12x13-14x15-16x17-18x19-20x22-21x23-24x26-25x28-30x32 |



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## 0130 - İki Ağız Anahtar Uzun Boy (mm)

| Ürün Kodu | mm | L mm | a1 mm | b1 mm | b2 mm |
|---|---|---|---|---|---|
| 0130 01 0555 | 5x5.5 | 125 | 3.5 | 14 | 16 |
| 0130 01 0607 | 6x7 | 125 | 3.5 | 14 | 16 |
| 0130 01 0608 | 6x8 | 125 | 3.5 | 14 | 18 |
| 0130 01 0708 | 7x8 | 125 | 3.5 | 16 | 18 |
| 0130 01 0709 | 7x9 | 140 | 4 | 16 | 20 |
| 0130 01 0809 | 8x9 | 140 | 4 | 18 | 20 |
| 0130 01 0810 | 8x10 | 140 | 4 | 18 | 22 |
| 0130 01 0910 | 9x10 | 155 | 4.5 | 20 | 22 |
| 0130 01 0911 | 9x11 | 155 | 4.5 | 20 | 24 |
| 0130 01 1011 | 10x11 | 155 | 4.5 | 22 | 24 |
| 0130 01 1012 | 10x12 | 162 | 4.7 | 22 | 26 |
| 0130 01 1013 | 10x13 | 162 | 4.7 | 22 | 28 |
| 0130 01 1014 | 10x14 | 172 | 5 | 22 | 30 |
| 0130 01 1113 | 11x13 | 172 | 5 | 24 | 28 |
| 0130 01 1114 | 11x14 | 172 | 5 | 24 | 30 |
| 0130 01 1213 | 12x13 | 172 | 5 | 26 | 28 |
| 0130 01 1214 | 12x14 | 172 | 5 | 26 | 30 |
| 0130 01 1314 | 13x14 | 188 | 5.5 | 28 | 30 |
| 0130 01 1315 | 13x15 | 188 | 5,5 | 30 | 32 |
| 0130 01 1415 | 14x15 | 188 | 5.5 | 30 | 32 |
| 0130 01 1317 | 13x17 | 205 | 6.2 | 28 | 36 |
| 0130 01 1417 | 14x17 | 205 | 6.2 | 30 | 36 |
| 0130 01 1617 | 16x17 | 205 | 6.2 | 34 | 36 |
| 0130 01 1618 | 16x18 | 220 | 7 | 34 | 38 |
| 0130 01 1719 | 17x19 | 220 | 7 | 36 | 40 |

| Ürün Kodu | mm | L mm | a1 mm | b1 mm | b2 mm |
|---|---|---|---|---|---|
| 0130 01 1819 | 18x19 | 220 | 7 | 38 | 40 |
| 0130 01 1722 | 17x22 | 235 | 7.5 | 36 | 46 |
| 0130 01 1921 | 19x21 | 235 | 7.5 | 40 | 44 |
| 0130 01 1922 | 19x22 | 235 | 7.5 | 40 | 46 |
| 0130 01 2022 | 20x22 | 235 | 7.5 | 42 | 46 |
| 0130 01 1724 | 17x24 | 248 | 8,3 | 36 | 50 |
| 0130 01 1924 | 19x24 | 248 | 8,3 | 40 | 50 |
| 0130 01 2123 | 21x23 | 248 | 8,3 | 44 | 48 |
| 0130 01 2224 | 22x24 | 248 | 8,3 | 46 | 50 |
| 0130 01 2227 | 22x27 | 265 | 8.8 | 46 | 56 |
| 0130 01 2426 | 24x26 | 265 | 8.8 | 50 | 54 |
| 0130 01 2427 | 24x27 | 265 | 8.8 | 50 | 56 |
| 0130 01 2430 | 24x30 | 282 | 9,3 | 50 | 61,5 |
| 0130 01 2528 | 25x28 | 282 | 9,3 | 52 | 57.5 |
| 0130 01 2729 | 27x29 | 300 | 9.8 | 56 | 59 |
| 0130 01 2730 | 27x30 | 300 | 9.8 | 56 | 61.5 |
| 0130 01 2732 | 27x32 | 300 | 9.8 | 56 | 65.5 |
| 0130 01 3032 | 30x32 | 300 | 9.8 | 61.5 | 65.5 |
| 0130 01 3036 | 30x36 | 325 | 10.4 | 61.5 | 76 |
| 0130 01 3236 | 32x36 | 325 | 10.4 | 65.5 | 76 |
| 0130 01 3436 | 34x36 | 330 | 10.4 | 71 | 76 |
| 0130 01 3641 | 36x41 | 360 | 12 | 76 | 87 |
| 0130 01 4146 | 41x46 | 400 | 12.5 | 87 | 98 |
| 0130 01 4650 | 46x50 | 450 | 13 | 98 | 107 |




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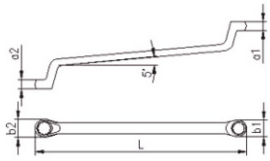
## 0130 - İki Ağız Anahtar Takımı Uzun Boy

| Sipariş | mm |
|---|---|
| 0130 00 2106 | 06x07-08x09-10x11<br>12x13-14x15-16x17 |
| 0130 00 2108 | 06x07-08x09-10x11 12x13<br>14x15- 16x17-18x19-20x22 |
| 0130 00 2110 | 06x07-08x09-10x11-12x13-14x15<br>16x17-18x19-20x22-21x23-24x26 |
| 0130 00 2112 | 06x07-08x09-10x11-12x13-14x15<br>16x17-18x19-20x22-21x23-24x26-25x28-27x32 |

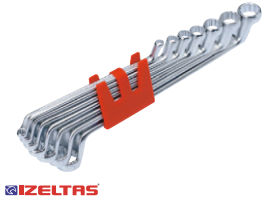





## Yıldız İki Ağız Anahtar

| Sipariş | mm | L mm | a1 mm | a2 mm | b1 mm | b2 mm |
|---|---|---|---|---|---|---|
| 0430 03 0607 | 6x7 | 176 | 5.6 | 6 | 10 | 11.5 |
| 0430 03 0809 | 8x9 | 190 | 6.4 | 6,8 | 13 | 14.5 |
| 0430 03 0810 | 8x10 | 190 | 6.4 | 7,3 | 13 | 15,5 |
| 0430 03 1011 | 10x11 | 206 | 7,3 | 7,6 | 15,5 | 17 |
| 0430 03 1012 | 10x12 | 206 | 7,3 | 8.5 | 15,5 | 18.5 |
| 0430 03 1013 | 10x13 | 220 | 7.3 | 9 | 15.5 | 20 |
| 0430 03 1014 | 10x14 | 220 | 7.3 | 9.5 | 15.5 | 21.5 |
| 0430 03 1113 | 11x13 | 220 | 7,6 | 9 | 17 | 20 |
| 0430 03 1213 | 12x13 | 220 | 8.5 | 9 | 18.5 | 20 |
| 0430 03 1214 | 12x14 | 220 | 8.5 | 9.5 | 18.5 | 21.5 |
| 0430 03 1315 | 13x15 | 236 | 9 | 10 | 20 | 23 |
| 0430 03 1415 | 14x15 | 236 | 9.5 | 10 | 21.5 | 23 |
| 0430 03 1317 | 13x17 | 250 | 9 | 11,5 | 20 | 26,5 |
| 0430 03 1417 | 14x17 | 250 | 9,5 | 11,5 | 21,5 | 26,5 |
| 0430 03 1617 | 16x17 | 250 | 10,8 | 11,5 | 25 | 26,5 |
| 0430 03 1618 | 16x18 | 250 | 10,8 | 12 | 25 | 27.5 |
| 0430 03 1719 | 17x19 | 271 | 11,5 | 12.5 | 26,5 | 29 |
| 0430 03 1819 | 18x19 | 271 | 12 | 12.5 | 27.5 | 29 |
| 0430 03 1922 | 19x22 | 291 | 12.5 | 13.5 | 29 | 33 |
| 0430 03 1924 | 19x24 | 311 | 12.5 | 14.2 | 29 | 36.5 |

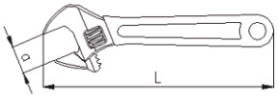
| Sipariş | mm | L mm | a1 mm | a2 mm | b1 mm | b2 mm |
|---|---|---|---|---|---|---|
| 0430 03 2022 | 20x22 | 291 | 12,9 | 13,5 | 30.5 | 33 |
| 0430 03 2123 | 21x23 | 311 | 13.1 | 14 | 32 | 35 |
| 0430 03 2224 | 22x24 | 321 | 13,5 | 14.2 | 33 | 36.5 |
| 0430 03 2227 | 22x27 | 331 | 14.2 | 15 | 36.5 | 40.5 |
| 0430 03 2426 | 24x26 | 331 | 14.2 | 14,6 | 36.5 | 39.5 |
| 0430 03 2427 | 24x27 | 331 | 14.2 | 15 | 36.5 | 40,5 |
| 0430 03 2430 | 24x30 | 352 | 14.2 | 16.7 | 36.5 | 40 |
| 0430 03 2528 | 25x28 | 352 | 14.5 | 15.5 | 38 | 42.5 |
| 0430 03 2729 | 27x29 | 371 | 15 | 16,7 | 40,5 | 45 |
| 0430 03 2730 | 27x30 | 371 | 15 | 16,7 | 40,5 | 45 |
| 0430 03 2732 | 27x32 | 371 | 15 | 16,7 | 40,5 | 47.5 |
| 0430 03 3032 | 30x32 | 371 | 16.4 | 16,7 | 45 | 47.5 |
| 0430 03 3034 | 30x34 | 379 | 16.4 | 16.9 | 45 | 50 |
| 0430 03 3036 | 30x36 | 402 | 16.4 | 17.5 | 45 | 53 |
| 0430 03 3236 | 32x36 | 402 | 16,7 | 17.5 | 47.5 | 53 |
| 0430 03 3436 | 34x36 | 420 | 17.1 | 17.5 | 50 | 53 |
| 0430 03 3641 | 36x41 | 438 | 17.5 | 19.5 | 53 | 61 |
| 0430 03 4146 | 41x46 | 485 | 19.5 | 20.5 | 61 | 67,5 |
| 0430 03 4650 | 46x50 | 535 | 20.5 | 22.4 | 67,5 | 73,5 |



## 0430 - Yıldız İki Ağız Anahtar Takımı

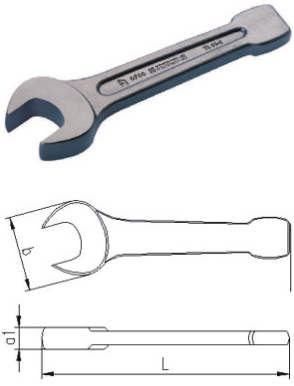
| Sipariş | mm |
|---|---|
| 0430 00 2106 | 06x07-08x09-10x11<br>12x13-14x15-16x17 |
| 0430 00 2108 | 06x07-08x09-10x11-12x13<br>14x15-16x17-18x19-20x22 |
| 0430 00 2110 | 06x07-08x09-10x11-12x13-14x15<br>16x17-18x19-20x22-21x23-24x26 |
| 0430 00 2112 | 06x07-08x09-10x11-12x13-14x15<br>16x17-18x19-20x22-21x23-24x26-25x28-27x32 |






## 0600 - Kurbağacık Anahtar

| Sipariş | L mm | L inch | mm |
|---|---|---|---|
| 0600 01 1006 | 160 | 6" | 18 |
| 0600 01 1008 | 208 | 8" | 23 |
| 0600 01 1010 | 260 | 10" | 28 |
| 0600 01 1012 | 308 | 12" | 34 |
| 0600 01 1015 | 388 | 15" | 43 |

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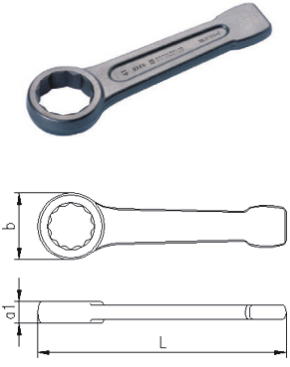
## 0700 - Çatal Çakma Anahtar

| Sipariş | mm | L mm | a1 mm | b mm |
|---|---|---|---|---|
| 0700 05 0024 | 24 | 160 | 15 | 50 |
| 0700 05 0027 | 27 | 180 | 16 | 55 |
| 0700 05 0030 | 30 | 190 | 17 | 65 |
| 0700 05 0032 | 32 | 190 | 17 | 65 |
| 0700 05 0036 | 36 | 210 | 19 | 75 |
| 0700 05 0038 | 38 | 210 | 19 | 75 |
| 0700 05 0041 | 41 | 230 | 19 | 85 |
| 0700 05 0042 | 42 | 230 | 19 | 85 |
| 0700 05 0046 | 46 | 255 | 21 | 95 |
| 0700 05 0047 | 47 | 255 | 21 | 95 |

| Sipariş | mm | L mm | a1 mm | b mm |
|---|---|---|---|---|
| 0700 05 0050 | 50 | 275 | 21 | 105 |
| 0700 05 0055 | 55 | 310 | 24 | 120 |
| 0700 05 0060 | 60 | 310 | 24 | 120 |
| 0700 05 0065 | 65 | 340 | 28 | 135 |
| 0700 05 0070 | 70 | 375 | 31 | 155 |
| 0700 05 0075 | 75 | 375 | 31 | 155 |
| 0700 05 0080 | 80 | 405 | 34 | 170 |
| 0700 05 0085 | 85 | 405 | 34 | 170 |
| 0700 05 0090 | 90 | 445 | 38 | 190 |
| 0700 05 0095 | 95 | 445 | 38 | 190 |
| 0700 05 0100 | 100 | 485 | 44 | 215 |
| 0700 05 0105 | 105 | 485 | 44 | 215 |
| 0700 05 0110 | 110 | 510 | 50 | 234 |
| 0700 05 0115 | 115 | 510 | 50 | 234 |
| 0700 05 0120 | 120 | 543 | 54 | 254 |
| 0700 05 0125 | 125 | 543 | 54 | 254 |
| 0700 05 0130 | 130 | 570 | 55 | 275 |
| 0700 05 0135 | 135 | 570 | 55 | 275 |
| 0700 05 0140 | 140 | 570 | 55 | 275 |
| 0700 05 0145 | 145 | 640 | 60 | 307 |
| 0700 05 0150 | 150 | 640 | 55 | 307 |

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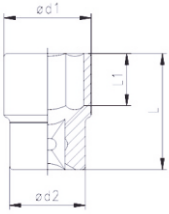
## 0750 - Yıldız Çakma Anahtar

| Sipariş | mm | L mm | a1 mm | b mm |
|---|---|---|---|---|
| 0750 05 0024 | 24 | 160 | 15 | 42 |
| 0750 05 0027 | 27 | 180 | 16 | 46 |
| 0750 05 0030 | 30 | 190 | 17 | 52 |
| 0750 05 0032 | 32 | 190 | 17 | 52 |
| 0750 05 0036 | 36 | 205 | 19 | 59 |
| 0750 05 0038 | 38 | 205 | 19 | 59 |
| 0750 05 0041 | 41 | 225 | 20 | 64 |
| 0750 05 0042 | 42 | 225 | 20 | 64 |
| 0750 05 0046 | 46 | 240 | 22 | 73 |
| 0750 05 0047 | 47 | 240 | 22 | 73 |

| Sipariş | mm | L mm | a1 mm | b mm |
|---|---|---|---|---|
| 0750 05 0050 | 50 | 255 | 23 | 78 |
| 0750 05 0055 | 55 | 272 | 25 | 88 |
| 0750 05 0060 | 60 | 272 | 25 | 88 |
| 0750 05 0065 | 65 | 300 | 28 | 100 |
| 0750 05 0070 | 70 | 330 | 32 | 109 |
| 0750 05 0075 | 75 | 330 | 32 | 109 |
| 0750 05 0080 | 80 | 360 | 35 | 123 |
| 0750 05 0085 | 85 | 360 | 35 | 123 |
| 0750 05 0090 | 90 | 390 | 40 | 142 |
| 0750 05 0095 | 95 | 390 | 40 | 142 |
| 0750 05 0100 | 100 | 420 | 44 | 152 |
| 0750 05 0105 | 105 | 420 | 44 | 152 |
| 0750 05 0110 | 110 | 450 | 46 | 165 |
| 0750 05 0115 | 115 | 450 | 46 | 165 |
| 0750 05 0120 | 120 | 480 | 48 | 185 |
| 0700 05 0125 | 125 | 543 | 54 | 254 |
| 0700 05 0130 | 130 | 570 | 55 | 275 |
| 0700 05 0135 | 135 | 570 | 55 | 275 |
| 0700 05 0140 | 140 | 570 | 55 | 275 |
| 0700 05 0145 | 145 | 640 | 60 | 307 |
| 0700 05 0150 | 150 | 640 | 60 | 307 |



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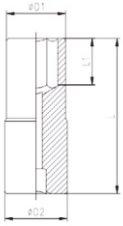
## 1107 - 1/4" Altı Köşe Lokma Anahtar

| Sipariş | mm | ØD1 mm | ØD2 mm | L1 mm | L mm |
|---|---|---|---|---|---|
| 1107 06 0004 | 4 | 6.8 | 11.8 | 4 | 24.5 |
| 1107 06 0045 | 4.5 | 7.4 | 11.8 | 5 | 24.5 |
| 1107 06 0005 | 5 | 8 | 11.8 | 6 | 24.5 |
| 1107 06 0055 | 5.5 | 8.7 | 11.8 | 6 | 24.5 |
| 1107 06 0006 | 6 | 9.2 | 11.8 | 7 | 24.5 |
| 1107 06 0007 | 7 | 10.3 | 11.8 | 7 | 24.5 |
| 1107 06 0008 | 8 | 11.4 | 11.8 | 8 | 24.5 |
| 1107 06 0009 | 9 | 12.9 | 12.2 | 8 | 24.5 |
| 1107 06 0010 | 10 | 14.3 | 13 | 9 | 24.5 |
| 1107 06 0011 | 11 | 15.8 | 14.2 | 9 | 24.5 |
| 1107 06 0012 | 12 | 16.8 | 15.5 | 9 | 24.5 |
| 1107 06 0013 | 13 | 17.8 | 16.5 | 9 | 24.5 |



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## 1107- 1/4" Altı Köşe Derin Lokma Anahtar

| Sipariş | mm | ØD1 mm | ØD2 mm | L1 mm | L mm |
|---|---|---|---|---|---|
| 1107 06 4004 | 4 | 6.8 | 11.8 | 6 | 50 |
| 1107 06 4045 | 4.5 | 7.4 | 11.8 | 7 | 50 |
| 1107 06 4005 | 5 | 8 | 11.8 | 7 | 50 |
| 1107 06 4055 | 5.5 | 8.7 | 11.8 | 9 | 50 |
| 1107 06 4006 | 6 | 9.2 | 11.8 | 9 | 50 |
| 1107 06 4007 | 7 | 10.3 | 11.8 | 15 | 50 |

| Sipariş | mm | ØD1 mm | ØD2 mm | L1 mm | L mm |
|---|---|---|---|---|---|
| 1107 06 4008 | 8 | 11.8 | 11.8 | 15 | 50 |
| 1107 06 4009 | 9 | 13 | 13 | 15 | 50 |
| 1107 06 4010 | 10 | 14.5 | 14.5 | 15 | 50 |
| 1107 06 4011 | 11 | 15.8 | 15.8 | 21 | 50 |
| 1107 06 4012 | 12 | 16.8 | 16.8 | 21 | 50 |
| 1107 06 4013 | 13 | 17.8 | 17.8 | 21 | 50 |



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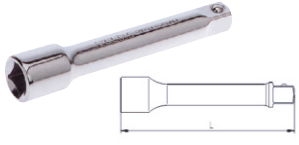
## 1107 - 1/4" Lokmalı Allen Uç

| Sipariş | mm | L mm | g |
|---|---|---|---|
| 1107 06 1125 | 2.5 | 37 | 13 |
| 1107 06 1103 | 3 | 37 | 13 |
| 1107 06 1104 | 4 | 37 | 15 |
| 1107 06 1105 | 5 | 37 | 15 |

| Sipariş | mm | L mm | g |
|---|---|---|---|
| 1107 06 1106 | 6 | 37 | 15 |
| 1107 06 1107 | 7 | 37 | 16 |
| 1107 06 1108 | 8 | 37 | 17 |
| 1107 06 1110 | 10 | 37 | 19 |



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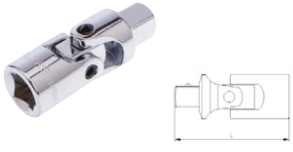
## 1507 - 1/4" Ara Kol

| Sipariş | L mm |
|---|---|
| 1507 06 0050 | 50 |
| 1507 06 0100 | 100 |



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## 1507 - 1/4" Mafsal

| Sipariş | L mm |
|---|---|
| 1507 06 0038 | 38 |



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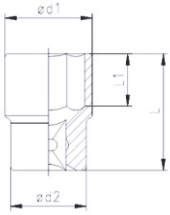
## 1507 - 1/4" Cırcır Kolu

| Sipariş | L mm |
|---|---|
| 1507 06 2140 | 140 |



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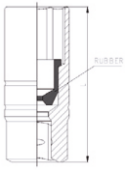
1110 - 3/8" Altı Köşe Lokma Anahtar

| Sipariş | mm | ØD1 mm | ØD2 mm | L1 mm | L mm |
|---|---|---|---|---|---|
| 1110 06 0006 | 6 | 9.8 | 17.8 | 9 | 27 |
| 1110 06 0007 | 7 | 10.8 | 17.8 | 9 | 27 |
| 1110 06 0008 | 8 | 12 | 17.8 | 9 | 27 |
| 1110 06 0009 | 9 | 13.2 | 17.8 | 9 | 27 |
| 1110 06 0010 | 10 | 14.5 | 17.8 | 9 | 27 |
| 1110 06 0011 | 11 | 15.8 | 17.8 | 9 | 27 |
| 1110 06 0012 | 12 | 16.8 | 17.8 | 9 | 27 |
| 1110 06 0013 | 13 | 17.8 | 16.8 | 9 | 27 |
| 1110 06 0014 | 14 | 19.6 | 17.5 | 11 | 29 |
| 1110 06 0015 | 15 | 20.8 | 18 | 11 | 29 |
| 1110 06 0016 | 16 | 21.8 | 19 | 11 | 29 |
| 1110 06 0017 | 17 | 23.4 | 20 | 11 | 29 |
| 1110 06 0018 | 18 | 24.7 | 21 | 13 | 29 |
| 1110 06 0019 | 19 | 25.8 | 22 | 13 | 29 |
| 1110 06 0020 | 20 | 27.1 | 24 | 13 | 32 |
| 1110 06 0021 | 21 | 27.8 | 24 | 13 | 32 |
| 1110 06 0022 | 22 | 29.7 | 26 | 15 | 32 |
| 1110 06 0023 | 23 | 29.7 | 26 | 15 | 32 |



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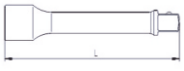
1110 - 3/8" Buji Lokma Anahtar (Lastikli)

| Sipariş | mm | L mm |
|---|---|---|
| 1110 06 9208 | 21 | 70 |





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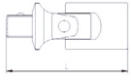
1510 - 3/8" Ara Kol

| Sipariş | L mm |
|---|---|
| 1510 06 0075 | 75 |
| 1510 06 0150 | 150 |





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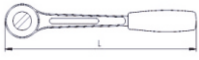
1510 - 3/8" Mafsal

| Sipariş | L mm |
|---|---|
| 1510 06 0056 | 56.5 |





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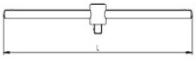
1510 - 3/8" Cırcır Kolu

| Sipariş | L mm |
|---|---|
| 1510 06 0200 | 200 |





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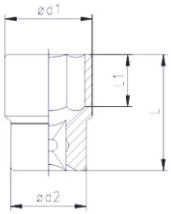
1510 - 3/8" T Kol

| Sipariş | L mm |
|---|---|
| 1510 06 1200 | 200 |



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## 1113 - 1/2" Altı Köşe Lokma Anahtar

| Sipariş | mm | ØD1 mm | ØD2 mm | L1 mm | L mm |
|---|---|---|---|---|---|
| 1113 06 1008 | 8 | 13.2 | 21.8 | 7 | 38 |
| 1113 06 1009 | 9 | 14 | 21.8 | 7 | 38 |
| 1113 06 1010 | 10 | 15 | 23.3 | 8 | 38 |
| 1113 06 1011 | 11 | 16.4 | 23.3 | 8 | 38 |
| 1113 06 1012 | 12 | 17.8 | 23.3 | 9 | 38 |

| Sipariş | mm | ØD1 mm | ØD2 mm | L1 mm | L mm |
|---|---|---|---|---|---|
| 1113 06 1013 | 13 | 19 | 23.3 | 10 | 38 |
| 1113 06 1014 | 14 | 20.4 | 23.3 | 11 | 38 |
| 1113 06 1015 | 15 | 21.6 | 23.3 | 11 | 38 |
| 1113 06 1016 | 16 | 22.9 | 24 | 11 | 38 |
| 1113 06 1017 | 17 | 24 | 22.5 | 12 | 38 |
| 1113 06 1018 | 18 | 25.2 | 23 | 13 | 38 |
| 1113 06 1019 | 19 | 26.8 | 23 | 13 | 38 |
| 1113 06 1020 | 20 | 28 | 23 | 13 | 38 |
| 1113 06 1021 | 21 | 29.2 | 23 | 13 | 38 |
| 1113 06 1022 | 22 | 30.2 | 24 | 15 | 40 |
| 1113 06 1023 | 23 | 31.4 | 25 | 15 | 40 |
| 1113 06 1024 | 24 | 32.6 | 26 | 17 | 42 |
| 1113 06 1025 | 25 | 34 | 27 | 17 | 42 |
| 1113 06 1026 | 26 | 35.3 | 28 | 17 | 42 |
| 1113 06 1027 | 27 | 36.6 | 28 | 19 | 42 |
| 1113 06 1028 | 28 | 37.8 | 30 | 20 | 42 |
| 1113 06 1029 | 29 | 39 | 30 | 21 | 44 |
| 1113 06 1030 | 30 | 40 | 29.5 | 21 | 44 |
| 1113 06 1032 | 32 | 42.5 | 30 | 23 | 44 |



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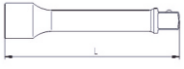
## 1513 - 1/2" Lokma Adaptörü

| Sipariş | inch |
|---|---|
| 1513 06 0002 | 1/2" Fx3/8" M |
| 1513 06 0003 | 1/2" Fx3/4" M |





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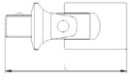
## 1513 - 1/2" Ara Kol

| Sipariş | L mm |
|---|---|
| 1513 06 4125 | 125 |
| 1513 06 4250 | 250 |





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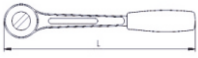
## 1513 - 1/2" Mafsal

| Sipariş | L mm |
|---|---|
| 1513 06 4070 | 70 |





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## 1/2" Cırcır Kolu (32 Diş)

| Sipariş | L mm |
|---|---|
| 1513 06 0032 | 250 |



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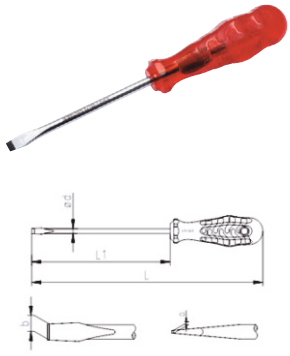
## 1513 - 1/2" Cırcır Kolu (72 diş)

| Sipariş | L mm |
|---|---|
| 1513 06 0072 | 250 |



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## 4100 - Kraft Seri Düz Uçlu Tornavida

| Sipariş | Ø D1xL1 | a mm | b mm | L mm | L1 mm |
|---|---|---|---|---|---|
| 4100 17 0340 | 3x40 | 0.5 | 0.5 | 3 | 110 |
| 4100 17 0380 | 3x80 | 0.5 | 0.5 | 3 | 155 |
| 4100 17 0480 | 4x80 | 0.8 | 0.8 | 4 | 165 |
| 4100 17 4100 | 4x100 | 0.8 | 0.8 | 4 | 185 |
| 4100 17 0580 | 5x80 | 1.0 | 1.0 | 5.5 | 175 |
| 4100 17 5100 | 5x100 | 1.0 | 1.0 | 5.5 | 195 |
| 4100 17 5125 | 5x125 | 1.0 | 1.0 | 5.5 | 220 |
| 4100 17 5150 | 5x150 | 1.0 | 1.0 | 5.5 | 245 |
| 4100 17 6100 | 6x100 | 1.2 | 1.2 | 6.5 | 195 |
| 4100 17 6125 | 6x125 | 1.2 | 1.2 | 6.5 | 220 |
| 4100 17 6150 | 6x150 | 1.2 | 1.2 | 6.5 | 245 |
| 4100 17 6175 | 6x175 | 1.2 | 1.2 | 6.5 | 270 |
| 4100 17 7125 | 7x125 | 1.2 | 1.2 | 8 | 230 |
| 4100 17 7150 | 7x150 | 1.2 | 1.2 | 8 | 255 |
| 4100 17 7175 | 7x175 | 1.2 | 1.2 | 8 | 280 |
| 4100 17 8150 | 8x150 | 1.6 | 1.6 | 10 | 255 |
| 4100 17 8175 | 8x175 | 1.6 | 1.6 | 10 | 280 |
| 4100 17 8200 | 8x200 | 1.6 | 1.6 | 10 | 305 |
| 4100 17 9200 | 9x200 | 2.0 | 2.0 | 12 | 305 |
| 4100 17 1125 | 11x250 | 2.5 | 2.5 | 14 | 365 |



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## 4100 - Kraft Seri Süngüsü Uzun Düz Uçlu Tornavida

| Sipariş | Ø D1xL1 | a mm | b mm | L mm | L1 mm |
|---|---|---|---|---|---|
| 4100 17 3150 | 3x150 | 0.5 | 0.5 | 3 | 225 |
| 4100 17 3250 | 3x250 | 0.5 | 0.5 | 3 | 325 |
| 4100 17 4250 | 4x250 | 0.8 | 0.8 | 4 | 335 |
| 4100 17 4300 | 4x300 | 0.8 | 0.8 | 4 | 385 |
| 4100 17 5200 | 5x200 | 1.0 | 1.0 | 5.5 | 295 |
| 4100 17 5250 | 5x250 | 1.0 | 1.0 | 5.5 | 345 |
| 4100 17 5300 | 5x300 | 1.0 | 1.0 | 5.5 | 395 |
| 4100 17 5350 | 5x350 | 1.0 | 1.0 | 5.5 | 445 |
| 4100 17 6350 | 6x350 | 1.2 | 1.2 | 6.5 | 445 |
| 4100 17 6400 | 6x400 | 1.2 | 1.2 | 6.5 | 495 |
| 4100 17 6450 | 6x450 | 1.2 | 1.2 | 6.5 | 545 |
| 4100 17 1130 | 11x300 | 2.5 | 2.5 | 14 | 415 |



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## 4100 - Kraft Seri Tornavida Seti (7 Parça)

| Sipariş | İçerik |
|---|---|
| 4100 00 8107 | 3x80 - 4x80 - 4x100 - 5x125 - 6x150 Düz uçlu |
| | 4.5x80 - 6x100 Yıldız uçlu |



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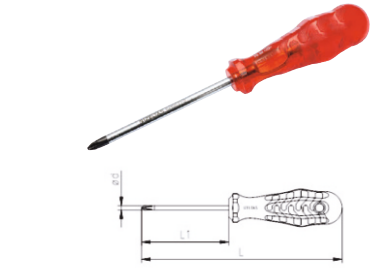
## 4100 - Kraft Seri Düz Uçlu Tornavida Seti (8 parça)

| Sipariş | İçerik |
|---|---|
| 4100 00 8108 | 3x80 - 4x80 - 4x100 - 5x100 - 5x125 - 6x100<br>6x125 - 6x150 Düz uçlu |



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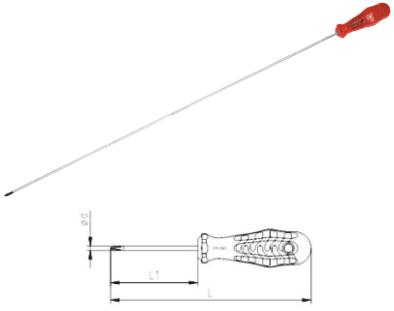
## 4120 - Kraft Seri Yıldız Uçlu Tornavida

| Sipariş | Ø D1xL1 | mm | L mm |
|---|---|---|---|
| 4120 18 0360 | 3x60 | Ph0 | 135 |
| 4120 18 4580 | 4.5x80 | Ph1 | 165 |
| 4120 18 5100 | 4.5x100 | Ph1 | 185 |
| 4120 18 5150 | 4.5x150 | Ph1 | 235 |
| 4120 18 6100 | 6x100 | Ph2 | 195 |
| 4120 18 6150 | 6x150 | Ph2 | 245 |
| 4120 18 6200 | 6x200 | Ph2 | 295 |
| 4120 18 8150 | 8x150 | Ph3 | 255 |
| 4120 18 1200 | 10x200 | Ph4 | 315 |



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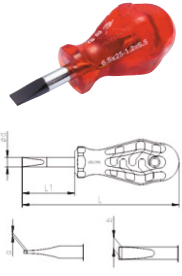
## 4120 - Kraft Seri Süngüsü Uzun Yıldız Uçlu Tornavida

| Sipariş | Ø D1xL1 | mm | L mm |
|---|---|---|---|
| 4120 18 5300 | 4.5x300 | Ph1 | 385 |
| 4120 18 5500 | 4.5x500 | Ph1 | 585 |
| 4120 18 6300 | 6x300 | Ph2 | 395 |
| 4120 18 6500 | 6x500 | Ph2 | 595 |



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## 4110 - Kraft Seri Düz Uçlu Topaç Tornavida

| Sipariş | Ø D1xL1 | a mm | b mm | L mm |
|---|---|---|---|---|
| 4110 17 5525 | 5.5x25 | 1 | 5.5 | 70 |
| 4110 17 5540 | 5.5x40 | 1 | 5.5 | 105 |
| 4110 17 6525 | 6.5x25 | 1.2 | 6.5 | 70 |
| 4110 17 6540 | 6.5x40 | 1.2 | 6.5 | 105 |
| 4110 17 0825 | 8x25 | 1.2 | 8 | 70 |
| 4110 17 0840 | 8x40 | 1.2 | 8 | 105 |



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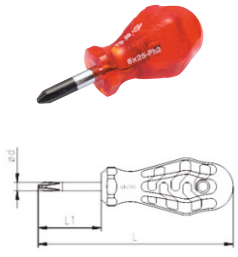
## 4120 - Kraft Seri Yıldız Uçlu Tornavida Seti (6 Parça)

| Sipariş | İçerik |
|---|---|
| 4120 00 8106 | 3x60 – 4.5x80<br>4.5x100 – 4.5x150<br>6x100 – 6x150<br>Yıldız Uçlu |



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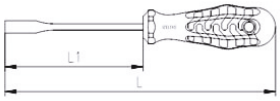
## 4130 - Kraft Seri Yıldız Uçlu Topaç Tornavida

| Sipariş | Ø D1xL1 | mm | L mm |
|---|---|---|---|
| 4130 18 4525 | 4.5x25 | Ph1 | 70 |
| 4130 18 4540 | 4.5x40 | Ph1 | 105 |
| 4130 18 0625 | 6x25 | Ph2 | 70 |
| 4130 18 0640 | 6x40 | Ph2 | 105 |



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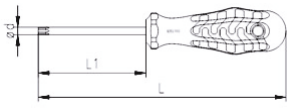
## 4770 - Lokma Uçlu Tornavida

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4770 19 0040 | 4 | 220 | 125 |
| 4770 19 0050 | 5 | 220 | 125 |
| 4770 19 0055 | 5.5 | 220 | 125 |
| 4770 19 0060 | 6 | 220 | 125 |
| 4770 19 0070 | 7 | 230 | 125 |
| 4770 19 0080 | 8 | 230 | 125 |

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4770 19 0090 | 9 | 230 | 125 |
| 4770 19 0100 | 10 | 230 | 125 |
| 4770 19 0110 | 11 | 230 | 125 |
| 4770 19 0120 | 12 | 230 | 125 |
| 4770 19 0130 | 13 | 230 | 125 |
| 4770 19 0140 | 14 | 230 | 125 |



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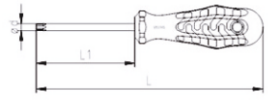
## 4775 - Torx® Uçlu Tornavida

| Sipariş | ∅ D1xL1 | mm | L mm |
|---|---|---|---|
| 4775 18 0010 | 4x80 | T10 | 165 |
| 4775 18 0015 | 4x80 | T15 | 165 |
| 4775 18 0020 | 4x100 | T20 | 185 |
| 4775 18 0025 | 4.5x100 | T25 | 185 |

| Sipariş | ∅ D1xL1 | mm | L mm |
|---|---|---|---|
| 4775 18 0027 | 5x125 | T27 | 220 |
| 4775 18 0030 | 6x125 | T30 | 220 |
| 4775 18 0040 | 7x125 | T40 | 230 |
| 4775 18 0045 | 8x125 | T45 | 230 |



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## 4776 - Delikli Torx® Uçlu Tornavida

| Sipariş | ∅ D1xL1 | mm | L mm |
|---|---|---|---|
| 4776 18 0009 | 4x60 | TR9 | 145 |
| 4776 18 0010 | 4x80 | TR10 | 165 |
| 4776 18 0015 | 4x80 | TR15 | 165 |
| 4776 18 0020 | 4x100 | TR20 | 185 |

| Sipariş | ∅ D1xL1 | mm | L mm |
|---|---|---|---|
| 4776 18 0025 | 4.5x100 | TR25 | 185 |
| 4776 18 0027 | 5x125 | TR27 | 220 |
| 4776 18 0030 | 6x125 | TR30 | 220 |
| 4776 18 0040 | 7x125 | TR40 | 230 |



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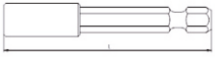
## 4770 - Lokma Uçlu Tornavida Seti (8 Parça)

| Sipariş | İçerik |
|---|---|
| 4770 00 8108 | 6 - 7 - 8 - 9 -10 - 11 - 12 -13 |





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## 4790 - Üniversal Bits Adaptörü (Manyetik)

| Sipariş | mm | mm | L mm |
|---|---|---|---|
| 4790 26 6360 | 6.3 | 6.3 | 60 |



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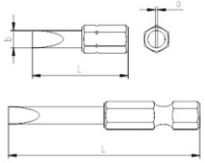
## 4810 - Düz Bits



| Sipariş | | L mm |
|---|---|---|
| 4810 20 0645 | 0.6x4.5 | 25 |
| 4810 20 5645 | 0.6x4.5 | 50 |
| 4810 20 0855 | 0.8x5.5 | 25 |
| 4810 20 5855 | 0.8x5.5 | 50 |
| 4810 20 1265 | 1.2x6.5 | 25 |
| 4810 20 5265 | 1.2x6.5 | 50 |



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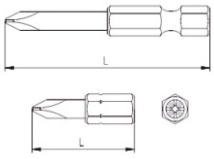
## 4820 - Yıldız Bits



| Sipariş | | L mm |
|---|---|---|
| 4820 21 0001 | Ph1 | 25 |
| 4820 21 0011 | Ph1 | 50 |
| 4820 21 0002 | Ph2 | 25 |
| 4820 21 0012 | Ph2 | 50 |
| 4820 21 0003 | Ph3 | 25 |
| 4820 21 0013 | Ph3 | 50 |



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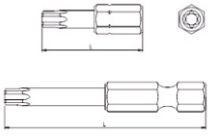
## 4830 - Torx® Bits



| Sipariş | | L mm |
|---|---|---|
| 4830 21 0025 | T25 | 25 |
| 4830 21 0125 | T25 | 50 |
| 4830 21 0027 | T27 | 25 |
| 4830 21 0127 | T27 | 50 |
| 4830 21 0030 | T30 | 25 |
| 4830 21 0130 | T30 | 50 |
| 4830 21 0040 | T40 | 25 |
| 4830 21 0140 | T40 | 50 |



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## 4800 - 7'li Bits Set -1

| Sipariş | İçerik |
|---|---|
| 4800 00 7107 | Düz 0.6x4.5 - 0.8x5.5<br>Yıldız Ph1 - Ph2 - Ph3<br>Torx T27<br>6.3x6.0 Adaptör |




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## 4810 - Düz Bits Set (25 mm)

| Sipariş | mm |
|---|---|
| 4810 00 0645 | 06x4.5 |
| 4810 00 0855 | 0.8x5.5 |
| 4810 00 1265 | 1.2x6.5 |




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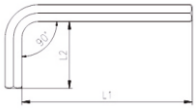
## 4820 - Yıldız Bits Set (25 mm)

| Sipariş | mm |
|---|---|
| 4820 00 0001 | Ph1 |
| 4820 00 0002 | Ph2 |
| 4820 00 0003 | Ph3 |



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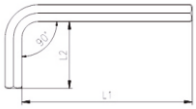
## 4900 - Allen Anahtar Altı Köşe

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4900 22 0015 | 1.5 | 45 | 14 |
| 4900 22 0020 | 2 | 50 | 16 |
| 4900 22 0025 | 2.5 | 56 | 18 |
| 4900 22 0030 | 3 | 63 | 20 |
| 4900 22 0035 | 3.5 | 66 | 22 |
| 4900 22 0040 | 4 | 70 | 25 |
| 4900 22 0050 | 5 | 80 | 28 |
| 4900 22 0060 | 6 | 90 | 32 |

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4900 22 0070 | 7 | 95 | 34 |
| 4900 22 0080 | 8 | 100 | 36 |
| 4900 22 0090 | 9 | 105 | 38 |
| 4900 22 0100 | 10 | 112 | 40 |
| 4900 22 0120 | 12 | 125 | 45 |
| 4900 22 0140 | 14 | 140 | 56 |
| 4900 22 0160 | 16 | 152 | 60 |
| 4900 22 0170 | 17 | 160 | 63 |
| 4900 22 0190 | 19 | 180 | 70 |
| 4900 22 0220 | 22 | 200 | 80 |
| 4900 22 0240 | 24 | 224 | 90 |






IZELTAS

## 4903- Allen Anahtar Altı Köşe Uzun Boy

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4903 22 0020 | 2 | 100 | 16 |
| 4903 22 0025 | 2.5 | 112 | 18 |
| 4903 22 0030 | 3 | 126 | 20 |
| 4903 22 0035 | 3.5 | 136,5 | 22 |
| 4903 22 0040 | 4 | 140 | 25 |
| 4903 22 0050 | 5 | 160 | 28 |
| 4903 22 0060 | 6 | 180 | 32 |
| 4903 22 0070 | 7 | 190 | 34 |

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4903 22 0080 | 8 | 200 | 36 |
| 4903 22 0090 | 9 | 210 | 38 |
| 4903 22 0100 | 10 | 224 | 40 |
| 4903 22 0120 | 12 | 250 | 45 |
| 4903 22 0140 | 14 | 280 | 56 |
| 4903 22 0160 | 16 | 290 | 60 |
| 4903 22 0170 | 17 | 320 | 63 |
| 4903 22 0190 | 19 | 360 | 70 |



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## 4900- Allen Anahtar Takım Altı Köşe

| Sipariş | mm |
|---|---|
| 4900 00 3110 | 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 |
| 4900 00 3112 | 2 - 2.5 - 3 - 3.5 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 12 |



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## 4903 - Allen Anahtar Takım Altı Köşe Uzun Boy

| Sipariş | mm |
|---|---|
| 4903 00 3110 | 2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 |
| 4903 00 3112 | 2 - 2.5 - 3 - 3.5 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 12 |



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## 4905 - Yuvarlak Başlı Allen Anahtar Takımı (8 Parça)

| Sipariş | mm |
|---|---|
| 4905 00 7108 | 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 |



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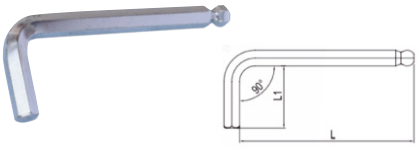
## 4906 - Yuvarlak Başlı Allen Anahtar Takımı Uzun

| Sipariş | mm |
|---|---|
| 4906 00 3109 | 1.5 - 2 - 2.5 - 3 - 4 - 5 - 6 - 8 - 10 |

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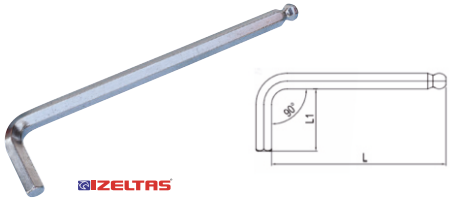
## 4905 - Yuvarlak Başlı Allen Anahtar (mm)

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4905 22 0020 | 2 | 50 | 16 |
| 4905 22 0025 | 2.5 | 56 | 18 |
| 4905 22 0030 | 3 | 63 | 20 |
| 4905 22 0040 | 4 | 70 | 25 |
| 4905 22 0050 | 5 | 80 | 28 |
| 4905 22 0060 | 6 | 90 | 32 |
| 4905 22 0080 | 8 | 100 | 36 |
| 4905 22 0100 | 10 | 112 | 40 |

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## 4906 - Yuvarlak Başlı Allen Anahtarı Uzun

| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4906 22 0015 | 1.5 | 79 | 12 |
| 4906 22 0020 | 2 | 84 | 16 |
| 4906 22 0025 | 2.5 | 89 | 16 |
| 4906 22 0030 | 3 | 99 | 18 |
| 4906 22 0040 | 4 | 109 | 23 |
| 4906 22 0050 | 5 | 125 | 26 |
| 4906 22 0060 | 6 | 150 | 28 |
| 4906 22 0080 | 8 | 167 | 33 |
| 4906 22 0100 | 10 | 190 | 37 |



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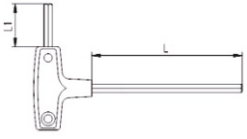
## 4920 - T Tipi Allen Anahtar




| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4920 22 0025 | 2.5 | 110 | 14 |
| 4920 22 0030 | 3 | 125 | 17 |
| 4920 22 0040 | 4 | 140 | 20 |
| 4920 22 0050 | 5 | 155 | 23 |
| 4920 22 0060 | 6 | 170 | 26 |
| 4920 22 0070 | 7 | 185 | 30 |
| 4920 22 0080 | 8 | 200 | 34 |
| 4920 22 0100 | 10 | 220 | 40 |



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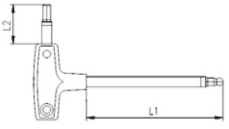
## 4921 - Yuvarlak Başlı T Tipi Allen Anahtar




| Sipariş | mm | L mm | L1 mm |
|---|---|---|---|
| 4921 22 0025 | 2.5 | 110 | 14 |
| 4921 22 0030 | 3 | 125 | 17 |
| 4921 22 0040 | 4 | 140 | 20 |
| 4921 22 0050 | 5 | 155 | 23 |
| 4921 22 0060 | 6 | 170 | 26 |
| 4921 22 0070 | 7 | 185 | 30 |
| 4921 22 0080 | 8 | 200 | 34 |
| 4921 22 0100 | 10 | 220 | 40 |

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## 4920 - T Tipi Allen Anahtar Takımı (8 Parça)

| Sipariş | mm |
|---|---|
| 4920 00 8108 | 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 |




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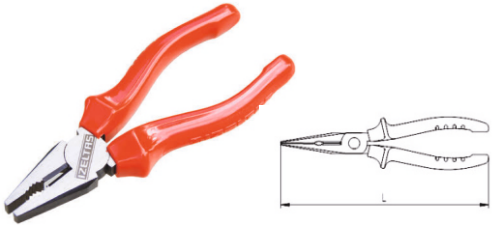
## 4921 - Yuvarlak Başlı T Tipi Allen Anahtar Takımı (8 Parça)

| Sipariş | mm |
|---|---|
| 4921 00 8108 | 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 10 |



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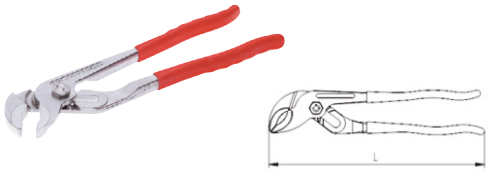
### 3020 - Kombine Pense

| Sipariş | L mm | L inch | Model |
|---|---|---|---|
| 3020 12 2160 | 160 | 6 1/4" | OPAK |
| 3020 12 2180 | 180 | 7 1/8" | OPAK |
| 3020 12 2200 | 200 | 8" | OPAK |



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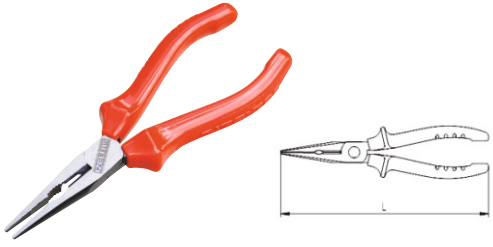
### 2400 - Üniversal Fort Pense

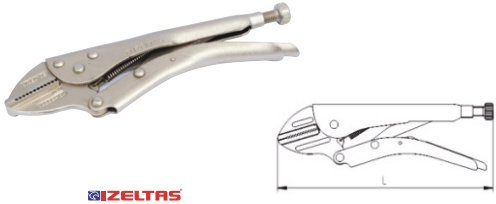
| Sipariş | L mm | L inch | mm |
|---|---|---|---|
| 2400 11 0160 | 160 | 6 1/4" | 30 |
| 2400 11 0240 | 240 | 9 1/2" | 35 |
| 2400 11 0315 | 305 | 12 1/2" | 40 |



IZELTAS

### 3220- Uzun Kargaburun Düz Uçlu

| Sipariş | L mm | L inch | Model |
|---|---|---|---|
| 3220 13 2140 | 140 | 5 1/2" | OPAK |
| 3220 13 2160 | 160 | 6 1/4" | OPAK |
| 3220 13 2180 | 180 | 7 1/8" | OPAK |
| 3220 13 2200 | 200 | 8" | OPAK |



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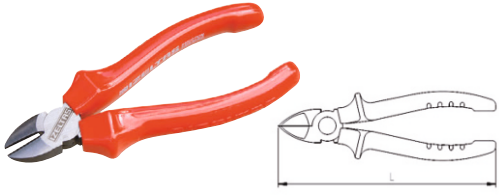
### 2505 - Standart Ayarlı Pense

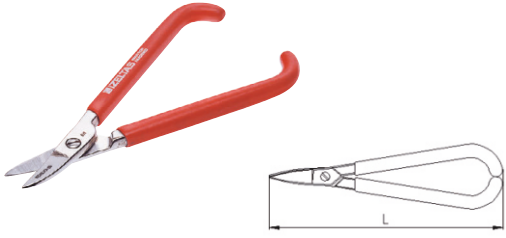
| Sipariş | L mm | L inch | mm |
|---|---|---|---|
| 2505 11 0250 | 250 | 10" | 30 |



IZELTAS

### 3700 - Yan Keski

| Sipariş | L mm | L inch | Model |
|---|---|---|---|
| 3700 16 2140 | 140 | 5 1/2" | OPAK |
| 3700 16 2160 | 160 | 6 1/4" | OPAK |
| 3700 16 2180 | 180 | 7 1/8" | OPAK |



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### 6801 - Kuyumcu Makası (Eğri)

| Sipariş | L mm | L inch |
|---|---|---|
| 6801 27 0180 | 180 | 7 1/8" |



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### 3301 - Dış Segman Pense (Yaylı Düz)

| Sipariş | L mm | |
|---|---|---|
| 3301 12 0140 | 140 | 10-25 |
| 3301 12 0180 | 180 | 19-60 |
| 3301 12 0225 | 225 | 40-100 |
| 3301 12 0295 | 295 | 85-165 |



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### 3321 - İç Segman Pensi (Yaysız Düz)

| Sipariş | L mm | |
|---|---|---|
| 3321 12 0140 | 140 | 8-25 |
| 3321 12 0180 | 180 | 19-60 |
| 3321 12 0225 | 225 | 40-100 |
| 3321 12 0310 | 310 | 85-165 |



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### 3311 - Dış Segmen Pense (Yaylı Eğri)

| Sipariş | L mm | |
|---|---|---|
| 3311 12 0125 | 125 | 10-25 |
| 3311 12 0170 | 170 | 19-60 |
| 3311 12 0210 | 210 | 40-100 |
| 3311 12 0275 | 275 | 85-165 |



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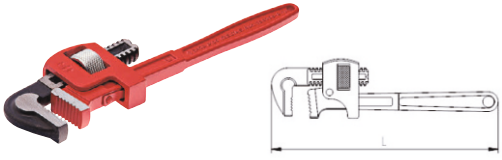
### 3331 - İç Segman Pensi (Yaysız Eğri)

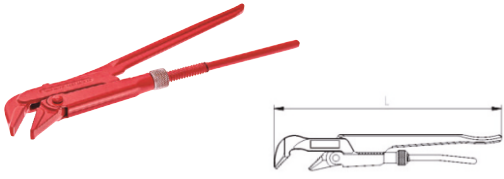
| Sipariş | L mm | |
|---|---|---|
| 3331 12 0170 | 170 | 19-60 |
| 3331 12 0210 | 210 | 40-100 |
| 3331 12 0290 | 290 | 85-165 |



IZELTAS

### 2100 - Stilson Boru Anahtarı

| Sipariş | L mm | L inch | mm | inch |
|---|---|---|---|---|
| 2100 10 0008 | 200 | 8" | 27 | 3/4" |
| 2100 10 0010 | 250 | 10" | 34 | 1" |
| 2100 10 0012 | 300 | 12" | 42 | 1 1/4" |
| 2100 10 0014 | 350 | 14" | 50 | 1 1/2" |
| 2100 10 0018 | 450 | 18" | 60 | 2" |
| 2100 10 0024 | 600 | 24" | 76 | 2 1/2" |



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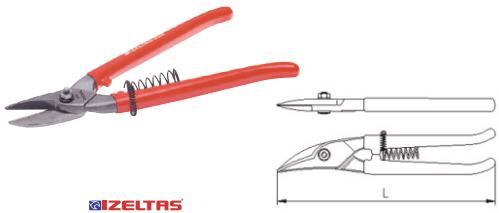
### 2200 - Maşalı Boru Anahtarı (45°)

| Sipariş | L mm | L inch | mm | inch |
|---|---|---|---|---|
| 2200 10 0005 | 255 | 22 | 1/2" | 385 |
| 2200 10 0010 | 335 | 35 | 1" | 720 |
| 2200 10 0015 | 470 | 46 | 1 1/2" | 1345 |
| 2200 10 0020 | 630 | 65 | 2 | 2470 |

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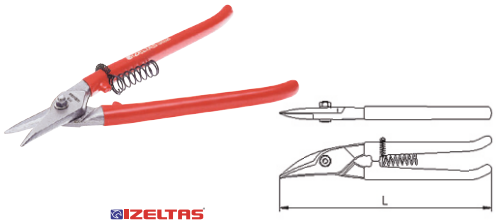
## 6210 - Kaportacı Makası (Sağ)

| Sipariş | L mm | L inch |
|---|---|---|
| 6210 27 0250 | 250 | 10" |
| 6210 27 0275 | 275 | 11" |
| 6210 27 0300 | 300 | 12" |

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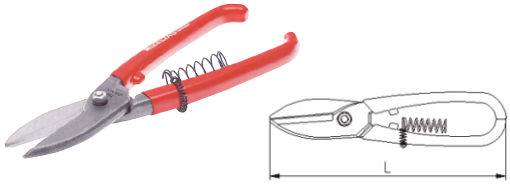
## Kaportacı Makası (Sol)

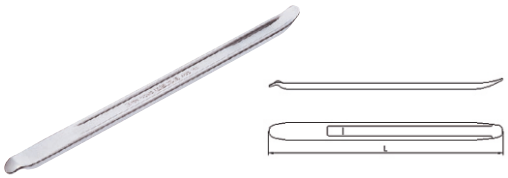
| Sipariş | L mm | L inch |
|---|---|---|
| 6211 27 0250 | 250 | 10" |
| 6211 27 0275 | 275 | 11" |
| 6211 27 0300 | 300 | 12" |




IZELTAS

## 6821 - Tenekeci Makası (Yaylı)

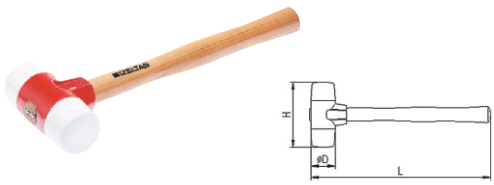
| Sipariş | L mm | L inch |
|---|---|---|
| 6821 27 0250 | 250 | 10" |
| 6821 27 0300 | 300 | 12" |




IZELTAS

## 6350 - Levye Oluklu

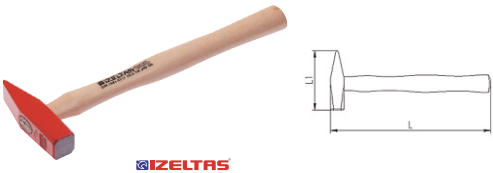
| Sipariş | L mm | L inch |
|---|---|---|
| 6350 26 0300 | 300 | 12" |
| 6350 26 0400 | 400 | 16" |
| 6350 26 0500 | 500 | 20" |
| 6350 26 0600 | 600 | 24" |




IZELTAS

## 5850 - Plastik Çekiç

| Sipariş | L mm | Ø D mm | H mm |
|---|---|---|---|
| 5850 25 0030 | 300 | 30 | 100 |
| 5850 25 0040 | 320 | 40 | 110 |
| 5850 25 0050 | 350 | 50 | 120 |




IZELTAS

## 5800 - Tesviyeci Çekiç

| Sipariş | L mm | L1 mm | g |
|---|---|---|---|
| 5800 25 0100 | 260 | 82 | 100 |
| 5800 25 0200 | 280 | 95 | 200 |
| 5800 25 0300 | 300 | 105 | 300 |
| 5800 25 0500 | 320 | 118 | 500 |
| 5800 25 1000 | 360 | 135 | 1000 |
| 5800 25 1500 | 380 | 145 | 1500 |
| 5800 25 2000 | 400 | 155 | 2000 |



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## 6225 - Madeni Yağdanlık (Flexible Uçlu)

| Sipariş | Ölçü cc |
|---|---|
| 6225 26 0200 | 200 |
| 6225 26 0300 | 300 |
| 6225 26 0500 | 500 |



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## 8410 - Takım Çantası (Üç Gözlü)

| Sipariş | Boyut |
|---|---|
| 8410 33 6103 | 190x300x150 |
| 8410 33 6203 | 190x420x150 |




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## 1107 - 1/4" Karbüratör Lokma Takımı (18 parça mm)

| Sipariş | Lokmalar | Avadanlıklar |
|---|---|---|
| 1107 00 6015 | 4-5-6 - 7-8-9-10-11-12-13 Altı Köşe | 1/4" Cırcır Kolu |
| | | 1/4" Mafsal |
| | | 1/4" T Kol |
| | 8 - 10 Sekiz Köşe | 1/4" Ara Kol 50mm |
| | | 1/4" Ara Kol 100mm |
| | | 1/4" Mafsallı Kol |




IZELTAS

## 1113 - 1/2" Lokma Takımı Altıköşe (24 parça, mm)

| Sipariş | Lokmalar | Avadanlıklar |
|---|---|---|
| 1113 00 2024 | 10 - 11 - 12 - 13 - 14 - 15 16 - 17 - 18 - 19 - 21 - 22 23 - 24 - 26 - 27 - 28 30 - 32 | 1/2" Cırcır Kolu |
| | | 1/2" T Kol |
| | | 1/2" Mafsal |
| | | 1/2" Ara Kol 125 mm |
| | | 1/2" Ara Kol 250 mm |



IZELTAS

## 1110 - 3/8" Lokma Takımı Altıköşe (20 parça, mm)

| Sipariş | Lokmalar | Avadanlıklar |
|---|---|---|
| 1110 00 6019 | 6-7-8-9-10-11-12-13-14 17-19-21-22 | 3/8" Cırcır Kolu |
| | | 3/8" Mafsal |
| | Altı Köşe | 3/8" T Kol |
| | | 3/8" Ara Kol |
| | 20.8 Buji Lokma (Lastikli Altı Köşe) | 3/8" Ara Kol |
| | | 3/8" Mafsallı Kol |



Sappower

## IW 3C17 - 1/2" Havalı Sökme ve Sıkma

| Sipariş | Gövde Materyali | Soket Tutucu | Max. Sıkma Torku | Darbe Mekanizması | Boşta Devir | Standart Civata Ölç. | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IW-3C17 | Composit | 1/2" | 1288 nm | Çift Çekiç | 7500 rpm | 19 mm | 185 mm | 1.90 kg | 6.3 bar | 10 mm | 113 1/min |



Sappower

## IW 3C6K - 1/2" Havalı Sökme ve Sıkma Seti

| Sipariş | İçerik | Adet |
|---|---|---|
| IW-3C6 | 9 mm, 10 mm, 11 mm, 13 mm, 14 mm, 17 mm, 19 mm, 22 mm, 24 mm, 27 mm, LM-1 Mini Ya layıcı, 125 mm Uzatma | 1'er Adet |



Sappower

## IW5A2750 - 1" Havalı Sökme ve Sıkma

| Sipariş | Gövde Materyali | Soket Tutucu | Max. Sıkma Torku | Darbe Mekanizması | Boşta Devir | Standart Civata Ölç. | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IW-5A2750 | Alüminyum | 1" | 2800 nm | Tek Çekiç | 5500 rpm | 45 mm | 570 mm | 13.80 kg | 6.3 bar | 19 mm | 667 1/min |



Sappower

## IW 5M6 - 1" Havalı Sökme ve Sıkma

| Sipariş | Gövde Materyali | Soket Tutucu | Max. Sıkma Torku | Darbe Mekanizması | Boşta Devir | Standart Civata Ölç. | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| IW-5M6 | Alüminyum | 1" | 3300 nm | Pin-Less | 3600 rpm | 45 mm | 570 mm | 16.80 kg | 6.3 bar | 19 mm | 687 1/min |




Sappower

## RW-1 - 1/2" Havalı Cırcır Tip Sökme ve Sıkma

| Sipariş | Gövde Materyali | Soket Tutucu | Max. Sıkma Torku | Darbe Mekanizması | Boşta Devir | Standart Civata Ölç. | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-1 | Alüminyum | 1/2" | 69 nm | Standart | 160 rpm | 13 mm | 260 mm | 1.20 kg | 6.3 bar | 10 mm | 113 1/min |




Sappower

## RW-2 - 3/8" Havalı Cırcır Tip Sökme ve Sıkma

| Sipariş | Gövde Materyali | Soket Tutucu | Max. Sıkma Torku | Darbe Mekanizması | Boşta Devir | Standart Civata Ölç. | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RW-2 | Alüminyum | 3/8" | 34 nm | Standart | 300 rpm | 5 mm | 128 mm | 0.50 kg | 6.3 bar | 10 mm | 51 1/min |



Sappower

## D10-Y - 10 mm Havalı Matkap (Sağ - Sol)

| Sipariş | Gövde Materyali | Mandren Kapasitesi | Mandren Tipi | Mekanizma | Dişli Tipi | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D10-Y | Alüminyum | 10 mm | Anahtarsız | Standart | 3 | 1800 rpm | 186 mm | 1.10 kg | 6.3 bar | 10 mm | 113 1/min. |



Sappower

## D10-1 - 10 mm Havalı Matkap (Sağ - Sol)

| Sipariş | Gövde Materyali | Mandren Kapasitesi | Mandren Tipi | Mekanizma | Dişli Tipi | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D10-1 | Alüminyum | 10 mm | Anahtarsız | Standart | 3 | 1800 rpm | 165 mm | 1.40 kg | 6.3 bar | 10 mm | 190 1/min. |



Sapower

## 10 mm Havalı Matkap 90° (Sağ - Sol)

| Sipariş | Gövde Materyali | Mandren Kapasitesi | Mandren Tipi | Mekanizma | Dişli Tipi | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DA-10 | Alüminyum | 10 mm | Anahtarlı | Standart | 3 | 1600 rpm | 205 mm | 1.10 kg | 6.3 bar | 10 mm | 113 l/min. |



Sapower

## KC-312 - Havalı Kılavuz Çekme

| Delme Kapasitesi | |
|---|---|
| Alüminyum | M3-M12 |
| Bakır | M3-M12 |
| Demir | M3-M8 |

| Sipariş | Gövde Materyali | Uç Kapasitesi | Mekanizma | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|
| KC-312 | Alüminyum | M3-M12 | Standart | 150 rpm | 200 mm | 1.90 kg | 6.3 bar | 8 mm | 184 l/min. |



Sapower

## SD-6 - Havalı Tornavida (Sağ - Sol)

| Sipariş | Gövde Materyali | Vidalama Kapasitesi | Max. Sıkma Torku | Mekanizma | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|
| SD-6 | Alüminyum | 3-6 mm | 3-8 mm | Standart | 1800 rpm | 211 mm | 1.20 kg | 6.3 bar | 10 mm | 113 l/min. |



Sapower

## SDS-5 - Havalı Dikey Tornavida (Sağ - Sol)

| Sipariş | Gövde Materyali | Vidalama Kapasitesi | Max. Sıkma Torku | Mekanizma | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|
| SDS-5 | Alüminyum | 3-6 mm | 1-3.5 mm | Standart | 1500 rpm | 231 mm | 0.60 kg | 6.3 bar | 10 mm | 113 l/min. |



Sappower

## DG-3Y - Havalı Kalıpçı Taşlama

| Sipariş | Gövde Materyali | Uç Kapasitesi | Mekanizma | Boşta Devir | Güç | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|
| DG-3Y | Composit - Alüminyum | 6 mm | Standart | 25000 rpm | 0.45 hp | 151 mm | 0.32 kg | 6.3 bar | 8 mm | 86 1/min |



Sappower

## DG-6Y - Havalı Kalıpçı Taşlama

| Sipariş | Gövde Materyali | Uç Kapasitesi | Mekanizma | Boşta Devir | Güç | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|
| DG-6Y | Composit - Alüminyum | 6 mm | Standart | 22000 rpm | 0.45 hp | 178 mm | 0.60 kg | 6.3 bar | 10 mm | 113 1/min |



Sappower

## DG-6L - Uzun Havalı Kalıpçı Taşlama

| Sipariş | Gövde Materyali | Uç Kapasitesi | Mekanizma | Boşta Devir | Güç | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|
| DG-6L | Alüminyum | 6 mm | Standart | 21000 rpm | 0.45 hp | 280 mm | 0.80 kg | 6.3 bar | 10 mm | 85 1/min |



Sappower

## DG-690 - 90° Havalı Kalıpçı Taşlama

| Sipariş | Gövde Materyali | Uç Kapasitesi | Mekanizma | Boşta Devir | Güç | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|
| DG-690 | Composit - Alüminyum | 6 mm | Standart | 18000 rpm | 0.45 hp | 178 mm | 0.80 kg | 6.3 bar | 10 mm | 85 1/min |



## AG-1M - Havalı Taşlama (Mini)

| Sipariş | Gövde Materyali | Disk Kapasitesi | Aksesuar Bağlantı Vidası | Mekanizma | Boşta Devir | Güç | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AG-1M | Alüminyum | 50 mm | 6 mm | Standart | 15000 rpm | 0.45 hp | 188 mm | 0.80 kg | 6 bar | 10 mm | 85 l/min. |



## DG-5M - Mikro Havalı Kalıpçı Taşlama

| Sipariş | Gövde Materyali | Uç Kapasitesi | Mekanizma | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|
| DG-5M | Alüminyum | 3 mm | Standart | 54000 rpm | 134 mm | 0.20 kg | 6.3 bar | 8 mm | 57 l/min |



## ET-1 - Havalı Yazı Yazma

| Sipariş | Gövde Materyali | Uç Kapasitesi | Mekanizma | Boşta Devir | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|
| ET-1 | Alüminyum | 6 mm | Standart | 3800 rpm | 171 mm | 0.20 kg | 6.3 bar | 8 mm | 57 l/min |

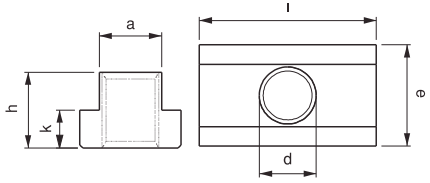


## RG-1 - Havalı Perçin Tabancası

| Çekme Gücü | Perçin Ölçüleri |
|---|---|
| 880 lbs | 2,4 - 3,2 - 4,0 - 4,8 mm |

| Sipariş | Kullanılan Perçin | Hareket Uzunluğu | Mekanizma | Yükseklik | Uzunluk | Ağırlık | Çalışma Basıncı | Min. Hortum Ölçüsü | Hava Tüketimi |
|---|---|---|---|---|---|---|---|---|---|
| RG-1 | Alüminyum | 14 mm | Standart | 273 mm | 230 mm | 1.50 kg | 6.3 bar | 10 mm | 113.2 l/min. |

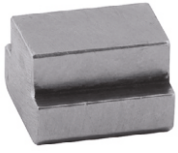


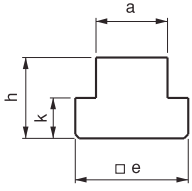




ER-EL

**1710 - Uzun T-Pabuç**

| Sipariş | d x a | a | e | l | h | k | (g) |
|---|---|---|---|---|---|---|---|
| 1710-0608 | M6 x 8 | 7.7 | 13 | 26 | 10 | 6 | 14 |
| 1710-0810 | M8 x 10 | 9.7 | 15 | 30 | 12 | 6 | 25 |
| 1710-1012 | M10 x 12 | 11.7 | 18 | 36 | 14 | 7 | 49 |
| 1710-1214 | M12 x 14 | 13.7 | 22 | 44 | 16 | 8 | 82 |
| 1710-1416 | M14 x 16 | 15.7 | 25 | 50 | 18 | 9 | 120 |
| 1710-1618 | M16 x 18 | 17.7 | 28 | 56 | 20 | 10 | 165 |
| 1710-1820 | M18 x 20 | 19.7 | 32 | 64 | 24 | 12 | 260 |
| 1710-2022 | M20 x 22 | 21.7 | 35 | 70 | 28 | 14 | 365 |
| 1710-2224 | M22 x 24 | 23.7 | 40 | 80 | 32 | 16 | 535 |
| 1710-2428 | M24 x 28 | 27.7 | 44 | 88 | 36 | 18 | 745 |
| 1710-3036 | M30 x 36 | 35.6 | 54 | 108 | 44 | 22 | 1390 |



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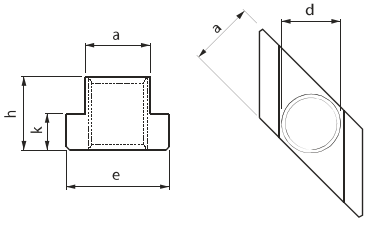
**1730 - Deliksiz T - Pabuç**

| Sipariş | a | a | e | h | k | (g) |
|---|---|---|---|---|---|---|
| 1730-06 | 6 | 5.7 | 10 | 8 | 4 | 4 |
| 1730-08 | 8 | 7.7 | 13 | 10 | 6 | 10 |
| 1730-10 | 10 | 9.7 | 15 | 12 | 6 | 16 |
| 1730-12 | 12 | 11.7 | 18 | 14 | 7 | 27 |
| 1730-14 | 14 | 13.7 | 22 | 16 | 8 | 50 |
| 1730-16 | 16 | 15.7 | 25 | 18 | 9 | 70 |
| 1730-18 | 18 | 17.7 | 28 | 20 | 10 | 95 |
| 1730-20 | 20 | 19.7 | 32 | 24 | 12 | 150 |
| 1730-22 | 22 | 21.7 | 35 | 28 | 14 | 210 |
| 1730-24 | 24 | 23.7 | 40 | 32 | 16 | 310 |
| 1730-28 | 28 | 27.7 | 44 | 36 | 18 | 430 |
| 1730-36 | 36 | 35.6 | 54 | 44 | 22 | 800 |
| 1730-42 | 42 | 41.6 | 65 | 52 | 26 | 1400 |



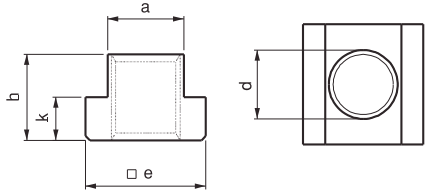




ER-EL

**1770 - Dereceli T-Pabuç**

| Sipariş | d x a | a | e | h | k | (g) |
|---|---|---|---|---|---|---|
| 1770-0810 | M8x10 | 9.7 | 15 | 12 | 6 | 10 |
| 1770-1012 | M10x12 | 11.7 | 18 | 14 | 7 | 15 |
| 1770-1014 | M10x14 | 13.7 | 22 | 16 | 8 | 30 |
| 1770-1214 | M12x14 | | | | | 25 |
| 1770-1416 | M14x16 | 15.7 | 25 | 18 | 9 | 40 |
| 1770-1018 | M10x18 | 17.7 | 28 | 20 | 10 | 70 |
| 1770-1618 | M16x18 | | | | | 60 |
| 1770-1620 | M16x20 | 19.7 | 32 | 24 | 12 | 95 |
| 1770-1820 | M18x20 | | | | | 90 |
| 1770-1622 | M16x22 | 21.7 | 35 | 28 | 14 | 135 |
| 1770-2022 | M20x22 | | | | | 125 |
| 1770-1628 | M16x28 | 27.7 | 44 | 36 | 16 | 330 |
| 1770-2028 | M20x28 | | | | | 295 |
| 1770-2428 | M24x28 | | | | | 265 |




ER-EL

**1750 - T - Pabuç**

| Sipariş | d x | a | a | e | h | k | (g) |
|---|---|---|---|---|---|---|---|
| 1750-0506 | M5 x 6 | 5.7 | 10 | 8 | 4 | 4 | 4 |
| 1750-0608 | M6 x 8 | 7.7 | 13 | 10 | 6 | 6 | 10 |
| 1750-0810 | M8 x 10 | 9.7 | 15 | 12 | 6 | 12 | |
| 1750-0812 | M8 x 12 | 11.7 | 18 | 14 | 7 | 22 | |
| 1750-1012 | M10 x 12 | | | | | 20 | |
| 1750-0814 | M8 x 14 | 13.7 | 22 | 16 | 8 | 40 | |
| 1750-1014 | M10 x 14 | | | | | 37 | |
| 1750-1214 | M12 x 14 | | | | | 30 | |
| 1750-0816 | M8 x 16 | 15.7 | 25 | 18 | 9 | 60 | |
| 1750-1016 | M10 x 16 | | | | | 55 | |
| 1750-1216 | M12 x 16 | | | | | 55 | |
| 1750-1416 | M14 x 16 | | | | | 45 | |
| 1750-0818 | M8 x 18 | 17.7 | 28 | 20 | 10 | 90 | |
| 1750-1018 | M10 x 18 | | | | | 87 | |
| 1750-1218 | M12 x 18 | | | | | 80 | |
| 1750-1418 | M14 x 18 | | | | | 75 | |
| 1750-1618 | M16 x 18 | | | | | 65 | |
| 1750-1620 | M16 x 20 | 19.7 | 32 | 24 | 12 | 115 | |
| 1750-1820 | M18 x 20 | | | | | 105 | |
| 1750-1622 | M16 x 22 | 21.7 | 35 | 28 | 14 | 170 | |
| 1750-1822 | M18 x 22 | | | | | 160 | |
| 1750-2022 | M20 x 22 | | | | | 150 | |
| 1750-1624 | M16 x 24 | 23.7 | 40 | 32 | 16 | 260 | |
| 1750-2024 | M20 x 24 | | | | | 240 | |
| 1750-2224 | M22 x 24 | | | | | 220 | |
| 1750-1628 | M16 x 28 | 27.7 | 44 | 36 | 18 | 375 | |
| 1750-2028 | M20 x 28 | | | | | 350 | |
| 1750-2228 | M22 x 28 | | | | | 330 | |
| 1750-2428 | M24 x 28 | | | | | 330 | |
| 1750-2436 | M24 x 36 | 35.6 | 54 | 44 | 22 | 665 | |
| 1750-3036 | M30 x 36 | | | | | 585 | |
| 1750-3642 | M36 x 42 | 41.6 | 65 | 52 | 26 | 1025 | |
| 1750-4248 | M42 x 48 | 47.6 | 75 | 60 | 30 | 1600 | |



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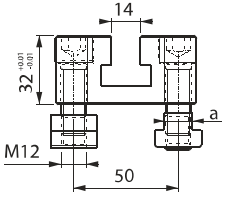
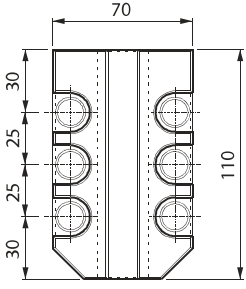
**1950 - T-Kanal Temizleyici**

| Sipariş | a | (g) |
|---|---|---|
| 1950-1214 | 12-14 | 25 |
| 1950-1618 | 16-18 | 45 |

| Sipariş | a | (g) |
|---|---|---|
| 1950-2022 | 20-22 | 45 |
| 1950-2428 | 24-28 | 70 |

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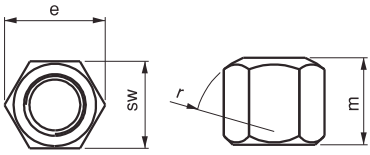
**1960 - Modüler T-Blok**

| Sipariş | a | (g) |
|---|---|---|
| 1960-110 | 14-16-18-20 | 1160 |



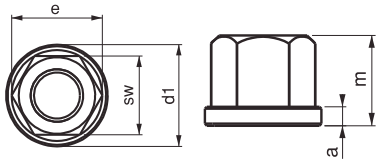



## 1790 - Takviyeli Somun

ER-EL

| Sipariş | | sw | e | m | r | (g) |
|---|---|---|---|---|---|---|
| 1790-06 | M6 | 10 | 11.5 | 9 | 9 | 5 |
| 1790-08 | M8 | 13 | 15 | 12 | 12 | 9 |
| 1790-10 | M10 | 17 | 19.6 | 15 | 15 | 20 |
| 1790-12 | M12 | 19 | 21.9 | 18 | 17 | 25 |
| 1790-14 | M14 | 22 | 25.4 | 21 | 20 | 40 |
| 1790-16 | M16 | 24 | 27.7 | 24 | 22 | 55 |
| 1790-18 | M18 | 27 | 31.2 | 27 | 24 | 80 |
| 1790-20 | M20 | 30 | 34.6 | 30 | 27 | 110 |
| 1790-22 | M22 | 32 | 36.9 | 33 | 30 | 130 |
| 1790-24 | M24 | 36 | 41.5 | 36 | 32 | 190 |
| 1790-30 | M30 | 46 | 53.1 | 45 | 41 | 400 |
| 1790-36 | M36 | 55 | 63.5 | 54 | 50 | 680 |
| 1790-42 | M42 | 65 | 75 | 63 | 58 | 1150 |



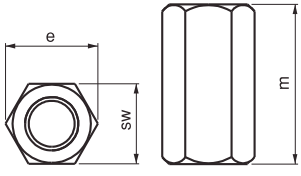



## 1810 - Pullu Somun

ER-EL

| Sipariş | | sw | e | m | a | d1 | (g) |
|---|---|---|---|---|---|---|---|
| 1810-08 | M8 | 13 | 14.7 | 12 | 3.5 | 18 | 12 |
| 1810-10 | M10 | 17 | 19.2 | 15 | 4 | 22 | 25 |
| 1810-12 | M12 | 19 | 21.5 | 18 | 4 | 25 | 30 |
| 1810-14 | M14 | 22 | 24.9 | 21 | 4.5 | 28 | 50 |
| 1810-16 | M16 | 24 | 27.2 | 24 | 5 | 31 | 65 |
| 1810-18 | M18 | 27 | 30.6 | 27 | 5 | 34 | 90 |
| 1810-20 | M20 | 30 | 34 | 30 | 6 | 37 | 130 |
| 1810-22 | M22 | 32 | 36.3 | 33 | 6 | 40 | 155 |
| 1810-24 | M24 | 36 | 40.8 | 36 | 6 | 45 | 220 |
| 1810-30 | M30 | 46 | 52.3 | 45 | 8 | 58 | 465 |
| 1810-36 | M36 | 55 | 62 | 54 | 10 | 68 | 500 |
| 1810-42 | M42 | 65 | 75 | 63 | 12 | 80 | 1340 |



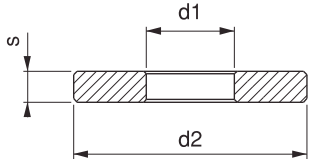




## 1830 - Uzatma Somun

ER-EL

| Sipariş | | sw | e | m | (g) |
|---|---|---|---|---|---|
| 1830-06 | M6 | 10 | 11.7 | 18 | 8 |
| 1830-08 | M8 | 13 | 15 | 24 | 19 |
| 1830-10 | M10 | 17 | 19.6 | 30 | 45 |
| 1830-12 | M12 | 19 | 21.6 | 36 | 55 |
| 1830-14 | M14 | 22 | 25.4 | 42 | 90 |
| 1830-16 | M16 | 24 | 27.7 | 48 | 115 |
| 1830-18 | M18 | 27 | 31.2 | 54 | 165 |
| 1830-20 | M20 | 30 | 34.6 | 60 | 230 |
| 1830-22 | M22 | 32 | 36.9 | 66 | 245 |
| 1830-24 | M24 | 36 | 41.5 | 72 | 400 |
| 1830-30 | M30 | 46 | 53.1 | 90 | 840 |
| 1830-36 | M36 | 55 | 63.5 | 108 | 1430 |
| 1830-42 | M42 | 65 | 75 | 126 | 2330 |



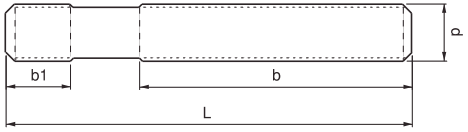



ER-EL

**1870 - Pul**

| Sipariş | metrik | whitworth | d1 | d2 | s | (g) |
|---|---|---|---|---|---|---|
| 1870-06 | M6 | 1/4 | 6.4 | 17 | 3 | 6 |
| 1870-08 | M8 | 5/16 | 8.4 | 23 | 4 | 10 |
| 1870-10 | M10 | 3/8 | 10.5 | 28 | 4 | 16 |
| 1870-12 | M12 | 1/2 | 13 | 35 | 5 | 30 |
| 1870-14 | M14 | - | 15 | 40 | 5 | 40 |
| 1870-16 | M16 | 5/8 | 17 | 45 | 6 | 60 |
| 1870-18 | M18 | - | 19 | 45 | 6 | 60 |
| 1870-20 | M20 | 3/4 | 21 | 50 | 6 | 70 |
| 1870-22 | M22 | 7/8 | 23 | 50 | 8 | 90 |
| 1870-24 | M24 | 7/8 | 25 | 60 | 8 | 145 |
| 1870-30 | M30 | 11/8 | 31 | 68 | 10 | 215 |
| 1870-36 | M36 | 11/4 | 38 | 80 | 12 | 360 |
| 1870-42 | M42 | 11/2 | 44 | 98 | 15 | 640 |






ER-EL

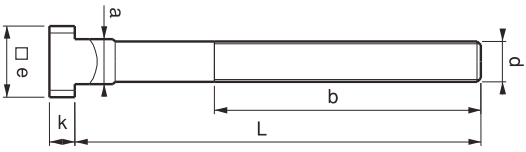
**1690 - Düz Saplama**

| Sipariş | d | x L | b1 | b | Sıkma Nm | Sıkma kN | g |
|---|---|---|---|---|---|---|---|
| 1690-08040 | M8 | x 40 | 11 | 20 | 36 | 27 | 10 |
| 1690-08063 | | x 63 | | 40 | | | 15 |
| 1690-08080 | | x 80 | | 50 | | | 20 |
| 1690-08100 | | x 100 | | 63 | | | 30 |
| 1690-08125 | | x 125 | | 75 | | | 35 |
| 1690-08160 | | x 160 | | 100 | | | 45 |
| 1690-10050 | M10 | x 50 | 13 | 25 | 67 | 43 | 20 |
| 1690-10063 | | x 63 | | 32 | | | 25 |
| 1690-10080 | | x 80 | | 50 | | | 35 |
| 1690-10100 | | x 100 | | 63 | | | 45 |
| 1690-10125 | | x 125 | | 75 | | | 55 |
| 1690-10160 | | x 160 | | 100 | | | 70 |
| 1690-10200 | | x 200 | | 125 | | | 95 |
| 1690-12050 | M12 | x 50 | 15 | 25 | 120 | 63 | 35 |
| 1690-12063 | | x 63 | | 32 | | | 40 |
| 1690-12080 | | x 80 | | 50 | | | 55 |
| 1690-12100 | | x 100 | | 63 | | | 70 |
| 1690-12125 | | x 125 | | 75 | | | 90 |
| 1690-12160 | | x 160 | | 100 | | | 115 |
| 1690-12200 | | x 200 | | 125 | | | 140 |
| 1690-14063 | M14 | x 63 | 17 | 32 | 191 | 86 | 60 |
| 1690-14080 | | x 80 | | 50 | | | 75 |
| 1690-14100 | | x 100 | | 63 | | | 95 |
| 1690-14125 | | x 125 | | 75 | | | 120 |
| 1690-14160 | | x 160 | | 100 | | | 150 |
| 1690-14200 | | x 200 | | 125 | | | 198 |
| 1690-14250 | | x 250 | | 160 | | | 240 |

| Sipariş | d | x L | b1 | b | Sıkma Nm | Sıkma kN | g |
|---|---|---|---|---|---|---|---|
| 1690-1663 | M16 | x 63 | 19 | 32 | 302 | 118 | 85 |
| 1690-1680 | | x 80 | | 50 | | | 105 |
| 1690-16100 | | x 100 | | 63 | | | 130 |
| 1690-16125 | | x 125 | | 75 | | | 160 |
| 1690-16160 | | x 160 | | 100 | | | 205 |
| 1690-16200 | | x 200 | | 125 | | | 260 |
| 1690-16250 | | x 250 | | 160 | | | 325 |
| 1690-16315 | | x 315 | | 180 | | | 405 |
| 1690-16500 | | x 500 | | 315 | | | 650 |
| 1690-1880 | M18 | x 80 | 23 | 50 | 405 | 144 | 130 |
| 1690-18100 | | x 100 | | 60 | | | 160 |
| 1690-18125 | | x 125 | | 75 | | | 200 |
| 1690-18160 | | x 160 | | 100 | | | 260 |
| 1690-18200 | | x 200 | | 125 | | | 320 |
| 1690-18250 | | x 250 | | 150 | | | 400 |
| 1690-18315 | | x 315 | | 180 | | | 510 |
| 1690-2080 | M20 | x 80 | 27 | 32 | 580 | 184 | 155 |
| 1690-20100 | | x 100 | | 60 | | | 200 |
| 1690-20125 | | x 125 | | 70 | | | 250 |
| 1690-20160 | | x 160 | | 100 | | | 330 |
| 1690-20200 | | x 200 | | 125 | | | 400 |
| 1690-20250 | | x 250 | | 160 | | | 510 |
| 1690-20315 | | x 315 | | 200 | | | 640 |
| 1690-20400 | | x 400 | | 250 | | | 815 |
| 1690-20500 | | x 500 | | 315 | | | 1020 |
| 1690-22100 | M22 | x 100 | 31 | 45 | 772 | 228 | 250 |
| 1690-22125 | | x 125 | | 70 | | | 305 |

| Sipariş | d | x L | b1 | b | Sıkma Nm | Sıkma kN | g |
|---|---|---|---|---|---|---|---|
| 1690-22160 | M22 | x 160 | 31 | 100 | 772 | 228 | 400 |
| 1690-22200 | | x 200 | | 125 | | | 500 |
| 1690-22250 | | x 250 | | 160 | | | 620 |
| 1690-22315 | | x 315 | | 180 | | | 780 |
| 1690-22400 | | x 400 | | 250 | | | 1010 |
| 1690-24100 | M24 | x 100 | 35 | 45 | 994 | 265 | 290 |
| 1690-24125 | | x 125 | | 70 | | | 365 |
| 1690-24160 | | x 160 | | 100 | | | 470 |
| 1690-24200 | | x 200 | | 125 | | | 580 |
| 1690-24250 | | x 250 | | 160 | | | 730 |
| 1690-24315 | | x 315 | | 200 | | | 920 |
| 1690-24400 | | x 400 | | 250 | | | 1170 |
| 1690-24500 | | x 500 | | 315 | | | 1470 |
| 1690-24630 | | x 630 | | 315 | | | 1860 |
| 1690-30125 | M30 | x 125 | 43 | 56 | 1930 | 421 | 570 |
| 1690-30200 | | x 200 | | 125 | | | 910 |
| 1690-30250 | | x 250 | | 160 | | | 1150 |
| 1690-30315 | | x 315 | | 200 | | | 1435 |
| 1690-30500 | | x 500 | | 315 | | | 2315 |
| 1690-30700 | | x 700 | | 400 | | | 3215 |
| 1690-301000 | | x 1000 | | 400 | | | 4700 |
| 1690-36160 | M36 | x 160 | 51 | 80 | 3378 | 614 | 1100 |
| 1690-36200 | | x 200 | | 125 | | | 1340 |
| 1690-36250 | | x 250 | | 160 | | | 1710 |
| 1690-36315 | | x 315 | | 200 | | | 2150 |
| 1690-36400 | | x 400 | | 250 | | | 2700 |
| 1690-36500 | | x 500 | | 315 | | | 3450 |
| 1690-36700 | | x 700 | | 400 | | | 4750 |
| 1690-42315 | M42 | x 315 | 59 | 200 | 5415 | 843 | 2950 |
| 1690-42400 | | x 400 | | 250 | | | 3750 |
| 1690-42500 | | x 500 | | 315 | | | 4690 |



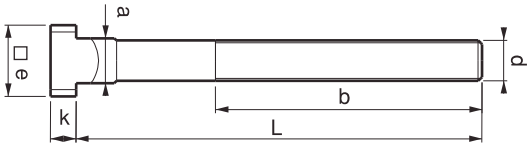



## 1610 - Somunlu Pullu
## T - Ayaklı Saplama

ER-EL

| Sipariş | d x | a | x L | b | a | e | k | Sıkma Nm | Sıkma kN | g |
|---|---|---|---|---|---|---|---|---|---|---|
| 1610-06625 | M6 x 6 | | x 25 | 15 | 5.7 | 10 | 4 | 17 | 17 | 19 |
| 1610-06640 | | | x 40 | 28 | | | | | | 25 |
| 1610-06663 | | | x 63 | 40 | | | | | | 36 |
| 1610-08832 | M8 x 8 | | x 32 | 22 | 7.7 | 12 | 6 | 43 | 32 | 39 |
| 1610-08850 | | | x 50 | 35 | | | | | | 45 |
| 1610-08880 | | | x 80 | 50 | | | | | | 56 |
| 1610-101040 | M10 x 10 | | x 40 | 23 | 9.7 | 15 | 6 | 79 | 51 | 65 |
| 1610-101063 | | | x 63 | 45 | | | | | | 80 |
| 1610-101080 | | | x 80 | 50 | | | | | | 90 |
| 1610-1010100 | | | x 100 | 60 | | | | | | 110 |
| 1610-101250 | M10 x 12 | | x 50 | 35 | 11.7 | 18 | 7 | 79 | 51 | 85 |
| 1610-101263 | | | x 63 | 40 | | | | | | 95 |
| 1610-101280 | | | x 80 | 55 | | | | | | 100 |
| 1610-1012100 | | | x 100 | 60 | | | | | | 110 |
| 1610-1012125 | | | x 125 | 75 | | | | | | 125 |
| 1610-1012160 | | | x 160 | 90 | | | | | | 140 |
| 1610-1012200 | | | x 200 | 120 | | | | | | 160 |
| 1610-121250 | M12 x 12 | | x 50 | 35 | 11.7 | 18 | 7 | 141 | 74 | 120 |
| 1610-121263 | | | x 63 | 40 | | | | | | 128 |
| 1610-1212080 | | | x 80 | 55 | | | | | | 140 |
| 1610-1212100 | | | x 100 | 65 | | | | | | 160 |
| 1610-1212125 | | | x 125 | 75 | | | | | | 170 |
| 1610-1212160 | | | x 160 | 100 | | | | | | 195 |
| 1610-1212200 | | | x 200 | 120 | | | | | | 220 |
| 1610-121450 | M12 x 14 | | x 50 | 35 | 13.7 | 22 | 8 | 141 | 74 | 140 |
| 1610-121463 | | | x 63 | 45 | | | | | | 150 |
| 1610-121480 | | | x 80 | 55 | | | | | | 155 |
| 1610-1214100 | | | x 100 | 65 | | | | | | 175 |
| 1610-1214125 | | | x 125 | 75 | | | | | | 195 |
| 1610-1214160 | | | x 160 | 100 | | | | | | 220 |
| 1610-1214200 | | | x 200 | 120 | | | | | | 240 |
| 1610-141663 | M14 x 16 | | x 63 | 45 | 15.7 | 25 | 9 | 223 | 101 | 200 |
| 1610-141680 | | | x 80 | 55 | | | | | | 230 |
| 1610-1416100 | | | x 100 | 65 | | | | | | 245 |
| 1610-1416125 | | | x 125 | 75 | | | | | | 270 |
| 1610-1416160 | | | x 160 | 100 | | | | | | 310 |
| 1610-1416200 | | | x 200 | 120 | | | | | | 340 |
| 1610-1416250 | | | x 250 | 150 | | | | | | 390 |
| 1610-161663 | M16 x 16 | | x 63 | 45 | 15.7 | 25 | 9 | 354 | 138 | 260 |
| 1610-161680 | | | x 80 | 55 | | | | | | 285 |
| 1610-1616100 | | | x 100 | 65 | | | | | | 310 |
| 1610-1616125 | | | x 125 | 85 | | | | | | 345 |
| 1610-1616160 | | | x 160 | 100 | | | | | | 385 |
| 1610-1616200 | | | x 200 | 120 | | | | | | 435 |
| 1610-1616250 | | | x 250 | 150 | | | | | | 505 |
| 1610-161863 | M16 x 18 | | x 63 | 45 | 17.7 | 28 | 10 | 354 | 138 | 290 |
| 1610-161880 | | | x 80 | 55 | | | | | | 305 |
| 1610-1618100 | | | x 100 | 65 | | | | | | 340 |
| 1610-1618125 | | | x 125 | 85 | | | | | | 370 |
| 1610-1618160 | | | x 160 | 100 | | | | | | 415 |
| 1610-1618200 | | | x 200 | 120 | | | | | | 460 |
| 1610-1618250 | | | x 250 | 150 | | | | | | 525 |
| 1610-182080 | M18 x 20 | | x 80 | 55 | 19.7 | 32 | 12 | 474 | 169 | 405 |
| 1610-1820100 | | | x 100 | 65 | | | | | | 435 |
| 1610-1820125 | M18 x 20 | | x 125 | 85 | 19.7 | 32 | 12 | 474 | 169 | 480 |
| 1610-1820160 | | | x 160 | 110 | | | | | | 535 |
| 1610-1820200 | | | x 200 | 125 | | | | | | 610 |
| 1610-1820250 | | | x 250 | 150 | | | | | | 680 |
| 1610-1820315 | | | x 315 | 190 | | | | | | 790 |
| 1610-202080 | M20 x 20 | | x 80 | 55 | 19.7 | 32 | 12 | 679 | 215 | 480 |
| 1610-2020100 | | | x 100 | 65 | | | | | | 515 |
| 1610-2020125 | | | x 125 | 85 | | | | | | 570 |
| 1610-2020160 | | | x 160 | 110 | | | | | | 635 |
| 1610-2020200 | | | x 200 | 125 | | | | | | 725 |
| 1610-2020250 | | | x 250 | 160 | | | | | | 820 |
| 1610-2020315 | | | x 315 | 190 | | | | | | 950 |
| 1610-202280 | M20 x 22 | | x 80 | 55 | 21.7 | 35 | 14 | 679 | 215 | 530 |
| 1610-2022100 | | | x 100 | 65 | | | | | | 565 |
| 1610-2022125 | | | x 125 | 85 | | | | | | 620 |
| 1610-2022160 | | | x 160 | 110 | | | | | | 690 |
| 1610-2022200 | | | x 200 | 125 | | | | | | 775 |
| 1610-2022250 | | | x 250 | 150 | | | | | | 880 |
| 1610-2022315 | | | x 315 | 190 | | | | | | 1050 |
| 1610-222480 | M22 x 24 | | x 80 | 55 | 23.7 | 40 | 16 | 903 | 266 | 700 |
| 1610-2224100 | | | x 100 | 65 | | | | | | 740 |
| 1610-2224125 | | | x 125 | 85 | | | | | | 805 |
| 1610-2224160 | | | x 160 | 110 | | | | | | 890 |
| 1610-2224200 | | | x 200 | 125 | | | | | | 1000 |
| 1610-2224250 | | | x 250 | 150 | | | | | | 1115 |
| 1610-2224315 | | | x 315 | 190 | | | | | | 1280 |
| 1610-2424100 | M24 x 24 | | x 100 | 70 | 23.7 | 40 | 16 | 1163 | 310 | 885 |
| 1610-2424125 | | | x 125 | 85 | | | | | | 970 |
| 1610-2424160 | | | x 160 | 110 | | | | | | 1060 |
| 1610-2424200 | | | x 200 | 125 | | | | | | 1180 |
| 1610-2424250 | | | x 250 | 150 | | | | | | 1320 |
| 1610-2424315 | | | x 315 | 190 | | | | | | 1515 |
| 1610-2424400 | | | x 400 | 240 | | | | | | 1750 |
| 1610-2428100 | M24 x 28 | | x 100 | 70 | 27.7 | 44 | 18 | 1163 | 310 | 1000 |
| 1610-2428125 | | | x 125 | 85 | | | | | | 1065 |
| 1610-2428160 | | | x 160 | 110 | | | | | | 1150 |
| 1610-2428200 | | | x 200 | 125 | | | | | | 1280 |
| 1610-2428250 | | | x 250 | 150 | | | | | | 1425 |
| 1610-2428315 | | | x 315 | 190 | | | | | | 1640 |
| 1610-2428400 | | | x 400 | 240 | | | | | | 1870 |
| 1610-2428500 | | | x 500 | 290 | | | | | | 2170 |
| 1610-3036125 | M30 x 36 | | x 125 | 80 | 35.6 | 54 | 22 | 2258 | 493 | 1900 |
| 1610-3036160 | | | x 160 | 110 | | | | | | 2065 |
| 1610-3036200 | | | x 200 | 135 | | | | | | 2250 |
| 1610-3036250 | | | x 250 | 150 | | | | | | 2500 |
| 1610-3036315 | | | x 315 | 200 | | | | | | 2770 |
| 1610-3036500 | | | x 500 | 300 | | | | | | 3630 |
| 1610-3642160 | M36 x 42 | | x 160 | 100 | 41.6 | 65 | 26 | 3950 | 719 | 3310 |
| 1610-3642250 | | | x 250 | 175 | | | | | | 3930 |
| 1610-3642400 | | | x 400 | 250 | | | | | | 5010 |
| 1610-3642600 | | | x 600 | 340 | | | | | | 6900 |
| 1610-4248160 | M42 x 48 | | x 160 | 100 | 47.6 | 75 | 30 | 6337 | 986 | 4600 |
| 1610-4248250 | | | x 250 | 175 | | | | | | 5600 |
| 1610-4248400 | | | x 400 | 250 | | | | | | 7200 |






## T - Ayaklı Saplama

1590

ER-EL

| Sipariş | d x a | x L | b | a | e | k | (g) |
|---|---|---|---|---|---|---|---|
| 1590-101040 | M10 x10 | x 40 | 30 | 9.7 | 15 | 6 | 30 |
| 1590-101063 | | x 63 | 45 | | | | 50 |
| 1590-101080 | | x 80 | 50 | | | | 60 |
| 1590-1010100 | | x 100 | 60 | | | | 70 |
| 1590-101250 | M10 x12 | x 50 | 35 | 11.7 | 18 | 7 | 60 |
| 1590-101263 | | x 63 | 40 | | | | 65 |
| 1590-101280 | | x 80 | 55 | | | | 75 |
| 1590-1012100 | | x 100 | 60 | | | | 90 |
| 1590-1012125 | | x 125 | 75 | | | | 110 |
| 1590-1012160 | | x 160 | 90 | | | | 135 |
| 1590-1012200 | | x 200 | 120 | | | | 160 |
| 1590-121250 | M12 x12 | x 50 | 35 | 11.7 | 18 | 7 | 65 |
| 1590-121263 | | x 63 | 40 | | | | 70 |
| 1590-1212080 | | x 80 | 55 | | | | 80 |
| 1590-1212100 | | x 100 | 65 | | | | 100 |
| 1590-1212125 | | x 125 | 75 | | | | 120 |
| 1590-1212160 | | x 160 | 100 | | | | 140 |
| 1590-1212200 | | x 200 | 120 | | | | 170 |
| 1590-121450 | M12 x14 | x 50 | 35 | 13.7 | 22 | 8 | 70 |
| 1590-121463 | | x 63 | 45 | | | | 80 |
| 1590-121480 | | x 80 | 55 | | | | 100 |
| 1590-1214100 | | x 100 | 65 | | | | 110 |
| 1590-1214125 | | x 125 | 75 | | | | 120 |
| 1590-1214160 | | x 160 | 100 | | | | 150 |
| 1590-1214200 | | x 200 | 120 | | | | 180 |
| 1590-141663 | M14 x16 | x 63 | 45 | 15.7 | 25 | 9 | 115 |
| 1590-141680 | | x 80 | 55 | | | | 130 |
| 1590-1416100 | | x 100 | 65 | | | | 150 |
| 1590-1416125 | | x 125 | 75 | | | | 180 |
| 1590-1416160 | | x 160 | 100 | | | | 220 |
| 1590-1416200 | | x 200 | 120 | | | | 280 |
| 1590-1416250 | | x 250 | 150 | | | | 300 |
| 1590-161663 | M16 x16 | x 63 | 45 | 15.7 | 25 | 9 | 140 |
| 1590-161680 | | x 80 | 55 | | | | 160 |
| 1590-1616100 | | x 100 | 65 | | | | 180 |
| 1590-1616125 | | x 125 | 85 | | | | 225 |
| 1590-1616160 | | x 160 | 100 | | | | 270 |
| 1590-1616200 | | x 200 | 125 | | | | 315 |
| 1590-1616250 | | x 250 | 150 | | | | 380 |
| 1590-161863 | M16 x18 | x 63 | 45 | 17.7 | 28 | 10 | 160 |
| 1590-161880 | | x 80 | 55 | | | | 185 |
| 1590-1618100 | | x 100 | 65 | | | | 203 |
| 1590-1618125 | | x 125 | 85 | | | | 245 |
| 1590-1618160 | | x 160 | 100 | | | | 280 |
| 1590-1618200 | | x 200 | 125 | | | | 330 |
| 1590-1618250 | | x 250 | 150 | | | | 430 |
| 1590-182080 | M18 x20 | x 80 | 55 | 19.7 | 32 | 12 | 290 |
| 1590-1820100 | | x 100 | 65 | | | | 340 |
| 1590-1820125 | | x 125 | 85 | | | | 390 |
| 1590-1820160 | | x 160 | 110 | | | | 470 |
| 1590-1820200 | | x 200 | 125 | | | | 550 |

| Sipariş | d x a | x L | b | a | e | k | (g) |
|---|---|---|---|---|---|---|---|
| 1590-1820250 | M18 x20 | x 250 | 150 | 19.7 | 32 | 12 | 670 |
| 1590-1820315 | | x 315 | 190 | | | | 800 |
| 1590-202080 | M20 x20 | x 80 | 55 | 19.7 | 32 | 12 | 300 |
| 1590-2020100 | | x 100 | 65 | | | | 350 |
| 1590-2020125 | | x 125 | 85 | | | | 400 |
| 1590-2020160 | | x 160 | 110 | | | | 480 |
| 1590-2020200 | | x 200 | 125 | | | | 560 |
| 1590-2020250 | | x 250 | 160 | | | | 690 |
| 1590-2020315 | | x 315 | 190 | | | | 820 |
| 1590-202280 | M20 x22 | x 80 | 55 | 21.7 | 35 | 14 | 330 |
| 1590-2022100 | | x 100 | 65 | | | | 370 |
| 1590-2022125 | | x 125 | 85 | | | | 428 |
| 1590-2022160 | | x 160 | 110 | | | | 500 |
| 1590-2022200 | | x 200 | 125 | | | | 570 |
| 1590-2022250 | | x 250 | 150 | | | | 680 |
| 1590-2022315 | | x 315 | 190 | | | | 820 |
| 1590-222480 | M22 x24 | x 80 | 55 | 23.7 | 40 | 16 | 480 |
| 1590-2224100 | | x 100 | 65 | | | | 540 |
| 1590-2224125 | | x 125 | 85 | | | | 600 |
| 1590-2224160 | | x 160 | 110 | | | | 770 |
| 1590-2224200 | | x 200 | 125 | | | | 900 |
| 1590-2224250 | | x 250 | 150 | | | | 960 |
| 1590-2224315 | | x 315 | 190 | | | | 1270 |
| 1590-2424100 | M24 x24 | x 100 | 70 | 23.7 | 40 | 16 | 540 |
| 1590-2424125 | | x 125 | 85 | | | | 600 |
| 1590-2424160 | | x 160 | 110 | | | | 770 |
| 1590-2424200 | | x 200 | 125 | | | | 900 |
| 1590-2424250 | | x 250 | 150 | | | | 960 |
| 1590-2424315 | | x 315 | 190 | | | | 1270 |
| 1590-2424400 | | x 400 | 240 | | | | 1410 |
| 1590-2428100 | M24 x28 | x 100 | 70 | 27.7 | 44 | 18 | 650 |
| 1590-2428125 | | x 125 | 85 | | | | 730 |
| 1590-2428160 | | x 160 | 110 | | | | 800 |
| 1590-2428200 | | x 200 | 125 | | | | 950 |
| 1590-2428250 | | x 250 | 150 | | | | 1120 |
| 1590-2428315 | | x 315 | 190 | | | | 1350 |
| 1590-2428400 | | x 400 | 240 | | | | 1500 |
| 1590-2428500 | | x 500 | 290 | | | | 1950 |
| 1590-3036125 | M30 x36 | x 125 | 80 | 35.6 | 54 | 22 | 1250 |
| 1590-3036160 | | x 160 | 110 | | | | 1450 |
| 1590-3036200 | | x 200 | 135 | | | | 1650 |
| 1590-3036250 | | x 250 | 150 | | | | 1900 |
| 1590-3036315 | | x 315 | 200 | | | | 2100 |
| 1590-3036500 | | x 500 | 300 | | | | 3300 |
| 1590-3642160 | M36 x42 | x 160 | 100 | 41.6 | 65 | 26 | 2200 |
| 1590-3642250 | | x 250 | 175 | | | | 2820 |
| 1590-3642400 | | x 400 | 250 | | | | 3930 |
| 1590-3642600 | | x 600 | 340 | | | | 5480 |
| 1590-4248160 | M42 x48 | x 160 | 100 | 47.6 | 75 | 30 | 3400 |
| 1590-4248250 | | x 250 | 175 | | | | 4300 |
| 1590-4248400 | | x 400 | 250 | | | | 5800 |



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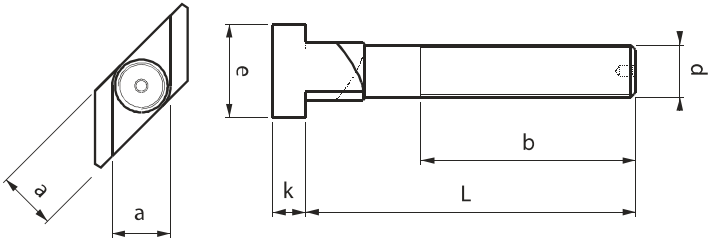
## 1650 - Dereceli T-Ayaklı Saplama




| Sipariş | d x L | | b | a | e | k | Sıkma Verileri Nm | kN | (g) |
|---|---|---|---|---|---|---|---|---|---|
| 1650-1214050 | M12x14 | x 50 | 35 | 13.7 | 22 | 8 | 141 | 74 | 70 |
| 1650-1214080 | | x 80 | 55 | | | | | | 100 |
| 1650-1214125 | | x 125 | 75 | | | | | | 120 |
| 1650-1618063 | M16x18 | x63 | 45 | 17.7 | 28 | 10 | 354 | 138 | 160 |
| 1650-1618100 | | x100 | 65 | | | | | | 220 |
| 1650-1618160 | | x160 | 100 | | | | | | 280 |
| 1650-2022080 | M20x22 | x80 | 55 | 21.7 | 35 | 14 | 679 | 215 | 330 |
| 1650-2022125 | | x125 | 85 | | | | | | 430 |
| 1650-2022200 | | x200 | 120 | | | | | | 570 |
| 1650-2428100 | M24x28 | x100 | 70 | 27.7 | 44 | 18 | 1163 | 310 | 650 |
| 1650-2428125 | | x125 | 85 | | | | | | 770 |
| 1650-2428250 | | x250 | 150 | | | | | | 1150 |



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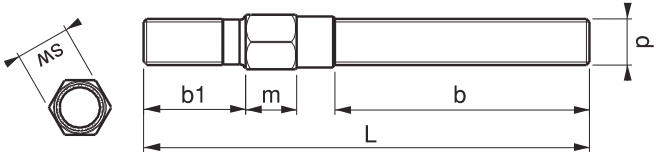
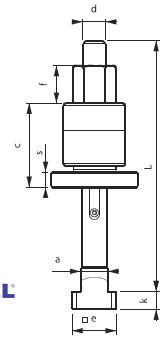
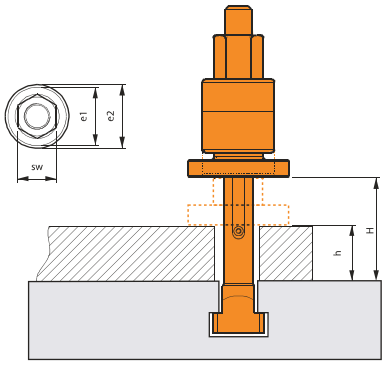
## 1670 - Anahtar T - Ayaklı Saplama




| Sipariş | d | L | b | b1 | m | sw | Sıkma Verileri Nm | kN | (g) |
|---|---|---|---|---|---|---|---|---|---|
| 1670-12130 | M12 | 130 | 65 | 24 | 14 | 14 | 120 | 63 | 160 |
| 1670-12160 | | 160 | 90 | | | | | | 185 |
| 1670-14130 | M14 | 130 | 65 | 28 | 15 | 15 | 191 | 86 | 216 |
| 1670-14160 | | 160 | 90 | | | | | | 246 |
| 1670-16140 | M16 | 140 | 70 | 32 | 16 | 17 | 302 | 118 | 310 |
| 1670-16160 | | 160 | 95 | | | | | | 340 |
| 1670-18150 | M18 | 150 | 70 | 35 | 19 | 19 | 405 | 144 | 395 |
| 1670-18180 | | 180 | 95 | | | | | | 450 |
| 1670-20150 | M20 | 150 | 70 | 40 | 22 | 22 | 580 | 184 | 520 |
| 1670-20180 | | 180 | 95 | | | | | | 575 |
| 1670-22150 | M22 | 150 | 70 | 40 | 22 | 24 | 772 | 228 | 610 |
| 1670-22180 | | 180 | 95 | | | | | | 705 |
| 1670-24170 | M24 | 170 | 75 | 47 | 22 | 27 | 994 | 265 | 875 |
| 1670-24205 | | 205 | 105 | | | | | | 990 |
| 1670-24250 | | 250 | 140 | | | | | | 1125 |
| 1670-30250 | M30 | 250 | 135 | 55 | 32 | 36 | 1930 | 421 | 1950 |
| 1670-30315 | | 315 | 195 | | | | | | 2260 |





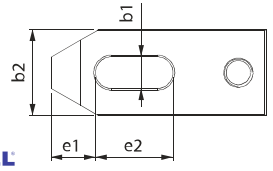



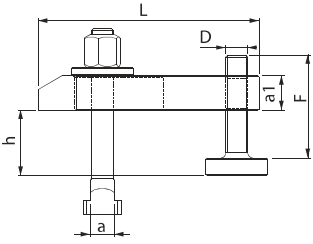

## 1630 - Kombine T-Ayaklı Saplama

ER-EL

| Sipariş | d x L | a | e | k | h-H | e1 | e2 | c | s | f | sw | Sıkma Verileri Nm | Sıkma Verileri kN | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1630-2022200 | M20x22x200 | 21.7 | 35 | 14 | 25-75 | 49 | 69 | 92 | 12 | 30 | 30 | 679 | 215 | 1635 |
| 1630-2022250 | M20x22x250 | 21.7 | 35 | 14 | 70-120 | 49 | 69 | 92 | 12 | 30 | 30 | 679 | 215 | 1720 |
| 1630-2424200 | M24x24x200 | 23.7 | 40 | 16 | 25-75 | 53 | 74 | 92 | 12 | 30 | 36 | 1163 | 310 | 2075 |
| 1630-2424250 | M24x24x250 | 23.7 | 40 | 16 | 70-120 | 53 | 74 | 92 | 12 | 30 | 36 | 1163 | 310 | 2250 |
| 1630-2428200 | M24x28x200 | 27.7 | 44 | 18 | 25-75 | 53 | 74 | 92 | 12 | 30 | 36 | 1163 | 310 | 2180 |
| 1630-2428250 | M24x28x250 | 27.7 | 44 | 18 | 70-120 | 53 | 74 | 92 | 12 | 30 | 36 | 1163 | 310 | 2340 |
| 1630-3036200 | M30x36x200 | 35.6 | 54 | 22 | 25-75 | 68 | 88 | 94 | 14 | 30 | 46 | 2258 | 493 | 3660 |
| 1630-3036250 | M30x36x250 | 35.6 | 54 | 22 | 70-120 | 68 | 88 | 94 | 14 | 30 | 46 | 2258 | 493 | 3910 |





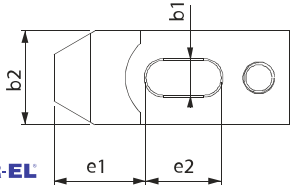



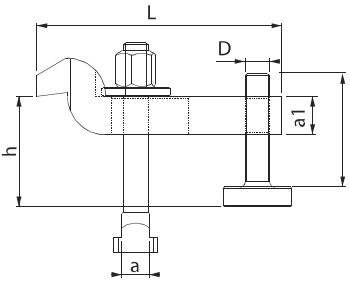

## 1170 - Ayarlanabilir Destek Civatalı Kombine Bağlama Pabucu

ER-EL

| Sipariş | a | L | a1 | b2 | e1 | e2 | b1 | | h | D x F | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1170-1010080 | 10 | 80 | 15 | 30 | 15 | 30 | 11 | M10x10x80 | 10-35 | M10x42 | 370 |
| 1170-1212100 | 12 | 100 | 20 | 40 | 21 | 40 | 14.5 | M12x12x100 | 12-40 | M12x50 | 740 |
| 1170-1212125 | 12 | 125 | 20 | 40 | 21 | 50 | 14.5 | M12x12x160 | 12-85 | M12x95 | 940 |
| 1170-1214100 | 14 | 100 | 20 | 40 | 21 | 40 | 14.5 | M12x14x100 | 12-40 | M12x50 | 705 |
| 1170-1214125 | 14 | 125 | 20 | 40 | 21 | 50 | 14.5 | M12x14x160 | 12-85 | M12x95 | 965 |
| 1170-1616125 | 16 | 125 | 25 | 50 | 26 | 45 | 18.5 | M16x16x125 | 15-50 | M16x62 | 1115 |
| 1170-1616160 | 16 | 160 | 25 | 50 | 26 | 65 | 18.5 | M16x16x160 | 15-85 | M16x97 | 1870 |
| 1170-1618125 | 18 | 125 | 25 | 50 | 26 | 45 | 18.5 | M16x18x125 | 15-50 | M16x62 | 1540 |
| 1170-2020160 | 20 | 160 | 30 | 60 | 30 | 60 | 22.5 | M20x20x160 | 15-45 | M20x62 | 1675 |
| 1170-2020200 | 20 | 200 | 30 | 60 | 30 | 80 | 22.5 | M20x20x200 | 15-80 | M20x97 | 3295 |
| 1170-2022160 | 22 | 160 | 30 | 60 | 30 | 60 | 22.5 | M20x22x160 | 15-45 | M20x62 | 2730 |
| 1170-2022200 | 22 | 200 | 30 | 60 | 30 | 80 | 22.5 | M20x22x200 | 15-80 | M20x97 | 3340 |
| 1170-2424160 | 24 | 160 | 30 | 70 | 35 | 60 | 26.5 | M24x24x160 | 16-60 | M24x81 | 3465 |
| 1170-2428160 | 28 | 160 | 30 | 70 | 35 | 60 | 26.5 | M24x28x160 | 16-60 | M24x81 | 5560 |
| 1170-2428200 | 28 | 200 | 30 | 70 | 35 | 80 | 26.5 | M24x28x200 | 16-95 | M24x116 | 4755 |





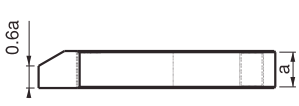



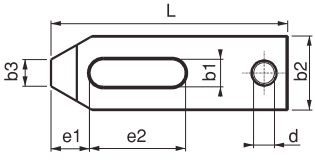

## 1190 - Ayarlanabilir Destek Civatalı Kombine Bağl. Pabucu Z-Pabuç

ER-EL

| Sipariş | a | L | a1 | b2 | e1 | e2 | b1 | | h | D x F | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1190-1010100 | 10 | 100 | 15 | 30 | 32 | 32 | 11 | M10x10x80 | 26-50 | M10x42 | 405 |
| 1190-1212125 | 12 | 125 | 20 | 40 | 40 | 40 | 14.5 | M12x12x100 | 33-60 | M12x50 | 870 |
| 1190-1214125 | 14 | 125 | 20 | 40 | 40 | 40 | 14.5 | M12x14x100 | 37-60 | M12x50 | 890 |
| 1190-1616160 | 16 | 160 | 25 | 50 | 49 | 50 | 18.5 | M16x16x125 | 41-75 | M16x62 | 1785 |
| 1190-1618160 | 18 | 160 | 25 | 50 | 49 | 50 | 18.5 | M16x18x125 | 41-75 | M16x62 | 1810 |
| 1190-2020200 | 20 | 200 | 30 | 60 | 55 | 70 | 22.5 | M20x20x160 | 46-75 | M20x62 | 3105 |
| 1190-2022200 | 22 | 200 | 30 | 60 | 55 | 70 | 22.5 | M20x22x160 | 46-75 | M20x62 | 3155 |
| 1190-2424200 | 24 | 200 | 35 | 70 | 72 | 60 | 26 | M24x24x200 | 52-95 | M24x81 | 4695 |
| 1190-2428200 | 28 | 200 | 35 | 70 | 72 | 60 | 26 | M24x28x200 | 52-95 | M24x81 | 4790 |



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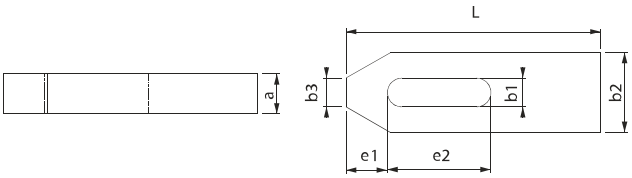
## 1330 - Destek Delikli Düz Pabuç

| Sipariş | L | b1 | metrik | whitworth | a | b2 | b3 | e1 | e2 | d | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1330-06050 | 50 | 6.6 | M6 | 1/4 | 10 | 20 | 8 | 10 | 20 | M8 | 50 |
| 1330-08060 | 60 | 9 | M8 | 5/16 | 12 | 25 | 10 | 13 | 22 | M8 | 105 |
| 1330-01080 | 80 | 11 | M10 | 3/8 | 15 | 30 | 12 | 15 | 30 | M10 | 210 |
| 1330-12100 | 100 | 14.5 | M12 - M14 | 1/2 | 20 | 40 | 14 | 21 | 40 | M12 | 465 |
| 1330-12125 | 125 | | | | | | | 21 | 50 | | 590 |
| 1330-16125 | 125 | 18.5 | M16 - M18 | 5/8 | 25 | 50 | 18 | 26 | 45 | M16 | 930 |
| 1330-16160 | 160 | | | | | | | | 65 | | 1200 |
| 1330-20160 | 160 | 22.5 | M20 - M22 | 3/4 | 30 | 60 | 22 | 30 | 60 | M20 | 1710 |
| 1330-20200 | 200 | | | | 30 | 60 | 22 | | 80 | | 2170 |
| 1330-20250 | 250 | | | | 35 | 70 | 30 | | 100 | | 3885 |
| 1330-24160 | 160 | 26 | M24 | 1 | 30 | 70 | 26 | 35 | 60 | M24 | 1965 |
| 1330-24200 | 200 | | | | 35 | 70 | 26 | | 80 | | 2920 |
| 1330-24250 | 250 | | | | 35 | 70 | 26 | | 100 | | 3720 |
| 1330-24315 | 315 | | | | 40 | 80 | 35 | | 100 | | 6435 |
| 1330-30250 | 250 | 33 | M30 | 11/4 | 40 | 80 | 34 | 45 | 100 | M24 | 4825 |
| 1330-30315 | 315 | | | | 50 | | | | 130 | | 7665 |
| 1330-36400 | 400 | 43 | M36 - M42 | 11/2 | 58 | 100 | 43 | 100 | 150 | M30 | 14490 |

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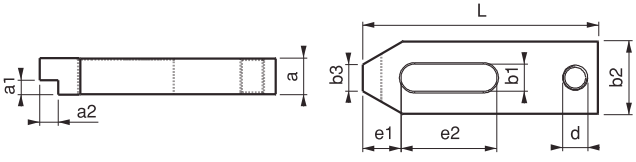
## 1350 - Düz Pabuç

| Sipariş | L | b1 | metrik | whitworth | a | b2 | b3 | e1 | e2 | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1350-06050 | 50 | 6,6 | M6 | 1/4 | 10 | 20 | 8 | 10 | 20 | 60 |
| 1350-08060 | 60 | 9 | M8 | 5/16 | 12 | 25 | 10 | 13 | 22 | 110 |
| 1350-10080 | 80 | 11 | M10 | 3/8 | 15 | 30 | 12 | 15 | 30 | 185 |
| 1350-12100 | 100 | 14,5 | M12-M14 | 1/2 | 20 | 40 | 14 | 21 | 40 | 480 |
| 1350-12125 | 125 | | | | | | | 21 | 50 | 610 |
| 1350-16125 | 125 | 18,5 | M16-M18 | 5/8 | 25 | 50 | 18 | 26 | 45 | 980 |
| 1350-16160 | 160 | | | | | | | | 65 | 1240 |
| 1350-20160 | 160 | 22,5 | M20-M22 | 3/4 | 30 | 60 | 22 | 30 | 60 | 1795 |
| 1350-20200 | 200 | | | | | | | | 80 | 2255 |
| 1350-24200 | 200 | 26 | M24 | 1 | 30 | 70 | 26 | 35 | 80 | 2570 |
| 1350-24250 | 250 | | | | 35 | | | | 100 | 3875 |
| 1350-30250 | 250 | 33 | M30 | 11/4 | 40 | 80 | 34 | 45 | 100 | 4990 |
| 1350-30315 | 315 | | | | 50 | | | | 130 | 7885 |
| 1350-36400 | 400 | 43 | M36-M42 | 11/2 | 60 | 100 | 43 | 100 | 150 | 14450 |

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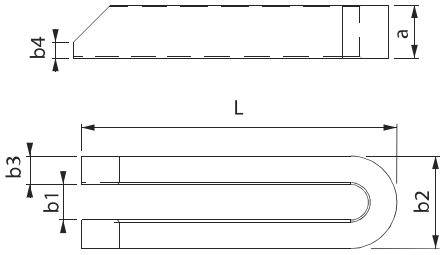
## 1370 - Kademeli Destek Delikli Düz Pabuç

| Sipariş | L | b1 | metrik | whitworth | a | b2 | a1 x a2 | b3 | e1 | e2 | d | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1370-01080 | 80 | 11 | M10 | 3/8 | 15 | 30 | 5x8 | 12 | 15 | 30 | M10 | 180 |
| 1370-12100 | 100 | 14.5 | M12-14 | 1/2 | 20 | 40 | 8x10 | 14 | 21 | 40 | M12 | 410 |
| 1370-12125 | 125 | | | | | | | | | 50 | | 590 |
| 1370-16125 | 125 | 18.5 | M16-18 | 5/8 | 25 | 50 | 10x12.5 | 18 | 26 | 45 | M16 | 910 |
| 1370-16160 | 160 | | | | | | | | | 65 | | 1180 |
| 1370-20160 | 160 | 22.5 | M20-22 | 3/4 | 30 | 60 | 12x15 | 22 | 30 | 60 | M20 | 1575 |
| 1370-20200 | 200 | | | | | | | | | 80 | | 2150 |
| 1370-24160 | 160 | 26 | M24 | 1 | 30 | 70 | 12x15 | 26 | 35 | 60 | M24 | 1800 |
| 1370-24200 | 200 | | | | 35 | | 14x17 | | | 80 | | 2875 |
| 1370-24250 | 250 | | | | 35 | | 14x17 | | | 100 | | 3500 |



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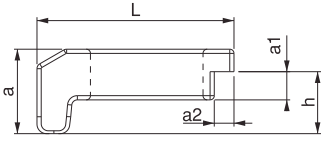
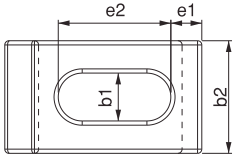
## 1390 - Çatal Pabuç

| Sipariş | L | b1 | metrik | whitworth | a | b2 | b3 | b4 | (g) |
|---|---|---|---|---|---|---|---|---|---|
| 1390-06060 | 60 | 6.6 | M6 | 1/4 | 12 | 19 | 6.2 | 3 | 65 |
| 1390-08080 | 80 | 9 | M8 | 5/16 | 15 | 25 | 8 | 4 | 140 |
| 1390-10100 | 100 | 11 | M10 | 3/8 | 20 | 30 | 9.5 | 5 | 240 |
| 1390-12125 | 125 | 14.5 | M12-M14 | 1/2 | 25 | 38 | 12 | 6 | 700 |
| 1390-12160 | 160 | | | | | | | | 915 |
| 1390-12200 | 200 | | | | | | | | 1235 |
| 1390-16160 | 160 | 18.5 | M16-M18 | 5/8 | 27 | 48 | 15 | 8 | 945 |
| 1390-16200 | 200 | | | | 27 | | | 8 | 1215 |
| 1390-16250 | 250 | | | | 37 | | | 10 | 2000 |
| 1390-20200 | 200 | 22.5 | M20-M22 | 3/4 | 37 | 52 | 15 | 10 | 1650 |
| 1390-20250 | 250 | | | | 37 | 62 | 20 | | 2765 |
| 1390-20315 | 315 | | | | 37 | 62 | 20 | | 3510 |
| 1390-20500 | 500 | | | | 47 | 62 | 20 | | 7200 |
| 1390-24200 | 200 | 26 | M24 | 1 | 37 | 66 | 20 | 10 | 2260 |
| 1390-24250 | 250 | | | | 37 | | | | 2740 |
| 1390-24315 | 315 | | | | 37 | | | | 3515 |
| 1390-24500 | 500 | | | | 47 | | | | 7100 |
| 1390-30250 | 250 | 33 | M30 | 11/4 | 47 | 73 | 20 | 12 | 3500 |
| 1390-30315 | 315 | | | | 47 | 73 | 20 | | 4190 |
| 1390-30400 | 400 | | | | 47 | 73 | 20 | | 5735 |
| 1390-30600 | 600 | | | | 46 | 73 | 20 | | 8455 |
| 1390-301000 | 1000 | | | | 57 | 93 | 30 | | 28000 |
| 1390-36400 | 400 | 40 | M36 | 11/2 | 57 | 100 | 30 | 12 | 10800 |
| 1390-36600 | 600 | | | | | | | | 16500 |
| 1390-42600 | 600 | 43 | M42 | 11/2 | 77 | 123 | 40 | 12 | 28800 |



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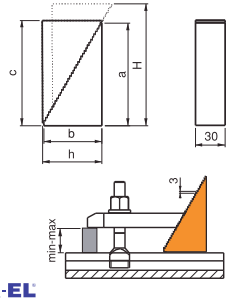
## 1387 - Plaka Bağlama Pabucu

| Sipariş | L | b1 | metrik | whitworth | a | b2 | a1 x a2 | e1 | e2 | h | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1387-12070 | 70 | 13 | M12 | 1/2 | 21.5 | 40 | 8 x 6 | 11 | 40 | 14 | 255 |
| 1387-16070 | 70 | 17 | M16 | 5/8 | 29.5 | 40 | 10 x 7 | 11 | 40 | 22 | 290 |



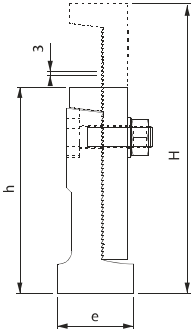



## 1310 - Merdiven Diş Destek

ER-EL

| Sipariş | h - H | a | b | c | min - max |
|---|---|---|---|---|---|
| 1310-01 | 37 - 85 | 57 | 35 | 60 | 0 - 40 |
| 1310-02 | 48 - 112 | 73 | 45 | 76 | 0 - 60 |
| 1310-03 | 58 - 139 | 90 | 55 | 93 | 0 - 75 |
| 1310-04 | 66 - 165 | 108 | 64 | 111 | 0 - 90 |



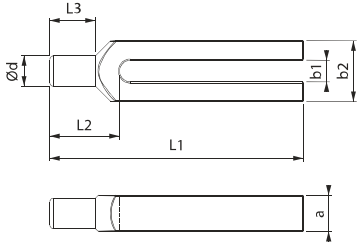



## 1585 - Merdiven Diş Kombine Destek

ER-EL

| Sipariş | h-H | e | kgf | g |
|---|---|---|---|---|
| 1585-050 | 110-150 | 48x48 | 4000 | 1120 |
| 1585-060 | 155-220 | 60x58 | 5000 | 2710 |
| 1585-080 | 220-340 | 80x78 | 6000 | 6560 |



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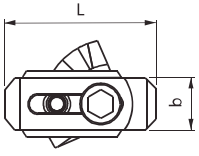
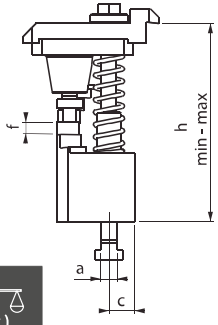
## 1470 - Silindir Başlı Çatal Pabuç

| Sipariş | L1 | b1 | metrik | whitworth | a | b2 | Ød | L2 | L3 | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1470-08100 | 100 | 9 | M8 | 5/6 | 15 | 30 | 12 | 30 | 18 | 180 |
| 1470-10125 | 125 | 11 | M10 | 3/8 | 20 | 30 | 16 | 36 | 24 | 290 |
| 1470-12160 | 160 | 14.5 | M12-M14 | 1/2 | 25 | 40 | 20 | 45 | 30 | 715 |
| 1470-12200 | 200 | | | | | | | | | 815 |
| 1470-16200 | 200 | 18.5 | M16-M18 | 5/8 | 30 | 50 | 24 | 55 | 36 | 1210 |
| 1470-16250 | 250 | | | | | | | | | 1550 |
| 1470-20250 | 250 | 22.5 | M20-M22 | 3/4 | 40 | 60 | 30 | 65 | 45 | 2680 |
| 1470-20315 | 315 | | | | | | | | | 3435 |
| 1470-24250 | 250 | 26 | M24 | 1 | 40 | 70 | 38 | 80 | 56 | 3060 |
| 1470-24315 | 315 | | | | | | | | | 4120 |
| 1470-30315 | 315 | 34 | M30 | 11/4 | 50 | 80 | 45 | 85 | 56 | 5600 |
| 1470-30400 | 400 | | | | | | | | | 7135 |



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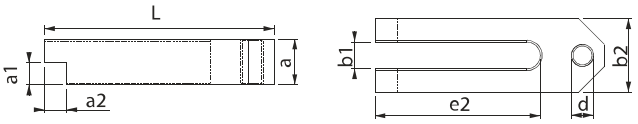
## 1230 - Basamaklı Kombine Pabuç

| Sipariş | a | h min - max | f | c | L | b | (g) |
|---|---|---|---|---|---|---|---|
| 1230-01 | 14-16-18-20-22 | 40 - 80 | 5 | 16 | 110 | 38 | 1200 |
| 1230-02 | | 70 - 125 | 10 | 16 | 110 | 38 | 1490 |
| 1230-03 | | 120 - 175 | 10 | 18 | 110 | 38 | 2700 |
| 1230-04 | | 170 - 225 | 10 | 23 | 110 | 38 | 4260 |



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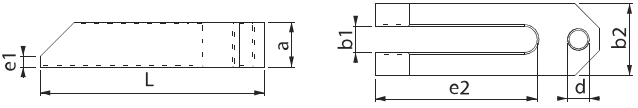
**1400 - Kademeli Destek Delikli Çatal Pabuç**

| Sipariş | L | b1 | metrik | whitworth | a | e2 | a1xa2 | b2 | d | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1400-10100 | 100 | 11 | M10 | 3/8 | 20 | 70 | 10x10 | 30 | M10 | 260 |
| 1400-12125 | 125 | 14.5 | M12-14 | 1/2 | 25 | 90 | 12x12 | 40 | M12 | 565 |
| 1400-16160 | 160 | 18.5 | M16-18 | 5/8 | 30 | 110 | 15x15 | 50 | M16 | 1235 |
| 1400-20200 | 200 | 22.5 | M20-22 | 3/4 | 40 | 135 | 20x20 | 60 | M20 | 2460 |



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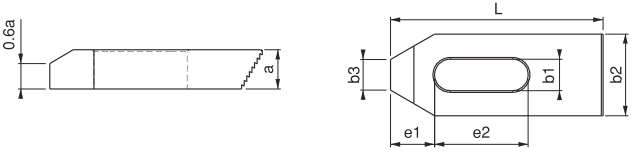
**1410 - Destek Delikli Çatal Pabuç**

| Sipariş | L | b1 | metrik | whitworth | a | e1 | e2 | b2 | d | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1410-10100 | 100 | 11 | M10 | 3/8 | 20 | 5 | 70 | 30 | M10 | 260 |
| 1410-12125 | 125 | 14.5 | M12-14 | 1/2 | 25 | 6 | 90 | 40 | M12 | 560 |
| 1410-16160 | 160 | 18.5 | M16-18 | 5/8 | 30 | 8 | 110 | 50 | M16 | 1230 |
| 1410-20200 | 200 | 22.5 | M20-22 | 3/4 | 40 | 10 | 135 | 60 | M20 | 1490 |



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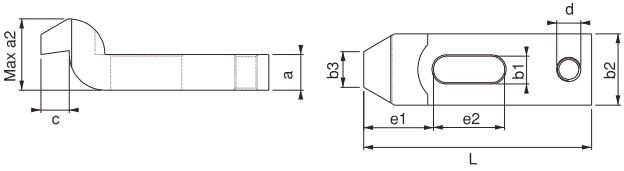
**1290 - Merdiven Diş Bağlama Pabucu**

| Sipariş | L | b1 | metrik | whitworth | a | b2 | b3 | e1 | e2 |
|---|---|---|---|---|---|---|---|---|---|
| 1290-06050 | 50 | 6.6 | M6 | 1/4 | 10 | 20 | 8 | 10 | 20 |
| 1290-06080 | 80 | | | | | | | | 30 |
| 1290-08060 | 60 | 9 | M8 | 5/6 | 12 | 25 | 10 | 13 | 22 |
| 1290-08100 | 100 | | | | | | | | 45 |
| 1290-10080 | 80 | 11 | M10 | 3/8 | 15 | 30 | 12 | 15 | 30 |
| 1290-10100 | 100 | | | | | | | | 45 |
| 1290-12100 | 100 | 14.5 | M12 - M14 | 1/2 | 20 | 40 | 14 | 21 | 45 |
| 1290-12125 | 125 | | | | | | | | 55 |
| 1290-16125 | 125 | 18.5 | M16 - M18 | 5/8 | 25 | 50 | 18 | 26 | 55 |
| 1290-16160 | 160 | | | | | | | | 65 |



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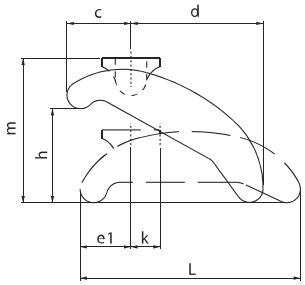
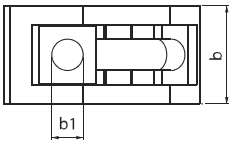
## 1450 - Destek Delikli
## Z - Bağlama Pabucu

| Sipariş | L | b1 | metrik | whitworth | a | a2 | b2 | b3 | c | e1 | e2 | d | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1450-06060 | 60 | 6.6 | M6 | 1/4 | 10 | 20 | 20 | 10 | 8 | 20 | 20 | M8 | 80 |
| 1450-08080 | 80 | 9 | M8 | 5/16 | 12 | 24 | 25 | 12 | 9 | 25 | 25 | M8 | 170 |
| 1450-10100 | 100 | 11 | M10 | 3/8 | 15 | 30 | 30 | 15 | 12 | 32 | 32 | M10 | 245 |
| 1450-12125 | 125 | 14.5 | M12 - M14 | 1/2 | 19 | 40 | 38 | 20 | 16 | 40 | 40 | M12 | 600 |
| 1450-16125 | 125 | 18.5 | M16 - M18 | 5/8 | 24 | 50 | 48 | 25 | 20 | 49 | 40 | M16 | 925 |
| 1450-16160 | 160 | | | | | | | | | | 50 | | 1205 |
| 1450-20160 | 160 | 22.5 | M20 - M22 | 3/4 | 29 | 58 | 58 | 30 | 24 | 55 | 55 | M20 | 1705 |
| 1450-20200 | 200 | 22.5 | M20 - M22 | 3/4 | 29 | 58 | 58 | 30 | 24 | 55 | 70 | M20 | 2145 |
| 1450-24160 | 160 | 26 | M24 | 1 | 33 | 70 | 70 | 35 | 28 | 53 | 55 | M24 | 2110 |
| 1450-24200 | 200 | | | | | | | | | 72 | 60 | | 3070 |
| 1450-24250 | 250 | | | | | | | | | 72 | 80 | | 3710 |
| 1450-30250 | 250 | 33 | M30 | 11/4 | 38 | 80 | 77 | 40 | 40 | 91 | 80 | M24 | 4635 |
| 1450-30315 | 315 | | | | 48 | 100 | | | | | 100 | | 7050 |



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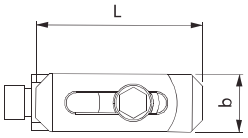
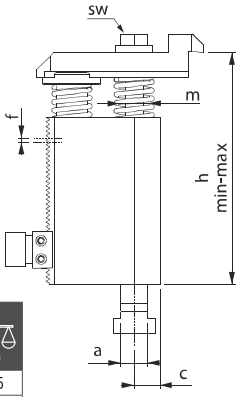
## 1210 - Kademeli Bağlama Pabucu

| Sipariş | b1 | a | DIN 787 | m | h | b x L | c | d | e1 | k x 4 | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1210-013 | 13 | 12-14 | - | 52 | 0-40 | 40x90 | 28 | 48 | 23 | 14 | 340 |
| 1210-017 | 17 | 16-18 | - | 80 | 0-60 | 58x130 | 38 | 74 | 29 | 18 | 990 |
| 1210-021 | 21 | 20-22 | - | 98 | 0-75 | 68x140 | 46 | 80 | 32 | 20 | 1450 |
| 1210-025 | 25 | 24-28 | - | 110 | 0-90 | 78x175 | 52 | 100 | 39 | 24 | 2360 |
| 1210-012 | 13 | 12 | M12x12x100 | 52 | 0-40 | 40x90 | 28 | 48 | 23 | 14 | 400 |
| 1210-014 | 13 | 14 | M12x14x100 | 52 | 0-40 | 40x90 | 28 | 48 | 23 | 14 | 420 |
| 1210-016 | 17 | 16 | M16x16x160 | 80 | 0-60 | 58x130 | 38 | 74 | 29 | 18 | 1140 |
| 1210-018 | 17 | 18 | M16x18x160 | 80 | 0-60 | 58x130 | 38 | 74 | 29 | 18 | 1145 |
| 1210-020 | 21 | 20 | M20x20x200 | 98 | 0-75 | 68x140 | 46 | 80 | 32 | 20 | 1560 |



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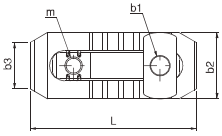
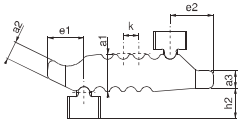
## 1250 - Kombine Bağlama Pabucu

| Sipariş | a | h min - max | f | c | L | b | m | sw | Sıkma Kuvveti Kgf | Nm | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1250-02 | 14-16-18-20-22 | 80-137 | 3 | 17 | 110 | 38 | M12 | 19 | 2250 | 85 | 2015 |
| 1250-03 | | 125-224 | 3 | 17 | 110 | 38 | M12 | 19 | 2250 | 85 | 2910 |
| 1250-04 | | 160-300 | 3 | 17 | 110 | 38 | M12 | 19 | 2250 | 85 | 3665 |









## 1195 - Çift Taraflı Bağlama Pabucu

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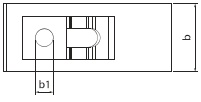
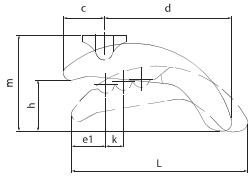
| Sipariş | a | a1 | a2 | a3 | b2 x L | b3 | e1 | e2 | h2 | k | b1 | m | h1 | kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1195-44115 | 10-12-14 | 27 | 12.5 | 12 | 44x115 | 30 | 25 | 30 | 21 | 11 | 13 | M12 | 0-55 | 3000 | 506 |
| 1195-63187 | 16-18-20-22 | 42 | 25 | 20 | 63x187 | 30 | 44 | 40 | 32.5 | 14 | 21 | M20 | 0-80 | 6000 | 2241 |
| 1195-70235 | 20-22-24-28 | 51 | 36.5 | 24 | 70x235 | 30 | 60 | 47 | 34 | 17 | 25 | M20 | 0-100 | 7500 | 3550 |



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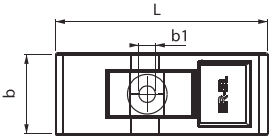
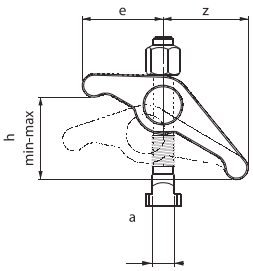
## 1205 - Kademeli Bağlama Pabucu

| Sipariş | b1 | a | DIN 787 | m | h | b x L | c | d | e1 | k x 3 | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1205-017 | 17 | 16-18 | - | 93 | 15-50 | 65x165 | 39 | 128 | 30 | 17 | 2100 |
| 1205-021 | 21 | 20-22 | - | 111 | 20-65 | 75x189 | 43 | 146 | 33 | 19 | 3200 |
| 1205-025 | 25 | 24-28 | - | 126 | 20-75 | 85x213 | 49 | 164 | 39 | 21 | 4500 |
| 1205-031 | 31 | 36 | - | 143.5 | 20-85 | 95x238 | 56 | 182 | 46 | 23 | 6300 |
| 1205-016 | 17 | 16 | M16x16x125 | 93 | 15-50 | 65x165 | 39 | 128 | 30 | 17 | 2500 |
| 1205-018 | 17 | 18 | M16x18x125 | 93 | 15-50 | 65x165 | 39 | 128 | 30 | 17 | 2500 |
| 1205-020 | 21 | 20 | M20x20x160 | 111 | 20-65 | 75x189 | 43 | 146 | 33 | 19 | 3900 |
| 1205-022 | 21 | 22 | M20x22x160 | 111 | 20-65 | 75x189 | 43 | 146 | 33 | 19 | 3900 |
| 1205-024 | 25 | 24 | M24x24x200 | 126 | 20-75 | 85x213 | 49 | 164 | 39 | 21 | 5700 |
| 1205-028 | 25 | 28 | M24x28x200 | 126 | 20-75 | 85x213 | 49 | 164 | 39 | 21 | 5700 |
| 1205-036 | 31 | 36 | M30x36x250 | 143.5 | 20-85 | 95x238 | 56 | 182 | 46 | 23 | 8800 |






## 1270 - Desteksiz Askı Pabuç

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| Sipariş | a | h min-max | DIN 787 | b1 | e | z | L | b | (g) |
|---|---|---|---|---|---|---|---|---|---|
| 1270-1012 | 12 | 0 - 45 | M10 x 12 x 125 | 11 | 48 | 61 | 109 | 40 | 660 |
| 1270-1214 | 14 | 0 - 45 | M12 x 14 x 125 | 13 | 48 | 61 | 109 | 40 | 705 |
| 1270-1416 | 16 | 0 - 55 | M14 x 16 x 125 | 15 | 57 | 72 | 129 | 50 | 1190 |
| 1270-1618 | 18 | 0 - 55 | M16 x 18 x 125 | 17 | 57 | 72 | 129 | 50 | 1265 |



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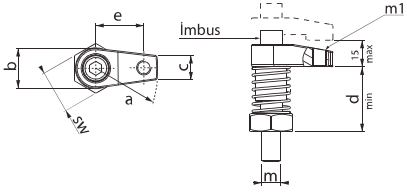


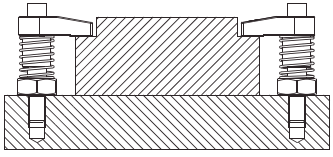

## 1275 - Kombine Burçlu Pabuç

| Sipariş | a | b | c | d | e | m | sw | m1 | İmbus | Sıkma Kuvveti Kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1275-3012 | 30 | 28 | 16 | 40 | 23 | M12 | 30 | M8 | M10 | 750 | 300 |
| 1275-5012 | 50 | 32 | 20 | 45 | 40 | M12 | 36 | M12 | M12 | 1000 | 500 |
| 1275-5016 | 50 | 32 | 20 | 45 | 40 | M16 | 36 | M12 | M12 | 1000 | 510 |
| 1275-6016 | 60 | 40 | 25 | 45 | 45 | M16 | 41 | M16 | M16 | 1250 | 750 |



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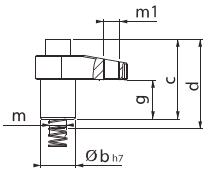
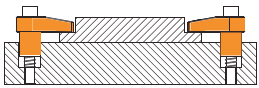
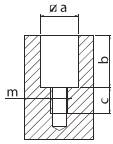


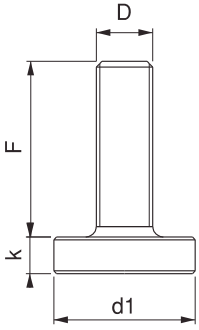
| a (F7) | b | c | m | Teknik |
|---|---|---|---|---|
| 22 | 30 | 20 | M10 | |
| 26 | 40 | 25 | M12 | |
| 32 | 40 | 25 | M16 | |




## 1280 - Kombine Burçlu Pabuç

| Sipariş | a | Ø b h7 | c | d | e | f | g | m | m1 | j | Sıkma Kuvveti Kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1280-3010 | 30 | 22 | 58 | 80 | 28 | 16 | 30 | M10 | M8 | 23 | 750 | 220 |
| 1280-5012 | 50 | 26 | 70 | 90 | 32 | 20 | 40 | M12 | M12 | 40 | 1100 | 400 |
| 1280-6016 | 60 | 32 | 74 | 95 | 40 | 25 | 40 | M16 | M16 | 45 | 1250 | 610 |






| Sipariş | D x F | d1 | k |
|---|---|---|---|
| 1490-08032 | M8 x 32 | 25 | 8 |
| 1490-10042 | M10 x 42 | 30 | 8 |
| 1490-12050 | M12 x 50 | 36 | 10 |
| 1490-12095 | M12 x 95 | 36 | 10 |
| 1490-16062 | M16 x 62 | 45 | 13 |
| 1490-16097 | M16 x 97 | 45 | 13 |
| 1490-16117 | M16 x 117 | 45 | 13 |
| 1490-20062 | M20 x 62 | 50 | 13 |
| 1490-20097 | M20 x 97 | 50 | 13 |
| 1490-20117 | M20 x 117 | 50 | 13 |
| 1490-24081 | M24 x 81 | 50 | 14 |
| 1490-24116 | M24 x 116 | 50 | 14 |
| 1490-30180 | M30 x 180 | 70 | 24 |

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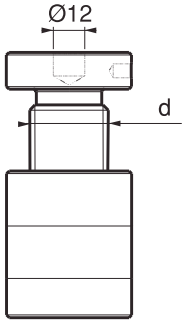
**1490 - Pabuç Destek Civatası**




| Sipariş | | d | | | kgf | (g) |
|---|---|---|---|---|---|---|
| 1510-023030 | 23 - 30 | M16 | 34 | 32 | 1000 | 140 |
| 1510-040060 | 40 - 60 | M16 | 34 | 32 | 1800 | 250 |
| 1510-042052 | 42 - 52 | Tr 30 x 4 | 50 | 50 | 6000 | 570 |
| 1510-050070 | 50 - 70 | Tr 30 x 4 | 50 | 50 | 6000 | 680 |
| 1510-070100 | 70 - 100 | Tr 30 x 4 | 50 | 50 | 6000 | 960 |
| 1510-100140 | 100 - 140 | Tr 30 x 4 | 50 | 50 | 6000 | 1395 |
| 1510-140220 | 140 - 220 | Tr 30 x 4 | 54 | 54 | 6000 | 2285 |
| 1510-210330 | 210 - 330 | Tr 30 x 6 | 58 | 58 | 8000 | 3950 |
| 1510-260430 | 260 - 430 | Tr 30 x 6 | 68 | 68 | 8000 | 7250 |

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**1510 - Trapez Diş Yükseltici Destek**




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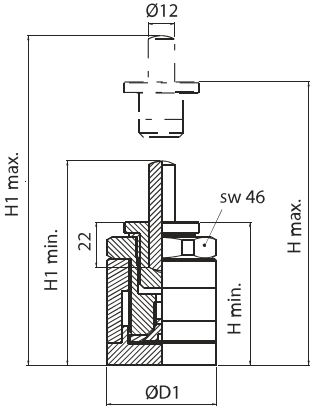
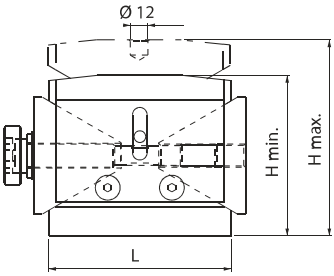
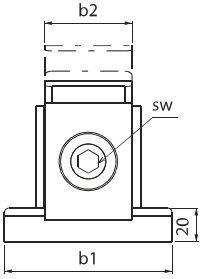
**1515 - Manyetik Vidalı Yükseltici**




| Sipariş | H min. | H max. | D1 | Ø12 x 50 H1 min. - H1 max. | Ø12x80 H1 min. - H1 max. | kgf | (g) |
|---|---|---|---|---|---|---|---|
| 1515-065085 | 65 | 85 | 50 | 93-113 | 123-143 | 3000 | 810 |
| 1515-085125 | 85 | 125 | 50 | 113-153 | 143-183 | 3000 | 1050 |



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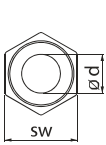
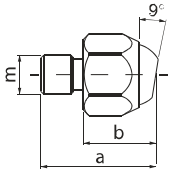
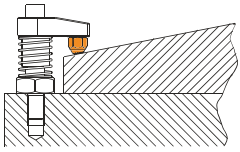
**1520 - Blok Destek**

| Sipariş | H min. | H max. | b1 | b2 | L | sw | kgf | (g) |
|---|---|---|---|---|---|---|---|---|
| 1520-050063 | 50 | 63 | - | 40 | 63 | 8 | 4000 | 1890 |
| 1520-100125 | 100 | 125 | 115 | 60 | 125 | 14 | 10000 | 9910 |
| 1520-170190 | 170 | 190 | 145 | 80 | 175 | 22 | 25000 | 28480 |





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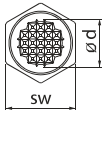
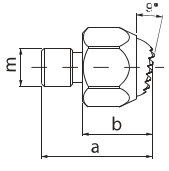
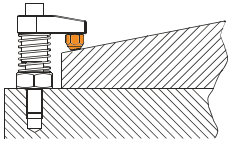
**1282 - Oynar Başlı Baskı Pabucu**

| Sipariş | a | b | m | d | sw | (g) |
|---|---|---|---|---|---|---|
| 1282-0825 | 25 | 12 | M8 | 8 | 14 | 10 |
| 1282-1030 | 30 | 17 | M10 | 10 | 17 | 30 |
| 1282-1235 | 35 | 22 | M12 | 12 | 22 | 60 |
| 1282-1642 | 42 | 26 | M14 | 14 | 27 | 125 |





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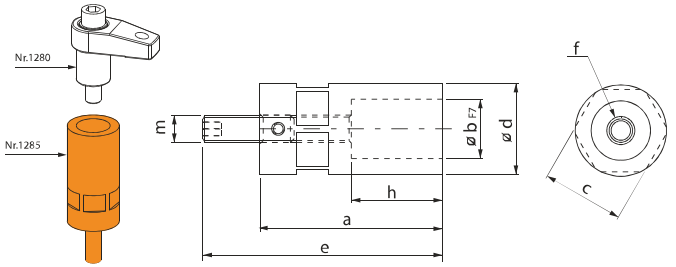
**1283 - Oynar Başlı Baskı Pabucu**

| Sipariş | a | b | m | d | sw | (g) |
|---|---|---|---|---|---|---|
| 1283-0825 | 25 | 12 | M8 | 8 | 14 | 10 |
| 1283-1030 | 30 | 17 | M10 | 10 | 17 | 30 |
| 1283-1235 | 35 | 22 | M12 | 12 | 22 | 60 |
| 1283-1642 | 42 | 26 | M14 | 14 | 27 | 120 |



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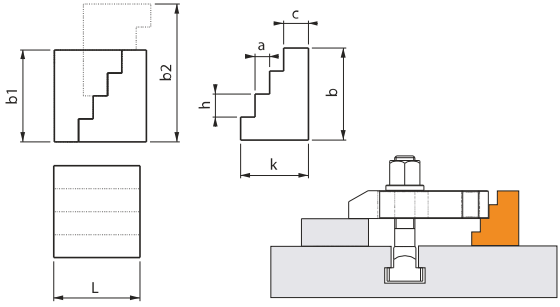
## 1285 - Yükseltme Kovanı

| Sipariş | a | b F7 | c | | e | d | m | h f | (g) |
|---|---|---|---|---|---|---|---|---|---|
| 1285-12080 | 80 | 26 | 36 | 40 | 110 | M12 | M12 | 40 | 600 |
| 1285-12100 | 100 | 26 | 36 | 40 | 130 | M12 | M12 | 40 | 795 |
| 1285-16080 | 80 | 32 | 46 | 50 | 110 | M16 | M16 | 40 | 945 |
| 1285-16100 | 100 | 32 | 46 | 50 | 130 | M16 | M16 | 40 | 1230 |



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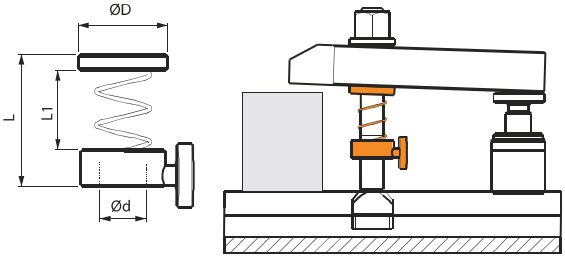
## 1580 - Basamaklı Destek

| Sipariş | h | a | c | k | b | L | b1 | b2 | (g) |
|---|---|---|---|---|---|---|---|---|---|
| 1580-050 | 13 | 8 | 13 | 37 | 52 | 50 | 52 | 78 | 460 |
| 1580-060 | 16 | 10 | 17 | 47 | 64 | 60 | 64 | 96 | 860 |
| 1580-070 | 19 | 13 | 18 | 57 | 76 | 70 | 76 | 114 | 1420 |






## 1970 - Pabuç Kaldırma Yaylı Pul

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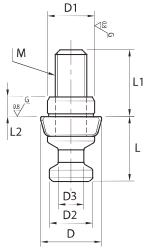
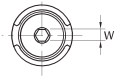
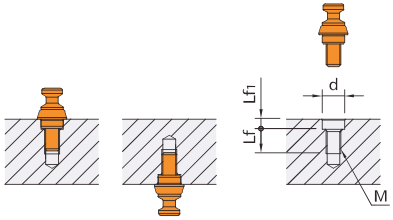
| Sipariş | | Ø D | Ø d | L | L1 | (g) |
|---|---|---|---|---|---|---|
| 1970-10 | M10 | 27 | 10.5 | 35 | 20 | 65 |
| 1970-12 | M12 | 27 | 12.5 | 40 | 33 | 70 |
| 1970-14 | M14 | 28 | 14.5 | 40 | 30 | 60 |
| 1970-16 | M16 | 37 | 16.5 | 45 | 30 | 110 |

| Sipariş | | Ø D | Ø d | L | L1 | (g) |
|---|---|---|---|---|---|---|
| 1970-18 | M18 | 37 | 18.5 | 45 | 40 | 115 |
| 1970-20 | M20 | 37 | 21 | 45 | 42 | 105 |
| 1970-22 | M22 | 37 | 23 | 45 | 45 | 120 |
| 1970-24 | M24 | 45 | 25 | 50 | 45 | 170 |



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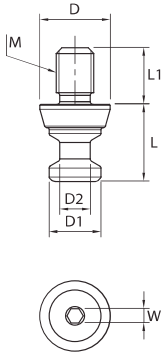
## 0950 - 5 Eksen Blok Bağlama Çektirme Civatası

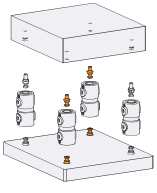
Uygulama Örneği

| Sipariş | M | D1 (g6) | L2 | L1 | D | L | D2 | D3 | W | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 0950-08061D | M6 | 10 | 5 | 17 | 15.5 | 16.5 | 11 | 6.5 | 3 | 17 |
| 0950-08001D | M8 | 12 | 5 | 17 | 15.5 | 16.5 | 11 | 6.5 | 3 | 20 |
| 0950-12081D | M8 | 12 | 5 | 17 | 24.5 | 25 | 16 | 9.5 | 5 | 51 |
| 0950-12001D | M12 | 18 | 6 | 24 | 24.5 | 25 | 16 | 9.5 | 5 | 70 |
| 0950-16121D | M12 | 18 | 6 | 24 | 31.5 | 33 | 21 | 13 | 6 | 123 |
| 0950-16001D | M16 | 22 | 7.5 | 30 | 31.5 | 33 | 21 | 13 | 6 | 150 |

| Sipariş | d (H7) | Lf | Lf1 | M |
|---|---|---|---|---|
| 0950-08061D | 10 | 13 | 5.5 | M6 |
| 0950-08001D | 12 | 13 | 5.5 | M8 |
| 0950-12081D | 12 | 13 | 5.5 | M8 |
| 0950-12001D | 18 | 19 | 6.5 | M12 |
| 0950-16121D | 18 | 23 | 6.5 | M12 |
| 0950-16001D | 22 | 2 | 8 | M16 |





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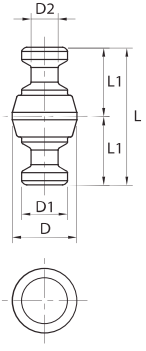
## 0950 - 5 Eksen Blok Bağlama Çektirme Civatası

| Sipariş | M | L1 | D | L | D1 | D2 | W | (g) |
|---|---|---|---|---|---|---|---|---|
| 0950-06001M | M6 | 8 | 11 | 10 | 8 | 4.8 | 2.5 | 5 |
| 0950-08061M | M6 | 9 | 15 | 16.5 | 11 | 6.5 | 3 | 13 |
| 0950-08001M | M8 | 12 | 15 | 16.5 | 11 | 6.5 | 3 | 16 |
| 0950-12081M | M8 | 12 | 24 | 25 | 16 | 9.5 | 5 | 46 |
| 0950-12001M | M12 | 18 | 24 | 25 | 16 | 9.5 | 5 | 57 |
| 0950-16121M | M12 | 18 | 31 | 33 | 21 | 13 | 6 | 108 |
| 0950-16001M | M16 | 22 | 31 | 33 | 21 | 13 | 6 | 125 |



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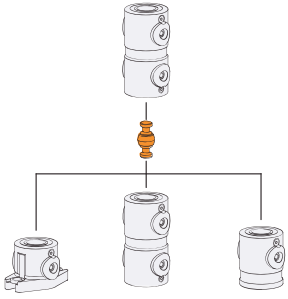
## 0950 - 5 Eksen Blok Bağlama Çektirme Civatası

| Sipariş | D | L | D1 | D2 | L1 | (g) |
|---|---|---|---|---|---|---|
| 0950-08001 | 15.5 | 33 | 11 | 6.5 | 16.5 | 24 |
| 0950-12001 | 24.5 | 50 | 16 | 9.5 | 25 | 85 |
| 0950-16001 | 31.5 | 66 | 21 | 13 | 33 | 190 |





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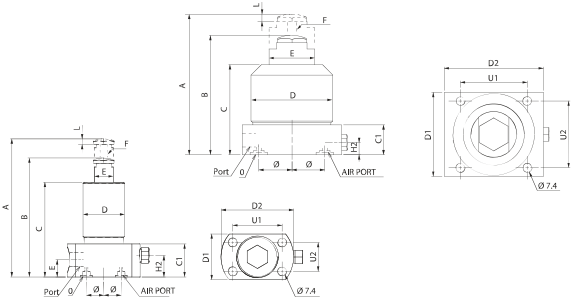
## 1056-WS - Hidrolik İş Parçası Desteği




| Çalışma Özelliği | Kuvvet Desteği 20 Mpa | Strok | Max.Basınç | Min.Basınç | Normal Basınç | Çalışma Isısı | Temas Kuvvet kg |
|---|---|---|---|---|---|---|---|
| Yay | 600 kgf | 8 | 35 Mpa | 5 Mpa | 21 Mpa | 0°~ +70° | - |
| Hidrolik | 600 kgf | 8 | | | | | 2.35 |
| Yay | 800 kgf | 13 | | | | | - |
| Hidrolik | 800 kgf | 10.4 | | | | | 6.25 |
| Yay | 1200 kgf | 10.4 | | | | | - |
| Hidrolik | 1200 kgf | 10.4 | | | | | 8.86 |

| Sipariş | A | B | C | C1 | D | D1 | D2 | E | F | H1 | H2 | K | L | Q | U1 | U2 | O (O-RİNG) | PORT | Ağırlık (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1056-WS16A | 85.1 | 75.4 | 64.5 | 23.9 | M35 x1.5 | 38.1 | 60.5 | 16 | 12.4 | 11.2 | 7.6 | M10 x1.5 | 4.5 | - | 41.1 | 23.9 | - | - | 0.60 |
| 1056-WS16B | 99.3 | 89.7 | 78.7 | 27.4 | M35 x1.5 | 38.1 | 60.5 | 16 | 12.4 | 14.2 | 17.8 | M10 x1.5 | 4.5 | - | 41.1 | 23.9 | - | - | 0.60 |
| 1056-WS25B | 105 | 92 | 83 | 25 | M60 x1.5 | 64 | 64 | 25 | 19 | 12.5 | - | M10 x1.5 | - | - | 52 | 52 | P7 | G1/8 | 1.80 |
| 1056-WS30A | 102.1 | 91.7 | 77.5 | 26.5 | M50 x1.5 | 64 | 64 | 25 | 19 | 14 | 17.5 | M16 x2 | 6 | 24.5 | 50 | 50 | P7 | G1/8 | 1.80 |
| 1056-WS38A | 96.5 | 86.1 | 74.9 | 24.9 | M68 x1.5 | 69.9 | 82.6 | 39 | 25.4 | 12.2 | 10.2 | M20 x2.5 | 6.1 | 27.4 | 55.4 | 55.4 | P10 | G1/8 | 2.20 |
| 1056-WS38B | 102.1 | 91.7 | 78 | 26.4 | M68 x1.5 | 69.9 | 82.6 | 38 | 25.4 | 13.7 | 13.2 | M20 x2.5 | 6.1 | 27.4 | 55.4 | 55.4 | P10 | G1/8 | 2.20 |



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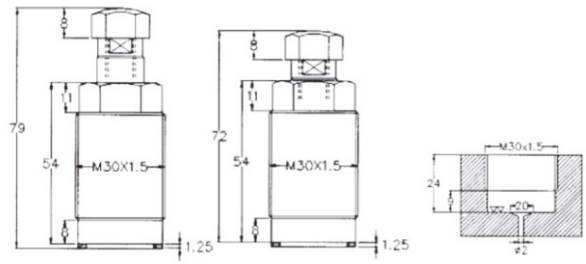
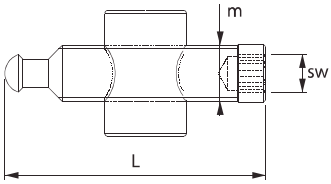
## 1056-SP - Hidrolik İş Parçası Desteği




| Sipariş | Çalışma Yağ Basıncı | Hareket Tipi | Strok | Piston Çubuğu Ø(mm) | Kuvvet Desteği 200kg/ cm² | Temas Kuvveti kg | A | B | C | D | E | F | Ağırlık (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1056-SP16A | 100-350 kg/cm2 | Yaylı | 8 | 16 | 210 kg | - | 79 | 54 | 8 | M30 x1.5 | 11 | 8 | 0.30 |
| 1056-SP16B | 100-350 kg/cm2 | Hidrolik | 8 | 16 | 210 kg | 2.35 | 72 | 54 | 8 | M30 x1.5 | 11 | 8 | 0.30 |



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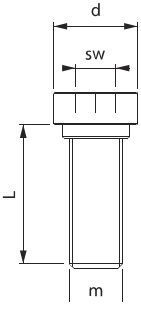
**Pabuç Kaldırma Civata ve Somunu** 1120 - 1130 / 1150 - 1160

| Sipariş | m | L | sw | | (g) |
|---|---|---|---|---|---|
| 1120-0714 | M14 | 72 | 8 | - | 138 |
| 1130-0818 | M18 | 83 | 10 | - | 235 |
| 1150-0920 | M20 | 96 | 12 | - | 360 |
| 1160-1024 | M24 | 134 | 12 | 24 | 795 |
| 1165-1124 | M24 | 149 | - | 24 | 950 |



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**Sabitleme İmbus Civatası** 1120 - 1130 / 1150 - 1160

| Sipariş | m | L | d | sw | (g) |
|---|---|---|---|---|---|
| 1120-310 | M10 | 29 | 16.5 | 8 | 28 |
| 1120-312 | M12 | 29 | 16.5 | 8 | 34 |
| 1130-412 | M12 | 30 | 20.5 | 10 | 45 |
| 1130-416 | M16 | 34 | 20.5 | 10 | 75 |
| 1150-516 | M16 | 34 | 24.5 | 12 | 75 |
| 1150-518 | M18 | 38 | 24.5 | 12 | 90 |
| 1150-520 | M20 | 38 | 24.5 | 12 | 105 |
| 1160-620 | M20 | 45 | 34 | 12 | 170 |
| 1160-622 | M22 | 49 | 34 | 12 | 217 |
| 1160-624 | M24 | 45 | 34 | 12 | 390 |
| 1160-724 | M24 | 55 | 34 | 12 | 405 |
| 1160-730 | M30 | 66 | 38.5 | 12 | 450 |
| 1165-820 | M20 | 45 | 34 | 12 | 170 |
| 1165-822 | M22 | 49 | 34 | 12 | 217 |
| 1165-824 | M24 | 45 | 34 | 12 | 390 |
| 1165-924 | M24 | 55 | 34 | 12 | 405 |
| 1165-930 | M30 | 66 | 38.5 | 12 | 400 |



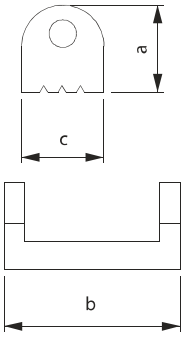
DP



BSP



ESP

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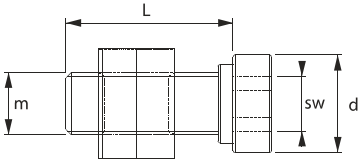
**DP Ön Baskı Pabucu** 1120 - 1130 / 1150 - 1160

| Sipariş | a | b | c | (g) |
|---|---|---|---|---|
| 1120-DP | 13.5 | 26.5 | 12 | 15 |
| 1120-BSP | 15.5 | 26.5 | 12 | 18 |
| 1120-ESP | 18 | 26.5 | 12 | 21 |
| 1130-DP | 17 | 32 | 15 | 20 |
| 1130-BSP | 19 | 32 | 15 | 30 |
| 1130-ESP | 22 | 32 | 15 | 30 |
| 1150-DP | 19 | 38 | 18 | 40 |
| 1150-BSP | 21 | 38 | 18 | 40 |
| 1150-ESP | 25 | 38 | 18 | 50 |
| 1160-DP | 22 | 44 | 22 | 55 |
| 1160-BSP | 25 | 44 | 22 | 70 |
| 1160-ESP | 28 | 44 | 22 | 80 |
| 1165-DP | 22 | 44 | 22 | 55 |
| 1165-BSP | 25 | 44 | 22 | 70 |
| 1165-ESP | 28 | 44 | 22 | 80 |



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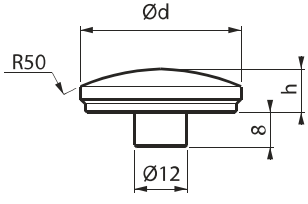
**Sabitleme İmbus** 1120 - 1130
**Civata ve T-Pabuç** 1150 - 1160

| Sipariş | a | m | L | d | sw | (g) |
|---|---|---|---|---|---|---|
| 1120-512 | 12 | M10 | 29 | 16.5 | 8 | 48 |
| 1120-514 | 14 | M12 | 29 | 16.5 | 8 | 54 |
| 1130-614 | 14 | M12 | 30 | 20.5 | 10 | 80 |
| 1130-616 | 16 | M12 | 30 | 20.5 | 10 | 100 |
| 1130-618 | 18 | M12 | 30 | 20.5 | 10 | 130 |
| 1130-620 | 20 | M12 | 36 | 20.5 | 10 | 180 |
| 1130-622 | 22 | M12 | 36 | 20.5 | 10 | 220 |
| 1150-718 | 18 | M16 | 34 | 24.5 | 12 | 145 |
| 1150-720 | 20 | M16 | 34 | 24.5 | 12 | 190 |
| 1150-722 | 22 | M16 | 42 | 24.5 | 12 | 260 |
| 1150-724 | 24 | M16 | 42 | 24.5 | 12 | 350 |
| 1150-728 | 28 | M16 | 42 | 24.5 | 12 | 470 |
| 1160-822 | 22 | M20 | 45 | 34 | 12 | 320 |
| 1160-824 | 24 | M20 | 45 | 34 | 12 | 410 |
| 1160-826 | 28 | M24 | 45 | 34 | 12 | 550 |
| 1160-828 | 28 | M24 | 55 | 34 | 12 | 580 |
| 1160-832 | 32 | M24 | 61 | 34 | 12 | 603 |
| 1160-836 | 36 | M24 | 66 | 38.5 | 12 | 865 |
| 1165-922 | 22 | M20 | 45 | 34 | 12 | 320 |
| 1165-924 | 24 | M20 | 45 | 34 | 12 | 410 |
| 1165-926 | 28 | M24 | 45 | 34 | 12 | 550 |
| 1165-928 | 28 | M24 | 55 | 34 | 12 | 580 |
| 1165-932 | 32 | M24 | 61 | 34 | 12 | 603 |
| 1165-936 | 36 | M24 | 66 | 38.5 | 12 | 865 |



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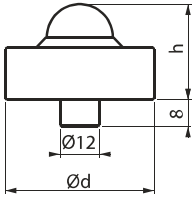
**1555 - Radüslü Destek**

| Sipariş | h | Ø d | (g) |
|---|---|---|---|
| 1555 | 10 | 37 | 75 |



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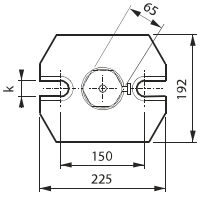
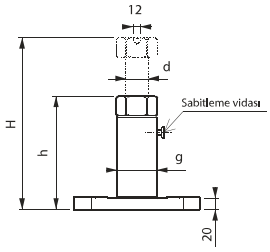
**1560 - Bilyalı Destek**

| Sipariş | h | Ø d | kgf | (g) |
|---|---|---|---|---|
| 1560 | 25 | 45 | 3000 | 220 |



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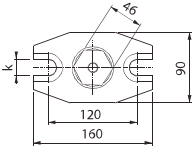
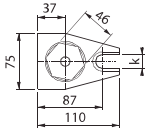
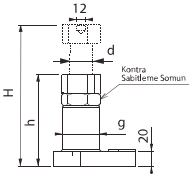
**1530 - Trapez Diş Yükseltici Destek**

| Sipariş | H / h | d | g | k | kgf | (g) |
|---|---|---|---|---|---|---|
| 1530-200 | 200-300 | Tr40x7 | 69 | 28 | 8000 | 10.0 |
| 1530-280 | 280-460 | Tr40x7 | 69 | 28 | 6000 | 11.8 |
| 1530-430 | 430-750 | Tr40x7 | 69 | 28 | 5000 | 14.2 |
| 1530-710 | 710-1250 | Tr40x7 | 69 | 28 | 4000 | 20.9 |



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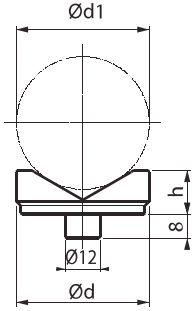
**1550 - Trapez Diş Yükseltici Destek**

| Sipariş | H / h | d | g | k | kgf | (g) |
|---|---|---|---|---|---|---|
| 1550-100 | 100-140 | Tr30x6 | 49 | 18 | 6000 | 2.05 |
| 1550-140 | 140-200 | Tr30x6 | 49 | 18 | 6000 | 2.45 |
| 1550-200 | 200-320 | Tr30x6 | 49 | 22 | 4000 | 3.90 |
| 1550-320 | 320-550 | Tr30x6 | 49 | 22 | 2500 | 5.15 |



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**1565 - V-Yatak**

| Sipariş | h | Ø d | Ø d1 min | Ø d1 max | (g) |
|---|---|---|---|---|---|
| 1565 | 15 | 45 | 10 | 50 | 130 |



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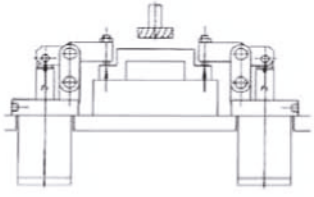
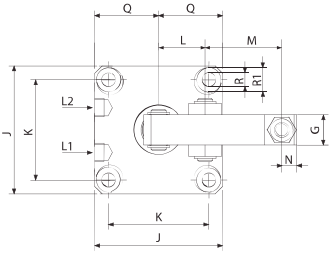
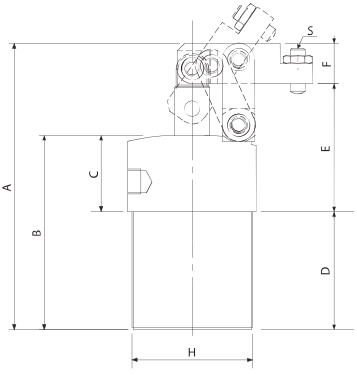
## 1058/PLCU - Pnömatik Üstten Bağlama






| Sipariş | Çalışma Basıncı | Çalışma Isısı | Bağlama Tipi | Strok (mm) | Delik Çapı Ø (mm) | Piston Çubuğu Ø (mm) | Sıkma Kuvveti (kg) |
|---|---|---|---|---|---|---|---|
| 1058-PLCU25 | 4-10 kgf/cm2 | -10°~ +80° | Üst Flans ve Disli Gövde | 22 | Ø 25 | Ø 14 | 27 |
| 1058-PLCU32 | | | | 28 | Ø 32 | Ø 16 | 40 |
| 1058-PLCU40 | | | | 30 | Ø 40 | Ø 16 | 66 |
| 1058-PLCU50 | | | | 30 | Ø 50 | Ø 20 | 105 |
| 1058-PLCU63 | | | | 30 | Ø 63 | Ø 20 | 166 |

| A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|
| 128.5 | 86.5 | 25 | 61.5 | 50 | 17 | 16 | M40x1.5 | 60 | 50 | 37 |
| 149.5 | 97.5 | 25 | 72.5 | 57 | 20 | 18 | M50x1.5 | 70 | 60 | 45 |
| 157.5 | 97.5 | 25 | 72.5 | 60 | 25 | 20 | M55x1.5 | 75 | 65 | 50 |
| 174 | 104 | 25 | 79 | 65 | 30 | 22 | M65x1.5 | 88 | 75 | 58 |
| 179 | 105 | 25 | 80 | 69 | 30 | 22 | M80x1.5 | 108 | 90 | 70 |

| L | M | O | N | P | Q | R | R1 | S | L1 Bağlama / L2 Sökme | Ağırlık (kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 23 | 23 | 7 | 35 | 25 | 5.5 | 9 | M6x1 | M6x1 | 0.60 |
| 22 | 30 | 23 | 8 | 40 | 30 | 6.5 | 11 | M8x1.25 | G 1/8 | 1.00 |
| 24 | 32 | 26 | 10 | 42.5 | 32.5 | 6.5 | 11 | M8x1.25 | G 1/8 | 1.20 |
| 27.5 | 36 | 32 | 14 | 50.5 | 37.5 | 8.5 | 14 | M12x1.75 | G 1/8 | 2.00 |
| 32 | 42 | 35 | 14 | 63 | 45 | 8.5 | 14 | M12x1.75 | G 1/8 | 2.70 |



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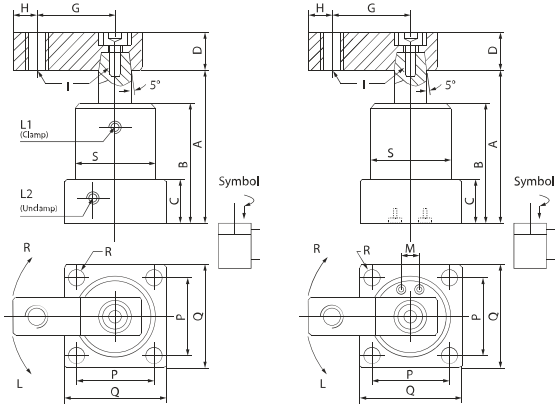
## 1058/NAS - Pnömatik Dönmeli Bağlama

NAS – Flanşlı Uyarlama, Tek Kol Borulu veya Manifoldlu

• Satın almadan önce hareket tipini ve dönme açısını bildiriniz.




| Sipariş | Bağlama Tipi | Bağlama Kolu | Max.Basınç | Normal Basınç | Hareket Tipi | Dönme Açısı | Dönme Strok (mm) |
|---|---|---|---|---|---|---|---|
| 1058-NAS025 | Flans | Tel Kol | 7 kg/cm2 | 4-6 kg/cm2 | Çift Hareketli | 90° (0° 45°, 60°, 180°) ± 2° | 12 |
| 1058-NAS032 | | | | | | | 12 |
| 1058-NAS040 | | | | | | | 12 |
| 1058-NAS050 | | | | | | | 14 |
| 1058-NAS063 | | | | | | | 14 |

| Bağlama Strok (mm) | Delik Çapı Ø (mm) | Piston Çubuğu Ø | Bağl. Gücü (5 kg/cm2) | A (mm) Sökme | B (mm) | C (mm) | D (mm) |
|---|---|---|---|---|---|---|---|
| 14 | 25 | 14 | 16 | 95.5 | 65.5 | 23 | 16 |
| 14 | 32 | 16 | 30 | 102.5 | 71 | 23 | 19 |
| 15 | 40 | 16 | 50 | 106 | 75 | 26 | 19 |
| 15 | 50 | 20 | 85 | 113 | 80 | 26 | 25.4 |
| 15 | 63 | 20 | 140 | 119 | 86 | 30 | 25.4 |

| H (mm) | L1 Bağlama / L2 Sökme | I (mm) | P (mm) | Q (mm) | R (mm) | S (mm) | M (mm) | F (mm) | Ağırlık (kg) |
|---|---|---|---|---|---|---|---|---|---|
| 8 | M5 | M6 | 30 | 40 | Ø 4.5 | Ø 35 | 18 | 12.5 | 0.40 |
| 9 | 1/8 PF | M8 | 44 | 54 | Ø 6.5 | Ø 50 | 22 | 17 | 0.70 |
| 9 | 1/8 PF | M8 | 48 | 58 | Ø 6.5 | Ø 55 | 26 | 19.5 | 0.85 |
| 10 | 1/8 PF | M10 | 55 | 68 | Ø 8.5 | Ø 65 | 30 | 24 | 1.30 |
| 10 | 1/8 PF | M10 | 64 | 80 | Ø 8.5 | Ø 70 | 40 | 20 | 1.80 |



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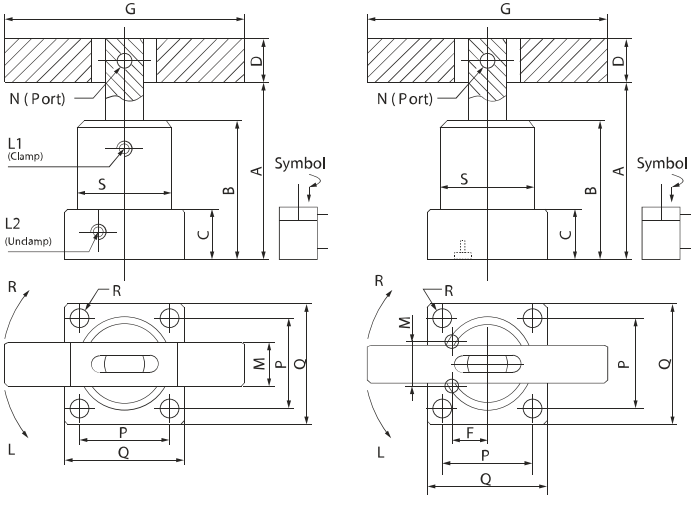
## 1058/NASD - Pnömatik Dönmeli Bağlama

NASD – Flanşlı Uyarlama, Çift Kol Borulu veya Manifoldlu

• Satın almadan önce hareket tipinive dönme açısını bildiriniz.




| Sipariş | Bağlama Tipi | Bağlama Kolu | Max.Basınç | Normal Basınç | Hareket Tipi | Dönme Açısı | Dönme Strok (mm) |
|---|---|---|---|---|---|---|---|
| 1058-NASD032 | Flans | Çift Kol | 7 kg/cm2 | 4-6 kg/cm2 | Çift Hareketli | 90° (0° 45°, 60°, 180°) ± 2° | 12 |
| 1058-NASD040 | | | | | | | 12 |
| 1058-NASD050 | | | | | | | 14 |
| 1058-NASD063 | | | | | | | 14 |

| Bağlama Strok (mm) | Delik Çapı Ø (mm) | Piston Çubuğu Ø | Bağl. Gücü (5 kg/cm2) | A (mm) Sökme | B (mm) | C (mm) | D (mm) | G (mm) |
|---|---|---|---|---|---|---|---|---|
| 14 | 32 | 16 | 30 | 102.5 | 71 | 23 | 19 | 100 |
| 15 | 40 | 16 | 50 | 106 | 75 | 26 | 19 | 100 |
| 15 | 50 | 20 | 85 | 113 | 80 | 26 | 22 | 120 |
| 15 | 63 | 25 | 140 | 119 | 86 | 30 | 22 | 120 |

| L1 Bağlama / L2 Sökme | N (mm) | P (mm) | Q (mm) | R (mm) | S (mm) | M (mm) | F (mm) | Ağırlık (kg) |
|---|---|---|---|---|---|---|---|---|
| 1/8 PF | Ø 8 | 44 | 54 | Ø 6.5 | Ø 50 | 22 | 17 | 0.80 |
| 1/8 PF | Ø 8 | 48 | 58 | Ø 6.5 | Ø 55 | 26 | 19.5 | 0.95 |
| 1/8 PF | Ø 8 | 55 | 68 | Ø 8.5 | Ø 65 | 30 | 24 | 1.40 |
| 1/8 PF | Ø 8 | 64 | 80 | Ø 8.5 | Ø 75 | 40 | 29 | 1.90 |



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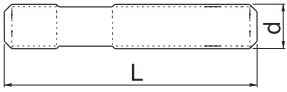
## 2010 - Merdiven Yükselticili Bağlama Seti




- 6 adet DIN 508 T-Pabuç
- 16 adet DIN 6379 saplama
- 6 adet DIN 6330B takviyeli somun
- 4 adet DIN 6331 pullu somun
- 2 adet 1830 uzatma somun
- 4 adet DIN 6340 kalın pul
- 4 adet Nr.1290 merdiven pabuç
- 8 adet Nr. 1310 merdiven diş destek
- 1 adet Nr. 1950 T-Kanal temizleyici
- 1 adet statik boyalı çelik set

| Sipariş | d x a | | (kg) | DIN 6379 d x L |
|---|---|---|---|---|
| 2010-1012 | M10 x 12 | 330 x 255 | 7.27 | M10 x 80 - 100 - 160 - 200 |
| 2010-1214 | M12 x 14 | 380 x 255 | 9.26 | M12 x 80 - 100 - 160 - 200 |
| 2010-1416 | M14 x 16 | 435 x 255 | 12.29 | M14 x 80 - 100 - 160 - 200 |
| 2010-1618 | M16 x 18 | 435 x 255 | 15.62 | M16 x 80 - 100 - 160 - 200 |
| 2010-1820 | M18 x 20 | 495 x 255 | 18.00 | M18 x 80 - 100 - 160 - 200 |



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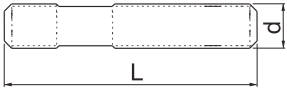
## 1990 - Vidalı Yükselticili Bağlama Seti




- 6 adet DIN 508 T-Pabuç (M20x22'de 4 adet)
- 16 adet DIN 6379 saplama
- 6 adet DIN 6330B takviyeli somun
- 4 adet DIN 6331 pullu somun
- 2 adet Nr. 1830 uzatma somun
- 4 adet DIN 6340 kalın pul
- 4 adet Nr. 1330 destek delikli pabuç
- 8 adet Nr. 1510 vida dis yükseltici destek
- 1 adet Nr. 1950 T-Kanal temizleyici
- 1 adet statik boyalı çelik set
- M20 VBS'de somun ve pul 4'er adet M10-12 VBS'de 1510 yükseltici 6 adet konulmaktadır.

| Sipariş | d x a | | (kg) | DIN 6379 d x L |
|---|---|---|---|---|
| 1990-1012 | M10 x 12 | 265 x 255 | 6.44 | M10 x 80 - 100 - 160 - 200 |
| 1990-1214 | M12 x 14 | 305 x 255 | 8.72 | M12 x 80 - 100 - 160 - 200 |
| 1990-1416 | M14 x 16 | 435 x 255 | 12.98 | M14 x 80 - 100 - 160 - 200 |
| 1990-1618 | M16 x 18 | 435 x 255 | 16.30 | M16 x 80 - 100 - 160 - 200 |
| 1990-1820 | M18 x 20 | 495 x 255 | 17.82 | M18 x 80 - 100 - 160 - 200 |
| 1990-2022 | M20 x 22 | 540 x 255 | 23.10 | M20 x 100 - 125 - 160 - 200 |

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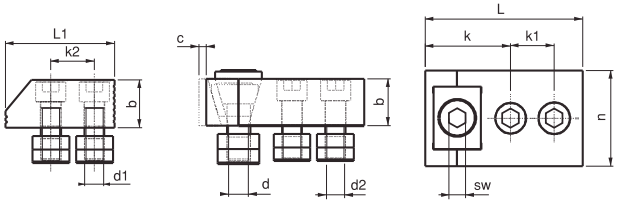
## 2030 - Dereceli Yandan Bağlama Seti






| Sipariş | a | c | L | b | n | k | k1 | k2 | L1 | d | d1 | d2 | sw | Sıkma Kuvveti | Tork Değeri ( N - m ) | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2030-1214 | 14 | 5 | 90 | 23 | 47 | 47 | 26 | 26 | 65 | M12 | M12 | M12 | 10 | 2000 Kgf | 35 | 3490 |
| 2030-1216 | 16 | | | | | | | | | | | | | | | 3670 |
| 2030-1418 | 18 | 5 | 95 | 28 | 57 | 52 | 26 | 26 | 65 | M12 | M12 | M12 | 10 | 2000 Kgf | 35 | 5000 |
| 2030-1420 | 20 | | | | | | | | | | | | | | | 5355 |
| 2030-1422 | 22 | | | | | | | | | | | | | | | 5720 |
| 2030-1424 | 24 | | | | | | | | | | | | | | | 6190 |
| 2030-1428 | 28 | | | | | | | | | | | | | | | 6650 |

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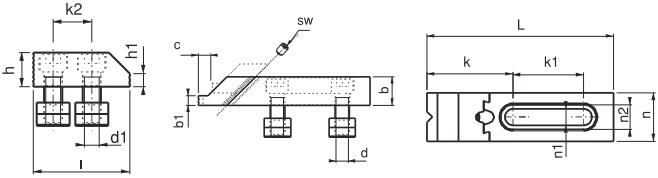
## 2070 - Kızaklı Yandan Bağlama Seti






| Sipariş | a | c | L | b | b1 | n | n1 | n2 | k | k1 | k2 | sw | ı | h | h1 | d | d1 | Sıkma Kuvveti | Tork Değeri ( N - m ) | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2070-1214 | 14 | 10 | 142 | 24 | 8 | 37 | 12.5 | 18.5 | 65 | 54 | 26 | 6 | 65 | 23 | 10 | M12 | M12 | 850 Kgf | 15 | 3575 |
| 2070-1216 | 16 | | | | | | | | | | | | | | | | | | | 3710 |
| 2070-1218 | 18 | 14 | 145 | 28 | 10 | 48 | 12.5 | 18.5 | 74 | 56 | 26 | 8 | 65 | 28 | 11 | M12 | M12 | 1000 Kgf | 35 | 5215 |
| 2070-1420 | 20 | | | | | | | | | | | | | | | | | | | 5400 |
| 2070-1422 | 22 | | | | | | | | | | | | | | | | | | | 5610 |

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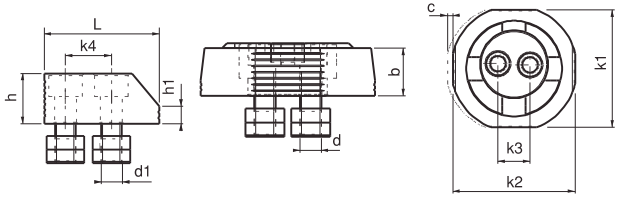
## 2090 - Kollu Yandan Bağlama Seti






| Sipariş | a | c | b | k1 | k2 | k3 | k4 | L | h | h1 | d | d1 | Sıkma Kuvveti | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2090-1214 | 14 | 3.5 | 30 | 95 | 99 | 26 | 26 | 65 | 28 | 10 | M12 | M12 | 3500 | 7925 |
| 2090-1216 | 16 | | | | | | | | | | | | | 8490 |
| 2090-1218 | 18 | | | | | | | | | | | | | 4610 |
| 2090-1420 | 20 | | | | | | | | | | | | | 8850 |
| 2090-1422 | 22 | | | | | | | | | | | | | 9030 |
| 2090-1424 | 24 | | | | | | | | | | | | | 9490 |
| 2090-1428 | 28 | | | | | | | | | | | | | 9800 |

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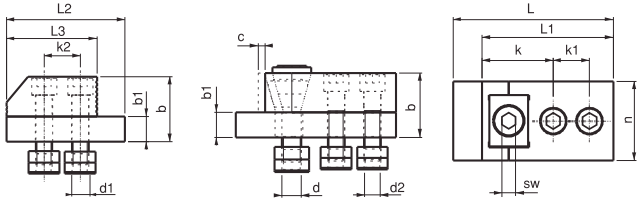
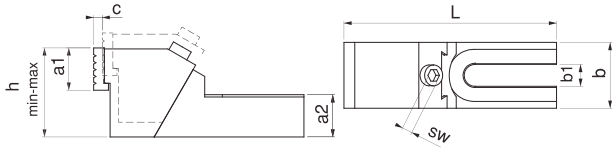
## 2050 - Kızaklı Yandan Bağlama ( Paralelli ) Seti






| Sipariş | a | c | L | L1 | L2 | L3 | b | b1 ±0.01 | n | k | k1 | k2 | d | d1 | d2 | sw | Sıkma Kuvveti | Tork Değeri ( N - m ) | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2050-1214 | 14 | 5 | 110 | 90 | 85 | 65 | 41 | 18 | 47 | 47 | 26 | 26 | M12 | M12 | M12 | 6 | 1000 Kgf | 15 | 5920 |
| 2050-1216 | 16 | | | | | | | | | | | | | | | | | | 6210 |
| 2050-1418 | 18 | 5 | 115 | 95 | 85 | 65 | 46 | 18 | 57 | 52 | 26 | 26 | M12 | M12 | M12 | 8 | 1250 Kgf | 20 | 8090 |
| 2050-1420 | 20 | | | | | | | | | | | | | | | | | | 8440 |
| 2050-1422 | 22 | | | | | | | | | | | | | | | | | | 8825 |
| 2050-1424 | 24 | | | | | | | | | | | | | | | | | | 10080 |
| 2050-1428 | 28 | | | | | | | | | | | | | | | | | | 10750 |



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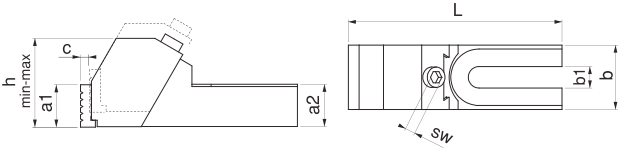
## 2095 - Blok Yandan Bağlama

| Sipariş | a | a1 | a2 | b | b1 | c | h min - max | L | sw | F1 Sıkma Kuvveti | F2 Sıkma Kuvveti | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2095-571 | 14 - 16 - 18 | 37 | 37 | 57 | 19 | 8 | 78 - 98 | 185 | 10 | 2250 Kgf | 350 Kgf | 3.68 |
| 2095-761 | 20 - 22 - 24 - 28 | 37 | 45 | 76 | 26 | 11 | 98 - 118 | 240 | 14 | 3000 Kgf | 450 Kgf | 7.66 |



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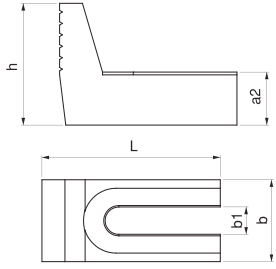
## 2095 - Blok Yandan Bağlama

| Sipariş | a | a1 | a2 | b | b1 | c | h min - max | L | sw | F1 Sıkma Kuvveti | F2 Sıkma Kuvveti | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2095-572 | 14 - 16 - 18 | 37 | 37 | 57 | 19 | 8 | 78 - 98 | 185 | 10 | 2250 | 350 | 3.6 |
| 2095-762 | 20 - 22 - 24 - 28 | 37 | 45 | 76 | 26 | 11 | 98 - 118 | 240 | 14 | 3000 | 450 | 6.7 |



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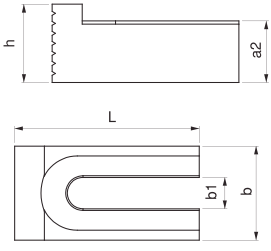
## 2098 - Blok Yandan Bağlama Dayaması

| Sipariş | a | a2 | b | b1 | h | L | (kg) |
|---|---|---|---|---|---|---|---|
| 2098-571 | 14 - 16 - 18 | 37 | 57 | 19 | 85 | 124 | 2.025 |
| 2098-761 | 20 - 22 - 24 - 28 | 45 | 76 | 26 | 105 | 154 | 4.185 |



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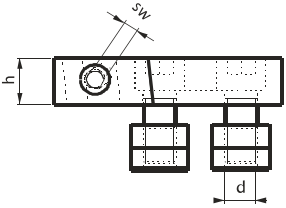
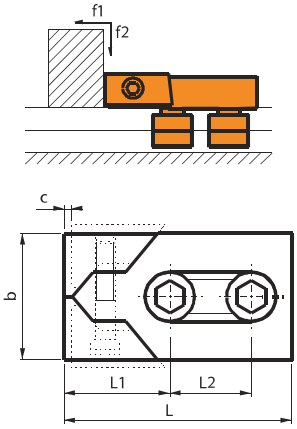
## 2098 - Blok Yandan Bağlama Dayaması

| Sipariş | a | a2 | b | b1 | h | L | (kg) |
|---|---|---|---|---|---|---|---|
| 2098-572 | 14 - 16 - 18 | 37 | 57 | 19 | 47 | 112 | 2.800 |
| 2098-762 | 20 - 22 - 24 - 28 | 45 | 76 | 26 | 49 | 140 | 4.185 |





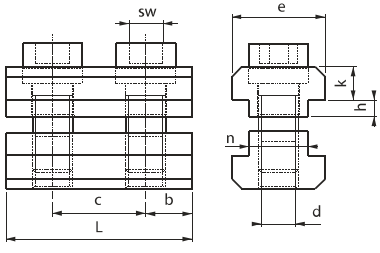




ER-EL

## 2110 - Çift Çeneli Yandan Bağlama Pabucu

| Sipariş | a | c | h | b | L | L1 | L2 | sw | d | Sıkma Kuvveti f1 kgf | Sıkma Kuvveti f2 kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2110-12 | 12 | 3 | 20 | 40 | 80 | 39 | 26 | 6 | M10 | 1600 | 60 | 415 |
| 2110-14 | 14 | | | | | | | | | 2200 | 90 | 425 |
| 2110-16 | 16 | 4 | 25 | 50 | 100 | 46 | 34 | 8 | M14 | 3200 | 120 | 785 |
| 2110-18 | 18 | | | | | | | | | 3600 | 140 | 810 |
| 2110-20 | 20 | | | | | | | | | 3600 | 140 | 850 |
| 2110-22 | 22 | 5 | 28.5 | 78 | 140 | 65 | 50 | 10 | M20 | 3600 | 140 | 2275 |
| 2110-24 | 24 | | | | | | | | | 3600 | 140 | 2360 |
| 2110-28 | 28 | | | | | | | | | 4000 | 160 | 2500 |



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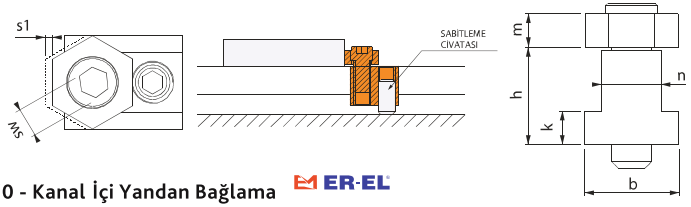
## 2130 - Dayama

| Sipariş | a | n | e | c | d | b | h | k | L | sw | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2130-12 | 12 | 11.7 | 18 | 18 | M8 | 9 | 3 | 7 | 36 | 6 | 100 |
| 2130-14 | 14 | 13.7 | 22 | 22 | M8 | 11 | 4 | 8 | 44 | 6 | 180 |
| 2130-16 | 16 | 15.7 | 25 | 25 | M12 | 12.5 | 5 | 9 | 50 | 10 | 270 |
| 2130-18 | 18 | 17.7 | 28 | 28 | M12 | 14 | 5 | 10 | 56 | 10 | 355 |
| 2130-20 | 20 | 19.7 | 32 | 32 | M16 | 16 | 5 | 12 | 64 | 14 | 570 |
| 2130-22 | 22 | 21.7 | 35 | 35 | M16 | 17.5 | 6 | 14 | 70 | 14 | 770 |
| 2130-24 | 24 | 23.7 | 40 | 40 | M20 | 20 | 6 | 16 | 80 | 17 | 1180 |
| 2130-28 | 28 | 27.7 | 44 | 44 | M20 | 22 | 6 | 18 | 88 | 17 | 1560 |



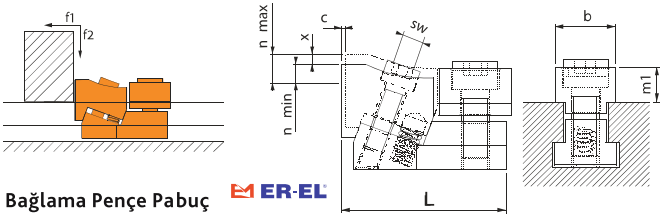



## 2150 - Kanal İçi Yandan Bağlama

ER-EL

| Sipariş | a | s1 | m | sw | L | h | k | n | b | Sıkma Kuvveti kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2150-08 | 8 | 1.4 | 5 | 4 | 23 | 9.5 | 6 | 7.7 | 13 | 310 | 25 |
| 2150-10 | 10 | 1.4 | 5 | 4 | 23 | 14 | 6 | 9.7 | 15 | 310 | 35 |
| 2150-12 | 12 | 1.2 | 7 | 5 | 28 | 15 | 7 | 11.7 | 18 | 340 | 60 |
| 2150-14 | 14 | 1.7 | 7 | 7 | 30 | 22 | 8 | 13.7 | 22 | 800 | 95 |
| 2150-16 | 16 | 1.7 | 10 | 8 | 30 | 22 | 9 | 15.7 | 25 | 1500 | 130 |
| 2150-18 | 18 | 2 | 10 | 8 | 35 | 28 | 10 | 17.7 | 28 | 1500 | 190 |
| 2150-20 | 20 | 2.5 | 13 | 10 | 40 | 32 | 12 | 19.7 | 32 | 2000 | 290 |
| 2150-22 | 22 | 2.5 | 13 | 12 | 45 | 38 | 14 | 21.7 | 35 | 2000 | 390 |



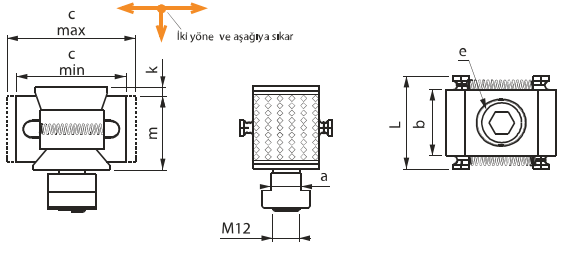



## 2170 - Yandan Bağlama Pençe Pabuç

ER-EL

| Sipariş | a | c | n | | x | L | b | m1 | sw | Sıkma Kuvveti | | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | min | max | | | | | | f1 kgf | f2 kgf | |
| 2170-12 | 12 | 2 | 2 | 6 | 4 | 46 | 21 | 10 | 5 | 500 | 60 | 120 |
| 2170-14 | 14 | 2.5 | 2.5 | 7.5 | 5 | 51 | 26 | 10 | 6 | 550 | 70 | 200 |
| 2170-16 | 16 | 3 | 2.5 | 8.5 | 6 | 61 | 27.5 | 12 | 6 | 800 | 90 | 290 |
| 2170-18 | 18 | 3 | 2 | 8 | 6 | 67 | 35 | 13 | 8 | 900 | 100 | 420 |
| 2170-20 | 20 | 4 | 2.5 | 11 | 8.5 | 78 | 38 | 13 | 10 | 1200 | 140 | 640 |
| 2170-22 | 22 | 4.5 | 2.5 | 12 | 9.5 | 87 | 39 | 16.5 | 10 | 1600 | 190 | 830 |






ER-EL

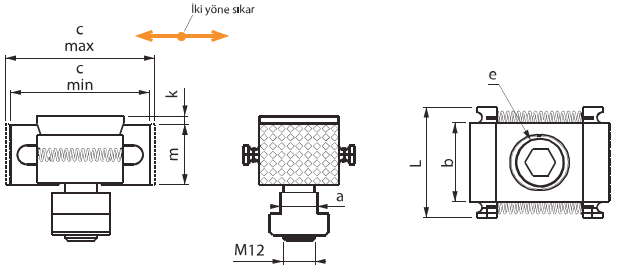
## 2190 - Çift Açılır Yandan Bağlama

| Sipariş | c | | a | m | k | b | L | e DIN 912 | Sıkma Kuvveti kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| | min | max | | | | | | | | |
| 2190-5055 | 50 | 55 | 14-16-18-20-22 | 35 | 4 | 30 | 42 | M12 | 1750 | 390 |



ER-EL

## 2210 - Çift Açılır Yandan Bağlama




| Sipariş | c min | c max | a | m | k | b | L | e DIN 912 | Sıkma Kuvveti kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 2210-4954 | 49 | 54 | 14-16-18-20-22 | 23 | 4 | 30 | 42 | M12 | 1500 | 280 |



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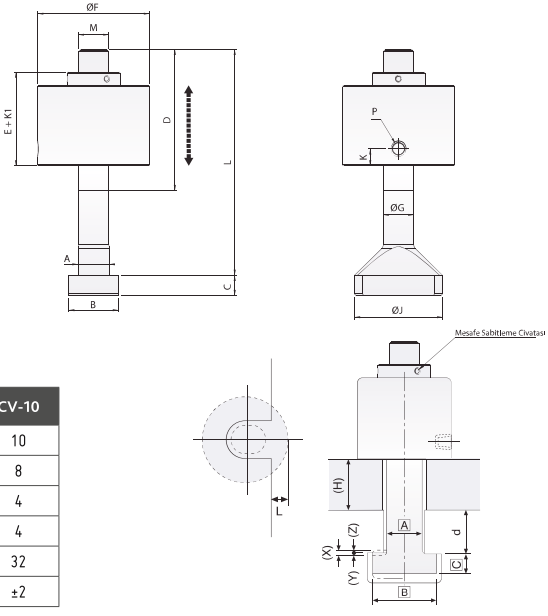
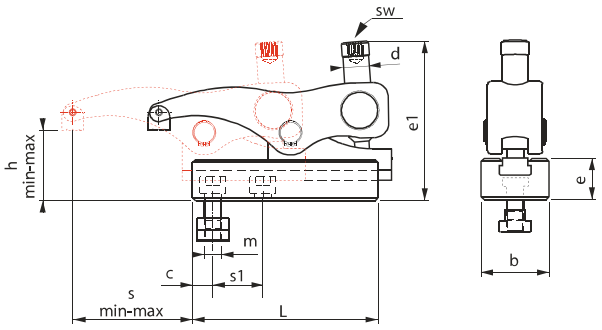
## 1010 CV - Hidrolik Pabuç Model




| Model | CV-4 | CV-6 | CV-10 |
|---|---|---|---|
| Bağlama kapasitesi (ton) | 4 | 6 | 10 |
| Toplam strok (X) mm | 8 | 8 | 8 |
| Pabuç strok (Y) mm | 4 | 4 | 4 |
| Muhafaza edilen strok (Z) mm | 4 | 4 | 4 |
| Silindirin toplam hacmi cc | 13 | 21 | 32 |
| Kalıp taban kalınlığı toleransı (H) mm | ±2 | ±2 | ±2 |

| Sipariş | a | A | B | C | D | E + K1 | Ayar Mesafesi | F | Max. L | M | ØG | ØJ | K | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1010-CV042020125 | 20 | 19.6 | 32 | 12 | 85 | 70 | 15 | 65 | 125 | M20 | 20 | 58 | 15 | PT 1/4 |
| 1010-CV042020160 | 20 | 19.6 | 32 | 12 | 110 | 70 | 40 | 65 | 160 | M20 | 20 | 58 | 15 | PT 1/4 |
| 1010-CV042022125 | 22 | 21.6 | 35 | 14 | 85 | 70 | 15 | 65 | 125 | M20 | 20 | 58 | 15 | PT 1/4 |
| 1010-CV042022160 | 22 | 21.6 | 35 | 14 | 110 | 70 | 40 | 65 | 160 | M20 | 20 | 58 | 15 | PT 1/4 |
| 1010-CV062424125 | 24 | 23.6 | 40 | 16 | 85 | 77 | 8 | 82 | 125 | M24 | 24 | 64 | 15 | PT 1/4 |
| 1010-CV062424160 | 24 | 23.6 | 40 | 16 | 110 | 77 | 33 | 82 | 160 | M24 | 24 | 64 | 15 | PT 1/4 |
| 1010-CV062428125 | 28 | 27.6 | 44 | 18 | 85 | 77 | 8 | 82 | 125 | M24 | 24 | 64 | 15 | PT 1/4 |
| 1010-CV062428160 | 28 | 27.6 | 44 | 18 | 110 | 77 | 33 | 82 | 160 | M24 | 24 | 64 | 15 | PT 1/4 |
| 1010-CV102727160 | 27 | 26.6 | 46 | 18 | 110 | 83 | 27 | 99 | 160 | M27 | 27 | 78 | 15 | PT 1/4 |
| 1010-CV102727200 | 27 | 26.6 | 46 | 18 | 125 | 83 | 42 | 99 | 200 | M27 | 27 | 78 | 15 | PT 1/4 |
| 1010-CV102732160 | 32 | 31.6 | 50 | 20 | 110 | 83 | 27 | 99 | 160 | M27 | 27 | 78 | 15 | PT 1/4 |
| 1010-CV102732200 | 32 | 31.6 | 50 | 20 | 125 | 83 | 42 | 99 | 200 | M27 | 27 | 78 | 15 | PT 1/4 |
| 1010-CV103036160 | 36 | 35.6 | 56 | 23 | 110 | 83 | 27 | 99 | 160 | M30 | 30 | 88 | 15 | PT 1/4 |
| 1010-CV103036200 | 36 | 35.6 | 56 | 23 | 135 | 83 | 52 | 99 | 200 | M30 | 30 | 88 | 15 | PT 1/4 |
| 1010-CV103036250 | 36 | 35.6 | 56 | 23 | 150 | 83 | 67 | 99 | 250 | M30 | 30 | 88 | 15 | PT 1/4 |



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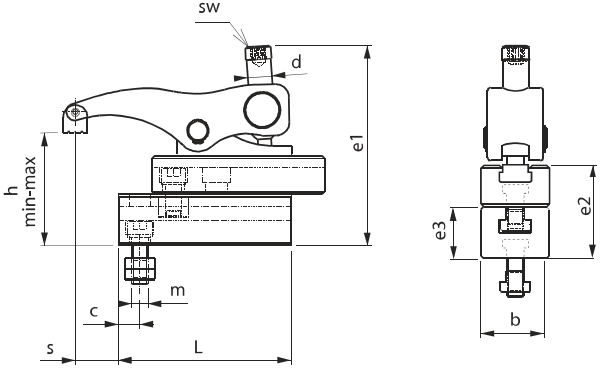
## 1120/1130 - Kızaklı Kombine Bağlama Pabucu

| Sipariş | a | m | h min | h max | s | s1 | e1 | d | sw | L | e | b | c | Sıkma Kuvveti kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1120-014 T | 14 | M12 | 0 | 50 | 12-66 | 25 | 100 | M14 | 8 | 104 | 35.5 | 38 | 13 | 1600 | 1700 |
| 1120-016 T | 16 | M12 | 0 | 50 | 12-66 | 25 | 100 | M14 | 8 | 104 | 35.5 | 38 | 13 | 1600 | 1700 |
| 1120-018 T | 18 | M12 | 0 | 50 | 12-66 | 25 | 100 | M14 | 8 | 104 | 35.5 | 38 | 13 | 1600 | 1700 |
| 1130-014 T | 14 | M12 | 0 | 60 | 15-83 | 30 | 113 | M18 | 10 | 130 | 39 | 48 | 17.5 | 2000 | 3040 |
| 1130-016 T | 16 | M12 | 0 | 60 | 15-83 | 30 | 113 | M18 | 10 | 130 | 39 | 48 | 17.5 | 2000 | 3055 |
| 1130-018 T | 18 | M12 | 0 | 60 | 15-83 | 30 | 113 | M18 | 10 | 130 | 39 | 48 | 17.5 | 2000 | 3085 |
| 1130-020 T | 20 | M12 | 0 | 60 | 15-83 | 30 | 113 | M18 | 10 | 130 | 39 | 48 | 17.5 | 2000 | 3135 |
| 1130-022 T | 22 | M12 | 0 | 60 | 15-83 | 30 | 113 | M18 | 10 | 130 | 39 | 48 | 17.5 | 2000 | 3150 |



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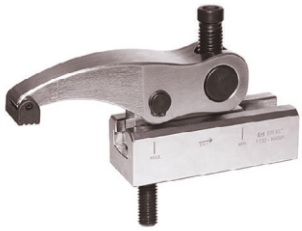
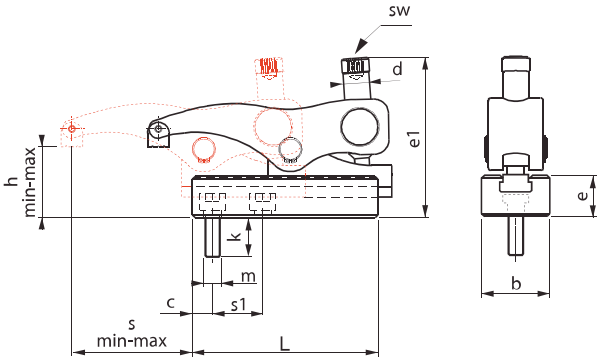
## 1120/1130 - Kızaklı Kombine Bağlama Pabucu

| Sipariş | a | m | h min | h max | s | e1 | e2 | d | sw | L | b | e3 | c | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1120-014 DT | 14 | M12 | 36 | 86 | 12-66 | 136 | 71.5 | M14 | 8 | 104 | 38 | 38 | 13 | 2540 |
| 1120-016 DT | 16 | M12 | 36 | 86 | 12-66 | 136 | 71.5 | M14 | 8 | 104 | 38 | 38 | 13 | 2540 |
| 1120-018 DT | 18 | M12 | 36 | 86 | 12-66 | 136 | 71.5 | M14 | 8 | 104 | 38 | 38 | 13 | 2540 |
| 1130-014 DT | 14 | M12 | 45 | 105 | 15-83 | 158 | 83 | M18 | 10 | 130 | 48 | 45 | 17.5 | 4750 |
| 1130-016 DT | 16 | M12 | 45 | 105 | 15-83 | 158 | 83 | M18 | 10 | 130 | 48 | 45 | 17.5 | 4775 |
| 1130-018 DT | 18 | M12 | 45 | 105 | 15-83 | 158 | 83 | M18 | 10 | 130 | 48 | 45 | 17.5 | 4805 |
| 1130-020 DT | 20 | M12 | 45 | 105 | 15-83 | 158 | 83 | M18 | 10 | 130 | 48 | 45 | 17.5 | 4855 |
| 1130-022 DT | 22 | M12 | 45 | 105 | 15-83 | 158 | 83 | M18 | 10 | 130 | 48 | 45 | 17.5 | 4905 |



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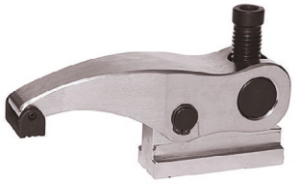
## 1120/1130 - Kızaklı Kombine Bağlama Pabucu

| Sipariş | a | h min | h max | s | s1 | e1 | d | sw | L | e | b | c | k | Sıkma Kuvveti Kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1120-010 M | M10 | 0 | 50 | 12-66 | 25 | 100 | M14 | 8 | 104 | 35.5 | 38 | 13 | 20 | 1600 | 1700 |
| 1120-012 M | M12 | 0 | 50 | 12-66 | 25 | 100 | M14 | 8 | 104 | 35.5 | 38 | 13 | 20 | 1600 | 1700 |
| 1130-012 M | M12 | 0 | 60 | 15-83 | 30 | 113 | M18 | 10 | 130 | 39 | 48 | 17.5 | 22 | 2000 | 3000 |
| 1130-016 M | M16 | 0 | 60 | 15-83 | 30 | 113 | M18 | 10 | 130 | 39 | 48 | 17.5 | 26 | 2000 | 3030 |



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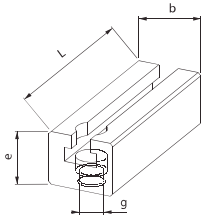
## 1120/1130 - Üst Kızak Grubu

| Sipariş | a | h min | h max | sw | | (g) |
|---|---|---|---|---|---|---|
| 1120-0050 | 14-18 | 0 | 50 | 8 | - | 860 |
| 1120-0051 | 14-18 | 0 | 50 | 8 | - | 1050 |
| 1130-0060 | 14-22 | 0 | 60 | 10 | - | 1680 |
| 1130-0061 | 14-22 | 0 | 60 | 10 | - | 2150 |
| 1150-0062 | 18-28 | 0 | 65 | 12 | - | 2565 |
| 1150-0063 | 18-28 | 0 | 65 | 12 | - | 3360 |
| 1160-2080 | 22-36 | 20 | 80 | 12 | 24 | 5050 |
| 1160-2081 | 22-36 | 20 | 80 | 12 | 24 | 6900 |
| 1165-3080 | 22-36 | 20 | 80 | - | 24 | 6850 |



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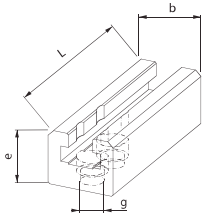
## Alt Destek

1130
1150
1160

| Sipariş | g | a | L | b | e | (g) |
|---|---|---|---|---|---|---|
| 1130-045 | M12<br>M16 | 14 | 130 | 48 | 45 | 1630 |
| 1150-048 | M16<br>M18<br>M20 | 18 | 140 | 55 | 48 | 2070 |
| 1160-059 | M20<br>M22<br>M24 | 28 | 178 | 74 | 59 | 3980 |



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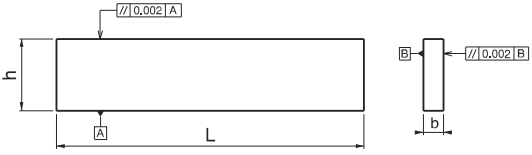
## 'T' Kızaklı Gövde

1130
1150
1160

| Sipariş | g | a | L | b | e | (g) |
|---|---|---|---|---|---|---|
| 1130-047 | M12<br>M16 | 18-28 | 130 | 48 | 39 | 1275 |
| 1150-053 | M16<br>M18<br>M20 | 18-28 | 140 | 55 | 42 | 1700 |
| 1160-074 | M20<br>M22<br>M24 | 22-28 | 178 | 74 | 55 | 3650 |



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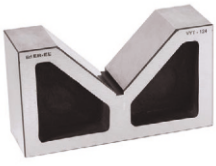
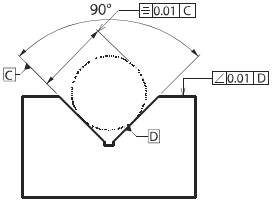
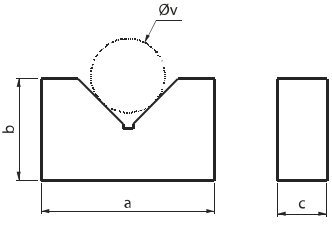
**2230 - Paralel Set**

| Sipariş | h x b x L | tolerans h | tolerans b | (kg) | Adet |
|---|---|---|---|---|---|
| 2230-028 | 14x10x150 | ±0.01 | ±0.01 | 10.8 | 2 |
| | 16x10x150 | | | | 2 |
| | 18x10x150 | | | | 2 |
| | 20x10x150 | | | | 2 |
| | 22x10x150 | | | | 2 |
| | 24x10x150 | | | | 2 |
| | 26x10x150 | | | | 2 |
| | 28x10x150 | | | | 2 |
| | 30x10x150 | | | | 2 |
| | 32x10x150 | | | | 2 |
| | 35x10x150 | | | | 2 |
| | 40x10x150 | | | | 2 |
| | 45x10x150 | | | | 2 |
| | 50x10x150 | | | | 2 |



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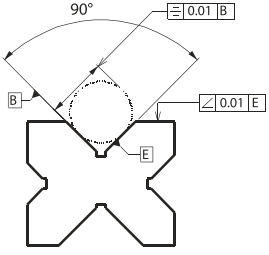
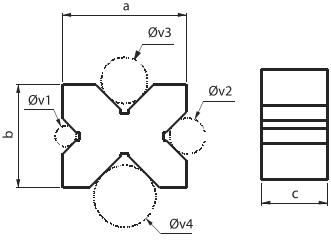
**2270 - V-Yatak**

| Sipariş | a | b | c | Øv min | Øv max | (g) |
|---|---|---|---|---|---|---|
| 2270-140 | 140 | 82 | 40 | 20 | 110 | 1980 |
| 2270-204 | 204 | 115 | 66 | 15 | 150 | 6150 |



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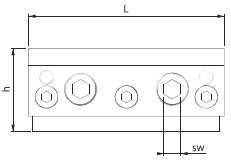
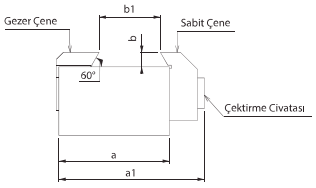
**2290 - XV Yatak**

| Sipariş | a | b | c | Øv1 min | Øv1 max | Øv2 min | Øv2 max | Øv3 min | Øv3 max | Øv4 min | Øv4 max |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2290-120 | 120 | 100 | 60 | 12 | 40 | 12 | 60 | 12 | 75 | 12 | 90 |
| 2290-150 | 152 | 132 | 74 | 15 | 80 | 15 | 95 | 15 | 110 | 15 | 120 |



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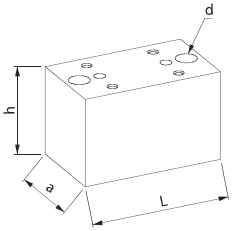
## 2295 - CNC 5 Eksen Parça Bağlama Aparatı

| Sipariş | L | h | a | a1 | b | b1 | sw | (g) |
|---|---|---|---|---|---|---|---|---|
| 2295-090 | 90 | 39 | 55 | 73 | 7 | 21-35 | 8 | 1480 |
| 2295-115 | 115 | 49 | 65 | 82.5 | 8.5 | 31-42 | 10 | 2690 |
| 2295-130 | 130 | 56 | 75 | 98 | 10 | 37-48 | 12 | 4160 |



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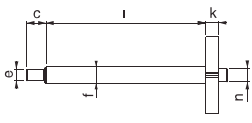
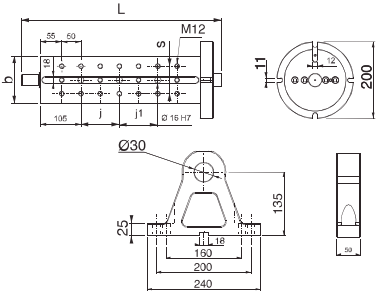
## 2297 - CNC 5 Eksen Parça Bağlama Takozu

| Sipariş | a | h | L | d | (g) |
|---|---|---|---|---|---|
| 2297-090 | 55 | 58 | 87 | M10 | 2110 |
| 2297-115 | 65 | 68 | 110 | M12 | 3750 |
| 2297-130 | 75 | 80 | 126.5 | M12 | 5830 |



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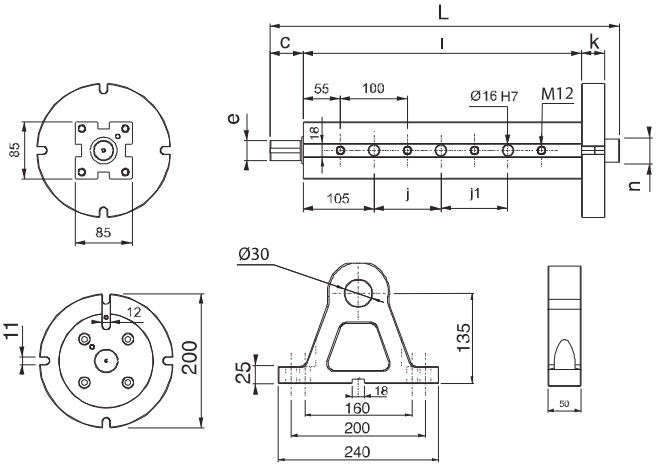
## 2450 - Divizör Kulesi

| Sipariş | L | ı | f | n | b | k | c | e | s | Ø16H7 j | Ø16H7 j1 | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2450-415L | 503.5 | 415 | 45 | - | 125 | 35 | 31 | 30 | 72 | 100 | 100 | 29.25 |
| 2450-615L | 703.5 | 615 | 50 | - | 160 | 35 | 31 | 30 | 90 | 100 | 300 | 46.75 |



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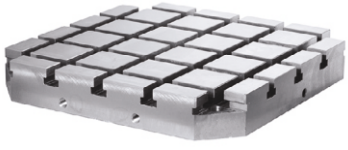
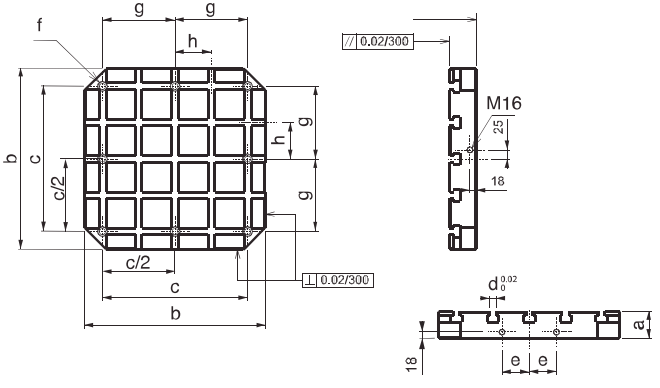
## 2470 - Divizör Kulesi

| Sipariş | L | ı | n | k | e | c | Ø16H7 j | Ø16H7 j1 | (kg) |
|---|---|---|---|---|---|---|---|---|---|
| 2470-415K | 502 | 415 | - | 35 | 30 | 31 | 100 | 100 | 33 |
| 2470-615K | 702 | 615 | - | 35 | 30 | 31 | 100 | 300 | 42 |



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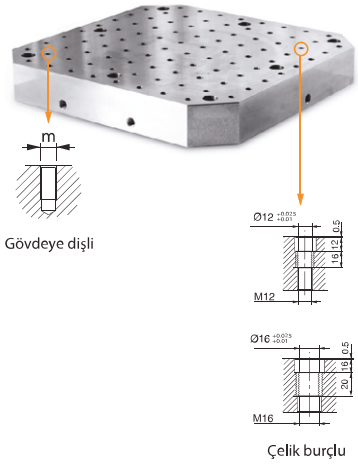
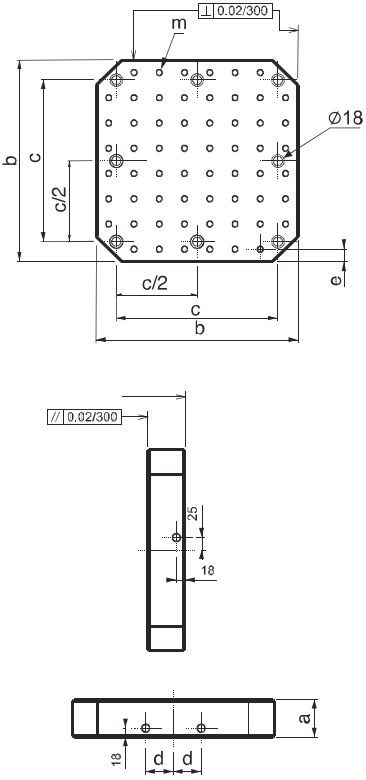
## 2490 - CNC Yatay İşleme Tablası T-Kanallı

| Sipariş | a ±0.02 | b | c | d | e | f | g | h ±0.02 | (kg) |
|---|---|---|---|---|---|---|---|---|---|
| 2490-7540014 | 75 | 400 | 320 | 14 | 55 | 18 | 160 | 80 | 71 |
| 2490-7550014 | 75 | 500 | 400 | 14 | 75 | 18 | 200 | 100 | 115 |
| 2490-7563014 | 75 | 630 | 500 | 14 | 100 | 18 | 250 | 125 | 188 |
| 2490-7540018 | 75 | 400 | 320 | 18 | 55 | 18 | 160 | 80 | 65 |
| 2490-7550018 | 75 | 500 | 400 | 18 | 75 | 18 | 200 | 100 | 107 |
| 2490-7563018 | 75 | 630 | 500 | 18 | 100 | 18 | 250 | 125 | 178 |

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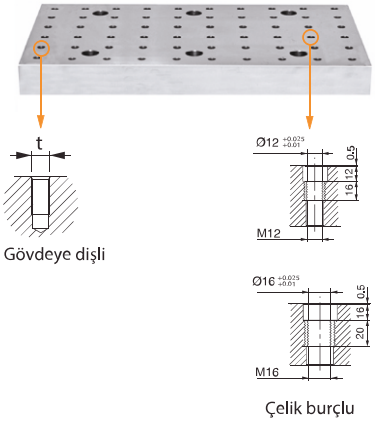
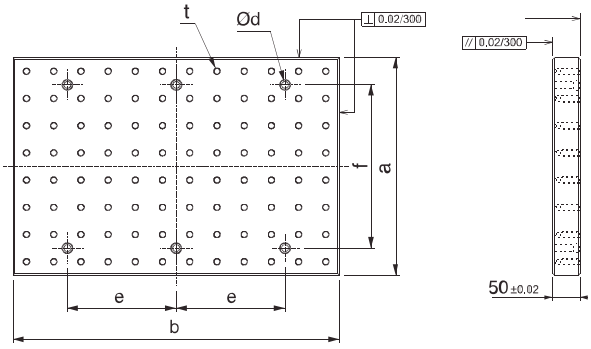
## 2510 - CNC Yatay İşleme Tablası (Gövdeye Dişli)

| Sipariş | a ±0.02 | b | c | d | e | m | (kg) |
|---|---|---|---|---|---|---|---|
| 2510-7540012 | 75 | 400 | 320 | 55 | 25 | M12 | 80 |
| 2510-7550012 | 75 | 500 | 400 | 75 | 25 | M12 | 127 |
| 2510-7563012 | 75 | 630 | 500 | 100 | 40 | M12 | 204 |
| 2510-7540016 | 75 | 400 | 320 | 55 | 25 | M16 | 79 |
| 2510-7550016 | 75 | 500 | 400 | 75 | 25 | M16 | 125 |
| 2510-7563016 | 75 | 630 | 500 | 100 | 40 | M16 | 200 |
| 2520-7540012 | 75 | 400 | 320 | 55 | 25 | M12 | 80 |
| 2520-7550012 | 75 | 500 | 400 | 75 | 25 | M12 | 127 |
| 2520-7563012 | 75 | 630 | 500 | 100 | 40 | M12 | 204 |
| 2520-7540016 | 75 | 400 | 320 | 55 | 25 | M16 | 79 |
| 2520-7550016 | 75 | 500 | 400 | 75 | 25 | M16 | 125 |
| 2520-7563016 | 75 | 630 | 500 | 100 | 40 | M16 | 200 |

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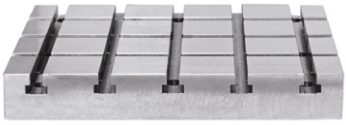
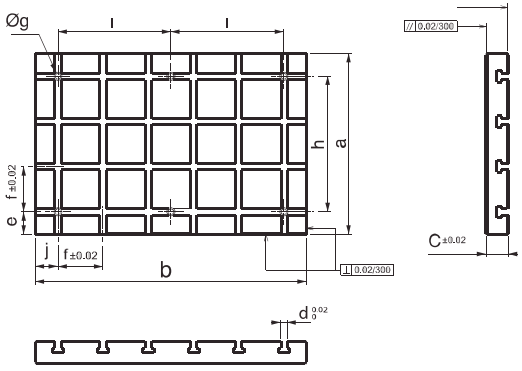
## 2530 - CNC Dik İşleme Pleyti (Gövdeye Dişli)

| Sipariş | a | b | Ød | e | f | t | (kg) |
|---|---|---|---|---|---|---|---|
| 2530-040012 | 400 | 600 | 18 | - | - | M12 | 73 |
| 2530-050012 | 500 | 600 | 18 | - | - | M12 | 112 |
| 2530-060012 | 600 | 800 | 18 | - | - | M12 | 162 |
| 2530-140012 | 400 | 800 | 18 | - | - | M12 | 119 |
| 2530-145012 | 450 | 900 | 18 | - | - | M12 | 151 |
| 2530-150012 | 500 | 1000 | 18 | - | - | M12 | 173 |
| 2530-040016 | 400 | 600 | 18 | - | - | M16 | 87 |
| 2530-050016 | 500 | 600 | 18 | - | - | M16 | 108 |
| 2530-060016 | 600 | 800 | 18 | - | - | M16 | 155 |
| 2530-140016 | 400 | 800 | 18 | - | - | M16 | 115 |
| 2530-145016 | 450 | 900 | 18 | - | - | M16 | 146 |
| 2530-150016 | 500 | 1000 | 18 | - | - | M16 | 171 |
| 2540-040012 | 400 | 600 | 18 | - | - | M12 | 73 |
| 2540-050012 | 500 | 600 | 18 | - | - | M12 | 112 |
| 2540-060012 | 600 | 800 | 18 | - | - | M12 | 162 |
| 2540-140012 | 400 | 800 | 18 | - | - | M12 | 119 |
| 2540-145012 | 450 | 900 | 18 | - | - | M12 | 151 |
| 2540-150012 | 500 | 1000 | 18 | - | - | M12 | 173 |
| 2540-040016 | 400 | 600 | 18 | - | - | M16 | 87 |
| 2540-050016 | 500 | 600 | 18 | - | - | M16 | 108 |
| 2540-060016 | 600 | 800 | 18 | - | - | M16 | 155 |
| 2540-140016 | 400 | 800 | 18 | - | - | M16 | 115 |
| 2540-145016 | 450 | 900 | 18 | - | - | M16 | 146 |
| 2540-150016 | 500 | 1000 | 18 | - | - | M16 | 171 |



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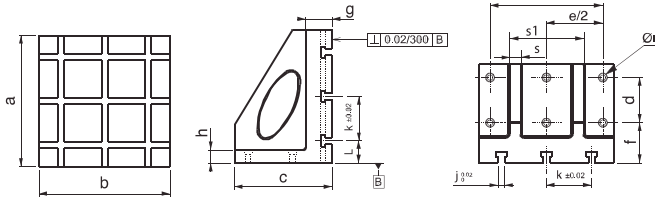
## 2550 - CNC Dik İşleme Pleyti
## T-Kanallı

| Sipariş | a | b | c | d | e | f | Ø g | h | ı | j | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2550-040014 | 400 | 600 | 60 | 14 | 50 | 100 | 18 | - | - | 50 | 90 |
| 2550-050014 | 500 | 600 | 60 | 14 | 50 | 100 | 18 | - | - | 50 | 115 |
| 2550-060014 | 600 | 800 | 60 | 14 | 50 | 100 | 18 | - | - | 50 | 198 |
| 2550-140014 | 400 | 800 | 60 | 14 | 50 | 100 | 18 | - | - | 50 | 120 |
| 2550-145014 | 450 | 900 | 60 | 14 | 75 | 100 | 18 | - | - | 50 | 162 |
| 2550-150014 | 500 | 1000 | 60 | 14 | 50 | 100 | 18 | - | - | 50 | 199 |
| 2550-040018 | 400 | 600 | 75 | 18 | 50 | 100 | 18 | - | - | 50 | 108 |
| 2550-050018 | 500 | 600 | 75 | 18 | 50 | 100 | 18 | - | - | 50 | 135 |
| 2550-060018 | 600 | 800 | 75 | 18 | 50 | 100 | 18 | - | - | 50 | 216 |
| 2550-140018 | 400 | 800 | 75 | 18 | 50 | 100 | 18 | - | - | 50 | 143 |
| 2550-145018 | 450 | 900 | 75 | 18 | 75 | 100 | 18 | - | - | 50 | 183 |
| 2550-150018 | 500 | 1000 | 75 | 18 | 50 | 100 | 18 | - | - | 50 | 225 |



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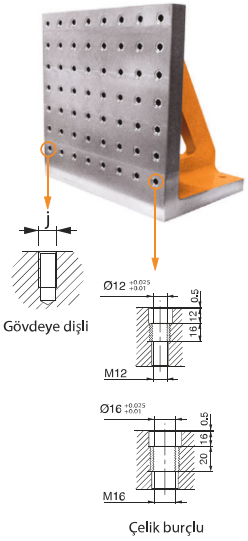
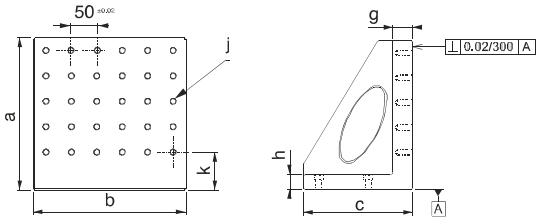
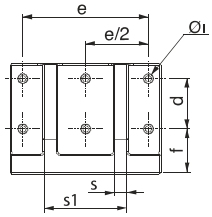
## 2590 - L Gönye

| Sipariş | a | b | c | d | e | f | g | h | Øı | j | k | L | s | s1 | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2590-30014 | 300 | 300 | 220 | 100 | 250 | 90 | 60 | 30 | 18 | 14 | 100 | 50 | 25 | 170 | 50 |
| 2590-40014 | 400 | 400 | 300 | 160 | 320 | 90 | 60 | 30 | 18 | 14 | 100 | 50 | 30 | 240 | 100 |
| 2590-50014 | 500 | 500 | 350 | 200 | 400 | 90 | 60 | 35 | 18 | 14 | 100 | 50 | 35 | 300 | 185 |
| 2590-63014 | 630 | 630 | 450 | 250 | 500 | 100 | 65 | 40 | 18 | 14 | 125 | 65 | 40 | 360 | 315 |
| 2590-30018 | 300 | 300 | 220 | 100 | 250 | 90 | 60 | 30 | 18 | 18 | 100 | 50 | 25 | 170 | 50 |
| 2590-40018 | 400 | 400 | 300 | 160 | 320 | 90 | 60 | 30 | 18 | 18 | 100 | 50 | 30 | 240 | 98 |
| 2590-50018 | 500 | 500 | 350 | 200 | 400 | 90 | 60 | 35 | 18 | 18 | 100 | 50 | 35 | 300 | 174 |
| 2590-63018 | 630 | 630 | 450 | 250 | 500 | 100 | 65 | 40 | 18 | 18 | 125 | 65 | 40 | 360 | 286 |

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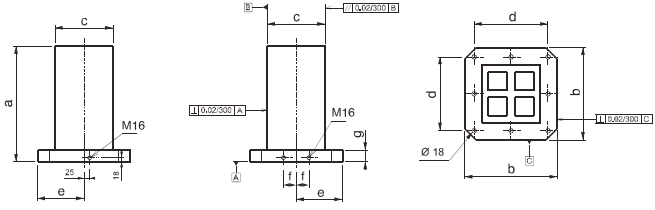
## 2570/2575 - L Gönye (Çelik Burçlu)

| Sipariş | a | b | c | d | e | f | g | h | Øı | j | k | s | s1 | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2570-30012 | 300 | 300 | 220 | 100 | 250 | 90 | 40 | 30 | 18 | M12 | 75 | 25 | 170 | 50 |
| 2570-40012 | 400 | 400 | 280 | 160 | 320 | 90 | 40 | 30 | 18 | M12 | 75 | 30 | 240 | 88 |
| 2570-50012 | 500 | 500 | 345 | 200 | 400 | 90 | 50 | 35 | 18 | M12 | 75 | 35 | 300 | 175 |
| 2570-63012 | 630 | 630 | 435 | 250 | 500 | 100 | 50 | 40 | 18 | M12 | 105 | 40 | 360 | 298 |
| 2570-30016 | 300 | 300 | 220 | 100 | 250 | 90 | 40 | 30 | 18 | M16 | 75 | 25 | 170 | 45 |
| 2570-40016 | 400 | 400 | 280 | 160 | 320 | 90 | 40 | 30 | 18 | M16 | 75 | 30 | 240 | 84 |
| 2570-50016 | 500 | 500 | 345 | 200 | 400 | 90 | 50 | 35 | 18 | M16 | 75 | 35 | 300 | 170 |
| 2570-63016 | 630 | 630 | 435 | 250 | 500 | 100 | 50 | 40 | 18 | M16 | 105 | 40 | 360 | 293 |
| 2575-30012 | 300 | 300 | 220 | 100 | 250 | 90 | 40 | 30 | 18 | M12 | 75 | 25 | 170 | 50 |
| 2575-40012 | 400 | 400 | 280 | 160 | 320 | 90 | 40 | 30 | 18 | M12 | 75 | 30 | 240 | 88 |
| 2575-50012 | 500 | 500 | 345 | 200 | 400 | 90 | 50 | 35 | 18 | M12 | 75 | 35 | 300 | 175 |
| 2575-63012 | 630 | 630 | 435 | 250 | 500 | 100 | 50 | 40 | 18 | M12 | 105 | 40 | 360 | 298 |
| 2575-30016 | 300 | 300 | 220 | 100 | 250 | 90 | 60 | 30 | 18 | M16 | 75 | 25 | 170 | 60 |
| 2575-40016 | 400 | 400 | 280 | 160 | 320 | 90 | 60 | 30 | 18 | M16 | 75 | 30 | 240 | 111 |
| 2575-50016 | 500 | 500 | 345 | 200 | 400 | 90 | 60 | 35 | 18 | M16 | 75 | 35 | 300 | 176 |
| 2575-63016 | 630 | 630 | 435 | 250 | 500 | 100 | 65 | 40 | 18 | M16 | 105 | 40 | 360 | 313 |



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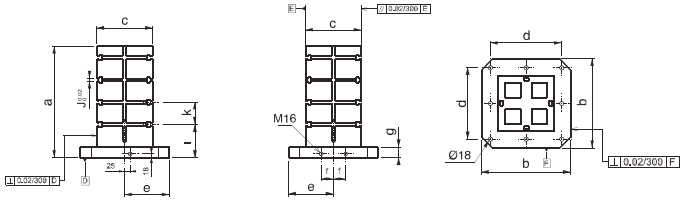
## 2610 - CNC Yatay İşleme Kulesi (Kare)

| Sipariş | a | b | c | d | e | f | g | (kg) |
|---|---|---|---|---|---|---|---|---|
| 2610-400250 | 500 | 400 | 250 | 320 | 200 | 55 | 50 | 180 |
| 2610-500300 | 600 | 500 | 300 | 400 | 250 | 75 | 50 | 240 |
| 2610-630350 | 700 | 630 | 350 | 500 | 315 | 100 | 50 | 390 |



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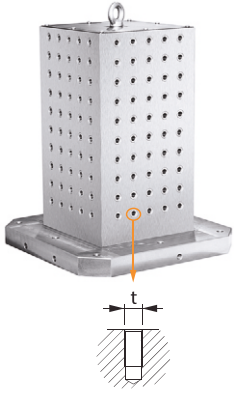
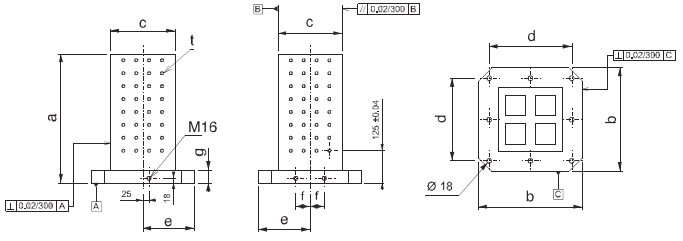
## 2630 - CNC Yatay İşleme Kulesi (Kare) T-Kanallı

| Sipariş | a | b | c | d | e | f | g | ı | k | J | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2630-40025014 | 500 | 400 | 250 | 320 | 200 | 55 | 50 | 150 | 100 | 14 | 165 |
| 2630-50030014 | 600 | 500 | 300 | 400 | 250 | 75 | 50 | 150 | 100 | 14 | 227 |
| 2630-63035014 | 700 | 630 | 350 | 500 | 315 | 100 | 50 | 150 | 125 | 14 | 375 |
| 2630-40025018 | 500 | 400 | 250 | 320 | 200 | 55 | 50 | 150 | 100 | 18 | 155 |
| 2630-50030018 | 600 | 500 | 300 | 400 | 250 | 75 | 50 | 150 | 100 | 18 | 223 |
| 2630-63035018 | 700 | 630 | 350 | 500 | 315 | 100 | 50 | 150 | 125 | 18 | 370 |




Gövdeye dişli

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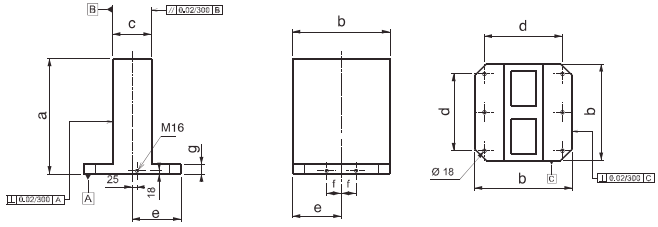
## 2650 - CNC Yatay İşleme Kulesi Kare (Gövdeye Dişli)

| Sipariş | a | b | c | d | e | f | g | t | (kg) |
|---|---|---|---|---|---|---|---|---|---|
| 2650-40025012 | 500 | 400 | 250 | 320 | 200 | 55 | 50 | M12 | 170 |
| 2650-50030012 | 600 | 500 | 300 | 400 | 250 | 75 | 50 | M12 | 230 |
| 2650-63035012 | 700 | 630 | 350 | 500 | 315 | 100 | 50 | M12 | 380 |
| 2650-40025016 | 500 | 400 | 250 | 320 | 200 | 55 | 50 | M16 | 168 |
| 2650-50030016 | 600 | 500 | 300 | 400 | 250 | 75 | 50 | M16 | 228 |
| 2650-63035016 | 700 | 630 | 350 | 500 | 315 | 100 | 50 | M16 | 376 |



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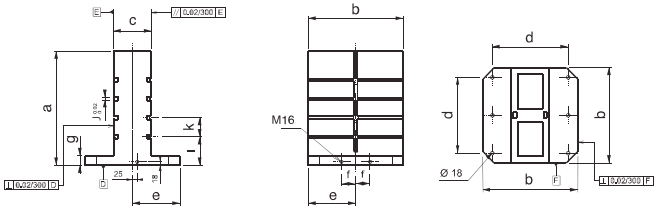
## 2670 - CNC Yatay İşleme Kulesi (Dikdörtgen)

| Sipariş | a | b | c | d | e | f | g | (kg) |
|---|---|---|---|---|---|---|---|---|
| 2670-400150 | 500 | 400 | 150 | 320 | 200 | 55 | 50 | 175 |
| 2670-500200 | 600 | 500 | 200 | 400 | 250 | 75 | 50 | 265 |
| 2670-630250 | 700 | 630 | 250 | 500 | 315 | 100 | 50 | 484 |



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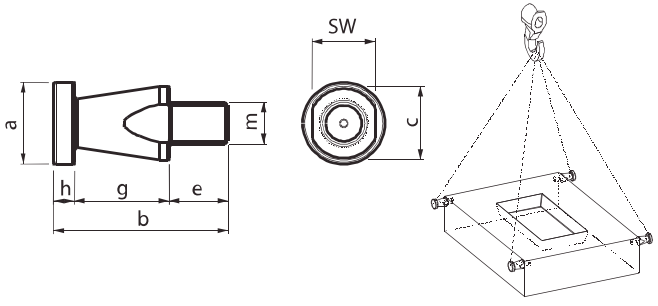
## 2690 - CNC Yatay İşleme Kulesi (Dikdörtgen) T-Kanallı

| Sipariş | a | b | c | d | e | f | g | ı | k (±0.02) | J | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2690-40015014 | 500 | 400 | 150 | 320 | 200 | 55 | 50 | 150 | 100 | 14 | 165 |
| 2690-50020014 | 600 | 500 | 200 | 400 | 250 | 75 | 50 | 150 | 100 | 14 | 240 |
| 2690-63025014 | 700 | 630 | 250 | 500 | 315 | 100 | 50 | 150 | 125 | 14 | 455 |
| 2690-40015018 | 500 | 400 | 150 | 320 | 200 | 55 | 50 | 150 | 100 | 18 | 152 |
| 2690-50020018 | 600 | 500 | 200 | 400 | 250 | 75 | 50 | 150 | 100 | 18 | 238 |
| 2690-63025018 | 700 | 630 | 250 | 500 | 315 | 100 | 50 | 150 | 125 | 18 | 450 |



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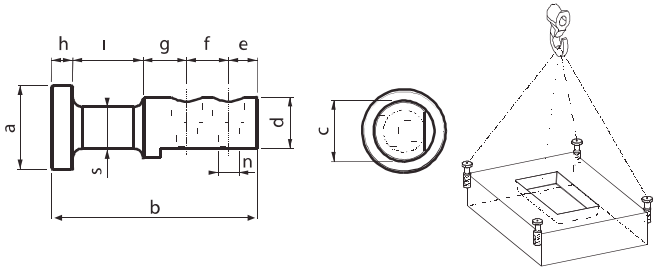
## 2730 - Kalıp Taşıma Mapası

| Sipariş | m | a | b | c | sw | e | g | h | Bir Mapanın Taşıma Kuvveti kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 2730-016 | M16 | 39 | 85 | 35 | 30 | 30 | 45 | 10 | 660 | 370 |
| 2730-020 | M20 | 39 | 85 | 35 | 30 | 30 | 45 | 10 | 1000 | 390 |



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## 2750 - Kalıp Taşıma Mapası

| Sipariş | a | b | c | d | e | f | g | h | ı | n | s | Bir Mapanın Taşıma Kuvveti kgf | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2750-044 | 44 | 108 | 32 | 27 | 15 | 22 | 23 | 11 | 37 | 11 | 22 | 400 | 525 |



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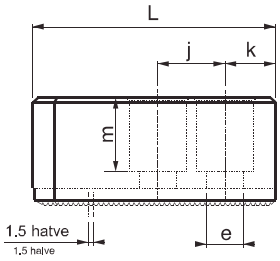
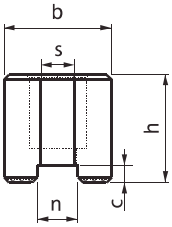
## 2770/2775 - CNC Yumuşak Ayak




| Sipariş | inch | hatve halve | L | b | h | n t7 | c | k | j | e | m | s | Ø min | (g) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2770-0612 | 6" inch | 1.5x60 | 72 | 32 | 32 | 12 | 5 | 15 | 20 | 11 | 22 | 10 | 6.5 | 1460 |
| 2770-0814 | 8" inch | 1.5x60 | 98 | 37 | 37 | 14 | 5 | 24 | 25 | 13 | 22 | 14 | 8.5 | 2785 |
| 2770-1016 | 10" inch | 1.5x60 | 110 | 42 | 42 | 16 | 5 | 30 | 30 | 13 | 29 | 14 | 10 | 4060 |
| 2770-1218 | 12" inch | 1.5x60 | 130 | 50 | 52 | 18 | 5 | 39 | 30 | 15 | 32 | 17 | 12 | 6510 |
| 2770-1221 | 12" inch | 1.5x60 | 130 | 50 | 52 | 21 | 5 | 39 | 30 | 17 | 32 | 19 | 12 | 6575 |
| 2775-0612 | 6" inch | 1.5x60 | 72 | 28 | 37 | 12 | 5 | 15 | 20 | 11 | 17 | 10 | 6.5 | 1415 |
| 2775-0814 | 8" inch | 1.5x60 | 95 | 35 | 67 | 14 | 5 | 24 | 25 | 13 | 19 | 14 | 8.5 | 4465 |
| 2775-1016 | 10" inch | 1.5x60 | 110 | 38 | 77 | 16 | 5 | 30 | 30 | 13 | 19 | 14 | 10 | 6850 |
| 2775-1218 | 12" inch | 1.5x60 | 130 | 48 | 77 | 18 | 5 | 39 | 30 | 15 | 23 | 17 | 12 | 10075 |
| 2775-1221 | 12" inch | 1.5x60 | 130 | 48 | 77 | 21 | 5 | 39 | 30 | 17 | 23 | 19 | 12 | 9600 |



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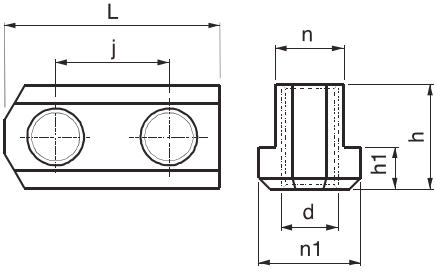
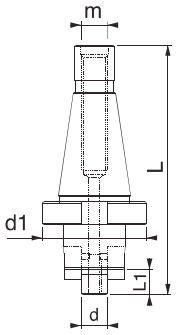
## 2790 - Yumuşak Ayak T-Pabucu




| Sipariş | inch | L | h | n t6 | n1 | h1 | d | j | (g) |
|---|---|---|---|---|---|---|---|---|---|
| 2790-0610 | 6" inch | 38 | 18.5 | 12 | 18 | 7.5 | M10 | 20 | 55 |
| 2790-0812 | 8" inch | 45 | 21.5 | 14 | 21 | 8.5 | M12 | 25 | 85 |
| 2790-1012 | 10" inch | 52 | 21.5 | 16 | 22 | 8.5 | M12 | 30 | 115 |
| 2790-1214 | 12" inch | 55 | 33.5 | 18 | 26.5 | 13.5 | M14 | 30 | 225 |
| 2790-1216 | 12" inch | 55 | 27 | 21 | 29 | 13.5 | M16 | 30 | 210 |



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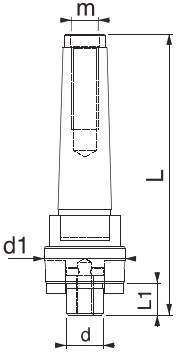
## 2410 - Freze Tarama Başlığı Tutucusu

| Sipariş | ISO | d | d1 | L | L1 | m | (g) |
|---|---|---|---|---|---|---|---|
| 2410-3016 | ISO 30 | 16 | 48 | 125 | 17 | M12 | 665 |
| 2410-3022 | ISO 30 | 22 | 48 | 125 | 19 | M12 | 760 |
| 2410-3027 | ISO 30 | 27 | 48 | 125 | 21 | M12 | 790 |
| 2410-3032 | ISO 30 | 32 | 63.5 | 125 | 22 | M12 | 1020 |
| 2410-4016 | ISO 40 | 16 | 63.5 | 153 | 17 | M16 | 1170 |
| 2410-4027 | ISO 40 | 27 | 63.5 | 153 | 19 | M16 | 1360 |
| 2410-4040 | ISO 40 | 40 | 73.5 | 153 | 27 | M16 | 1795 |
| 2410-5016 | ISO 50 | 16 | 98 | 195 | 17 | M24 | 3250 |
| 2410-5022 | ISO 50 | 22 | 98 | 195 | 19 | M24 | 3350 |
| 2410-5032 | ISO 50 | 32 | 98 | 195 | 24 | M24 | 3590 |



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## 2420 - Freze Tarama Başlığı

| Sipariş | MK | d | d1 | L | L1 | m | (g) |
|---|---|---|---|---|---|---|---|
| 2415-0416 | MK 4 | 16 | 40 | 168 | 17 | M16 | 945 |
| 2415-0422 | MK 4 | 22 | 48 | 168 | 19 | M16 | 1010 |
| 2415-0427 | MK 4 | 27 | 53 | 168 | 21 | M16 | 1135 |
| 2415-0432 | MK 4 | 32 | 63.5 | 168 | 24 | M16 | 1255 |
| 2415-0516 | MK 5 | 16 | 63.5 | 208 | 17 | M20 | 2145 |
| 2415-0522 | MK 5 | 22 | 63.5 | 208 | 19 | M20 | 2375 |
| 2415-0527 | MK 5 | 27 | 63.5 | 208 | 21 | M20 | 2360 |
| 2415-0532 | MK 5 | 32 | 63.5 | 208 | 24 | M20 | 2500 |
| 2415-0540 | MK 5 | 40 | 73.5 | 208 | 27 | M20 | 2700 |



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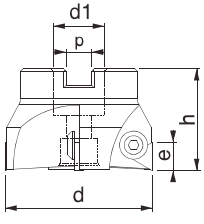
## 2420 - Freze Tarama Başlığı



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### Yedek Baskı Vidası

| Sipariş | d | Metrik | Alyan |
|---|---|---|---|
| 2420-06 | 40-50-63 | M6x0.75 | 4 |
| 2420-08 | 80-100 | M8x1 | 5 |

| Sipariş | d | h | d1 | p | e | | Uç Tipi | (g) |
|---|---|---|---|---|---|---|---|---|
| 2420-0804 | 80 | 52 | 32 | 14.5 | 22 | 4 | TPKN | 800 |
| 2420-1005 | 100 | 52 | 32 | 14.5 | 22 | 5 | TPKN | 1320 |



| Sipariş | J x M | k | h | h1 | e | L | L1 | L2 | (kg) |
|---|---|---|---|---|---|---|---|---|---|
| 2390-010 | ISO30-M12 | 83 | 99 | 35 | 18 | 85<br>95<br>132 | 128 | 26 | 6030 |
| 2390-015 | ISO40-M16 | | | | | | | | 6555 |
| 2390-020 | ISO50-M24 | | | | | | | | 9110 |
| 2390-025 | BT40 -M16 | | | | | | | | 6900 |
| 2390-030 | BT50 - M24 | | | | | | | | 9840 |
| 2390-035 | SK40- M16 | | | | | | | | 6750 |
| 2390-040 | SK50- M24 | | | | | | | | 8970 |
| 2390-045 | MK4 - M16 | | | | | | | | 6180 |
| 2390-050 | MK4 Kamalı | | | | | | | | 6880 |
| 2390-055 | MK5 - M20 | | | | | | | | 7785 |
| 2390-060 | MK5 Kamalı | | | | | | | | 7450 |

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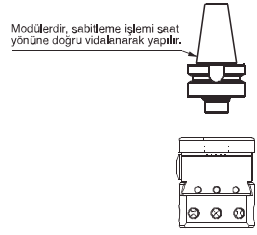
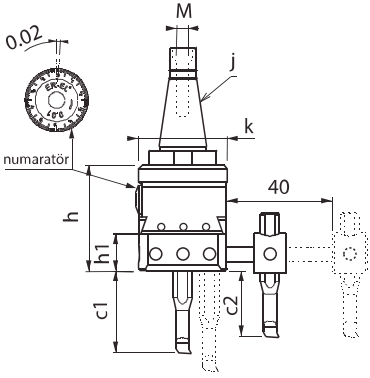
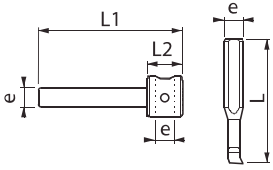
## 2390 - Delik İşleme Apartı

Ürün 0.02 isleme hassasiyetli olup 18mm'den 210mm'ye kadar islem yapabilir.
Modüler sistem olusu kullanım için kolaylık saglar.
Tutucu degistirilerek CNC ve Mekanik tezgahlarda kullanım avantajı saglar.
Ürün, 4 ad. delik barası, 1 ad. T-Kanal temizleyici ile ahsap kutudadır.
Degistirilebilir Tutucular:
ISO-30-40-50 BT40-50 SK40-50 MK4-5 ile kullanım imkanı.

| Sipariş | L | L1 | e | Kesici Uç Tipi | (kg) |
|---|---|---|---|---|---|
| 2395-1 | 85 | - | 18 | DCMT | 112 |
| 2395-2 | 95 | - | 18 | DCMT | 130 |
| 2395-3 | 132 | - | 18 | DCMT | 200 |
| 2395-4 | - | 128 | 18 | - | 360 |




| Ø min | Ø max | c1 | Devir - dk. |
|---|---|---|---|
| 18 | 95 | 50 | 400-450 |
| 18 | 95 | 63 | 400-450 |
| 20 | 100 | 100 | 170-220 |



• Ürünün kızağındaki alt deliklerine baraları takarak 18mm'den 100mm çapa kadar büyütme 0-100mm kadar derinliğe inebilir.

| Ø min | Ø max | c1 | Devir - dk. |
|---|---|---|---|
| 95 | 210 | 55 | 90-170 |
| 95 | 210 | 65 | 90-170 |



• Ürünün kızağındaki yan deliğe ara vasatı takarak, şekilde görüldüğü gibi 95mm'den - 210mm çapa kadar büyütme, 0-65mm kadar derinliğe inebilir



| Sipariş | d | d1 | h | h1 | L | (kg) |
|---|---|---|---|---|---|---|
| 2385-130 | 48 | 32 | 91 | 60 | 151 | 3.05 |

• Ürün 0.01 isleme hassasiyetli olup 9mm'den 130mm çapa 145 mm derinlige islem yapabilir degistirilebilir bara ve kartus özelligi ile mükemmel kullanıma sahiptir.

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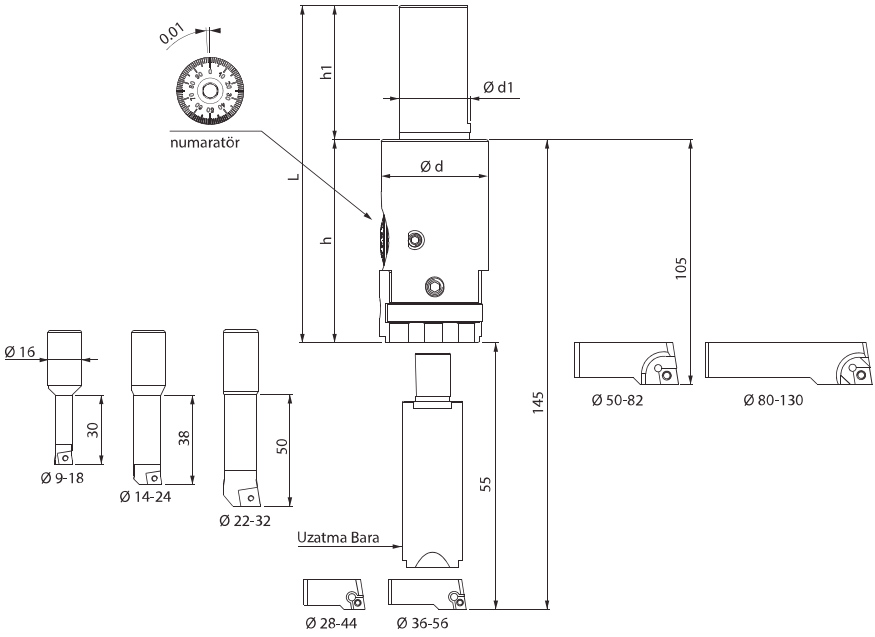
## 2385 - Hassas Delik İşleme Aparatı




| Sipariş | Cinsi | Uç Tipi | Devir | İlerleme | ap |
|---|---|---|---|---|---|
| 2386-00918 | 09-18 Bara | CCMT 06 | 2700 d/dk. | F 75 | 0.1 - 0.5 mm |
| 2386-01424 | 14-24 Bara | CCMT 06 | 2500 d/dk. | F 75 | 0.1 - 0.5 mm |
| 2386-02232 | 22-32 Bara | CCMT 09 | 2000 d/dk. | F 50 | 0.1 - 1 mm |
| 2386-02844 | 28-44 Kartus | CCMT 06 | 1800 d/dk. | F 60 | 0.1 - 1 mm |
| 2386-03656 | 36-56 Kartus | CCMT 06 | 1500 d/dk. | F 65 | 0.1 - 1.5 mm |
| 2386-05082 | 50-82 Kartus | CCMT 09 | 1500 d/dk. | F 70 | 0.1 - 2 mm |
| 2386-80130 | 80-130 Kartus | CCMT 09 | 360 d/dk. | F 75 | 2 mm |
| 2386-00055 | Uzatma Bara | - | 400 d/dk. | F 75 | 1.5 mm |



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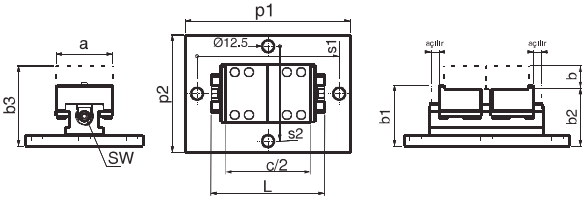
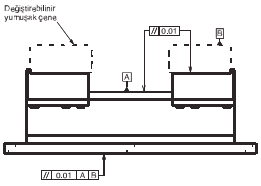
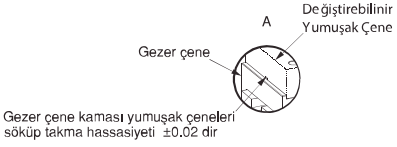
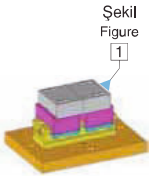
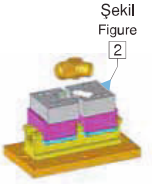
## 2310 - Çift Açılır Çelik Mengene

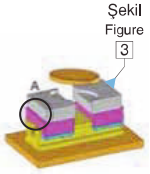


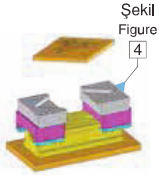



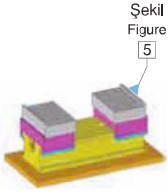



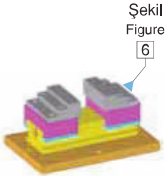



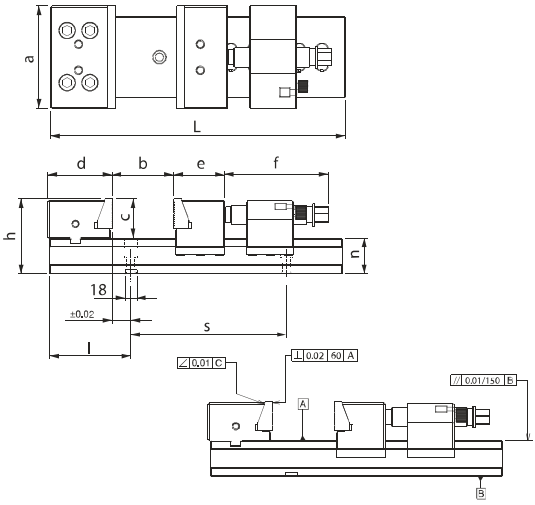




| Sipariş | a | L | c/2 | Açılır 2 x mm | İş Bağlama Kapasitesi | b | b1 | b2 ±0,02 | b3 | p1 | p2 | s1 | s2 | Sıkma Kuvveti | sw | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2310-060 | 60 | 120 | 90 | 20 | 120 mm | 23.5 | 70.5 | 67.5 | 91 | 174 | 124 | 150 | 100 | 1000 Kgf | 9 | 7 |
| 2310-078 | 78 | 182 | 130 | 30 | 180 mm | 33 | 97 | 93 | 126 | 224 | 124 | 200 | 100 | 1600 Kgf | 12 | 14 |
| 2310-100 | 100 | 220 | 154 | 38 | 220 mm | 35 | 99 | 95 | 130 | 274 | 174 | 250 | 150 | 1600 Kgf | 12 | 22 |
| 2310-125 | 125 | 260 | 174 | 47 | 260 mm | 38 | 108 | 103 | 141 | 324 | 174 | 300 | 150 | 2200 Kgf | 14 | 335 |
| 2310-157 | 157 | 350 | 208 | 75 | 350 mm | 46 | 123 | 118 | 164 | 424 | 224 | 400 | 200 | 2200 Kgf | 17 | 65 |



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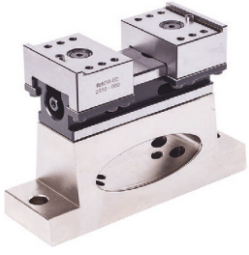
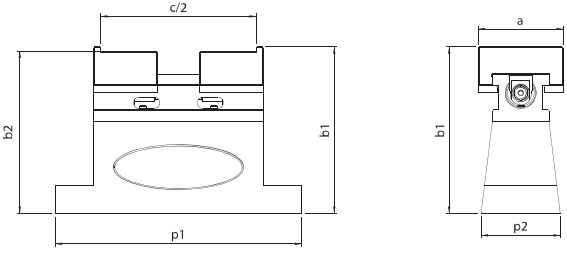
## 2330 - Mekanik Çelik Mengene

| Sipariş | a | b | c | L | d | e | f | h | ı | n | s | Sıkma Kuvveti kg | Tork Değeri (N-m) | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2330-127160 | 127 | 0-160 | 60 | 422 | 99 | 78 | 160 | 115 | 125 | 55 | 200 | 4500 | 170 | 28 |
| 2330-157200 | 157 | 0-200 | 60 | 462 | 99 | 78 | 160 | 115 | 150 | 55 | 200 | 4500 | 170 | 46 |
| 2330-157300 | 157 | 0-300 | 60 | 562 | 99 | 78 | 160 | 115 | 150 | 55 | 250 | 4500 | 170 | 51 |
| 2330-197300 | 197 | 0-300 | 60 | 562 | 99 | 78 | 160 | 115 | 150 | 55 | 250 | 4500 | 170 | 66 |
| 2330-197400 | 197 | 0-400 | 60 | 662 | 99 | 78 | 160 | 115 | 150 | 55 | 350 | 4500 | 170 | 73 |
| 2330-197500 | 197 | 0-500 | 60 | 762 | 99 | 78 | 160 | 115 | 150 | 55 | 250/250 | 4500 | 170 | 80 |
| 2330-197600 | 197 | 0-600 | 60 | 862 | 99 | 78 | 160 | 115 | 150 | 55 | 250-250 | 4500 | 170 | 86 |



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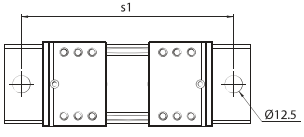
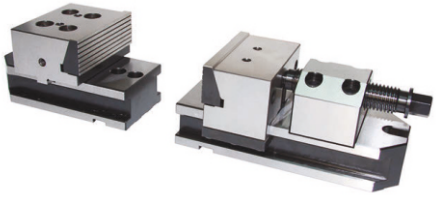
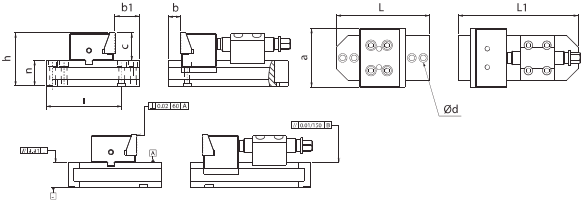
## 2315 - Çift Açılır 5-Eksen Mengene




| Sipariş | a | L | c/2 | Açılır 2 x mm | b1 | b2 ±0,02 | p1 | p2 | s1 | Sıkma Kuvveti | Tork Değeri (N-m) | SW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2315-060 | 60 | 120 | 90 | 20 | 117.5 | 114.5 | 174 | 56 | 150 | 800 | 45 | 9 |
| 2315-078 | 78 | 180 | 130 | 30 | 159 | 155 | 224 | 73.5 | 200 | 1500 | 110 | 12 |
| 2315-100 | 100 | 220 | 154 | 38 | 159 | 155 | 274 | 95 | 250 | 1500 | 110 | 12 |



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## 2345 - Modüler Mekanik Çelik Mengene

| Sipariş | a | L | L1 | b1 | b | c | h | ı | n | Ød | Sıkma kgf | Tork (N-m) | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2345-127 | 127 | 202 | 260 | 53 | 0-58 | 60 | 115 | 163.5 | 55 | 12.5 | 4500 | 170 | 28 |



## 2333 - Yedek Parça

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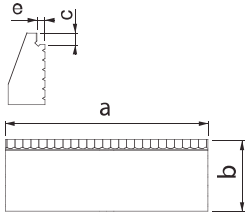
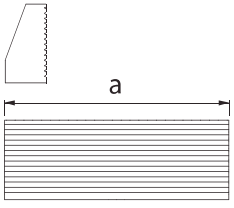



| Sipariş | a | b | c | d | e | f | (g) |
|---|---|---|---|---|---|---|---|
| 2333-127 | 127 | 45 | 7 | - | 5 | - | 760 |
| 2333-157 | 157 | 45 | 7 | - | 5 | - | 935 |
| 2333-197 | 197 | 45 | 7 | - | 5 | - | 1180 |



## 2334- Yedek Parça

ER-EL




| Sipariş | a | b | c | d | e | f | (g) |
|---|---|---|---|---|---|---|---|
| 2334-127 | 127 | 45 | 7 | - | 5 | - | 760 |
| 2334-157 | 157 | 45 | 7 | - | 5 | - | 935 |
| 2334-197 | 197 | 45 | 7 | - | 5 | - | 1180 |



## 2335 - Yedek Parça

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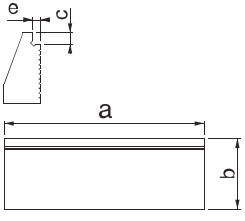
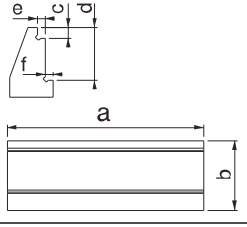



| Sipariş | a | b | c | d | e | f | (g) |
|---|---|---|---|---|---|---|---|
| 2335-127 | 127 | 45 | 7 | 34 | 5 | 5 | 950 |
| 2335-157 | 157 | 45 | 7 | 34 | 5 | 5 | 1010 |
| 2335-197 | 197 | 45 | 7 | 34 | 5 | 5 | 1290 |



## 2340 - Yedek Parça

ER-EL

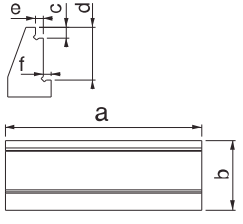



| Sipariş | a | b | c | d | e | f | (g) |
|---|---|---|---|---|---|---|---|
| 2340-127 | 127 | 45 | 7 | 34 | 5 | 5 | 950 |
| 2340-157 | 157 | 45 | 7 | 34 | 5 | 5 | 1010 |
| 2340-197 | 197 | 45 | 7 | 34 | 5 | 5 | 1290 |

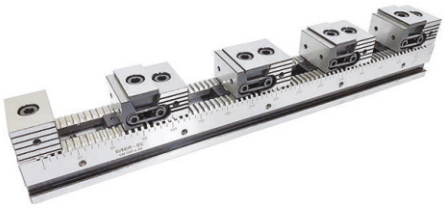


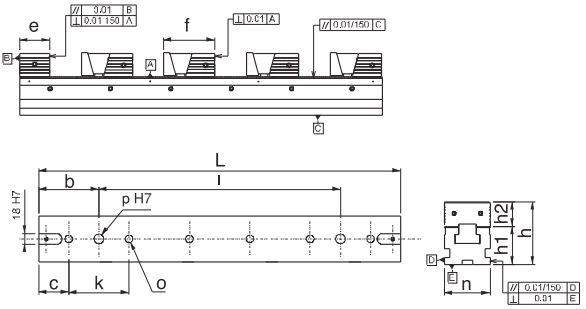
## 2336 - Yedek Parça

ER-EL




| Sipariş | a | b | c | d | e | f | (g) |
|---|---|---|---|---|---|---|---|
| 2336-127 | 127 | 45 | 7 | 34 | 5 | 5 | 950 |
| 2336-157 | 157 | 45 | 7 | 34 | 5 | 5 | 1010 |
| 2336-197 | 197 | 45 | 7 | 34 | 5 | 5 | 1290 |



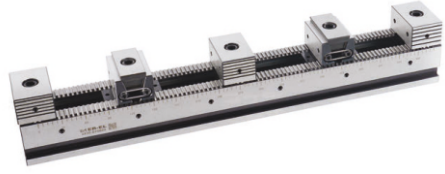


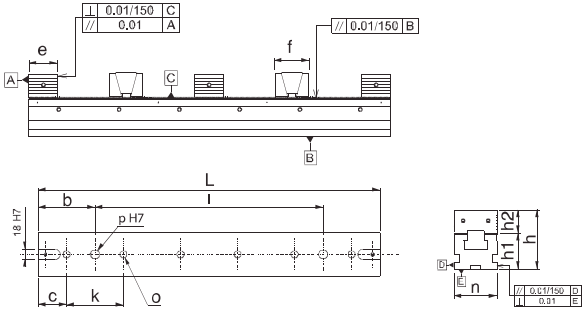

ER-EL

## 2430 - Çok Çeneli Seri Mengene

| Sipariş | L | n | h1 | h2 | h | o | e | f | b | c | k | ı | p H7 | Standart Bağlama Adedi | Sıkma Kuvveti kgf | Tork Değeri (N-m) | (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2430-055300 | 300 | 55 | 50 | 32 | 72 | 12.5 | 36 | 65 | 100 | 50 | 100 | 100 | 18 | 2 | 1750 | 25 | 9 |
| 2430-055500 | 500 | 55 | 50 | 32 | 72 | 12.5 | 36 | 65 | 100 | 50 | 100 | 300 | 18 | 4 | | | 15 |
| 2430-075400 | 400 | 75 | 65 | 37 | 102 | 12.5 | 48 | 77 | 100 | 50 | 100 | 200 | 18 | 2 | 2000 | 35 | 20 |
| 2430-075600 | 600 | 75 | 65 | 37 | 102 | 12.5 | 48 | 77 | 100 | 50 | 100 | 400 | 18 | 4 | | | 33 |
| 2430-100400 | 400 | 100 | 65 | 37 | 102 | 12.5 | 48 | 80 | 100 | 50 | 100 | 200 | 18 | 2 | 2500 | 50 | 27 |
| 2430-100600 | 600 | 100 | 65 | 37 | 102 | 12.5 | 48 | 80 | 100 | 50 | 100 | 400 | 18 | 3 | | | 41 |

| 1 İş parçası | 2 İş parçası | 3 İş parçası | 4 İş parçası | 5 İş parçası |
|---|---|---|---|---|
| 196 mm | 65 mm | 22 mm | - | - |
| 394 mm | 165 mm | 88 mm | 50 mm | 26 mm |
| 268 mm | 95 mm | 38 mm | 9 mm | - |
| 472 mm | 197 mm | 106 mm | 60 mm | 32 mm |
| 265 mm | 93 mm | 35 mm | - | - |
| 469 mm | 195 mm | 103 mm | 57 mm | 30 mm |



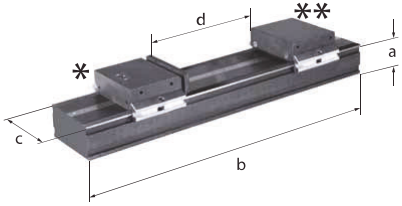



ER-EL

## 2435 - Çok Çeneli Seri Mengene

| Sipariş | L | n | h1 | h2 | h | o | e | f | b | c | k | ı | p H7 | Standart Bağlama Adedi | Sıkma Kuvveti kgf | Tork Değeri (N-m) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2435-055300 | 300 | 55 | 50 | 32 | 82 | 12.5 | 32 | 37 | 100 | 50 | 100 | 100 | 18 | 2 | 1750 | 25 |
| 2435-055500 | 500 | 55 | 50 | 32 | 82 | 12.5 | 32 | 37 | 100 | 50 | 100 | 300 | 18 | 4 | | |
| 2435-075400 | 400 | 75 | 65 | 37 | 102 | 12.5 | 37 | 57 | 100 | 50 | 100 | 200 | 18 | 2 | 2000 | 35 |
| 2435-075600 | 600 | 75 | 65 | 37 | 102 | 12.5 | 37 | 57 | 100 | 50 | 100 | 400 | 18 | 4 | | |
| 2435-100400 | 400 | 100 | 65 | 37 | 102 | 12.5 | 37 | 57 | 100 | 50 | 100 | 200 | 18 | 2 | 2500 | 50 |
| 2435-100600 | 600 | 100 | 65 | 37 | 102 | 12.5 | 37 | 57 | 100 | 50 | 100 | 400 | 18 | 4 | | |



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## 2440-SL - Seri Mengene

Gezer Çene Çeşitleri

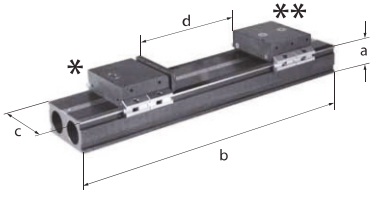



Dayama Çeşitleri




| Sipariş | a | b | c | d |
|---|---|---|---|---|
| 2440-SL080400 | 35 | 400 | 80 | 0-289 |
| 2440-SL080500 | 35 | 500 | 80 | 0-389 |
| 2440-SL080600 | 35 | 600 | 80 | 0-489 |



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## 2440-SL - Seri Mengene

Gezer Çene Çeşitleri

Dayama




| Sipariş | a | b | c | d |
|---|---|---|---|---|
| 2440-SL120300 | 60 | 300 | 120 | 0-90 |
| 2440-SL120600 | 60 | 600 | 120 | 0-390 |
| 2440-SL120800 | 60 | 800 | 120 | 0-590 |



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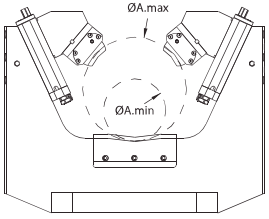
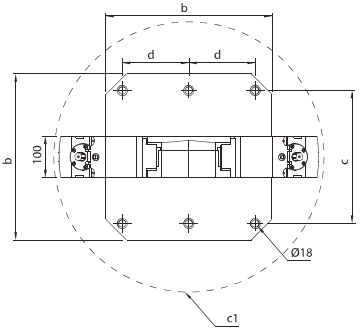
## 2440 - Seri Mengene Dayaması

| Sipariş |
|---|
| 2440-SL80120 |

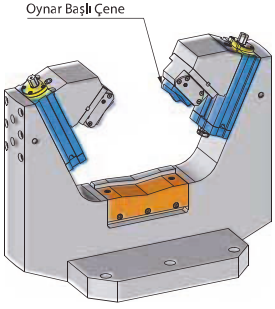


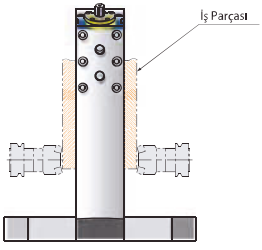



ER-EL

## 2600 - Çatal Kule



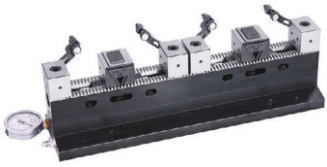







• Kullanım alanı: CNC yatay işleme, Borwekt tezgahlarında silindir parçaların iki yüzeyinide işleme kolaylığı sağlar.
• Hareketli yüzeylerin tamamı hassas taslanmıs ve sertleştirilmiştir.

| Sipariş | b | d | c | c1 | A min. | A max. | Sıkma kuvveti kgf |
|---|---|---|---|---|---|---|---|
| 2600-400400 | 400 | 160 | 320 | - | - | - | 4000 |
| 2600-500500 | 500 | 200 | 400 | - | - | - | 4000 |
| 2600-630630 | 630 | 250 | 500 | - | - | - | 4000 |



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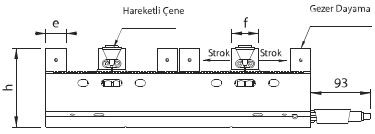
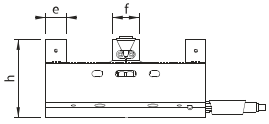
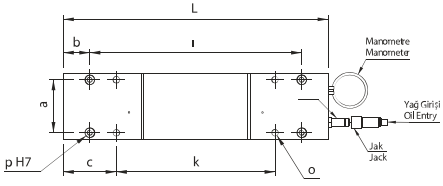
## 2445 - Hidrolik Çok Çeneli Seri Mengene

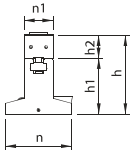
| Sipariş | ÇİFT AÇILIR ÇENE İLE İŞ PARÇASI BAĞLAMA ADETLERİ<br>2 İş parçası | 4 İş parçası |
|---|---|---|
| 2445-055300 | 87 mm | - |
| 2445-055500 | - | 60 mm |
| 2445-075400 | 125 mm | - |
| 2445-075600 | - | 75 mm |
| 2445-100400 | 125 mm | - |
| 2445-100600 | - | 75 mm |

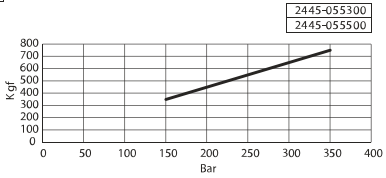
Not: İş bağlama adetleri ölçülerinde yumuşak ayak dahil değildir.

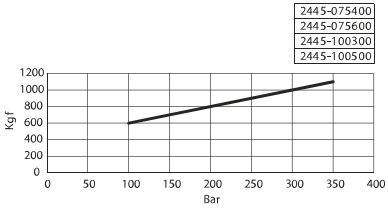


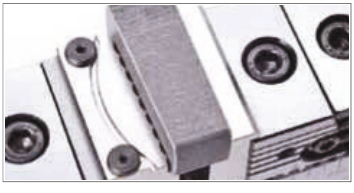



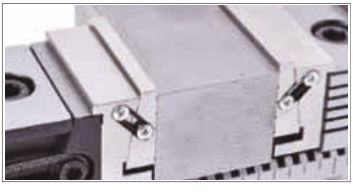



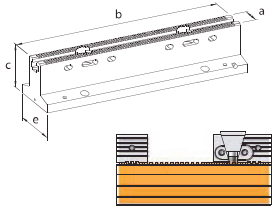

| Sipariş | L | n | n1 | h | h1 | h2 | o | e | f | a | b | c | k | ı | p H7 | Standart Bağlama Adedi | Stroke | Sıkma Kuvveti kgf |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2445-055300 | 300 | 125 | 55 | 148 | 105 | 43 | 12.5 | 38 | 51.5 | 100 | 50 | 100 | 100 | 200 | 18 | 2 | 8x2 | 750 |
| 2445-055500 | 500 | 125 | 55 | 148 | 105 | 43 | 12.5 | 38 | 51.5 | 100 | 100 | 150 | 200 | 400 | 18 | 4 | 8x2 | 750 |
| 2445-075400 | 400 | 175 | 75 | 158 | 115 | 43 | 12.5 | 48 | 51.5 | 150 | 50 | 100 | 200 | 300 | 18 | 2 | 8x2 | 1100 |
| 2445-075600 | 600 | 175 | 75 | 158 | 115 | 43 | 12.5 | 48 | 51.5 | 150 | 100 | 150 | 300 | 500 | 18 | 4 | 8x2 | 1100 |
| 2445-100400 | 400 | 175 | 100 | 158 | 115 | 43 | 12.5 | 48 | 51.5 | 150 | 50 | 100 | 200 | 300 | 18 | 2 | 8x2 | 1100 |
| 2445-100600 | 600 | 175 | 100 | 158 | 115 | 43 | 12.5 | 48 | 51.5 | 150 | 100 | 150 | 300 | 500 | 18 | 4 | 8x2 | 1100 |












| Sipariş | a | b | c | e |
|---|---|---|---|---|
| 2445-055300AG | 55 | 300 | 105 | 125 |
| 2445-055500AG | 55 | 500 | 105 | 125 |
| 2445-075400AG | 75 | 400 | 115 | 175 |
| 2445-075600AG | 75 | 600 | 115 | 175 |
| 2445-100400AG | 100 | 400 | 115 | 175 |
| 2445-100600AG | 100 | 600 | 115 | 175 |

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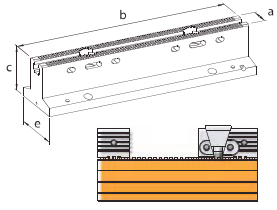
**2445-AG - Hidrolik Çok Çeneli Seri Mengene Alt Gövde**



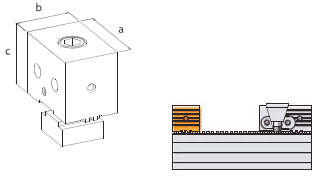



| Sipariş | a | b | c | e |
|---|---|---|---|---|
| 2443-055300AG | 55 | 300 | 105 | 125 |
| 2443-055500AG | 55 | 500 | 105 | 125 |
| 2443-075400AG | 75 | 400 | 115 | 175 |
| 2443-075600AG | 75 | 600 | 115 | 175 |
| 2443-100400AG | 100 | 400 | 115 | 175 |
| 2443-100600AG | 100 | 600 | 115 | 175 |

ER-EL

**2443-AG - Hidrolik Çok Çeneli Seri Mengene Alt Gövde**



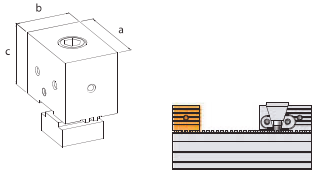



| Sipariş | a | b | c |
|---|---|---|---|
| 2443-2445055MGD | 55 | 38 | 43 |
| 2443-2445075MGD | 75 | 48 | 43 |
| 2443-2445100MGD | 100 | 48 | 43 |

ER-EL

**2443/MGD - Hidrolik Çok Çeneli Seri Mengene Manyetik Gezer Dayama**



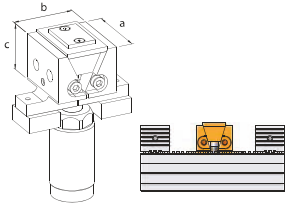



| Sipariş | a | b | c |
|---|---|---|---|
| 2443-24450556D | 55 | 38 | 43 |
| 2443-24450756D | 75 | 48 | 43 |
| 2443-2445100GD | 100 | 48 | 43 |

ER-EL

**2443/GD - Hidrolik Çok Çeneli Seri Mengene Gezer Dayama**



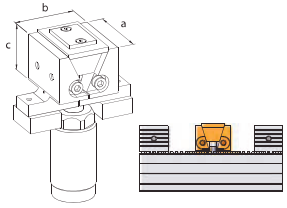



ER-EL

**2445/MHÇ - Hidrolik Çok Çeneli Seri Mengene Manyetik Hareketli Çene**

| Sipariş | a | b | c |
|---|---|---|---|
| 2445-055MHÇ | 55 | 51.5 | 43 |
| 2445-075MHÇ | 75 | 51.5 | 43 |
| 2445-100MHÇ | 100 | 51.5 | 43 |



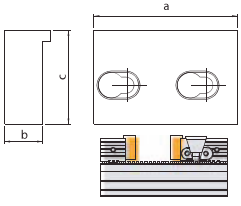



ER-EL

**2445/HÇ - Hidrolik Çok Çeneli Seri Mengene Hareketli Çene**

| Sipariş | a | b | c |
|---|---|---|---|
| 2445-055HÇ | 55 | 51.5 | 43 |
| 2445-075HÇ | 75 | 51.5 | 43 |
| 2445-100HÇ | 100 | 51.5 | 43 |



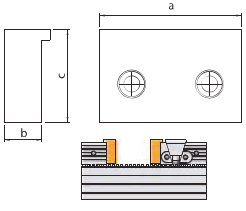



ER-EL

**2443 - Hidrolik Çok Çeneli Seri Mengene Yumuşak Çene**

| Sipariş | a | b | c |
|---|---|---|---|
| 2443-24450556 | 55 | 14 | 38 |
| 2443-24450756 | 75 | 14 | 38 |
| 2443-24451006 | 100 | 14 | 38 |

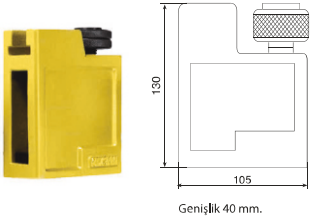





ER-EL

**2430/2435 - Çok Çeneli Seri Mengene Yumuşak Çene**

| Sipariş | a | b | c |
|---|---|---|---|
| 2430-24350555 | 53 | 14 | 34 |
| 2430-24350755 | 73 | 14 | 39 |
| 2430-24351005 | 98 | 14 | 39 |

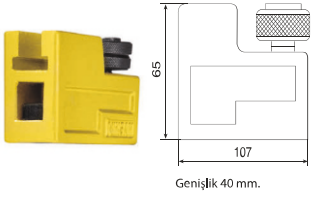



Genişlik 40 mm.

ER-EL

**1168/MK1022 - Kombine Bağlama Pabucu Alt Destek**

| Sipariş | a | (kg) |
|---|---|---|
| 1168-MK1022 | 16 | 1.10 |

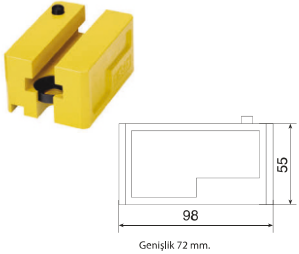



Genişlik 40 mm.

ER-EL

**1168/MK1021 - Kombine Bağlama Pabucu Alt Destek**

| Sipariş | a | (kg) |
|---|---|---|
| 1168-MK1021 | 16 | 1.80 |



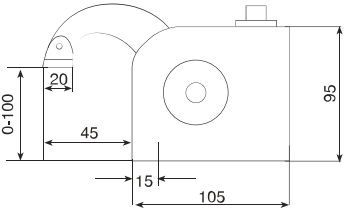

Genişlik 72 mm.

ER-EL

**1168/MPK5022 - Kombine Bağlama Pabucu Alt Destek**

| Sipariş | a | (kg) |
|---|---|---|
| 1168-MPK5022 | 18 | 0.90 |





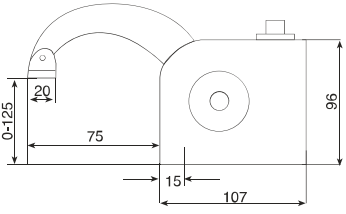

Genişlik 40 mm.

ER-EL

## 1168/MB1011 - Kombine Bağlama Pabucu

| Sipariş | a | Sıkma Kuvveti | (kg) |
|---|---|---|---|
| 1168-MB101112 | 12 | 1600 | 1.70 |
| 1168-MB101114 | 14 | 1600 | 1.70 |
| 1168-MB101116 | 16 | 1600 | 1.70 |
| 1168-MB101118 | 18 | 1600 | 1.70 |
| 1168-MB101120 | 20 | 1600 | 1.70 |





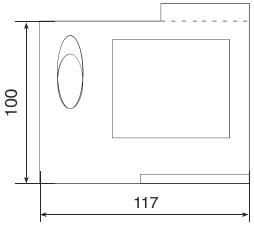

Genişlik 40 mm.

ER-EL

## 1168/MBU1031 - Kombine Bağlama Pabucu

| Sipariş | a | Sıkma Kuvveti | (kg) |
|---|---|---|---|
| 1168-MBU103112 | 12 | 1600 | 1.80 |
| 1168-MBU103114 | 14 | 1600 | 1.80 |
| 1168-MBU103116 | 16 | 1600 | 1.80 |
| 1168-MBU103118 | 18 | 1600 | 1.80 |
| 1168-MBU103120 | 20 | 1600 | 1.80 |





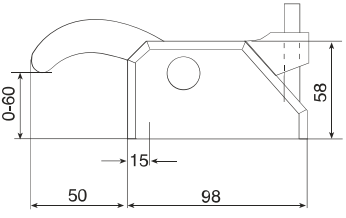

Genişlik 40 mm.

ER-EL

## 1168/MFK2042 - Kombine Bağlama Pabucu Alt Destek

| Sipariş | a | Sıkma Kuvveti | (kg) |
|---|---|---|---|
| 1168-MFK204212 | 12 | 1600 | 0.80 |
| 1168-MFK204214 | 14 | 1600 | 0.80 |
| 1168-MFK204216 | 16 | 1600 | 0.80 |
| 1168-MFK204218 | 18 | 1600 | 0.80 |
| 1168-MFK204220 | 20 | 1600 | 0.80 |






Genişlik 72 mm.

ER-EL

## 1168/MEP5011 - Kombine Bağlama Pabucu

| Sipariş | a | Sıkma Kuvveti | (kg) |
|---|---|---|---|
| 1168-MEP501116 | 16 | 5000 | 2.80 |
| 1168-MEP501118 | 18 | 5000 | 2.80 |
| 1168-MEP501120 | 20 | 5000 | 2.80 |
| 1168-MEP501122 | 22 | 5000 | 2.80 |
| 1168-MEP501124 | 24 | 5000 | 2.80 |



## M10 - Dik Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇧ | F2 (kN) | | | |
|---|---|---|---|---|---|
| 800.0 (M10/0) | 0.5 | 0.7 | 90 | 50 | M4x25 |
| 800.1 (M10/1) | 0.8 | 1.1 | 105 | 60 | M5x30 |
| 800.2 (M10/2) | 1.0 | 1.2 | 140 | 76 | M6x35 |
| 800.3 (M10/3) | 1.8 | 2.5 | 200 | 105 | M8x45 |
| 800.4 (M10/4) | 2.0 | 3.0 | 230 | 140 | M8x65 |
| 800.5 (M10/5) | 3.0 | 5.0 | 265 | 190 | M12x80 |
| 800.6 (M10/6) | 3.5 | 5.5 | 300 | 230 | M12x110 |



## M11 - Dik Bağlama Elemanı

ÇİZMAK

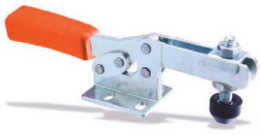
| Sipariş | F1 (kN) ⇧ | F2 (kN) | | | |
|---|---|---|---|---|---|
| 802.1 (M11/1) | 0.8 | 1.1 | 117 | 60 | M5x30 |
| 802.2 (M11/2) | 0.8 | 1.2 | 153 | 76 | M6x35 |
| 802.3 (M11/3) | 1.8 | 2.5 | 210 | 105 | M8x45 |
| 802.4 (M11/4) | 2.0 | 3.0 | 255 | 140 | M8x65 |
| 802.5 (M11/5) | 3.0 | 5.0 | 323 | 190 | M12x80 |
| 802.6 (M11/6) | 3.5 | 5.5 | 335 | 230 | M12x110 |



## M12 - Dik Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇧ | F2 (kN) | | | |
|---|---|---|---|---|---|
| 803.1 (M12/1) | 0.8 | 1.1 | 132 | 60 | M5x30 |
| 803.2 (M12/2) | 0.8 | 1.2 | 135 | 76 | M6x35 |
| 803.3 (M12/3) | 1.8 | 2.5 | 235 | 105 | M8x45 |
| 803.4 (M12/4) | 2.0 | 3.0 | 200 | 141 | M8x65 |



## M20 - Yatay Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇧ | F2 (kN) | | | |
|---|---|---|---|---|---|
| 830.0 (M20/0) | 0.25 | 0.4 | 23 | 85 | M4x25 |
| 830.1 (M20/1) | 0.8 | 1.1 | 30 | 128 | M5x30 |
| 830.2 (M20/2) | 1.0 | 1.2 | 44 | 158 | M6x35 |
| 830.3 (M20/3) | 1.8 | 2.5 | 48 | 221 | M8x45 |
| 830.4 (M20/4) | 2.0 | 3.0 | 74 | 293 | M8x65 |
| 830.5 (M20/5) | 3.0 | 5.0 | 71 | 330 | M12x80 |



## M21 - Yatay Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇧ | F2 (kN) | | | |
|---|---|---|---|---|---|
| 832.0 (M21/0) | 0.25 | 0.4 | 32 | 85 | M4x25 |
| 832.1 (M21/1) | 0.8 | 1.1 | 42 | 128 | M5x30 |
| 832.2 (M21/2) | 1.0 | 1.2 | 59 | 158 | M6x35 |
| 832.3 (M21/3) | 1.8 | 2.5 | 63 | 221 | M8x45 |
| 832.4 (M21/4) | 2.0 | 3.0 | 96 | 293 | M8x65 |
| 832.5 (M21/5) | 3.0 | 5.0 | 93 | 330 | M12x80 |



## M22 - Yatay Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇧ | F2 (kN) | | | |
|---|---|---|---|---|---|
| 833.1 (M22/1) | 0.8 | 1.1 | 68 | 128 | M5x30 |
| 833.2 (M22/2) | 1.0 | 1.2 | 94 | 155 | M6x35 |
| 833.3 (M22/3) | 1.8 | 2.5 | 86 | 221 | M8x45 |
| 833.4 (M22/4) | 2.0 | 3.0 | 97 | 261 | M8x65 |



## M60 - İtme Çekme Tipi Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇨ | F2 (kN) ⇦ | | | |
|---|---|---|---|---|---|
| 841.0 (M60/0) | 0.8 | 0.8 | 40 | 110 | M4x20 |
| 841.1 (M60/1) | 1.0 | 1.0 | 58 | 120 | M4x20 |
| 841.2 (M60/2) | 2.0 | 2.0 | 80 | 175 | M6x25 |
| 841.3 (M60/3) | 2.5 | 2.5 | 102 | 190 | M8x35 |
| 841.5 (M60/5) | 4.5 | 4.5 | 123 | 230 | M12x50 |



## M61 - İtme Çekme Tipi Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇨ | F2 (kN) ⇦ | | | |
|---|---|---|---|---|---|
| 844.2 (M61/2) | 1.0 | 1.0 | 85 | 70 | M6x35 |
| 844.3 (M61/3) | 2.5 | 2.5 | 135 | 110 | M8x35 |
| 844.5 (M61/5) | 4.0 | 4.0 | 155 | 175 | M12x50 |



## M64 - İtme Çekme Tipi Bağlama Elemanı

ÇİZMAK

| Sipariş | F1 (kN) ⇨ | F2 (kN) ⇦ | | | |
|---|---|---|---|---|---|
| 842.3 (M64/3) | 4.0 | 4.0 | 115 | 191 | M8x35 |
| 842.5 (M64/5) | 10.0 | 10.0 | 133 | 245 | M12x50 |
| 842.7 (M64/7) | 25.0 | 25.0 | 170 | 333 | M12x50 |



## M46 - Kancalı Bağlama Elemanı

ÇİZMAK

| Sipariş | (kN) | Ayar Aralığı | | |
|---|---|---|---|---|
| 847.1 (M46/1) | 2.0 | 5 mm | 33 | 130 |
| 847.3 (M46/3) | 3.0 | 12 mm | 36 | 230 |
| 847.5 (M46/5) | 5.0 | 12 mm | 70 | 310 |



## M40Y - Kancalı Bağlama Elemanı

ÇİZMAK

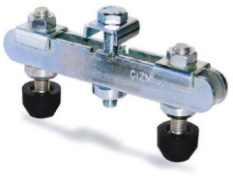
| Sipariş | (kN) | Ayar Aralığı | | |
|---|---|---|---|---|
| 848.2 (M40Y/2) | 2.0 | 117 | 60 | M5x30 |
| 848.3 (M40Y/3) | 3.0 | 153 | 76 | M6x35 |
| 848.4 (M40Y/4) | 5.0 | 210 | 105 | M8x45 |



## MS10/20 - Mafsallı Baskı Civatası

ÇİZMAK

| Sipariş | | h | L |
|---|---|---|---|
| 891.0 (MS10/20-0) | M4 x 25 | 18.5 | 31 |
| 891.1 (MS10/20-1) | M5 x 30 | 22 | 38 |
| 891.2 (MS10/20-2) | M6 x 35 | 25 | 43 |
| 891.3 (MS10/20-3) | M8 x 45 | 29 | 57 |
| 891.4 (MS10/20-4) | M8 x 65 | 47 | 77 |
| 891.5 (MS10/20-5) | M12 x 80 | 56 | 97 |



ÇİZMAK

## MS10/30 - Çapraz Kol

| Sipariş | | | |
|---|---|---|---|
| 895.1 (MS10/30-1) | M5 x 30 | 22 - 72 | 85 |
| 895.2 (MS10/30-2) | M6 x 35 | 28 - 85 | 100 |
| 895.3 (MS10/30-3) | M8 x 45 | 34 - 100 | 120 |
| 895.4 (MS10/30-4) | M8 x 65 | 40 - 100 | 150 |
| 895.5 (MS10/30-5) | M8 x 65 | 40 - 125 | 150 |



ÇİZMAK

## MS10/15 - Koruyucu Lastik

| Sipariş | | | |
|---|---|---|---|
| 893.0 (MS10/15-0) | M4 | 11 | 8.5 |
| 893.1 (MS10/15-1) | M5 | 12 | 9 |
| 893.2 (MS10/15-2) | M6 | 15 | 11.5 |
| 893.3 (MS10/15-3) | M8 | 19 | 14 |
| 893.4 (MS10/15-4) | M10 | 24 | 17 |
| 893.5 (MS10/15-5) | M12 | 25 | 20 |



ÇİZMAK

## P55 - İtme Tipi Pnömatik Bağlama Elemanı

| |
|---|
| M8x35 |
| M12x50 |
| M12x50 |

| Sipariş | F1 (kN) ⇧ | F2 (kN) | F3 (kN) ⇦ | Vn | | |
|---|---|---|---|---|---|---|
| 650.3 (P55/3) | 4.0 | 2.5 | 0.75 | 0.8 | 85 | 320 |
| 650.5 (P55/4) | 10.0 | 5.0 | 1.0 | 2.2 | 115 | 450 |
| 650.7 (P55/7) | 25.0 | - | 1.0 | 4.5 | 150 | 533 |



ÇİZMAK

## P50 - Dik Pnömatik Bağlama Elemanı

| Sipariş | F1 (kN) ⇧ | F2 (kN) | F1 (kN) ⇩ | F2 (kN) | F5 (kN) ⇦ | Vn** | | | |
|---|---|---|---|---|---|---|---|---|---|
| 600.2 (P50/2) | 1.0 | 1.2 | 0.7 | 1.0 | 0.30 | 0.26 | 170 | 130 | M6x35 |
| 600.3 (P50/3) | 1.4 | 2.5 | 0.6 | 1.1 | 0.50 | 0.35 | 205 | 160 | M8x45 |
| 600.4 (P50/4) | 2.0 | 3.0 | 1.5 | 2.0 | 0.75 | 0.08 | 260 | 220 | M8x65 |



ÇİZMAK

## P52 - Dik Pnömatik Bağlama Elemanı

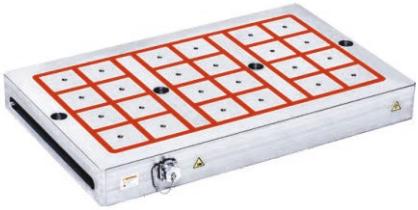
| Sipariş | F1 (kN) ⇧ | F2 (kN) | F1 (kN) ⇩ | F2 (kN) | F5 (kN) ⇦ | Vn** | | | |
|---|---|---|---|---|---|---|---|---|---|
| 620K/1 (P52/1) | 0.8 | 1.1 | 0.2 | 0.3 | 0.10 | 0.08 | 52 | 175 | M5x30 |
| 620K/2 (P52/2) | 1.0 | 1.2 | 0.7 | 1.0 | 0.30 | 0.26 | 64 | 200 | M6x35 |
| 620K/3 (P52/3) | 1.4 | 2.5 | 0.65 | 1.1 | 0.50 | 0.35 | 85 | 250 | M8x45 |
| 620K/4 (P52/4) | 2.0 | 3.0 | 1.5 | 2.2 | 0.75 | 0.80 | 100 | 290 | M8x65 |



## Manyetik Tabla

JBT

Kare çekirdek teknolojisi iki eksende maksimum sıkma gücü sağlar. Su geçirmez özellikte hızlı sıkılan metal konnektör. Stok üründür bir günde değiştirilir. Mono blok 66 mm kalınlığında yüksek kaliteli çelik gövde sayesinde yüksek mukavemet ve hassaslık sağlanırken titreşimler sönümlenir. Bu sayede işlenmiş yüzey kalitesi artarken makina ömrüde uzar. Her kutup bağımsız sarım özelliğine sahiptir. Bağımsız sarımlar sayesinde sadece zarar gören kutup onarılabilinir. Kare çekirdekler sayesinde küçük iş parçalarını sabityebilirken sabit ve yükseklik ayarlı kutup yükselticileri ile dalgalı yüzeyleri sıkma imkanı sağlar.



| Sipariş | Manyetik Tabla | Uzunluk x Genişlik x Yükseklik | Kontrollör |
|---|---|---|---|
| MANTAB400 | 400 x 400 | 370 x 370 x 66 | MTKK4A |
| MANTAB500 | 400 x 500 | 370 x 450 x 66 | MTKK5A |
| MANTAB600 | 400 x 600 | 370 x 594 x 66 | MTKK6A |
| MANTAB800 | 400 x 800 | 370 x 800 x 66 | MTKK8A |



Yüksek kaliteli kontrol ünitesi ve kumanda konsoluna sahiptir. Uzun ömürlü olması için kumanda konsolu metalden üretilmiş olup üzerindeki led aydınlatmalı butonlar paslanmaz çeliktir.

| Sipariş | Kontrollör | Güç | Volt |
|---|---|---|---|
| MANTAB400K | MTKK4A | 2.8 kW | AC 220V |
| MANTAB500K | MTKK5A | 4 kW | AC 220V |
| MANTAB600K | MTKK6A | 3.5 kW | AC 220V |
| MANTAB800K | MTKK8A | 5.6 kW | AC 220V |









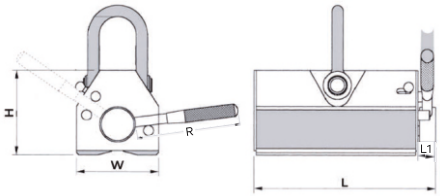




## PML

JBT

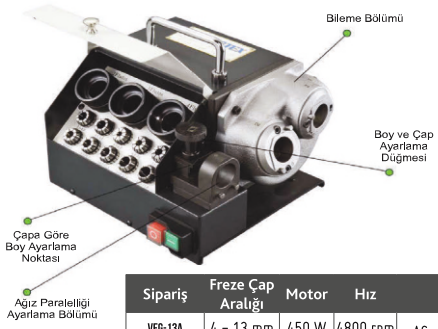
## Manyetik Tabla




**Kullanım Şekli :**
Manyetik kaldıraç 'off' durumunda iken malzemenin üzerine konulur. Kol 'on' konumuna getirildiğinde malzemeyi tutar. Taşıma sonrasında tekrar 'off' durumuna getirilir. Manyetik kaldıraç boşta iken kesinlikle kol 'on' konumunda bırakılmamalıdır. Aksi takdirde kaldıraç aniden malzemenin üzerine yapışır ve tehlike oluşturur.
(Taşınacak malzeme yüzeyinin kesinlikle temiz olmasına önem göstermelidir.)

| Sipariş | L1 | L | W | H | R | Ağırlık | Kaldırma kg | Max. Kaldırma kg |
|---|---|---|---|---|---|---|---|---|
| MANKAL0100 | 3 | 132 | 62 | 72 | 160 | 3 | 100 | 300 |
| MANKAL0300 | 4 | 206 | 94 | 93 | 215 | 9 | 300 | 900 |
| MANKAL0600 | 4.5 | 270 | 120 | 115 | 240 | 20 | 600 | 1200 |
| MANKAL1000 | 5 | 322 | 138 | 140 | 265 | 37 | 1000 | 3000 |
| MANKAL1500 | 5.5 | 350 | 138 | 140 | 265 | 43 | 1500 | 4500 |
| MANKAL2000 | 6 | 400 | 155 | 160 | 360 | 64 | 2000 | 6000 |
| MANKAL3000 | 6 | 470 | 160 | 170 | 360 | 80 | 3000 | 9000 |
| MANKAL5000 | 6.5 | 575 | 210 | 220 | 500 | 105 | 5000 | 15000 |




| Sipariş | Freze Çap Aralığı | Motor | Hız | Güç | Ağırlık |
|---|---|---|---|---|---|
| VEG-13A | 4 - 13 mm | 450 W | 4800 rpm | AC - 110 veya 220 1PH 50/60HZ | 17 kg |
| VEG-25A | 12 - 25 mm | 1000 W | 4300 rpm | | 31 kg |

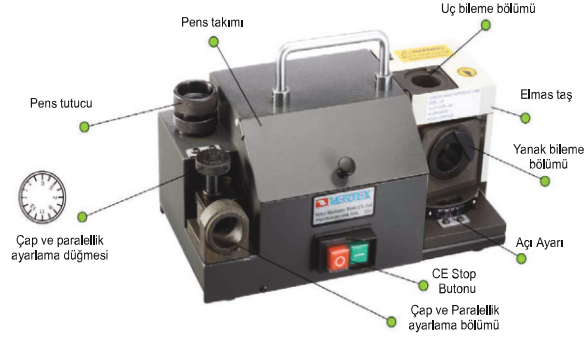
VERTEX

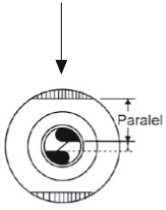
## VEG - Karbür (Elmas) Freze Bileme Makinası




Standart aksesuarları 10 adet pens ve 3 adet freze tutucudur.
Kullanım şekli: Örn. 4 ağızlı elmas freze, 4 ağızlı tutucunun içine pens ile birlikte takılarak ağız paralelliği ayarlama bölümü yerleştirilir. Tutucunun '0' noktası ile ağız paralelliği ayarlanır. Makina üzerindeki 1, 2 ve 3. aşamalar sırası ile takip edilir.

| Sipariş | Bileme Taşı | Kullanılacağı Malzeme | Ağırlık (kg) |
|---|---|---|---|
| VEG-13BS | CBN 300x1 (4 ~ 6 mm için) | HSS | 0.35 |
| VEG-13BL | CBN 270x1 (7 ~ 13 mm için) | HSS | 0.35 |
| VEG-13DS | SDC 270x1 (4 ~ 6 mm için) | KARBÜR | 0.35 |
| VEG-13DL | SDC 270x1 (7 ~ 13 mm için) | KARBÜR | 0.35 |
| VEG-25BS | CBN 150x1 (12 ~ 25 mm için) | HSS | - |
| VEG-25DS | SDC 150x1 (12 ~ 25 mm için) | KARBÜR | - |




VERTEX

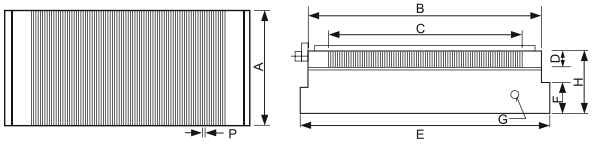
## VDG - Matkap Ucu Bileme Makinası

**Kullanım şekli:** Matkap ucu pens ile birlikte tutucunun içine bağlanır. Çap ve paralellik ayarlama bölümünde yandaki şekilde paralellik ayarlanır ve bileme bölümünde işlem gerçekleştirilir.

| Sipariş | Bilenecek Malzeme | Tane Büyüklüğü |
|---|---|---|
| VDD-13B | HSS | CBN200 |
| VDD-13D | KARBÜR | SDC200 |
| VDG-20B | HSS | CBN200 |
| VDG-20D | KARBÜR | SDC200 |
| VDG-25B | HSS | CBN200 |
| VDG-25D | KARBÜR | SDC200 |

| Sipariş | Bileme Çapı | Merkez Derece Noktası | Motor Devri | Standart Ürünler |
|---|---|---|---|---|
| VDG 13A | 2 mm-13 mm | 90° - 140° | 5100 rpm | ER20: 3-4-5-6-7-8-9-10-11-12-13 mm pensler ve 1 adet tutucu |
| VDG 20 | 8 mm-20 mm | 90° - 140° | 3280 rpm | ER32: 8-9-10-11-12-13-14-15 16-17-18-19-20 mm pensler ve 1 adet pens tutucu |
| VDG 25 | 12 mm-26 mm | 100° - 136° | 5300 rpm | ER40: 12-13-14-15-16-17-18-19-20 21-22-23-24-26 mm pensler ve 1 adet pens tutucu |





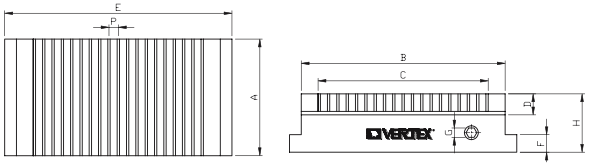

VERTEX

## VGF - Manyetik Tabla

Küçük ve ince parçalar için idealdir.
Erezyon ve taşlama tezgahları için önerilir.
Manyetik sıkma şekli kol iledir.
Tipi ince çizgilidir.

| Sipariş | Ebat | Tabla Ölçüsü A | B | C | P | G | E | F | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| VGF 1530 B | 150 x 300 | 150 | 300 | 256 | 5 (1+4) | 8 | 320 | 15 | 50 | 19 |
| VGF 2040 B | 200 x 400 | 200 | 400 | 356 | 5 (1+4) | 8 | 420 | 15 | 50 | 32 |
| VGF 2045 B | 200 x 450 | 200 | 450 | 406 | 5 (1+4) | 8 | 470 | 15 | 50 | 46 |





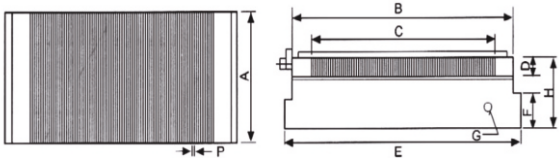

VERTEX

## VG - Manyetik Tabla

Büyük ve kalın parçalar için idealdir.
Erezyon ve taşlama tezgahları için önerilir.
Manyetik sıkma şekli kol iledir.
Tipi kalın çizgilidir.

| Sipariş | Ebat | Tabla Ölçüsü A | B | C | P | G | E | F | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| VG 407 | 100 x 175 | 100 | 175 | 146 | 8 (2+6) | 8 | 187 | 15 | 50 | 7 |
| VG 510 | 125 x 250 | 125 | 250 | 206 | 8 (2+6) | 8 | 262 | 15 | 50 | 12 |
| VG 612 | 150 x 300 | 150 | 300 | 256 | 8 (2+6) | 8 | 318 | 15 | 50 | 18 |
| VG 816 | 200 x 400 | 200 | 400 | 365 | 8 (2+6) | 8 | 418 | 15 | 50 | 31 |
| VG 1020 | 250 x 500 | 250 | 500 | 456 | 8 (2+6) | 8 | 518 | 15 | 50 | 48 |





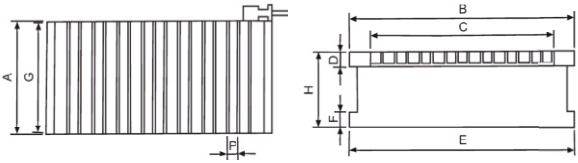

VERTEX

## VRTW - Manyetik Tabla

Çok küçük ve çok ince parçalar için idealdir.
Erezyon ve taşlama tezgahları için önerilir.
Manyetik sıkma şekli kol iledir.
Tipi çok ince çizgilidir.

| Sipariş | Ebat | Tabla Ölçüsü A | B | C | P | E | F | H | Kg |
|---|---|---|---|---|---|---|---|---|---|
| VRTW 1530 A | 150 x 300 | 150 | 300 | 256 | 2,5 (1 + 1,5) | 320 | 15 | 50 | 19 |
| VRTW 2040 A | 200 x 400 | 200 | 400 | 356 | 2,5 (1 + 1,5) | 420 | 15 | 50 | 32 |



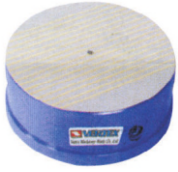


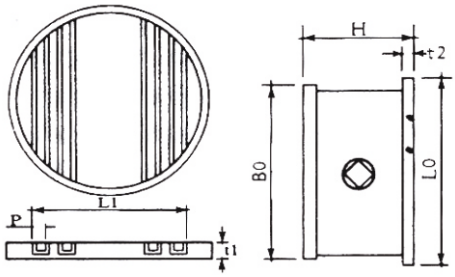

VERTEX

## VLZ / VEM V / VEM Z
## Elektrikli Manyetik Tabla
## 600 - 1200 GAUSS

VLZ tip taşlama tezgahları için uygundur.
VEM V tip küçük ve ince parçalarda taşlama tezgahı için uygundur.
VEM Z tip çok güçlü CNC tezgahlarda kullanılabilir.
Tamamının voltaj çıkışı DC 90 V dir.
Kontrol panosu ile kullanılmalıdır.

| Sipariş | Ebat | Tabla Ölçüsü A | B | C | P | D | G | F | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| VLZ 816 | 200 x 400 | 200 | 400 | 332 | 15 (3+12) | 20 | 194 | 20 | 70 | 38 |
| VLZ 1224 | 300 x 600 | 300 | 600 | 529 | 15 (3+12) | 20 | 290 | 20 | 70 | 97 |
| VEM 3060 W | 300 x 600 | 300 | 600 | 520 | 4 (1+3) | 25 | 246 | 20 | 100 | 135 |
| VEM 3060 Z | 300 x 600 | 300 | 600 | 545 | 45 (10+35) | 20 | 290 | 20 | 120 | 130 |






VERTEX

## VGD - Yuvarlak Tip Manyetik Tabla

| Sipariş | B0 | t1 | L1 | t2 | L0 | H |
|---|---|---|---|---|---|---|
| VGD 06 | 150 | 21 | 101 | 18 | 200 | 78 |
| VGD 08 | 200 | 21 | 137 | 18 | 200 | 78 |
| VGD 10 | 250 | 21 | 191 | 18 | 250 | 78 |
| VGD 12 | 300 | 21 | 227 | 18 | 305 | 78 |

Yuvarlak manyetik tablalar taşlama tezgahlarında, erezyon tezgahlarında kullanıma uygundur.

Küçük ve ince parçaları bağlamak için idealdir.

Manyetik sıkma şekli kol iledir.



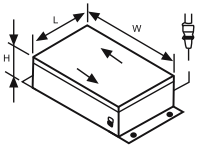
VDM - 68



VDM - 9



VDM - 8 - 11




VERTEX

## VDM - Manyetik Almalar

| Sipariş | Ölçüler | Kapasite | Yükseklik | Kg |
|---|---|---|---|---|
| VDM 11 | 200 x 280 | 550 VA | 130 | 15 |
| VDM 68 | 150 x 200 | 330 VA | 100 | 8,5 |
| VDM 8 | 160 x 110 | 210 VA | 100 | 5 |
| VDM 9 | 123 x 83 | 110 VA | 83 | 1,8 |

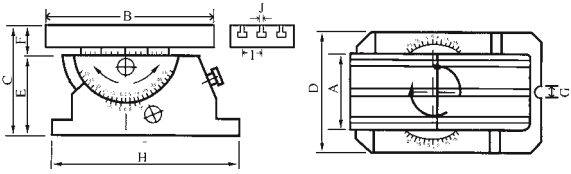
**VDM 11**
Güçlü masa tipi manyetik alıcıdır. Sürekli kullanıma uygundur.

**VDM 68**
Güçlü masa tipi manyetik alıcıdır. sürekli kullanıma uygundur.

**VDM 8**
Ekonomik tip manyetik alıcıdır. İşi bittiği anda elektrik ile irtibatı kesilmelidir.

**VDM 9**
Büyük ve taşınması zor kalıplar için idealdir. Isı derecesi yükseldiğinde elektrik akımını keserek devreden çıkar.






VERTEX

## VUA - Üniversal Açılı Tabla

Açılı tabla hassas taşlanmış / Rijit tasarım
Yatay 360°, dikey 45° hareket kabiliyeti

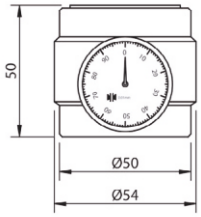
VMV ve VDV tip mengene ile 3 ayaklı ayna takılabilir.
Hassas okuma için ölçülendirilmiştir.

| Sipariş | A | B | C | D | E | F | G | H | I | J | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VUA-408 | 100 | 200 | 125 | 110 | 82 | 50 | 16 | 182 | 30 | 12 | 15 |
| VUA-510 | 126 | 250 | 125 | 110 | 82 | 50 | 16 | 182 | 40 | 12 | 18.1 |



VERTEX

## HP-50AM - Takım 'Z' Sıfırlama Aparatı



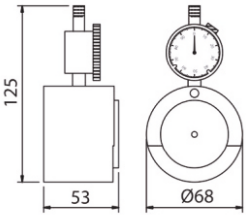

Takım sıfırlamayı tabla üzerine yerleştirdikten sonra üzerine düz bir parça koyup saati el ile çevirerek '0' konumuna getirin. Daha sonra kesici takımı, takım sıfırlamaya değdirin.
Saat '0' konumuna geldiğinde tabla kesici arası mesafe 50 mm dir.

| Sipariş | Yükseklik | Stil | Ağırlık |
|---|---|---|---|
| HP-50AM | 50 mm | Standart Tip | 1.1 |




VERTEX

## HP-50B - Takım 'Z' Sıfırlama Aparatı




Takım sıfırlamayı tabla üzerine yerleştirdikten sonra üzerine düz bir parça koyup saati el ile çevirerek '0' konumuna getirin. Daha sonra kesici takımı, takım sıfırlamaya değdirin.
Saat '0' konumuna geldiğinde tabla kesici arası mesafe 50 mm dir.

| Sipariş | Yükseklik | Stil | Ağırlık |
|---|---|---|---|
| HP-50B | 50 mm | Standart Tip | 1.7 |

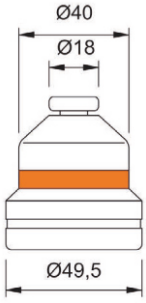
HP-50Z




HP-50ZM

VERTEX

## HP - Takım 'Z' Sıfırlama Aparatı

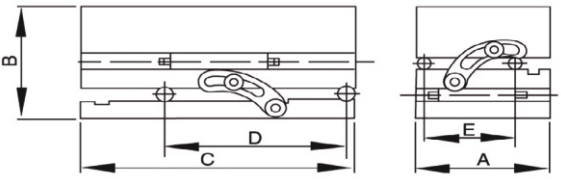



**Yükseklik** : 50 mm
**Hassasiyet** : 0.005 mm
**Ağırlık** : 0.7 kg

**Dokunduğunda kırmızı ışık yanar.**

| Sipariş | Özellik |
|---|---|
| HP-50Z | Standart Tip |
| HP-50ZM | Manyetik Tabanlı |





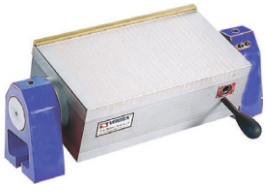

VERTEX

## V-MSF - Dereceli Manyetik Tabla

Çift açılır manyetik tabla iki farlı derecede aynı anda çalışabilir.

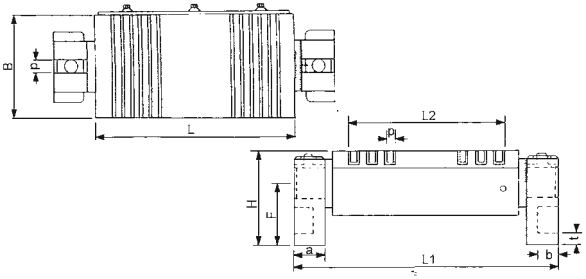
Küçük ve ince parçalarda taşlama ve erezyon tezgahları için idealdir.

| Sipariş | A | C | B | P | Derece |
|---|---|---|---|---|---|
| V-66 MSF | 150 | 150 | 122 | 25 (1 + 1,5) | 0° - 60° |
| V-612 MSF | 150 | 300 | 122 | | 0° - 60° |



VERTEX

## VLU - Dereceli Manyetik Tabla



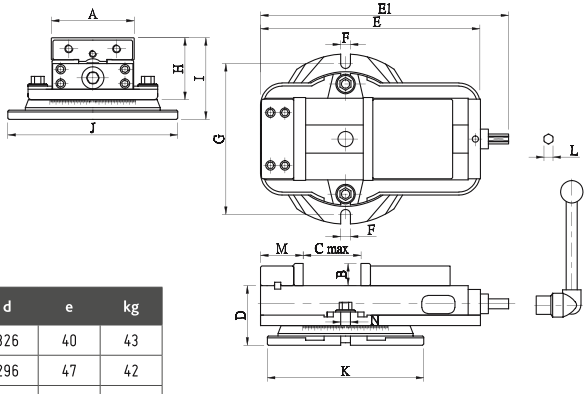

Not (0°-90°) açılı iş parçasını taşlayabilir, dereceli yaka ile kolayca ayarlanabilir

| Sipariş | Tabla Ölçüsü | Manyetik Ölçüler | | | Tabla Ayak Ölçüleri | | | | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| | | B | L | L2 | D | C | F | L1 | | |
| VLU-510B | 125 x 250 | 125 | 250 | 190 | 16 | 100 | 96 | 380 | 150 | 34 |
| VLU-612B | 150 x 300 | 150 | 300 | 240 | 16 | 100 | 96 | 430 | 150 | 44.5 |
| VLU-618B | 150 x 450 | 150 | 450 | 414 | 16 | 100 | 96 | 430 | 150 | 43 |



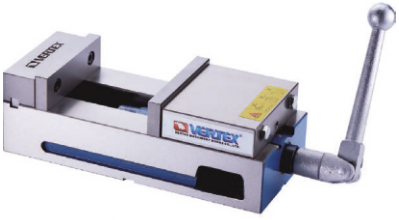
VERTEX

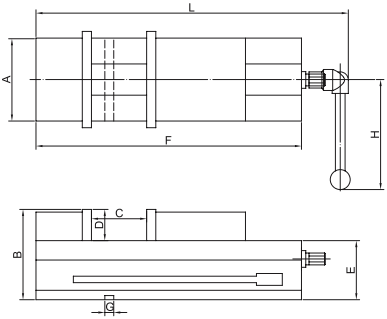
## VA - VD - Freze Mengenesi

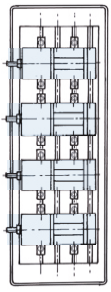



| Sipariş | A | C | B | a | k | c | d | e | kg |
|---|---|---|---|---|---|---|---|---|---|
| VD 690 | 155 | 230 | 46 | 450 | 288 | 118 | 326 | 40 | 43 |
| VD 675 | 160 | 190 | 49 | 445 | 295 | 121 | 296 | 47 | 42 |
| VA 5 | 135 | 112 | 36 | 359 | 193 | 101 | 246 | 32 | 30 |
| VA 6 | 155 | 143 | 46 | 22 | 209 | 118 | 288 | 39 | 42 |
| VA 8 | 210 | 220 | 60 | 553 | 295 | 145 | 355 | 45 | 80 |

Çeneler sulanmış ve taşlanmıştır.
Çeneler değiştirilebilir.
360° Dönerli hassas tezgah mengenesidir.





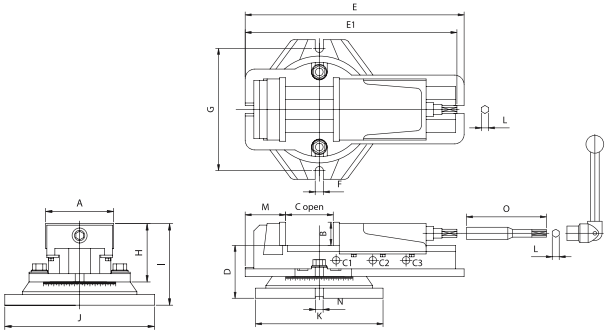
VERTEX

## VMC - Taşlanmış Tezgah Mengenesi

Tüm yüzeyleri taşlanmış olması sebebi ile dik ve yatay pozisyonda bağlanabilir.
Çeneleri sertleştirilmiş ve taşlanmıştır.

| Sipariş | A | C | B | F | D | Kg |
|---|---|---|---|---|---|---|
| VMC 4 | 108 | 100 | 100 | 285 | 37 | 14 |
| VMC 6 | 156 | 142 | 120 | 368 | 46 | 31 |



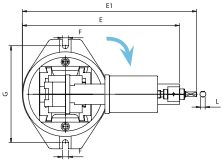


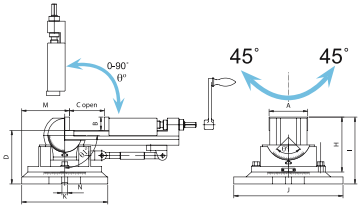

VERTEX

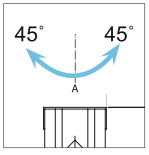
## VJ - Uzun Tip Süper Açılır Mengene

| Sipariş | A | B | C Açılım | D | E | F | G | H | I | J | K | L | Maksimum Kapanma Gücü | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VJ-400 | 110 | 37 | 180 | 522 | 440 | 133 | 168 | 94 | 58 | 80 | 97 | 150 | 1500 Kg | 24.8 |
| VJ-500 | 130 | 48 | 230 | 580 | 455 | 168 | 192 | 114 | 65 | 97 | 75 | 157 | 1500 Kg | 33.4 |
| VJ-600 | 154 | 54 | 300 | 695 | 540 | 186 | 200 | 131 | 78 | 116 | 90 | 182 | 1500 Kg | 46.1 |





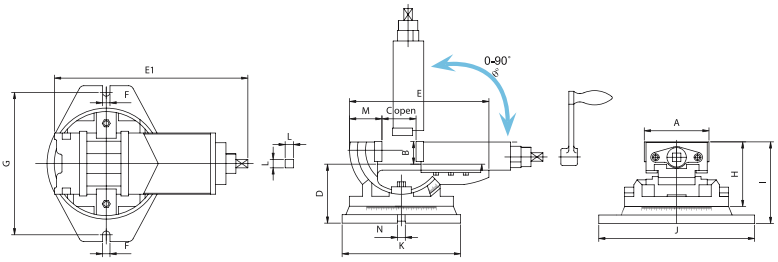

VERTEX

## VW - 3 Açılı Freze Mengenesi

Mengene 360° dönerlidir.
Yatay ve dikey olarak 90° yatırılabilir.
Sağ ve sola 45° yatırılabilir.
Hassas taşlanmış çeneler değiştirilebilir.

| Sipariş | A | B | C Açılım | D | E | F | G | H | I | Toplam Yükseklik | Maksimum Kapanma Gücü | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VW-3 | 81 | 30 | 80 | 127 | 14 | 400 | 185 | 240 | 210 | 475 | 1500 Kg | 16.7 |
| VW-4 | 110 | 37 | 116 | 145 | 16 | 535 | 238 | 317 | 280 | 595 | 1500 Kg | 32.7 |
| VW-5 | 135 | 37 | 145 | 167 | 18 | 620 | 270 | 357 | 327 | 690 | 1500 Kg | 49.4 |





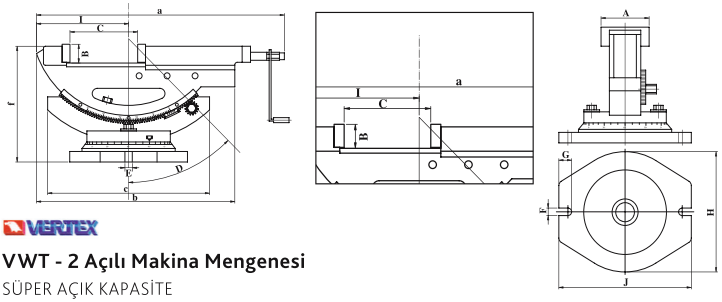

VERTEX

## VWT - 2 Açılı Freze Mengenesi

Mengene 360° dönerlidir.
Yatay ve dikey olarak 90° yatırılabilir.
Hassas taşlanmış çeneler değiştirilebilir.

| Sipariş | Çene En | Çene Yükseklik | Maksimum Açılım | Malzeme Yuvası | Yükseklik | E x B x Y Toplam | Maksimum Kapanma Gücü | Kg | Paket Ölçüleri |
|---|---|---|---|---|---|---|---|---|---|
| VWT-5 | 125 | 46 | 100 | 16 | 160 mm | 410 x 315 x 160 | 900 Kg | 31.7 | 432 x 330 x 190 |
| VWT-6A | 160 | 51 | 120 | 16 | 195 mm | 430 x 320 x 195 | 1600 Kg | 47 | 510 x 365 x 240 |





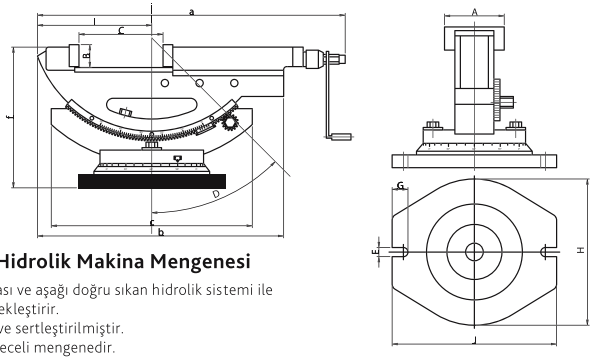

VERTEX

## VWT - 2 Açılı Makina Mengenesi

SÜPER AÇIK KAPASİTE
İki kilitleme vidasıyla ayarlanan yatırılabilir koltuk, yüksek stabiliteyle çalışır
açı ayarı 0°-50° arasında değişir Kolay okuma için eğim dereceleri derecelendirilmiştir.
360° derecelendirilmiş döner taban ve her yöne sabitlenebilir.

| Sipariş | A | B | C Açılım | D | E | F | G | H | J | a | b | c | f | Maksimum Kapanma Gücü | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VWT-4B | 110 | 36 | 220 | 50 | 15 | 15 | 26 | 240 | 270 | 500 | 404 | 335 | 230 | 1200 Kg | ( T ) 33.3 |
| VWT-6B | 154 | 54 | 350 | 50 | 20 | 19 | 28 | 300 | 330 | 800 | 585 | 415 | 290 | 1600 Kg | ( T ) 88 |



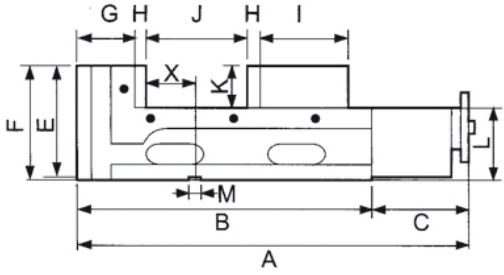

VERTEX

## VHT - 2 Açılı Hidrolik Makina Mengenesi

Hidrolik mekanizması ve aşağı doğru sıkan hidrolik sistemi ile
kuvvetli sıkma gerçekleştirir.
Çeneleri taşlanmış ve sertleştirilmiştir.
En büyük 2 açılı dereceli mengenedir.

| Sipariş | A | B | C Açılım | D | E | F | G | H | J | a | b | c | f | Maksimum Kapanma Gücü | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VHT-4 | 110 | 36 | 220 | 50 | 15 | 15 | 26 | 240 | 270 | 500 | 404 | 335 | 230 | 2500 Kg | ( T ) 33.3 |
| VHT-6 | 154 | 54 | 350 | 50 | 20 | 19 | 28 | 300 | 330 | 800 | 585 | 415 | 290 | 4500 Kg | ( T ) 88 |





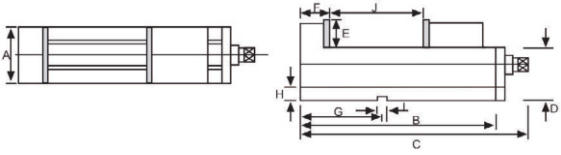

VERTEX

## VMC - Pnömatik Mengene

Yüksek kaliteli çelik yüzeyler sertleştirilmiş ve taşlanmıştır.
1.5 sn gibi kısa bir sürede açıp kapanma özelliğine sahiptir.
Uygulanmak istenen güç ayar tuşu ile kontrol edilip hareketle sıkma gerçekleştirilebilir.
Manuel kol sayesinde güç kontrol edilip, sıkma yapılabilir.

| Sipariş | A | B | a | D | E | F | G | H | I | C | K | L | M | X | Kapanma Gücü | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VMC-6PL | 630 | 490 | 140 | 160 | 160 | 163 | 86 | 15 | 120 | 0 - 250 | 58 | 105 | 18 | 45 | 6000 | 51 |

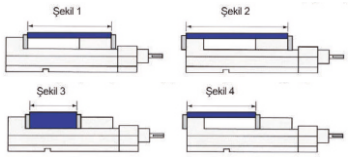





VERTEX

## VMC HV - Hidrolik Makine Mengenesi Güçlü Tip

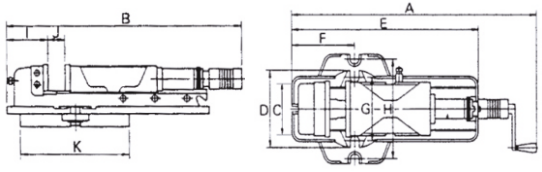





Hidrolik mekanizması ve aşağı doğru sıkan hidrolik sistemi ile kuvvetli sıkma gerçekleştirilir.
Tüm yüzeyleri taşlanmışve sertleştirilmiştir.
Tüm yüzeyleri taşlanmış olması sebebi ile dik ve yatay pozisyonda bağlanabilir.
Aşağıdaki şekillerde 4 ayrı biçimde çeneler değiştirilerek bağlama alanı genişletilir.

| Sipariş | A | B | C | D | E | F | G | Şekil 1 | Şekil 2 | Şekil 3 | Şekil 4 | Kuvvet | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VMC 130 HV | 131 | 405 | 535 | 95 | 55 | 85 | 150 | 290 | 380 | 180 | 240 | 5000 | 40 |
| VMC 160 HV | 161 | 495 | 625 | 105 | 58 | 100 | 165 | 360 | 470 | 240 | 320 | 6500 | 58 |
| VMC 200 HV | 201 | 570 | 700 | 110 | 63 | 108 | 190 | 420 | 540 | 280 | 360 | 8000 | 87 |






## VHO - Kademeli Hidrolik Mengene

VERTEX

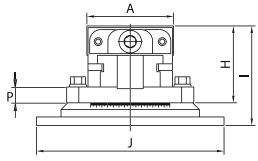
Hidrolik mekanizması ve aşağı doğru sıkan hidrolik sistemi ile kuvvetli sıkma gerçekleştirilir.
Çeneleri taşlanmışve sertleştirilmiştir.
Pimli hidrolik mengene bağlama şekli çok seridir.

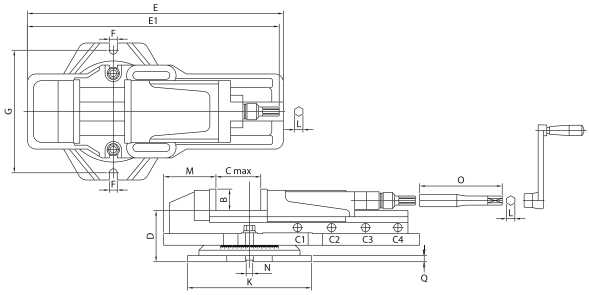
| Sipariş | Çene Genişliği | Açma Kapasitesi | B | C | D | E | F | G | H | I | K | h | Kuvvet |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VHO 5 | 130 | 220 | 570 | 130 | 190 | 505 | 180 | 10 | 250 | 105 | 260 | 55 | 3500 |
| VHO 6 | 160 | 300 | 625 | 160 | 240 | 625 | 208 | 196 | 300 | 125 | 320 | 58 | 4000 |
| VHO 8 | 200 | 310 | 725 | 200 | 280 | 700 | 265 | 240 | 360 | 165 | 365 | 63 | 6000 |



VERTEX

## VH - Hidrolik Freze Mengenesi




Çeneler sertleştirilmiş ve taşlanmıştır.
Hidrolik pimli hidrolik mengene 360° dönerli ekonomik tiptir.

| Sipariş | A | B | C | a | D | E | F | G | H | Maksimum Sıkma Kuvveti | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VH-4 | 105 | 36 | 170 | 525 | 440 | 170 | 95 | 58 | 95 | 3750 Kg | 27.2 |
| VH-5 | 130 | 48 | 210 | 670 | 550 | 207 | 120 | 70.5 | 107 | 4500 Kg | 47.4 |
| VH-6 | 150 | 53 | 300 | 800 | 620 | 225 | 135 | 82.5 | 117 | 5250 Kg | 63 |
| VH-8 | 200 | 62 | 300 | 900 | 680 | 280 | 162 | 100 | 150 | 6000 Kg | 106.6 |



VERTEX

## VMV - Pimli Hassas Taşlanmış Mengene

Mengene yatay ve dikey bağlama yapılabilir.
Her yüzeyi taşlanmıştır.
Hassasiyeti 0.005'dir. Malzeme sertliği 56 - 58 HRC'dir.

| Sipariş | Çene Genişliği | Açma Mesafesi | Çene Yüksekliği | Tam Boy |
|---|---|---|---|---|
| VMV-15 | 36 | 40 | 20 | 100 |
| VMV-20 | 48 | 75 | 30 | 150 |
| VMV-25 | 63 | 90 | 35 | 170 |
| VMV-30 | 73 | 100 | 35 | 190 |
| VMV-35 | 88 | 125 | 45 | 225 |
| VMV-40 | 98 | 125 | 5 | 230 |
| VMV-50 | 125 | 150 | 50 | 287 |
| VMV-60 | 150 | 200 | 50 | 330 |



VERTEX

## SVB - Pimli Hassas Dereceli Taşlanmış Mengene

Maksimum 45° açıda çalışabilir.
Her yüzeyi taşlanmıştır.
Hassasiyeti 0.005'dir.
Malzeme sertliği 56 - 58 HRC'dir.

| Sipariş | Çene Genişliği | Açma Mesafesi | Çene Yüksekliği | Tam Boy |
|---|---|---|---|---|
| SVB-20 | 48 | 80 | 30 | 155 |
| SVB-25 | 63 | 90 | 35 | 175 |
| SVB-30 | 73 | 90 | 35 | 180 |

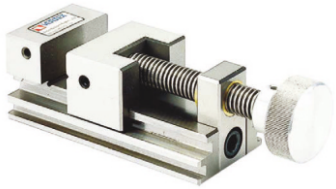


VERTEX

## SVD - Vidalı Dereceli Taşlanmış Mengeneler

Maksimum 45° açıda çalışabilir.
Her yüzeyi taşlanmıştır.
Hassasiyeti 0.005'dir.
Malzeme sertliği 56 - 58 HRC'dir.

| Sipariş | Çene Genişliği | Açma Mesafesi | Çene Yüksekliği | Tam Boy |
|---|---|---|---|---|
| SVD-200 | 48 | 60 | 25 | 155 |
| SVD-250 | 63 | 68 | 30 | 176 |
| SVD-300 | 73 | 72 | 30 | 180 |



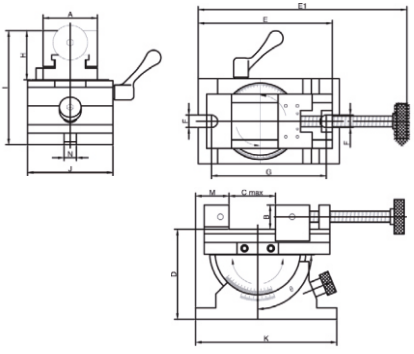
VERTEX

## V-VE - Vidalı Hassas Taşlanmış Mengene

Mengene yatay ve dikey bağlama yapılabilir.
Her yüzeyi taşlanmıştır.
Hassasiyeti 0.005'dir.
Malzeme sertliği 56 - 58 HRC'dir.

| Sipariş | Çene Genişliği | Açma Mesafesi | Çene Yüksekliği | Tam Boy |
|---|---|---|---|---|
| V-VE 20 | 60 | 32 | 25 | 90 |
| V-VE 25 | 70 | 80 | 30 | 160 |
| V-VE 30 | 73 | 95 | 32 | 175 |



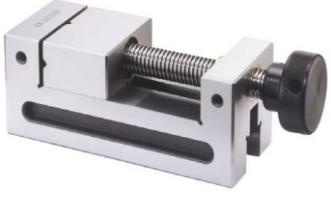


VERTEX

## VUA - Universal Çok Açılı Hassas Taşlanmış Mengeneler

Mengene 360° dönerlidir.
Her yüzeyi taşlanmıştır.
Hassasiyeti 0.003'dür.
Malzeme sertliği 56 - 58 HRC'dir.

| Sipariş | A | B | C | E | F | G | H | J | L | O | P | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VUA-3 | 70 | 80 | 31 | 158 | 173 | 32 | 32 | 45 | 110 | 63 | 75 | 182 |
| VUA-4 | 88 | 110 | 35 | 166 | 200 | 32 | 36 | 56 | 110 | 67 | 99 | 182 |



VERTEX

## VDV - Vidalı Hassas Taşlanmış Mengeneler

Mengene yatay ve dikey bağlama yapılabilir.
Her yüzeyi taşlanmıştır.
Hassasiyeti 0.005'dir.
Malzeme sertliği 56 - 58 HRC'dir.

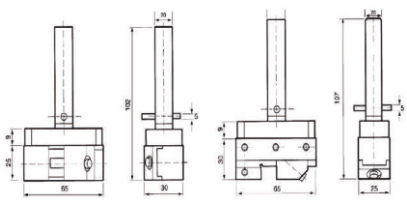
| Sipariş | Çene Genişliği | Açma Mesafesi | Çene Yüksekliği | Tam Boy |
|---|---|---|---|---|
| VDV-20 | 48 | 60 | 25 | 155 |
| VDV-25 | 63 | 75 | 30 | 176 |
| VDV-30 | 73 | 71 | 30 | 181 |
| VDV-35 | 88 | 125 | 38 | 250 |
| VDV-40 | 98 | 125 | 38 | 250 |



VERTEX

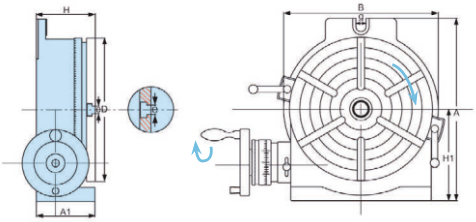
## VEH/VMV - EDM Elektrod Mengenesi

VEH 20 saplı elektrod mengenesidir.
VMV 10 yalnız mengenesidir.



| Sipariş | Çene Genişliği | Açma Mesafesi | Çene Yüksekliği |
|---|---|---|---|
| VEH-20 | 25 | 20 | 10 |
| VMV-10 | 25 | 20 | 10 |





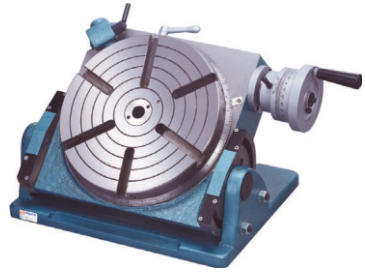

VERTEX

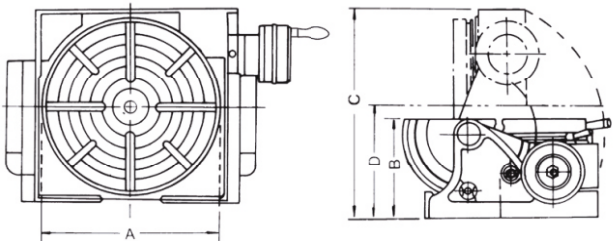
## HV - Döner Tabla

HV tip döner tablalar yatay ve dikey kullanılabilir.
Skala takibi ile dairesel olarak 360° dönebilir. Kol bir tur çevrildiğinde 4° dönmektedir.
Kol 90 tur çevrildiğinde 360° 'i tamamlamış olur. Dişli oranı 90:1

| Sipariş | D | A1 | H | A | B | e | Mors | H1 | Ayna | kg |
|---|---|---|---|---|---|---|---|---|---|---|
| HV-4 | 110 | 58 | 72 | 138 | 115 | 11 | MT2 | 85 | 100 | 7.5 |
| HV-6 | 150 | 78 | 80 | 205 | 160 | 11 | MT2 | 100 | 125 | 13 |
| HV-8 | 205 | 100 | 102 | 265 | 220 | 14 | MT3 | 135 | 160 | 28 |

| Sipariş | D | A1 | H | A | B | e | Mors | H1 | Ayna | kg |
|---|---|---|---|---|---|---|---|---|---|---|
| HV-10 | 254 | 106 | 109 | 321 | 280 | 14 | MT3 | 165 | 200 | 37 |
| HV-12 | 305 | 123 | 125 | 388 | 330 | 16 | MT4 | 195 | 250 | 63 |
| HV-14 | 353 | 123 | 125 | 445 | 380 | 16 | MT4 | 230 | 300 | 81 |
| HV-16 | 406 | 128 | 130 | 503 | 430 | 16 | MT4 | 255 | 400 | 122 |

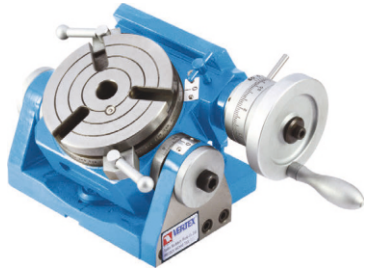


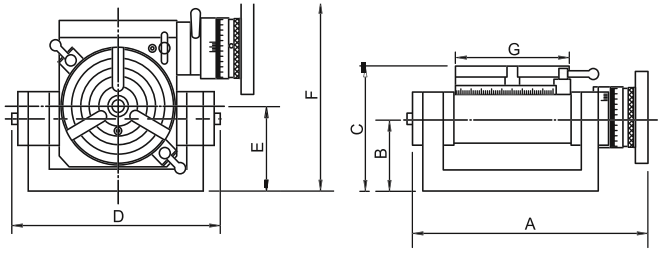



VERTEX

## VU - Açılı Ayarlı Döner Tabla

| Sipariş | A | B | C | D | E | F | Mors Tipi | Redüksiyon Orantısı | Pim ile Bölünme Taksimatı | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| VU-300 | 300 | 185 | 405 | 228 | 336 | 444 | MT - 5 | 90 : 1 | 24 | 93 |





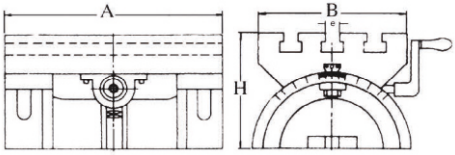

VERTEX

## VU - Dereceli Tabla Divizör

Üniversal tip döner tablalar yatay ve dikey olarak kullanılabilir. 90° 'e kadar her ölçüde durdurulabilir. Kol 1 tur döndüğünde 4° 'e döner 90 turda 360° 'i tamamlamış olur. Tezgahlarda 2 eksen avantajlıdır.

| Sipariş | A | B | C | D | E | F | G | Kg |
|---|---|---|---|---|---|---|---|---|
| VU-100 | 228 | 68 | 117 | 202 | 80 | 117 | 100 | 13.5 |
| VU-150 | 266 | 75 | 140 | 246 | 90 | 216 | 150 | 21 |
| VU-200 | 429 | 111 | 177 | 432 | 141 | 283 | 205 | 50 |





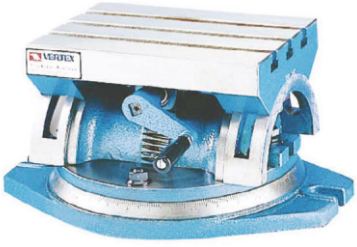

VERTEX

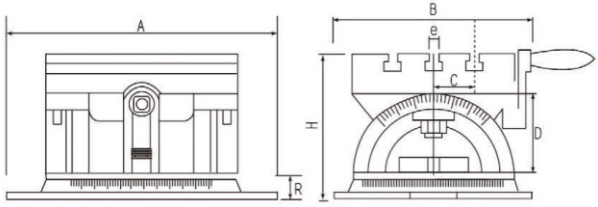
## VP - Sinüs Dereceli Tablalar

Öne ve arkaya ölçü cetveli 45 ° açı verilebilir.
Kalıpçı freze ve CNC için uygundur.

| Sipariş | TABLA | | | T Kanal | Kg |
|---|---|---|---|---|---|
| | A | B | C | | |
| VP-180 | 185 | 132 | 95 | 13 | 7,5 |
| VP-250 | 255 | 180 | 136 | 116 | 22,5 |

| Sipariş | TABLA | | | T Kanal | Kg |
|---|---|---|---|---|---|
| | A | B | C | | |
| VP-380 | 380 | 255 | 181 | 16 | 69 |
| VP-600 | 600 | 300 | 202 | 16 | 100 |



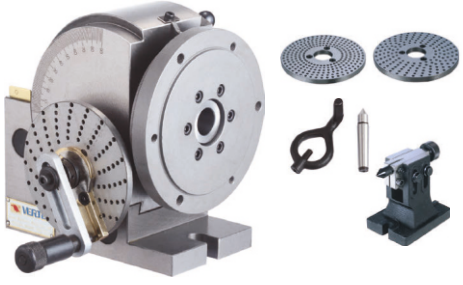


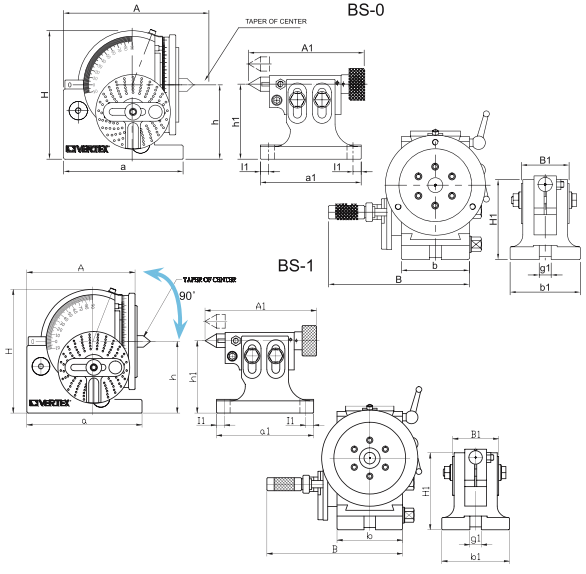

VERTEX

## VP-S - Dereceli Tablalar

| Sipariş | TABLA | | | T Kanal | | | Kg |
|---|---|---|---|---|---|---|---|
| | A | B | C | e | C | D | |
| VP-250S | 243 | 230 | 177 | 10 | 50 | 90 | 40 |
| VP-380S | 360 | 270 | 233 | 12 | 68 | 127 | 76 |

Öne ve arkaya ölçü cetveli 45° açı verilebilir. Kalıpçı freze ve CNC için uygundur. 360° dönerlidir.






VERTEX

## BS - Üniversal Divizör

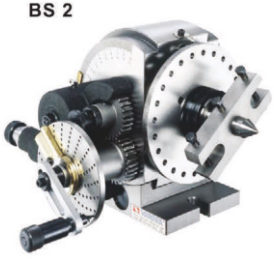
BS tip üniversal dividözdür.
İstenilen açıdan işleme yapılabilir.
Dikey 10° Yatay 90° altında
Kol 1 tur döndüğünde 9 ° 'e döner.
40 tur döndüğünde 360 ° 'yi tamamlamış olur.
Dişli oranı 40:1
BS 0 ayna çapı 100 mm'dir.
BS 1 ayna çapı 125 - 160 mm'dir.

| Sipariş | A | B | C | D | E | F | G | Kg |
|---|---|---|---|---|---|---|---|---|
| BS 0 | 189 | 160 | 100 | 173 | 16 | 91 | 140 | 22 |
| BS 1 | 293 | 210 | 128 | 220 | 16 | 114 | 156 | 26 |

| Sipariş | A | B | C | D | E | F | G | Kg |
|---|---|---|---|---|---|---|---|---|
| BS 0 - J | 189 | 160 | 100 | 173 | 16 | 91 | 140 | 22 |
| BS 1 - J | 293 | 210 | 128 | 220 | 16 | 114 | 156 | 26 |

Standart Aksesuarlar

BS 2





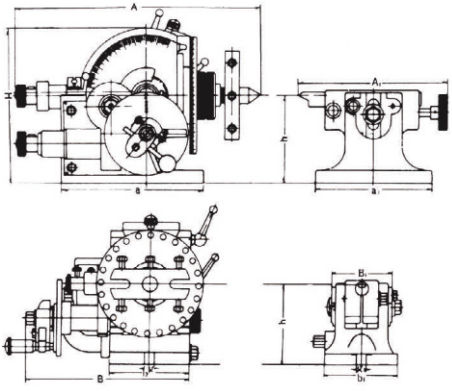
BS 2 J



VERTEX

## BS - Üniversal Divizör

BS tip üniversal dividözdür.
İstenilen açıdan işleme yapılabilir.
Dikey 10° Yatay 90° altında
Kol 1 tur döndüğünde 9° 'e döner.
40 tur döndüğünde 360° 'yi tamamlamış olur.
Dişli oranı 40:1
BS 2 ayna çapı 200 mm'dir.



| Sipariş | A | B | H | h | a |
|---|---|---|---|---|---|
| BS 2 | 365 | 272 | 236 | 132.7 | 213 |
| BS 2 - J | 365 | 272 | 236 | 132.7 | 213 |



STANDART AKSESUARLAR



ÖZEL AKSESUARLAR





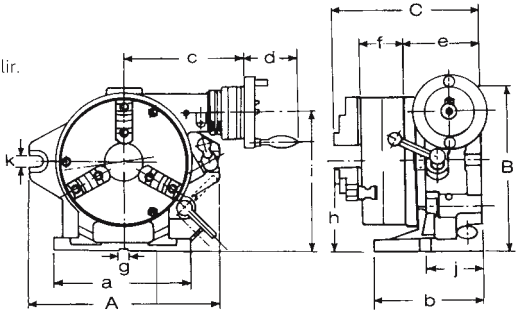
CS-8'İN GÖVDESİ, YÜZEY PLAKASI VE DİVİZÖR PLAKASI İLE UYUMLUDUR.

VERTEX

## CS - Yatay Dikey Süper Index Divizör (Aynalı)

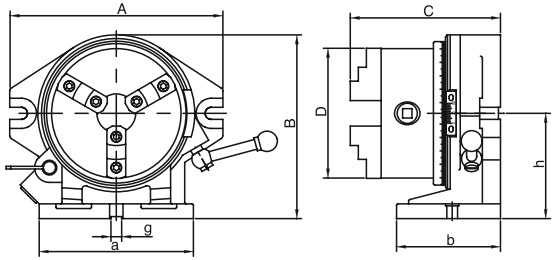
CS-6 ayna çapı 160 mm'dir.
CS-8 ayna çapı 200 mm'dir.

Standart döner tabla aksesuarı sayesinde döner tabla olarak kullanılabilir.
Bölüntülü 7 ad. plakaya sahiptir.
180 - 120 - 90 - 60 - 45 - 30 - 15°lerde sabitlenerek çalışabilir.
Dişli oranı 90:1




| Sipariş | A | B | C | a | b | c | d | e | f | g | h | i | j | k | kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CS-6 | 250 | 235 | 221 | 220 | 150 | 184 | 82 | 112 | 66 | 16 | 123 | 186 | 80 | 18 | 50 |
| CS-8 | 310 | 285 | 243 | 225 | 160 | 201 | 82 | 125 | 75 | 16 | 155 | 232 | 90 | 18 | 79 |






VERTEX

## CC - Yatay Dikey Index Divizör (Aynalı)

Bölüntülü 7 ad. plakaya sahiptir.
180 - 120 - 90 - 60 - 45 - 30 - 15°lerde sabitlenerek çalışabilir.
Çalışma şekli manueldir.
Dişli oranı 90:1

| Sipariş | A | B | C | D | a | b | h | g | Delik Ölçüsü | Ayna Çapı | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CC-6 | 260 | 218 | 156.2 | 167 | 220 | 130 | 123 | 16 | 36 | 160 | 36 |
| CC-8 | 312 | 257 | 173.3 | 200 | 258 | 148 | 155 | 16 | 63 | 200 | 51 |




VPS 301C (Seramik Uçlu Prop) | VPS 301 (Düz Prop) | VPS 302 (Uçlu Prop)

VERTEX

## VPS - Mekanik Proplar

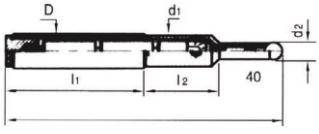
| Sipariş | Tip |
|---|---|
| VPS 301C | Seramik Uçlu Prop |
| VPS 301 | Düz Prop |
| VPS 302 | Uçlu Prop |

Mekanik proplar takım merkezi ile iş parçası kenarı arasındaki mesafeyi bulmak için kullanılır. Kenar sıfırlama probu tutucuya monte edildikten sonra makina devri 400 - 600 dev/dak. 'a getirilir. Makina çalıştırıldıktan itibaren prop iş parçasına yaklaştırılır. Probun her iki gövdeside dikey olarak bir araya geldiğinde kenar sıfırlama tamamlanmış demektir. Fener mili ölçüm yüzeyinden 5 mm mesafededir.




VERTEX

## VPS - Işıklı - Sesli Proplar




| Sipariş | D | d1 | d2 | L | l1 | l2 | Gram |
|---|---|---|---|---|---|---|---|
| VPS 20 | 20 | 16 | 10 | 157 | 77 | 35 | 320 |
| VPS 20B | 20 | 18 | 10 | 160 | 79 | 41 | 350 |

Işıklı ve ışıklı sesli proplar iş parçası kenarı ve takım merkezi arasındaki mesafeyi ışık veya ses yardımı ile bulmak içim kullanılır. iş parçası manyetik yüklü olmamalıdır.



VMS-9B | VMS-7B

VERTEX

## VMS - Manyetik Seperatör

| Sipariş | Boy x En x Yükseklik | Kg |
|---|---|---|
| VMS-7B | 180 x 170 x 75 | 2.7 |
| VMS-9B | 239 x 220 x 65 | 4.0 |

Manyetik seperatörler plastik enjeksiyon makinalarının ham madde giriş bölümüne monte edilip, plastik içerisindeki metal parçaları üzerine çekerek hammaddeden ayrışarak temizlenmesini sağlar.



VERTEX

## VMB 70 - Manyetik Ayaklar

| Sipariş | Taban Ölçüleri L x W x H | Kuvvet | Kol Ölçü | Kg |
|---|---|---|---|---|
| VMB-70 | 62 x 50 x 55 | 100 | 25 x 198 | 2 |



VERTEX

## VMB-B - Manyetik Ayaklar

| Sipariş | Taban Ölçüleri L x W x H | Kuvvet | Kol Ölçü | Kg |
|---|---|---|---|---|
| VMB-B | 62 x 50 x 55 | 80 | 12 x 173 | 1.5 |



VERTEX

## VMB-106 - Manyetik Ayaklar

| Sipariş | Taban Ölçüleri L x W x H | Kuvvet | Kol Ölçü | Kg |
|---|---|---|---|---|
| VMB-106 | 75 x 50 x 55 | 100 | 25 x 125 | 3 |



VERTEX

## VMB-01 - Manyetik Ayaklar

| Sipariş | Taban Ölçüleri L x W x H | Kuvvet | Kol Ölçü | Kg |
|---|---|---|---|---|
| VMB-01 | 62 x 50 x 55 | 80 | 12 x 173 | 1 |



VERTEX

## VMH-62 - Manyetik Ayaklar

| Sipariş | Taban Ölçüleri L x W x H | Kuvvet | Kol Ölçü | Kg |
|---|---|---|---|---|
| VMH-62 | 65 x 50 x 55 | 75 | 16 x 330 | 1.7 |



VERTEX

## VMH-54 - Manyetik Ayaklar

| Sipariş | Taban Ölçüleri L x W x H | Kuvvet | Kol Ölçü | Kg |
|---|---|---|---|---|
| VMH-54 | 65 x 50 x 55 | 75 | 16 x 330 | 1.5 |



VERTEX

## VH-56 - Manyetik Ayaklar

| Sipariş |
|---|
| VH-56 |



VERTEX

## VMB-02 - Manyetik Ayaklar

| Sipariş |
|---|
| VMB-02 |



VERTEX

## VMB-03 - Manyetik Ayaklar

| Sipariş |
|---|
| VMB-03 |



VERTEX

## VMB-12 - Manyetik Ayaklar

| Sipariş |
|---|
| VMB-12 |



VERTEX

## VMB-06 - Manyetik Ayaklar

| Sipariş |
|---|
| VMB-06 |



VERTEX

## VML-A - Manyetik Ayaklar

| Sipariş |
|---|
| VML-A |



VERTEX

## VMF-112 - Manyetik Ayaklar

| Sipariş |
|---|
| VMF-112 |



VERTEX

## VMS- 1/4 Manyetik Ayaklar
## VMS - 3/8

| Sipariş |
|---|
| VMS-1/4 |
| VMS-3/8 |



VERTEX

## VMH-63 - Manyetik Ayaklar

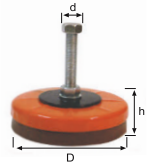
| Sipariş |
|---|
| VMH-63 |



VERTEX

## VMB-106H - Manyetik Ayaklar

| Sipariş | Taban Ölçüleri L x W x H | Kuvvet | Kol Ölçü | Kg |
|---|---|---|---|---|
| VMB-106H | 75 x 50 x 55 | 100 | 25 x 125 | 1.9 |




LEVEL

## ES - Makina Tamponları

| D | h | d | Ayar Mesafesi | Taşıma Kapasitesi |
|---|---|---|---|---|
| 80 | 45 | M 12 x 1.5 | 12 | 100 kg - 400 Adet |
| 120 | 45 | M 16 x 1.5 | 14 | 400 kg - 600 Adet |
| 160 | 45 | M 16 x 1.5 | 16 | 600 kg - 900 Adet |
| 160 | 45 | M 20 x 1.5 | 16 | 900 kg - 1200 Adet |
| 200 | 55 | M 12 x 2.5 | 25 | 1000 kg - 4000 Adet |
| 200 | 55 | M 16 x 2.5 | 25 | 1000 kg - 4000 Adet |
| 200 | 60 | M 20 x 3.0 | 25 | 1500 kg - 5000 Adet |



LEVEL

## EK - Kauçuk Bloklar

| WxL | H | H1 | Taşıma kg/adet |
|---|---|---|---|
| 100x100 | 20 | 1-5 kg/cm² | 500 |
| 100x100 | 30 | 1-6 kg/cm² | 500 |
| 120x120 | 20 | 1-5 kg/cm² | 750 |
| 120x120 | 30 | 1-6 kg/cm² | 750 |
| 150x150 | 20 | 1-5 kg/cm² | 1.125 |
| 150x150 | 30 | 1-6 kg/cm² | 1.125 |
| 125x200 | 20 | 1-5 kg/cm² | 1.250 |
| 125x200 | 30 | 1-6 kg/cm² | 1.250 |
| 300x300 | 13 | 1-3 kg/cm² | 4.000 |
| 300x300 | 20 | 1-5 kg/cm² | 4.000 |



JBT

## Spiral Hortum

| Ağız | h | Ayar Mesafesi |
|---|---|---|
| Yuvarlak | 300 | 1/4 |
| Yuvarlak | 400 | 3/8 |
| Genis | 300 | 1/4 |
| Genis | 400 | 3/8 |
| Yuvarlak | 400 | 1/2 |
| Genis | 400 | 1/2 |
| Hortum fiyatına eklenir | | |




JBT

## Kollu Gres Pompası

| Ürün |
|---|
| Pompa |
| Yedek Uç |



JBT

## İnce Yağ Pompası

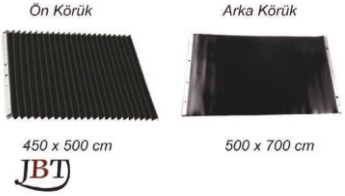
| Ürün |
|---|
| Disi |
| Erkek |



JBT

## Varil Pompası

| Ürün |
|---|
| Çevirmeli |
| Tulumbalı |




JBT

## Freze Talaş Koruma Körükleri

| Ürün |
|---|
| Ön |
| Arka |





mekap

## İş Ayakkabıları

| Model | ISO | Ürün Kodu | Koruma | Saya |
|---|---|---|---|---|
| Jupiter | EN ISO 20345:2011 | 157-01 Gray | S1/S1P | Süet Deri |

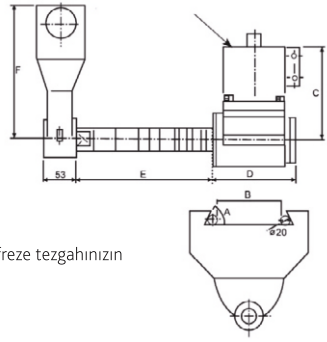
| Astar | İç Taban | Taban | Burun Koruma | Ara Taban | Numara |
|---|---|---|---|---|---|
| Ter emici nefes alabilen astar | Nefes alan iç tabanlık | PU/PU Çift Densite | Çelik Burun | Çelik Taban | 36-46 |





VRA tip yalnızca üniversal tarama başlığıdır.
VHA tip üniversal malafası ve yatağı ile birliktedir.
Her iki tipte 5 farklı pinol çapı çeşitleri mevcuttur.

Pinol çapları ;
85,725 - 2 / 3 numara kalıpçı frezeler.
100-105 3 / 4 numara kalıpçı frezeler.
110-115 5 / 6 numara kalıpçı frezeler.
(Örn. Gentiger Kalıpçı Freze)



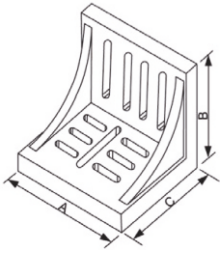

Sipariş esnasında model ile birlikte lütfen freze tezgahınızın pinol çapını belirtiniz.

VERTEX

**VRA NT Üniversal Freze Başlıkları**
**VHA NT**

| Sipariş | C | D | E | F |
|---|---|---|---|---|
| VHA NT-40 | 183 | 190 | 270 | 233 |
| VRA NT-40 | 183 | 190 | | |






Yüksek kaliteli sfero dökümden imal edilmiştir.
Yüzeyler hassas taşlanmış ve sertleştirilmiştir.
0.01 hassasiyete sahiptir.

VERTEX

**VR - Tezgah Gönyesi 90°**

| Sipariş | A | B | C |
|---|---|---|---|
| VR-6 | 150 | 126 | 115 |
| VR-8 | 202 | 150 | 126 |
| VR-10 | 250 | 202 | 126 |
| VR-12 | 300 | 228 | 101 |



VERTEX

**VCP 25 - Manyetik V Yatak**

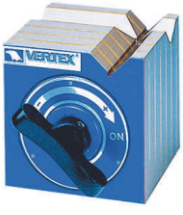
| Sipariş | Kuvvet | H | W | L | L1 | L2 |
|---|---|---|---|---|---|---|
| VCP-25 | 70 Kgs | 95.3 | 70 | 101.6 | 50 | 20 |



VERTEX

**VCP 26 Manyetik V Yatak**
**VCP 27**

| Sipariş | Kuvvet | H | W | L | L1 |
|---|---|---|---|---|---|
| VCP 26 | 30 Kgs | 73 | 54 | 70 | 38 |
| VCP 27 | 35 Kgs | 75 | 60 | 125 | 38 |




| W1 Kuvvet | Kuvvet |
|---|---|
| 25 Kgs | 50 Kgs |
| 50 Kgs | 140 Kgs |

VERTEX

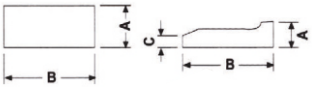
**VCP 26 Taşlanmış Kare V Yatak**
**VCP 27**

| Sipariş | H | W | L | W1 |
|---|---|---|---|---|
| VCP 31 | 100 | 100 | 100 | 26 |
| VCP 32 | 150 | 150 | 150 | 32 |



VERTEX

## VP 100 - 18 Parçalı Paralel Set

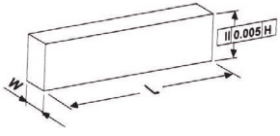



| Sipariş | A | B | L | Adet |
|---|---|---|---|---|
| VP-100 | 5 | 16 | 100 | 2 |
| | 6 | 18 | 100 | 2 |
| | 8 | 24 | 100 | 2 |
| | 10 | 30 | 100 | 2 |
| | 12 | 36 | 150 | 2 |
| | 14 | 48 | 150 | 2 |
| | 18 | 60 | 150 | 2 |
| | 22 | 62 | 150 | 2 |



VERTEX

## VP 128A - 28 Parçalı Paralel Set




| Sipariş | W | H | L | Adet |
|---|---|---|---|---|
| VP-128A | 10 | 14 | 150 | 2 |
| | 10 | 16 | 150 | 2 |
| | 10 | 18 | 150 | 2 |
| | 10 | 20 | 150 | 2 |
| | 10 | 22 | 150 | 2 |
| | 10 | 24 | 150 | 2 |
| | 10 | 26 | 150 | 2 |
| | 10 | 28 | 150 | 2 |
| | 10 | 30 | 150 | 2 |
| | 10 | 32 | 150 | 2 |
| | 10 | 35 | 150 | 2 |
| | 10 | 40 | 150 | 2 |
| | 10 | 45 | 150 | 2 |
| | 10 | 50 | 150 | 2 |



**U2**



**U2 - E**

Parmak Freze Bileme Aparatı



**U2 - L**

Kater elmas Uç Bileme Aparatı



**U2 - T**

Matkap Ucu Bileme Aparatı

VERTEX

## U2 - Takım Bileme

**Standart Donanım**

Taş bileme elması
EKW Bileme taşı
5 adet Pens 4 - 6 - 8 - 10 - 12
Aydınlatma lambası
Tutucular ve takımlar

Tezgahlarda kullanılmak üzere hazırlanacak özel formlu kalemleri bilemek için idealdir.
Matkap ve frezede bilenebilir.
Maksimum pens kapasitesi 18 mm'dir.
Devir 3.600 rpm
Motor 1/3 Hp 220 V 50 / 60 Hz
Ağırlık 60 Kg
Makina ölçüleri 45 x 40 x 35

| Sipariş | Sipariş |
|---|---|
| U2 | U2-L |
| U2-E | U2-T |



VERTEX

## V-PGM - Motorlu Pim ve Zımba Taşlama Kademe Boy Ayara Aparatı

| Sipariş |
|---|
| V-PGM |

Taşlama makinasına bağlanarak kullanılır.
Taşlama çapı 1.5 - 25 mm'dir. Boy mesafesi 20 - 120 mm'dir.
Form verme ve radius işlemleri için idealdir.
Çift ruleli ünite uzun pim ve zımba taşlamak içindir.

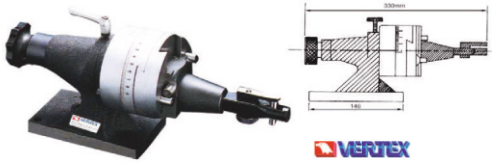


VERTEX

## SX/SY/SZ - Freze Otomatiği

Tüm freze tezgahlarında X-Y-Z eksenlerinde kolaylıkla uygulanmaktadır.

| Sipariş | Sipariş | Sipariş |
|---|---|---|
| SX500 | SY500 | SZ500 |



VERTEX

## V-TDB - Taşlama Taşına Form Verme Aparatı

Satıh taşlama tezgahlarında taşlama taşına açı ve radius vermek için kullanılır.
Toplam 360° dönme açısı ile eşit 4 parça bölümlüdür. (4x90°) Her çizgi arası 6 dakikadır.

| Sipariş |
|---|
| V-TDB |



VERTEX

## V-PB - Zımba Kademe ve Form Verme Aparatı

| Sipariş |
|---|
| V-PB |

2 eksen dönüş hareketi ile 360º eksenel dönüş yapabilir.
Eksantrik hareket mesafesi 12,5 mm'dir. Kapasitesi 4 - 30 mm'dir.
Eksantrik hareket ile zımbalarda kare ve köşeli form vermede idealdir. Merkeze yükseklik mesafesi 80 mm'dir.



VERTEX

## Dijital Koordinat Okuma Sistemi

| Sipariş |
|---|
| 2 EKSEN |
| 3 EKSEN |

Freze tezgahları için 3 eksen
Torna ve taşlama tezgahları için 2 eksen Dijital koordinat okuma sistemleri
Eksen cetvelleri ayrıca temin edilebilir.




Otomatik yağlama sistemi ; Kalıpçı freze, eksantrik presler için kullanıma uygundur.
30 dakikada bir içindeki dişli çark sayesinde otomatik olarak yağlama yapar.

VERTEX

## Otomatik Yağlama Sistemi

| Sipariş | Sıklık | Boşaltım Miktarı | Max. Basınç | Kapasite litre | kg |
|---|---|---|---|---|---|
| SMA-3 | Pompalama süresi 5 -10 -15 - 30 - 60 dk olarak ayarlanabilir | 1~3 | 3 kg/cm² | 2 | 1.8 |
| SMA-6 | | 3~ | 3 kg/cm² | 2 | 1.8 |
| SMA-8.5 | | 4~8.5 | 3 kg/cm² | 2 | 1.9 |




Manuel yağlama pompası ; Kalıpçı freze, eksantrik presler için kullanıma uygundur.
El ile manuel olarak istenilen sürede yağlama yapılabilir.

VERTEX

## Manuel Yağlama Pompası

| Sipariş | Boşaltım Miktarı | Max. Basınç | Kapasite | Verimli Kapasite | Ebat | kg |
|---|---|---|---|---|---|---|
| LT-6 | 6 | 15 kg/cm² | 350 cc | 250 cc | 85 x 85 | 1.2 |
| LT-18 | 7 | 15 kg/cm² | 600 cc | 400 cc | 100 x 110 | 1.6 |
| LT-18A | 7 | 15 kg/cm² | 650 cc | 450 cc | 98 x 107 | 1.6 |



## VEG300 - Pim Kesme Makinası



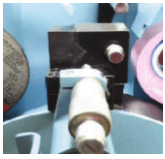

Sipariş
VEG300

| | |
|---|---|
| Uzunluk Toleransı | : Ø1mm - 24mm x 325mm |
| Kısalık Toleransı | : Ø1mm - 24mm x 60mm |
| Kesme Diski | : 115 - 185mm x 1,0 x 22mm |
| Taşlama Taşı | : 100mm x 50mm x 20mm (60 kum) |
| Motor | : 380V 50Hz 0.75Kw 1500 devir/dk. |
| Devir - RPM | : 3650 (devir/dk.) |
| Gönyesellik | : Ø1 - 24mm x 90 / ±0,02 |
| Makine Ağırlığı | : 80 Kg |
| Makine Ölçüleri | : 500mm x 425mm x 355mm |

Daha uzun boy kesme işlemleri için * 600 mm'lik cetvel opsiyoneldir ve isteğe göre tercih edilebilir.



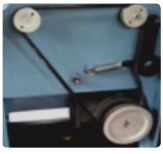
Çap kesme kapasitesi 1 - 24 mm arasındadır. 60 - 325 mm arası uzunluktaki parçaları cetvelde bulunan mikrometre yardımıyla hassas bir şekilde kesebilirsiniz (600 mm cetvel opsiyoneldir).



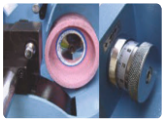
Güçlü ve hızlı bir sıkma mekanizması mengene ile hız ve kolaylık sağlar. Mengene üzerindeki taş düzeltme elması ile çanak taş kolayca bilenebilir.



Makinenin kontrol panelinde acil stop butonu ve enerji ikaz ışıklı start - stop butonu vardır.
Kontrol Kolu Hareketleri:
Yukarı: Kesme
Aşağı: Alın Taşlama
Sağ: Mengene Açma



Transmisyon tahrik gücünü kayışa konumlandırılan plastik rulman ile parça çapına bağlı olarak kendi devrini otomatik ayarlar.



Çalışma esnasında kesilen parçalar "çanak taş ile ölçü ayarını değiştirmek zorunda kalmadan" 90 / ±0,02 gönyesellik hassasiyetiyle taşlanır.



Pleksiglas kapak emniyeti sağlar. Kapak açıldığında makine durur ve kapak kapatılmadan çalıştırılamaz.



VERTEX

## VCF500
**Pah Kırma Makinası**

| | |
|---|---|
| Köşe Radius | : 15° - 45° |
| Devir | : 3500 rpm |
| Pah Kapasitesi | : 0 - 3 |
| Motor | : 220W |

Sipariş
VCF500



VERTEX

## VCF500F
**Pah Kırma Makinası**

| | |
|---|---|
| Köşe Radius | : 45° |
| Devir | : 3500 rpm |
| Pah Kapasitesi | : 0 - 3 |
| Motor | : 220W |

Sipariş
VCF500F



VERTEX

## VCF600
**Pah Kırma Makinası**

| | |
|---|---|
| Köşe Radius | : 45° |
| Devir | : 3500 rpm |
| Pah Kapasitesi | : 0 - 3 |
| Motor | : 220W |

Sipariş
VCF500F



## 2A 100 - Freze Mengeneleri

| Sipariş | Çene Genişliği | Max Açılım | Çene Yüksekliği |
|---|---|---|---|
| 2A 100 | 126 | 100 | 40 |



## G120 - Freze Mengeneleri

| Sipariş | Çene Genişliği | Max Açılım | Çene Yüksekliği |
|---|---|---|---|
| G120 | 100 | 120 | 40 |



## G160 - Freze Mengeneleri

| Sipariş | Çene Genişliği | Max Açılım | Çene Yüksekliği |
|---|---|---|---|
| G160 | 130 | 160 | 42 |



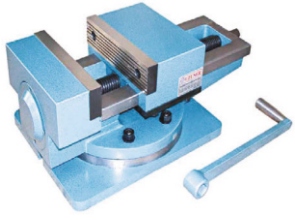
## M200 - Freze Mengeneleri

| Sipariş | Çene Genişliği | Max Açılım | Çene Yüksekliği |
|---|---|---|---|
| M200 | 147 | 200 | 61 |



## M250 - Freze Mengeneleri

| Sipariş | Çene Genişliği | Max Açılım | Çene Yüksekliği |
|---|---|---|---|
| M250 | 190 | 250 | 61 |



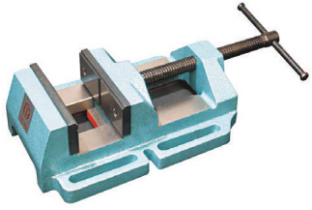
## M400 - Freze Mengeneleri

| Sipariş | Çene Genişliği | Max Açılım | Çene Yüksekliği |
|---|---|---|---|
| M400 | 250 | 400 | 72 |



## CNC200 CNC300 Freze Mengeneleri

| Sipariş | Max Açılım | | Çene Yüksekliği |
|---|---|---|---|
| | Şekil 1 | Şekil 2 | |
| CNC200 | 200 | 400 | 50 |
| CNC300 | 300 | 550 | 64 |



## MT - Matkap Mengeneleri

| Sipariş | Max Açılım | Çene Yüksekliği |
|---|---|---|
| MT 100 | 100 | 100 |
| MT 125 | 125 | 110 |
| MT 150 | 150 | 140 |



kanca Makina & El Aletleri

## KNC - Masa Mengeneleri

| Sipariş | Çene Yüksekliği |
|---|---|
| KNC100 | 100 mm |
| KNC125 | 125 mm |
| KNC135 | 135 mm |

| Sipariş | Çene Yüksekliği |
|---|---|
| KNC150 | 150 mm |
| KNC175 | 175 mm |
| KNC200 | 200 mm |



**MİCRO–D**

Dönerli Çift Çene

BAYKAY - Tezgah Sportları



**MİCRO–S**

Dönerli Çift Çene



**MİCRO–TY**

Sabit Tek Çene

| Sport Tipi | | MICRO ( SP ) | MICRO 1 ( TY ) | MICRO 2 ( TY ) |
|---|---|---|---|---|
| Tabla Ölçüleri | mm | 190 x 125 | 230 x 145 | 320 x 145 |
| İş Tabla Yüksekliği | mm | 105 | 100 | 100 |
| X ve Y Eksenleri Hareketi | mm | 115 x 100 | 160 | 260 |
| T Kanal Sayısı | mm | 3 | 3 | 3 |
| T Kanal Genişliği | mm | 9 x 19 | 9 x 19 | 9 x 19 |
| 1 Tambur Turu | mm | 2.5 | 2.5 | 2.5 |
| Min. Tambur Bölüntüsü | mm | 0.05 | 0.025 | 0.025 |



**MİCRO–SP**

Sabit Çift Çene

| Sport Tipi | | MICRO ( D ) | MICRO 1 ( S ) | MICRO 2 ( D ) | MICRO 2 ( S ) |
|---|---|---|---|---|---|
| Tabla Ölçüleri | mm | 230 x 145 | 230 x 145 | 320 x 145 | 320 x 145 |
| İş Tabla Yüksekliği | mm | 155 | 125 | 155 | 125 |
| X ve Y Eksenleri Hareketi | mm | 160 x 120 | 160 x 120 | 260 x 120 | 260 x 105 |
| T Kanal Sayısı | mm | 3 | 3 | 3 | 3 |
| T Kanal Genişliği | mm | 9 x 19 | 9 x 19 | 9 x 19 | 9 x 19 |
| 1 Tambur Turu | mm | 2.5 | 2.5 | 2.5 | 2.5 |
| Min. Tambur Bölüntüsü | mm | 0.025 | 0.025 | 0.025 | 0.025 |



**S TİPİ**

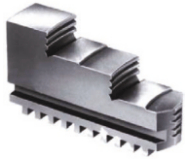
Dönerli 3 Çene

| Sport Tipi | | S1 | S2 | S3 | S4 | S5 | S6 |
|---|---|---|---|---|---|---|---|
| Tabla Ölçüleri | mm | 360 x 210 | 435 x 245 | 520 x 275 | 610 x 275 | 705 x 280 | 1000 x 325 |
| İş Tabla Yüksekliği | mm | 180 | 200 | 220 | 220 | 215 | 235 |
| X ve Y Eksenleri Hareketi | mm | 210 x 160 | 260 x 170 | 335 x 265 | 425 x 265 | 435 x 275 | 700 x 235 |
| T Kanal Sayısı | mm | 2 | 3 | 3 | 3 | 3 | 5 |
| T Kanal Genişliği | mm | 12 x 22 | 12 x 22 | 12 x 22 | 12 x 22 | 12 x 22 | 12 x 22 |
| 1 Tambur Turu | mm | 4 | 4 | 4 | 4 | 4 | 5 |
| Min. Tambur Bölüntüsü | mm | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |



## Düz Yedek Ayak Takımı

| Ebat | Ebat | Ebat | Ebat |
|---|---|---|---|
| 80 x 3 | 250 x 3 | 80 x 4 | 250 x 4 |
| 100 x 3 | 315 x 3 | 100 x 4 | 315 x 4 |
| 125 x 3 | 400 x 3 | 125 x 4 | 400 x 4 |
| 160 x 3 | 500 x 3 | 160 x 4 | 500 x 4 |
| 200 x 3 | 630 x 3 | 200 x 4 | 630 x 4 |



## Ters Yedek Ayak Takımı

| Ebat | Ebat | Ebat | Ebat |
|---|---|---|---|
| 80 x 3 | 250 x 3 | 80 x 4 | 250 x 4 |
| 100 x 3 | 315 x 3 | 100 x 4 | 315 x 4 |
| 125 x 3 | 400 x 3 | 125 x 4 | 400 x 4 |
| 160 x 3 | 500 x 3 | 160 x 4 | 500 x 4 |
| 200 x 3 | 630 x 3 | 200 x 4 | 630 x 4 |

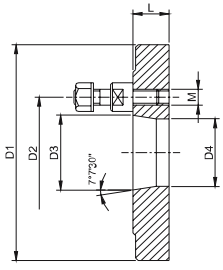


## Torna Aynası İçin Anahtar

| Ebat | AA |
|---|---|
| 80 | 8 |
| 100 | 8 |
| 125 | 10 |
| 160 | 10 |
| 200 | 12 |
| 250 | 12 |

| Ebat | AA |
|---|---|
| 315 | 13 |
| 400 | - |
| 500 | - |
| 630 | - |
| 800 | - |

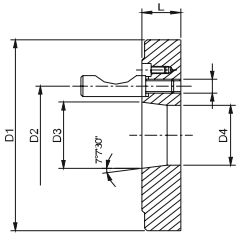





## Ayna Flanşı

| D1 | No | D2 | D3 | D4 | L | M |
|---|---|---|---|---|---|---|
| 160 | 4 | 85 | 63.525 | 60.6 | 25 | M10 |
| | 5 | 104.8 | 82.563 | 79.4 | 25 | M10 |
| | 6 | 133.4 | 106.375 | 103 | 25 | M12 |
| 200 | 5 | 104.8 | 82.563 | 79.4 | 25 | M10 |
| | 6 | 133.4 | 106.375 | 103 | 25 | M12 |
| | 8 | 171.4 | 139.719 | 136 | 25 | M16 |
| 250 | 5 | 104.8 | 82.563 | 79.4 | 30 | M10 |
| | 6 | 133.4 | 106.375 | 103 | 30 | M12 |
| | 8 | 171.4 | 139.719 | 136 | 30 | M16 |
| 315 | 6 | 133.4 | 106.375 | 103 | 35 | M12 |
| | 8 | 171.4 | 139.719 | 136 | 35 | M16 |
| | 11 | 235 | 196.869 | 192.5 | 35 | M20 |
| 400 | 6 | 133.4 | 106.375 | 103 | 36 | M12 |
| | 8 | 171.4 | 139.719 | 136 | 36 | M16 |
| | 11 | 235 | 196.869 | 192.5 | 36 | M20 |
| 500 | 8 | 171.4 | 139.719 | 136 | 40 | M16 |
| | 11 | 235 | 196.869 | 192.5 | 40 | M20 |

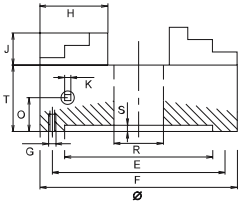





## Camlock Ayna Flanşı

| D1 | No | D2 | D3 | D4 | L | M |
|---|---|---|---|---|---|---|
| 160 | 4 | 82.55 | 63.525 | 60.6 | 25 | M12x1 |
| | 5 | 104.8 | 82.563 | 79.4 | 28 | M12x1 |
| | 6 | 133.4 | 106.375 | 103 | 33 | M16x1.5 |
| 200 | 5 | 104.8 | 82.563 | 79.4 | 28 | M12x1 |
| | 6 | 133.4 | 106.375 | 103 | 33 | M16x1.5 |
| | 8 | 171.4 | 139.719 | 136 | 38 | M20x1.5 |
| 250 | 5 | 104.8 | 82.563 | 79.4 | 33 | M12x1 |
| | 6 | 133.4 | 106.375 | 103 | 33 | M16x1.5 |
| | 8 | 171.4 | 139.719 | 136 | 38 | M20x1.5 |
| 315 | 6 | 133.4 | 106.375 | 103 | 35 | M16x1.5 |
| | 8 | 171.4 | 139.719 | 136 | 38 | M20x1.5 |
| | 11 | 235 | 196.869 | 192.5 | 44 | M22x1.5 |
| 400 | 6 | 133.4 | 106.375 | 103 | 40 | M16x1.5 |
| | 8 | 171.4 | 139.719 | 136 | 40 | M20x1.5 |
| | 11 | 235 | 196.869 | 192.5 | 45 | M22x1.5 |
| 500 | 8 | 171.4 | 139.719 | 136 | 45 | M20x1.5 |
| | 11 | 235 | 196.869 | 192.5 | 45 | M22x1.5 |



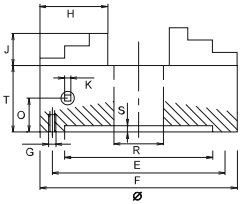



## 3 Ayaklı Aynalar

3 ayaklı merkezi sıkmalı üniversal torna aynası yüksek kaliteli döküm gövde, torna tezgahlarında, freze, divizör ve döner tablalarda kullanılır.

| Ø | E H6 | F±0,2 | S | T | R |
|---|---|---|---|---|---|
| 80 | 63 | 70 | 3 | 45 | 17 |
| 100 | 80 | 90 | 3 | 52 | 23 |
| 125 | 100 | 110 | 4 | 58 | 28 |
| 160 | 130 | 143 | 4 | 62 | 48 |
| 200 | 162 | 180 | 5 | 76 | 52 |
| 250 | 210 | 226 | 5 | 82 | 78 |
| 315 | 265 | 290 | 6 | 100 | 108 |
| 400 | 350 | 375 | 7 | 110 | 144 |
| 500 | 420 | 458 | 8 | 120 | 190 |
| 630 | 560 | 595 | 7 | 133.5 | 270 |



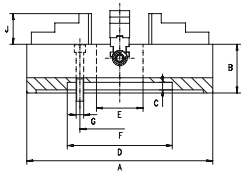



## 4 Ayaklı Aynalar

4 ayaklı merkezi sıkmalı üniversal torna aynası yüksek kaliteli döküm gövde, torna tezgahlarında, freze, divizör ve döner tablalarda kullanılır.

| Ø | E H6 | F±0,2 | S | T | R |
|---|---|---|---|---|---|
| 80 | 63 | 70 | 3 | 45 | 17 |
| 100 | 80 | 90 | 3 | 52 | 23 |
| 125 | 100 | 110 | 4 | 58 | 28 |
| 160 | 130 | 143 | 4 | 62 | 48 |
| 200 | 162 | 180 | 5 | 76 | 52 |
| 250 | 210 | 226 | 5 | 82 | 78 |
| 315 | 265 | 290 | 6 | 100 | 108 |
| 400 | 350 | 375 | 7 | 110 | 144 |
| 500 | 420 | 458 | 8 | 120 | 190 |
| 630 | 545 | 586 | 7 | 135 | 252 |



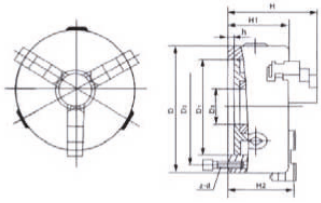



## Kepenkli Aynalar

4 ayaklı her bir ayak bağımsız olarak ayarlanabilir.
Yüksek kaliteli döküm gövde, üniversal tornalar, freze, divizör ve döner tablalarda kullanılabilir.

| ØA | B | C | D H7 | E | F | G | J |
|---|---|---|---|---|---|---|---|
| 160 | 65 | 5 | 75 | 45 | 95 | 4 x M10 | 24 |
| 200 | 80 | 6 | 80 | 56 | 112 | 4 x M10 | 27 |
| 250 | 90 | 6 | 110 | 75 | 130 | 4 x M12 | 30 |
| 320 | 90 | 6 | 140 | 95 | 165 | 4 x M16 | 44 |
| 400 | 95 | 8 | 160 | 125 | 185 | 4 x M16 | 48 |
| 500 | 106 | 8 | 200 | 160 | 236 | 4 x M20 | 55 |
| 630 | 118 | 10 | 220 | 180 | 258 | 4 x M20 | 62 |
| 800 | 132 | 12 | 250 | 210 | 300 | 8 x M20 | 70 |
| 1000 | 150 | 15 | 320 | 260 | 370 | 8 x M20 | 80 |
| 1250 | 165 | 15 | 400 | 280 | 500 | 8 x M20 | 91 |



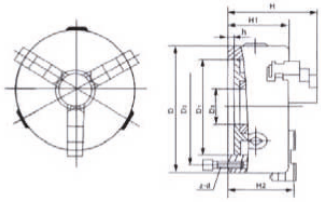


SAN OU CHUCK BISON TOS SVITAVY

## 3 Ayaklı Önden Bağlamalı Divizör Aynaları

| D | D1 | D2 | D3 | H | H1 | h | z-d |
|---|---|---|---|---|---|---|---|
| 80 | 55 | 66 | 16 | 66.5 | 50 | 4 | 3 - M16 |
| 100 | 72 | 84 | 22 | 74.5 | 55 | 3 | 3 - M8 |
| 125 | 95 | 108 | 30 | 84.5 | 58 | 4 | 3 - M8 |
| 160 | 130 | 142 | 45 | 94 | 65 | 5 | 3 - M8 |
| 200 | 165 | 180 | 65 | 109 | 75 | 5 | 3 - M10 |
| 250 | 206 | 226 | 80 | 120 | 80 | 5 | 3 - M12 |
| 315 | 260 | 285 | 100 | 147.5 | 90 | 6 | 3 - M16 |
| 400 | 340 | 368 | 130 | 173.5 | 100 | 6 | 3 - M16 |
| 500 | 440 | 465 | 210 | 202 | 115 | 6 | 6 - M16 |
| 630 | 545 | 586 | 252 | 220.5 | 135 | 7 | 6 - M16 |



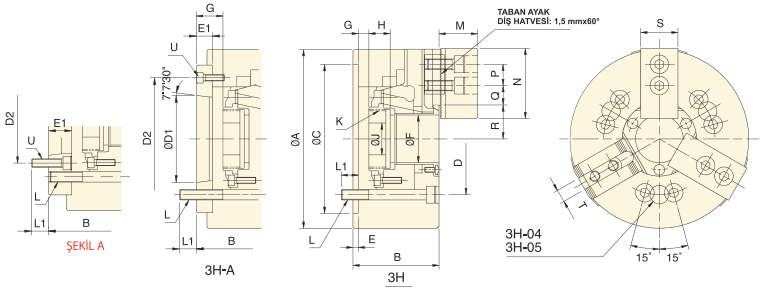


SAN OU CHUCK BISON TOS SVITAVY

## 4 Ayaklı Önden Bağlamalı Divizör Aynaları

| D | D1 | D2 | D3 | H | H1 | h | z-d |
|---|---|---|---|---|---|---|---|
| 80 | 55 | 66 | 16 | 66.5 | 50 | 4 | 3 - M16 |
| 100 | 72 | 84 | 22 | 74.5 | 55 | 3 | 3 - M8 |
| 125 | 95 | 108 | 30 | 84.5 | 58 | 4 | 3 - M8 |
| 160 | 130 | 142 | 45 | 94 | 65 | 5 | 3 - M8 |
| 200 | 165 | 180 | 65 | 109 | 75 | 5 | 3 - M10 |
| 250 | 206 | 226 | 80 | 120 | 80 | 5 | 3 - M12 |
| 315 | 260 | 285 | 100 | 147.5 | 90 | 6 | 3 - M16 |
| 400 | 340 | 368 | 130 | 173.5 | 100 | 6 | 3 - M16 |
| 500 | 440 | 465 | 210 | 202 | 115 | 6 | 6 - M16 |
| 630 | 545 | 586 | 252 | 220.5 | 135 | 7 | 6 - M16 |






## 3 Ayaklı
## Açık Merkezli Hidrolik Ayna

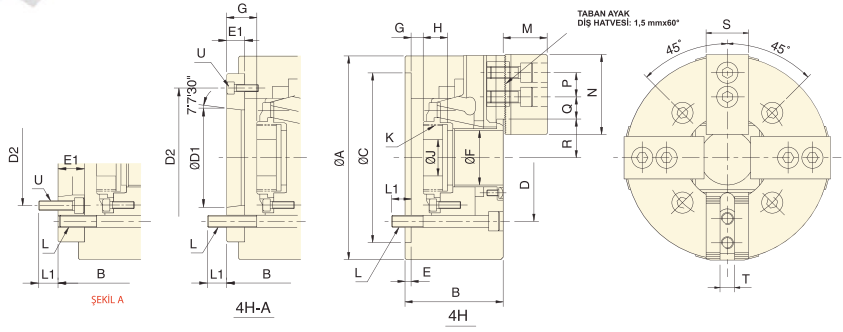
| ÖZELLİK MODEL/ADAPTÖR | | PİSTON STROK (mm) | AYAK STROK (mm) | SIKMA ÇAPI MAX. | SIKMA ÇAPI MİN. | ÇEKME KUVVETİ KN (kgf) | SIKMA KUVVETİ KN (kgf) | MAX. DEVİR d/d | ATALET MOMENTİ GD Kg.m | AĞIRLIK Kg | | UYGUN SİLİNDİR MODELİ | MAX. HİDROLİK BASINCI Mpa (kgf/cm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3H-04 | | 10 | 5,4 | 110 | 7 | 13.7(1400) | 28.4(2900) | 8000 | 0,01 | 4 | | TH-536 | 2,3(23) |
| 3H-05 | A4 | | | 135 | 12 | 17.1(1750) | 35.8(3650) | 7000 | 0,02 | 6,7 | 7,5 | | 2,9(29) |
| 3H-06 | A5 | 12 | 5,5 | 168 | 15 | 21.5(2200) | 56.8(5800) | 6000 | 0,06 | 11,9 | 13,7 | TH-646 | 2,8(28) |
| 3H-08 | A5 | 16 | 7,4 | 210 | 13 | 34.3(3500) | 85.8(8750) | 5000 | 0,18 | 22,5 | 25,4 | TH-852 | 2,8(19) |
| | A6 | | | | | | | | | | 23,6 | | |
| 3H-10 | A6 | 19 | 8,8 | 254 | 31 | 42.6(4380) | 110.7(11300) | 4200 | 0,33 | 34,5 | 41,5 | TH-1075 | 2,7(27) |
| | A8 | | | | | | | | | | 40 | | |
| 3H-12 | A8 | 23 | 10,6 | 304 | 34 | 54.9(5600) | 143.6(14650) | 3300 | 0,77 | 56,6 | 59,5 | TH-1291 | 2,7(27) |
| 3H-15 | A8 | | | 381 | 50 | 71(7250) | 179.8(18350) | 2500 | 2,47 | 120 | 134 | TH-1512 | 2,4(24) |
| | A11 | | | | | | | | 2,39 | | 127 | | |
| 3H-18 | A11 | | | 450 | | | | 2000 | 4,78 | 164 | 178 | | |

| ÖZELLİK MODEL/ADAPTÖR | | A | B | | C (H6) | D | D1 | D2 | E | E1 | F | G (max) | | G (min) | | H | J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3H-04 | | 110 | 59 | | 85 | 70.6 | - | - | 4 | - | 26 | 3.5 | | -6.5 | | 17.5 | 12 |
| 3H-05 | A4 | 135 | 60 | 71 | 110 | 82.6 | 63.51 | 96 | | 15 | 33 | 1 | 16 | -9 | 6 | 20 | |
| 3H-06 | A5 | 168 | 81 | 91 | 140 | 104.8 | 82.56 | 116 | 5 | | 45 | 11 | 26 | -1 | 14 | 19 | 20 |
| 3H-08 | A5 | 210 | 91 | 109 | 170 | 133.4 | | 104.8 | | 23 | 52 | 14.5 | 37.5 | -1.5 | 21.5 | 20.5 | 30 |
| | A6 | | | 103 | | | 106.38 | 150 | | 17 | | | 31.5 | | 15.5 | | |
| 3H-10 | A6 | 254 | 100 | 120 | 220 | 171.4 | | 133.4 | | 25 | 75 | 8.5 | 33.5 | -10.5 | 14.5 | 25 | 45 |
| | A8 | | | 113 | | | 139.72 | 190 | | 18 | | | 26.5 | | 7.5 | | |
| 3H-12 | A8 | 304 | 110 | 122 | | | | | 6 | | 91 | 8 | 26 | -15 | 3 | 28 | 50 |
| 3H-15 | A8 | 381 | 133 | 160 | 300 | 235 | | 171.4 | | 33 | 120 | 11 | 44 | -12 | 21 | 39 | 60 |
| | A11 | | | 133 | | | 196.87 | 260 | | 22 | | | 33 | | 10 | | |
| 3H-18 | A11 | 450 | | | | | | | | | | | | | | | |

| ÖZELLİK MODEL / ADAPTÖR | | K (max) | L | L1 | | M | N | P | Q (max) | Q (min) | R (max) | R (min) | S | T | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3H-04 | | M 32 x 1.5 | 3~M10 | 16 | | 24 | 52 | 14 | 11.3 | 6.8 | 23 | 20.3 | 25 | 10 | - |
| 3H-05 | A4 | M 40 x 1.5 | | 15 | 15 | 31 | 62 | | 19.8 | 7.8 | 265 | 23.8 | | | 3~M6 |
| 3H-06 | A5 | M 55 x 2 | 6~M10 | 16 | 16 | 37 | 73 | 20 | 22.8 | 9.3 | 32 | 29.3 | 31 | 12 | |
| 3H-08 | A5 | M 60 x 2 | 6~M12 | 20 | 17 | 38 | 95 | 25 | 29.8 | 14.8 | 387 | 35 | 35 | 14 | 6~M10 |
| | A6 | | | | 18 | | | | | | | | | | 3~M16 |
| 3H-10 | A6 | M 85 x 2 | 6~M16 | 22 | | 43 | 110 | 30 | 33.8 | 14.3 | 51 | 46.6 | 40 | 16 | 6~M12 |
| | A8 | | | | 24 | | | | | | | | | | 3~M8 |
| 3H-12 | A8 | M 100 x 2 | | 23 | 25 | 51 | 130 | | 45.8 | 15.8 | 61.3 | 56 | 50 | 21 | |
| 3H-15 | A8 | M 130 x 2 | 6~M20 | 30 | 25 | 63 | 165 | 43 | 47.3 | 18.2 | 80 | 74.7 | 62 | 25.5 ya da 22 | 6~M12 |
| | A11 | | | | 28 | | | | | | | | | | 3~M10 |
| 3H-18 | A11 | | | | | | | | 79.2 | | | | | | |



## 4 Ayaklı
## Açık Merkezli Hidrolik Ayna




| ÖZELLİK / MODEL/ADAPTÖR | | PİSTON STROK (mm) | AYAK STROK (mm) | SIKMA ÇAPI MAX. | SIKMA ÇAPI MİN. | ÇEKME KUVVETİ KN (kgf) | SIKMA KUVVETİ KN (kgf) | MAX. DEVİR d/d | ATALET MOMENTİ GD Kg.m | AĞIRLIK Kg | | UYGUN SİLİNDİR MODELİ | MAX. HİDROLİK BASINCI Mpa (kgf/cm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4H-06 | A5 | 12 | 5.5 | 168 | 15 | 21.6(2000) | 56.8(5800) | 6000 | 0.07 | 12.5 | 14.3 | TH-646 | 2.8(28) |
| 4H-08 | A5 | 16 | 7.4 | 210 | 13 | 34.3(3500) | 85.8(8750) | 5000 | 0.19 | 23.5 | 25.4 | TH-852 | 2.8(28) |
| | A6 | | | | | | | | | | 24.3 | | |
| 4H-10 | A6 | 19 | 8.8 | 254 | 31 | 42.6(4380) | 110.7(11300) | 4200 | 0.34 | 36.3 | 41 | TH-1075 | 2.7(27) |
| | A8 | | | | | | | | | | 39.3 | | |
| 4H-12 | A8 | 23 | 10.6 | 304 | 34 | 54.9(5600) | 143.6(14650) | 3300 | 0.79 | 62 | 65.7 | TH-1512 | 2.7(27) |
| 4H-15 | A8 | | | 381 | 50 | 71(7250) | 179.8(18350) | 2500 | 2.50 | 123.7 | 137.7 | | 2.4(24) |
| | A11 | | | | | | | | 2.42 | | 130.7 | | |
| 4H-18 | A11 | | | 450 | | | | 2000 | 4.85 | 170 | 184 | | |

| ÖZELLİK / MODEL/ADAPTÖR | | A | B | | C (H6) | D | D1 | D2 | E | E1 | F | G (max) | | G (min) | | H | J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4H-06 | A5 | 168 | 81 | 91 | 140 | 104.8 | 82.56 | 116 | 5 | 15 | 45 | 11 | 26 | -1 | 14 | 19 | 20 |
| 4H-08 | A5 | 210 | 210 | 91 | 170 | 133.4 | | 104.8 | | 23 | 52 | 14.5 | 37.5 | -1.5 | 21.5 | 20.5 | 30 |
| | A6 | | | | | | 106.38 | 150 | | 17 | 75 | | 31.5 | | 15.5 | | |
| 4H-10 | A6 | 254 | 254 | 100 | 220 | 171.4 | | 133.4 | | 25 | | 8.5 | 33.5 | -10.5 | 14.5 | 25 | 45 |
| | A8 | | | | | | 139.72 | 190 | | 18 | 91 | | 26.5 | | 7.5 | | |
| 4H-12 | A8 | 304 | 110 | 122 | | | | | 6 | | | 8 | 26 | -15 | 3 | 28 | 50 |
| 4H-15 | A8 | 381 | 133 | 160 | 300 | 235 | | 171.4 | | 33 | 120 | 11 | 44 | -12 | 21 | 39 | 60 |
| | A11 | | | 149 | | | 196.87 | 260 | | 22 | | | 33 | | 10 | | |
| 4H-18 | A11 | 450 | | | | | | | | | | | | | | | |

| ÖZELLİK / MODEL/ADAPTÖR | | K (max) | L | L1 | | M | N | P | Q (max) | Q (min) | R (max) | R (min) | S | T | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4H-06 | A5 | M 55 x 2 | 4~M10 | 16 | 16 | 37 | 73 | 20 | 22.8 | 9.3 | 32 | 29.3 | 31 | 12 | 3~M6 |
| 4H-08 | A5 | M 60 x 2 | 4~M12 | 20 | 17 | 38 | 95 | 25 | 29.8 | 14.8 | 38.7 | 35 | 35 | 14 | 6~M10 |
| | A6 | | | | 18 | | | | | | | | | | 3~M6 |
| 4H-10 | A6 | M 85 x 2 | 4~M16 | 22 | | 43 | 110 | 30 | 33.8 | 14.3 | 51 | 46.6 | 40 | 16 | 6~M12 |
| | A8 | | | | 22 | | | | | | | | | | 3~M8 |
| 4H-12 | A8 | M 100 x 2 | | 23 | 25 | 51 | 130 | | 45.8 | 15.8 | 61.3 | 56 | 50 | 21 | |
| 4H-15 | A8 | M 130 x 2 | 4~M20 | 30 | 24 | 63 | 165 | 43 | 47.3 | 18.2 | 80 | 74.7 | 62 | 25.5 | 6~M16 |
| | A11 | | | | 28 | | | | | | | | | | |
| 4H-18 | A11 | | | | | | | | 79.2 | | | | | | 3~M10 |

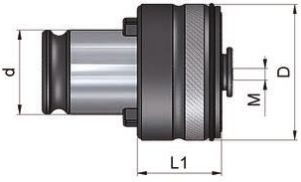


## Havalı Klavuz Çekme Makinası

| Kapasite | Güç (kw) | Hız (rpm) | Çalışma Basıncı (bar) | Ağırlık (kg) |
|---|---|---|---|---|
| M5-M16 | 3 | 0-600 | 60-100 | 200 |
| M5-M24 | 3 | 1.Kademe:0-150 | 60-100 | 225 |
| | | 2.Kademe:0-600 | | |
| M5-M36 | 5.5 | 0-100 | 60-120 | 250 |

## Masa Ölçüleri

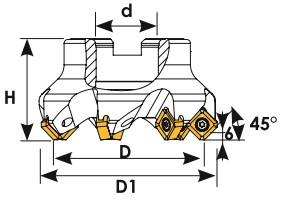
| Sipariş | En | Boy | Yükseklik |
|---|---|---|---|
| HMS3 | 800 | 1000 | 900 |
| HMS2 | 700 | 900 | 900 |




## Klavuz Adaptöleri

| d | M | Şaft | Kare |
|---|---|---|---|
| 19 | M2 | 2,8 | 2,1 |
| 19 | M2,5 | 2,8 | 2,1 |
| 19 | M3 | 3,5 | 2,7 |
| 19 | M3,5 | 4,0 | 3,0 |
| 19 | M4 | 4,5 | 3,4 |
| 19 | M5 | 6,0 | 4,9 |
| 19 | M6 | 6,0 | ,9 |
| 31 | M5 | 6 | 4,9 |
| 31 | M6 | 6 | 4,9 |
| 31 | M8 | 8 | 6,2 |
| 31 | M10 | 7 | 5,5 |
| 31 | M10 | 10 | 8,0 |
| 31 | M12 | 9 | 7,0 |
| 48 | M14 | 11 | 9,0 |
| 48 | M16 | 12 | 9,0 |
| 48 | M18 | 14 | 11,0 |
| 48 | M20 | 16 | 12,0 |
| 48 | M22 | 18 | 14,5 |





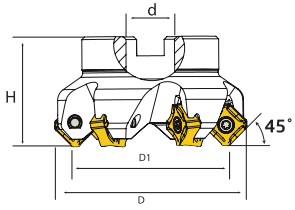

TEKNİK

## Tarama Başlığı
## 45 ° SNKX 1206

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | D | D1 | d | Z | H | kg | |
| T319 | D040 d16 Z03 SNKX 12 | 40 | 53 | 16 | 3 | 45 | 0,417 | |
| T320 | D050 d22 Z04 SNKX 12 | 50 | 63 | 22 | 4 | 44 | 0,593 | |
| T322 | D063 d22 Z06 SNKX 12 | 63 | 76 | 22 | 6 | 44 | 0,710 | SNKX 1206 |
| T325 | D080 d27 Z07 SNKX 12 | 80 | 93 | 27 | 7 | 52 | 1,334 | |
| T330 | D100 d32 Z08 SNKX 12 | 100 | 113 | 32 | 8 | 52 | 1,926 | |
| T332 | D125 d40 Z10 SNKX 12 | 125 | 138 | 40 | 10 | 63 | 3,780 | |
| T334 | D160 d40 Z12 SNKX 12 | 160 | 173 | 40 | 12 | 63 | 5,380 | |
| T335 | D200 d60 Z14 SNKX 12 | 200 | 213 | 60 | 14 | 63 | 6,690 | |

TC076 M4x12,5 T15





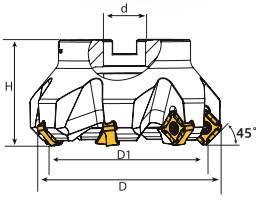

TEKNİK

## Tarama Başlığı
## 45 ° SNKX 1206-ONHX 0505

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | D | D1 | d | Z | H | kg | |
| T623 | D050 d22 Z04 SNKX 12 ONHX 05 | 50 | 42,4 | 22 | 4 | 40 | 0,458 | |
| T624 | D063 d22 Z06 SNKX 12 ONHX 05 | 63 | 55,4 | 22 | 6 | 40 | 0,608 | SNKX 1206 |
| T625 | D080 d27 Z07 SNKX 12 ONHX 05 | 80 | 72,4 | 27 | 7 | 50 | 1,051 | ONHX 0505 |
| T626 | D100 d32 Z08 SNKX 12 ONHX 05 | 100 | 92,4 | 32 | 8 | 50 | 1,813 | PLBT |
| T627 | D125 d40 Z10 SNKX 12 ONHX 05 | 125 | 117,4 | 40 | 10 | 63 | 3,277 | |
| T628 | D160 d40 Z12 SNKX 12 ONHX 05 | 160 | 152,4 | 40 | 12 | 63 | 4,577 | |

TC074 M4x10 T15





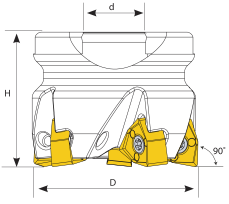

TEKNİK

## Tarama Başlığı
## 45 ° SNKX 1606-ONHX 0606

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | D | D1 | d | Z | H | kg | |
| T629 | D063 d22 Z05 SNKX 16 ONHX 06 | 63 | 63 | 22 | 5 | 50 | 0,776 | |
| T630 | D080 d27 Z06 SNKX 16 ONHX 06 | 80 | 80 | 27 | 6 | 50 | 2,013 | SNKX 1606 |
| T631 | D100 d32 Z07 SNKX 16 ONHX 06 | 100 | 100 | 32 | 7 | 63 | 2,750 | ONHX 0606 |
| T632 | D125 d40 Z08 SNKX 16 ONHX 06 | 125 | 125 | 40 | 8 | 63 | 4,026 | PLBT |
| T633 | D160 d40 Z10 SNKX 16 ONHX 06 | 160 | 160 | 40 | 10 | 63 | 4,712 | |
| T634 | D200 d60 Z12 SNKX 16 ONHX 06 | 200 | 200 | 60 | 12 | 63 | 8,112 | |

TC083 M5x12 T20



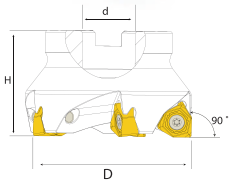



TEKNİK

## Tarama Başlığı
## 90 ° WNMU 0705

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T392 | D050 d22 Z05 WNMU 07 | 50 | 22 | 5 | 40 | 0,337 | |
| T393 | D063 d22 Z06 WNMU 07 | 63 | 22 | 6 | 40 | 0,515 | WNMU 0705 |
| T394 | D080 d27 Z07 WNMU 07 | 80 | 27 | 7 | 50 | 1,012 | ISC |
| T395 | D100 d32 Z08 WNMU 07 | 100 | 32 | 8 | 50 | 1,342 | |
| | TC074 M4x10 | | | T15 | | | |



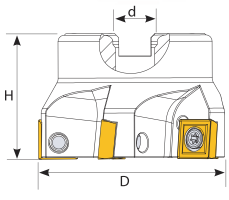



TEKNİK

## Tarama Başlığı
## 90 ° WNMU 0806

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T543 | D050 d22 Z03 WNMU 08 | 50 | 22 | 3 | 46 | 0,360 | |
| T544 | D063 d22 Z04 WNMU 08 | 63 | 22 | 4 | 46 | 0,556 | WNMU 0806 |
| T545 | D080 d27 Z05 WNMU 08 | 80 | 27 | 5 | 50 | 1,016 | KRLY |
| T546 | D100 d32 Z06 WNMU 08 | 100 | 32 | 6 | 50 | 1,360 | |
| | TC083 M5x12 | | | T20 | | | |



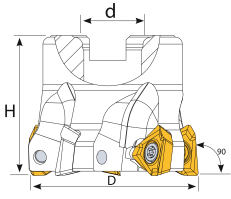



TEKNİK

## Tarama Başlığı
## 90 ° SPMT 1204

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T649 | D040 d16 Z03 SPMT 12 | 40 | 16 | 3 | 40 | 0,253 | |
| T650 | D050 d22 Z04 SPMT 12 | 50 | 22 | 4 | 40 | 0,362 | |
| T651 | D063 d22 Z05 SPMT 12 | 63 | 22 | 5 | 50 | 0,772 | |
| T652 | D080 d27 Z06 SPMT 12 | 80 | 27 | 6 | 50 | 1,186 | SPMT 1204 |
| T653 | D100 d32 Z08 SPMT 12 | 100 | 32 | 8 | 50 | 1,786 | |
| T654 | D125 d40 Z08 SPMT 12 | 125 | 40 | 8 | 63 | 2,935 | |
| T655 | D160 d40 Z10 SPMT 12 | 160 | 40 | 10 | 63 | 3,980 | |
| | TC083 M5x12 | | | T20 | | | |



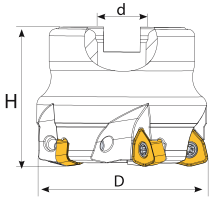



TEKNİK

**Tarama Başlığı**
**90 ° 3PKT 1505**

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T398 | D050 d22 Z05 3PKT 15 | 50 | 22 | 5 | 40 | 0,325 | |
| T399 | D063 d22 Z06 3PKT 15 | 63 | 22 | 6 | 40 | 0,490 | 3PKT 1505 |
| T400 | D080 d27 Z07 3PKT 15 | 80 | 27 | 7 | 50 | 1,105 | TGTC |
| | TC074 M4x10 | | | T15 | | | |



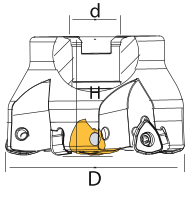



TEKNİK

**Tarama Başlığı**
**WNMX 09T3**

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T669 | D040 d16 Z04 WNMX 09 | 40 | 16 | 4 | 40 | 0,213 | |
| T670 | D050 d22 Z05 WNMX 09 | 50 | 22 | 5 | 40 | 0,329 | WNMX 09T3 |
| T671 | D063 d22 Z06 WNMX 09 | 63 | 22 | 6 | 40 | 0,542 | KRLY |
| T671-1 | D080 d27 Z06 WNMX 09 | 80 | 27 | 6 | 50 | 1,077 | |
| T671-2 | D100 d32 Z07 WNMX 09 | 100 | 32 | 7 | 50 | 1,627 | |
| | TC065 M3x7 | | | T8 | | | |



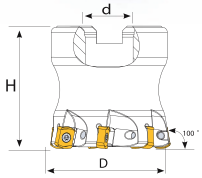



TEKNİK

**Tarama Başlığı**
**WNMX 1305**

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T687 | D063 d22 Z04 WNMX 13 | 63 | 22 | 4 | 50 | 0,752 | |
| T688 | D080 d27 Z05 WNMX 13 | 80 | 27 | 5 | 50 | 1,040 | WNMX 1305 |
| T689 | D100 d32 Z06 WNMX 13 | 100 | 32 | 6 | 50 | 1,625 | KRLY |
| T690 | D125 d40 Z07 WNMX 13 | 125 | 40 | 7 | 63 | 3,716 | |
| | TC074 M4x10 | | | T15 | | | |





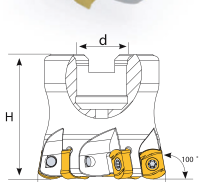

TEKNİK

**Tarama Başlığı**
**100 ° BLMP 0603**

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T480 | D040 d16 Z06 BLMP 06 | 40 | 16 | 6 | 45 | 0,262 | BLMP 0603 |
| T481 | D050 d22 Z07 BLMP 06 | 50 | 22 | 7 | 50 | 0,457 | TGTC |
| T482 | D052 d22 Z07 BLMP 06 | 52 | 22 | 7 | 50 | 0,472 | |

TC064 M3x6,5 T8





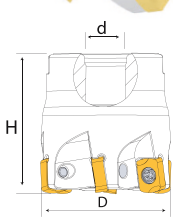

TEKNİK

**Tarama Başlığı**
**100 ° BLMP 0904**

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T485 | D040 d16 Z05 BLMP 09 | 40 | 16 | 5 | 40 | 0,176 | |
| T486 | D052 d22 Z06 BLMP 09 | 52 | 22 | 6 | 50 | 0,427 | BLMP 0904 |
| T487 | D063 d22 Z07 BLMP 09 | 63 | 22 | 7 | 50 | 0,615 | TGTC |

TC069 M3,5x8,5 T10





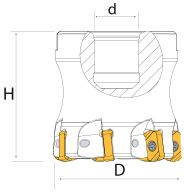

TEKNİK

**Tarama Başlığı**
**LNMX 0603**

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T835 | D032 d16 Z05 LNMX 06 | 32 | 16 | 5 | 40 | 0,173 | LNMX 0603 |
| T836 | D040 d16 Z06 LNMX 06 | 40 | 16 | 6 | 40 | 0,279 | KRLY |
| T837 | D050 d22 Z08 LNMX 06 | 50 | 22 | 8 | 40 | 0,400 | |

TC065-1 M3x7 T8



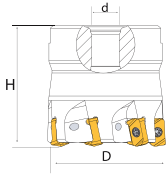



TEKNİK

## Tarama Başlığı
## LNMU 0303

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T728 | D040 d16 Z06 LNMU 03 | 40 | 16 | 6 | 40 | 0,275 | LNMU 0303 |
| T729 | D050 d22 Z07 LNMU 03 | 50 | 22 | 7 | 50 | 0,541 | TNGLY - 0KE |
| T730 | D063 d22 Z09 LNMU 03 | 63 | 22 | 9 | 50 | 0,766 | |
| | TC063 M2,5x7 | | | T8 | | | |



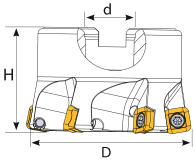



TEKNİK

## Tarama Başlığı
## LOGU 0303

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T731 | D040 d16 Z06 LOGU 03 | 40 | 16 | 6 | 40 | 0,283 | LOGU 0303 |
| T732 | D050 d22 Z07 LOGU 03 | 50 | 22 | 7 | 50 | 0,582 | KYCR |
| T734 | D063 d22 Z09 LOGU 03 | 63 | 22 | 9 | 50 | 1,188 | |
| | TC064 M3x7 | | | T15 | | | |



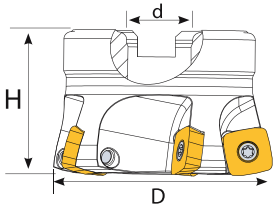



TEKNİK

## Tarama Başlığı
## SDMT 09T3

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T362 | D040 d16 Z04 SDMT 09 | 40 | 16 | 4 | 40 | 0,215 | SDMT 09T3 |
| T363 | D050 d22 Z05 SDMT 09 | 50 | 22 | 5 | 40 | 0,355 | ZCC |
| T364 | D063 d22 Z06 SDMT 09 | 63 | 22 | 6 | 40 | 0,592 | |
| | TC067 M3,5x8,5 | | | T15 | | | |





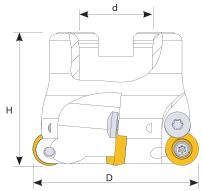

TEKNİK

## Tarama Başlığı
## SDMT 1204

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T358 | D050 d22 Z04 SDMT 12 | 50 | 22 | 4 | 40 | 0,315 | SDMT 1204 |
| T359 | D063 d22 Z05 SDMT 12 | 63 | 22 | 5 | 40 | 0,422 | ZCC |
| T360 | D080 d27 Z06 SDMT 12 | 80 | 27 | 6 | 52 | 1,051 | |

TC074 M4x10 T15





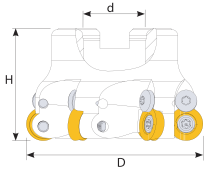

TEKNİK

## Tarama Başlığı
## RDMT 1003

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T288 | D040 d16 Z03 RDMT 10 | 40 | 16 | 3 | 40 | 0,208 | |
| T289 | D040 d16 Z04 RDMT 10 | 40 | 16 | 4 | 40 | 0,220 | |
| T290 | D050 d22 Z04 RDMT 10 | 50 | 22 | 4 | 40 | 0,310 | |
| T291 | D050 d22 Z05 RDMT 10 | 50 | 22 | 5 | 40 | 0,302 | RDMT 1003 |
| T292 | D063 d22 Z05 RDMT 10 | 63 | 22 | 5 | 40 | 0,445 | ISO |
| T293 | D063 d22 Z06 RDMT 10 | 63 | 22 | 6 | 40 | 0,460 | |
| T294 | D080 d27 Z06 RDMT 10 | 80 | 27 | 6 | 50 | 1,033 | |
| T294-1 | D080 d27 Z07 RDMT 10 | 80 | 27 | 7 | 50 | 1,048 | |
| T295 | D100 d32 Z07 RDMT 10 | 100 | 32 | 7 | 50 | 1,463 | |
| T295-1 | D100 d32 Z08 RDMT 10 | 100 | 32 | 8 | 50 | 1,478 | |

TC040 M3,5 TC040 M3,5 T15





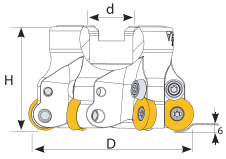

TEKNİK

## Tarama Başlığı
## RDMT 12T3

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T280 | D040 d16 Z03 RDMT 10 | 40 | 16 | 3 | 40 | 0,235 | |
| T281 | D040 d16 Z04 RDMT 10 | 40 | 16 | 4 | 40 | 0,236 | |
| T282 | D050 d22 Z04 RDMT 10 | 50 | 22 | 4 | 40 | 0,311 | |
| T283 | D050 d22 Z05 RDMT 10 | 50 | 22 | 5 | 40 | 0,309 | RDMT 12T3 |
| T284 | D063 d22 Z05 RDMT 10 | 63 | 22 | 5 | 40 | 0,468 | ISO |
| T285 | D063 d22 Z06 RDMT 10 | 63 | 22 | 6 | 40 | 0,500 | |
| T286 | D080 d27 Z06 RDMT 10 | 80 | 27 | 6 | 50 | 0,925 | |
| T286-1 | D080 d27 Z07 RDMT 10 | 80 | 27 | 7 | 50 | 0,950 | |
| T287 | D100 d32 Z07 RDMT 10 | 100 | 32 | 7 | 50 | 1,402 | |
| T287-1 | D100 d32 Z08 RDMT 10 | 100 | 32 | 8 | 50 | 1,435 | |

TC067 M3,5X8,5 TC040 M3,5 T15



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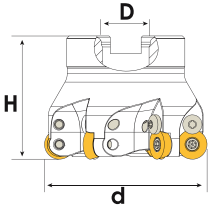
## Tarama Başlığı
## RDMT 1604

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T270 | D050 d22 Z04 RDMT 16 | 50 | 22 | 4 | 50 | 0,350 | |
| T271 | D052 d22 Z04 RDMT 16 | 52 | 22 | 4 | 50 | 0,350 | RDMT 1604 |
| T273 | D063 d22 Z05 RDMT 16 | 63 | 22 | 5 | 45 | 0,512 | ISO |
| T272 | D066 d27 Z05 RDMT 16 | 66 | 27 | 5 | 50 | 0,495 | |
| T274 | D080 d27 Z06 RDMT 16 | 80 | 27 | 6 | 50 | 0,890 | |
| T275 | D100 d32 Z07 RDMT 16 | 100 | 32 | 7 | 52 | 1,370 | |

TC074 M4x10 BSP010 TC080 M4,5x11 T15





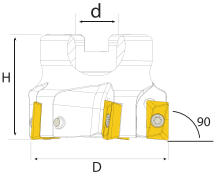

TEKNİK

## Tarama Başlığı
## RDMT 12T3

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T667 | D052 d22 Z05 RDMT 12 | 52 | 22 | 5 | 50 | 0,403 | RDMT 12T3 |
| T668-1 | D066 d27 Z06 RDMT 12 | 66 | 27 | 6 | 50 | 0,670 | PLBT |
| T668 | D080 d27 Z07 RDMT 12 | 80 | 27 | 7 | 50 | 1,181 | |

TC067 M3,5X8,5 TC040 M3,5 T15





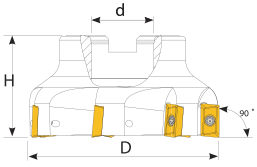

TEKNİK

## Tarama Başlığı
## 90 ° APKT 1604

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T767 | D050 d22 Z04 APKT 16 | 50 | 22 | 4 | 45 | 0,381 | APKT 1604 |
| T768 | D063 d22 Z05 APKT 16 | 63 | 22 | 5 | 45 | 0,507 | YG1 |
| T769 | D080 d27 Z06 APKT 16 | 80 | 27 | 6 | 52 | 1,125 | |

TC074 M4x10 T15





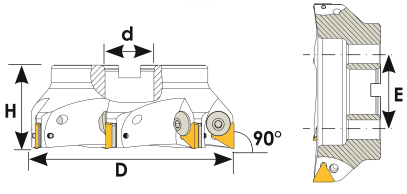

TEKNİK

## Tarama Başlığı
## 90 ° APKT 1604

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | Uç |
|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | kg | |
| T180 | D040 d16 Z03 APKT 16 | 40 | 16 | 3 | 45 | 0,267 | |
| T181 | D040 d16 Z04 APKT 16 | 40 | 16 | 4 | 45 | 0,258 | |
| T182 | D050 d22 Z04 APKT 16 | 50 | 22 | 4 | 45 | 0,406 | |
| T183 | D050 d22 Z05 APKT 16 | 50 | 22 | 5 | 45 | 0,400 | |
| T184 | D063 d22 Z05 APKT 16 | 63 | 22 | 5 | 45 | 0,577 | |
| T185 | D063 d22 Z06 APKT 16 | 63 | 22 | 6 | 45 | 0,578 | APKT 1604 |
| T186 | D080 d27 Z06 APKT 16 | 80 | 27 | 6 | 52 | 1,159 | KRLY |
| T187 | D080 d27 Z07 APKT 16 | 80 | 27 | 7 | 52 | 1,249 | |
| T188 | D100 d32 Z07 APKT 16 | 100 | 32 | 7 | 52 | 1,057 | |
| T189 | D100 d32 Z08 APKT 16 | 100 | 32 | 8 | 52 | 1,530 | |
| T190 | D125 d40 Z09 APKT 16 | 125 | 40 | 9 | 62 | 3,642 | |
| T192 | D160 d40 Z10 APKT 16 | 160 | 40 | 10 | 62 | 4,885 | |
| T193 | D200 d60 Z12 APKT 16 | 200 | 60 | 12 | 63 | 6,370 | |
| T195 | D300 d60 Z15 APKT 16 | 300 | 60 | 15 | 62 | 14,360 | |

TC074 M4x10 T15



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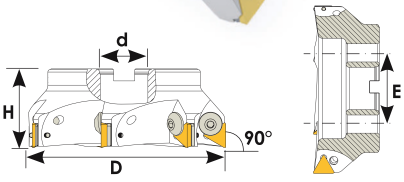
## Tarama Başlığı
## TPKN 1603-2204

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | E | kg | |
| T114 | D042 d16 Z03 TPKN 16 | 42 | 16 | 3 | 44 | -- | 0,280 | TPKN 1603 |
| T116 | D050 d22 Z03 TPKN 16 | 50 | 22 | 3 | 44 | -- | 0,340 | ISO |
| T118 | D063 d22 Z03 TPKN 16 | 63 | 22 | 3 | 44 | -- | 0,463 | |
| T120 | D063 d22 Z04 TPKN 16 | 63 | 22 | 4 | 44 | -- | 0,481 | |
| T122 | D080 d32 Z05 TPKN 16 | 80 | 32 | 5 | 52 | -- | 0,954 | |
| T124 | D100 d32 Z06 TPKN 16 | 100 | 32 | 6 | 52 | -- | 1,542 | |
| T126 | D063 d22 Z03 TPKN 22 | 63 | 22 | 3 | 50 | -- | 0,532 | |
| T128 | D080 d32 Z04 TPKN 22 | 80 | 32 | 4 | 52 | -- | 0,795 | TPKN 2204 |
| T130 | D100 d32 Z05 TPKN 22 | 100 | 32 | 5 | 52 | -- | 1,398 | ISO |
| T132 | D125 d40 Z06 TPKN 22 | 125 | 40 | 6 | 62 | -- | 3,153 | |
| T134 | D160 d40 Z07 TPKN 22 | 160 | 40 | 7 | 62 | 66,7 | 4,150 | |
| T136 | D200 d60 Z08 TPKN 22 | 200 | 60 | 8 | 62 | 101,6 | 5,458 | |
| T138 | D250 d60 Z09 TPKN 22 | 250 | 60 | 9 | 62 | 101,6 | 8,235 | |

| Kod | | |
|---|---|---|
| T114-T124 | TC052 M6x17 | 4 Allen |
| T126-T138 | TC054 M8x24 | 5 Allen |





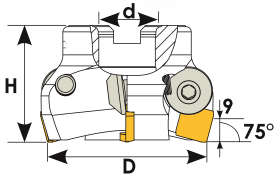

TEKNİK

## Tarama Başlığı
## TPKN 1603-2204

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | E | kg | |
| T100 | D080 d32 Z05 TPKN 16 A | 80 | 32 | 5 | 52 | -- | 0,961 | TPKN 1603 |
| T102 | D100 d32 Z06 TPKN 16 A | 100 | 32 | 6 | 52 | -- | 1,518 | ISO |
| T104 | D080 d32 Z04 TPKN 22 A | 80 | 32 | 4 | 52 | -- | 0,810 | |
| T106 | D100 d32 Z05 TPKN 22 A | 100 | 32 | 5 | 52 | -- | 1,444 | TPKN 2204 |
| T108 | D125 d40 Z06 TPKN 22 A | 125 | 40 | 6 | 62 | -- | 3,164 | ISO |
| T110 | D160 d40 Z07 TPKN 22 A | 160 | 40 | 7 | 62 | 66,7 | 4,220 | |
| T112 | D200 d60 Z08 TPKN 22 A | 200 | 60 | 8 | 62 | 101,6 | 5,412 | |
| T113 | D250 d60 Z09 TPKN 22 A | 250 | 60 | 9 | 62 | 101,6 | 8,166 | |

| Kod | | |
|---|---|---|
| T100-T102 | TC052 M6x17 | 4 Allen |
| T104-T113 | TC054 M8x24 | 5 Allen |





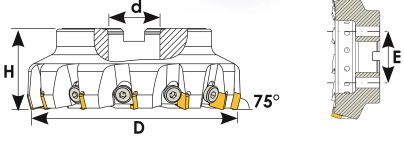

TEKNİK

## Tarama Başlığı
## SPKN 1203

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | Uç |
|---|---|---|---|---|---|---|
| | | D | d | Z | H | |
| T148 | D050 d22 Z03 SPKN 12 | 50 | 22 | 3 | 45 | SPKN 1203 |
| T150 | D063 d22 Z04 SPKN 12 | 63 | 22 | 4 | 45 | ISO |

| Kod | | |
|---|---|---|
| | TC054 M8x24 | 5 Allen |



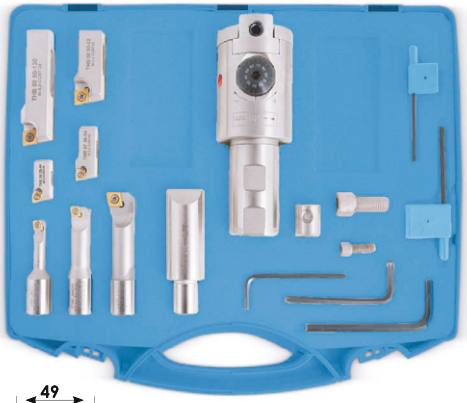



TEKNİK

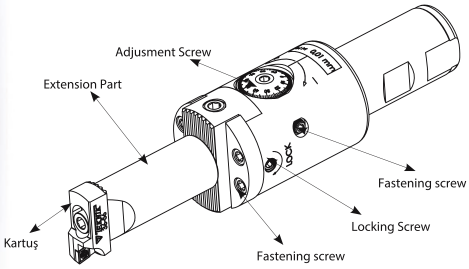
## Tarama Başlığı
## TPKN 1603-2204

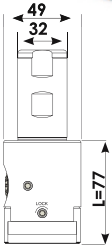
| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | D | d | Z | H | E | kg | |
| T152 | D080 d27 Z06 SPKN 12 | 80 | 27 | 6 | 55 | --- | 1,260 | |
| T154 | D100 d32 Z08 SPKN 12 | 100 | 32 | 8 | 55 | --- | 1,698 | SPKN 1203 |
| T156 | D125 d40 Z10 SPKN 12 | 125 | 40 | 10 | 62 | --- | 3,400 | ISO |
| T158 | D160 d40 Z12 SPKN 12 | 160 | 40 | 12 | 62 | 66,7 | 5,012 | |
| T160 | D200 d60 Z12 SPKN 12 | 200 | 60 | 12 | 62 | 101,6 | 6,542 | |
| T162 | D300 d60 Z20 SPKN 12 | 300 | 60 | 20 | 65 | 101,6 | 15,11 | |

| Kod | | |
|---|---|---|
| | TC056 Sol M8x24-L | 5 Allen |

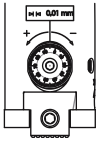


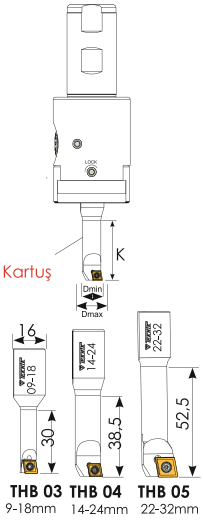
THB 01 SET 9-130 mm



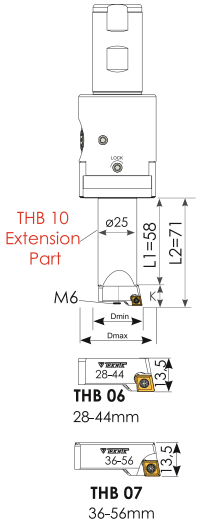




**THB 02**
**GÖVDE**
**BODY**
**Fine / Fein**



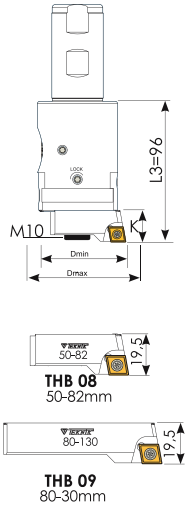



**THB 03** 9-18mm **THB 04** 14-24mm **THB 05** 22-32mm




**THB 06**
28-44mm

**THB 07**
36-56mm




**THB 08**
50-82mm

**THB 09**
80-30mm

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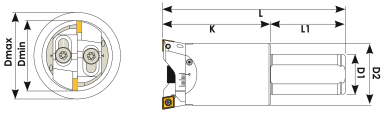
## 9 - 130 mm Hassas Bara Seti

| Sipariş | Ürün Kodu | K | L1 | L2 | L3 | Dmin - Dmax | kg | |
|---|---|---|---|---|---|---|---|---|
| THB01 | Hassas Bara Seti | ... | ... | ... | ... | 9-130 | 3,100 | ... |
| THB02 | GÖVDE / BODY | ... | ... | ... | ... | ... | - | ... |
| THB03 | 09-18 Kartus | 32,5 | ... | ... | ... | 9-18 | - | CCMT 0602 |
| THB04 | 14-24 Kartus | 39,6 | ... | ... | ... | 14-24 | - | CCMT 0602 |
| THB05 | 22-32 Kartus | 52,5 | ... | ... | ... | 22-32 | - | CCMT 09T3 |
| THB06 | 28-44 Kartus | 13,7 | ... | 71 | ... | 28-44 | - | CCMT 0602 |
| THB07 | 36-56 Kartus | 13,7 | ... | 71 | ... | 36-56 | - | CCMT 0602 |
| THB08 | 50-82 Kartus | 19,5 | ... | ... | 95,5 | 50-82 | - | CCMT 09T3 |
| THB09 | 80-130 Kartus | 19,5 | ... | ... | 95,5 | 80-130 | - | CCMT 09T3 |
| THB10 | Ara Uzatma | ... | 58 | ... | ... | ... | - | ... |



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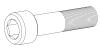
**Kartuş ve Sabitleme Civatası**



| Sipariş | Dmin - Dmax | Uç |
|---|---|---|
| KR096 | 16 - 20 | WCMX 0302 |
| KR098 | 19 - 23 | CCMT 0602 |
| KR100 | 23 - 28 | CCMT 0602 |
| KR102 | 28 - 38 | CCMT 0903 T3 |
| KR104 | 37 - 48 | CCMT 0903 T3 |
| KR106 | 45 - 56 | CCMT 0903 T3 |
| KR108 | 55 - 75 | CCMT 0903 T3 |
| KR110 | 70 - 90 | CCMT 0903 T3 |
| KR112 | 90 - 130 | CCMT 0903 T3 |
| KR115 | 55 - 75 | CCMT 1204 |
| KR116 | 70 - 90 | CCMT 1204 |
| KR117 | 90 - 130 | CCMT 1204 |



| Sipariş | Sabitleme Civatası |
|---|---|
| TC102 | M4 x 16 |
| TC102 | M4 x 16 |
| TC104 | M5 x 25 |
| TC104 | M5 x 25 |
| TC106 | M6 x 30 |
| TC108 | M8 x 30 |
| TC108 | M8 x 30 |
| TC108 | M8 x 30 |
| TC108 | M8 x 30 |
| TC108 | M8 x 30 |
| TC108 | M8 x 30 |
| TC108 | M8 x 30 |

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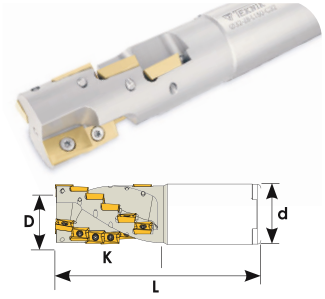
**16 - 130 mm Kaba Bara**

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Dmin | Dmax | K | D1 | L1 | D2 | L | kg | |
| TKB088 | 16-20 K052 WCMX 03 | 16 | 20 | 52 | 16 | 48 | 15,7 | 100 | 0,176 | WCMX 0302 |
| TKB090 | 16-20 K102 WCMX 03 | 16 | 20 | 102 | 16 | 48 | 15,7 | 150 | 0,237 | ISO |
| TKB092 | 16-20 K152 WCMX 03 | 16 | 20 | 152 | 16 | 48 | 15,7 | 200 | 0,362 | |
| TKB094 | 19-23 K052 CCMT 06 | 19 | 23 | 52 | 16 | 48 | 17,7 | 100 | 0,192 | |
| TKB096 | 19-23 K102 CCMT 06 | 19 | 23 | 102 | 16 | 48 | 17,7 | 150 | 0,292 | CCMT 0602 |
| TKB098 | 19-23 K152 CCMT 06 | 19 | 23 | 152 | 16 | 48 | 17,7 | 200 | 0,401 | ISO |
| TKB100 | 23-28 K050 CCMT 06 | 23 | 28 | 50 | 20 | 50 | 21,2 | 100 | 0,298 | |
| TKB102 | 23-28 K100 CCMT 06 | 23 | 28 | 100 | 20 | 50 | 21,2 | 150 | 0,347 | |
| TKB104 | 23-28 K185 CCMT 06 | 23 | 28 | 185 | 20 | 50 | 21,2 | 235 | 0,682 | |
| TKB106 | 28-38 K055 CCMT 09 | 28 | 38 | 55 | 20 | 50 | 25,7 | 105 | 0,378 | |
| TKB108 | 28-38 K105 CCMT 09 | 28 | 38 | 105 | 20 | 50 | 25,7 | 155 | 0,376 | |
| TKB110 | 28-38 K174 CCMT 09 | 28 | 38 | 174 | 25 | 56 | 25,7 | 230 | 0,267 | |
| TKB111 | 28-38 K274 CCMT 09 | 28 | 38 | 274 | 25 | 56 | 25,7 | 330 | 1,342 | |
| TKB112 | 37-48 K064 CCMT 09 | 37 | 48 | 64 | 25 | 56 | 32 | 120 | 0,661 | |
| TKB114 | 37-48 K114 CCMT 09 | 37 | 48 | 114 | 25 | 56 | 33 | 170 | 0,991 | CCMT 0903 |
| TKB116 | 37-48 K204 CCMT 09 | 37 | 48 | 204 | 25 | 56 | 33 | 260 | 1,597 | ISO |
| TKB118 | 45-56 K070 CCMT 09 | 45 | 56 | 70 | 32 | 60 | 39,5 | 130 | 1,035 | |
| TKB120 | 45-56 K120 CCMT 09 | 45 | 56 | 120 | 32 | 60 | 40 | 180 | 1,528 | |
| TKB122 | 45-56 K200 CCMT 09 | 45 | 56 | 200 | 32 | 60 | 40 | 260 | 2,385 | |
| TKB124 | 55-75 K085 CCMT 09 | 55 | 75 | 85 | 32 | 60 | 50 | 145 | 1,638 | |
| TKB126 | 55-75 K135 CCMT 09 | 55 | 75 | 135 | 32 | 60 | 50 | 195 | 2,422 | |
| TKB128 | 55-75 K220 CCMT 09 | 55 | 75 | 220 | 32 | 60 | 50 | 280 | 3,745 | |
| TKB130 | 70-90 K085 CCMT 09 | 70 | 90 | 85 | 32 | 60 | 64 | 145 | 2,100 | |
| TKB132 | 70-90 K135 CCMT 09 | 70 | 90 | 135 | 32 | 60 | 64 | 195 | 2,942 | |
| TKB134 | 70-90 K220 CCMT 09 | 70 | 90 | 220 | 40 | 70 | 64 | 290 | 4,915 | |
| TKB136 | 90-130 K115 CCMT 09 | 90 | 130 | 115 | 32 | 60 | 74 | 175 | 3,130 | |
| TKB138 | 90-130 K165 CCMT 09 | 90 | 130 | 165 | 32 | 60 | 74 | 225 | 4,138 | |

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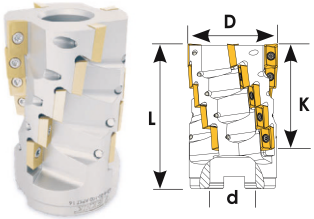
## Helis Freze - APKT 1604

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | K | d | L | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| HF20 | D32 Z06 K43 APKT 16 | 32 | 6 | 43 | 32 | 125 | 0,658 | |
| HF22 | D40 Z09 K43 APKT 16 | 40 | 9 | 43 | 32 | 125 | 0,821 | APKT 1604 |
| HF24 | D32 Z08 K58 APKT 16 | 32 | 8 | 58 | 32 | 150 | 0,771 | KRLY |
| HF26 | D40 Z12 K58 APKT 16 | 40 | 12 | 58 | 32 | 150 | 0,950 | |
| HF30 | D32 Z08 K58 APKT 16 | 32 | 8 | 58 | 32 | 200 | 1,120 | |
| HF32 | D40 Z12 K58 APKT 16 | 40 | 12 | 58 | 32 | 200 | 1,280 | |

TC074 M4x10 T15

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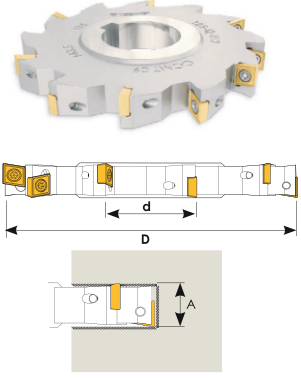
## Helis Freze - APKT 1604

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | K | d | L | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| HF52 | D63 Z20 K75 APKT 16 | 63 | 20 | 75 | 32 | 100 | 1,455 | APKT 1604 |
| HF53 | D80 Z25 K75 APKT 16 | 80 | 25 | 75 | 32 | 100 | 2,645 | KRLY |
| HF54 | D100 Z30 K75 APKT 16 | 100 | 30 | 75 | 40 | 100 | 4,329 | |

TC074 M4x10 T15

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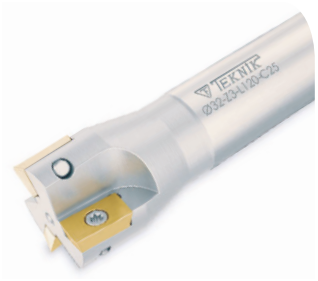
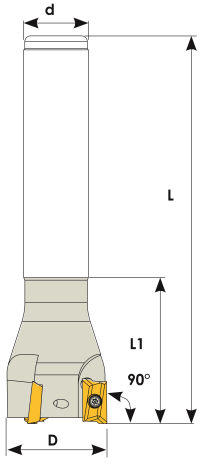
## Disk Freze
## CCMT 0602 - 09T3 - 1204

| Sipariş | Ürün Kodu | Ölçüler (mm) D | A | Z | d | kg | Uç |
|---|---|---|---|---|---|---|---|
| DF150 | D080 A08 Z10 CCMT 06 | 80 | 8 | 10 | 27 | 0,236 | |
| DF160 | D100 A08 Z12 CCMT 06 | 100 | 8 | 12 | 32 | 0,365 | |
| DF170 | D125 A08 Z14 CCMT 06 | 125 | 8 | 14 | 40 | 0,512 | |
| DF182 | D160 A08 Z16 CCMT 06 | 160 | 8 | 16 | 40 | 0,996 | CCMT 0602 |
| DF194 | D200 A08 Z18 CCMT 06 | 200 | 8 | 18 | 40 | 1,587 | ISO |
| DF152 | D080 A10 Z10 CCMT 06 | 80 | 10 | 10 | 27 | 0,289 | |
| DF162 | D100 A10 Z12 CCMT 06 | 100 | 10 | 12 | 32 | 0,453 | |
| DF172 | D125 A10 Z14 CCMT 06 | 125 | 10 | 14 | 40 | 0,703 | |
| DF184 | D160 A10 Z16 CCMT 06 | 160 | 10 | 16 | 40 | 1,228 | |
| DF196 | D200 A10 Z18 CCMT 06 | 200 | 10 | 18 | 40 | 2,035 | |
| DF154 | D080 A12 Z08 CCMT 09 | 80 | 12 | 8 | 27 | 0,470 | |
| DF164 | D100 A12 Z10 CCMT 09 | 100 | 12 | 10 | 32 | 0,472 | |
| DF174 | D125 A12 Z12 CCMT 09 | 125 | 12 | 12 | 40 | 0,750 | |
| DF186 | D160 A12 Z14 CCMT 09 | 160 | 12 | 14 | 40 | 1,360 | CCMT 09T3 |
| DF198 | D200 A12 Z16 CCMT 09 | 200 | 12 | 16 | 40 | 2,400 | ISO |
| DF156 | D080 A14 Z08 CCMT 09 | 80 | 14 | 8 | 27 | 0,335 | |
| DF166 | D100 A14 Z10 CCMT 09 | 100 | 14 | 10 | 32 | 0,552 | |
| DF176 | D125 A14 Z12 CCMT 09 | 125 | 14 | 12 | 40 | 0,871 | |
| DF188 | D160 A14 Z14 CCMT 09 | 160 | 14 | 14 | 40 | 1,535 | |
| DF200 | D200 A14 Z16 CCMT 09 | 200 | 14 | 16 | 40 | 2,575 | |
| DF158 | D080 A16 Z06 CCMT 12 | 80 | 16 | 6 | 27 | 0,545 | |
| DF168 | D100 A16 Z08 CCMT 12 | 100 | 16 | 8 | 32 | 0,567 | |
| DF178 | D125 A16 Z10 CCMT 12 | 125 | 16 | 10 | 40 | 1,121 | CCMT 1204 |
| DF190 | D160 A16 Z12 CCMT 12 | 160 | 16 | 12 | 40 | 1,727 | ISO |
| DF180 | D125 A20 Z10 CCMT 12 | 125 | 20 | 10 | 40 | 1,430 | |
| DF192 | D160 A20 Z12 CCMT 12 | 160 | 20 | 12 | 40 | 2,650 | |

| Kod | | |
|---|---|---|
| DF150-DF196 | TC063 M2,5x7 | T8 |
| DF0154-DF200 | TC067 M3,5x8,5 | T15 |
| DF0158-DF192 | TC083 M5x12 | T20 |



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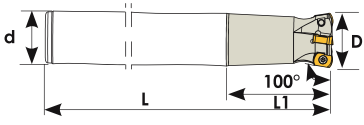
**Saplı Tarama - APKT 1604**

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| S256 | D25 d25 Z02 L120 APKT 16 | 25 | 2 | 120 | 25 | 45 | 0,430 | |
| S258 | D30 d25 Z03 L120 APKT 16 | 30 | 3 | 120 | 25 | 45 | 0,460 | |
| S260 | D32 d25 Z02 L120 APKT 16 | 32 | 3 | 120 | 25 | 45 | 0,469 | |
| S262 | D35 d25 Z03 L120 APKT 16 | 35 | 3 | 120 | 25 | 45 | 0,498 | |
| S264 | D40 d25 Z04 L120 APKT 16 | 40 | 4 | 120 | 25 | 45 | 0,547 | |
| S266 | D25 d25 Z02 L150 APKT 16 | 25 | 2 | 150 | 25 | 55 | 0,544 | |
| S268 | D30 d25 Z03 L150 APKT 16 | 30 | 3 | 150 | 25 | 55 | 0,575 | |
| S270 | D32 d32 Z03 L150 APKT 16 | 32 | 3 | 150 | 32 | 55 | 0,876 | APKT 1604 |
| S272 | D35 d32 Z03 L150 APKT 16 | 35 | 3 | 150 | 32 | 55 | 0,915 | KRLY |
| S274 | D40 d32 Z04 L150 APKT 16 | 40 | 4 | 150 | 32 | 55 | 0,960 | |
| S276 | D25 d25 Z02 L200 APKT 16 | 25 | 2 | 200 | 25 | 65 | 0,750 | |
| S278 | D30 d25 Z03 L200 APKT 16 | 30 | 3 | 200 | 25 | 55 | 0,783 | |
| S280 | D32 d32 Z03 L200 APKT 16 | 32 | 3 | 200 | 32 | 55 | 1,218 | |
| S282 | D35 d32 Z03 L200 APKT 16 | 35 | 3 | 200 | 32 | 55 | 1,245 | |
| S283 | D40 d32 Z02 L200 APKT 16 | 40 | 4 | 200 | 32 | 55 | 1,296 | |
| S432 | D25 d25 Z02 L250 APKT 16 | 25 | 2 | 250 | 25 | 70 | 0,939 | |
| S434 | D30 d25 Z03 L250 APKT 16 | 30 | 3 | 250 | 25 | 55 | 1,028 | |
| S436 | D32 d32 Z03 L250 APKT 16 | 32 | 3 | 250 | 32 | 60 | 1,520 | |
| S438 | D35 d32 Z03 L250 APKT 16 | 35 | 3 | 250 | 32 | 65 | 1,567 | |
| S440 | D40 d32 Z04 L250 APKT 16 | 40 | 4 | 250 | 32 | 60 | 1,612 | |
| S442 | D25 d25 Z02 L300 APKT 16 | 25 | 2 | 300 | 25 | 70 | 1,127 | |
| S444 | D30 d25 Z03 L300 APKT 16 | 30 | 3 | 300 | 25 | 60 | 1,168 | |
| S446 | D32 d32 Z03 L300 APKT 16 | 32 | 3 | 300 | 32 | 70 | 1,827 | |
| S448 | D35 d32 Z03 L300 APKT 16 | 35 | 3 | 300 | 32 | 65 | 1,879 | |
| S450 | D40 d32 Z04 L300 APKT 16 | 40 | 4 | 300 | 32 | 70 | 1,922 | |
| S453 | D32 d32 Z03 L350 APKT 16 | 32 | 3 | 350 | 32 | 80 | 2,274 | |
| S454 | D35 d32 Z03 L350 APKT 16 | 35 | 3 | 350 | 32 | 65 | 2,332 | |
| S456 | D40 d32 Z04 L350 APKT 16 | 40 | 4 | 350 | 32 | 55 | 2,375 | |

TC074 M4x10 T15



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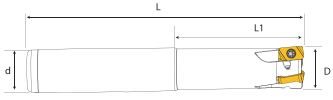
**Saplı Tarama - BLMP 0603**

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| S479 | D16 d16 Z02 L150 BLMP 06 | 16 | 2 | 150 | 16 | 40 | 0,235 | |
| S478 | D17 d16 Z02 L150 BLMP 06 | 17 | 2 | 150 | 16 | 40 | 0,244 | BLMP 0603 |
| S481 | D20 d20 Z03 L150 BLMP 06 | 20 | 3 | 150 | 20 | 40 | 0,335 | TGTC |
| S483 | D25 d20 Z04 L150 BLMP 06 | 25 | 4 | 150 | 20 | 30 | 0,280 | |
| S480 | D21 d20 Z03 L200 BLMP 06 | 21 | 3 | 200 | 20 | 40 | 0,520 | |
| S482 | D26 d25 Z04 L200 BLMP 06 | 26 | 4 | 200 | 25 | 40 | 0,771 | |

TC064 M3x6,5 T8



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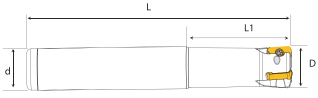
## Saplı Tarama - LOGU 0303

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| S677 | D16 d16 Z02 L150 LOGU 03 | 16 | 2 | 150 | 16 | 50 | 0,219 | |
| S678 | D20 d20 Z03 L150 LOGU 03 | 20 | 3 | 150 | 20 | 60 | 0,356 | LOGU 0303 |
| S679 | D21 d20 Z03 L150 LOGU 03 | 21 | 3 | 150 | 20 | 60 | 0,365 | KYCR |
| S680 | D25 d25 Z04 L150 LOGU 03 | 25 | 4 | 150 | 25 | 60 | 0,579 | |

 TC064 M3x6  T8 



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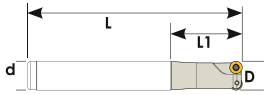
## Saplı Tarama - LNMU 0303

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| S671 | D16 d16 Z02 L150 LNMU 03 | 16 | 2 | 150 | 16 | 50 | 0,233 | |
| S672 | D17 d16 Z02 L150 LNMU 03 | 17 | 2 | 150 | 16 | 40 | 0,241 | LNMU 0303 |
| S673 | D20 d20 Z03 L150 LNMU 03 | 20 | 3 | 150 | 20 | 50 | 0,381 | TNGLY - OKE |
| S674 | D21 d20 Z03 L150 LNMU 03 | 21 | 3 | 150 | 20 | 50 | 0,389 | |
| S675 | D25 d25 Z04 L150 LNMU 03 | 25 | 4 | 150 | 25 | 60 | 0,589 | |

 TC063 M2,5x7  T8 



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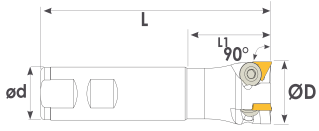
## Saplı Tarama - RDMT 1003-12T3

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| S771 | D20 d20 Z02 L160 RDMT 10 | 20 | 2 | 160 | 20 | 60 | 0,359 | RDMT 1003 |
| S772 | D20 d25 Z02 L220 RDMT 10 | 20 | 2 | 220 | 25 | 120 | 0,658 | PLBT |
| S773 | D25 d25 Z02 L220 RDMT 10 | 25 | 2 | 220 | 25 | 120 | 0,741 | RDMT 12T3 |
| S773 | D25 d32 Z02 L230 RDMT 10 | 25 | 2 | 230 | 32 | 130 | 1,099 | PLBT |

| Kod | | |
|---|---|---|
| S771-S772 | TC071 M3,5x7 | T15 |
| S773-S774 | TC067 M3,5x8,5 | |





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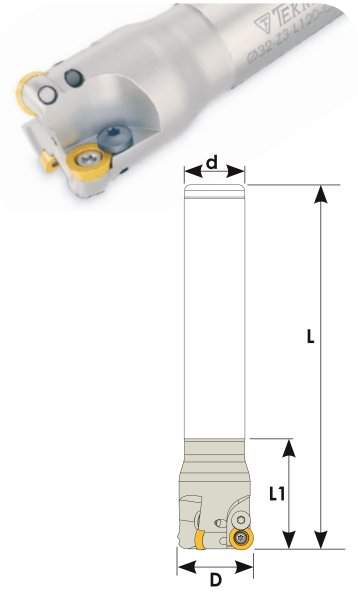
## Saplı Tarama - TPKN 1103-1603-2204

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| S116 | D22 d20 Z02 L120 TPKN 11 | 22 | 2 | 120 | 20 | 45 | 0,301 | |
| S118 | D25 d25 Z02 L120 TPKN 11 | 25 | 2 | 120 | 25 | 45 | 0,438 | TPKN 1103 |
| S124 | D32 d25 Z03 L120 TPKN 11 | 32 | 3 | 120 | 25 | 45 | 0,480 | ISO |
| S128 | D35 d25 Z02 L120 TPKN 11 | 35 | 2 | 120 | 25 | 45 | 0,507 | TPKN 1603 |
| S130 | D40 d25 Z03 L120 TPKN 11 | 40 | 3 | 120 | 25 | 45 | 0,552 | ISO |
| S132 | D45 d25 Z03 L120 TPKN 11 | 45 | 3 | 120 | 25 | 45 | 0,606 | |
| S134 | D50 d32 Z03 L120 TPKN 11 | 50 | 3 | 120 | 32 | 55 | 0,896 | TPKN 2204 ISO |

| Kod | | |
|---|---|---|
| S116-S124 | TC050 M6x14 | 3 Allen |
| S128-S132 | TC052 M6x17 | 4 Allen |
| S134 | TC054 M8x24 | 5 Allen |



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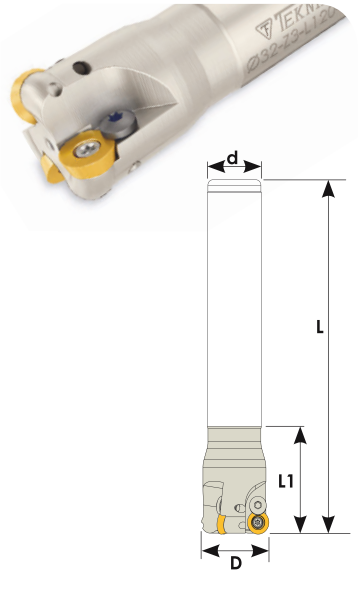
## Saplı Tarama - RDMT 1003

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| R190 | D20 d20 Z02 L120 RDMT 10 | 20 | 2 | 120 | 20 | 55 | 0,265 | |
| R192 | D25 d25 Z02 L120 RDMT 10 | 25 | 2 | 120 | 25 | 50 | 0,435 | |
| R193 | D30 d25 Z03 L120 RDMT 10 | 30 | 3 | 120 | 25 | 40 | 0,468 | |
| R194 | D32 d25 Z03 L120 RDMT 10 | 32 | 3 | 120 | 25 | 40 | 0,484 | |
| R196 | D35 d25 Z03 L120 RDMT 10 | 35 | 3 | 120 | 25 | 45 | 0,508 | RDMT 1003 |
| R198 | D40 d25 Z04 L120 RDMT 10 | 40 | 4 | 120 | 25 | 45 | 0,558 | ISO |
| R200 | D20 d20 Z02 L150 RDMT 10 | 20 | 2 | 150 | 20 | 60 | 0,336 | |
| R202 | D25 d25 Z02 L150 RDMT 10 | 25 | 2 | 150 | 25 | 60 | 0,544 | |
| R203 | D30 d25 Z03 L150 RDMT 10 | 30 | 3 | 150 | 25 | 40 | 0,586 | |
| R204 | D32 d32 Z03 L150 RDMT 10 | 32 | 3 | 150 | 32 | 45 | 0,898 | |
| R206 | D35 d32 Z03 L150 RDMT 10 | 35 | 3 | 150 | 32 | 45 | 0,923 | |
| R208 | D40 d32 Z04 L150 RDMT 10 | 40 | 4 | 150 | 32 | 45 | 0,967 | |
| R210 | D20 d20 Z02 L200 RDMT 10 | 20 | 2 | 200 | 20 | 80 | 0,477 | |
| R212 | D25 d25 Z02 L200 RDMT 10 | 25 | 2 | 200 | 25 | 70 | 0,747 | |
| R213 | D30 d25 Z03 L200 RDMT 10 | 30 | 3 | 200 | 25 | 40 | 0,789 | |
| R214 | D32 d32 Z03 L200 RDMT 10 | 32 | 3 | 200 | 32 | 45 | 1,273 | |
| R216 | D35 d32 Z03 L200 RDMT 10 | 35 | 3 | 200 | 32 | 45 | 1,227 | |
| R218 | D40 d32 Z04 L200 RDMT 10 | 40 | 4 | 200 | 32 | 45 | 1,281 | |

| Kod | | | | |
|---|---|---|---|---|
| R190 | TC071 M3,5x7 | TC040 M3,5 | T15 | |
| R192-R218 | TC067 M3,5x8,5 | TC040 M3,5 | | |

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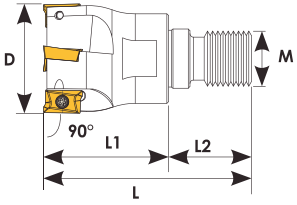
## Saplı Tarama - RDMT 12T3

| Sipariş | Ürün Kodu | Ölçüler (mm) D | Z | L | d | L1 | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| R228 | D25 d25 Z02 L120 RDMT 12 | 25 | 2 | 120 | 25 | 50 | 0,422 | |
| R229 | D30 d25 Z02 L120 RDMT 12 | 30 | 2 | 120 | 25 | 40 | 0,456 | |
| R230 | D32 d25 Z03 L120 RDMT 12 | 32 | 3 | 120 | 25 | 40 | 0,473 | |
| R232 | D35 d25 Z03 L120 RDMT 12 | 35 | 3 | 120 | 25 | 40 | 0,485 | |
| R234 | D40 d25 Z03 L120 RDMT 12 | 40 | 3 | 120 | 25 | 40 | 0,513 | RDMT 12T3 |
| R236 | D25 d25 Z02 L150 RDMT 12 | 25 | 2 | 150 | 25 | 60 | 0,539 | ISO |
| R237 | D30 d25 Z02 L150 RDMT 12 | 30 | 2 | 150 | 25 | 55 | 0,536 | |
| R238 | D32 d32 Z03 L150 RDMT 12 | 32 | 3 | 150 | 32 | 45 | 0,876 | |
| R240 | D35 d32 Z03 L150 RDMT 12 | 35 | 3 | 150 | 32 | 45 | 0,900 | |
| R242 | D40 d32 Z03 L150 RDMT 12 | 40 | 3 | 150 | 32 | 45 | 0,956 | |
| R244 | D25 d25 Z02 L200 RDMT 12 | 25 | 2 | 200 | 25 | 70 | 0,740 | |
| R245 | D30 d25 Z02 L200 RDMT 12 | 30 | 2 | 200 | 25 | 55 | 0,784 | |
| R246 | D32 d32 Z03 L200 RDMT 12 | 32 | 3 | 200 | 32 | 45 | 1,201 | |
| R248 | D35 d32 Z03 L200 RDMT 12 | 35 | 3 | 200 | 32 | 45 | 1,226 | |
| R250 | D40 d32 Z03 L200 RDMT 12 | 40 | 3 | 200 | 32 | 45 | 1,287 | |
| R255 | D30 d25 Z02 L300 RDMT 12 | 30 | 2 | 300 | 25 | 55 | 1,168 | |
| R256 | D32 d32 Z03 L300 RDMT 12 | 32 | 3 | 300 | 32 | 70 | 1,829 | |
| R258 | D35 d32 Z03 L300 RDMT 12 | 35 | 3 | 300 | 32 | 45 | 1,855 | |
| R260 | D40 d32 Z03 L300 RDMT 12 | 40 | 3 | 300 | 32 | 45 | 1,995 | |

TC067 M3,5x8,5 T15 TC040 M3,5



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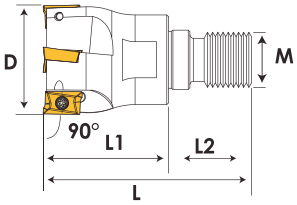
## Vidalı Takım - APXT 1003

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|
| | | D | Z | M | L | L1 | L2 | kg | |
| VT136 | D16 Z02 M08 APXT 10 | 16 | 2 | M08 | 41 | 25 | 16 | 0,050 | |
| VT138 | D20 Z03 M10 APXT 10 | 20 | 3 | M10 | 55 | 35 | 20 | 0,097 | APXT 1003 |
| VT140 | D25 Z03 M12 APXT 10 | 25 | 3 | M12 | 55 | 33 | 22 | 0,135 | KRLY |
| VT143 | D32 Z04 M16 APXT 10 | 32 | 4 | M16 | 60 | 36 | 24,5 | 0,195 | |
| VT146 | D35 Z04 M16 APXT 10 | 35 | 4 | M16 | 60 | 36 | 24,5 | 0,225 | |
| VT148 | D40 Z05 M16 APXT 10 | 40 | 5 | M16 | 60 | 36 | 24,5 | 0,266 | |
| VT150 | D42 Z05 M16 APXT 10 | 42 | 5 | M16 | 60 | 36 | 24,5 | 0,294 | |

TC060 M2,5x5,5 T8



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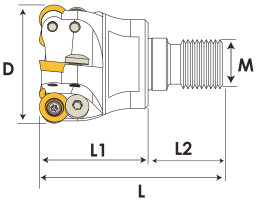
## Vidalı Takım - APKT 1604

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|
| | | D | Z | M | L | L1 | L2 | kg | |
| VT160 | D25 Z02 M12 APKT 16 | 25 | 2 | M12 | 55 | 33 | 22 | 0,107 | |
| VT163 | D32 Z03 M16 APKT 16 | 32 | 3 | M16 | 60 | 24 | 24,5 | 0,180 | APKT 1604 |
| VT166 | D35 Z03 M16 APKT 16 | 35 | 3 | M16 | 60 | 24 | 24,5 | 0,211 | KRLY |
| VT168 | D40 Z04 M16 APKT 16 | 40 | 4 | M16 | 60 | 24 | 24,5 | 0,238 | |
| VT170 | D42 Z04 M16 APKT 16 | 42 | 4 | M16 | 60 | 24 | 24,5 | 0,251 | |

TC074 M4x10 T15



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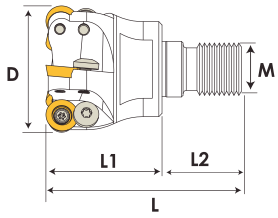
## Vidalı Takım - RDMT 1003

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|
| | | D | Z | M | L | L1 | L2 | kg | |
| VT098 | D20 Z02 M10 RDMT 10 | 20 | 2 | M10 | 55 | 35 | 20 | 0,087 | |
| VT100 | D25 Z03 M12 RDMT 10 | 25 | 3 | M12 | 55 | 33 | 22 | 0,114 | RDMT 1003 |
| VT103 | D32 Z03 M16 RDMT 10 | 32 | 3 | M16 | 60 | 35,5 | 24,5 | 0,188 | ISO |
| VT106 | D35 Z04 M16 RDMT 10 | 35 | 4 | M16 | 60 | 35,5 | 24,5 | 0,201 | |
| VT107 | D35 Z05 M16 RDMT 10 | 35 | 5 | M16 | 60 | 35,5 | 24,5 | 0,211 | |
| VT108 | D40 Z05 M16 RDMT 10 | 40 | 5 | M16 | 60 | 35,5 | 24,5 | 0,241 | |
| VT110 | D42 Z05 M16 RDMT 10 | 42 | 5 | M16 | 60 | 35,5 | 24,5 | 0,265 | |

| Kod | | | |
|---|---|---|---|
| VT098 | TC071 M3,5x7 | TC040 M3,5 | T15 |
| VT100-VT110 | TC067 M3,5x8,5 | | |



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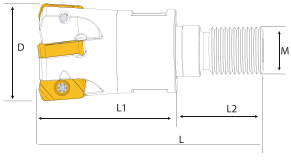
## Vidalı Takım - RDMT 12T3

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|
| | | D | Z | M | L | L1 | L2 | kg | |
| VT120 | D25 Z02 M12 RDMT 12 | 25 | 2 | M12 | 55 | 33 | 22 | 0,106 | |
| VT123 | D32 Z03 M16 RDMT 12 | 32 | 3 | M16 | 60 | 35,5 | 24,5 | 0,177 | RDMT 12T3 |
| VT126 | D35 Z03 M16 RDMT 12 | 35 | 3 | M16 | 60 | 35,5 | 24,5 | 0,196 | ISO |
| VT128 | D40 Z04 M16 RDMT 12 | 40 | 4 | M16 | 60 | 35,5 | 24,5 | 0,230 | |
| VT130 | D42 Z04 M16 RDMT 12 | 42 | 4 | M16 | 60 | 35,5 | 24,5 | 0,237 | |

 TC067 M3,5x8,5  TC040 M3,5  T15 



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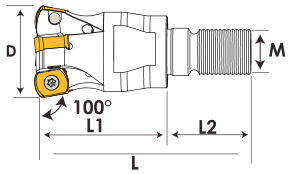
## Vidalı Takım - LNMU 0303

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|
| | | D | Z | M | L | L1 | L2 | kg | |
| VT300 | D16 Z02 M08 LNMU 03 | 16 | 2 | M08 | 42 | 25 | 17 | 0,029 | |
| VT302 | D20 Z03 M10 LNMU 03 | 20 | 3 | M10 | 49 | 30 | 19 | 0,061 | LNMU 0303 |
| VT304 | D25 Z04 M12 LNMU 03 | 25 | 4 | M12 | 57 | 35 | 22 | 0,108 | TNGLY-OKE |
| VT305 | D32 Z05 M16 LNMU 03 | 32 | 5 | M16 | 63 | 40 | 23 | 0,227 | |
| VT307 | D40 Z06 M16 LNMU 03 | 40 | 6 | M16 | 63 | 40 | 23 | 0,272 | |

 TC063 M2,5x7  T8 



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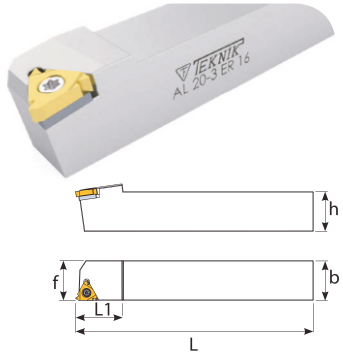
## Vidalı Takım - BLMP 0603

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|
| | | D | Z | M | L | L1 | L2 | kg | |
| VT190 | D16 Z02 M08 BLMP 06 | 16 | 2 | M08 | 41 | 41 | 16 | 0,044 | |
| VT191 | D20 Z03 M10 BLMP 06 | 20 | 3 | M10 | 48 | 48 | 18 | 0,081 | BLMP 0603 |
| VT192 | D25 Z04 M12 BLMP 06 | 25 | 4 | M12 | 57 | 57 | 22 | 0,119 | TGTC |
| VT193 | D32 Z05 M16 BLMP 06 | 32 | 5 | M16 | 65 | 65 | 25 | 0,233 | |
| VT194 | D35 Z05 M16 BLMP 06 | 35 | 5 | M16 | 65 | 65 | 25 | 0,240 | |
| VT195 | D40 Z06 M16 BLMP 06 | 40 | 6 | M16 | 68 | 68 | 25 | 0,291 | |
| VT196 | D42 Z06 M16 BLMP 06 | 42 | 6 | M16 | 68 | 68 | 25 | 0,313 | |

 TC064 M3x6,5  T8 

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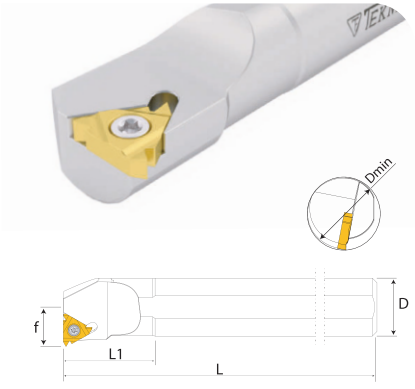
## Dış Çap Diş Katerleri / R

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | L | L1 | h | f | b | kg | |
| D261 | AL 1212 J16-ER16 | 12 | 12 | 16 | 110 | 20 | 0,140 | |
| D259 | AL 1616 H16-ER16 | 16 | 16 | 16 | 100 | 22 | 0,250 | 16-ER |
| D258 | AL 2020 K16-ER16 | 20 | 20 | 20 | 125 | 25 | 0,410 | |
| D260 | AL 2525 M16-ER16 | 25 | 25 | 25 | 150 | 30 | 0,750 | |
| D262 | AL 3232 P16-ER16 | 32 | 32 | 32 | 170 | 30 | 1,430 | |
| D266 | AL 2525 M22-ER22 | 25 | 25 | 25 | 150 | 30 | 0,740 | 22-ER |

| Kod | | | | |
|---|---|---|---|---|
| D261-D262 | TC068 M3,5x11 | TA040 | TC048 M5 | T15 |
| D266 | TC078 M4x11 | -- | -- | |

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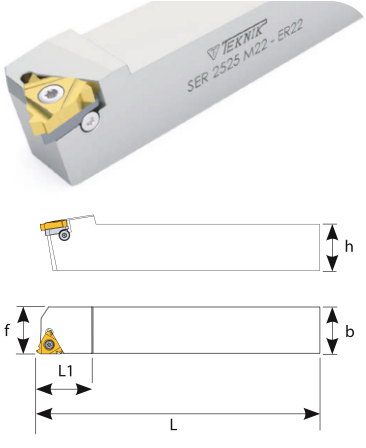
## İç Çap Diş Katerleri / R

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | Delik Çapı | kg | Uç |
|---|---|---|---|---|---|---|---|---|
| | | D | L | L1 | f | Dmin | | |
| K348 | S10J STIR-IR11 | 10 | 110 | 20 | 6 | 12 | 0,079 | |
| K350 | S12K STIR-IR11 | 12 | 125 | 25 | 7,2 | 14 | 0,117 | 11 IR |
| K352 | S16Q STIR-IR16 | 16 | 180 | 40 | 11 | 20 | 0,286 | |
| K354 | S20Q STIR-IR16 | 20 | 180 | 40 | 13 | 25 | 0,436 | 16 IR |
| K356 | S25R STIR-IR16 | 25 | 200 | 40 | 16 | 29 | 0,762 | |
| K358 | S32T STIR-IR16 | 32 | 300 | 60 | 19,5 | 36 | 1,829 | |
| K358-1 | S20Q STIR-IR22 | 20 | 180 | 40 | 14 | 24 | 0,431 | |
| K359 | S25R STIR-IR22 | 25 | 200 | 40 | 17 | 32 | 0,757 | 22 IR |
| K360 | S32T STIR-IR22 | 32 | 300 | 60 | 19,5 | 36 | 1,818 | |
| K360-1 | S40T STIR-IR22 | 40 | 300 | 60 | 24,5 | 45 | 2,831 | |

| Kod | | |
|---|---|---|
| K348-K350 | TC060 M2,5x5,5 | T8 |
| K352-K358 | TC067 M3,5x8,5 | T10 |
| K358-1-K360-1 | TC078 M4x11 | T15 |

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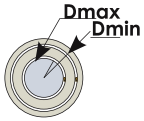
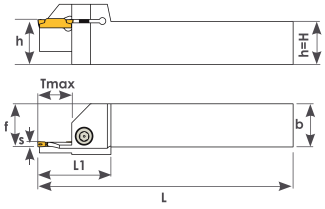
## Dış Çap Diş Katerleri / R

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|
| | | h | b | f | L | L1 | kg | |
| D494 | SER 0808 H11-ER11 | 8 | 8 | 11 | 100 | 20 | 0,061 | |
| D495 | SER 1010 H11-ER11 | 10 | 10 | 11 | 100 | 20 | 0,091 | 11 ER |
| D496 | SER 1010 M11-ER11 | 10 | 10 | 11 | 150 | 20 | 0,136 | |
| D497 | SER 1212 K11-ER11 | 12 | 12 | 12 | 125 | 20 | 0,160 | |
| D498 | SER 1212 M11-ER11 | 12 | 12 | 12 | 150 | 20 | 0,193 | |
| D500 | SER 1212 J16-ER16 | 12 | 12 | 16 | 110 | 22 | 0,110 | |
| D501 | SER 1616 H16-ER16 | 16 | 16 | 16 | 100 | 25 | 0,220 | |
| D502 | SER 2020 K16-ER16 | 20 | 20 | 20 | 125 | 30 | 0,410 | 16 ER |
| D503 | SER 2525 M16-ER16 | 25 | 25 | 25 | 150 | 30 | 0,750 | |
| D504 | SER 3232 P16-ER16 | 32 | 32 | 32 | 170 | 30 | 1,410 | |
| D505 | SER 2525 M22-ER22 | 25 | 25 | 25 | 150 | 30 | 0,740 | |
| D506 | SER 3232 P22-ER22 | 32 | 32 | 32 | 170 | 30 | 1,430 | 22 ER |
| D507 | SER 4040 R22-ER22 | 40 | 40 | 40 | 200 | 36 | 1,396 | |
| D491 | SER 2525 M27-ER27 | 25 | 25 | 32 | 150 | 36 | 2,585 | |
| D492 | SER 3232 P27-ER27 | 32 | 32 | 32 | 170 | 40 | 0,791 | 27 ER |
| D493 | SER 4040 R27-ER27 | 40 | 40 | 40 | 200 | 40 | 1,405 | |

| Kod | | | | | |
|---|---|---|---|---|---|
| D494-D498 | TC060 M2,5x5,5 | – | – | | T8 |
| D500-D504 | TC068 M3,5x11 | TA061 | TA060 | TC062 M3 | T15 |
| D505-D507 | TC077 M4x15 | TA062 | | | |
| D491-D493 | TC086 M5x18 | TA064 | – | TC053 M4 | T20 |



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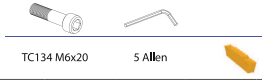
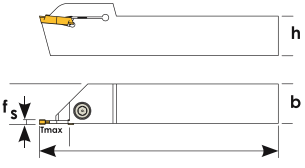
## Kanal Kater - KRLY-R

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Dmin | Dmax | S | Tmax | f | b | h | L | L1 | kg | |
| D780 | 2525 3C-R (50-60) | 50 | 60 | 3 | 17 | 25 | 25 | 25 | 150 | 40 | 0,741 | |
| D782 | 2525 3C-R (60-80) | 60 | 80 | 3 | 17 | 25 | 25 | 25 | 150 | 40 | 0,717 | MGM 300 |
| D784 | 2525 3C-R (80-110) | 80 | 110 | 3 | 17 | 25 | 25 | 25 | 150 | 40 | 0,720 | KRLY |
| D785 | 2525 3C-R (110-150) | 110 | 150 | 3 | 17 | 25 | 25 | 25 | 150 | 40 | 0,730 | |
| D786 | 2525 4C-R (50-60) | 50 | 60 | 4 | 20 | 25 | 25 | 25 | 150 | 45 | 0,704 | |
| D788 | 2525 4C-R (60-80) | 60 | 80 | 4 | 20 | 25 | 25 | 25 | 150 | 45 | 0,712 | MGM 400 |
| D790 | 2525 4C-R (80-110) | 80 | 110 | 4 | 20 | 25 | 25 | 25 | 150 | 45 | 0,701 | KRLY |
| D791 | 2525 4C-R (110-150) | 110 | 150 | 4 | 20 | 25 | 25 | 25 | 150 | 45 | 0,712 | |
| D791-1 | 2525 4C (140-600) | 140 | 600 | 4 | 25 | 25 | 25 | 25 | 150 | 49 | 0,667 | |
| D792 | 2525 5C-R (50-80) | 50 | 80 | 5 | 20 | 25 | 25 | 25 | 150 | 45 | 0,721 | |
| D796 | 2525 5C-R (80-110) | 80 | 110 | 5 | 20 | 25 | 25 | 25 | 150 | 45 | 0,716 | MGM 500 |
| D798 | 2525 5C-R (110-150) | 110 | 150 | 5 | 20 | 25 | 25 | 25 | 150 | 45 | 0,718 | KRLY |
| D799-1 | 2525 5C-R (350-500) | 350 | 500 | 5 | 20 | 25 | 25 | 25 | 150 | 45 | 0,713 | |
| D799-2 | 2525 5C-R (140-600) | 140 | 600 | 5 | 25 | 25 | 25 | 25 | 150 | 49 | 0,664 | |



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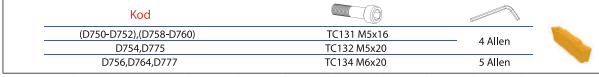
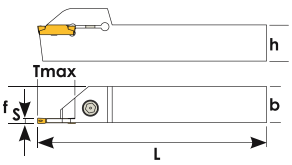
## Kanal Kater - ISCR-R

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|
| | | h | b | S | Tmax | f | L | kg | |
| D750 | 1212 2C-R DGN | 12 | 12 | 2 | 16 | 12 | 125 | 0,158 | |
| D752 | 1616 2C-R DGN | 16 | 16 | 2 | 16 | 16 | 125 | 0,260 | DGN 2C |
| D754 | 2020 2C-R DGN | 20 | 20 | 2 | 18 | 20 | 125 | 0,398 | ISCR |
| D756 | 2525 2C-R DGN | 25 | 25 | 2 | 19 | 25 | 150 | 0,712 | |
| D758 | 1212 3C-R DGN | 12 | 12 | 3 | 16 | 12 | 125 | 0,160 | |
| D760 | 1616 3C-R DGN | 16 | 16 | 3 | 19 | 16 | 125 | 0,253 | DGN 3C |
| D762 | 2020 3C-R DGN | 20 | 20 | 3 | 20 | 20 | 125 | 0,394 | ISCR |
| D764 | 2525 3C-R DGN | 25 | 25 | 3 | 22 | 25 | 150 | 0,711 | |
| D764-1 | 2525 3C-R DGN | 25 | 25 | 3 | 25 | 25 | 150 | 0,711 | |
| D775 | 2020 4C-R DGN | 20 | 20 | 4 | 20 | 20 | 125 | 0,391 | DGN 4C |
| D777 | 2525 4C-R DGN | 25 | 25 | 4 | 20 | 25 | 150 | 0,709 | ISCR |





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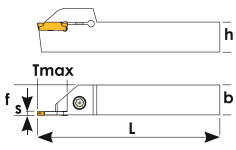
## Kanal Kater - MGM/R

| Sipariş | Ürün Kodu | Ölçüler (mm) h | b | S | Tmax | f | L | kg | Uç |
|---|---|---|---|---|---|---|---|---|---|
| D658 | 1212 2C-R MGM | 12 | 12 | 2 | 16 | 12 | 125 | 0,162 | |
| D660 | 1616 2C-R MGM | 16 | 16 | 2 | 16 | 16 | 125 | 0,250 | MGM 200 |
| D662 | 2020 2C-R MGM | 20 | 20 | 2 | 16 | 20 | 125 | 0,404 | KRLY |
| D664 | 2525 2C-R MGM | 25 | 25 | 2 | 16 | 25 | 150 | 0,726 | |
| D666 | 3232 2C-R MGM | 32 | 32 | 2 | 16 | 32 | 170 | 1,349 | |
| D667 | 1212 3C-R MGM | 12 | 12 | 3 | 18 | 12 | 125 | 0,162 | |
| D668 | 1616 3C-R MGM | 16 | 16 | 3 | 18 | 16 | 125 | 0,268 | MGM 300 |
| D670 | 2020 3C-R MGM | 20 | 20 | 3 | 18 | 20 | 125 | 0,407 | KRLY |
| D672 | 2525 3C-R MGM | 25 | 25 | 3 | 18 | 25 | 150 | 0,727 | |
| D674 | 3232 3C-R MGM | 32 | 32 | 3 | 18 | 32 | 170 | 1,280 | |
| D675 | 1616 4C-R MGM | 16 | 16 | 4 | 18 | 16 | 125 | 0,273 | |
| D676 | 2020 4C-R MGM | 20 | 20 | 4 | 18 | 20 | 125 | 0,408 | MGM 400 |
| D678 | 2525 4C-R MGM | 25 | 25 | 4 | 18 | 25 | 150 | 0,727 | KRLY |
| D680 | 3232 4C-R MGM | 32 | 32 | 4 | 20 | 32 | 170 | 1,287 | |
| D682 | 2020 5C-R MGM | 20 | 20 | 5 | 25 | 20 | 125 | 0,391 | MGM 500 |
| D684 | 2525 5C-R MGM | 25 | 25 | 5 | 25 | 25 | 150 | 0,703 | KRLY |
| D686 | 3232 5C-R MGM | 32 | 32 | 5 | 25 | 32 | 170 | 1,268 | |
| D687 | 2525 6C-R MGM | 25 | 25 | 6 | 27 | 25 | 150 | 0,745 | MGM 600 KRLY |

| Kod | | |
|---|---|---|
| D658-D660,D667-D668,D675-D676 | TC131 M5x16 | 4 Allen |
| D662,D670,D675-D676,D682 | TC132 M5x20 | |
| D664-D666,D672-D674,D378,D680,D684,D687 | TC134 M6x20 | 5 Allen |



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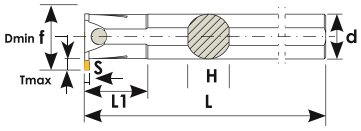
## Kanal Kater - MGM/R

| Sipariş | Ürün Kodu | Ölçüler (mm) h | b | S | Tmax | f | L | kg | Uç |
|---|---|---|---|---|---|---|---|---|---|
| D960 | 2525 3C-R MGM | 25 | 25 | 3 | 25 | 25 | 150 | 0,727 | MGM 300 |
| D963 | 2525 3C-R MGM | 25 | 25 | 3 | 40 | 25 | 170 | 0,722 | KRLY |
| D961 | 2525 4C-R MGM | 25 | 25 | 4 | 25 | 25 | 150 | 0,727 | MGM 400 |
| D964 | 2525 4C-R MGM | 25 | 25 | 4 | 40 | 25 | 170 | 0,721 | KRLY |
| D962 | 2525 5C-R MGM | 25 | 25 | 5 | 40 | 25 | 170 | 0,745 | MGM 500 KRLY |

| | |
|---|---|
| TC134 M6x20 | 5 Allen |



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## Kanal Kater - KRLY-R

| Sipariş | Ürün Kodu | Ölçüler (mm) | | | | | | | | | Uç |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Dmin | Tmax | L | L1 | d | h | f | s | kg | |
| K600 | S16Q 2C-R MGM | 21 | 5 | 180 | 35 | 16 | 15 | 12,5 | 2 | 0,288 | MGM 200 |
| K602 | S20Q 2C-R MGM | 26 | 5,7 | 180 | 35 | 20 | 18 | 15,5 | 2 | 0,440 | KRLY |
| K603 | S25Q 2C-R MGM | 31 | 5,7 | 200 | 35 | 25 | 23 | 18 | 2 | 0,787 | |
| K604 | S20Q 3C-R MGM | 26 | 6 | 180 | 35 | 20 | 18 | 15,5 | 3 | 0,450 | |
| K606 | S25R 3C-R MGM | 32 | 6,7 | 200 | 40 | 25 | 23 | 19 | 3 | 0,784 | MGM 300 |
| K608 | S32S 3C-R MGM | 38 | 6,1 | 250 | 60 | 32 | 30 | 21,5 | 3 | 1,555 | KRLY |
| K609 | S40T 3C-R MGM | 48 | 7,2 | 300 | 60 | 40 | 38 | 27 | 3 | 2,940 | |
| K610 | S20Q 4C-R MGM | 26 | 6 | 180 | 35 | 20 | 18 | 15,5 | 4 | 0,443 | |
| K612 | S25R 4C-R MGM | 31 | 6 | 200 | 40 | 25 | 23 | 18,2 | 4 | 0,783 | MGM 400 |
| K614 | S32S 4C-R MGM | 38 | 6 | 250 | 65 | 32 | 30 | 21,5 | 4 | 1,552 | KRLY |
| K616 | S40T 4C-R MGM | 47 | 7,2 | 300 | 60 | 40 | 38 | 27 | 4 | 2,942 | |
| K618 | S25R 5C-R MGM | 32 | 7 | 200 | 40 | 25 | 23 | 19,2 | 5 | 0,777 | MGM 500 |
| K620 | S32S 5C-R MGM | 39 | 7 | 250 | 60 | 32 | 30 | 22,5 | 5 | 1,561 | KRLY |
| K622 | S40T 5C-R MGM | 47 | 7,4 | 300 | 60 | 40 | 38 | 27 | 5 | 2,936 | |

| Kod | | |
|---|---|---|
| K600-K602,K604,K610 | TC130 M5x12 | 4 Allen |
| K603,K606,K612,K618 | TC131 M5x16 | |
| K608-K609,K614-K616,K620-K622 | TC134 M6x20 | 5 Allen |




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## Kater - CKJNR

| Sipariş | Ürün Kodu | | Uç |
|---|---|---|---|
| RD018 | CKJNR 20x20 K16 | Altlıklı | KNUX 16 |
| RD014 | CKJNR 25x25 M16 | Altlıklı | ISO |
| RD013 | CKJNR 32x32 P16 | Altlıklı | |




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## Kater - CKJNL

| Sipariş | Ürün Kodu | | Uç |
|---|---|---|---|
| RD038 | CKJNL 20x20 K16 | Altlıklı | KNUX 16 |
| RD034 | CKJNL 25x25 M16 | Altlıklı | ISO |
| RD032 | CKJNL 32x32 P16 | Altlıklı | |

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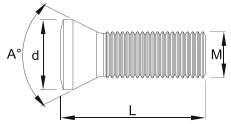
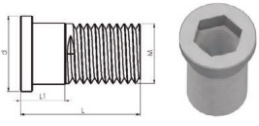
## Yedek Parçalar

| Sipariş | Parça | M | L | d | A | Anahtar |
|---|---|---|---|---|---|---|
| TC057 | | M1,6 | 3,4 | 2,6 | 60° | T6 |
| TC057-1 | | M1,8 | 4,1 | 2,5 | 60° | T6 |
| TC058 | | M2 | 4,2 | 2,8 | 60° | T6 |
| TC058-1 | | M2 | 5 | 2,8 | 60° | T6 |
| TC058-2 | | M2,2 | 6 | 3 | 60° | T7 |
| TC059 | | M2,2 | 5 | 3 | 60° | T7 |
| TC059-1 | | M2,5 | 4,7 | 3,5 | 60° | T8 |
| TC060 | | M2,5 | 5,5 | 3,5 | 60° | T8 |
| TC061 | | M2,5 | 6,5 | 3,5 | 50° | T8 |
| TC063 | | M2,5 | 7 | 3,5 | 60° | T8 |
| TC092 | | M2,5 | 5,5 | 3,8 | 60° | T8 |
| TC093 | | M2,5 | 7 | 3,8 | 60° | T8 |
| TC064 |   | M3 | 6,2 | 3,8 | 60° | T8 |
| TC065 | | M3 | 7 | 4,2 | 60° | T8 |
| TC065-1 | | M3 | 7 | 4 | 60° | T8 |
| TC066 | | M3 | 10 | 5,3 | 55° | T15 |
| TC067 |  | M3,5 | 8,5 | 5,3 | 60° | T15 |
| TC068 | | M3,5 | 11 | 5,3 | 60° | T15 |
| TC069 | | M3,5 | 8,5 | 4,8 | 60° | T10 |
| TC071 | | M3,5 | 7 | 5,3 | 60° | T15 |
| TC072 | | M4 | 10 | 5,5 | 60° | T15 |
| TC073 | | M4 | 7 | 5,5 | 60° | T15 |
| TC074 | | M4 | 10 | 5,5 | 60° | T15 |
| TC075 | | M4 | 11 | 7 | 60° | T15 |
| TC076 | | M4 | 12,5 | 5,5 | 60° | T15 |
| TC077 | | M4 | 15 | 6,8 | 60° | T15 |
| TC078 | | M4 | 11 | 6,7 | 60° | T15 |
| TC079 | | M4 | 11 | 5,2 | 45° | T15 |
| TC080 | | M4,5 | 11 | 6,2 | 60° | T15 |
| TC083 | | M5 | 12 | 7 | 60° | T20 |
| TC085 | | M5 | 12 | 6,6 | 75° | T20 |
| TC086 | | M5 | 18 | 7,5 | 60° | T20 |
| TC048 |  | M5 | 9 | 6,3 | | 4 Allen |
| TC049 | | M5 | 7,7 | | | 3,5 Allen |
| TC049-1 | | M6 | 10 | | | 4 Allen |

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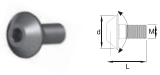
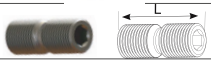
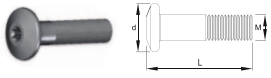
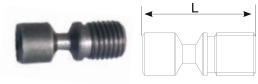
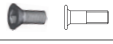
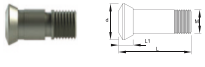
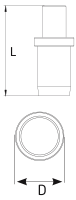
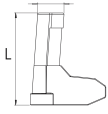
## Yedek Parçalar

| Sipariş | Parça | M | L | d | Anahtar |
|---|---|---|---|---|---|
| TC050 |  | M6 | 14 | 11,2 | 3 Allen |
| TC052 | | M6 | 17 | 14 | 4 Allen |
| TC054 | | M8 | 24 | 17,1 | 5 Allen |
| TC056 |  | M8 (sol-left) | 24 | 17,1 | 5 Allen |
| TC300 |  | M8 | 21 | | 4 Allen |
| TC044 |  | M6 | 27 | 11 | 3 Allen |
| TC046 | | M5 | 26 | 10 | 3 Allen |
| TC047 | | M8 | 29 | 13,6 | 5 Allen |
| TH512 |  | M5 | 12 | | 2 Allen |
| TH613 | | M6 | 13,4 | | 2,5 Allen |
| TH617 | | M6 | 17 | | 2 Allen |
| TH818 | | M8 | 18 | | 3 Allen |
| TH821 | | M8 | 21 | | 3 Allen |
| TH822 | | M8 | 22 | | 2,5 Allen |
| TH825 | | M8 | 25 | | 3 Allen |
| TC036 |  | M3 | 10 | 5,6 | T10 |
| TC038 |  | M4 | 10 | 7,30 | T15 |
| TC039 |  | M6 | 12 | 10,6 | 4 Allen |
| TC040 |  | M3,5 | 10 | 8 | T15 |
| TC062 |  | M3 | 6,7 | 5,5 | T15 |
| TC053 | | M4 | 9 | 6,5 | T20 |
| TC053-1 | | M4 | 9 | 6,5 | T15 |
| TC095 |  | M5 | 12 | 9,5 | 3 Allen |
| TC170 |  | M3 | 7 | 4,2 | T8 |
| TC172 | | M4 | 9 | 5,8 | T15 |
| TC174 | | M5 | 10 | 7 | T20 |
| TC176 | | M5 | 12 | 7,3 | T20 |
| TC178 | | M5 | 16 | 7,8 | 3 Allen |
| TC181 | | M6 | 22 | 9,5 | 3 Allen |
| TC184 | | M8 | 25 | 13 | 4 Allen |

TEKNİK

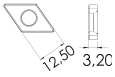
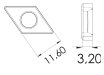
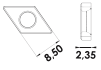
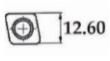
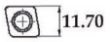
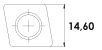
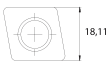
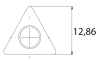
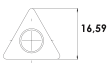
## Yedek Parçalar

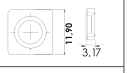
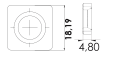
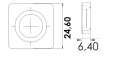
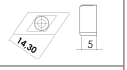
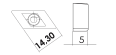
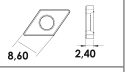
| Sipariş | Tip | Parça | Ölçüler (mm) M |
|---|---|---|---|
| BK017 | DNMG 11 |  |  |
| BK018 | CNMG 16 |  |  |
| BK019 | WNMG 06 |  |  |
| BK020 | DNMG 15<br>CNMG 12<br>SNMG 12 |  |  |
| BK021 | VNMG 16 |  |  |
| BK022 | TNMG 16 |  |  |
| BK023 | TNMG 22 |  |  |
| BK024 | DNMG 11 (Small) |  |  |
| BK025 | CNMG 19 |  |  |
| BK027 | SNMG 25 |  |  |
| BK026 | WNMG 08 |  |  |
| BK028 | KNUX / Right |  |  |
| BK030 | KNUX / Left |  |  |
| BK035 | RDMT 16 |  |  |
| BK036 | TPKN16 |  |  |
| BK300 | OFCR 07 |  |  |

| Sipariş | Tip | Parça | Ölçüler (mm) M |
|---|---|---|---|
| BSP010 | Baskı Pulu |  |  |
| BSP030 | Baskı Pulu (Normal) | | |
| BSP031 | Baskı Pulu | | |
| BSP032 | Baskı Pulu | | |
| BY040 | M6 |  |  |
| BY041 | M5 | | |
| BY042 | M6 | | |
| BY043 | M5 | | |
| BY044 | | | |
| BSP020 L10-D6 | TNMG 16 |  |  |
| | WNMG 06 | | |
| BSP021 L15-D7 | TNMG 22 | | |
| | DNMG 11 | | |
| | WNMG 08 | | |
| TL3 | L12,2-D3,5 |  |  |
| TL3B | L10-D3 | | |
| TL4 | L13-D4,5 | | |
| TL4A | L10,5-D4,7 | | |
| TL4B | L15,6-D5 | | |
| TS-3 | D6,65-L5,5 |  |  |
| TS-4 | D7,71-L7 | | |

TEKNİK

## Yedek Parçalar

| Sipariş | Tip | Parça | Ölçüler (mm) M |
|---|---|---|---|
| TA014 | DNMG 15 Shim |  |   |
| TA014-1 | DNMG 15 Shim |  |   |
| TA013 | DNMG 11 Shim |  |   |
| TA023 | CNMG 09 Shim |  |  |
| TA016 | CNMG 12 Shim |  |   |
| TA016-1 | CNMG 12 Shim |  |   |
| TA022 | CNMG 16 Shim |  |   |
| TA017 | CNMG 19 Shim |  |   |
| TA021 | WNMG 06 Shim |  |   |
| TA020-1 | WNMG 08 Shim |  |   |
| TA020 | WNMG 08 Shim |  |   |
| TA019 | TNMG 16 Shim |  |   |
| TA045 | TNMG 22 Shim |  |   |
| TA052 | SEET 12 Shim |  |   |

| Sipariş | Tip | Parça | Ölçüler (mm) M |
|---|---|---|---|
| TA050 | SNMG 12 Shim |  |   |
| TA051 | SNMG 19 Shim |  |   |
| TA053 | SNMG 25 Shim |  |   |
| TA046 | KNUX RIGHT Shim |  |   |
| TA048 | KNUX LEFT Shim |  |   |
| TA030 | DCMT 11 Shim |  |   |
| TA034 | VBMT 16 Shim |  |   |
| TA032 | VCMT 16 Shim |  |   |
| TA033 | VNMG 16 Shim |  |  |
| TA010 | TPKN 16 Shim |  |   |
| TA012 | TPKN 22 Shim |  |   |
| TA015 | CCMT 09 Shim |  |   |
| TA015-1 | CCMT 12 Shim |  |   |
| TA040 | ER 16 Shim |  |   |
| TA061 | 16 ER Shim |  |   |
| TA060 | 16 IR Shim |  |   |
| TA062 | 22 ER Shim |  |   |
| TA063 | 22 IR Shim |  |   |
| TA064 | 27 ER Shim |  |   |
| TA065 | 27 IR Shim |  |   |



DENG TOOLS

## CCMT - Takma Uçlar

| Sipariş |
|---|
| CCMT 060204 NN |
| CCMT 09T304 NN |
| CCMT 09T308 NN |
| CCMT 120404 NN |
| CCMT 120408 NN |
| CCMT 120412 NN |



DENG TOOLS

## CNMG - Takma Uçlar

| Sipariş |
|---|
| CNMG 120404 NN |
| CNMG 120408 NX |
| CNMG 120408 NN |
| CNMG 120408 NM |
| CNMG 120412 NN |



DENG TOOLS

## CNMM - Takma Uçlar

| Sipariş |
|---|
| CNMM 120412 NR |



DENG TOOLS

## CPMT - Takma Uçlar

| Sipariş |
|---|
| CPMT 060204 NN |
| CPMT 060208 NN |
| CPMT 09T304 NN |
| CPMT 09T308 NN |



DENG TOOLS

## DCMT - Takma Uçlar

| Sipariş |
|---|
| DCMT 070204 NN |
| DCMT 11T304 NN |
| DCMT 11T308 NN |



DENG TOOLS

## DNMG - Takma Uçlar

| Sipariş |
|---|
| DNMG 110404 NN |
| DNMG 110408 NN |
| DNMG 150404 NN |
| DNMG 150408 NX |
| DNMG 150408 NN |
| DNMG 150412 NN |
| DNMG 150604 NN |
| DNMG 150608 NX |
| DNMG 150608 NN |
| DNMG 150612 NN |



DENG TOOLS

## DNUX - Takma Uçlar

| Sipariş |
|---|
| DNUX 150608 R11 |



## KNUX - Takma Uçlar

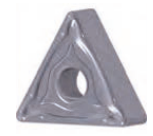
| Sipariş |
|---|
| KNUX 160405 L |
| KNUX 160405 R |



DENG TOOLS

## RCMT - Takma Uçlar

| Sipariş |
|---|
| RCMT 0602 M0 |
| RCMT 0803 M0 |
| RCMT 10T3 M0 |
| RCMT 1204 M0 |



DENG TOOLS

## TNMG - Takma Uçlar

| Sipariş |
|---|
| TNMG 160404 NN |
| TNMG 160408 NX |
| TNMG 160408 NN |
| TNMG 160412 NN |
| TNMG 220404 NN |
| TNMG 220408 NX |
| TNMG 220408 NN |
| TNMG 220412 NN |



DENG TOOLS

**TNMP - Takma Uçlar**

| Sipariş |
|---|
| TNMP 160408 NN |



DENG TOOLS

**TNUX - Takma Uçlar**

| Sipariş |
|---|
| TNUX 160404 L |
| TNUX 160404 R |
| TNUX 160408 L |
| TNUX 160408 R |



DENG TOOLS

**TPMR - Takma Uçlar**

| Sipariş |
|---|
| TPMR 160304 NN |
| TPMR 160308 NN |



DENG TOOLS

**VBMT - Takma Uçlar**

| Sipariş |
|---|
| VBMT 110304 NN |
| VBMT 160404 NN |
| VBMT 160408 NN |



DENG TOOLS

**VCMT - Takma Uçlar**

| Sipariş |
|---|
| VCMT 160404 NN |
| VCMT 160408 NN |



DENG TOOLS

**VNMG - Takma Uçlar**

| Sipariş |
|---|
| VNMG 160404 NN |
| VNMG 160408 NN |



DENG TOOLS

**WNMG - Takma Uçlar**

| Sipariş |
|---|
| WNMG 060404 NN |
| WNMG 060408 NX |
| WNMG 060408 NN |
| WNMG 080404 NN |
| WNMG 080408 NX |
| WNMG 080408 NN |
| WNMG 080408 NM |
| WNMG 080412 NN |



**WNMP - Takma Uçlar**

| Sipariş |
|---|
| WNMP 060404 NN |
| WNMP 060408 NN |
| WNMP 080408 NN |



DENG TOOLS

**SCMT - Takma Uçlar**

| Sipariş |
|---|
| SCMT 09T304 NN |
| SCMT 09T308 NN |



DENG TOOLS

**SNMG - Takma Uçlar**

| Sipariş |
|---|
| SNMG 120408 NX |
| SNMG 120408 NN |
| SNMG 120412 NN |



DENG TOOLS

## TCMT - Takma Uçlar

| Sipariş |
|---|
| TCMT 110204 NN |
| TCMT 110208 NN |
| TCMT 16T304 NN |
| TCMT 16T308 NN |
| TCMT 16T312 NN |



DENG TOOLS

## CCGT - Takma Uçlar

| Sipariş |
|---|
| CCGT 060204 ALU |
| CCGT 09T304 ALU |



DENG TOOLS

## CNGG - Takma Uçlar

| Sipariş |
|---|
| CNGG 09T304 ALU |
| CNGG 120404 ALU |
| CNGG 120408 ALU |



DENG TOOLS

## DCGT - Takma Uçlar

| Sipariş |
|---|
| DCGT 11T304 ALU |



DENG TOOLS

## DNGG - Takma Uçlar

| Sipariş |
|---|
| DNGG 110404 ALU |
| DNGG 110408 ALU |



DENG TOOLS

## TNGG - Takma Uçlar

| Sipariş |
|---|
| TNGG 160404 ALU |



DENG TOOLS

## VNGG - Takma Uçlar

| Sipariş |
|---|
| VNGG 160404 ALU |
| VNGG 160408 ALU |



## WNGG - Takma Uçlar

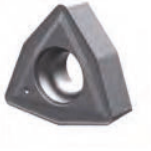
| Sipariş |
|---|
| WNGG 060404 ALU |
| WNGG 080404 ALU |



DENG TOOLS

## SPMG - Takma Uçlar

| Sipariş |
|---|
| SPMG 050204 NN |
| SPMG 060204 NN |
| SPMG 07T308 NN |
| SPMG 090408 NN |
| SPMG 110408 NN |
| SPMG 140512 NN |



DENG TOOLS

## WCMX - Takma Uçlar

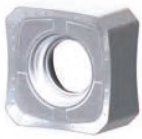
| Sipariş |
|---|
| WCMX 030208 NN |
| WCMX 040208 NN |
| WCMX 050308 NN |
| WCMX 06T308 NN |
| WCMX 080412 NN |



SEKT - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| SEKT 1204 AFTN |
| SEKT 12T3 AGSN |



SNKX - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| SNKX 1205-45 |
| SNKX 1607-45 |



HNKX - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| HNKX 0604-45* |



ONKX - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| ONKX 0806-45 |



SDKT - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| SDKT 1204 AETN |



SPKN - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| SPKN 1203 EDTR |
| SPKN 1204 EDTR |
| SPKN 1504 EDTR |



SEKN - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| SEKN 1203 AFTN |
| SEKN 1204 AFTN |
| SEKN 1504 AFTN |



ODMT - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| ODMT 0504 ZZTR |
| ODMT 060508 TN |



ODMW - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| ODMW 060508 TN |



TPKN - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| TPKN 1603 PDTR |
| TPKN 2204 PDTR |



RDMT - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| RDMT 0602 M0 |
| RDMT 0702 M0 |
| RDMT 0803 M0 |
| RDMT 1003 M0 |
| RDMT 10T3 M0 |
| RDMT 1204 M0 |
| RDMT 12T3 M0 |
| RDMT 1604 M0 |



APKT - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| APKT 060204 PDTR |
| APKT 100308 PDTR |
| APKT 160408 PDTR |



BNMX - Takma Uçlar

DENG TOOLS

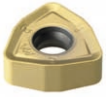
| Sipariş |
|---|
| BNMX 0603 |



LNMU - Takma Uçlar

DENG TOOLS

| Sipariş |
|---|
| LNMU 0303 |



WNMX- Takma Uçlar

DENG TOOLS

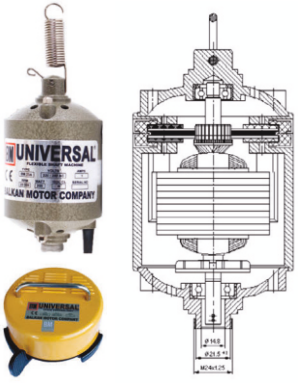
| Sipariş |
|---|
| WNMX 09T316 |



XNKT - Takma Uçlar

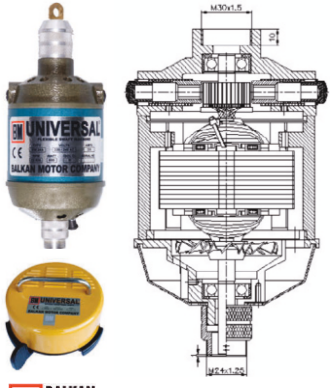
DENG TOOLS

| Sipariş | Sipariş |
|---|---|
| XNKT 060405 | XNKT 080508 |



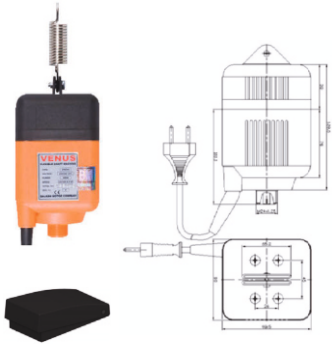

BALKAN SANAYİ

**BM23A - Spiral Motor**




BALKAN SANAYİ

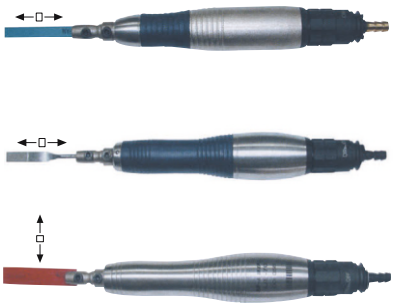
**BM24A - Spiral Motor**




BALKAN SANAYİ

**BM25A - Spiral Motor**

| Sipariş | Test Volt. (V) | Test Frek. (Hz) | Yüksüz Halde | | | Maximum Verim Şartlarında | | | | | | Maximum Güç Şartlarında | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Devir (Rpm) | Akım (Amp) | Moment (Ncm) | Akım (Amp) | Moment (Ncm) | Devir (Rpm) | Akım (Amp) | Verim (%) | Çıkış Gücü (W) | Moment (Ncm) | Devir (Rpm) | Akım (Amp) | Verim (%) | Çıkış Gücü (W) |
| BM23A | 220 | 50 | 17927 | 0.473 | 43.59 | 2.078 | 13.4 | 8547 | 1.071 | 56.07 | 119.97 | 26.5 | 5118 | 1.625 | 46.28 | 142.05 |
| BM24A | 220 | 50 | 16985 | 0.961 | 93.48 | 6.608 | 26.19 | 9978 | 2.904 | 53.55 | 273.72 | 53.36 | 6181 | 4.753 | 46.04 | 345.43 |
| BM25A | 220 | 50 | 15817 | 0.729 | 83.77 | 4.498 | 23.6 | 8885 | 1.913 | 60.56 | 219.56 | 48.76 | 5468 | 3.125 | 51.41 | 279.22 |



## U-LAP

### UTR - Havalı Diprofiller

Erezyonlu ve Tel Erezyonda sertleşmiş yüzeyleri kolayca aşındırır el ile parlatma için ulaşılması zor olan yüzeylerde kolayca çalışmayı sağlar.

| Sipariş | Strok | Hız d / dk | Hava Basıncı | Ebat | Ağırlık |
|---|---|---|---|---|---|
| UTR - 030 | 0.3 mm ileri – geri | 40.000 | 2 – 6 Bar | 28 x 200 | 200 gr. |
| UTR - 070 | 0.7 mm ileri – geri | 35.000 | 2 – 6 Bar | 28 x 200 | 200 gr. |
| SAR - 070 | 0.7 mm sag – sol | 15.000 | 2 – 6 Bar | 18 x 180 | 250 gr. |



## U-LAP

### UG - Havalı Spiraller

Kaynaklı yüzeylerde, kanallarda finiş yüzeylerde genel amaçlı kullanılmaktadır.

| Sipariş | Pens | Devir | Hava Basıncı | Ebat | Ağırlık |
|---|---|---|---|---|---|
| UG - 300 | 3 – 6 mm | 35.000 | 2 – 6 Bar | 22 x 182 | 170 gr. |
| UG - 400 | 2.35 – 3 mm | 60.000 | 2 – 6 Bar | 17 x 159 | 130 gr. |
| UG - 500 | 2.35 – 3 mm | 60.000 | 2 – 6 Bar | 20 x 160 | 110 gr. |



★ HAAF ★ HOFFEN cutting tool

### Havalı Mini Pah Kırma Makinası HOFFEN (Pah Kırma Ucu)

Ürünün 2,5 KW veya daha fazla bir hava kompresörü tarafından sürülmesi gerekiyor.



| Sipariş |
|---|
| HAVALIPAH |

| Sipariş |
|---|
| TCMX 080204R |
| TCMX 080204C |



Değersiz alaşımlar ve değerli metal dökümlerin düzeltilmesi için.

**Ø 6.35 x 25 mm**

**Silindir Parlatma Lastikleri**



Altın ve değersiz metal yüzeylerinin matlaştırılması için

**Ø 6.35 x 25 mm**

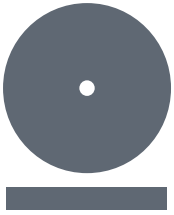
**Silindir Parlatma Lastikleri**



Altın ve değersiz metal yüzeylerinin yüksek parlaklıkta parlatılması için

**Ø 6.35 x 25 mm**

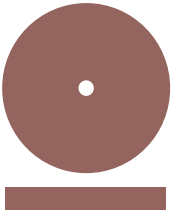
**Silindir Parlatma Lastikleri**



Değersiz alaşımlar ve değerli metal dökümlerin düzeltilmesi için

**Ø 22 x 3.00 mm**

**Daire Parlatma Lastikleri**



Altın ve değersiz metal yüzeylerinin matlaştırılması için

**Ø 22 x 3.00 mm**

**Daire Parlatma Lastikleri**



Altın ve değersiz metal yüzeylerinin yüksek parlaklıkta parlatılması için

**Ø 22 x 3.00 mm**

**Daire Parlatma Lastikleri**



Değersiz alaşımlar ve değerli metal dökümlerin düzeltilmesi için

**Ø 6.35 x 25 mm**

**Saplı Parlatma Lastikleri**



Altın ve değersiz metal yüzeylerinin matlaştırılması için

**Ø 6.35 x 25 mm**

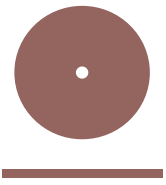
**Saplı Parlatma Lastikleri**



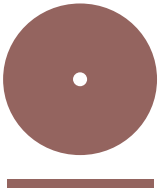
Altın ve değersiz metal yüzeylerinin yüksek parlaklıkta parlatılması için

**Ø 6.35 x 25 mm**

**Saplı Parlatma Lastikleri**

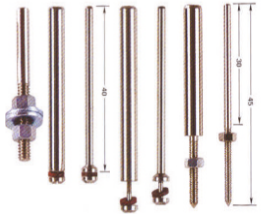


Ø 20 x 0.70 mm



Ø 40 x 1.00 mm

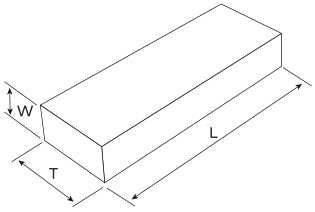
**Sepera Kesme Taşları**



**Bağlama Aparatları**

| Açıklama |
|---|
| 2.35 mm disli somunlu baglama aparatı / kısa |
| 3 mm disli somunlu baglama aparatı / kalın disli |
| 2.35 mm kademesiz ince kafalı baglama aparatı |
| 3 mm düz baglama aparatı |
| 3 mm disli kademesiz baglama aparatı |
| 6 mm baglama aparatı |
| 6 mm pullu baglama aparatı / kısa |






ÜÇER

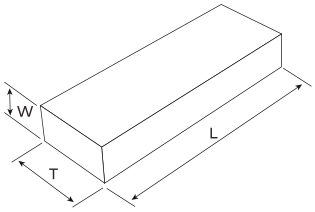
**Kombine Yağ Taşı**



80 Kum
220 Kum
80 Kum
220 Kum

| Sipariş | Tip | W | T | L |
|---|---|---|---|---|
| TA 1002516 E | EKR | 16 | 25 | 100 |
| TA 1254020 E | EKR | 20 | 40 | 125 |
| TA 1505025 E | EKR | 25 | 50 | 150 |
| TA 2005025 E | EKR | 25 | 50 | 200 |
| TA 1002516 S | SCG | 16 | 25 | 100 |
| TA 1254020 S | SCG | 20 | 40 | 125 |
| TA 1505025 S | SCG | 25 | 50 | 150 |
| TA 2005025 S | SCG | 25 | 50 | 200 |





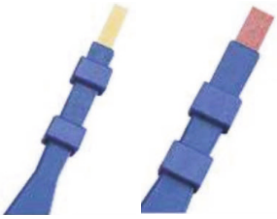

BORIDE Engineered Abrasives

**Kombine Yağ Taşı**



120 Kum
320 Kum

| Sipariş | W | T | L |
|---|---|---|---|
| CBA-FC45 | 16 | 41 | 114 |
| CBA-FC67 | 25 | 51 | 152 |
| CBA-FC87 | 25 | 51 | 202 |



Besdia®

**Seramik Gaz Taşı Tutucusu**



| Ölçü |
|---|
| 1x4 |
| 1x6 |

| Ölçü |
|---|
| 1x10 |
| ∅ 3 |





Besdia®

**Gaz Taşı Tutucusu**

| Ölçü |
|---|
| 3x6 |
| 3x13 |
| 6x13 |
| ∅ 6 |
| 3x6 |
| 6x6 |
| 3x13 |
| 6x6 |
| 6x13 |



BORIDE Engineered Abrasives

## Gaz Taşları Orange EDM

| Sipariş | Ölçü | Kum |
|---|---|---|
| GAZB036120 | ▭ 3 x 6 | 120 |
| GAZB036180 | | 180 |
| GAZB036220 | | 220 |
| GAZB036320 | | 320 |
| GAZB036400 | | 400 |
| GAZB036600 | | 600 |
| GAZB036800 | | 800 |
| GAZB0361000 | | 1000 |
| GAZB0361200 | | 1200 |
| GAZB0313120 | ▭ 3 x 13 | 120 |
| GAZB0313180 | | 180 |
| GAZB0313220 | | 220 |
| GAZB0313320 | | 320 |
| GAZB0313400 | | 400 |
| GAZB0313600 | | 600 |
| GAZB0313800 | | 800 |
| GAZB03131000 | | 1000 |
| GAZB03131200 | | 1200 |

| Sipariş | Ölçü | Kum |
|---|---|---|
| GAZB0613120 | ▭ 6 x 13 | 120 |
| GAZB0613180 | | 180 |
| GAZB0613220 | | 220 |
| GAZB0613320 | | 320 |
| GAZB0613400 | | 400 |
| GAZB0613600 | | 600 |
| GAZB0613800 | | 800 |
| GAZB06131000 | | 1000 |
| GAZB06131200 | | 1200 |
| GAZB0625120 | ▭ 6 x 25 | 120 |
| GAZB0625180 | | 180 |
| GAZB0625220 | | 220 |
| GAZB0625320 | | 320 |
| GAZB0625400 | | 400 |
| GAZB0625600 | | 600 |
| GAZB0625800 | | 800 |
| GAZB06251000 | | 1000 |
| GAZB06251200 | | 1200 |

| Sipariş | Ölçü | Kum |
|---|---|---|
| GAZB01010120 | □ 10 x 10 | 120 |
| GAZB01010180 | | 180 |
| GAZB01010220 | | 220 |
| GAZB01010320 | | 320 |
| GAZB01010400 | | 400 |
| GAZB01010600 | | 600 |
| GAZB01010800 | | 800 |
| GAZB010101000 | | 1000 |
| GAZB010101200 | | 1200 |
| GAZBOY6120 | Ø 6 | 120 |
| GAZBOY6180 | | 180 |
| GAZBOY6220 | | 220 |
| GAZBOY6320 | | 320 |
| GAZBOY6400 | | 400 |
| GAZBOY6600 | | 600 |
| GAZBOY6800 | | 800 |
| GAZBOY61000 | | 1000 |
| GAZBOY61200 | | 1200 |
| GAZBÜ6120 | △ 6 | 120 |
| GAZBÜ6180 | | 180 |
| GAZBÜ6220 | | 220 |
| GAZBÜ6320 | | 320 |
| GAZBÜ6400 | | 400 |
| GAZBÜ6600 | | 600 |
| GAZBÜ6800 | | 800 |
| GAZBÜ61000 | | 1000 |



CERATON®

## Seramik Gaz Taşları

| Sipariş | Ölçü | Kum |
|---|---|---|
| SGAZ14180 | 1 x 4 x100 | 180 |
| SGAZ14250 | | 250 |
| SGAZ14280 | | 280 |
| SGAZ14360 | | 360 |
| SGAZ14400 | | 400 |
| SGAZ14500 | | 500 |
| SGAZ14700 | | 700 |
| SGAZ141000 | | 1000 |
| SGAZ141200 | | 1200 |

| Sipariş | Ölçü | Kum |
|---|---|---|
| SGAZ16180 | 1 x 6 x100 | 180 |
| SGAZ16250 | | 250 |
| SGAZ16280 | | 280 |
| SGAZ16360 | | 360 |
| SGAZ16400 | | 400 |
| SGAZ16500 | | 500 |
| SGAZ16700 | | 700 |
| SGAZ161000 | | 1000 |
| SGAZ161200 | | 1200 |

| Sipariş | Ölçü | Kum |
|---|---|---|
| SGAZ110180 | 1 x 10 x100 | 180 |
| SGAZ110250 | | 250 |
| SGAZ110280 | | 280 |
| SGAZ110360 | | 360 |
| SGAZ110400 | | 400 |
| SGAZ110500 | | 500 |
| SGAZ110700 | | 700 |
| SGAZ1101000 | | 1000 |
| SGAZ1101200 | | 1200 |

| Sipariş | Ölçü | Kum |
|---|---|---|
| SGAZ3180 | Ø 3 x 100 | 180 |
| SGAZ3250 | | 250 |
| SGAZ3280 | | 280 |
| SGAZ3360 | | 360 |
| SGAZ3400 | | 400 |
| SGAZ3500 | | 500 |
| SGAZ3700 | | 700 |
| SGAZ31000 | | 1000 |
| SGAZ31200 | | 1200 |




BORIDE Engineered Abrasives

**Gaztaşı Sıvısı**



SDP

**Elmas Parlatma Macunu (20gr)**

| Sipariş | Tanımı | Mikron | Kullanım Alanı |
|---|---|---|---|
| PASTA20001 | 1/0 | 0.3 | Son Parlatma |
| PASTA20021 | 2/1 | 0.5 | Son Parlatma |
| PASTA20032 | 3/2 | 1 | Son Parlatma |
| PASTA20053 | 5/3 | 3 | Ön ve Son Parlatma |
| PASTA20075 | 7/5 | 6 | Ön ve Son Parlatma |
| PASTA20107 | 10/7 | 9 | Lepleme ve Ön Parlatma |
| PASTA201410 | 14/10 | 15 | Lepleme ve Ön Parlatma |
| PASTA202014 | 20/14 | 30 | Leplememe ve Talas Kaldırma |
| PASTA202820 | 28/20 | 45 | Talas Kaldırma |
| PASTA204028 | 40/28 | 60 | Talas Kaldırma |
| PASTA206040 | 60/40 | 90 | Talas Kaldırma |
| L106 | Gaztası Sıvısı | | |



**Spiro Bant Zımpara & Tutucusu**

| Tutucu Çap | Tutucu Çap |
|---|---|
| Ø 4 | Ø 15 |
| Ø 5 | Ø 20 |
| Ø 6 | Ø 25 |
| Ø 8 | Ø 30 |
| Ø 10 | Ø 40 |
| Ø 12 | Ø 50 |

| Ölçü | Kum |
|---|---|
| 4x10 | 120 |
| | 220 |
| | 320 |
| | 400 |
| | 600 |
| 5x12 | 120 |
| | 220 |
| | 320 |
| | 400 |
| | 600 |

| Ölçü | Kum |
|---|---|
| 6x12 | 120 |
| | 220 |
| | 320 |
| | 400 |
| | 600 |
| 8x12 | 120 |
| | 220 |
| | 320 |
| | 400 |
| | 600 |

| Ölçü | Kum |
|---|---|
| 10x12 | 120 |
| | 220 |
| | 320 |
| | 400 |
| | 600 |
| 12x30 | 60 |
| | 80 |
| | 100 |
| | 120 |
| | 220 |

| Ölçü | Kum |
|---|---|
| 15x30 | 60 |
| | 80 |
| | 100 |
| | 120 |
| | 220 |
| 20x30 | 60 |
| | 80 |
| | 100 |
| | 120 |
| | 220 |

| Ölçü | Kum |
|---|---|
| 25x30 | 60 |
| | 80 |
| | 100 |
| | 120 |
| | 220 |
| 30x30 | 60 |
| | 80 |
| | 100 |
| | 120 |
| | 220 |

| Ölçü | Kum |
|---|---|
| 40x30 | 60 |
| | 80 |
| | 100 |
| | 120 |
| | 220 |
| 50x30 | 60 |
| | 80 |
| | 100 |
| | 120 |
| | 220 |



Besdia®

**Elastik Parlatma Lastiği**




| Sipariş | ÇAP (D) | BOY (L) |
|---|---|---|
| N 413 | 4 | 13 |
| N 515 | 5 | 15 |
| N 617 | 6 | 17 |
| N 820 | 8 | 20 |
| N 1020 | 10 | 20 |




| Sipariş | ÇAP (D) | BOY (L) |
|---|---|---|
| R 413 | 4 | 13 |
| R 515 | 5 | 15 |
| R 617 | 6 | 17 |
| R 820 | 8 | 20 |
| R 1020 | 10 | 20 |



Karbosan

## Mop Elyaf Disk

| Ölçü |
|---|
| 110 x 22 |



Karbosan

## Mop Elyaf Kombi Disk

| Ölçü | Kum |
|---|---|
| 110 x 22 | 120 |



Karbosan

## Mop Keçe Disk

| Ölçü |
|---|
| 110 x 22 |



Karbosan

## Mop Keçe Kombi Disk

| Ölçü | Kum |
|---|---|
| 110 x 22 | 120 |



## Bez Zımpara

| Kum | En |
|---|---|
| 60 | 200 mm |
| 80 | |
| 100 | |
| 120 | |
| 150 | |
| 180 | |
| 220 | |
| 280 | |
| 320 | |
| 400 | |
| 600 | |
| 800 | |



## Plaka Su Zımparası

| Kum |
|---|
| 60 |
| 80 |
| 100 |
| 120 |
| 150 |
| 180 |
| 220 |
| 280 |
| 320 |
| 400 |
| 600 |
| 800 |
| 1000 |
| 1200 |
| 1500 |
| 2000 |



Karbosan

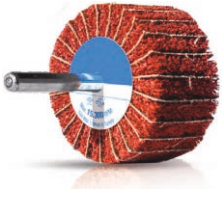
## Scotch Elyaf Plaka



Karbosan

## Mop Elyaf

| ØxhxD |
|---|
| 30x20x6 |
| 30x25x6 |
| 30x30x6 |
| 40x20x6 |
| 40x30x6 |
| 50x20x6 |
| 50x30x6 |
| 50x40x6 |
| 60x30x6 |
| 60x40x6 |
| 60x50x6 |
| 80x30x6 |
| 80x40x6 |
| 80x50x6 |



Karbosan

## Zımparalı Mop Elyaf

| ØxhxD |
|---|
| 30x20x6 |
| 30x25x6 |
| 30x30x6 |
| 40x20x6 |
| 40x30x6 |
| 50x20x6 |
| 50x30x6 |
| 50x40x6 |
| 60x30x6 |
| 60x40x6 |
| 60x50x6 |
| 80x30x6 |
| 80x40x6 |
| 80x50x6 |



Karbosan

## Saplı Mop Zımpara

| ØxhxD | Kum |
|---|---|
| 20x10x3 | 60 |
| 20x10x3 | 120 |
| 20x15x3 | 60 |
| 20x15x3 | 120 |
| 25x10x3 | 60 |
| 25x10x3 | 120 |
| 25x15x3 | 60 |
| 25x15x3 | 120 |
| 30x10x3 | 60 |
| 30x10x3 | 120 |
| 30x15x3 | 60 |
| 30x15x3 | 120 |
| 20x15x6 | 60 |
| 20x15x6 | 120 |
| 20x20x6 | 60 |

| ØxhxD | Kum |
|---|---|
| 20x20x6 | 120 |
| 20x25x6 | 60 |
| 20x25x6 | 120 |
| 25x15x6 | 60 |
| 25x15x6 | 120 |
| 25x20x6 | 60 |
| 25x20x6 | 120 |
| 25x30x6 | 60 |
| 25x30x6 | 120 |
| 30x10x6 | 60 |
| 30x10x6 | 120 |
| 30x15x6 | 60 |
| 30x15x6 | 120 |
| 30x20x6 | 60 |
| 30x20x6 | 120 |

| ØxhxD | Kum |
|---|---|
| 40x20x6 | 60 |
| 40x20x6 | 120 |
| 40x30x6 | 60 |
| 40x30x6 | 120 |
| 50x20x6 | 60 |
| 50x20x6 | 120 |
| 50x30x6 | 60 |
| 50x30x6 | 120 |
| 60x30x6 | 60 |
| 60x30x6 | 120 |
| 60x40x6 | 60 |
| 60x40x6 | 120 |
| 80x40x6 | 60 |
| 80x40x6 | 120 |



Karbosan

## Zımparalı Mop Keçe

| Ø x h x D |
|---|
| 20 x 15 x 6 |
| 20 x 20 x 6 |
| 25 x 15 x 6 |
| 25 x 20 x 6 |
| 30 x 15 x 6 |
| 30 x 20 x 6 |

| Ø x h x D |
|---|
| 30 x 25 x 6 |
| 30 x 30 x 6 |
| 40 x 20 x 6 |
| 40 x 30 x 6 |
| 50 x 20 x 6 |
| 50 x 30 x 6 |

| Ø x h x D |
|---|
| 50 x 40 x 6 |
| 60 x 30 x 6 |
| 60 x 40 x 6 |
| 60 x 50 x 6 |
| 80 x 40 x 6 |
| 80 x 50 x 6 |



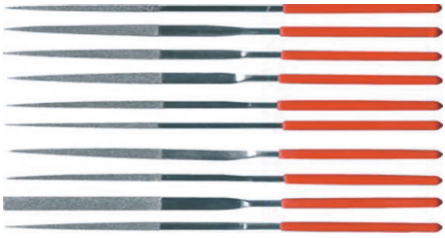

Karbosan

## Mop Keçe

| Ø x h x D |
|---|
| 20 x 15 x 6 |
| 20 x 20 x 6 |
| 25 x 15 x 6 |
| 25 x 20 x 6 |
| 30 x 15 x 6 |
| 30 x 20 x 6 |

| Ø x h x D |
|---|
| 30 x 25 x 6 |
| 30 x 30 x 6 |
| 40 x 20 x 6 |
| 40 x 30 x 6 |
| 50 x 20 x 6 |
| 50 x 30 x 6 |

| Ø x h x D |
|---|
| 50 x 40 x 6 |
| 60 x 30 x 6 |
| 60 x 40 x 6 |
| 60 x 50 x 6 |
| 80 x 40 x 6 |
| 80 x 50 x 6 |



Besdia®

**PF - 10'lu Elmas Eğe Seti**

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| PF - 101 | | 140 | 50 | 1.5 | 6 | 120 |
| PF - 102 | | 140 | 50 | 2 | 5 | 120 |
| PF - 103 | | 140 | 50 | 3 | Ø | 120 |
| PF - 104 | | 140 | 50 | 2.5 | 2.5 | 120 |
| PF - 105 | | 140 | 50 | 3.5 | 3.5 | 120 |
| PF - 106 | | 140 | 50 | 1.5 | 5.4 | 120 |
| PF - 107 | | 140 | 50 | 6 | 1.7 | 120 |
| PF - 108 | | 140 | 50 | 2 | 6 | 120 |
| PF - 109 | | 140 | 50 | 2 | 5 | 120 |
| PF - 110 | | 140 | 50 | 1.5 | 6 | 120 |
| PF - 10 | PVC AMBALAJLI 10'LU PAKET | | | | | |



Besdia®

**PTF - 10'lu Elmas Eğe Seti**

| Sipariş | Form | Boy | Elmas Boyu | Kum |
|---|---|---|---|---|
| PTF-100 | 2 / 0.4 - 1.7 | 130 | 30 | 200 |
| | | | | 400 |
| | | | | 600 |
| | 4 / 0.4 - 1.7 | 130 | 30 | 200 |
| | | | | 400 |
| | | | | 600 |
| | 6 / 0.4 - 1.7 | 130 | 30 | 200 |
| | | | | 400 |
| | | | | 600 |
| | | 140 | 50 | 600 |



Besdia®

**PF - 5'li Elmas Eğe Seti**

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| PF100-6Lİ SET | | 140 | 50 | 1.5 | 6 | 120 |
| | | 140 | 50 | 2 | 5 | 120 |
| | | 140 | 50 | 3 | Ø | 120 |
| | | 140 | 50 | 2.5 | 2.5 | 120 |
| | | 140 | 50 | 3.5 | 3.5 | 120 |
| | PVC AMBALAJLI 5'Lİ PAKET | | | | | |



Besdia®

**PF10L - 10'lu Elmas Eğe Seti**

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| PF-101L | | 140 | 70 | 1,5 | 5,5 | 120 |
| PF-102L | | 140 | 70 | 2 | 5 | 120 |
| PF-103L | | 140 | 70 | 3 | Ø | 120 |
| PF-104L | | 140 | 70 | 2,5 | 2,5 | 120 |
| PF-105L | | 140 | 70 | 3,5 | 3,5 | 120 |
| PF-106L | | 140 | 70 | 1,5 | 5,4 | 120 |
| PF-107L | | 140 | 70 | 6 | 1,7 | 120 |
| PF-108L | | 140 | 70 | 2 | 6 | 120 |
| PF-109L | | 140 | 70 | 2 | 5 | 120 |
| PF-110L | | 140 | 70 | 1,5 | 6 | 120 |
| PF10L | PVC AMBALAJLI 10'LU PAKET | | | | | |



Besdia®

**PF70 - Elmas Eğe**

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| PF-705 | | 140 | 50 | 0.5 | 5,5 | 150 |
| PF-708 | | 140 | 50 | 0.8 | 5,5 | 150 |
| PF-710 | | 140 | 50 | 1.0 | 5,5 | 150 |



Besdia®

**PFL10 - 10'lu Elmas Eğe Seti**

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| PFL-101 | | 180 | 50 | 1,5 | 5,5 | 200 |
| PFL-102 | | 180 | 50 | 2 | 5 | 200 |
| PFL-103 | | 180 | 50 | 3 | Ø | 200 |
| PFL-104 | | 180 | 50 | 2,5 | 2,5 | 200 |
| PFL-105 | | 180 | 50 | 3,5 | 3,5 | 200 |
| PFL-106 | | 180 | 50 | 1 | 5,5 | 200 |
| PFL-705 | | 180 | 50 | 0,5 | 5,5 | 200 |
| PFL-708 | | 180 | 50 | 0,8 | 5,5 | 200 |
| PFL-03 | | 180 | 50 | 2 | Ø | 200 |
| PFL-01 | | 180 | 50 | 1,5 | 5,5 | 200 |
| PFL-10 | PVC AMBALAJLI 10'LU PAKET | | | | | |



Besdia®

**PF20 - 5'li Elmas Eğe Seti**

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| PF-201 | | 200 | 70 | 8,5 | 1,6 | 120 |
| PF-202 | | 200 | 70 | 7 | 2,5 | 120 |
| PF-203 | | 200 | 70 | 4 | Ø | 120 |
| PF-204 | | 200 | 70 | 3,5 | 3,5 | 120 |
| PF-205 | | 200 | 70 | 4,5 | 4,5 | 120 |
| PF-20 | PVC AMBALAJLI 5 LI PAKET | | | | | |



Besdia®

PF30 - 5'li Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| PF-301 | | 180 | 60 | 7,5 | 1,5 | 120 |
| PF-302 | | 180 | 60 | 6 | 2,1 | 120 |
| PF-303 | | 180 | 60 | 3,5 | Ø | 120 |
| PF-304 | | 180 | 60 | 3 | 3 | 120 |
| PF-305 | | 180 | 60 | 4 | 4 | 120 |
| PF-30 | PVC AMBALAJLI 5 LI PAKET | | | | | |



Besdia®

BF60 - 5'li Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| BF - 601 | | 140 | 30 | 1.3 | 6 | 150 |
| BF - 602 | | 140 | 30 | 2 | 5 | 150 |
| BF - 603 | | 140 | 30 | 3 | Ø | 150 |
| BF - 604 | | 140 | 30 | 2.5 | 2.5 | 150 |
| BF - 605 | | 140 | 30 | 5.5 | 3.5 | 150 |
| BF - 60 | PVC AMBALAJLI 5 LI PAKET | | | | | |



Besdia®

BF80 - 6'lı Elmas Eğe Seti

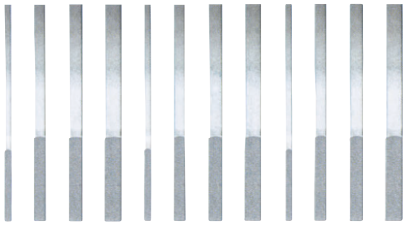
| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| BF-801 | | 155 | 30 | 3 | 2 | 200 |
| BF-802 | | 155 | 30 | 2 | Ø | 200 |
| BF-803 | | 155 | 30 | 3 | Ø | 200 |
| BF-804 | | 155 | 30 | 3 | Ø | 200 |
| BF-805 | | 155 | 30 | 3 | 3 | 200 |
| BF-806 | | 155 | 30 | 3 | 3 | 200 |
| BF-80 | PVC AMBALAJLI 6 LI PAKET | | | | | |



Besdia®

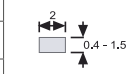
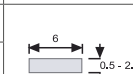
BF90 - 10'lu Elmas Eğe Seti

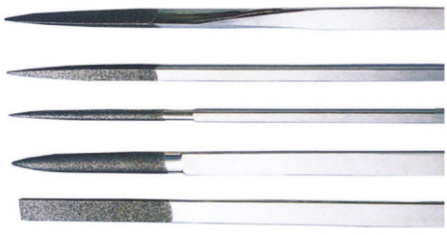
| Sipariş | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|
| BF - 901 | 140 | 20 | 1.3 | 6 | 150 |
| BF - 902 | 140 | 20 | 2.5 | 2.5 | 150 |
| BF - 903 | 140 | 20 | 1.5 | 3.5 | 150 |
| BF - 904 | 140 | 20 | 3.5 | 3.5 | 150 |
| BF - 905 | 140 | 20 | 2 | 5 | 150 |
| BF - 906 | 140 | 20 | 1.5 | 3.5 | 150 |
| BF - 907 | 140 | 20 | 2 | 3.5 | 150 |
| BF - 908 | 140 | 20 | 3 | Ø | 150 |
| BF - 909 | 140 | 20 | 5 | 1.5 | 150 |
| BF - 910 | 140 | 20 | 2.3 | Ø | 150 |
| BF - 90 | PVC AMBALAJLI 10'LU PAKET | | | | |



Besdia®

CF400 - 12'li Elmas Eğe Seti

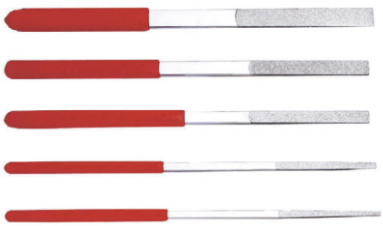
| Sipariş | Form | Boy | Elmas Boyu | Kum |
|---|---|---|---|---|
| CF - 402J |   | 180 | 40 | 150 |
| CF - 402F | | | | 200 |
| CF - 402V | | | | 400 |
| CF - 404J |   | 180 | 50 | 150 |
| CF - 404F | | | | 200 |
| CF - 404V | | | | 400 |
| CF - 406J |   | 180 | 50 | 150 |
| CF - 406F | | | | 200 |
| CF - 406V | | | | 400 |
| CF - 408J |   | 180 | 50 | 150 |
| CF - 408F | | | | 200 |
| CF - 408V | | | | 400 |
| CF - 12 | PVC AMBALAJLI 12'Lİ PAKET | | | |



Besdia®

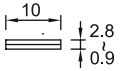
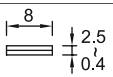
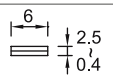
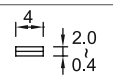
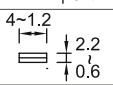
IF50 - 5'li Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| IF - 501 |  | 215 | 80 | 3.5 | 11 | 100 |
| IF - 502 |  | 215 | 80 | 4.4 | 10.5 | 100 |
| IF - 503 |  | 215 | 80 | 5.0 | Ø | 100 |
| IF - 504 |  | 215 | 80 | 6.3 | 6.3 | 100 |
| IF - 505 |  | 215 | 80 | 7.7 | 7.7 | 100 |
| IF - 50 | PVC AMBALAJLI 5 Lİ PAKET | | | | | |



Besdia®

CF50 - 5'li Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kum |
|---|---|---|---|---|
| CF-501 |   | 180 | 70 | 150 |
| CF-502 |   | 180 | 60 | 150 |
| CF-503 |   | 180 | 60 | 150 |
| CF-504 |   | 180 | 50 | 200 |
| CF-505 |   | 180 | 50 | 200 |
| CF-50 | PVC AMBALAJLI 5 Lİ PAKET | | | |



Besdia®

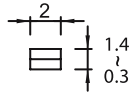
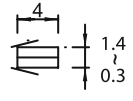
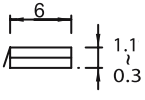
FAS10 - 10'lu Diprofil Elmas Eğe Seti

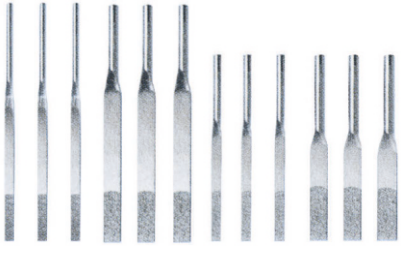
| Sipariş | Form | Boy | Elmas Boyu | Genişlik | Kalınlık | Kum |
|---|---|---|---|---|---|---|
| FA - 101 | | 90 | 60 | 10 | 1 | 200&400 |
| FA - 102 | | 90 | 60 | 8 | 1 | 200&400 |
| FA - 103 | | 70 | 40 | 6 | 0.8 | 200&400 |
| FA - 104 | | 60 | 25 | 4 | 0.8 | 200&400 |
| FA - 105 | | 45 | 15 | 2 | 0.8 | 200&400 |
| FA - 10 | PVC AMBALAJLI 10'LU PAKET | | | | | |



Besdia®

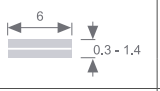
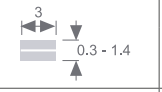
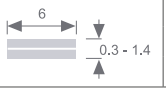
MTP120 - 12'li Diprofil Elmas Eğe Seti

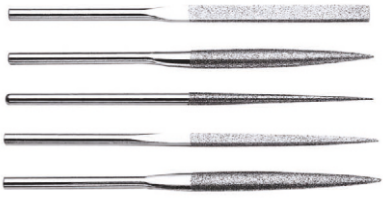
| Sipariş | Form | Boy | Elmas Boyu | Kum |
|---|---|---|---|---|
| MTP-12J |   | 72 | 25 | 150 |
| MTP-12F | | | | 200 |
| MTP-12H | | | | 300 |
| MTP-12V | | | | 400 |
| MTP-14J |   | 72 | 25 | 150 |
| MTP-14F | | | | 200 |
| MTP-14H | | | | 300 |
| MTP-14V | | | | 400 |
| MTP-16J |   | 72 | 25 | 150 |
| MTP-16F | | | | 200 |
| MTP-16H | | | | 300 |
| MTP-16V | | | | 400 |
| MTP-120 | PVC AMBALAJLI 12Lİ PAKET | | | |



Besdia®

MTF100 - 12'li Diprofil Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kum |
|---|---|---|---|---|
| MTF - 13F |   | 72 | 15 | 200 |
| MTF - 13V | | | | 400 |
| MTF - 13X | | | | 600 |
| MTF - 16F |   | 72 | 15 | 200 |
| MTF - 16V | | | | 400 |
| MTF - 16X | | | | 600 |
| MTF - 23F |   | 56 | 15 | 200 |
| MTF - 23V | | | | 400 |
| MTF - 23X | | | | 600 |
| MTF - 26F |   | 56 | 15 | 200 |
| MTF - 26V | | | | 400 |
| MTF - 26X | | | | 600 |
| MTF - 12 | PVC AMBALAJLI 12'Lİ PAKET | | | |



Besdia®

MPF10 - 5'li Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| MPF-101 | | 90 | 45 | 1,2 | 4 | 150 |
| MPF-102 | | 90 | 45 | 2 | 5 | 150 |
| MPF-103 | | 90 | 45 | 3 | Ø | 150 |
| MPF-104 | | 90 | 45 | 2,5 | 2,5 | 150 |
| MPF-105 | | 90 | 45 | 2 | 5 | 150 |
| MPF-10 | PVC AMBALAJLI 5 Lİ PAKET | | | | | |



Besdia®

MBF60 - 5'li Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| MBF-601 | | 85 | 30 | 1,2 | 5,5 | 150 |
| MBF-602 | | 85 | 30 | 2 | 5 | 150 |
| MBF-603 | | 85 | 30 | 3 | Ø | 150 |
| MBF-604 | | 85 | 30 | 2,5 | 2,5 | 150 |
| MBF-605 | | 85 | 30 | 3,5 | 3,5 | 150 |
| MBF-60 | PVC AMBALAJLI 5 Lİ PAKET | | | | | |

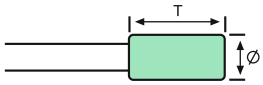


Besdia®

MBF90 - 10'lu Elmas Eğe Seti

| Sipariş | Form | Boy | Elmas Boyu | Kalınlık | Genişlik | Kum |
|---|---|---|---|---|---|---|
| MB-901 | | 65 | 20-30 | 1,2 | 5,8 | 150 |
| MB-902 | | 65 | 20-30 | 1,4 | 3,2 | 150 |
| MB-903 | | 65 | 20-30 | 2 | 5 | 150 |
| MB-904 | | 65 | 20-30 | 1,4 | 3,2 | 150 |
| MB-905 | | 65 | 20-30 | 3 | Ø | 150 |
| MB-906 | | 65 | 20-30 | 2,5 | Ø | 150 |
| MB-907 | | 65 | 20-30 | 2,5 | 2,5 | 150 |
| MB-908 | | 65 | 20-30 | 1,4 | 3,2 | 150 |
| MB-909 | | 65 | 20-30 | 1,4 | 3,2 | 150 |
| MB-910 | | 65 | 20-30 | 2 | 3,5 | 150 |
| MBF-90 | PVC AMBALAJLI 10'LU PAKET | | | | | |



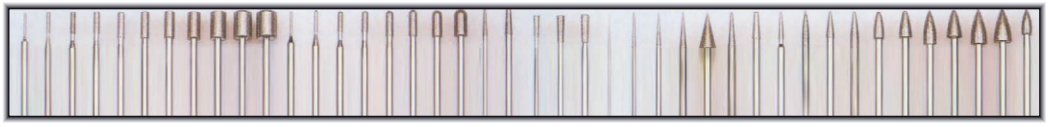




Besdia®

## BMS - Püskürtme Spiral Elmas Uçlar

Şaft 3 mm

| Sipariş |
|---|
| BMS20 SET |
| BMS30 SET |



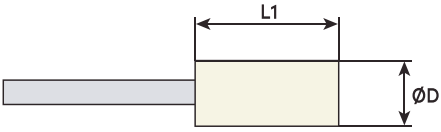
| Sipariş | Form | Ø | T |
|---|---|---|---|
| 10A | | 1 | 8 |
| 15A | | 1.5 | 8 |
| 20A | | 2 | 8 |
| 25A | | 2.5 | 8 |
| 30A | | 3 | 10 |
| 35A | | 3.5 | 10 |
| 40A | | 4 | 10 |
| 50A | | 5 | 10 |
| 60A | | 6 | 10 |
| 10C | | 1 | 8 |
| 15C | | 1.5 | 8 |
| 20C | | 2 | 8 |
| 25C | | 2.5 | 8 |
| 30C | | 3 | 10 |
| 35C | | 3.5 | 10 |
| 40C | | 4 | 10 |
| 50C | | 5 | 10 |
| 60C | | 6 | 10 |
| 20T | | 2 | 10 |

| Sipariş | Form | Ø | T |
|---|---|---|---|
| 30T | | 3 | 10 |
| 30V | | 3 | 10 |
| 13R | | 1.2 | 16 |
| 14R | | 1.5 | 13 |
| 15R | | 1.5 | 10 |
| 20R | | 2 | 12 |
| 30R | | 3 | 14 |
| 31R | | 3.3 | 15 |
| 32R | | | 10 |
| 20P | | 2 | 12 |
| 30P | | 3 | 15 |
| 40P | | 4 | 15 |
| 50P | | 5 | 15 |
| 60P | | 6 | 13 |
| 20F | | 2 | 10 |
| 30F | | 3 | 10 |
| 33F | | 3.3 | 15 |
| 40F | | 4 | 10 |
| 50F | | 5 | 10 |

| Sipariş | Form | Ø | T |
|---|---|---|---|
| 60F | | 6 | 12 |
| 61F | | 6 | 10 |
| 20J | | 2 | 6 |
| 30J | | 3 | 14 |
| 40J | | 4 | 9 |
| 50J | | 5 | 10 |
| 51J | | 5 | 13 |
| 60J | | | 13 |
| 10B | | 1 | 8 |
| 15B | | 1.5 | - |
| 20B | | 2 | - |
| 25B | | 2.5 | - |
| 30B | | 3 | - |
| 40B | | 4 | - |
| 50B | | 5 | - |
| 60B | | 6 | - |
| 80B | | 8 | - |
| 30Q | | 3 | 5 |
| 40Q | | 4 | 7 |

| Sipariş | Form | Ø | T |
|---|---|---|---|
| 50Q | | 5 | 9 |
| 51Q | | 5 | 12 |
| 60Q | | 6 | 10 |
| 61Q | | 6 | 12 |
| 20S | | 2 | 4 |
| 30S | | 3 | 6 |
| 31S | | 3 | 5.5 |
| 32S | | 3 | 6 |
| 33S | | 3 | 6 |
| 34S | | 3 | 6 |
| 35S | | 3 | 6 |
| 36S | | 3 | 5 |
| 40S | | 4 | 8 |
| 50S | | 5 | 10 |
| 60S | | 6 | 12 |
| 1320U | | 13 | 2 |
| 1325U | | 13 | 2.5 |
| 1320E | | 13 | 2 |
| 1325E | | 13 | 2.5 |



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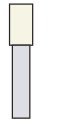
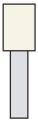
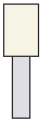
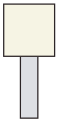
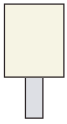
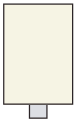
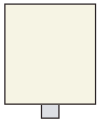
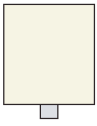
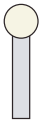
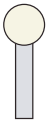
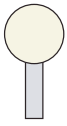
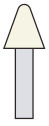
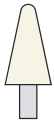
## Parlatma Keçeleri

| |  A 0408 |  A 0509 |  A 0610 |  A 0810 |  A 1014 |  A 1220 |  A 1520 |
|---|---|---|---|---|---|---|---|
| Ø D | 4 | 5 | 6 | 8 | 10 | 12 | 15 |
| L1 | 8 | 9 | 10 | 10 | 14 | 20 | 20 |

| |  A 2020 |  B 8 |  B 10 |  B 12 |  B 18 |  R 1014 |  R 1225 |
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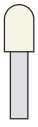
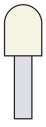
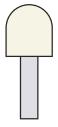
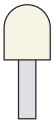
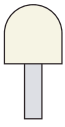
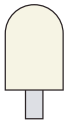
| L1 | 20 | - | - | - | - | 14 | 25 |

| |  C 0408 |  C0509 |  C 0610 |  C 0810 |  C 1013 |  C 1214 |  C 1220 |
|---|---|---|---|---|---|---|---|
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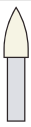
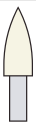
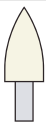
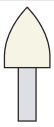
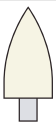
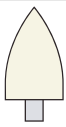
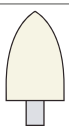
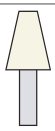
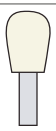
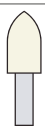
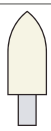
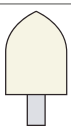
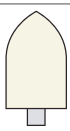
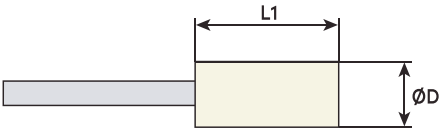
| L1 | 8 | 9 | 10 | 10 | 13 | 14 | 20 |

| |  J 0410 |  J 0512 |  J 0616 |  J 0817 |  J 1014 |  J 1020 |  J 1220 |
|---|---|---|---|---|---|---|---|
| Ø D | 4 | 5 | 6 | 8 | 10 | 12 | 12 |
| L1 | 8 | 9 | 10 | 10 | 13 | 14 | 20 |

| |  J 1225 |  T 1218 |  H 1218 |  K 0610 |  K 0814 |  K1014 |  K 1220 |
|---|---|---|---|---|---|---|---|
| Ø D | 12 | 12 | 12 | 6 | 8 | 10 | 12 |
| L1 | 25 | 18 | 18 | 10 | 14 | 14 | 20 |



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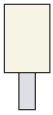
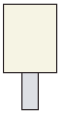
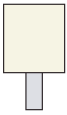
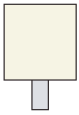
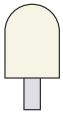
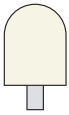
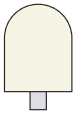
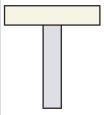
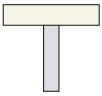
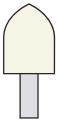
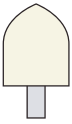
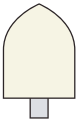
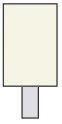
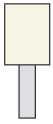
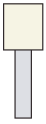
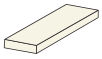
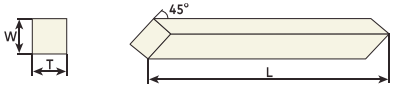
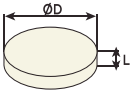
## Parlatma Keçeleri

| |  BA 1225 |  BA 1525 |  BA 2025 |  BA 2530 |  BC 1520 |  BC 2025 |  BC 2530 |  BE 3208 |  BE 4010 |
|---|---|---|---|---|---|---|---|---|---|
| Ø D | 12 | 15 | 20 | 25 | 15 | 20 | 25 | 32 | 40 |
| L1 | 25 | 25 | 25 | 30 | 20 | 25 | 30 | 8 | 10 |

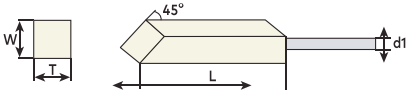
| |  BK 1525 |  BK 2025 |  BK 2530 |  NO. 1 |  NO. 2 |  NO. 3 |  NO. 4 |  NO. 5 |  NO. 6 |
|---|---|---|---|---|---|---|---|---|---|
| Ø D | 15 | 20 | 25 | 20 | 16 | 12 | 9 | 7 | Plaka Keçe |
| L1 | 25 | 25 | 30 | 38 | 34 | 25 | 14 | 11 | 3 x 25 x 50 |




| | S 06 | S 10 |
|---|---|---|
| W | 6 | 10 |
| T | 6 | 10 |
| L | 100 | 100 |




| | E 2503 | E 2504 | E 2505 |
|---|---|---|---|
| d1 | 1.7 | 1.7 | 1.7 |
| Ø D | 25 | 25 | 25 |
| L | 3 | 4 | 5 |




| | R 06 | R 10 | R 12 |
|---|---|---|---|
| W | 6 | 10 | 12 |
| T | 6 | 10 | 12 |
| L | 25 | 35 | 45 |
| d1 | 3 | 3 | 3 |



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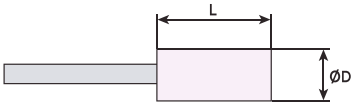
## 3 - 6 mm Şaftlı Spiral Taşlar




| | 256 A | 308 A | 410 A | 510 A | 612 A | 816 A |
|---|---|---|---|---|---|---|
| Ø D | 2.5 | 3 | 4 | 5 | 6 | 8 |
| L | 6 | 8 | 10 | 10 | 12 | 16 |

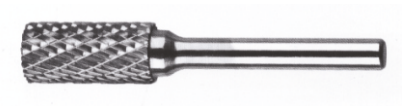
| | 1016 A | 813 R | 30 B | 40 B | 50 B | 60 B | 80 B | 100 B | 120 B | 1224 R | 308 T | 310 T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ø D | 10 | 8 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 12 | 3 | 3 |
| L | 16 | 13 | - | - | - | - | - | - | - | 24 | 8 | 10 |

| | 412 T | 710 T | 412 J | 616 J | 816 J | 1016 J | 609 S | 612 P | 815 P | 1018 P | 412 K | 515 K |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ø D | 4 | 7 | 4 | 6 | 8 | 10 | 6 | 6 | 8 | 10 | 4 | 5 |
| L | 12 | 10 | 12 | 16 | 16 | 16 | 9 | 12 | 15 | 18 | 12 | 15 |

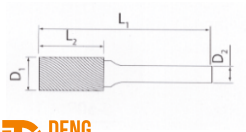
| | 816 K | 132 E | 133 E | 162 E | 1608 A | 2008 A | 2016 A | 2510 A | 2520 A | 3220 A | 4025 A | 5030 A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ø D | 8 | 13 | 13 | 16 | 16 | 20 | 20 | 25 | 25 | 32 | 40 | 50 |
| L | 16 | 2 | 3 | 2 | 8 | 8 | 16 | 10 | 20 | 20 | 25 | 30 |

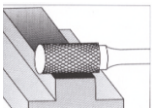
| | 1015 B | 1620 B | 2020 B | 2030 B | 2040 B | 2525 B | 2532 B | 3240 B | 2508 C | 3208 C | 4010 C | 1220 D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ø D | 10 | 16 | 20 | 20 | 20 | 25 | 25 | 32 | 25 | 32 | 40 | 12 |
| L | 15 | 20 | 20 | 30 | 40 | 25 | 32 | 40 | 8 | 8 | 10 | 20 |

| | 2035 D | 0816 F | 1320 F | 2032 F | 0816 E | 1230 E | 1640 E | 2030 E | 2040 E | 2525 E | 2540 E | 3240 E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ø D | 20 | 8 | 13 | 20 | 8 | 12 | 16 | 20 | 20 | 25 | 25 | 32 |
| L | 35 | 16 | 20 | 32 | 16 | 30 | 40 | 30 | 40 | 25 | 40 | 40 |





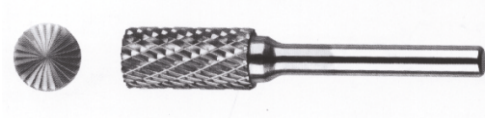


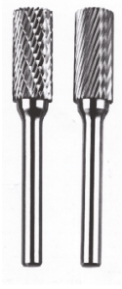



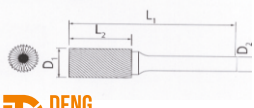
DENG TOOLS

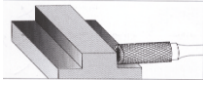
**Silindir Düz Uçlu Kalıpçı Freze**

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| A0106L2 | K-A0106L2 | 1,5 | 3 | 50 | 6 |
| A0211L2 | K-A0211L2 | 2,5 | 3 | 50 | 11 |
| A0313 | K-A0313 | 3 | 6 | 60 | 13 |
| A0314L2 | K-A0314L2 | 3 | 3 | 50 | 14 |
| A0413 | K-A0413 | 4 | 3 | 50 | 13 |
| A0513 | K-A0513 | 5 | 3 | 50 | 13 |
| A0516 | K-A0516 | 5 | 6 | 50 | 16 |
| A0613 | K-A0613 | 6 | 3 | 50 | 13 |
| A0616 | K-A0616 | 6 | 6 | 60 | 16 |
| A0820 | K-A0820 | 8 | 6 | 65 | 20 |
| A1020 | K-A1020 | 10 | 6 | 65 | 20 |
| A1225 | K-A1225 | 12 | 6 | 69 | 25 |
| A1625 | K-A1625 | 16 | 6 | 69 | 25 |
| A1925 | K-A1925 | 19 | 6 | 69 | 25 |
| A2525 | K-A2525 | 25 | 6 | 69 | 25 |





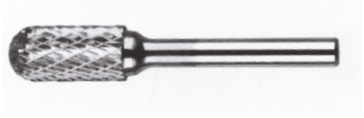


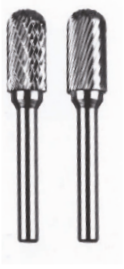



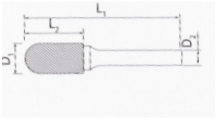
DENG TOOLS

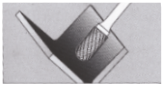
**Silindir Alın Kesicili Kalıpçı Freze**

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| B0106L2 | K-B0106L2 | 1,5 | 3 | 50 | 6 |
| B0211L2 | K-B0211L2 | 2,5 | 3 | 50 | 11 |
| B0312 | K-B0312 | 3 | 6 | 56 | 12 |
| B0314 | K-B0314 | 3 | 3 | 50 | 14 |
| B0413 | K-B0413 | 4 | 6 | 50 | 13 |
| B0513 | K-B0513 | 5 | 6 | 50 | 13 |
| B0613 | K-B0613 | 6 | 3 | 50 | 13 |
| B0616 | K-B0616 | 6 | 6 | 50 | 16 |
| B0820 | K-B0820 | 8 | 6 | 64 | 20 |
| B1020 | K-B1020 | 10 | 6 | 64 | 20 |
| B1225 | K-B1225 | 12 | 6 | 69 | 25 |
| B1625 | K-B1625 | 16 | 6 | 69 | 25 |
| B2525 | K-B2525 | 25 | 6 | 69 | 25 |







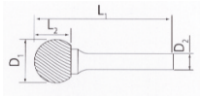



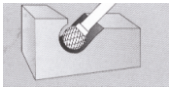
DENG TOOLS

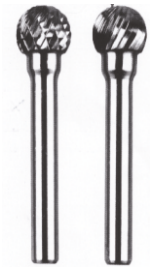
**Silindir Küre Uçlu Kalıpçı Freze**

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| C0211 | K-C0211 | 2,5 | 3 | 38 | 11 |
| C0313 | K-C0313 | 3 | 6 | 56 | 12 |
| C0314 | K-C0314 | 3 | 3 | 50 | 14 |
| C0413 | K-C0413 | 4 | 3 | 50 | 13 |
| C0413L2 | K-C0413L2 | 4 | 6 | 50 | 13 |
| C0513 | K-C0513 | 5 | 3 | 50 | 13 |
| C0516 | K-C0516 | 5 | 6 | 60 | 16 |
| C0613 | K-C0613 | 6 | 3 | 50 | 13 |
| C0616 | K-C0616 | 6 | 6 | 60 | 16 |
| C0820 | K-C0820 | 8 | 6 | 64 | 20 |
| C1020 | K-C1020 | 10 | 6 | 64 | 20 |
| C1225 | K-C1225 | 12 | 6 | 65 | 25 |
| C1625 | K-C1625 | 16 | 6 | 69 | 25 |
| C1925 | K-C1925 | 19 | 6 | 69 | 25 |
| C2525 | K-C2525 | 25 | 6 | 69 | 25 |







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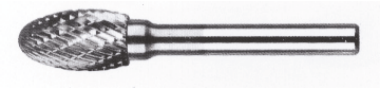
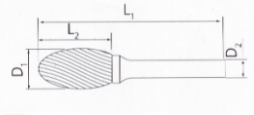
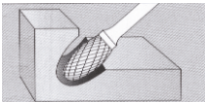
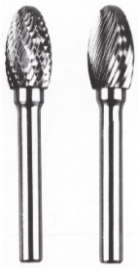
**Küre Uçlu Kalıpçı Freze**

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| D0202 | K-D0202 | 2,5 | 3 | 38 | 2,3 |
| D0303 | K-D0303 | 3 | 3 | 50 | 2,5 |
| D0302L | K-D0302L | 3 | 6 | 50 | 2,5 |
| D0403 | K-D0403 | 4 | 3 | 38 | 3,4 |
| D0504 | K-D0504 | 5 | 3 | 38 | 4,7 |
| D0504L2 | K-D0504L2 | 5 | 6 | 50 | 4 |
| D0605 | K-D0605 | 6 | 3 | 44 | 5 |
| D0605L2 | K-D0605L2 | 6 | 6 | 50 | 5 |
| D0806 | K-D0806 | 8 | 6 | 50 | 6,4 |
| D1009 | K-D1009 | 10 | 6 | 53 | 9 |
| D1210 | K-D1210 | 12 | 6 | 55 | 10,8 |
| D1614 | K-D1614 | 16 | 6 | 58 | 14 |
| D1916L | K-D1916L | 19 | 6 | 62 | 16 |
| D2521 | K-D2521 | 25 | 6 | 65 | 21 |





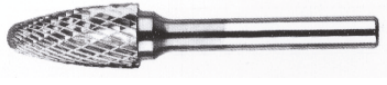



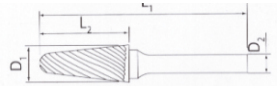


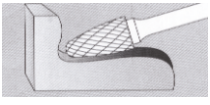
DENG TOOLS

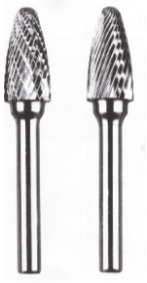
**Silindir Alın Kesicili Kalıpçı Freze**

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| E0307 | K-E0307 | 3 | 3 | 50 | 5,5 |
| E0507 | K-E0507 | 5 | 3 | 44 | 7,1 |
| E0610 | K-E0610 | 6 | 3 | 47 | 9,5 |
| E0609L2 | K-E0609L2 | 6 | 6 | 50 | 9,5 |
| E1222 | K-E1222 | 12 | 6 | 66 | 22 |
| E1625 | K-E1625 | 16 | 6 | 69 | 25 |
| E1925 | K-E1925 | 19 | 6 | 69 | 25 |





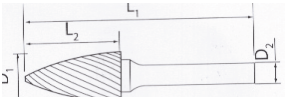



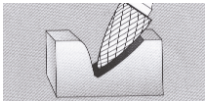


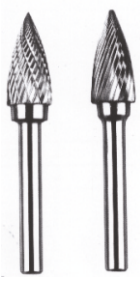
**Kalıpçı Freze**

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| F0313 | K-F0313 | 3 | 3 | 50 | 12,7 |
| F0312L2 | K-F0312L2 | 3 | 6 | 56 | 12,7 |
| F0513 | K-F0513 | 5 | 3 | 50 | 12,7 |
| F0613 | K-F0613 | 6 | 3 | 50 | 13 |
| F0618 | K-F0618 | 6 | 6 | 50 | 19 |
| F1020 | K-F1020 | 10 | 6 | 64 | 20 |
| F1225 | K-F1225 | 12 | 6 | 69 | 25 |
| F1625 | K-F1625 | 16 | 6 | 69 | 25 |
| F1625 | K-F1625 | 19 | 6 | 69 | 25 |





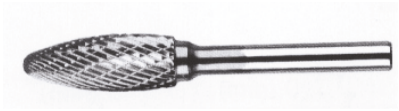



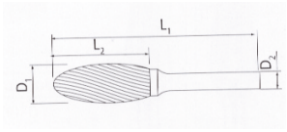


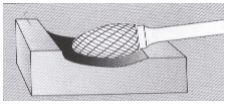
DENG TOOLS

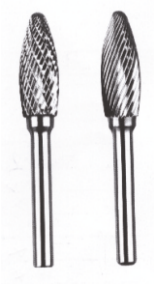
**Kalıpçı Freze**

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| G0306 | K-G0306 | 3 | 3 | 38 | 6 |
| G0312L2 | K-G0312L2 | 3 | 3 | 50 | 12,7 |
| G0513 | K-G0513 | 5 | 3 | 50 | 13 |
| G0613 | K-G0613 | 6 | 3 | 50 | 13 |
| G0616 | K-G0616 | 6 | 6 | 60 | 16 |
| G0817 | K-G0817 | 8 | 6 | 64 | 20 |
| G1020 | K-G1020 | 10 | 6 | 64 | 20 |
| G1225 | K-G1225 | 12 | 6 | 69 | 25 |
| G1625 | K-G1625 | 16 | 6 | 69 | 25 |
| G1925 | K-G1925 | 19 | 6 | 69 | 25 |





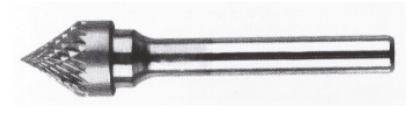



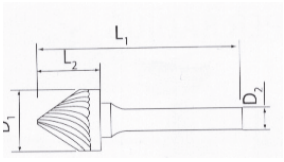


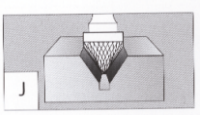
DENG TOOLS

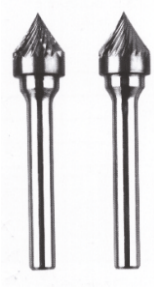
Kalıpçı Freze

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| H0306L2 | K-H0306L2 | 3 | 3 | 50 | 6,3 |
| H0509 | K-H0509 | 5 | 3 | 50 | 9,5 |
| H0820 | K-H0820 | 8 | 6 | 64 | 20 |
| H1024 | K-H1024 | 10 | 6 | 64 | 20 |
| H1232 | K-H1232 | 12 | 6 | 76 | 32 |
| H1636 | K-H1636 | 16 | 6 | 80 | 36 |
| H1941 | K-H1941 | 19 | 6 | 85 | 41 |





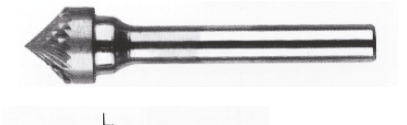



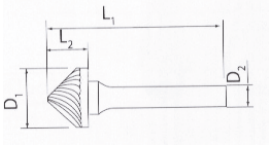



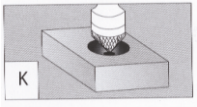
DENG TOOLS

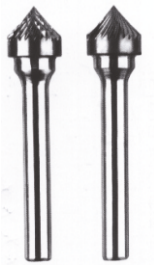
Kalıpçı Freze

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| J0302 | K-J0302 | 3 | 3 | 38 | 2,5 |
| J0604 | K-J0604 | 6 | 6 | 50 | 4 |
| J1008 | K-J1008 | 10 | 6 | 55 | 8 |
| J1211 | K-J1211 | 12 | 6 | 58 | 11 |
| J1614 | K-J1614 | 16 | 6 | 61 | 14,5 |
| J1917 | K-J1917 | 19 | 6 | 65 | 17,5 |
| J2524 | K-J2524 | 25 | 6 | 68 | 24,5 |





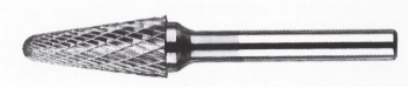



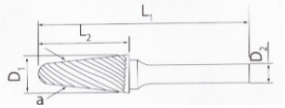



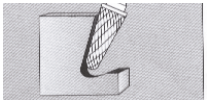
DENG TOOLS

Kalıpçı Freze

| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 |
|---|---|---|---|---|---|
| K0301 | K-K0301 | 3 | 3 | 38 | 1,5 |
| K0603 | K-K0603 | 6 | 6 | 50 | 3 |
| K1004 | K-K1004 | 10 | 6 | 52 | 4,7 |
| K1206 | K-K1206 | 12 | 6 | 57 | 6,3 |
| K1608 | K-K1608 | 16 | 6 | 57 | 8 |
| K1909 | K-K1909 | 19 | 6 | 58 | 9,5 |
| K2512 | K-K2512 | 25 | 6 | 60 | 12,7 |





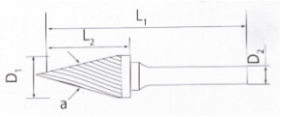



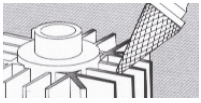
DENG TOOLS
Kalıpçı Freze



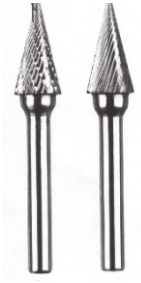
| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 | a |
|---|---|---|---|---|---|---|
| L0309 | K-L0309 | 3 | 3 | 38 | 9,5 | 8° |
| L0312L2 | K-L0312K-L2 | 3 | 3 | 50 | 12,7 | 8° |
| L0512 | K-L0512 | 5 | 3 | 38 | 12,7 | 14° |
| L0616 | K-L0616 | 6 | 6 | 50 | 16 | 14° |
| L0822 | K-L0822 | 8 | 6 | 66 | 22 | 14° |
| L1025 | K-L1025 | 10 | 6 | 69 | 25 | 14° |
| L1228 | K-L1228 | 12,7 | 6 | 72 | 28 | 14° |
| L1630 | K-L1630 | 16 | 6 | 74 | 30 | 14° |
| L1938 | K-L1938 | 19 | 6 | 82 | 38 | 14° |



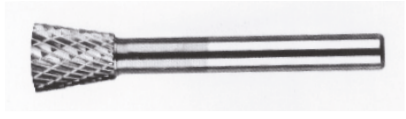


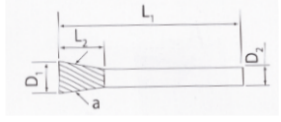



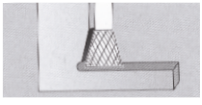
DENG TOOLS
Kalıpçı Freze



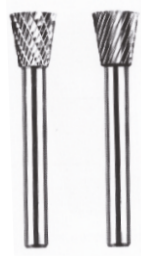
| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 | a |
|---|---|---|---|---|---|---|
| M0308 | K-M0308 | 3 | 3 | 38 | 8,9 | 12° |
| M0311L2 | K-M0311L2 | 3 | 3 | 50 | 11 | 14° |
| M0316 | K-M0316 | 3 | 3 | 38 | 16 | 7° |
| M0513 | K-M0513 | 5 | 3 | 50 | 13 | 16° |
| M0613 | K-M0613 | 6 | 3 | 54 | 13 | 22° |
| M0613L2 | K-M0613L2 | 6 | 6 | 50 | 13 | 22° |
| M1020 | K-M1020 | 10 | 6 | 64 | 20 | 28° |
| M1225 | K-M1225 | 12 | 6 | 69 | 25 | 28° |
| M1625 | K-M1625 | 16 | 6 | 69 | 25 | 31° |



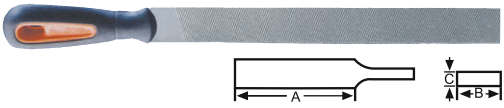


DENG TOOLS
Kalıpçı Freze

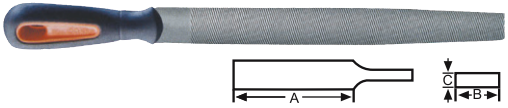


| Düz Kanal Sipariş | Talaş Kırıcı Sipariş | D1 | D2 | L1 | L2 | a |
|---|---|---|---|---|---|---|
| N0203 | K-N0203 | 2,5 | 3 | 38 | 3 | 10° |
| N0304 | K-N0304 | 3 | 3 | 38 | 4 | 10° |
| N0506 | K-N0506 | 5 | 3 | 38 | 6,3 | 10° |
| N0606 | K-N0606 | 6 | 3 | 44 | 6 | 10° |
| N0608 | K-N0608 | 6 | 6 | 50 | 8 | 10° |
| N1010 | K-N1010 | 10 | 6 | 54 | 10 | 13° |
| N1212 | K-N1212 | 12 | 6 | 56 | 12 | 28° |
| N1619 | K-N1619 | 16 | 6 | 63 | 12 | 18° |
| N1916 | K-N1916 | 19 | 6 | 60 | 19 | 30° |



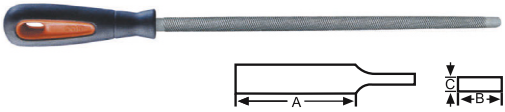

## Lama Eğe

| Form | Ebat | A | B | C |
|---|---|---|---|---|
| Lama | 4 | 100 | 12 | 3 |
| | 6 | 150 | 16 | 4 |
| | 8 | 200 | 20 | 5 |
| | 10 | 250 | 25 | 5.5 |
| | 12 | 300 | 30 | 6 |



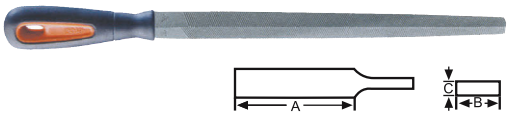

## Y.Yuvarlak Eğe

| Form | Ebat | A | B | C |
|---|---|---|---|---|
| Yarım Yuvarlak | 4 | - | - | - |
| | 6 | 150 | 16.0 | 4.7 |
| | 8 | 200 | 20.5 | 6 |
| | 10 | 250 | 26.5 | 7.5 |
| | 12 | 300 | 31.0 | 9 |



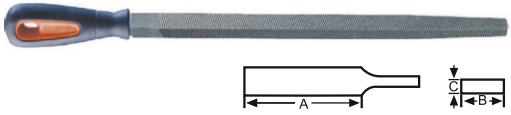

## Yuvarlak Eğe

| Form | Ebat | A | B | C |
|---|---|---|---|---|
| Yuvarlak | 4 | - | - | |
| | 6 | 150 | 6 | |
| | 8 | 200 | 8 | |
| | 10 | 250 | 10 | |
| | 12 | 300 | 12 | |



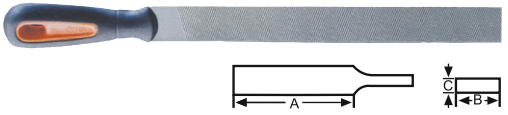

## Üçgen Eğe

| Form | Ebat | A | B | C |
|---|---|---|---|---|
| Üçgen | 4 | - | - | |
| | 6 | 150 | 11.0 | |
| | 8 | 200 | 15.5 | |
| | 10 | 250 | 17.5 | |
| | 12 | 300 | 19.5 | |




## Kare Eğe

| Form | Ebat | A | B | C |
|---|---|---|---|---|
| Kare | 4 | - | - | |
| | 6 | 150 | 6 | |
| | 8 | 200 | 8 | |
| | 10 | 250 | 10 | |
| | 12 | 300 | 12 | |



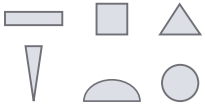

## Mil Eğesi

| Form | Ebat | A | B | C |
|---|---|---|---|---|
| Mil Egesi ( iki Kenarı Düz ) | 4 | - | - | - |
| | 6 | 150 | 16 | 2.7 |
| | 8 | 200 | 20 | 3.3 |
| | 10 | 250 | 25 | 4.0 |
| | 12 | 300 | 30 | 5.0 |



## Saatçi Eğeleri

6'lı ve 12'li Takımlar
A = 140 - 160 mm Setler



| Set |
|---|
| 6'lı |
| 12'li |




Karbosan

## NK Zımpara Taşları

| Ölçü | Kum |
|---|---|
| 125x20x20 | 24 |
| 150x20x20 | 24 |
| 150x25x20 | 24 |
| 175x20x20 | 24 |
| 175x25x20 | 24 |
| 200x20 x20 | 24 |
| 200x25x20 | 24 |
| 200x30x20 | 24 |
| 200x32x20 | 24 |
| 250x25x25 | 24 |
| 250x32x25 | 24 |
| 250x40x25 | 24 |
| 300x30x30 | 24 |
| 300x32x30 | 24 |
| 300x40x30 | 24 |
| 350x40x40 | 24 |
| 400x40x40 | 24 |
| 75x13x10 | 36 |

| Ölçü | Kum |
|---|---|
| 100x13x10 | 36 |
| 100x16x20 | 36 |
| 125x16x16 | 36 |
| 125x20x20 | 36 |
| 150x20x20 | 36 |
| 150x25x20 | 36 |
| 175x20x20 | 36 |
| 175x25x20 | 36 |
| 200x20 x20 | 36 |
| 200x25x20 | 36 |
| 200x30x20 | 36 |
| 200x32x20 | 36 |
| 250x25x25 | 36 |
| 250x30x25 | 36 |
| 250x32x25 | 36 |
| 250x40x25 | 36 |
| 300x30x30 | 36 |
| 300x32x30 | 36 |

| Ölçü | Kum |
|---|---|
| 300x40x30 | 36 |
| 350x40x40 | 36 |
| 400x40x40 | 36 |
| 75x13x10 | 46 |
| 100x13x10 | 46 |
| 100x16x20 | 46 |
| 125x16x16 | 46 |
| 125x20x20 | 46 |
| 150x20x20 | 46 |
| 150x25x20 | 46 |
| 175x20x20 | 46 |
| 175x25x20 | 46 |
| 200x20 x20 | 46 |
| 200x25x20 | 46 |
| 200x30x20 | 46 |
| 200x32x20 | 46 |
| 250x25x25 | 46 |
| 250x30x25 | 46 |

| Ölçü | Kum |
|---|---|
| 250x32x25 | 46 |
| 250x40x25 | 46 |
| 300x30x30 | 46 |
| 300x32x30 | 46 |
| 300x40x30 | 46 |
| 350x40x40 | 46 |
| 400x40x40 | 46 |
| 75x13x10 | 60 |
| 100x13x10 | 60 |
| 100x16x20 | 60 |
| 125x16x16 | 60 |
| 125x20x20 | 60 |
| 150x25x20 | 60 |
| 150x25x20 | 60 |
| 175x20x20 | 60 |
| 175x25x20 | 60 |
| 200x20 x20 | 60 |




Karbosan

## EKR Zımpara Taşları

| Ölçü | Kum |
|---|---|
| 150 x 20 x 20 | 36 |
| 175 x 20 x 20 | 36 |
| 250 x 25 x 76.2 | 36 |
| 250 x 30 x 76.2 | 36 |
| 250 x 32 x 76.2 | 36 |
| 250 x 40 x 76.2 | 36 |
| 300 x 40 x 127 | 36 |
| 350 x 40 x 127 | 36 |
| 350 x 50 x 127 | 36 |
| 400 x 40 x 127 | 36 |
| 150 x 20 x 20 | 36 |
| 175 x 20 x 20 | 46 |

| Ölçü | Kum |
|---|---|
| 200 x 20 x20 | 46 |
| 250 x 25 x 76.2 | 46 |
| 250 x 30 x 76.2 | 46 |
| 250 x 32 x 76.2 | 46 |
| 250 x 40 x 76.2 | 46 |
| 300 x 40 x 127 | 46 |
| 300 x 40 x 127 | 46 |
| 350 x 40 x 127 | 46 |
| 350 x 50 x 127 | 46 |
| 400 x 40 x 127 | 46 |
| 150 x 20 x 20 | 60 |
| 175 x 20 x 20 | 60 |

| Ölçü | Kum |
|---|---|
| 200 x 20 x20 | 60 |
| 250 x 25 x 76.2 | 60 |
| 250 x 30 x 76.2 | 60 |
| 250 x 32 x 76.2 | 60 |
| 250 x 40 x 76.2 | 60 |
| 300 x 40 x 76.2 | 60 |
| 300 x 40 x 127 | 60 |
| 350 x 40 x 127 | 60 |
| 350 x 50 x 127 | 60 |
| 400 x 40 x 127 | 60 |




Karbosan

## SCG Elmas Taş

| Ölçü | Kum |
|---|---|
| 125 x 20 x 25 | 80 |
| 150 x 20 x 20 | 80 |
| 150 x 25 x 20 | 80 |
| 175 x 20 x 20 | 80 |
| 175 x 25 x 20 | 80 |
| 200 x 20 x20 | 80 |
| 200 x 25 x 20 | 80 |
| 200 x 32 x 20 | 80 |
| 250 x 25 x 25 | 80 |
| 250 x 32 x 25 | 80 |
| 300 x 32 x 30 | 80 |



Form D



Form E

Karbosan

## EKR Çanak Taşlar

Form D

| Ölçü | Kum |
|---|---|
| 50 x 32 x 13 | 60 |
| 75 x 40 x 20 | 60 |
| 100 x 50 x 20 | 60 |
| 125 x 63 x 20 | 60 |
| 150 x 80 x 20 | 60 |

Form E

| Ölçü | Kum |
|---|---|
| 50 x 25 x 13 | 60 |
| 75 x 30 x 20 | 60 |
| 100 x 35 x 20 | 60 |
| 125 x 45 x 20 | 60 |
| 150 x 50 x 20 | 60 |




Karbosan

## Kesici Diskler

Tip 42

| Ölçü | Evsaf |
|---|---|
| 100x2.5x16 | A 36 T BF80 |
| 100x3.0x16 | A 36 T BF80 |
| 115x2.5x22.23 | A 36 T BF80 |
| 115x3.0x22.23 | A 36 T BF80 |
| 125x2.5x22.23 | A 36 T BF80 |
| 125x3.0x22.23 | A 36 T BF80 |
| 180x2.5x22.23 | A 36 T BF80 |
| 180x3.0x22.23 | A 36 T BF80 |
| 230x2.5x22.23 | A 36 T BF80 |
| 230x3.0x22.23 | A 36 T BF80 |

Tip 41

| Ölçü | Evsaf |
|---|---|
| 115x2.5x22.23 | A 36 T BF80 |
| 115x3.0x22.23 | A 36 T BF80 |
| 125x2.5x22.23 | A 36 T BF80 |
| 125x3.0x22.23 | A 36 T BF80 |
| 150x3.0x22.23 | A 36 T BF80 |
| 180x2.5x22.23 | A 36 T BF80 |
| 180x3.0x22.23 | A 36 T BF80 |
| 230x2.5x22.23 | A 36 T BF80 |
| 230x3.0x22.23 | A 36 T BF80 |

Tip 41 İnce

| Ölçü | Evsaf |
|---|---|
| 115x1.0x22.23 | A 54 R BF80 |
| 115x1.6x22.23 | A 46 R BF80 |
| 125x1.0x22.23 | A 54 R BF80 |
| 125x1.6x22.23 | A 46 R BF80 |
| 180x1.9x22.23 | A 36 R BF80 |
| 230x1.9x22.23 | A 36 R BF80 |




Karbosan

## Metal Çapakalma Diskleri

| Ölçü | Evsaf |
|---|---|
| 100 x 6.4 x 22.23 | A 24 RS BF80 |
| 115 x 6.4 x 22.23 | A 24 RS BF80 |
| 125 x 6.4 x 22.23 | A 24 RS BF80 |
| 180 x 6.4 x 22.23 | A 24 RS BF80 |
| 180 x 8.0 x 22.23 | A 24 RS BF80 |
| 180 x 10 x 22.23 | A 24 RS BF80 |
| 230 x 6.4 x 22.23 | A 24 RS BF80 |
| 230 x 8.0 x 22.23 | A 24 RS BF80 |
| 230 x 10 x 22.23 | A 24 RS BF80 |




Karbosan

## NK Ara Taşı

| Ölçü |
|---|
| 150 x 2.0 x 20 |
| 175 x 2.0 x 20 |
| 190 x 2.0 x 28 |






Karbosan

## Flap Disk Zımpara

| Ölçü | Kum |
|---|---|
| 100 x 16 | 40 |
| 100 x 16 | 60 |
| 100 x 16 | 80 |
| 100 x 16 | 120 |
| 115 x 22.23 | 36 |
| 115 x 22.23 | 40 |
| 115 x 22.23 | 50 |
| 115 x 22.23 | 60 |
| 115 x 22.23 | 80 |
| 115 x 22.23 | 100 |
| 115 x 22.23 | 120 |
| 125 x 22.23 | 36 |
| 125 x 22.23 | 40 |

| Ölçü | Kum |
|---|---|
| 125 x 22.23 | 50 |
| 125 x 22.23 | 60 |
| 125 x 22.23 | 80 |
| 125 x 22.23 | 100 |
| 125 x 22.23 | 120 |
| 180 x 22.23 | 36 |
| 180 x 22.23 | 40 |
| 180 x 22.23 | 50 |
| 180 x 22.23 | 60 |
| 180 x 22.23 | 80 |
| 180 x 22.23 | 100 |
| 180 x 22.23 | 120 |



Karbosan

## Fiber Disk Zımpara

| Ölçü | Kum |
|---|---|
| 115 x 22 | 36 |
| 115 x 22 | 40 |
| 115 x 22 | 60 |

| Ölçü | Kum |
|---|---|
| 180 x 22 | 36 |
| 180 x 22 | 40 |
| 180 x 22 | 60 |



JBT

## Taş Düzeltme Elması

| Ölçü |
|---|
| 0.50 |
| 1.00 |
| 1.50 |

| Ölçü |
|---|
| 2.00 |
| 2.50 |



JBT

## Çoklu Taş Düzeltme Elması



Yoğunluk
C75 - 100

JBT

## Elmas Çanak Taş

| Ebat | Çap | Delik Çapı |
|---|---|---|
| 2 x 5 | 100 | 20 |
| 3 x 5 | | |
| 2 x 6 | | |

| Ebat | Çap | Delik Çapı |
|---|---|---|
| 4 x 6 | 100 | 20 |
| 2 x 8 | | |
| 3 x 8 | | |



JBT

## Elmas Disk Taş

| Çap | Delik Çapı |
|---|---|
| 75 | 20 |
| 100 | 20 |
| 125 | 32 |

| Çap | Delik Çapı |
|---|---|
| 150 | 32 |
| 175 | 32 |
| 200 | 32 |



JBT

## Elmas Dik Taş

| Çap | Delik Çapı |
|---|---|
| 75 | 20 |
| 100 | 20 |
| 125 | 32 |

NOGA
SIMPLY SOPHISTICATED

## Çapak Alma Raspa Uçları

Uçlar 10'lu paket halindedir.

| Sipariş | Ürün | Sipariş | Ürün | Sipariş | Ürün |
|---|---|---|---|---|---|
| S10<br>BS1010 |  | S20<br>BS2015 |  | S101<br>BS1010 |  |
| S10 LH<br>BS1011 |  | S30<br>BS3010 |  | S101 LH<br>BS1011 |  |
| S10 TIN<br>BS1012 |  | S35<br>BS3510 |  | S101 TIN<br>BS1012 |  |
| S10C<br>BS1016 |  | S60<br>BS6010 |  | S150<br>BS3000 |  |
| S10C<br>BS2010 |  | S100<br>BS1018 |  | S202<br>BS2010 |  |



NOGA
SIMPLY SOPHISTICATED

### Çok Amaçlı Raspa Bıçağı

| Sipariş |
|---|
| NG-1003 |



NOGA
SIMPLY SOPHISTICATED

### Çift Köşeli Kesme Raspa Bıçağı

| Sipariş |
|---|
| DB-1000 |



NOGA
SIMPLY SOPHISTICATED

### Metal Gövdeli Raspa Bıçağı

| Sipariş |
|---|
| RB-1000 |



NOGA
SIMPLY SOPHISTICATED

### Çapak Alma Raspa Bıçağı

| Sipariş |
|---|
| LB-1900 |




NOGA
SIMPLY SOPHISTICATED

### Çapak Alma Raspa Seti

| Sipariş |
|---|
| NG-8150 |



NOGA
SIMPLY SOPHISTICATED

### 30° Yolluk Kesme Makası



NOGA
SIMPLY SOPHISTICATED

### 45° Yolluk Kesme Makası



NOGA
SIMPLY SOPHISTICATED

### 90° Yolluk Kesme Makası




WINKEL

**W150217 - 400°C Yüksek Isı Gresi**

Ürün -25°C ile +450°C arasında sürtünmeyi önemli ölçüde azaltır. Çok amaçlı kullanılabilmesinin yanı sıra montaj pastası, yağlayıcı ve yüksek sıcaklıklarda ayırıcı madde olarak da kullanılır. Benzer ürünlere oranla içeriğindeki molibden di sülfür muhtevası çok daha yüksektir. 600°C' ye kadar yüksek sıcaklıkta çalışan; Sıkı ve rahat geçmelerde, Burçlar ve dişli çarklarda, Otomotiv sanayi dişli çark düzenlerinde , kaymalı ve kızak yataklarının kılavuz ve bağlantıların kuru yağlama gerektiren kızak, ray eklem ve millerde, kauçuk plastik parçalarında (o-ring, v-ring v.s., montaj pastası olarak sıkı geçme parçalarda (cıvata, burç, pin, çark vb.) sabit kilitli bağlantılarda (kama, yivli ve çentikli bağlantılar vb.) konik, kama maşonlu sürtünme kilitli bağlantılarda, cıvata bağlantılarında kullanılır. Yüksek sıcaklık ve uygun olmayan atmosferde antisize olarak, düşük devirde hareket eden rulman ve benzeri mekanizmalarda, tekstil sanayinde ramöz en ayar milleri ve tarak makinelerinin oynak aksamlarında kullanılır.
**Kullanım Şekli :** Ürünün montaj yapılacak yüzeye uygulayınız, daha sonra montajını yapınız.

| Sipariş |
| --- |
| W150217 |




WINKEL

**W150218 - 700°C Yüksek Isı Gresi**

700 °C Grafitli Yüksek Isı gresi lityum sabunlu, yüksek kaliteli, yaşlanmaya dayanıklı, seçilmiş baz yağlara ve aktif bileşenlere dayanan belirgin korozyon koruması ile EP - çok amaçlı grestir. Sıcaklığa dayanıklı, suya dayanıklı, harekete dayanıklı, basınca dayanıklı, aşınma azaltıcıdır. Metal yüzeylere iyi yapışır ve iyi sızdırmazlık etkisi nedeniyle yağlama noktasını bir yağ bileziği ile korur. Aktif bileşenler, aşınmayı azaltmaya ve yük kapasitesini arttırmaya yarar. 700°C Grafitli Yüksek Isı gresi termal ve mekanik yağlama noktaları için uygundur, ör. çelik işlerinde, çakıl tarak makinelerinde ve pres yağlamada. Aynı zamanda zorlu çalışma koşullarında kimyasal fabrikalarda, şeker fabrikalarında ve inşaat sektöründe iyi çalıştığı kanıtlanmıştır.

| Sipariş |
| --- |
| W150218 |




WINKEL

**W150202 - Bakırlı Gres**

Anti-Seize Bakır Montaj Pastası, mükemmel yağlama özelliklerine sahip genel amaçlı bir montaj pastasıdır. Ürün ısıya ve uzun süreli hava şartlarına maruz kaldığında dahi vida ve bağlantılarını korur ve kenetlenmeleirini önler. Su itici özelliklere sahiptir ve korozyona karşı koruma sağlar. Yüzeylere yüksek kalitede tutunur. Ürünün formülünde alüminyum mevcut - tur; bakır, nikel, molibden, kurşun, çinko, krom vb metaller kullanılmamıştır.
**Kullanım Alanı :** Tüm montaj işlemlerinde için montaj macunu olarak kullanılır ör. genel - likle metal gres ile yağlanan veya monte edilen parçalarda ve cıvata bağlantılarında. Çelik konstrüksiyon, marin, çelik ve kimya sektörlerinde kullanımı idealdir.
**Kullanım Şekli :** Mümkünse uygulanacak yüzeyi temizleyip, ince bir katman halinde uygu - layınız. Normal yağlarla karıştırmayınız. Gres kartuş tabancası ve merkezi yağlama sistemleri için uygundur.

| Sipariş |
| --- |
| W150202 |




WINKEL

**W150200 - Seramik Gres**

Anti-Seize Seramik Montaj Pastası seramik parçacıkları ile zenginleştirilmiş, yüksek kalite - de özel bir yağlayıcı ve mükemmel bir ayırıcıdır.Metal içermez.Çevre dostudur.Mükemmel tutunma özelliğine sahiptir; yüzeylerden suyu ve nemi iter. Korozyona karşı uzun süreli koruma ve yağlama sağlar. Özel formülasyonu sayesinde, ısıya ve hava şartlarına uzun süreli maruz kalan dişli bağlantılarını korur.
**Kullanım Alanı :** Genellikle işlenmiş parçalar ve dişler için ideal bir montaj macunudur. Bu nedenle yağlama ve koruma için, örneğin dişli bağlantılarda, rulman yataklarında ve kaymalı yataklarda, zincirlerde, bağlantı kenarlarında, kam millerinde, fren parçaları ve basınçlı hava cihazlarında kullanılabilir.
**Kullanım Şekli :** Ürünün montaj yapılacak yüzeye uygulayınız, daha sonra montajını yapınız

| Sipariş |
| --- |
| W150200 |




Anti-Seize Metal Gres Montaj Pastası, mükemmel yağlama özelliklerine sahip genel amaçlı bir montaj pastasıdır. Ürün ısıya ve uzun süreli hava şartlarına maruz kaldığında dahi vida ve bağlantılarını korur ve kenetlenmeleirini önler. Su itici özelliklere sahiptir ve korozyona karşı koruma sağlar. Yüzeylere yüksek kalitede tutunur. Ürünün formülünde alüminyum mevcuttur; bakır, nikel, molibden, kurşun, çinko, krom vb metaller kullanıl - mamıştır.
**Kullanım Alanı :** Tüm montaj işlemlerinde için montaj macunu olarak kullanılır ör. genel - likle metal gres ile yağlanan veya monte edilen parçalarda ve cıvata bağlantılarında.Çelik konstrüksiyon, marin, çelik ve kimya sektörlerinde kullanımı idealdir.
**Kullanım Şekli :** Mümkünse uygulanacak yüzeyi temizleyip, ince bir katman halinde uygulayınız. Normal yağlarla karıştırmayınız. Gres kartuş tabancası ve merkezi yağla

**W150219 - Anti Seize Metal Gres Montaj Pasta**

Sipariş
W150219

WINKEL




Yağlı makine parçaları, disk frenler ve fren parçaları için yoğun temizleme etkisi olarak son derece aktif, özel bir temizleyicidir. Fren balataları ve debriyaj balatalarında uygundur. Hızlı ve kapsamlı, kalıntı içermez, aşındırmaz, kauçuk ve plastik parçalara zararı olmaz. Havalandırma sistemlerinin temizliği için ve makine, zincirler ve frenlerde her türlü kullanılır.
**Kullanım Şekli :** Beyanlarımız tamamen tecrübelerimize dayanan tavsiyeler niteliğinde olup ön denemeler yapılmaksızın doğacak zarar nedeniyle sorumluluk kabul edilmez. Kullanmadan önce iyice sallayınız ve uygun mesafeden, uygulanacak yüzeye püskürtünüz. Yüzeyi bir bez yardımıyla siliniz.

**W170104 - Genel Temizleme Sprey**

Sipariş
W170104

WINKEL




Bir yağlama ürünüdür. Yüksek basınca karşı dayanıklıdır. Korozyon, su ve 180ºC sıcaklığa karşı dayanıklıdır. Yapışma özelliği çok daha fazladır. Akış ya da damlama yapmaz. Şeffaf ve kalıcı yağlama yapar. Ağır iş makineleri, forklift zincirleri kalıp aparatı ve otomotiv sektöründe kullanılmaktadır.
**Kullanım Şekli :** Uygulanacak alanı öncelikle temizleyiniz. Kullanmadan önce kutuyu iyice çalkalayınız. Yağlanacak alana ürünü sıkınız, kısa süre etki etmesi için bekleyiniz ve sonrasında bir kere daha ürünü uygulayınız.

**W160114 - WW 3000 Sıvı Gres Sprey**

Sipariş
W160114

WINKEL




Optimal ve uzun süre dayanıklı koruma tabakası, güçlü dolgunluk ve kapma özelliği, hızlı kuruma, metal, ahşap, cam, seramik yüzeyler için çift etki, korozyon ve pasa karşı koruma, kalıplardaki boru hatlarındaki metallerde, makinelerde vb etkili koruma, suda çözülmeyen uzun süre kalıcı kuru koruma tabakası oluşturur.
**Kullanım Şekli :** Beyanlarımız tamamen tecrübelerimize dayanan tavsiyeler niteliğinde olup ön denemeler yapılmaksızın doğacak zarar nedeniyle sorumluluk kabul edilemez. Kullanmadan önce kutuyu çalkalayınız. Söz konusu yüzeyleri iyice temizleyiniz ve spreyi yaklaşık 20 cm mesafeden yüzeye eşit gelecek şekilde püskürtünüz.

**W150170 - Kalıp Koruyucu Sprey**

Sipariş
W150170

WINKEL




Tüm metal, makine ve teçhizatlarda korozyona karşı koruyarak pas oluşumunu engeller. Yüzeyde ince bir mum tabakası oluşturur. Su ve tuzlu su buharına dayanıklıdır.Kullanımı ve çıkartılması kolaydır.
**Kullanım Alanı :** Uzun mesafe taşımalarda, özellikle deniz nakliyatında korozyona karşı koruma sağlar. Uzun süreli makine ve alet muhafazası için de uygundur.
**Kullanım Şekli :** Kullanmadan önce kutuyu çalkalayınız. Kullanılacak yüzeyi yağdan arındırıp temizleyiniz. En iyi çalışma derecesi 15-20°C'dir. 25-30cm mesafeden eşit şekilde püskürtünüz. İşlem bittikten sonra yüzeyde bir matlaşma oluşur, buda mumun oluşumunu gösterir.

**W160106 - Koruyucu Balmumu Sprey**

Sipariş
W160106

WINKEL




Gıda yağlama sprey özel yağlamadır. Açık renkli ve iyi tutunma özelliği vardır. Çoğu yüzeylerde kullanılır. Suya ve oksite karşı dayanıklıdır. ve özellikle Korozyona karşı iyi koruma sağlar. Gıda ve şişeleme makinelerinde, süt, soda, bira fabrikalarında et, sebze, meyve, balık makinelerinin değişik aksamlarının yağlanmasında kullanılır Tatsız ve kokusuzdur, insan sağlığına zarar vermez. Gerekmediğinde fazla yağlamayın. LMBG Gıda Yağlama Spreyi doğru kullanıldığı taktirde onaylar Almanya Nordrhein Westfalen eyaletinde denenmiştir.
**Kullanım Şekli :** Beyanlarımız tamamen tecrübelerimize dayanan tavsiyeler niteliğinde olup ön denemeler yapılmaksızın doğacak zarar nedeniyle sorumluluk kabul edilemez. Kullanmadan önce kutuyu çalkalayınız. Yüzeye yayın ve bekleyiniz. Gerekirse işlemi tekrarlayınız. Makineyi kullanmadan önce kapatınız.

**W160105 - Gıda Onaylı Yağlama Sprey**

Sipariş
W160105

WINKEL




Mükemmel sürtünme özelliklerine sahip mineral yağ bazlı pas sökücüdür, üstün pas nüfuzu ve yüksek pas çözeltisi sağlar. $MoS_2$ katı yağlayıcılar nedeniyle çok iyi sürtünmeyi azaltır. Reçine, silikon ve asit içermez. Korozyon koruması iyi ve uzun sürelidir.

**Kullanım Şekli:** Aşırı paslanmış ve oksitlenmiş vida bağlantılarını gevşetmek, otomobillerde, kamyonlarda, tarım ve inşaat makinelerinde, agregalarda ve ekipmanlarda pasın temizlenmesi için kullanılır. Uygulanacak parçalara püskürtün ve kısa bir süre nüfuz etmesini bekleyiniz. İnatçı bileşikler için uygulamayı tekrarlayınız ve gerekirse işlem süresini uzatınız.

**W160120 - Kuvvetli Pas Sökücü Sprey**

Sipariş
W160120

WINKEL




Her türlü kirlenmiş ve tozlanmış hassas yüzeylerde temizleme yapar. Köpüğü sayesinde yüzeyde çizilme yapmaz. İz ve leke yapmadan derinlemesine temizlik sağlar. Tüm yüzeylerden yağ, nikotin böcek kalıntılarını ve parmak izlerini temizler. Kurumuş kirleri çözer. Yüksek verimliliği sayesinde çok ekonomiktir. Derinden nüfuz eden kirleri bile çözen, yoğun bir şekilde hareket eden temizleme köpüğüdür.
Sanayinin tüm kollarında, ev zanaat ve hobi işlerinde, cam, ayna, fayans, parlak kromaj, pleksiglas, araç iç konsül, televizyon ve bilgisayar ekranı ile plastik yüzeylerde kullanılır.
**Kullanım Şekli:** Kullanmadan önce kutuyu kuvvetlice çalkalayınız. Kirli yüzeylere 20-30 cm mesafeden püskürtünüz. Uygulamadan hemen sonra ürün sabit bir köpük oluşturur. Nüfuz etmesini bekleyiniz. Köpük yapının parçalanmasından sonra yüzeyi bir bez veya süngerle iyice temizleyiniz. Eğer yüzeyler henüz tamamen temizlenmemişse, lütfen temizleme prosedürünü tekrarlayınız.

**W160110 - Multi Signum Sprey**

Sipariş
W160110

WINKEL




## W140601 - El Temizleme Kremi

El temizleme kremi en inatçı kir, yağ, yağ, katran, zift, kömür öğütme tozu ve artıklardan temizler. Dermatolojik olarak güvenli maddeleri olan, alkali ve solventsiz el temizleyicisidir. İçerdiği ince zımparalar derin gözenek temizliği ve nazikce sağlar. Yüksek etkili, derinlemesine temizler, nemlendirici ,ekonomik ve biyolojik olarak parçalanabilir.
**Kullanım Sekli:** Beyanlarımız tamamen tecrübelerimize dayanan tavsiyeler niteliğinde olup ön denemeler yapılmaksızın doğacak zarar nedeniyle sorumluluk kabul edilmez.
El Temizleme Kremini kuru ellerinizde ovalayın, biraz su ilave edin ve iyice yıkayın.El temizleme kremi içindeki maddeler tamamen biyolojik olarak parçalanabilir ve tamamen çözülür ve bu nedenle drenajı ve boruları tıkamaz.

| Sipariş | Ürün |
|---|---|
| W140601 | 500 gr |
| W140602 | 3 lt |
| W140603 | 30 lt |

WINKEL



## W150208 - Sentetik Soğutma Sıvısı

Suda çözünür, yarı sentetik ve biostabil olan teknoloji mikroemülsiyon yağı olarak yüksek mineral yağ içeriği ile her tür demir ve demir dışı metallerin talaşlı işlenmesi için tasarlanmıştır.

**Kullanım Şekli:** Belirtilen miktarda suyu bir kaba koyduktan sonra sentetik soğutma sıvısını ekleyiniz ve karıştıma aleti yardımıyla karıştırınız.

| Sipariş | Ürün |
|---|---|
| W15020820 | 20 lt |
| W15020830 | 30 lt |

WINKEL



## W150203 - Erozyon Yağı

Erozyon Yağı elektroerozyon tezgahlarında elektrot ve işlenen parça arasında üniform bir dielektrik tabakası oluşturarak, erozyona neden olan deşarjların maksimum enerjiyi üretmesini ve dolayısıyla parçanın en mükemmel şekilde işlenmesini sağlar. Küçük parçaların çok hassas ve ince işlemleri için son derece uygundur. Yüksek oksidasyon stabilitesine sahiptir.EDM (Electro Discharge Machining) işlemlerinde en uygun dielektrik özelliğini sağlar. İşlenme artıklarının süratle uzaklaştırılabilmesi için düşük viskoziteye sahiptir. Düşük uçuculuk ve az duman oluşumu meydana getirir. Üstün ısı iletimi yapar. İçerdiği antioksidanlar sayesinde olağanüstü oksidasyon stabilitesine sahiptir. Asgari renk değişimine uğrar. Toksik değildir.
**Kullanım Şekli:** Erozyon Yağı yüksek yüzey kalitesinin istendiği bütün elektroerozyon uygulamaları için uygundur. Bunun yanı sıra alüminyum soğuk haddeleme işleminde de kullanılabilir. Daldırma yöntemi ile uygulanabilir.

| Sipariş | Ürün |
|---|---|
| W15020360 | 60 lt |

WINKEL



## W150212 - Taşlama Sıvısı

Demir ve çeliğin taşlanmasında soğutucu olarak görev yapan sentetik karakterde bir yağdır. %2-3 oranında su ile karıştığında mükemmel soğutucu ve pas önleyici özelliği vardır. Kesilen metal parçalarını hemen bertaraf ederek makine aksamını müstesna olarak temiz tutan ve böylelikle serbest bir işlemeyi sağlamada iyi bir yüzey meydana gelmesini ve taşlamanın hassasiyetini arttırır.

| Sipariş | Ürün |
|---|---|
| W15021230 | 30 lt |

WINKEL




Kalıp koruyucu yapışkan olmayan bir üründür. Korozyonu önler. Pas ve kirlenmeye karşı uzun süreli koruma sağlar. Bu balmumu bazlı koruyucu ürün tüm alanlara nüfus eder ve kalıpların yerleştirilmesinde kolaylık sağlar. Berrak opak benzeri rengi ile etki alanını belirlemenizde yardımcı olur.

BEST

**MP61 - Kalıp Koruyucu**

| Sipariş |
|---|
| MP61 |




Crc çok amaçlı yağlayıcı kalıp koruyucu 3-36 500ml Genel kullanım için iyi geçirgenliğe sahip hafif yağlama yağıdır. Mükemmel geçirgenlik özellik-lerine sahip bir üniversal yağdır. Basit uygulamalarda çok-Amaçlı yağlama için uygundur. Ayrıca kapalı ortamda depolanan parçalar için iyi bir korozyon koruması temin eder.

CRC

**CRC3-36 - Çok Amaçlı Yağlayıcı Kalıp Koruyucu**

| Sipariş |
|---|
| CRC3-36 |




Plastik enjeksiyon makinalarında plastikhammaddesinin kalıplara yapışmasını engelleyen, ayırıcı olarak kullanılan bir üründür. Yanıcı değildir. C (cfc's) ve hydrocholorofluorocarbons (hcfc's) içermez. 250°C' ye kadar dayanıklıdır.

BEST

**Kalıp Ayırıcı Silikon**

| Sipariş |
|---|
| KA2000 |




Silikon içermediğinden dolayı üretilen mamüllerin boyanmasını ve sağlıklı bir şekilde etiketlenmesini sağlar. Çabuk uçucudur. 200°C' ye kadar olan sıcaklığa mükemmel dirençlidir. Uygulaması ile elde edilen ürünlerde boyamam ve etiketlemede sorun çıkartmaz. (cfc's) ve (hcfc's) içermez.

BEST

**Kalıp Ayırıcı Silikonsuz**

| Sipariş |
|---|
| KA571 |




Alüminyumda, paslanmazda, siyah metalde ve tüm çelik türlerinde delme, kesme ve kılavuz çekme işlerinde kullanılır. İşlem sırasında oluşacak olan ısıyı düşürerek takımların zarar görmesini engeller ve çok rahat bir çalışma ortamı sağlar. Tüm metallerde sürtünmeyi azaltır. Kılavuz ve matkap ömrünü uzatır. Kusursuz diş çekme ve delme işlemi sağlar.

WINKEL

**WINCUT - Kesme Yağı**

| Sipariş |
|---|
| 460 ML |
| 5 LITRE |
| 30 LITRE |




Metal çekim özelliği ile paslı ve aşınmış yüzeylere nüfuz ederek, pası çıkarır, sıkışmış somunlar, bağlantılar, kontrol mekanizmaları ve diğer metal parçaların serbest bir biçimde çalışmasını sağlar ve yüzeye tamamen yayılarak mikroskopik gözenekleri dahi kaplar. Bu sayede neme ve diğer pas oluşturucu maddelere karşı koruma sağlar.

WINKEL

**WD40 - WD- 40 Sprey**

| Sipariş |
|---|
| 200 ML |
| 350 ML |
| 5 LITRE |



## Kalıp Alışırma & Marka Boyası

| Sipariş |
|---|
| Kırmızı Alıstırma Boyası |
| Kırmızı Marka Boyası |
| Mavi Marka Boyası |
| Yesil Marka Boyası |




Kalıplarda istenmeyen deliklerin kapanmasında kullanılır. Kullanılan yerlerde sert bir tabaka oluşturur. Bu yüzeyde daha sonra tesfiye ve delme işlemi yapılabilir. Sıvı ve toz karıştırılarak kıvam elde edildikten sonra uygulama yapılır.

## TAKILON Tamir Seti

| Sipariş |
|---|
| Küçük |
| Büyük |




Tek bileşikli silikon bazlı, yüksek ısıya dayanıklı, sürekli elastik kalabilen kırmızı renkli bir malzemedir. Her türlü yalıtım ve contalama işlerinde, motorlu araç sanayisinde, tamirat ve bakım işlerinde, makine tesisat ve kazanlarda, boru ve su tesisatlarında, bijon ve cıvatalarda, elektrikli ve elektronik aletlerde başarı ile kullanılır. Kesilip, hazırlanan contalardaki gibi tam yerine uymama güçlüğü yoktur. Kullanıldığı alanlardaki etkin kaplayıcılık özelliği ile her türlü ezik, delik vb. hataları kapatır.

## Kırmızı 404 Sıvı Conta




Sıvı conta beyaz oda sıcaklığında kauçuklaşan gelişmiş silikon esaslı contalama malzemesidir. Sürüldüğü yerden akıcı değildir ve solvent içermediği için kauçuklaştıktan sonra hacmi küçülmez, dolayısıyla kırılma ve çatlama olmaz.

## Beyaz 404 Sıvı Conta




Yeni üretilen bir kalıbın alt ve üst eşlerinin alıştırılmasında ve sac parçaların markalama işlemlerinde üstün performans sunmaktadır. Sac kalıplarında olduğu kadar, plastik kalıplarında da kullanılabilir. Tüy bırakmayan bir fırça ile uygulanır. Hem örtücü hem de silinebilir.

## Kalıp Alıştırma Macunu

| Sipariş |
|---|
| KIRMIZI |
| MAVI |




Motorların ve egzost supaplarının alıştırılmasında, en yüksek performans için raspalama, perdah ve parlatma işlerinde, metal zemin üzerinde ağır kullanım şartlarından doğan metal deformasyonlarını giderme ve düzeltmede en iyi neticeyi verir. ÖZEL FORMÜLÜ sayesinde en güvenilir, yüksek performanslı aşındırma, düzeltme, seviye ayarlama honlama, temizleme ve parlatma sağlar. En iyi netice için uygun kalınlıktaki kum seçimi önemli olup, önce kalın macun ile aşındırma-seviye ayarlama, sonra ince macunla düzeltme-perdah-parlatma işlemleri yapılması önerilir. Özellikleri - Yüksek dirençli metal yüzey aşındırıcısıdır. - Metallerde düzeltme, seviye ayarlama, honlama, temizleme ve parlatma sağlar. ve egzost supaplarının alıştırılması için ideal malzemedir.



İç ve dış cephelerde, paslanabilen tüm metaller üzerine kullanılabilir. aslanabilen her türlü metal yüzeyi koruma amaçlı kullanılır, pas önleme özelliği, yapışma gücü ve örtücülüğü yüksektir. Suya ve deniz etkisine, rutubete ve dış tesirlerin yıpratıcı etkilerine dayanıklıdır.

**Toz Sülyen Boya**




Marpol tüp krem cila, profesyonel kullanım dışında amatör kullanımda da oldukça tercih edilen bir üründür. Tüm metal ve metaldışı ürünlerde sıklıkla kullanılabilir. Manuel yolla, nemli bir pamuklu bezle yüzeye uygulamak koşuluyla göz alıcı bir parlaklık sağlar.

**Metal Cilası (Tüp İçinde)**




Alman malı bu üstün nitelikli yapıştırıcıyı; bütün metallerde, ahşapta, mermer, seramik vb. birçok malzemelerde kullanabilirsiniz. Yapıştırılacak malzemelerin birbiriyle aynı yapı eya özellikte olması gerekmez.

**SUN-FIX Macun Kaynak**

| Sipariş |
|---|
| KÜÇÜK |
| BÜYÜK |




Winol Glanz tüm saf metalleri temizler, bakım yapar, korur ve parlatır (eloksal metaller için uygun değildir): Altın, gümüş, bakır, bronz, pirinç, kalay, alüminyum, krom, paslanmaz çelik, magnezyum ve nikel, aynı zamanda fiberglas, boyalı yüzeyler ve yıpranmış otomotiv kaplamalarda kullanılır. Bir hobi cilacısı iseniz, Winol Glanz ile mat gölgeleri parlatabilir (otomobil), böylece boya yüzeyinde, yüzeyin geri kalanına geçişi görmezsiniz. Winol Glanz toksik değildir, cilde zarar vermez ve metallerin lekelenmesini geciktiren özel bir korozyon koruması içerir.

**Kullanım Şekli :** Uygulama basittir - sonuç ikna edicidir: Kuru veya nemli bir bezle uygulayınız, kısa bir süre bekleteniz ve sonra yüksek parlak verecek şekilde parlatınız. Sadece metal bakımdan daha fazlasıdır: Winol Glanz değerini korur, metalleri tekrar parlatır ve evin, bahçenin, arabanın, teknenin vb. şimdiye kadar kullandığınız maddelerin yerine geçer.

WINKEL®

**Winol Glanz (Metal Parlatıcı)**

| Sipariş |
|---|
| W140623 |




Evo Bond 502 Super Glue Süper Yapıştırıcı (Orjinal) 20 gr lık tekrar kullanılabilir tüplerde paketlenmiş, plastik, ahşap, seramik, kauçuk, deri, metal ve daha birçok yüzeyde kullanılabilen bir "hızlı apıştırıcı" dır. 502 evobond'u kullanırken, uygulama yapılacak yüzeyin temiz, kuru ve düzgün olduğuna emin olunuz. Yapıştırma yapılacak yüzein sadece tek bir tarafına evobond 502 japon yapıştırıcısı nı sürünüz. 1 damla yapıştırıcı 2,5cm 2 alana yeterli olacaktır. Yüzeye uygulandıktan sonra birbirine temas halinde birkaç saniye beklenmelidir.

**502 - Süper Yapıştırıcı**




WEICON ALF rulmanlı ve sürgülü yataklar, birleşme yerleri, kumanda kolları, kayıcı kılavuzlar, dingiller, frezeli miller ve gres yağı için verilen tüm kayma hızlarında uygundur.AL-T başka pek çok endüstriyel alanda kullanılabilmektedir.

**AL-F - Çok Yönlü Yağlayıcı**



**Özellikleri :** Genel amaçlı, ekstra hızlı, çok düşük viskoziteli, alkali esaslı solvent içermeyen bir hızlı yapıştırıcıdır. En kılcal boşluklara dahi nüfuz eder. Plastik, metal ve kauçuk yüzeyleri ultra hızlı yapıştırır.

**Kullanım Alanı :** Plastik, metal, kauçuk, lastik, deri, keçe, vinil, mantar, kağıt, seramik, cam, sert ahşap, formika vb. kaplamalı yüzeyler tüm bu yüzeylerde kullanılabilir.

EMS FORCE

**Force801 - Süper Yapıştırıcı**

| Sipariş | Ambalaj |
|---|---|
| 8015 | 10 gr |
| 8016 | 10 gr (Round) |
| 8011 | 20 gr |
| 8012 | 50 gr |
| 8013 | 250 gr |
| 8014 | 1000 gr |




**Özellikleri :** Yumuşak metal ve komponentlerde 1/4" (6 mm) den küçük dişliler ve ayar gerektiren yerlerde kullanılan, tekrar sökülmesi kolay olan biranaerobik yapıştırıcıdır.

EMS FORCE

**TL-22 - Düşük Kuvvet Civata Sabitleyici**

| Sipariş | Ambalaj |
|---|---|
| 41311 | 15 ml |
| 41411 | 50 ml |
| 41511 | 250 ml |




**Özellikleri :** Orta mukavemetli, sökülebilir, genel amaçlı anaerobik bir üründür. Tüm civata ve somun boylarında kullanılabilir. Yapıştırıldıktan sonra damlama ve akma yapmaz. Kolay uygulanabilir ve sıdırmazlık özelliğine sahiptir. Makine ayar civatalarında, hidrolik sistem civatalarında, rulman yataklarının civatalarında, taşıyıcı konveyör bant civatalarında kullanılır.

EMS FORCE

**TL-43 - Orta Kuvvet Civata Sabitleyici**

| Sipariş | Ambalaj |
|---|---|
| 41314 | 15 ml |
| 41414 | 50 ml |
| 41514 | 250 ml |




**Özellikleri :** 1" (25 mm) 'e kadar civata, saplama ve somunların sökülmemesinin istendiği yerlerde kullanılır. Genel olarak motor saplamaları, su pompa kaplin bağlantıları ve beyaz eşya sanayiinde kullanılır.

EMS FORCE

**TL-70 - Yüksek Kuvvet Civata Sabitleyici**

| Sipariş | Ambalaj |
|---|---|
| 41315 | 15 ml |
| 41415 | 50 ml |
| 41515 | 250 ml |




**Özellikleri :** Tek komponentli, düşük viskoziteli, oluşumlu bir üründür. Sert yüzeylerin tüm tiplerinde kullanılabilen bir kenetleyici olup mekanik bağlantıların daha da kuvvetli olması için kullanılır. Şaft çıkıntısı ile kamaları kilitler. Aşınmış bağlantılarda boşluğu alır. Rulmanları yerine kenetler, yerinden çıkmasını önler. Rotoru şafta kenetler; kovanı, gömlekleri yataklarına ve şaft üzerinde kenetler. Düşük viskozitesi sayesinde ince boşlukları doldurur ve hassas geçmelerde kullanılır.

EMS FORCE

**RT-01 - Rulman Kenetleyici**

| Sipariş | Ambalaj |
|---|---|
| 41331 | 15 ml |
| 41431 | 50 ml |
| 41531 | 250 ml |




**Özellikleri :** Silindir metal parçaların birbirine geçmesinde kullanılan tek komponentli sabitleyicidir. Sertleşmesi, metallerin birbirine hava almayacak biçimde geçmesiyle olur. Genellikle aşınmış parçalarda ve yüksek toleranslı geçme istenen yerlerde kullanılır. Isı dayanımı 230°C 'dir. Rulmanların şaftların, silindirik ileride sökümün istenmediği yerlerde güvenle kullanılabilir. Yeşil renkte, yüksek mukavemetlidir. Yüksek ısı ile tekrar sökülmesi mümkündür.

EMS FORCE

**RT-20 - Yüksek Sıcaklık İçin Rulman Kenetleyici**

| Sipariş | Ambalaj |
|---|---|
| 41332 | 15 ml |
| 41432 | 50 ml |
| 41532 | 250 ml |




**Özellikleri :** Tek komponentli, yüksek vizkoziteli, yüksek mukavemetli bir üründür. Sert yüzeylerin tüm tiplerinde kullanılabilen bir kenetleyici olup mekanik bağlantıların daha da kuvvetli olması için kullanılır. Rulmanları yerine kenetler, aşınmış bağlantılarda boşluğu alır. Rotoru şafta kenetler. Kovanı, gömlekleri yataklarına ve şaft üzerinde kenetler.

EMS FORCE

**RT-38 - Çok Yüksek Kuvvet Rulman Kenetleyici**

| Sipariş | Ambalaj |
|---|---|
| 41333 | 15 ml |
| 41433 | 50 ml |
| 41533 | 250 ml |




**Özellikleri :** Düşük viskoziteli bir sızdırmazlık elemanıdır. Kolay uygulanabilen ve çapı 50 mm'ye kadar olan hidrolik ve pnömatik fittingslerde servomekanizmalarda kullanılan anaerobik bir üründür. Tam kuruduğundan büzüşmez. Yüksek basınca (700 bar), vibrasyona, solventlere, 150°C'ye kadar ısıya, neme ve korozyona çok iyi korur.

EMS FORCE

**HP-42 - Hidrolik ve Pnömatik Sızdırmazlık**

| Sipariş | Ambalaj |
|---|---|
| 41351 | 15 ml |
| 41451 | 50 ml |
| 41551 | 250 ml |




**Özellikleri :** Metal-metal ve plastik-metal dişli bağlantılar için uygundur. İçme suyu uygulamaları için onayı vardır. Damlamayan formulasyonu ile kirletmez. Sızdırmazlık özelliklerini uygulamadan çok sonra da darbelere ve titreşimlere karşı korur. Gelişmiş formülasyonu ile kimyasallara karşı direnç sağlar. Her türlü su, yağ, gres ve birçok kimyasalın geçtiği boru dişlileri, basınçlı kaplar, hava kompresörleri, hidrolik sistem ve tanklar, vibrasyona karşı mukavemet gerektiren yerler, TSE EN 751-1 Standardına göre, H tipi metalik kalın vidalı bağlantılar için uygundur.

EMS FORCE

**5577 - Boru Sızdırmazlık Elemanı**

| Sipariş | Ambalaj |
|---|---|
| 41459 | 50 ml |
| 41659 | 50 ml (ACORDEON) |
| 41559 | 250 ml |




**Özellikleri :** Kırmızı renkli, yüksek sıcaklığa dayanıklı, hızlı oluşum gösteren sıvı contadır. Tüm metal parçalarda sıvı conta oalrak kullanılır. 200°C'ye kadar sıcaklıkta sızdırmazlık görevi görür. Yüksek sıcaklıkta, her biçimde uygulama yapılabilir. Yağdan ve kirden arındırılmış temiz ve kuru yüzeylere elle, fırçayla ve tüple uygulanır. Yüzeye film kaplama şeklinde uygulanarak çatlaklar ve boşluklar doldurulur, yüzey düzgünleştirilir. Daha hızlısertleşme isteniyorsa aktivatör kullanımı önerilir.

EMS FORCE

**GM 10 - Yüksek Sıcaklığa Dayanıklı Conta**

| Sipariş | Ambalaj |
|---|---|
| 41631 | 50 ml (ACORDEON) |
| 41431 | 50 ml |
| 41531 | 250 ml |

## Metrik ISO Vidaları DIN 13

| Anma Çapı | Matkap Çapı |
|---|---|
| M1.0 x 0.25 | 0.75 |
| M1.1 x 0.25 | 0.85 |
| M1.2 x 0.25 | 0.95 |
| M1.4 x 0.30 | 1.10 |
| M1.6 x 0.35 | 1.25 |
| M1.7 x 0.35 | 1.30 |
| M1.8 x 0.35 | 1.45 |
| M2.0 x 0.40 | 1.60 |
| M2.2 x 0.45 | 1.75 |
| M2.3 x 0.40 | 1.90 |
| M2.5 x 0.45 | 2.05 |
| M2.6 x 0.45 | 2.10 |
| M3.0 x 0.50 | 2.50 |
| M3.5 x 0.60 | 2.90 |
| M4.0 x 0.70 | 3.30 |
| M4.5 x 0.75 | 3.70 |
| M5.0 x 0.80 | 4.20 |
| M5.5 x 0.90 | 4.60 |
| M6.0 x 1.00 | 5.00 |
| M7.0 x 1.00 | 6.00 |
| M8.0 x 1.25 | 6.80 |
| M9.0 x 1.25 | 7.80 |

| Anma Çapı | Matkap Çapı |
|---|---|
| M10.0 x 1.50 | 8.50 |
| M11.0 x 1.25 | 9.50 |
| M12.0 x 1.75 | 10.20 |
| M14.0 x 2.00 | 12.00 |
| M16.0 x 2.00 | 14.00 |
| M18.0 x 2.50 | 15.50 |
| M20.0 x 2.50 | 17.50 |
| M22.0 x 2.50 | 19.50 |
| M24.0 x 3.00 | 21.00 |
| M27.0 x 3.00 | 24.00 |
| M30.0 x 3.50 | 26.50 |
| M33.0 x 3.50 | 29.50 |
| M36.0 x 4.00 | 32.00 |
| M39.0 x 4.00 | 35.00 |
| M42.0 x 4.50 | 37.50 |
| M45.0 x 4.50 | 40.50 |
| M48.0 x 5.00 | 46.00 |
| M52.0 x 5.00 | 47.00 |
| M56.0 x 5.50 | 50.50 |
| M60.0 x 5.50 | 54.50 |
| M64.0 x 6.00 | 58.00 |
| M68.0 x 6.00 | 62.00 |

## Metrik İnce ISO Vidaları DIN 13

| Anma Çapı | Matkap Çapı |
|---|---|
| M4.0 x 0.35 | 3.60 |
| M4.0 x 0.50 | 3.50 |
| M5.0 x 0.50 | 4.50 |
| M6.0 x 0.50 | 5.50 |
| M6.0 x 0.75 | 5.25 |
| M7.0 x 0.75 | 6.25 |
| M8.0 x 0.50 | 7.50 |
| M8.0 x 1.00 | 7.25 |
| M9.0 x 1.00 | 7.00 |
| M10.0 x 1.00 | 8.00 |
| M10.0 x 1.25 | 9.25 |
| M11.0 x 1.00 | 9.00 |
| M12.0 x 0.75 | 8.80 |
| M12.0 x 1.00 | 10.00 |
| M12.0 x 1.50 | 11.25 |
| M13.0 x 1.00 | 11.00 |
| M14.0 x 1.00 | 10.50 |
| M14.0 x 1.50 | 12.00 |
| M16.0 x 1.00 | 13.00 |
| M16.0 x 1.50 | 12.80 |
| M18.0 x 1.00 | 12.50 |
| M18.0 x 2.00 | 15.00 |

| Anma Çapı | Matkap Çapı |
|---|---|
| M20.0 x 1.00 | 14.50 |
| M20.0 x 1.50 | 19.00 |
| M20.0 x 2.00 | 18.50 |
| M20.0 x 1.00 | 21.00 |
| 22.0 x 1.50 | 20.50 |
| 22.0 x 2.00 | 20.00 |
| 24.0 x 1.50 | 22.50 |
| 24.0 x 2.00 | 22.00 |
| 25.0 x 1.50 | 23.50 |
| 26.0 x 1.50 | 24.50 |
| 27.0 x 1.50 | 25.50 |
| 27.0 x 2.00 | 25.00 |
| 28.0 x 1.50 | 26.50 |
| 30.0 x 1.50 | 28.50 |
| 30.0 x 2.00 | 28.00 |

## Gaz (Boru) Vida

| Anma Çapı | Diş | Dış Çap | Matkap Çapı |
|---|---|---|---|
| G1/8 | 28 | 9.728 | 8.80 |
| G1/4 | 19 | 13.157 | 11.80 |
| G3/8 | 19 | 16.662 | 15.25 |
| G1/2 | 14 | 20.955 | 19.00 |
| G5/8 | 14 | 22.911 | 21.00 |
| G3/4 | 14 | 26.441 | 24.50 |
| G7/8 | 14 | 30.201 | 28.25 |
| G1 | 11 | 33.249 | 30.75 |
| G1 1/8 | 11 | 37.897 | 35.50 |
| G1 1/4 | 11 | 41.910 | 39.00 |
| G1 3/8 | 11 | 44.423 | 42.50 |

## Gaz (Boru) Vida

| Anma Çapı | Diş | Dış Çap | Matkap Çapı |
|---|---|---|---|
| G1 1/2 | 11 | 47.803 | 45.50 |
| G1 3/4 | 11 | 53.746 | 51.00 |
| G2 | 11 | 59.614 | 57.00 |
| G2 1/4 | - | - | 63.00 |
| G2 1/2 | - | - | 72.50 |
| G2 3/4 | - | - | 79.00 |
| G3 | - | - | 85.50 |
| G3 1/4 | - | - | 91.50 |
| G3 1/2 | - | - | 98.00 |
| G3 3/4 | - | - | 104.00 |
| G4 | - | - | 110.50 |

## Whitworth Vida Normal BSW

| Anma Çapı | Diş | Dış Çap | Matkap Çapı |
|---|---|---|---|
| W1/16 | 60 | 1.387 | 1.20 |
| W3/32 | 48 | 2.381 | 1.90 |
| W1/18 | 40 | 3.175 | 2.50 |
| W5/32 | 32 | 3.969 | 3.20 |
| W3/16 | 24 | 4.762 | 3.60 |
| W7/32 | 24 | 5.556 | 4.50 |
| W1/4 | 20 | 6.350 | 5.10 |
| W5/16 | 18 | 7.938 | 6.50 |
| W3/3 | 16 | 9.525 | 7.90 |
| W7/16 | 14 | 11.113 | 9.20 |
| W1/2 | 12 | 12.700 | 10.50 |
| W9/16 | 11 | 14.287 | 12.10 |
| W5/8 | 11 | 15.876 | 13.50 |
| W3/4 | 10 | 19.051 | 16.50 |
| W7/8 | 9 | 22.226 | 19.25 |
| W1 | 8 | 25.400 | 22.00 |
| 11/8 | 7 | 28.576 | 24.50 |
| 11/4 | 7 | 31.751 | 27.50 |
| W13/8 | 6 | 34.926 | 30.50 |

## Whitworth Vida İnce BSF

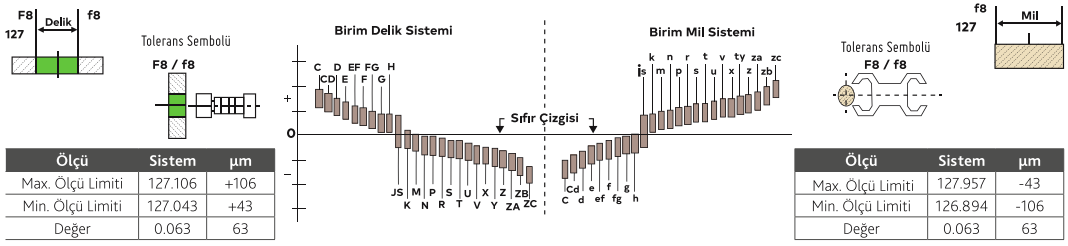
| Anma Çapı | Diş | Dış Çap | Matkap Çapı |
|---|---|---|---|
| W3/16 | 32 | 4.762 | 3.90 |
| W7/32 | 28 | 5.656 | 4.50 |
| W1/4 | 26 | 6.350 | 5.30 |
| W9/32 | 26 | 7.142 | 6.10 |
| W5/16 | 22 | 7.938 | 6.70 |
| W3/8 | 20 | 9.525 | 8.20 |
| W7/16 | 18 | 11.113 | 9.60 |
| W1/2 | 16 | 12.700 | 11.00 |
| W9/16 | 16 | 14.288 | 12.50 |
| W5/8 | 14 | 15.875 | 14.00 |
| W11/16 | 14 | 17.463 | 15.50 |
| W3/4 | 12 | 19.050 | 16.75 |
| W7/8 | 11 | 22.225 | 19.75 |
| W1 | 10 | 25.400 | 22.75 |

## Amerikan Kaba Vida UNC

| Anma Çapı | Diş | Dış Çap | Matkap Çapı |
|---|---|---|---|
| UNC NR. 1 | 64 | 1.854 | 1.55 |
| UNC NR. 2 | 56 | 2.184 | 1.85 |
| UNC NR. 3 | 48 | 2.515 | 2.10 |
| UNC NR. 4 | 40 | 2.845 | 2.35 |
| UNC NR. 5 | 40 | 3.175 | 2.65 |
| UNC NR. 6 | 32 | 5.505 | 2.85 |
| UNC NR. 8 | 32 | 4.166 | 3.45 |
| UNC NR. 10 | 24 | 4.826 | 3.90 |
| UNC NR. 12 | 24 | 5.846 | 4.50 |
| UNC 1/4 | 20 | 6.350 | 5.20 |
| UNC 5/16 | 18 | 7.938 | 6.60 |
| UNC 3/8 | 16 | 9.525 | 8.00 |
| UNC 7/16 | 14 | 11.112 | 9.40 |
| UNC 1/2 | 13 | 12.700 | 10.80 |
| UNC 9/16 | 12 | 14.288 | 12.20 |
| UNC 5/8 | 11 | 15.875 | 13.50 |
| UNC 3/4 | 10 | 19.050 | 16.50 |
| UNC 7/8 | 9 | 22.225 | 19.50 |
| UNC 1 | 8 | 25.400 | 22.25 |
| UNC 1 1/8 | - | - | 25.00 |
| UNC 1 1/4 | - | - | 28.00 |
| UNC 1 1/2 | - | - | 34.00 |

## Amerikan İnce Vida UNF

| Anma Çapı | Diş | Dış Çap | Matkap Çapı |
|---|---|---|---|
| UNF NR. 0 | 80 | 1.524 | 1.25 |
| UNF NR. 1 | 72 | 1.854 | 1.55 |
| UNF NR. 2 | 64 | 2.184 | 1.90 |
| UNF NR. 3 | 56 | 2.515 | 2.15 |
| UNF NR. 4 | 48 | 2.845 | 2.40 |
| UNF NR. 5 | 44 | 3.175 | 2.70 |
| UNF NR. 6 | 40 | 5.505 | 2.95 |
| UNF NR. 8 | 36 | 4.166 | 3.50 |
| UNF NR. 10 | 32 | 4.826 | 4.10 |
| UNF NR. 12 | 28 | 5.846 | 4.70 |
| UNF 1/4 | 28 | 6.350 | 5.50 |
| UNF 5/16 | 24 | 7.938 | 6.90 |
| UNF 3/8 | 24 | 9.525 | 8.50 |
| UNF 7/16 | 20 | 11.112 | 9.90 |
| UNF 1/2 | 20 | 12.700 | 11.50 |
| UNF 9/16 | 18 | 14.288 | 12.90 |
| UNF 5/8 | 18 | 15.875 | 14.50 |
| UNF 3/4 | 16 | 19.050 | 17.50 |
| UNF 7/8 | 14 | 22.225 | 20.50 |
| UNF 1 | 12 | 25.400 | 23.25 |
| UNF 1 1/8 | - | - | 26.50 |
| UNF 1 1/4 | - | - | 29.50 |
| UNF 1 1/2 | - | - | 36.00 |




| Ölçü | Sistem | µm |
|---|---|---|
| Max. Ölçü Limiti | 127.106 | +106 |
| Min. Ölçü Limiti | 127.043 | +43 |
| Değer | 0.063 | 63 |

| Ölçü | Sistem | µm |
|---|---|---|
| Max. Ölçü Limiti | 127.957 | -43 |
| Min. Ölçü Limiti | 126.894 | -106 |
| Değer | 0.063 | 63 |



**Delik Ölçü** **DIN 7161**

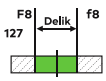
Çap Basamakları (mm)

| Sapmaları | D8 | D9 | E6 | E7 | E8 | F6 | F7 | F8 | G5 | G6 | G7 | H4 | H5 | H6 | H7 | H8 | H9 | H10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 34<br>20 | 45<br>20 | 20<br>14 | 24<br>14 | 28<br>14 | +12<br>+6 | +16<br>+6 | +20<br>+6 | +6<br>+2 | +8<br>+2 | +12<br>+2 | +3<br>0 | +4<br>0 | +6<br>0 | +10<br>0 | +14<br>0 | +25<br>0 | +40<br>0 |
| 3 - 6 | 48<br>30 | 60<br>30 | +28<br>+20 | +32<br>+20 | +38<br>+20 | +18<br>+10 | +22<br>+10 | +28<br>+10 | +9<br>+4 | +12<br>+4 | +16<br>+4 | +4<br>0 | +5<br>0 | +8<br>0 | +12<br>0 | +18<br>0 | +30<br>0 | +48<br>0 |
| 6 - 10 | 62<br>40 | 76<br>40 | +34<br>+25 | +40<br>+25 | +47<br>+25 | +22<br>+13 | +28<br>+13 | +35<br>+13 | +11<br>+5 | +14<br>+5 | +20<br>+5 | +4<br>0 | +6<br>0 | +9<br>0 | +15<br>0 | +22<br>0 | +36<br>0 | +58<br>0 |
| 10 - 18 | 77<br>50 | 93<br>50 | +43<br>+32 | +50<br>+32 | +59<br>+32 | +27<br>+16 | +34<br>+16 | +43<br>+16 | +14<br>+6 | +17<br>+6 | +24<br>+6 | +5<br>0 | +8<br>0 | +11<br>0 | +18<br>0 | +27<br>0 | +43<br>0 | +70<br>0 |
| 18 - 30 | 98<br>65 | 117<br>65 | +53<br>+40 | +61<br>+40 | +73<br>+40 | +33<br>+20 | +41<br>+20 | +53<br>+20 | +16<br>+7 | +20<br>+7 | +28<br>+7 | +6<br>0 | +9<br>0 | +13<br>0 | +21<br>0 | +33<br>0 | +52<br>0 | +84<br>0 |
| 30 - 50 | 119<br>80 | 142<br>180 | +66<br>+50 | +75<br>+50 | +89<br>+50 | +41<br>+25 | +50<br>+25 | +64<br>+25 | +20<br>+9 | +25<br>+9 | +34<br>+9 | +7<br>0 | +11<br>0 | +16<br>0 | +25<br>0 | +39<br>0 | +62<br>0 | +100<br>0 |
| 50 - 80 | 146<br>100 | 174<br>100 | +79<br>+60 | +90<br>+60 | +106<br>+60 | +49<br>+30 | +60<br>+30 | +76<br>+30 | +23<br>+10 | +29<br>+10 | +40<br>+10 | +8<br>0 | +13<br>0 | +19<br>0 | +30<br>0 | +46<br>0 | +74<br>0 | +120<br>0 |
| 80 - 120 | 174<br>120 | 207<br>120 | +94<br>+72 | +107<br>+72 | +126<br>+72 | +58<br>+36 | +71<br>+36 | +90<br>+36 | +27<br>+12 | +34<br>+12 | +47<br>+12 | +10<br>0 | +15<br>0 | +22<br>0 | +35<br>0 | +54<br>0 | +87<br>0 | +140<br>0 |
| 120 - 180 | 208<br>145 | 245<br>145 | +110<br>+85 | +125<br>+85 | +148<br>+85 | +68<br>+43 | +83<br>+43 | +106<br>+43 | +32<br>+14 | +39<br>+14 | +54<br>+14 | +12<br>0 | +18<br>0 | +25<br>0 | +40<br>0 | +63<br>0 | +100<br>0 | +160<br>0 |
| 180 - 250 | 242<br>170 | 285<br>170 | +129<br>+100 | +146<br>+100 | +172<br>+100 | +79<br>+50 | +96<br>+50 | +122<br>+50 | +35<br>+15 | +44<br>+15 | +61<br>+15 | +14<br>0 | +20<br>0 | +29<br>0 | +46<br>0 | +72<br>0 | +115<br>0 | +185<br>0 |

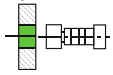
**Delik Ölçü** **DIN 7161**

Çap Basamakları (mm)

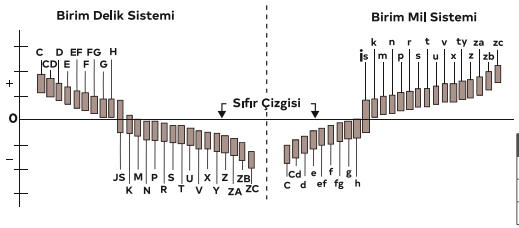
| Sapmaları | JS6 | JS7 | JS8 | K6 | K7 | K8 | M5 | M6 | M7 | N6 | N7 | P6 | P7 | R7 | S7 | T7 | U7 | X7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | +3 | +5 | +7 | 0 | 0 | 0 | -2 | -2 | -2 | -4 | -4 | -6 | -6 | -10 | -14 | - | -18 | -20 |
| | -3 | -5 | -7 | -6 | -10 | -14 | -6 | -8 | -12 | -10 | -14 | -12 | -16 | -20 | -24 | - | -28 | -30 |
| 3 - 6 | +4 | +6 | +9 | +2 | +3 | +5 | -3 | -1 | 0 | -5 | -4 | -9 | -8 | -11 | -15 | - | -19 | -24 |
| | -4 | -6 | -9 | -6 | -9 | -13 | -8 | -9 | -12 | -13 | -16 | -17 | -20 | -23 | -27 | - | -31 | -36 |
| 6 - 10 | +4.5 | +7 | +11 | +2 | +5 | +6 | -4 | -3 | 0 | -7 | -4 | -12 | -9 | -13 | -17 | - | -22 | -28 |
| | -4.5 | -7 | -11 | -7 | -10 | -16 | -10 | -12 | -15 | -16 | -19 | -21 | -24 | -28 | -32 | - | -37 | -43 |
| 10 - 18 | +5.5 | +9 | +13.5 | +2 | +6 | +8 | -4 | -4 | 0 | -9 | -5 | -15 | -11 | -16 | -21 | - | -26 | -33 |
| | -5.5 | -9 | -13.5 | -9 | -12 | -19 | -12 | -15 | -18 | -20 | -23 | -26 | -29 | -34 | -39 | - | -44 | -56 |
| 18 - 30 | +6.5 | +10 | +16.5 | +2 | +6 | +10 | -5 | -4 | 0 | -11 | -7 | -18 | -14 | -20 | -27 | -30 | -33 | -46 |
| | -6.5 | -10 | -16.5 | -11 | -15 | -23 | -14 | -17 | -21 | -24 | -28 | -31 | -35 | -41 | -48 | -54 | -61 | -77 |
| 30 - 50 | +8 | +12 | +19.5 | +3 | +7 | 12 | -5 | -4 | 0 | -12 | -8 | -21 | -17 | -25 | -34 | -39 | -51 | - |
| | -8 | -12 | -19.5 | -13 | -18 | -27 | -16 | -20 | -25 | -28 | -33 | -37 | -42 | -50 | -59 | -70 | -86 | - |
| 50 - 80 | +9.5 | +15 | +23 | +4 | +9 | +14 | -6 | -5 | 0 | -14 | -9 | -26 | -21 | -30 | -42 | -55 | -76 | - |
| | -9.5 | -15 | -23 | -15 | -21 | -32 | -19 | -24 | -30 | -33 | -39 | -45 | -51 | -62 | -78 | -94 | -121 | - |
| 80 - 120 | +11 | +17 | +27 | +4 | +10 | +16 | -8 | -6 | 0 | -16 | -10 | -30 | -24 | -38 | -58 | -78 | -111 | - |
| | -11 | -17 | -27 | -18 | -25 | -38 | -23 | -28 | -35 | -38 | -45 | -52 | -59 | -76 | -10 | -126 | -166 | - |
| 120 - 180 | +12.5 | +20 | +31.5 | +4 | +12 | +20 | -9 | -8 | 0 | -20 | -12 | -36 | -28 | -48 | -77 | -107 | - | - |
| | -12.5 | -20 | -31.5 | -21 | -28 | -43 | -27 | -33 | -40 | -45 | -52 | -61 | -68 | -93 | -133 | -171 | - | - |
| 180 - 250 | +14.5 | +23 | +36 | +5 | +13 | +22 | -11 | -8 | 0 | -22 | -14 | -41 | -33 | -60 | -105 | - | - | - |
| | -14.5 | -23 | -36 | -24 | -33 | -50 | -31 | -37 | -46 | -51 | -60 | -70 | -79 | -113 | -169 | - | - | - |



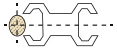

Tolerans Sembolü
F8 / f8

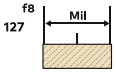


| Ölçü | Sistem | µm |
|---|---|---|
| Max. Ölçü Limiti | 127.106 | +106 |
| Min. Ölçü Limiti | 127.043 | +43 |
| Değer | 0.063 | 63 |




Tolerans Sembolü
F8 / f8






| Ölçü | Sistem | µm |
|---|---|---|
| Max. Ölçü Limiti | 127.957 | -43 |
| Min. Ölçü Limiti | 126.894 | -106 |
| Değer | 0.063 | 63 |

**Dış Çap** — **DIN 7161**

**Çap Basamakları (mm)**

| Sapmaları | d8 | d9 | e6 | e7 | e8 | f6 | f7 | f8 | g5 | g6 | g7 | h4 | h5 | h6 | h7 | h8 | h9 | h10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | -20<br>-34 | -20<br>-45 | -14<br>-20 | -14<br>-24 | -14<br>-28 | -6<br>-12 | -6<br>-16 | -6<br>-20 | -2<br>-6 | -2<br>-12 | 0<br>-3 | 0<br>-3 | 0<br>-4 | 0<br>-6 | 0<br>-10 | 0<br>-14 | 0<br>-25 | 0<br>-40 |
| 3 - 6 | -30<br>-48 | -30<br>-60 | -20<br>-28 | -20<br>-32 | -20<br>-38 | -10<br>-18 | -10<br>-22 | -10<br>-28 | -4<br>-9 | -4<br>-12 | -4<br>-16 | 0<br>-4 | 0<br>-5 | 0<br>-8 | 0<br>-12 | 0<br>-18 | 0<br>-30 | 0<br>-48 |
| 6 - 10 | -40<br>-62 | -40<br>-76 | -25<br>-34 | -25<br>-40 | -25<br>-47 | -13<br>-22 | -13<br>-28 | -13<br>-35 | -5<br>-11 | -5<br>-14 | -5<br>-20 | 0<br>-4 | 0<br>-6 | 0<br>-9 | 0<br>-15 | 0<br>-22 | 0<br>-36 | 0<br>-58 |
| 10 - 18 | -50<br>-77 | -50<br>-93 | -32<br>-43 | -32<br>-50 | -32<br>-59 | -16<br>-27 | -16<br>-34 | -16<br>-43 | -6<br>-14 | -6<br>-17 | -6<br>-24 | 0<br>-5 | 0<br>-8 | 0<br>-11 | 0<br>-18 | 0<br>-27 | 0<br>-43 | 0<br>-70 |
| 18 - 30 | -65<br>-98 | -65<br>-117 | -40<br>-54 | -40<br>-61 | -40<br>-73 | -20<br>-33 | -20<br>-41 | -20<br>-53 | -7<br>-16 | -7<br>-26 | -7<br>-28 | 0<br>-6 | 0<br>-9 | 0<br>-13 | 0<br>-21 | 0<br>-33 | 0<br>-52 | 0<br>-84 |
| 30 - 50 | -80<br>-119 | -80<br>-142 | -50<br>-66 | -50<br>-75 | -50<br>-89 | -25<br>-41 | -25<br>-50 | -25<br>-64 | -9<br>-20 | -9<br>-25 | -9<br>-34 | 0<br>-7 | 0<br>-11 | 0<br>-16 | 0<br>-25 | 0<br>-39 | 0<br>-62 | 0<br>-100 |
| 50 - 80 | -100<br>-146 | -100<br>-174 | -60<br>-79 | -60<br>-90 | -60<br>-106 | -30<br>-49 | -30<br>-60 | -30<br>-76 | -10<br>-23 | -10<br>-29 | -10<br>-40 | 0<br>-8 | 0<br>-13 | 0<br>-19 | 0<br>-30 | 0<br>-46 | 0<br>-74 | 0<br>-120 |
| 80 - 120 | -120<br>-174 | -120<br>-207 | -72<br>-94 | -72<br>-107 | -72<br>-126 | -36<br>-58 | -36<br>-71 | -36<br>-90 | -12<br>-27 | -12<br>-34 | -12<br>-47 | 0<br>-10 | 0<br>-15 | 0<br>-22 | 0<br>-35 | 0<br>-54 | 0<br>-87 | 0<br>-140 |
| 120 - 180 | -145<br>-208 | -145<br>-245 | -85<br>-110 | -85<br>-125 | -85<br>-148 | -43<br>-68 | -43<br>-83 | -43<br>-106 | -14<br>-32 | -14<br>-39 | -14<br>-54 | 0<br>-12 | 0<br>-18 | 0<br>-25 | 0<br>-40 | 0<br>-63 | 0<br>-100 | 0<br>-160 |
| 180 - 250 | -170<br>-242 | -170<br>-285 | -100<br>-129 | -100<br>-146 | -100<br>-172 | -50<br>-79 | -50<br>-96 | -50<br>-122 | -15<br>-35 | -15<br>-44 | -15<br>-61 | 0<br>-14 | 0<br>-20 | 0<br>-29 | 0<br>-46 | 0<br>-72 | 0<br>-115 | 0<br>-185 |

**Dış Çap** — **DIN 7161**

**Çap Basamakları (mm)**

| Sapmaları | js6 | js7 | js8 | k5 | k6 | k7 | k8 | m5 | m6 | m7 | n5 | n6 | p6 | r6 | s6 | t6 | u6 | x6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | +3<br>-3 | +5<br>-5 | +7<br>-7 | +4<br>0 | +6<br>0 | +10<br>0 | +14<br>0 | +6<br>+2 | +8<br>+2 | -<br>- | +8<br>+4 | +10<br>+4 | +12<br>+6 | +16<br>+10 | +20<br>+14 | -<br>- | +24<br>+18 | 26<br>20 |
| 3 - 6 | +4<br>-4 | +6<br>-6 | +9<br>-9 | +6<br>+1 | +9<br>+1 | +13<br>+1 | +18<br>0 | +9<br>+4 | +12<br>+4 | +16<br>+4 | +13<br>+8 | +16<br>+8 | +20<br>+12 | +23<br>+15 | +27<br>+19 | -<br>- | +31<br>+23 | 36<br>28 |
| 6 - 10 | +4.5<br>-4.5 | +7<br>-7 | +11<br>-11 | +7<br>+1 | +10<br>+1 | +16<br>+1 | +22<br>0 | +12<br>+6 | +15<br>+6 | +21<br>+6 | +16<br>+10 | +19<br>+10 | +24<br>+15 | +28<br>+19 | +32<br>+23 | -<br>- | +37<br>+28 | 43<br>34 |
| 10 - 18 | +5.5<br>-5.5 | +9<br>-9 | +13.5<br>-13.5 | +9<br>+1 | +12<br>+1 | +19<br>+1 | +27<br>0 | +15<br>+7 | +18<br>+7 | +25<br>+7 | +20<br>+12 | +23<br>+12 | +29<br>+18 | +34<br>+23 | +39<br>+28 | -<br>- | +44<br>+33 | 56<br>40 |
| 18 - 30 | +6.5<br>-6.5 | +10<br>-10 | +16.5<br>-16.5 | +11<br>+2 | +15<br>+2 | +23<br>+2 | +33<br>0 | +17<br>+8 | +21<br>+8 | +29<br>+8 | +24<br>+15 | +28<br>+15 | +35<br>+22 | +41<br>+28 | +48<br>+35 | +54<br>+41 | +61<br>+41 | 77<br>54 |
| 30 - 50 | +8<br>-8 | +12<br>-12 | +19.5<br>-19.5 | +13<br>+2 | +18<br>+2 | +27<br>+2 | +39<br>0 | +20<br>+9 | +25<br>+9 | +34<br>+9 | +28<br>+17 | +33<br>+17 | +42<br>+26 | +50<br>+34 | +59<br>+43 | +70<br>+48 | +86<br>+60 | -<br>- |
| 50 - 80 | +9.5<br>-9.5 | +15<br>-15 | +23<br>-23 | +15<br>+2 | +21<br>+2 | +32<br>+2 | +46<br>0 | +24<br>+11 | +30<br>+11 | +41<br>+11 | +33<br>+20 | +39<br>+20 | +51<br>+32 | +62<br>+41 | +78<br>+53 | +94<br>+66 | +121<br>+87 | -<br>- |
| 80 - 120 | +11<br>-11 | +17<br>-17 | +27<br>-27 | +18<br>+3 | +25<br>+3 | +38<br>+3 | +54<br>0 | +28<br>+13 | +35<br>+13 | +48<br>+13 | +38<br>+23 | +40<br>+23 | +59<br>+37 | +76<br>+51 | +101<br>+71 | +126<br>+91 | +166<br>+124 | -<br>- |
| 120 - 180 | +12.5<br>-12.5 | +20<br>-20 | +31.5<br>-31.5 | +21<br>+3 | +28<br>+3 | +43<br>+3 | +63<br>0 | +33<br>+15 | +40<br>+15 | +55<br>+15 | -<br>- | +52<br>+27 | +68<br>+43 | +93<br>+63 | +133<br>+92 | +171<br>+122 | -<br>- | -<br>- |
| 180 - 250 | +14.5<br>-14.5 | +23<br>-23 | +36<br>-36 | +24<br>+4 | +33<br>+4 | +50<br>+4 | +72<br>0 | +37<br>+17 | +46<br>+17 | +63<br>+17 | -<br>- | +60<br>+31 | +79<br>+50 | +113<br>+77 | +169<br>+122 | -<br>- | -<br>- | -<br>- |

| | DIN | Quantum (QTS | EWK | BÖHLER | UDDEHOLM | JIS | AISI SAE | İçerdiği Alaşım Elementleri (%) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | C | Si | Mn | Cr | Mo | Ni | V | W | Co | Diğer |
| Sıcak İş Çelikleri | 1.2343 | 1.2343 | THYROTHERM 2343 | ~W 300 | ~UHB VIDAR | SKD 6 | H 11 | 0.38 | 1.00 | 0.40 | 1.30 | - | 0.40 | - | - | - | |
| | 1.2344 | 1.2344 | THYROTHERM 2344 | W 302 | ~UHB ORVAR | SKD 61 | H 13 | 0.40 | 1.00 | 0.40 | 5.30 | 1.40 | - | 1.00 | - | - | - |
| | 1.2365 | 1.2365 | THYROTHERM 2365 | W 320 | - | SKD 7 | H 10 | 0.32 | 0.25 | 0.30 | 3.00 | 2.80 | - | 0.50 | - | - | - |
| | 1.2367 | 1.2367 | THYROTHERM 2367 | ~W 300 | - | - | - | 0.37 | 0.40 | 0.45 | 5.00 | 3.00 | - | 0.60 | - | - | - |
| | - | - | - | - | UHB QRO 90 | - | - | 0.38 | 0.30 | 0.75 | 2.60 | 2.30 | - | 0.90 | - | - | - |
| | 1.2714 | 1.2714 (40-44 HRC) | THYROTHERM 2714 | W 500 | UHB ALVAR 14 | ~SKD 4 | 6 F 3 | 0.56 | 0.30 | 0.70 | 1.10 | 0.50 | 1.70 | 0.10 | - | - | - |
| | 1.2782 | 1.2782 | THYROTHERM 2782 | ~H 525 | - | ~SUH 310 | ~314 | 0.15 | 2.00 | 0.80 | 25.00 | - | 20.00 | - | - | - | - |
| | 1.2787 | 1.2787 SUPRA | THYROTHERM 2787 | N 350 | - | ~SUS 431 | 431 | 0.22 | 0.40 | 0.50 | 16.50 | - | 1.70 | - | - | - | - |
| | 1.2340 | E 38 K | E 38 K | - | - | - | - | 0.35 | 0.30 | 0.30 | 5.00 | 1.35 | - | 0.45 | - | - | S<0.003 |
| | 1.2999 | 1.2999 SUPRA | THYROTHERM 2999 | - | - | - | - | 0.45 | 0.30 | 0.30 | 3.00 | 5.00 | - | 1.00 | - | - | - |
| Soğuk İş Çelikleri | 1.2067/1.3505 | 1.2067 | THYRODUR 2067 | K200 | UHB 20 C15 | SUJ 12 | L3 | 1.00 | 0.20 | 0.35 | 1.50 | - | - | - | - | - | - |
| | 1.2080 | 1.2080 | THYRODUR 2080 | K100 | UHB SVERKER 1 | SKD 1 | D3 | 2.00 | 0.30 | 0.30 | 12.00 | - | - | - | - | - | - |
| | 1.2363 | 1.2363 | THYRODUR 2363 | K 305 | UHB RIGOR-S1 | SKD 12 | A2 | 1.00 | 0.30 | 0.50 | 5.00 | 0.95 | - | 0.20 | - | - | - |
| | 1.2379 | 1.2379 | THYRODUR 2397 | K 110 | ~UHB SVERKER 21 | SKD 11 | D2 | 1.55 | 0.30 | 0.35 | 12.00 | 0.75 | - | 0.90 | - | - | - |
| | 1.2436 | 1.2436 | THYRODUR 2436 | K 107 | ~UHB SVERKER 3 | - | D6 | 2.10 | 0.35 | 0.35 | 12.00 | - | - | - | 0.70 | - | - |
| | 1.2520 | 1.2520 | THYRODUR 2550 | K455 | ~UHB REGIN 3 | - | S1 | 0.60 | 0.60 | 0.35 | 1.10 | - | - | 0.20 | 2.00 | - | - |
| | 1.2721 | 1.2721 | THYRODUR 2721 | ~K 605 | UHB GRANE | - | - | 0.55 | 0.25 | 0.45 | 1.00 | - | 3.10 | - | - | - | - |
| | 1.2767 | 1.2767 | THYRODUR 2767 | K 600 | ~UHB GRANE | - | 6 F 7 | 0.45 | 0.25 | 0.35 | 1.40 | 0.20 | 4.00 | - | - | - | - |
| | 1.2842 | 1.2842 | THYRODUR 2842 | K 720 | UHB AROS | - | 0 2 | 0.90 | 0.20 | 2.00 | 0.40 | - | - | 1.0 | - | - | - |
| Plastik Kalıp Çeşitleri | 1.1730 | 1.1730 | THYRODUR 1730 | K 945 | UHB 11 | - | SAE 1045 | 0.45 | 0.30 | 0.70 | - | - | - | - | - | - | - |
| | 1.2312 (Blok) | 1.2312 | THYROPLAST 2312 | M 200 | UHB HOLDAX | - | ~P 20 S | 0.40 | 0.40 | 1.50 | 1.90 | 0.22 | - | - | - | - | S 0.05 |
| | 1.2312 (Plaka) | FAROXY 2312 | THYROPLAST 2312 | M 200 | UHB HOLDAX | - | ~P 20 S | 0.40 | 0.40 | 1.50 | 1.90 | 0.22 | - | - | - | - | S 0.05 |
| | 1.2738 (Blok) | 1.2738 EHT | THYROPLAST 2738 EHT | - | - | - | - | 0.28 | 0.30 | 1.50 | 1.30 | + | 1.00 | - | - | - | - |
| | 1.2738 (Blok) | 1.2738 | THYROPLAST 2738 | M 238 | ~UHB IMPAX | - | ~P 20 +Ni | 0.40 | 0.30 | 1.50 | 1.90 | 0.22 | 1.00 | - | - | - | S 0.008 |
| | 1.2738 (Plaka) | FAROXY 2738 | THYROPLAST 2738 | M 238 | ~UHB IMPAX | - | ~P 20 +Ni | 0.40 | 0.30 | 1.50 | 1.90 | 0.22 | 1.00 | - | - | - | S 0.0005 |
| | 1.2316 (Blok) | 1.2316 | THYROPLAST 2316 | ~M 300 | - | - | 420 mod | 0.36 | ≤1.00 | 0.70 | 16.00 | 1.20 | - | - | - | - | - |
| | 1.2316 (Plaka) | FAROXY 2316 | THYROPLAST 2316 | ~M 300 | - | - | 420 mod | 0.36 | ≤1.00 | 0.70 | 16.00 | 1.20 | - | - | - | - | - |
| | - | - | - | - | ~UHB RAMAX S | - | - | 0.33 | 0.35 | 1.35 | 16.70 | - | - | - | - | - | S 0.12 |
| | 1.2083 | 1.2083 SUPRA | THYROPLAST 2083 | ~M 310 | UHB STAVAX | ~SUS 420 J2 | ~420 SS | 0.42 | ≤1.00 | 0.70 | 13.00 | - | - | - | - | - | - |
| | 1.2162 | 1.2162 | THYROPLAST 2162 | M 100 | UHB PREXI | - | ~P2 | 0.21 | 0.25 | 1.30 | 1.20 | - | - | - | - | - | - |
| | 1.2895 | PH 42 FM | PH 42 FM | - | - | - | - | 0.15 | - | 0.50 | - | 3.00 | - | - | - | - | ???? |
| | 1.2796 | PH 42 SUPRA | PH 42 SUPRA | - | - | - | - | 0.15 | - | 0.50 | - | 3.00 | - | - | - | - | Cu 1.00 / Al 1.00 |
| | 1.2790 | PH X FM | PH X FM | - | - | - | - | 0.05 | - | 1.30 | 11.00 | - | - | - | - | - | S 0.12 |
| | 1.2892 | PH X SUPRA | PH X SUPRA | - | - | - | - | 0.05 | - | - | 15.00 | - | 4.50 | - | - | - | ???? |
| Paslanmaz Çelikler | 1.4021 | 1.4021 | REMANIT 4021 | N 320 | - | SUS 420 | ~420 | 0.20 | 1.00 | 1.50 | 13.00 | - | - | - | - | - | - |
| | 1.4034 | 1.4034 | REMANIT 4034 | N 540 | - | - | - | 0.47 | 1.00 | 1.00 | 13.00 | - | - | - | - | - | - |
| | 1.4057 | 1.4057 | REMANIT 4057 | N 350 | - | SUS 431 | 431 | 0.17 | 1.00 | 1.50 | 16.50 | - | 2.00 | - | - | - | - |
| | 1.4122 | 1.4122 | REMANIT 4122 | N 335 | - | - | - | 0.45 | 1.00 | 1.50 | 17.00 | 1.00 | 1.00 | - | - | - | - |
| | 1.4301 | 1.4301 | REMANIT 4301 | A 500 | - | SUS 304 | 304 | 0.07 | 1.00 | 2.00 | 18.00 | - | 10.00 | - | - | - | - |
| | 1.4841 | 1.4841 | THERMAX 4841 | H 525 | - | SUH 310 | 314 | 0.10 | 2.00 | 0.70 | 25.00 | - | 20.00 | - | - | - | - |
| Yüksek Hız Çelikleri | 1.3343 | E M2 | THYRAPID 3343 | S 600 | UHB 29 | SKH 51 | M 2 | 0.90 | ≤0.45 | ≤0.40 | 4.20 | 5.00 | - | 1.80 | 6.40 | - | - |
| | 1.3343 | E M35 | THYRAPID 3243 | S 705 | UHB 424 | SKH 55 | M 41 | 0.90 | ≤0.45 | ≤0.40 | 4.20 | 5.00 | - | 1.80 | 6.40 | 4.80 | - |
| | 1.3247 | E M42 | THYRAPID 3247 | S 500 | - | SKH 59 | M 42 | 1.08 | ≤0.45 | ≤0.40 | 3.80 | 9.40 | - | 1.20 | 1.50 | 8.00 | - |
| | 1.3207 | WKE 42 | THYRAPID 3207 | S 700 | - | SKH 57 | - | 1.27 | ≤0.45 | ≤0.40 | 4.00 | 3.60 | - | 3.20 | 9.50 | 10.00 | - |
| Toz Metal Çelikleri | - | ASP 2005 | - | - | - | - | - | 1.50 | 0.30 | ≤0.40 | 4.00 | 2.50 | - | 4.00 | 2.50 | - | - |
| | - | - | - | - | VANADIS 4 | - | - | 1.50 | 1.00 | 0.40 | 8.00 | 1.50 | - | 4.00 | - | - | - |
| | - | - | - | - | VANADIS 6 | - | - | 2.10 | 1.00 | 0.40 | 6.80 | 1.50 | - | 5.40 | - | - | - |
| | - | - | - | - | VANADIS 10 | - | - | 2.90 | 1.00 | 0.50 | 8.00 | 1.50 | - | 9.80 | - | - | - |
| | - | ASP 2012 | - | - | - | - | - | 0.60 | 1.00 | 0.30 | 4.00 | 2.00 | - | 1.50 | 2.10 | - | - |
| | 1.3344 | ASP 2023 | - | S 607 | VANADIS 23 | SKH 53 | M 3:/2 | 1.28 | ≤0.45 | ≤0.40 | 4.10 | 5.00 | - | 3.10 | 6.40 | - | - |
| | - | ASP 2030 | - | - | VANADIS 30 | - | - | 1.28 | ≤0.45 | ≤0.40 | 4.20 | 5.00 | - | 3.10 | 6.40 | 8.50 | - |
| | - | ASP 2053 | - | - | - | - | - | 2.48 | ≤0.45 | ≤0.40 | 4.20 | 3.10 | - | 8.00 | 4.20 | - | - |
| | 1.3241 | ASP 2060 | - | - | VANADIS 60 | - | - | 2.30 | ≤0.45 | ≤0.40 | 4.20 | 7.00 | - | 6.50 | 6.50 | 10.50 | - |
| | - | ASP 2080 | - | - | - | - | - | 2.45 | ≤0.45 | ≤0.40 | 4.00 | 5.00 | - | 6.30 | 11.00 | 16.00 | S 0.23 |
| Nitrasyon Çelikleri | 1.8509 | - | NITRODUR 41 CrAlMo7 | V 800 | - | SACM 645 | G 71406 | 0.42 | 0.30 | 0.60 | 1.65 | 0.30 | - | - | - | - | Al 1.00 |
| | 1.8519 | - | NITRODUR 31 CrMoV9 | V 350 | - | - | - | 0.30 | 0.30 | 0.50 | 1.50 | 0.20 | - | 0.15 | - | - | - |
| | 1.8550/1.2891 | 1.8550 | NITRODUR 34 CrAlNi7 | V 820 | - | - | K 52440 | 0.35 | 0.30 | 0.50 | 1.70 | 0.20 | 1.00 | - | - | - | Al 1.00 |

| | Teslimat Şekli | Çalışma Sertliği | Genel Kullanım Yerleri |
|---|---|---|---|
| Sıcak İş Çelikleri | 750-800°C Yumuşatma tavlaması, max. 235 HB | 44-48 HRC | Hafif metallerin basınçlı döküm ve extrüzyon kalıpları ile sıcak dövme kalıplarında |
| | 750-800°C Yumuşatma tavlaması, max. 235 HB | 44-48 HRC | Hafif metallerin basınçlı döküm ve extrüzyon kalıpları ile sıcak dövme kalıplarında |
| | 750-800°C Yumuşatma tavlaması, max. 235 HB | 44-48 HRC | Ağır metallerin basınçlı döküm kalıp parçalarında dövme ve extrüzyon kalıplarında |
| | 730-820°C Yumuşatma tavlaması, max. 235 HB | 44-48 HRC | Dövme, extrüzyon kalıplarında ve uzun ömürlü olması istenen basınçlı döküm kalıplarında |
| | 760-820°C Yumuşatma tavlaması, max. 135 HB | 44-48 HRC | 1.2367 ve 1.2365 aynı yerlerde kullanılır. (Isıl iletkenliği 1.2365 ile aynı, 1.2367'ye göre daha düşüktür.) |
| | Ön sertleştirilmiş, 40-44 HRC | 40-44 HRC | Dövme işlemi için standart kalıp malzemesidir. (1.2714 çelin için 40-44 HRC sertlik geçerlidir.) |
| | Ön sertleştirilmiş, max. 210 HB | 180-210 HB | Cam üretim proseslerinde nozul/enjeksiyon parçalarında ve ağızlarda (1150°C'ye kadar oksid dayanımı) |
| | 710-850°C Yumuşatma tavlaması, max. 245 HB | 40-44 HRC | Cam üretim proseslerinde kalıp çekirdeği ve zımba olarak |
| | 740-780°C Yumuşatma tavlaması, max. 170 HB | 44-48 HRC | Uzun ömürlü olması istenen hafif metallerin extrüzyon, basınçlı döküm kalıplarında |
| | 750-800°C Yumuşatma tavlaması, max. 230 HB | 46-48 HRC | Yüksek hızlarda çalışan extrüzyon ve dövme kalıplarında, ağır metallerin sıcak şekillenmesinde |
| Soğuk İş Çelikleri | 710-750°C Yumuşatma tavlaması, max. 225 HB | 58-60 HRC | Torna tezgahları, raybalar, matkaplar, freze bıçakları, vida kalıplarında |
| | 800-840°C Yumuşatma tavlaması, max. 250 HB | 60-61 HRC | Ağır iş kesme ve zımba parçalarında, raybalarda ve zımbalarda |
| | 800-840°C Yumuşatma tavlaması, max. 240 HB | 60-61 HRC | Orta kalınlıktaki malzemeler için zımba ve kesim parçalarında, profil ve boru makaralarında |
| | 830-860°C Yumuşatma tavlaması, max. 250 HB | 60-61 HRC | Hassas kesme (<6 mm saclar) ve desenleme kalıplarında, raybalarda, soğuk zımbalarda profil ve boru makaralarında |
| | 800-840°C Yumuşatma tavlaması, max. 250 HB | 61-62 HRC | Ağır iş kesme (<6 mm saclar) ve zımba parçalarında, rayba, zımba ve broşlarda |
| | 710-750°C Yumuşatma tavlaması, max. 225 HB | 56-58 HRC | Kesiklerde, saçların kesim kalıplarında (>12 mm kalınlık) soğuk zımba ve soğuk makas bıçaklarında |
| | 610-650°C Yumuşatma tavlaması, max. 250 HB | 52-56 HRC | Soğuk şekil verme ve kafa şişirme kalıpları, çatal, kaşık ve makas bıçaklarında |
| | 610-650°C Yumuşatma tavlaması, max. 260 HB | 52-56 HRC | Kalın parçalar iin büyük kesme kalıplarında (>12 mm kalınlık) desenleme ve bükme kalıpları ile plastik kalıplarında |
| | 680-720°C Yumuşatma tavlaması, max. 220 HB | 60-61 HRC | Kesim ve zımba aletlerinde, raybalarda, broşlarda,makas bıçaklarında ve parlaklığın önemli olmadığı plastik kalıplarda |
| Plastik Kalıp Çelikleri | 680-710°C Yumuşatma tavlaması, max. 190 HB | 190 HB | Plastiklerin ve metallerin basınçlı döküm kaliplarında en dış tabakada kalıp hamili olarak |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Parlaklığın ön planda bulunmadığı ve işlenebilirliğin yüksek olması istenen plastik kalıplarında |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Parlaklığın ön planda bulunmadığı ve işlenebilirliğin yüksek olması istenen plastik kalıplarında |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Blok malzemelerde çekirdeğe kadar olan sertiliğini normal 1.2738 malzemesine göre çok daha iyi muhafaza eder |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Çekirdeğe kadar sertliğini muhafaza eden, parlaklığı ve işlenebilirliği iyi olan plastik kalıp çeliğidir |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Çekirdeğe kadar sertliğini muhafaza eden, parlaklığı ve işlenebilirliği iyi olan plastik kalıp çeliğidir |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Yüksek korozyon direnci, paslanmazlık ve parlaklık istenen plastik kalıplarında (PVC kalıpları için ideal) |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Yüksek korozyon direnci, paslanmazlık ve parlaklık istenen plastik kalıplarında (PVC kalıpları için ideal) |
| | Ön sertleştirilmiş, max. 280-325 HB | 33-35 HRC | Yüksek kükürt içeriği nedeni ile işlenebilirliği iyi ancak parlaklığı ve tokluğu düşük olan korozif plastik kalıp çeliğidir. |
| | 760-800°C Yumuşatma tavlaması, max. 225 HB | 52-54 HRC | Yüksek korozyon direnci ve paslanmazlığın yanı sıra yüksek sertlik ve yüksek parlaklık istenen kalıplarda |
| | 680-710°C Yumuşatma tavlaması, max. 215 HB | 50-52 HRC | Plastik kalıpları için aşınma dayanımı, tokluk, parlaklık ve yüksek düzey sertliği istenen kalıplarda |
| | Ön sertleştirilmiş, max. 40 HRC | 38-42 HRC | Özellikle plastik kalıplar, taban plakalar, plastik çerçeveler ve kalıp parçaları yapımında (1.2312 yerine) |
| | Ön sertleştirilmiş, max. 40 HRC | 38-42 HRC | Her türlü yüksek dayanım istenen plastik kalıp uygulamalarında pres ve plastik enjeksiyon kalıplarında (1.2738 yerine) |
| | Ön sertleştirilmiş, max. 35 HRC | 38-42 HRC | Plastik kalıp tabanlarında parlaklık istenmeyen ve soğutma suyunun gerekli olmadığı kalıplarda |
| | Ön sertleştirilmiş, max. 40 HRC | 38-42 HRC | Krozif plastik kalıplarında hava araçlarının parçalarında ve kimya endüstrisinde (1.2316 yerine) |
| Paslanmaz Çelikler | 730-780°C Yumuşatma tavlaması, max. 230 HB | 47 HRC | Piston çubukları pervane şaftlarının yapımında, pompa parçalarında |
| | 750-850°C Yumuşatma tavlaması, max. 210 HB | 52-54 HRC | Kesim makineleri, palet kalıpları, bıçak ve makasların yapımında |
| | 680-800°C Yumuşatma tavlaması, max. 280 HB | 240-325 HB | Kağıt makineleri pompalar valfler ve cam için pres kalıplarında |
| | 750-850°C Yumuşatma tavlaması, max. 280 HB | 220-280 HB | Civata, miller ve yüksek sıcaklık parçalarında |
| | Yaşlandırılmış, max. 210 HB | 210 HB | Gıda endüstirisindeki cihazlar için |
| | Ön sertleştirilmiş, max. 220 HB | 160-240 HB | Yüksek sıcaklıkta aşınma dayanımı ve sertlik gerektiren yerlerde |
| Yüksek Hız Çelikleri | 850-900°C Yumuşatma tavlaması, max. 260 HB | 62-65 HRC | Rayba, bıçak, delme, bükme ve kesmelerde |
| | 850-900°C Yumuşatma tavlaması, max. 270 HB | 62-66 HRC | Testere uçları, broşlar ve yüksek performanslı kesme işlerinde |
| | 850-900°C Yumuşatma tavlaması, max. 280 HB | 65-68 HRC | Broş, freze, matkap ve testere yapımında |
| | 850-900°C Yumuşatma tavlaması, max. 300 HB | 65-67 HRC | Delik açma, kesici takım, form verme tezgahlarında |
| Toz Metal Çelikleri | 850-900°C Yumuşatma tavlaması, max. 260 HB | 60-64 HRC | Yüksek tokluk gerektiren bütün soğuk iş uygulamalarında |
| | Max. 235 HB | 58-63 HRC | ASP 2005 ile kullanım alanları benzerdir. |
| | Max. 235 HB | 63-64 HRC | ASP 2023 ile kullanım alanları benzerdir. |
| | Max. 280-310 HB | 62-66 HRC | ASP 2053 ile kullanım alanları benzerdir. |
| | 850-900°C Yumuşatma tavlaması, max. 230 HB | 52-58 HRC | Büküm sıcak iş aletlerinde, makina ve madde parçaları ile uzun ömürlü olması istenen extrüzyon kalıplarında |
| | 850-900°C Yumuşatma tavlaması, max. 260 HB | 60-66 HRC | Extrüzyon kalıplarında, yüksek performanslı kesimlerde, soğuk iş uygulamalarında |
| | 850-900°C Yumuşatma tavlaması, max. 300 HB | 62-67 HRC | Freze, kesme ve yüksek performanslı işlem yerlerinde |
| | 850-900°C Yumuşatma tavlaması, max. 300 HB | 62-67 HRC | Aşınmasının çok olduğu soğuk çalışmalarda, tekstil bıçaklarında, ağaç ve kağıt kesme aparatlarında |
| | 850-900°C Yumuşatma tavlaması, max. 340 HB | 62-69 HRC | Sertlik gerektiren işlemlerde ve yüksek sıcaklıkta aşınma dayanımında |
| | 850-900°C Yumuşatma tavlaması, max. 380 HB | 69-70 HRC | Tüm freze takımlarında, kuru kesme ve sıcak sertliğin önemli olduğu uygulamalarda |
| Nitrasyon Çelikleri | Ön sertleştirilmiş, 800-1150 N/mm² | *60-68 HRC | 100 mm çaptan büyük parçalarda nitrasyon işlemlerinden sonra yüksek yüzey sertliği gerektiren imalatta |
| | Ön sertleştirilmiş, 800-1150 N/mm² | *52-54 HRC | 100 mm çaptan büyük parçalarda krank, valf, sıcak buhar armatürleri vb. imalatta |
| | Ön sertleştirilmiş, 800-1150 N/mm² | *60-68 HRC | Kovan, vida ve plastik extrüzyon makineleri yapımında (1.8509'dan daha homojen sertlik dağılımına vakıftır.) |

## Plastik Ürünlerin Enjeksiyon Kalıplarındaki Çekme Payları

| Kalıp Çekmesi | Ticari İsim | Hammadde |
|---|---|---|
| 0.4 - 0.7 | Magnum, Polylac, Terluron | ABS |
| 1.5 - 2.5 | Freenflex, Evathone | EVA |
| 0.8 - 1.2 | Dilamid, Specialamid | PA6 |
| 0.2 - 0.9 | Dilamid, Specialamid, Luxamid, Econyl | %30 CE PA6 |
| 1.2 - 1.5 | Zytel | PA 66 |
| 0.3 - 1.0 | Zytel, Dilamid | %30 CE PA6 |
| 1.5 - 1.8 | Crastin | PBT |
| 0.3 - 1.0 | Crastin | %30 CE PA6 |
| 0.6 - 0.8 | Callbre | PC |
| 0.3 - 1.0 | Rynite | %30 CE PA6 |
| 0.3 - 0.8 | Acryrex | PMMA |

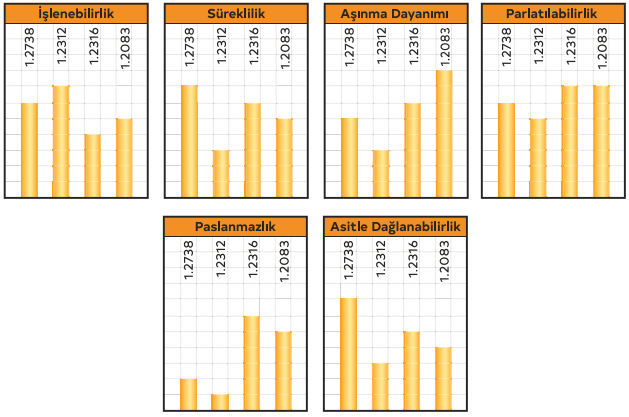
| Kalıp Çekmesi | Ticari İsim | Hammadde |
|---|---|---|
| 1.8 - 2.1 | Delrin, Resital | POM |
| 1.5 - 2.2 | Ads'if | PP |
| 1.3 - 1.8 | Moblen, Appryl | PP |
| 0.3 - 0.6 | Styron, Baceron | PS |
| 0.2 - 0.3 | Questa | SPS |
| 0.5 - 0.7 | Tyri | SAN |
| 0.5 - 0.6 | K - Resin | SB |
| 0.4 - 1.3 | Hytrel 35-50 D | TEEE |
| 0.5 - 2.2 | Hytrel 50-85 D | TEEE |
| 0.8 - 1.0 | Pearithane, Pellcthane, Laripu | TPU |

## Muhtelif Malzemeler Teknik Terimleri ve Özgül Ağırlıkları

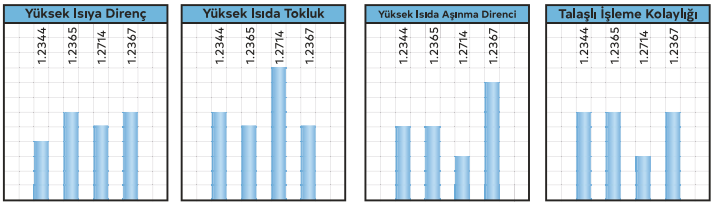
| Malzeme | Simgesi | Özgül Ağırlığı |
|---|---|---|
| Alüminyum | AL | 2.7 |
| Amerikyum | Am | 13.6 |
| Antimon | Sb | 6.697 |
| Argon | Ar | 0.001784 g/ml |
| Arsenik | As | 5.75 |
| Altın | Au | 18.3 |
| Azot | N | 0.0012506 g/ml |
| Bakır | Cu | 8.9 |
| Baryum | Ba | 3.51 |
| Berilyum | Be | 3.5 |
| Brom | Br | 3.129 g/ml |
| Bronz (Kızıl) | - | 8.9 |
| Bor | B | 2.5 |
| Bizmut | Bi | 9.8 |
| Civa Çeliği | - | 7.8 |
| Civa | Hg | 13.6 |
| Çinko | Zn | 7.1 |
| Demir | Fe | 7.85 |
| Delrin | POM | 1.42 |
| Fiber | - | 1.45 |
| Flüor | F | 0.001696 g/ml |
| Fosfor | P | 1.823 g/ml |
| Gümüş | Ag | 10.5 |
| Hidrojen | H | 0.0899 kg/ m3 |
| Helyum | He | 0.0001636 g/ml |
| İridyum | Ir | 22.42 |
| İyot | I | 4.940 g/ml |
| Katmiyum | Cd | 8.37 |
| Kalay | Sn | 7.3 |
| Kalsiyum | Ca | 11.3 |
| Karbon | C | 2.267 g/ml |
| Cast Polymid | - | 1.14 |
| Klor | Cl | 0.003214 g/ml |

| Malzeme | Simgesi | Özgül Ağırlığı |
|---|---|---|
| Kobalt | Co | 8.9 |
| Kripton | Kr | 0.003708 g/ml |
| Ksenon | Xe | 0.00588 g/ml |
| Kurşun | Pb | 11.3 |
| Kükürt | S | 2.07 g/ml |
| Lantan | La | 6.146 |
| Lityum | Li | 0.535 g/ml |
| Magnezyum | Mg | 1.74 |
| Mangan | Mn | 7.470 g/ml |
| Moblen | Mo | 9.6 |
| Neon | Ne | 0.0008999 g/ml |
| Nikel | Ni | 8.9 |
| Oksijen | O | 0.00142895 g/ml |
| Krom (Paslanmaz) | Cr | 8 |
| Pirinç (Sarı) | - | 8.5 |
| Platin | Pt | 21.4 |
| Polyamit | - | 1.135 |
| Polietilen | - | 1 |
| Polipropilen | - | 0.95 |
| Potasyum | K | 0.856 g/ml |
| Pvc | - | 1.5 |
| Radyum | Ra | 5 g/ml |
| Rodyum | Rh | 12.45 g/ml |
| Selenyum | Se | 4.819 g/ml |
| Silisyum | Si | 2.33 g/ml |
| Sodyum | Na | 0.968 g/ml |
| Teflon | - | 2.1 |
| Titanyum | Ti | 21.3 |
| Tungsten | W | 19.25 g/ml |
| Uranyum | U | 19.05 g/ml |
| Vanadium | V | 6.11 g/ml |
| Vulkollan | - | 1.22 |
| Zirkonyum | Zr | 6.511 g/ml |

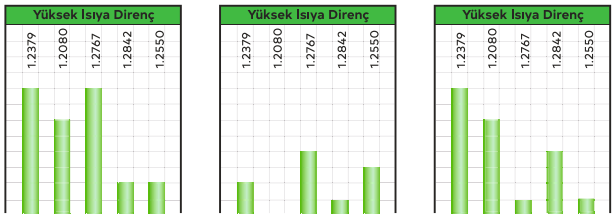
## Plastik Kalıp Çeliklerinin Karşılaştırma Tablosu




## Sıcak İş Takımı Çeliklerinin Karşılaştırma Tablosu




## Soğuk İş Takımı Çeliklerinin Karşılaştırma Tablosu



| Anma Ölçüsü d (mm) | Yuvarlak  | Kare  | Altıköşe  |
|---|---|---|---|
| 0.5 | 0.0015 | 0.0019 | 0.0017 |
| 1.0 | 0.006 | 0.0078 | 0.006 |
| 1.5 | 0.014 | 0.017 | 0.015 |
| 2.0 | 0.025 | 0.031 | 0.027 |
| 2.5 | 0.038 | 0.049 | 0.043 |
| 3.0 | 0.055 | 0.071 | 0.061 |
| 3.5 | 0.075 | 0.096 | 0.083 |
| 4.0 | 0.098 | 0.126 | 0.109 |
| 4.5 | 0.125 | 0.159 | 0.138 |
| 5.0 | 0.154 | 0.196 | 0.170 |
| 5.5 | 0.187 | 0.236 | 0.205 |
| 6.0 | 0.222 | 0.330 | 0.245 |
| 6.5 | 0.260 | 0.385 | 0.287 |
| 7.0 | 0.302 | 0.439 | 0.333 |
| 7.5 | 0.347 | 0.502 | 0.382 |
| 8.0 | 0.395 | 0.564 | 0.435 |
| 8.5 | 0.445 | 0.636 | 0.491 |
| 9.0 | 0.499 | 0.704 | 0.551 |
| 9.5 | 0.556 | 0.785 | 0.613 |
| 10.0 | 0.617 | 0.870 | 0.680 |
| 10.5 | 0.680 | 0.950 | 0.750 |
| 11.0 | 0.746 | 1.032 | 0.823 |
| 11.5 | 0.815 | 1.130 | 0.899 |
| 12.0 | 0.888 | 1.219 | 0.979 |
| 12.5 | 0.963 | 1.327 | 1.062 |
| 13.0 | 1.042 | 1.422 | 1.149 |
| 13.5 | 1.124 | 1.742 | 1.239 |
| 14.0 | 1.208 | 1.539 | 1.332 |
| 14.5 | 1.296 | 1.640 | 1.429 |
| 15.0 | 1.387 | 1.766 | 1.530 |
| 15.5 | 1.481 | 1.886 | 1.633 |
| 16.0 | 1.578 | 2.010 | 1.740 |
| 16.5 | 1.679 | 2.137 | 1.851 |
| 17.0 | 1.782 | 2.269 | 1.965 |

| Anma Ölçüsü d (mm) | Yuvarlak  | Kare  | Altıköşe  |
|---|---|---|---|
| 17.5 | 1.888 | 2.404 | 20.82 |
| 18.0 | 1.988 | 2.543 | 2.203 |
| 18.5 | 2.110 | 2.687 | 2.326 |
| 19.0 | 2.226 | 2.834 | 2.454 |
| 19.5 | 2.344 | 2.985 | 2.585 |
| 20.0 | 2.466 | 3.140 | 2.719 |
| 20.5 | 2.591 | 3.299 | 2.854 |
| 21.0 | 2.719 | 3.462 | 2.988 |
| 21.5 | 2.850 | 3.629 | 3.142 |
| 22.0 | 2.984 | 3.799 | 3.290 |
| 22.5 | 3.121 | 3.974 | 3.442 |
| 23.0 | 3.262 | 4.153 | 3.596 |
| 23.5 | 3.405 | 4.335 | 3.754 |
| 24.0 | 3.551 | 4.522 | 3.916 |
| 24.5 | 3.701 | 4.712 | 4.081 |
| 25.0 | 3.853 | 4.906 | 4.249 |
| 25.5 | 4.009 | 5.104 | 4.421 |
| 26.0 | 4.168 | 5.307 | 4.596 |
| 26.5 | 4.330 | 5.513 | 4.4774 |
| 27.0 | 4.495 | 5.723 | 4.956 |
| 27.5 | 4.662 | 5.936 | 5.140 |
| 28.0 | 4.834 | 6.154 | 5.330 |
| 28.5 | 5.008 | 6.376 | 5.522 |
| 29.0 | 5.185 | 6.602 | 5.717 |
| 29.5 | 5.365 | 6.831 | 5.916 |
| 30.0 | 5.549 | 7.065 | 6.118 |
| 30.5 | 5.735 | 7.302 | 6.324 |
| 31.0 | 5.925 | 7.544 | 6.533 |
| 31.5 | 6.117 | 7.789 | 6.746 |
| 32.0 | 6.313 | 8.038 | 6.991 |
| 32.5 | 6.512 | 8.291 | 7.181 |
| 33.0 | 6.714 | 8.549 | 7.403 |
| 33.5 | 6.919 | 8.810 | 7.629 |

| Anma Ölçüsü d (mm) | Yuvarlak  | Kare  | Altıköşe  |
|---|---|---|---|
| 34.0 | 7.127 | 9.075 | 7.859 |
| 34.5 | 7.338 | 9.343 | 8.092 |
| 35.0 | 7.550 | 9.616 | 8.328 |
| 35.5 | 7.770 | 9.893 | 8.568 |
| 36.0 | 7.990 | 10.174 | 8.811 |
| 36.5 | 8.214 | 10.458 | 9.057 |
| 37.0 | 8.440 | 10.747 | 9.307 |
| 37.5 | 8.670 | 11.039 | 9.560 |
| 38.0 | 8.903 | 11.335 | 9.817 |
| 38.5 | 9.139 | 11.639 | 10.077 |
| 39.0 | 9.377 | 11.940 | 10.340 |
| 39.5 | 9.620 | 12.248 | 10.607 |
| 40.0 | 9.855 | 12.560 | 10.877 |
| 40.5 | 10.113 | 12.876 | 11.151 |
| 41.0 | 10.364 | 13.196 | 11.428 |
| 41.5 | 10.610 | 13.520 | 11.708 |
| 42.0 | 10.876 | 13.847 | 11.992 |
| 42.5 | 11.136 | 14.179 | 12.279 |
| 43.0 | 11.400 | 14.515 | 12.570 |
| 43.5 | 11.666 | 14.854 | 12.864 |
| 44.0 | 11.936 | 15.198 | 13.162 |
| 44.5 | 12.209 | 15.545 | 13.462 |
| 45.0 | 12.485 | 15.896 | 13.766 |
| 45.5 | 12.746 | 16.251 | 14.074 |
| 46.0 | 13.046 | 16.611 | 14.385 |
| 46.5 | 13.331 | 16.974 | 14.700 |
| 47.0 | 13.619 | 17.341 | 15.017 |
| 47.5 | 13.910 | 17.712 | 15.319 |
| 48.0 | 14.205 | 18.086 | 15.663 |
| 48.5 | 14.502 | 18.465 | 15.991 |
| 49.0 | 14.803 | 18.848 | 16.323 |
| 49.5 | 15.107 | 19.234 | 16.657 |
| 50.0 | 15.413 | 19.625 | 16.995 |

| Çekme Mukavemeti Rm | Brinell Sertliği İz Çapı | | Vickers Sertliği | Rockwell Sertliği | | |
|---|---|---|---|---|---|---|
| N / mm² | d | HB | HV | HRB | HRC | HR 30 N |
| 265 | 6.63 | 76.0 | 80 | - | - | - |
| 270 | 6.45 | 80.7 | 85 | 41.0 | - | - |
| 285 | 6.30 | 85.5 | 90 | 48.0 | - | - |
| 305 | 6.16 | 90.2 | 95 | 52.0 | - | - |
| 320 | 6.01 | 95.0 | 100 | 56.2 | - | - |
| 335 | 5.90 | 98.8 | 105 | - | - | - |
| 350 | 5.75 | 105 | 110 | 62.3 | - | - |
| 370 | 5.65 | 109 | 115 | - | - | - |
| 385 | 5.54 | 114 | 120 | 66.7 | - | - |
| 400 | 5.43 | 119 | 125 | - | - | - |
| 415 | 5.33 | 124 | 130 | 71.2 | - | - |
| 430 | 5.26 | 128 | 135 | - | - | - |
| 450 | 5.16 | 133 | 140 | 75.0 | - | - |
| 465 | 5.08 | 138 | 145 | - | - | - |
| 480 | 4.99 | 143 | 150 | 78.7 | - | - |
| 495 | 4.93 | 147 | 155 | - | - | - |
| 510 | 4.85 | 152 | 160 | 81.7 | - | - |
| 530 | 4.79 | 156 | 165 | - | - | - |
| 545 | 4.71 | 162 | 170 | 85.0 | - | - |
| 560 | 4.66 | 166 | 175 | - | - | - |
| 575 | 4.59 | 171 | 180 | 87.1 | - | - |
| 595 | 4.43 | 176 | 185 | - | - | - |
| 610 | 4.47 | 181 | 190 | 89.5 | - | - |
| 625 | 4.43 | 185 | 195 | - | - | - |
| 640 | 4.37 | 190 | 200 | 91.5 | - | - |
| 660 | 4.32 | 195 | 205 | 92.5 | - | - |
| 675 | 4.27 | 199 | 210 | 93.5 | - | - |
| 690 | 4.22 | 204 | 215 | 94.0 | - | - |
| 705 | 4.18 | 209 | 220 | 95.0 | - | - |
| 720 | 4.13 | 214 | 225 | 96.0 | - | - |
| 740 | 4.08 | 219 | 230 | 96.7 | - | - |
| 755 | 4.05 | 223 | 235 | - | - | - |
| 770 | 4.01 | 228 | 240 | 98.1 | 20.3 | 41.7 |
| 785 | 3.97 | 233 | 245 | - | 21.3 | 52.5 |
| 800 | 3.92 | 238 | 250 | 99.5 | 22.2 | 43.4 |
| 820 | 3.89 | 242 | 255 | - | 23.1 | 44.2 |
| 835 | 3.86 | 247 | 260 | 101 | 24.0 | 45.0 |
| 850 | 3.82 | 252 | 265 | - | 27.8 | 45.7 |
| 865 | 3.78 | 257 | 270 | 102 | 25.6 | 46.4 |
| 880 | 3.75 | 261 | 275 | - | 26.4 | 47.2 |
| 900 | 3.72 | 266 | 280 | 104 | 27.1 | 47.8 |
| 915 | 3.69 | 271 | 285 | - | 27.8 | 48.4 |
| 930 | 3.66 | 276 | 290 | 105 | 28.5 | 49.0 |
| 950 | 3.63 | 280 | 295 | - | 29.2 | 49.7 |
| 965 | 3.60 | 285 | 300 | - | 29.8 | 50.2 |
| 995 | 3.54 | 295 | 310 | - | 31.0 | 51.3 |
| 1030 | 3.49 | 304 | 320 | - | 32.2 | 52.3 |
| 1060 | 3.43 | 314 | 330 | - | 33.3 | 53.6 |

| Çekme Mukavemeti Rm | Brinell Sertliği İz Çapı | | Vickers Sertliği | Rockwell Sertliği | | |
|---|---|---|---|---|---|---|
| N / mm² | d | HB | HV | HRB | HRC | HR 30 N |
| 1095 | 3.39 | 323 | 340 | - | 34.4 | 54.4 |
| 1125 | 3.34 | 333 | 350 | - | 35.5 | 55.4 |
| 1155 | 3.29 | 342 | 360 | - | 36.6 | 56.4 |
| 1220 | 3.21 | 361 | 380 | - | 38.8 | 58.4 |
| 1225 | 3.17 | 371 | 390 | - | 39.8 | 59.3 |
| 1290 | 3.13 | 380 | 400 | - | 40.8 | 60.2 |
| 1320 | 3.09 | 390 | 410 | - | 42.7 | 61.9 |
| 1385 | 3.02 | 409 | 430 | - | 43.6 | 62.7 |
| 1420 | 2.99 | 418 | 440 | - | 44.5 | 63.5 |
| 1455 | 2.95 | 428 | 450 | - | 45.3 | 64.3 |
| 1485 | 2.92 | 437 | 460 | - | 46.1 | 64.9 |
| 1520 | 2.89 | 447 | 470 | - | 46.9 | 65.7 |
| 1555 | 2.86 | 456 | 480 | - | 47.7 | 66.4 |
| 1595 | 2.83 | 466 | 490 | - | 48.4 | 67.7 |
| 1630 | 2.81 | 475 | 500 | - | 49.1 | 67.7 |
| 1665 | 2.78 | 485 | 510 | - | 49.8 | 68.3 |
| 1700 | 2.75 | 494 | 520 | - | 50.5 | 69.0 |
| 1740 | 2.73 | 504 | 530 | - | 51.1 | 69.5 |
| 1775 | 2.70 | 513 | 540 | - | 51.7 | 70.0 |
| 1810 | 2.68 | 523 | 550 | - | 52.3 | 70.5 |
| 1845 | 2.66 | 532 | 560 | - | 53.0 | 71.2 |
| 1880 | 2.63 | 542 | 570 | - | 53.6 | 71.7 |
| 1920 | 2.60 | 551 | 580 | - | 54.1 | 72.1 |
| 1955 | 2.59 | 561 | 590 | - | 54.7 | 72.7 |
| 1955 | 2.59 | 570 | 600 | - | 55.2 | 73.2 |
| 2030 | 2.54 | 580 | 620 | - | 56.3 | 74.2 |
| 2070 | 2.52 | 589 | 620 | - | 56.3 | 74.2 |
| 2105 | 2.51 | 599 | 630 | - | 56.8 | 74.6 |
| 2145 | 2.49 | 608 | 640 | - | 57.3 | 75.1 |
| 2180 | 2.47 | 618 | 650 | - | 57.8 | 75.5 |
| 2180 | - | - | 660 | - | 58.3 | 75.9 |
| - | - | - | 670 | - | 58.8 | 76.4 |
| - | - | - | 680 | - | 59.2 | 76.8 |
| - | - | - | 690 | - | 59.7 | 77.2 |
| - | - | - | 700 | - | 60.1 | 77.6 |
| - | - | - | 720 | - | 61.0 | 78.4 |
| - | - | - | 740 | - | 61.8 | 79.1 |
| - | - | - | 760 | - | 62.5 | 79.7 |
| - | - | - | 780 | - | 63.3 | 80.4 |
| - | - | - | 800 | - | 64.0 | 81.1 |
| - | - | - | 820 | - | 64.7 | 81.7 |
| - | - | - | 840 | - | 65.3 | 82.2 |
| - | - | - | 860 | - | 65.9 | 82.7 |
| - | - | - | 880 | - | 66.4 | 83.1 |
| - | - | - | 900 | - | 67.0 | 83.6 |
| - | - | - | 920 | - | 67.5 | 84.0 |
| - | - | - | 940 | - | 68.0 | 84.4 |

# YP MÜHENDİSLİK

Kalıp Ekipmanları ve Kesici Takımlar

## ÇÖZÜM ORTAKLARIMIZ

| | | | | |
|---|---|---|---|---|
| DENG TOOLS<br>ELMAS UÇLAR | SPEED TIGER<br>KARBÜR FREZELER | VERTEX<br>MAKİNA AKSESUARLARI | JBT<br>KALIP ELEMANLARI | SFE<br>KALIP ELEMANLARI |
| BORIDE<br>GAZ TAŞLARI | Besdia<br>PARLATMA ÜRÜNLERİ | CERATON<br>SERAMİK GAZ TAŞLARI | SDP<br>ELMAS PASTALAR | Mitutoyo<br>ÖLÇÜ ALETLERİ |
| INSIZE<br>ÖLÇÜ ALETLERİ | VÖLKEL<br>KESİCİ TAKIMLAR | ebs<br>SOĞUTMA SİSTEMLERİ | Sapower<br>HAVALI ALETLER | TEKNİK<br>TAKIM TUTUCULAR |
| GSP HIGH TECH SAWS<br>DAİRE TESTERELER | ER-EL<br>BAĞLAMA EKİPMANLARI | MAKİNA TAKIM<br>KESİCİ TAKIMLAR | HAAF<br>KALIP ELEMANLARI | Gas Springs VİRA<br>GAZLI YAYLAR |
| DELTA<br>KALIP ELEMANLARI | KOCEL<br>ÜNİVERSAL TK. DOLAPLARI | DEĞERLİ<br>TAKIM TUTUCULAR | Karbosan<br>KESİCİ VE AŞINDIRICI TAŞLAR | Beta<br>EL ALETLERİ |
| IZELTAS<br>EL ALETLERİ | TOS SVITAVY<br>TORNA AYNALARI | ÇİZMAK<br>BAĞLANTI ELEMANLARI | BAHCO<br>ATÖLYE EKİPMANLARI | BÖHLER<br>ÇELİK SANAYİ |
| AK-İŞ<br>YEDEK PARÇALAR | Tornum<br>YEDEK PARÇALAR | WINKEL<br>ENDÜSTRİYEL SPREYLER | WURTH<br>ENDÜSTRİYEL SPREYLER | Hi-paş PLASTİK<br>ATÖLYE EKİPMANLARI |
| ATLAS ZIMPARA<br>ZIMPARALAR | P·S·E<br>KALIP YAYLARI | mekap<br>İŞ AYAKKABILARI | BEST<br>ENDÜSTRİYEL SPREYLER | Member IMC Group ISCAR<br>ELMAS UÇLAR |

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