BANKA BİLGİLERİMİZ

GARANTİ BANKASI
Topçular Şubesi **Şube Kodu :** 311 **Hesap No :** 6295513
IBAN : TR55 0006 2000 3110 0006 2955 13
ALBARAKA TÜRK
Bayrampaşa Şubesi **Şube Kodu :** 13 **Hesap No :** 01673380 - 1
IBAN : TR97 0020 3000 0167 3380 0000 01

SATIŞINI YAPTIĞIMIZ MARKALAR

P·S·E KALIP YAYLARI	SPEED TIGER KARBÜR FREZELER	VERTEX MAKİNA AKSESUARLARI	JBT KALIP ELEMANLARI	EFE KALIP ELEMANLARI
BORIDE GAZ TAŞLARI	BEST PARLATMA ÜRÜNLERİ	CERATON® SERAMİK GAZ TAŞLARI	SDP ELMAS PASTALAR	Mitutoyo ÖLÇÜ ALETLERİ
INSIZE ÖLÇÜ ALETLERİ	BOSCH EL ALETLERİ	ebs® SOĞUTMA SİSTEMLERİ	Sappower pneumatic tools HAVALI ALETLER	TEKNİK TAKIM TUTUCULAR
GSP HIGH TECH SAWS DAİRE TESTERELER	VÖLKEL KESİCİ TAKIMLAR	MAKİNA TAKIM KESİCİ TAKIMLAR	CUMSA STANDART KALIP ELEMANLARI	Gas Springs VİRA® GAZLI YAYLAR
DELTA® KALIP ELEMANLARI	ER-EL® BAĞLAMA EKİPMANLARI	DEĞERLİ® TAKIM TUTUCULAR	Karbosan KESİCİ ve AŞINDIRICI TAŞLAR	Beta EL ALETLERİ
IZELTAS® EL ALETLERİ	KOCEL ÇELİK EŞYA SAN. TİC. LTD. ŞTİ ÜNİVERSAL TAKIM DOLAPLARI	KANCA DÖVME ÇELİK EL ALETLERİ www.kanca.com.tr EL ALETLERİ	ESERSAN TEZGAH TAMPONLARI	BÖHLER ÇELİK SANAYİ
AK-İŞ YEDEK PARÇALAR	TOE SVITAVY TORNA AYNALARI	MÇİZMAK BAĞLANTI ELEMANLARI	BAHCO ATÖLYE EKİPMANLARI	Hi-paş PLASTİK ATÖLYE EKİPMANLARI
ATLAS ZIMPARA ZIMPARALAR	YEDEK PARÇALAR	YOKE MAPALAR	UZUNER MENGENELER	mekap İŞ AYAKKABILARI
 ELMAS UÇLAR	LAMINA TECHNOLOGIES ELMAS UÇLAR	WINKEL® ENDÜSTRİYEL SPREYLER	WURTH® ENDÜSTRİYEL SPREYLER	BEST ENDÜSTRİYEL SPREYLER
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HAKSAN KALIP ELEMANLARI siz değerli sanayicilerimizden aldığı destek, katkı ve güç ile yoluna hızla devam etmektedir. Şirketimizin öncelikli ilkesi kaliteli ürünü, en cazip fiyatlar ile hızlı şekilde son kullanıcıya ulaştırmaktır.

Kuruluşundan günümüze HAKSAN KALIP ELEMANLARI şirket yapısını kurumsallaştırmaya yönlendirmiş müşteri odaklı bir felsefe benimsemiştir. Distribütörlüğünü yaptığı markalar ile ilgili kararlarında seçkinliği hedef alan şirketimiz, müşteri memnuniyetini esas alan, çağın dinamiklerine paralel ürün ve pazarlama konsepti oluşturan Dünyaca tanınmış markaların Türk sanayisine sunumunu ilke edinmiştir.

HAKSAN KALIP ELEMANLARI model, teknik, kalite, özellik ve saygınlık taşıyan markaların distribütörlüğünü, tüketici beklenti ve ihtiyaçlarına göre kendini yenileyebilmesi, kalitesinden taviz vermeyen hizmet anlayışı, çağdaş profesyonel yönetimi ile Türk sanayisi tedarikçileri arasında lider konumunda aranan isim olmuştur.

Bu vesile ile kuruluşumuzdan günümüze yanımızda olan değerli müşterilerimize teşekkürü bir borç bilir, işlerinizde kolaylıklar, bereketli kazançlar dileriz.

1972'den Günümüze

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YEŞİL RENK
KALIP YAYLARI



MAVİ RENK
KALIP YAYLARI



KIRMIZI RENK
KALIP YAYLARI



SARI RENK
KALIP YAYLARI



POLİÜRETAN
YAYLAR



YAY AYAR CİVATASI
BİLYALI SETSKUR



PLASTİK ÇEKTİRME
DAYAMA PLAKASI



GAZLI YAYLAR
(VİRA)



HSS
ZIMBA



HSS ÖZEL FORMLU
ZIMBALAR



HAVŞA BAŞLI İTİCİ



PLASTİK ENJ.
SİLİNDİR BAŞLI İTİCİ



METAL ENJ.
SİLİNDİR BAŞLI İTİCİ



LAMA İTİCİ PİM
KADEMELİ İTİCİ PİM



PLASTİK ve METAL
ENJ. BORU İTİCİ PİM



PLS. ve METAL ENJ.
YOLLUK MEMELERİ



MERKEZLEME
BLOKLARI



DÜZ ve ÇEKTİRMELİ
TESPİT PİMLERİ



ÇEKTİRMELİ
PİM ÇIKARICI



KALIP
TAKVİMLERİ



HAVALI
VALFLER



CİVATALAR



CİVA
ÇELİĞİ



ISI YALITIM PLAKASI
MODÜLER TUTUCU



KABLO TUTUCU
KAPAĞI



GAZ ATMA FİLTRELERİ



MAPALAR



MUZ YOLLUK SİSTEMLERİ



PLASTİK KALIBI STANDART ÜRÜNLER



MAÇA KIZAK TUTUCULAR



ENJEKSİYON KALIP SETLERİ



KESME KALIP SETLERİ



HORTUM GİRİŞLİ REKORLAR



SEPARATÖRLER



TIKAÇLAR



PLASTİK SEPARATÖRLER



OTOMATİK GİRİŞLİ REKORLAR



590 SERİSİ GÖVDE (SU)



560 SERİSİ GÖVDE (SU)



A26 SERİSİ (HAVA)



UZATMA REKOR



OTOM. İTİCİ PLAKA BAĞLANTI SİSTEMİ



600 SERİSİ REKORLAR



PNÖMATİK REKORLAR



REDÜKSİYONLAR



SİRKÜLASYON REGÜLATÖRÜ



KOLON - BURÇ ÜRÜNLERİ



ŞAPKALI KADEMELİ KOLON



ŞAPKALI BURÇ



KUYRUKLU ŞAPKALI KADEMELİ KOLON



KUYRUKLU ŞAPKALI BURÇ (HASCO)



TESPİT BURCU (HASCO)



ORTADAN FLANŞLI BURÇ



BİLYALI BURÇ TAKIM



ŞAPKALI KOLON (HASCO)



YAĞ KANALSIZ KOLON



KONİK KİTLEME



KUYRUKLU ŞAPKALI BURÇ (YERLİ)



TESPİT BURCU (YERLİ)



ŞAPKALI KOLON (YERLİ)



KUYRUKLU ŞAPKALI KADEMELİ KOLON (YERLİ)



PİM YATAĞI (YERLİ)



BAĞLAMA PABUCU



SAÇ KALIBI ÜRÜNLERİ



ORTADAN ŞAPKALI KOLON



ARKASI KALIN KOLON



ORTADAN ŞAPKALI BURÇ



ÜSTTEN ŞAPKALI BURÇ



BRONZLU BURÇ



BRONZLU BURÇ



SİNTERLİ BURÇ



SİNTERLİ BURÇ



KISA BİLYALI BURÇ



ŞAPKALI BİLYALI BURÇ



SARI BİLYALI KAFES BURÇ



LİNEER
BURÇ



GRAFİTLİ
BURÇ



GRAFİTLİ SÜRTÜNME
PLAKASI



ÇELİK SÜRTÜNME
PLAKASI



DÜZ
KAM



DÖKÜM
SET



TAŞIMA
MİLİ



EMNİYET
PİMİ



KOLON TUTUCU
FLANŞ



TUTUCU
HALKA



STOPLAMA
BLOĞU



BURÇ
TUTUCU FLANŞ



STOPLAMA
BLOĞU



HAVALANDIRMA
PİMİ



STOPLAMA
BLOĞU



HAVALANDIRMA
PİMİ



FRENLEYİCİ



TAŞIMA
MİLİ



EMNİYET
PİMİ



EMNİYET
PİMİ



MERKEZLEME
PİMİ



KONİK
MERKEZLEME



KONİK
MERKEZLEME



KONİK
MERKEZLEME



ÇELİK SÜRTÜNME
PLAKASI



ÇELİK SÜRTÜNME PLAKASI



KAMA



STOPLAMA BLOĞU



KAMA



GAZLI YAYLAR (DELTA)



KALIP BAĞLANTI ELEMANLARI



"T" PABUÇLAR



SOMUN & PULLAR



"T" AYAKLI SAPLAMA



DÜZ SAPLAMA ANAHTAR AĞIZLI SAPLAMA



DÜZ PABUÇ



ÇATAL PABUÇ



ÇEŞİTLİ PABUÇLAR



ÇİFT TARAFLI BAĞLAMA PABUCU



KADEMELİ BAĞLAMA PABUCU



ŞAPKALI YÜKSELTİCİ



OYNAR BAŞLI BASKI PABUCU



5 EKSEN BLOK BAĞLAMA ÇEKTİRME CİVATASI



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PABUÇ KALDIRMA CİVATASI



TRAPEZ DİŞ YÜKSELTİCİ DESTEK



PNÖMATİK DÖNMELİ BAĞLAMA



PNÖMATİK DÖNMELİ BAĞLAMA



PNÖMATİK ÜSTTEN BAĞLAMA



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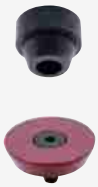
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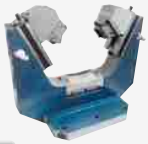
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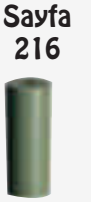
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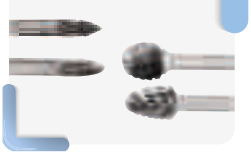
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ELMAS
EĞELER



EĞELER



ZIMPARA
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KESME ve
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DIAMOND
TAŞ



TAŞLAMA
TAŞLARI



EĞELEMELER



BALKAN
MOTOR



HAVALI
ALETLER



HAVALI
ALETLER



ÖLÇÜ
ALETLERİ



KUMPASLAR



MİHENGİRLER



MİKROMETRELER



SALGI SAATİ
KOMPRATÖR SAATİ



SİLİNDİR
KOMPRATÖRÜ



GÖNYELER



MASTARLAR



ÇELİK
LAYNER BANT



MANYETİK
'V' BLOK



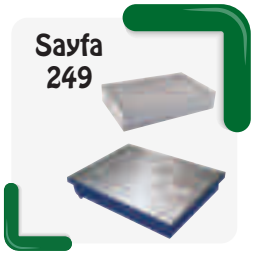
JOHNSON
MASTAR SETİ



3D
TESTER



SAYAÇLAR



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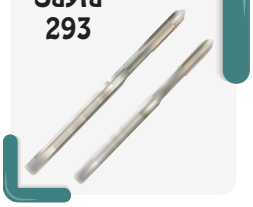
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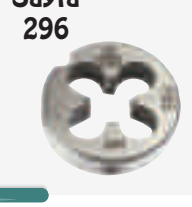
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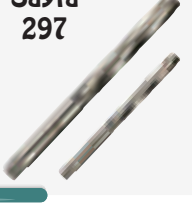
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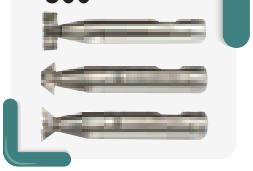
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İÇ ve DIŞ
PASO KATERLERİ



UDRİLL
MATKAPLAR



KANAL AÇMA
KESME KATERLERİ



YEDEK
PARÇALAR



HSS DAİRE
TESTERELER



TEZGAH
AKSESUARLARI



MANYETİK
TABLALAR



MANYETİK
TABLALAR



MANYETİK
ALICILAR



UNİVERSAL
AÇILI TABLA



'Z' SIFIRLAMA



DERECELİ MANYETİK
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HASSAS TEZGAH
MENGENELERİ



AÇILI TEZGAH
MENGENELERI



PNÖMATIK HASSAS
CNC MENGENESI



HIDROLIK TEZGAH
MENGENESI



PIMLI HASSAS
TAŞLANMIŞ
MENGENELER



VIDALI HASSAS
TAŞLANMIŞ
MENGENELER



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BS TIP ÜNIVERSAL
DIVIZÖRLER



YATAY DIKEY
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PROPLAR



IŞIKLI ve SESLİ
PROPLAR



MANYETİK
SEPERATÖRLER



TEZGA LAMBALARI



MANYETİK AYAKLAR



ÜNİVERSAL FREZE BAŞLIKLARI TEZGAH GÖNYESİ



MANYETIK 'V' BLOKLAR



TAŞLANMIŞ PARALEL SETLER



U2 ÜNİVERSAL BİLEME MAKİNASI



DİJİTAL OKUMA SİSTEMİ



FORM VERME APARATLARI



EKSEN MOTORU



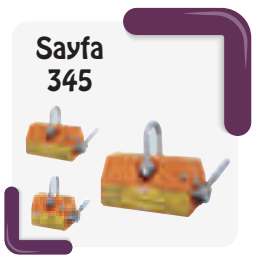
PİM KESME MAKİNALARI



PAH KIRMA MAKİNALARI



PAH KIRMA MAKİNALARI



MANYETİK KALDIRAÇLAR



FREZE MENGENELERİ



TEZGAH SPORTLARI



MANDRENLER DÖNER PUNTALAR



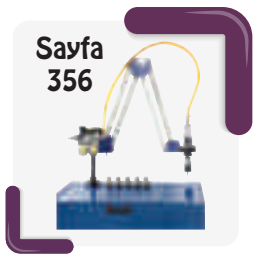
AYNA FLANŞLARI



TORNA AYNALARI



HİDROLİK TORNA AYNALARI



HAVALI KLAVUZ ÇEKME MAKİNASI



EL ALETLERİ ve MAKİNA EKİPMANLARI



KOMBİNE ANAHTARLAR



İKİ AĞIZ ANAHTARLAR



ANAHTAR TAKIMLARI



YILDIZ İKİ AĞIZ ANAHTARLAR


Sayfa 361
KURBAĞACIK ANAHTARLAR


Sayfa 362
ÇATAL & YILDIZ ÇAKMA ANAHTARLAR


Sayfa 363
ALTI KÖŞE LOKMA ANAHTARLAR

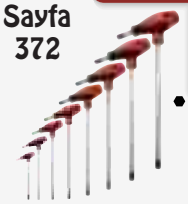

Sayfa 366
TORNAVİDA ÇEŞİTLERİ

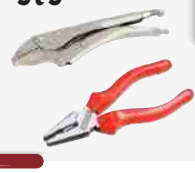

Sayfa 366
TORNAVİDA SETLERİ


Sayfa 369
BİTS UÇLAR
BİTS UÇ SETLERİ


Sayfa 370
ALLEN ANAHTARLAR


Sayfa 370
ALLEN ANAHTAR TAKIMLARI


Sayfa 372
'T' TİP ALLEN ANAHTARLAR


Sayfa 373
PENSELER


Sayfa 374
SEGMAN PENSELERİ


Sayfa 374
STİLSON BORU ANAHTARLARI


Sayfa 375
KAPORTACI MAKASLARI


Sayfa 375
PLASTİK ÇEKİÇ

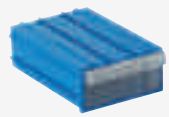

Sayfa 377
RASPA TAKIMLARI

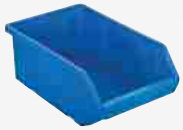

Sayfa 378
ELEKTRİKLİ EL ALETLERİ


Sayfa 380
DARBELİ PRESLER


Sayfa 381
MASAÜSTÜ MATKAP TEZGAHLARI


Sayfa 382
ÜNİVERSAL TAKIM DOLAPLARI


Sayfa 386
PLASTİK ÇEKMECELER


Sayfa 391
AVADANLIKLAR


Sayfa 393
TRANSPALETLER
İSTİF MAKİNALARI


Sayfa 395
MAKİNA EKİPMANLARI

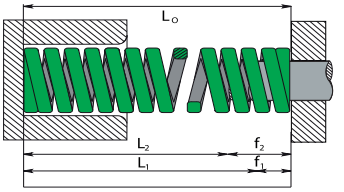

Sayfa 396
İŞ AYAKKABILARI


Sayfa 397
KALIP ve MAKİNA KİMYASALLARI



YEŞİL YAY

Hafif Yük



	Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Esneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS
mm	Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	CL 10 x 25	10	5	25	10	13	1,7	17	3,9	39	5,8	58	8,0	80	10,3	103	100
	CL 10 x 32			32	8,5	16	2,1	18	4,9	42	7,4	63	10,2	86	13,1	111	100
	CL 10 x 38			38	6,8	20	2,5	17	5,9	40	8,8	60	12,1	82	15,6	106	100
	CL 10 x 44			44	6	23	2,9	18	6,8	41	10,1	61	14,0	84	18,0	108	100
	CL 10 x 51			51	5	26	3,4	17	7,8	39	11,8	59	16,2	81	20,9	105	100
	CL 10 x 64			64	4,3	33	4,2	18	9,8	42	14,6	63	20,2	87	26,0	112	100
	CL 10 x 76			76	3,2	39	5,1	16	11,7	37	17,6	56	24,2	77	31,2	100	100
	CL 10 x 305			305	1,1	156	20,3	22	46,9	52	70,3	77	96,9	107	125,0	138	10
13	CL 13 x 25	12,5	6,3	25	17,9	13	1,7	30	3,9	69	5,8	104	8,0	143	10,3	184	100
	CL 13 x 32			32	16,4	16	2,1	35	4,9	81	7,4	121	10,2	167	13,1	215	100
	CL 13 x 38			38	13,6	20	2,5	34	5,9	80	8,8	119	12,1	164	15,6	212	100
	CL 13 x 44			44	12,1	23	2,9	35	6,8	82	10,1	123	14,0	169	18,0	218	100
	CL 13 x 51			51	11,4	26	3,4	39	7,8	89	11,8	134	16,2	185	20,9	238	100
	CL 13 x 64			64	9,3	33	4,3	40	9,9	92	14,8	138	20,4	190	26,3	245	100
	CL 13 x 76			76	7,1	39	5,1	36	11,7	83	17,6	125	24,2	172	31,2	222	100
	CL 13 x 89			89	5,4	46	5,9	32	13,7	74	20,5	111	28,3	153	36,5	197	100
	CL 13 x 305			305	1,4	156	20,3	28	46,9	66	70,3	98	96,9	136	125,0	175	10
16	CL 16 x 25	16	8	25	23,4	13	1,7	39	3,9	90	5,8	136	8,0	187	10,3	241	100
	CL 16 x 32			32	22,9	16	2,1	49	4,9	112	7,4	169	10,2	232	13,1	300	100
	CL 16 x 38			38	19,3	20	2,5	49	5,9	113	8,8	169	12,1	233	15,6	301	100
	CL 16 x 44			44	17,1	23	2,9	50	6,8	115	10,1	173	14,0	239	18,0	308	100
	CL 16 x 51			51	15,7	26	3,4	53	7,8	123	11,8	185	16,2	254	20,9	328	100
	CL 16 x 64			64	10,7	33	4,3	46	9,9	106	14,8	158	20,4	218	26,3	281	100
	CL 16 x 76			76	10	39	5,1	51	11,7	117	17,6	176	24,2	242	31,2	312	100
	CL 16 x 89			89	8,6	46	5,9	51	13,7	118	20,5	177	28,3	243	36,5	314	100
	CL 16 x 102			102	7,8	52	6,8	53	15,7	122	23,5	183	32,4	253	41,8	326	50
	CL 16 x 305			305	2,5	156	20,3	51	46,9	117	70,3	176	96,9	242	125,0	313	10
19	CL 19 x 25	20	10	25	55,8	13	1,7	92	3,8	213	5,7	320	7,9	441	10,2	569	100
	CL 19 x 32			32	45	16	2,0	91	4,7	211	7,0	316	9,7	436	12,5	563	100
	CL 19 x 38			38	33,3	19	2,4	81	5,6	187	8,4	281	11,6	387	15,0	500	100
	CL 19 x 44			44	30	22	2,9	86	6,6	198	9,9	297	13,6	409	18,0	540	100
	CL 19 x 51			51	24,5	25	3,3	80	7,5	184	11,3	276	15,5	380	20,0	490	100
	CL 19 x 64			64	20	31	4,1	81	9,4	188	14,1	281	19,4	388	25,0	500	100
	CL 19 x 76			76	16	37	4,8	77	11,1	178	16,7	266	22,9	367	30,0	480	100
	CL 19 x 89			89	14	44	5,7	80	13,1	184	19,7	276	27,1	380	35,0	490	50
	CL 19 x 102			102	12	51	6,7	80	15,4	185	23,1	277	31,8	381	41,0	492	50
	CL 19 x 115			115	10,9	58	7,5	81	17,3	188	25,9	282	35,7	389	46,0	501	50
	CL 19 x 127			127	9,5	64	8,3	79	19,1	182	28,7	273	39,5	375	51,0	485	50
	CL 19 x 139			139	8,4	70	9,1	76	21,0	176	31,5	265	43,4	365	56,0	470	50
	CL 19 x 152			152	7,5	76	9,9	74	22,9	172	34,3	257	47,3	355	61,0	458	50
	CL 19 x 305			305	4	153	19,8	79	45,8	183	68,6	275	94,6	378	122,0	488	10
26	CL 26 x 25	25	12,5	25	100	13	1,7	166	3,8	383	5,7	574	7,9	791	10,2	1020	100
	CL 26 x 32			32	80,3	16	2,0	163	4,7	376	7,0	565	9,7	778	12,5	1004	100
	CL 26 x 38			38	62	19	2,4	151	5,6	349	8,4	523	11,6	721	15,0	930	100
	CL 26 x 44			44	52,9	22	2,9	151	6,6	349	9,9	524	13,6	722	18,0	952	100
	CL 26 x 51			51	44	25	3,3	143	7,5	330	11,3	495	15,5	682	20,0	880	100
	CL 26 x 64			64	35,2	31	4,1	143	9,4	330	14,1	495	19,4	682	25,0	880	100
	CL 26 x 76			76	28	37	4,8	135	11,1	311	16,7	466	22,9	642	30,0	840	50
	CL 26 x 89			89	24	44	5,7	137	13,1	315	19,7	473	27,1	651	35,0	840	50
	CL 26 x 102			102	21,1	51	6,7	141	15,4	324	23,1	487	31,8	670	41,0	865	50
	CL 26 x 115			115	18,7	58	7,5	140	17,3	323	25,9	484	35,7	667	46,0	860	25
	CL 26 x 127			127	16,7	64	8,3	138	19,1	319	28,7	479	39,5	660	51,0	852	25
	CL 26 x 139			139	15,3	70	9,1	139	21,0	321	31,5	482	43,4	664	56,0	857	25
	CL 26 x 152			152	14	76	9,9	139	22,9	320	34,3	480	47,3	662	61,0	854	20
	CL 26 x 178			178	12,5	89	11,5	144	26,6	333	39,9	499	55,0	688	71,0	888	20
	CL 26 x 203			203	10,4	101	13,2	137	30,4	316	45,6	474	62,8	653	81,0	842	20
	CL 26 x 305			305	7,0	153	19,8	139	45,8	320	68,6	480	94,6	662	122,0	854	5



YEŞİL YAY

Hafif Yük

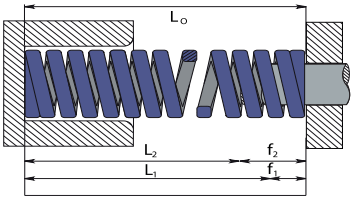
Kalite	Kare Kesit	Renk	Performans
ISO 10243		YEŞİL RAL 6002	80%

Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Esneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS	D_H	
Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N		mm	
CL 32 x 38	32	16	38	94,0	19	2,4	229	5,6	529	8,4	793	11,6	1093	15,0	1410	50	32	
CL 32 x 44			44	79,5	23	2,9	233	6,8	537	10,1	805	14,0	1109	18,0	1431	50		
CL 32 x 51			51	67,0	25	3,3	218	7,5	503	11,3	754	15,5	1039	20,0	1340	50		
CL 32 x 64			64	53,0	31	4,1	215	9,4	497	14,1	745	19,4	1027	25,0	1325	50		
CL 32 x 76			76	44,0	38	4,9	215	11,3	495	16,9	743	23,3	1023	30,0	1320	25		
CL 32 x 89			89	37,2	44	5,7	212	13,1	488	19,7	732	27,1	1009	35,0	1302	25		
CL 32 x 102			102	32,0	51	6,7	213	15,4	492	23,1	738	31,8	1017	41,0	1312	20		
CL 32 x 115			115	29,0	58	7,5	217	17,3	500	25,9	750	35,7	1034	46,0	1334	20		
CL 32 x 127			127	25,0	64	8,3	207	19,1	478	28,7	717	39,5	988	51,0	1275	20		
CL 32 x 139			139	23,0	70	9,1	209	21,0	483	31,5	725	43,4	998	56,0	1288	10		
CL 32 x 152			152	21,5	76	9,9	213	22,9	492	34,3	738	47,3	1016	61,0	1312	10		
CL 32 x 178			178	18,2	89	11,5	210	26,6	485	39,9	727	55,0	1001	71,0	1292	10		
CL 32 x 203			203	15,8	101	13,2	208	30,4	480	45,6	720	62,8	992	81,0	1280	10		
CL 32 x 254			254	12,5	128	16,6	207	38,3	478	57,4	717	79,1	988	102,0	1275	5		
CL 32 x 305			305	10,3	153	19,8	204	45,8	471	68,6	707	94,6	974	122,0	1257	5		
CL 38 x 51	40	20	51	92,0	25	3,3	299	7,5	690	11,3	1035	15,5	1426	20,0	1840	25	38	
CL 38 x 64			64	73,0	31	4,1	297	9,4	684	14,1	1027	19,4	1414	25,0	1825	25		
CL 38 x 76			76	63,0	38	4,9	307	11,3	709	16,9	1063	23,3	1465	30,0	1890	25		
CL 38 x 89			89	51,0	44	5,7	290	13,1	669	19,7	1004	27,1	1383	35,0	1785	25		
CL 38 x 102			102	43,0	51	6,7	286	15,4	661	23,1	992	31,8	1366	41,0	1763	20		
CL 38 x 115			115	39,6	58	7,5	296	17,3	683	25,9	1025	35,7	1412	46,0	1822	20		
CL 38 x 127			127	37,0	64	8,3	307	19,1	708	28,7	1061	39,5	1462	51,0	1887	10		
CL 38 x 139			139	32,0	70	9,1	291	21,0	672	31,5	1008	43,4	1389	56,0	1792	10		
CL 38 x 152			152	28,0	76	9,9	278	22,9	641	34,3	961	47,3	1324	61,0	1708	10		
CL 38 x 178			178	25,2	89	11,5	291	26,6	671	39,9	1006	55,0	1387	71,0	1789	5		
CL 38 x 203			203	22,7	101	13,2	299	30,4	690	45,6	1034	62,8	1425	81,0	1839	5		
CL 38 x 254			254	17,0	128	16,6	282	38,3	650	57,4	975	79,1	1344	102,0	1734	5		
CL 38 x 305			305	14,8	153	19,8	293	45,8	677	68,6	1016	94,6	1399	122,0	1806	5		
CL 51 x 64	50	25	64	156,0	31	4,1	634	9,4	1463	14,1	2194	19,4	3023	25,0	3900	10	51	
CL 51 x 76			76	125,0	38	4,9	609	11,3	1406	16,9	2109	23,3	2906	30,0	3750	10		
CL 51 x 89			89	109,0	44	5,7	620	13,1	1431	19,7	2146	27,1	2957	35,0	3815	10		
CL 51 x 102			102	94,0	51	6,7	626	15,4	1445	23,1	2168	31,8	2987	41,0	3854	10		
CL 51 x 115			115	81,0	58	7,5	605	17,3	1397	25,9	2096	35,7	2888	46,0	3726	4		
CL 51 x 127			127	71,0	64	8,3	588	19,1	1358	28,7	2037	39,5	2806	51,0	3621	4		
CL 51 x 139			139	66,5	70	9,1	605	21,0	1397	31,5	2095	43,4	2886	56,0	3724	4		
CL 51 x 152			152	60,0	76	9,9	595	22,9	1373	34,3	2059	47,3	2837	61,0	3660	4		
CL 51 x 178			178	52,0	89	11,5	600	26,6	1385	39,9	2077	55,0	2861	71,0	3692	4		
CL 51 x 203			203	44,0	101	13,2	579	30,4	1337	45,6	2005	62,8	2762	81,0	3564	4		
CL 51 x 254			254	35,0	128	16,6	580	38,3	1339	57,4	2008	79,1	2767	102,0	3570	4		
CL 51 x 305			305	28,5	153	19,8	565	45,8	1304	68,6	1956	94,6	2695	122,0	3477	4		
CL 63 x 76	63	38	76	189,0	38	4,9	921	11,3	2126	16,9	3189	23,3	4394	30,0	5670	10	63	
CL 63 x 89			89	158,0	44	5,7	899	13,1	2074	19,7	3111	27,1	4286	35,0	5530	10		
CL 63 x 102			102	131,0	51	6,7	873	15,4	2014	23,1	3021	31,8	4163	41,0	5371	10		
CL 63 x 115			115	116,0	58	7,5	867	17,3	2001	25,9	3002	35,7	4135	46,0	5336	4		
CL 63 x 127			127	103,0	64	8,3	854	19,1	1970	28,7	2955	39,5	4071	51,0	5253	4		
CL 63 x 152			152	84,3	76	9,9	836	22,9	1928	34,3	2893	47,3	3985	61,0	5142	4		
CL 63 x 178			178	71,5	89	11,5	825	26,6	1904	39,9	2856	55,0	3934	71,0	5077	4		
CL 63 x 203			203	61,7	101	13,2	812	30,4	1874	45,6	2811	62,8	3873	81,0	4998	4		
CL 63 x 254			254	47,0	128	16,6	779	38,3	1798	57,4	2697	79,1	3715	102,0	4794	4		
CL 63 x 305			305	38,2	153	19,8	757	45,8	1748	68,6	2621	94,6	3612	122,0	4660	4		



MAVİ YAY

Orta Ağır Yük



	Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Esneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS
mm	Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	**CM 10 x 25**	10	5	25	16,0	12	1,5	25	3,6	57	5,3	86	7,4	118	9,5	152	100
	CM 10 x 32			32	13,0	15	2,0	26	4,6	59	6,9	89	9,5	123	12,2	159	100
	CM 10 x 38			38	11,9	18	2,3	28	5,4	64	8,1	96	11,2	133	14,4	171	100
	CM 10 x 44			44	10,3	21	2,7	28	6,3	65	9,4	97	12,9	133	16,7	172	100
	CM 10 x 51			51	8,9	24	3,2	28	7,3	65	10,9	97	15,0	134	19,4	173	100
	CM 10 x 64			64	7,5	30	3,9	30	9,1	68	13,7	103	18,8	141	24,3	182	100
	CM 10 x 76			76	5,3	36	4,7	25	10,8	57	16,3	86	22,4	119	28,9	153	100
	CM 10 x 305			305	1,6	145	18,9	30	43,5	70	65,3	104	89,9	144	116,0	186	10
13	**CM 13 x 25**	12,5	6,3	25	30,0	12	1,5	46	3,6	107	5,3	160	7,4	221	9,5	285	100
	CM 13 x 32			32	24,8	15	2,0	49	4,6	113	6,9	170	9,5	234	12,2	303	100
	CM 13 x 38			38	21,4	18	2,3	50	5,4	116	8,1	173	11,2	239	14,4	308	100
	CM 13 x 44			44	18,5	21	2,7	50	6,3	116	9,4	174	12,9	239	16,7	309	100
	CM 13 x 51			51	15,5	24	3,2	49	7,3	113	10,9	169	15,0	233	19,4	301	100
	CM 13 x 64			64	12,1	30	3,9	48	9,1	110	13,7	165	18,8	228	24,3	294	100
	CM 13 x 76			76	10,2	36	4,7	48	10,8	111	16,3	166	22,4	228	28,9	295	100
	CM 13 x 89			89	8,4	42	5,5	46	12,7	106	19,0	160	26,2	220	33,8	284	100
	CM 13 x 305			305	2,1	145	18,9	40	43,5	91	65,3	137	89,9	189	116,0	244	10
16	**CM 16 x 25**	16	8	25	49,4	12	1,5	76	3,6	176	5,3	264	7,4	364	9,5	469	100
	CM 16 x 32			32	37,1	15	2,0	74	4,6	170	6,9	255	9,5	351	12,2	453	100
	CM 16 x 38			38	33,9	18	2,3	79	5,4	183	8,1	275	11,2	378	14,4	488	100
	CM 16 x 44			44	30,0	21	2,7	81	6,3	188	9,4	282	12,9	388	16,7	501	100
	CM 16 x 51			51	26,4	24	3,2	83	7,3	192	10,9	288	15,0	397	19,4	512	100
	CM 16 x 64			64	20,5	30	3,9	81	9,1	187	13,7	280	18,8	386	24,3	498	100
	CM 16 x 76			76	17,8	36	4,7	84	10,8	193	16,3	289	22,4	399	28,9	514	100
	CM 16 x 89			89	15,2	42	5,5	83	12,7	193	19,0	289	26,2	398	33,8	514	100
	CM 16 x 102			102	13,5	49	6,3	85	14,6	196	21,8	295	30,1	406	38,8	524	50
	CM 16 x 305			305	4,8	145	18,9	90	43,5	209	65,3	313	89,9	432	116,0	557	10
19	**CM 19 x 25**	20	10	25	98,0	12	1,5	150	3,5	345	5,3	518	7,3	714	9,4	921	100
	CM 19 x 32			32	72,6	15	2,0	142	4,5	327	6,8	490	9,3	675	12,0	871	100
	CM 19 x 38			38	56,0	18	2,3	127	5,3	294	7,9	441	10,9	608	14,0	784	100
	CM 19 x 44			44	47,5	21	2,7	127	6,2	294	9,3	441	12,8	607	16,5	784	100
	CM 19 x 51			51	41,7	24	3,1	129	7,1	297	10,7	446	14,7	614	19,0	792	100
	CM 19 x 64			64	32,3	30	3,9	126	9,0	291	13,5	436	18,6	601	24,0	775	100
	CM 19 x 76			76	25,1	35	4,6	114	10,5	264	15,8	395	21,7	545	28,0	703	100
	CM 19 x 89			89	22,0	41	5,4	118	12,4	272	18,6	408	25,6	563	33,0	726	50
	CM 19 x 102			102	19,8	48	6,2	122	14,3	282	21,4	423	29,5	583	38,0	752	50
	CM 19 x 115			115	18,1	54	7,0	126	16,1	292	24,2	438	33,3	603	43,0	778	50
	CM 19 x 127			127	16,6	60	7,8	129	18,0	299	27,0	448	37,2	618	48,0	797	50
	CM 19 x 139			139	15,1	65	8,5	128	19,5	294	29,3	442	40,3	609	52,0	785	50
	CM 19 x 152			152	13,2	71	9,3	122	21,4	282	32,1	423	44,2	583	57,0	752	50
	CM 19 x 305			305	6,1	143	18,5	113	42,8	261	64,1	391	88,4	539	114,0	695	10
26	**CM 26 x 25**	25	12,5	25	147,0	12	1,5	225	3,5	518	5,3	777	7,3	1071	9,4	1382	100
	CM 26 x 32			32	118,0	15	2,0	230	4,5	531	6,8	797	9,3	1097	12,0	1416	100
	CM 26 x 38			38	93,0	18	2,3	212	5,3	488	7,9	732	10,9	1009	14,0	1302	100
	CM 26 x 44			44	80,8	21	2,7	217	6,2	500	9,3	750	12,8	1033	16,5	1333	100
	CM 26 x 51			51	68,6	24	3,1	212	7,1	489	10,7	733	14,7	1010	19,0	1303	100
	CM 26 x 64			64	53,0	30	3,9	207	9,0	477	13,5	716	18,6	986	24,0	1272	100
	CM 26 x 76			76	43,2	35	4,6	197	10,5	454	15,8	680	21,7	937	28,0	1210	50
	CM 26 x 89			89	38,2	41	5,4	205	12,4	473	18,6	709	25,6	977	33,0	1261	50
	CM 26 x 102			102	33,0	48	6,2	204	14,3	470	21,4	705	29,5	972	38,0	1254	50
	CM 26 x 115			115	28,0	54	7,0	196	16,1	452	24,2	677	33,3	933	43,0	1204	25
	CM 26 x 127			127	25,9	60	7,8	202	18,0	466	27,0	699	37,2	963	48,0	1243	25
	CM 26 x 139			139	23,2	65	8,5	196	19,5	452	29,3	679	40,3	935	52,0	1206	25
	CM 26 x 152			152	20,8	71	9,3	193	21,4	445	32,1	667	44,2	919	57,0	1186	20
	CM 26 x 178			178	17,8	84	10,9	194	25,1	447	37,7	671	51,9	924	67,0	1193	20
	CM 26 x 203			203	15,8	95	12,4	195	28,5	450	42,8	675	58,9	931	76,0	1201	20
	CM 26 x 305			305	10,2	143	18,5	189	42,8	436	64,1	654	88,4	901	114,0	1163	5



MAVİ YAY

Orta Ağır Yük

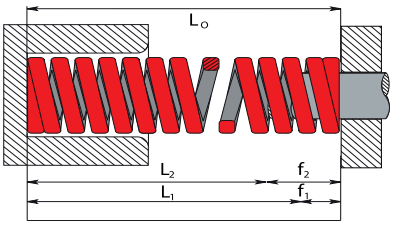
Kalite	Kare Kesit	Renk	Performans
ISO 10243		MAVİ RAL 5003	80%

Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Eşneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS	D_{HI}	
Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N		mm	
CM 32 x 38	32	16	38	185,0	18	2,3	421	5,3	971	7,9	1457	10,9	2007	14,0	2590	50		32
CM 32 x 44			44	158,0	21	2,7	424	6,2	978	9,3	1466	12,8	2020	16,5	2607	50		
CM 32 x 51			51	134,0	24	3,1	414	7,1	955	10,7	1432	14,7	1973	19,0	2546	50		
CM 32 x 64			64	99,0	30	3,9	386	9,0	891	13,5	1337	18,6	1841	24,0	2376	50		
CM 32 x 76			76	80,5	35	4,6	366	10,5	845	15,8	1268	21,7	1747	28,0	2254	25		
CM 32 x 89			89	69,1	41	5,4	371	12,4	855	18,6	1283	25,6	1767	33,0	2280	25		
CM 32 x 102			102	58,8	48	6,2	363	14,3	838	21,4	1257	29,5	1732	38,0	2234	20		
CM 32 x 115			115	51,5	54	7,0	360	16,1	830	24,2	1246	33,3	1716	43,0	2215	20		
CM 32 x 127			127	44,8	60	7,8	349	18,0	806	27,0	1210	37,2	1667	48,0	2150	20		
CM 32 x 139			139	42,3	65	8,5	357	19,5	825	29,3	1237	40,3	1705	52,0	2200	10		
CM 32 x 152			152	37,8	71	9,3	350	21,4	808	32,1	1212	44,2	1670	57,0	2155	10		
CM 32 x 178			178	32,5	84	10,9	354	25,1	817	37,7	1225	51,9	1688	67,0	2178	10		
CM 32 x 203			203	28,9	95	12,4	357	28,5	824	42,8	1235	58,9	1702	76,0	2196	10		
CM 32 x 254			254	21,4	119	15,4	330	35,6	762	53,4	1144	73,6	1576	95,0	2033	5		
CM 32 x 305			305	18,3	143	18,5	339	42,8	782	64,1	1173	88,4	1617	114,0	2086	5		
CM 38 x 51	40	20	51	181,6	24	3,1	561	7,1	1294	10,7	1941	14,7	2674	19,0	3450	25		38
CM 38 x 64			64	140,0	30	3,9	546	9,0	1260	13,5	1890	18,6	2604	24,0	3360	25		
CM 38 x 76			76	108,0	35	4,6	491	10,5	1134	15,8	1701	21,7	2344	28,0	3024	25		
CM 38 x 89			89	90,7	41	5,4	486	12,4	1122	18,6	1684	25,6	2320	33,0	2993	25		
CM 38 x 102			102	81,0	48	6,2	500	14,3	1154	21,4	1731	29,5	2385	38,0	3078	20		
CM 38 x 115			115	71,8	54	7,0	502	16,1	1158	24,2	1737	33,3	2393	43,0	3087	20		
CM 38 x 127			127	62,7	60	7,8	489	18,0	1129	27,0	1693	37,2	2332	48,0	3010	10		
CM 38 x 139			139	57,5	65	8,5	486	19,5	1121	29,3	1682	40,3	2317	52,0	2990	10		
CM 38 x 152			152	51,6	71	9,3	478	21,4	1103	32,1	1654	44,2	2279	57,0	2941	10		
CM 38 x 178			178	44,1	84	10,9	480	25,1	1108	37,7	1662	51,9	2290	67,0	2955	5		
CM 38 x 203			203	36,7	95	12,4	453	28,5	1046	42,8	1569	58,9	2162	76,0	2789	5		
CM 38 x 254			254	30,1	119	15,4	465	35,6	1072	53,4	1608	73,6	2216	95,0	2860	5		
CM 38 x 305			305	24,6	143	18,5	456	42,8	1052	64,1	1577	88,4	2173	114,0	2804	5		
CM 51 x 64	50	25	64	209,0	30	3,9	815	9,0	1881	13,5	2822	18,6	3887	24,0	5016	10		51
CM 51 x 76			76	168,0	35	4,6	764	10,5	1764	15,8	2646	21,7	3646	28,0	4704	10		
CM 51 x 89			89	140,0	41	5,4	751	12,4	1733	18,6	2599	25,6	3581	33,0	4620	10		
CM 51 x 102			102	119,0	48	6,2	735	14,3	1696	21,4	2544	29,5	3505	38,0	4522	10		
CM 51 x 115			115	106,0	54	7,0	741	16,1	1709	24,2	2564	33,3	3532	43,0	4558	4		
CM 51 x 127			127	97,0	60	7,8	757	18,0	1746	27,0	2619	37,2	3608	48,0	4656	4		
CM 51 x 139			139	87,0	65	8,5	735	19,5	1697	29,3	2545	40,3	3506	52,0	4524	4		
CM 51 x 152			152	80,0	71	9,3	741	21,4	1710	32,1	2565	44,2	3534	57,0	4560	4		
CM 51 x 178			178	69,5	84	10,9	757	25,1	1746	37,7	2619	51,9	3609	67,0	4657	4		
CM 51 x 203			203	59,8	95	12,4	739	28,5	1704	42,8	2556	58,9	3522	76,0	4545	4		
CM 51 x 229			229	50,9	108	14,0	711	32,3	1642	48,4	2462	66,7	3392	86,0	4377	4		
CM 51 x 254			254	43,9	119	15,4	678	35,6	1564	53,4	2346	73,6	3232	95,0	4171	4		
CM 51 x 305			305	38,6	143	18,5	715	42,8	1650	64,1	2475	88,4	3410	114,0	4400	4		
CM 63 x 76	63	38	76	312,0	35	4,6	1420	10,5	3276	15,8	4914	21,7	6770	28,0	8736	10		63
CM 63 x 89			89	260,0	41	5,4	1394	12,4	3218	18,6	4826	25,6	6650	33,0	8580	10		
CM 63 x 102			102	221,0	48	6,2	1365	14,3	3149	21,4	4724	29,5	6508	38,0	8398	10		
CM 63 x 115			115	187,0	54	7,0	1307	16,1	3015	24,2	4523	33,3	6232	43,0	8041	4		
CM 63 x 127			127	168,0	60	7,8	1310	18,0	3024	27,0	4536	37,2	6250	48,0	8064	4		
CM 63 x 152			152	136,0	71	9,3	1260	21,4	2907	32,1	4361	44,2	6008	57,0	7752	4		
CM 63 x 178			178	114,0	84	10,9	1241	25,1	2864	37,7	4296	51,9	5919	67,0	7638	4		
CM 63 x 203			203	100,0	95	12,4	1235	28,5	2850	42,8	4275	58,9	5890	76,0	7600	4		
CM 63 x 229			229	89,2	108	14,0	1247	32,3	2877	48,4	4315	66,7	5945	86,0	7671	4		
CM 63 x 254			254	78,4	119	15,4	1210	35,6	2793	53,4	4190	73,6	5772	95,0	7448	4		
CM 63 x 305			305	64,7	143	18,5	1199	42,8	2766	64,1	4149	88,4	5716	114,0	7376	4		



KIRMIZI YAY

Ağır Yük



	Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Esneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS
mm	Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	CF 10 x 25	10	5	25	22,1	9	1,2	27	2,8	62	4,2	93	5,8	129	7,5	166	100
	CF 10 x 32			32	17,5	12	1,6	27	3,6	63	5,4	95	7,4	130	9,6	168	100
	CF 10 x 38			38	17,1	14	1,9	32	4,3	73	6,4	110	8,8	151	11,4	195	100
	CF 10 x 44			44	15,0	17	2,1	32	5,0	74	7,4	111	10,2	153	13,2	198	100
	CF 10 x 51			51	12,8	19	2,5	32	5,7	73	8,6	110	11,9	152	15,3	196	100
	CF 10 x 64			64	10,7	24	3,1	33	7,2	77	10,8	116	14,9	159	19,2	205	100
	CF 10 x 76			76	7,5	29	3,7	28	8,6	64	12,8	96	17,7	133	22,8	171	100
	CF 10 x 305			305	2,1	114	14,9	31	34,3	72	51,5	108	70,9	149	91,5	192	10
13	CF 13 x 25	12,5	6,3	25	42,1	9	1,2	51	2,8	118	4,2	178	5,8	245	7,5	316	100
	CF 13 x 32			32	33,2	12	1,6	52	3,6	120	5,4	179	7,4	247	9,6	319	100
	CF 13 x 38			38	29,3	14	1,9	54	4,3	125	6,4	188	8,8	259	11,4	334	100
	CF 13 x 44			44	24,6	17	2,1	53	5,0	122	7,4	183	10,2	252	13,2	325	100
	CF 13 x 51			51	19,6	19	2,5	49	5,7	113	8,6	169	11,9	232	15,3	300	100
	CF 13 x 64			64	15,0	24	3,1	47	7,2	108	10,8	162	14,9	223	19,2	288	100
	CF 13 x 76			76	13,2	29	3,7	49	8,6	113	12,8	169	17,7	233	22,8	301	100
	CF 13 x 89			89	11,4	33	4,3	50	10,0	114	15,0	171	20,7	236	26,7	304	100
	CF 13 x 305			305	2,8	114	14,9	42	34,3	96	51,5	144	70,9	199	91,5	256	10
16	CF 16 x 25	16	8	25	75,7	9	1,2	92	2,8	213	4,2	319	5,8	440	7,5	568	100
	CF 16 x 32			32	52,8	12	1,6	82	3,6	190	5,4	285	7,4	393	9,6	507	100
	CF 16 x 38			38	48,5	14	1,9	90	4,3	207	6,4	311	8,8	429	11,4	553	100
	CF 16 x 44			44	42,8	17	2,1	92	5,0	212	7,4	318	10,2	438	13,2	565	100
	CF 16 x 51			51	37,1	19	2,5	92	5,7	213	8,6	319	11,9	440	15,3	568	100
	CF 16 x 64			64	30,3	24	3,1	95	7,2	218	10,8	327	14,9	451	19,2	582	100
	CF 16 x 76			76	25,7	29	3,7	95	8,6	220	12,8	330	17,7	454	22,8	586	100
	CF 16 x 89			89	21,7	33	4,3	94	10,0	217	15,0	326	20,7	449	26,7	579	100
	CF 16 x 102			102	19,3	38	5,0	96	11,5	222	17,2	332	23,7	458	30,6	591	50
	CF 16 x 305			305	7,1	114	14,9	106	34,3	244	51,5	365	70,9	504	91,5	650	10
19	CF 19 x 25	20	10	25	216,0	9	1,2	263	2,8	608	4,2	911	5,8	1256	7,5	1620	100
	CF 19 x 32			32	168,0	12	1,6	262	3,6	605	5,4	907	7,4	1250	9,6	1613	100
	CF 19 x 38			38	129,0	14	1,8	231	4,1	532	6,2	798	8,5	1100	11,0	1419	100
	CF 19 x 44			44	112,0	16	2,1	237	4,9	546	7,3	819	10,1	1128	13,0	1456	100
	CF 19 x 51			51	94,0	19	2,4	229	5,6	529	8,4	793	11,6	1093	15,0	1410	100
	CF 19 x 64			64	72,1	24	3,1	223	7,1	514	10,7	771	14,7	1062	19,0	1370	100
	CF 19 x 76			76	59,7	29	3,7	223	8,6	515	12,9	772	17,8	1064	23,0	1373	100
	CF 19 x 89			89	50,5	34	4,4	222	10,1	511	15,2	767	20,9	1057	27,0	1364	50
	CF 19 x 102			102	44,2	39	5,0	223	11,6	514	17,4	771	24,0	1062	31,0	1370	50
	CF 19 x 115			115	38,4	44	5,7	218	13,1	504	19,7	756	27,1	1042	35,0	1344	50
	CF 19 x 127			127	34,1	48	6,2	211	14,3	486	21,4	729	29,4	1004	38,0	1296	50
	CF 19 x 139			139	31,0	53	6,8	212	15,8	488	23,6	732	32,5	1009	42,0	1302	50
	CF 19 x 152			152	28,2	58	7,5	211	17,2	486	25,9	730	35,6	1005	46,0	1297	50
	CF 19 x 305			305	15,0	114	14,8	222	34,1	512	51,2	768	70,5	1058	91,0	1365	10
26	CF 26 x 25	25	12,5	25	375,0	9	1,2	457	2,8	1055	4,2	1582	5,8	2180	7,5	2813	100
	CF 26 x 32			32	297,0	12	1,6	463	3,6	1069	5,4	1604	7,4	2210	9,6	2851	100
	CF 26 x 38			38	219,0	14	1,8	392	4,1	903	6,2	1355	8,5	1867	11,0	2409	100
	CF 26 x 44			44	187,0	16	2,1	395	4,9	912	7,3	1367	10,1	1884	13,0	2431	100
	CF 26 x 51			51	156,0	19	2,4	380	5,6	878	8,4	1316	11,6	1814	15,0	2340	100
	CF 26 x 64			64	123,0	24	3,1	380	7,1	876	10,7	1315	14,7	1811	19,0	2337	100
	CF 26 x 76			76	99,0	29	3,7	370	8,6	854	12,9	1281	17,8	1765	23,0	2277	50
	CF 26 x 89			89	84,0	34	4,4	369	10,1	851	15,2	1276	20,9	1758	27,0	2268	50
	CF 26 x 102			102	73,0	39	5,0	368	11,6	849	17,4	1273	24,0	1754	31,0	2263	50
	CF 26 x 115			115	65,0	44	5,7	370	13,1	853	19,7	1280	27,1	1764	35,0	2276	25
	CF 26 x 127			127	57,7	48	6,2	356	14,3	822	21,4	1233	29,4	1699	38,0	2193	25
	CF 26 x 139			139	52,7	53	6,8	360	15,8	830	23,6	1245	32,5	1715	42,0	2213	25
	CF 26 x 152			152	47,8	58	7,5	357	17,2	825	25,9	1237	35,6	1704	46,0	2199	20
	CF 26 x 178			178	41,0	66	8,6	353	19,9	815	29,8	1222	41,1	1684	53,0	2173	20
	CF 26 x 203			203	35,8	76	9,9	355	22,9	819	34,3	1228	47,3	1692	61,0	2184	20
	CF 26 x 305			305	22,9	114	14,8	339	34,1	782	51,2	1172	70,5	1615	91,0	2084	5



KIRMIZI YAY

Ağır Yük

Kalite	Kare Kesit	Renk	Performans
ISO 10243		KIRMIZI RAL 3000	80%

Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Esneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS	D_H	
Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N		mm	
CF 32 x 38	32	16	38	388,0	14	1,8	694	4,1	1601	6,2	2401	8,5	3308	11,0	4268	50	32	
CF 32 x 44			44	324,0	16	2,1	685	4,9	1580	7,3	2369	10,1	3264	13,0	4212	50		
CF 32 x 51			51	272,0	19	2,4	663	5,6	1530	8,4	2295	11,6	3162	15,0	4080	50		
CF 32 x 64			64	212,0	24	3,1	655	7,1	1511	10,7	2266	14,7	3122	19,0	4028	50		
CF 32 x 76			76	172,0	29	3,7	643	8,6	1484	12,9	2225	17,8	3066	23,0	3956	25		
CF 32 x 89			89	141,0	34	4,4	619	10,1	1428	15,2	2141	20,9	2950	27,0	3807	25		
CF 32 x 102			102	122,0	39	5,0	615	11,6	1418	17,4	2127	24,0	2931	31,0	3782	20		
CF 32 x 115			115	107,0	44	5,7	609	13,1	1404	19,7	2107	27,1	2902	35,0	3745	20		
CF 32 x 127			127	93,0	48	6,2	574	14,3	1325	21,4	1988	29,4	2739	38,0	3534	20		
CF 32 x 139			139	86,0	53	6,8	587	15,8	1355	23,6	2032	32,5	2799	42,0	3612	10		
CF 32 x 152			152	78,0	58	7,5	583	17,2	1346	25,9	2018	35,6	2781	46,0	3588	10		
CF 32 x 178			178	67,2	66	8,6	579	19,9	1336	29,8	2003	41,1	2760	53,0	3562	10		
CF 32 x 203			203	59,1	76	9,9	586	22,9	1352	34,3	2028	47,3	2794	61,0	3605	10		
CF 32 x 254			254	46,4	95	12,4	573	28,5	1322	42,8	1984	58,9	2733	76,0	3526	5		
CF 32 x 305			305	38,0	114	14,8	562	34,1	1297	51,2	1945	70,5	2680	91,0	3458	5		
CF 38 x 51	40	20	51	350,0	19	2,4	853	5,6	1969	8,4	2953	11,6	4069	15,0	5250	25	38	
CF 38 x 64			64	269,0	24	3,1	831	7,1	1917	10,7	2875	14,7	3961	19,0	5111	25		
CF 38 x 76			76	219,0	29	3,7	819	8,6	1889	12,9	2833	17,8	3904	23,0	5037	25		
CF 38 x 89			89	190,0	34	4,4	834	10,1	1924	15,2	2886	20,9	3976	27,0	5130	25		
CF 38 x 102			102	163,0	39	5,0	821	11,6	1895	17,4	2842	24,0	3916	31,0	5053	20		
CF 38 x 115			115	142,0	44	5,7	808	13,1	1864	19,7	2796	27,1	3852	35,0	4970	20		
CF 38 x 127			127	128,0	48	6,2	790	14,3	1824	21,4	2736	29,4	3770	38,0	4864	10		
CF 38 x 139			139	115,0	53	6,8	785	15,8	1811	23,6	2717	32,5	3743	42,0	4830	10		
CF 38 x 152			152	105,0	58	7,5	785	17,2	1811	25,9	2717	35,6	3743	46,0	4830	10		
CF 38 x 178			178	89,0	66	8,6	767	19,9	1769	29,8	2653	41,1	3656	53,0	4717	5		
CF 38 x 203			203	77,0	76	9,9	763	22,9	1761	34,3	2642	47,3	3640	61,0	4697	5		
CF 38 x 254			254	61,0	95	12,4	753	28,5	1739	42,8	2608	58,9	3593	76,0	4636	5		
CF 38 x 305			305	51,0	114	14,8	754	34,1	1740	51,2	2611	70,5	3597	91,0	4641	5		
CF 51 x 64	50	25	64	413,0	24	3,1	1275	7,1	2943	10,7	4414	14,7	6081	19,0	7847	10	51	
CF 51 x 76			76	339,0	29	3,7	1267	8,6	2924	12,9	4386	17,8	6043	23,0	7797	10		
CF 51 x 89			89	288,0	34	4,4	1264	10,1	2916	15,2	4374	20,9	6026	27,0	7776	10		
CF 51 x 102			102	245,0	39	5,0	1234	11,6	2848	17,4	4272	24,0	5886	31,0	7595	10		
CF 51 x 115			115	215,0	44	5,7	1223	13,1	2822	19,7	4233	27,1	5832	35,0	7525	4		
CF 51 x 127			127	192,0	48	6,2	1186	14,3	2736	21,4	4104	29,4	5654	38,0	7296	4		
CF 51 x 139			139	168,0	53	6,8	1147	15,8	2646	23,6	3969	32,5	5468	42,0	7056	4		
CF 51 x 152			152	154,0	58	7,5	1151	17,2	2657	25,9	3985	35,6	5490	46,0	7084	4		
CF 51 x 178			178	134,0	66	8,6	1154	19,9	2663	29,8	3995	41,1	5504	53,0	7102	4		
CF 51 x 203			203	117,0	76	9,9	1160	22,9	2676	34,3	4015	47,3	5531	61,0	7137	4		
CF 51 x 254			254	89,0	95	12,4	1099	28,5	2537	42,8	3805	58,9	5242	76,0	6764	4		
CF 51 x 305			305	73,0	114	14,8	1080	34,1	2491	51,2	3737	70,5	5148	91,0	6643	4		
CF 63 x 76	63	38	76	618,0	29	3,7	2310	8,6	5330	12,9	7995	17,8	11016	23,0	14214	10	63	
CF 63 x 89			89	515,0	34	4,4	2260	10,1	5214	15,2	7822	20,9	10776	27,0	13905	10		
CF 63 x 102			102	438,0	39	5,0	2206	11,6	5092	17,4	7638	24,0	10523	31,0	13578	10		
CF 63 x 115			115	370,0	44	5,7	2104	13,1	4856	19,7	7284	27,1	10036	35,0	12950	4		
CF 63 x 127			127	333,0	48	6,2	2056	14,3	4745	21,4	7118	29,4	9807	38,0	12654	4		
CF 63 x 152			152	269,0	58	7,5	2011	17,2	4640	25,9	6960	35,6	9590	46,0	12374	4		
CF 63 x 178			178	226,0	66	8,6	1946	19,9	4492	29,8	6738	41,1	9283	53,0	11978	4		
CF 63 x 203			203	198,0	76	9,9	1963	22,9	4529	34,3	6794	47,3	9361	61,0	12078	4		
CF 63 x 254			254	155,0	95	12,4	1914	28,5	4418	42,8	6626	58,9	9130	76,0	11780	4		
CF 63 x 305			305	128,0	114	14,8	1893	34,1	4368	51,2	6552	70,5	9027	91,0	11648	4		



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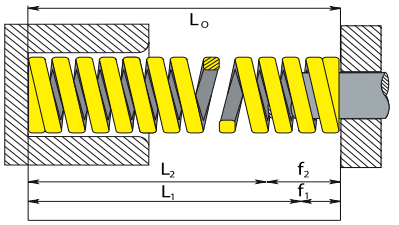
Çok Ağır Yük



	Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Esneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS
mm	Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N	
10	CXF 10 x 25	10	5	25	36,8	8	1,0	37	2,3	86	3,5	128	4,8	177	6,2	228	100
	CXF 10 x 32			32	27,9	10	1,3	36	3,0	84	4,5	126	6,2	173	8,0	223	100
	CXF 10 x 38			38	23,7	12	1,5	37	3,6	84	5,3	127	7,4	175	9,5	225	100
	CXF 10 x 44			44	19,2	14	1,8	34	4,1	79	6,2	119	8,5	164	11,0	211	100
	CXF 10 x 51			51	16,5	16	2,1	35	4,9	80	7,3	121	10,1	166	13,0	215	100
	CXF 10 x 64			64	13,2	20	2,6	34	6,0	79	9,0	119	12,4	164	16,0	211	100
	CXF 10 x 76			76	10,9	24	3,1	34	7,1	78	10,7	117	14,7	161	19,0	207	100
	CXF 10 x 305			305	2,6	95	12,4	32	28,5	74	42,8	111	58,9	153	76,0	198	10
13	CXF 13 x 25	12,5	6,3	25	58,5	8	1,0	59	2,3	136	3,5	204	4,8	281	6,2	363	100
	CXF 13 x 32			32	43,9	10	1,3	57	3,0	132	4,5	198	6,2	272	8,0	351	100
	CXF 13 x 38			38	36,0	12	1,5	56	3,6	128	5,3	192	7,4	265	9,5	342	100
	CXF 13 x 44			44	30,3	14	1,8	54	4,1	125	6,2	188	8,5	258	11,0	333	100
	CXF 13 x 51			51	26,2	16	2,1	55	4,9	128	7,3	192	10,1	264	13,0	341	100
	CXF 13 x 64			64	21,2	20	2,6	55	6,0	127	9,0	191	12,4	263	16,0	339	100
	CXF 13 x 76			76	17,1	24	3,1	53	7,1	122	10,7	183	14,7	252	19,0	325	100
	CXF 13 x 89			89	14,5	28	3,6	52	8,3	120	12,4	179	17,1	247	22,0	319	100
	CXF 13 x 305			305	4,3	95	12,4	53	28,5	123	42,8	184	58,9	253	76,0	327	10
16	CXF 16 x 25	16	8	25	118,0	8	1,0	119	2,3	274	3,5	412	4,8	567	6,2	732	100
	CXF 16 x 32			32	89,0	10	1,3	116	3,0	267	4,5	401	6,2	552	8,0	712	100
	CXF 16 x 38			38	72,1	12	1,5	111	3,6	257	5,3	385	7,4	531	9,5	685	100
	CXF 16 x 44			44	60,9	14	1,8	109	4,1	251	6,2	377	8,5	519	11,0	670	100
	CXF 16 x 51			51	52,3	16	2,1	111	4,9	255	7,3	382	10,1	527	13,0	680	100
	CXF 16 x 64			64	41,2	20	2,6	107	6,0	247	9,0	371	12,4	511	16,0	659	100
	CXF 16 x 76			76	34,1	24	3,1	105	7,1	243	10,7	364	14,7	502	19,0	648	100
	CXF 16 x 89			89	29,5	28	3,6	106	8,3	243	12,4	365	17,1	503	22,0	649	100
	CXF 16 x 102			102	25,6	33	4,2	108	9,8	250	14,6	374	20,1	516	26,0	666	50
	CXF 16 x 305			305	8,4	95	12,4	104	28,5	239	42,8	359	58,9	495	76,0	638	10
19	CXF 19 x 25	20	10	25	293,0	8	1,0	295	2,3	681	3,5	1022	4,8	1408	6,2	1817	100
	CXF 19 x 32			32	224,0	10	1,3	291	3,0	672	4,5	1008	6,2	1389	8,0	1792	100
	CXF 19 x 38			38	177,0	12	1,5	273	3,6	631	5,3	946	7,4	1303	9,5	1682	100
	CXF 19 x 44			44	149,0	14	1,8	266	4,1	615	6,2	922	8,5	1270	11,0	1639	100
	CXF 19 x 51			51	128,0	16	2,1	270	4,9	624	7,3	936	10,1	1290	13,0	1664	100
	CXF 19 x 64			64	99,0	20	2,6	257	6,0	594	9,0	891	12,4	1228	16,0	1584	100
	CXF 19 x 76			76	81,7	24	3,1	252	7,1	582	10,7	873	14,7	1203	19,0	1552	100
	CXF 19 x 89			89	69,5	28	3,6	249	8,3	573	12,4	860	17,1	1185	22,0	1529	50
	CXF 19 x 102			102	60,6	33	4,2	256	9,8	591	14,6	886	20,1	1221	26,0	1576	50
	CXF 19 x 115			115	53,0	36	4,7	250	10,9	576	16,3	865	22,5	1191	29,0	1537	50
	CXF 19 x 127			127	47,5	40	5,2	247	12,0	570	18,0	855	24,8	1178	32,0	1520	50
	CXF 19 x 139			139	43,0	44	5,7	245	13,1	564	19,7	847	27,1	1166	35,0	1505	50
	CXF 19 x 152			152	39,0	48	6,2	241	14,3	556	21,4	834	29,4	1149	38,0	1482	50
	CXF 19 x 305			305	21,2	95	12,4	262	28,5	604	42,8	906	58,9	1249	76,0	1611	10
26	CXF 26 x 25	25	12,5	25	459,0	8	1,0	462	2,3	1067	3,5	1601	4,8	2206	6,2	2846	100
	CXF 26 x 32			32	374,4	10	1,3	487	3,0	1123	4,5	1685	6,2	2321	8,0	2995	100
	CXF 26 x 38			38	346,0	12	1,5	534	3,6	1233	5,3	1849	7,4	2547	9,5	3287	100
	CXF 26 x 44			44	244,0	14	1,8	436	4,1	1007	6,2	1510	8,5	2080	11,0	2684	100
	CXF 26 x 51			51	207,5	16	2,1	438	4,9	1012	7,3	1517	10,1	2091	13,0	2698	100
	CXF 26 x 64			64	161,0	20	2,6	419	6,0	966	9,0	1449	12,4	1996	16,0	2576	100
	CXF 26 x 76			76	130,8	24	3,1	404	7,1	932	10,7	1398	14,7	1926	19,0	2485	50
	CXF 26 x 89			89	110,5	28	3,6	395	8,3	912	12,4	1367	17,1	1884	22,0	2431	50
	CXF 26 x 102			102	96,3	33	4,2	407	9,8	939	14,6	1408	20,1	1940	26,0	2504	50
	CXF 26 x 115			115	85,7	36	4,7	404	10,9	932	16,3	1398	22,5	1926	29,0	2485	25
	CXF 26 x 127			127	76,3	40	5,2	397	12,0	916	18,0	1373	24,8	1892	32,0	2442	25
	CXF 26 x 139			139	68,9	44	5,7	392	13,1	904	19,7	1357	27,1	1869	35,0	2412	20
	CXF 26 x 152			152	63,5	48	6,2	392	14,3	905	21,4	1357	29,4	1870	38,0	2413	20
	CXF 26 x 178			178	53,9	55	7,2	385	16,5	889	24,8	1334	34,1	1838	44,0	2372	20
	CXF 26 x 203			203	47,0	64	8,3	390	19,1	899	28,7	1348	39,5	1858	51,0	2397	20
	CXF 26 x 305			305	30,9	95	12,4	382	28,5	881	42,8	1321	58,9	1820	76,0	2348	5



SARI YAY

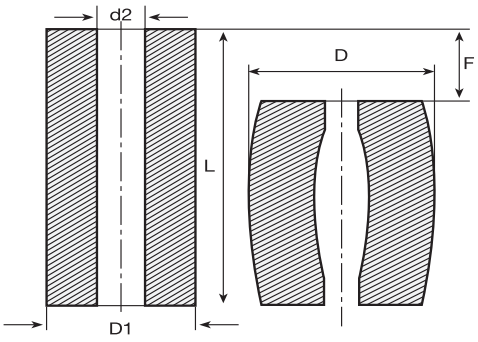
Çok Ağır Yük

Kalite	Kare Kesit	Renk	Performans
ISO 10243		SARI RAL 1004	80%

Ürün	D_H Dış Çap	D_S İç Çap	L_O Serbest Uzunluk	R_G Yük Katsayısı	f_{BL} Max. Esneme	A 13%f_{BL}		B 30%f_{BL}		C 45%f_{BL}		D 62%f_{BL}		E 80%f_{BL}		PCS	D_H	
Kod	mm	mm	mm	N/mm	mm	mm	N	mm	N	mm	N	mm	N	mm	N		mm	
CXF 32 x 38	32	16	38	528,2	12	1,5	815	3,6	1882	5,3	2823	7,4	3889	9,5	5018	50	32	
CXF 32 x 44			44	424,4	14	1,8	759	4,1	1751	6,2	2626	8,5	3618	11,0	4668	50		
CXF 32 x 51			51	353,0	16	2,1	746	4,9	1721	7,3	2581	10,1	3557	13,0	4589	50		
CXF 32 x 64			64	269,2	20	2,6	700	6,0	1615	9,0	2423	12,4	3338	16,0	4307	50		
CXF 32 x 76			76	218,5	24	3,1	675	7,1	1557	10,7	2335	14,7	3217	19,0	4152	25		
CXF 32 x 89			89	180,3	28	3,6	645	8,3	1488	12,4	2231	17,1	3074	22,0	3967	25		
CXF 32 x 102			102	155,0	33	4,2	655	9,8	1511	14,6	2267	20,1	3123	26,0	4030	20		
CXF 32 x 115			115	140,0	36	4,7	660	10,9	1523	16,3	2284	22,5	3147	29,0	4060	20		
CXF 32 x 127			127	124,0	40	5,2	645	12,0	1488	18,0	2232	24,8	3075	32,0	3968	20		
CXF 32 x 139			139	112,3	44	5,7	639	13,1	1474	19,7	2211	27,1	3046	35,0	3931	10		
CXF 32 x 152			152	102,0	48	6,2	630	14,3	1454	21,4	2180	29,4	3004	38,0	3876	10		
CXF 32 x 178			178	88,2	55	7,2	631	16,5	1455	24,8	2183	34,1	3008	44,0	3881	10		
CXF 32 x 203			203	76,0	64	8,3	630	19,1	1454	28,7	2180	39,5	3004	51,0	3876	10		
CXF 32 x 254			254	60,8	80	10,4	632	24,0	1459	36,0	2189	49,6	3016	64,0	3891	5		
CXF 32 x 305			305	49,0	95	12,4	605	28,5	1397	42,8	2095	58,9	2886	76,0	3724	5		
CXF 38 x 51	40	20	51	628,0	16	2,1	1327	4,9	3062	7,3	4592	10,1	6327	13,0	8164	25	38	
CXF 38 x 64			64	487,0	20	2,6	1266	6,0	2922	9,0	4383	12,4	6039	16,0	7792	25		
CXF 38 x 76			76	379,0	24	3,1	1170	7,1	2700	10,7	4051	14,7	5581	19,0	7201	25		
CXF 38 x 89			89	321,0	28	3,6	1148	8,3	2648	12,4	3972	17,1	5473	22,0	7062	25		
CXF 38 x 102			102	281,0	33	4,2	1187	9,8	2740	14,6	4110	20,1	5662	26,0	7306	20		
CXF 38 x 115			115	245,0	36	4,7	1155	10,9	2664	16,3	3997	22,5	5506	29,0	7105	20		
CXF 38 x 127			127	221,0	40	5,2	1149	12,0	2652	18,0	3978	24,8	5481	32,0	7072	10		
CXF 38 x 139			139	190,0	44	5,7	1081	13,1	2494	19,7	3741	27,1	5154	35,0	6650	10		
CXF 38 x 152			152	168,0	48	6,2	1037	14,3	2394	21,4	3591	29,4	4948	38,0	6384	10		
CXF 38 x 178			178	146,0	55	7,2	1044	16,5	2409	24,8	3614	34,1	4979	44,0	6424	5		
CXF 38 x 203			203	132,0	64	8,3	1094	19,1	2525	28,7	3787	39,5	5217	51,0	6732	5		
CXF 38 x 254			254	107,0	80	10,4	1113	24,0	2568	36,0	3852	49,6	5307	64,0	6848	5		
CXF 38 x 305			305	87,8	95	12,4	1084	28,5	2502	42,8	3753	58,9	5171	76,0	6673	5		
CXF 51 x 64	50	25	64	709,0	20	2,6	1843	6,0	4254	9,0	6381	12,4	8792	16,0	11344	10	51	
CXF 51 x 76			76	572,0	24	3,1	1766	7,1	4076	10,7	6113	14,7	8423	19,0	10868	10		
CXF 51 x 89			89	475,0	28	3,6	1698	8,3	3919	12,4	5878	17,1	8099	22,0	10450	10		
CXF 51 x 102			102	405,0	33	4,2	1711	9,8	3949	14,6	5923	20,1	8161	26,0	10530	10		
CXF 51 x 115			115	352,0	36	4,7	1659	10,9	3828	16,3	5742	22,5	7911	29,0	10208	4		
CXF 51 x 127			127	316,0	40	5,2	1643	12,0	3792	18,0	5688	24,8	7837	32,0	10112	4		
CXF 51 x 139			139	274,0	44	5,7	1558	13,1	3596	19,7	5394	27,1	7432	35,0	9590	4		
CXF 51 x 152			152	239,0	48	6,2	1476	14,3	3406	21,4	5109	29,4	7039	38,0	9082	4		
CXF 51 x 178			178	215,0	55	7,2	1537	16,5	3548	24,8	5321	34,1	7332	44,0	9460	4		
CXF 51 x 203			203	187,0	64	8,3	1550	19,1	3576	28,7	5365	39,5	7391	51,0	9537	4		
CXF 51 x 254			254	153,0	80	10,4	1591	24,0	3672	36,0	5508	49,6	7589	64,0	9792	4		
CXF 51 x 305			305	127,0	95	12,4	1569	28,5	3620	42,8	5429	58,9	7480	76,0	9652	4		
CXF 63 x 76	63	38	76	952,0	24	3,1	2939	7,1	6783	10,7	10175	14,7	14018	19,0	18088	10	63	
CXF 63 x 89			89	819,0	28	3,6	2928	8,3	6757	12,4	10135	17,1	13964	22,0	18018	10		
CXF 63 x 102			102	700,0	33	4,2	2958	9,8	6825	14,6	10238	20,1	14105	26,0	18200	10		
CXF 63 x 115			115	620,0	36	4,7	2922	10,9	6743	16,3	10114	22,5	13935	29,0	17980	4		
CXF 63 x 127			127	565,0	40	5,2	2938	12,0	6780	18,0	10170	24,8	14012	32,0	18080	4		
CXF 63 x 152			152	458,0	48	6,2	2828	14,3	6527	21,4	9790	29,4	13488	38,0	17404	4		
CXF 63 x 178			178	384,0	55	7,2	2746	16,5	6336	24,8	9504	34,1	13094	44,0	16896	4		
CXF 63 x 203			203	337,0	64	8,3	2793	19,1	6445	28,7	9668	39,5	13320	51,0	17187	4		
CXF 63 x 254			254	263,0	80	10,4	2735	24,0	6312	36,0	9468	49,6	13045	64,0	16832	4		
CXF 63 x 305			305	218,0	95	12,4	2692	28,5	6213	42,8	9320	58,9	12840	76,0	16568	4		

Vulkolon Yaylar





Vulkolon Yaylar Teknik Özellikleri

Sipariş Şekli : D1

D1	d2	L(mm)
Ø 16 mm	-	310
Ø 20 mm	-	310
Ø 20 mm	8,50	310
Ø 25 mm	-	310
Ø 25 mm	10,50	310
Ø 32 mm	-	310
Ø 32 mm	13,50	310
Ø 40 mm	-	310
Ø 40 mm	13,50	310
Ø 50 mm	-	310
Ø 50 mm	17	310
Ø 63 mm	-	310
Ø 63 mm	17	310
Ø 80 mm	-	310
Ø 80 mm	21	310
Ø 100 mm	-	310
Ø 100 mm	21	310
Ø 125 mm	-	310
Ø 125 mm	27	310

80 Shore *Maksimum esneme payı %30*



90 Shore *Maksimum esneme payı %25*



Poliüretan Yaylar Teknik Özellikleri *Sipariş Şekli :* D1

*Teknik veri tablosuna göre **L (Tam Boy)** kullanılması tavsiye edilen uzunluktur.*
Shore sertliklerine göre esneme payları aşağıdaki tabloda belirtilmiştir.

D1 (Dış Çap)	d2 (Delik Çapı)	L (Tam Boy)	Sarı (80 Shore)			Kırmızı (90 Shore)		
			P Yük / kg	D Esn. Max. Çap	F Esn. Max. Boy	P Yük / kg	D Esn. Max. Çap	F Esn. Max. Boy
16	-	12	179	21	3,6	226	20	3
		16	173		4,8	218		5
		20	170		6,0	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		6,0	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		6,0	530		5
		25	412		7,5	520		6,25
		32	40		9,6	510		8
		40	380		12,0	50		10
		50	365		15,0	480		12,50
32	13,5	16	730	42	4,8	930	40	4
		20	720		6,0	900		5
		25	690		7,5	880		6,25
		32	670		9,6	850		8
		40	650		12,0	820		10
		50	635		15,0	810		12,50
40	13,5	20	1280	52	6,0	1620	50	5
		25	1260		7,5	1550		6,25
		32	1180		9,6	1500		8
		40	1170		12,0	1450		10
		50	1120		15,0	1410		12,50
		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		12,0	2300		10
		50	1810		15,0	2250		12,50
		63	1760		18,9	2200		15,75
		80	1730		24,0	2150		20
63	17	32	3400	82	9,6	4200	78	9
		40	3200		12,0	4050		10
		50	3100		15,0	3900		12,50
		63	3000		18,9	3800		15,75
		80	2900		24,0	3700		20
		100	2800		30,0	3600		25
80	21	40	5500	104	12,0	6900	99	10
		50	5250		15,0	6600		12,50
		63	5050		18,9	6400		15,75
		80	4900		24,0	6200		20
		100	4750		30,0	6000		25
		125	4650		37,5	5800		31,25
100	21	50	9000	130	15,0	1300	125	12,50
		63	8600		18,9	10800		15,75
		80	8250		24,0	10400		20
		100	8000		30,0	10000		25
		125	7600		37,5	9700		31,25
		160	7500		48,0	9500		40
125	27	63	14200	160	18,9	17600	156	15,75
		80	13200		24,0	16800		20
		100	12800		30,0	16000		25
		125	12400		37,5	15300		31,25
		160	12000		48,0	15000		40

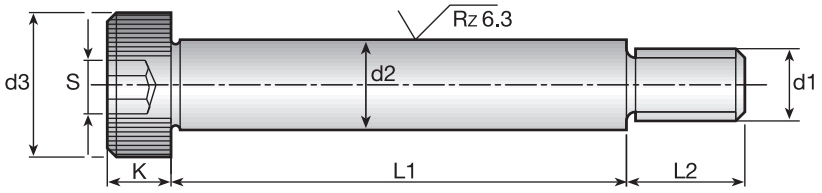
Tabak (Disk) Yaylar



Tabak Yayları DIN 2093 ve AVRUPA üretim Standartlarına göre üretilmiştir. Ayrıca Müşteri İsteklerine göre değişik ölçülerde üretimi yapılmaktadır.
Kalınlığı 0,5 mm ve yüksek yaylar bilya kurşun ışınlamasıyla üretildiğinden ömür süreleri daha uzun olmaktadır.

Yay Ayar Civatası / YAC

Malzeme
Özel alaşımlı çelik
Yüzey
Serteştirilmiş, taşlanmış





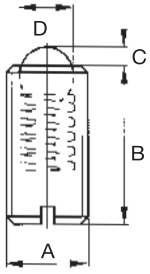
Sipariş Şekli : d1 x d2 x L1

d1	d2	d3	K	S	L2	L1															
						10	12	16	20	25	30	35	40	45	50	55	60	65	70	80	90	100	120
M5	6	10	5	3	9.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
M6	8	13	6	4	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
M8	10	16	7.5	5	13			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
M10	12	18	9	6	16			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
M12	16	24	11	8	18						✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
M16	20	30	14	10	22								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
M20	24	35	16	12	27										✓	✓	✓	✓	✓	✓	✓	✓	✓

Bilyalı Setiskur / BS

Malzeme Özel alaşımlı çelik



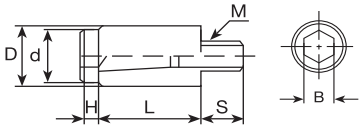


Sipariş Şekli : A

A	B	C	D	N İlk Basınç (newton)	N1 Nihai Basınç (newton)
M4	9	0.8	2.5	6	12
M5	12	0.9	3	7	13
M6	14	1.0	3.5	9	15
M8	16	1.5	5	20	35
M10	19	2.0	6	25	45
M12	22	2.5	8	35	60
M16	24	3.5	10	65	110

Plastik Çektirme



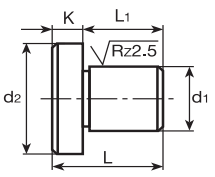


Sipariş Şekli : D

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

Dayama Plakası





Sipariş Şekli : d1

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

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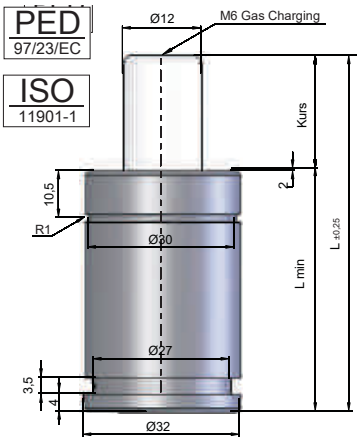
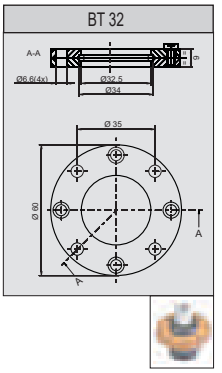
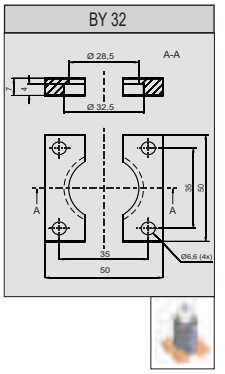
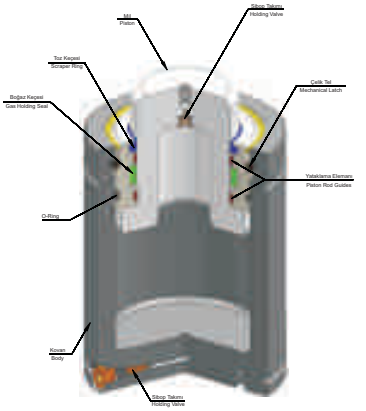
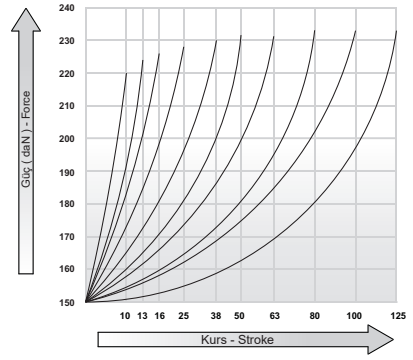










Basınç Gazı
Pressure Gas : Nitrogen N2

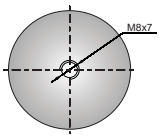
Max. Basınç
Max. load pressure : 150 bar

Min. Basınç
Min. load pressure : 25 bar

Çalışma Sıcaklığı
Working Temperature : 0°C ve +80°C

Max Çalışma Hızı
Max. operating speed : 1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 150-10	10	70	60		~0,28	
SN 150-13	13	75,4	62,7		~0,29	
SN 150-16	16	82	66		~0,30	
SN 150-25	25	100	75		~0,33	
SN 150-38	38	126	88	**150**	~0,36	
SN 150-50	50	150	100		~0,40	
SN 150-63	63	177	113,5		~0,44	
SN 150-80	80	210	130		~0,49	
SN 150-100	100	250	150		~0,55	
SN 150-125	125	300	175		~0,64	



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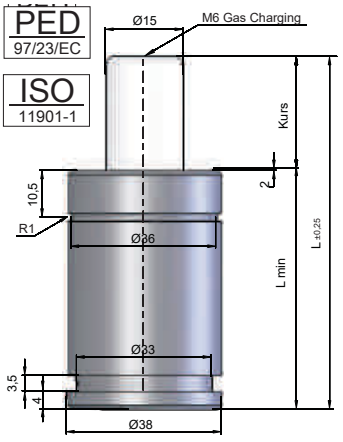
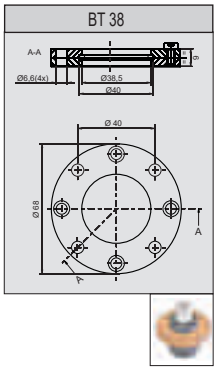
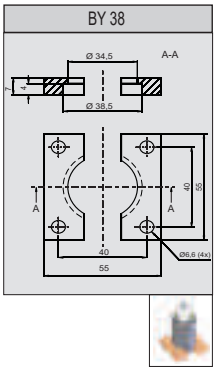
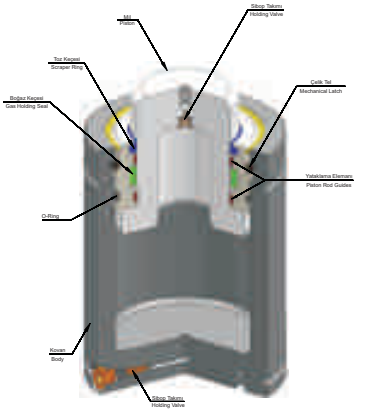
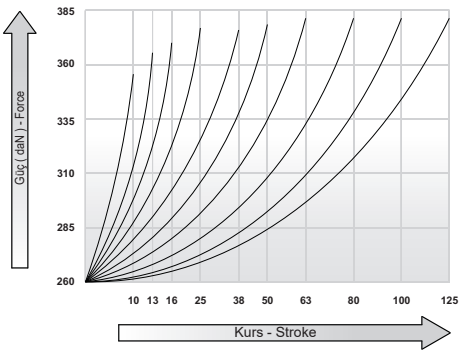










Basınç Gazı
Pressure Gas : Nitrogen N2

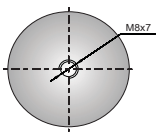
Max. Basınç
Max. load pressure : 150 bar

Min. Basınç
Min. load pressure : 25 bar

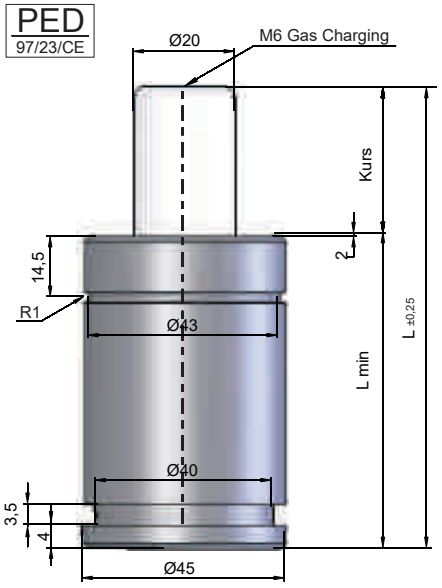
Çalışma Sıcaklığı
Working Temperature : 0°C ve +80°C

Max Çalışma Hızı
Max. operating speed : 1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 250-10	10	70	60		~ 0,40	
SN 250-13	13	75,4	62,7		~ 0,41	
SN 250-16	16	82	66		~ 0,43	
SN 250-25	25	100	75		~ 0,48	
SN 250-38	38	126	88	**250**	~ 0,54	
SN 250-50	50	150	100		~ 0,60	
SN 250-63	63	177	113,5		~ 0,66	
SN 250-80	80	210	130		~ 0,74	
SN 250-100	100	250	150		~ 0,81	
SN 250-125	125	300	175		~ 0,98	



PED 97/23/CE



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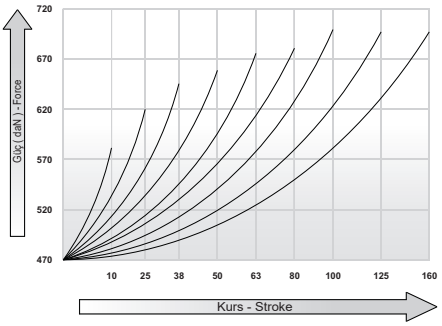
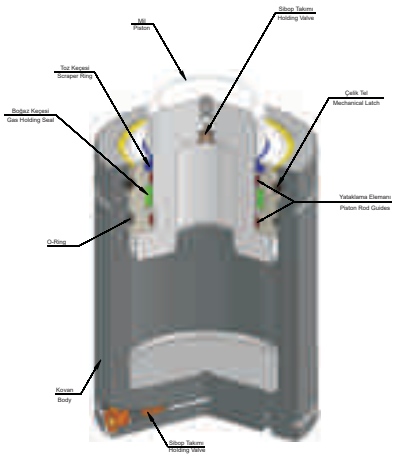
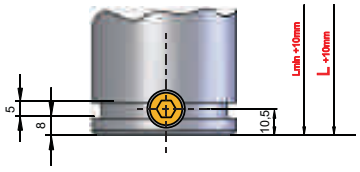
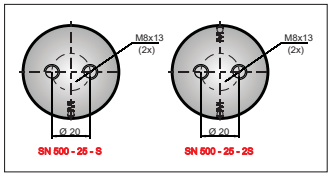


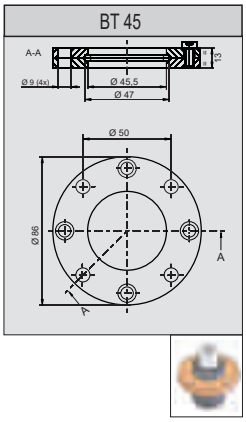
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

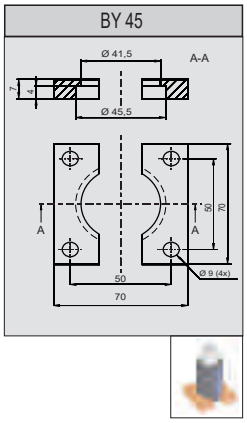
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 500-13	13	110,4	97,7	500	~ 0,90	M8x13 (2x) Ø 20
SN 500-25	25	135	110		~ 1,00	
SN 500-38	38	161	123		~ 1,10	
SN 500-50	50	185	135		~ 1,20	
SN 500-63	63	212	148,5		~ 1,30	
SN 500-80	80	245	165		~ 1,40	
SN 500-100	100	285	185		~ 1,60	
SN 500-125	125	335	210		~ 1,80	
SN 500-160	160	405	245		~ 2,10	

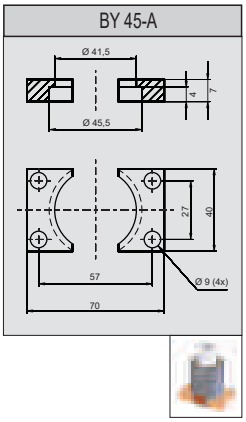


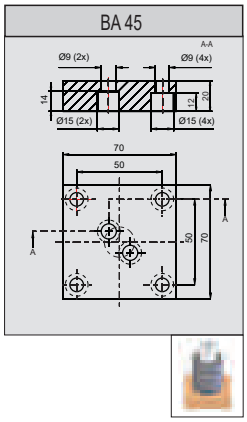


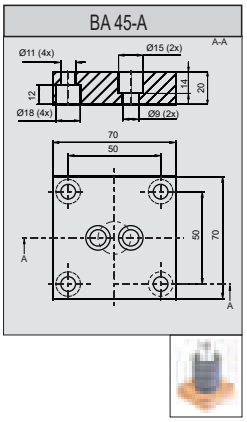












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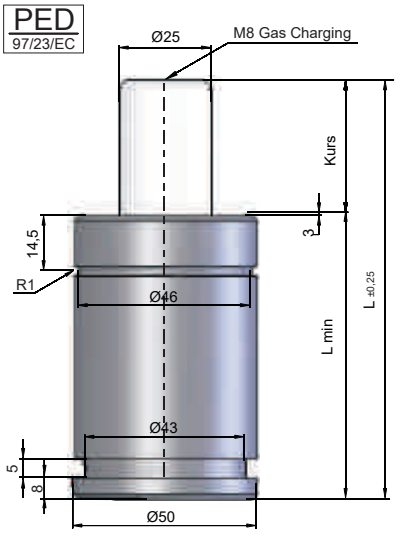

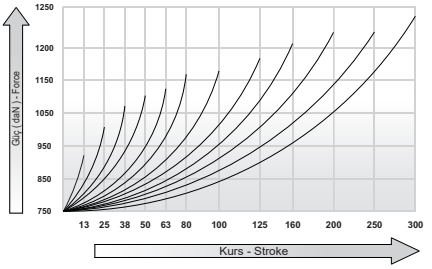

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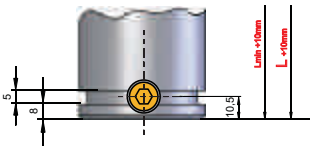
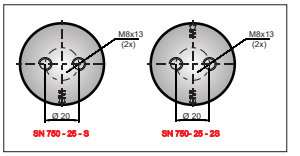
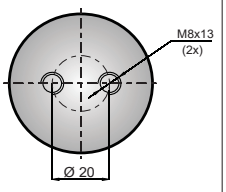
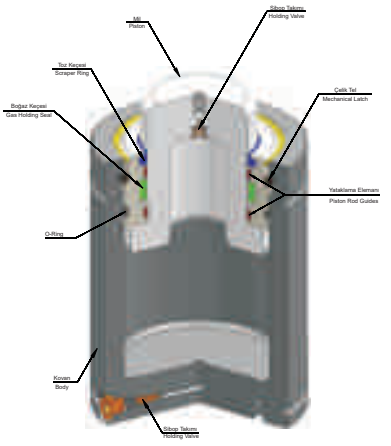
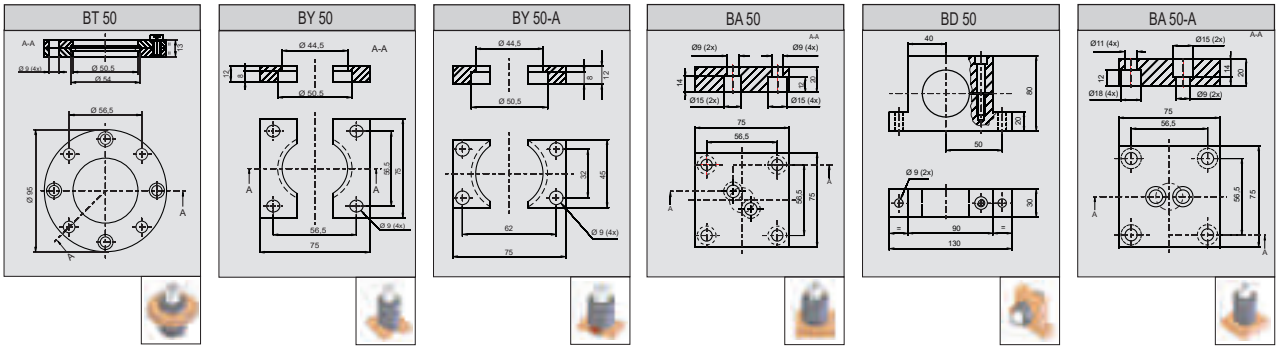




Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 750-13	13	120,4	107,7	750	~ 1,25	
SN 750-25	25	145	120		~ 1,38	
SN 750-38	38	171	133		~ 1,53	
SN 750-50	50	195	145		~ 1,65	
SN 750-63	63	222	158,5		~ 1,80	
SN 750-80	80	255	175		~ 1,96	
SN 750-100	100	295	195		~ 2,09	
SN 750-125	125	345	220		~ 2,33	
SN 750-160	160	415	255		~ 2,68	
SN 750-200	200	495	295		~ 3,10	
SN 750-250	250	595	345		~ 3,60	
SN 750-300	300	695	395		~ 4,10	





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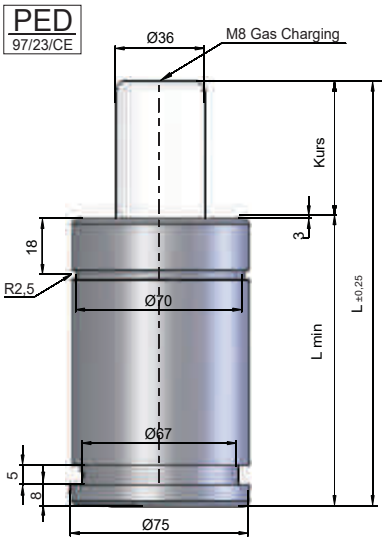

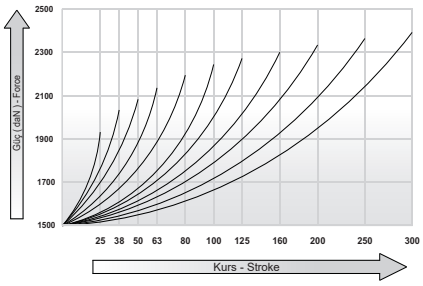

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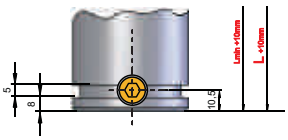
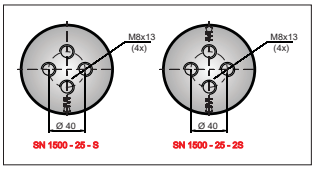
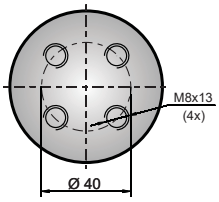
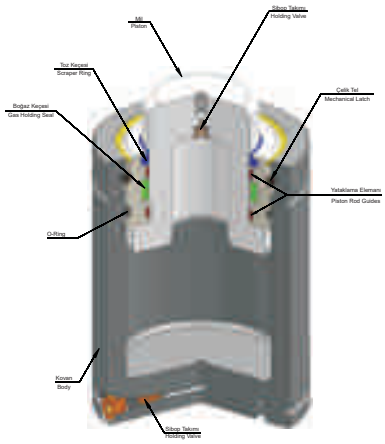
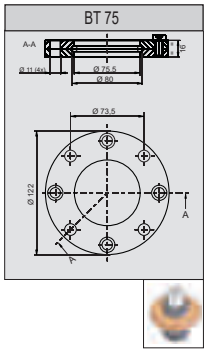


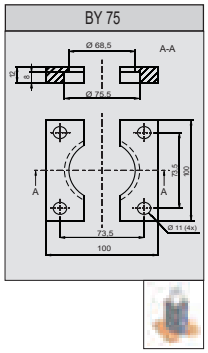


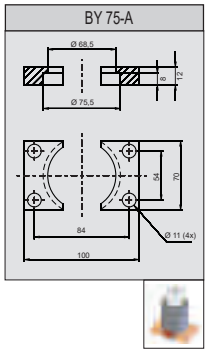
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

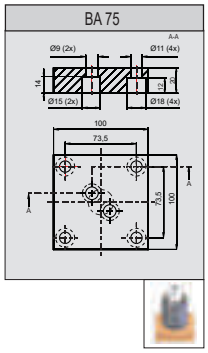
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 1500-25	25	160	135	1500	~ 3,64	
SN 1500-38	38	186	148		~ 3,91	
SN 1500-50	50	210	160		~ 4,15	
SN 1500-63	63	237	173,5		~ 4,47	
SN 1500-80	80	270	190		~ 4,81	
SN 1500-100	100	310	210		~ 5,22	
SN 1500-125	125	360	235		~ 5,75	
SN 1500-160	160	430	270		~ 6,33	
SN 1500-200	200	510	310		~ 7,34	
SN 1500-250	250	610	360		~ 8,50	
SN 1500-300	300	710	410		~ 9,60	

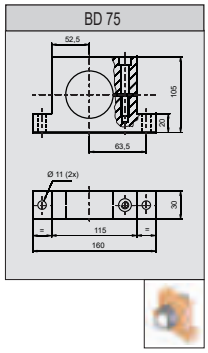


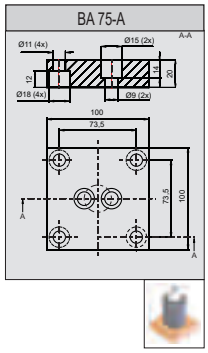












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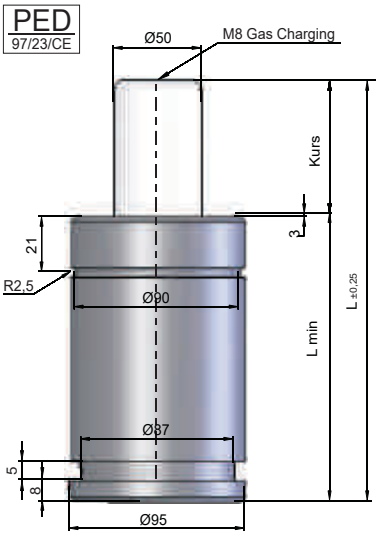

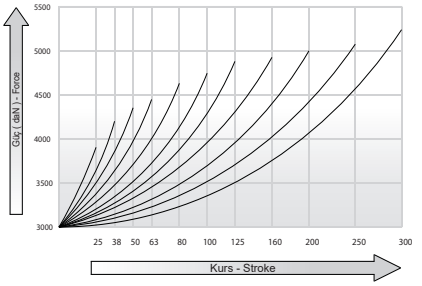

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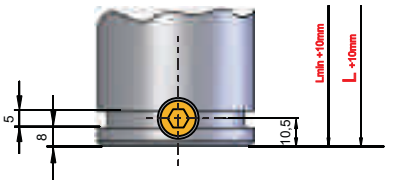
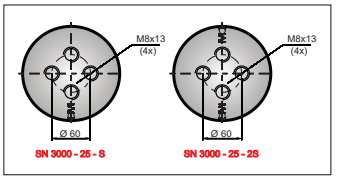
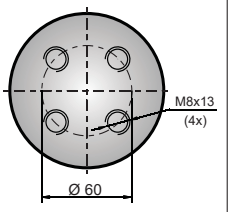
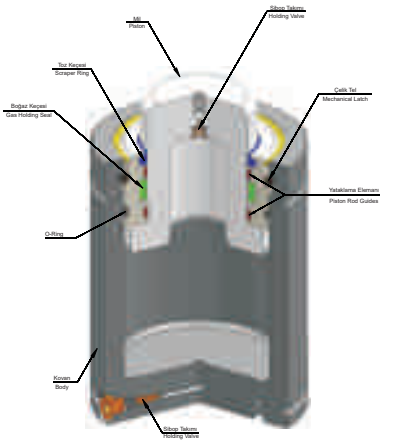
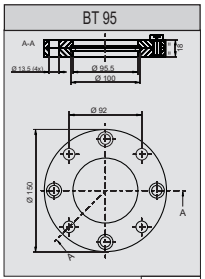


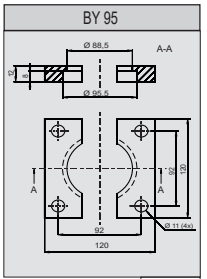


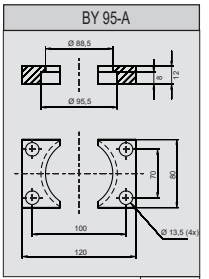
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

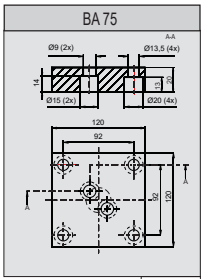
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 3000-25	25	170	145	3000	~ 6,36	
SN 3000-38	38	196	158		~ 6,75	
SN 3000-50	50	220	170		~ 7,35	
SN 3000-63	63	247	183,5		~ 7,87	
SN 3000-80	80	280	200		~ 8,44	
SN 3000-100	100	320	220		~ 9,03	
SN 3000-125	125	370	245		~ 10,1	
SN 3000-160	160	440	280		~ 11,3	
SN 3000-200	200	520	320		~ 12,8	
SN 3000-250	250	620	370		~ 14,5	
SN 3000-300	300	720	420		~ 16,2	

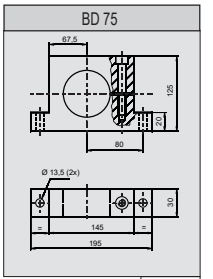


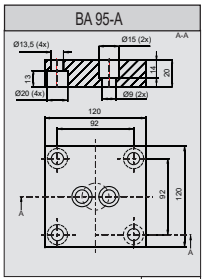












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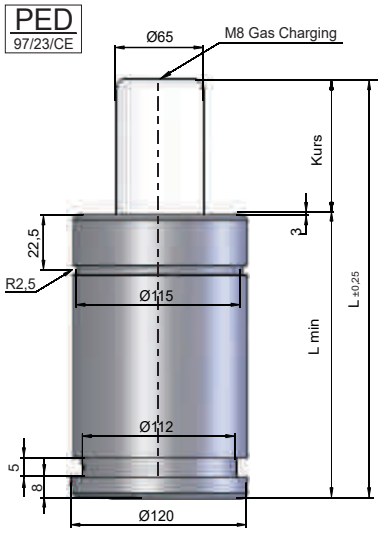

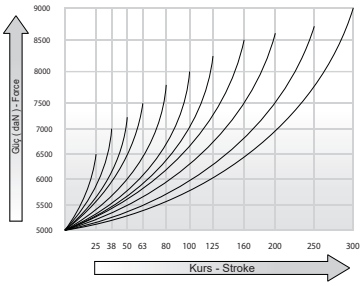

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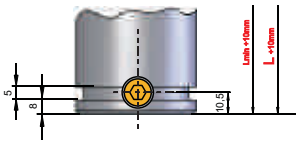
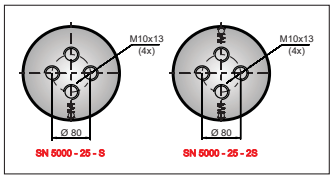
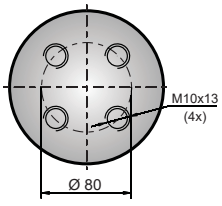
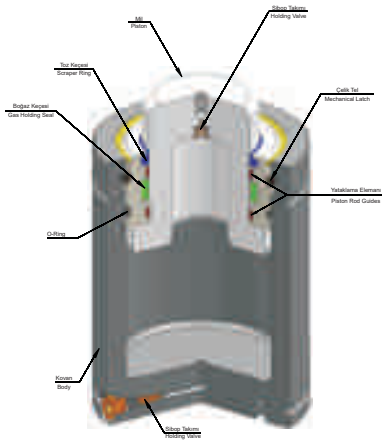
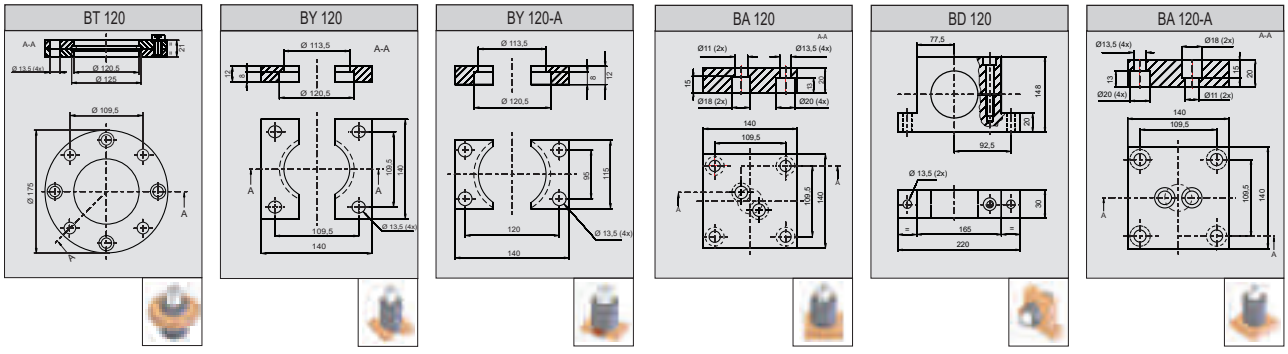




Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 5000-25	25	190	165	5000	~ 12,2	
SN 5000-38	38	216	178		~ 12,9	
SN 5000-50	50	240	190		~ 13,7	
SN 5000-63	63	267	203,5		~ 14,5	
SN 5000-80	80	300	220		~ 15,4	
SN 5000-100	100	340	240		~ 16,7	
SN 5000-125	125	390	265		~ 18,3	
SN 5000-160	160	460	300		~ 20,1	
SN 5000-200	200	540	340		~ 22,3	
SN 5000-250	250	640	390		~ 24,8	
SN 5000-300	300	740	440		~ 27,3	





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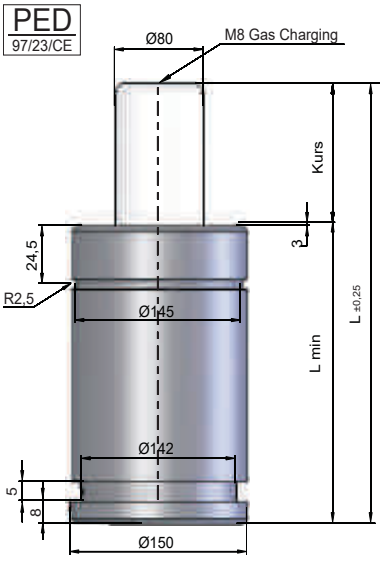

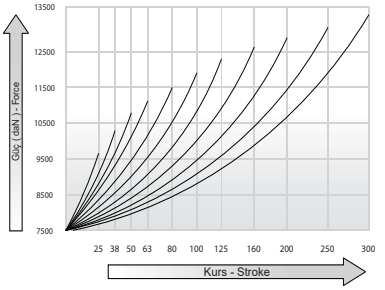

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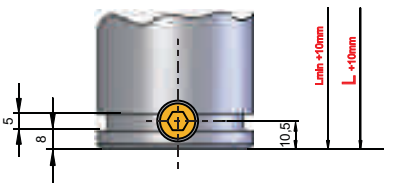
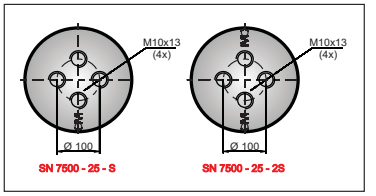




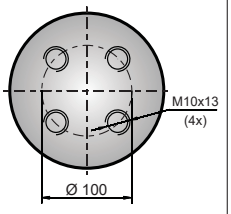
Basınç Gazı / Pressure Gas : Nitrogen N2

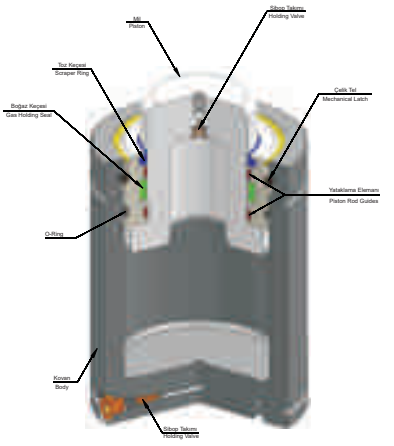
Max. Basınç / Max. load pressure : 150 bar

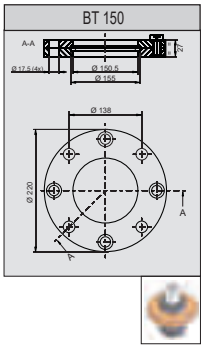
Min. Basınç / Min. load pressure : 25 bar

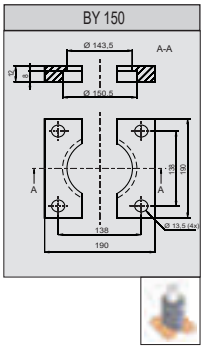
Çalışma Sıcaklığı / Working Temperature : 0°C ve +80°C

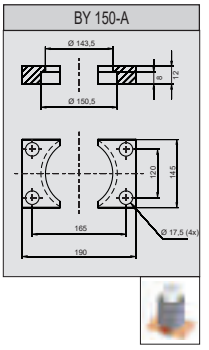
Max Çalışma Hızı / Max. operating speed : 1,8 m / s

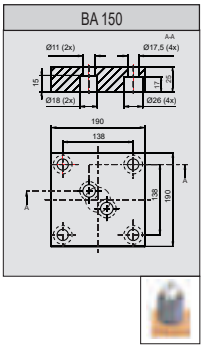
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 7500-25	25	205	180	5000	~ 19,8	
SN 7500-38	38	231	193		~ 21,0	
SN 7500-50	50	255	205		~ 21,8	
SN 7500-63	63	282	218,5		~ 22,6	
SN 7500-80	80	315	235		~ 24,4	
SN 7500-100	100	355	255		~ 26,1	
SN 7500-125	125	405	280		~ 28,0	
SN 7500-160	160	475	315		~ 31,4	
SN 7500-200	200	555	355		~ 35,0	
SN 7500-250	250	655	405		~ 38,5	
SN 7500-300	300	755	455		~ 42,4	

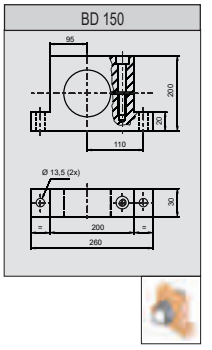


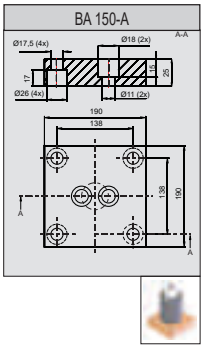












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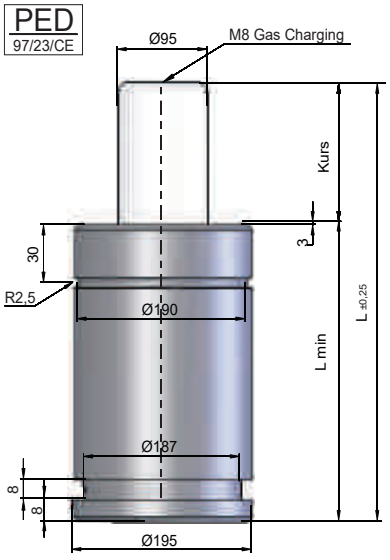
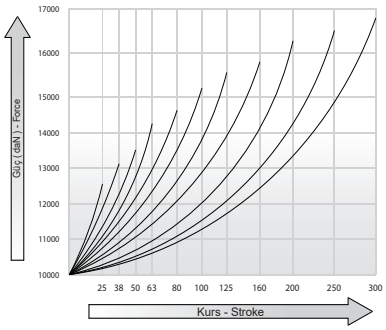
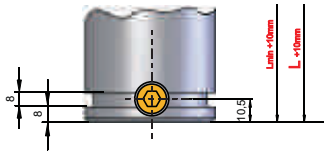
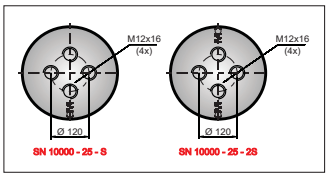


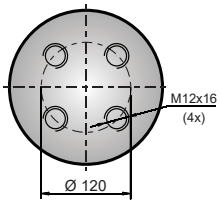


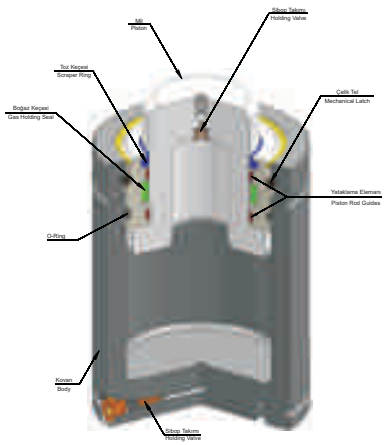
ISO 11901-1



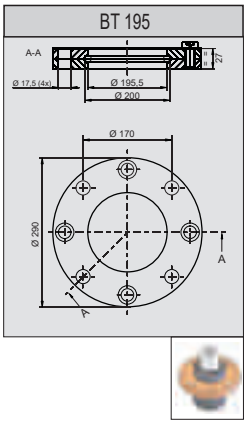


Basınç Gazı Pressure Gas	:	Nitrogen N2	
Max. Basınç Max. load pressure	:	150 bar	
Min. Basınç Min. load pressure	:	25 bar	
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C	
Max Çalışma Hızı Max. operating speed	:	1,8 m / s	

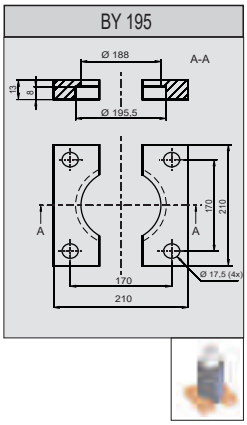
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
SN 10000-25	25	210	185	10000	~ 34,8	
SN 10000-38	38	236	198		~ 36,7	
SN 10000-50	50	260	210		~ 38,5	
SN 10000-63	63	287	223,5		~ 40,5	
SN 10000-80	80	320	240		~ 43,0	
SN 10000-100	100	360	260		~ 46,0	
SN 10000-125	125	410	285		~ 49,8	
SN 10000-160	160	480	320		~ 55,0	
SN 10000-200	200	560	360		~ 61,0	
SN 10000-250	250	660	410		~ 68,5	
SN 10000-300	300	760	460		~ 76,0	



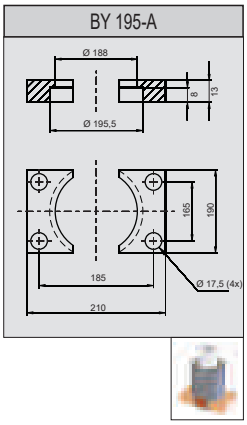
BT 195



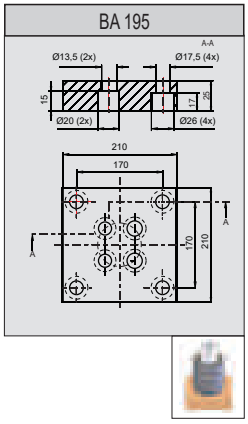
BY 195



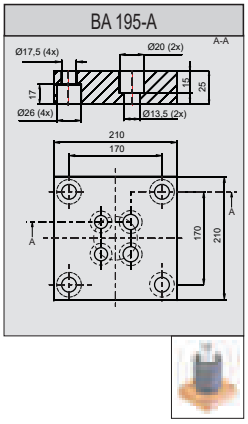
BY 195-A



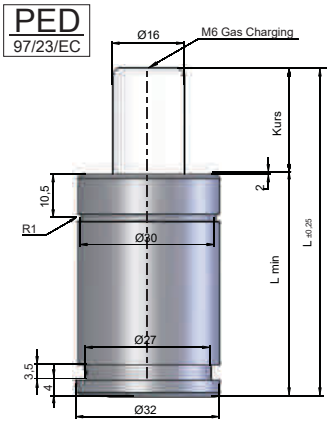
BA 195

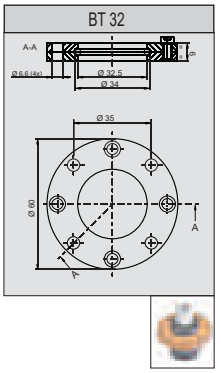


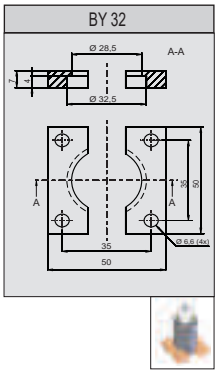
BA 195-A

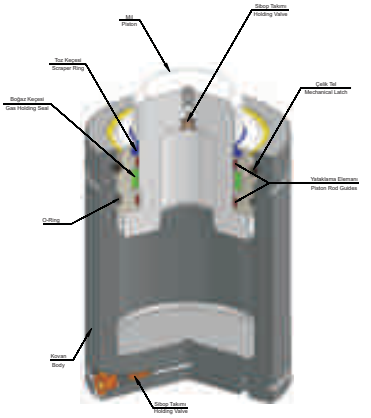


PED 97/23/EC









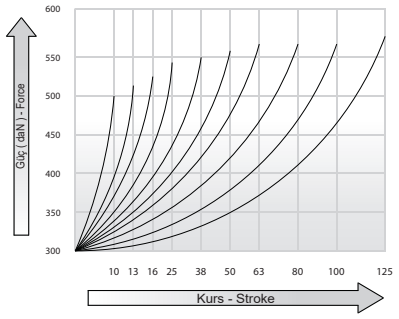
Basınç Gazı
Pressure Gas : Nitrogen N2

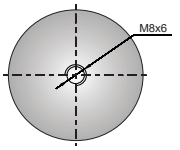
Max. Basınç
Max. load pressure : 150 bar

Min. Basınç
Min. load pressure : 25 bar

Çalışma Sıcaklığı
Working Temperature : 0°C ve +80°C

Max Çalışma Hızı
Max. operating speed : 1,8 m / s



Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
Y 300-10	10	70	60	250	~ 0,29	
Y 300-13	13	75,4	62,7		~ 0,30	
Y 300-16	16	82	66		~ 0,31	
Y 300-25	25	100	75		~ 0,34	
Y 300-38	38	126	88		~ 0,38	
Y 300-50	50	150	100		~ 0,43	
Y 300-63	63	177	113,5		~ 0,48	
Y 300-80	80	210	130		~ 0,54	
Y 300-100	100	250	150		~ 0,61	
Y 300-125	125	300	175		~ 0,69	

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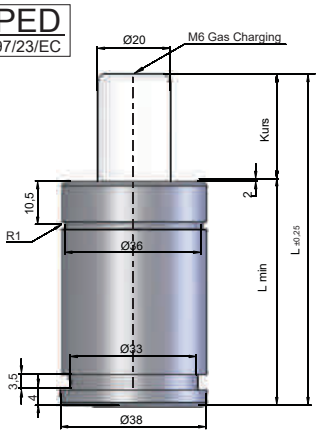
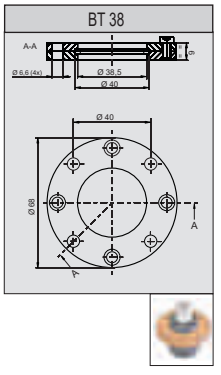
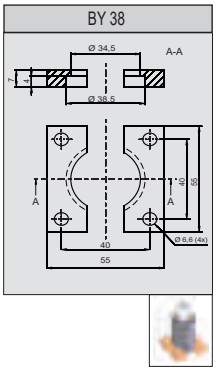
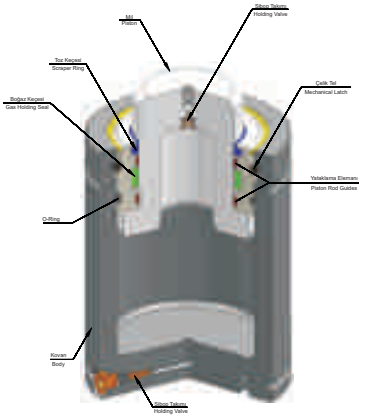








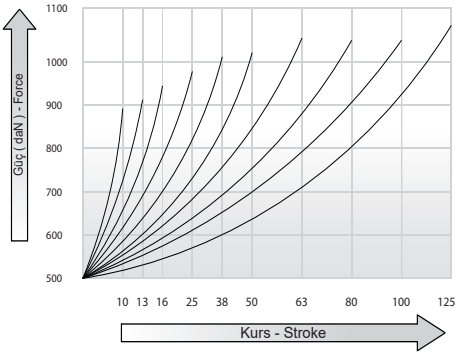
Basınç Gazı
Pressure Gas : Nitrogen N2

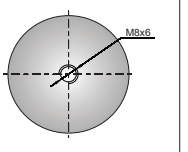
Max. Basınç
Max. load pressure : 150 bar

Min. Basınç
Min. load pressure : 25 bar

Çalışma Sıcaklığı
Working Temperature : 0°C ve +80°C

Max Çalışma Hızı
Max. operating speed : 1,8 m / s



Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
Y 500-10	10	70	60	250	~ 0,29	
Y 500-13	13	75,4	62,7		~ 0,30	
Y 500-16	16	82	66		~ 0,31	
Y 500-25	25	100	75		~ 0,34	
Y 500-38	38	126	88		~ 0,38	
Y 500-50	50	150	100		~ 0,43	
Y 500-63	63	177	113,5		~ 0,48	
Y 500-80	80	210	130		~ 0,54	
Y 500-100	100	250	150		~ 0,61	
Y 500-125	125	300	175		~ 0,69	

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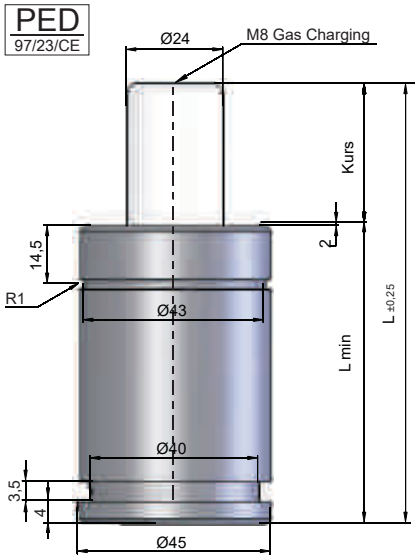
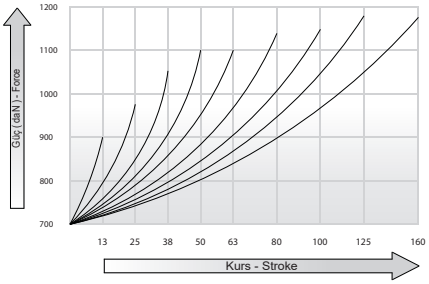
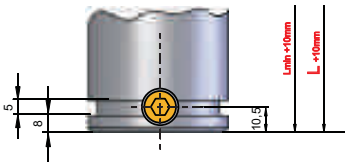
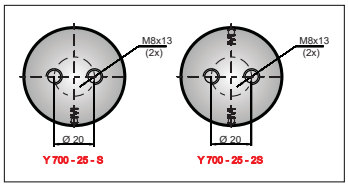
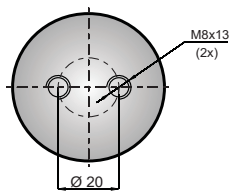


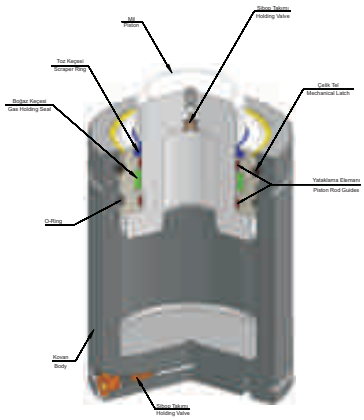


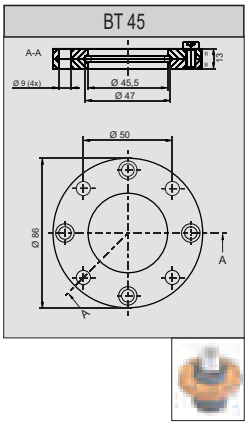


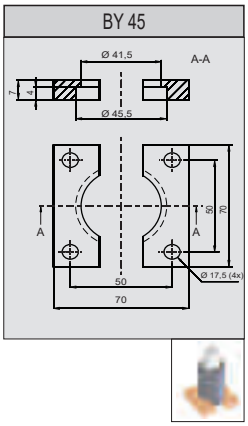


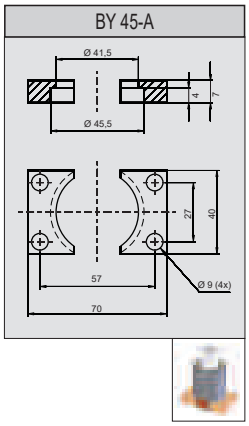
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

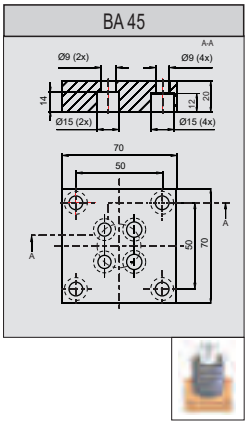
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
Y 700-13	13	110,4	97,7	700	~ 0,98	
Y 700-25	25	135	110		~ 1,07	
Y 700-38	38	161	123		~ 1,16	
Y 700-50	50	185	135		~ 1,25	
Y 700-63	63	212	148,5		~ 1,35	
Y 700-80	80	245	165		~ 1,47	
Y 700-100	100	285	185		~ 1,72	
Y 700-125	125	335	210		~ 1,80	
Y 700-160	160	405	245		~ 2,05	

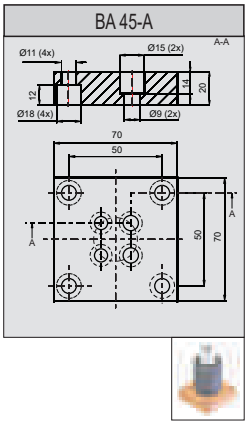




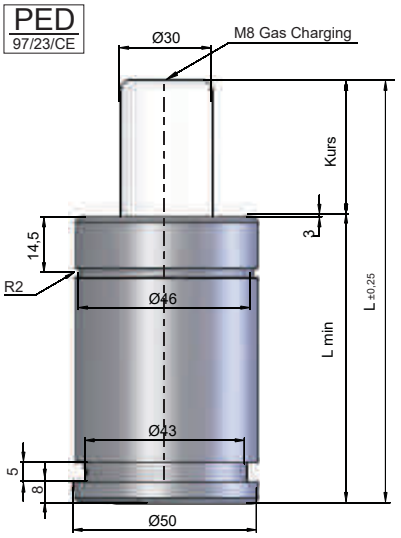


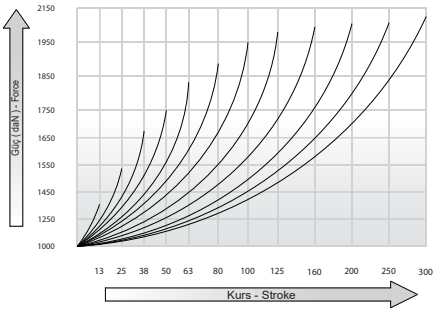


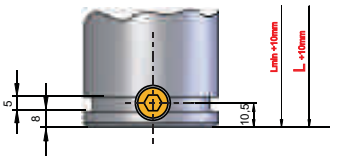


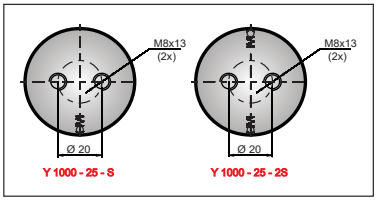


PED 97/23/CE

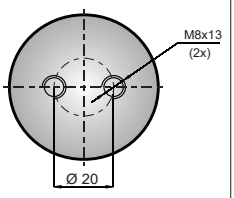


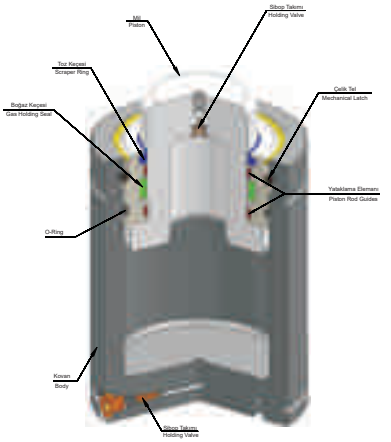


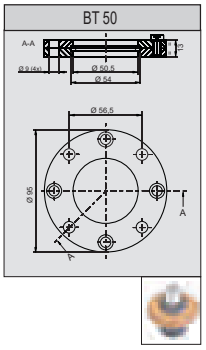


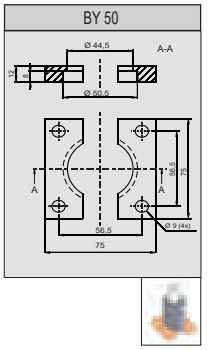


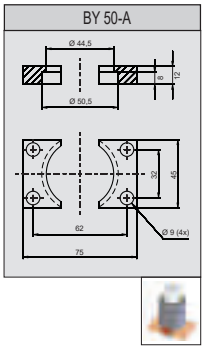
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

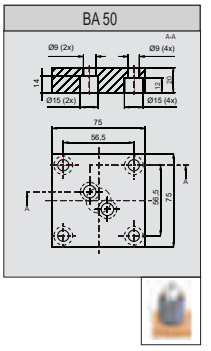
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
Y1000-13	13	120,4	107,7	1000	~ 1,35	
Y 1000-25	25	145	120		~ 1,44	
Y 1000-38	38	171	133		~ 1,59	
Y 1000-50	50	195	145		~ 1,68	
Y 1000-63	63	222	158,5		~ 1,83	
Y 1000-80	80	255	175		~ 1,99	
Y 1000-100	100	295	195		~ 2,19	
Y 1000-125	125	345	220		~ 2,43	
Y 1000-160	160	415	255		~ 2,77	
Y 1000-200	200	495	295		~ 3,16	
Y 1000-250	250	595	345		~ 3,64	
Y 1000-300	300	695	395		~ 4,13	

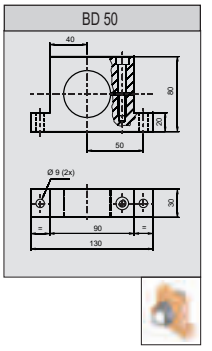


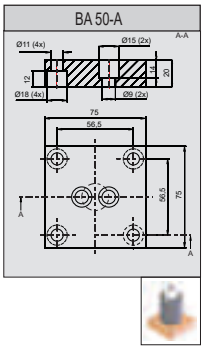












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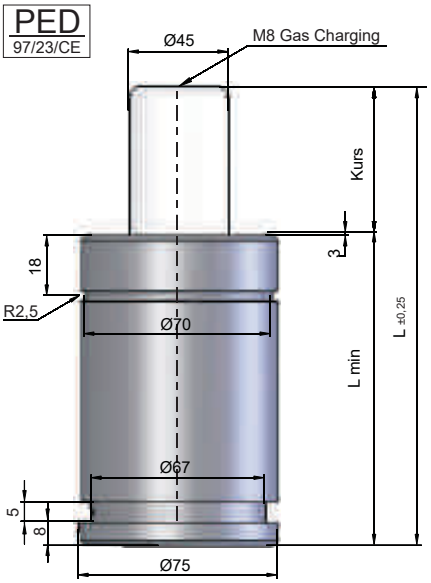
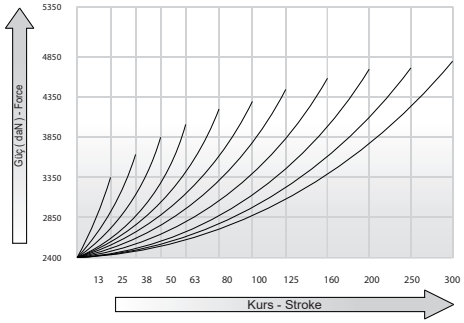
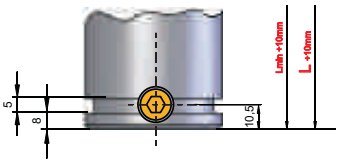
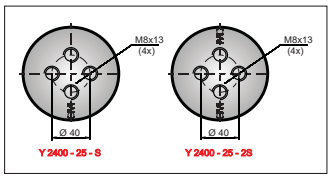


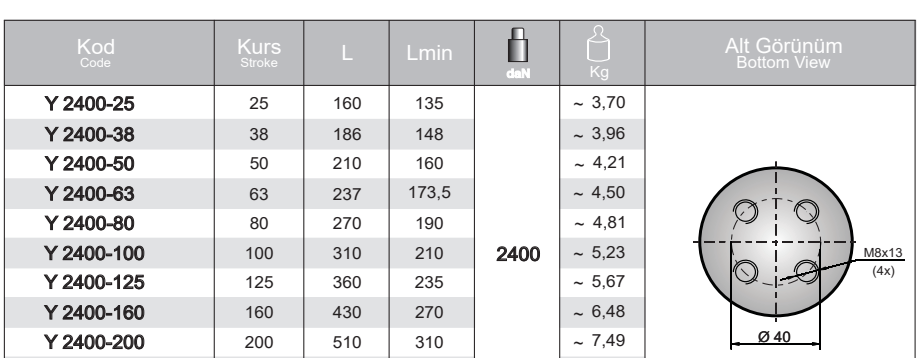


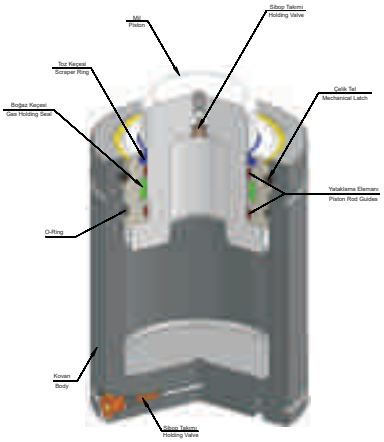


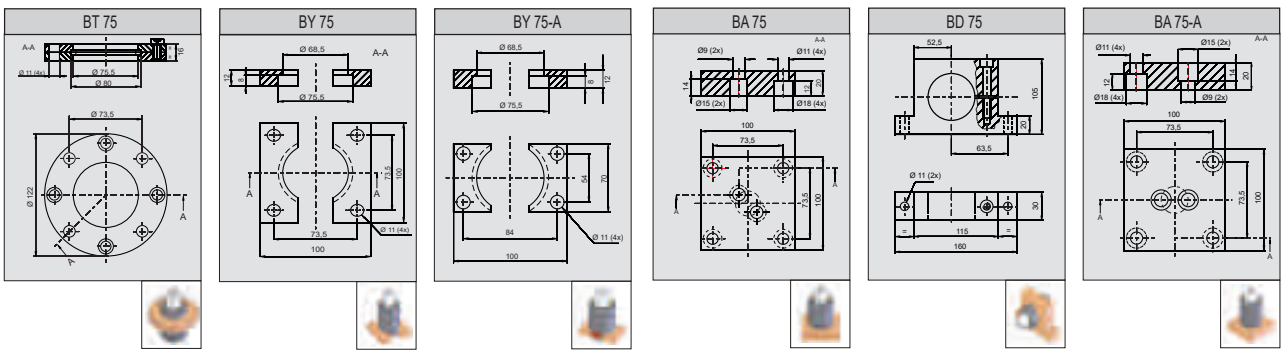


Basınç Gazı Pressure Gas	: Nitrogen N2
Max. Basınç Max. load pressure	: 150 bar
Min. Basınç Min. load pressure	: 25 bar
Çalışma Sıcaklığı Working Temperature	: 0°C ve +80°C
Max Çalışma Hızı Max. operating speed	: 1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
Y 2400-25	25	160	135		~ 3,70	
Y 2400-38	38	186	148		~ 3,96	
Y 2400-50	50	210	160		~ 4,21	
Y 2400-63	63	237	173,5		~ 4,50	
Y 2400-80	80	270	190		~ 4,81	
Y 2400-100	100	310	210	**2400**	~ 5,23	
Y 2400-125	125	360	235		~ 5,67	
Y 2400-160	160	430	270		~ 6,48	
Y 2400-200	200	510	310		~ 7,49	
Y 2400-250	250	610	360		~ 9,36	
Y 2400-300	300	710	410		~ 11,23	







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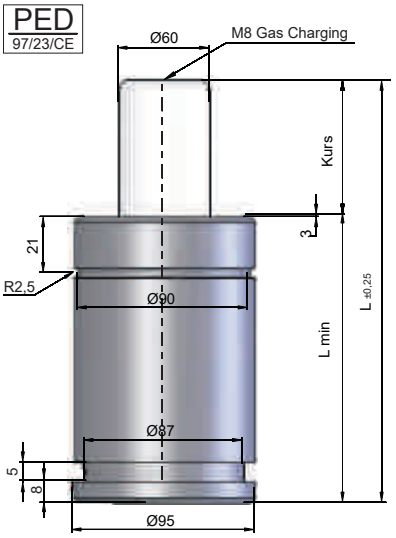
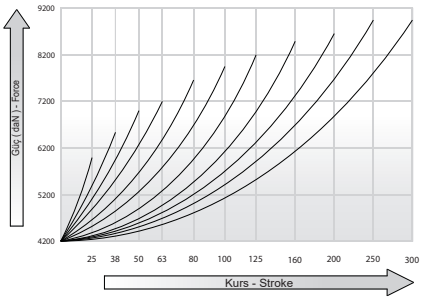
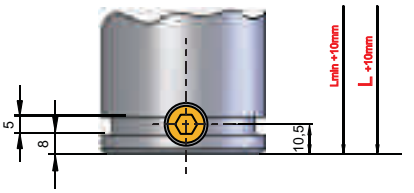
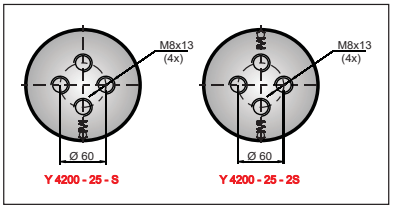


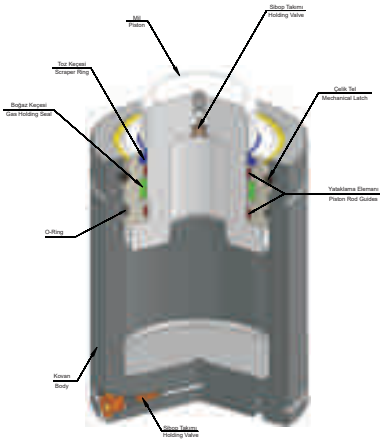


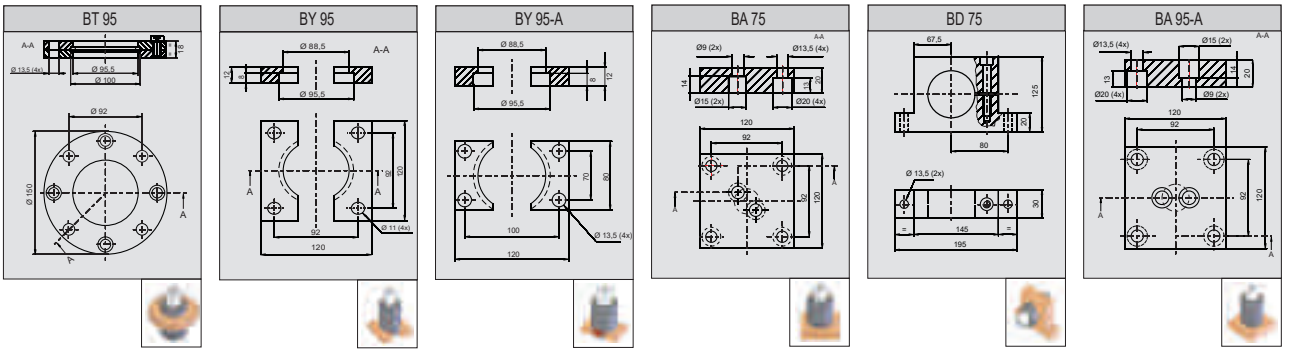




Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
Y 4200-25	25	170	145	4200	~ 6,54	M8x13 (4x) Ø 60
Y 4200-38	38	196	158		~ 7,00	
Y 4200-50	50	220	170		~ 7,37	
Y 4200-63	63	247	183,5		~ 7,84	
Y 4200-80	80	280	200		~ 8,35	
Y 4200-100	100	320	220		~ 9,30	
Y 4200-125	125	370	245		~ 9,80	
Y 4200-160	160	440	280		~ 10,5	
Y 4200-200	200	520	320		~ 11,3	
Y 4200-250	250	620	370		~ 12,3	
Y 4200-300	300	720	420		~ 13,3	





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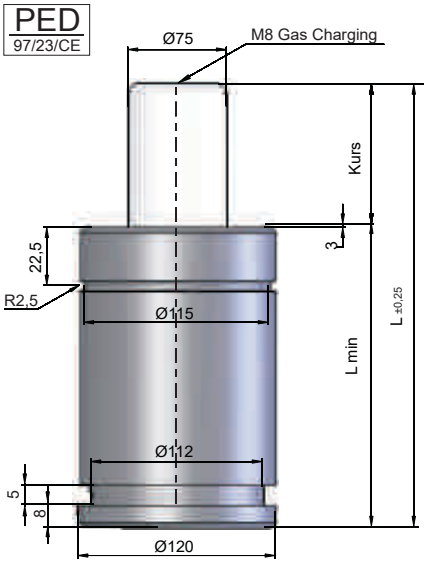
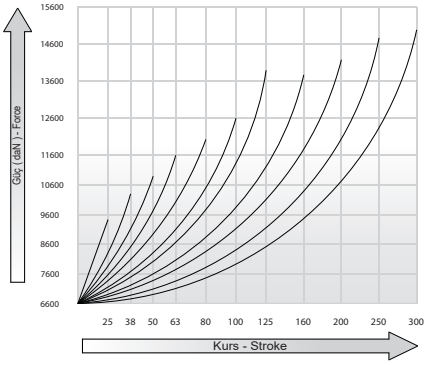
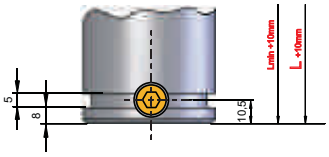
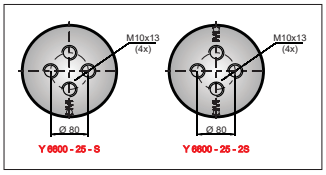
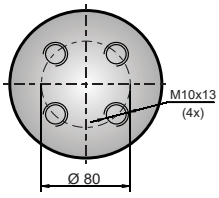


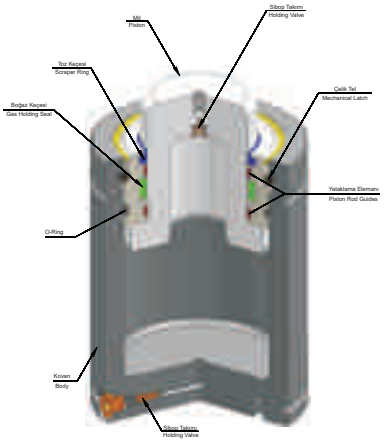


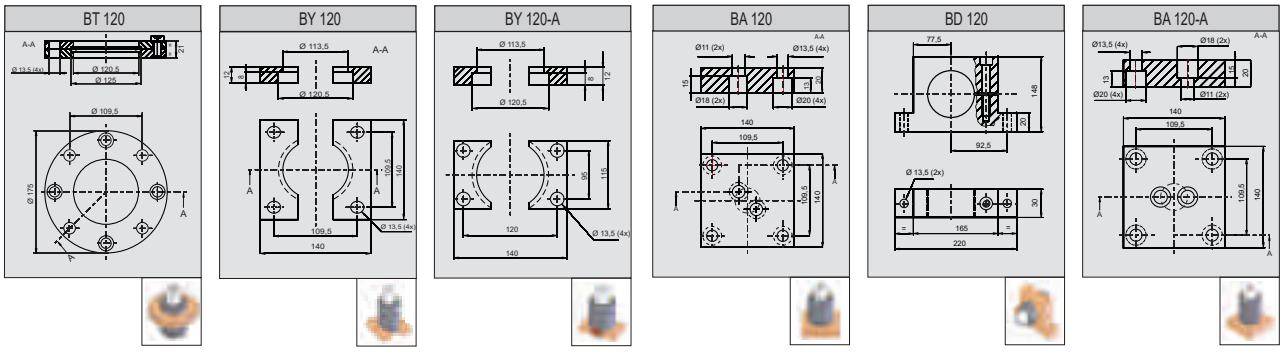




Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
Y 6600-25	25	190	165	6600	~ 12,1	
Y 6600-38	38	216	178		~ 13,7	
Y 6600-50	50	240	190		~ 15,1	
Y 6600-63	63	267	203,5		~ 15,5	
Y 6600-80	80	300	220		~ 16,1	
Y 6600-100	100	340	240		~ 17,5	
Y 6600-125	125	390	265		~ 19,3	
Y 6600-160	160	460	300		~ 21,8	
Y 6600-200	200	540	340		~ 24,7	
Y 6600-250	250	640	390		~ 28,3	
Y 6600-300	300	740	440		~ 31,9	





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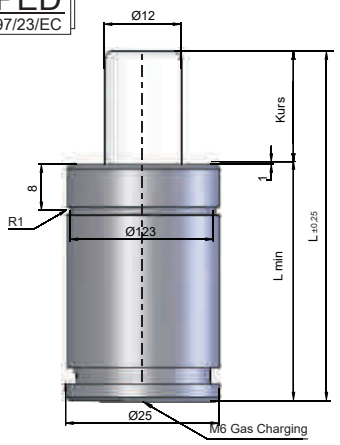
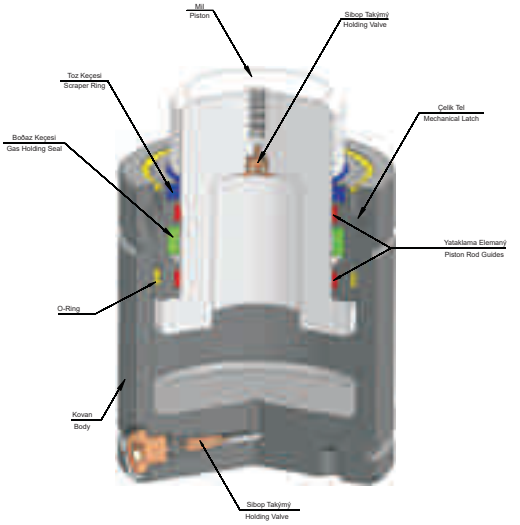
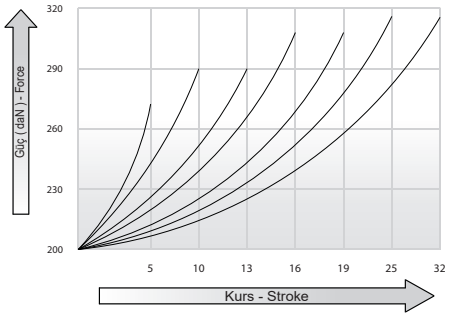
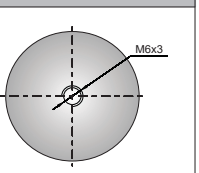


Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s





Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 200-5	5	40	35	200	~ 0,09	
YO 200-10	10	50	40		~ 0,10	
YO 200-13	13	56	43		~ 0,10	
YO 200-16	16	62	46		~ 0,11	
YO 200-19	19	68	49		~ 0,12	
YO 200-25	25	80	55		~ 0,13	
YO 200-32	32	94	62		~ 0,16	

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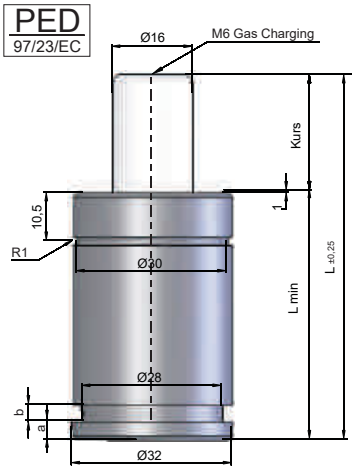
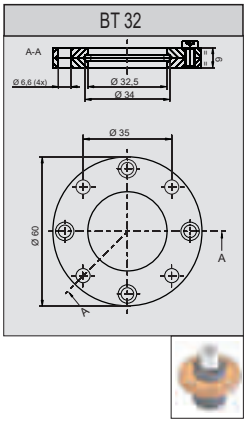
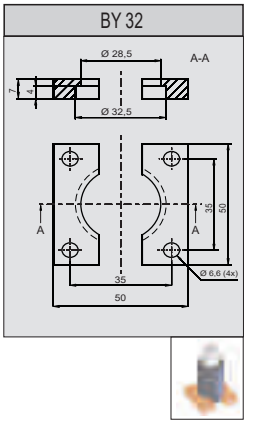
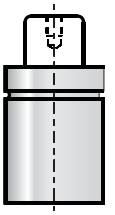


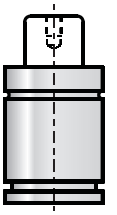




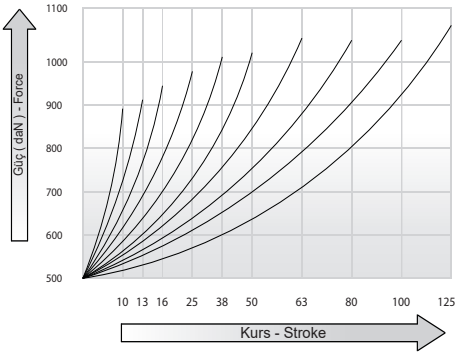
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

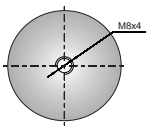


Kurs (5 - 16)



Kurs (19 - 125)



Kod Code	Kurs Stroke	L	Lmin	a	b	daN	Kg	Alt Görünüm Bottom View
YO 300-5	5	40	35	---	---	300	~ 0,17	
YO 300-10	10	50	40	---	---		~ 0,18	
YO 300-13	13	56	43	---	---		~ 0,19	
YO 300-16	16	62	46	---	---		~ 0,20	
YO 300-19	19	68	49	4	3,5		~ 0,22	
YO 300-25	25	80	55	4	3,5		~ 0,25	
YO 300-32	32	94	62	4	3,5		~ 0,27	
YO 300-38	38	106	68	4	3,5		~ 0,29	
YO 300-50	50	130	80	4	3,5		~ 0,34	
YO 300-63	63	156	93	4	3,5		~ 0,39	
YO 300-75	75	180	105	4	3,5		~ 0,42	
YO 300-80	80	190	110	4	3,5		~ 0,45	
YO 300-100	100	230	130	4	3,5		~ 0,53	
YO 300-125	125	280	155	4	3,5		~ 0,68	

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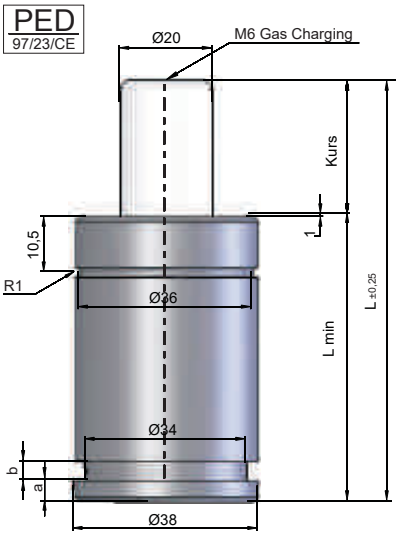
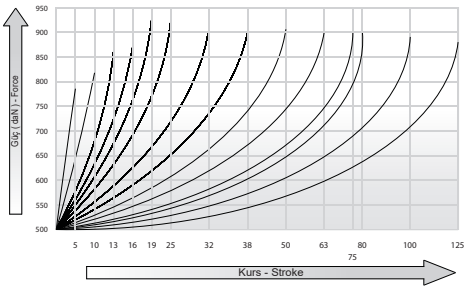
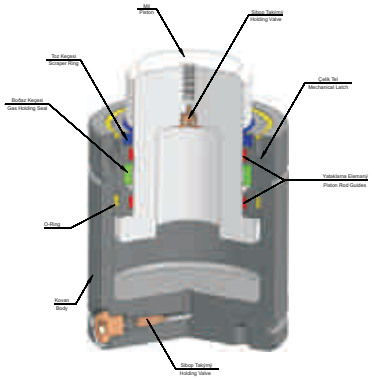
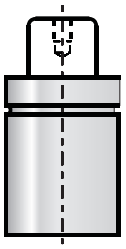


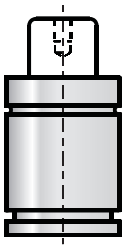




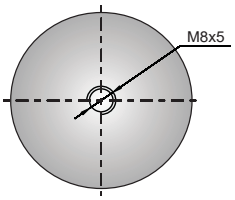
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s



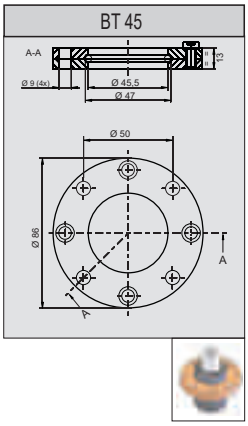
Kurs (5 - 16)



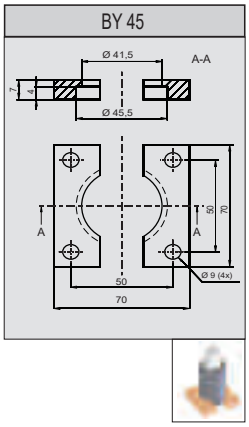
Kurs (19 - 125)

Kod Code	Kurs Stroke	L	Lmin	a	b	daN	Kg	Alt Görünüm Bottom View
YO 500-5	5	40	35	---	---	500	~ 0,25	
YO 500-10	10	50	40	---	---		~ 0,27	
YO 500-13	13	56	43	---	---		~ 0,29	
YO 500-16	16	62	46	---	---		~ 0,31	
YO 500-19	19	68	49	4	3,5		~ 0,33	
YO 500-25	25	80	55	4	3,5		~ 0,36	
YO 500-32	32	94	62	4	3,5		~ 0,40	
YO 500-38	38	106	68	4	3,5		~ ,044	
YO 500-50	50	130	80	4	3,5		~ 0,50	
YO 500-63	63	156	93	4	3,5		~ 0,57	
YO 500-75	75	180	105	4	3,5		~ 0,61	
YO 500-80	80	190	110	4	3,5		~ 0,66	
YO 500-100	100	230	130	4	3,5		~ 0,77	
YO 500-125	125	280	155	4	3,5		~ 0,90	

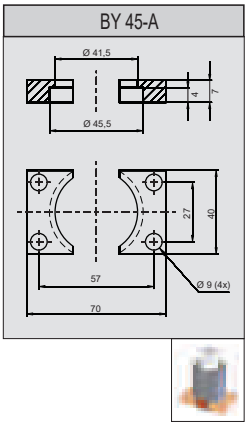
BT 45



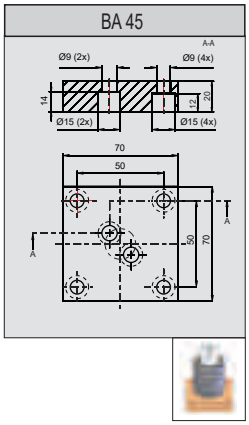
BY 45



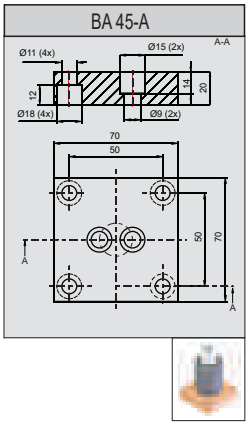
BY 45-A



BA 45



BA 45-A



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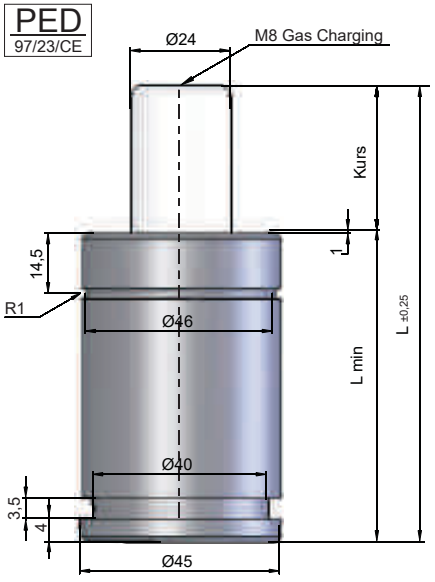
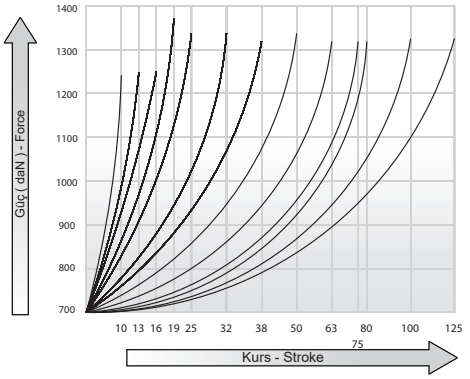
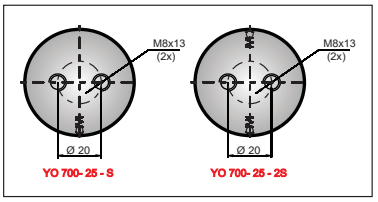
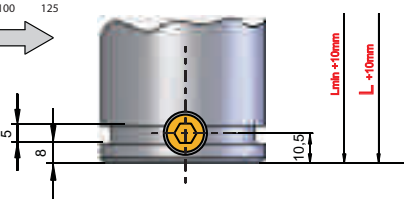




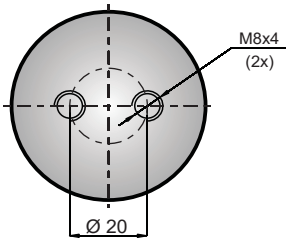
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s



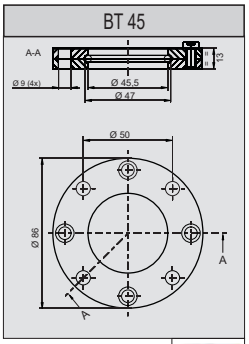


Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+10** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
YO 1000 - 25 - S

For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+10 mm.**
For the Orders , you must add an **(S)** on the end.
YO 1000 - 25 - S

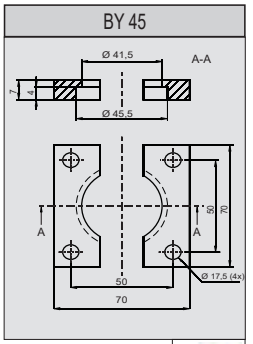
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 700-10	10	52	42	700	~ 0,39	
YO 700-13	13	58	45		~ 0,42	
YO 700-16	16	64	48		~ 0,45	
YO 700-19	19	70	51		~ 0,48	
YO 700-25	25	82	57		~ 0,53	
YO 700-32	32	96	64		~ 0,58	
YO 700-38	38	108	70		~ 0,62	
YO 700-50	50	132	82		~ 0,71	
YO 700-63	63	158	95		~ 0,81	
YO 700-75	75	182	107		~ 0,85	
YO 700-80	80	192	112		~ 0,93	
YO 700-100	100	232	132		~ 1,04	
YO 700-125	125	282	157		~ 1,28	

BT 45



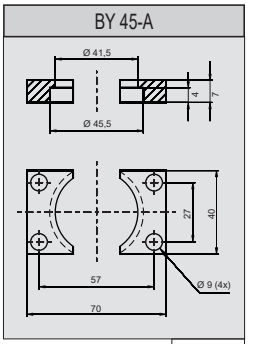


BY 45



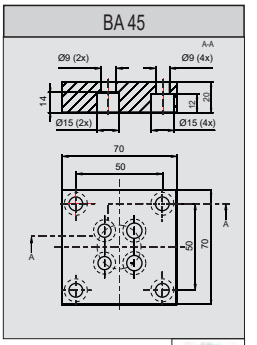


BY 45-A



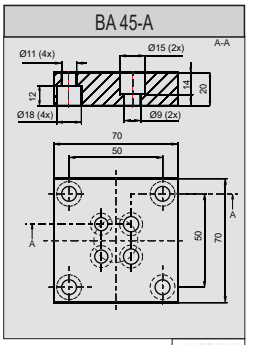


BA 45





BA 45-A





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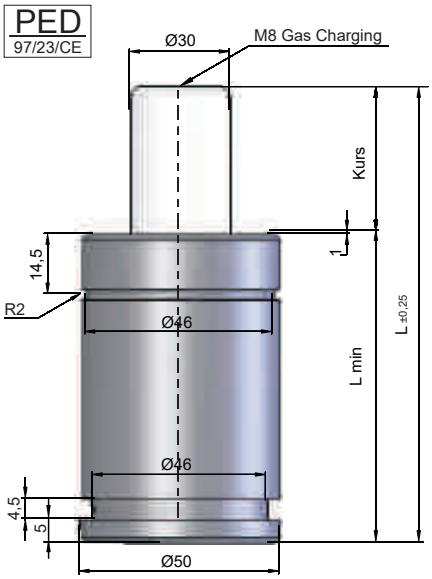
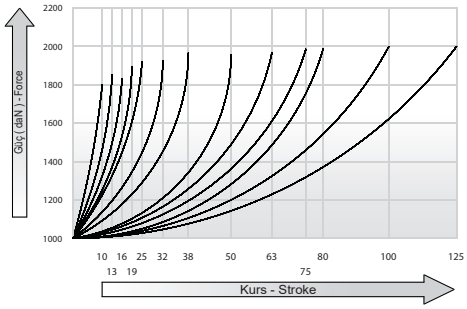
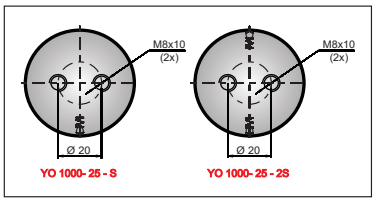
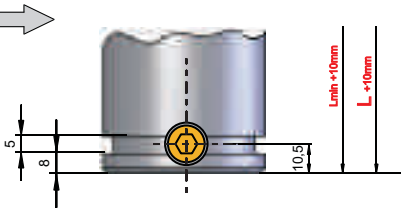




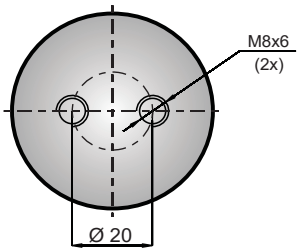
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

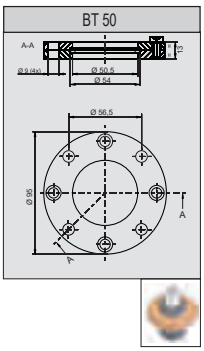


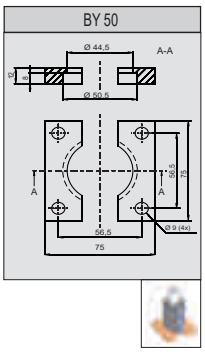


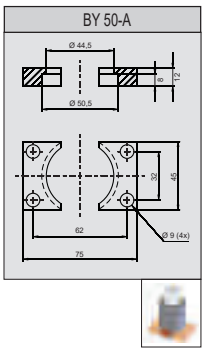
Seri bağlanacak gazlı yaylarda
L ve **L min** ölçülerine **+10** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
YO 1000 - 25 - S

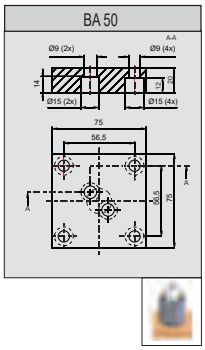
For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+10 mm.**
For the Orders , you must add an **(S)** on the end.
YO 1000 - 25 - S

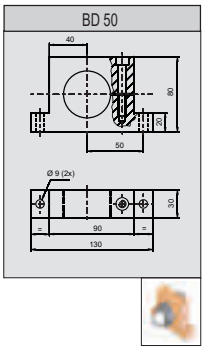
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 1000-10	10	58	48	1000	~ 0,57	
YO 1000-13	13	64	51		~ 0,59	
YO 1000-16	16	70	54		~ 0,62	
YO 1000-19	19	76	57		~ 0,65	
YO 1000-25	25	88	63		~ 0,70	
YO 1000-32	32	102	70		~ 0,77	
YO 1000-38	38	114	76		~ 0,83	
YO 1000-50	50	138	88		~ 0,94	
YO 1000-63	63	164	101		~ 1,07	
YO 1000-75	75	188	113		~ 1,16	
YO 1000-80	80	198	118		~ 1,21	
YO 1000-100	100	238	138		~ 1,43	
YO 1000-125	125	288	163		~ 1,70	

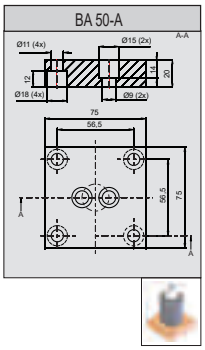












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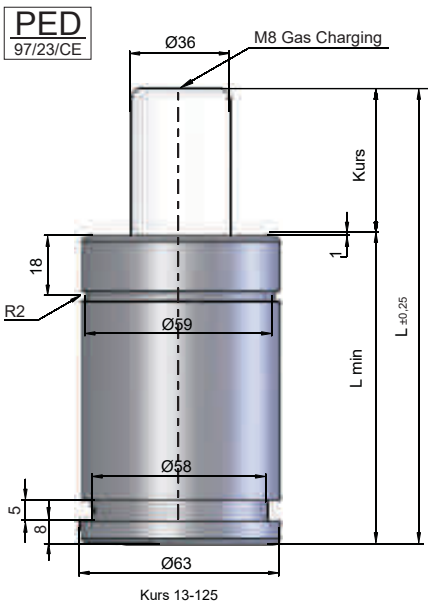
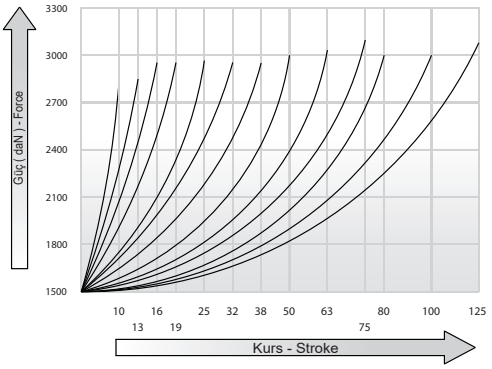
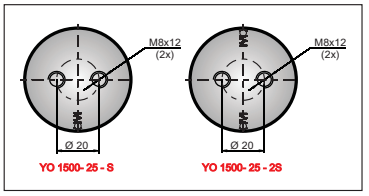
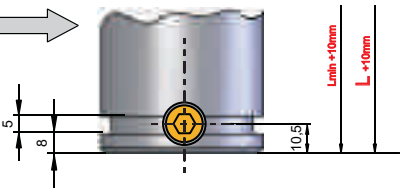


Kurs 13-125



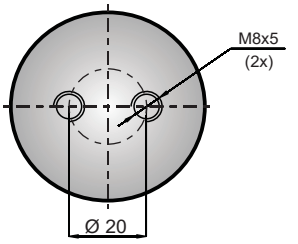
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s



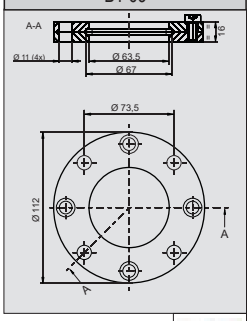


Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+10** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
YO 1500 - 25 - S

For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+10 mm.**
For the Orders , you must add an **(S)** on the end.
YO 1500 - 25 - S

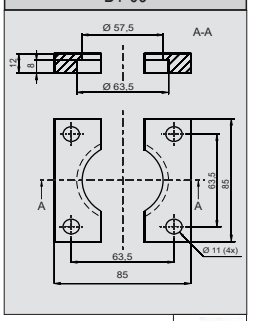
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 1500-10	10	64	54	1500	~ 1,02	
YO 1500-13	13	70	57		~ 1,05	
YO 1500-16	16	76	60		~ 1,10	
YO 1500-19	19	82	63		~ 1,15	
YO 1500-25	25	94	69		~ 1,25	
YO 1500-32	32	108	76		~ 1,35	
YO 1500-38	38	120	82		~ 1,44	
YO 1500-50	50	144	94		~ 1,61	
YO 1500-63	63	170	107		~ 1,81	
YO 1500-75	75	194	119		~ 1,90	
YO 1500-80	80	204	124		~ 2,06	
YO 1500-100	100	244	144		~ 2,38	
YO 1500-125	125	294	169		~ 2,86	

BT 63



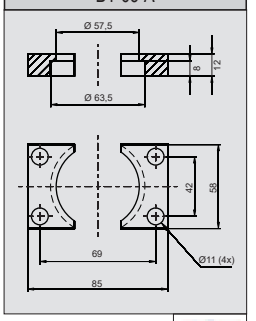


BY 63



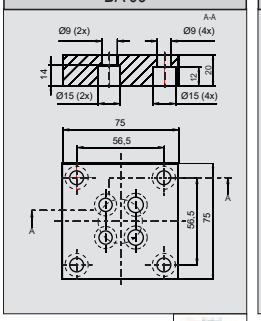


BY 63-A



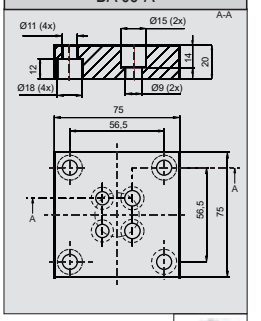


BA 63





BA 63-A





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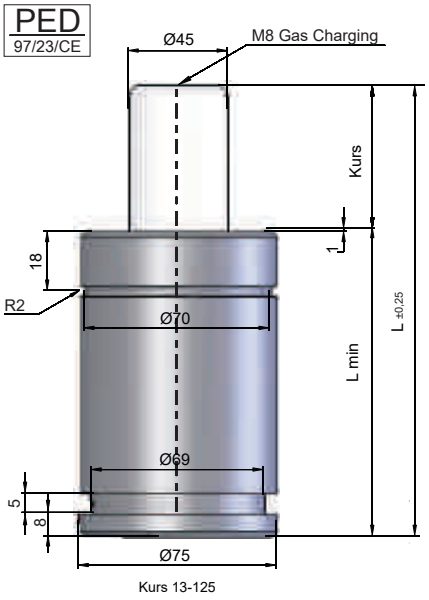
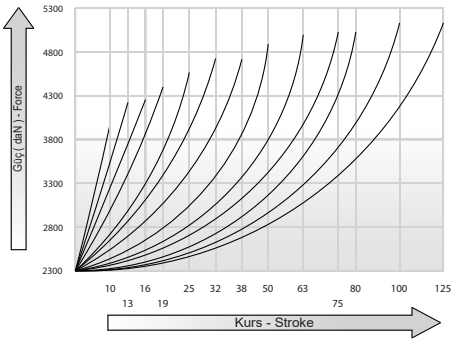
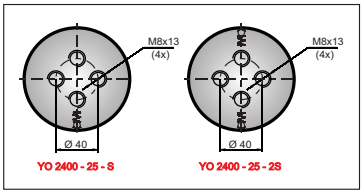
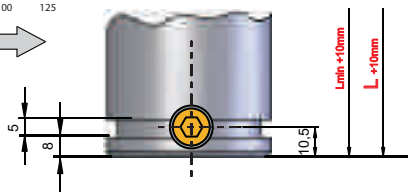


Kurs 13-125



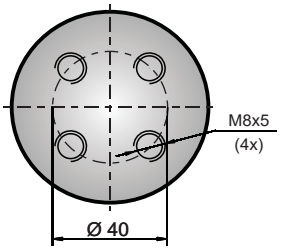


Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

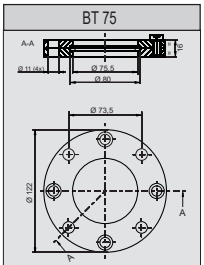


Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+10** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
YO 2400 - 25 - S

For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+10 mm.**
For the Orders , you must add an **(S)** on the end.
YO 2400 - 25 - S

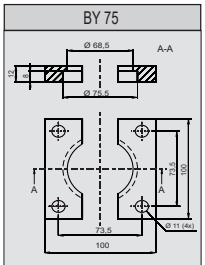
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 2400-10	10	65	55	1500	~ 1,47	
YO 2400-13	13	71	58		~ 1,52	
YO 2400-16	16	77	61		~ 1,58	
YO 2400-19	19	83	64		~ 1,65	
YO 2400-25	25	95	70		~ 1,77	
YO 2400-32	32	109	77		~ 1,93	
YO 2400-38	38	121	83		~ 2,05	
YO 2400-50	50	145	95		~ 2,30	
YO 2400-63	63	171	108		~ 2,55	
YO 2400-75	75	195	120		~ 2,75	
YO 2400-80	80	205	125		~ 2,85	
YO 2400-100	100	245	145		~ 3,28	
YO 2400-125	125	295	170		~ 3,93	

BT 75



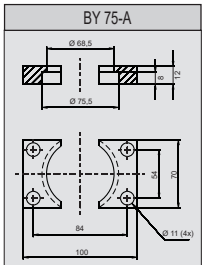


BY 75





BY 75-A





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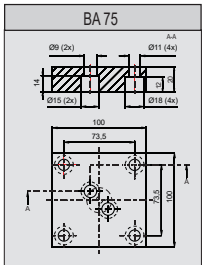



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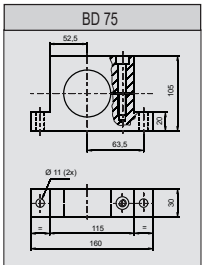
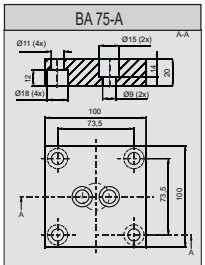




BA 75-A





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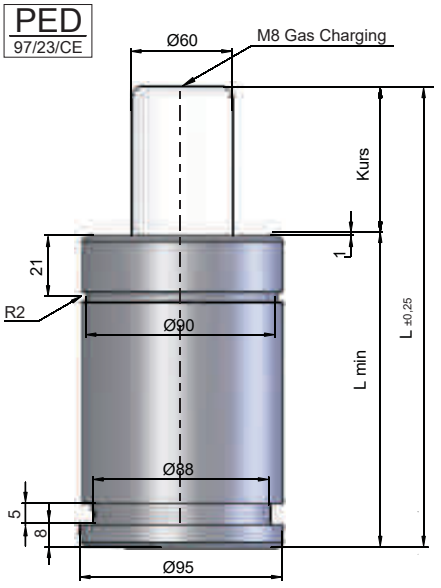
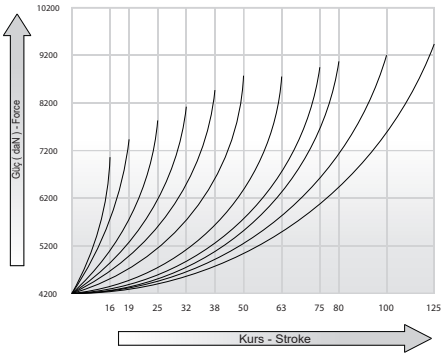
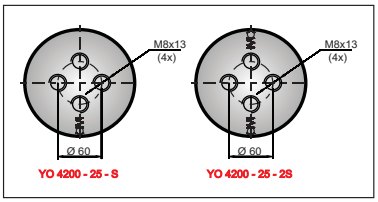
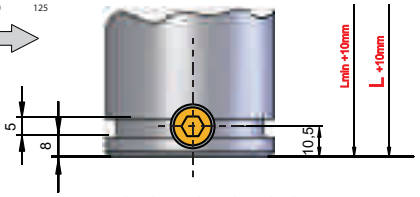




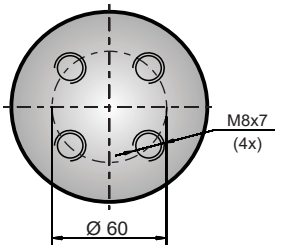
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

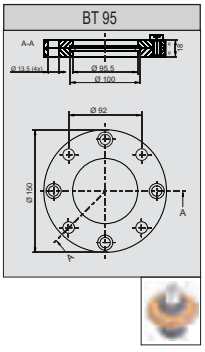


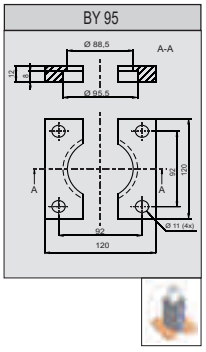


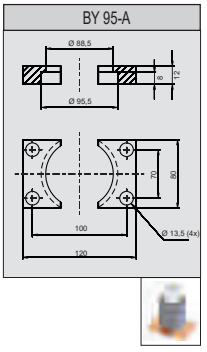
Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+10** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
YO 4200 - 25 - S

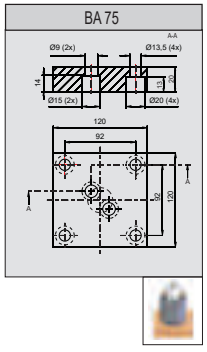
For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+10 mm.**
For the Orders , you must add an **(S)** on the end.
YO 4200 - 25 - S

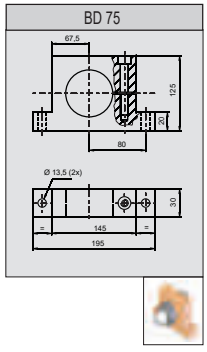
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 4200-16	16	97	81	4200	~ 3,40	
YO 4200-19	19	103	84		~ 3,45	
YO 2400-25	25	115	90		~ 3,65	
YO 4200-32	32	129	97		~ 3,82	
YO 4200-38	38	141	103		~ 4,00	
YO 4200-50	50	165	115		~ 4,44	
YO 4200-63	63	191	128		~ 4,95	
YO 4200-75	75	215	140		~ 5,20	
YO 4200-80	80	225	145		~ 5,41	
YO 4200-100	100	265	165		~ 6,00	
YO 4200-125	125	315	190		~ 6,70	

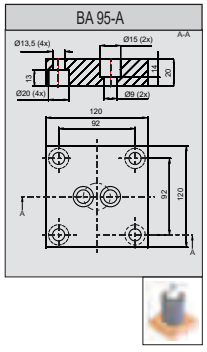












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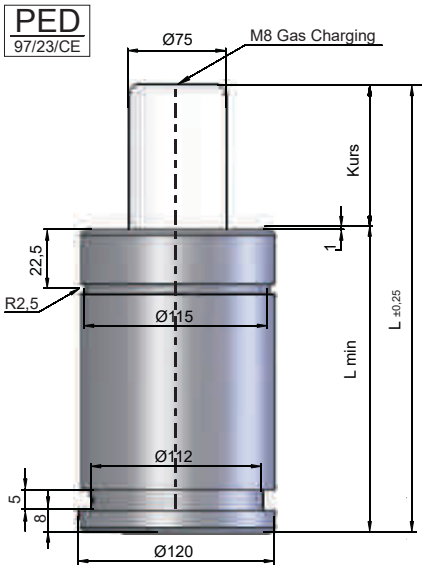
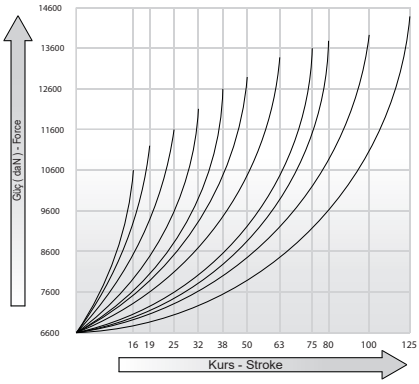
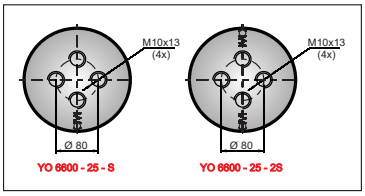
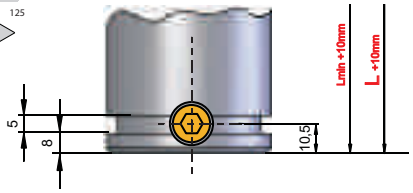




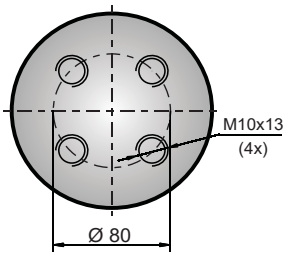
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

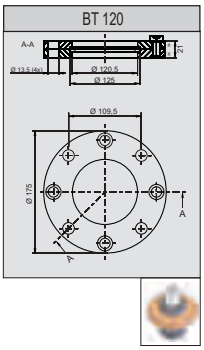


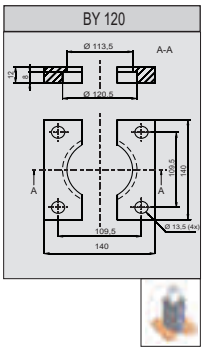


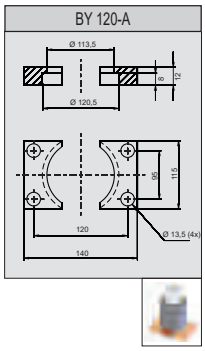
Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+10** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
YO 6600 - 25 - S

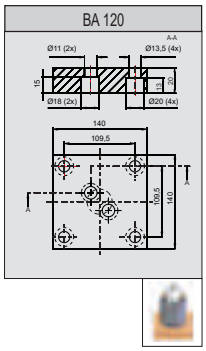
For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+10 mm.**
For the Orders , you must add an **(S)** on the end.
YO 6600 - 25 - S

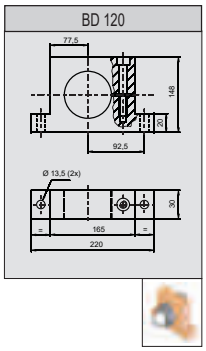
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 6600-16	16	107	91	6600	~ 6,60	
YO 6600-19	19	113	94		~ 6,65	
YO 6600-25	25	125	100		~ 6,82	
YO 6600-32	32	139	107		~ 7,18	
YO 6600-38	38	151	113		~ 7,57	
YO 6600-50	50	175	125		~ 8,18	
YO 6600-63	63	201	138		~ 8,81	
YO 6600-75	75	225	150		~ 8,95	
YO 6600-80	80	235	155		~ 9,10	
YO 6600-100	100	275	175		~ 10,7	
YO 6600-125	125	325	200		~ 12,5	

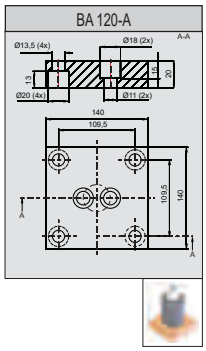












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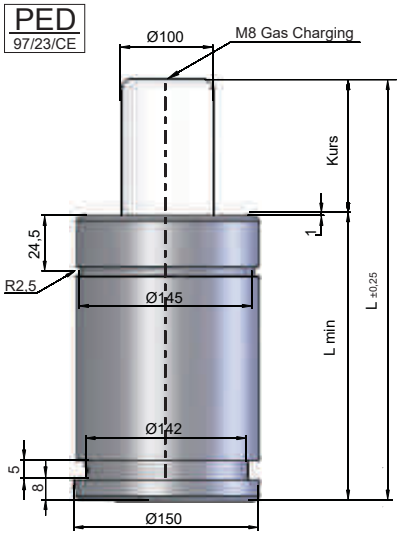
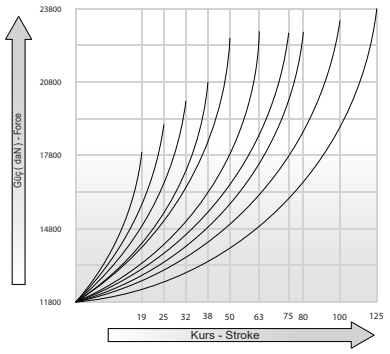
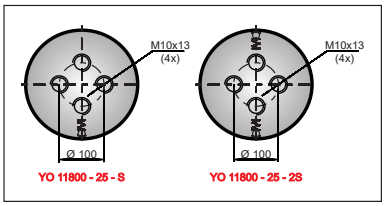
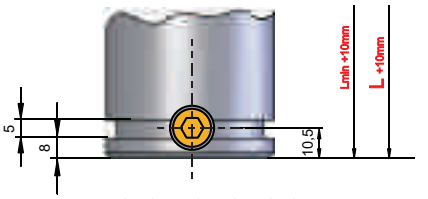




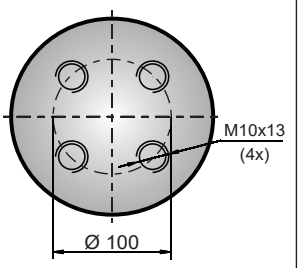


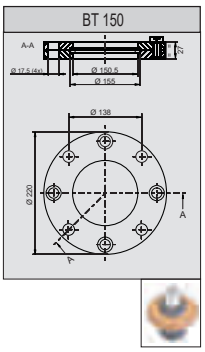
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

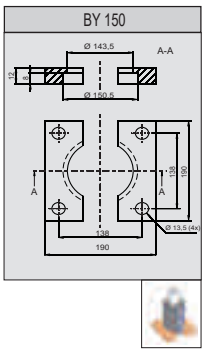


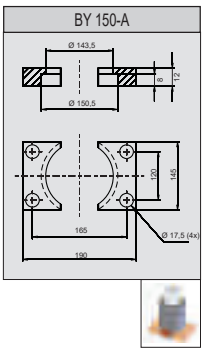
Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+10** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
YO 11800 - 25 - S

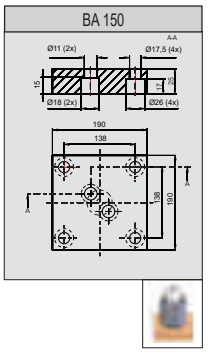
For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+10 mm.**
For the Orders , you must add an **(S)** on the end.
YO 6600 - 25 - S

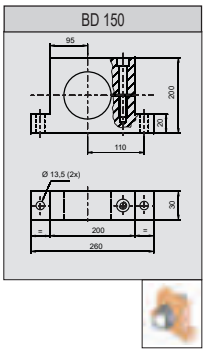
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
YO 11800-19	19	116	97	6600	~ 9,57	
YO 11800-25	25	128	103		~ 9,96	
YO 11800-32	32	142	110		~ 10,41	
YO 11800-38	38	154	116		~ 10,81	
YO 11800-50	50	178	128		~ 11,59	
YO 11800-63	63	204	141		~ 11,88	
YO 11800-75	75	228	153		~ 12,21	
YO 11800-80	80	238	158		~ 12,43	
YO 11800-100	100	278	178		~ 13,51	
YO 11800-125	125	328	203		~ 15,14	

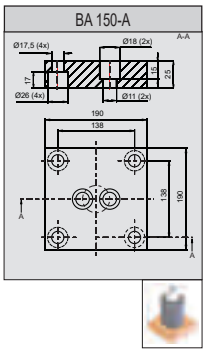


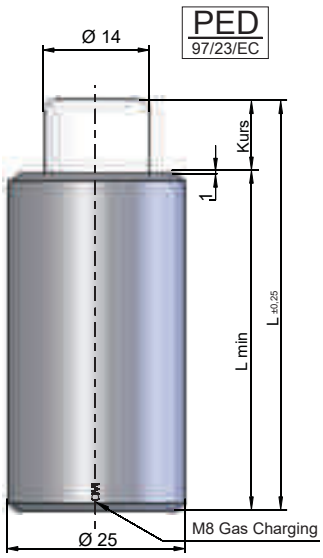


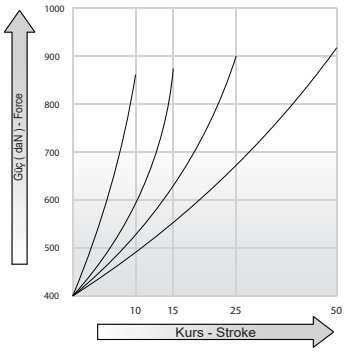


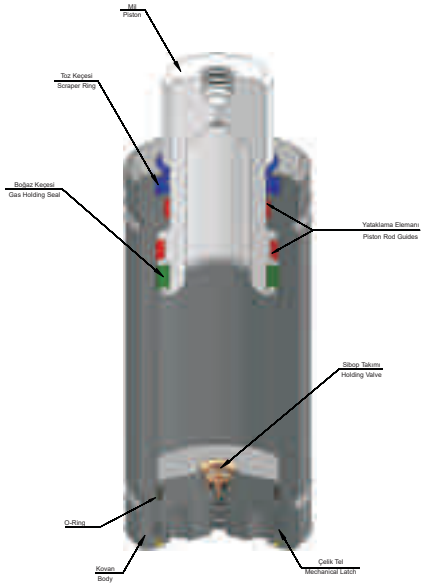












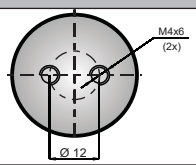
Basınç Gazı
Pressure Gas : Nitrogen N2

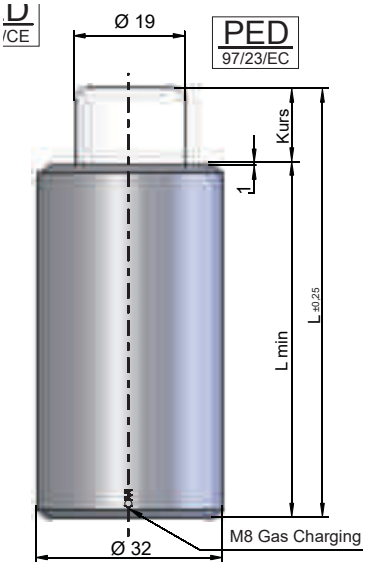
Max. Basınç
Max. load pressure : 150 bar

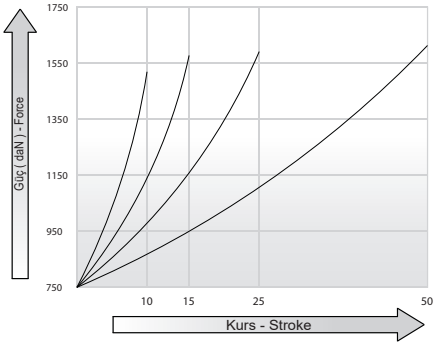
Min. Basınç
Min. load pressure : 25 bar

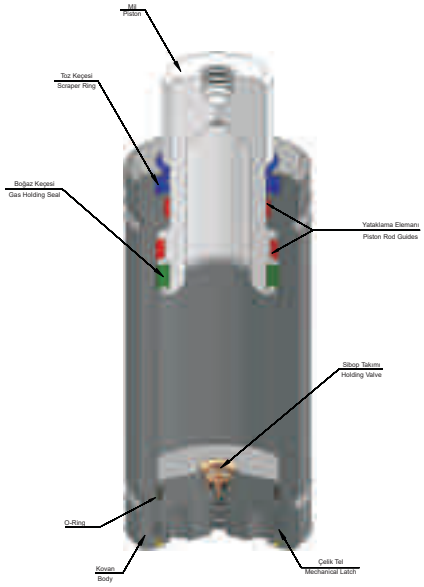
Çalışma Sıcaklığı
Working Temperature : 0°C ve +80°C

Max Çalışma Hızı
Max. operating speed : 1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
G 40-10	10	75	65	**400**	~ 0,18	
G 40-15	15	90	75		~ 0,20	
G 40-25	25	120	95		~ 0,24	
G 40-50	50	195	145		~ 0,35	







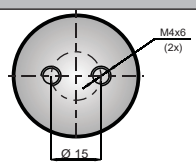
Basınç Gazı
Pressure Gas : Nitrogen N2

Max. Basınç
Max. load pressure : 150 bar

Min. Basınç
Min. load pressure : 25 bar

Çalışma Sıcaklığı
Working Temperature : 0°C ve +80°C

Max Çalışma Hızı
Max. operating speed : 1,8 m / s

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
G 75-10	10	75	65	**400**	~ 0,18	
G 75-15	15	90	75		~ 0,20	
G 75-25	25	120	95		~ 0,24	
G 75-50	50	195	145		~ 0,35	

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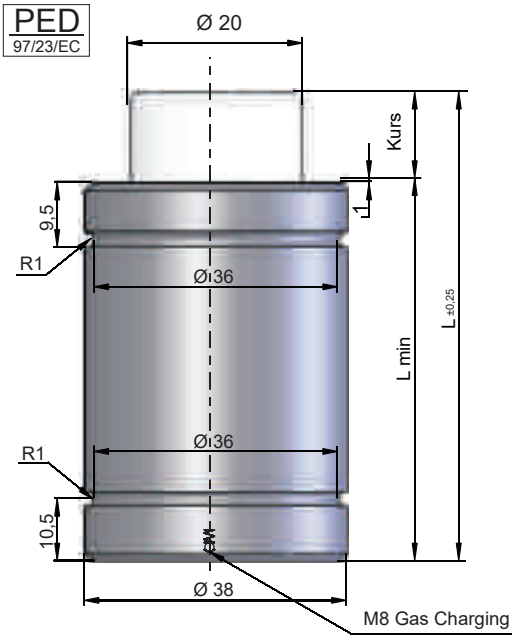
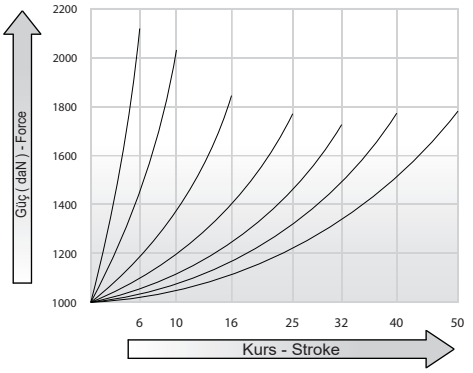
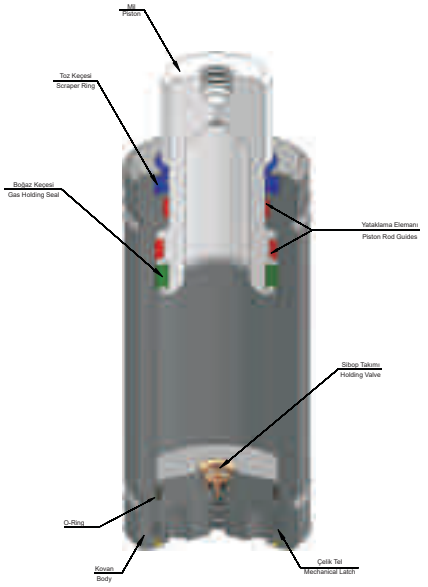
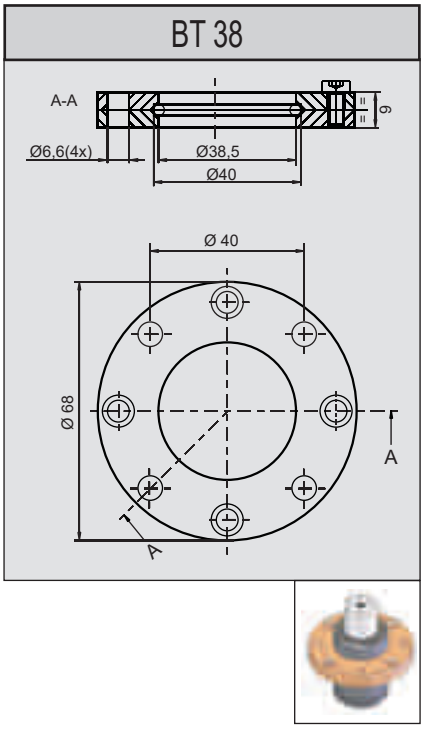


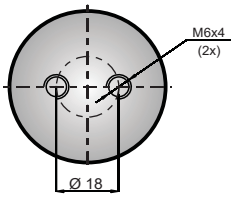


Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

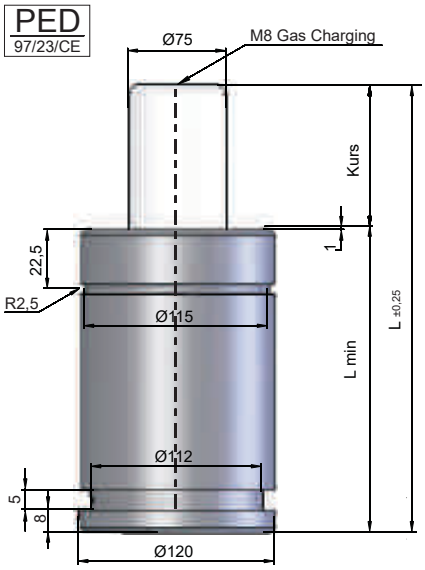


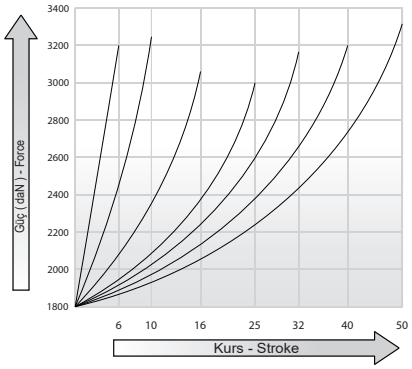


Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
G 100-6	6	61	55		~0,36	
G 100-10	10	75	65		~0,41	
G 100-16	16	100	84		~0,48	
G 100-25	25	135	110	1000	~0,58	
G 100-32	32	167	135		~0,62	
G 100-40	40	195	155		~0,68	
G 100-50	50	230	180		~0,74	



PED 97/23/CE

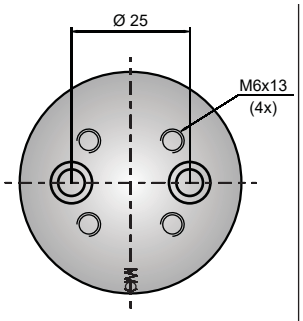


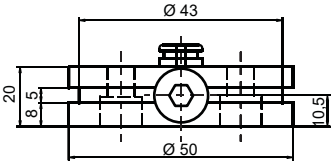


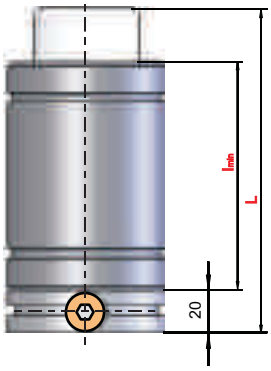
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

Seri Bağlantı Adaptörü



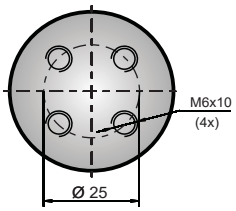




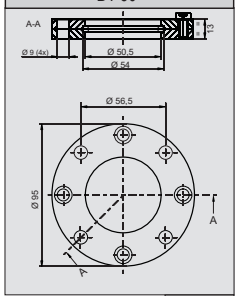


Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+20** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
G 180 - 25 - S

For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+20 mm.**
For the Orders , you must add an **(S)** on the end.
G 180 - 25 - S

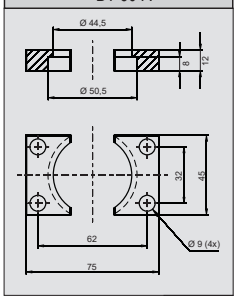
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
G 180-6	6	66	60	**1800**	~ 0,71	
G 180-10	10	80	70		~ 0,78	
G 180-16	16	106	90		~ 0,91	
G 180-25	25	135	110		~ 1,04	
G 180-32	32	162	130		~ 1,12	
G 180-40	40	190	150		~ 1,21	
G 180-50	50	220	170		~ 1,33	

BT 50



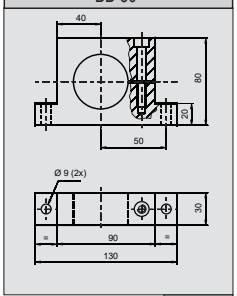


BY 50-A



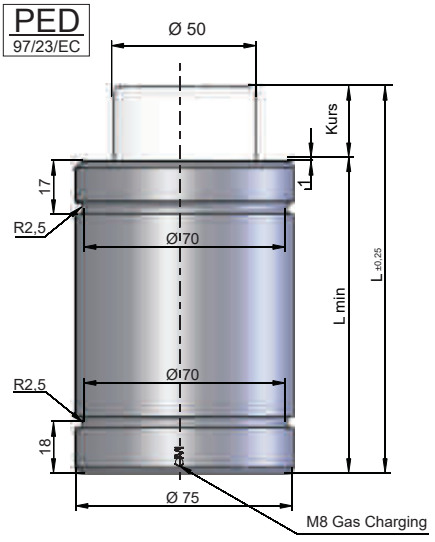


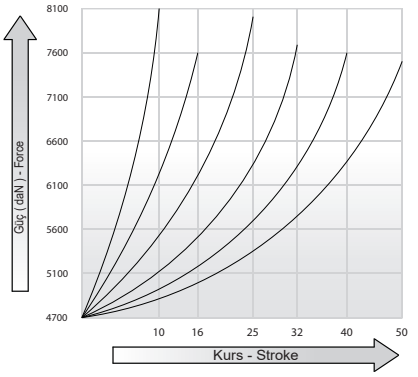
BD 50



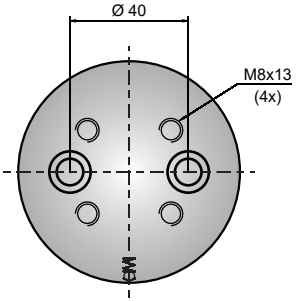


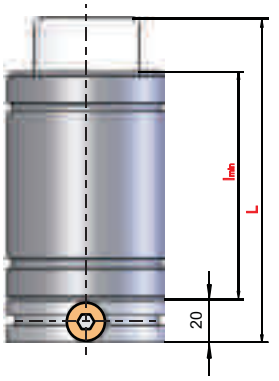
PED 97/23/EC





Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s



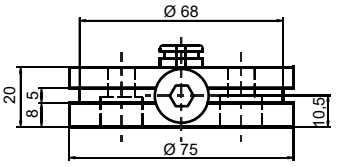


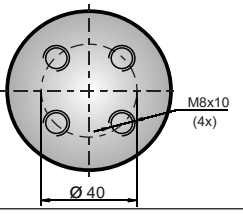
Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+20** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
G 470 - 25 - S

For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+20 mm.**
For the Orders , you must add an **(S)** on the end.
G 470 - 25 - S

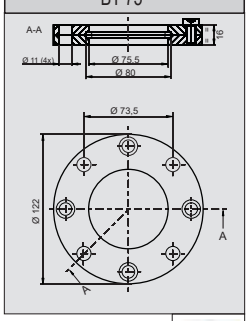
Seri Bağlantı Adaptörü





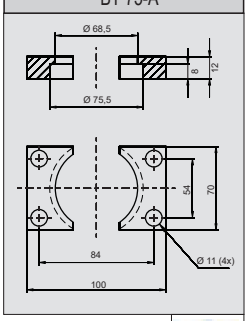
Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
G 470-10	10	80	70	**4700**	~ 1,85	
G 470-16	16	106	90		~ 2,11	
G 470-25	25	135	110		~ 2,34	
G 470-32	32	167	135		~ 2,54	
G 470-40	40	200	160		~ 2,77	
G 470-50	50	240	190		~ 3,06	

BT 75



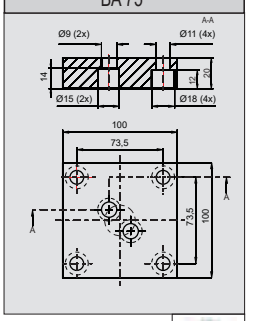


BY 75-A



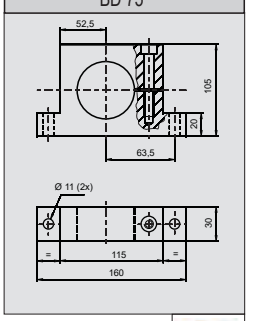


BA 75



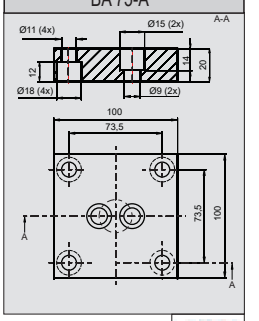


BD 75





BA 75-A





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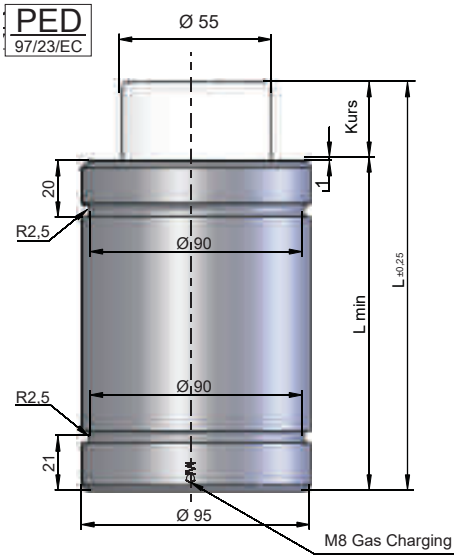
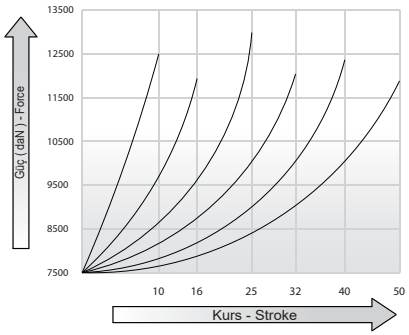
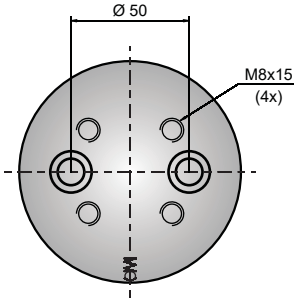


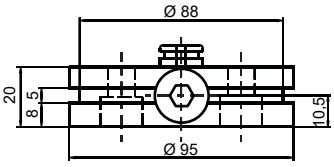


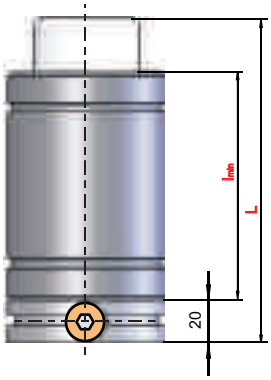
Basınç Gazı Pressure Gas	:	Nitrogen N2
Max. Basınç Max. load pressure	:	150 bar
Min. Basınç Min. load pressure	:	25 bar
Çalışma Sıcaklığı Working Temperature	:	0°C ve +80°C
Max Çalışma Hızı Max. operating speed	:	1,8 m / s

Seri Bağlantı Adaptörü



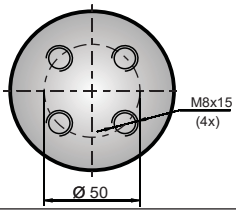




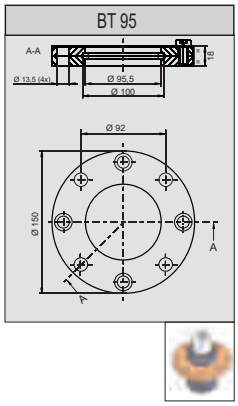


Seri bağlanacak gazlı yaylarda
L ve **Lmin** ölçülerine **+20** mm eklenecektir .
Sipariş için kodlama sonuna **(S)** eklenecektir .
G 750 - 25 - S

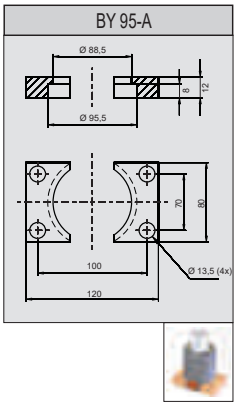
For the Gas Springs to be connected serial
L and **Lmin** dimensions must be increased **+20 mm.**
For the Orders , you must add an **(S)** on the end.
G 750 - 25 - S

Kod Code	Kurs Stroke	L	Lmin	daN	Kg	Alt Görünüm Bottom View
G 750-10	10	90	80	**7500**	~ 2,94	
G 750-16	16	116	100		~ 3,32	
G 750-25	25	145	120		~ 3,73	
G 750-32	32	182	150		~ 4,32	
G 750-40	40	210	170		~ 4,72	
G 750-50	50	255	205		~ 5,38	

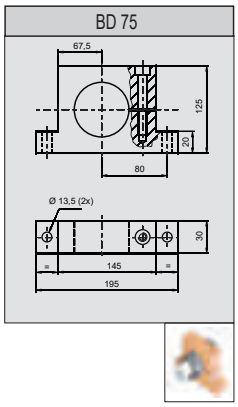
BT 95

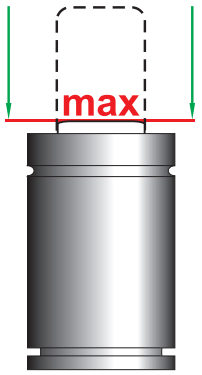


BY 95-A

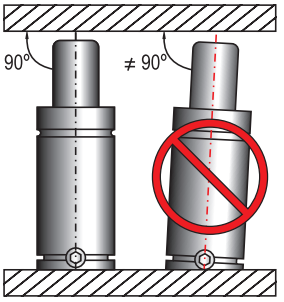


BD 75





Silindiri tanımlanan maksimum değerler dışında kullanmayınız



Silindiri dikey pozisyona getiriniz



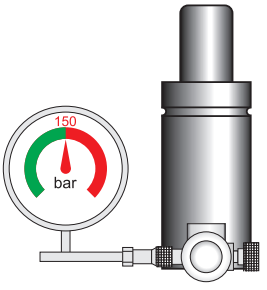
Gövde veya mil üzerinde herhangi bir mekanik işlem yapmayınız



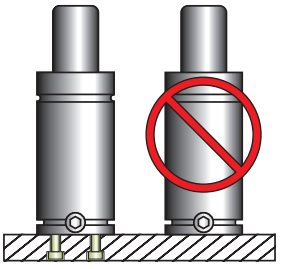
Silindir yüzeyinin sıvı veya katı maddelerle kirlenmesine izin vermeyiniz



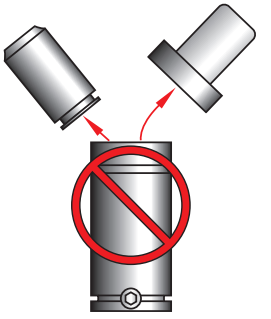
Silindiri azot N_2 dışında herhangi bir gazla şarj etmeyiniz



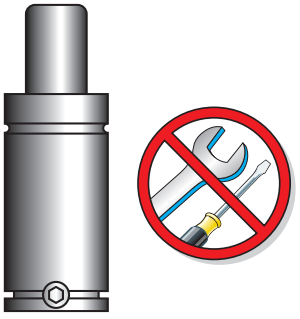
Silindiri 150 bardan daha fazla basınçla şarj etmeyiniz



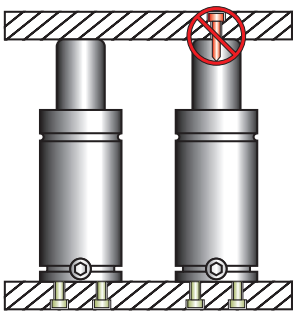
Silindiri emniyete almadan monte etmeyiniz



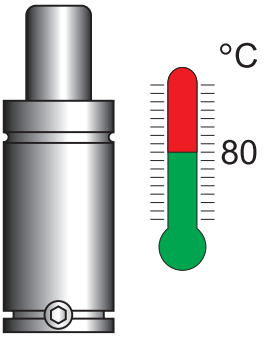
Silindiri sökmeyiniz



Görevlisinden başkasının bakım yapmasına izin vermeyiniz



Silindiri emniyete alırken milin üstündeki deliği kullanmayınız



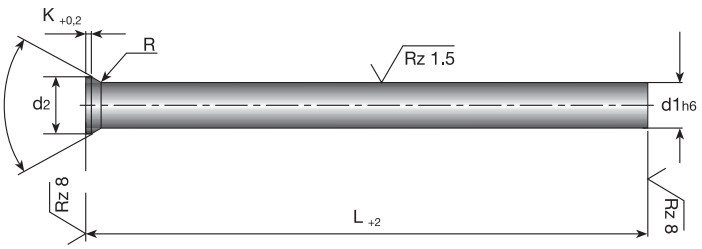
Gaz silindirini kullanırken kalıp sıcaklığının 80°C' yi geçmesine izin vermeyiniz

HSS / Yüksek Hız Çeliği

Malzeme : 1.3343

Sertlik : Gövde 60/62 HRC / Kafa 45+5 HRC

Yüzey : sertleştirilmiş, taşlanmış.





Mevcut Ürünler

Sipariş Şekli : HSS / HWS d1 x L

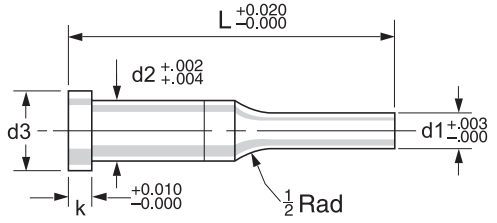
d1 h6	d2	K +0,2	L_{+2}				
			71	80	100	125	160
0,5	0,9	0,2	✓	✓	✓		
0,6	1,1		✓	✓	✓		
0,7	1,3		✓	✓	✓		
0,8	1,4	0,4	✓	✓	✓		
0,9	1,6		✓	✓	✓		
1,0/1,1	1,8	0,5	✓	✓	✓		
1,2/1,3	2,0		✓	✓	✓		
1,4/1,5	2,2		✓	✓	✓		
1,6/1,7	2,5		✓	✓	✓		
1,8/1,9	2,8		✓	✓	✓		
2,0	3,0		✓	✓	✓	✓	✓
2,1/2,2	3,2		✓	✓	✓	✓	✓
2,3/2,5	3,5		✓	✓	✓	✓	✓
2,6/2,9	4,0		✓	✓	✓	✓	✓
3,0/3,4	4,5		✓	✓	✓	✓	✓
3,5/3,9	5,0		✓	✓	✓	✓	✓
4,0/4,4	5,5		✓	✓	✓	✓	
4,5/4,9	6,0		✓	✓	✓	✓	✓
5,0/5,4	6,5		✓	✓	✓	✓	✓
5,5/5,9	7,0		✓	✓	✓	✓	✓
6,0/6,4	8,0		✓	✓	✓	✓	✓
6,5/7,4	9,0	1,0	✓	✓	✓	✓	✓
7,5/8,4	10,0		✓	✓	✓	✓	✓
8,5/9,4	11,0		✓	✓	✓	✓	
9,5/10,0	12,0		✓	✓	✓	✓	✓
10,5/11,0	13,0		✓	✓	✓	✓	✓
11,5/12,0	14,0		✓	✓	✓	✓	✓
12,5/13,0	15,0		✓	✓	✓	✓	✓
13,5/14,0	16,0	1,5	✓	✓	✓	✓	✓
14,5/15,0	17,0		✓	✓	✓	✓	✓
16,0	18,0		✓	✓	✓	✓	✓
17,0	19,0		✓	✓	✓	✓	✓
18,0	20,0		✓	✓	✓	✓	✓
20,0	22,0		✓	✓	✓	✓	✓



Tabloda gösterilen mevcut ürünler HSS olarak hazırlanmıştır.

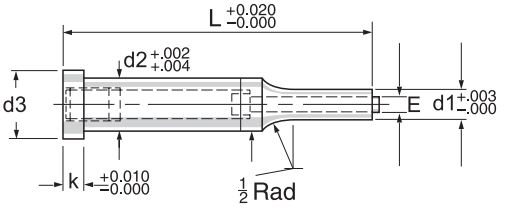
Silindir Başlı Kademeli Zımba





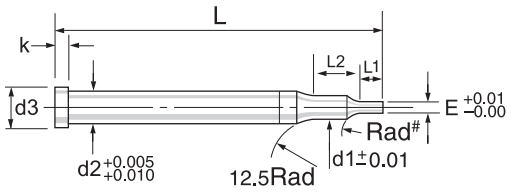
Silindir Başlı Kademeli Fırlatıcı Zımba





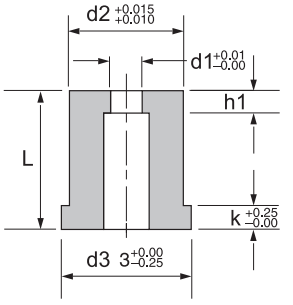
Silindir Başlı Çift Kademeli Zımba





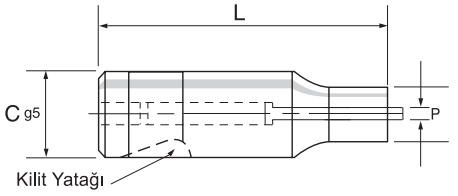
Zımba Kovanı





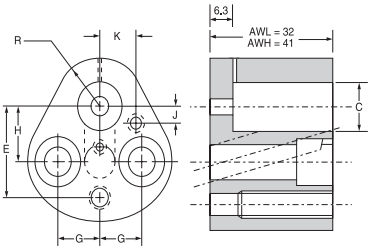
Bilye Kilitlemeli Kademeli Zımba



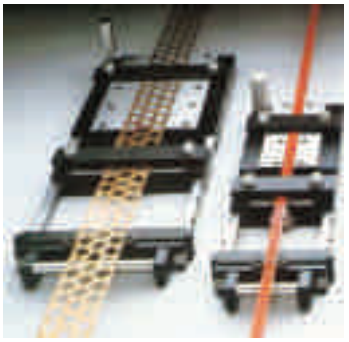


Kilitli Zımba Kovanı





Press Kalıp Sürücüleri



Model	Max Bant Eni (mm)	Hatve (mm)	Max Bant Kalınlığı (mm)
A 50	50	50	1.9
A 100	50	100	1.8
A 150	50	150	1.5
B 50	75	50	1.8
B 100	75	100	1.7
B 150	75	150	1.6
C 50	100	50	1.7
C 100	100	100	1.5
C 150	100	150	1.4

Sipariş üzerine özel ölçülü sürücüler imal edilmektedir.

Güçlü ön ve arka hava yastıkları 0.02 mm'e varan hassasiyet ile çalışabilme olanağı sağlar. Doğrudan kalıp üzerine monte edilir. Üst kalıbın dikey hareketi sürücüye komut verir. Darbelere ve sürtünmelere maruz bütün yüzeyler sertleştirilmiş ve sert krom kaplanmıştır. Hatve ayarı çok basittir. Sürülecek bandın mutlaka düzlemselliğine dikkat ediniz.

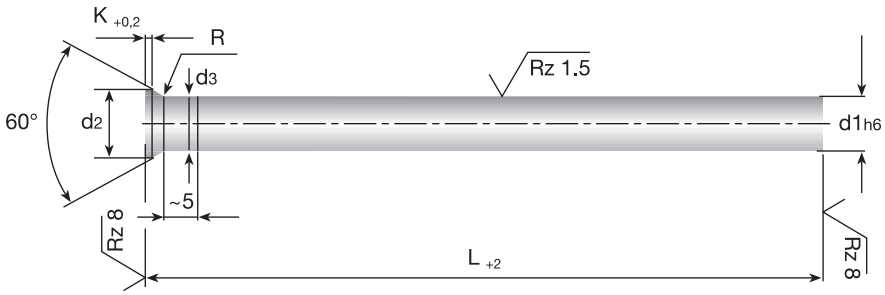
Önemli Uyarı

Sürücünün sağlıklı çalışabilmesi için mutlaka şartlandırıcı kullanınız.



HBİ / Havşa Başlı İtici

Malzeme : Özel alaşımlı çelik 1.2516
Sertlik : Gövde 60/62 HRC / Kafa 45±5 HRC
Yüzey : Sertleştirilmiş, taşlanmış



Sipariş Şekli : HBİ d1 x L

Mevcut Ürünler

d1 h6	d2	d3	K +0,2	L+2 80	100	125	160	200	250	315
1,0	1,8	d1 +0,03	0,5	✓	✓	✓	✓	✓		
1,5	2,2			✓	✓	✓	✓	✓	✓	
2,0	3,0			✓	✓	✓	✓	✓	✓	✓
2,5	3,5			✓	✓	✓	✓	✓	✓	✓
3,0	4,5			✓	✓	✓	✓	✓	✓	✓
3,5	5,0			✓	✓	✓	✓	✓	✓	✓
4,0	5,5			✓	✓	✓	✓	✓	✓	✓
4,5	6,0			✓	✓	✓	✓	✓	✓	✓
5,0	6,5			✓	✓	✓	✓	✓	✓	✓
5,5	7,0			✓	✓	✓	✓	✓	✓	✓
6,0	8,0			✓	✓	✓	✓	✓	✓	✓
6,5	9,0		1,0	✓	✓	✓	✓	✓	✓	✓
7,0	9,0			✓	✓	✓	✓	✓	✓	✓
7,5	10,0			✓	✓	✓	✓	✓	✓	✓
8,0	10,0			✓	✓	✓	✓	✓	✓	✓
8,5	11,0			✓	✓	✓	✓	✓	✓	✓
9,0	11,0			✓	✓	✓	✓	✓	✓	✓
9,5	12,0			✓	✓	✓	✓	✓	✓	✓
10,0	12,0			✓	✓	✓	✓	✓	✓	✓
10, 5	13,0			✓	✓	✓	✓	✓	✓	✓
11,0	13,0			✓	✓	✓	✓	✓	✓	✓
12,0	14,0			✓	✓	✓	✓	✓	✓	✓
13,0	15,0			✓	✓	✓	✓	✓	✓	✓
14,0	16,0		1,5	✓	✓	✓	✓	✓	✓	✓
16,0	18,0			✓	✓	✓	✓	✓	✓	✓

Sipariş esnasında istenilen boy ölçüsünde kısaltma yapılabilir.

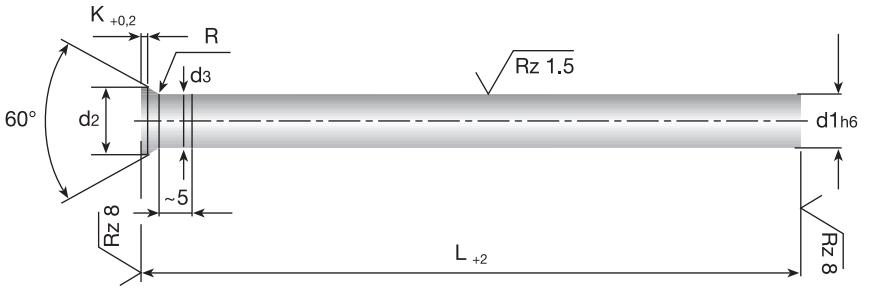


Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.

HBİO

Havşa Başlı İtici Ondalıklı

Malzeme : Özel alaşımlı çelik 1.2516
Sertlik : Gövde 60/62 HRC / Kafa 45±5 HRC
Yüzey : Sertleştirilmiş, taşlanmış





Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.

Sipariş Şekli : HBİ d1 x L

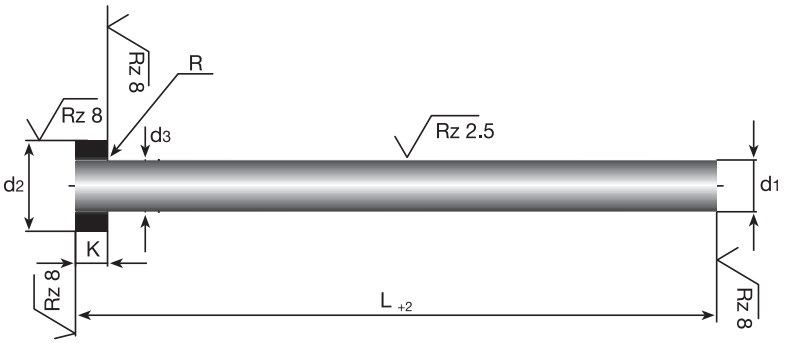
Mevcut Ürünler

d1 h6	d2	d3	K +0,2	L_{+2} 80	100	125	160	200	250
1,1	1,80	d1 +0,03	0,5	✓	✓	✓	✓	✓	✓
1,2	2			✓	✓	✓	✓	✓	✓
1,3				✓	✓	✓	✓	✓	✓
1,4	2,20			✓	✓	✓	✓	✓	✓
1,6	2,5			✓	✓	✓	✓	✓	✓
1,7				✓	✓	✓	✓	✓	✓
1,8	2,80			✓	✓	✓	✓	✓	✓
1,9				✓	✓	✓	✓	✓	✓
2,1	3,2			✓	✓	✓	✓	✓	✓
2,2				✓	✓	✓	✓	✓	✓
2,3	3,50			✓	✓	✓	✓	✓	✓
2,4				✓	✓	✓	✓	✓	✓
2,6	4			✓	✓	✓	✓	✓	✓
2,7				✓	✓	✓	✓	✓	✓
2,8				✓	✓	✓	✓	✓	✓
2,9				✓	✓	✓	✓	✓	✓
3,1	4,5			✓	✓	✓	✓	✓	✓
3,2	4,5			✓	✓	✓	✓	✓	✓
3,3				✓	✓	✓	✓	✓	✓
3,4				✓	✓	✓	✓	✓	✓
3,6	5			✓	✓	✓	✓	✓	✓
3,7				✓	✓	✓	✓	✓	✓
3,8				✓	✓	✓	✓	✓	✓
3,9				✓	✓	✓	✓	✓	✓
4,1	5,5			✓	✓	✓	✓	✓	✓
4,2				✓	✓	✓	✓	✓	✓
4,3				✓	✓	✓	✓	✓	✓
4,4				✓	✓	✓	✓	✓	✓
4,6	6			✓	✓	✓	✓	✓	✓
4,7				✓	✓	✓	✓	✓	✓
4,8				✓	✓	✓	✓	✓	✓
4,9				✓	✓	✓	✓	✓	✓
5,1	6,50			✓	✓	✓	✓	✓	✓
5,2				✓	✓	✓	✓	✓	✓
5,3				✓	✓	✓	✓	✓	✓
5,4				✓	✓	✓	✓	✓	✓
5,6	7			✓	✓	✓	✓	✓	✓
5,7				✓	✓	✓	✓	✓	✓
5,8				✓	✓	✓	✓	✓	✓
5,9				✓	✓	✓	✓	✓	✓

Sipariş esnasında istenilen boy ölçüsünde kısaltma yapılabilir.

Plastik Enjeksiyon
SBİ / Silindir Başlı İtici

Malzeme : Özel alaşımlı çelik 1.2516
Sertlik : 60+2 HRC / Kafa 45+5 HRC
Yüzey : sertleştirilmiş, taşlanmış.





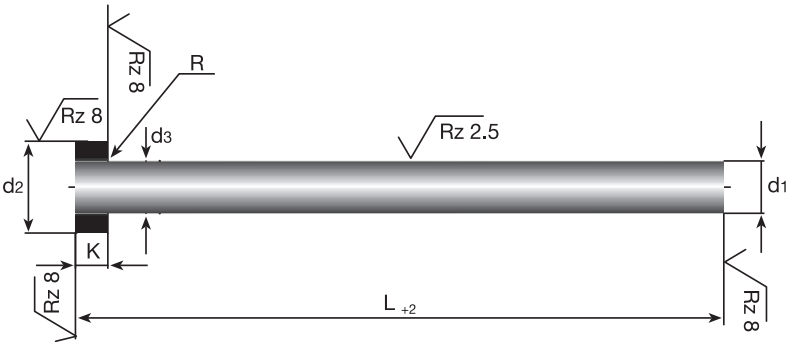
d1 g6	d2 - 0,2	K - 0,05	R +0,2	d3	L +2										
					100	125	160	200	250	315	400	500	630	800	1000
1,0	2,5	1,2	0,2	d1 +0,03	✓	✓	✓	✓	✓						
1,5	3	1,5			✓	✓	✓	✓	✓						
2,0	4	2			✓	✓	✓	✓	✓	✓	✓	✓			
2,5	5		0,3		✓	✓	✓	✓	✓	✓	✓	✓			
3,0	6	3			✓	✓	✓	✓	✓	✓	✓	✓	✓		
3,5	7				✓	✓	✓	✓	✓	✓	✓	✓	✓		
4,0	8				✓	✓	✓	✓	✓	✓	✓	✓	✓		
4,5					✓	✓	✓	✓	✓	✓	✓	✓	✓		
5,0	10				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5,5					✓	✓	✓	✓	✓	✓	✓	✓	✓		
6,0	12	5	0,5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6,5					✓	✓	✓	✓	✓	✓	✓	✓	✓		
7,0					✓	✓	✓	✓	✓	✓	✓	✓	✓		
7,5					✓	✓	✓	✓	✓	✓	✓	✓	✓		
8,0					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8,5	14			d1 +0,04	✓	✓	✓	✓	✓	✓	✓	✓	✓		
9,0					✓	✓	✓	✓	✓	✓	✓	✓	✓		
10,0	16				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10,5					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11,0					✓	✓	✓	✓	✓	✓	✓	✓	✓		
12,0	18	7	0,8		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13,0	22				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
14,0					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16,0					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18,0	24				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20,0	26	8	1,0		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25,0	32	10		d1 +0,1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.

Sipariş esnasında istenilen boy ölçüsünde kısaltma yapılabilir.

Plastik Enjeksiyon
SBO / Silindir Başlı İtici Ondalıklı

Malzeme : Özel alaşımlı çelik 1.2516
Sertlik : 60+2 HRC / Kafa 45+5 HRC
Yüzey : sertleştirilmiş, taşlanmış.





Sipariş Şekli : HBİ d1 x L

Mevcut Ürünler

d1 h6	d2	d3	K +0,2	L+2					
				80	100	125	160	200	250
1,1	2,50		1,2	✓	✓	✓	✓	✓	✓
1,2				✓	✓	✓	✓	✓	✓
1,3	3		1,5	✓	✓	✓	✓	✓	✓
1,4				✓	✓	✓	✓	✓	✓
1,6				✓	✓	✓	✓	✓	✓
1,7				✓	✓	✓	✓	✓	✓
1,8				✓	✓	✓	✓	✓	✓
1,9				✓	✓	✓	✓	✓	✓
2,1	4		2	✓	✓	✓	✓	✓	✓
2,2				✓	✓	✓	✓	✓	✓
2,3				✓	✓	✓	✓	✓	✓
2,4				✓	✓	✓	✓	✓	✓
2,6	5			✓	✓	✓	✓	✓	✓
2,7				✓	✓	✓	✓	✓	✓
2,8				✓	✓	✓	✓	✓	✓
2,9				✓	✓	✓	✓	✓	✓
3,1	6	d1 +0,03	3	✓	✓	✓	✓	✓	✓
3,2				✓	✓	✓	✓	✓	✓
3,3				✓	✓	✓	✓	✓	✓
3,4				✓	✓	✓	✓	✓	✓
3,6	7			✓	✓	✓	✓	✓	✓
3,7				✓	✓	✓	✓	✓	✓
3,8				✓	✓	✓	✓	✓	✓
3,9				✓	✓	✓	✓	✓	✓
4,1	8			✓	✓	✓	✓	✓	✓
4,2				✓	✓	✓	✓	✓	✓
4,3				✓	✓	✓	✓	✓	✓
4,4				✓	✓	✓	✓	✓	✓
4,6				✓	✓	✓	✓	✓	✓
4,7				✓	✓	✓	✓	✓	✓
4,8				✓	✓	✓	✓	✓	✓
4,9				✓	✓	✓	✓	✓	✓
5,1	10			✓	✓	✓	✓	✓	✓
5,2				✓	✓	✓	✓	✓	✓
5,3				✓	✓	✓	✓	✓	✓
5,4				✓	✓	✓	✓	✓	✓
5,6				✓	✓	✓	✓	✓	✓
5,7				✓	✓	✓	✓	✓	✓
5,8				✓	✓	✓	✓	✓	✓
5,9				✓	✓	✓	✓	✓	✓

Sipariş esnasında istenilen boy ölçüsünde kısaltma yapılabilir.

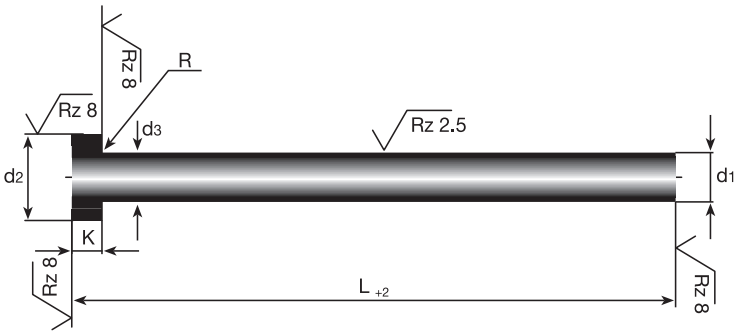
Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.

Metal Enjeksiyon

***SBİ** / Silindir Başlı İtici (Nitrasyonlu)*

- *Siyah Kaplama (SBİMS)*
- *Beyaz Kaplama (SBİMB)*

Malzeme : Sıcak iş çeliği 1.2344
Sertlik : 65+2 HRC / Kafa 45+5 HRC
Yüzey : Nitritli ve taşlanmış





d1 g6	d2 - 0,2	K - 0,05	R +0,2	d3	L+2 100	125	160	200	250	315	400	500	630	800	1000
1,0	2,5	1,2	0,2	d1 +0,03	✓	✓	✓	✓	✓						
1,5	3	1,5			✓	✓	✓	✓	✓						
2,0	4	2			✓	✓	✓	✓	✓	✓	✓				
2,5	5		0,3		✓	✓	✓	✓	✓	✓	✓				
3,0	6	3			✓	✓	✓	✓	✓	✓	✓	✓			
3,5	7				✓	✓	✓	✓	✓	✓	✓	✓			
4,0	8				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
4,5					✓	✓	✓	✓	✓	✓	✓	✓			
5,0	10				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5,5					✓	✓	✓	✓	✓	✓	✓	✓			
6,0	12	5	0,5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6,5					✓	✓	✓	✓	✓	✓	✓	✓			
7,0					✓	✓	✓	✓	✓	✓	✓	✓			
7,5					✓	✓	✓	✓	✓	✓	✓	✓			
8,0	14				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8,5					✓	✓	✓	✓	✓	✓	✓	✓			
9,0					✓	✓	✓	✓	✓	✓	✓	✓			
10,0	16				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10,5					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11,0					✓	✓	✓	✓	✓	✓	✓	✓			
12,0	18	7	0,8	d1 +0,04	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13,0	22				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
14,0					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16,0					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18,0	24				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20,0	26	8	1,0		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25,0	32	10		d1 +0,1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

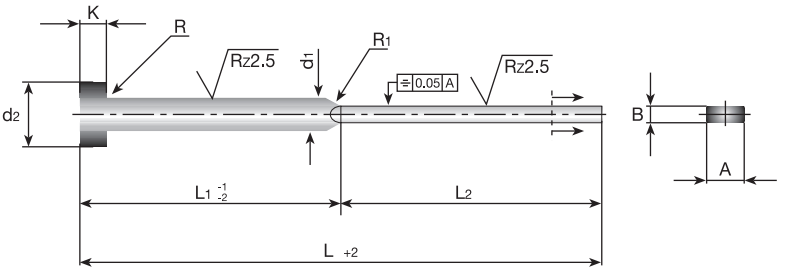
Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.

Sipariş esnasında istenilen boy ölçüsünde kısaltma yapılabilir.

Lama İtici Pim / **Lİ**

Malzeme : Özel alaşımlı çelik 1.2516
Sertlik : 60+2 HRC / Kafa 45+5 HRC
Yüzey : sertleştirilmiş, taşlanmış.

Lama itici pimler özel ürün olup, aşağıdaki tablo temsilen örnek olarak verilmiştir.
İstenilen her ebat ve ölçülerde temin edilebilir.
Sürekli stoklarımızda bulunamayabilir.
Lütfen termin süresi isteyiniz.





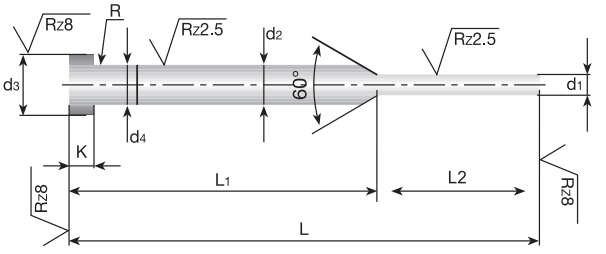
Siparis Şekli : Lİ d1 x L x L1 x L2x A x B

d1 g6	A - 0,015	B - 0,015	d2 - 0,2	K - 0,05	L1 30	40	50	65	80	100	125	160	200
					L2 30	40	50	60	80	100	125	155	200
					L 60	80	100	125	160	200	250	315	400
4	3,5	1	8	3									
4.2	3,8	1	8	3									
4.2	3,8	1,2	8	3									
6	5,5	1,2	12	5									
6	5,5	1,5	12	5									
6	5,5	2	12	5									
8	7,5	1,2	14	5									
8	7,5	1,5	14	5									
8	7,5	2	14	5									
10	9,5	1,5	16	5									
10	9,5	2	16	5									
12	11,5	2,5	18	7									
16	15,5	2	22	7									
16	15,5	2,5	22	7									

Kademeli İtici / **Kİ**

Malzeme : Özel alaşımlı çelik 1.2516
Sertlik : 60+2 HRC / Kafa 45+5 HRC
Yüzey : sertleştirilmiş, taşlanmış.

Kademeli itici pimler özel ürün olup, aşağıdaki tablo temsilen örnek olarak verilmiştir.
İstenilen her ebat ve ölçülerde temin edilebilir.
Sürekli stoklarımızda bulunamayabilir.
Lütfen termin süresi isteyiniz.



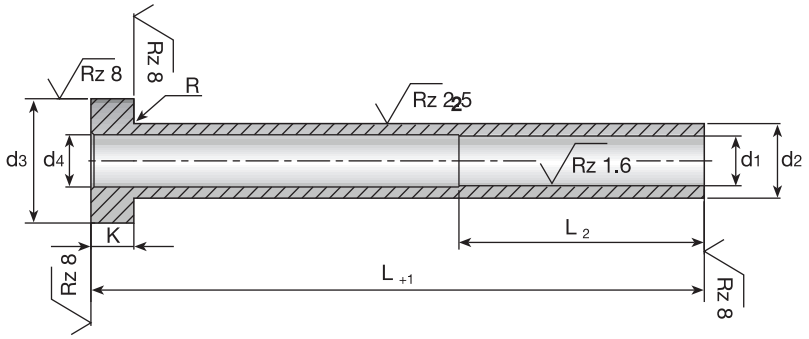


Sipariş Şekli : Kİ d2 x d1 x L x L1 x L2

d1 g6 min.	d1 g6 max.	d2 g6	d3 - 0,2	d4	K - 0,05	R +0,2	L +2 0			
							100	125	160	200
							L1 -1 -2			
							50	50	75	75
0,8	**1,4**	2	4	d1 +0.03	2	0,2				
1,5	**2,4**	3	6		3	0,3				
2,5	**2,9**	3	6		3	0,3				

Plastik Enjeksiyon
Metal Enjeksiyon
BİP / Boru İtici
(Sertleştirilmiş)

Malzeme : Özel alaşımlı çelik 1.2344
Sertlik : 65+2 HRC / Kafa 45+5 HRC
Yüzey : sertleştirilmiş, taşlanmış.



Sipariş Şekli : BİM d1 x d2 x L

d1 H5	d2 g6	d4	d3 - 0,2	K - 0,05	R +0,2	L2 +2	L_{+1} 75	100	125	150	160	175	200	225	250	275	300	500
2	4	2,4	8	3	0,3	35	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
2,5	5	2,9	10				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
3		3,4				45	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3,5	6 / 7	3,9	12	5	0,5		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	6	4,4					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4,2 / **5**	8	4,6 / 5,4	14				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	10	6,4	16				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	12	8,4	20	7	0,7		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	14	10,4	22				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	16	12,4					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



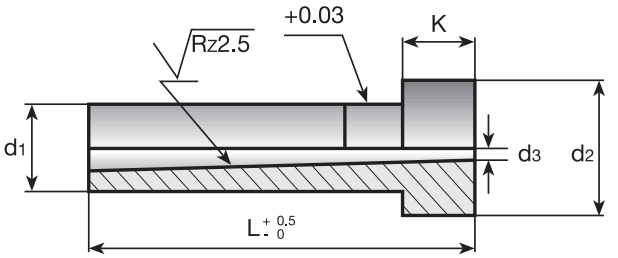
Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.

Plastik Kalıp Yolluk Memeleri / PKM

Malzeme : Özel Alaşımlı Çelik
Yüzey : Sertleştirilmiş ve taşlanmış



Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.



Sipariş Şekli : PKM d1 x L

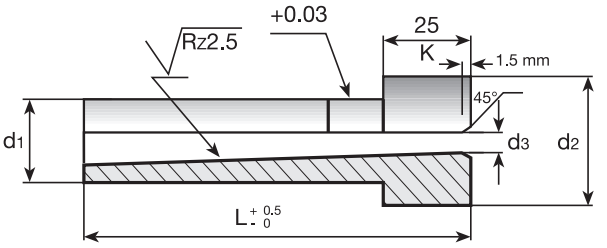
d1	d2	K	d3	L										
				50	65	75	85	95	105	115	125	135	150	200
12	28	20	4.3 3.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
18				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Metal Kalıp Yolluk Memeleri / MKM

Malzeme : Sıcak İş Çeliği 1.2344
Yüzey : Sertleştirilmiş ve taşlanmış



Kademeli ve özel ölçü ürünler süratle teslim edilmektedir.



Sipariş Şekli : MKM d1 x L

d1	d2	K	d3	L							
				50	65	75	85	95	105	115	125
12	28	25	5.6	✓	✓	✓	✓	✓	✓	✓	✓
14				✓	✓	✓	✓	✓	✓	✓	✓
16				✓	✓	✓	✓	✓	✓	✓	✓
18				✓	✓	✓	✓	✓	✓	✓	✓

Kalıp Yolluk Flanşı

Malzeme : Sıcak İş Çeliği 1.2344
Yüzey : Sertleştirilmiş ve taşlanmış

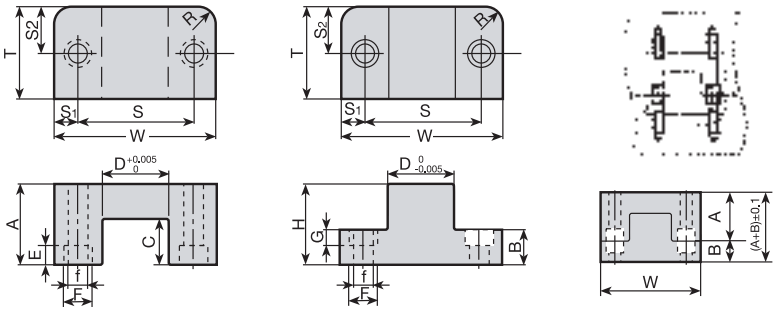


İsteğe göre temin edilir.

Flanş Çapı	80	100	125	150	160	200
Kalınlık	25	25	25	25	25	25
Delik Çapı	28	28	28	28	28	28

Küp Blok Kitleme
KBK (LK)



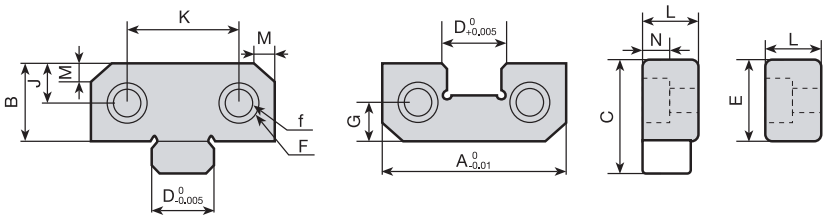


Sipariş Şekli : KOD

Kod	W -0.01	T ±0.25	A ±0.05	B ±0.05	C	D	E	M	F	f	G	H ±0.05	R ±0.25	S ±0.25	S_1 ±0.25	S_2 ±0.25
LK 15	38.1	25.4	22.17	9.47	13.13	12.70	7	M5	10.5	6	7	22.1	7.0	25.4	6.35	12.7
LK 25	63.5	38.1	34.87	15.82	19.48	25.40	8	M6	12.0	7.2	8	34.8	8.5	44.45	9.53	19.05
LK 35	88.9	50.8	44.4	19.0	25.70	36.58	11	M8	15.5	10.5	11	44.2	9.5	63.5	12.7	25.4

Kare Kitleme Blok
KKB (PL)



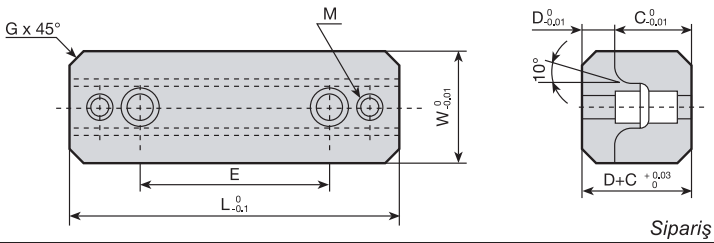


Sipariş Şekli : KOD

Kod	A	B	C	D	E	F	f	G	J	K	L	M	N
PL 38	38	22	30	12	17	10.5	6.5	7	11	22	13	5	8
PL 50	50	21.5	30	17	21.5	10.5	6.5	11	11	34	16	5	8
PL 75	75	36	50	25	36	16.5	10.5	18	18	50	19	8	12
PL 100	100	45	65	35	45	16.5	10.5	22	22	70	19	10	12
PL 125	125	45	65	45	45	16.5	10.5	22	22	84	25	10	12

Uzun Kare Kitleme
UKK (KY)





Sipariş Şekli : KOD

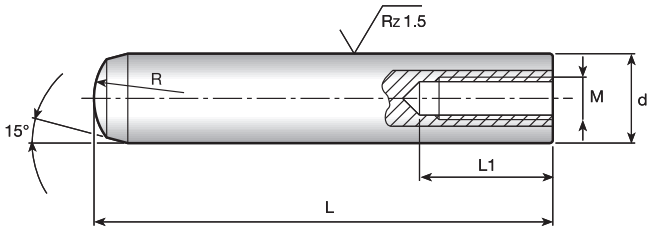
Kod	L	W	C	D	E	G	M
KY 50	50	25	17.5	8	36	5	M5
KY 100	100	30	22	10	60	5	M6
KY 150	150	40	25	13	100	5	M6

ÇTP / Çektirmeli Tespit Pimi

Sertlik : 60 HRC

Yüzey : Sertleştirilmiş, taşlanmış

Standart : h6 toleranslı
m6 toleranslı





Sipariş Şekli : ÇTP d x L

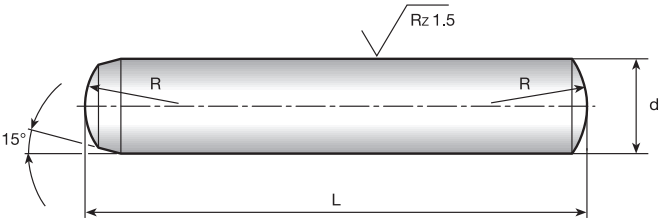
d	M	L1	L												
			20	24	30	36	40	45	50	55	60	70	80	90	100	120
6	M4	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
8	M5	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
10	M6	16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	M6	16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	M8	20					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	M8	20					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20	M10	25					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

DTP / Düz Tespit Pimi

Sertlik : 60 HRC

Yüzey : Sertleştirilmiş, taşlanmış

Standart : h6 toleranslı
m6 toleranslı

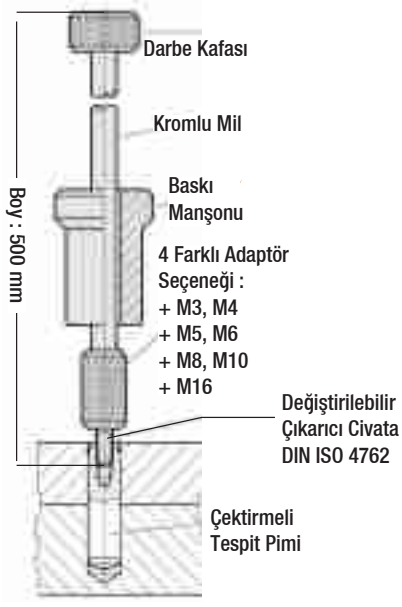




Sipariş Şekli : DTP d x L

d	L															
	10	16	20	24	30	36	40	45	50	55	60	70	80	90	100	120
3	✓	✓	✓	✓	✓	✓	✓	✓	✓							
4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
8		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓





Bu ürün çektirmeli tespit pimlerini hızlı ve güvenli bir şekilde sökülebilmesi için tasarlanmıştır. Ayrıca üzerinde diş bulunan makina elemanlarında uygulanabilir. Bu sökme aleti, üzerinde diş bulunan her türlü çektirmeli tespit pimini sökebilmek için M3 - M16 arası adaptörlerle birlikte plastik çantalı sunulur.



Kurulumla Birlikte Adaptör Takılır..



Tespit Pim Üzerinde Vidalama Yapılır



Küçük Bir Darbe Uygulama, Pim Çıkarılır



Çıkarılan Pim Adaptörden Alınır

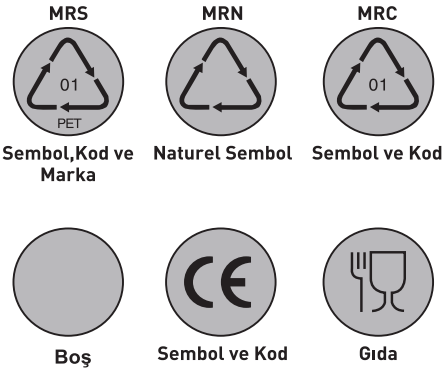
Geri Dönüşüm Mühreleri

Yeniden kullanımı mümkün olan plastik ürünlerin tanımlanmasında kullanır. Mühürler hammaddenin kolayca tanınmasını sağlar.



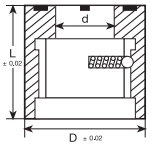
D (mm)	L
6	8
8	8
10	10
12	10
16	12
20	14

Sembol	Madde Cinsi
PET	Tereflete polietilen
PE - HD	Yükselen yoğunluklu polietilen
PVC	Vinil poliklorid
PE - HD	Alçak yoğunluklu polietilen
PP	Poli propilen
PS	Polyester
ABS	Termopolimer akrilonitril budatadin stren
	Gıda
PA	Naylon
POM	Poli Asetat
POM	Polifenil Oksit
PC	Polikarbonat





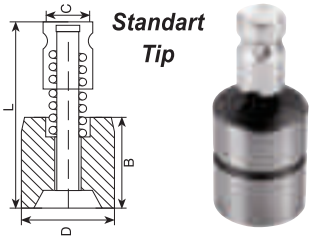
Kalıp Takvimleri



Sipariş Şekli Örnek : KTAY x D

D	L	d	Kalıp Takvimi OK	Kalıp Takvimi Gün	Kalıp Takvimi Ay	Kalıp Takvimi Yıl	Kalıp Takvimi Ay - Yıl
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					

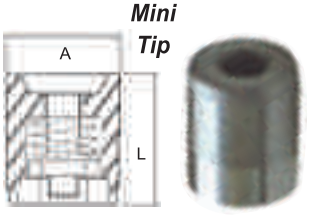
Havalı Valfler



Standart Tip

Sipariş Şekli : KOD

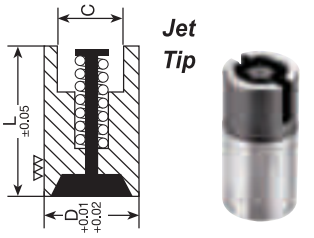
KOD	D	B	C	L
HİV 8	8	10	6	27
HİV 10	10	11	6	29
HİV 12	12	11	8	29
HİV 16	16	20	8	42
HİV 18	18	20	12	42
HİV 20	20	20	12	46
HİV 25	25	20	12	62



Mini Tip

Sipariş Şekli : KOD

KOD	A	L
HİM 6	6	12
HİM 8	8	12
HİM 10	10	12
HİM 12	12	12
HİM 16	16	20
HİM 20	20	20



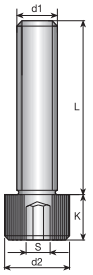
Jet Tip

Sipariş Şekli : KOD

KOD	D	C	L
HİJ 6	6	4	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

Imbus Civata

8,8 - 12,9 Kalite



DIN 912

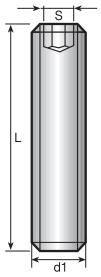


Sipariş Şekli : d1 x L

d1	d2	K	S	L																																			
				10	12	15	20	25	30	35	40	45	50	55	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	220	240	260	280	300	320	340	360	380	400
M3	5.5	3	2.5	✓		✓	✓	✓	✓	✓	✓	✓	✓																											
M4	7	4	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																						
M5	8.5	5	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																		
M6	10	6	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓															
M8	13	8	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓										
M10	16	10	8			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
M12	18	12	10			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
M14	21	14	12					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
M16	24	16	14					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
M18	27	18	14							✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓										
M20	30	20	17								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
M24	36	24	19										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
M30	45	30	22												✓	✓	✓	✓	✓		✓		✓			✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Setiskur Civata

12,9 Kalite



DIN 916

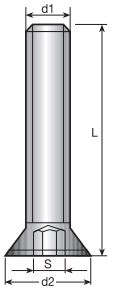


Sipariş Şekli : d1 x L

d1	S	L								
		10	15	20	25	30	35	40	50	60
M3	1.5	✓	✓	✓						
M4	2	✓	✓	✓	✓	✓				
M5	2.5	✓	✓	✓	✓	✓	✓	✓		
M6	3	✓	✓	✓	✓	✓	✓	✓		
M8	4	✓	✓	✓	✓	✓	✓	✓	✓	
M10	5	✓	✓	✓	✓	✓	✓	✓	✓	✓
M12	6	✓	✓	✓	✓	✓	✓	✓	✓	✓
M14	6		✓	✓	✓	✓	✓	✓	✓	✓
M16	8			✓	✓	✓	✓	✓	✓	✓

Havşa Başlı Civata

10,9 Kalite





Sipariş Şekli : d1 x L

d1	d2	S	L							
			10	15	20	25	30	35	40	50	60
M3	6	2	✓	✓	✓						
M4	8	2.5	✓	✓	✓	✓	✓				
M5	10	3	✓	✓	✓	✓	✓	✓	✓		
M6	12	4	✓	✓	✓	✓	✓	✓	✓		
M8	16	5	✓	✓	✓	✓	✓	✓	✓	✓	
M10	20	6		✓	✓	✓	✓	✓	✓	✓	✓
M12	24	8			✓	✓	✓	✓	✓	✓	✓
M16	30	10					✓	✓	✓	✓	✓

Civa Çeliği / CÇ

Sipariş Şekli : KOD

Kod	∅ ÇAP mm	Kg/m
CÇ 2	2 mm	0.040 kg
CÇ 2.5	2.5mm	0.050 kg
CÇ 3	3 mm	0.056 kg
CÇ 3.5	3.5mm	0.076 kg
CÇ 4	4 mm	0.100 kg
CÇ 4.5	4.5mm	0.126 kg
CÇ 5	5mm	0.154 kg
CÇ 5.5	5.5mm	0.187 kg
CÇ 6	6mm	0.222kg
CÇ 6.5	6.5mm	0.261kg
CÇ 7	7mm	0.302 kg
CÇ 7.5	7.5mm	0.350 kg
CÇ 8	8mm	0.396 kg
CÇ 8.5	8.5mm	0.445kg
CÇ 9	9mm	0.500 kg
CÇ 9.5	9.5mm	0.556 kg
CÇ 10	10mm	0.617 kg
CÇ 10.5	10.5mm	0.680 kg
CÇ 11	11mm	0.750 kg
CÇ 11.5	11.5mm	0.815 kg
CÇ 12	12mm	0.888 kg
CÇ 12.5	12.5mm	0.963 kg
CÇ 13	13mm	1.002 kg
CÇ 13.5	13.5mm	1.124 kg
CÇ 14	14mm	1.208 kg
CÇ 14.5	14.5mm	1.296 kg
CÇ 15	15mm	1.387 kg
CÇ 16	16mm	1.578 kg
CÇ 17	17mm	1.782 kg
CÇ 18	18mm	1.998 kg
CÇ 19	19mm	2.226 kg
CÇ 20	20mm	2.466 kg
CÇ 21	21mm	2.719 kg
CÇ 22	22mm	2.984 kg
CÇ 23	23mm	3.262 kg
CÇ 24	24mm	3.550 kg
CÇ 25	25mm	3.853 kg
CÇ 26	26mm	4.168 kg
CÇ 27	27mm	4.495 kg
CÇ 28	28mm	4.824 kg
CÇ 30	30mm	5.550 kg
CÇ 32	32mm	6.313 kg
CÇ 35	35mm	7.550 kg
CÇ 40	40mm	9.000 kg



MALZEMENİN TANIMI

Aşınma dayanımı yüksek olan soğuk iş takım çeliğidir. Cıva çeliği olarak da bilinir.

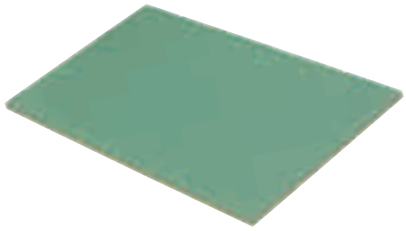
SU İLE SERTLEŞTİRİLEN TAKIM ÇELİĞİ SICAK ŞEKİL VERME- ISIL İŞLEM

DÖVME TAVI = 1050 - 800°C
YUMUŞATMA TAVI = 700°C
TAV SERTLİĞİ = 280 HB (azami)
GERİLİM GERDİRME / TAVLAMA = 600°C
Sertleştirme için ön ısı = 650°C
SERTLEŞTİRME = 0 12 ye kadar 800°C yağda
(Su verme) 0 12 - 20 Kadar 820°C suda.
0 20 - 40 Kadar 820°C suda.
Meneviş = 180-200C (1saat / 25mm)

MALZEMENİN KULLANIM ALANLARI

- *Matkaplarda*
- *Burgulu matkaplarda*
- *Dişçi matkaplarında*
- *Raybalarda*
- *Frezelerde*
- *Delik zımba ve stampalarında*
- *İtici Pimlerde*
- *Metal testerelerinde*

Isı Yalıtım Plakası



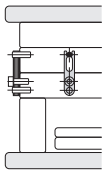


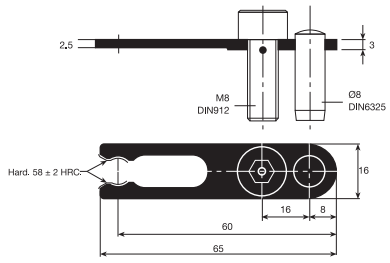
Isı Yalıtım Plakaları Kullanım Şekilleri

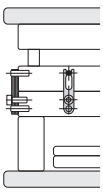
- Plakalar astbest içermez, sağlık sertifikası mevcuttur.
- Darbelerden sudan sürtünmelerden etkilenmez, elektriği iletmez
- Maksimum cm^2 1800 ton basınca dayanıklıdır.
- Isı Yalıtım Plakaları kalıpların görünüm standartını yükseltir.
- Tüm ölçüler isteğe bağlı temin edilir.
- 6mm 8mm 10mm kalınlık ölçüleri mevcuttur.

Modüler Tutucu

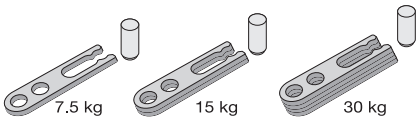


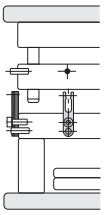






- Kalıbın kademeli açılımını sağlar
- Tutucu eklenerek direnç katılabilir.
- Her parça direnci 7,5 kg dır.



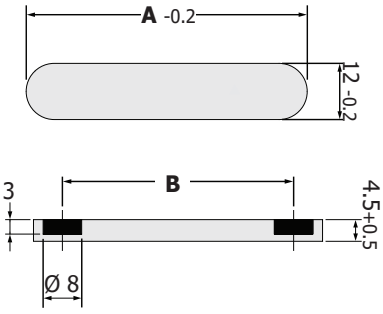


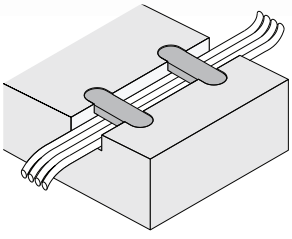


KABLO TUTUCU KAPAĞI

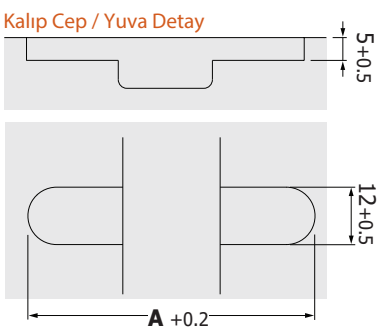
Manyetik Ürün, Ekstra Delik Gerekmez

Kablo Tutucu 40 x 12 Özellikle Sıcak Yolluklu Kalıplardaki Dağınık Kabloların Kanal İçinde Temiz ve Düzgün Durmasını Sağlar.
Ürün Manyetik Malzemedir, Kendiliğinden Yapışır Ekstra Delik Delmeye Gerek Yoktur
Max. Kalıp Sıcaklığını 80ºC'nin Altında Kalmasını Tavsiye Ediyoruz Çünkü Plastik Hatta Mıknatıslar Yüksek Isıdan Etkilenip Bozulabilir.





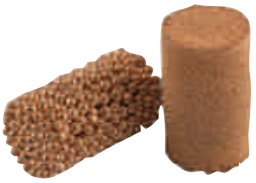
Kalıp Cep / Yuva Detay



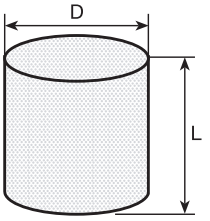
KOD	A	B	Malzeme	SW
KPK40	40	28	ABS + NfFeB	80ºC
KPK60	60	48	ABS + NfFeB	80ºC

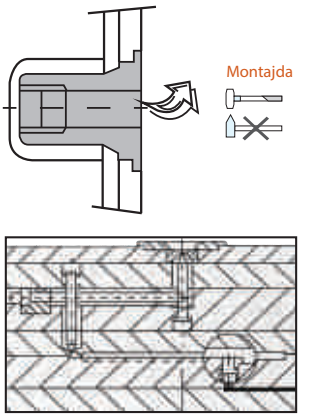
Gaz Atma Filtresi

Sipariş Şekli : KOD



KOD	D	L
PGF 2	2mm	5,0
PGF 3	3mm	10,0
PGF 4	4mm	10,0
PGF 5	5mm	10,0
PGF 6	6mm	10,0
PGF 8	8mm	10,0
PGF 10	10mm	10,0
PGF 12	12mm	12,0
PGF 15	15mm	10,0
PGF 16	16mm	10,0



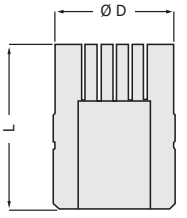


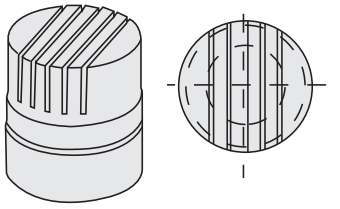
Gaz Atma Filtresi (Kanallı)

Sipariş Şekli : KOD



KOD	D	L
KGF 6	6mm	10,0
KGF 8	8mm	10,0
KGF 10	10mm	10,0
KGF 12	12mm	10,5



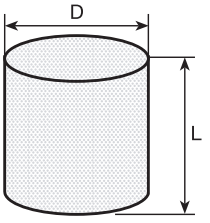


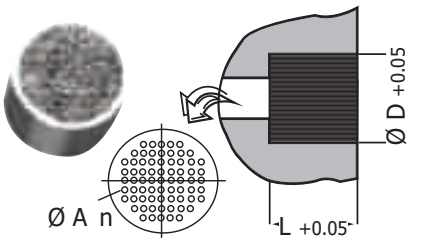
Gaz Atma Filtresi (Sinterli)

Sipariş Şekli : KOD



KOD	D	L
SGF 3	3mm	10,0
SGF 4	4mm	10,0
SGF 5	5mm	10,0
SGF 6	6mm	10,0
SGF 8	8mm	10,0
SGF 10	10mm	10,0
SGF 12	12mm	12,0
SGF 15	15mm	10,0



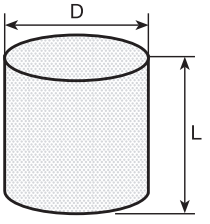


Gaz Atma Filtresi (Çelik Sinterli)

Sipariş Şekli : KOD

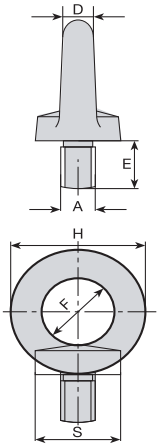


KOD	D	L
ÇSGF 4	4mm	10,0
ÇSGF 6	6mm	10,0
ÇSGF 8	8mm	10,0
ÇSGF 10	10mm	12,0
ÇSGF 12	12mm	12,0
ÇSGF 16	16mm	14,0
ÇSGF 20	20mm	15,0
ÇSGF 28	28mm	15,0



Erkek Aybold (Mapa)

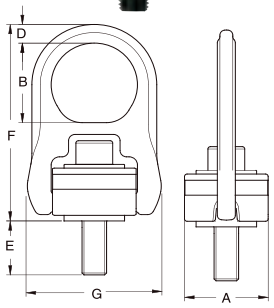




A	D	E	F	H	S	g	Kaldırma Kap.(kg)
M10	10	18	25	45	25	110	230
M12	12	22	30	54	30	195	340
M14	12	22	30	54	30	205	460
M16	14	28	35	63	35	325	700
M18	14	28	35	63	35	335	850
M20	16	30	40	72	40	505	1200
M24	20	38	50	90	50	1020	1800
M30	24	45	60	108	65	1850	3600
M36	28	55	70	126	75	2700	5100
M42	32	65	80	135	85	4030	7000
M56	42	78	100	184	110	8800	11500
M64	48	90	110	206	120	12400	16500

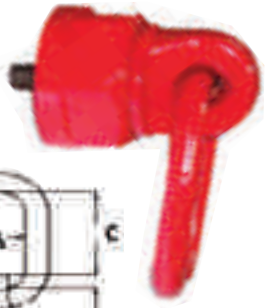
Döner Mapa YOKE

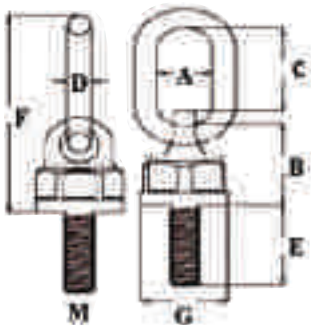




Model	Kaldırma Kapasitesi	Civata Boyutu	Ölçüler (mm)					
			E	A	B	D	F	G
8-203-004	500 Kg	M 8 x 1.25 x 50	17.0	40	41	9	102	65
8-203-005	550 Kg	M10 x 1.50 x 45	11.0	40	41	9	102	65
8-203-005L	550 Kg	M10 x 1.50 x 60	26.0	40	41	9	102	65
8-203-010	1300 Kg	M12 x 1.75 x 60	15.0	65	64	15	158	105
8-203-010L	1300 Kg	M12 x 1.75 x 75	30.0	65	64	15	158	105
8-203-019	2400 Kg	M16 x 2.00 x 65	20.0	65	64	15	158	105
8-203-019L	2400 Kg	M16 x 2.00 x 80	35.0	65	64	15	158	105
8-203-021	2700 Kg	M20 x 2.50 x 70	25.0	65	64	15	158	105
8-203-021L	2700 Kg	M20 x 2.50 x 90	45.0	65	64	15	158	105
8-203-030	3750 Kg	M20 x 2.50 x 80	25.0	85	79	19	204	134
8-203-030L	3750 Kg	M20 x 2.50 x 100	45.0	85	79	19	204	134
8-203-042	5250 Kg	M24 x 3.00 x 80	26.0	85	79	19	204	134
8-203-042L	5250 Kg	M24 x 3.00 x 110	56.0	85	79	19	204	134
8-203-070	8750 Kg	M30 x 3.50 x 140	81.0	100	100	25	241	160
8-203-110	13750 Kg	M36 x 4.00 x 160	76.0	120	111	30	286	194
8-203-125	15600 Kg	M42 x 4.50 x 180	95.0	120	111	30	286	220
8-203-135	16900 Kg	M48 x 5.00 x 190	105.0	120	111	30	286	220
8-203-155	19400 Kg	M56 x 5.50 x 180	94.0	138	109	34	308	241
8-203-223	27900 Kg	M64 x 6.00 x 190	98.0	138	100	38	312	241
8-203-315	39400 Kg	M72 x 6.00 x 240	131.0	166	127	45	377	300

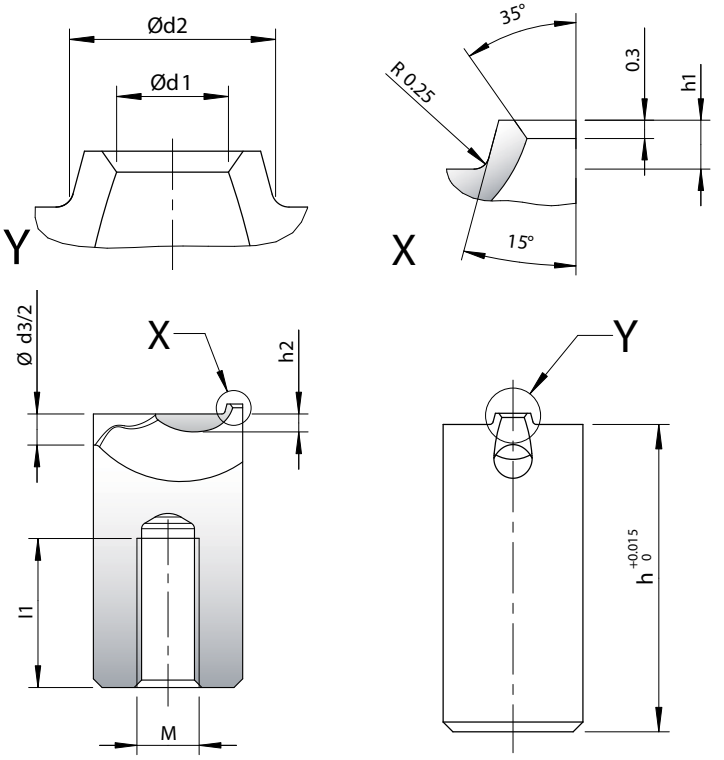
Fırdöndülü Mapa



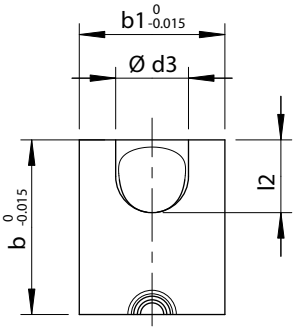


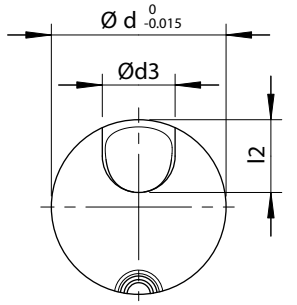
Çap	WLL(kg)	Ana Teknik Parametreler (mm)							Ağırlık
		A	B	C	D	E	F	G	
M10	500	28.6	39.0	31.8	7.80	19.0	85.8	36.0	0.27
M12	1050	35.0	67.0	38.0	12.7	19.1	149.8	60.0	1.20
M16	1300	35.0	67.0	38.0	12.7	31.8	149.8	60.0	1.20
M20	1900	40.0	78.3	67.0	19.1	38.1	178.7	70.0	2.21
M24	2150	40.0	78.3	67.0	19.1	38.1	178.7	70.0	2.21
M30	5000	51.6	83.1	95.0	22.2	50.0	227.4	80.0	3.86
M36	8000	51.6	83.1	95.0	22.2	54.0	227.4	80.0	3.86
M42	10000	65.0	103.7	118	25.0	63.0	265.8	83.0	6.08



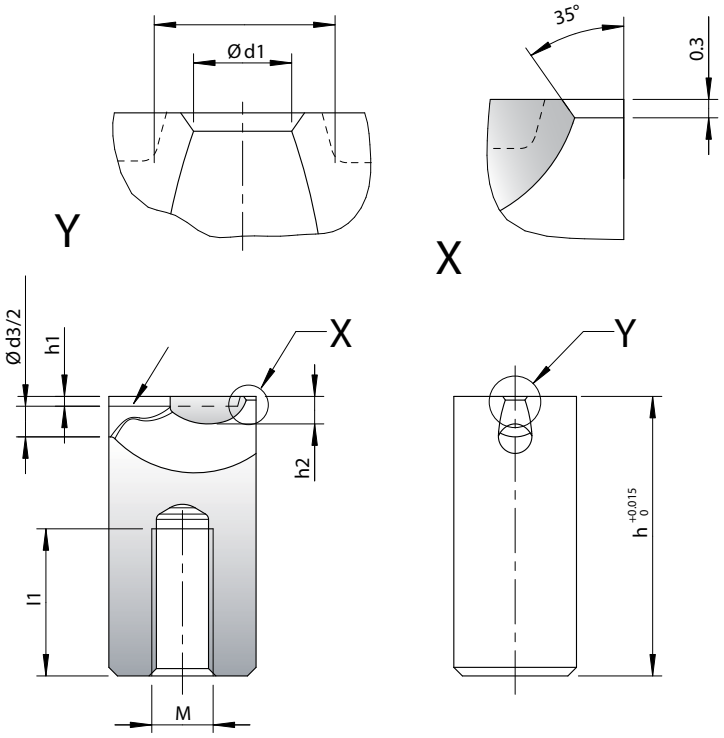


Sipariş Şekli : KOD x d1

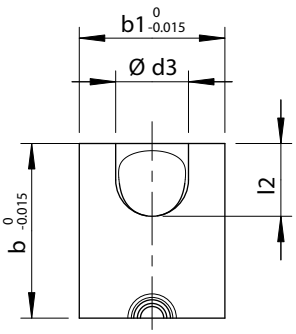
HGS	KOD	b	b1	d1	d2	d3	h	h1	h2	l1	l2	M
	HGS8 / S2	8	6	0.6	1.9	3	22.0	0.6	1.1	13	3.25	4
				0.8	2.1							
	HGS10 / S2	10	8	0.8	2.2	4	22.0	0.8	1.2	12	4	5
				1.2	2.6							
				1.6	3.0							
	HGS12 / S2	12	10	1.2	2.6	5	22.0	0.8	1.40	11	5	5
				1.6	3.0							
				2.0	3.4							
	HGS14 / S2	14	12	1.6	3.0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

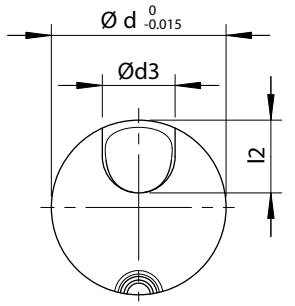
HGR	KOD	d	d1	d2	d3	h	h1	h2	l1	l2	M
	HGR6 / S2	6	0.6	1.9	2.5	17.0	0.6	0.8	10	2.5	4
	HGR8 / S2	8	0.6	1.9	3	22.0	0.6	1.1	13	3.25	4
			0.8	2.1							
	HGR10 / S2	10	0.8	2.2	4	22.0	0.8	1.2	12	4	5
			1.2	2.6							
			1.6	3.0							
	HGR12 / S2	12	1.2	2.6	5	22.0	0.8	1.4	11	5	5
			1.6	3.0							
			2.0	3.4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





Sipariş Şekli : KOD x d1

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

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

Çift Plakalı İtici Sistem (DE)

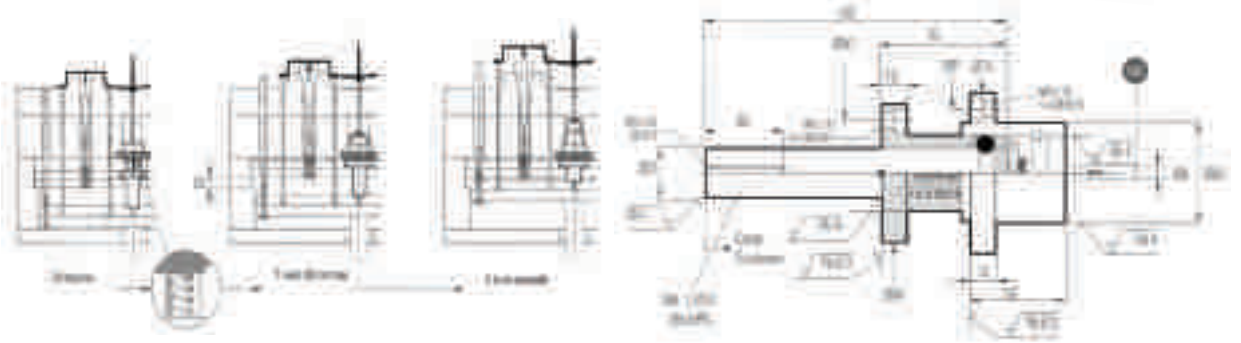
Çift Plakalı İtici Sistem: Bu ünite önceden belirlenen iki adımlı haraketi gerçekleştirir. Esnek iç maçalı kalıpla kademeli itmeyi elde etmek için çok kullanışlıdır.

Önemli Montaj ölçülerini belirlemek için ilk kursu seçmede 0 - 30 mm cetvelini kullanınız.

Malzeme : 1.7264 Sertleştirilmiş 52 ± 2HRC

Kod : DE 243648





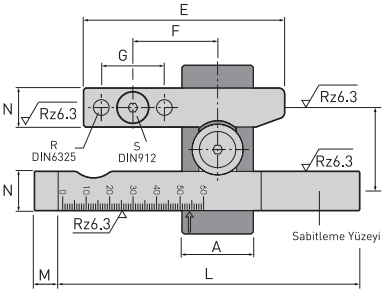
Kademeli Açma Ünitesi (GS)

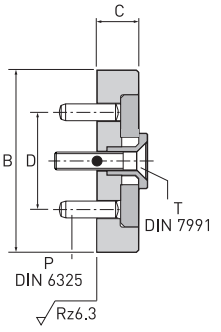
Malzeme : 0503 Sertleştirilmiş 55±3HRC (Sürtünen Bölge)

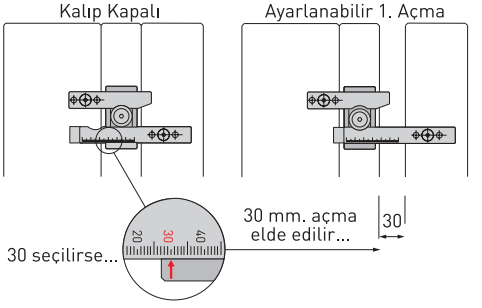
Kademeli Açma Ünitesi : İki adımlı kalıplar için tasarlanmıştır.
Cetvel ile ilk açma değeri belirlenebilir.
Plakaların açılma önceliği ünitenin montaj yönüne bağlıdır.

Önemli : İstenen kursu seçtikten sonra cetveli ölçeksiz kısmından sabitleyiniz.

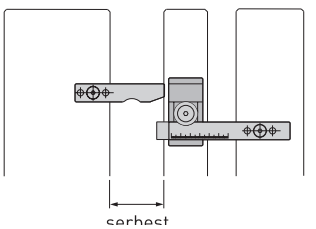








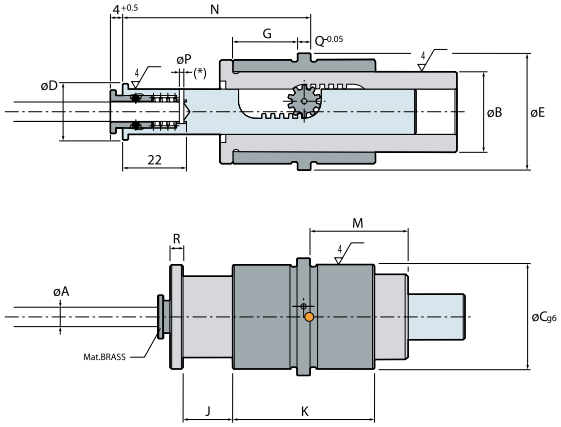
KOD	A	B	C	D	E	F	G	H	L	M	N	P (x2)	R (x4)	S (x2)	T	Esc. Sca
GS.226616	22	66	16	38	75	30	25	32	105	10	15	6x20	6x30	M6x30	M6x35	40
GS. 368619	36	86	19	46	102	43	32	42,7	153	12	20	8x24	8x36	M8x35	M8x40	60
GS. 421024	42	106	24	56	124	51	40	50,2	190	15	24,5	10x30	10x40	M10x40	M10x45	80



İtici Hızlandırıcı (AE)

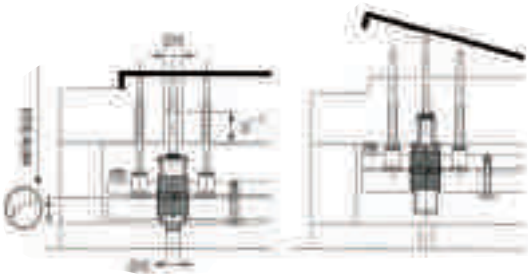


Malzeme : 7242 Sertleştirilmiş 52 / 54 HRC



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

Ref.	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

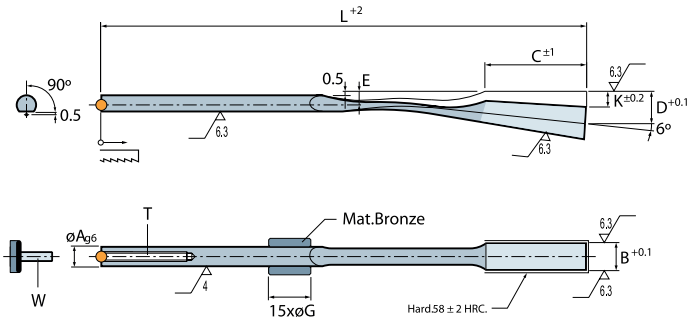


Esnek İç Maça (PW)

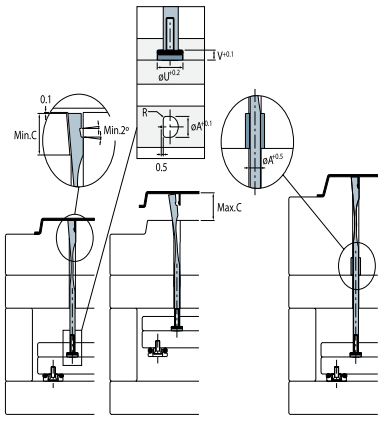
Esnek İç Maça : Yay çeliğinden imal edilmiştir. küçük tırnakların çıkarılmasında kullanılır. Diğer iticiler gibi itici plakasıyla birlikte çalışır

Malzeme : 8159 Templado 45 ± 3 HRC





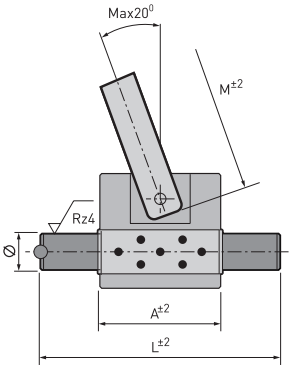
Ref.	A	B	C	D	E	G	K	L	M	N	R	T	U	V	W	CS
PW.060622	6	6.2	22	9	3.5	-	3.5	125	16	18	1.25	M4x36	12	5	M4x16(DIN7991)	-
PW.060630	6	6.2	30	10	3.5	12	4.5	175	20	26	1.25	M4x36	12	5	M4x16(DIN7991)	•
PW.060822	6	8.2	22	9	3.5	-	3.5	125	16	18	1.25	M4x36	12	5	M4x16(DIN7991)	-
PW.060830	6	8.2	30	10	3.5	12	4.5	175	20	26	1.25	M4x36	12	5	M4x16(DIN7991)	•
PW.080825	8	8.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16(DIN7984)	-
PW.081025	8	10.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16(DIN7984)	-
PW.081030	8	10.2	30	11.2	4.5	12	4.5	175	20	26	2	M5x36	14	6	M5x16(DIN7984)	•
PW.081225	8	12.2	25	11.5	4.5	-	4.5	140	18	21	2	M5x36	14	6	M5x16(DIN7984)	-
PW.081230	8	12.2	30	11.2	4.5	12	4.5	175	20	26	2	M5x36	14	6	M5x16(DIN7984)	•
PW.101430	10	14.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16(DIN7984)	•
PW.101630	10	16.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16(DIN7984)	•
PW.101830	10	18.2	30	13.6	5.5	16	5.5	175	20	26	2.5	M6x36	18	8	M6x16(DIN7984)	•

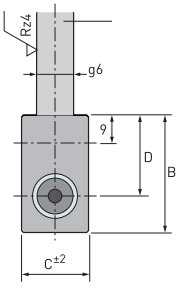


İç Maça Gövdesi (SD)

Malzeme : 1.3212 = 1080 N/mm²

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







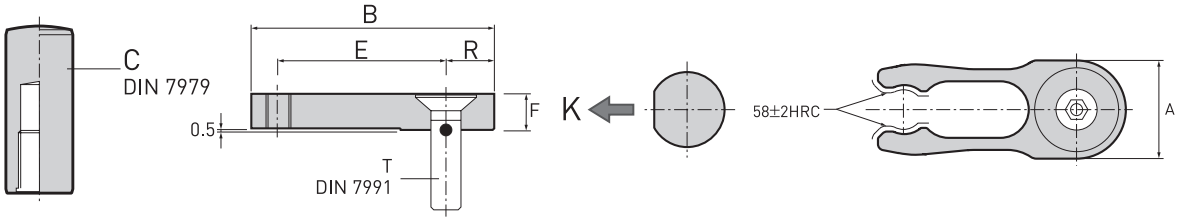
Kod	A	B	C	D	L	M	Ø
SD. 3220 GR	32	37	20	27	80	180	10
SD. 3824 GR	38	40	24	28	80	210	12
SD. 4528 GR	45	44	28	30	100	250	16

Maça Tutucu (RC)



Malzeme : 8159 Sertleştirilmiş 45±3HRC

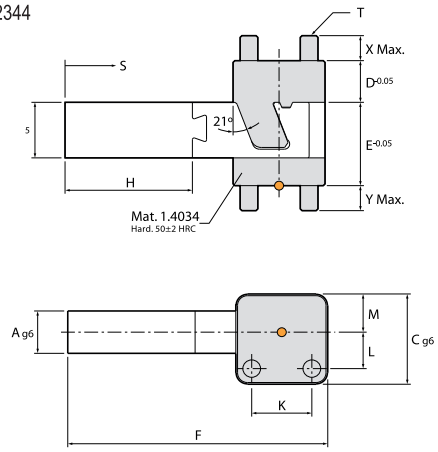
Maça Tutucu : K Değeri tutucudan kurtulmak için gereken yaklaşık yük değeridir.

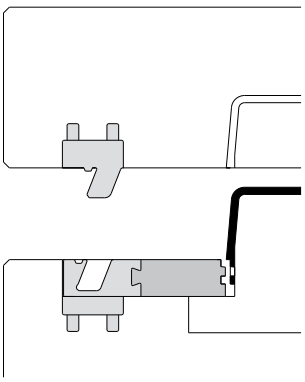


Kod	A	B	C	E	F	G	H	R	T	K Kg.
RC. 123006	12	30	6x20	21	5	4	16	6	M5x16	4
RC. 164008	16	40	8x20	28	6	5	15	8	M6x25	6
RC. 205010	20	50	10x24	34	8	6	17	10	M8x30	12
RC. 246012	24	60	12x32	42	10	7	23	12	M10x40	18
RC. 328012	32	80	16x40	56	12	9	27	16	M12x50	25
RC. 328016	32	80	16x40	56	16	9	25	16	M12x50	32

Kızaklı Maça (SU) Malzeme : 1.2344



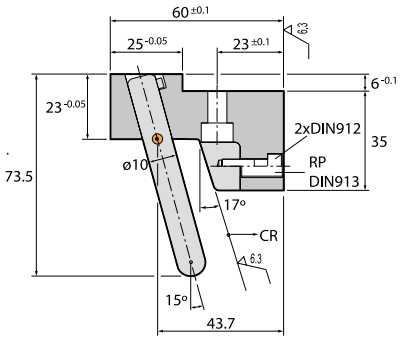


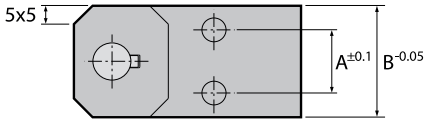


Ref.	A	B	C	D	E	F	H	K	L	M	R	S	T	X	Y
SU.081220	8.2	12	20	10	18	60	32	12.5	8.25	8	3.75	3	M4	7	8
SU.121626	12.2	16	26	12	24	73.5	36	17	10.5	11	4.5	4	M5	9	7
SU.162032	16.2	20	32	16	30	86.5	40	22	13	14	5	5	M6	10	11

Standart Maça Klavuzu (CG) Malzeme : 1.2312







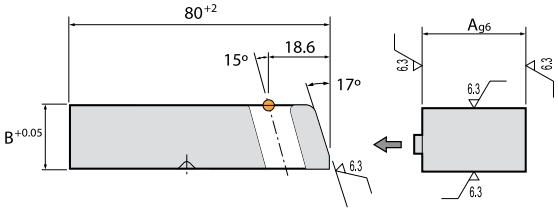
- İşlemiş açılı pim deliği ve ayarlanabilir maça bloğundan oluşur
- Dıştaki 2 vida dayama bloğunu sabitler, ortadaki vida ise pozisyonu belirler.

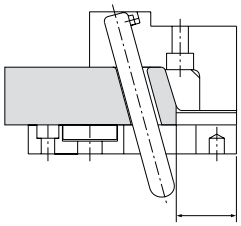
Ref.	A	B	CR (N)	RP	Includes
CG.603075	17	30	180.000	081015	GI.010075
CG.604075	22	40	320.000	101015	GI.010075

Maça Kızağı (CA) Malzeme : 1.2344



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





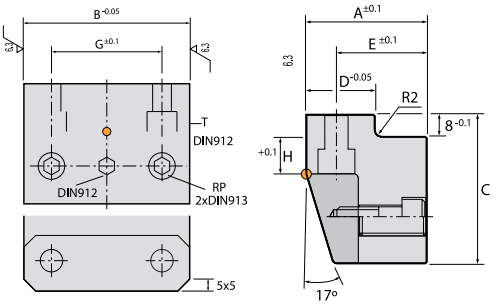
Ref.	A	B
CA.322080	32	20
CA.322480	32	24
CA.422080	42	20
CA.422480	42	24

Ayarlanabilir Maça Dayaması (CR)

Malzeme : 1.2312



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



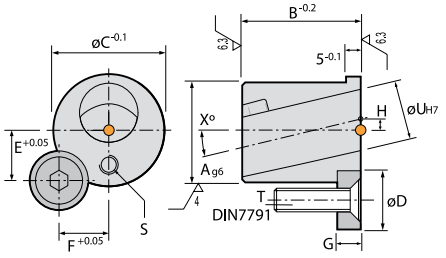
Kod	A	B	C	D	E	G	H	T	RP	CR(N)
CR.403840	40	38	40	25	30	22	12	M8x30	101020	320.000
CR.454849	45	48	49	28	35	28	16	M10x35	121025	480.000
CR.526052	52	60	52	32	40	35	16	M10x35	141030	750.000
CR.526852	52	68	52	32	40	45	16	M10x35	141030	750.000
CR.527556	52	75	56	32	40	50	16	M10x35	141030	750.000

Açılı Pim Tutucu 10º - 15º (GR)

Malzeme : 1.7242

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





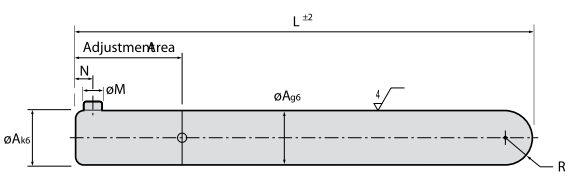
Kod	A	B	C	D	E	F	G	H	S	T	U	Xº
GR.182622-10	18	26	22	12	10.8	7.5	6	3.8	M5x5	M5x16	10	10
GR.222826-10	22	28	26	16	11	11	6	4	M6x6	M6x16	12	10
GR.283432-10	28	34	32	16	13	13	6	5	M6x6	M6x16	16	10
GR.344038-10	34	40	38	20	17	17	8	5.5	M8x6	M8x20	20	10
GR.424546-10	42	45	46	20	19.5	19.5	8	6	M8x6	M8x20	24	10
GR.465050-10	46	50	50	20	21	21	8	7	M8x6	M8x20	28	10
GR.182622-15	18	26	22	12	10.8	7.5	6	3.8	M5x5	M5x16	10	15
GR.222826-15	22	28	26	16	11	11	6	4	M6x6	M6x16	12	15
GR.283432-15	28	34	32	16	13	13	6	5	M6x6	M6x16	16	15
GR.344038-15	34	40	38	20	17	17	8	5.5	M8x6	M8x20	20	15
GR.424546-15	42	45	46	20	19.5	19.5	8	6	M8x6	M8x20	24	15
GR.465050-15	46	50	50	20	21	21	8	7	M8x6	M8x20	28	15

Açılı Pim (GI)

Malzeme : 1.7242



- 75 - 90 - 105 boylar temin edilir.



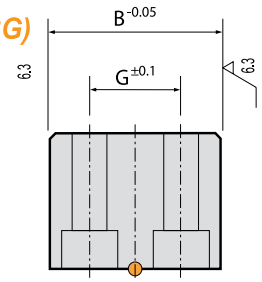
Kod	A	Adjustament Area	M	N	L			R
GI.010..	10	25	4	4	075	090	105	5
GI.012..	12	30	4	4	095	110	130	6
GI.016..	16	35	4	4	115	135	160	8
GI.020..	20	40	6	6	140	165	190	10
GI.024..	24	45	6	6	170	195	220	12
GI.028..	28	50	6	6	200	225	250	14

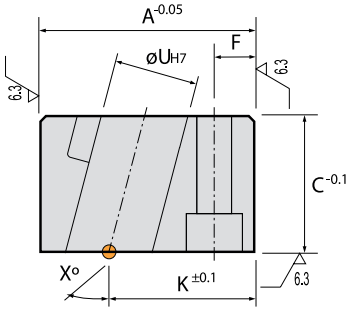
Açılı Pim Tutucu (BG)

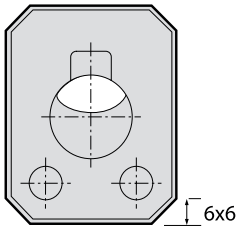
GR ile aynıdır.

Malzeme : 1.2312

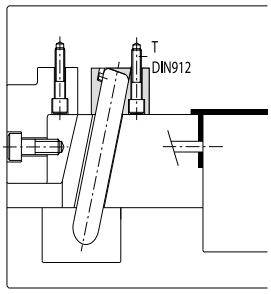






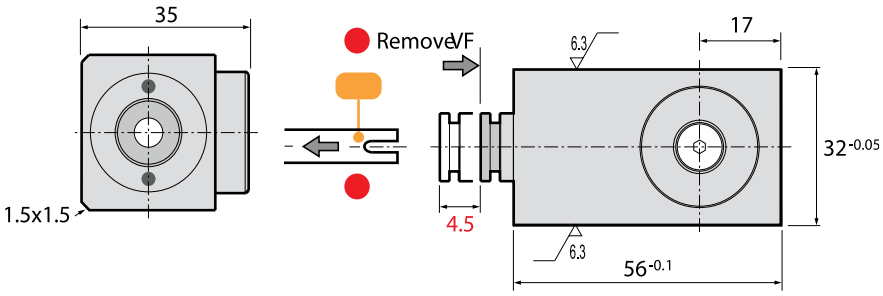


Kod	A	B	C	F	G	K	T	U	X
BG.423016-15	42	30	30	7.5	15	28	M6x35	16	15
BG.504020-15	50	40	36	9	22	34	M8x40	20	15
BG.554024-15	55	40	40	9	22	38	M8x45	24	15
BG.655028-15	65	50	45	12	26	45	M10x50	28	15
BG.423016-20	42	30	30	7.5	15	28	M6x35	16	20
BG.504020-20	50	40	36	9	22	34	M8x40	20	20
BG.554024-20	55	40	40	9	22	38	M8x45	24	20
BG.655028-20	65	50	45	12	26	45	M10x50	28	20



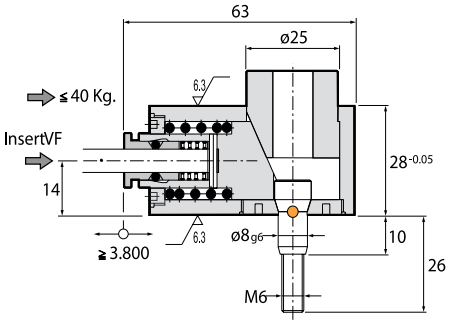
Delik Maçası (UP)

Malzeme : 1.7264





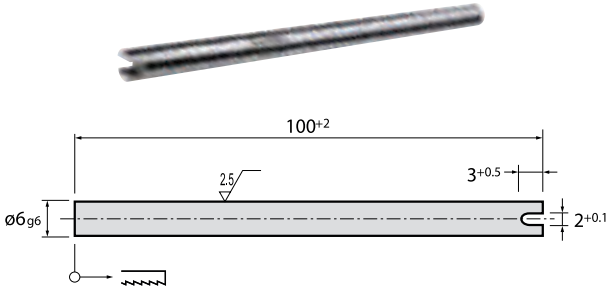
- Yan delikleri oluşturmak için kullanılır.
- Maça pimi otomatik kilitleme sistemi ile tutulur.
- Montaj için ihtiyaç duyulan alan oldukça küçüktür.

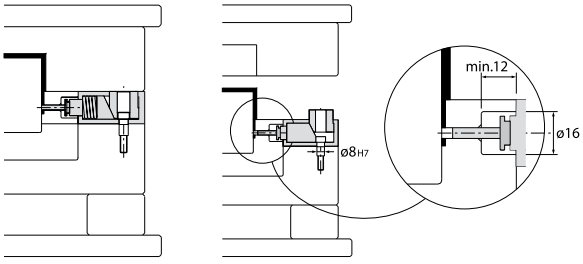


Delik Maçası Pimi (VF)

Malzeme : 1.2510

- İstenilen şekli işlemek için hazırdır.



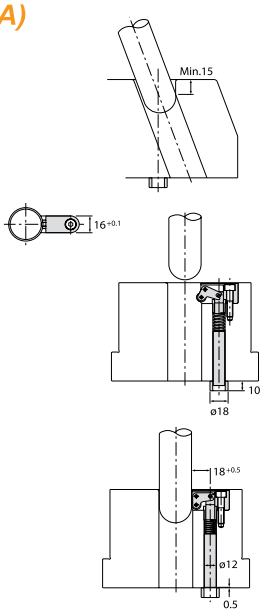


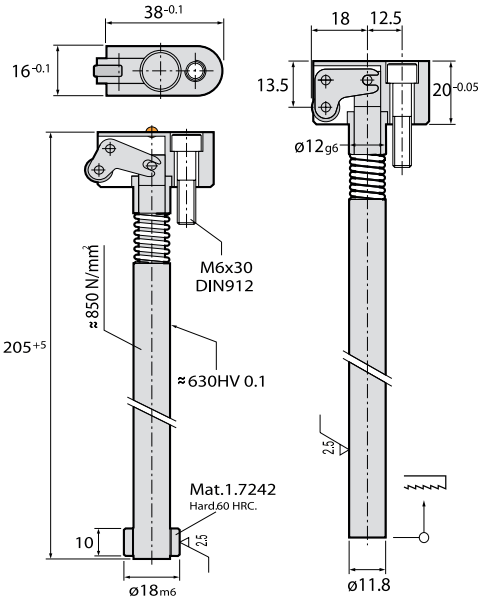
Otomatik Maça Tutucu (RA)

Malzeme : 1.2510

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



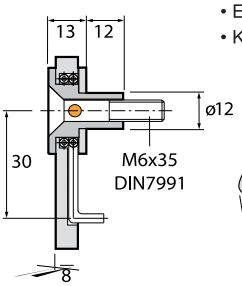




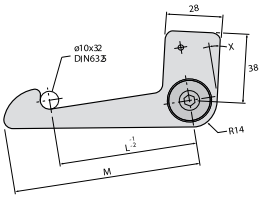
Emniyet Kilidi 75 (BS)

Malzeme : 1.0503





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



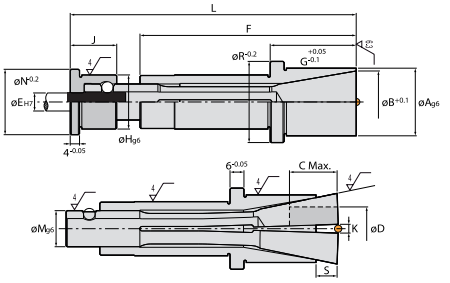
Ref.	L	M	N	X
BS.050075	50	75	8.7	15°
BS.075100	75	100	7	12°
BS.100125	100	125	6	10°
BS.125150	125	150	4.8	8°

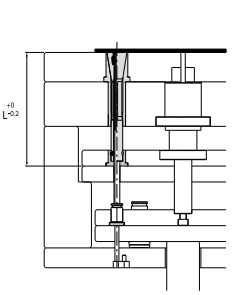
4'lü Otomatik Maça (PE)

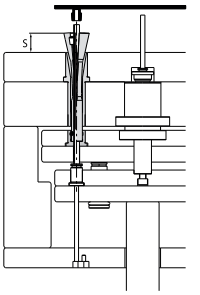
Malzeme : 1.2101

- 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 sertleşrime gibi işlemler gerektirmez.
- Kalıp ayrım yüzeyine 90° yuva açılır.











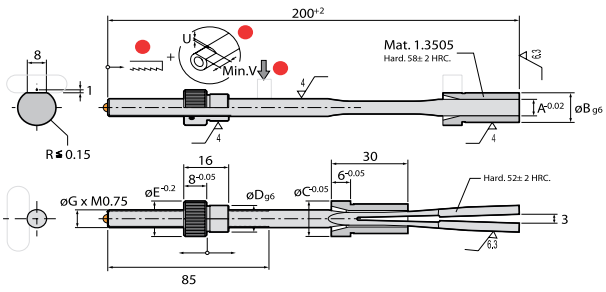
Kod	A	B	C	D	E	F	G	H	J	K	L	M	N	R	S
PE.201208	20	18	12	8	6	63	27	18	17	2	88	12	22	26	8
PE.302214	30	27.5	22	14	8	93	37	24	20	2.5	122.5	16	29	36	9.5
PE.403220	40	37	32	20	12	117	51	34	25	4	158	22	39	46	16

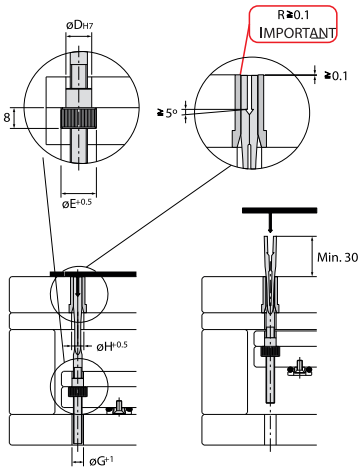
2'li Esnek İç Maça (ED)

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

Malzeme : 1.2101







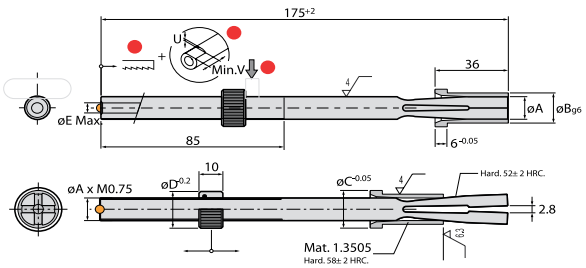
Kod	A	B	C	D	E	G	H	U	V
ED.068200	6	12	14	10	14	6	10	0.5	10
ED.088200	8	14	16	12	16	8	12	0.5	10
ED.108200	10	16	18	14	18	8	14	0.5	15
ED.128200	12	16	18	16	20	8	15	0.5	15

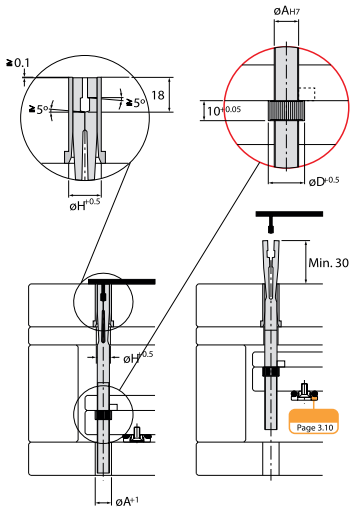
4'lü Esnek İç Maça (EE)

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

Malzeme : 1.2101







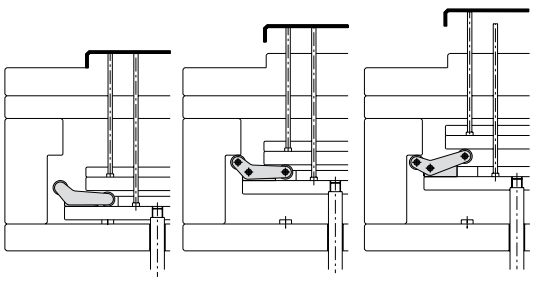
Kod	A	B	C	D	E	H	U	V
EE.060175	6	10	12	12	-	9	0.5	10
EE.082175	8	12	14	14	2	11	0.5	10
EE.103175	10	14	16	16	3	13	0.5	15
EE.124175	12	16	18	18	4	15	0.5	15
EE.168175	16	20	22	22	8	19	1	20

Plaka Hızlandırıcı (EP)

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

Malzeme : 1.2510





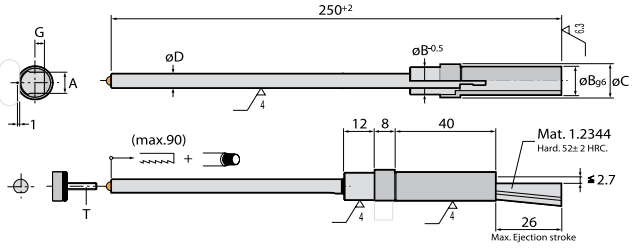
Kod	A	B	C	D	E	F	G	H	L	M	N	P	T	Max Itme
EP.200813	20	8	13.2	25.8	9.4	11.4	6	13.6	5.5	5	15	Ø2.5x10	M3x12	125 Kg
EP.251016	25	10	16	32.3	11.8	14.3	7	17	6.8	6	18.5	Ø3x12	M4x16	250 Kg
EP.371522	37.5	15	22	48.5	17.7	21.5	10.5	25.5	10.2	8	25	Ø4x16	M6x25	350 Kg
EP.502030	50	20	29.6	64.6	23.6	28.6	14	34	13.6	10	34	Ø5x20	M8x30	800 Kg

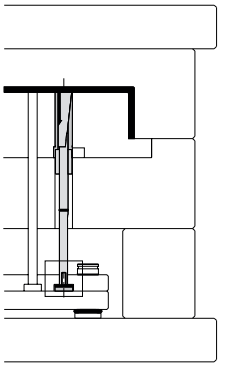
Standart Mekanik Maça (PS)

Malzeme : 1.4034

- 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.





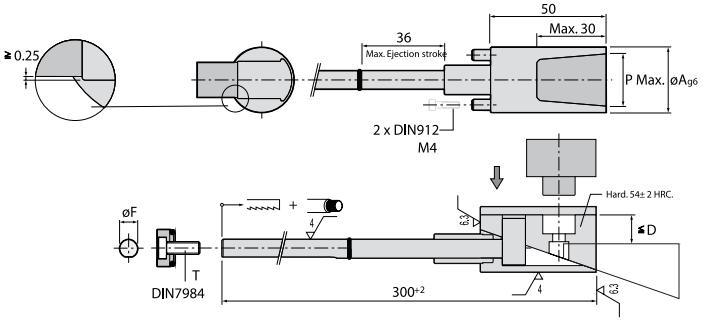


Kod	A	B	C	D	G	R	T	U	V
PS.062250	6.2	10	12	6	3.4	1.25	M4x16 (DIN7991)	12	5
PS.082250	8.2	12	14	6	4	1.25	M4x16 (DIN7991)	12	5
PS.102250	10.2	14	16	8	4.2	2	M5x16 (DIN7984)	14	6
PS.122250	12.2	16	18	8	4.2	2	M5x16 (DIN7984)	14	6

Burçlu Maça (PC)

Malzeme : 1.4034





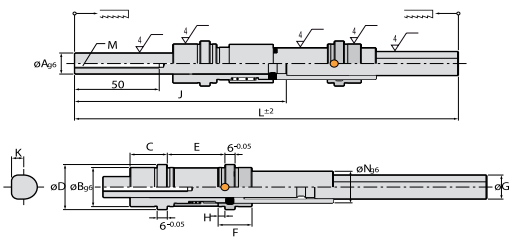
- Minimum itici plaka kursundan küçük tırnaklar (16 mm'e kadar) için kullanılır.
- Montaj kolaylığı için gövde ve kızağın alıştırması yapılmıştır, detay işlemleri gerektirir.
- Maçanın yataklaması diktir.

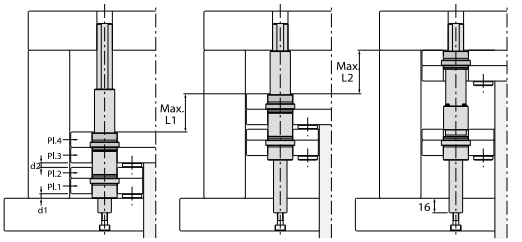
Kod	A	D	F	J	K	P	R	T	U	V
PC.285016	28	12	8	14	20	15.5	2	M5x16	14	6
PC.365022	36	16	10	15	27.5	21.5	2.5	M6x16	18	8

Çift Plaka İtici Sistemi (DX)

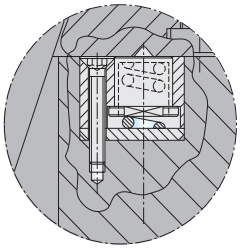
Malzeme : 1.7264





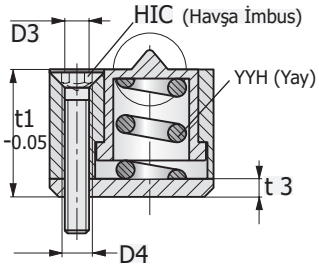


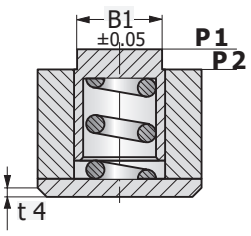
Kod	A	B	C	D	E	F	G	H	J	K	L	M	N	L1	L2
DX.142622	14	26	22	30	34	20	16	4	125	7.2	243	M6	21	42	48
DX.163027	16	30	27	34	44	23	18	6	152	8	314	M8	24	54	80

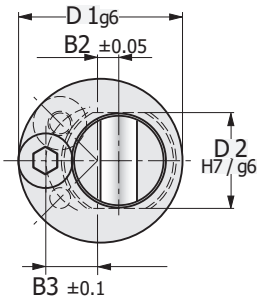


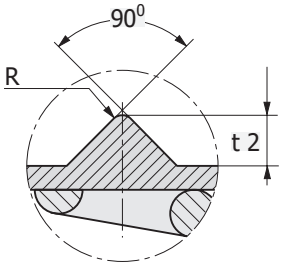


MAÇA KIZAK TUTUCU YAYLI ÜNİTE









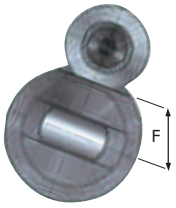
Enjeksiyon kalıplarında maça sistemlerinde slayt tutucu yuvarlak maça tutucular tespit pimsiz çalışır, maça tutucu olmadan da maçayı kaldırabilir. yuvarlak şekli montajı kolaylaştırır.
Maksimum sıcaklık :100°C Malzeme : 1.2767

KOD	D1	B1	B2	B3	t1	t2	t3
MTY.13	13	6.6	1.4	4.3	10	1.0	1.6
MTY.18	18	9.6	2.0	6.0	14	1.8	2.0
MTY.27	27	14.4	3.0	9.0	21	2.8	3.0

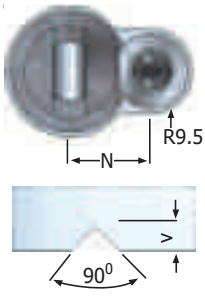
t4	D2	D3	D4	R	P1	P2	HIC
0.35	7	2.2	M3	0.35	28 Nw	34 Nw	M2 -16
0.50	10	3.2	M4	0.50	38 Nw	42 Nw	M3 -50
0.50	15	4.3	M5	0.75	38 Nw	92 Nw	M4 -25

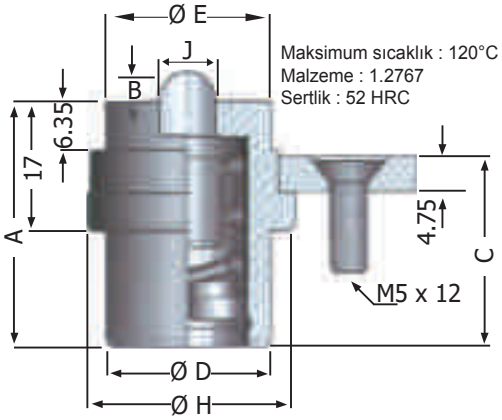
Kolay kullanım yüklemeye göre dizayn edilmiştir. Maça sistemi bağımsız kendi kendine çalışır.

MAÇA KIZAK TUTUCU YAYLI - PİMLİ ÜNİTE









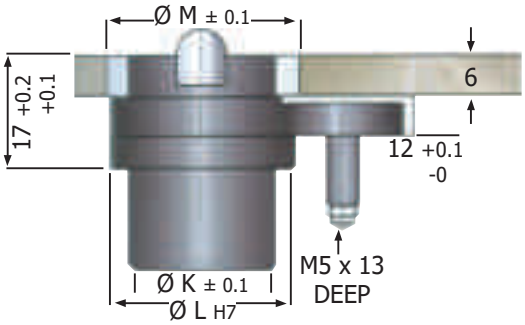
Maksimum sıcaklık : 120°C
Malzeme : 1.2767
Sertlik : 52 HRC

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 hızasızlık olduğunda dahi pim içeri girer.

KOD	A	B	C	D	E	F
MTYP.100	27.43	1.83	20.2	15.75	16	9.52
MTYP.200	33.53	3.07	26.29	18.8	19	10.67
MTYP.400	32	3.78	24.76	22.1	22	11.86

H	J	V	K	L	M	N	Kgf.
22	4.8	2.3	15.87	22	24	17	4.5
25	6.35	3.9	19.05	25	27	18.2	9
28	7.92	4.9	22.23	28	30	19.4	18

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

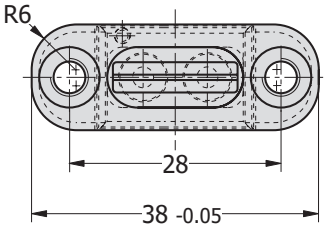


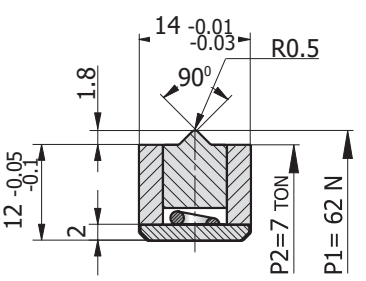


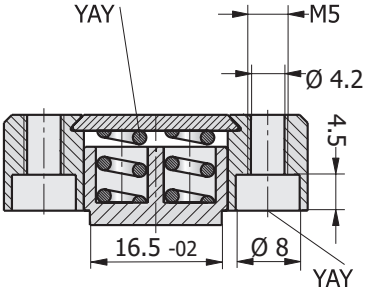
MAÇA TUTUCU TİP - MTT1

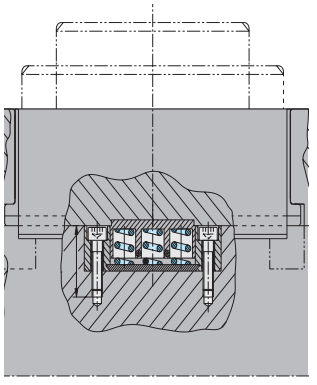
Maça Sistemlerinde Temas Bağlantılı Hat

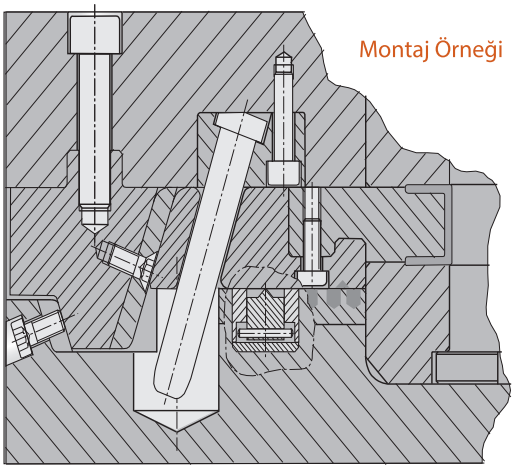
Maksimum sıcaklık : 100°C
Malzeme : 1.2343
Sertlik : 54 ± 2 HRC









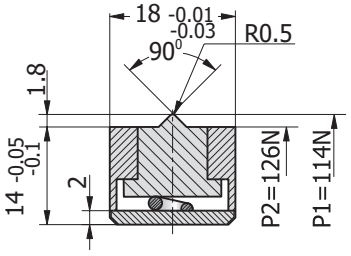


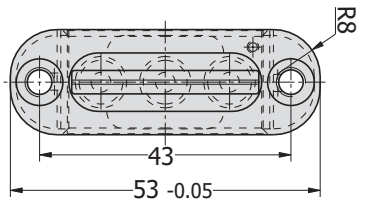
MAÇA TUTUCU TİP - MTT2

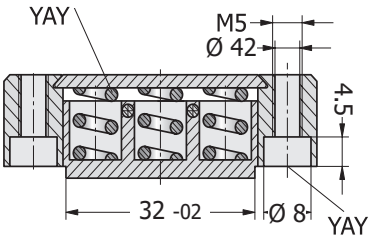
Maça Sisteminde Tutucu Olmadan Maçayı Kaldırır, Bağımsız Ünite

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





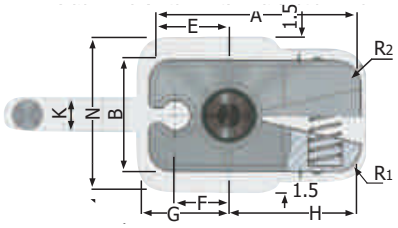




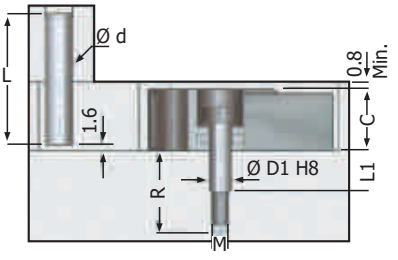
MAÇA TUTUCU PİMLİ

Hassas - Kilitlemeli ve Hizalamalı, Pimli





KOD	A	B	C	E	F	G
MTP 10M	38	19	16	16	**9.1**	19
MTP 20M	54	32	20	21	**12.7**	24
MTP 40M	86	45	30	53	**20.3**	36



H	N	K	D1	L1	R	R1	R2	M
26	25	**8**	6	6	15.5	8	5	M5
36	36	**10**	8	8.5	20.5	10	6	M6
56	56	**12**	10	10	25	13	10	M8

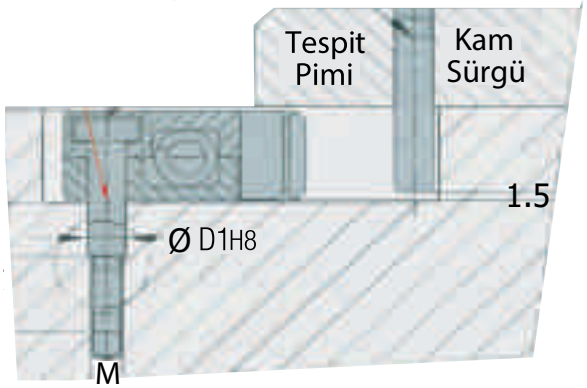
Maça Blok
10 (Kgf.)
20 (Kgf.)
40 (Kgf.)

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 :

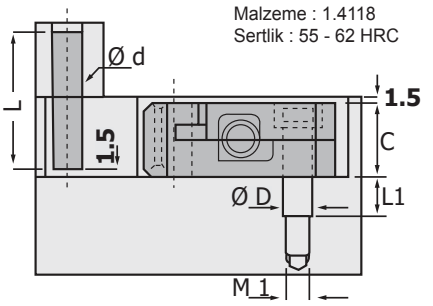
1. Maça tutucunun gövdesini tekrar yuvadan çıkarmak için kalıp üzerinde çıkarıcı pim deliği açmak gereklidir.
2. Maça tutucu üzerindeki pimin merkezi ile montaj esnasında maça tutucu üzerindeki merkezi arasındaki mesafe hassastır (F) iyi hesaplanıp ayarlanmalıdır.
3. Kalıbınıza uygun olan (Maça Tutucu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

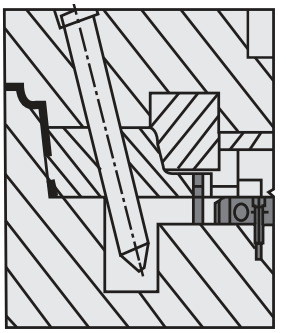


PİMLİ, KAPALI YAYLI TİP MAÇA TUTUCU

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.

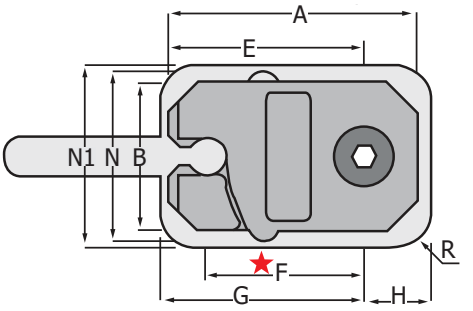






KOD	A	B	C	E	★F	N	G	H
MTPY.38	38	19	16	31.5	24.89	24	34.5	10
MTPY.54	54	32	20	43	34.93	36.5	46	14.5
MTPY.86	86	45	30	67	53.98	49.5	70	22.5

N1	R	D	L1	M1	d/L	Maça
25.5	8	6	8.5	M5X11	6x30	10 Kg.
38	10	8	10.5	M6X14	8x40	20 Kg.
51	12	10	17	M8X18	10x60	40 Kg.



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.

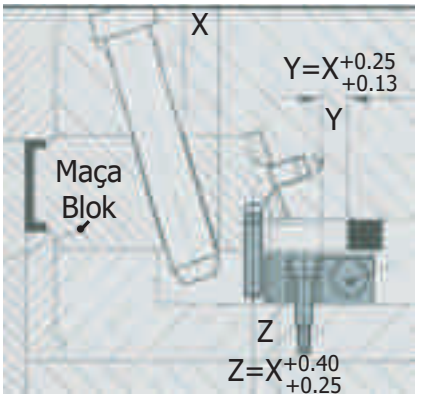
Uygulama:

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 bir dizayn olarak uygulanmıştır.

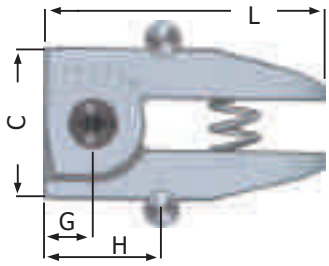
Montaj Örneği

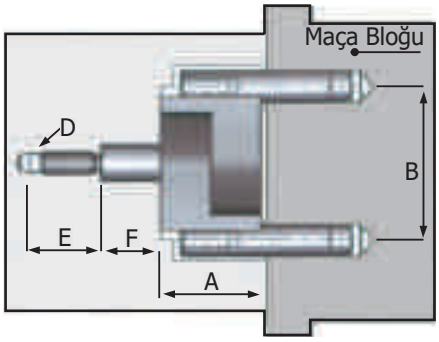


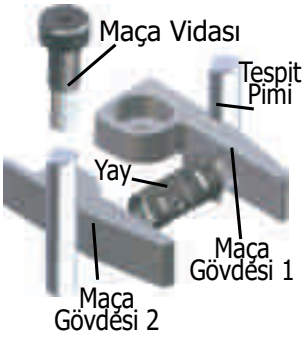
MAÇA TUTUCU MADALLI

Tespit pim montajlı, dengeli / hassas maça kilitleme ünitesi









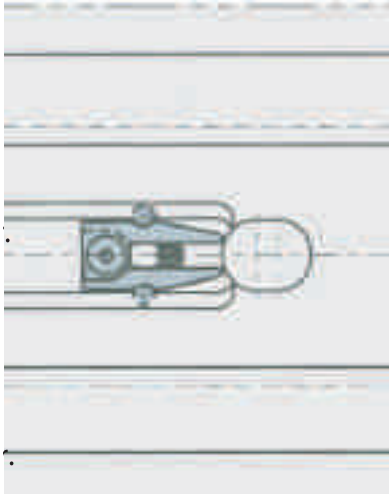
KOD	A	B	C	E	F
MTM 1040	10	21.5	18	9.5	5.1
MTM 1243	12	25.5	22	11	6.1
MTM 1650	16	31.5	28	11	8.1

KOD	G	H	L	D	Max. Tutma	Tespit Pimi
MTM 1040	7	17.5	40	M5	Ø 6 - 30	10
MTM 1243	7.5	18	43	M6		15
MTM 1650	9.5	20.5	50	M6		25

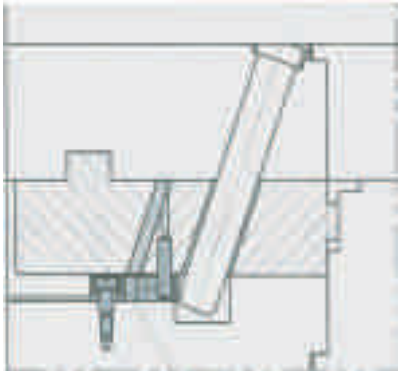
Malzeme : 1.2767
Sertlik : 55 - 62 HRC
Maksimum sıcaklık : 100°
Özellikle alaşımlı malzemeli kalıplarda tercih edilebilir.

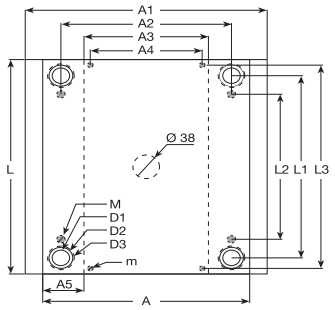
Maça Tutucu Mandalı:

Deliklere eklenen maça civatası (F) çok derinden olmamalı. Maça gövdesikendini kilitledikten sonra düzgünce ve pürüssüzce çalışması gerekir. Bu yüzden civatayı çok sıkmayın. Tespit pimi maçanın üstündeyken, maça gövdesi kalıbın üstüne tutturulur. Ayrıca maça kaydırma mesajesi tam olarak hesaplanıp montajı yapılmalıdır.



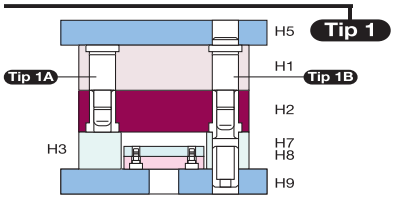
Montaj Örneği

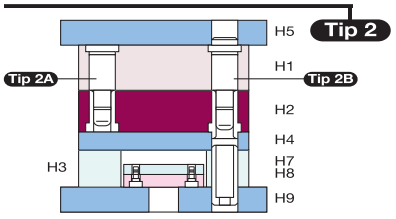


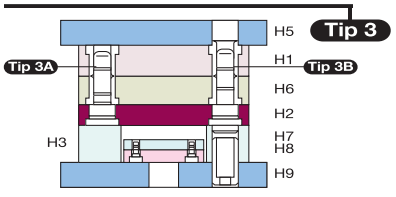


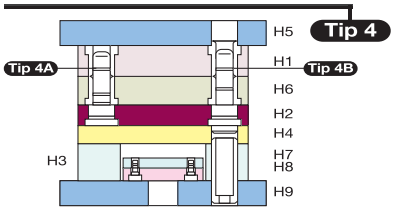


İstenilen ölçülerde kalıp seti imal edilir.



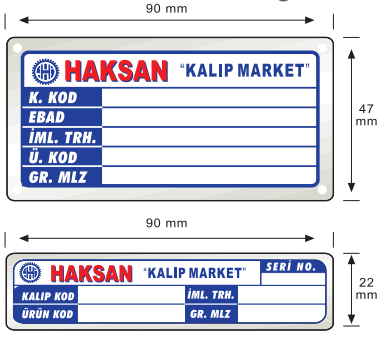






A	L	H1 H2	H6	H4	H3	H5 H9	H7	H8	A1	A2	A3	A4	A5	L1	L2	L3	D1	D2	m	M
156	156	27 & 87	27 & 87	27 & 47	57 & 77	27	14 & 17	17	196	114	80	58	37	114 154 204 254	62 102 152 202	134 174 224 274	16	24	M8	M10
	196																			
	246																			
	296																			
196	196	27 & 87	27 & 87	27 & 47	57 & 77	27	14 & 17	17	246	154	120 100	98 78	37 47	154 204 254 304 354	102 152 202 252 302	174 224 274 324 374	16 20	24 28	M8	M10
	246																			
	296																			
	346																			
	396																			
246	246	27 & 97	27 & 97	27 & 47	57 & 97	27 & 37	14 & 17	17	296	194	148 128	126 106	47 57	194 244 294 344 394	134 184 234 284 334	224 274 324 374 424	20 25	28 34	M8	M12
	296																			
	346																			
	396																			
	446																			
296	296	27 & 107	27 & 107	27 & 57	57 & 97	27 & 37	17 & 22	22	346	244	198 178	176 156	47 57	244 294 344 394 444	184 234 284 334 384	274 324 374 424 474	25	34	M8	M12
	346																			
	396																			
	446																			
	496																			
346	346	37 & 107	37 & 107	27 & 57	57 & 97	37 & 47	17 & 22	22	396	294	248 228	224 204	47 57	294 344 394 444 494	218 268 318 368 418	322 372 422 472 522	25	34	M10	M16
	396																			
	446																			
	496																			
	546																			
396	396	37 & 117	37 & 117	27 & 57	77 & 117	37 & 57	22 & 27	27	446	330	276 256	252 232	57 67	330 380 430 480 530	244 294 344 394 444	372 422 472 522 572	30	39	M10	M16
	446																			
	496																			
	546																			
	596																			
446	446	37 & 117	37 & 117	37 & 67	77 & 117	37 & 57	22 & 27	27	496	380	326 306 286	302 282 262	57 67 77	380 430 480 530 580	294 344 394 444 494	422 472 522 572 622	30	39	M10	M16
	496																			
	546																			
	596																			
	646																			
496	496	37 & 117	37 & 117	37 & 67	77 & 117	37 & 57	22 & 27	27	546	430	376 356 336	352 332 312	57 67 77	430 480 530 580 630	344 394 444 494 544	472 522 572 622 672	30	39	M10	M16
	546																			
	596																			
	646																			
	696																			
	746																			
546	546	47 & 127	47 & 127	47 & 77	77 & 137	47 & 67	22 & 27	27 & 37	596	466	405 385 365	375 355 335	67 77 87	466 516 566 616 666	356 406 456 506 556	516 566 616 666 716	40	54	M12	M20
	596																			
	646																			
	696																			
	746																			
	796																			
596	596	47 & 127	47 & 127	47 & 77	77 & 137	47 & 67	22 & 27	27 & 37	646	516	455 435 415	425 405 385	67 77 87	516 566 616 666 716	406 456 506 556 606	566 616 666 716 776	40	54	M12	M20
	646																			
	696																			
	746																			
	796																			

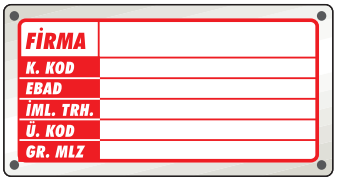
Özel İmalat Örneği



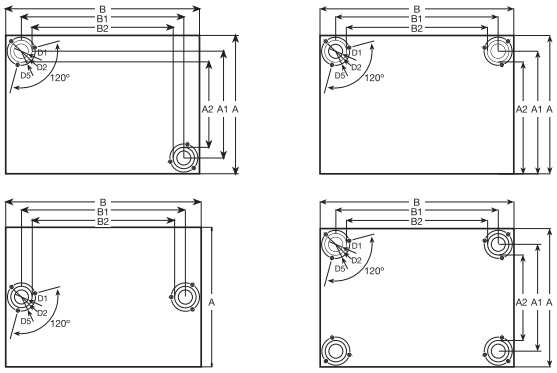
Kalıp Etiketi

- Kalıp etiketi, her çeşit kalıp üzerine kimliklendirmek için kullanılır.
- Aşağıdaki şekillerde 'hazır kalıp etiket örnekleri' sunulmuştur.
- Örnekler harici tamamen isteğe bağlı olarak şekil, renk değişimleri uygulanarak yeni ve orjinal etiketler hazırlanabilir. İsteğe bağlı olarak firma logolu, adresli uygulamalarda yapılabilir.
- Sadece kalıp için değil makina etiketlendirmek içinde ebatlar dahilinde özel tasarımlar ile etiketler kullanılabilmektedir.
- Etiket'in ebatları standart 2 çeşittir.
- Standart etiketlerin siparişleri verildiği andan itibaren kısa zaman içerisinde teslim edilebilmekle birlikte özel etiketlerin siparişleri esnasında termin süresi isteyiniz.
- Özel kalıp etiketlerinin siparişleri minimum 300 ad. olmalıdır.

Renk Örneği

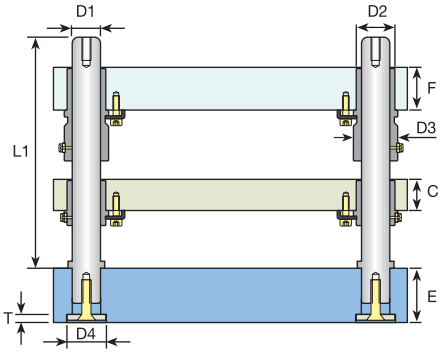


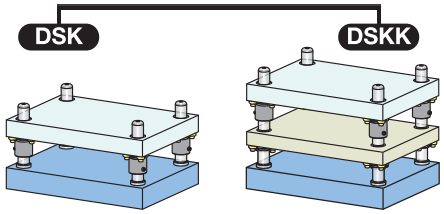


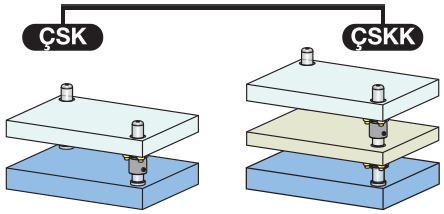


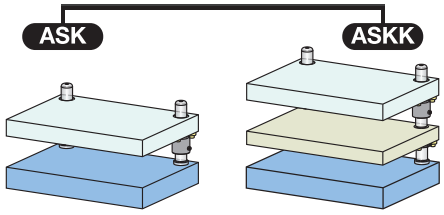


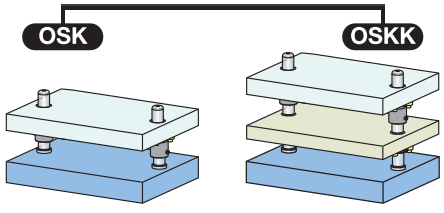
İstenilen ölçülerde kalıp seti imal edilir.









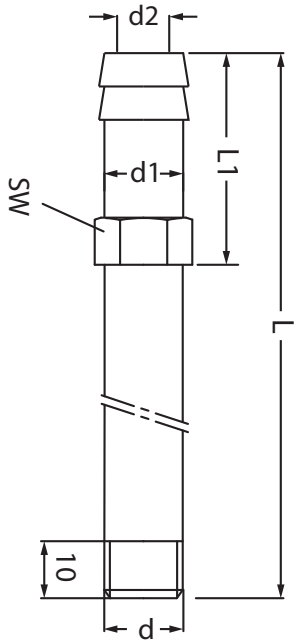


A	B	E	F	C	A1	A2	A3	A4	B1	B2	T	D4	D1	D2	D3	D5
156	156	27	27	27	110	76	133	116	110	76	7.5	28	20	28	34	44
	196	37	37						150	116						
	246	47							200	166						
	296								250	216						
196	196	27	27	27	150	116	173	156	150	116	7.5	28	20	28	34	44
	246	37	37						200	166						
	296	47							250	216						
	346								300	266						
	396								350	316						
246	246	37	37	27	190	151	218	198	190	151	7.5	35	25	34	39	50
	296	47	47	37					240	201						
	346	57							290	251						
	396								340	301						
	446								390	351						
296	296	37	37	37	230	186	263	341	230	186	7.5	35	30	39	44	55
	346	47	47	47					280	236						
	396	57	57						330	286						
	446								380	336						
	496								430	386						
346	346	37	37	37	280	236	313	291	280	236	7.5	35	30	39	44	55
	396	47	47	47					330	286						
	446	57	57						380	336						
	496								430	386						
	546								480	436						
396	396	47	47	37	320	266	358	331	320	266	10.5	45	40	50	54	66
	446	57	57	47					370	316						
	496	67							420	366						
	546								470	416						
	596								520	466						
446	446	47	47	37	370	316	408	381	370	316	10.5	45	40	50	54	66
	496	57	57	47					420	366						
	546	67	67						470	416						
	596								520	466						
	646								570	516						
496	496	47	47	47	420	366	458	431	420	366	10.5	45	40	50	54	66
	546	57	57						470	416						
	596	67	67						520	466						
	646								570	516						
	696								620	566						
546	546	57	57	47	450	386	498	466	450	386	10.5	60	50	60	64	76
	596	67	67						500	436						
	646	77	77						550	486						
	696								600	536						
	746								650	586						
596	596	57	57	47	500	436	548	516	500	436	10.5	60	50	60	64	76
	646	67	67	57					550	486						
	696	77	77						600	536						
	746								650	586						
	796								700	636						



Valfsiz / Without Valve Sipariş No Order No	d	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

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
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



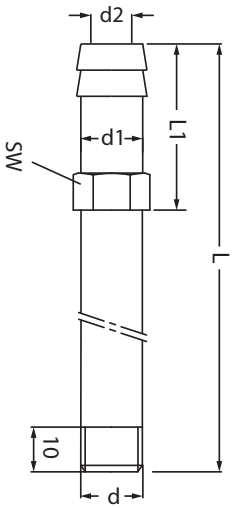
Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
SR ER M12	M12x1.75	12	7	40	28	13
SR ER M12-60	M12-60x1.75	12	7	60	28	13
SR ER M12-80	M12-80x1.75	12	7	80	28	13
SR ER M12-100	M12-100x1.75	12	7	100	28	13
SR ER M12-120	M12-120x1.75	12	7	120	28	13
SR ER M12-150	M12-150x1.75	12	7	150	28	13

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
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

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
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



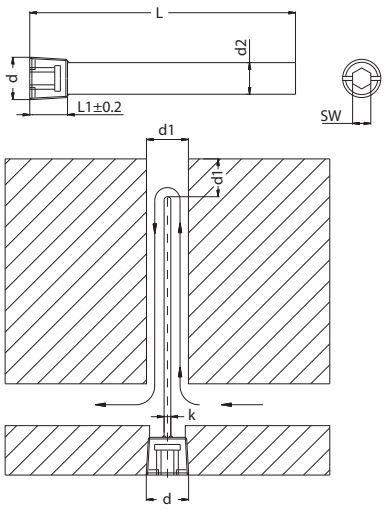
Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
SR ER 10	G 1/8"	12	7	40	28	13
SR ER 10-60	G 1/8"	12	7	60	28	13
SR ER 10-80	G 1/8"	12	7	80	28	13
SR ER 10-100	G 1/8"	12	7	100	28	13
SR ER 10-120	G 1/8"	12	7	120	28	13
SR ER 10-150	G 1/8"	12	7	150	28	13



Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
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

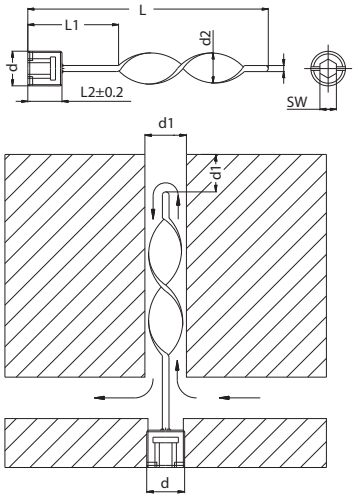
Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
SR ER 17	G 3/8"	12	7	40	28	17
SR ER 17-60	G 3/8"	12	7	60	28	17
SR ER 17-80	G 3/8"	12	7	80	28	17
SR ER 17-100	G 3/8"	12	7	100	28	17
SR ER 17-120	G 3/8"	12	7	120	28	17
SR ER 17-150	G 3/8"	12	7	150	28	17





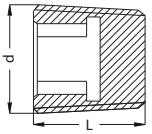
Metrik / Metric Thread Sip. No / Order No	d	SW	d1	d2	L	L1	k
SEP M8.100	8x0.75	4	6	5.8	100	8	1.6
SEP M8.200	8x0.75	4	6	5.8	200	8	1.6
SEP M10.100	10x1.0	5	8	7.8	100	8	1.6
SEP M10.125	10x1.5	5	8	7.8	125	8	1.6
SEP M10.200	10x1.0	5	8	7.8	200	8	1.6
SEP M10.300	10x1.0	5	8	7.8	300	8	1.6
SEP M12.125	12x1.5	6	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



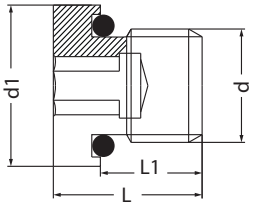


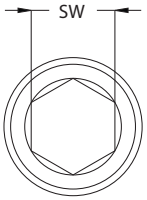
Metrik / Metric Thread Sip. No / Order No	d	SW	d1	d2	L	L1	L2	k
HSEP M8.100	8x0.75	4	6	5.8	100	50	8	1.6
HSEP M8.200	8x0.75	4	6	5.8	200	100	8	1.6
HSEP M8.300	8x0.75	4	6	5.8	300	150	8	1.6
HSEP M10.100	10x1.0	5	8	7.8	100	50	8	1.6
HSEP M10.100.1.5	10x1.5	5	8	7.8	100	50	8	1.6
HSEP M10.200	10x1.0	5	8	7.8	200	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



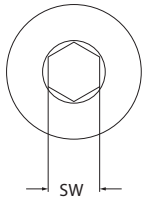








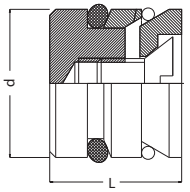
Sipariş No Order No	d	L	SW
KTP 10	BSP 1/8"	8	5
KTP 13	BSP 1/4"	10	7
KTP 17	BSP 3/8"	10	8
KTP 21	BSP 1/2"	10	10
KTP 26	BSP 3/4"	12	12
KTP 33	BSP 1"	19	17
KTP 42	BSP 1.1/4"	22	22
KTP 48	BSP 1.1/2"	22	24

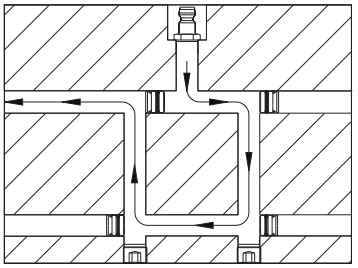


Sipariş No Order No	d	d1	L	L1	SW
OSKTR M10	M10x1	14	10	7	5
OSKTR M12	M12x1.5	17	11	8	6
OSKTR M14	M14x1.5	19	12	9	8
OSKTR M16	M16x1.5	21	12	9.5	10
OSKTR M22	M22x1.5	27	13	11.5	14
OSKTR M24	M24x1.5	30	15	11.5	14





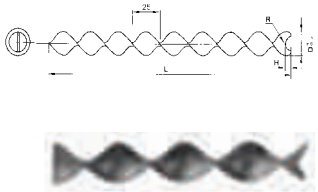


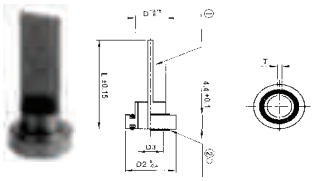


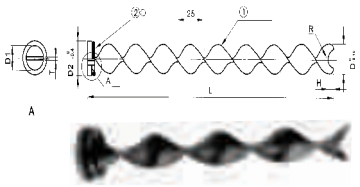
Viton Oringli Tıkaç

Çalışma Sıcaklığı / Temperature Range
Maks. 200°C / Max. 200°C

Viton Oring FPM (V) Sipariş No Order No	NBR Oring NBR Seals Sipariş No Order No	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







montajda ürün montaj yuvasına rahat (0.2-0.5) boşlukla geçmelidir.

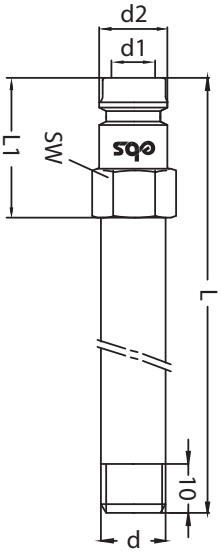
R	H	Kod	D	L
2	2	GCB	8	96-196-296
2.5	2.5		10	
3	3		12	
4	4		16	
5	5		20	96-196-296 396
6	6		25	

D1	D2	T	Ürün		L
			Kod	D	
6	15	1.2	GCT	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	

D1	D2	T	R	H	Ürün		L
					Kod	D	
8	15	1.5	2	2	GCA	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	



Valfsiz / Without Valve Sipariş No Order No	d	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

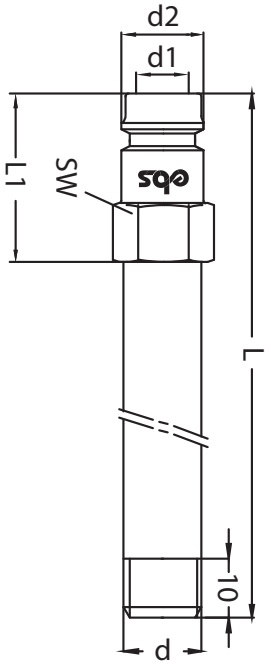


Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
590 ER 10-60	BSP 1/8"	9	13	14	60	20
590 ER 10-80	BSP 1/8"	9	13	14	80	20
590 ER 10-100	BSP 1/8"	9	13	14	100	20
590 ER 10-120	BSP 1/8"	9	13	14	120	20
590 ER 10-150	BSP 1/8"	9	13	14	150	20

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
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

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
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





Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
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

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
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

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
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

Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
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

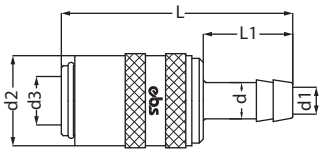
Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	SW	L	L1
590 ER M16-60	M16x2	9	13	14	60	20
590 ER M16-80	M16x2	9	13	14	80	20
590 ER M16-100	M16x2	9	13	14	100	20
590 ER M16-120	M16x2	9	13	14	120	20
590 ER M16-150	M16x2	9	13	14	150	20

590 SERİSİ



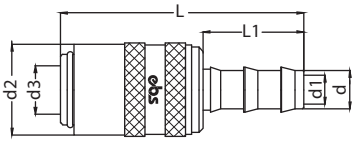


Hortum Gövde / Hose Tail Socket



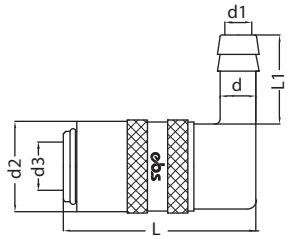
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
590 HGB 10	590 HG 10	10	7.5	23	13	59	23
590 HGB 13	590 HG 13	13	10	23	13	59	23

Kelepçesiz Hortum Gövde / Hose Clamp Socket



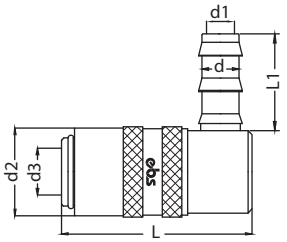
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
590 FGB 10	590 FG 10	10	7.5	23	13	64	28
590 FGB 13	590 FG 13	13	10	23	13	64	28

90° Hortum Gövde / 90° Hose Tail Socket



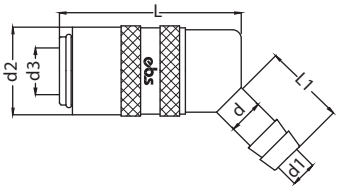
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
590 HGB 10-90	590 HG 10-90	10	7.5	23	13	52	29
590 HGB 13-90	590 HG 13-90	13	10	23	13	52	29

90° Kelepçesiz Hortum Gövde /90° Hose Clamp Socket



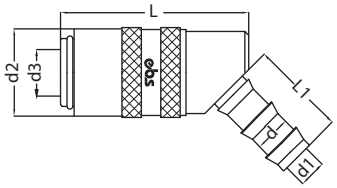
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
590 FGB 10-90	590 FG 10-90	10	7.5	23	13	52	29
590 FGB 13-90	590 FG 13-90	13	10	23	13	52	29

45° Hortum Gövde / 45° Hose Tail Socket



Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	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

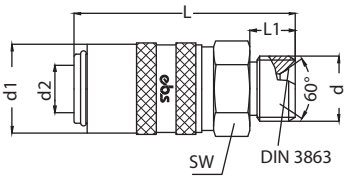
45° Kelepçesiz Hortum Gövde /45° Hose Clamp Socket



Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	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 SERİSİ

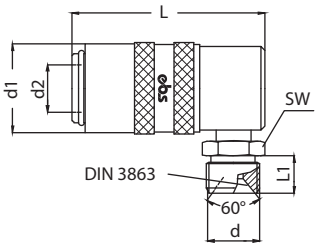
Erkek Gövde / Male Thread Socket



Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	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

90° Erkek Gövde / 90° Male Thread Socket

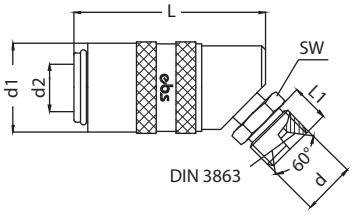




Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
590 EGB 13-90	590 EG 13-90	BSP 1/4"	23	13	52	9	15
590 EGB 17-90	590 EG 17-90	BSP 3/8"	23	13	52	9	19
590 EGB 21-90	590 EG 21-90	BSP 1/2"	23	13	52	9	21
590 EGB M16-90	590 EG M16-90	M16x1.5	23	13	52	10	19

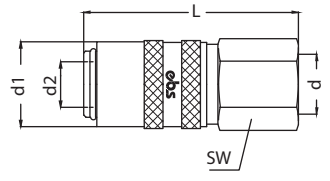
45° Erkek Gövde / 45° Male Thread Socket





Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	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

Dişi Gövde / Female Thread Socket

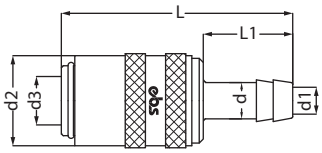


Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	L	SW
590 DGB 13	590 DG 13	BSP 1/4"	23	13	52	21
590 DGB 17	590 DG 17	BSP 3/8"	23	13	52	21
590 DGB 21	590 DG 21	BSP 1/2"	23	13	52	24
590 DGB M16	590 DG M16	M16x1.5	23	13	52	21

560 SERİSİ

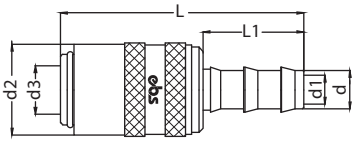


Hortum Gövde / Hose Tail Socket



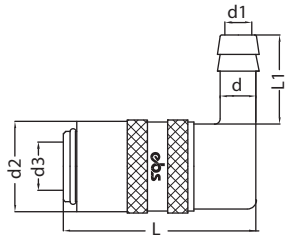
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
560 HGB 06	560 HG 06	6	4.5	18	9	47.5	17.5
560 HGB 08	560 HG 08	8	6	18	9	47.5	17.5
560 HGB 10	560 HG 10	10	7	18	9	47.5	17.5

Kelepçesiz Hortum Gövde / Hose Clamp Socket



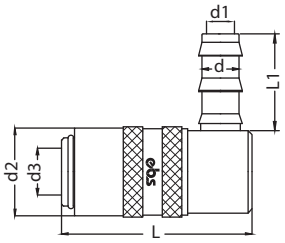
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
560 FGB 06	560 FG 06	6	4.5	18	9	48	18
560 FGB 08	560 FG 08	8	6	18	9	48	18
560 FGB 10	560 FG 10	10	7	18	9	48	18

90° Hortum Gövde / 90° Hose Tail Socket



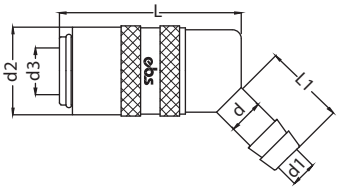
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
560 HGB 06-90	560 HG 06 -90	6	4.5	18	9	42	26
560 HGB 08-90	560 HG 08 -90	8	6	18	9	42	26
560 HGB 10-90	560 HG 10 -90	10	7	18	9	42	26

90° Kelepçesiz Hortum Gövde /90° Hose Clamp Socket



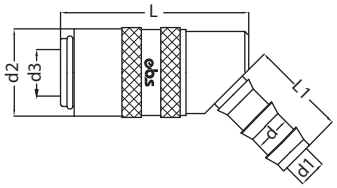
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
560 FGB 06-90	560 FG 06 -90	6	4.5	18	9	42	26
560 FGB 08-90	560 FG 08 -90	8	6	18	9	42	26
560 FGB 10-90	560 FG 10 -90	10	7	18	9	42	26

45° Hortum Gövde / 45° Hose Tail Socket



Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	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

45° Kelepçesiz Hortum Gövde /45° Hose Clamp Socket



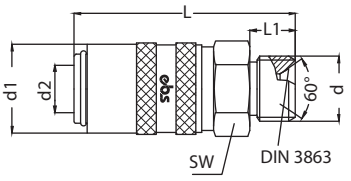
Valfli / With Valve Sipariş No Order No	Valflsiz / Without Valve Sipariş No Order No	d	d1	d2	d3	L	L1
560 FGB 06-45	560 FG 06 -45	6	4.5	18	9	42	26
560 FGB 08-45	560 FG 08 -45	8	6	18	9	42	26
560 FGB 10-45	560 FG 10 -45	10	7	18	9	42	26

560 SERİSİ



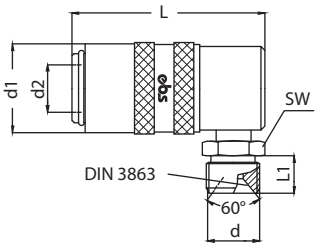


Erkek Gövde / Male Thread Socket



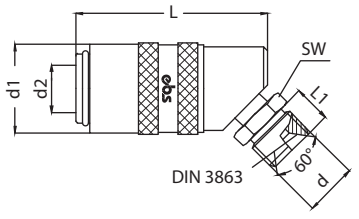
Valfli / With Valve Sipariş No Order No	Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
560 EGB 13	560 EG 13	BSP 1/4"	18	9	47.5	9	17
560 EGB 17	560 EG 17	BSP 3/8"	18	9	47.5	9	17
560 EGB M10	560 EG M10	M10x1.0	18	9	47.5	9	17
560 EGB M14	560 EG M14	M14x1.5	18	9	47.5	9	17

90° Erkek Gövde / 90° Male Thread Socket



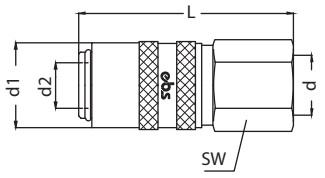
Valfli / With Valve Sipariş No Order No	Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
560 EGB 13-90	560 EG 13-90	BSP 1/4"	18	9	42	9	14
560 EGB 17-90	560 EG 17-90	BSP 3/8"	18	9	42	9	17
560 EGB M14-90	560 EG M14-90	M14x1.5	18	9	42	9	17

45° Erkek Gövde / 45° Male Thread Socket



Valfli / With Valve Sipariş No Order No	Valfsiz / Without Valve Sipariş No Order No	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

Dişi Gövde / Female Thread Socket

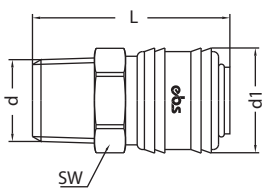


Valfli / With Valve Sipariş No Order No	Valfsiz / Without Valve Sipariş No Order No	d	d1	d2	L	L1	SW
560 DGB 13	560 DG 13	BSP 1/4"	18	9	47.5	9	17
560 DGB 17	560 DG 17	BSP 3/8"	18	9	47.5	9	21
560 DGB M10	560 DG M10	M10x1.0	18	9	47.5	9	17
560 DGB M14	560 DG M14	M14x1.5	18	9	47.5	9	17

A26 SERİSİ

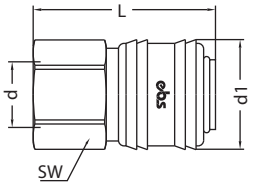


Erkek Gövde / Male Thread Socket



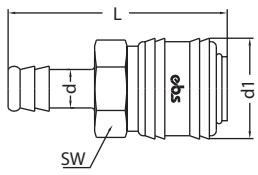
Valfli / With Valve Sipariş No Order No	d	d1	L	SW
A26 EGB 13	BSP 1/4"	25	58	21
A26 EGB 17	BSP 3/8"	25	58	21
A26 EGB 21	BSP 1/2"	25	59	21
A26 EGB M14	M14x1,5	25	58	21
A26 EGB M16	M16x1,5	25	58	21
A26 EGB M18	M18x1,5	25	59	21

Dişi Gövde / Female Thread Socket



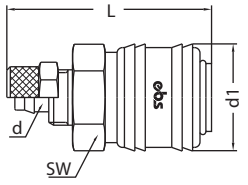
Valfli / With Valve Sipariş No Order No	d	d1	L	SW
A26 DGB 10	BSP 1/8"	25	41	21
A26 DGB 13	BSP 1/4"	25	41	21
A26 DGB 17	BSP 3/8"	25	41	21
A26 DGB 21	BSP 1/2"	25	41	24
A26 DGB M14	M14x1,5	25	41	21
A26 DGB M16	M16x1,5	25	41	21
A26 DGB M18	M18x1,5	25	41	22

Hortum Gövde / Hose Tail Socket



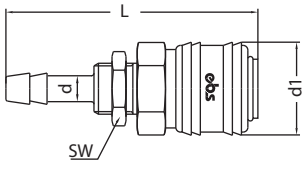
Valfli / With Valve Sipariş No Order No	d	d1	L	SW
A26 HGB 06	6 mm - 1/4"	25	55	21
A26 HGB 08	8 mm - 5/16"	25	55	21
A26 HGB 09	9 mm - 5/14"	25	55	21
A26 HGB 10	10 mm - 3/8"	25	55	21
A26 HGB 13	13 mm - 1/2"	25	55	21

Plastik Hortum Gövde / Plastic Hose Coupling



Valfli / With Valve Sipariş No Order No	d	d1	L	SW
A26 PGB 06	6x8 mm M12x1	25	50	21
A26 PGB 08	8x10 mm M16x1	25	54	21
A26 PGB 09	9x12 mm M16x1	25	63	21

Panel Plastik Hortum Gövde / Panel Mount Plastic Hose Coupling

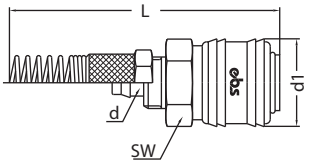


Valfli / With Valve Sipariş No Order No	d	d1	L	SW
A26 MGB 06	6 mm M12x1	25	60	21
A26 MGB 08	8 mm M16x1	25	63	21
A26 MGB 10	10 mm M16x1	25	72	21

A26 SERİSİ

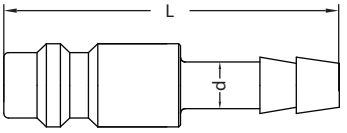


Yaylı Plastik Hortum Gövde / Plastic Hose Coupling with Spring



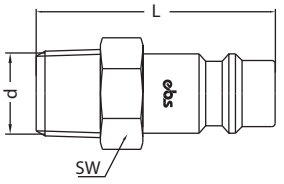
Valfli / With Valve Sipariş No Order No	d	d1	L	SW
A26 YGB 06	6x8 mm M12x1	25	133	21
A26 YGB 08	8x10 mm M16x1	25	148	21
A26 YGB 09	9x12 mm M16x1	25	148	21

Hortum Uç / Hose Plugs



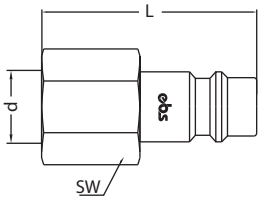
Valfli / With Valve Sipariş No Order No	d	L
A26 HR 06	6 mm - 1/4"	46
A26 HR 08	8 mm - 5/16"	46
A26 HR 09	9 mm - 5/14"	46
A26 HR 10	10 mm - 3/8"	46
A26 HR 13	13 mm - 1/2"	48

Erkek Uç lar / Male Plugs



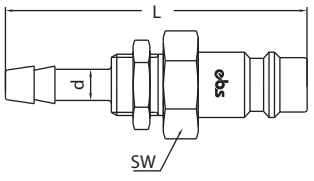
Valfsiz / Without Valve Sipariş No Order No	d	L	SW
A26 ER 10	BSP 1/8"	31	13
A26 ER 13	BSP 1/4"	33	14
A26 ER 17	BSP 3/8"	33	17
A26 ER 21	BSP 1/2"	38	22
A26 ER M14	M14x1,5	35	17
A26 ER M16	M16x1,5	36	17
A26 ER M18	M18x1,5	37	19

Dişi Uç lar / Female Plugs



Valfsiz / Without Valve Sipariş No Order No	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

Panel Hortum Uç / Panel Mount Plastic Hose Plug



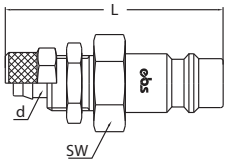
Valfsiz / Without Valve Sipariş No Order No	d	L	SW
A26 MR 06	6 mm M12x1	56	14
A26 MR 08	8 mm M12x1	56	14
A26 MR 10	10 mm M14x1	56	16

A26 SERİSİ



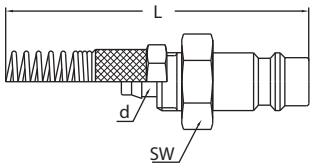


Plastik Hortum Uç / Plastic Hose Plug



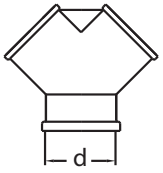
Valfsiz / Without Valve Sipariş No Order No	d	L	SW
A26 PR 04	4x6 mm M10x1	34	12
A26 PR 06	6x8 mm M12x1	34	12
A26 PR 08	8x10 mm M16x1	42	17
A26 PR 09	9x12 mm M16x1	42	17

Yaylı Plastik Hortum Uç / Plastic Hose Plug with Spring



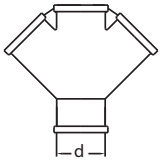
Valfsiz / Without Valve Sipariş No Order No	d	L	SW
A26 YR 04	4x6 mm M10x1	120	12
A26 YR 06	6x8 mm M12x1	120	12
A26 YR 08	8x10 mm M16x1	140	17
A26 YR 09	9x12 mm M16x1	140	17

İkili Gövde / 2 Way Connector



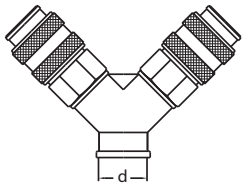
Sipariş No Order No	Bağlantı / Connection	
	Erkek / Male	Dişi / Female
A26 2G 13B	R 1/4"	G 1/4"
A26 2G 17B	R 3/8"	G 3/8"
A26 2G 21B	R 1/2"	G 1/2"

Üçlü Gövde / 3 Way Connector



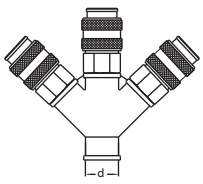
Sipariş No Order No	Bağlantı / Connection	
	Erkek / Male	Dişi / Female
A26 3G 13B	R 1/4"	G 1/4"
A26 3G 17B	R 3/8"	G 3/8"
A26 3G 21B	R 1/2"	G 1/2"

İkili Gövde / 2 Way Connector



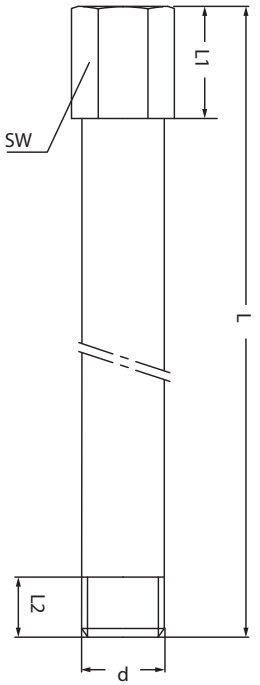
Valfli / With Valve Sipariş No Order No	d
A26 2GD 17	BSP 3/8"
A26 2GD 21	BSP 1/2"
A26 2GD 13	BSP 1/4"

Üçlü Gövde / 3 Way Connector



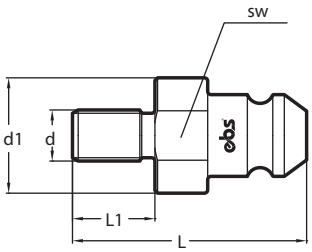
Valfli / With Valve Sipariş No Order No	d
A26 3GD 17	BSP 3/8"
A26 3GD 21	BSP 1/2"
A26 3GD 13	BSP 1/4"

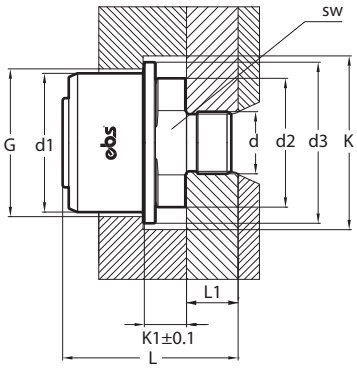




Valfsiz / Without Valve Sipariş No Order No	Bağlantı Ölç. (Erkek) Connection (Male)	Bağlantı Ölç. (Dişi) Connection (Female)	L	L1	L2	SW
UZR 10-60	G 1/8″	G 1/8″	60	12	10	14
UZR 10-80	G 1/8″	G 1/8″	80	12	10	14
UZR 10-100	G 1/8″	G 1/8″	100	12	10	14
UZR 10-120	G 1/8″	G 1/8″	120	12	10	14
UZR 10-150	G 1/8″	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
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
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



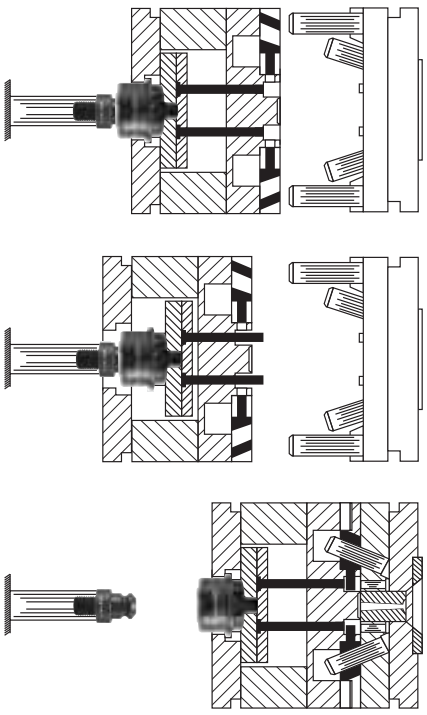




Sipariş No Order No	d	G	d1	d2	d3	K	K1	L1	L	sw	Çekme Kuvveti Pull Force kg
OPC-01 EG 12	M12 x 1.75	34	32	32	39	44	10	15	42.5	30	1500
OPC-01 EG 16	M16 x 1.5	34	32	32	39	44	10	15	42.5	30	1500

Sipariş No Order No	d	G	d	d1	d2	K	K1	L1	L	sw	Çekme Kuvveti Pull Force kg
OPC-02 EG 16-1	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	53	13	15	52	32	2400

Sipariş No Order No	d	G	d1	d2	d3	K	K1	L1	L	sw	Çekme Kuvveti Pull Force kg
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



Sipariş No Order No	d	sw	d1	L1	L	Çekme Kuvveti Pull Force kg
OPC-01 EU 10	M10 x 1.5	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

Sipariş No Order No	d	sw	d1	L1	L	Çekme Kuvveti Pull Force kg
OPC-02 EU 10	M10 x 1.5	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

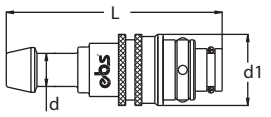
Sipariş No Order No	d	sw	d1	L1	L	Çekme Kuvveti Pull Force kg
OPC-03 EU 16	M16 x 2.0	32	35	25	68	3200
OPC-03 EU 18	M18 x 2.5	32	35	25	68	3200
OPC-03 EU 20	M20 x 2.5	32	35	25	68	3200
OPC-03 EU 24	M24 x 3.0	32	35	25	68	3200
OPC-03 EU 27	M27 x 3.0	32	35	25	68	3200
OPC-03 EU 30	M30 x 3.5	32	35	25	68	3200

600 SERİSİ



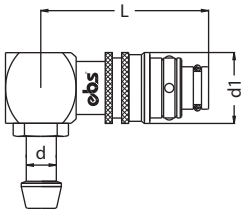


Hortum Gövde / Hose Tail Socket



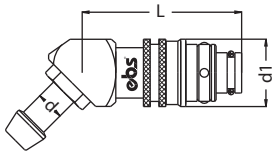
Valfsiz / Without Valve Sipariş No Order No	d	d1	L
600.08 HG 06	1/4" 06mm	20	62
600.08 HG 08	5/16" 08mm	20	62
600.08 HG 10	3/8" 10mm	20	62
600.08 HG 12	15/32" 12mm	20	62
600.08 HG 13	1/2" 13mm	20	62

90° Hortum Gövde / 90° Hose Tail Socket



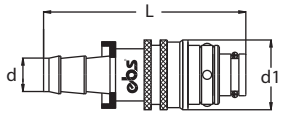
Valfsiz / Without Valve Sipariş No Order No	d	d1	L
600.08 HG 06-90°	1/4" 06mm	20	45.5
600.08 HG 08-90°	5/16" 08mm	20	45.5
600.08 HG 10-90°	3/8" 10mm	20	45.5
600.08 HG 12-90°	15/32" 12mm	20	45.5
600.08 HG 13-90°	1/2" 13mm	20	45.5

45° Hortum Gövde / 45° Hose Tail Socket



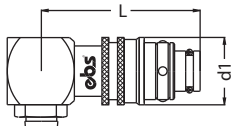
Valfsiz / Without Valve Sipariş No Order No	d	d1	L
600.08 HG 06-45°	1/4" 06mm	20	47.5
600.08 HG 08-45°	5/16" 08mm	20	47.5
600.08 HG 10-45°	3/8" 10mm	20	47.5
600.08 HG 12-45°	15/32" 12mm	20	47.5
600.08 HG 13-45°	1/2" 13mm	20	47.5

Kelepçesiz Hortum Gövde / Hose Clamp Socket



Valfsiz / Without Valve Sipariş No Order No	d	d1	L
600.08 FG 10	3/8" 10mm	20	37
600.08 FG 13	1/2" 13mm	20	40

90° Kelepçesiz Hortum Gövde /90° Hose Clamp Socket

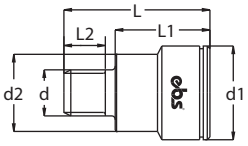


Valfsiz / Without Valve Sipariş No Order No	d	d1	L
600.08 FG 10-90°	3/8" 10mm	20	45.5
600.08 FG 13-90°	1/2" 13mm	20	45.5

600 SERİSİ

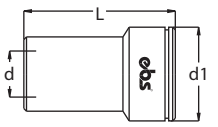


Erkek Uçlar / Male Plugs



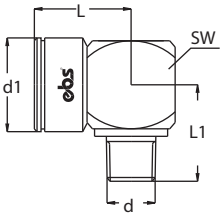
Valfsiz / Without Valve Sipariş No Order No	d	d1	L1	L2	d2	L	SW
600.08 ER 10	BSPT 1/8"	21	21	8	17.5	31	6
600.08 ER 13	BSPT 1/4"	21	21	10	17.5	33	8
600.08 ER 17	BSPT 3/8"	21	11	11	17.5	24	8
600.08 NR 10	NPT 1/8"	21	21	7	17.5	31	1/4"
600.08 NR 13	NPT 1/4"	21	21	10	17.5	33	5/16"
600.08 NR 17	NPT 3/8"	21	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 / Female Plugs



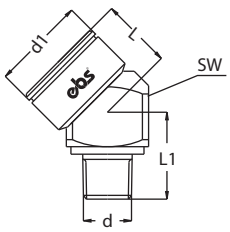
Valfsiz / Without Valve Sipariş No Order No	d	d1	L	SW
600.08 DR 10	BSPT 1/8"	21	39	8
600.08 DR 13	BSPT 1/4"	21	39	8

90° Erkek Uçlar / 90° Male Plugs



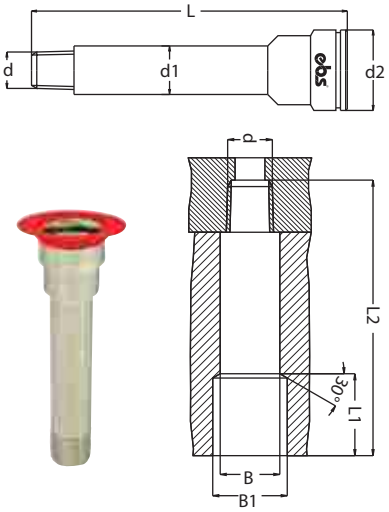
Valfsiz / Without Valve Sipariş No Order No	d	d1	L	L1	SW
600.08 ER 10-90°	BSPT 1/8"	21	33	23	20
600.08 ER 13-90°	BSPT 1/4"	21	33	25	20
600.08 ER 17-90°	BSPT 3/8"	21	33	26	20
600.08 NR 13-90°	NPT 1/4"	21	21	27	20

45° Erkek Uçlar / 45° Male Plugs



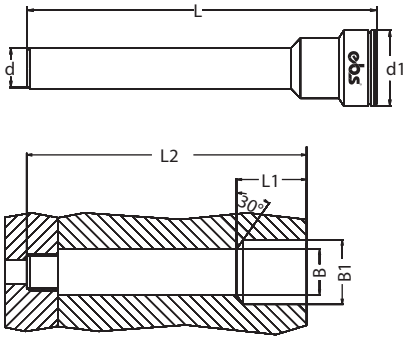
Valfsiz / Without Valve Sipariş No Order No	d	d1	L	L1	SW
600.08 ER 10-45°	BSPT 1/8"	21	33	16.5	20
600.08 ER 13-45°	BSPT 1/4"	21	33	16.5	20
600.08 ER 17-45°	BSPT 3/8"	21	33	16.5	20
600.08 NR 13-45°	NPT 1/4"	21	33	16.5	20

Erkek Uzatma Uçlar / Extension



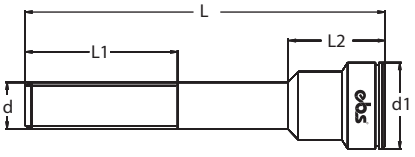
Valfsiz / Without Valve Sipariş No Order No	d	L min/max	L1	L2	d2	B1	B	d1	SW
600.08 ER10-100	BSPT 1/8"	33/100	23	L-5.5	21	22	11	10.2	6
600.08 ER10-150	BSPT 1/8"	100/150	23	L-5.5	21	22	11	10.2	6
600.08 ER10-200	BSPT 1/8"	150/200	23	L-5.5	21	22	11	10.2	6
600.08 ER10-250	BSPT 1/8"	200/250	23	L-5.5	21	22	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"

Erkek Uzatma Uçlar / Extension



Valfsiz / Without Valve Sipariş No Order No	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

Erkek Uzatma Uçlar / Extension



Valfsiz / Without Valve Sipariş No Order No	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

Plastik Bağlantılar	Sipariş No	Bağlantı Ölçüleri
	P001	PLASTİK REKOR 1/8-4
	P001	PLASTİK REKOR 1/8-6
	P001	PLASTİK REKOR 1/4-6
	P001	PLASTİK REKOR 3/8-6
	P001	PLASTİK REKOR 1/2-6
	P001	PLASTİK REKOR 1/8-8
	P001	PLASTİK REKOR 1/4-8
	P001	PLASTİK REKOR 3/8-8
	P001	PLASTİK REKOR 1/2-8
	P001	PLASTİK REKOR 1/4-10
	P001	PLASTİK REKOR 3/8-10
	P001	PLASTİK REKOR 1/2-10
	P001	PLASTİK REKOR 1/4-12
	P001	PLASTİK REKOR 3/8-12
	P001	PLASTİK REKOR 1/2-12
	P002	PLASTİK NİPEL 4
	P002	PLASTİK NİPEL 5
	P002	PLASTİK NİPEL 6
	P002	PLASTİK NİPEL 8
	P002	PLASTİK NİPEL 9
	P002	PLASTİK NİPEL 9,5
	P002	PLASTİK NİPEL 10
	P002	PLASTİK NİPEL 11
	P002	PLASTİK NİPEL 12
	P002	PLASTİK NİPEL 14
	P002	PLASTİK NİPEL 15
	P002	PLASTİK NİPEL 16
	P003	PLASTİK TE 4
	P003	PLASTİK TE 6
	P003	PLASTİK TE 8
	P003	PLASTİK TE 10
	P003	PLASTİK TE 12
	P003	PLASTİK TE 16
	P106	REDİKSİYON TE 6-6-8
	P108	REDİKSİYON TE 8-8-6
	P108	REDİKSİYON TE 8-8-10
	P101	REDİKSİYON TE 10-10-8
	P101	REDİKSİYON TE 10-10-12
	P101	REDİKSİYON TE 12-12-10
	P009	REDİKSİYON 6-4
	P009	REDİKSİYON 8-6
	P009	REDİKSİYON 10-8
	P009	REDİKSİYON 12-10
	P004	DÖNER DİRSEK 1/8-4
	P004	DÖNER DİRSEK 1/8-6
	P004	DÖNER DİRSEK 1/4-6
	P004	DÖNER DİRSEK 3/8-6
	P004	DÖNER DİRSEK 1/8-8
	P004	DÖNER DİRSEK 1/4-8
	P004	DÖNER DİRSEK 3/8-8
	P004	DÖNER DİRSEK 1/4-10
	P004	DÖNER DİRSEK 3/8-10
	P004	DÖNER DİRSEK 1/2-10
	P004	DÖNER DİRSEK 1/4-12
	P004	DÖNER DİRSEK 3/8-12
	P004	DÖNER DİRSEK 1/2-12

Plastik Bağlantılar	Sipariş No	Bağlantı Ölçüleri
	P005	PLASTİK DİRSEK 4
	P005	PLASTİK DİRSEK 6
	P005	PLASTİK DİRSEK 8
	P005	PLASTİK DİRSEK 10
	P005	PLASTİK DİRSEK 12
	P005	PLASTİK DİRSEK 16
	P006	ORTA BACAK DİŞLİ 1/8-6
	P006	ORTA BACAK DİŞLİ 1/4-6
	P006	ORTA BACAK DİŞLİ 3/8-6
	P006	ORTA BACAK DİŞLİ 1/8-8
	P006	ORTA BACAK DİŞLİ 1/4-8
	P006	ORTA BACAK DİŞLİ 3/8-8
	P006	ORTA BACAK DİŞLİ 1/4-10
	P006	ORTA BACAK DİŞLİ 3/8-10
	P006	ORTA BACAK DİŞLİ 1/4-12
	P006	ORTA BACAK DİŞLİ 3/8-12
	P007	YAN BACAK DİŞLİ TE 1/8-6
	P007	YAN BACAK DİŞLİ TE 1/4-6
	P007	YAN BACAK DİŞLİ TE 3/8-6
	P007	YAN BACAK DİŞLİ TE 1/8-8
	P007	YAN BACAK DİŞLİ TE 1/4-8
	P007	YAN BACAK DİŞLİ TE 3/8-8
	P007	YAN BACAK DİŞLİ TE 1/4-10
	P007	YAN BACAK DİŞLİ TE 3/8-10
	P007	YAN BACAK DİŞLİ TE 1/4-12
	P007	YAN BACAK DİŞLİ TE 3/8-12
	P010	PLASTİK YE 4-4-4
	P010	PLASTİK YE 6-6-6
	P010	PLASTİK YE 8-8-8
	P011	PLASTİK YE 10-10-10
	P011	PLASTİK YE 12-12-12
	2X4	POLİETİLEN HORTUM
	3X5	POLİETİLEN HORTUM
	4X6	POLİETİLEN HORTUM
	4X8	POLİETİLEN HORTUM
	5X8	POLİETİLEN HORTUM
	6X8	POLİETİLEN HORTUM
	6X10	POLİETİLEN HORTUM
	8X10	POLİETİLEN HORTUM
	8X12	POLİETİLEN HORTUM
	9X11	POLİETİLEN HORTUM
	10X12	POLİETİLEN HORTUM
	10X14	POLİETİLEN HORTUM
	12X16	POLİETİLEN HORTUM
	10X16	POLİETİLEN HORTUM
	6,5X10	POLİETİLEN HORTUM
	9X12	POLİETİLEN HORTUM
	5X3.3	POLYAMİD 12 HORTUM
	6X3	POLYAMİD 12 HORTUM
	6X4	POLYAMİD 12 HORTUM
	7X5	POLYAMİD 12 HORTUM
	7.5X3.5	POLYAMİD 12 HORTUM
	8X4.4	POLYAMİD 12 HORTUM
	8X5.5	POLYAMİD 12 HORTUM
	8X6	POLYAMİD 12 HORTUM
	9X6	POLYAMİD 12 HORTUM
	9.5X6	POLYAMİD 12 HORTUM
	9.5X7	POLYAMİD 12 HORTUM
	10X8	POLYAMİD 12 HORTUM
	12X9	POLYAMİD 12 HORTUM







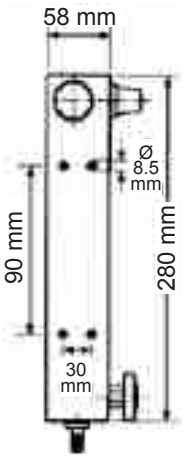
Sipariş No Order No	Bağlantı / Connection	
	Erkek / Male	Dişi / Female
TD 05/05	M5	M5
TD 05/10	M5	G 1/8″
TD 10/05	G 1/8″	M5
TD 10/10	G 1/8″	G 1/8″
TD 10/13	G 1/8″	G 1/4″
TD 13/10	G 1/4″	G 1/8″
TD 13/13	G 1/4″	G 1/4″
TD 13/17	G 1/4″	G 3/8″
TD 17/13	G 3/8″	G 1/4″
TD 17/17	G 3/8″	G 3/8″
TD 17/21	G 3/8″	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″

Sipariş No	Bağlantı	
	Dişi	Erkek
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″
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″

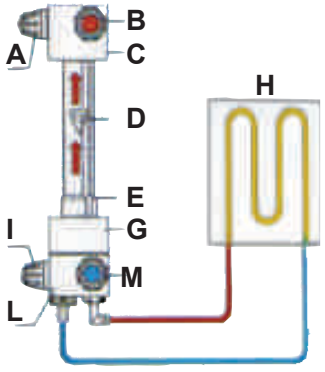
Sipariş No Order No	Bağlantı Ölçüleri Connection
MN M5	M5
MN 10	G 1/8″
MN 13	G 1/4″
MN 17	G 3/8″
MN 21	G 1/2″
MN 26	G 3/4″
MN 30	G 1″

Sirkülasyon Regülatörü

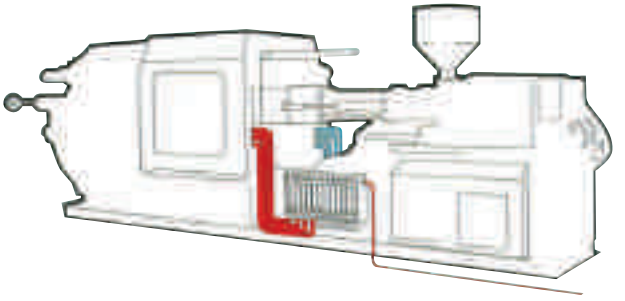




Sipariş No	Tüp Sayısı	Çıkış Devre	Boyut A
REG-04	4 'lü	Rakor / Uç	240
REG-06	6 'lı	R:1/4"	360
REG-08	8 'li		480
REG-10	10 'lu	10 mm	600
REG-12	12 'li	Hortum	720



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



DELTA®

KOLON BURÇ ÜRÜNLERİ

Plastik Kalıbı Grubu

- D 02 Şapkalı Kademeli Kolon
- D 20 Şapkalı Buç
- D 01 Şapkalı Kolon
- D 01 D Şapkalı Kolon (Yağ Kanalsız)
- D 03 Kuyruklu Şapkalı Kademeli Kolon
- D 21 Kuyruklu Şapkalı Burç
- D 40 Tespit Burcu
- D 22 Ortadan Flanşlı Burç
- D 22 B Ortadan Flanşlı Bilyalı Burç Takım
- D 08 Şapkalı Kolon (Yağ Kanalsız)
- D 09 Düz Kolon
- D 50 Konik Kitleme

Plastik ve Kesme Ortak Grup

- D 22 B Ortadan Flanşlı Bilyalı Burç Takım
- D 23 Ortadan Şapkalı Burç
- D 24 Üstten Şapkalı Burç
- D 25 Bronzlu Burç
- D 26 Bronzlu Burç
- D 32 Sinterli Burçü
- D 33 Sinterli Burç

Kesme Kalıbı Grubu

- D 00 Bilyalı Şapkalı Kolon
- D 05 Arkası Kalın Kolon
- D 23 Ortadan Şapkalı Burç
- D 24 Üstten Şapkalı Burç
- D 25 Bronzlu Burç
- D 26 Bronzlu Burç
- D 28 Kısa Bilyalı Burç
- D 32 Sinterli Burç
- D 33 Sinterli Burç
- D 27 Şapkalı Bilyalı Burç
- D 60 Bilyalı Kafes
- D 60.1 Bilyali Kafes Tutucu
- D 30 Grafitli Burçlar
- D 70.11 Döküm Blok Set
- D 11 Düz Kolon
- D 80 Grafitli Sürtünme Plakaları
- D 80 Çelik Sürtünme Pkaları
- D 88 Düz Kam
- D 10 Düz Kolon
- D 70 Döküm Bloklar
- D 90 Bağlama Pabucu

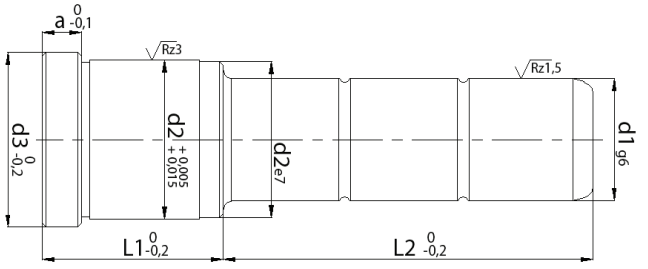


ŞKK D02

Şapkalı Kademeli Kolon

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





	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_12026026	12	26	26	16	19	4
036			36			
046			46			
056			56			
D02_12036026	12	36	26	16	19	4
036			36			
046			46			
056			56			
D02_12046026	12	46	26	16	19	4
036			36			
046			46			
056			56			
066			66			
D02_14026026	14	26	26	20	25	6
036			36			
046			46			
056			56			
066			66			
076			76			
D02_14036026	14	36	26	20	25	6
036			36			
046			46			
056			56			
066			66			
086			86			
D02_14046026	14	46	26	20	25	6
036			36			
046			46			
056			56			
076			76			
096			96			
D02_14056026	14	56	26	20	25	6
036			36			
046			46			
066			66			
086			86			
106			106			
D02_16026026	16	26	26	24	28	6
036			36			
046			46			
056			56			
076			76			

	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_16026096	16	26	96	24	28	6
D02_16036026	16	36	26	24	28	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
D02_16046026	16	46	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_16056026	16	56	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_16066026	16	66	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
116			116			
D02_16076026	16	76	26	24	28	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_16086026	16	86	26	24	28	6

ŞKK D02

Şapkalı Kademeli Kolon

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



	Ø					
Sipari• Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_16086036	16	86	36	24	28	6
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_18026026	18	26	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
D02_18036026	18	36	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
D02_18046026	18	46	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
126			126			
D02_18056026	18	56	26	26	31	6
036			36			
046			46			
056			56			
066			66			
086			86			
106			106			
126			126			
D02_18066026	18	66	26	26	31	6
036			36			
056			56			
076			76			
096			96			
116			116			
D02_18076026	18	76	26	26	31	6
046			46			
066			66			
086			86			
106			106			
126			126			
D02_18086026	18	86	26	26	31	6
046			46			
066			66			
086			86			
106			106			
126			126			
D02_20026026	20	26	26	28	32	6
036			36			
046			46			
056			56			
066			66			

	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_20036026	20	36	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
D02_20046026	20	46	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
D02_20056026	20	56	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_20066026	20	66	26	28	32	6
036			36	28	32	6
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_20076026	20	76	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_20086026	20	86	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_20096026	20	96	26	28	32	6
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			

ŞKK D02

Kademeli Kolon

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



	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_25026026	25	26	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
D02_25036026	25	36	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
D02_25046026	25	46	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_25056026	25	56	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_25066026	25	66	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_25076026	25	76	26	34	38	8
036			36			
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_25086036	25	86	36	34	38	8
046			46			
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			

	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_25096036	25	96	36	34	38	8
046			46			
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			
D02_25106046	25	106	46	34	38	8
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			
D02_30036036	30	36	36	39	43	10
046			46			
056			56			
066			66			
086			86			
106			106			
D02_30046036	30	46	36	39	43	10
046			46			
056			56			
066			66			
076			76			
096			96			
116			116			
D02_30056036	30	56	36	39	43	10
046			46			
056			56			
066			66			
076			76			
086			86			
106			106			
126			126			
D02_30066036	30	66	36	39	43	10
046			46			
056			56			
066			66			
076			76			
086			86			
096			96			
116			116			
136			136			
D02_30076036	30	76	36	39	43	10
046			46			
056			56			
076			76			
096			96			
116			116			
136			136			
D02_30086036	30	86	36	39	43	10
046			46			
066			66			
086			86			
106			106			
126			126			
146			146			

ŞKK D02

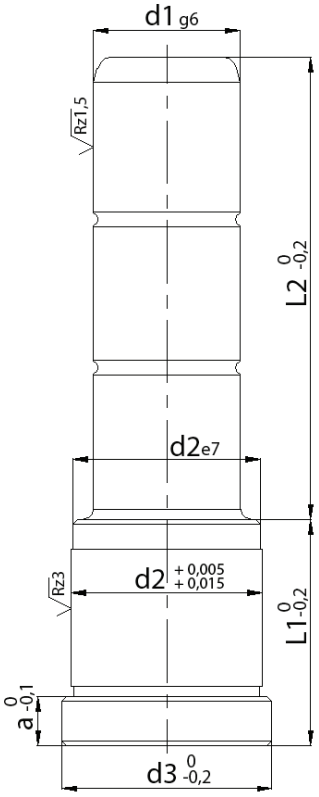
Kademeli Kolon

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



	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_30096046	30	96	46	39	43	10
066			66			
086			86			
106			106			
126			126			
146			146			
D02_30106056	30	106	56	39	43	10
076			76			
096			96			
116			116			
136			136			
D02_30116056	30	116	56	39	43	10
076			76			
096			96			
116			116			
136			136			
D02_40056056	40	56	56	54	58	10
086			86			
106			106			
126			126			
156			156			
186			186			
D02_40066066	40	66	66	54	58	10
096			96			
116			116			
136			136			
166			166			
196			196			
D02_40076076	40	76	76	54	58	10
106			106			
126			126			
146			146			
166			166			
196			196			
216			216			
D02_40086086	40	86	86	54	58	10
126			126			
146			146			
176			176			
206			206			
226			226			
D02_40096096	40	96	96	54	58	10
136			136			
156			156			
186			186			
216			216			
236			236			
D02_40106106	40	106	106	54	58	10
126			126			
156			156			
186			186			
226			226			
246			246			
D02_40116116	40	116	116	54	58	10
136			136			
166			166			
196			196			
236			236			
256			256			

	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	a
D02_40126126	40	126	126	54	58	10
166			166			
196			196			
236			236			
266			266			
D02_40136136	40	136	136	54	58	10
196			196			
226			226			
266			266			

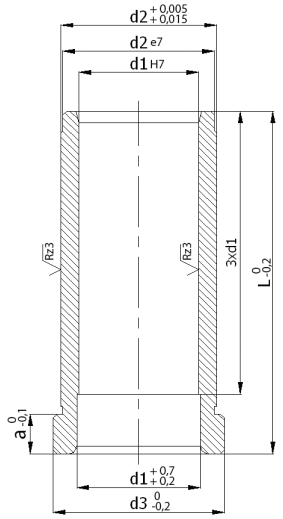


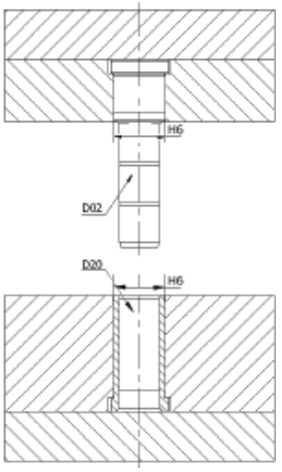
D20 ŞB

Burç / Guide Bush

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







	Ø				
Sipariş Kodu	**d1**	**L**	d2	d3	a
D20_12026	12	26	16	19	4
036		36			
046		46			
056		56			
066		66			
D20_14026	14	26	20	25	6
036		36			
046		46			
056		56			
066		66			
076		76			
D20_16026	16	26	24	28	6
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
D20_18026	18	26	26	31	6
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
D20_20026	20	26	28	32	6
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
096		96			
D20_25026	25	26	34	38	8
036		36			
046		46			
056		56			
066		66			
076		76			
086		86			
096		96			
106		106			
D20_30036	30	36	39	43	10
046		46			
056		56			
066		66			
076		76			
086		86			
096		96			
106		106			
116		116			
D20_40046	40	46	54	58	10
056		56			
066		66			
076		76			
086		86			
096		96			
106		106			
116		116			
126		126			
136		136			
146		146			

D03 KŞKK

Kuyruklu Kolon

Malzeme : Asil Çelik 1.1213 (Cf53)
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon





			Ø							
Sipariş Kodu	d1	Sipariş Kodu	d1	L1	L2	L3	L4	d2	d3	a
D03_14017035	14	D03_15017035	15	17	35	9	7	20	25	6
055		055			55					
075		075			75					
095		095			95					
D03_14022030	14	D03_15022030	15	22	30	9	7	20	25	6
050		050			50					
070		070			70					
090		090			90					
110		110			110					
125		125			125					
150		150			150					
D03_14027030	14	D03_15027030	15	27	30	9	7	20	25	6
045		045			45					
065		065			65					
085		085			85					
105		105			105					
125		125			125					
145		145			145					
165		165			165					
D03_14036035	14	D03_15036035	15	36	35	9	7	20	25	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
125		125			125					
145		145			145					
155		155			155					
D03_14046035	14	D03_15046035	15	46	35	9	7	20	25	6
045		045			45					
065		065			65					
085		085			85					
105		105			105					
125		125			125					
145		145			145					
D03_14056035	14	D03_15056035	15	56	35	9	7	20	25	6
055		055			55					
075		075			75					
095		095			95					
135		135			135					
D03_14066055	14	D03_15066055	15	66	55	9	7	20	25	6
065		065			65					
085		085			85					
D03_14066095		D03_15066095			95					
105		105			105					
125		125			125					
D03_14076035	14	D03_15076035	15	76	35	9	7	20	25	6
055		055			55					
075		075			75					
095		095			95					
125		125			125					
D03_14086055	14	D03_15086055	15	86	55	9	7	20	25	6
075		075			75					
095		095			95					
D03_14096055	14	D03_15096055	15	96	55	9	7	20	25	6
075		075			75					
095		095			95					

			Ø							
Sipariş Kodu	d1	Sipariş Kodu	d1	L1	L2	L3	L4	d2	d3	a
D03_14116075	14	D03_15116075	15	116	75	9	7	20	25	6
D03_18017035	18	D03_20017035	20	17	35	9	7	26	31	6
055		055			55					
075		075			75					
120		120			120					
D03_18022035	18	D03_20022035	20	22	35	9	7	26	31	6
045		045			45					
065		065			65					
085		085			85					
095		095			95					
115		115			115					
D03_18027035	18	D03_20027035	20	27	35	9	7	26	31	6
045		045			45					
065		065			65					
085		085			85					
105		105			105					
125		125			125					
165		165			165					
225		225			225					
245		245			245					
D03_18036035	18	D03_20036035	20	36	35	9	7	26	31	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
165		165			165					
225		225			225					
255		255			255					
D03_18046035	18	D03_20046035	20	46	35	9	7	26	31	6
045		045			45					
065		065			65					
085		085			85					
105		105			105					
135		135			135					
165		165			165					
245		245			245					
D03_18056035	18	D03_20056035	20	56	35	9	7	26	31	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
155		155			155					
D03_18066035	18	D03_20066035	20	66	35	9	7	26	31	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
145		145			145					
D03_18076035	18	D03_20076035	20	76	35	9	7	26	31	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					

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Sipariş Kodu	d1	Sipariş Kodu	Ø d1	L1	L2	L3	L4	d2	d3	a
D03_18076135	18	D03_20076135	20	76	135	9	7	26	31	6
D03_18086055	18	D03_20086055	20	86	55	9	7	26	31	6
075		075			75					
095		095			95					
125		125			125					
135		135			135					
D03_18096055	18	D03_20096055	20	96	55	9	7	26	31	6
075		075			75					
095		095			95					
D03_18116075	18	D03_20116075	20	116	75	9	7	26	31	6
115		115			115					
D03_18136135	18	D03_20136135	20	136	135	9	7	26	31	6
D03_22017035	22	D03_24017035	24	17	35	9	7	30	35	6
055		055			55					
D03_22017075	22	D03_24017075	24	17	75	9	7	30	35	6
D03_22022035	22	D03_24022035	24	22	35	9	7	30	35	6
055		055			55					
075		075			75					
095		095			95					
105		105			105					
130		130			130					
D03_22027035	22	D03_24027035	24	27	35	9	7	30	35	6
045		045			45					
065		065			65					
085		085			85					
105		105			105					
125		125			125					
165		165			165					
205		205			205					
245		245			245					
D03_22036035	22	D03_24036035	24	36	35	9	7	30	35	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
165		165			165					
205		205			205					
245		245			245					
285		285			285					
D03_22046035	22	D03_24046035	24	46	35	9	7	30	35	6
045		045			45					
065		065			65					
085		085			85					
105		105			105					
125		125			125					
165		165			165					
205		205			205					
D03_22056035	22	D03_24056035	24	56	35	9	7	30	35	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
165		165			165					
205		205			205					
D03_22066035	22	D03_24066035	24	66	35	9	7	30	35	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
155		155			155					

Sipariş Kodu	d1	Sipariş Kodu	Ø d1	L1	L2	L3	L4	d2	d3	a
D03_22076035	22	D03_24076035	24	76	35	9	7	30	35	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
145		145			145					
D03_22086055	22	D03_24086055	24	86	55	9	7	30	35	6
075		075			75					
095		095			95					
125		125			125					
135		135			135					
D03_22096055	22	D03_24096055	24	96	55	9	7	30	35	6
075		075			75					
095		095			95					
125		125			125					
D03_22106055	22	D03_24106055	24	106	55	9	7	30	35	6
075		075			75					
095		095			95					
115		115			115					
D03_22116075	22	D03_24116075	24	116	75	9	7	30	35	6
115		115			115					
155		155			155					
D03_22136095	22	D03_24136095	24	136	95	9	7	30	35	6
135		135			135					
D03_30027035	30	D03_32027035	32	27	35	9	7	42	47	6
045		045			45					
065		065			65					
085		085			85					
105		105			105					
125		125			125					
145		145			145					
165		165			165					
185		185			185					
245		245			245					
285		285			285					
D03_30036035	30	D03_32036035	32	36	35	9	7	42	47	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
155		155			155					
245		245			245					
285		285			285					
D03_30046045	30	D03_32046045	32	46	45	9	7	42	47	6
065		065			65					
085		085			85					
105		105			105					
125		125			125					
145		145			145					
165		165			165					
245		245			245					
285		285			285					
D03_30056045	30	D03_32056045	32	56	45	9	7	42	47	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
155		155			155					
175		175			175					
245		245			245					
295		295			295					

KŞKK

Sipariş Kodu	d1	Sipariş Kodu	Ø d1	L1	L2	L3	L4	d2	d3	a
D03_30066045	30	D03_32066045	32	66	45	9	7	42	47	6
055		055			55					
075		075			75					
095		095			95					
115		115			115					
135		135			135					
155		155			155					
175		175			175					
245		245			245					
295		295			295					
D03_30076055	30	D03_32076055	32	76	55	9	7	42	47	6
075		075			75					
095		095			95					
115		115			115					
D03_30076135	30	D03_32076135	32	76	135	9	7	42	47	6
155		155			155					
225		225			225					
D03_30086055	30	D03_32086055	32	86	55	9	7	42	47	6
075		075			75					
095		095			95					
115		115			115					
135		135			135					
155		155			155					
225		225			225					
D03_30096055	30	D03_32096055	32	96	55	9	7	42	47	6
075		075			75					
095		095			95					
115		115			115					
135		135			135					
155		155			155					
205		205			205					
D03_30106075	30	D03_32106075	32	106	75	9	7	42	47	6
095		095			95					
115		115			115					
125		125			125					
145		145			145					
165		165			165					
D03_30116075	30	D03_32116075	32	116	75	9	7	42	47	6
095		095			95					
115		115			115					
135		135			135					
155		155			155					
D03_30136095	30	D03_32136095	32	136	95	9	7	42	47	6
115		115			115					
135		135			135					
155		155			155					
D03_30156115	30	D03_32156115	32	156	115	9	7	42	47	6
155		155			155					
D03_30196155	30	D03_32196155	32	196	155	9	7	42	47	6
195		195			195					
D03_40046095	40	D03_42046095	42	46	95	12	7	54	60	10
165		165			165					
D03_40056075	40	D03_42056075	42	56	75	12	7	54	60	10
115		115			115					
155		155			155					
195		195			195					
D03_40066075	40	D03_42066075	42	66	75	12	7	54	60	10
135		135			135					
D03_40076075	40	D03_42076075	42	76	75	12	7	54	60	10
115		115			115					
175		175			175					
D03_40086075	40	D03_42086075	42	86	75	12	7	54	60	10
135		135			135					

Sipariş Kodu	d1	Sipariş Kodu	Ø d1	L1	L2	L3	L4	d2	d3	a
D03_40096075	40	D03_42096075	42	96	75	12	7	54	60	10
115		115			115					
155		155			155					
D03_40116095	40	D03_42116095	42	116	95	12	7	54	60	10
135		135			135					
195		195			195					
D03_40136095	40	D03_42136095	42	136	95	12	7	54	60	10
135		135			135					
215		215			215					
D03_40156115	40	D03_42156115	42	156	115	12	7	54	60	10
155		155			155					
215		215			215					
D03_40196155	40	D03_42196155	42	196	155	12	7	54	60	10
195		195			195					
235		235			235					
D03_40246165	40	D03_42246165	42	246	165	12	7	54	60	10
245		245			245					

D03

Kuyruklu Kolon

Malzeme : Asil Çelik 1.1213 (Cf53)
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon



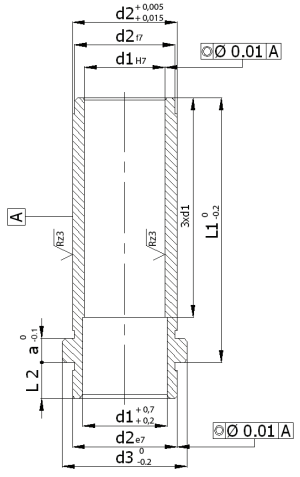


D21 KŞB

Kuyruklu Burç / Tailed Guide Bush

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







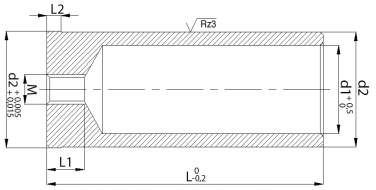
			Ø					
Sipariş Kodu	**d1**	Sipariş Kodu	**d1**	**L1**	d2	d3	a	L2
D21_14017	14	D21_15017	15	17	20	25	6	9
022		022		22				
027		027		27				
036		036		36				
046		046		46				
056		056		56				
066		066		66				
076		076		76				
086		086		86				
096		096		96				
116		116		116				
D21_18017	18	D21_20017	20	17	26	31	6	9
022		022		22				
027		027		27				
036		036		36				
046		046		46				
056		056		56				
066		066		66				
076		076		76				
086		086		86				
096		096		96				
106		106		106				
116		116		116				
136		136		136				
D21_22017	22	D21_24017	24	17	30	35	6	9
022		022		22				
027		027		27				
036		036		36				
046		046		46				
056		056		56				
066		066		66				
076		076		76				
086		086		86				
096		096		96				
106		106		106				
116		116		116				
136		136		136				
156		156		156				
D21_30027	30	D21_32027	32	27	42	47	6	9
036		036		36				
046		046		46				
056		056		56				
D21_30066	30	D21_32066	32	66	42	47	6	9
076		076		76				
086		086		86				
096		096		96				
106		106		106				
116		116		116				
126		126		126				
136		136		136				
156		156		156				
196		196		196				
D21_40046	40	D21_42046	42	46	54	60	10	12
056		056		56				
066		066		66				
076		076		76				
086		086		86				
096		096		96				
116		116		116				
136		136		136				
156		156		156				
196		196		196				
246		246		246				

D40

Tespit Burcu / Centring Sleves

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





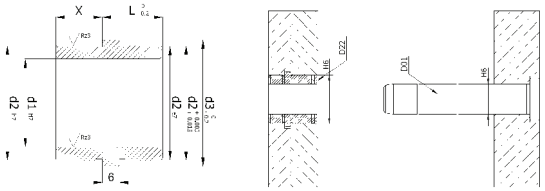
Sipariş Kodu	Ø d2	L	d1	M	L1	L2	d2 Tol.
D40_20030	20	30	16	12	10	2	g6
040		40					
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
D40_26030	26	30	21	12	13	2.5	g6
040		40					
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
180		180					
D40_30040	30	40	25	12	13	2.5	g6
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
180		180					
200		200					
240		240					
D40_42040	42	40	33	12	16	4.5	g6
060		60					
080		80					
100		100					
120		120					
140		140					
160		160					
180		180					
200		200					
220		220					
260		260					
300		300					
D40_54060	54	60	43	12	16	4.5	f6
080		80					
120		120					
D40_54160	54	160	43	12	16	4.5	f6
200		200					
240		240					
280		280					

D22

Flanşlı Burç

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





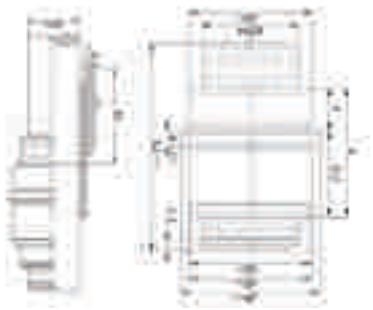
Sipariş Kodu	Ø d1	L	d2	d3	x
D22_1216	12	16	16	19	12
D22_1416	14	16	20	25	12
D22_1616	16	16	24	28	12
D22_1816	18	16	26	31	12
D22_2016	20	16	28	32	12
D22_2421	24	21	34	38	16
D22_2521	25	21	34	38	16
D22_3021	30	21	39	43	16

D22 B

Bilyalı Burç Takım

Malzeme : Asil Çelik 1.3505 (100Cr6)
Sertlik : 62± 2 HRC
Isıl İşlem : Sertleştirme



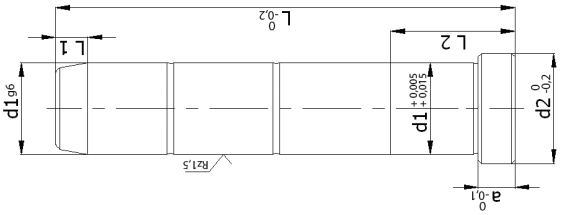


Sipari• Kodu	Ø d1	L1	Hmax	L2	L	f	d2	d3	d4	S2
D22B_1240	12	40	50	2.1	24	6	16	22	26	18
56		56	82							
D22B_1845	18	45	44	3	34	11	24	30	35	23
56		56	66							
71		71	96							
D22B_3056	30	56	32	4.8	54	21	38	46	52	33
75		75	70							
95		95	110							

ŞK D01

Kolon

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





	Ø					
Sipariş Kodu	**d1**	**L**	L1	L2	d2	a
D01_10040	10	40	4	17	12	3
060		60				
080		80		22		
100		100		27		
120		120				
D01_12040	12	40	7	17	16	6
060		60		22		
080		80		27		
100		100				
120		120		36		
140		140				
160		160				
D01_14060	14	60	7	17	18	8
080		80		22		
100		100		27		
120		120		36		
140		140				
160		160				
180		180		46		
D01_16040	16	40	7	22	20	8
060		60		27		
080		80				
100		100		36		
120		120				
140		140				
160		160		46		
180		180				
200		200		56		
D01_18060	18	60	7	27	22	8
080		80				
100		100		36		
120		120				
140		140				
160		160		46		
180		180				
200		200		56		
240		240				
D01_20060	20	60	7	27	24	8
080		80				
100		100		36		
120		120				
140		140				

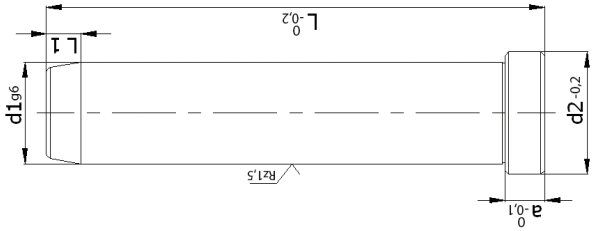
	Ø					
Sipariş Kodu	**d1**	**L**	L1	L2	d2	a
D01_20160	20	160	7	46	24	8
180		180				
200		200		56		
240		240		76		
D01_22080	22	80	7	36	26	15
100		100				
120		120				
140		140				
160		160		46		
180		180		56		
200		200				
220		220				
240		240		66		
300		300				
D01_24080	24	80	7	36	28	15
100		100				
120		120				
140		140				
160		160		46		
180		180		56		
200		200				
220		220				
240		240		66		
300		300				
D01_25100	25	100	7	35	29	10
120		120				
140		140				
160		160				
180		180				
200		200				
220		220				
250		250				
D01_30100	30	100	7	36	36	15
120		120				
140		140				
160		160		46		
180		180		56		
200		200		66		
220		220				
240		240				
300		300		76		
360		360				
D01_40160	40	160	10	46	48	15
180		180		56		
200		200		66		
220		220				
240		240				
280		280				
300		300		76		
320		320				
360		360				
D01_50160	50	160	10	56	58	15
200		200				
240		240				
300		300		66		
360		360		76		

D01D

Kolon

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





	Ø				
Sipariş Kodu	**d1**	**L**	L1	d2	a
D01D_10040	10	40	4	12	3
060		60			
080		80			
100		100			
120		120			
D01D_12040	12	40	7	16	6
060		60			
080		80			
100		100			
120		120			
140		140			
160		160			
D01D_14060	14	60	7	18	8
080		80			
100		100			
120		120			
140		140			
160		160			
180		180			
D01D_16040	16	40	7	20	8
060		60			
080		80			
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
D01D_18060	18	60	7	22	8
080		80			
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
240		240			
D01D_20060	20	60	7	24	8
080		80			
100		100			
120		120			
140		140			

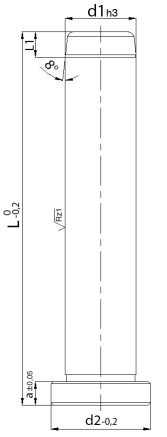
	Ø				
Sipariş Kodu	**d1**	**L**	L1	d2	a
D01D_20160	20	160	7	24	8
180		180			
200		200			
240		240			
D01D_22080	22	80	7	26	15
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
240		240			
300		300			
D01D_24080	24	80	7	28	15
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
240		240			
300		300			
D01D_30100	30	100	7	36	15
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
240		240			
300		300			
360		360			
D01D_40160	40	160	10	48	15
180		180			
200		200			
220		220			
240		240			
280		280			
300		300			
320		320			
D01D_40360	40	360	10	48	15
D01D_50160	50	160	10	58	15
200		200			
240		240			
300		300			
360		360			

D08
Kolon

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

	Ø				
Sipari• Kodu	**d1**	**L**	L1	d2	a
D08_12080	12	80	4	16	4
100		100			
120		120			
D08_18120	18	120	7	22	6
140		140			
160		160			
D08_30160	30	160	7	36	6
200		200			
240		240			





D09
Kolon

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

	Ø		
Sipari• Kodu	**d1**	**L**	L1
D09_12100	12	100	6
125		125	
D09_18125	18	125	6
160		160	
D09_30160	30	160	7
240		240	



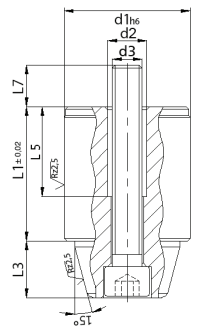


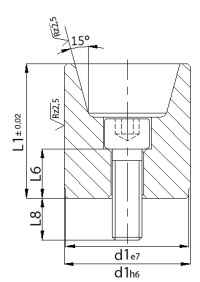
D50
Konik Kilitleme

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

	Ø									
Sipari• Kodu	**d1**	L	L1	L3	L5	L6	L7	L8	d2	d3
D50_12	12	34	16	4.5	9.6	8.6	8	7.5	M4	M3
D50_14	14	34	16	6	12.4	6	7.5	8	M5	M4
D50_16	16	34	16	6	12.4	5.8	7.5	8	M5	M4
D50_20	20	54	26	9	19.7	10.6	12	9.5	M8	M6
D50_25	25	54	26	10	19.7	9.2	11	11	M8	M6
D50_30	30	72	35	14	25	12.2	15	13	M10	M8
D50_32	32	72	35	14	25	12.2	15	13	M10	M8
D50_42	42	92	45	18	27	16.8	16	13	M10	M8



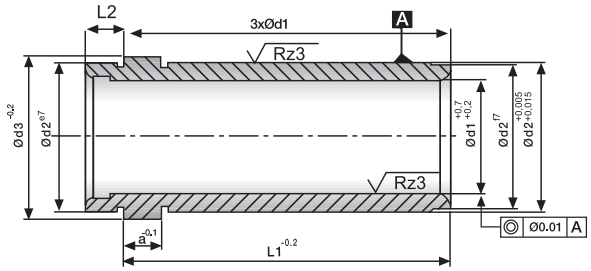




Kuyruklu Şapkalı Burç / KŞB - Yerli Tip

Malzeme : Asil Çelik 1.7131 (16MnCr5)
Sertlik : 62± 2 HRC
Isıl işlem : Sementasyon
DIN 16716 - C



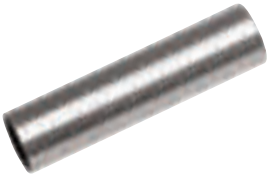


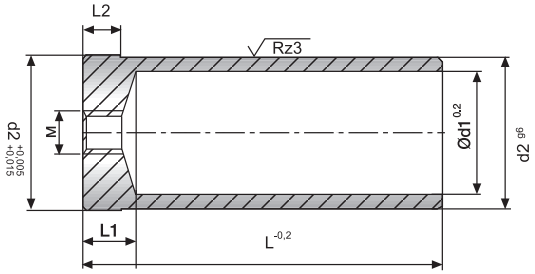
Sipariş Şekli : d1 x L1

d1	d2	d3	a	L2	L1									
					26	36	46	56	66	76	86	96	106	116
16	24	28	6	10	✓	✓	✓	✓	✓	✓	✓			
20	28	32	6	10	✓	✓	✓	✓	✓	✓	✓	✓		
25	34	38	8	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	
30	39	43	10	10		✓	✓	✓	✓	✓	✓	✓	✓	✓

Tespit Burcu / TB - D 40 - Yerli Tip

Malzeme : Asil Çelik 1.7131 (16MnCr5)
Sertlik : 62± 2 HRC
Isıl işlem : Sementasyon
DIN 16759



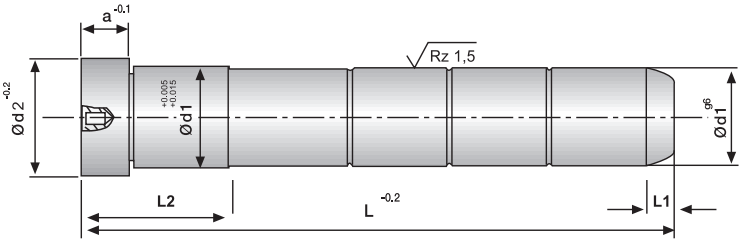


d2	d1	M	L1	L2	L					
					60	80	100	120	140	160
24	16	M8	15	5	✓	✓	✓	✓	✓	
28	20	M8	15	5	✓	✓	✓	✓	✓	
34	25	M10	15	5		✓	✓	✓	✓	✓
39	30	M10	15	5		✓	✓	✓	✓	✓

Şapkalı Kolon / ŞK - Yerli Tip

Malzeme : Asil Çelik 1.1213 (Cf 53)
Sertlik : 62± 2 HRC
Isıl işlem : Islah + indüksiyon





	Ø				
Sipariş Kodu	d1	L	L1	d2	a
ŞK 1240	12	40	7	16	10
60		60			
80		80			
100		100			
120		120			
140		140			
160		160			
ŞK 1460	14	60	7	18	10
80		80			
100		100			
120		120			
140		140			
160		160			
180		180			
ŞK 1640	16	40	7	20	10
60		60			
80		80			
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
ŞK 1860	18	60	7	22	10
80		80			
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
240		240			

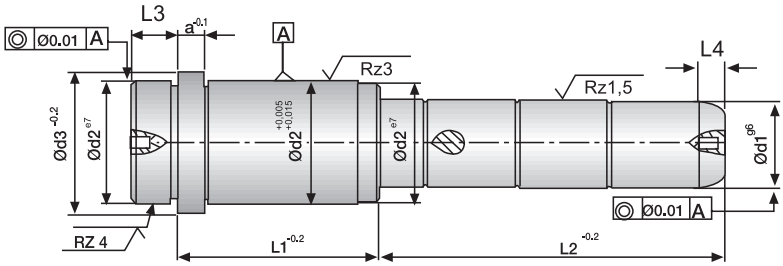
	Ø				
Sipariş Kodu	d1	L	L1	d2	a
ŞK 2060	20	60	7	4	10
80		80			
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
250		250			
ŞK 2580	25	80	7	29	10
100		100			
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
250		250			
300		300			
ŞK 30100	30	100	7	34	12
120		120			
140		140			
160		160			
180		180			
200		200			
220		220			
250		250			
300		300			
360		360			

**Özel ölçülü ürünler talep doğrultusunda yaptırılmaktadır.*

Kuyruklu Şapkalı Kademeli Kolon / KŞKK - Yerli Tip

Malzeme : Asil Çelik 1.1213 (Cf53)
Sertlik : 62± 2 HRC
Isıl İşlem : Islah + Indüksiyon

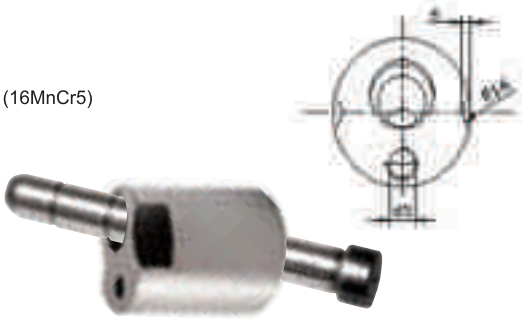


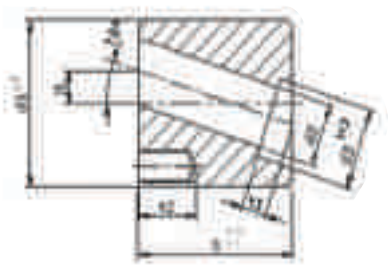


d1	d2	d3	a	L3	L1	L2												
						26	36	46	56	66	76	86	96	106	116	126	136	146
16	24	28	6	10	26	✓	✓	✓	✓	✓	✓		✓					
					36	✓	✓	✓	✓	✓		✓						
					46	✓	✓	✓	✓	✓	✓		✓		✓			
					56		✓	✓		✓		✓		✓		✓		✓
					66		✓		✓		✓		✓		✓		✓	
					76			✓		✓		✓		✓		✓		
					86			✓		✓		✓		✓		✓		
20	28	32	6	10	26	✓	✓	✓	✓	✓	✓		✓					
					36	✓	✓	✓	✓	✓		✓		✓		✓		
					46	✓	✓	✓	✓		✓		✓		✓			
					56	✓	✓	✓		✓		✓		✓		✓		
					66		✓		✓		✓		✓		✓		✓	
					76			✓		✓		✓		✓		✓		
					86				✓		✓		✓		✓			
					96			✓		✓		✓		✓		✓		
25	34	38	8	10	26				✓	✓	✓							
					36		✓	✓	✓	✓		✓		✓		✓		✓
					46		✓	✓	✓		✓		✓		✓		✓	
					56		✓	✓		✓		✓		✓		✓		✓
					66		✓		✓		✓		✓		✓		✓	
					76			✓		✓		✓		✓		✓		
					86				✓		✓		✓		✓		✓	
					96				✓		✓		✓		✓		✓	
					106					✓		✓		✓		✓		
30	39	43	10	10	36		✓	✓	✓	✓		✓		✓				
					46		✓	✓	✓		✓		✓		✓			
					56		✓	✓		✓		✓		✓		✓		
					66		✓		✓		✓		✓		✓		✓	
					76			✓		✓		✓		✓		✓		
					86				✓		✓		✓		✓		✓	
					96			✓		✓		✓		✓		✓		
					106				✓	✓		✓		✓		✓		
					116					✓		✓		✓		✓		

Boynuz Pimi Yatağı

Malzeme : Asil Çelik 1.7131 (16MnCr5)
Sertlik : 62± 2 HRC
Isıl işlem : Sementasyon
DIN 16716 - C



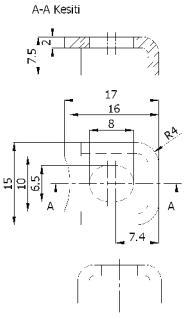


d1	S	d2	d3	d5	L1	L3	T1	T2
32	36	12	16	M6	7	10	10	12
36	36	14	18	M8	7	12	10	16
40	46	16	20	M8	8.5	13.5	10	16
40	46	18	22	M8	8.5	13.5	10	16
45	46	20	25	M8	8.5	15	10	16
50	56	25	29	M8	10	16	12	16
63	66	30	34	M10	12	21	15	20

D90

Bağlama Pabucu

Sertlik : 40-42 HRC











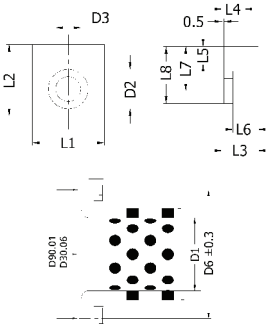


D90.01

Bağlama Pabucu

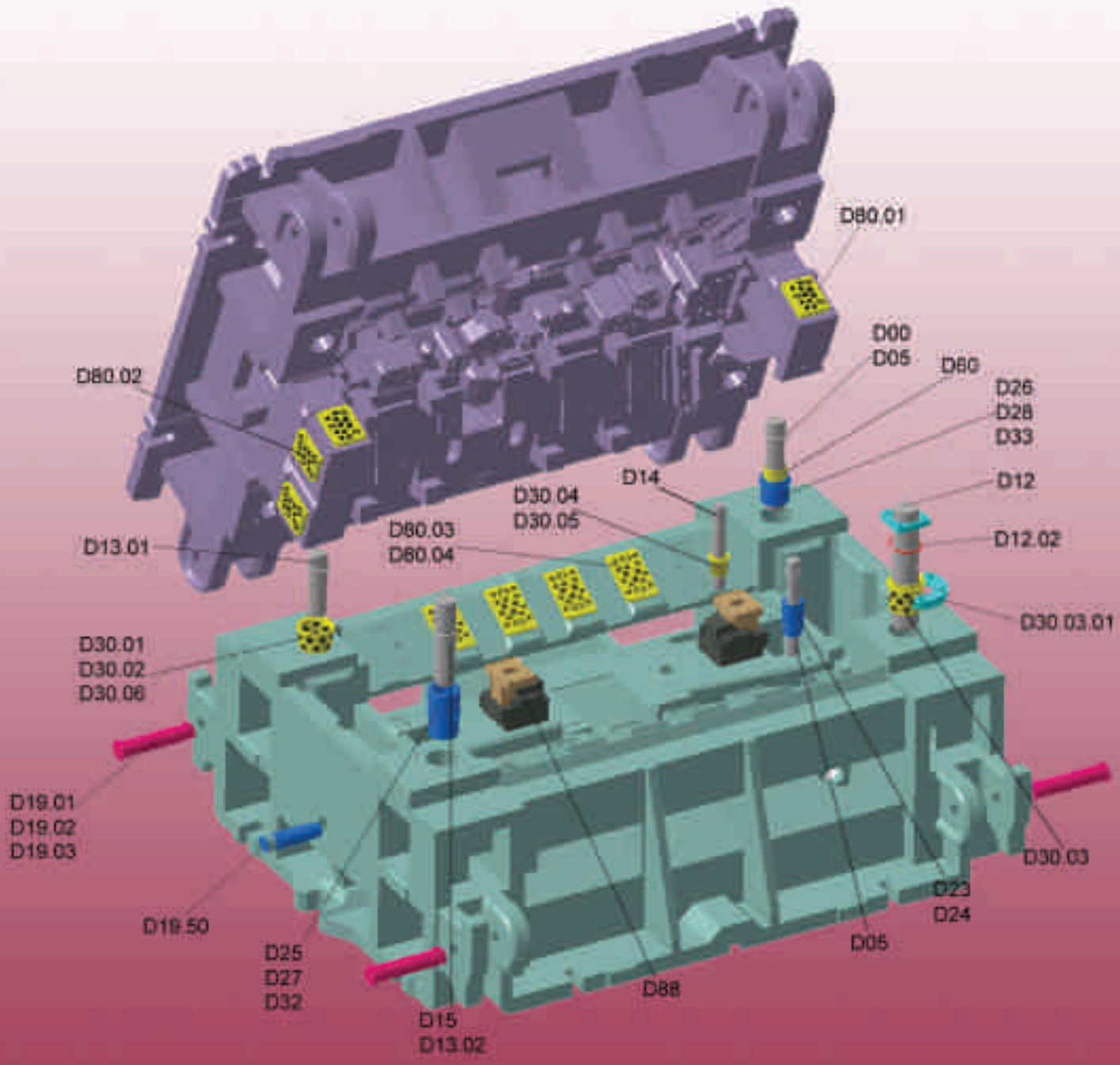
Sertlik : 40-42 HRC
DIN 9832





Sipariş Kodu	FORD CODE	BMW CODE	PSA Mabec Code	D1	L1	L2	L3	L4	L5	L6	L7	L8	D2	D3
D90.01_01	WDX1360 0901	B2 2978 11 2168834		25 32 40 50	20	20	10	6.3	5	7	12.5	16	11	7
D90.01_02	WDX1360 0902	B2 2978 11 2168842	Z000263005	63 80 100 125 160	32	32	16	10	10	11.5	21	27	17	11
D90.01_03	WDX1360 1001			25 32 40 50 63 80 100 125	32	32	16	6	10	11.5	21	27	17	11

SAÇ KALIBI ÜRÜNLERİ

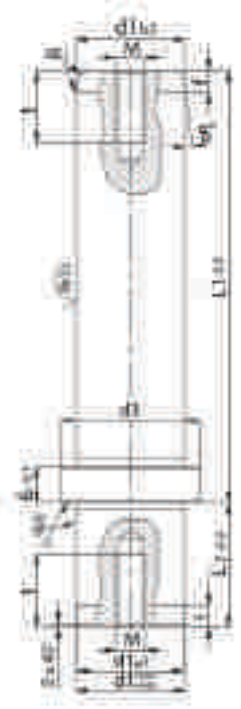


D00
Kolon

Malzeme : Asil Çelik 1.1213 (Cf 53)
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon (Induction)

OŞK







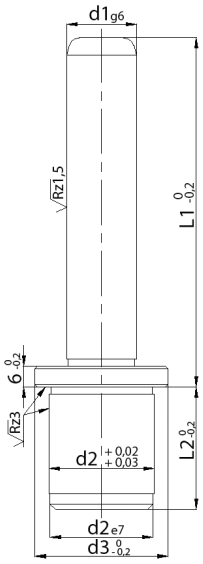
			Ø							
Sipariş Kodu	**d1**	Sipariş Kodu	**d1**	**L1**	**L2**	d3	t	f	R	M
D00_1510020	15	D00_1610020	16	100	20	22	20	4	3	6
11220		11220		112						
12520		12520		125						
14020		14020		140						
16020		16020		160						
18020		18020		180						
20020		20020		200						
D00_1910023	19	D00_2010023	20	100	23	25	20	4	3	8
11223		11223		112						
12523		12523		125						
14023		14023		140						
16023		16023		160						
18023		18023		180						
20023		20023		200						
D00_2410030	24	D00_2510030	25	100	30	32	20	6	5	8
11230		11230		112						
12530		12530		125						
14030		14030		140						
16030		16030		160						
18030		18030		180						
20030		20030		200						
22430		22430		224						
25030		25030		250						
D00_3011237	30	D00_3211237	32	112	37	40	20	6	5	8
12537		12537		125						
14037		14037		140						
16037		16037		160						
18037		18037		180						
20037		20037		200						
22437		22437		224						
25037		25037		250						
28037		28037		280						
31537		31537		315						
D00_3812537	38	D00_4012537	40	125	37	50	20	6	5	8
14037		14037		140						
16037		16037		160						
18037		18037		180						
20037		20037		200						
22437		22437		224						
25037		25037		250						
28037		28037		280						
31537		31537		315						
D00_3835537	38	D00_4035537	40	355	37	50	20	6	5	8
D00_4814047	48	D00_5014047	50	140	47	63	20	8	5	8
16047		16047		160						
18047		18047		180						
20047		20047		200						
22447		22447		224						
25047		25047		250						
28047		28047		280						
31547		31547		315						
35547		35547		355						
40047		40047		400						
D00_6016047	60	D00_6316047	63	160	47	80	20	8	5	8
18047		18047		180						
20047		20047		200						
22447		22447		224						
25047		25047		250						
28047		28047		280						
31547		31547		315						
35547		35547		355						
40047		40047		400						
		D00_8020060	80	200	60	95	20	8	5	12
		22460		224						
		25060		250						
		28060		280						
		31560		315						
		35560		355						
		40060		400						

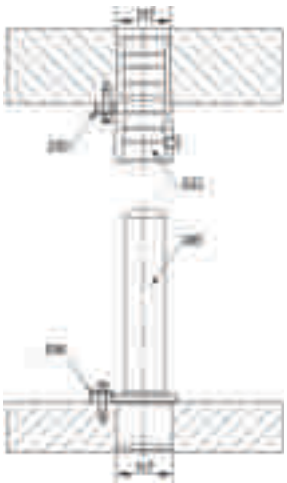
D05
Kolon

Malzeme : Asil Çelik 1.1213 (Cf 53)
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon (Induction)

AKK



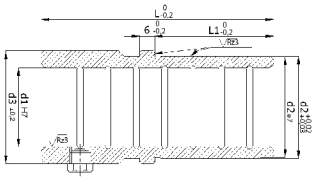




	Ø				
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3
D05_2010025	20	100	25	28	34
35			35		
D05_2012525		125	25		
35			35		
D05_2014025		140	25		
35			35		
D05_2016025		160	25		
35			35		
D05_2018025		180	25		
35			35		
D05_2510025	25	100	25	34	39
35			35		
D05_2512525		125	25		
35			35		
D05_2514025		140	25		
35			35		
D05_2516025		160	25		
35			35		
D05_2518025		180	25		
35			35		
D05_2520025		200	25		
35			35		
D05_2522025		220	25		
35			35		
D05_2524025		240	25		
35			35		
D05_3012535	30	125	35	39	44
45			45		
D05_3014035		140	35		
45			45		
D05_3016035		160	35		
45			45		
D05_3018035		180	35		
45			45		
D05_3020035		200	35		
45			45		
D05_3022035		220	35		
45			45		
D05_3024035		240	35		
45			45		
D05_3026035		260	35		
45			45		
D05_3028035	30	280	35	39	44
45			45		
D05_3031535		315	35		
45			45		

D23
Burç

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

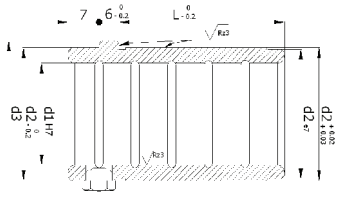




	Ø				
Sipariş Kodu	**d1**	**L**	**L1**	d2	d3
D23_2007026	20	70	26	28	34
36			36		
D23_2508026	25	80	26	34	39
36			36		
D23_3009036	30	90	36	39	44
46			46		
D23_4010036	40	100	36	50	54
10836		108	36	58	65
10046		100	46	50	54
D23_5012046	50	120	46	60	64
56			56		
12756		127	56	70	75
D23_6313056	63	130	56	80	87
15056		150	56	85	95
D23_8015060	80	150	60	105	115

D24
Burç

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

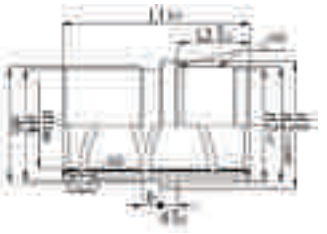




	Ø			
Sipariş Kodu	**d1**	**d2**	**L**	d3
D24_2002826	20	28	26	34
D24_2503426	25	34	26	39
D24_3003926	30	39	26	44
36			36	
D24_4005036	40	50	36	54
46			46	
05846		58		65
D24_5006046	50	60	46	64
07046		70		75
D24_6308546	63	85	46	95
56			56	
D24_8010560	80	105	60	115

D25
Bronzlu Burç

Malzeme : Asil Çelik 1.1186 (CK40) + Bronze
Sertlik : 52± 2 HRC
Isıl İşlem : İndüksiyon

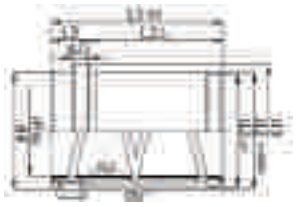




	Ø						
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	d4	d6
D25_1904323	19	43	23	32	40	32	39
05923		59					
05933			33				
D25_2004323	20	43	23	32	40	32	39
05923		59					
05933			33				
D25_2405923	24	59	23	40	48	40	46
07923		79					
07933			33				
D25_2505923	25	59	23	40	48	40	46
07923		79					
07933			33				
D25_3007530	30	75	30	48	55	48	53
09330		93					
09340			40				
D25_3207530	32	75	30	48	55	48	53
09330		93					
09340			40				
D25_3808237	38	82	37	58	65	58	63
10837		108					
10847			47				
D25_4008237	40	82	37	58	65	58	63
10837		108					
10847			47				
D25_4809747	48	97	47	70	80	70	77
12747		127					
12757			57				
D25_5009747	50	97	47	70	80	70	77
12747		127					
12757			57				
D25_6011660	60	116	60	85	95	85	92
15060		150					
D25_6311660	63	116	60	85	95	85	92
15060		150					
D25_8012060	80	120	60	105	118	105	115
15060		150					

D26
Bronzlu Burç

Malzeme : Asil Çelik 1.1186 (CK40) + Bronze
Sertlik : 52± 2 HRC
Isıl İşlem : İndüksiyon





	Ø						
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	d4	L3
D26_193523	19	35	23	32	40	32	12
4533		45	33				
D26_203523	20	35	23	32	40	32	12
4533		45	33				
D26_243523	24	35	23	40	48	40	12
4533		45	33				
D26_253523	25	35	23	40	48	40	12
4533		45	33				
D26_304230	30	42	30	48	55	48	12
5240		52	40				
D26_324230	32	42	30	48	55	48	12
5240		52	40				
D26_385237	38	52	37	58	65	58	15
6247		62	47				
D26_405237	40	52	37	58	65	58	15
6247		62	47				
D26_486547	48	65	47	70	80	70	18
7557		75	57				
D26_506547	50	65	47	70	80	70	18
7557		75	57				
D26_608060	60	80	60	85	95	85	20
D26_638060	63	80	60	85	95	85	20
D26_808060	80	80	60	105	118	105	20

D33
Sinterli Burç

Malzeme : 1.1191 (Ck45) + Sinter
Sertlik : 52± 2 HRC
Isıl İşlem : İndiksiyon

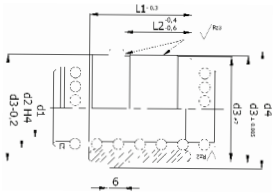




	Ø				
Sipariş Kodu	**d1**	**d2**	**L**	d3	d4
D33_2003226	20	32	26	40	32
36			36		
D33_2504026	25	40	26	47	40
36			36		
D33_3004826	30	48	26	54	48
36			36		
D33_4005836	40	58	36	64	58
46			46		
D33_5007046	50	70	46	78	70
D33_6308556	63	85	56	93	85
D33_8010560	80	105	60	118	105

D28
Burç

Malzeme : Asil Çelik 1.3505 (100Cr6)
Sertlik : 62± 2 HRC
Isıl İşlem : Sertleştirme





	Ø					
Sipariş Kodu	**d1**	**L1**	**L2**	d2	d3	d4
D28_153523	15	35	23	21	30	34
4533		45	33			
D28_163523	16	35	23	22	30	34
4533		45	33			
D28_193523	19	35	23	25	32	40
4533		45	33			
D28_203523	20	35	23	26	32	40
4533		45	33			
D28_243523	24	35	23	30	40	48
4533		45	33			
D28_253523	25	35	23	31	40	48
4533		45	33			
D28_304230	30	42	30	38	48	55
5240		52	40			
D28_324230	32	42	30	40	48	55
5240		52	40			
D28_385237	38	52	37	46	58	65
6247		62	47			
D28_405237	40	52	37	48	58	65
6247		62	47			
D28_486547	48	65	47	56	70	80
7557		75	57			
D28_506547	50	65	47	58	70	80
7557		75	57			
D28_608060	60	80	60	68	85	95
D28_638060	63	80	60	71	85	95

D32
Sinterli Burç

Malzeme : 1.1191 (Ck45) + Sinter
Sertlik : 52± 2 HRC
Isıl İşlem : İndiksiyon

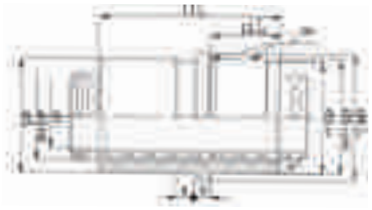




	Ø					
Sipariş Kodu	**d1**	**L**	**L1**	d2	d3	d4
D32_2007026	20	70	26	32	40	38
36			36			
D32_2508026	25	80	26	40	47	45
36			36			
D32_3009036	30	90	36	48	54	52
46			46			
D32_4010036	40	100	36	58	64	62
46			46			
D32_5012046	50	120	46	70	78	76
56			56			
D32_6315056	63	150	56	85	93	91
D32_8015060	80	150	60	105	118	115

D27
Burç

Malzeme : Asil Çelik 1.3505 (100Cr6)
Sertlik : 62± 2 HRC
Isıl İşlem : Sertleştirme

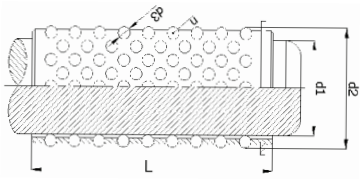




Sipariş Kodu	Ø d1	L1	L2	d2	d3	d4	d5
D27_1504323	15	43	23	21	30	34	32
05923		59					
05933			33				
D27_1604323	16	43	23	22	30	34	32
05923		59					
05933			33				
D27_1904323	19	43	23	25	32	40	39
05923		59					
05933			33				
D27_2004323	20	43	23	26	32	40	39
05923		59					
05933			33				
D27_2405923	24	59	23	30	40	48	46
07923		79					
07933			33				
D27_2505923	25	59	23	31	40	48	46
07923		79					
07933			33				
D27_3007530	30	75	30	38	48	55	53
09330		93					
09340			40				
D27_3207530	32	75	30	40	48	55	53
09330		93					
09340			40				
D27_3808237	38	82	37	46	58	65	63
10837		108					
10847			47				
D27_4008237	40	82	37	48	58	65	63
10837		108					
10847			47				
D27_4809747	48	97	47	56	70	80	77
12747		127					
12757			57				
D27_5009747	50	97	47	58	70	80	77
12747		127					
12757			57				
D27_6011660	60	116	60	68	85	95	92
15060		150					
D27_6311660	63	116	60	71	85	95	92
15060		150					

D60
Bilyalı Kafes

Malzeme : Ms58
Bilya Malzemesi : 100Cr6 (1.3505)

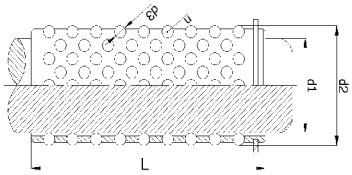




Sipariş Kodu	Ø d1	L	d2	d3	n
D60_12040	12	40	16	2	176
056		56			272
D60_15045	15	45	21	3	140
056		56			196
071		71			238
D60_16045	16	45	22	3	140
056		56			196
071		71			238
D60_18045	18	45	24	3	176
056		56			240
071		71			272
D60_19045	19	45	25	3	180
056		56			234
071		71			306
080		80			342
095		95			414
D60_20045	20	45	26	3	180
056		56			234
071		71			306
080		80			342
095		95			414
D60_24045	24	45	30	3	180
056		56			240
071		71			280
080		80			320
095		95			440
105		105			480
120		120			560
D60_25045	25	45	31	3	180
056		56			240
071		71			280
080		80			320
095		95			440
105		105			480
120		120			560
D60_30045	30	45	38	4	140
056		56			180
075		75			240
080		80			280
095		95			340
105		105			380
120		120			420
140		140			500

D60
Bilyalı Kafes

Malzeme : Ms58
Bilya Malzemesi : 100Cr6 (1.3505)

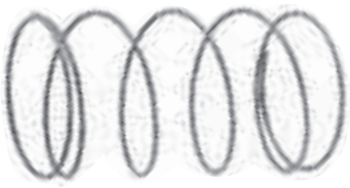




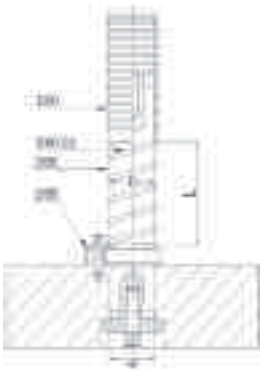
	Ø				
Sipariş Kodu	**d1**	**L**	d2	d3	n
D60_32045	32	45	40	4	140
056		56			180
075		75			240
080		80			280
095		95			340
105		105			380
120		120			420
140		140			500
D60_38056	38	56	46	4	216
071		71			288
080		80			336
095		95			408
105		105			456
120		120			528
140		140			624
160		160			720
D60_40056	40	56	48	4	216
071		71			288
080		80			336
095		95			408
105		105			456
120		120			528
140		140			624
160		160			720
D60_48071	48	71	56	4	360
080		80			390
095		95			480
105		105			540
120		120			600
140		140			720
160		160			840
D60_50071	50	71	58	4	360
080		80			390
095		95			480
105		105			540
120		120			600
140		140			720
160		160			840
D60_60085	60	85	68	4	504
95		95			558
105		105			612
120		120			720
140		140			828
160		160			972
D60_63085	63	85	71	4	504
95		95			558
105		105			612
120		120			720
140		140			828
160		160			972

D60.01
Bilyalı Kafes Tucu

Malzeme : Yay Çeliği



ØD	L	Not / Note
19	40-140	L 10 mm. aralıklarla L 10 mm. gradation
20	40-140	
24	40-180	
25	40-180	
30	50-230	
32	50-230	
38	60-230	
40	60-230	
48	70-280	
50	70-280	
60	80-250	
63	80-250	

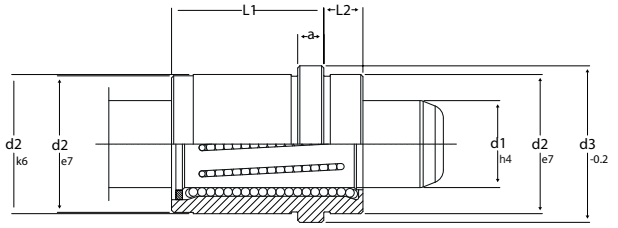


Sipariş Kodu Örneği

Spiral Yay	=	D60.01_
Ø Kolon	=	19
Yay Boy	=	40
Sipariş Kodu	=	D60.01_1940



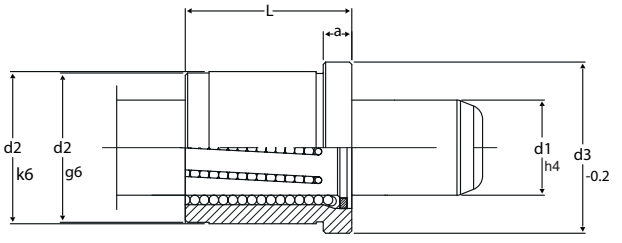
Malzeme :
Asil Çelik 1.3505 (100 Cr 6) + Bronze
Misket (Ball) 1.3505 (100 Cr 6)
Sertlik :
62 ± 2 HRC
Isıl İşlem :
Sertleştirme



d1	d2	d3	L1	a	L2
12	22	26	20	6	8
18	30	35	24	6	9
20	32	36	26	6	9
* 20	32	36	35	6	9
30	46	52	34	6	12



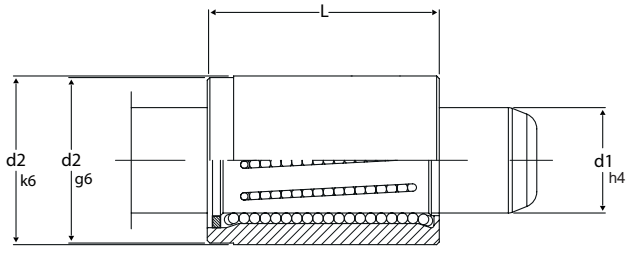
Malzeme :
Asil Çelik 1.3505 (100 Cr 6) + Bronze
Misket (Ball) 1.3505 (100 Cr 6)
Sertlik :
62 ± 2 HRC
Isıl İşlem :
Sertleştirme



d1	d2	d3	L	a
* 20	32	36	35	6
* 25	40	45	35	6
* 40	60	64	45	8
* 40	60	64	63	8



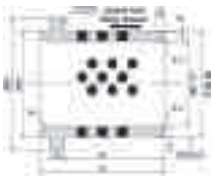
Malzeme :
Asil Çelik 1.3505 (100 Cr 6) + Bronze
Misket (Ball) 1.3505 (100 Cr 6)
Sertlik :
62 ± 2 HRC
Isıl İşlem :
Sertleştirme



d1	d2	L
* 20	32	35
* 20	32	45
* 25	40	45
* 25	40	55

D30.01
Grafitli Burç

Malzeme : SAE 430B
Sertlik : HB≥180





				Ø							
Sipariş Kodu	FORD WDX1370	NAAMS G61	OPEL U2802-99(A)	**d1**	**L1**	d2	d3	d4	L2	L3	R1
D30.01_020040				20	40	28	34	28	30	4	3
025040	11025	2540	F33020019	25	40	32	40	32	30	4	3
030050				30	50	40	50	40	40	4	3
032050	11032	3250	F33020020	32	50	40	50	40	40	4	3
040063	11040	4063	F33020021	40	63	50	63	50	50	5	3
050071	11050	5071	F33020022	50	71	63	71	63	56	6	5
063080	11063	6300	F33020023	63	80	80	90	80	63	8	6
080100	11080	8010	F33020024	80	100	100	112	100	80	10	8
100125	11100	1012	F33020025	100	125	125	140	125	106	12	10
125160	11125	1216	F33020026	125	160	160	180	160	132	12	12

D30.02
Grafitli Burc

Malzeme : SAE 430B
Sertlik : HB≥180

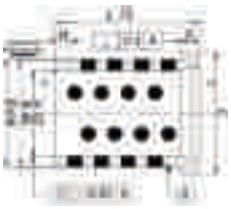




			Ø					
Sipariş Kodu	FORD WDX1370	FORD WSA 003	**d1**	**L**	d2	d3	l1	R
D30.02_020035	05020	11020	20	35	28	36	8	2
025040			25	40	32	40	8	6
030055			30	55	40	50	8	6
032055	05032		32	55	40	50	8	6
040070	05040		40	70	50	60	8	6
042070	05042	11042	42	70	50	60	8	6
050075	05050		50	75	63	75	12	8
052075	05052	11052	52	75	63	75	12	8
063080	05063		63	80	80	90	12	8
080100	05080		80	100	100	110	12	8
100125	05100		100	125	125	135	12	8

D30.03
Grafitli Burç

Malzeme : SAE 430B
Sertlik : HB≥180

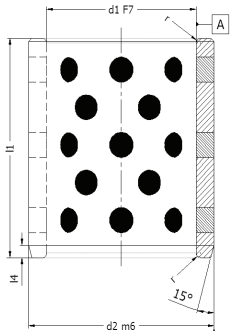




			Ø					
Sipariş Kodu	PSA MABEC CODE	RENAULT MABEC CODE	**A**	**L**	B	C	F	H
D30.03_025040			25	40	35	40	5	5
032050			32	50	44	50	6	5
040063	X345 274 670	M764 539 401	40	63	52	60	8	8
050080	X345 281 970	M764 544 501	50	80	63	71	10	8
063100	X345 287 270	M764 549 501	63	100	80	90	12	10
080125	X345 292 370	M764 554 601	80	125	100	112	16	10
100160		X345 298 500	100	160	125	140	20	10

D30.04
Grafitli Burç

Malzeme : SAE 430B
Sertlik : HB≥180



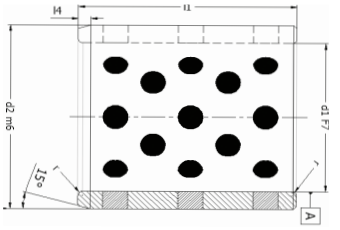


	Ø				
Sipariş Kodu	**d1**	**l1**	**d2**	l4	r
D30.04_20015028	20	15	28	4	0.75
016028		16	28		
016030		16	30		
020028		20	28		
020030		20	30		
025028		25	28		
025030		25	30		
030028		30	28		
030030		30	30		
035028		35	28		
035030		35	30		
037028		37	28		
040026		40	26		
040028		40	28		
040030		40	30		
050028		50	28		
D30.04_25016033	25	16	33	4	0.75
016035		16	35		
020033		20	33		
020035		20	35		
025033		25	33		
025035		25	35		
030033		30	33		
030035		30	35		
035033		35	33		
035035		35	35		
040033		40	33		
040035		40	35		
047033		47	33		
050032		50	32		
050033		50	33		
050035		50	35		
060033		60	33		
D30.04_30020038	30	20	38	4	0.75
020040		20	40		
025038		25	38		
025040		25	40		
030038		30	38		
030040		30	40		
035038		35	38		
035040		35	40		
040038		40	38		

Not:
Toleranssız ölçüler EN-22768 -1 standardına göre üretilir.
Belirtilmeyen köşeler R=0,5

D30.04
Grafitli Burç

Malzeme : SAE 430B
Sertlik : HB≥180





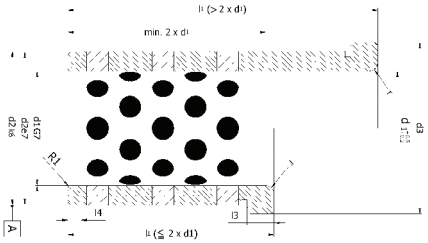
	Ø				
Sipari• Kodu	**d1**	**l1**	**d2**	l4	r
D30.04_30040040	30	40	40	4	0.75
050038		50	38		
050040		50	40		
060038		60	38		
060040		60	40		
060042		60	42		
D30.04_35020045	35	20	45	4	0.75
025044		25	44		
025045		25	45		
030044		30	44		
030045		30	45		
035044		35	44		
035045		35	45		
040044		40	44		
040045		40	45		
050044		50	44		
050045		50	45		
060044		60	44		
060045		60	45		
D30.04_40020050	40	20	50	4	1.5
025050		25	50		
025055		25	55		
030050		30	50		
030055		30	55		
035050		35	50		
035055		35	55		
040050		40	50		
040055		40	55		
050050		50	50		
050055		50	55		
060050		60	50		
060055		60	55		
070050		70	50		
077050		77	50		
080050		80	50		
D30.04_50030060	50	30	60	4	1.5
030062		30	62		
030065		30	65		
035060		35	60		
035062		35	62		
040060		40	60		
040062		40	62		

	Ø				
Sipariş Kodu	**d1**	**l1**	**d2**	l4	r
D30.04_50040065	50	40	65	4	1.5
050060		50	60		
050062		50	62		
050065		50	65		
060060		60	60		
060062		60	62		
060065		60	65		
070060		70	60		
070062		70	62		
070065		70	65		
080060		80	60		
080065		80	65		
095060		95	60		
100065		100	65		
D30.04_63030074	63	30	74	4	2
030075		30	75		
035074		35	74		
035075		35	75		
040074		40	74		
040075		40	75		
050074		50	74		
050075		50	75		
060074		60	74		
060075		60	75		
070074		70	74		
070075		70	75		
080074		80	74		
080075		80	75		
100075		100	75		

D30.05
Grafitli Burç

Malzeme : SAE 430B
Sertlik : HB≥180

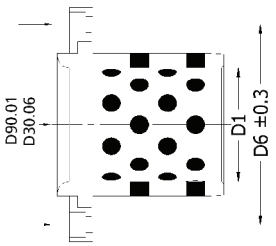


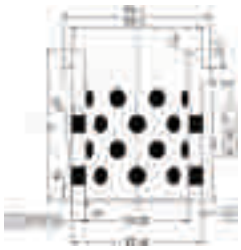


	Ø						
Sipari• Kodu	**d1**	**l1**	d2	d3	r	l3	l4
D30.05_20017	20	17	26	31	2	6	2
022		22					
027		27					
036		36					
046		46					
056		56					
066		66					
076		76					
D30.05_25046	25	46	32	38	3	6	3
056		56					
066		66					
076		76					
086		86					
D30.05_30027	30	27	42	47	3	6	4
036		36					
046		46					
056		56					
066		66					
076		76					
086		86					
096		96					
116		116					
D30.05_40046	40	46	54	60	3	10	5
056		56					
066		66					
076		76					
086		86					
096		96					
116		116					
136		136					
156		156					
D30.05_50076	50	76	66	72	3	10	5
086		86					
096		96					
116		116					
136		136					
156		156					
196		196					
D30.05_60096	60	96	80	86	3	20	5
116		116					
136		136					
156		156					
196		196					

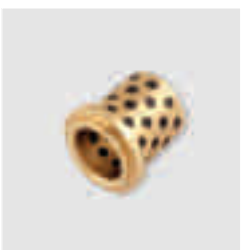
Grafitli Burç
D30.06

Malzeme : SAE 430B
Sertlik : HB≥180



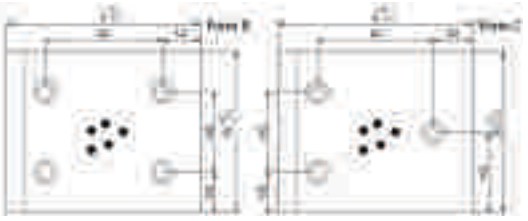
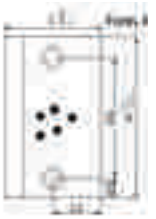


			Ø									
Sipariş Kodu	BMW CODE B2 2933 1	PSA MABEC CODE	**D1**	**L1**	D2	D3	D4	D6	L2	L3	L4	R
D30.06_025040	2168699		25	40	32	32	40	58	30	6.3	3	3
032050	2168700		32	50	40	40	50	66	40	6.3	4	3
040063	2168701		40	63	50	50	63	79	50	6.3	5	3
050071	2168702		50	71	63	63	71	89	56	6.3	6.3	5
063080	2168703		63	80	80	80	90	123	63	10	8	6
080100	2168704		80	100	100	100	112	143	80	10	10	8
100125	2168705	Z000499644	100	125	125	125	140	168	106	10	12.5	10
125160	2168706	Z000499646	125	160	160	160	180	203	132	10	16	12
160200	2168707		160	200	200	200	220	243	170	10	16	18

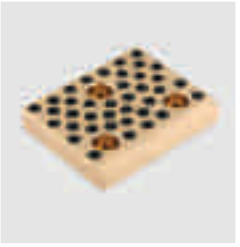


D80.02 Grafitli Sürtünme Plakası

Malzeme : SAE 430B
Sertlik : HB≥180

Sipariş Kodu	VW/AUDI 39D863	FORD WDX 13-70	OPEL 3425	W	L	w1	w2	w3	L1	L2	ØD	Ød	t	Form
D80.02_080050	21			80	50	25	30		25		15	9	9	A
D80.02_100050	31	02100050-Y	F33 04 0008	100	50	25	50		25		20	13.5	13	A
080	32		F33 04 0009	100	80				40					
D80.02_125050	41			125	50	25	75		25		20	13.5	13	A
080	42		F33 04 0014	125	80				40					
100	43	02125100-Y	F33 04 0015	125	100		62.5	75	25	50				C
125	44		F33 04 0016	125	125					75				
160	45	02125160-Y	F33 04 0017	125	160					110				
200	46	02125200-Y		125	200					150				
250		02125250-Y		125	250				40	170				
315		02125315-Y		125	315					235				
D80.02_160050	51			160	50	25	110		25		20	13.5	13	A
080	52			160	80				40					
100	53	02160100-Y	F33 04 0018	160	100		80	110	25	50				C
125	54		F33 04 0019	160	125					75				
160	55	02160160-Y	F33 04 0020	160	160					110				
200	56	02160200-Y		160	200					150				
250		02160250-Y		160	250		110		40	170				B
315		02160315-Y		160	315					235				



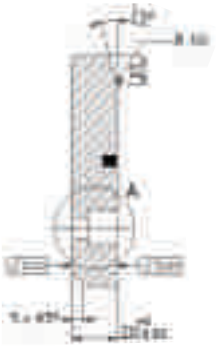
D80.01
Grafitli Sürtünme Plakası

Malzeme : SAE 430B
Sertlik : HB≥180

Sipariş Kodu	VW/AUDI 39D863	FORD WDX 13-70	OPEL 3425	W	L	w1	L1	L2	ØD	Ød	t
D80.01_050080	12			50	80	25	25	30	15	9	9
100	13	02050100-Y	F33 04 0000		100			50	20	13.5	13
125	14		F33 04 0001		125			75			
160	15	02050160-Y	F33 04 0002		160			110			
200	16	02050200-Y	F33 04 0003		200			150			
D80.01_080080	22			80	80	40	25	30	20	13.5	13
100	23	02080100-Y	F33 04 0004		100			50			
125	24		F33 04 0005		125			75			
160	25	02080160-Y	F33 04 0006		160			110			
200	26	02080200-Y	F33 04 0007		200			150			
250		02080250-Y			250		40	170			
315		02080315-Y			315			235			
D80.01_100100	33	02100100-Y	F33 04 0010	100	100	50	25	50	20	13.5	13
125	34	02100125-Y	F33 04 0011		125			75			
160	35	02100160-Y	F33 04 0012		160			110			
200	36	02100200-Y	F33 04 0013		200			150			
250		02100250-Y			250		40	170			
315		02100315-Y			315			235			







D80.03

Grafitli Sürtünme Plakası

Malzeme : SAE 430B
Sertlik : HB≥180





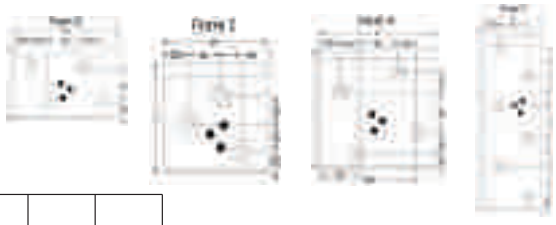
Sipariş Kodu	PSA Mabec Code	RENAULT Mabec Code	W	L	e	e1	e2	e3	Form
D80.03_070100	Z000 166 214	R100 092 843	70	100	50	20			A
150	Z000 166 216	R100 092 844		150		10	20		B
200	Z000 166 221	R100 092 845		200		20			D
D80.03_100150	Z000 166 217	R100 092 883	100	150	25	50		50	C
200	Z000 166 222	R100 092 884		200	50	50			D
250	Z000 166 225	R100 092 885		250		50			E
D80.03_150200	Z000 166 223	R100 092 890	150	200	50	100			D
250	Z000 166 226	R100 092 893		250		100			E



D80.03

Grafitli Sürtünme Plakası

Malzeme : SAE 430B
Sertlik : HB≥180





Sipari• Kodu	PSA Mabec Code	RENAULT Mabec Code	W	L	e	e1	e2	e3	e4	Form
D80.03_100100	Z000 166 215	R100 092 846	100	100		30	20		25	I
300	Z000 166 227	R100 092 886		300	50	50				F
D80.03_150100	Z000 166 218	R100 092 887	150	100		25	50	50		G
150	Z000 166 219	R100 092 888		150		25	50			H
300	Z000 166 228	R100 092 894		300	50	100				F
D80.03_200100	Z000 166 224	R100 092 895	200	100		50	50	50		G



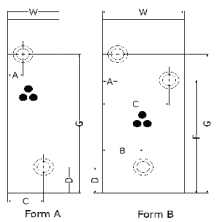
D80.04

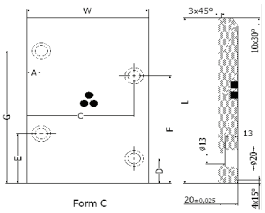
Grafitli Sürtünme Plakası

Malzeme : SAE 430B
Sertlik : HB≥180



Sipari• Kodu	FORD CODE WDX1362	W	L	A	B	C	D	E	F	G	Form
D80.04_050100	02050100-Y	50	100	25		25	30			60	A
150	02050150-Y		150				30			100	A
200	02050200-Y		200				40			160	A
D80.04_080100	02080100-Y	80	100	20		60	30			60	A
150	02080150-Y		150				30			110	A
200	02080200-Y		200				40			160	A
250	02080250-Y		250				40			210	A
315	02080315-Y		315		40		40		250	275	B
D80.04_100100	02100100-Y	100	100	22		78	30			60	A
150	02100150-Y		150				30			110	A
200	02100200-Y		200		50		40		135	160	B
250	02100250-Y		250		50		40		185	210	B
315	02100315-Y		315		50		40		250	275	B
D80.04_125100	02125100-Y	125	100	25		100	30			60	A
150	02125150-Y		150				30			110	A
200	02125200-Y		200		62		40		135	160	B
250	02125250-Y		250		62		40		185	210	B
315	02125315-Y		315				40	65	250	275	C
D80.04_160100	02160100-Y	160	100	30		130	30			60	A
150	02160150-Y		150				30			110	A
200	02160200-Y		200		80		40		135	160	B
250	02160250-Y		250				40	65	185	210	C
315	02160315-Y		315				40	65	250	275	C





D80.15

Çelik Sürtünme Plakası

Malzeme : Çelik
Sertlik : 62± 2 HRC





Sipariş Kodu	PSA Mabec Code	RENAULT Mabec Code	W	L	e1	e2	e3	e4	e5	e6	e7	e8	e9	Form
D80.15_070100	Z000166213	P446625854	70	100	20			70					10	A
150	P446626558	P446626558		150	10	20			120				10	B
200	P446627059	P446627059		200	20					170			10	D
D80.15_100150	P446626559	P446626559	100	150	50			45	95	120			25	C
200	P446627060	P446627060		200				70	120	170			25	D
250	P446627454	P446627454		250							220		25	E
D80.15_150200	P446627061	P446627061	150	200	100			70	120	170			50	D
250	P446627455	P446627455		250	100						220		50	E
D80.15_100100	P446625855	P446625855	100	100	30	50		45	70				25	I
300	P446627754	P446627754		300	50			70	120	170	220	270	25	F
D80.15_150100	P446626560	P446626560	150	100	25	75	100	70					50	G
150	P446626561	P446626561		150				45	95	120			50	H
300	P446627755	P446627755		300	100			70	120	170	220	270	50	F
D80.15_200100	Z000166220	P446627062	200	100	50	100	150	70					75	G

D88

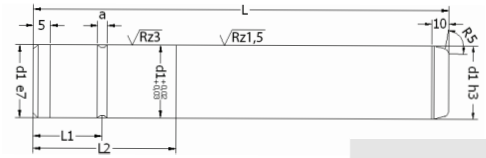
Düz Kam







Sipariş Kodu	Yay Ölçüleri		İlk Durum		Final		Zımba Alanı B x H (mm)	Maksimum Çalışma Gücü (kN)	Kurs (mm)
	Ø Yay (mm)	Serbest Boy (mm)	Uzunluk (mm)	Yükleme (N)	Uzunluk (mm)	Yükleme (N)			
D88_05225	20	70	62	150	37	600	52x65	10	25
D88_05240	20	100	92	100	52	610	52x65	10	40
D88_05260	20	150	137	110	77	620	52x65	10	60
D88_06540	22	100	92	130	52	770	65x70	18	40
D88_06560	22	150	137	130	77	770	65x70	18	60
D88_10040	27	100	92	190	52	1150	100x100	30	40
D88_10060	27	150	137	210	77	1170	100x100	30	60
D88_10080	30	200	188	173	108	1325	100x100	30	80
D88_15040	35	100	92	320	52	1880	150x100	60	40
D88_15060	35	150	137	340	77	1900	150x100	60	60
D88_20040	35	100	92	470	52	2820	200x110	80	40
D88_20060	35	150	137	510	77	2850	200x110	80	60
D88_25040	40	100	92	620	52	3690	250x130	100	40
D88_25060	40	150	137	660	77	3720	250x130	100	60
D88_30040	40	100	92	620	52	3690	300x130	130	40
D88_30060	40	150	137	660	77	3720	300x130	130	60
D88_40060	60	150	148	156	88	4760	400x150	140	60
D88_50060	60	150	148	310	88	9520	500x150	140	60
D88_60060	60	150	148	310	88	9520	600x150	140	60



D10
Kolon

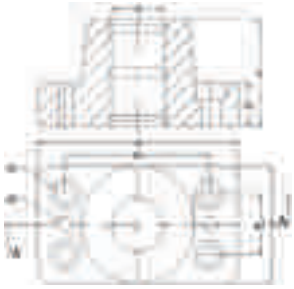
Malzeme : Asil Çelik 1.1213 (Cf 53)
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon



	Ø				
Sipariş Kodu	**d1**	**L**	L1	L2	a
D10_40180	40	180	37	77	8
220		220			
260		260			
300		300			
355		355			
400		400			
D10_50200	50	200	47	95	8
240		240			
280		280			
315		315			
355		355			
400		400			
450		450			
D10_63240	63	240	60	120	8
280		280			
315		315			
355		355			
400		400			
450		450			
D10_80240	80	240	60	120	8
280		280			
315		315			
355		355			
400		400			
450		450			
500		500			

D70.01
Döküm Blok

Malzeme : GG25



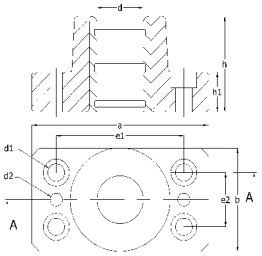


	Ø									
Sipariş Kodu	**d**	d1	d2	h	h1	a	b	e1	e2	M
D70.01_40	40	13	10	77	30	130	80	95	45	12
50	50	15	10	95	35	160	96	118	55	14
63	63	17	12	120	35	180	110	132	62	16
80	80	21	14	120	40	215	130	160	75	20

D70.02
Bronzlu Döküm Blok

Malzeme : GG25



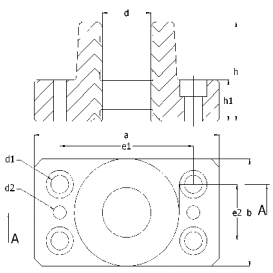


	Ø									
Sipariş Kodu	**d**	d1	d2	h	h1	a	b	e1	e2	M
D70.02_40	40	13	10	77	30	130	80	95	45	12
50	50	15	10	95	35	160	96	118	55	14
63	63	17	12	120	35	180	110	132	62	16
80	80	21	14	120	40	215	130	160	75	20

D70.03
Çelik Kaymalı Döküm Blok

Malzeme : GG25
Sertlik : 62± 2 HRC
Isıl İşlem : Sementasyon



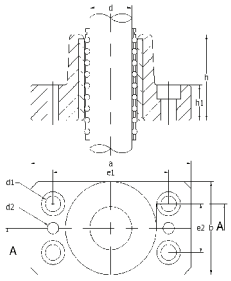


	Ø									
Sipariş Kodu	**d**	d1	d2	h	h1	a	b	e1	e2	M
D70.03_40	40	13	10	77	30	130	80	95	45	12
50	50	15	10	95	35	160	96	118	55	14
63	63	17	12	120	35	180	110	132	62	16
80	80	21	14	120	40	215	130	160	75	20

D70.04
Bilyalı Döküm Blok

Malzeme : GG25
Sertlik : 62± 2 HRC
Isıl İşlem : Sementasyon





	Ø									
Sipariş Kodu	**d**	d1	d2	h	h1	a	b	e1	e2	M
D70.04_40	40	13	10	77	30	130	80	95	45	12
50	50	15	10	95	35	160	96	118	55	14
63	63	17	12	120	35	180	110	132	62	16
80	80	21	14	120	40	215	130	160	75	20

D70.10
Kolon Sabitleme Bloğu

Malzeme : GG25



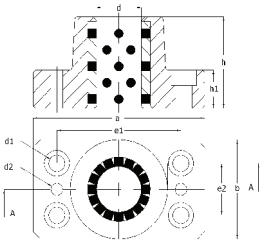


Sipariş Kodu	Ø d	d1	d2	h	h1	a	b	e1	e2	M
D70.10_40	40	13	10	77	30	130	80	95	45	12
50	50	15	10	95	35	160	96	118	55	14
63	63	17	12	120	35	180	110	132	62	16
80	80	21	14	120	40	215	130	160	75	20

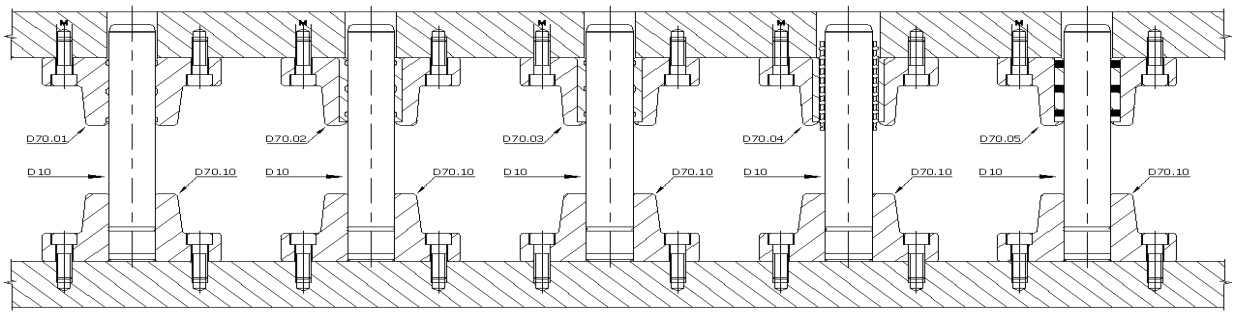
D70.05
Grafitli Döküm Blok

Malzeme : GG25 / SAE 430B
Sertlik : HB≥180





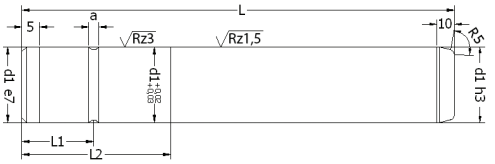
Sipariş Kodu	Ø d	d1	d2	h	h1	a	b	e1	e2	M
D70.05_40	40	13	10	77	30	130	80	95	45	12
50	50	15	10	95	35	160	96	118	55	14
63	63	17	12	120	35	180	110	132	62	16
80	80	21	14	120	40	215	130	160	75	20



D11
Kolon

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



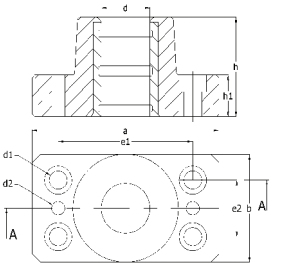


Sipariş Kodu	Ø d1	L	L1	L2	a
D11_40160	40	160	25	50	8
180		180			
200		200			
225		225			
250		250			
280		280			
D11_50160	50	160	35	70	8
180		180			
200		200			
225		225			
250		250			
280		280			
315		315			

D71.02
Bronzlu Döküm Blok

Malzeme : GG25 / Bronze



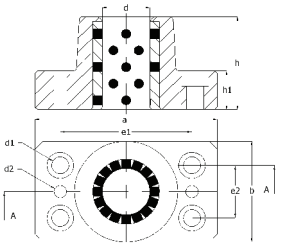


Sipariş Kodu	Ø d	d1	d2	h	h1	a	b	e1	e2	M
D71.02_40	40	13	10	70	25	130	75	100	44	12
50	50	13	10	85	25	155	90	125	60	12

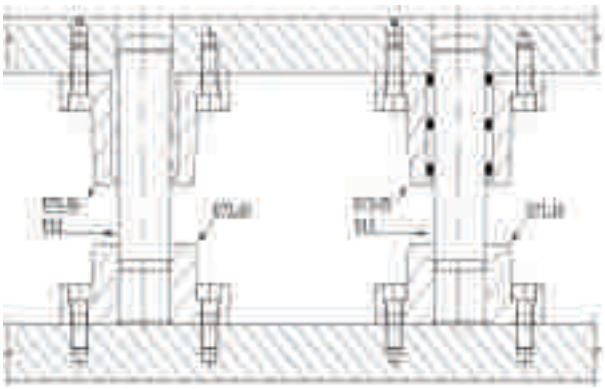
D71.05
Grafitli Döküm Blok

Malzeme : GG25 / SAE 430B
Sertlik : HB≥180



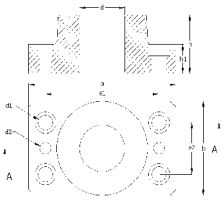


Sipariş Kodu	Ø d	d1	d2	h	h1	a	b	e1	e2	M
D71.05_40	40	13	10	70	25	130	75	100	44	12
50	50	13	10	85	25	155	90	125	60	12



D71.10
Kolon Sabitleme Bloğu

Malzeme : GG25



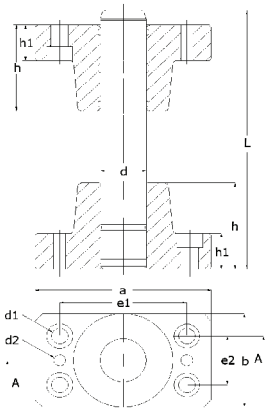


	Ø									
Sipariş Kodu	**d**	d1	d2	h	h1	a	b	e1	e2	M
D71.10_40	40	13	10	50	25	130	75	100	44	12
50	50	13	10	70	25	155	90	125	60	12

D70.011
Döküm Set

Malzeme : GG25 / Asil Çelik 1.1213 (Cf 53)
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon



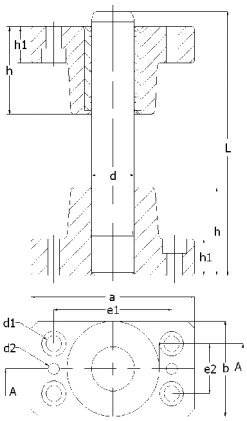


	Ø										
Sipariş Kodu	**d**	**L**	d1	d2	h	h1	a	b	e1	e2
D70.011_40180	40	180	13	10	77	30	130	80	95	45
220		220								
260		260								
300		300								
355		355								
400		400								
D70.011_50200	50	200	15	10	95	35	160	96	118	55
240		240								
280		280								
315		315								
355		355								
400		400								
450		450								
D70.011_63240	63	240	17	12	120	35	180	110	132	62
280		280								
315		315								
355		355								
400		400								
450		450								
D70.011_80240	80	240	21	14	120	40	215	130	160	75
280		280								
315		315								
355		355								
400		400								
450		450								
500		500								

D70.021
Bronzlu Döküm Set

Malzeme : GG25 / Bronze / Asil Çelik 1.1213
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon (Induction)





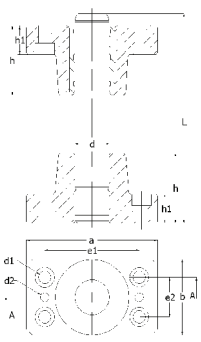
	Ø										
Sipariş Kodu	**d**	**L**	d1	d2	h	h1	a	b	e1	e2
D70.021_40180	40	180	13	10	77	30	130	80	95	45
220		220								
260		260								
300		300								
355		355								
400		400								
D70.021_50200	50	200	15	10	95	35	160	96	118	55
240		240								
280		280								
315		315								
355		355								
400		400								
450		450								
D70.021_63240	63	240	17	12	120	35	180	110	132	62
280		280								
315		315								
355		355								
400		400								
450		450								
D70.021_80240	80	240	21	14	120	40	215	130	160	75
280		280								
315		315								
355		355								
400		400								
450		450								
500		500								

D70.031

Malzeme : GG25
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon Sementasyon

Çelik Kaymalı Döküm Set





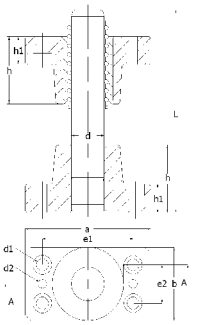
Sipariş Kodu	Ø d	L	d1	d2	h	h1	a	b	e1	e2
D70.031_40180	40	180	13	10	77	30	130	80	95	45
220		220								
260		260								
300		300								
355		355								
400		400								
D70.031_50200	50	200	15	10	95	35	160	96	118	55
240		240								
280		280								
315		315								
355		355								
400		400								
450		450								
D70.031_63240	63	240	17	12	120	35	180	110	132	62
280		280								
315		315								
355		355								
400		400								
450		450								
D70.031_80240	80	240	21	14	120	40	215	130	160	75
280		280								
315		315								
355		355								
400		400								
450		450								
500		500								

D70.041

Malzeme : GG25
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon Sementasyon

Bilyalı Döküm Set





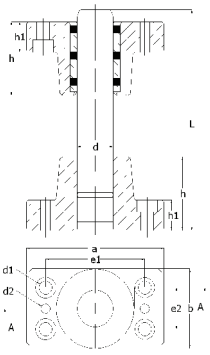
Sipariş Kodu	Ø d	L	d1	d2	h	h1	a	b	e1	e2
D70.041_40180	40	180	13	10	77	30	130	80	95	45
220		220								
260		260								
300		300								
355		355								
400		400								
D70.041_50200	50	200	15	10	95	35	160	96	118	55
240		240								
280		280								
315		315								
355		355								
400		400								
450		450								
D70.041_63240	63	240	17	12	120	35	180	110	132	62
280		280								
315		315								
355		355								
400		400								
450		450								
D70.041_80240	80	240	21	14	120	40	215	130	160	75
280		280								
315		315								
355		355								
400		400								
450		450								
500		500								

D70.051

Malzeme : GG25
SAE 430B
Sertlik : 62± 2 HRC
HB≥180
Isıl İşlem : İndüksiyon

Grafitli Döküm Set





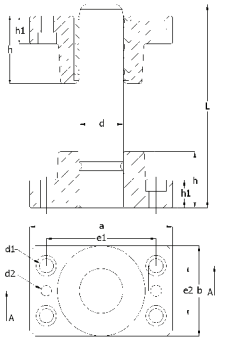
Sipariş Kodu	Ø d	L	d1	d2	h	h1	a	b	e1	e2
D70.051_40180	40	180	13	10	77	30	130	80	95	45
220		220								
260		260								
300		300								
355		355								
400		400								
D70.051_50200	50	200	15	10	95	35	160	96	118	55
240		240								
280		280								
315		315								
355		355								
400		400								
450		450								
D70.051_63240	63	240	17	12	120	35	180	110	132	62
280		280								
315		315								
355		355								
400		400								
450		450								
D70.051_80240	80	240	21	14	120	40	215	130	160	75
280		280								
315		315								
355		355								
400		400								
450		450								
500		500								

D71.021

Malzeme : GG25 / Bronze
Sertlik : 62± 2 HRC
Isıl İşlem : İndüksiyon

Bronzlu Döküm Set





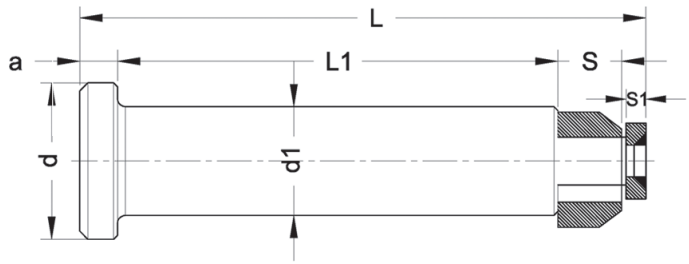
Sipariş Kodu	Ø d	L	d1	d2	h	h1	a	b	e1	e2
D71.021_40160	40	160	13	10	70	25	130	75	100	44
180		180								
200		200								
225		225								
250		250								
280		280								
D71.10_40	40		13	10	50	25	130	75	100	44
D71.021_50160	50	160	13	10	85	25	155	90	125	60
180		180								
200		200								
225		225								
250		250								
280		280								
315		315								
D71.10_50	50		13	10	70	25	155	90	125	60

D19.01

Taşıma Mili / Lifting Pins CNOMO-Norm

Malzeme - Material: Çelik (Steel)





	Ø								
Sipariş Kodu	**d1**	PSA Mabec Code	Taşıma Kap. Capacity (Kg) 2 Pcs.	d	L	L1	a	S	s1
D19.01_32	32	P953254770	6400	40	154	132	6	10	5
40	40	P953255870	10000	50	197.75	170	8	12.5	6
50	50	P953256670	16000	63	247.6	212	10	16	8
63	63	P953257470	25000	80	309	265	12	20	10

Warning!
In utilisation for turnover the load is supported from two pins only.

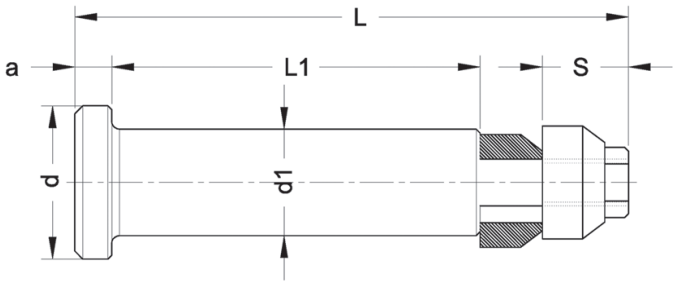
Dikkat!
Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.

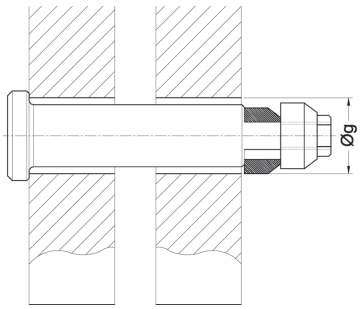
D19.02

Taşıma Mili / Lifting Pins

Malzeme - Material: Çelik (Steel)







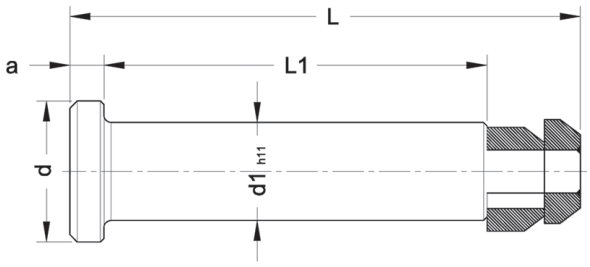
	Ø							
Sipariş Kodu	**g**	Taşıma Kapasitesi Capacity (Kg) 2 Pcs.	d	L	L1	d1	a	s
D19.02_16	16	1200	25	102.5	77	15.6	6	11.5
21	21	2000	30	113.5	86	20.6	6	13.5
26	26	4000	35	128.5	100	25.6	6	13.5
34	34	8000	43	166.5	135	33	6	15.5
44	44	14000	53	215.5	175	43	8	20.5

D19.03

Taşıma Mili / Lifting Pins

Malzeme - Material: Çelik (Steel)





		Ø					
Sipariş Kodu	FORD CODE WDX2260	**d1**	Taşıma Kapasitesi Capacity(Kg) 2 Pcs.	d	a	L	L1
D19.03_35	0135	35	3200	45	12	162.5	125
50	0150	50	8000	63	12	227.5	190
63	0163	63	12500	75	12	317.5	280
80	0180	80	31500	95	12	357.5	320

Warning!
In utilisation for turnover the load is supported from two pins only.

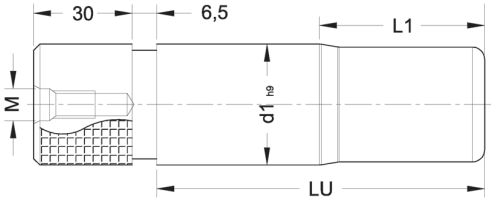
Dikkat!
Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.

D19.50

Emniyet Pimi / Pad Retainer Pin

Malzeme - Material: CK45



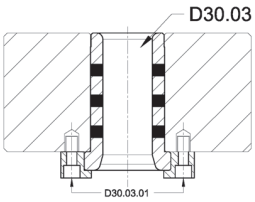


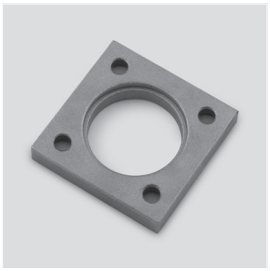
	Ø					
Sipariş Kodu	**d1**	**LU**	PSA MABEC CODE	RENAULT MABEC CODE	L1	M
D19.50_20081	20	81	Z000 400 337	R100 306 188	19	M8
25081	25	81	Z000 400 338	R100 306 190	19	M8
25098	25	98	Z000 400 339	R100 306 191	19	M8
32103	32	103	Z000 400 487	R100 306 194	26	M8
32148	32	148	Z000 400 342	R100 306 198	26	M8
40132	40	132	Z000 400 345	R100 306 201	33	M10
40192	40	192	Z000 400 346	R100 306 204	33	M10
50165	50	165	Z000 400 349	R100 306 207	41	M10
50220	50	220	Z000 400 350	R100 306 209	41	M10
63210	63	210	Z000 400 353	R100 306 210	51	M12
63250	63	250	Z000 400 354	R100 306 213	51	M12
80210	80	210	Z000 400 846	R100 357 232	51	M12

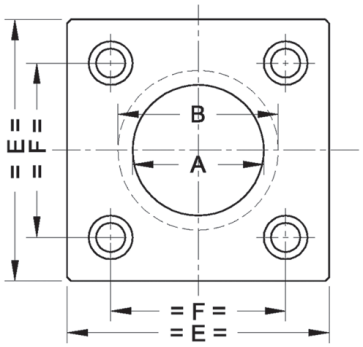
D12.01

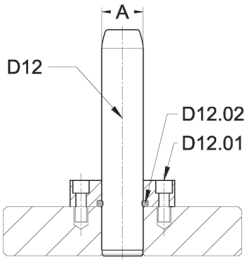
Kolon Tutucu Flanş / Clamping Flange - AFNOR

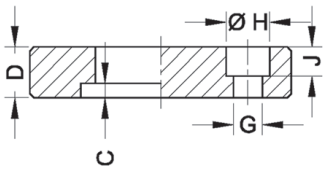
Malzeme - Material : CK45









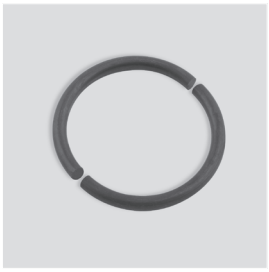


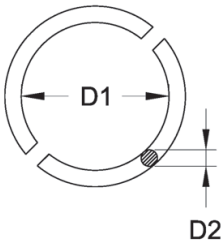
			Ø								
Sipariş Kodu	PSA Mabec Code	RENAULT Mabec Code	**A**	B	G	H	J	D	C	E	F
D12.01_025	Z000 248 844	P483 784 100	25	28	6.6	11	7	10	2.7	45	31
032	P446 932 711	P483 784 600	32	37	6.6	11	7	10	4.2	56	36
040	P446 932 701	P483 795 100	40	45	6.6	11	7	12	4.2	70	50
050	P446 932 702	P483 795 401	50	55	9	16	9	14	4.2	80	55
063	P446 932 703	P483 795 801	63	70	11	18	11	18	6.2	100	70
080	P446 932 704	P483 796 001	80	87	13	22	14	20	6.2	110	80
100		P483 796 401	100	107	13	22	14	20	6.2	140	100

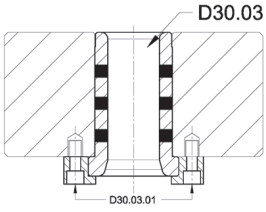
D12.02

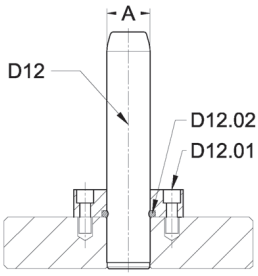
Tutucu Halka / Retaining Ring - AFNOR

Malzeme - Material : 1040







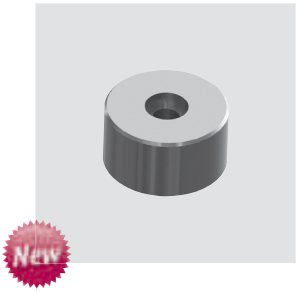


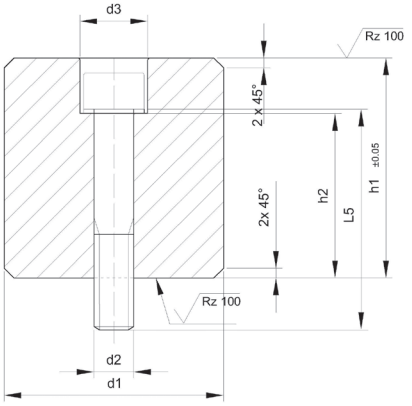
		Ø		
Sipariş Kodu	RENAULT Mabec Code	**A**	D1	D2
D12.02_025	P446 180 200	25	22.5	2.5
032	P446 180 300	32	28	4
040	P446 180 400	40	36	4
050	P446 180 500	50	46	4
063	P446 180 600	63	57	6
080	P446 180 700	80	74	6
100	P446 180 800	100	94	6

D17.01

Stoplama Blo€u
Stop Block

Malzeme - Material: Çelik - Steel





Sipariş Kodu	VW/AUDI CODE	d1	d2	d3	h1	Taş›ma Yükü	Adet
D17.01_060xxx	39V1162/14	60	14	20	1)	< 1800 kN	4
080xxx	39V1162/15	80				≥ 1800 - 3400 kN	
100xxx	39V1162/25	100	18	26		>3400 - 5300 kN	
120xxx	39V1162/17	120	22	33		>5300 - 10000 kN	
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 - 140	102	120	96	120	90	120
> 140 - 160	122	140	116	140	110	140

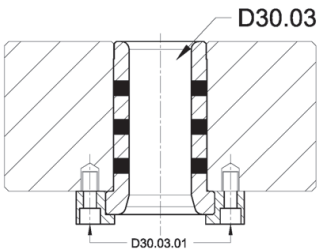
D30.03.01

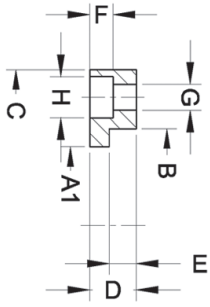
Burç Tutucu Flanş / Retaining Flange - AFNOR

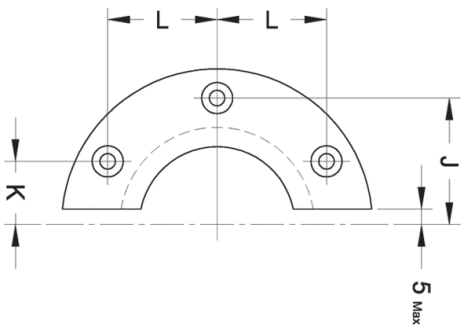
Malzeme - Material : CK45

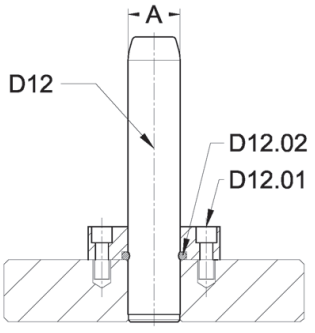


			Ø											
Sipariş Kodu	PSA Mabec Code	RENAULT Mabec Code	**A**	A1	B	C	D	E	F	G	H	K	J	L
D30.03.01_025		M321 534 500	25	32	41	72	10	5	7	6.6	12	20		20
032	P446 932 717	M321 544 501	32	40	51	80	12	6	7	6.6	12	21		25
040	P446 932 712	M321 548 501	40	50	61	100	12	8	7	6.6	12	14	41	38.5
050	P446 932 713	M321 552 601	50	63	72	125	16	10	9	9	16	17	49	46
063	P446 932 714	M321 556 601	63	80	91	140	20	12	11	11	18	17	57.5	55
080	P446 932 715	M321 560 601	80	100	113	180	25	16	13	14	22	20	72	70
100		M321 562 700	100	125	141	200	32	20	13	14	22	25	85	81





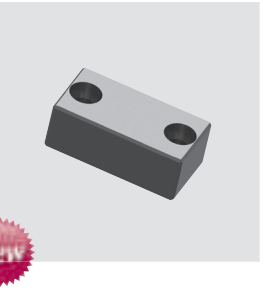


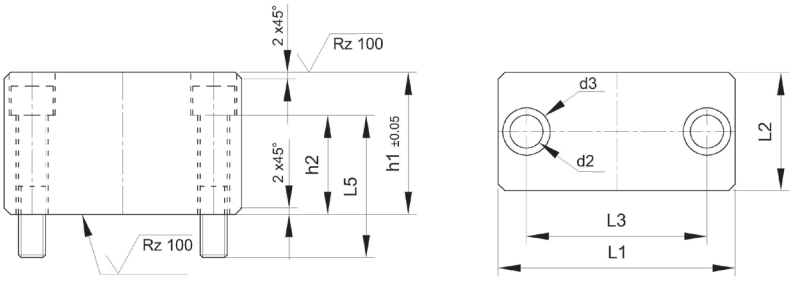


D17.02

Stoplama Blo€u
Stop Block

Malzeme - Material: Çelik - Steel





Sipariş Kodu	VW/AUDI CODE	L1	L2	L3	d2	d3	h1
D17.02.01_060xxx	39V1162/1	60	40	40	9	15	1)
080xxx	39V1162/2	80		56	11	18	
100xxx	39V1162/3	100		71	14	20	
100xxx	39V1162/4		50	76			
120xxx	39V1162/5	120	60	93			
150xxx	39V1162/20	150	80	120	18	26	
160xxx	39V1162/21	160	100	130			

Code	Taşıma Yükü	Adet
D17.02.01_100xxx	< 3500 kN	4
120xxx	≥ 3500 - 4900 kN	
150xxx	≥ 4900 - 9800 kN	
150xxx	≥ 9800 - 19600 kN	8
160xxx	≥ 19600 - 25000 kN	

DIN EN ISO 4762	M8		M10		M12		M16	
h1 1)	**h2**	**L5**	**h2**	**L5**	**h2**	**L5**	**h2**	**L5**
≥ 020 - 040	10	25	8	25	-	-	-	-
> 040 - 060	28	40	25	40	22	40	18	40
> 060 - 080	48	60	45	60	42	60	38	60
> 080 - 100	68	80	65	80	62	80	58	80
> 100 - 120			85	100	82	100	78	100
> 120 - 140			105	120	102	120	98	120
> 140 - 160					122	140	118	140

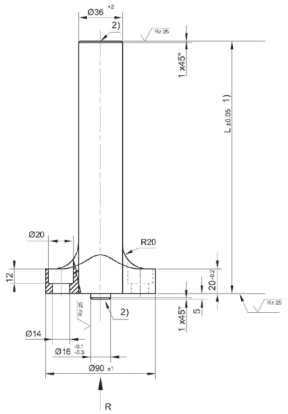
D18.01

Havaland›rma Pimi
Air Pin

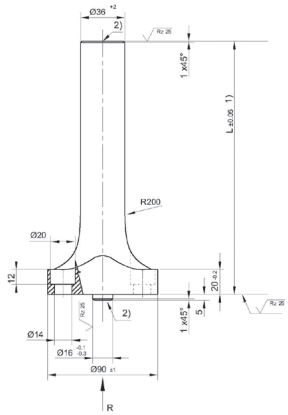
Malzeme - Material: Çelik - Steel



Sipariş Kodu	VW/AUDI CODE	L	Form
D18.01.02_36150	39D638/2	150	2
175	39D638/2	175	2
200	39D638/2	200	2
225	39D638/2	225	2
250	39D638/2	250	2
D18.01.03_36150	39D638/3	150	3
175	39D638/3	175	3
200	39D638/3	200	3
225	39D638/3	225	3
250	39D638/3	250	3
D18.01.04_36150	39D638/4	150	4
175	39D638/4	175	4
200	39D638/4	200	4
225	39D638/4	225	4
250	39D638/4	250	4
D18.01.05_36150	39D638/5	150	5
175	39D638/5	175	5
200	39D638/5	200	5
225	39D638/5	225	5
250	39D638/5	250	5
D18.01.06_36150	39D638/10	150	6
175	39D638/10	175	6
200	39D638/10	200	6
225	39D638/10	225	6
250	39D638/10	250	6
D18.01.07_36150	39D638/11	150	2
175	39D638/11	175	2
200	39D638/11	200	2
225	39D638/11	225	2
250	39D638/11	250	2
D18.01.08_36150	39D638/12	150	5
175	39D638/12	175	5
200	39D638/12	200	5
225	39D638/12	225	5
250	39D638/12	250	5

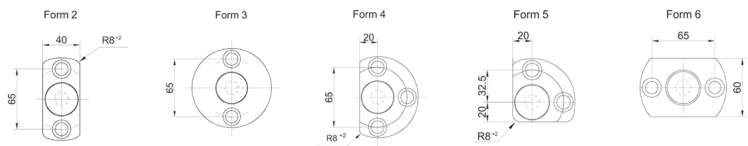


D18.01.02 - D18.01.05



D18.01.06 - D18.01.08

L Ölçüsü liste dışında özel üretim yapılır.



D18.02

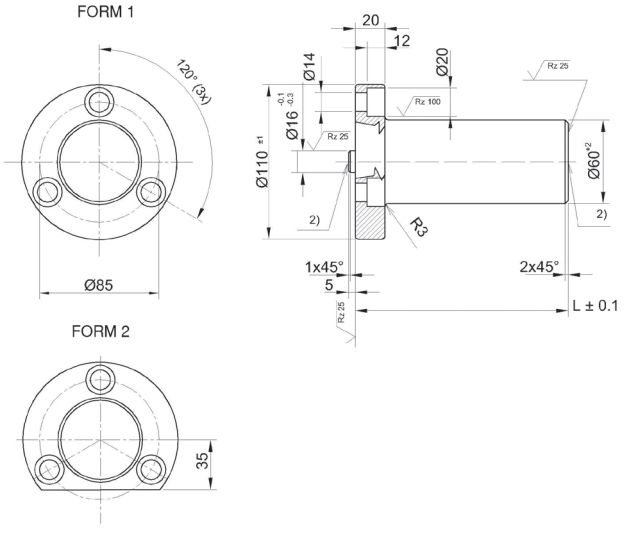
Havaland›rma Pimi
Air Pin

Malzeme - Material: Çelik - Steel



Sipariş Kodu	VW/AUDI CODE	d	L	Form
D18.02.01_60150	39D951/1	60	150	1
175	39D951/1	60	175	1
200	39D951/1	60	200	1
225	39D951/1	60	225	1
250	39D951/1	60	250	1
D18.02.02_60150	39D951/2	60	150	2
175	39D951/2	60	175	2
200	39D951/2	60	200	2
225	39D951/2	60	225	2
250	39D951/2	60	250	2

L Ölçüsü liste dışında özel üretim yapılır.



D18.03

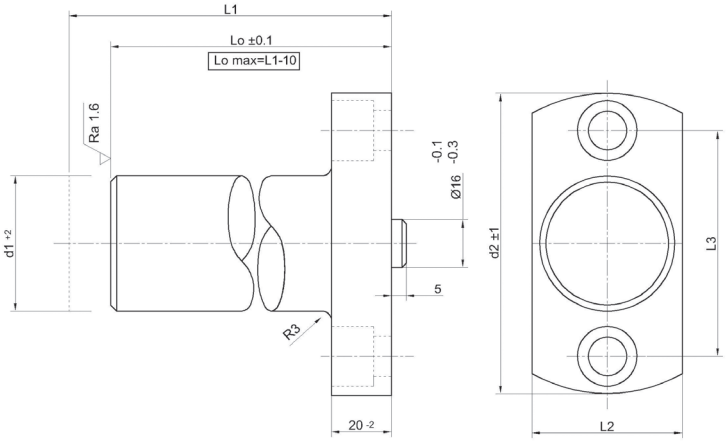
Havaland›rma Pimi
Air Pin Extension Stock

Malzeme - Material: Çelik - Steel



Sipariş Kodu	FORD CODE WDX1760	d1	d2	L1	L2	L3
D18.03_36110	0236110	36	90	110	40	65
150	0236150			150		
160	0236150			160		
175	0236175			175		
200	0236200			200		
225	0236225			225		
250	0236250			250		
275	0236275			275		
300	0236300			300		
325	0236325			325		
340	0236340			340		
360	0236360			360		
D18.03_45175	0245175	45	100	175	50	75
250	0245250			250		
360	0245360			360		

L Ölçüsü liste dışında özel üretim yapılır.



D18.04

Frenleyici
Retainer Bolt

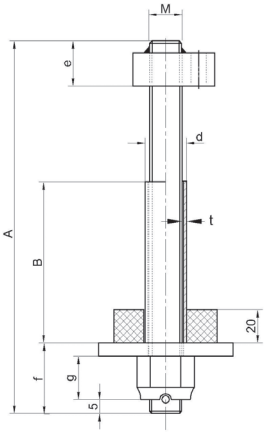
Malzeme - Material: Çelik + 92 Shore Poliüretan - Steel + 92 Shore Polyurethan



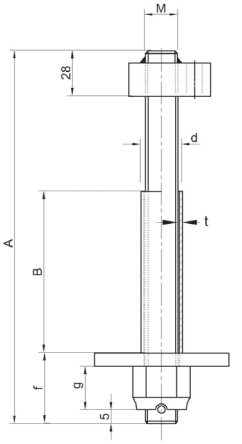
Sipariş Kodu	FORD CODE	KG	M	A	B	f	g	d	t	e	w	l	l1	l2	d1	d2
D18.04.01_16AAABBB	WDX14-60-0516	250	M16	?	?	30	19	22	2	28	35	50	20	20	50	65
20AAABBB	WDX14-60-0520	450	M20	?	?	35	22	25	2	28	40	50	20	20	63	82
24AAABBB	WDX14-60-0524	750	M24	?	?	42	27	30	2.5	28	45	50	20	20	80	105
30AAABBB	WDX14-60-0530	1250	M30	?	?	50	33	38	3.5	33	50	63	28	26	100	130

Sipariş Kodu	FORD CODE	KG	M	A	B	f	g	d	t	w	l	l1	l2	d2
D18.04.02_16AAABBB	WDX14-60-0616	1000	M16	?	?	30	19	22	2	35	50	20	20	40
20AAABBB	WDX14-60-0620	1400	M20	?	?	35	22	25	2	40	50	20	20	44

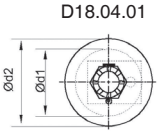
D18.04.01

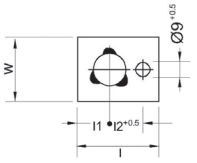


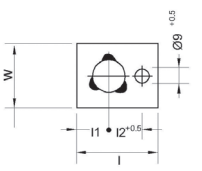
D18.04.02



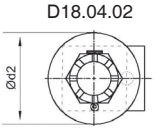
D18.04.01







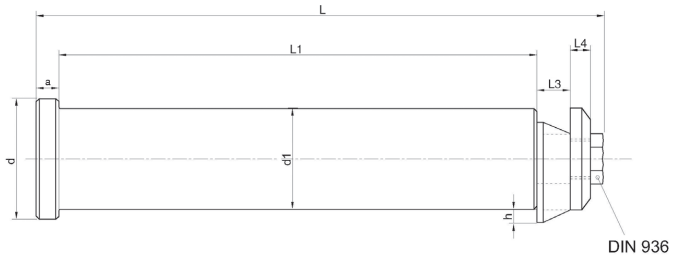
D18.04.02



D19.04

Taşıma Mili / Lifting Pins

Malzeme - Material: Çelik - Steel Cf53





Sipariş Kodu	FIAT CODE	Max. Taşıma Kap. 2 Pcs.	Max. Kalıp Ağırlığı	d	d1	L	a	L1	L3	L4	h
D19.04_29150	SOL_KG2000	2000 kg	4000 kg	38	29	178.5	6	150	9	6	4
D19.04_33170	SOL_KG3200	3200 kg	6400 kg	43	33	200.5	6	170	10	6	4
D19.04_43195	SOL_KG5000	5000 kg	10000 kg	53	43	233	8	195	12	8	6
D19.04_53180	SOL_KG8000_T	8000 kg	16000 kg	65	53	227	10	180	16	10	6
235	SOL_KG8000	8000 kg	16000 kg	65	53	282	10	235	16	10	7.5
D19.04_63215	SOL_KG13000_T	13000 kg	26000 kg	78	63	272.5	12	215	20	12	7.5
295	SOL_KG12000	12000 kg	24000 kg	78	63	352.5	12	295	20	12	8.5
D19.04_78355	SOL_KG13000	30000 kg	60000 kg	95	78	421.5	14	355	25	14	11

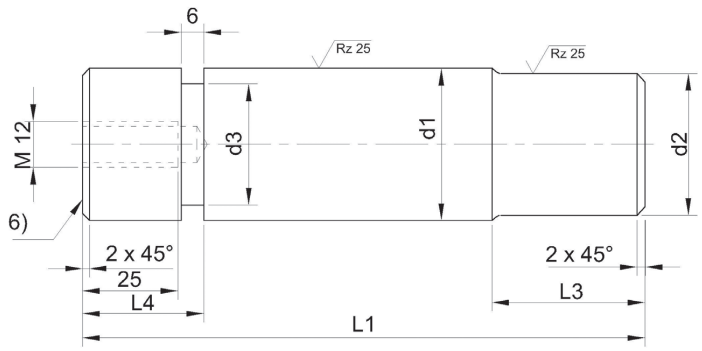
Dikkat!
Kalıp çevirme için kullanılırken yükleme sadece iki pim ile yapılmalıdır.

Warning!
In utilisation for turnover the load is supported from two pins only.

D19.50.01

Emniyet Pimi
Pad Retainer Pin

Malzeme - Material: Çelik - Steel Cf53





Sipariş Kodu	BMW CODE	VW/AUDI CODE	d1 (e8)	d2 +0,05	d3 -1,0	L1	L3	L4	r 1) -0.5	Taşıma kapasitesi
D19.50.01_32105	B2 5702 11 2169033	39D854/1	32	29	24	105	25	22	4	500 kg
122	B2 5702 11 2169034	39D854/2				122				
D19.50.01_40139	B2 5702 11 2169035	39D854/3	40	37	32	139	32	32	5	750 kg
159	B2 5702 11 2169036	39D854/4				159				
D19.50.01_50167	B2 5702 11 2169037	39D854/5	50	47	42	167	40		6	1250 kg
192	B2 5702 11 2169038	39D854/6				192				
D19.50.01_63202	B2 5702 11 2169039	39D854/7	63	60	55	202	50			2500 kg
237	B2 5702 11 2169040	39D854/8				237				

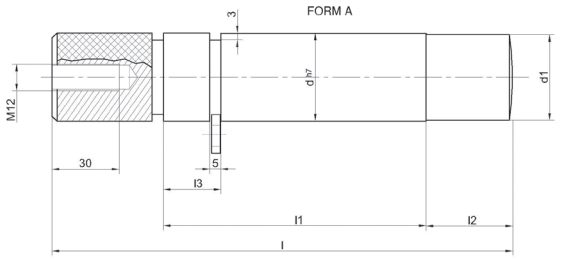
D19.50.02

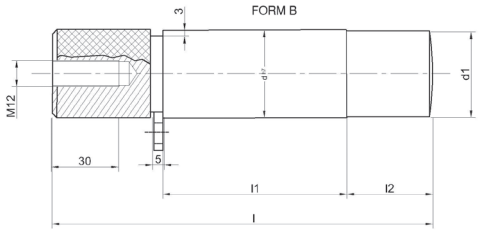
Emniyet Pimi
Pad Retainer Pin

Malzeme - Material: Çelik - Steel Cf53



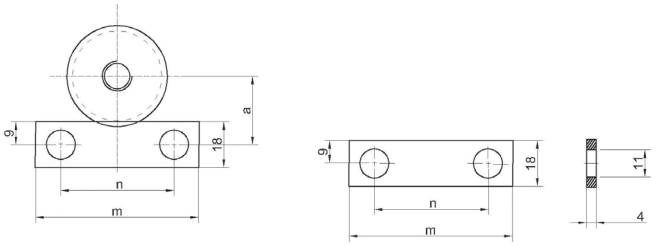
Sipariş Kodu	Form	d	l	d1	l1	l2	l3	a
D19.50.02_30155	A	30	155	29	87	33	19	22
40193	A	40	193	39	109	39	21	27
40229	A	50	229	49	131	43	23	32
40172	B	40	172	39	88	39	-	27
50206	B	50	206	49	108	43	-	32





Emniyet Pimi Tutucusu

Sipariş Kodu	d	m	n
D19.50.02.01	30	50	35
02	40	65	45
03	50	70	50

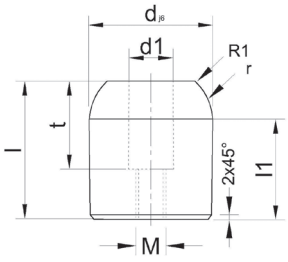


D51.01

Merkezleme Pimi
Locating Pin

Malzeme - Material : Çelik - Steel 16MnCr5
Sertlik - Hardness : 58 - 62 Hrc





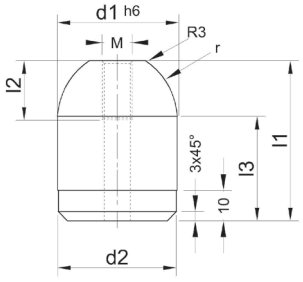
Sipariş Kodu	d	l	l1	d1	t	M	r
D51.01_2245	22	45	37.5	14	25	M10	20
3250	32	50	40	18	35	M12	20
4055	40	55	40	18	35	M12	20
5055	50	55	40	18	35	M12	20

D51.02

Merkezleme Pimi
Locating Pin

Malzeme - Material : Çelik - Steel 16MnCr5
Sertlik - Hardness : 58 - 62 Hrc





Sipariş Kodu	VW/AUDI CODE	d1	l1	l2	l3	d2	M	r
D51.02_2245	39V1205/1	22	45	16	35	21.95	M8	15
2255	39V1205/2	22	55	16	45	21.95	M8	15
3250		32	50	20	35	31.95	M10	20
4055	39V1205/3	40	55	20	35	39.95	M10	25
4065	39V1205/4	40	65	20	45	39.95	M10	25
4085	39V1205/5	40	85	20	65	39.95	M10	25
5055		50	55	20	35	49.95	M10	25

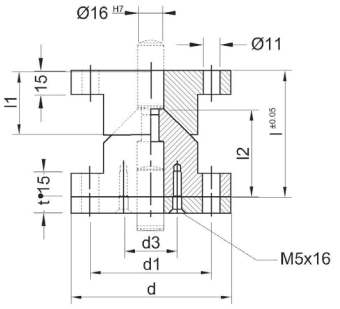
D55.01

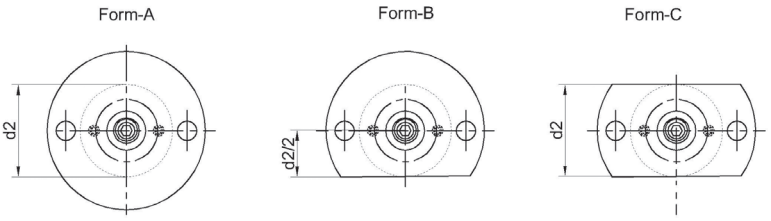
Konik Merkezleme
Locating Cone

Malzeme - Material : Çelik - Steel 16 MnCr5
Sertlik - Hardness : 60 - 64 Hrc
Ayar Plakası - Washer : Ck 45



Sipariş Kodu	VW/AUDI CODE	d	l	d1	d2	d3	l1	l2	t	Form
D55.01_100005		100	80	76	58	40.5	40	55	5.5	A
120005		120	90	96	78	50.5	50	65	5.5	A
100105		100	80	76	58	40.5	40	55	5.5	B
120105		120	90	96	78	50.5	50	65	5.5	B
100205		100	80	76	58	40.5	40	55	5.5	C
120205		120	90	96	78	50.5	50	65	5.5	C
100010	39V1168/10	100	80	76	58	40.5	40	55	10	A
120010	39V1168/12	120	90	96	78	50.5	50	65	10	A
100110	39V1168/14	100	80	76	58	40.5	40	55	10	B
120110	39V1168/16	120	90	96	78	50.5	50	65	10	B
100210	39V1168/18	100	80	76	58	40.5	40	55	10	C
120210	39V1168/20	120	90	96	78	50.5	50	65	10	C





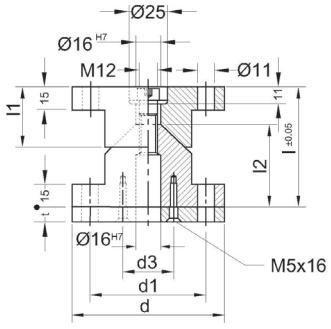
D55.02

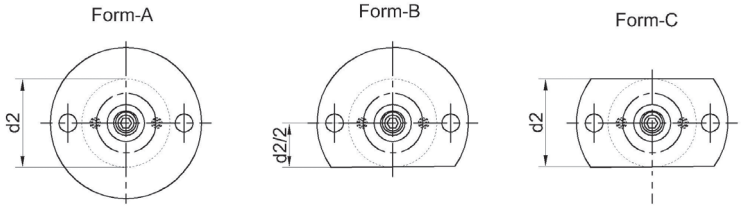
Konik Merkezleme
Locating Cone

Malzeme - Material : Çelik - Steel 16 MnCr5
Sertlik - Hardness : 60 - 64 Hrc
Ayar Plakası - Washer : Ck 45



Sipariş Kodu	d	l	d1	d2	d3	l1	l2	t	Form
D55.02_100005	100	80	76	58	40.5	40	55	5.5	A
120005	120	90	96	78	50.5	50	65	5.5	A
100105	100	80	76	58	40.5	40	55	5.5	B
120105	120	90	96	78	50.5	50	65	5.5	B
100205	100	80	76	58	40.5	40	55	5.5	C
120205	120	90	96	78	50.5	50	65	5.5	C
100010	100	80	76	58	40.5	40	55	10	A
120010	120	90	96	78	50.5	50	65	10	A
100110	100	80	76	58	40.5	40	55	10	B
120110	120	90	96	78	50.5	50	65	10	B
100210	100	80	76	58	40.5	40	55	10	C
120210	120	90	96	78	50.5	50	65	10	C
100215	100	80	76	58	40.5	40	55	10.5	C
120215	120	90	96	78	50.5	50	65	10.5	C

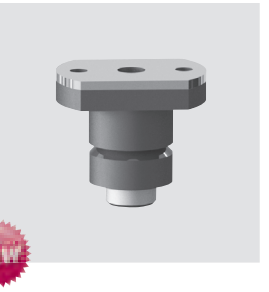




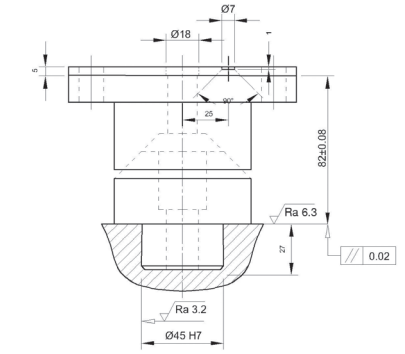
D55.03

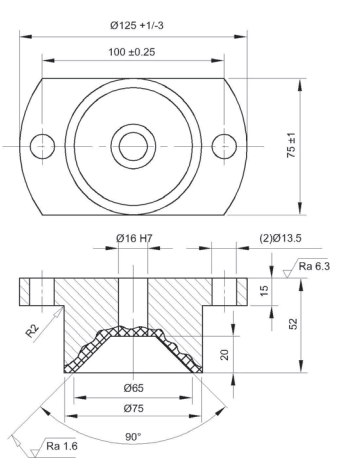
Konik Merkezleme
Locating Cone

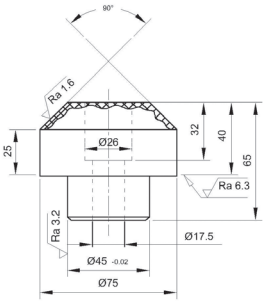
Malzeme - Material : Çelik - Steel
Sertlik - Hardness : 54 - 58 Hrc



Sipariş Kodu	FORD CODE
D55.03_14620175	WDX14-62-0175







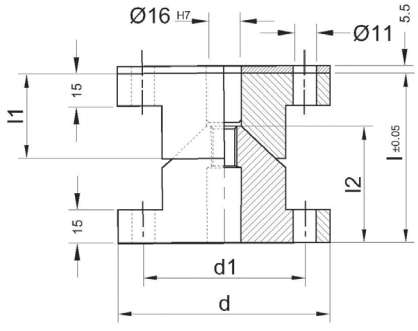
D55.04

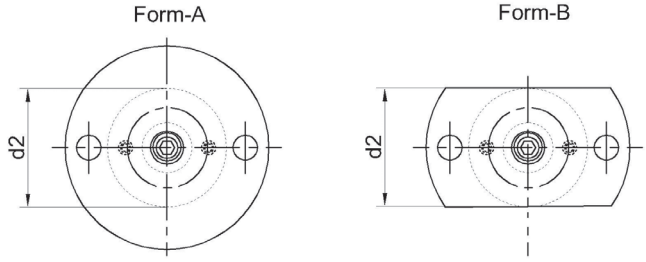
Konik Merkezleme
Locating Cone

Malzeme - Material : Çelik - Steel 16 MnCr5
Sertlik - Hardness : 60 - 64 Hrc
Ayar Plakası - Washer : Ck 45



Sipariş Kodu	d	l	d1	d2	l1	l2	Form
D55.04_100005	100	80	76	58	40	55	A
120005	120	90	96	78	50	65	A
100205	100	80	76	58	40	55	B
120205	120	90	96	78	50	65	B

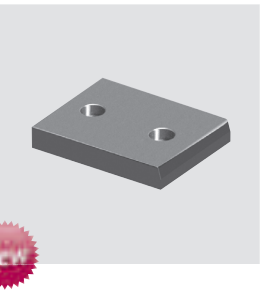




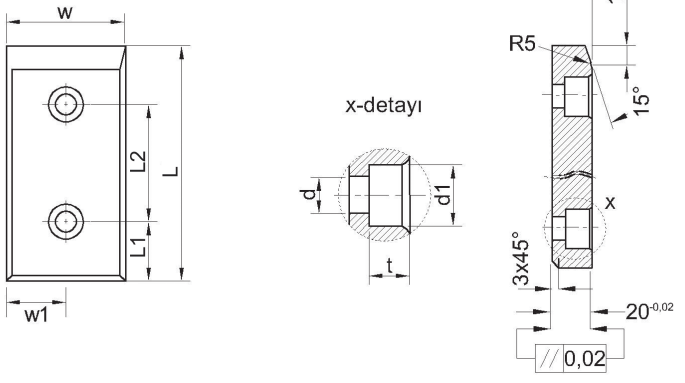
D80.16

Çelik Sürtünme Plakası
Sliding Pads

Malzeme - Material : Çelik - Steel
Sertlik - Hardness : 60 - 64 Hrc



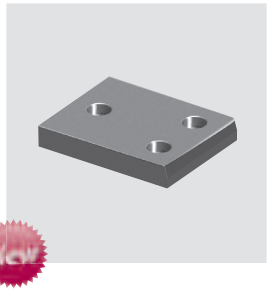
Sipariş Kodu	VW/AUDI 39D863	FORD WDX 13-65	W	L	w1	L1	L2	d1	d	t	Civata
D80.16_ 50080	62		50	80	25	25	30	15	9	9	M8x25
100	63	WDX136501050100-X		100			50	20	13.5	13	
125	64	WDX136501050125-X		125			75				
160	65	WDX136501050160-X		160			110				
200	66	WDX136501050200-X		200			150				
D80.16_ 80080	72		80	80	40	25	30	20	13.5	13	
100	73	WDX136501080100-X		100			50				
125	74	WDX136501080125-X		125			75				
160	75	WDX136501080160-X		160			110				
200	76	WDX136501080200-X		200			150				M12x25
250		WDX136501080250-X		250		40	170				
315		WDX136501080315-X		315			235				
D80.16_100100	83	WDX136501100100-X	100	100	50	25	50	20	13.5	13	
125	84	WDX136501100125-X		125			75				
160	85	WDX136501100160-X		160			110				
200	86	WDX136501100200-X		200			150				
250		WDX136501100250-X		250		40	170				
315		WDX136501100315-X		315			235				



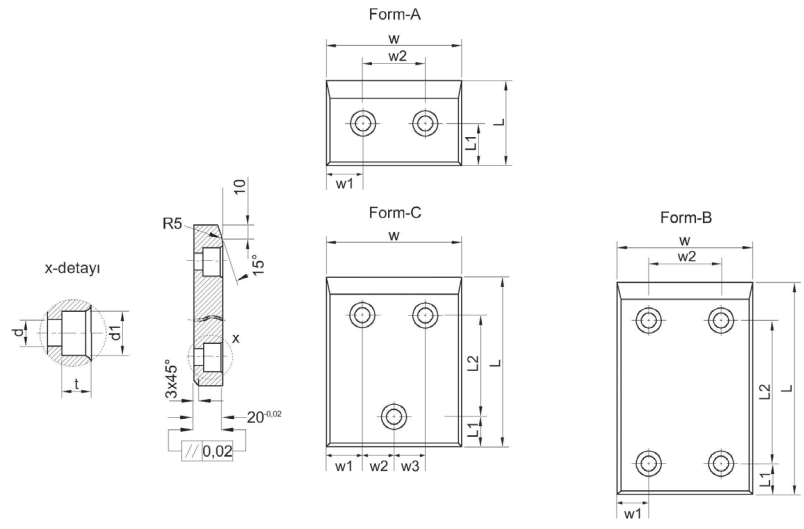
D80.16

Çelik Sürtünme Plakası
Sliding Pads

Malzeme - Material : Çelik - Steel
Sertlik - Hardness : 60 - 64 Hrc



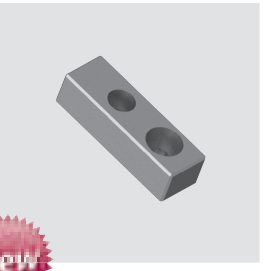
Sipariş Kodu	VW/AUDI 39D863	FORD WDX	W	L	w1	w2	w3	L1	L2	d1	d	t	Form	Civata
D80.16_080050	71		80	50	25	30		25		15	9	9	A	M8x25
D80.16_100050	81		100	50	25	50		25		20	13.5	13	A	
080	82		100	80				40						
D80.16_125050	91		125	50	25	75		25		20	13.5	13	A	
080	92		125	80				40						
100	93	WDX136501125100-X	125	100		37.5	37.5	25	50				C	
125	94	WDX136501125125-X	125	125					75					
160	95	WDX136501125160-X	125	160					110					
200	96	WDX136501125200-X	125	200					150					
250		WDX136501125250-X	125	250				40	170					
315		WDX136501125315-X	125	315					235					M12x25
D80.16_160050	101		160	50	25	110		25		20	13.5	13	A	
080	102		160	80				40						
100	103	WDX136501160100-X	160	100		55	55	25	50				C	
125	104	WDX136501160125-X	160	125					75					
160	105	WDX136501160160-X	160	160					110					
200	106	WDX136501160200-X	160	200					150					
250			160	250		110		40	170				B	
315			160	315					235					
250.01		WDX136501160250-X	160	250		55	55		170				C	
315.01		WDX136501160315-X	160	315					235					



D91.01

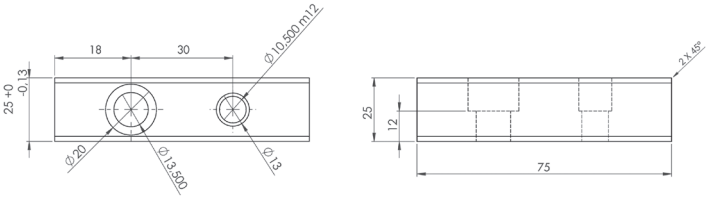
Kama
Metric Master Key

Malzeme - Material: Çelik - Steel

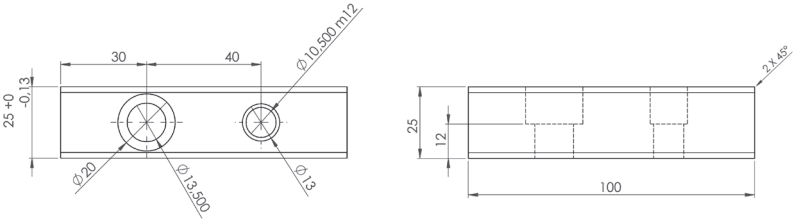


Sipariş Kodu	FORD CODE
D91.01_25075	WDX30-80-06075
100	WDX30-80-06100
150	WDX30-80-060150

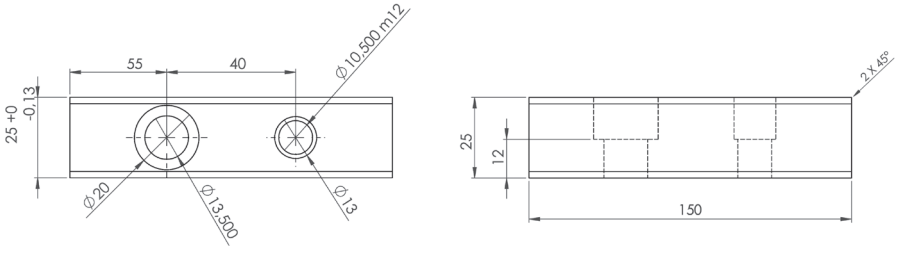
D91.01_25075



D91.01_25100



D91.01_25150



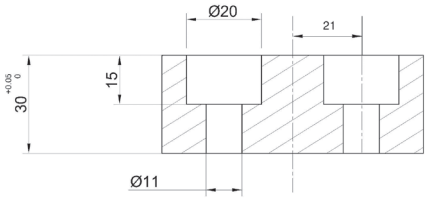
D91.02

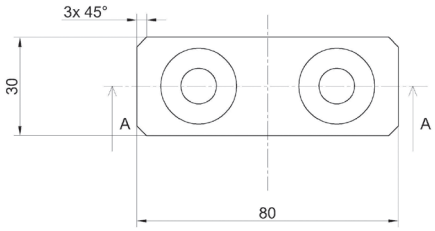
Stoplama Blo€u
Balance Stock

Malzeme - Material : CK 45



Sipariş Kodu	TOFAŞ CODE
D91.02_3080	TKS SMS 080 030 01





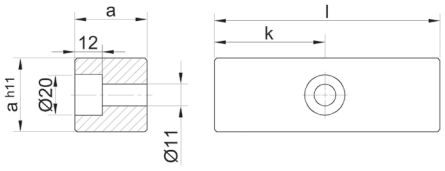
D91.03

Kama
Standard Key Square

Malzeme - Material : CK 45



Sipariş Kodu	FIAT CODE	a	l	k
D91.03_25080	CH_R_025080	25	80	40
125	CH_R_025125	25	125	62.5
D91.03_30080	CH_R_030080	30	80	40
125	CH_R_030125	30	125	62.5



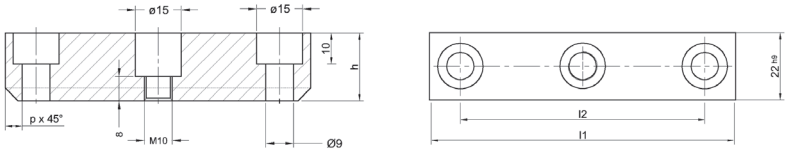
D91.04

Kama
Standard Key Square

Malzeme - Material : CK 45



Sipariş Kodu	VW/AUDI CODE	l1	l2	h	p
D91.04_14050	39V1304/1	50	32	14	-
080	39V1304/2	80	50	14	-
100	39V1304/3	100	80	14	-
125	39V1304/4	125	100	14	-
D91.04_22050	39V1304/7	50	32	22	4
080	39V1304/8	80	50	22	4
100	39V1304/9	100	80	22	4
125	39V1304/10	125	100	22	4
D91.04_40050	39V1304/11	50	32	40	4
080	39V1304/12	80	50	40	4
100	39V1304/13	100	80	40	4
125	39V1304/14	125	100	40	4



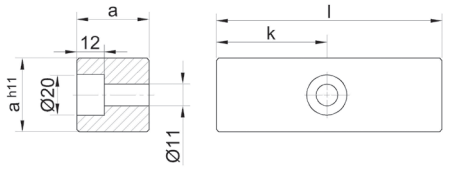
D91.03

Kama
Standard Key Square

Malzeme - Material : CK 45



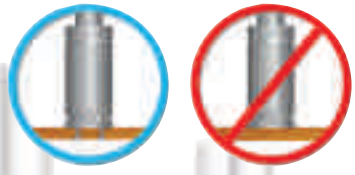
Sipariş Kodu	FIAT CODE	a	l	k
D91.03_25080	CH_R_025080	25	80	40
125	CH_R_025125	25	125	62.5
D91.03_30080	CH_R_030080	30	80	40
125	CH_R_030125	30	125	62.5



Dikkat



Gaz dolumunda sadece nitrojen (N2) kullanınız



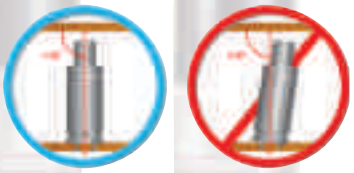
Gazlı yayı civata veya bağlama pabucuyla monte ediniz



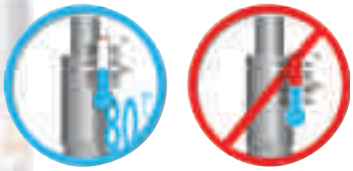
Gövde veya pime darbe uygulamayınız



Yağlama yapmayınız



Plakaya dik monte ediniz



Çalışma esnasında gazlı yayın ısısı 80°C'nin altında olmalıdır

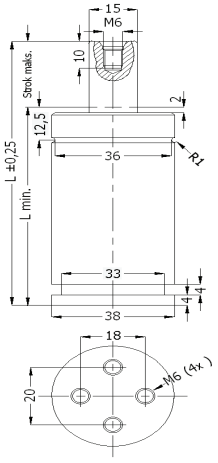
D100.01_00250

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 50 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 80 - 100 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.01_00250.010	X346590038	10	60	70
013		12,7	62,7	75,4
016	X346590039	16	66	82
019		19	69	88
025	X346590037	25	75	100
038		38,1	88,1	126,2
050	X346590036	50	100	150
063	Z000382437	63,5	113,5	177
080	X346590261	80	130	210
100		100	150	250

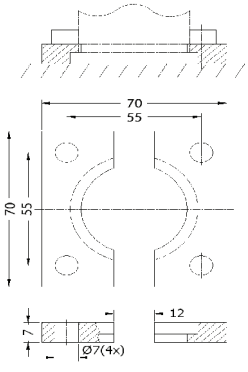




D100.50.01_00250

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



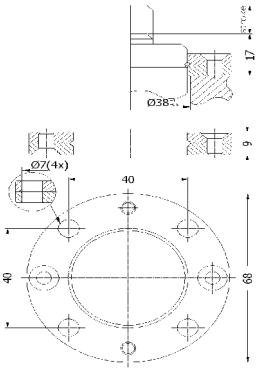


Sipariş Kodu	PSA Mabec Code
D100.50.01_00250	Z000304144

D100.50.02_00250

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_00250	X346591660

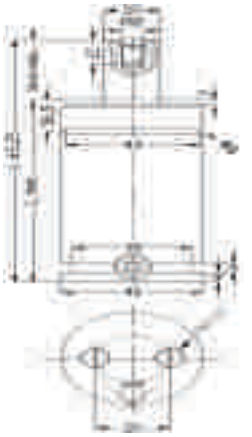
D100.01_00500

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 40 - 80 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.01_00500.010		10	95	105
013		12,7	97,7	110,4
016		16	101	117
019		19	104	123
025	X346590337	25	110	135
038		38,1	123,1	161,2
050	X346590336	50	135	185
063	Z000234960	63,5	148,5	212
080	X346590335	80	165	245
100		100	185	285
125		125	210	335

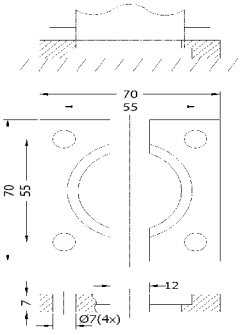




D100.50.01_00500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



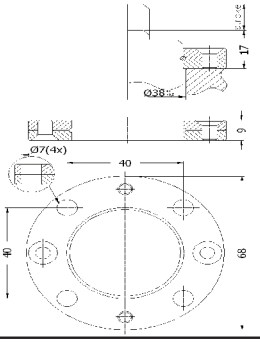


Sipariş Kodu	PSA Mabec Code
D100.50.01_00500	Z000243509

D100.50.02_00500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_00500	Z000461359

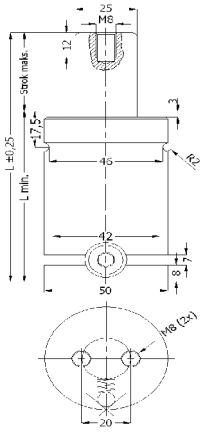
D100.01_00750

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 15 - 40 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.01_00750.013		12,7	107,7	120,4
025	X346590035	25	120	145
038		38,1	133,1	171,2
050	X346590034	50	145	195
063	Z000304414	63,5	158,5	222
080	X346590033	80	175	255
100	X346590032	100	195	295
125	X346590260	125	220	345
160	X346590253	160	255	415

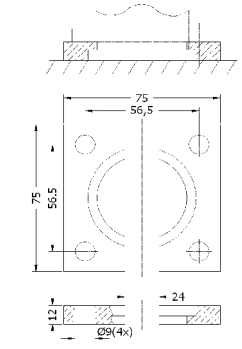




D100.50.01_00750

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



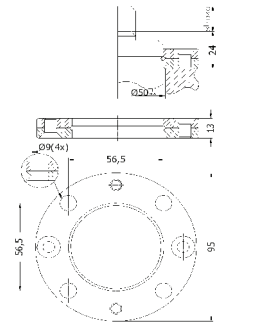


Sipariş Kodu	PSA Mabec Code
D100.50.01_00750	X346591692

D100.50.02_00750

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_00750	X346591659

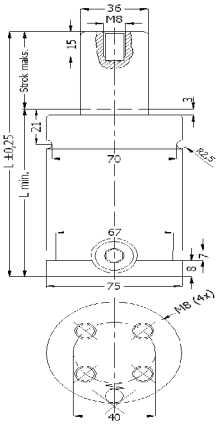
D100.01_01500

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 15 - 40 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.01_01500.025	X346590295	25	135	160
038		38,1	148,1	186,2
050	X346590041	50	160	210
063	Z000296562	63,5	173,5	237
080	X346590042	80	190	270
100	X346590031	100	210	310
125	X346590030	125	235	360
160	X346590029	160	270	430

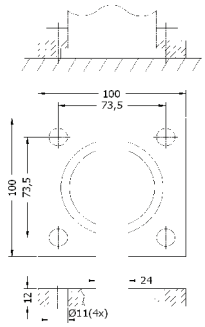




D100.50.01_01500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



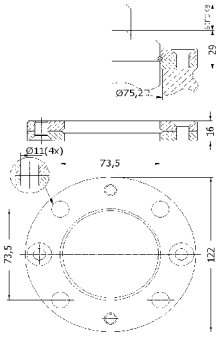


Sipariş Kodu	PSA Mabec Code
D100.50.01_01500	X346591670

D100.50.02_01500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_01500	X346591658

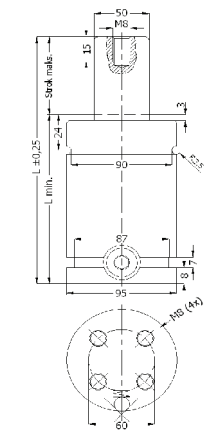
D100.01_03000

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 15 - 40 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.01_03000.025	X346590026	25	145	170
038		38,1	158,1	196,2
050	X346590294	50	170	220
063	Z000459069	63,5	183,5	247
080	X346590293	80	200	280
100	X346590028	100	220	320
125	X346590339	125	245	370
160	X346590252	160	280	440

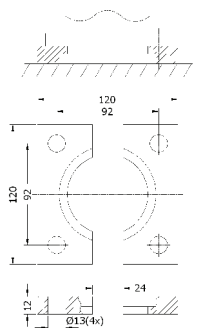




D100.50.01_03000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



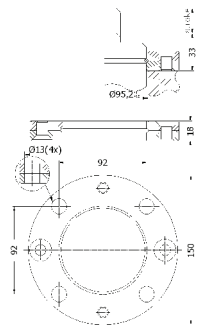


Sipariş Kodu	PSA Mabec Code
D100.50.01_03000	X346591686

D100.50.02_3000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_03000	X346591657

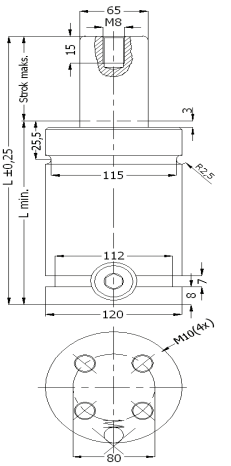
D100.01_05000

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 15 - 40 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.01_05000.025	Z000410553	25	165	190
038		38,1	178,1	216,2
050	X346590027	50	190	240
063		63,5	203,5	267
080	Z000492151	80	220	300
100	Z000301877	100	240	340
125	Z000239128	125	265	390
160		160	300	460

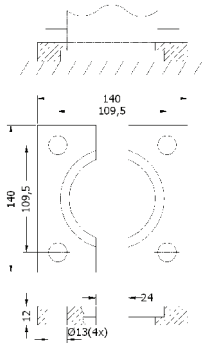




D100.50.01_05000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



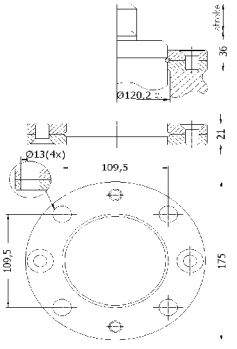


Sipariş Kodu	PSA Mabec Code
D100.50.01_05000	X346591688

D100.50.02_05000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_05000	X346591656

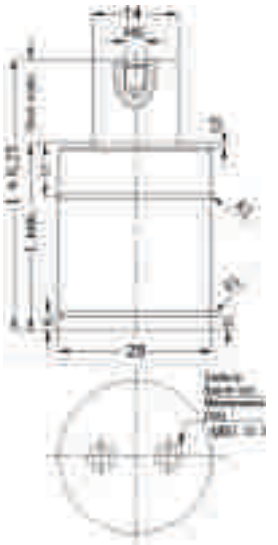
D100.02_00320

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 15 - 40 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	Strok Maks. Stroke Max.	l min	l
D100.02_00320.007	7	37	44
010	10	40	50
015	15	45	60
019	19	49	68
025	25	55	80
038	38	68	106
050	50	80	130
063	63	93	156
075	75	110	185
080	80	115	195
100	100	135	235
125	125	160	285





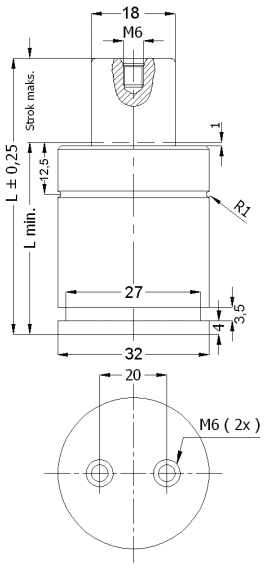
D100.02_00350

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 20 - 100 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	Strok Maks. Stroke Max.	l min	l
D100.02_00350.010	10	40	50
013	13	43	56
016	16	46	62
019	19	49	68
025	25	55	80
032	32	62	94
038	38	68	106
050	50	80	130
063	63	93	156
075	75	105	180
080	80	110	190
100	100	130	230
125	125	155	280





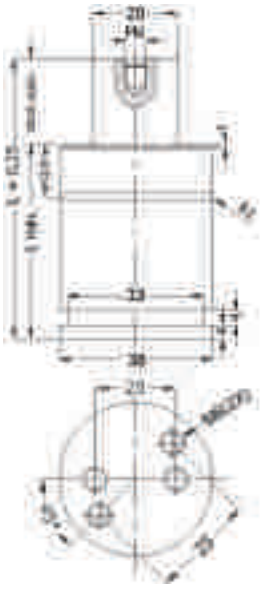
D100.02_00500

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 20 - 100 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.02_00500.010	Z000459071	10	40	50
013		13	43	56
016	Z000459074	16	46	62
019		19	49	68
025	Z000459075	25	55	80
032		32	62	94
038		38	68	106
050	Z000504472	50	80	130
063		63	93	156
075		75	105	180
080	Z000459076	80	110	190
100	Z000459077	100	130	230
125	Z000459078	125	155	280





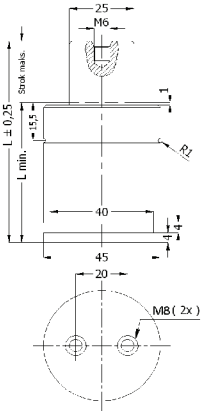
D100.02_00750

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 15 - 40 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.02_00750.010	Z000459079	10	42	52
013		13	45	58
016	Z000459080	16	48	64
019		19	51	70
025	Z000459087	25	57	82
032		32	64	96
038		38	70	108
050	Z000459088	50	82	132
063	Z000459089	63	95	158
075		75	107	182
080	Z000459090	80	112	192
100	Z000459208	100	132	232
125	Z000459165	125	157	282

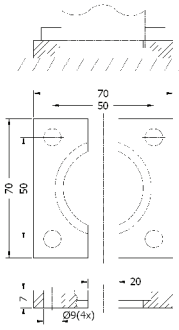




D100.50.01_00500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



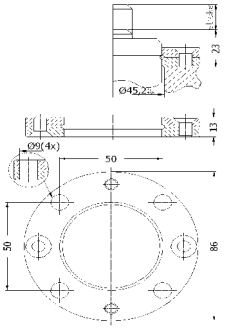


Sipariş Kodu	PSA Mabec Code
D100.50.01_00500	Z000243509

D100.50.02_00500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_00500	Z000461359

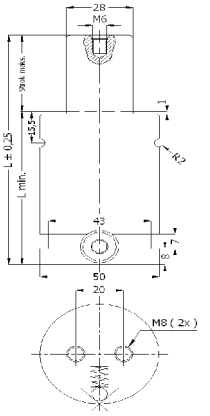
D100.02_01000

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 15 - 40 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.02_01000.013		13	51	64
016	Z000459167	16	54	70
019		19	57	76
025	Z000459168	25	63	88
032		32	70	102
038		38	76	114
050	Z000376302	50	88	138
063	Z000459169	63	101	164
075		75	113	188
080	Z000459170	80	118	198
100	Z000459171	100	138	238
125	Z000459173	125	163	288

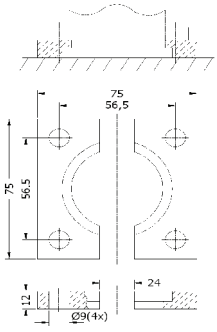




D100.50.01_00750

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



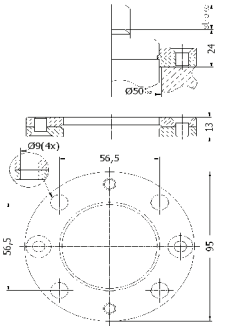


Sipariş Kodu	PSA Mabec Code
D100.50.01_00750	X346591692

D100.50.02_00750

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_00750	X346591659

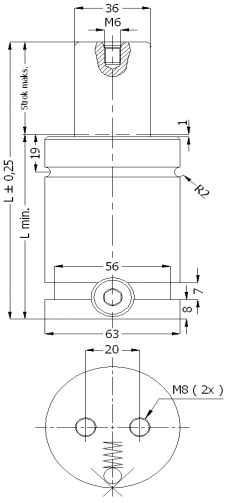
D100.02_01500

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 50 - 100 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	Strok Maks. Stroke Max.	l min	l
D100.02_01500.013	13	57	70
016	16	60	76
019	19	63	82
025	25	69	94
032	32	76	108
038	38	82	120
050	50	94	144
063	63	107	170
075	75	119	194
080	80	124	204
100	100	144	244
125	125	169	294



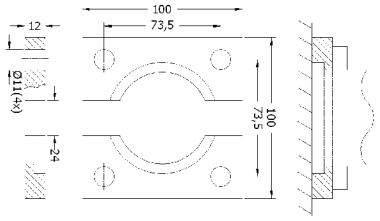


D100.50.01_01000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik

Sipariş Kodu
D100.50.01_01000





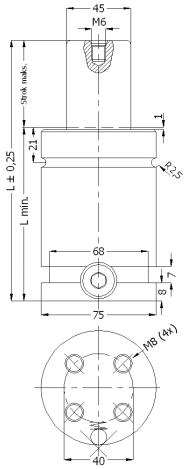
D100.02_02400

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 20 - 100 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.02_02400.016	Z000459174	16	61	77
019		19	64	83
025	Z000410552	25	70	95
032		32	77	109
038		38	83	121
050	Z000459175	50	95	145
063	Z000459177	63	108	171
075		75	120	195
080	Z000365402	80	125	205
100	Z000459178	100	145	245
125	Z000459179	125	170	295

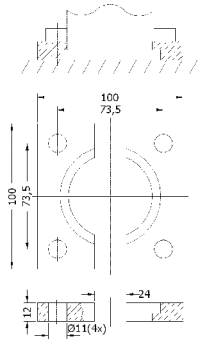




D100.50.01_01500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



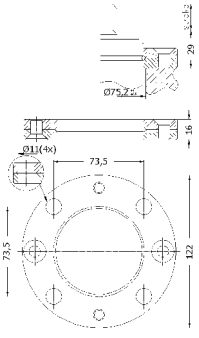


Sipariş Kodu	PSA Mabec Code
D100.50.01_01500	X346591670

D100.50.02_01500

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_01500	X346591658

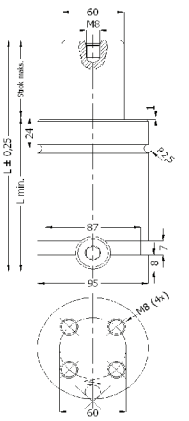
D100.02_04200

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 20 - 100 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariþ Kodu	PSA Mabec Code	Strok Maks. Stroke Max.	l min	l
D100.02_04200.016	Z000459180	16	74	90
019		19	77	96
025	Z000459181	25	83	108
032		32	90	122
038		38	96	134
050	Z000414099	50	108	158
063		63	121	184
075		75	133	208
080	Z000459182	80	138	218
100	Z000459183	100	158	258
125	Z000459184	125	183	308

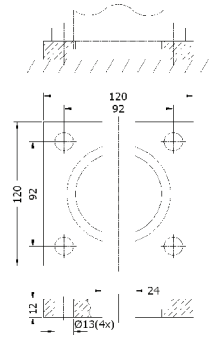




D100.50.01_03000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



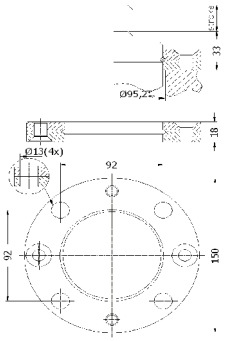


Sipariş Kodu	PSA Mabec Code
D100.50.01_03000	X346591686

D100.50.02_03000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_03000	X346591657

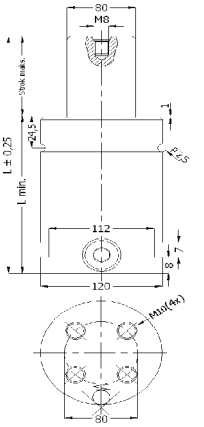
D100.02_06600

Kullanılan Gaz : Nitrojen N_2 / Nitrogen N_2
Maksimum Dolum Basıncı : 150 Bar
Minimum Dolum Basıncı : 25 Bar
Çalışma Sıcaklığı : 0°C / +80°C

Sıcaklığa Bağlı Kuvvet Artışı : ±0.3%/°C
Önerilen Strok/dk. : 20 - 100 (20°C)
Maksimum Piston Hızı : 1.6 m/s

Sipariş Kodu	Strok Maks. Stroke Max.	l min	l
D100.02_06600.016	16	84	100
019	19	87	106
025	25	93	118
032	32	100	132
038	38	106	144
050	50	118	168
063	63	131	194
075	75	143	218
080	80	148	228
100	100	168	268
125	125	193	318

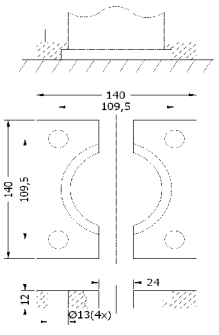




D100.50.01_05000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik



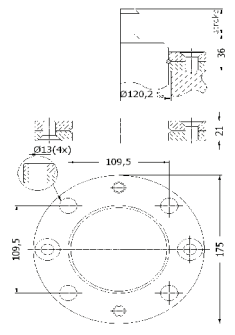


Sipariş Kodu	PSA Mabec Code
D100.50.01_05000	X346591688

D100.50.02_05000

Gazlı Yay Bağlama Pabucu
Malzeme : Çelik





Sipariş Kodu	PSA Mabec Code
D100.50.02_05000	X346591656

KALIP- İŞ PARÇASI BAĞLAMA EKİPMANLARI

- Bağlama Papuçları
- ‘T’ Ayaklı Saplamalar
- Düz Saplamalar
- Vidalı Yükselticiler
- ‘T’ Pabuçlar
- Takviyeli Somunlar
- Yandan Sıkma Pençe Pabuçlar
- Bağlama Setleri
- Blok Yandan Sıkmalar
- Paralel Setler
- Delik İşleme Aparatları
- Yatay - Dikey CNC Kuleleri
- CNC Yumuşak Ayaklar
- ‘V’ Yataklar













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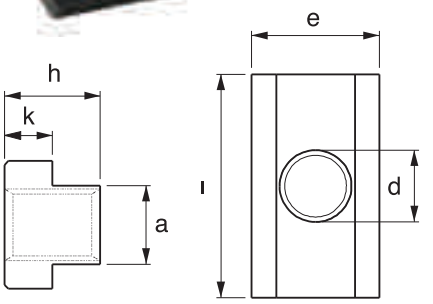
Uzun “T” Pabuç

Referans Nr.	dx	a	e	l	h	k	(g)
1710-0608	M6x8	7.7	13	26	10	6	14
1710-0810	M8x10	9.7	15	30	12	6	30
1710-1012	M10x12	11.7	18	36	14	7	49
1710-1214	M12x14	13.7	22	44	16	8	82
1710-1416	M14x16	15.7	25	50	18	9	120
1710-1618	M16x18	17.7	28	56	20	10	170
1710-1820	M18x20	19.7	32	64	24	12	260
1710-2022	M20x22	21.7	35	70	28	14	360
1710-2224	M22x24	23.7	40	80	32	16	550
1710-2428	M24x28	27.7	44	88	36	18	730
1710-3036	M30x36	35.6	54	108	44	22	1390



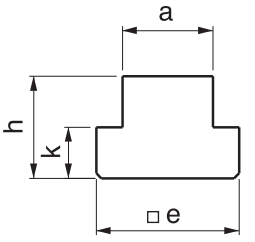


Ürün Nr. 1710 Uzun "T" Pabuç

Deliksiz "T" Pabuç

Referans Nr.	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	300
1730-28	28	27.7	44	36	18	430
1730-36	36	35.6	54	44	22	800



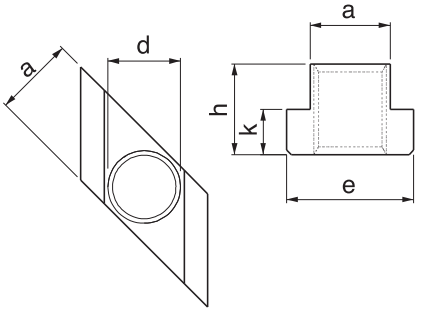


Ürün Nr. 1730 Deliksiz "T" Pabuç

Dereceli "T" Pabuç

Referans Nr.	dx	a	e	h	k	(g)
1770-0810	M8x10	9.7	15	12	6	15
1770-1012	M10x12	11.7	18	14	7	20
1770-1014 1770-1214	M10x14 * M12x14	13.7	22	16	8	30 25
1770-1416	M14x16	15.7	25	18	9	35
1770-1018 1770-1618	M10x18 * M16x18	17.7	28	20	10	65 45
1770-1620 1770-1820	M16x20 * M18x20	19.7	32	24	12	80 70
1770-1622 1770-2022	M16x22 * M20x22	21.7	35	28	14	120 100
1770-1628 1770-2028 1770-2428	M16x28 * M20x28 * M24x28	27.7	44	36	18	280 250 220



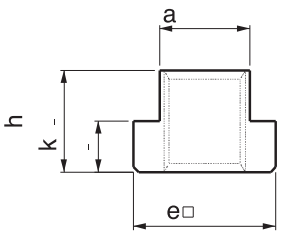


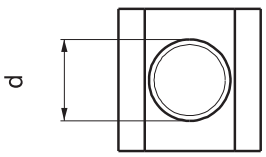
Ürün Nr. 1770 Dereceli "T" Pabuç

"T" Pabuç

Referans Nr.	dx (a)	a	e	h	k	(g)
1750-0608	M6x8	7.7	13	10	6	9
1750-0810	M8x10	9.7	15	12	6	12
1750-0812 1750-1012	M8x12 * M10x12	11.7	18	14	7	22 20
1750-0814 1750-1014 1750-1214	M8x14 * M10x14 * M12x14	13.7	22	16	8	40 37 35
1750-0816 1750-1016 1750-1216 1750-1416	M8x16 * M10x16 * M12x16 * M14x16	15.7	25	18	9	60 50 50 45
1750-0818 1750-1018 1750-1218 1750-1418 1750-1618	M8x18 * M10x18 * M12x18 * M14x18 * M16x18	17.7	28	20	10	90 87 80 75 65
1750-1620 1750-1820	M16x20 * M18x20	19.7	32	24	12	110 105
1750-1622 1750-1822 1750-2022	M16x22 * M18x22 * M20x22	21.7	35	28	14	175 160 155
1750-1624 1750-2024 1750-2224	M16x24 * M20x24 * M22x24	23.7	40	32	16	260 230 220
1750-1628 1750-2028 1750-2228 1750-2428	M16x28 * M20x28 * M22x28 * M24x28	27.7	44	36	18	380 350 340 320
1750-2436 1750-3036	M24x36 * M30x36	35.6	54	44	22	700 600



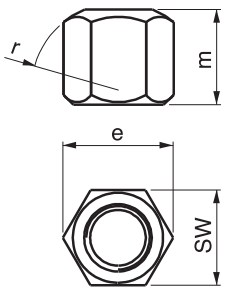




DIN 508 Ürün Nr. 1750 "T" Pabuç

Takviyeli Somun

Referans Nr.		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	14
1790-12	M12	19	21.9	18	17	20
1790-14	M14	22	25.4	21	20	45
1790-16	M16	24	27.7	24	22	60
1790-18	M18	27	31.2	27	24	85
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	200
1790-30	M30	46	53.1	45	41	400
1790-36	M36	55	63.5	54	50	720

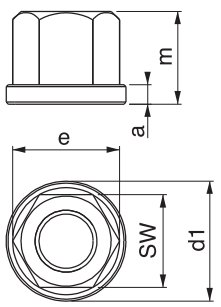




DIN 6330B Ürün Nr. 1790 Takviyeli Somun

Pullu Somun

Referans Nr.		sw	e	m	a	d1	(g)
1810-08	M8	13	15	12	3.5	18	12
1810-10	M10	17	19.7	15	4	22	25
1810-12	M12	19	21.9	18	4	25	35
1810-14	M14	22	25.4	21	4.5	28	50
1810-16	M16	24	27.7	24	5	31	70
1810-18	M18	27	31.2	27	5	34	95
1810-20	M20	30	34.6	30	6	37	130
1810-22	M22	32	36.9	33	6	40	160
1810-24	M24	36	41.5	36	6	45	230
1810-30	M30	46	53.1	45	8	58	470
1810-36	M36	55	63.0	54	10	68	800

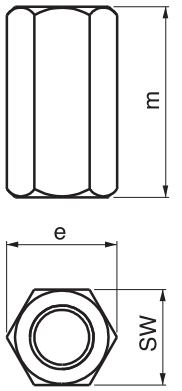




DIN 6331 Ürün Nr. 1810 Pullu Somun

Uzatma Somun

Referans Nr.		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	65
1830-14	M14	22	25.4	42	95
1830-16	M16	24	27.7	48	120
1830-18	M18	27	31.2	54	170
1830-20	M20	30	34.6	60	250
1830-22	M22	32	36.9	66	280
1830-24	M24	36	41.5	72	400
1830-30	M30	46	53.1	90	850
1830-36	M36	55	63.5	108	1470



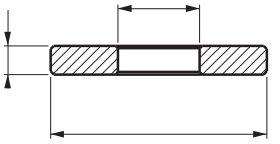


Ürün Nr. 1830 Uzatma Somun

Pul

Referans Nr.	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	35
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	75
1870-22	M22	7/8	23	50	8	95
1870-24	M24	7/8	25	60	8	170
1870-30	M30	11/8	31	68	10	230
1870-36	M36	11/4	38	80	12	350





DIN 6340 Ürün Nr. 1870 Pul

"T" Kanal Temizleyici

Referans Nr.	a	(g)
1950-1214	12-14	40
1950-1618	16-18	50
1950-2022	20-22	55
1950-2428	24-28	80

Ürün Nr. 1950 "T" Kanal temizleyici

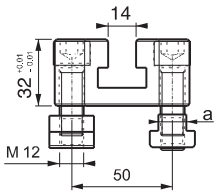


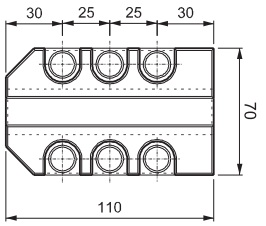


Modüler "T" Blok

Referans Nr.	a	(g)
1960-110	14-16-18-20	1200

Ürün Nr. 1960 Modüler "T" Blok







Somunlu Pullu "T" Ayaklı Saplama

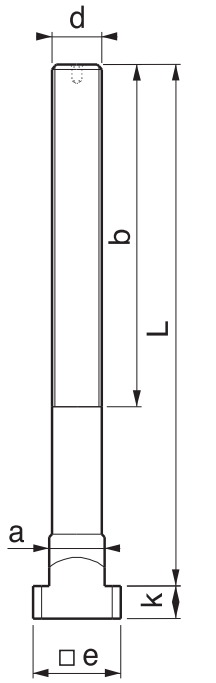
Referans Nr.	dx	x L	b	a	e	k	(g)
1610-1010040	M10x10	x40	30	9.7	15	6	65
1610-1010063		x63	45				80
1610-1010080		x80	50				90
1610-1010100		x100	60				110
1610-1012050	M10x12	x50	35	11.7	18	7	100
1610-1012063		x63	40				120
1610-1012080		x80	55				130
1610-1012100		x100	60				150
1610-1012125		x125	75				175
1610-1012160		x160	90				225
1610-1012200		x200	120				270
1610-1212050	M12x12	x50	35	11.7	18	7	120
1610-1212063		x63	40				128
1610-1212080		x80	55				130
1610-1212100		x100	65				145
1610-1212125		x125	75				170
1610-1212160		x160	100				195
1610-1212200		x200	120				220
1610-1214050	M12x14	x50	35	13.7	22	8	130
1610-1214063		x63	45				145
1610-1214080		x80	55				155
1610-1214100		x100	65				165
1610-1214125		x125	75				180
1610-1214160		x160	100				210
1610-1214200		x200	120				240
1610-1416063	M14x16	x63	45	15.7	25	9	200
1610-1416080		x80	55				220
1610-1416100		x100	65				230
1610-1416125		X125	75				280
1610-1416160		x160	100				310
1610-1416200		x200	120				350
1610-1416250		x250	150				400
1610-1616063	M16x16	x63	45	15.7	25	9	250
1610-1616080		x80	55				275
1610-1616100		x100	65				290
1610-1616125		x125	85				300
1610-1616160		x160	100				420
1610-1616200		x200	125				435
1610-1616250		x250	150				530
1610-1618063	M16x18	x63	45	17.7	28	10	260
1610-1618080		x80	55				305
1610-1618100		x100	65				315
1610-1618125		x125	85				360
1610-1618160		x160	100				390
1610-1618200		x200	125				448
1610-1618250		x250	150				560
1610-1820080	M18x20	x80	55	19.7	32	12	420
1610-1820100		x100	65				460
1610-1820125		x125	85				490
1610-1820160		x160	110				580
1610-1820200		x200	125				610
1610-1820250		x250	150				700
1610-1820315		x315	190				930
1610-2020080	M20x20	x80	55	19.7	32	12	520
1610-2020100		x100	65				560
1610-2020125		x125	85				570
1610-2020160		x160	110				680
1610-2020200		x200	125				710
1610-2020250		x250	160				800
1610-2020315		x315	190				1030
1610-2022080	M20x22	x80	55	21.7	35	14	530
1610-2022100		x100	65				610
1610-2022125		x125	85				670
1610-2022160		x160	110				710
1610-2022200		x200	125				720
1610-2022250		x250	150				890
1610-2022315		x315	190				1050
1610-2224080	M22x24	x80	55	23.7	40	16	900
1610-2224100		x100	65				960
1610-2224125		x125	85				1020
1610-2224160		x160	110				1250
1610-2224200		x200	125				1400
1610-2224250		x250	150				1600
1610-2224315		x315	190				1700

Referans Nr.	dx	x L	b	a	e	k	(g)
1610-2424100	M24x24	x100	70	23.7	40	16	910
1610-2424125		x125	85				970
1610-2424160		x160	110				1040
1610-2424200		x200	125				1265
1610-2424250		x250	150				1410
1610-2424315		x315	190				1640
1610-2424400		x400	240				1780
1610-2428100	M24x28	x100	70	27.7	44	18	980
1610-2428125		x125	85				1010
1610-2428160		x160	110				1150
1610-2428200		x200	125				1240
1610-2428250		x250	150				1500
1610-2428315		x315	190				1730
1610-2428400		x400	240				1860
1610-2428500		x500	290				2310
1610-3036125	M30x36	x125	80	35.6	54	22	1860
1610-3036160		x160	110				1950
1610-3036200		x200	135				2230
1610-3036250		x250	150				2550
1610-3036315		x315	200				2950
1610-3036500		x500	300				3950
1610-3642160	M36x42	x160	100	41.6	65	26	3220
1610-3642250		x250	175				3840
1610-3642400		x400	250				4950
1610-3642600		x600	340				6500
1610-4248160	M42x48	x160	100	47.6	75	30	6000
1610-4248250		x250	175				6900
1610-4248400		x400	250				8100

DIN 787

Ürün Nr. 1610 Somunlu Pullu "T" Ayaklı Saplama

- Malzeme 42 CrMo 4 DIN
- Kalite 10.9
- Siyah kaplama





Not: 200℃ üzerindeki ısıya mukavim ortamdaki çalışmalarda firmamız ile irtibata geçiniz.

"T" Ayaklı Saplama

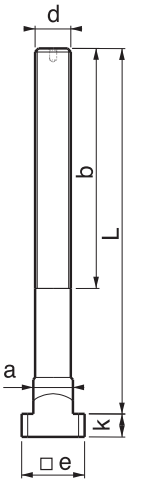
Referans Nr.	dx	x L	b	a	e	k	(g)
1590-1010040	M10x10	x40	30	9.7	15	6	30
1590-1010063		x63	45				50
1590-1010080		x80	50				60
1590-1010100		x100	60				70
1590-1012050	M10x12	x50	35	11.7	18	7	60
1590-1012063		x63	40				65
1590-1012080		x80	55				75
1590-1012100		x100	60				90
1590-1012125		x125	75				110
1590-1012160		x160	90				135
1590-1012200		x200	120				160
1590-1212050	M12x12	x50	35	11.7	18	7	65
1590-1212063		x63	40				70
1590-1212080		x80	55				80
1590-1212100		x100	65				100
1590-1212125		x125	75				120
1590-1212160		x160	100				140
1590-1212200		x200	120				170
1590-1214050	M12x14	x50	35	13.7	22	8	70
1590-1214063		x63	45				80
1590-1214080		x80	55				100
1590-1214100		x100	65				110
1590-1214125		x125	75				120
1590-1214160		x160	100				150
1590-1214200		x200	120				180
1590-1416063	M14x16	x63	45	15.7	25	9	115
1590-1416080		x80	55				130
1590-1416100		x100	65				150
1590-1416125		x125	75				180
1590-1416160		x160	100				220
1590-1416200		x200	120				280
1590-1416250		x250	150				300
1590-1616063	M16x16	x63	45	15.7	25	9	140
1590-1616080		x80	55				160
1590-1616100		x100	65				180
1590-1616125		x125	85				225
1590-1616160		x160	100				270
1590-1616200		x200	125				315
1590-1616250		x250	150				380
1590-1618063	M16x18	x63	45	17.7	28	10	160
1590-1618080		x80	55				185
1590-1618100		x100	65				203
1590-1618125		x125	85				245
1590-1618160		x160	100				280
1590-1618200		x200	125				330
1590-1618250		x250	150				430
1590-1820080	M18x20	x80	55	19.7	32	12	290
1590-1820100		x100	65				340
1590-1820125		x125	85				390
1590-1820160		x160	110				470
1590-1820200		x200	125				550
1590-1820250		x250	150				670
1590-1820315		x315	190				800
1590-2020080	M20x20	x80	55	19.7	32	12	300
1590-2020100		x100	65				350
1590-2020125		x125	85				400
1590-2020160		x160	110				480
1590-2020200		x200	125				560
1590-2020250		x250	160				690
1590-2020315		x315	190				820
1590-2022080	M20x22	x80	55	21.7	35	14	330
1590-2022100		x100	65				370
1590-2022125		x125	85				428
1590-2022160		x160	110				500
1590-2022200		x200	125				570
1590-2022250		x250	150				680
1590-2022315		x315	190				820
1590-2224080	M22x24	x80	55	23.7	40	16	480
1590-2224100		x100	65				540
1590-2224125		x125	85				600
1590-2224160		x160	110				770
1590-2224200		x200	125				900
1590-2224250		x250	150				960
1590-2224315		x315	190				1270

Referans Nr.	dx	x L	b	a	e	k	(g)
1590-2424100	M24x24	x100	70	23.7	40	16	540
1590-2424125		x125	85				600
1590-2424160		x160	110				770
1590-2424200		x200	125				900
1590-2424250		x250	150				960
1590-2424315		x315	190				1270
1590-2424400		x400	240				1410
1590-2428100	M24x28	x100	70	27.7	44	18	650
1590-2428125		x125	85				730
1590-2428160		x160	110				800
1590-2428200		x200	125				950
1590-2428250		x250	150				1120
1590-2428315		x315	190				1350
1590-2428400		x400	240				1500
1590-2428500		x500	290				1950
1590-3036125	M30x36	x125	80	35.6	54	22	1250
1590-3036160		x160	110				1450
1590-3036200		x200	135				1650
1590-3036250		x250	150				1900
1590-3036315		x315	200				2100
1590-3036500		x500	300				3300
1590-3642160	M36x42	x160	100	41.6	65	26	2200
1590-3642250		x250	175				2820
1590-3642400		x400	250				3930
1590-3642600		x600	340				5480
1590-4248160	M42x48	x160	100	47.6	75	30	3400
1590-4248250		x250	175				4300
1590-4248400		x400	250				5800

DIN 787

Ürün Nr. 1590 "T" Ayaklı Saplama

- Malzeme 42 CrMo 4 DIN
- Kalite 10.9
- Siyah kaplama





Not: 200℃ üzerindeki ısıya mukavim ortamdaki çalışmalarda firmamız ile irtibata geçiniz.



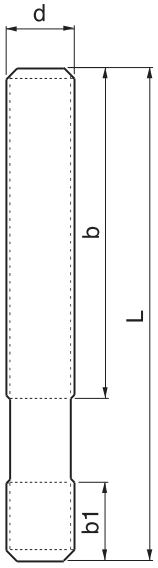
Düz Saplama

Referans Nr.	d x L	b1	b	(g)
1690-08040	x40		20	10
1690-08063	x63		40	20
1690-08080	x80		50	25
1690-08100	M8 x100	11	63	30
1690-08125	x125		75	35
1690-08160	x160		100	45
1690-10050	x50		25	25
1690-10063	x63		32	35
1690-10080	x80		50	40
1690-10100	M10 x100	13	75	50
1690-10125	x125		75	60
1690-10160	x160		100	80
1690-10200	x200		125	100
1690-12050	x50		25	35
1690-12063	x63		32	45
1690-12080	x80		50	55
1690-12100	M12 x100	15	63	70
1690-12125	x125		75	90
1690-12160	x160		100	115
1690-12200	x200		125	140
1690-14063	x63		32	95
1690-14080	x80		50	90
1690-14100	x100		63	95
1690-14125	M14 x125	17	75	120
1690-14160	x160		100	150
1690-14200	x200		125	195
1690-14250	x250		160	240
1690-16063	x63		32	85
1690-16080	x80		50	105
1690-16100	x100		63	130
1690-16125	x125		75	160
1690-16160	M16 x160	19	100	220
1690-16200	x200		125	280
1690-16250	x250		160	325
1690-16315	x315		180	425
1690-16500	x500		315	650
1690-18080	x80		50	130
1690-18100	x100		60	160
1690-18125	x125		75	200
1690-18160	M18 x160	23	100	260
1690-18200	x200		125	320
1690-18250	x250		150	400
1690-18315	x315		180	500
1690-20080	x80		32	190
1690-20100	x100		60	220
1690-20125	x125		70	260
1690-20160	x160		100	330
1690-20200	M20 x200	27	125	410
1690-20250	x250		160	510
1690-20315	x315		200	640
1690-20400	x400		250	815
1690-20500	x500		315	1020
1690-22100	x100		45	270
1690-22125	x125		60	330
1690-22160	x160		100	430
1690-22200	M22 x200	31	125	500
1690-22250	x250		160	670
1690-22315	x315		180	790
1690-22400	x400		250	1070
1690-24100	x100		45	290
1690-24125	x125		70	380
1690-24160	x160		100	470
1690-24200	x200		125	580
1690-24250	M24 x250	35	160	730
1690-24315	x315		200	920
1690-24400	x400		250	1160
1690-24500	x500		315	1450
1690-24630	x630		315	1650
1690-30125	x125		56	600
1690-30200	x200		125	950
1690-30250	x250		160	1230
1690-30315	M30 x315	43	200	1500
1690-30500	x500		315	2360
1690-30700	x700		400	3300
1690-301000	x1000		400	4700

Referans Nr.	d x L	b1	b	(g)
1690-36160	x160		80	1100
1690-36200	x200		125	1340
1690-36250	x250		160	1710
1690-36315	M36 x315	51	200	2150
1690-36400	x400		250	2700
1690-36500	x500		315	3450
1690-36700	x700		400	4750
1690-42315	x315		200	2950
1690-42400	M42 x400	59	250	3750
1690-42500	x500		315	4690

DIN 6379
Ürün Nr. 1690 Düz Saplama

- Malzeme 41Cr 4 DIN
- Kalite 10.9
- Siyah kaplama

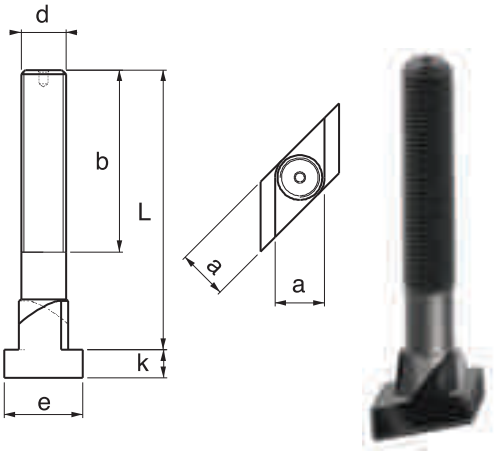




Not: 200℃ üzerindeki ısıya mukavim ortamdaki çalışmalarda firmamız ile irtibata geçiniz.

Dereceli "T" Ayaklı Saplama

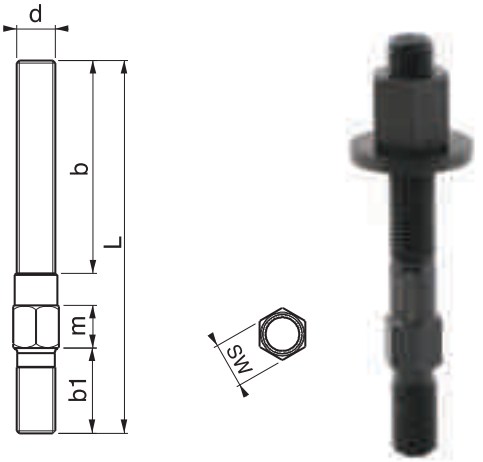
Referans Nr.	dx a	x L	b	a	e	k	(g)
1650-1214050		x50	35				70
1650-1214080	M12x14	x80	55	13.7	22	8	100
1650-1214125		x125	75				120
1650-1618063		x63	45				160
1650-1618100	M16x18	x100	65	17.7	28	10	220
1650-1618160		x160	100				280
1650-2022080		x80	55				330
1650-2022125	M20x22	x125	85	21.7	35	14	430
1650-2022200		x200	120				570
1650-2428100		x100	70				650
1650-2428125	M24x28	x125	85	27.7	44	18	770
1650-2428250		x250	150				1150



Ürün Nr. 1650 Dereceli "T" Ayaklı Saplama

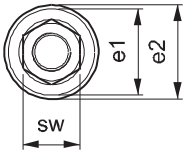
Anahtar Ağızlı Saplama

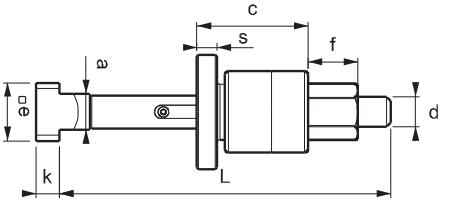
Referans Nr.	d	L	b	b1	m	sw	(g)
1670-12130 1670-12160	M12	130 160	65 90	24	14	14	160 185
1670-14130 1670-14160	M14	130 160	65 90	28	15	15	216 246
1670-16140 1670-16160	M16	140 160	70 95	32	16	17	295 340
1670-18150 1670-18180	M18	150 180	70 95	35	19	19	395 450
1670-20150 1670-20180	M20	150 180	70 95	40	22	22	500 565
1670-22150 1670-22180	M22	150 180	70 95	40	22	24	650 900
1670-24170 1670-24205 1670-24250	M24	170 205 250	75 105 140	47	22	27	850 1025 1200
1670-30260 1670-30315	M30	260 315	145 195	55	32	36	1470 1800



Ürün Nr. 1670 Anahtar Ağızlı Saplama

Kombine "T" Ayaklı Saplama



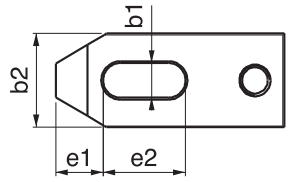


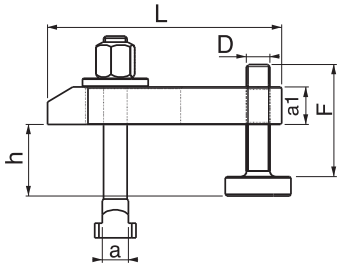
Referans Nr.	dx a	xL	a	e	k	h-H	e1	e2	c	s	f	sw	(g)
1630-2022200	M20x22x200		21.7	35	14	25-75	49	69	92	12	30	30	1550
1630-2022250	M20x22x250		21.7	35	14	70-120	49	69	92	12	30	30	1800
1630-2424200	M24x24x200		23.7	40	16	25-75	53	74	92	12	30	36	1900
1630-2424250	M24x24x250		23.7	40	16	70-120	53	74	92	12	30	36	2100
1630-2428200	M24x28x200		27.7	44	18	25-75	53	74	92	12	30	36	2200
1630-2428250	M24x28x250		27.7	44	18	70-120	53	74	92	12	30	36	2500
1630-3036200	M30x36x200		35.6	54	22	25-75	68	88	94	14	30	46	3250
1630-3036250	M30x36x250		35.6	54	22	70-120	68	88	94	14	30	46	3500



Ürün Nr. 1630 Kombine "T" Ayaklı Saplama

Ayarlanabilir Destek Civatalı



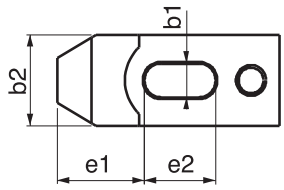


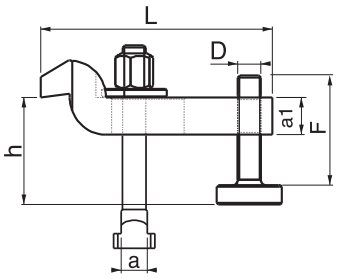


Referans Nr.	a	L	a1	b2	e1	e2	b1		h	D x F	(g)
1170-1010080	10	80	15	30	15	30	11	M10x10x80	10-35	M10x42	330
1170-1212100	12	100	20	40	21	40	14.5	M12x12x100	12-40	M12x50	700
1170-1212125	12	125	20	40	21	50	14.5	M12x12x160	12-85	M12x95	740
1170-1214100	14	100	20	40	21	40	14.5	M12x14x100	12-40	M12x50	730
1170-1214125	14	125	20	40	21	50	14.5	M12x14x160	12-85	M12x95	750
1170-1616125	16	125	25	50	26	45	18.5	M16x16x125	15-50	M16x62	1400
1170-1616160	16	160	25	50	26	65	18.5	M16x16x160	15-85	M16x97	1600
1170-1618125	18	125	25	50	26	45	18.5	M16x18x125	15-50	M16x62	1500
1170-1618160	18	160	25	50	26	65	18.5	M16x18x160	15.85	M16x97	1600
1170-2020160	20	160	30	60	30	60	22.5	M20x20x160	15-45	M20x62	2600
1170-2020200	20	200	30	60	30	80	22.5	M20x20x200	15-80	M20x97	2700
1170-2022160	22	160	30	60	30	60	22.5	M20x22x160	15-45	M20x62	2800
1170-2022200	22	200	30	60	30	80	22.5	M20x22x200	15-80	M20x97	2900
1170-2424160	24	160	30	70	35	60	26.5	M24x24x160	16-60	M24x81	3200
1170-2424200	24	200	30	70	35	80	26.5	M24x24x200	16-95	M24x116	3650
1170-2428160	28	160	30	70	35	60	26.5	M24x28x160	16-60	M24x81	4000
1170-2428200	28	200	30	70	35	80	26.5	M24x28x200	16-95	M24x116	4150

Ürün Nr. 1170 Ayarlanabilir Destek Civatalı Kombine Bağlama Pabuç

Kombine Bağlama Z Pabucu





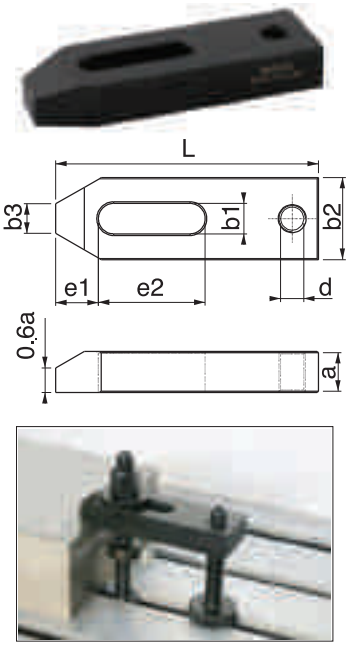


Referans Nr.	a	L	a1	b2	e1	e2	b1		h	D x F	(g)
1190-1010100	10	100	15	30	32	32	11	M10x10x80	26-50	M10x42	350
1190-1212125	12	125	20	40	40	40	14.5	M12x12x100	33-60	M12x50	700
1190-1214125	14	125	20	40	40	40	14.5	M12x14x100	37-60	M12x50	750
1190-1616160	16	160	25	50	49	50	18.5	M16x16x125	41-75	M16x62	1300
1190-1618160	18	160	25	50	49	50	18.5	M16x18x125	41-75	M16x62	1500
1190-2020200	20	200	30	60	55	70	22.5	M20x20x160	46-75	M20x62	2500
1190-2022200	22	200	30	60	55	70	22.5	M20x22x160	46-75	M20x62	2700
1190-2424200	24	200	35	70	72	60	26	M24x24x200	52-95	M24x81	3800
1190-2428200	28	200	35	70	72	60	26	M24x28x200	52-95	M24x81	4000

Ürün Nr. 1190 Ayarlanabilir Destek Civatalı Kombine Bağlama "Z" Pabuç

Destek Delikli Düz Pabuç

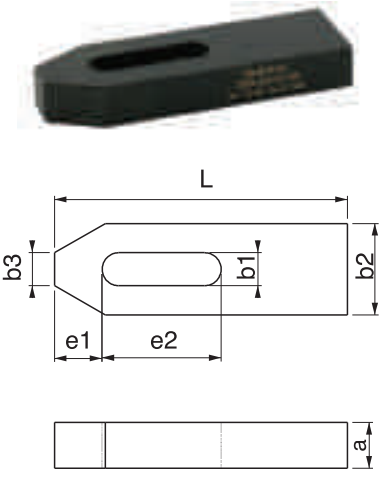
Referans Nr.	L	b1	metrik	whitworth	a	b2	b3	e1	e2	d	(g)
1330-06050	50	6,6	M6	1/4	10	20	8	10	20	M8	60
1330-08060	60	9	M8	5/16	12	25	10	13	22	M8	110
1330-10080	80	11	M10	3/8	15	30	12	15	30	M10	200
1330-12100	100	14,5	M12-M14	1/2	20	40	14	21	40	M12	550
1330-12125	125							21	50		600
1330-16125	125	18.5	M16-M18	5/8	25	50	18	26	45	M16	1100
1330-16160	160								65		1330
1330-20160	160	22.5	M20-M22	3/4	30	60	22	30	60	M20	2000
1330-20200	200				30	60	22		80		2200
1330-20250	250				35	70	30		100		2500
1330-24160	160	26	M24	1	30	70	26	35	60	M24	1900
1330-24200	200				35	70	26		80		2500
1330-24250	250				35	70	30		100		3750
1330-24315	315				40	80	35		130		4200
1330-30250	250	33	M30	11 / 4	40	80	34	45	100	M24	4800
1330-30315	315				50				130		7600
1330-36400	400	43	M36-M42	11 / 2	60	100	43	100	150	M24	17800



Ürün Nr. 1330 Destek Delikli Düz Pabuç

Düz Pabuç

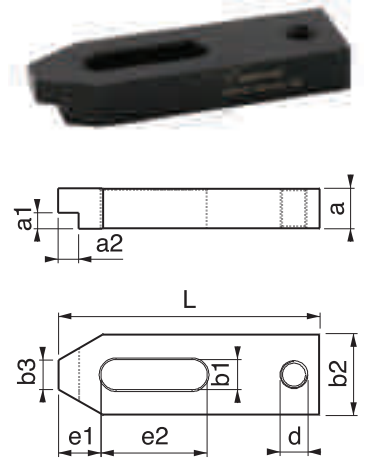
Referans Nr.	L	b1	metrik	whitworth	a	b2	b3	e1	e2	(g)
1350-06050	50	6.6	M6	1/4	10	20	8	10	20	60
1350-08060	60	9	M8	5/16	12	25	10	13	22	110
1350-10080	80	11	M10	3/8	15	30	12	15	30	220
1350-12100	100	14.5	M12-M14	1/2	20	40	14	21	40	490
1350-12125	125								50	640
1350-16125	125	18.5	M16-M18	5/8	25	50	18	26	45	1000
1350-16160	160								65	1270
1350-20160	160	22.5	M20-M22	3/4	30	60	22	30	60	1830
1350-20200	200								80	2240
1350-24200	200	26	M24	1	30	70	26	35	80	2650
1350-24250	250				35				100	3850
1350-30250	250	33	M30	11/4	40	80	34	45	100	5000
1350-30315	315				50				130	7800
1350-36400	400	43	M36-M42	11/2	60	100	43	100	150	18000



Ürün Nr. 1350 Düz Pabuç

Kademeli Destek Delikli Düz Pabuç

Referans Nr.	L	b1	metrik	whitworth	a	b2	a1xa2	b3	e1	e2	d	(g)
1370-10080	80	11	M10	3/8	15	30	5X8	12	15	30	M10	200
1370-12100	100	14.5	M12-14	1/2	20	40	8x10	14	21	40	M12	470
1370-12125	125									50		610
1370-16125	125	18.5	M16-18	5/8	25	50	10x12.5	18	26	45	M16	960
1370-16160	160									65		1190
1370-20160	160	22,5	M20-22	3/4	30	60	12x15	22	30	60	M20	1730
1370-20200	200									80		2140
1370-24160	160	26	M24	1	30	70	12x15	26	35	60	M24	1900
1370-24200	200				35		14x17			80		2500
1370-24250	250				35		14x17			100		3700

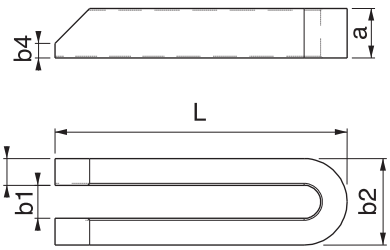


Ürün Nr. 1370 Kademeli Destek Delikli Düz Pabuç

Çatal Pabuç

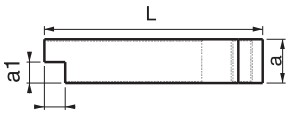
Referans Nr.	L	b1	metrik	whitworth	a	b2	b3	b4	(g)
1390-06060	60	6.6	M6	1/4	12	19	6	3	60
1390-08080	80	9	M8	5/16	15	25	8	4	140
1390-10100	100	11	M10	3/8	20	31	10	5	300
1390-12125 1390-12160 1390-12200	125 160 200	14.5	M12-M14	1/2	25	38	12	6	570 730 910
1390-16160 1390-16200 1390-16250	160 200 250	18.5	M16-M18	5/8	30 30 40	48	15	8 8 10	1080 1360 2250
1390-20200 1390-20250 1390-20315 1390-20500	200 250 315 500	22.5	M20-M22	3/4	40 40 40 50	52 62 62 62	15 20 20 20	10	1800 3000 3850 7500
1390-24200 1390-24250 1390-24315 1390-24500	200 250 315 500	26	M24	1	40 40 40 50	66	20	10	2400 3000 3850 7600
1390-30250 1390-30315 1390-30400 1390-30600 1390-301000	250 315 400 600 1000	33	M30	11/4	50 50 50 50 60	74 74 74 74 94	20 20 20 20 30	12	3700 4750 6100 9200 28000
1390-36400 1390-36600	400 600	40	M36	11/2	60	100	30	12	11000 16500
1390-42600	600	43	M42	11/2	80	123	40	12	29600

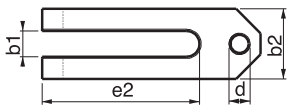






Ürün Nr. 1390 Çatal Pabuç





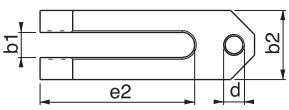
Kademeli Destek Delikli Çatal Pabuç

Referans Nr.	L	b1	metrik	whitworth	a	e2	a1xa2	b2	d	(g)
1400-10100	100	11	M10	3/8	20	70	10x10	30	M10	300
1400-12125	125	14.5	M12-14	1/2	25	90	12x12	40	M12	600
1400-16160	160	18.5	M16-18	5/8	30	110	15x15	50	M16	1200
1400-20200	200	22.5	M20-22	3/4	40	135	20x20	60	M20	2900



Ürün Nr. 1400 Kademeli Destek Delikli Çatal Pabuç





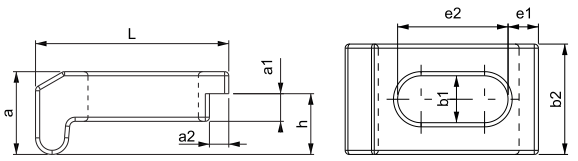
Destek Delikli Çatal Pabuç

Referans Nr.	L	b1	metrik	whitworth	a	e1	e2	b2	d	(g)
1410-10100	100	11	M10	3/8	20	5	70	30	M10	300
1410-12125	125	14.5	M12-M14	1/2	25	6	90	40	M12	600
1410-16160	160	18.5	M16-M18	5/8	30	8	110	50	M16	1200
1410-20200	200	22.5	M20-M22	3/4	40	10	135	60	M20	2900



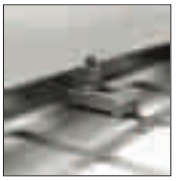
Ürün Nr. 1410 Destek Delikli Çatal Pabuç

Plaka Sıkma Pabucu

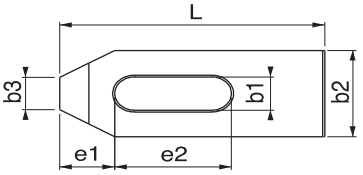




Referans Nr.	L	b1	metrik	whitworth	a	b2	a1xa2	e1	e2	h	(g)
1387-12070	70	13	M12	1/2	22	40	8x6	11	40	14	300
1387-16070	70	17	M16	5/8	30	40	10x7	11	40	22	350



Merdiven Diş Bağlama Pabucu





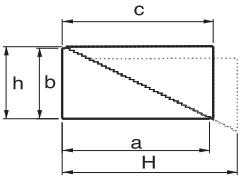


Referans Nr.	L	b1	metrik	whitworth	a	b2	b3	e1	e2	(g)
1290-06050	50	6.6	M6	1/4	10	20	8	10	20	50
1290-06080	80								30	80
1290-08060	60	9	M8	5/16	12	25	10	13	22	90
1290-08100	100								45	170
1290-10080	80	11	M10	3/8	15	30	12	15	30	190
1290-10100	100								45	340
1290-12100	100	14.5	M12-M14	1/2	20	40	14	21	45	450
1290-12125	125								55	600
1290-16125	125	18.5	M16-M18	5/8	25	50	18	26	55	800
1290-16160	160								65	1400

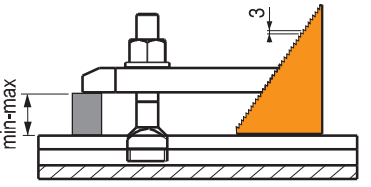


Ürün Nr. 1290 Merdiven Diş Bağlama Pabucu

Merdiven Diş Destek



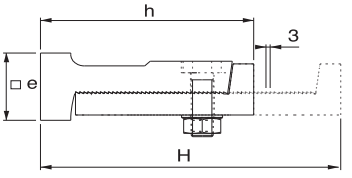






Referans Nr.	h-H	a	b	c	min-max	(g)
1310-01	37-85	57	35	60	0-40	490
1310-02	48-112	73	45	76	0-60	780
1310-03	58-139	90	55	93	0-75	1160
1310-04	66-165	108	64	111	0-90	1500

Ürün Nr. 1310 Merdiven Diş Destek



Merdiven Diş Kombine Destek



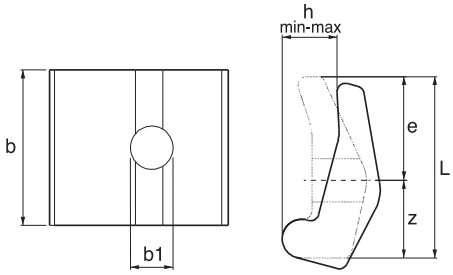
Referans Nr.	h-H	e	kgf	(g)
1585-050	110-150	50	4000	1300
1585-060	155-220	60	5000	2600
1585-080	220-340	80	6000	6000

Ürün Nr. 1585 Merdiven Diş Kombine Destek



"L" pabuç

Referans Nr.	b1	metrik	h min - max	e	z	L	b	(g)
1430-013	13	M10-M12	3-12	23	20	43	36	150
1430-025	25	M22-M24	3-30	46	40	86	75	1000

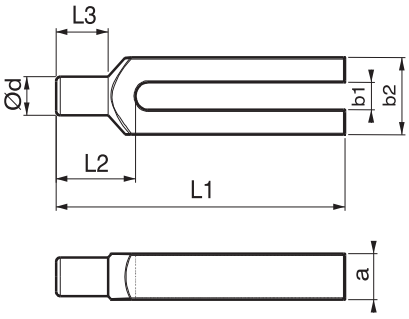


Ürün Nr. 1430 "L" pabuç

Silindir Başlı Çatal Pabuç



Referans Nr.	L1	b1	metrik	whitworth	a	b2	ød	L2	L3	(g)
1470-08100	100	9	M8	5/16	15	30	12	30	18	220
1470-10125	125	11	M10	3/8	20	30	16	36	24	350
1470-12160 1470-12200	160 200	14.5	M12-M14	1/2	25	40	20	45	30	770 980
1470-16200 1470-16250	200 250	18.5	M16-M18	5/8	30	50	24	55	36	1450 1750
1470-20250 1470-20315	250 315	22.5	M20-M22	3/4	40	60	30	65	45	2750 3450
1470-24250 1470-24315	250 315	26	M24	1	40	70	38	80	56	3200 4100
1470-30315 1470-30400	315 400	34	M30	11/4	50	80	45	85	56	5700 7000

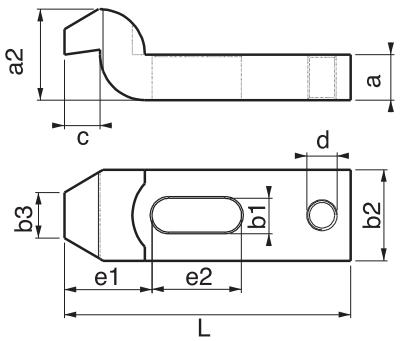


DIN 6315C Ürün Nr. 1470 Silindir Başlı Çatal Pabuc

Destek Delikli "Z" Bağlama Pabucu



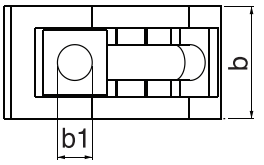
Referans Nr.	L	b1	metrik	whitworth	a	b2	b3	c	e1	e2	d	(g)
1450-06060	60	6.6	M6	1/4	10	20	10	8	20	20	M8	80
1450-08080	80	9	M8	5/16	12	25	12	9	25	25	M8	160
1450-10100	100	11	M10	3/8	15	30	15	12	32	32	M10	300
1450-12125	125	14.5	M12-M14	1/2	20	40	20	16	40	40	M12	570
1450-16125 1450-16160	125 160	18.5	M16-M18	5/8	25	50	25	20	49	40 50	M16	980 1150
1450-20160 1450-20200	160 200	22.5	M20-M22	3/4	30	60	30	24	55	55 70	M20	1800 2150
1450-24160 1450-24200 1450-24250	160 200 250	26	M24	1	35	70	35	28	53 72 72	55 60 80	M24	2100 2560 3100
1450-30250 1450-30315	250 315	33	M30	11/4	40 50	80	40	40	91	80 100	M24	5400 9000

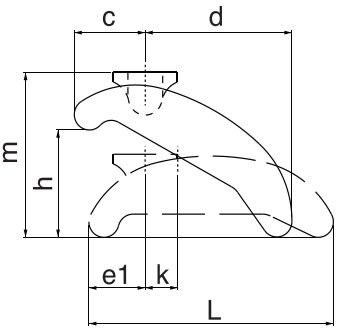


DIN 6316 Ürün Nr. 1450 Destek Delikli "Z" Bağlama Pabucu

Kademeli Bağlama Pabucu



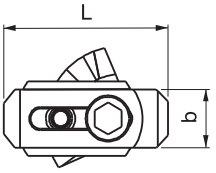




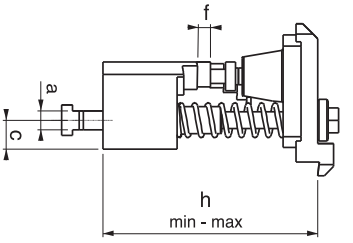
Referans Nr.	b1		m	h	b x L	c	d	e1	k	(g)
1210-013	13	M10-M12	52	0-40	40x90	28	48	23	14	275
1210-017	17	M14-M16	80	0-60	58x130	38	74	29	18	790
1210-021	21	M18-M20	98	0-75	68x140	46	80	32	20	1200
1210-025	25	M22-M24	110	0-90	78x175	52	100	39	24	1700



Ürün Nr. 1210 Kademeli Bağlama Pabucu



Basamaklı Kombine Pabuç





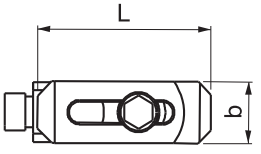


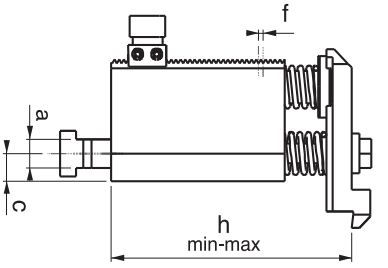
Referans Nr.	a	h min - max	f	c	L	b	(g)
1230 - 01	14-16-18-20-22	40 - 80	5	16	110	38	950
1230 - 02		70 - 125	10	16	110	38	1400
1230 - 03		120 - 175	10	18	110	38	2600
1230 - 04		170 - 225	10	23	110	38	4000

Ürün Nr. 1230 Basamaklı Kombine Pabuç



Kombine Bağlama Pabucu





Referans Nr.	a	h min - max	f	c	L	b	(g)
1250 - 02	14-16-18-20-22	80-137	3	17	110	38	1750
1250 - 03		125-224	3	17	110	38	2500
1250 - 04		160-300	3	17	110	38	3200



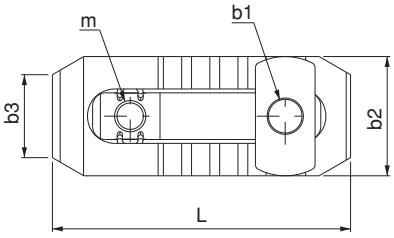
Çift Taraflı Bağlama Pabucu

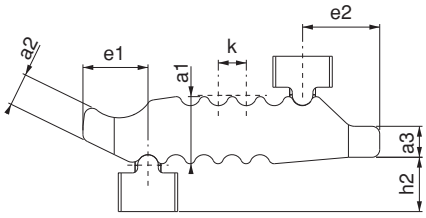
Referans Nr.	a	a1	a2	a3	b2xL	b3	e1	e2	h2	k	b1	m	h1	kgf	(g)
1195-44115	10-12-14	27	12.5	12	44x115	30	25	30	21	11	13	M12	0-55	3000	506
1195-55150	12-14-16-18	36	18	17	55x150	41	35	36	23	12	17	M16	0-70	4000	1382
1195-63187	16-18-20-22	42	25	20	63x187	30	44	44	32.5	14	21	M20	0-80	6000	2241
1195-70235	20-22-24-28	51	36.5	24	70x235	30	60	47	34	17	25	M20	0-100	7500	3550

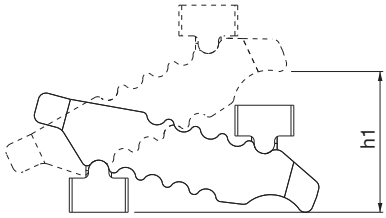
Ürün Nr. 1195 Çift Taraflı Bağlama Pabucu
- Malzeme: Ck45 DIN Dövme Çelik
- Sertlik: 32-35 HRC
- Siyah Kaplama

Product Nr. 1195 Coupling Clamps Double Sided
- Metarial: Ck45 DIN Forged Steel
- Hardness: 32-35 HRC
- Black coating









Kademeli Bağlama Pabucu

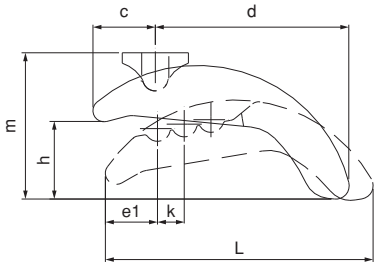
Referans Nr.	b1	a	DIN 787	m	h	b x L	c	d	e1	k x3	(kg)
1205-017	17	16-18	-	93	15-50	65x165	39	128	30	17	2.10
1205-021	21	20-22	-	111	20-65	75x189	43	146	33	19	3.20
1205-025	25	24-28	-	126	20-75	85x213	49	164	39	21	4.50
1205-031	31	36	-	143.5	20-85	95x238	56	182	46	23	6.30
1205-016	17	16	M16x16x125	93	15-50	65x165	39	128	30	17	2.50
1205-018	17	18	M16x18x125	93	15-50	65x165	39	128	30	17	2.50
1205-020	21	20	M20x20x160	111	20-65	75x189	43	146	33	19	3.90
1205-022	21	22	M20x22x160	111	20-65	75x189	43	146	33	19	3.90
1205-024	25	24	M24x24x200	126	20-75	85x213	49	164	39	21	5.70
1205-028	25	28	M24x28x200	126	20-75	85x213	49	164	39	21	5.70
1205-036	31	36	M30x36x250	143.5	20-85	95x238	56	182	46	23	8.80

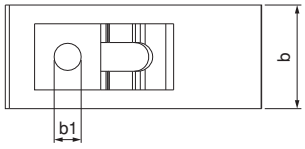




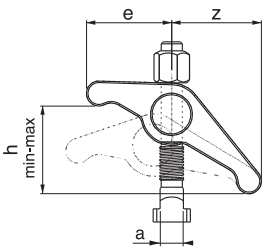
Ürün Nr. 1205 Kademeli Bağlama Pabucu
- Destek kullanmadan 15-85mm arası kullanım imkanı sağlar
- Malzeme: Ck45 DIN Dövme Çelik
- Sertlik: 32-35 HRC
- Siyah kaplama

Product Nr. 1205 Stepped Coupling Clamp
- It provides using between 15-85 mm without supporting.
- Material: Ck45 DIN Forged Steel
- Hardness: 32-35 HRC
- Black coated

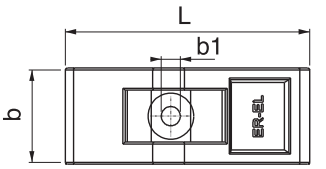








Desteksiz Askı Pabuç

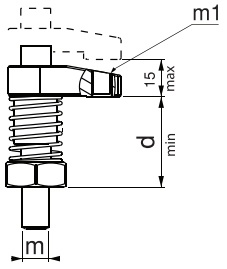


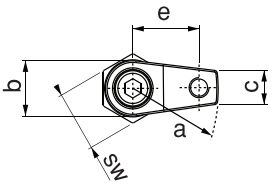
Referans Nr.	a	h min-max	b1	e	z	L	b	(g)
1270-1012 1270-1214	12 14	0-45	11 13	48	61	109	40	710
1270-1416 1270-1618	16 18	0-55	15 17	57	72	129	50	1200

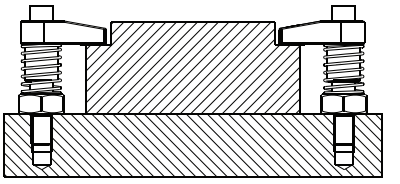


Ürün Nr. 1270 Desteksiz Askı Pabuç

Kombine Burçlu Pabuç



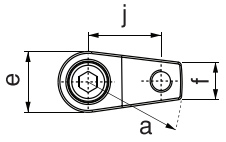


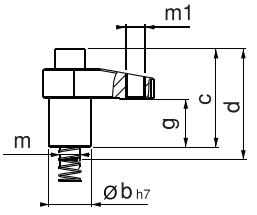


Referans Nr.	a	b	c	d	e	m	sw	m1	(g)
1275-3012	30	28	16	40	23	M12	30	M8	290
1275-5012	50	32	20	45	40	M12	36	M12	500
1275-5016	50	32	20	45	40	M16	36	M12	500
1275-6016	60	40	25	45	45	M16	41	M16	750



Ürün Nr. 1275 Kombine Burçlu Pabuç



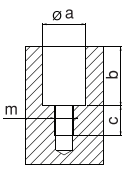


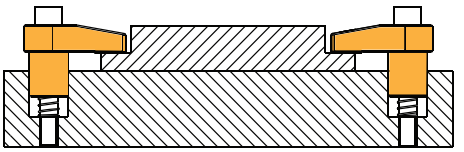


Referans Nr.	a	ø b h7	c	d	e	f	g	m	m1	j	(g)
1280-3010	30	22	54	75	28	16	30	M10	M8	23	200
1280-5012	50	26	65	85	32	20	40	M12	M12	40	350
1280-6016	60	32	71	95	40	25	40	M16	M12	45	610

Ürün Nr. 1280 Kombine Burçlu Pabuç

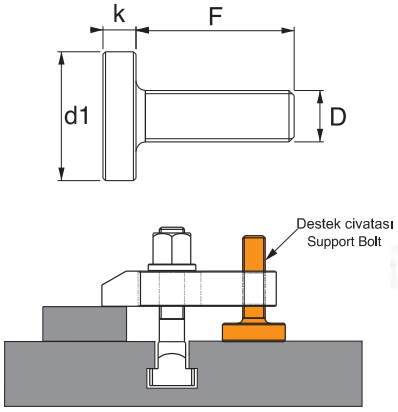
Referans Nr.	a (F7)	b	c	m
1280-3010	22	30	20	M10
1280-5012	26	40	25	M12
1280-6016	32	40	25	M16





Pabuç Destek Civatası

Referans Nr.	D x F	d1	k	(g)
1490-10042	M10x42	30	8	60
1490-12050	M12x50	36	10	100
1490-12095	M12x95	36	10	150
1490-16062	M16x62	45	13	200
1490-16097	M16x97	45	13	250
1490-16117	M16x117	45	13	300
1490-20062	M20x62	50	13	340
1490-20097	M20x97	50	13	400
1490-20117	M20x117	50	13	430
1490-24081	M24x81	50	14	600
1490-24116	M24x116	50	14	850

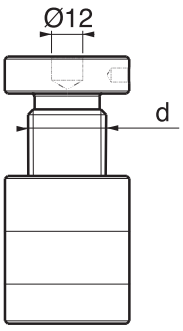




Ürün Nr. 1490 Pabuç Destek Civatası

Trapez Diş Yükseltici Destek

Referans Nr.	h H	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 30x4	50	50	6000	550
1510-050070	50-70	Tr 30x4	50	50	6000	620
1510-070100	70-100	Tr 30x4	50	50	6000	900
1510-100140	100-140	Tr 30x4	50	50	6000	1600
1510-140220	140-220	Tr 30x4	54	54	6000	2400
1510-210330	210-330	Tr 30x6	58	58	5000	3900
1510-260430	260-430	Tr 30x6	68	68	4000	6700

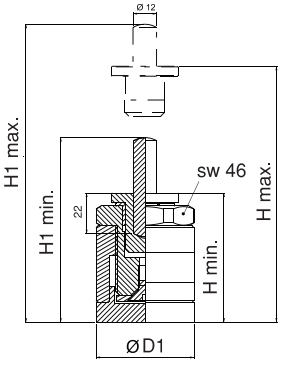




Ürün Nr. 1510 Trapez Diş Yükseltici Destek

Manyetik Vidalı Yükseltici

Referans Nr.	H min.	H max.	D1	Ø12x50 H1 min.- H1 max.	Ø12x80 H1 min.- H1 max.	kgf	(g)
1515-065085	65	85	50	93-113	123-143	3000	800
1515-085125	85	125	50	113-153	143-183	3000	1000

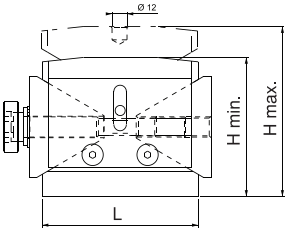




Ürün Nr. 1515 Manyetik Vidalı Yükseltici

Blok Destek

Referans Nr.	H min.	H max.	b1	b2	L	sw	Sıkma kuvveti Clamping force kgf	(g)
1520-050063	50	63	-	40	63	8	4000	1300
1520-100125	100	125	115	60	125	14	10000	8600
1520-170190	170	190	145	80	175	22	25000	23750

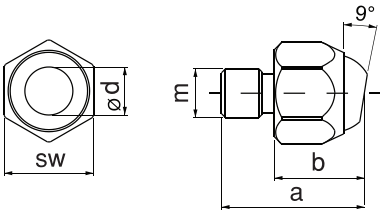




Ürün Nr. 1520 Blok Destek

Oynar Başlı Baskı Pabucu

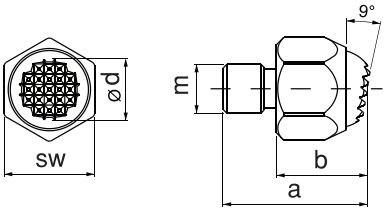
Referans Nr.	a	b	m	d	sw	(g)
1282-0825	25	12	M8	8	14	20
1282-1030	30	16	M10	10	17	30
1282-1235	35	22	M12	12	22	70
1282-1642	42	26	M16	14	27	140





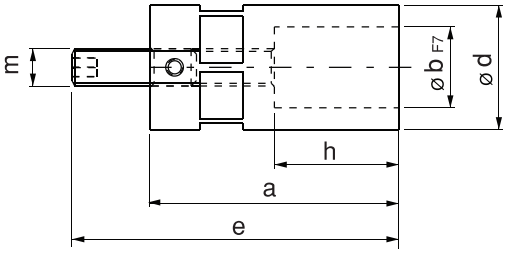
Ürün Nr. 1282 Oynar Başlı Baskı Pabucu

Referans Nr.	a	b	m	d	sw	(g)
1283-0825	25	12	M8	8	14	20
1283-1030	30	16	M10	10	17	30
1283-1235	35	22	M12	12	22	70
1283-1642	42	26	M16	14	27	140

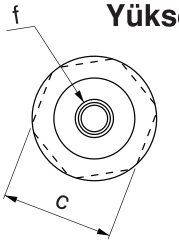


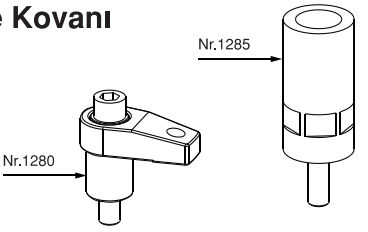


Ürün Nr. 1283 Oynar Başlı Baskı Pabucu



Yükseltme Kovanı

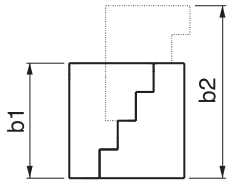




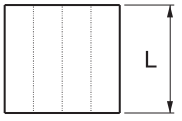
Referans Nr.	a	b F7	c	d	e	f	m	h	(g)
1285-12080	80	26	36	40	110	M12	M12	40	600
1285-12100	100	26	36	40	130	M12	M12	40	800
1285-16080	80	32	46	50	110	M16	M16	40	830
1285-16100	100	32	46	50	130	M16	M16	40	1200

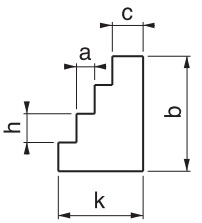


Ürün Nr. 1285 Yükseltme Kovanı



Basamaklı Destek





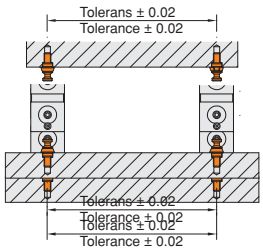
Referans Nr.	h	a	c	k	b	L	b1	b2	(g)
1580-050	13	8	13	37	52	50	52	78	480
1580-060	16	10	17	47	64	60	64	96	880
1580-070	19	13	18	57	76	70	76	114	1400



Ürün Nr. 1580 Basamaklı Destek

5-Eksen Blok Bağlama Çektirme Civatası

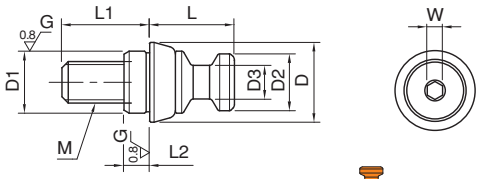
Referans Nr.	M	D1 (g6)	L2	L1	D	L	D2	D3	W	(g)
0950-08061L	M6	10	5	17	15.5	16.5	11	6.5	3	17
0950-08000L	M8	12	5	17	15.5	16.5	11	6.5	3	20
0950-12081L	M8	12	5	17	24.5	25	16	9.5	5	52
0950-12001L	M12	18	6	24	24.5	25	16	9.5	5	70

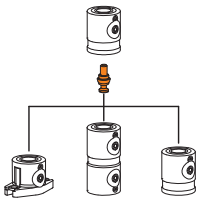


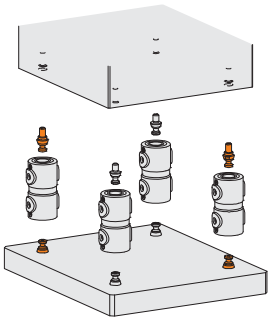


Ürün Nr. 0950 5-Eksen Blok Bağlama Çektirme Civatası
• Tolerans ±0.02

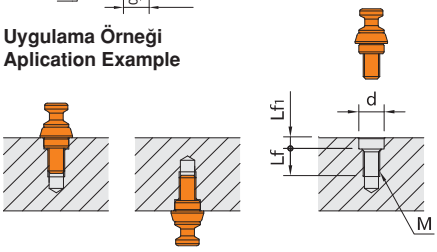
Product Nr. 0950 5-Axis Clamping Block Puller Bolt
• Tolerance ± 0.02







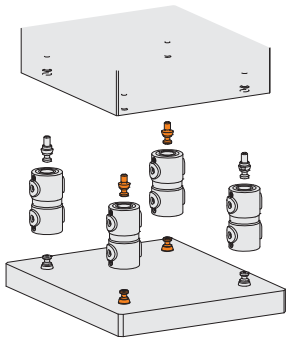
Uygulama Örneği
Aplication Example



Referans Nr.	d (H7)	Lf	Lf1	M
0950-08061L	10	13	5.5	M6
0950-08000L	12	13	5.5	M8
0950-12081L	12	13	5.5	M8
0950-12001L	18	19	6.5	M12

5-Eksen Blok Bağlama Çektirme Civatası

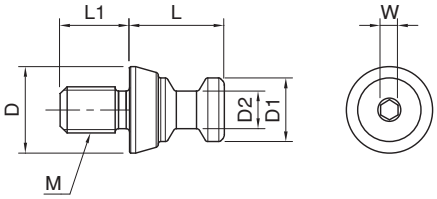
Referans Nr.	M	L1	D	L	D1	D2	W	(g)
0950-08061M	M6	9	15	16.5	11	6.5	3	13
0950-08001M	M8	12	15	16.5	11	6.5	3	16
0950-12081M	M8	12	24	25	16	9.5	5	46
0950-12001M	M12	18	24	25	16	9.5	5	57





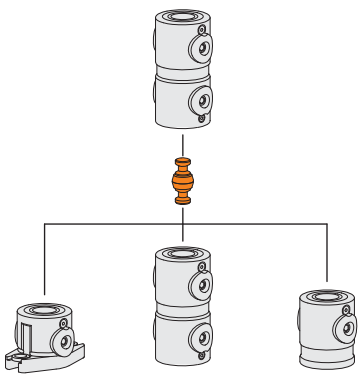
Ürün Nr. 0950 5-Eksen Blok Bağlama Çektirme Civatası
• Tolerans ±0.2

Product Nr. 0950 5-Axis Clamping Block Puller Bolt
• Tolerance ±0.2



5-Eksen Blok Bağlama Çektirme Civatası

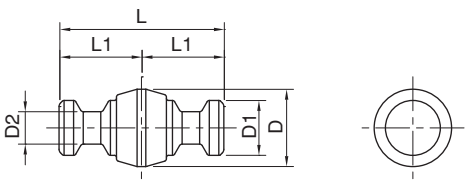
Referans Nr.	D	L	D1	D2	L1	(g)
0950-08001	15.5	33	11	6.5	16.5	24
0950-12001	24.5	50	16	9.5	25	85





Ürün Nr. 0950 5-Eksen Blok Bağlama Çektirme Civatası
• Tekrarlama Konumlaması 0.2

Product Nr. 0950 5-Axis Clamping Block Puller Bolt
• Locating Repeatability is 0.2



Hidrolik İş Parçası Desteği

Referans Nr.	Çalışma Özelliği Advane Method	Kuvvet Desteği 20 Mpa Supporting Force	Strok Stroke	Max.Basınç Max. Pressure	Min.Basınç Min. Pressure	Normal Basınç Normal Pressure	Çalışma Isısı Operating Temperature	Temas Kuvveti / kg Contact force	A	B	C	C1	D	D1	D2	E	F	H1	H2	K	L	Q	U1	U2	O (O-ring)	Port	Ağırlık Weight (kg)
1056-WS16A	Yay Spring	600 kgf	8	35 Mpa	5 Mpa	21 Mpa	0°~+70°	-	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	Hidrolik Hydraulic	600 kgf	8					2.35	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-WS30A	Yay Spring	800 kgf	13					-	105	92	83	25	M60 x1.5	64	64	25	19	12.5	-	M10 x1.5	-	-	52	52	P7	G1/8	1.80
1056-WS25B	Hidrolik Hydraulic	800 kgf	10.4					6.25	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	Yay Spring	1200 kgf	10.4					-	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	Hidrolik Hydraulic	1200 kgf	10.4					8.86	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

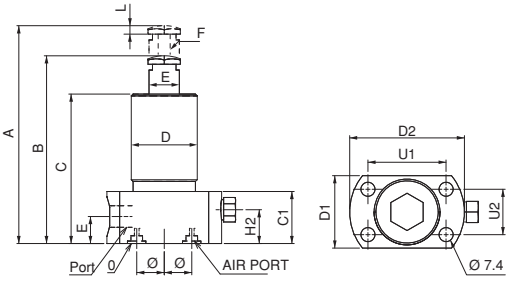
Ürün Nr. 1056 Hidrolik İş Parçası Desteği

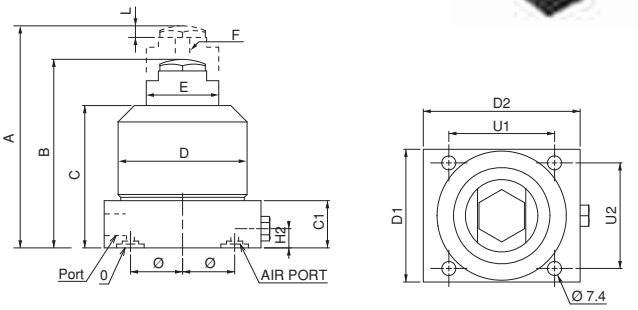
Açıklama
İş parçası desteği işlem esnasında vibrasyonu düşürmek ve deformasyonu engellemek için kullanılır.
Türleri
A tipi : Yayla itme; Piston milini en yüksek pozisyondayken iş parçası pozisyonu ayarlanır.
B tipi : Yağ basıncıyla itme; Piston milini en alçak pozisyonda iken iş parçası pozisyonu ayarlanır.

Product Nr. 1056 Hydraulic Work Support

Description
Hydraulic work support is used for avoiding deformation and decreasing vibration during machining.
Types
A type : knocking-out with a spring- the spring is used to control a contact force when the knocking out rod (piston rod) extends to a higest knocking-out position and contacts the workpiece.
B type : Knocking-out with oil pressure- when the knocking-out rod is at lowest position, it is operated by means of oil pressure and is knocked out when being filled with oil and uses a spring to control the contact force with the workpiece.







Hidrolik İş Parçası Desteği

Referans Nr.	Çalışma Yağ Basıncı Operating Oil Pressure	Hareket Tipi Acting Type	Strok Stroke	Piston Çubuğu Piston Rod Ø(mm)	Kuvvet Desteği 200kg/ cm² Supporting Force	Temas Kuvveti / kg Contact force	A	B	C	D	E	F	Ağırlık Weight (kg)
1056-SP16A	100-350 kg/cm²	Yaylı Spring	8	16	210 kg	-	79	54	8	M30 x1.5	11	8	0.30
1056-SP16B	100-350 kg/cm²	Hidrolik Hydraulic	8	16	210 kg	2.35	72	54	8	M30 x1.5	11	8	0.30





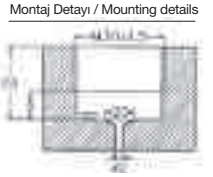
SP16A SP16B

Ürün Nr. 1056 Hidrolik İş Parçası Desteği

Product Nr. 1056 Hydraulic Work Support

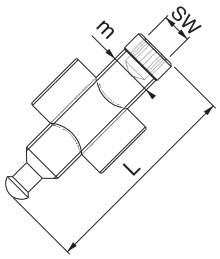


Montaj Detayı / Mounting details



Pabuç Kaldırma Civata ve Somunu

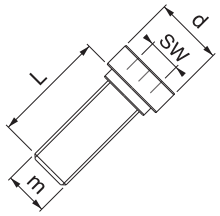
Referans Nr.	m	L	sw		(g)
1130-818	M18	83	10	-	245
1150-920	M20	96	12	-	385
1160-1024	M24	134	12	24	855





Sabitleme İnbus Civatası

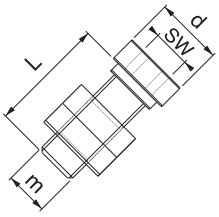
Referans Nr.	m	L	d	sw	(g)
1130-412	M12	30	20.5	10	60
1130-416	M16	34	20.5	10	65
1150-516	M16	34	24.5	12	80
1150-518	M18	38	24.5	12	85
1150-520	M20	38	24.5	12	90
1160-620	M20	45	34	12	186
1160-622	M22	49	34	12	217
1160-624	M24	46	34	12	230
1160-724	M24	55	34	12	261
1160-730	M30	66	38.5	12	455





Sabitleme İnbus Civata ve "T"

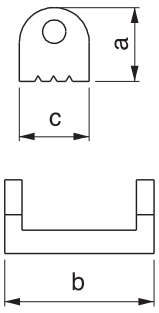
Referans Nr.	a	m	L	d	sw	(g)
1130-614	14	M12	30	20.5	10	120
1130-616	16	M12	30	20.5	10	120
1130-618	18	M12	30	20.5	10	120
1130-620	20	M12	36	20.5	10	130
1130-622	22	M12	36	20.5	10	130
1150-718	18	M16	34	24.5	12	160
1150-720	20	M16	34	24.5	12	160
1150-722	22	M16	34	24.5	12	160
1150-724	24	M16	42	24.5	12	170
1150-728	28	M16	42	24.5	12	170
1160-822	22	M20	45	34	12	341
1160-824	24	M20	45	34	12	341
1160-828	28	M24	55	34	12	580
1160-832	32	M24	61	34	12	603
1160-836	36	M30	66	38.5	12	1000





Ön Baskı Pabucu

Referans Nr.	a	b	c	(g)
1130-DP	17	32	15	35
1130-BSP	19	32	15	35
1130-ESP	22	32	15	35
1150-DP	19	38	18	55
1150-BSP	21	38	18	55
1150-ESP	25	38	18	55
1160-DP	22	44	22	58
1160-BSP	25	44	22	68
1160-ESP	28	44	22	79



DP

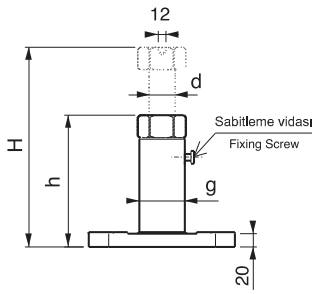


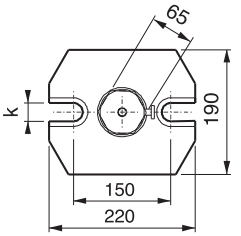
BSP



ESP





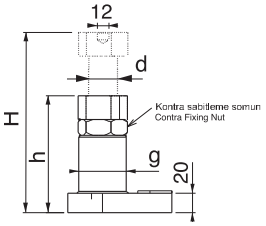


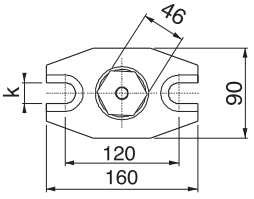
Trapez Diş Yükseltici Destek

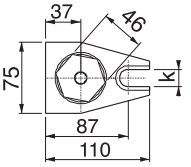


Referans Nr.	H / h	d	g	k	kgf	(g)
1530-200	200-300	Tr40x7	70	26	8000	8000
1530-280	280-460	Tr40x7	70	26	6000	12000
1530-430	430-750	Tr40x7	70	26	5000	12600
1530-710	710-1250	Tr40x7	70	26	4000	16500

Ürün Nr. 1530 Büyük Boy Yükseltici Destek







Trapez DişYükseltici Destek



Referans Nr.	H / h	d	g	k	kgf	(g)
1550-100	100-140	Tr30x6	50	18	6000	1750
1550-140	140-200	Tr30x6	50	18	6000	2200
1550-200	200-320	Tr30x6	50	22	4000	3400
1550-320	320-550	Tr30x6	50	22	2500	4850

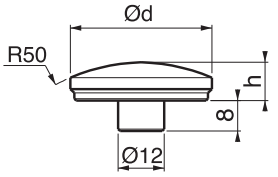
Ürün Nr. 1550 Büyük Boy Yükseltici Destek

Trapez Diş Yükseltici Yedek Parçaları

Radüslü Destek

Referans Nr.	h	Ø d	(g)
1555	10	37	90

Ürün Nr. 1555 Trapez Diş Yükseltici Radüslü Destek

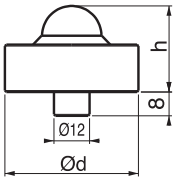




Bilyalı Destek

Referans Nr.	h	Ø d	kgf	(g)
1560	25	45	3000	210

Ürün Nr. 1560 Trapez Diş Yükseltici Bilyalı Destek

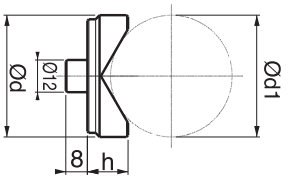




"V" Yatak

Referans Nr.	h	Ø d	Ø d1 min	Ø d1 max	(g)
1565	15	45	10	50	120

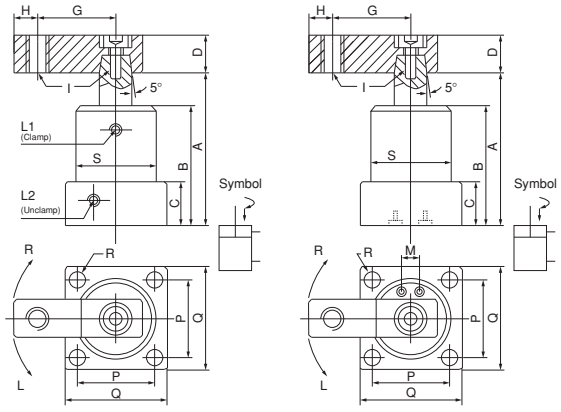
Ürün Nr. 1565 Trapez Diş Yükseltici "V" Yatak





Pnömatik Dönmeli Bağlama

Referans Nr.	Bağlama Tipi Mounting Type	Bağlama Kolu Clamping Arm	Max.Basınç Max. Pressure	Normal Basınç Normal Pres.	Hareket Tipi Acting Type	Dönme Açısı Swivel Angle	Dönme Strok Swivel Stroke (mm)	Bağlama Strok Clamp. Str. (mm)	Delik Çapı / Bore Diameter Ø (mm)	Piston Çubuğu Piston Rod Ø	Bağl. Gücü/Clamp Force (5 kg/cm2)	A (mm) Sökme Unclamp	B (mm)	C (mm)	D (mm)	G (mm)	H (mm)	L1 Bağlama / Clamp L2 Sökme / Unclamp	I (mm)	P (mm)	Q (mm)	R (mm)	S (mm)	M (mm)	F (mm)	Ağırlık Weight (kg)
1058-NAS025	Flanş / Bottom Flange	Tel Kol / Single Arm	7 kg/cm²	4-6 kg/cm²	Çift Hareketli / Double Acting	90° (0° 45°, 60°, 180°) ± 2°	12	14	25	14	16	95.5	65.5	23	□ 16	30	8	M5	M6	30	40	Ø 4.5	Ø 35	18	12.5	0.40
1058-NAS032							12	14	32	16	30	102.5	71	23	□ 19	50	9	1/8 PF	M8	44	54	Ø 6.5	Ø 50	22	17	0.70
1058-NAS040							12	15	40	16	50	106	75	26	□ 19	50	9	1/8 PF	M8	48	58	Ø 6.5	Ø 55	26	19.5	0.85
1058-NAS050							14	15	50	20	85	113	80	26	□ 25.4	70	10	1/8 PF	M10	55	68	Ø 8.5	Ø 65	30	24	1.30
1058-NAS063							14	15	63	20	140	119	86	30	□ 25.4	70	10	1/8 PF	M10	64	80	Ø 8.5	Ø 70	40	20	1.80



Ürün Nr. 1058 Pnömatik Dönmeli Bağlama
Product Nr. 1058 Pneumatic Swing Clamp

NAS – Flanşlı Uyarlama, Tek Kol Borulu veya Manifoldlu

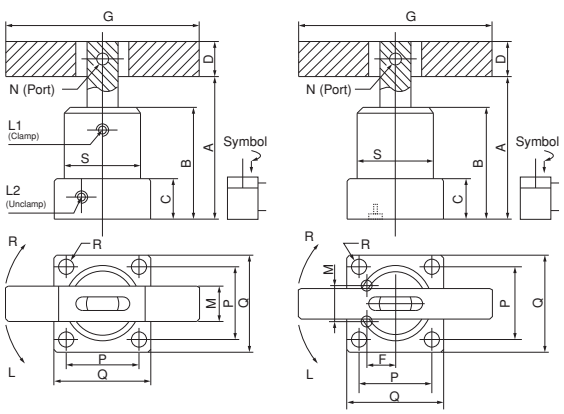
NAS – Flange Version, Single Arm With Pipe or the Manifold

- Satın almadan önce hareket tipini ve dönme açısını bildiriniz.
- Before buying please, movement indicate the type and rotation angle.



Pnömatik Dönmeli Bağlama

Referans Nr.	Bağlama Tipi Mounting Type	Bağlama Kolu Clamping Arm	Max.Basınç Max. Pressure	Normal Basınç Normal Pres.	Hareket Tipi Acting Type	Dönme Açısı Swivel Angle	Dönme Strok Swivel Stroke (mm)	Bağlama Strok Clamp. Str. (mm)	Delik Çapı / Bore Diameter Ø (mm)	Piston Çubuğu Piston Rod Ø	Bağl. Gücü/Clamp Force (5kg/cm2)	A (mm) Sökme Unclamp	B (mm)	C (mm)	D (mm)	G (mm)	L1 Bağlama / Clamp L2 Sökme / Unclamp	N (mm)	P (mm)	Q (mm)	R (mm)	S (mm)	M (mm)	F (mm)	Ağırlık Weight (kg)
1058-NASD032	Flanş / Bottom Flange	Çift Kol / Double Arm	7 kg/cm²	4-6 kg/cm²	Çift Hareketli / Double Acting	90° (0° 45°, 60°, 180°) ± 2°	12	14	32	16	30	102.5	71	23	□ 19	100	1/8 PF	Ø 8	44	54	Ø 6.5	Ø 50	22	17	0.80
1058-NASD040							12	15	40	16	50	106	75	26	□ 19	100	1/8 PF	Ø 8	48	58	Ø 6.5	Ø 55	26	19.5	0.95
1058-NASD050							14	15	50	20	85	113	80	26	□ 22	120	1/8 PF	Ø 8	55	68	Ø 8.5	Ø 65	30	24	1.40
1058-NASD063							14	15	63	25	140	119	86	30	□ 22	120	1/8 PF	Ø 8	64	80	Ø 8.5	Ø 75	40	29	1.90



Ürün Nr. 1058 Pnömatik Dönmeli Bağlama
Product Nr. 1058 Pneumatic Swing Clamp

NASD – Flanşlı Uyarlama, Çift Kol Borulu veya Manifoldlu

NASD – Flange Version, Double Arms With Pipe or the Manifold

- Satın almadan önce hareket tipini ve dönme açısını bildiriniz.
- Before buying please, movement indicate the type and rotation angle.



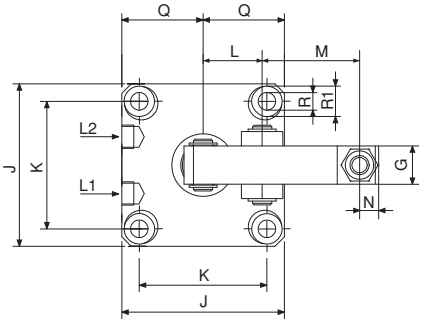
Pnömatik Üstten Bağlama

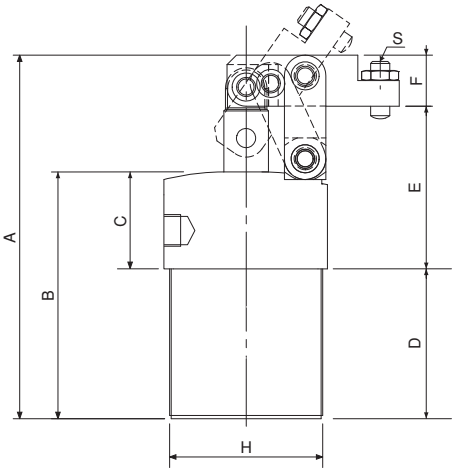
Referans Nr.	Çalışma Basıncı Operating Pressure	Çalışma Isısı Temperature Range	Bağlama Tipi Mounting Type	Strok Stroke (mm)	Delik Çapı / Bore Diameter Ø (mm)	Piston Çubuğu Piston Rod Ø (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	O	N	P	Q	R	R1	S	L1 Bağlama / Clamp L2 Sökme / Unclamp	Ağırlık Weight (kg)
1058-PLCU25	4-10 kgf/cm²	-10°~ +80°	Üst Flanş ve Dişli Gövde Upper Flange & Threaded Body	22	Ø 25	Ø 14	128.5	86.5	25	61.5	50	17	16	M40 x1.5	60	50	37	18	23	23	7	35	25	5.5	9	M6 x1	M5 x0.8	0.60
1058-PLCU32				28	Ø 32	Ø 16	149.5	97.5	25	72.5	57	20	18	M50 x1.5	70	60	45	22	30	23	8	40	30	6.5	11	M8 x1.25	G 1/8	1.00
1058-PLCU40				30	Ø 40	Ø 16	157.5	97.5	25	72.5	60	25	20	M55 x1.5	75	65	50	24	32	26	10	42.5	32.5	6.5	11	M8 x1.25	G 1/8	1.20
1058-PLCU50				30	Ø 50	Ø 20	174	104	25	79	65	30	22	M65 x1.5	88	75	58	27.5	36	32	14	50.5	37.5	8.5	14	M12 x1.75	G 1/8	2.00
1058-PLCU63				30	Ø 63	Ø 20	179	105	25	80	69	30	22	M80 x1.5	108	90	70	32	42	35	14	63	45	8.5	14	M12 x1.75	G 1/8	2.70

Ürün Nr. 1058 Pnömatik Üstten Bağlama **Product Nr. 1058 Pneumatic Above Clamp**



Borulu / With Pipe





Merdiven Yükselticili Bağlama Set

Referans Nr.	dx a		(g)	d x L DIN 6379
2010-1012	M10X12	330X255	6000	M10X80-100-160-200
2010-1214	M12X14	380X255	8000	M10X80-100-160-200
2010-1416	M14X16	435X255	13500	M14X80-100-160-200
2010-1618	M16x18	435X255	15000	M16x80-100-160-200
2010-1820	M18X20	495X255	16500	M18X80-100-160-200



Ürün Nr. 2010 Merdiven Yükselticili Bağlama Set

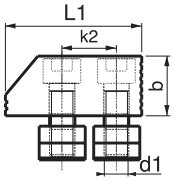
Vidalı Yükselticili Bağlama Set

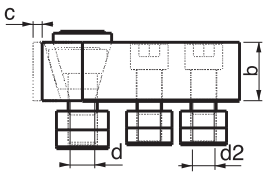
Referans Nr.	dx a		(g)	d x L DIN 6379
1990-1012	M10x12	265x255	6000	M10x80-100-160-200
1990-1214	M12x14	305x255	8000	M12x80-100-160-200
1990-1416	M14x16	435-255	13500	M14x80-100-160-200
1990-1618	M16x18	435-255	15000	M16x80-100-160-200
1990-1820	M18x20	495x255	16500	M18x80-100-160-200
1990-2022	M20x22	540x255	18500	M20x100-125-160-200

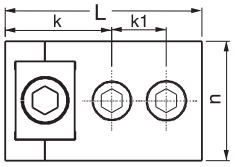


Ürün Nr. 1990 Vidali Yükseltici Bağlama Set

Dereceli Yandan Sıkma Set







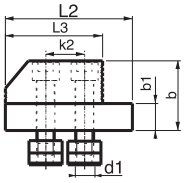


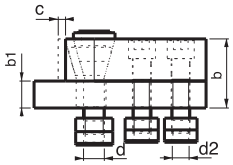
Referans Nr.	a	c	L	b	n	k	k1	k2	L1	d	d1	d2	sıkma kuvveti clamping force kgf	(g)
2030-14	14	5	90	23	47	47	26	26	65	M12	M12	M12	2000	3600
2030-16	16													
2030-18	18	5	95	28	57	52	26	26	65	M14	M12	M12	2500	4200
2030-20	20													
2030-22	22													
2030-24	24													
2030-28	28													

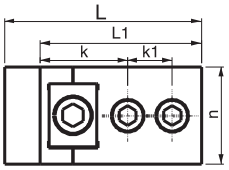


Ürün Nr. 2030 Dereceli Yandan Sıkma Set

Dereceli Yandan Sıkma (Paralelli) Set









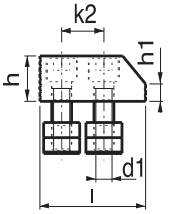
Referans Nr.	a	c	L	L1	L2	L3	b	b1 ±0,01	n	k	k1	k2	d	d1	d2	sıkma kuvveti clamping force kgf	(g)
2050-14	14	5	110	90	85	65	41	18	47	47	26	26	M12	M12	M12	2000	7000
2050-16	16																
2050-18	18	5	115	95	85	65	46	18	57	52	26	26	M14	M12	M12	2500	8800
2050-20	20																
2050-22	22																
2050-24	24																
2050-28	28																

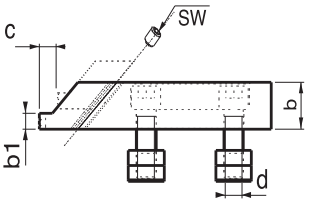


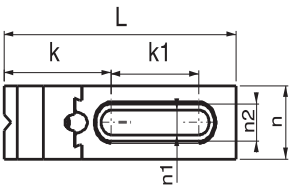
Ürün Nr. 2050 Dereceli Yandan Sıkma (Paralelli) Set

Kızaklı Yandan Sıkma Set





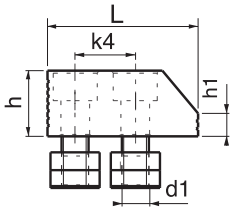


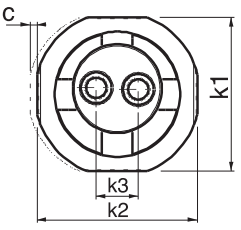


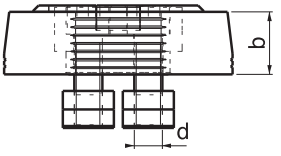
Referans Nr.	a	c	L	b	b1	n	n1	n2	k	k1	k2	sw	ı	h	h1	d	d1	sıkma kuvveti clamping force kgf	(g)
2070-14 2070-16	14 16	10	142	23	8	37	12.5	19	65	54	26	6	65	23	10	M12	M12	600	3650
2070-18 2070-20 2070-22	18 20 22	14	145	28	10	48	12.5	19	74	54	26	8	65	28	11	M12	M12	800	4300

Ürün Nr. 2070 Kızaklı Yandan Sıkma Seti

Kollu Yandan Sıkma Set









Referans Nr.	a	c	b	k1	k2	k3	k4	L	h	h1	d	d1	sıkma kuvveti clamping force kgf	(g)
2090-14	14	3.5	30	95	99	26	26	65	28	10	M12	M12	3500	7608
2090-16	16													7630
2090-18	18													7660
2090-20	20													7710
2090-22	22													7770
2090-24	24													7870
2090-28	28													7990

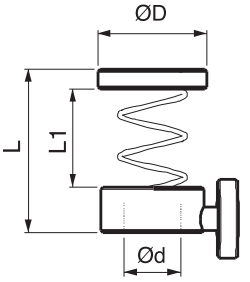


Ürün Nr. 2090 Kollu Yandan Sıkma Set

Referans Nr.		Ø D	Ø d	L	L1	(g)
1970-10	M10	27	11	35	20	75
1970-12	M12	28	13	40	33	78
1970-14	M14	28	15	40	30	80
1970-16	M16	37	17	45	30	122
1970-18	M18	37	19	45	40	125
1970-20	M20	37	21	45	42	130
1970-22	M22	37	23	45	45	135
1970-24	M24	45	25	50	45	180

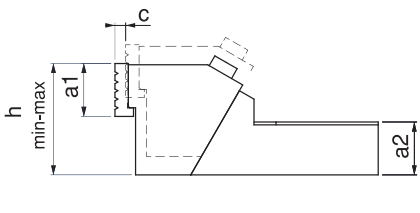
Ürün Nr. 1970 Pabuç Kaldırma Yaylı Pul

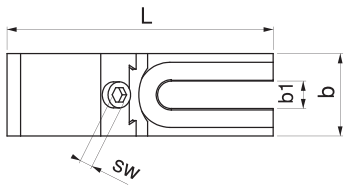
Pabuç Kaldırma Yaylı Pul





Blok Yandan Sıkma



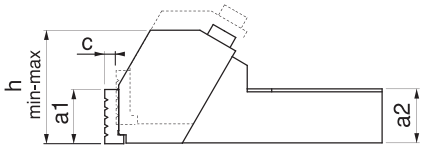


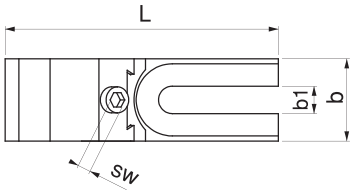


Referans Nr.	a	a1	a2	b	b1	c	h min-max	L	sw	F1 Sıkma kuvveti Clamping force kgf	F2 Sıkma kuvveti Clamping force kgf	kg
2095-571	14-16-18	37	37	57	19	8	78-98	185	10	2200	350	3.7
2095-761	20-22-24-28	37	45	76	26	11	98-118	240	14	3400	450	7.9

Ürün Nr. 2095 Blok Yandan Sıkma

Blok Yandan Sıkma



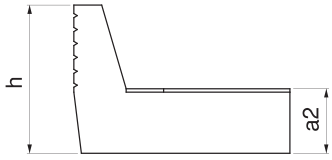


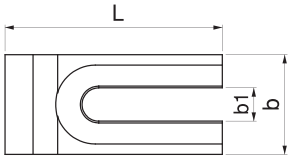


Referans Nr.	a	a1	a2	b	b1	c	h min-max	L	sw	F1 Sıkma kuvveti Clamping force kgf	F2 Sıkma kuvveti Clamping force kgf	kg
2095-572	14-16-18	37	37	57	19	8	78-98	185	10	2200	350	3.3
2095-762	20-22-24-28	37	45	76	26	11	98-118	240	14	3400	450	6.7

Ürün Nr. 2095 Blok Yandan Sıkma

Blok Yandan Sıkma Dayaması



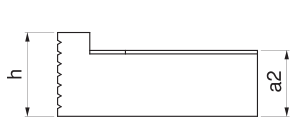


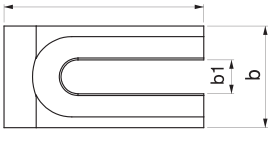


Referans Nr.	a	a2	b	b1	h	L	kg
2098-571	14-16-18	37	57	19	85	124	2
2098-761	20-22-24-28	45	76	26	105	154	3.7

Ürün Nr. 2098 Blok Yandan Sıkma Dayaması

Blok Yandan Sıkma Dayaması

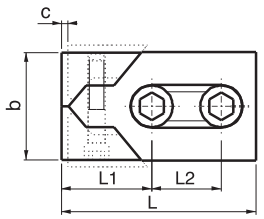






Referans Nr.	a	a2	b	b1	h	L	kg
2098-572	14-16-18	37	57	19	47	112	1.4
2098-762	20-22-24-28	45	76	26	49	140	2.5

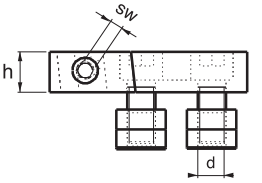
Ürün Nr. 2098 Blok Yandan Sıkma Dayaması



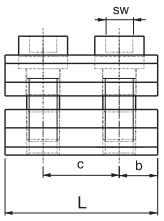
Çift Çeneli Yandan Sıkma Pabucu



Referans Nr.	a	c	h	b	L	L1	L2	sw	d	Sıkma Kuvveti Clamping Force f1 kgf	f2 kgf	(g)
2110-12	12	3	20	40	80	39	26	6	M10	1600	60	560
2110-14	14								M12	2200	90	610
2110-16	16	4	25	50	100	46	34	8	M14	3200	120	1200
2110-18	18								M16	3600	140	1300
2110-20	20								M16	3600	140	1325
2110-22	22	5	30	78	140	65	50	10	M20	3600	140	2995
2110-24	24								M20	3600	140	3200
2110-28	28								M24	4000	160	3600

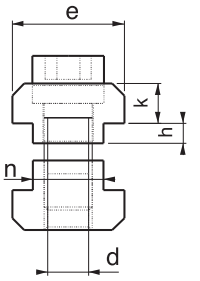


Ürün Nr. 2110 Çift Çeneli Yandan Sıkma



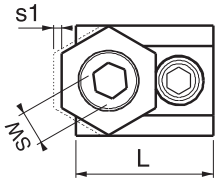
Dayama



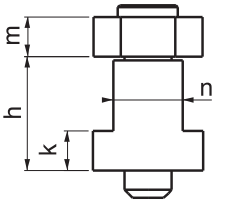


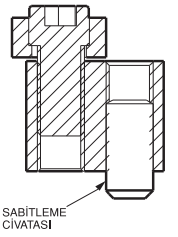
Referans Nr.	a	n	e	c	d	b	h	k	L	sw	(g)
2130-12	12	11.7	18	18	M8	9	3	7	36	6	100
2130-14	14	13.7	22	22	M8	11	4	8	44	6	140
2130-16	16	15.7	25	25	M12	12.5	5	9	50	10	240
2130-18	18	17.7	28	28	M12	14	5	10	56	10	340
2130-20	20	19.7	32	32	M16	16	5	12	64	14	520
2130-22	22	21.7	35	35	M16	17.5	6	14	70	14	720
2130-24	24	23.7	40	40	M20	20	6	16	80	17	880
2130-28	28	27.7	44	44	M20	22	6	18	88	17	1450

Ürün Nr. 2130 Dayama



Kanal İçi Yandan Sıkma





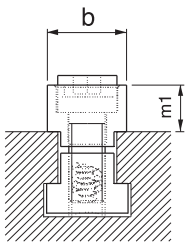
Referans Nr.	a	s1	m	sw	L	h	k	n	sıkma kuvveti clamping force kgf	(g)
2150-08	8	1.4	5	4	23	9.5	5	7.7	310	25
2150-10	10	1.4	5	4	23	14	5	9.7	310	35
2150-12	12	1.2	5	5	28	15	6	11.7	340	60
2150-14	14	1.7	7	8	30	22	8	13.7	800	95
2150-16	16	2	10	8	30	22	9	15.7	1500	130
2150-18	18	2	10	8	35	28	10	17.7	1500	190
2150-20	20	2.5	13	10	40	32	12	19.7	2000	290
2150-22	22	2.5	13	12	45	38	14	21.7	2000	390



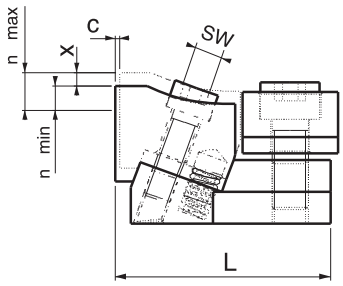
Ürün: Nr. 2150 Kanal İçi Yandan Sıkma



Yandan Sıkma Pençe Pabuç

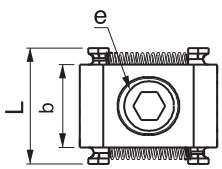


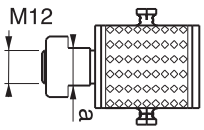
Referans Nr.	a	c	n min	n max	x	L	b	m1	sw	sıkma kuvveti clamping force f1 kgf	f2 kgf	(g)
2170-12	12	2	2	6	4	46	18	7	5	500	60	120
2170-14	14	2.5	2.5	7.5	5	51	22	8	6	550	70	200
2170-16	16	3	2.5	8.5	6	61	25	9	6	800	90	290
2170-18	18	3	2	8	6	67	28	10	8	900	100	440
2170-20	20	4	2.5	11	8.5	78	32	12	10	1200	140	650
2170-22	22	4.5	2.5	12	9.5	87	35	14	10	1600	190	840

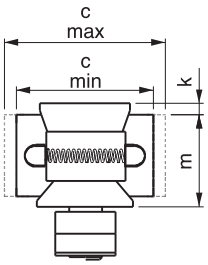


Ürün Nr. 2170 Yandan Sıkma Pençe Pabuç

Çift Açılır Yandan Sıkma





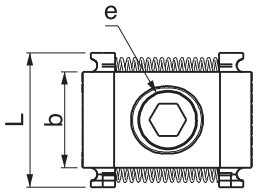


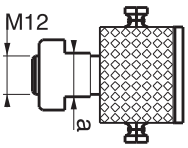


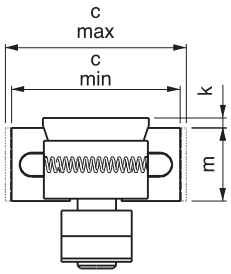
Referans Nr.	c min	c max	a	m	k	b	L	e DIN 912	sıkma kuvveti clamping force kgf	(g)
2190-5055	50	55	(a) 14-16-18-20-22 "T" kanallarda çalışır It is used in "T" Slot	35	4	30	42	M12	3000	350

Ürün Nr. 2190 Çift Açılır Yandan Sıkma

Çift Açılır Yandan Sıkma









Referans Nr.	c min	c max	a	m	k	b	L	e DIN 912	sıkma kuvveti clamping force kgf	(g)
2210-4954	49	54	(a) 14-16-18-20-22 "T" kanallarda çalışır It is used in "T" Slot	23	4	30	42	M12	3000	250

Ürün Nr. 2210 Çift Açılır Yandan Sıkma

Hidrolik Pabuç Model CV

Model		CV-4	CV-6	CV-10
Bağlama kapasitesi Capacity of clamp	Ton	4	6	10
Toplam strok (X) Total stroke (X)	mm	8	8	8
Pabuç strok (Y) Stroke of clamp (Y)	mm	4	4	4
Muhafaza edilen strok (Z) Preserved stroke (Z)	mm	4	4	4
Silindirin toplam hacmi Total volumn of cylinder	cc	13	21	32
Kalıp taban kalınlığı toleransı (H) The tolerance of the template thickness (H)	mm	±2	±2	±2

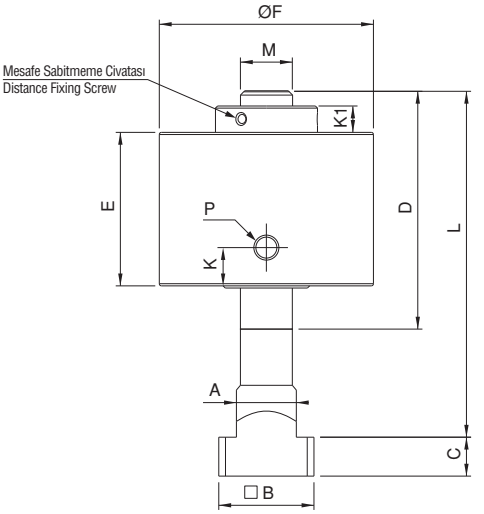


Hidrolik basınç / Hydraulic pressure : 250kgf/cm2

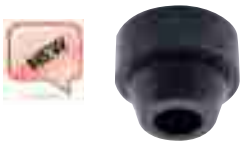
Referans Nr.	A	B	C	D	E	F	Max. L	M	K1	K	P
1010-CV042020125	20	32	12	85	58	65	125	M20	12	15	PT 1/4
1010-CV042022160	20	32	12	110	58	65	160	M20	12	15	PT 1/4
1010-CV042020160	22	35	14	85	58	65	125	M20	12	15	PT 1/4
1010-CV042022125	22	35	14	110	58	65	160	M20	12	15	PT 1/4
1010-CV062424125	24	40	16	85	65	82	125	M24	12	15	PT 1/4
1010-CV062424160	24	40	16	110	65	82	160	M24	12	15	PT 1/4
1010-CV062428125	28	44	18	85	65	82	125	M24	12	15	PT 1/4
1010-CV062428160	28	44	18	110	65	82	160	M24	12	15	PT 1/4
1010-CV102727125	27	46	18	85	71	99	125	M27	12	15	PT 1/4
1010-CV102727160	27	46	18	110	71	99	160	M27	12	15	PT 1/4
1010-CV102727200	27	46	18	125	71	99	200	M27	12	15	PT 1/4
1010-CV102732125	32	50	20	85	71	99	125	M27	12	15	PT 1/4
1010-CV102732160	32	50	20	110	71	99	160	M27	12	15	PT 1/4
1010-CV102732200	32	50	20	125	71	99	200	M27	12	15	PT 1/4

Ürün Nr. 1010 Hidrolik Pabuç Model CV
• Vidalanarak mesafe ayarı yapılabilir.

Product Nr. 1010 Hydraulic Clamp Model CV
• Screw-distance adjustment can be made.



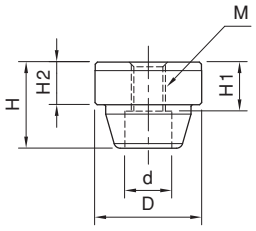
Konumlama Pimi

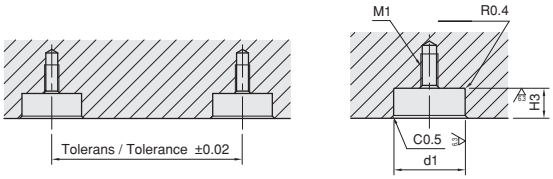


Referans Nr.	D (g6)	H2	H	M	H1	d	(g)
1489-16032	16	5.5	11.5	M5x0.80	6	8	18
1489-25050	25	10	20	M8x1.25	11.5	11	49
1489-38070	38	15	29.5	M10x1.50	18	14	176
1489-56095	56	22	43.5	M16x2.00	28.5	20	569

Ürün Nr. 1489 Konumlama Pimi
• Malzeme: 42 CrMo 4 DIN

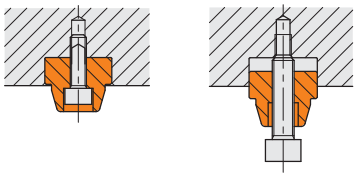
Product Nr. 1489 Flex Locator Pins
• Material: 42 CrMo 4 DIN





Montaj Detayı / Mounting Details

Referans Nr.	d1 (H7)	H3 (±0.05)	M1
1489-16032	16	6	M4x0.7
1489-25050	25	10.5	M6x1.00
1489-38070	38	15.5	M8x1.25
1489-56095	56	22.5	M12x1.75



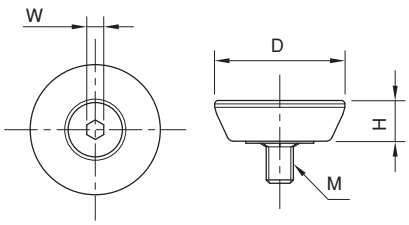
Konumlama Pimi Kapağı



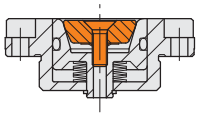
Referans Nr.	D	H	M	W	(g)
1489-16032P	12	4	M3x0.5	2	3
1489-38070P	19	6	M4x0.7	2.5	5
1489-25050P	29	7	M5x0.8	3	14
1489-56095P	44	8	M6x1.0	4	35

Ürün Nr. 1489 Konumlama Pimi Kapağı

Product Nr. 1489 Flex Locator Protecting Covers



Montaj Detayı / Mounting Details



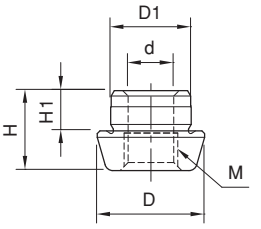
Konumlama Pimi

Referans Nr.	D1 (p6)	H1	D	H	M	d	(g)
1489-20045	12	4.5	15	10	M10x1.50	8.5	6
1489-12025	15	7.5	20	15	M12x1.75	10.2	16
1489-15032	20	10	30	20	M16x2.00	14	47



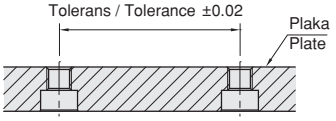
Ürün Nr. 1489 Konumlama Pimi
• Malzeme: 42 CrMo 4 DIN

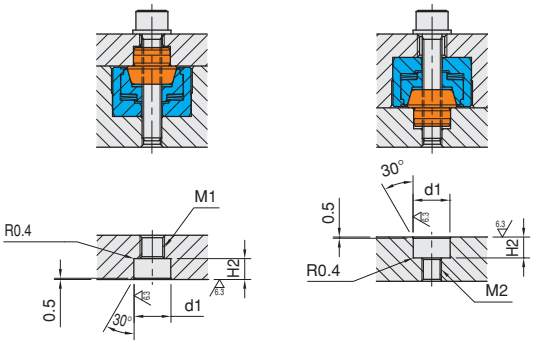
Product Nr. 1489 Flex Locator Pins
• Material: 42 CrMo 4 DIN



Montaj Detayı / Mounting Details

Referans Nr.	d (H6)	H2	M1	M2
1489-20045	12	5.5	M8x1.25	M6x1.00
1489-12025	15	8.5	M10x1.50	M8x1.25
1489-15032	20	11	M14x1.50	M12x1.75





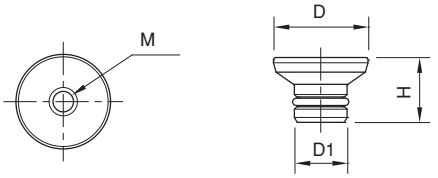
Konumlama Pimi Kapağı

Referans Nr.	D	H	D1	M	(g)
1489-20045P	15	10	9	M4x0.7	2
1489-12025P	19	13	11	M5x0.8	5
1489-15032P	29	18	16	M6x1.0	17

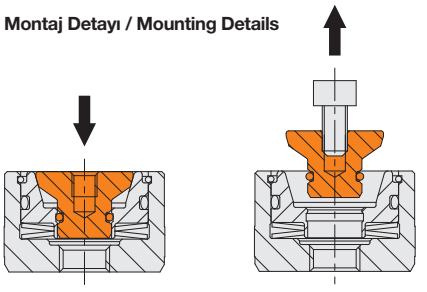


Ürün Nr. 1489 Konumlama Pimi Kapağı

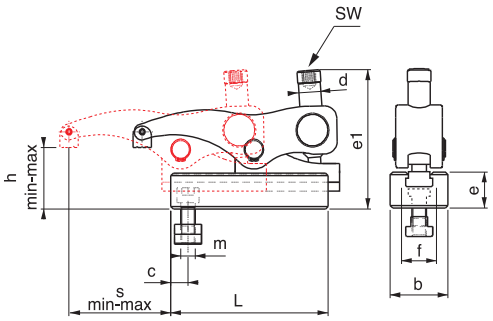
Product Nr. 1489 Flex Locator Protecting Covers



Montaj Detayı / Mounting Details



Kızaklı Kombine Sıkma Pabucu

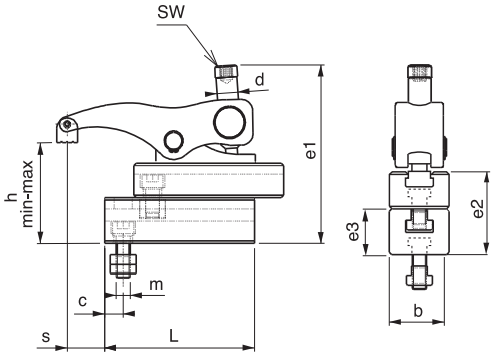








Referans Nr.	a	m	h min	h max	s	s1	e1	d	sw	L	e	b	c	f	sıkma kuvveti clamping force Kgf	(g)
1130-014 T	14	M12	0	60	15-83	30	113	M18	10	130	38	48	16	28	2000	2600
1130-016 T	16	M12	0	60	15-83	30	113	M18	10	130	38	48	16	28	2000	2600
1130-018 T	18	M12	0	60	15-83	30	113	M18	10	130	38	48	16	28	2000	2600
1130-020 T	20	M12	0	60	15-83	30	113	M18	10	130	38	48	16	28	2000	2600
1130-022 T	22	M12	0	60	15-83	30	113	M18	10	130	38	48	16	28	2000	2600
1150-118 T	18	M16	0	62	18-96	35	125	M20	12	140	42	55	18	32	2500	3800
1150-120 T	20	M16	0	62	18-96	35	125	M20	12	140	42	55	18	32	2500	3800
1150-122 T	22	M16	0	62	18-96	35	125	M20	12	140	42	55	18	32	2500	3800
1150-124 T	24	M16	0	62	18-96	35	125	M20	12	140	42	55	18	32	2500	3800
1150-128 T	28	M16	0	62	18-96	35	125	M20	12	140	42	55	18	32	2500	3800
1160-222T	22	M20	20	80	22-95	41.5	175	M24	12 24	178	55	74	24	45	5500	8900
1160-224T	24	M20	20	80	22-95	41.5	175	M24	12 24	178	55	74	24	45	5500	8900
1160-228T	28	M24	20	80	22-95	41.5	175	M24	12 24	178	55	74	24	45	5500	8900
1160-232T	32	M24	20	80	22-95	41.5	175	M24	12 24	178	55	74	24	45	5500	8900
1160-236T	36	M30	20	80	22-95	41.5	175	M24	12 24	178	55	74	24	45	5500	8900





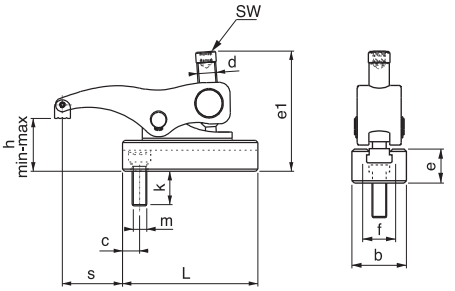




Referans Nr.	a	m	h min	h max	s	e1	e2	d	sw	L	b	e3	c	(g)
1130-014 DT	14	M12	45	105	15-83	158	83	M18	10	130	48	45	16	4000
1130-016 DT	16	M12	45	105	15-83	158	83	M18	10	130	48	45	16	4000
1130-018 DT	18	M12	45	105	15-83	158	83	M18	10	130	48	45	16	4000
1130-020 DT	20	M12	45	105	15-83	158	83	M18	10	130	48	45	16	4000
1130-022 DT	22	M12	45	105	15-83	158	83	M18	10	130	48	45	16	4000
1150-118 DT	18	M16	48	110	18-96	173	90	M20	12	140	55	48	18	5400
1150-120 DT	20	M16	48	110	18-96	173	90	M20	12	140	55	48	18	5400
1150-122 DT	22	M16	48	110	18-96	173	90	M20	12	140	55	48	18	5400
1150-124 DT	24	M16	48	110	18-96	173	90	M20	12	140	55	48	18	5400
1150-128 DT	28	M16	48	110	18-96	173	90	M20	12	140	55	48	18	5400
1160-222DT	22	M20	79	139	22-95	235	114	M24	12 24	178	74	59	24	12800
1160-224DT	24	M20	79	139	22-95	235	114	M24	12 24	178	74	59	24	12800
1160-228DT	28	M24	79	139	22-95	235	114	M24	12 24	178	74	59	24	12800
1160-232DT	32	M24	79	139	22-95	235	114	M24	12 24	178	74	59	24	12800
1160-236DT	36	M30	79	139	22-95	235	114	M24	12 24	178	74	59	24	12800

Kızaklı Kombine Sıkma Pabucu









Referans Nr.	m	h min	h max	s	s1	e1	d	sw		L	e	b	c	f	k	sıkma kuvveti clamping force Kgf	(g)
1130-012 M	M12	0	60	15-83	30	113	M18	10		130	38	48	16	28	22	2000	2600
1130-016 M	M16	0	60	15-83	30	113	M18	10		130	38	48	16	28	26	2000	2600
1150-116 M	M16	0	62	18-96	35	125	M20	12		140	42	55	18	32	26	2500	3800
1150-118 M	M18	0	62	18-96	35	125	M20	12		140	42	55	18	32	30	2500	3800
1150-120 M	M20	0	62	18-96	35	125	M20	12		140	42	55	18	32	30	2500	3800
1160-220M	M20	20	80	22-95	41.5	175	M24	12	24	178	55	74	24	45	34	5500	8900
1160-222M	M22	20	80	22-95	41.5	175	M24	12	24	178	55	74	24	45	38	5500	8900
1160-224M	M30	20	80	22-95	41.5	175	M24	12	24	178	55	74	24	45	55	5500	8900

K.K.S.P Yedek Parçalar

Referans Nr.	a	h min	h max	sw		(g)
1130-060	14-22	0	60	10	-	1500
1150-062	18-28	0	62	12	-	2400
1160-2080	22-36	20	80	12	24	5200

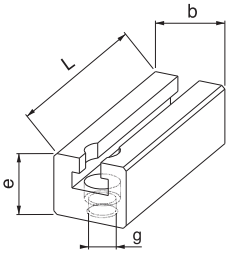
K.K.S.P
Üst Kızak Grubu



Referans Nr.	g	a	L	b	e	(g)
1130-047	M12 M16	14-22	130	48	39	1200
1150-053	M16 M18 M20	18-28	140	55	42	1400
1160-074	M20 M22 M24 M30	22-36	178	74	55	3600

K.K.S.P
'T' Kızaklı Gövde





Referans Nr.	g	a	L	b	e	(g)
1130-045	M12 M16	14	128	48	45	1600
1150-048	M16 M18 M20	18	140	55	48	2000
1160-059	M20 M22 M24 M30	22	178	74	59	3900

K.K.S.P
Alt Destek

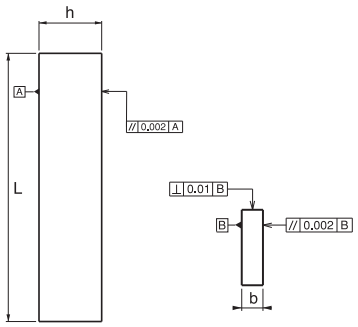




Paralel Set



Referans Nr.	h x b x L	tolerans tolerance h	tolerans tolerance b	(kg)	Adet Piece
2230-028	14x10x150	±0.01	±0.01	10.6	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

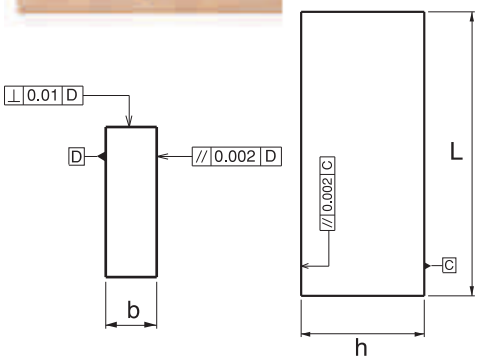


Ürün Nr. 2230 Paralel Set-28

Paralel Set



Referans Nr.	h x b x L	tolerans tolerance h	tolerans tolerance b	(kg)	Adet Piece
2250-016	20x 6 x100	±0.01	±0.01	10.8	2
	23x 8 x100				2
	28x10x100				2
	36x12x150				2
	42x14x150				2
	48x16x150				2
	58x18x150				2
	65x22x150				2

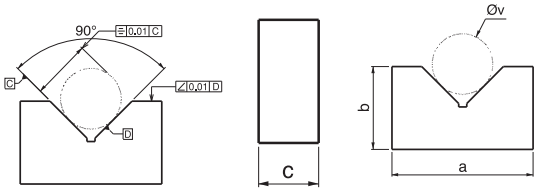


Ürün Nr. 2250 Paralel Set-16

"V" Yatak

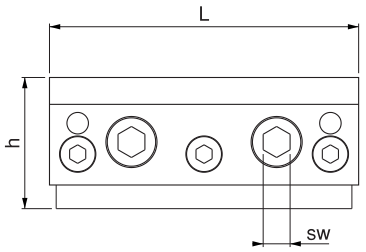


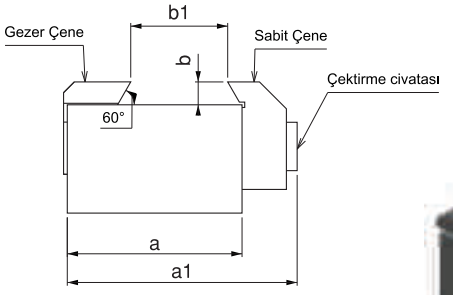
Referans Nr.	a	b	c	Øv min	Øv max	(g)
2270-140	140	82	40	10	120	2000
2270-204	204	115	66	15	150	6000



Ürün Nr. 2270 "V" Yatak

CNC 5 Eksen Parça Bağlama Aparatı



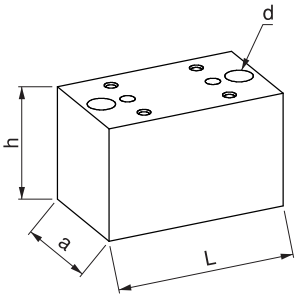




Referans Nr.	L	h	a	a1	b	b1	sw	(kg)
2295-090	90	39	55	73	7	21-35	8	1.3
2295-115	115	49	65	82.5	8.5	31-42	10	2.5
2295-130	130	56	75	98	10	37-48	12	4.0

CNC 5 Eksen Parça Bağlama Takozu

Referans Nr.	a	h	L	d	(kg)
2297-090	55	58	87	M10	2
2297-115	65	68	110	M12	3.6
2297-130	75	80	126.6	M12	5.6





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2

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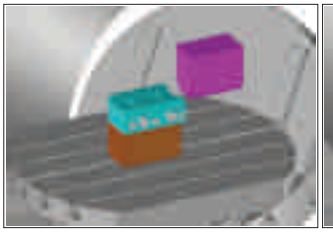
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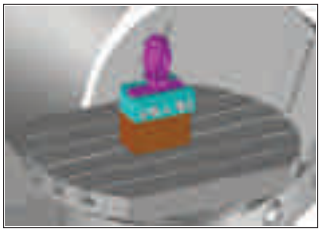


"X V" Yatak

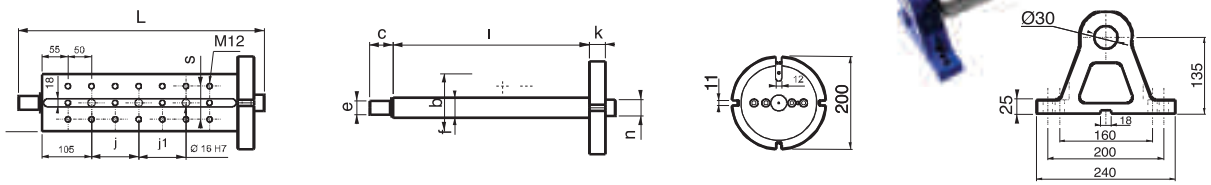
Referans Nr.	a	b	c	Øv1 min	Øv1 max	Øv2 min	Øv2 max	Øv3 min	Øv3 max	Øv4 min	Øv4 max	(g)
2290-120	120	100	60	10	30	30	60	60	90	90	120	2700
2290-150	150	130	74	15	50	50	80	80	120	120	150	5000



Ürün Nr. 2290 "X V" Yatak

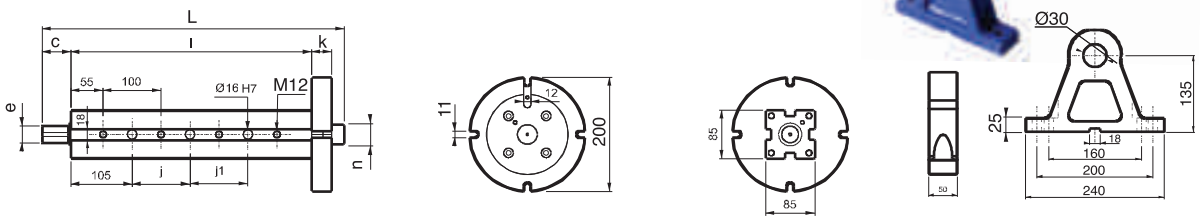
Divizör Kulesi

Referans Nr.	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	23.5
2450-615L	703.5	615	50	–	160	35	31	30	90	100	300	39.5



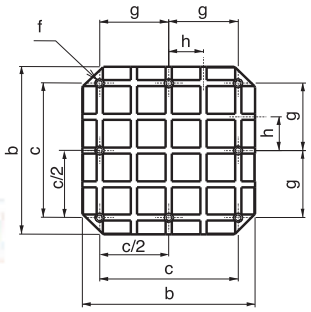
Divizör Kulesi

Referans Nr.	L	ı	n	k	e	c	Ø16H7 j	Ø16H7 j1	kg
2470-415K	502	415	–	35	30	31	100	100	22
2470-615K	702	615	–	35	30	31	100	300	34



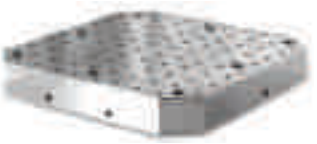
CNC Yatay İşleme Tablası

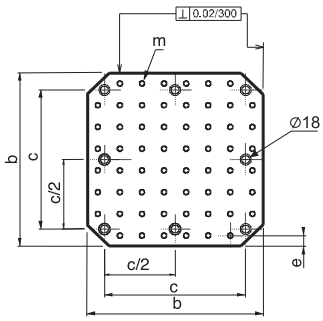


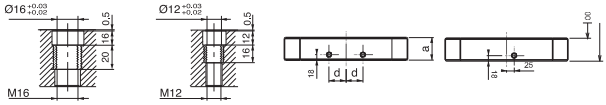


Referans Nr.	a	b	c	d	e	f	g ±0.02	h ±0.02	kg
2490-7540014	75	400	320	14	55	18	160	80	87
2490-7550014	75	500	400	14	75	18	200	100	120
2490-7563014	75	630	500	14	100	18	250	125	197
2490-7540018	75	400	320	18	55	18	160	80	85
2490-7550018	75	500	400	18	75	18	200	100	118
2490-7563018	75	630	500	18	100	18	250	125	195

CNC Yatay İşleme Tablası



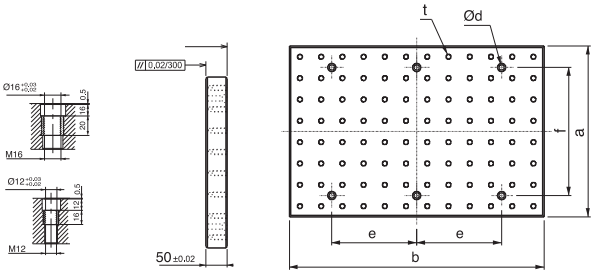




Referans Nr.	a	b	c	d	e	m	kg
2510-7540012	75	400	320	55	25	M12	97
2510-7550012	75	500	400	75	25	M12	124
2510-7563012	75	630	500	100	40	M12	201
2510-7540016	75	400	320	55	25	M16	95
2510-7550016	75	500	400	75	25	M16	122
2510-7563016	75	630	500	100	40	M16	199

CNC Dik İşleme Pleyti



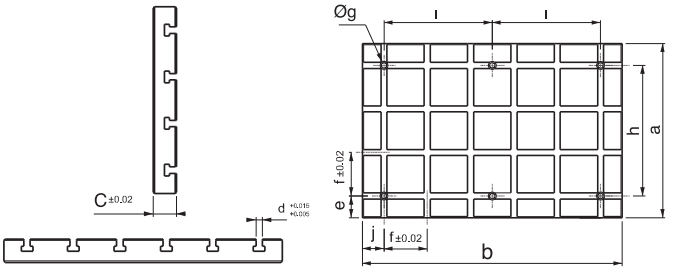


Referans Nr.	a	b	Ød	e	f	t	kg
2530-040012	400	600	18	-	-	M12	90
2530-050012	500	600	18	-	-	M12	112
2530-060012	600	800	18	-	-	M12	162
2530-140012	400	800	18	-	-	M12	119
2530-145012	450	900	18	-	-	M12	151
2530-150012	500	1000	18	-	-	M12	173

Referans Nr.	a	b	Ød	e	f	t	kg
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

CNC Dik İşleme Pleyti



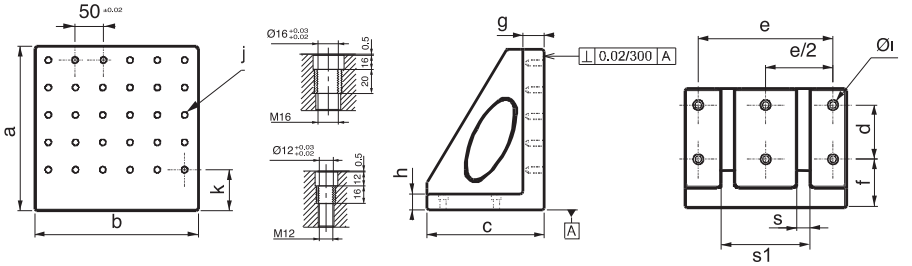


Referans Nr.	a	b	c	d	e	f	Øg	h	ı	j	kg
2550-040014	400	600	60	14	50	100	18	-	-	50	90
2550-050014	500	600	60	14	50	100	18	-	-	50	115
2550-060014	600	800	60	14	50	100	18	-	-	50	198
2550-140014	400	800	60	14	50	100	18	-	-	50	120
2550-145014	450	900	60	14	75	100	18	-	-	50	162
2550-150014	500	1000	60	14	50	100	18	-	-	50	199

Referans Nr.	a	b	c	d	e	f	Øg	h	ı	j	kg
2550-040018	400	600	75	18	50	100	18	-	-	50	114
2550-050018	500	600	75	18	50	100	18	-	-	50	148
2550-060018	600	800	75	18	50	100	18	-	-	50	240
2550-140018	400	800	75	18	50	100	18	-	-	50	158
2550-145018	450	900	75	18	75	100	18	-	-	50	205
2550-150018	500	1000	75	18	50	100	18	-	-	50	258

L Gönye

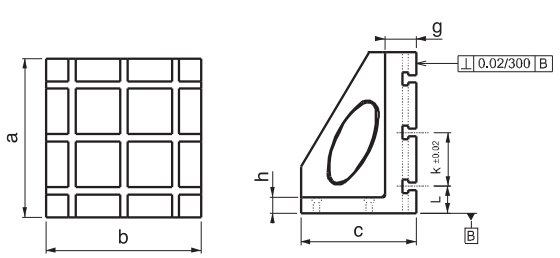




Referans Nr.	a	b	c	d	e	f	g	h	Øı	j	k	s	s1	kg
2570-30012	300	300	220	100	250	90	40	30	18	M12	75	25	170	50
2570-40012	400	400	280	160	320	90	40	30	18	M12	75	30	240	88
2570-50012	500	500	345	200	400	90	50	35	18	M12	75	35	300	175
2570-63012	630	630	435	250	500	100	50	40	18	M12	105	40	360	298
2570-30016	300	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

L Gönye

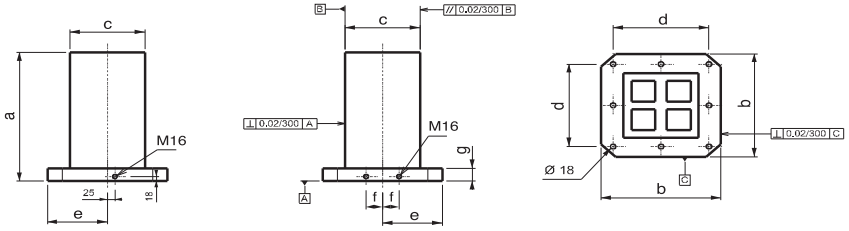




Referans Nr.	a	b	c	d	e	f	g	h	Øı	j	k	L	s	s1	kg
2590-30014	300	300	220	100	250	90	60	30	18	14	100	50	25	170	50
2590-40014	400	400	300	160	320	90	60	30	18	14	100	50	30	240	100
2590-50014	500	500	350	200	400	90	60	35	18	14	100	50	35	300	185
2590-63014	630	630	450	250	500	100	65	40	18	14	125	65	40	360	315
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

CNC Yatay İşleme Kulesi

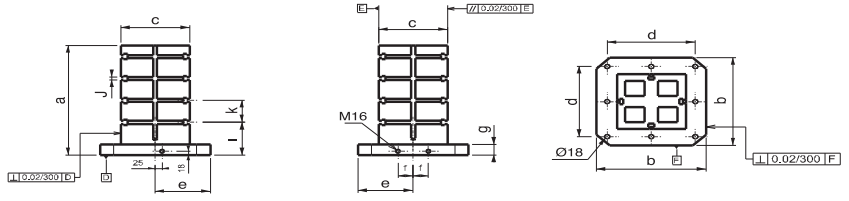




Referans Nr.	a	b	c	d	e	f	g	kg
2610-400250	500	400	250	320	200	55	50	180
2610-500300	600	500	300	400	250	75	50	240
2610-630350	700	630	350	500	315	100	50	390

CNC Yatay İşleme Kulesi

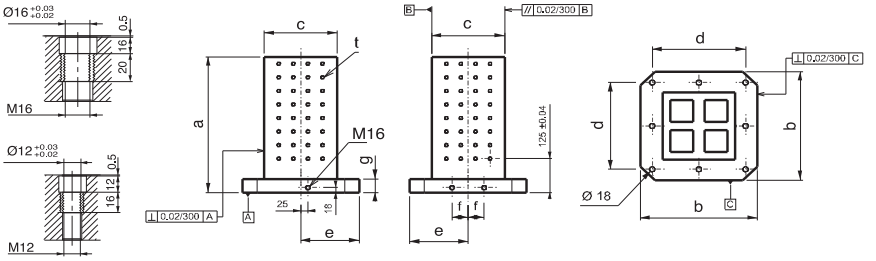




Referans Nr.	a	b	c	d	e	f	g	ı	k	J (H7)	kg
2630-40025014	500	400	250	320	200	55	50	150	100	14	165
2630-50030014	600	500	300	400	250	75	50	150	100	14	227
2630-63035014	700	630	350	500	315	100	50	150	125	14	375
2630-40025018	500	400	250	320	200	55	50	150	100	18	155
2630-50030018	600	500	300	400	250	75	50	150	100	18	223
2630-63035018	700	630	350	500	315	100	50	150	125	18	370

CNC Yatay İşleme Kulesi

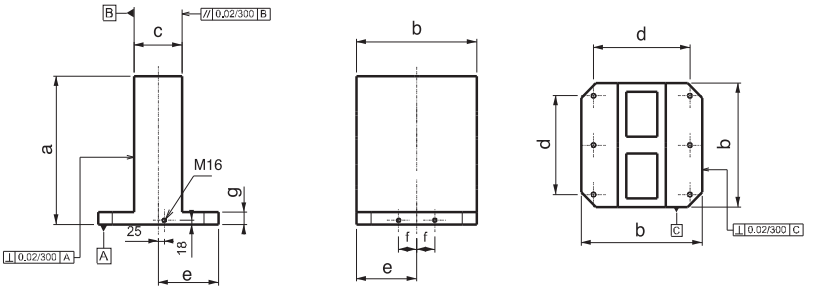




Referans Nr.	a	b	c	d	e	f	g	t	kg
2650-40025012	500	400	250	320	200	55	50	M12	170
2650-50030012	600	500	300	400	250	75	50	M12	230
2650-63035012	700	630	350	500	315	100	50	M12	380
2650-40025016	500	400	250	320	200	55	50	M16	168
2650-50030016	600	500	300	400	250	75	50	M16	228
2650-63035016	700	630	350	500	315	100	50	M16	376

CNC Yatay İşleme Kulesi

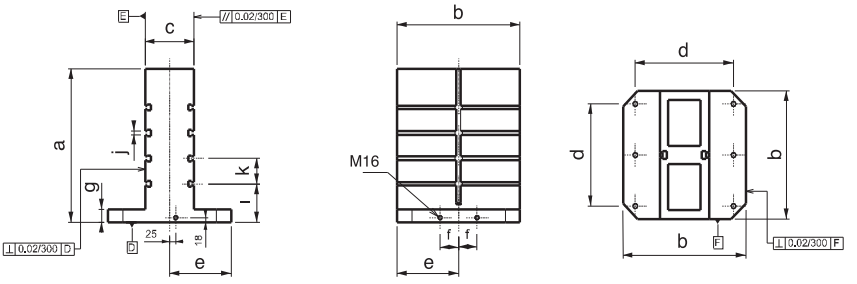




Referans Nr.	a	b	c	d	e	f	g	kg
2670-400150	500	400	150	320	200	55	50	175
2670-500200	600	500	200	400	250	75	50	265
2670-630250	700	630	250	500	315	100	50	484

CNC Yatay İşleme Kulesi

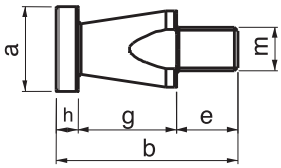


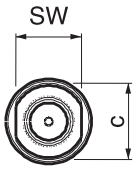


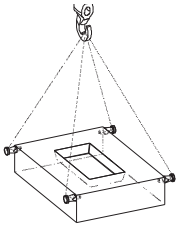
Referans Nr.	a	b	c	d	e	f	g	ı	k (± 0.02)	j (H7)	kg
2690-40015014	500	400	150	320	200	55	50	150	100	14	165
2690-50020014	600	500	200	400	250	75	50	150	100	14	240
2690-63025014	700	630	250	500	315	100	50	150	125	14	455
2690-40015018	500	400	150	320	200	55	50	150	100	18	152
2690-50020018	600	500	200	400	250	75	50	150	100	18	238
2690-63025018	700	630	250	500	315	100	50	150	125	18	450

Kalıp Taşıma Mapası





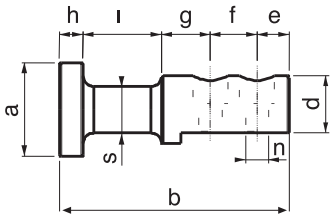


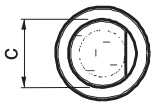


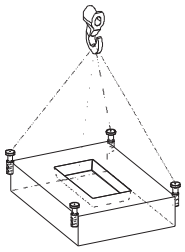
Referans Nr.	m	a	b	c	sw	e	g	h	Bir mapanın taşıma kuvveti Lifting Force of one Ringbolt Kgf	(g)
2730-016	M16	39	85	35	30	30	45	10	660	400
2730-020	M20	39	85	35	30	30	45	10	1000	420

Kalıp Taşıma Mapası



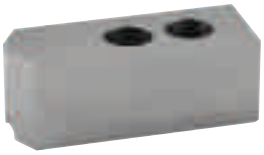


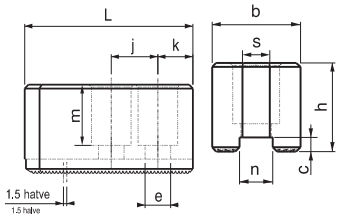




Referans Nr.	a	b	c	d	e	f	g	h	ı	n	s	Bir mapanın taşıma kuvveti Lifting Force of one Ringbolt Kgf	g
2750-044	44	108	32	27	15	22	23	11	37	11	22	400	600

CNC Yumuşak Ayak

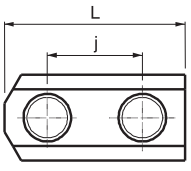


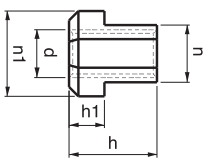


Referans Nr.	inch	hatve halve	L	b	h	n t7	c	k	j	e	m	s	kg
2770-0612	6"inc	1.5x60	72	32	32	12	5	15	20	11	22	10	1.2
2770-0814	8"inc	1.5x60	98	37	37	14	5	24	25	13	22	14	2.5
2770-1016	10"inc	1.5x60	110	42	42	16	5	30	30	13	29	14	3.7
2770-1218	12"inc	1.5x60	130	50	52	18	5	39	30	15	32	17	7.0
2770-1221	12"inc	1.5x60	130	50	52	21	5	39	30	17	32	19	6.5
2775-0612	6"inc	1.5x60	72	30	37	12	5	15	20	11	17	10	1.7
2775-0814	8"inc	1.5x60	95	35	67	14	5	24	25	13	19	14	3.6
2775-1016	10"inc	1.5x60	110	40	77	16	5	30	30	13	19	14	6.6
2775-1218	12"inc	1.5x60	130	50	77	18	5	39	30	15	23	17	9.3
2775-1221	12"inc	1.5x60	130	50	77	21	5	39	30	17	23	19	9.2

Yumuşak Ayak “T” Pabucu



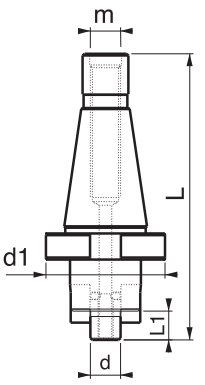




Referans Nr.	inch	L	h	n T6	n1	h1	d	j	(g)
2790-0610	6"inc	38	18.5	12	18	7.5	M10	20	60
2790-0812	8"inc	45	21.5	14	21	8.5	M12	25	80
2790-1012	10"inc	52	21.5	16	22	8.5	M12	30	100
2790-1214	12"inc	55	33.5	18	26.5	13.5	M14	30	225
2790-1216	12"inc	55	27	18	29	13.5	M16	30	220

Freze Tarama Kafa Tutucusu

Referans Nr.	ISO	d	d1	L	L1	m	(g)
2410-3016	ISO 30	16	48	125	17	M12	600
2410-3022	ISO 30	22	48	125	19	M12	620
2410-3027	ISO 30	27	48	125	21	M12	640
2410-3032	ISO 30	32	63.5	125	22	M12	680
2410-4016	ISO 40	16	63.5	153	17	M16	1200
2410-4022	ISO 40	22	63.5	153	19	M16	1250
2410-4027	ISO 40	27	63.5	153	21	M16	1300
2410-4032	ISO 40	32	63.5	153	24	M16	1360
2410-4040	ISO 40	40	73.5	153	27	M16	1420
2410-5016	ISO 50	16	98	195	17	M24	3470
2410-5022	ISO 50	22	98	195	19	M24	3520
2410-5027	ISO 50	27	98	195	21	M24	3580
2410-5032	ISO 50	32	98	195	24	M24	3625
2410-5040	ISO 50	40	98	195	27	M24	3700

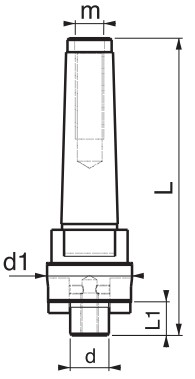




Ürün Nr. 2410 ISO 30-40-50 Freze Tarama Kafa Tutucusu

Freze Tarama Kafa Tutucusu

Referans Nr.	MK	d	d1	L	L1	m	(g)
2415-0416	MK 4	16	40	168	17	M16	910
2415-0422	MK 4	22	48	168	19	M16	940
2415-0427	MK 4	27	53	168	21	M16	990
2415-0432	MK 4	32	63.5	168	24	M16	1000
2415-0516	MK 5	16	63.5	208	17	M20	1900
2415-0522	MK 5	22	63.5	208	19	M20	1960
2415-0527	MK 5	27	63.5	208	21	M20	2010
2415-0532	MK 5	32	63.5	208	24	M20	2070
2415-0540	MK 5	40	73.5	208	27	M20	2120

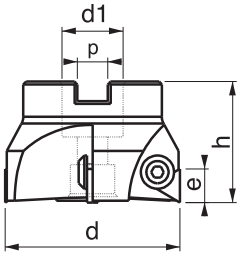




Ürün Nr. 2415 MK4-MK5 Freze Tarama Kafa Tutucusu

Freze Tarama Başlığı

Referans Nr.	d	h	d1	p	e		Kesici uç tipi Cutting Edge type	(g)
2420-0403	40	44	16	8.5	16	3	TPKN	230
2420-0503	50	44	22	10.5	16	3	TPKN	295
2420-0633	63	44	22	10.5	16	3	TPKN	460
2420-0634	63	44	22	10.5	16	4	TPKN	525
2420-0804	80	52	32	14.5	22	4	TPKN	900
2420-1005	100	52	32	14.5	22	5	TPKN	1380





Ürün Nr. 2420 Freze Tarama Başlığı

Yedek Baskı Vidası

Referans Nr.	d	Metrik	Alyan Allen
2420-06	40-50-63	M6x0.75	4
2420-08	80-100	M8x1	5



Ürün Nr. 2420 Yedek Baskı Vidası

Delik İşleme Aparatı

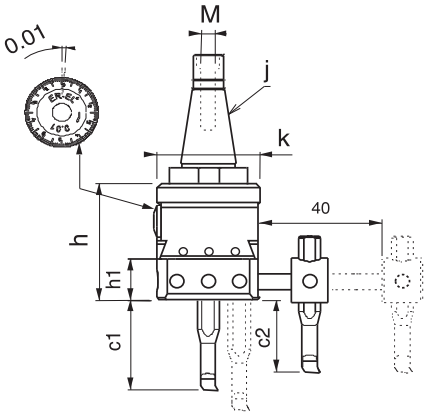
Referans Nr.	J x M	k	h	h1	e	L	L1	L2	kg
2390-010	ISO30-M12								5.6
2390-015	ISO40-M16					85			5.9
2390-020	ISO50-M24								6.1
2390-025	BT40 - M16								6.2
2390-030	BT50 - M24	83	99	35	18	95	128	26	8.1
2390-035	SK40 - M16								9.1
2390-040	SK50 - M24								9.2
2390-045	MK4 - M16					132			6.1
2390-050	MK4 Kamalı								5.9
2390-055	MK5 - M20								7.1
2390-060	MK5 Kamalı								6.9



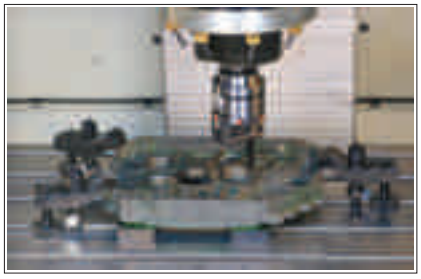
Ürün Nr. 2390 Delik İşleme Aparatı

Referans Nr.	L	L1	e	Kesici uç tipi Cutting Edge type	kg
2395-1	85	-	18	DCMT	112
2395-2	95	-	18	DCMT	165
2395-3	132	-	18	DCMT	210
2395-4	-	128	18	-	408

• Ürünün kızağındaki alt deliklerine baraları takarak 18mm'den 100mm çapa kadar büyütme 0-100mm kadar derinliğe inebilir.



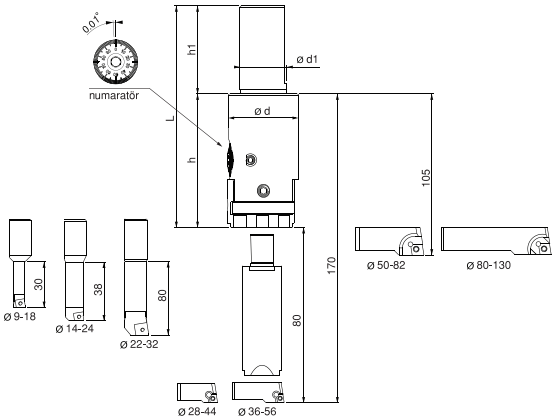




Ürün Nr. 2390 Delik İşleme Aparatı

• Ürün 0.01 işleme hassasiyeti olup 18mm'den 210mm'ye kadar işlem yapabilir.
Modüler sistem oluşu kullanım için kolaylık sağlar.
Tutucu değiştirilerek CNC ve Mekanik tezgahlarda kullanım avantajı sağlar. Ürünün 4 ad. delik barası, 1adet "T" kanal temizleyici ile ahşap kutudadır.
Değiştirebilir tutucular:
ISO30-40-50 BT40-50 SK40-50 MK4-5 ile kullanım imkanı..

Hassas Delik İşleme Aparatı



Not:
Ø 52 den sonra gövdeyle 105 mm uzatma barayla 170 mm derinliğe ulaşır.



Referans Nr.	d	d1	h	h1	L	kg
2385-130	48	32	91	60	151	2.2

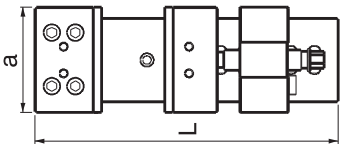
Ürün Nr. 2385 Hassas Delik İşleme Aparatı

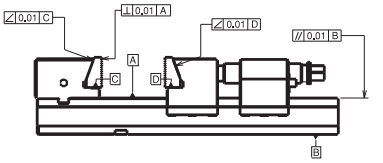
Ürün Nr. 2385 Hassas Delik İşleme Aparatı

• Ürün 0.01 işleme hassasiyetli olup 9mm'den 130mm çapa 170mm derinliğe işlem yapabilir değiştirilebilir bara va kartuş özelliği ile mükemmel kullanıma sahiptir

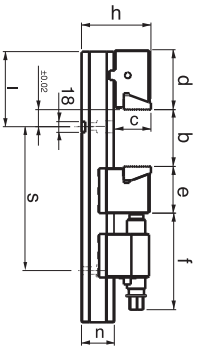
Mekanik Çelik Mengene





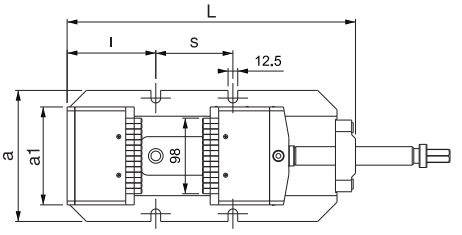


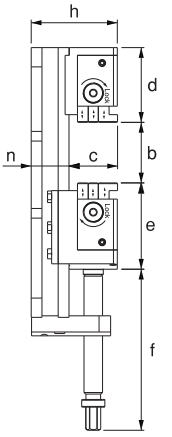
MODEL	a	b	c	L	d	e	f	h	ı	n	s	sıkma kuvveti clamping force kgf	(kg)
2330-127160	127	0-160	60	414	99	78	160	115	125	55	200	3500	28
2330-157200	157	0-200	60	453	99	78	160	115	125	55	200	4500	37
2330-157300	157	0-300	60	553	99	78	160	115	125	55	250	4500	42
2330-197300	197	0-300	60	553	99	78	160	115	150	55	250	4500	56
2330-197400	197	0-400	60	653	99	78	160	115	150	55	350	4500	62
2330-197500	197	0-500	60	753	99	78	160	115	150	55	200/250	4500	68



Kavramalı Mengene



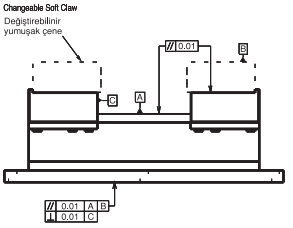


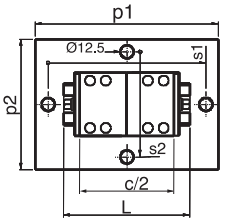


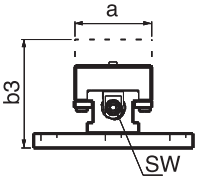
MODEL	a	a1	b	c	e	f	h	l	ı	s	n	(kg)
2300-127130	170	127	0-130	63	112	209	112	374	115	100	49	27

Çift Açılır Çelik Mengene

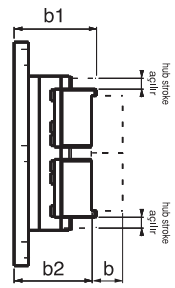




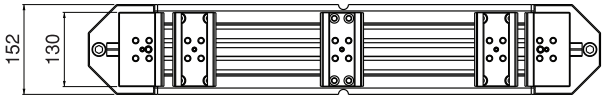


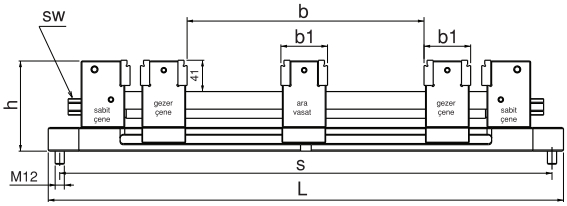


MODEL	a	L	c/2	açılır opens 2 x mm	iş bağlama kapasitesi Work Piece Coupling Capacity (mm)	b	b1	b2 ±0,02	b3	p1	p2	s1	s2	sıkma kuvveti clamping force kgf	sw	(kg)
2310-060	60	120	90	27	120	23.5	70.5	67.5	91	174	124	150	100	1000	9	5
2310-078	78	180	130	40	180	33	97	93	126	224	124	200	100	1600	12	10
2310-100	100	220	154	48	220	35	99	95	130	274	174	250	150	1600	12	19
2310-125	125	260	174	62	260	38	108	103	141	324	174	300	150	2200	14	26
2310-157	157	350	208	86	350	46	123	118	164	424	224	400	200	2200	17	52



Grup Çift Açılır Çelik Mengene



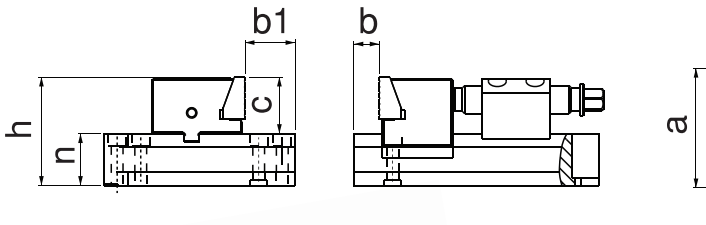




MODEL	b	b1	L	h	s	sw	Standart bağlama adedi coupling piece	Sıkma kuvveti Clamping force kgf	kg
2375-092	92	61	430	119	400	19	2	2000	39
2375-192	192	61	530	119	500	19	2	2000	41
2375-342	342	61	680	119	650	19	2	2000	44
2375-442	442	61	780	119	750	19	2	2000	48

MODEL	İş Bağlama Adetleri / Volume Workholding				
	1 iş parçası 1 Workpiece	2 iş parçası 2 Workpiece	3 iş parçası 3 Workpiece	4 iş parçası 4 Workpiece	5 iş parçası 5 Workpiece
2375-092	92	15	-	-	-
2375-192	192	66	23	-	-
2375-342	342	140	73	39.5	-
2375-442	442	190	106.5	64.5	39

Modüler Mekanik Çelik Mengene

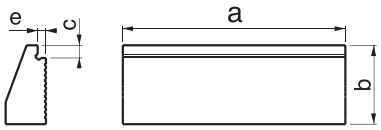




MODEL	a	L	L1	b1	b	c	h	n	ø d	Sıkma kuvveti Clamping force kgf	kg
2345-127	127	202	260	53	0-58	60	115	55	12.5	3500	28

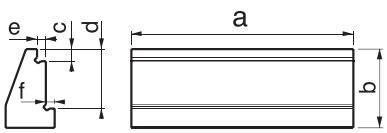
MÇM Faturalı Çeneler





MODEL	a	b	c	e	(g)
2335-127	127	45	7	5	1000

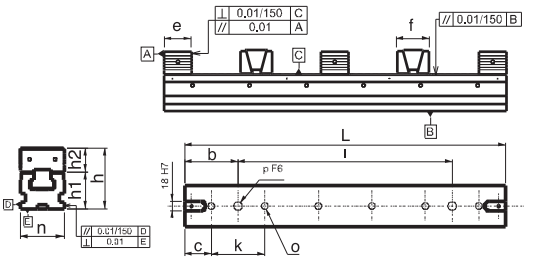




MODEL	a	b	c	d	e	f	(g)
2340-127	127	45	7	34	5	5	950

Çok Çeneli Seri Mengene

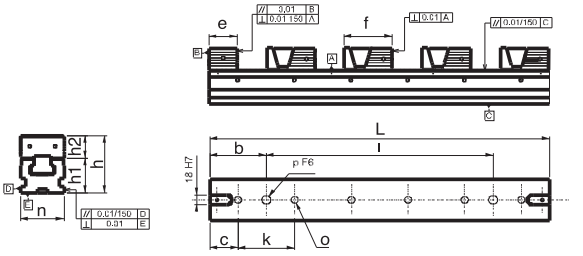




MODEL	L	n	h1	h2	h	o	e	f	b	c	k	›	p F6
2435-055300	300	55	48	25	73	12.5	37	37	100	50	100	100	18
2435-055500	500	55	48	25	73	12.5	37	37	100	50	100	300	18
2435-075400	400	75	63	38	101	12.5	47	57	100	50	100	200	18
2435-075600	600	75	63	38	101	12.5	47	57	100	50	100	400	18
2435-100400	400	100	65	38	103	12.5	47	57	100	50	100	200	18
2435-100600	600	100	65	38	103	12.5	47	57	100	50	100	400	18

Çok Çeneli Seri Mengene

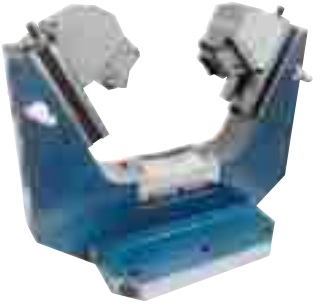




MODEL	L	n	h1	h2	h	o	e	f	b	c	k	›	p F6	Standartda ba□ama adedi
2430-055300	300	55	48	25	73	12.5	37	60	100	50	100	100	18	2
2430-055500	500	55	48	25	73	12.5	37	60	100	50	100	300	18	4
2430-075400	400	75	63	38	101	12.5	47	82	100	50	100	200	18	2
2430-075600	600	75	63	38	101	12.5	47	82	100	50	100	400	18	4
2430-100400	400	100	65	38	103	12.5	47	82	100	50	100	200	18	2
2430-100600	600	100	65	38	103	12.5	47	82	100	50	100	400	18	3

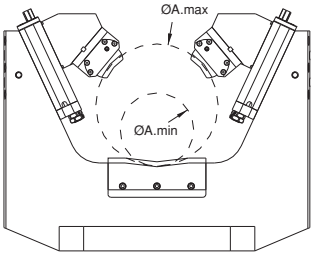
Çatal Kule

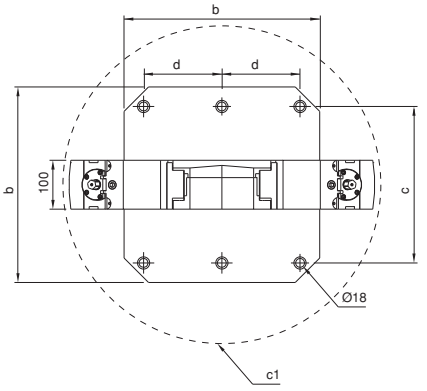
Referans Nr.	b	d	c	c1	A min.	A max.	Sıkma kuvveti Clamping force kgf
2600-400400	400	160	320	-	-	-	4000
2600-500500	500	200	400	-	-	-	4000
2600-630630	630	250	500	-	-	-	4000

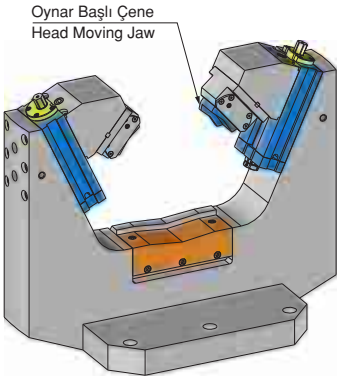


Ürün Nr. 2600 Çatal Kule
- Kullanım alanı: CNC yatay işleme, Borwekt tezgahlarında silindir parçaların iki yüzeyinde işleme kolaylığı sağlar.
- Hareketli yüzeylerin tamamı hassas taşlanmış ve sertleştirilmiştir.

Product Nr. 2600 Fork Tower
- Application area: Provides better operation on both sides of cylinderic workpieces on cnc horizontal machines and bohrwerks.
- Entire moving surface is sensitevely grinded and hardened.

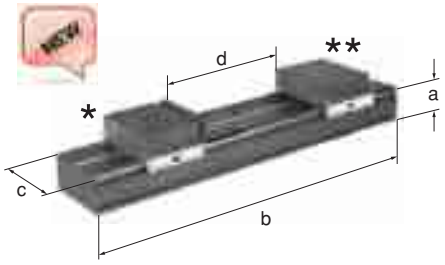






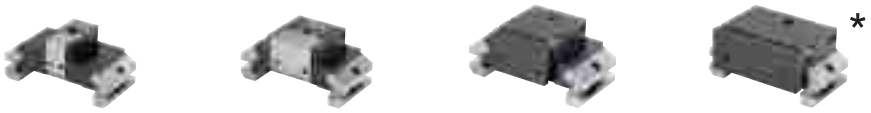
Seri Mengene

Referans Nr.	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



Ürün Nr. 2440 Seri Mengene
Product Nr. 2440 Serial Vice

Gezer Çene Çeşitleri / Portable Jaw Types

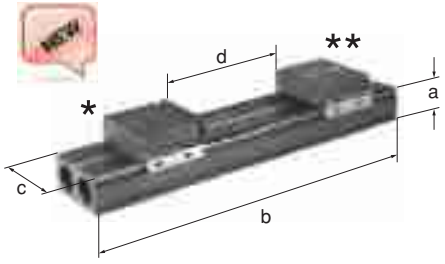


Dayama Çeşitleri / Stopper Types



Seri Mengene

Referans Nr.	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



Ürün Nr. 2440 Seri Mengene
Product Nr. 2440 Serial Vice

Gezer Çene Çeşitleri



Dayama



Seri Mengene Dayaması

Referans Nr.
2440-SL80120

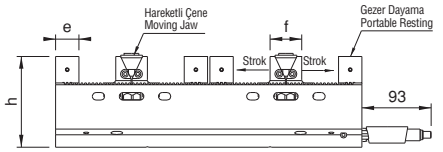


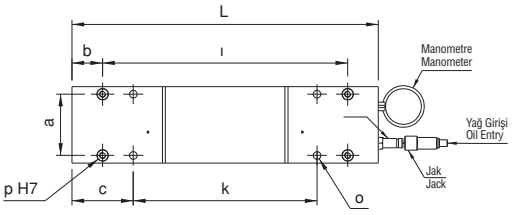
Ürün Nr. 2440 Seri Mengene Dayaması
Product Nr. 2440 Serial Vice Workpiece Stop

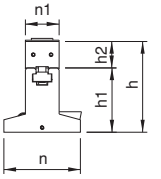
Hidrolik Çok Çeneli Seri Mengene

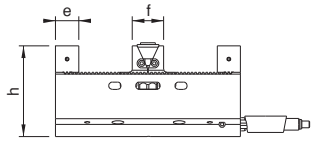
Referans Nr.	L	n	n1	h	h1	h2	o	e	f	a	b	c	k	ı	p H7	sıkma kuvveti clamping force Kgf
2445-055300	300	125	55	148	105	43	12.5	38	51.5	100	50	100	100	200	18	850
2445-055500	500	125	55	148	105	43	12.5	38	51.5	100	50	100	300	400	18	850
2445-075400	400	175	75	158	115	43	12.5	48	51.5	150	50	100	200	300	18	1100
2445-075600	600	175	75	158	115	43	12.5	48	51.5	150	50	100	400	500	18	1100
2445-100400	400	175	100	158	115	43	12.5	48	51.5	150	50	100	200	300	18	1100
2445-100600	600	175	100	158	115	43	12.5	48	51.5	150	50	100	400	500	18	1100

Ürün Nr. 2445 Çok Çeneli Seri Mengene
Product Nr. 2445 Multi Jawed Wrench Tooling









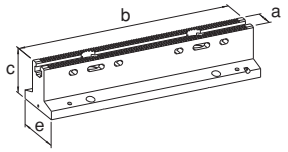
Referans Nr.	ÇİFT AÇILIR ÇENE İLE İŞ PARÇASI BAĞLAMA ADETLERİ Numbers of Double Opening Jaw with Workpiece Couplings	
	2 İş parçası 2 Workpiece	4 İş parçası 4 Workpiece
2445-055300	87 mm	-
2445-055500	-	60 mm
2445-075400	125 mm	-
2445-075600	-	75 mm
2445-100400	125 mm	-
2445-100600	-	75 mm



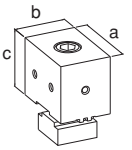
Not: İş bağlama adetleri ölçülerinde yumuşak ayak dahil değildir. **Note:** It does not include binding units of measure soft feet in business.

Referans Nr.	a	b	c	e	Referans Nr.	a	b	c	Referans Nr.	a	b	c	Referans Nr.	a	b	c
055300HAG	55	300	105	125	055300GD	55	38	43	055300HÇ	55	51.5	43	055300HYÇ	55	14	38
055500HAG	55	500	105	125	055500GD	55	38	43	055500HÇ	55	51.5	43	055500HYÇ	55	14	38
075400HAG	75	400	115	175	075400GD	75	48	43	075400HÇ	75	51.5	43	075400HYÇ	75	14	38
075600HAG	75	600	115	175	075600GD	75	48	43	075600HÇ	75	51.5	43	075600HYÇ	75	14	38
100400HAG	100	400	115	175	100400GD	100	48	43	100400HÇ	100	51.5	43	100400HYÇ	100	14	38
100600HAG	100	600	115	175	100600GD	100	48	43	100600HÇ	100	51.5	43	100600HYÇ	100	14	38

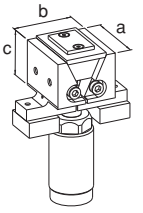
Hidrolik Alt Gövde
Hydraulic Sub-body



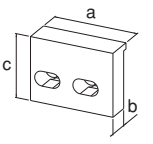
Gezer Dayama
Portable Resting



Hareketli Çene
Moving Jaw



Yumuşak Çene
Soft Jaw



Dik Bağlama Ekipmanı Kod : 800



Boy Size	F1 (kN)	F2 (kN)			hw		g
0	0.5	0.7	90	50	2 x 4	M4 x 25	92
1	0.9	1.1	105	60	4 x 5	M5 x 30	114
2	1.0	1.2	140	75	5 x 6	M6 x 35	178
3	1.8	2.3	200	105	8 x 12	M8 x 45	400
4	2.0	3.6	280	140	8 x 21	M8 x 60	630
5	3.0	5.0	365	180	10 x 34	M12 x 80	1000
6	5.5	6.8	360	220	2 x 37	M12 x 110	2160

Yatay Bağlama Ekipmanı Kod : 830



Boy Size	F1 (kN)	F2 (kN)			hw		g
0	0.25	0.40	70	65	3 x 2	M4 x 25	97
1	0.80	1.10	90	100	4 x 3	M5 x 30	112
2	1.00	1.20	44	150	3 x 8	M6 x 35	182
3	1.90	2.50	48	220	7 x 11	M8 x 45	340
4	3.00	5.00	74	300	6 x 18	M8 x 65	700
5	5.00	8.00	71	320	7 x 25	M12 x 80	1170

Dik Bağlama Ekipmanı Kod : 802



Boy Size	F1 (kN)	F2 (kN)			hw		g
1	0.8	1.1	117	60	2 x 5	M5 x 30	114
2	1.0	1.2	140	75	5 x 14	M6 x 35	178
3	1.8	2.3	210	105	8 x 20	M8 x 45	400
4	2.0	3.6	285	140	8 x 30	M8 x 65	630
5	3.0	5.0	333	180	10 x 45	M12 x 80	1000

Yatay Bağlama Ekipmanı Kod : 832



Boy Size	F1 (kN)	F2 (kN)			hw		g
0	0.25	0.40	52	85	0 x 7	M4 x 25	97
1	0.8	1.10	42	100	3 x 10	M5 x 30	112
2	1.0	1.20	59	150	7 x 10	M6 x 35	182
3	1.80	2.50	62	221	8 x 20	M8 x 45	340
4	3.00	3.00	96	295	8 x 30	M8 x 65	700
5	3.00	5.00	93	330	12 x 37	M12 x 80	1170

Dik Bağlama Ekipmanı Kod : 803



Boy Size	F1 (kN)	F2 (kN)			hw		g
1	0.8	1.1	102	50	1.5 x 5.5	M5 x 30	125
2	1.0	1.2	135	75	2 x 11	M6 x 35	220
3	1.8	2.5	208	105	5 x 18	M8 x 45	470
4	2	3	270	141	11 x 40	M8 x 65	650

Yatay Bağlama Ekipmanı Kod : 833



Boy Size	F1 (kN)	F2 (kN)			hw		g
3	1.8	2.5	96	321	6 x 18	M8 x 45	400
4	2	3	97	361	12 x 40	M8 x 65	700

İtme - Çekme Tipi Bağlama Ekipmanı Kod : 841



Boy Size	F1 (kN)	F2 (kN)				g
0	0.8	0.8	40	110	M4 x 20	90
1	1.0	1.0	50	120	M4 x 20	120
2	2.0	2.0	80	175	M6 x 25	270
3	2.5	2.5	102	190	M8 x 35	450
5	4.5	4.5	125	200	M12 x 50	880

Kancalı Bağlama Ekipmanı Kod : 848



Boy Size	(kN)	Ayar Aralığı Adjustm. distance (mm)			g
1	1	26	28	60	90
2	1.4	32	43	70	110
3	2.5	42	64	102	300
4	4.5	55	84	140	710

İtme - Çekme Tipi Bağlama Ekipmanı Kod : 842



Boy Size	F1 (kN)	F2 (kN)				g
3	4.0	4.0	115	181	M8 x 35	630
5	10.0	10.0	133	245	M12 x 50	1020
7	25.0	25.0	170	300	M12 x 50	3610

Pnömatik Bağlama Ekipmanı Kod : 620/K



Boy Size	F1 (kN)	F2 (kN)	F2' (kN)	Vn* (kN)	F3 (kN)	Vn**				g
1	0.8	1.1	0.20	0.3	0.10	0.08	52	175	M6 x 50	910
2	1.0	1.2	0.75	1.0	0.20	0.25	84	200	M8 x 50	975
3	1.4	2.5	0.85	1.1	0.50	0.35	95	254	M8 x 50	1100
4	3.0	3.0	1.50	2.2	0.75	0.95	105	245	M8 x 50	1500

Kancalı Bağlama Ekipmanı Kod : 847



Boy Size	(kN)	Ayar Aralığı Adjustm. distance (mm)			g
1	2.0	5	33	130	100
3	3.0	12	36	230	300
5	5.0	12	70	310	850

Pnömatik Bağlama Ekipmanı Kod : 650



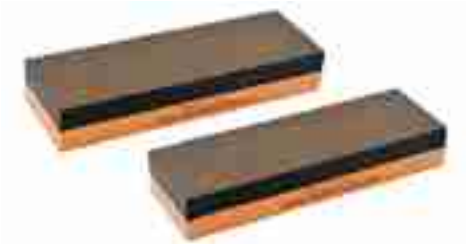
Boy Size	F1 (kN)	F2 (kN)	F2' (kN)	Vn**				g
3	4.0	2.5	0.75	0.8	65	300	M8 x 35	3200
5	10.0	5.5	1.0	2.2	115	460	M10 x 50	3650
7	25.0	-	1.0	4.5	130	520	M10 x 50	7680

KALIP PARLATMA MALZEMELERİ

- Gaz Taşları
- Seramik Gaz Taşları
- Saplı Taşlar
- Elmas Pastalar
- Saplı Parlatma Keçeleri
- Elektro Kaplamalı Elmas Uçlar
- Sert Metal Çapak Alma
- Kalıpçı Frezeler
- Havalı Diprofiller
- Havalı Spiraller
- Elmas Eğeler
- Tesviye Eğeleri
- Zımparalar
- Saplı Zımparalar
- Kesici Taşlar
- Aşındırıcı Taşlar
- Elektrikli Parlatma Makineleri
- Havalı El Aletleri



Aliminyum Oksit Kombine Taşlar



KOD	Ölçü \ Kum	120 - 320
FC45	16 x 40 x L=115mm	■
FC67	25 x 50 x L=150mm	■
FC87	25 x 50 x L=200mm	■

Gaz Taşları Standart Ölçü ve Şekil Tablosu

Tip	Ölçü \ Kum	120	180	220	320	400	600	800	1000
▭	1.5x6	■	■	■	■	■	■	■	■
▭	1.5x13	■	■	■	■	■	■	■	■
□	3x3	■	■	■	■	■	■	■	■
▭	3x6	■	■	■	■	■	■	■	■
▭	3x13	■	■	■	■	■	■	■	■
▭	3x25	■	■	■	■	■	■	■	■
□	4x4	■	■	■	■	■	■	■	■
□	6x6	■	■	■	■	■	■	■	■
▭	6x13	■	■	■	■	■	■	■	■
▭	6x25	■	■	■	■	■	■	■	■
□	10x10	■	■	■	■	■	■	■	■
Ø	6	■	■	■	■	■	■	■	■
Ø	10	■	■	■	■	■	■	■	■
△	6	■	■	■	■	■	■	■	■
△	10	■	■	■	■	■	■	■	■
⌓	6	■	■	■	■	■	■	■	■

Standart boy= 150 mm



Gaz Taşı Tutucuları



Kod	Uyumlu taş ölçüleri
029910	3x6, 3x13, 6x6
029912	6x6, 6x13,
029913	Ø6, Ø10
029914	1.5x6, 1.5x13, 6x6

BORIDE / USA

Gaz Taşı Sıvısı

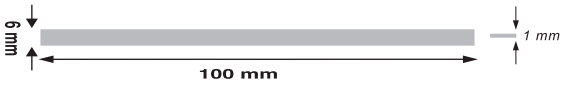


- Kemet beyaz nemlendirici gaztaşı, zımpara ve lepleme işlemleri sırasında kullanılır. Yüzeyde temizleme ve yumuşatma sağlar
- Kullanılan ürünün kesme özelliğini artırır.
- Sağlığa zararlı yan etkisi yoktur.

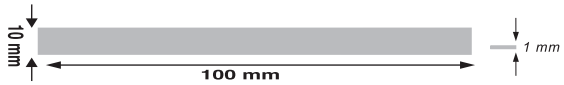
Seramik Gaz Taşları



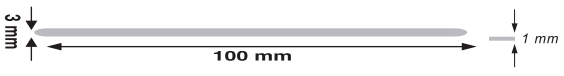
Renk	Ölçü	Kum
	1 x 4 x 100	180
		250
		280
		360
		400
		500
		700
		1000
		1200



Renk	Ölçü	Kum
	1 x 6 x 100	180
		250
		280
		360
		400
		500
		700
		1000
		1200



Renk	Ölçü	Kum
	1 x 10 x 100	180
		250
		280
		360
		400
		500
		700
		1000
		1200



Renk	Ölçü	Kum
	3 x 100	180
		250
		280
		360
		400
		500
		700
		1000
		1200



Makina kullanımı için

Kod	Ürün	Ölçü
GTT-321	Plastik Gaztaşı Tutucusu	3 x 6 - 3 x 13



el kullanımı için

Kod	Ürün	Ölçü
GTT-329	**Plastik Gaztaşı Tutucusu**	**3 x 6 - 3 x 13**



el kullanımı için

Sip.Kod	Ürün	Ölçü
GTT-322	**Plastik Gaztaşı Tutucusu**	**3 x 6 - 4 x 4**



el kullanımı için

Kod	Ürün	Ölçü
GTT-324	**Metal Gaztaşı Tutucusu**	**3 x 6**



el kullanımı için

Kod	Ürün	Ölçü
GTT-332	**Metal Gaztaşı Tutucusu**	**3 x 13 - 6 x 13**



makina kullanımı için

Kod	Ürün	Ölçü
GTT-334	**Seramik Gaztaşı Tutucusu**	**1 x 4 - 1 x 6 1 x 10 - Ø 3**



el kullanımı için

Kod	Ürün	Ölçü
GTT-328	**Seramik Gaztaşı Tutucusu**	**1 x 4 - 1 x 6**



el kullanımı için

Kod	Ürün	Ölçü
GTT-336	**Seramik Gaztaşı Tutucusu**	**1 x 6 - 1 x 10**



Form A Form R								
Kod	256A	308A	410A	510A	612A	816A	1016A	813R
D x L	2.5x6	3x8	4x10	5x10	6x12	8x16	10x16	8x13

Form B Form R Form T Form J Form S Form P																			
Kod	30B	40B	50B	60B	80B	100B	120B	1224R	308T	310T	412T	710T	412J	616J	816J	1016J	609S	612P	815P	1018P
D x L	Ø 3	Ø 4	Ø 5	Ø 6	Ø 8	Ø 10	Ø 12	12x24	3x8	3x10	4x12	7x10	4x12	6x16	8x16	10x16	6x9	6x12	8x15	10x18

Form K Form E 6 mm Şaft Form A Form B																			
Kod	412K	515K	816K	132E	133E	162E	1608A	2008A	2016A	2510A	2520A	3220A	4025A	5030A	1015B	1620B	2020B	2030B	2040B
D x L	4x12	5x15	8x16	13x2	13x3	16x2	16x8	20x8	20x16	25x10	25x20	32x20	40x25	50x30	10x15	16x20	20x20	20x30	20x40

Form B Form C Form D Form F Form E																			
Kod	2525B	2532B	3240B	2508C	3208C	4010C	1220D	2035D	0816F	1320F	2032F	0816E	1230E	1640E	2030E	2040E	2525E	2540E	3240E
D x L	25x25	25x32	32x40	25x8	32x8	40x10	12x20	20x35	8x16	13x20	20x32	8x16	12x30	16x40	20x30	20x40	25x25	25x40	32x40

Silindir Parlatma Lastikleri Ø 6.35 x 25 mm



Değersiz Alaşımlar ve Değerli Metal Dökümlerin Düzeltilmesi İçin.

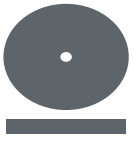


Altın ve Değersiz Metal Yüzeylerinin Matlaştırılması İçin



Altın ve Değersiz Metal Yüzeylerinin Yüksek Parlaklıkta Parlatılması İçin

Daire Parlatma Lastikleri Ø 22 x 3.00 mm



Değersiz Alaşımlar ve Değerli Metal Dökümlerin Düzeltilmesi İçin



Altın ve Değersiz Metal Yüzeylerinin Matlaştırılması İçin



Altın ve Değersiz Metal Yüzeylerinin Yüksek Parlaklıkta Parlatılması İçin

Saplı Parlatma Lastikleri Ø 6.35 x 25 mm



Değersiz Alaşımlar ve Değerli Metal Dökümlerin Düzeltilmesi İçin



Altın ve Değersiz Metal Yüzeylerinin Matlaştırılması İçin



Altın ve Değersiz Metal Yüzeylerinin Yüksek Parlaklıkta Parlatılması İçin

Separe Kesme Taşları

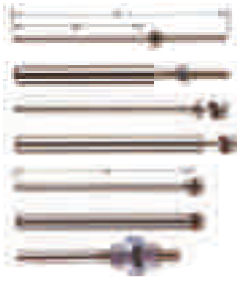


Ø 20 x 0.70 mm

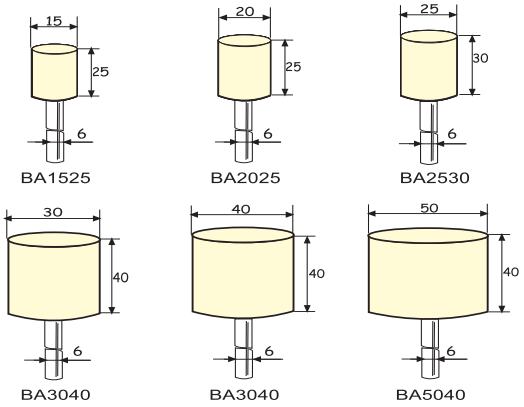


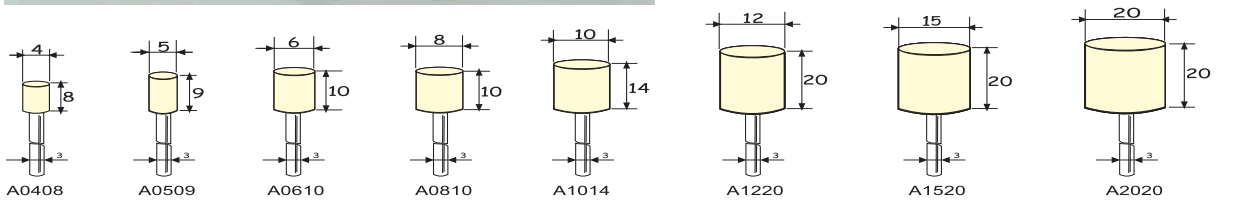
Ø 40 x 1.00 mm

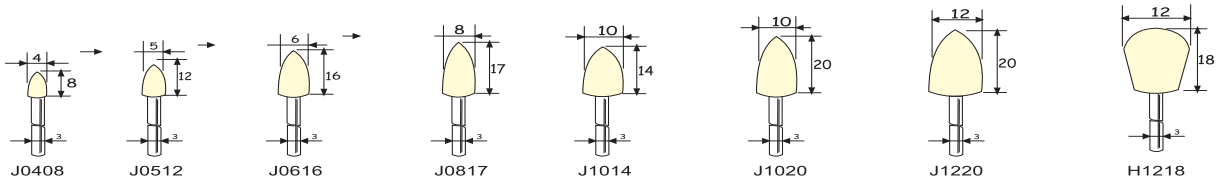
Kod	Açıklama
760	2.35 mm dişili somunlu bağl. apr. / kısa
763	3 mm dişili somunlu bağl. apr. / kalın dişli
765	2.35 mm kademesiz ince kafalı bağl. apr.
766	3 mm düz bağlama aparatı
769	3 mm dişli kademesiz bağl. aparatı
770	6 mm bağlama aparatı
771	6 mm pullu bağl. aparatı / kısa

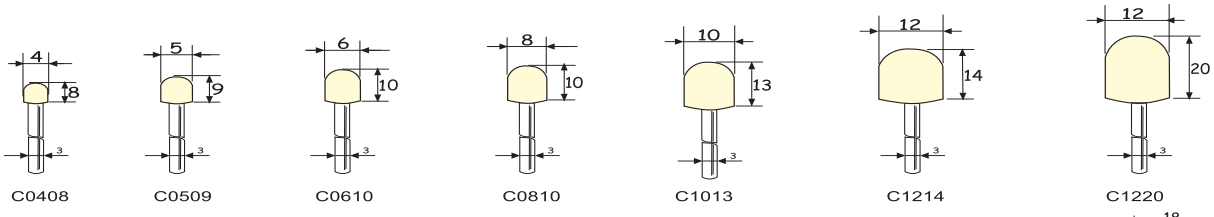


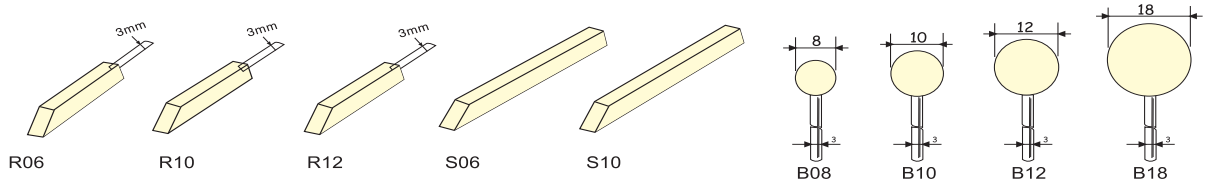












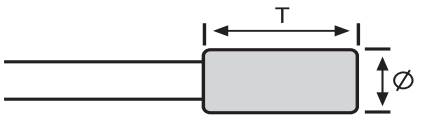
Ürün	Mikron	Şırınga
ELMAS PASTA	0 - 1 MİCRON	20 GRAM
	2 - 1 MİCRON	
	3 - 2 MİCRON	
	5 - 3 MİCRON	
	5 - 7 MİCRON	
	7 - 10 MİCRON	
	14 - 20 MİCRON	
	20 - 28 MİCRON	
	40 - 60 MİCRON	

Elmas Pastalar



Elmas Pasta Sıvısı









ØD	Ø1	Ø1.5	Ø2	Ø2.5	Ø3	Ø3.5	Ø4	Ø5	Ø6	Ø1	Ø1.5	Ø2	Ø2.5	Ø3	Ø3.5	Ø4	Ø5	Ø6
T	8	8	8	8	10	10	10	10	10	8	8	8	8	10	10	10	10	10
No.	10A	15A	20A	25A	30A	35A	40A	50A	60A	10C	15C	20C	25C	30C	35C	40C	50C	60C

ØD	Ø2	Ø3	Ø3	Ø1.2	Ø1.5	Ø1.5	Ø2	Ø3	Ø3.3	Ø3.3	Ø2	Ø3	Ø4	Ø5	Ø6	Ø2	Ø3	Ø3.3
T	10	10	10	16	13	10	12	14	15	10	12	15	15	15	13	10	10	15
No.	20T	30T	30V	13R	14R	15R	20R	30R	31R	32R	20P	30P	40P	50P	60P	20F	30F	33F

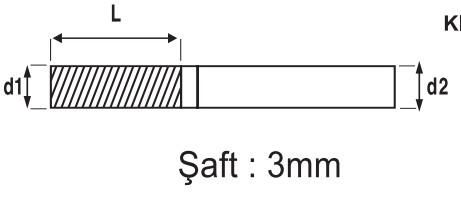
ØD	Ø4	Ø5	Ø6	Ø6	Ø2	Ø3	Ø4	Ø5	Ø5	Ø6	Ø1	Ø1.5	Ø2	Ø2.5	Ø3	Ø4	Ø5	Ø6
T	10	10	12	10	6	14	9	10	13	13	8	-	-	-	-	-	-	-
No.	40F	50F	60F	61F	20J	30J	40J	50J	51J	60J	10B	15B	20B	25B	30B	40B	50B	60B

ØD	Ø8	Ø3	Ø4	Ø5	Ø5	Ø6	Ø6	Ø2	Ø3	Ø3	Ø3	Ø3	Ø3	Ø3	Ø3	Ø4	Ø5	Ø6
T	-	5	7	9	12	10	12	4	6	5.5	6	6	6	6	5	8	10	12
No.	80B	30Q	40Q	50Q	51Q	60Q	61Q	20S	30S	31S	32S	33S	34S	35S	36S	40S	50S	60S

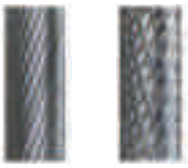
ØD	Ø13	Ø13	Ø13	Ø13
T	2	2.5	2	2.5
No.	1320U	1325U	1320E	1325E

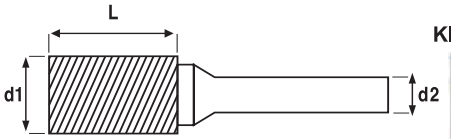
Kullanım Alanları

* Karbür
* Mermer
* Seramik
* Granit
* Sertleştirilmiş Çelik
* Tüm Metal Malzemeler

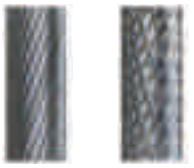


Şaft : 3mm





Şaft : 6mm



Kod	Ürün	d1 x L x d2
EYF - 1036		1.5 x 6 x 3 mm
EYF - 1037		2.5 x 11 x 3 mm
EYF - 1038		3 x 4 x 3 mm
EYF - 1039		2.4 x 4 x 3 mm
EYF - 1040		3 x 4 x 3 mm
EYF - 1041		3 x 6 x 3 mm
EYF - 1042		3 x 10 x 3 mm
EYF - 1043		3 x 6 x 3 mm
EYF - 1044		3 x 10 x 3 mm
EYF - 1045		3 x 6 x 3 mm
EYF - 1046		3 x 12 x 3 mm
EYF - 1050		2.4 x 3 mm
EYF - 1051		3 x 3 mm
EYF - 1052		6 x 3 mm
EYF - 1053		3 x 10 x 8 mm
EYF - 1054		3 x 13 x 8 mm
EYF - 1055		2.4 x 3 x 3 mm
EYF - 1056		3 x 3 x 3 mm

Kod	Ürün	d1 x L x d2
EYF - 1057		6 x 12 x 3 mm
EYF - 1058		6 x 12 x 3 mm
EYF - 1059		6 x 3 mm
EYF - 1060		6 x 10 x 3 mm
EYF - 1061		6 x 12 x 3 mm
EYF - 1062		6 x 12 x 3 mm
EYF - 1063		6 x 12 x 3 mm
EYF - 1064		6 x 12 x 3 mm

PF 05 Elmas Eğe Seti



PF Serisi Tekli Elmas Eğeler

Kod	Form	Boy (mm)	Elmas boyu (mm)	Kalınlık (mm)	Genişlik (mm)	Kum
PFL-101		140	50	1.5	6	120
PFL-102		140	50	2	5	120
PFL-103		140	50	3	Ø	120
PFL-104		140	50	2.5	2.5	120
PFL-105		140	50	3.5	3.5	120
PF 05	PVC AMBALAJLI 5'Lİ TAKIM					

PF 10L Elmas Eğe Seti



PF Serisi Tekli Elmas Eğeler

Kod	Form	Boy (mm)	Elmas boyu (mm)	Kalınlık (mm)	Genişlik (mm)	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 10L	PVC AMBALAJLI 10'LU TAKIM					

PFL 10 Elmas Eğe Seti



Kod	Form	Boy (mm)	Elmas boyu (mm)	Kalınlık (mm)	Genişlik (mm)	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-107		180	50	0.5	5.5	200
PFL-108		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	AHŞAP KUTULU 10'LU TAKIM					

CF 40 Elmas Eğe Seti



CF Serisi Tekli Elmas Eğeler

Kod	Form (mm)	Boy (mm)	Elmas Boyu (mm)	Kum
CF-402J	2, 0.4 - 1.5	180	40	150
CF-402F				200
CF-402V				400
CF-404J	4, 0.5 - 2.0	180	50	150
CF-404F				200
CF-404V				400
CF-406J	6, 0.5 - 2.0	180	50	150
CF-406F				200
CF-406V				400
CF-408J	8, 0.5 - 2.0	180	50	150
CF-408F				200
CF-408V				400
CF 50	PVC AMBALAJLI 12'Lİ TAKIM			

CF 50 Elmas Eğe Seti



Kod	Form	Boy (mm)	Elmas boyu (mm)	Kalınlık (mm)	Genişlik (mm)	Kum
CF 501		180	70	0.9 - 2.8	10	200
CF 502		180	60	0.4 - 2.5	8	200
CF 503		180	60	0.4 - 2.5	6	200
CF 504		180	50	0.4 - 2.0	4	200
CF 505		180	50	0.6 - 2.2	1.2 - 4	200
CF 50	AHŞAP KUTULU 5'Lİ TAKIM					

IF 50 Elmas Eğe Seti



IF Serisi Tekli Elmas Eğeler

Kod	Form	Boy (mm)	Elmas boyu (mm)	Kalınlık (mm)	Genişlik (mm)	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 TAKIM					

BF 90 Elmas Eğe Seti



BF Serisi Tekli Elmas Eğeler

Kod	Form	Boy (mm)	Elmas boyu (mm)	Kalınlık (mm)	Genişlik (mm)	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 TAKIM					

BF 60 Elmas Eğe Seti



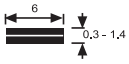
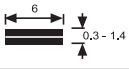
IF Serisi Tekli Elmas Eğeler

Kod	Form	Boy (mm)	Elmas boyu (mm)	Kalınlık (mm)	Genişlik (mm)	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'Lİ TAKIM					

MTF 100 Diprofil Eğe Seti



MTF Serisi Tekli Elmas Eğeler

Kod	Form (mm)	Boy (mm)	Elmas Boyu (mm)	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 100	PVC AMBALAJLI 12'Lİ TAKIM			

FAS 10 Diprofil Eğe Seti



FAS Serisi Tekli Elmas Eğeler

Kod	Form	Boy (mm)	Elmas boyu (mm)	Genişlik (mm)	Kalınlık (mm)	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
FAS 10	AHŞAP KUTULU 10'LU TAKIM					



Form	Ebat	A	B	C
Lama (Hand)	4	100	12	3
	6	150	16	4
	8	200	20	5
	10	250	25	5.5
	12	300	30	6



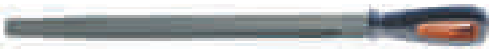
Form	Ebat	A	B	C
Yarım Yuvarlak	4	-	-	-
	6	150	16.0	4.7
	8	200	20.5	6
	10	250	26.5	7.5
	12	300	31.0	9



Form	Ebat	A	B	C
Yuvarlak	4	-	-	
	6	150	6	
	8	200	8	
	10	250	10	
	12	300	12	



Form	Ebat	A	B	C
Üç Köşe	4	-	-	
	6	150	11.0	
	8	200	15.5	
	10	250	17.5	
	12	300	19.5	



Form	Ebat	A	B	C
Kare	4	-	-	
	6	150	6	
	8	200	8	
	10	250	10	
	12	300	12	



Form	Ebat	A	B	C
Mil Eğesi (iki kenarı düz)	4	-	-	-
	6	150	16	2.7
	8	200	20	3.3
	10	250	25	4.0
	12	300	30	5.0

SAATÇİ EĞELER



Lama

Y.Yuv.

Yuvarlak

Oval

Üç köşe

Kare

Bıçak

EĞE SAPLARI



4'' - 6'' - 8'' - 10'' - 12''



Delikli Elyaf Mop Zımpara



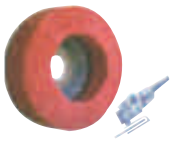
Ürün Çapı
165 x 30 x 25
165 x 30 x 45
165 x 50 x 25
165 x 50 x 45

Cırtlı Disk Zımpara



Ø 115
Kum : 60 - 80 - 120
150 - 180 - 220 - 360

Elyaf Disk



Ürün Çapı
110 x 22

Elyaf Zımpara Disk



Ürün Çapı
110 x 22

Alüminyum Oksit Delikli Disk Zımparalar



Beyaz Renkli; Ø 125
Kum : 60 - 80 - 120 - 150
180 - 220 - 360

Kahve Renkli; Ø 125
Kum : 60 - 80 - 120 - 150
180 - 220 - 360

Kamalı Elyaf Mop



Ürün Çapı
100 x 110 x 19

Dairesel Elyaf Mop



Ürün Çapı
165 x 30 x 25

Alüminyum Oksit Disk Zımparalar



Beyaz Renkli; Ø 115 - Ø180
Kum : 60 - 80 - 120 - 150
180 - 220 - 360

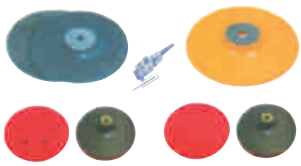
Kahve Renkli; Ø 115
Kum : 60 - 80 - 120 - 150
180 - 220 - 360

Elyaf Plakalar



Ürün Çapı
230 x 280 Kaba İşlem
230 x 280 İnce İşlem

Zımpara Bağlama Diski



Ürün Çapı
115 x 22
180 x 22
115 x M14 Vidalı



Kod	Ürün Çapı	Tel Çapı	Model
HA - 10141	17	0.30	Sarı Telli Kalem Fırça
HA - 10139	25		
HA - 10137	30		
HA - 10145	50		Sarı Telli Çanak Fırça
HA - 10149	75		
HA - 10127	40 x 6		Sarı Telli Daire Fırça
HA - 10131	60 x 8		
HA - 10135	100 x 10		



Kod	Ürün Çapı	Model
SEM - 30	Ø 30 x 30 Şaft 6 mm	SAPLI ELYAF MOP
SEM - 40	Ø 40 x 30 Şaft 6 mm	
SEM - 50	Ø 50 x 30 Şaft 6 mm	
SEM - 60	Ø 60 x 30 Şaft 6 mm	
SEM - 80	Ø 80 x 30 Şaft 6 mm	
ZEM - 30	Ø 30 x 30 Şaft 6 mm	ZIMPARALI ELYAF MOP
ZEM - 40	Ø 40 x 30 Şaft 6 mm	
ZEM - 50	Ø 50 x 30 Şaft 6 mm	
ZEM - 60	Ø 60 x 30 Şaft 6 mm	
ZEM - 80	Ø 80 x 30 Şaft 6 mm	

SAPLI MOP ZIMPARALAR



Çap x En x Mil (mm)
20 x 15 x 6
20 x 20 x 6
20 x 25 x 6
25 x 15 x 6
25 x 20 x 6
25 x 30 x 6
30 x 10 x 6
30 x 15 x 6
30 x 20 x 6

Çap x En x Mil (mm)
40 x 10 x 6
40 x 15 x 6
40 x 20 x 6
40 x 30 x 6
50 x 10 x 6
50 x 15 x 6
50 x 20 x 6
50 x 30 x 6
60 x 15 x 6

Çap x En x Mil (mm)
60 x 20 x 6
60 x 30 x 6
60 x 40 x 6
80 x 15 x 6
80 x 20 x 6
80 x 30 x 6
80 x 40 x 6



Şerit Bez Zımpara Sert - Yumuşak

Ebat	Kum								
	60	80	100	120	180	220	320	400	600
100									
120									
130									
150	✓	✓	✓	✓	✓	✓	✓	✓	✓
200									
250									

SPİRAL MOP ZIMPARALAR



Shaft 3 mm

Shaft 6 mm

MİNİ MOP LASTİKLER (Shaft 3 mm)

ÜRÜN	ÇAP	KUM
SPİRAL BANT ZIMPARA	4 mm x 8 mm	120-220-320-400-600 KUM
SPİRAL BANT ZIMPARA	5 mm x 10 mm	120-220-320-400-600 KUM
SPİRAL BANT ZIMPARA	6 mm x 12 mm	120-220-320-400-600 KUM
SPİRAL BANT ZIMPARA	8 mm x 15 mm	120-220-320-400-600 KUM
SPİRAL BANT ZIMPARA	10 mm x 20 mm	120-220-320-400-600 KUM
SPİRAL BANT ZIMPARA	12 mm x 26 mm	120-220-320-400-600 KUM

ÜNİVERSAL MOP LASTİKLER (Shaft 6 mm)

ÜRÜN	ÇAP	KUM
SPİROBANT	10 mm x 20 mm	120-220-320-400-600 KUM
SPİROBANT	13 mm x 25 mm	120-220-320-400-600 KUM
SPİROBANT	15 mm x 25 mm	120-220-320-400-600 KUM
SPİROBANT	20 mm x 30 mm	120-220-320-400-600 KUM
SPİROBANT	25 mm x 30 mm	120-220-320-400-600 KUM
SPİROBANT	30 mm x 30 mm	120-220-320-400-600 KUM



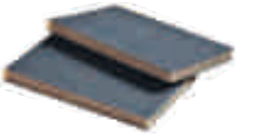
Su Zımparası

Mevcut Kum Kalınlıkları

60 - 80 - 100 - 120 - 150 - 180 - 220 - 240
280 - 320 - 360 - 400 - 500 - 600 - 800 - 1000
1200 - 1500 - 2000



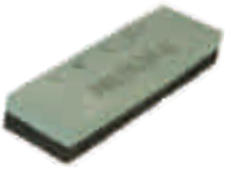
Sünger Zımpara



• Metal, ağaç, sert plastik gibi malzemelerin el ile zımparalanmasında kullanılır.

Mevcut Kum Kalınlıkları

60 - 80 - 100 - 120 - 150 - 180 - 220 - 240
280 - 320 - 360 - 400



SC / SCG
Kombine Yağ Taşı

100 x 25 x 16
125 x 40 x 20
150 x 50 x 25
200 x 50 x 25



EKR / EKDR
Kombine Yağ Taşı

100 x 25 x 16
125 x 40 x 20
150 x 50 x 25
200 x 50 x 25

NK Taşlama Taşları A24 RS BF80





• Genel amaçlı demir çelik ve metallerin taşlanmasında kullanılır.

Ebat
100 x 6,4 x 16
115 x 6,4 x 22
125 x 6,4 x 22
180 x 6,4 x 22
180 x 8,0 x 22
180 x 10 x 22
230 x 6,4 x 22
230 x 8,0 x 22
230 x 10 x 22

Metal Kesme Taşları A36 T BF80





• Metal ve döküm malzelemerin kesme işlemine uygundur.

Ebat
100x2,5x16
115x2,5x22
125x2,5x22
180x3,0x22
230x3,0x22

İnox Kesme Taşı AA24 S BF80



inox



• Çelik ve inox malzemelerin kesme işlemine uygundur.

THINLINE

Ebat
115 x 1,0 x 22
115 x 1,2 x 22
115 x 1,6 x 22
125 x 1,0 x 22
125 x 1,6 x 22
180 x 1,9 x 22
230 x 1,9 x 22

Fiber Disk Zımpara



Ebat	Kum
115x22	36-40-60
180x22	36-40-60



Flap Disk (Zımpara)



Ebat	Kum			
	40	60	80	120
100 x 16	✓	✓	✓	✓
115 x 22	✓	✓	✓	✓
125 x 22	✓	✓	✓	✓
180 x 22	✓	✓	✓	✓

Diamon Disk Taş



Ebat
75 x 3 x 6
100 x 4 x 8
125 x 4 x 8
150 x 4 x 8

NK Ara Taşı



Ebat
150 x 2,0 x 20
175 x 2,0 x 20
190 x 2,0 x 28

Diamond Çanak Taş



Ebat	Yoğunluk	Çap	Delik Çapı
2x5	C75-100	100	20
3x5	C75-100	100	20
2x6	C75-100	100	20
3x6	C75-100	100	20
2x8	C75-100	100	20
3x8	C75-100	100	20

NK Taşlama Taşları



• Genel amaçlı zımpara taşları yüzey taşlama silindir taşalama ve takımhanelerin bileme işlerinde kullanılır.

Ebat	Kum			
	24	36	46	60
75 x 13 x 10		✓	✓	✓
100 x 13 x 10		✓	✓	✓
100 x 16 x 20		✓	✓	✓
125 x 16 x 16		✓	✓	✓
125 x 20 x 20	✓	✓	✓	✓
150 x 20 x 20	✓	✓	✓	✓
150 x 25 x 20	✓	✓	✓	✓
175 x 20 x 20	✓	✓	✓	✓
175 x 25 x 20	✓	✓	✓	✓
200 x 20 x 20	✓	✓	✓	✓
200 x 25 x 20	✓	✓	✓	
200 x 30 x 20	✓	✓	✓	
200 x 32 x 20	✓	✓	✓	
250 x 25 x 25	✓	✓	✓	
250 x 30 x 25	✓	✓	✓	
250 x 32 x 25	✓	✓	✓	
250 x 40 x 25	✓	✓	✓	
300 x 30 x 30	✓	✓	✓	
300 x 32 x 30	✓	✓	✓	
300 x 40 x 30	✓	✓	✓	
350 x 40 x 40	✓	✓	✓	
400 x 40 x 40	✓	✓	✓	

EKR Çelik Taşları



• Yüzey taşlama tezgahlarında kullanıma uygundur.

Ebat	Kum		
	36	46	60
150 x 20 x 20	✓	✓	✓
175 x 20 x 20	✓	✓	✓
200 x 20 x 20		✓	✓
250 x 25 x 76,2	✓	✓	✓
250 x 30 x 76,2	✓	✓	✓
250 x 32 x 76,2	✓	✓	✓
250 x 40 x 76,2	✓	✓	✓
300 x 40 x 76,2		✓	✓
300 x 40 x 127	✓	✓	✓
350 x 40 x 127	✓	✓	✓
350 x 50 x 127	✓	✓	✓
400 x 40 x 127	✓	✓	✓

Çanak Taşlar



Ebat	Form
D 50	EKR 60 DÜZ
D 75	EKR 60 DÜZ
D 100	EKR 60 DÜZ
D 125	EKR 60 DÜZ
D150	EKR 60 DÜZ



Ebat	Form
E 50	EKR 60 KONİK
E 75	EKR 60 KONİK
E 100	EKR 60 KONİK
E 125	EKR 60 KONİK
E 150	EKR 60 KONİK

SCG Elmas Bileme Taşları



• Karbür ve karbür plakalı aletlerde kullanım için uygundur

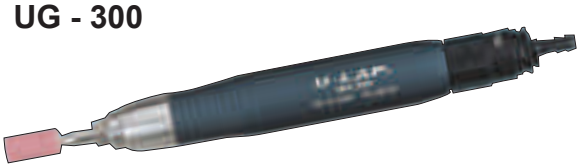
Ebat	Kum
	80
125 x 20 x 20	✓
150 x 20 x 20	✓
150 x 25 x 20	✓
175 x 20 x 20	✓
175 x 25 x 20	✓
200 x 20 x 20	✓
200 x 25 x 20	✓
200 x 32 x 20	✓
250 x 25 x 25	✓
250 x 32 x 25	✓
300 x 32 x 30	✓

Taş Düzeltme Elmasları



KOD	AÇIKLAMA
DS 015 - BEST	Taş Düzeltme Elması 0,50 Karat
DS 025 - BEST	Taş Düzeltme Elması 1,00 Karat
0,50 - ÇİN	Taş Düzeltme Elması 0,50 Karat
0,75 - ÇİN	Taş Düzeltme Elması 0,75 Karat
1,00 - ÇİN	Taş Düzeltme Elması 1,00 Karat
1,50 - ÇİN	Taş Düzeltme Elması 1,50 Karat
2,00 - ÇİN	Taş Düzeltme Elması 2,00 Karat

UG - 300



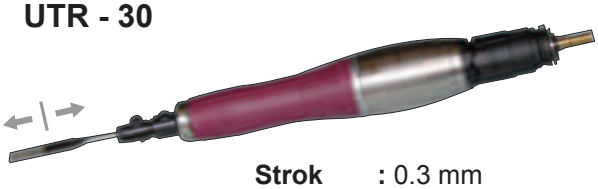
Devir : 35.000 rpm
Ağırlık : 170 gr
Boyutlar : Ø20 x 160L mm

UG - 500



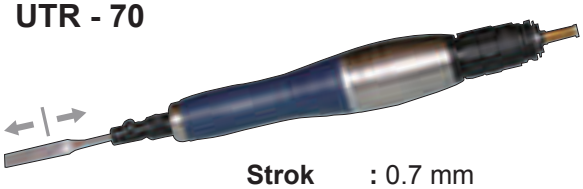
Devir : 60.000 rpm
Ağırlık : 110 gr
Boyutlar : Ø20 x 160L mm

UTR - 30



Strok : 0.3 mm
Devir : 30.000 rpm
Ağırlık : 220 gr
Boyutlar : Ø28 x 200L mm

UTR - 70



Strok : 0.7 mm
Devir : 28.000 rpm
Ağırlık : 220 gr
Boyutlar : Ø28 x 200L mm

NAK - 90



Devir : 23.500 rpm
Pens Çapı : 30 mm

NAK - 45



Devir : 23.500 rpm
Pens Çapı : 30 mm

SPİRAL KAMÇI





SPİRAL MOTOR ASKI KOLU





(BM 23 A)



(BM 25 A)

Kod	Güç	Devir/dk.	V
BM 21 A	125 W	15000	220 V
BM 23 A	200 W	25000	220 V
BM 24 A	500 W	22500	220 V
BM 25 A	500 W	25000	220 V
BM 26 A	275 W	25000	220 V

HAVALI SÖKME VE SIKMA - 1/2” IW-3C17

Hızlı, güçlü ve dayanıklı. Değişik sıkma ve sökme işleri için.

. Güçlü, sağlam ve hafif kompozit gövde,
. Ele uyum sağlayan yumuşak kaplamalı kabza.

Kullanım Alanları

Otomobil servislerinde, endüstriyel makina tamir bakım servislerinde.



Professionel

Ürün Kodu - Product code	IW-3C17
Gövde Materyali - Housing material	Composite
Soket Tutucu - Square Drive	1/2”
Max. Sıkma Torku - Max. Torque	1288 nm (132 kg)
Darbe Mekanizması - Impact Mechanism	Çift Çekiç - Twin hammer
Boşta Devir - Free Speed	7500 rpm
Standart Civata Ölçüsü - Standart bold size	16 mm
Uzunluk - Length	185 mm
Ağırlık - Weight	1.94 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI SÖKME VE SIKMA - 1/2” IW-3C6

Hafif, güçlü ve dayanıklı. Orta sınıf işlerinizde.

· Sağlam, güçlü ve hafif kompozit gövde,
· El ile temas noktaları ısı iletmeyen yumuşak malzeme kaplı
· Çift Çekiç darbe mekanizmalı

Kullanım Alanları

Küçük motor ve şanzımanların onarımı, kaporta, karoser, çiftlikler, hafif ticari araçlar ve genel otomotiv servis ihtiyaçları için.



Professionel

Ürün Kodu - Product code	IW-3C6
Gövde Materyali - Housing material	Composite
Soket Tutucu - Square Drive	1/2”
Max. Sıkma Torku - Max. Torque	610 nm (62 kg)
Darbe Mekanizması - Impact Mechanism	Çift Çekiç - Twin hammer
Boşta Devir - Free Speed	7500 rpm
Standart Civata Ölçüsü - Standart bold size	16 mm
Uzunluk - Length	185 mm
Ağırlık - Weight	2.1 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	183 l/min.

HAVALI SÖKME VE SIKMA SETİ - 1/2” IW-3M74K



IW-3M74K SET İÇERİK	
IW-3M74	= 1 adet
1/2” 11mm Lokma	= 1 adet
1/2” 13mm Lokma	= 2 adet
1/2” 14mm Lokma	= 1 adet
1/2” 17mm Lokma	= 2 adet
1/2” 19mm Lokma	= 1 adet
1/2” 22mm Lokma	= 1 adet
1/2” 24mm Lokma	= 1 adet
1/2” 27mm Lokma	= 1 adet
LM-1 Mini Yağlayıcı	= 1 adet
125mm 1/2” Uzatma	= 1 adet

Professionel

HAVALI MATKAP (sağ-sol) - 10mm D10-1C

Anahtarsız mandrenli matkap

- Güçlü, hafif ve sağlam gövde,
- Ele uyum sağlayan ergonomik yapı.

Kullanım Alanları

Metal, ahşap ve plastik delme işlerinde.



Ürün Kodu - Product code	D10-1C
Gövde Materyali - Housing material	Composite
Mandren Kapasitesi - Chuck capacity	10mm
Mandren Tipi - Chuck Type	Anahtarsız-Keyless
Mekanizma - Mechanism	Standart
Dişli Tipi - Gear Type	3
Boşta Devir - Free Speed	1800 rpm
Uzunluk - Length	170 mm
Ağırlık - Weight	0,94 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	114 l/min.

Professionel

HAVALI MATKAP (sağ-sol) - 10mm — D10-Y

Anahtarsız mandrenli matkap

- Güçlü, hafif ve sağlam gövde,
- Ele uyum sağlayan ergonomik yapı.

Kullanım Alanları

Metal, ahşap ve plastik delme işlerinde.



Professionel

Ürün Kodu - Product code	D10-Y
Gövde Materyali - Housing material	Aluminium
Mandren Kapasitesi - Chuck capacity	10mm
Mandren Tipi - Chuck Type	Anahtarsız-Keyless
Mekanizma - Mechanism	Standart
Dişli Tipi - Gear Type	3
Boşta Devir - Free Speed	1800 rpm
Uzunluk - Length	178 mm
Ağırlık - Weight	1.36 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI TORNAVİDA (sağ-sol) — SD-6

Küçük ebatlı vidalamalar için

- Güçlü, hafif ve sağlam gövde,
- Ele uyum sağlayan ergonomik yapı.

Kullanım Alanları

Genel vidalama işlerinde.



Professionel

Ürün Kodu - Product code	SD-6
Gövde Materyali - Housing material	Aluminium
Vidalama Kapasitesi - Screw capacity	3-6 mm
Max. Sıkma Torku - Max. Torque	5 - 13 nm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	1800 rpm
Uzunluk - Length	178 mm
Ağırlık - Weight	1.10 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI TORNAVİDA (sağ-sol) SD6-1

Büyük ebatlı vidalamalar için

- Güçlü, hafif ve sağlam gövde,
- Ele uyum sağlayan ergonomik yapı.

Kullanım Alanları

Güç gerektiren vidalama işlerinde.



Professionel

Ürün Kodu - Product code	SD6-1
Gövde Materyali - Housing material	Aluminium
Vidalama Kapasitesi - Screw capacity	4-8 mm
Max. Sıkma Torku - Max. Torque	8 - 16 nm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	800 rpm
Uzunluk - Length	215 mm
Ağırlık - Weight	1.70 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	121 l/min.

HAVALI DİKEY İNCE TORNAVİDA (sağ-sol) SDS-5

Küçük ebatlı vidalama işlerinde.

- Güçlü, hafif ve sağlam gövde,
- Ele uyum sağlayan ergonomik yapı.

Kullanım Alanları

Genel vidalama işlerinde.



Professionel

Ürün Kodu - Product code	SDS-5
Gövde Materyali - Housing material	Aluminium
Vidalama Kapasitesi - Screw capacity	3-6 mm
Max. Sıkma Torku - Max. Torque	1 - 3.5 nm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	1500 rpm
Uzunluk - Length	209 mm
Ağırlık - Weight	0.60 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI DİKEY TORNAVİDA (sağ-sol) SDS-6

Küçük ebatlı vidalama işlerinde.

- Güçlü, hafif ve sağlam gövde,
- Ele uyum sağlayan ergonomik yapı.

Kullanım Alanları

Genel vidalama işlerinde.



Professionel

Ürün Kodu - Product code	SDS-6
Gövde Materyali - Housing material	Aluminium
Vidalama Kapasitesi - Screw capacity	3-6 mm
Max. Sıkma Torku - Max. Torque	3 - 8 nm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	1800 rpm
Uzunluk - Length	242 mm
Ağırlık - Weight	1.10 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI DİKEY TORNAVİDA (sağ-sol) SD-EA-6

Küçük ebatlı vidalama işlerinde.

- Güçlü, hafif ve sağlam gövde,
- Ele uyum sağlayan ergonomik yapı.

Kullanım Alanları

Genel vidalama işlerinde.



Professionel

Ürün Kodu - Product code	SD-EA-6
Gövde Materyali - Housing material	Aluminium
Vidalama Kapasitesi - Screw capacity	3-6 mm
Max. Sıkma Torku - Max. Torque	4.5 - 11 nm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	800 rpm
Uzunluk - Length	279 mm
Ağırlık - Weight	1.20 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI KALIPÇI TAŞLAMA — DG-3Y

Güçlü ve yüksek devirli.

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında.



Professionel

Ürün Kodu - Product code	DG-3Y
Gövde Materyali - Housing material	Composite
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	25000 rpm
Güç - Power	1 hp (0.70 KW)
Uzunluk - Length	151 mm
Ağırlık - Weight	0.32 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	86 l/min.

HAVALI KALIPÇI TAŞLAMA — DG-Y

Yüksek tip kalıpçı taşlama makinası

- Hafif tip alüminyum gövde.

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında, pvc-alüminyum doğrama atölyesinde.



Professionel

Ürün Kodu - Product code	DG-Y
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	22000 rpm
Güç - Power	0.43 hp
Uzunluk - Length	178 mm
Ağırlık - Weight	0.60 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI KALIPÇI TAŞLAMA — DG-5Y

Güçlü ve yüksek devirli.

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında.



Ürün Kodu - Product code	DG-6Y
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	22000 rpm
Güç - Power	1 hp (0.70 KW)
Uzunluk - Length	200 mm
Ağırlık - Weight	0.80 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	150 l/min.

HAVALI KALIPÇI TAŞLAMA — DG-6Y

Güçlü ve yüksek devirli.

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında.



Ürün Kodu - Product code	DG-6Y
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	20000 rpm
Güç - Power	0.43 hp
Uzunluk - Length	165 mm
Ağırlık - Weight	0.55 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI KALIPÇI TAŞLAMA (uzun) DG-6L

Yüksek Devirli uzun tip kalıpçı taşlama makinası

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama,
- Zor erişilen yerlere uygun uzun yapı.

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında.



Ürün Kodu - Product code	DG-6L
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	21000 rpm
Güç - Power	0.43 hp
Uzunluk - Length	280 mm
Ağırlık - Weight	0.80 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	85 l/min.

HAVALI KALIPÇI TAŞLAMA (uzun) DG-8L

Yüksek Devirli uzun tip kalıpçı taşlama makinası

- Üzeri kompozit gövde,
- Elde kaymayı önleyen kaplama,
- Zor erişilen yerlere uygun uzun yapı.

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında.



Ürün Kodu - Product code	DG-8L
Gövde Materyali - Housing material	Composite
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	25000 rpm
Güç - Power	0.43 hp
Uzunluk - Length	256 mm
Ağırlık - Weight	0.70 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	77 l/min.

HAVALI KALIPÇI TAŞLAMA SETİ — DG-6K

Güçlü ve yüksek devirli.

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında.



Professionel

Ürün Kodu - Product code	DG-6K
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	20000 rpm
Güç - Power	0.43 hp
Uzunluk - Length	165 mm
Ağırlık - Weight	0.55 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	113 l/min.

HAVALI KALIPÇI TAŞLAMA (90°) — DG-690

Açılı kalıpçı taşlama makinası

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama
- Zor erişilen yerler için açılı yapı

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde.



Professionel

Ürün Kodu - Product code	DG-690
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	18000 rpm
Güç - Power	0.43 hp
Uzunluk - Length	178 mm
Ağırlık - Weight	0.80 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	85 l/min.

MİKRO HAVALI KALIPÇI TAŞLAMA — DG-M

Mikro tip kalıpçı taşlama makinası

- Hafif tip alüminyum gövde.

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde



Ürün Kodu - Product code	DG-M
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	3 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	70000 rpm
Uzunluk - Length	134 mm
Ağırlık - Weight	0.20 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	43 l/min.

Professionel

HAVALI TAŞLAMA (mini) — AG-1M

Hafif ve küçük. Küçük işler için mükemmel

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama

Kullanım Alanları

Mini taşlama işlerinde.



Ürün Kodu - Product code	AG-1M
Gövde Materyali - Housing material	Aluminium
Disk Kapasitesi - Disc capacity	50 mm
Aksesuar Bağlantı Vidası - Accesory bolt	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	15000 rpm
Güç - Power	0.43 hp
Uzunluk - Length	188 mm
Ağırlık - Weight	0.80 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	85 l/min.

Professionel

HAVALI ORBİTAL ZIMPARA (kendinden vakumlu) S-6G

Kolay kullanım, yormayan zımparalama

- Hafif kompozit gövde,
- Yüksek devir,
- Tek el ile kolay kullanım.

Kullanım Alanları

Oto kaporta tamir ve bakım servislerinde, tampon, metal parçalar, fiberglas tekneler, son kat zımparalamalar, ahşap işleri ve genel zımparalama işlerinde.



Ürün Kodu - Product code	S-6G
Gövde Materyali - Housing material	Aluminium
Mekanizma - Mechanism	Standart
Vakum Tipi - Vacuum type	Kendinden- Self
Boşta Devir - Free speed	12000 rpm
Orbital Hareket - Dia orbital	5 mm
Ped Ölçüsü - Pad size	150 mm
Uzunluk - Length	232 mm
Ağırlık - Weight	0.98 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	57 l/min.

Professionel

HAVALI RENDE SR-1

Güçlü rendeleme işlerinde kullanım için

- Çift Pistonlu
- Güçlü rendeleme



Ürün Kodu - Product code	SR-1
Gövde Materyali - Housing material	Aluminium
Taban Çapı - Pad Size	63 x 400mm
Mekanizma - Mechanism	Standart
Boştaki Devir - Free Speed	3000 rpm
Uzunluk - Length	406 mm
Ağırlık - Weight	3.10 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	10 mm
Hava Tüketimi - Air consumption	113 l/min.

Professionel

HAVALI YAZI YAZMA — ET-1

Güçlü ve yüksek devirli.

- Üzeri kompozit kaplı alüminyum gövde,
- Elde kaymayı önleyen kaplama

Kullanım Alanları

Küçük çaplı kalıp parlatma ve taşlama işlerinde, araçların lastik onarımlarında.



Professionel

Ürün Kodu - Product code	ET-1
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	6 mm
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	3800 rpm
Uzunluk - Length	171 mm
Ağırlık - Weight	0.20 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	57 l/min.

HAVALI DÜZ MAKAS (dış kesim için) — MS-1

Genel Kesim işlerine uygun havalı makas

- Üzeri kompozit kaplı alüminyum gövde
- Elde kaymayı önleyen tasarım.

Kullanım Alanları

Metal levha kesim işlerinde.



Professionel

Ürün Kodu - Product code	MS-1
Gövde Materyali - Housing material	Aluminium
Mekanizma - Mechanism	Standart
Kesme Kapasitesi - Cuting capacity	1 mm
Boşta Devir - Free speed	2600 rpm
Uzunluk - Length	240 mm
Ağırlık - Weight	1.0 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	85 l/min.

HAVALI ŞARTLANDIRICI — FRL-3

Havalı aletler için şartlandırıcı.

- Hava filtresi,
- Basınç ayarlama,
- Otomatik yağlayıcı.

Kullanım Alanları

Her türlü el aletlerinin kullanıldığı hava besleme sistemlerinde.



Ürün Kodu - Product code	FRL-3
Gövde Materyali - Housing material	Aluminium
Yükseklik - Height	240 mm
Hava giriş ve çıkışı - Air inlet / outlet	1/2"
Ağırlık - Weight	1.34 kg
Max. Basınç - Max. pressure	8 bar
Max. ısı - Max. temperature	60 °C
Hava geçişi - Air Flow	2250 l/min

Professionel

HAVALI KILAVUZ ÇEKME — KC-312

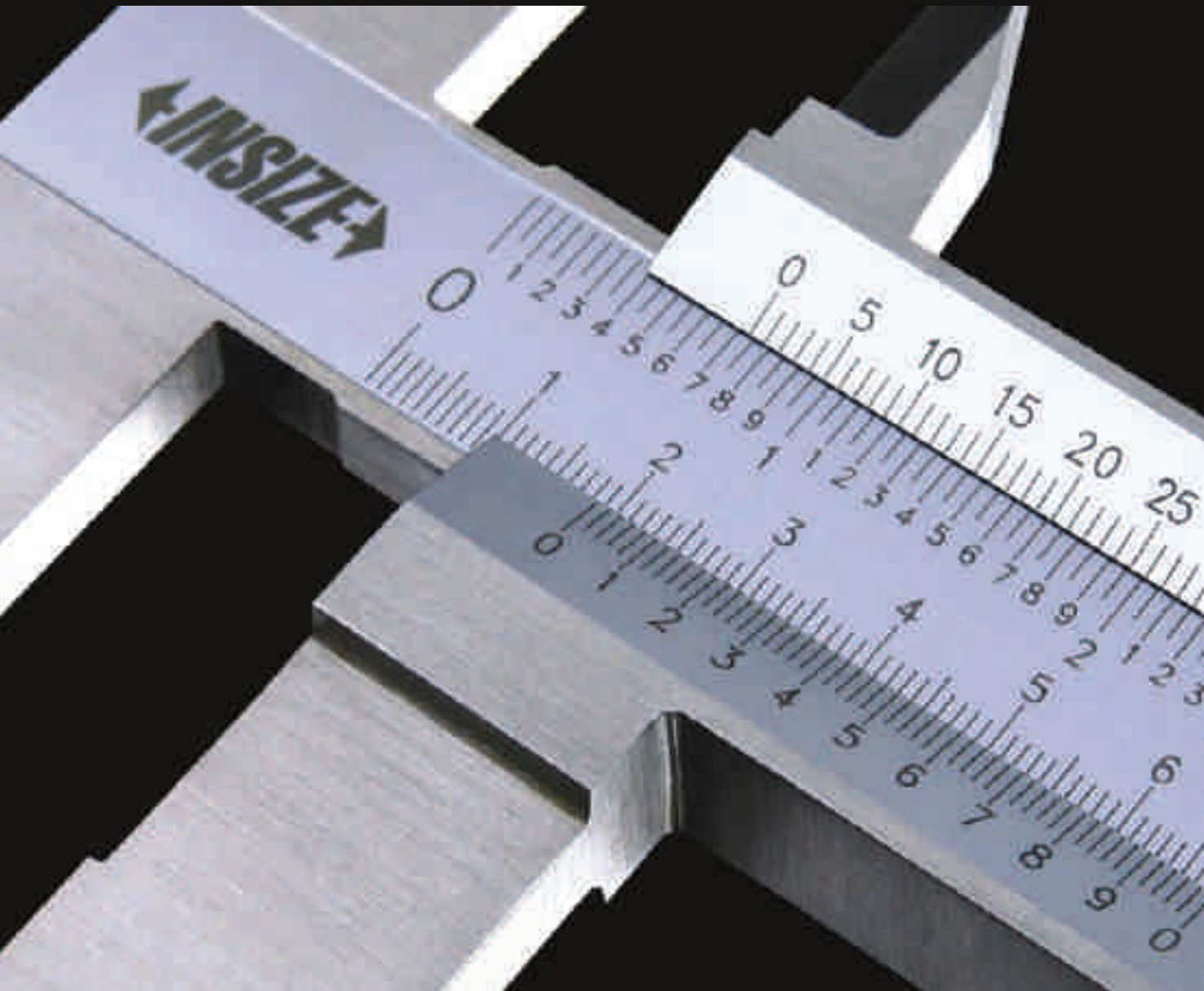


Ürün Kodu - Product code	KC-312
Gövde Materyali - Housing material	Aluminium
Uç Kapasitesi - Collect size	M3 - M12
Mekanizma - Mechanism	Standart
Boşta Devir - Free Speed	400 rpm
Uzunluk - Length	290 mm
Ağırlık - Weight	1.73 kg
Çalışma Basıncı - Recommended air pressure	6.3 bar
Minimum Hortum Ölçüsü - Minimum hose size	8 mm
Hava Tüketimi - Air consumption	110 l/min.

Professionel

ÖLÇÜ ALETLERİ

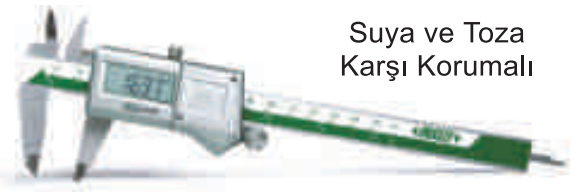
- Diijital Kumpaslar
- Mekanik Kumpaslar
- Derinlik Kumpasları
- Yükseklik Mihengirleri
- Dıç Çap Mikrometreleri
- Komparatör Saatleri
- Salgı Komparatörleri
- Silindir Komparatörleri
- Dereceli Mercekli Gönyeler
- Kıl - Şapkalı Gönyeler
- Linear Bantlar
- Jhonson Mastar Setleri
- Vida Mastarları
- 3D Teaster





Dijital Kumpas

Kod	Ölçüm Aralığı
1112-150	0-150mm/0-6"
1112-200	0-200mm/0-8"
1112-300	0-300mm/0-12"



Suya ve Toza Karşı Korumalı

Dijital Kumpas IP 67 Korumalı

Kod	Ölçüm Aralığı
1118-150	0-150mm/0-6"
1118-200	0-200mm/0-8"
1118-300	0-300mm/0-12"



Dijital Kumpas

Kod	Ölçüm Aralığı
1111-75	0-75mm/0-3"
1111-100	0-100mm/0-4"



Mekanik Saatli Kumpas

Kod	Ölçüm Aralığı
1312-100	0-100mm
1311-150	0-150mm
1312-150	0-150mm

Kod	Ölçüm Aralığı
1311-200	0-200mm
1312-200	0-200mm
1311-300	0-300mm
1312-300	0-300mm



Mekanik Kumpas

Kod	Ölçüm Aralığı
1205-100	0-100mm/0-4"
1205-150	0-150mm/0-6"
1205-200	0-200mm/0-8"
1205-300	0-300mm/0-12"



3 Ağızlı Mekanik Kumpas

Kod	Ölçüm Aralığı
1273-40	1-40mm/0.04-1.6"
1273-75	20-75mm/0.8-3"
1274-40	4-40mm/0.16-1.6"
1274-75	20-75mm/0.8-3"



Mekanik Kumpas

Kod	Ölçüm Aralığı	Standart Çene Ölçüsü
1208-284	0-200mm/0-8"	80mm/3.1"
1208-184	0-250mm/0-10"	80mm/3.1"
1208-394	0-300mm/0-12"	90mm/3.5"
1208-414	0-400mm/0-16"	100mm/3.9"
1208-514	0-500mm/0-20"	100mm/3.9"
1208-614	0-600mm/0-24"	100mm/3.9"
1208-824	0-800mm/0-32"	150mm/5.9"
1208-1024	0-1000mm/0-40"	150mm/5.9"



Mekanik Kumpas

Kod	Ölçüm Aralığı	Standart Çene Ölçüsü
1207-364	0-300mm/0-12"	60mm/2.4"
1207-514	0-500mm/0-20"	100mm/3.9"
1207-614	0-600mm/0-24"	100mm/3.9"
1207-824	0-800mm/0-32"	150mm/5.9"
1207-1024	0-1000mm/0-40"	150mm/5.9"
1207-1524	0-1500mm/0-60"	150mm/5.9"
1207-2024	0-2000mm/0-80"	150mm/5.9"



Djital Derinlik Kumpası

Kod	Ölçüm Aralığı
1141-150A	0 - 150 mm
1141-200A	0 - 200 mm
1141-300A	0 - 300 mm
1141-500A	0 - 500 mm



Derinlik Kumpası Aparatı

Kod	Taban Uzunluğu
6140	76mm/3"

Saatli Yükseklik Mihengiri



Kod	Ölçüm Aralığı	Sütun
1351-300	0-300mm	2
1351-450	0-450mm	2
1351-500	0-500mm	2
1351-600	0-600mm	2
1351-1000	0-1000mm	3

Çift Kolonlu Dijitial Yükseklik Mihengiri



Kod	Ölçüm Aralığı	Sütun
1151-300	0-300mm/0-12"	2
1151-450	0-450mm/0-18"	2
1151-500	0-500mm/0-20"	2
1151-600	0-600mm/0-24"	2
1151-1000	0-1000mm/0-40"	3



Yükseklik Mihengiri

Kod	Ölçüm Aralığı
1250-300	0-300mm/0-12"
1250-450	0-450mm/0-18"
1250-500	0-500mm/0-20"
1250-600	0-600mm/0-24"
1250-1000	0-1000mm/0-40"
1250-1500	0-1500mm/0-60"



Dijitial Yükseklik Mihengiri

Kod	Ölçüm Aralığı
1150-300	0-300mm/0-12"
1150-500	0-500mm/0-20"
1150-600	0-600mm/0-24"
1150-1000	0-1000mm/0-40"
1150-1500	0-1500mm/0-60"
1150-2000	0-2000mm/0-80"

Dış Çap Mikrometreler



Set

Kod	Ölçüm Aralığı
3203-25	0-25mm
3203-50	25-50mm
3203-75	50-75mm
3203-100	75-100mm
3203-125	100-125mm
3203-150	125-150mm

Kod	Ölçüm Aralığı
3203-175	150-175mm
3203-200	175-200mm
3203-225	200-225mm
3203-250	225-250mm
3203-275	250-275mm
3203-300	275-300mm

Kod	Ölçüm Aralığı
3203-753	0-75mm (3pcs)
3203-1004	0-100mm (4pcs)
3203-1506	0-150mm (6pcs)
3203-3006	150-300mm (6pcs)
3203-3012	0-300mm (12pcs)

Dijital Dış Çap Mikrometreleri



Set

Kod	Ölçüm Aralığı
3108-25	0-25mm
3108-50	25-50mm
3108-75	50-75mm
3108-100	75-100mm
3108-125	100-125mm
3108-150	125-150mm

Kod	Ölçüm Aralığı
3108-175	150-175mm
3108-200	175-200mm
3108-225	200-225mm
3108-250	225-250mm
3108-275	250-275mm
3108-300	275-300mm

Kod	Ölçüm Aralığı
3108-753	0-75mm (3pcs)
3108-1004	0-100mm (4pcs)
3108-1506	0-150mm (6pcs)

Dış Çap Mikrometresi



Kod	Ölçüm Aralığı
3205-400	300-400mm
3205-500	400-500mm
3205-600	500-600mm
3205-700	600-700mm
3205-800	700-800mm
3205-900	800-900mm

Kod	Ölçüm Aralığı
3205-1000	900-1000mm
3205-1200	1000-1200mm
3205-1400	1200-1400mm
3205-1600	1400-1600mm
3205-1800	1600-1800mm
3205-2000	1800-2000mm

Derinlik Mikrometresi



Kod	Ölçüm Aralığı
3241-25	0-25mm
3241-50	0-50mm
3241-100	0-100mm

Kod	Ölçüm Aralığı
3241-150	0-150mm
3241-200	0-200mm
3241-300	0-300mm

İç Çap Komparatörü



Kod	Ölçüm Aralığı	Kol Boyu
2222-15	5-15mm	20mm
2222-20	10-20mm	25mm
2222-30	20-30mm	30mm
2222-40	30-40mm	30mm
2222-50	40-50mm	30mm

Kod	Ölçüm Aralığı	Kol Boyu
2222-25	5-25mm	35mm
2222-301	10-30mm	55mm
2222-401	20-40mm	80mm
2222-501	30-50mm	80mm
2222-60	40-60mm	80mm

Dış Çap Komparatörü



Kod	Ölçüm Aralığı	Kol Boyu
2333-10	0-10mm	40mm
2333-20	10-20mm	40mm
2333-30	20-30mm	40mm
2333-40	30-40mm	40mm
2333-50	40-50mm	40mm

Kod	Ölçüm Aralığı	Kol Boyu
2333-201	0-20mm	80mm
2333-301	10-30mm	80mm
2333-401	20-40mm	80mm
2333-501	30-50mm	80mm
2333-601	40-60mm	80mm

Komparatör Saati



Kod	Ölçüm Aralığı	Hassasiyet
2308-3F	0-3mm	0.01mm
2308-5F	0-5mm	0.01mm
2308-10F	0-10mm	0.01mm

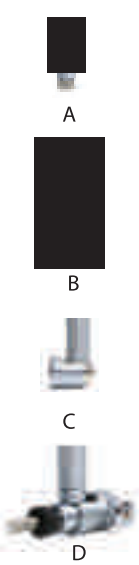
Salgı Komparatörü



Kod	Direnç	Hassasiyet	Uç Boyu
2380-08	0-0.8mm	0.01 mm	16,5
2381-08	0-0.8mm	0.01 mm	16,5
2380-02	0.2 mm	0.002 mm	16
2381-02	0.2 mm	0.002 mm	16



2322-10





2322-160

Delik (Silindir) Komparatörü

Kod	Ölçüm Aralığı	Derinlik	Örs Tipi
2322-10	6-10mm	40mm	A
2322-18	10-18mm	100mm	B
2322-35	18-35mm	150mm	C
2322-50	35-50mm	150mm	D
2322-100	50-100mm	150mm	D
2322-160	50-160mm	150mm	D
2322-250	160-250mm	400mm	D
2322-450	250-450mm	400mm	D

Manyetik Ayak



Kod : 6204-40
Güç : 40 kgf



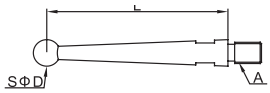
Kod : 6201-60
Güç : 60 kgf



Kod : 6208-80
Güç : 80 kgf

Salgı Komparatörü Yedek Uçlar





Kod	Malzeme	L(mm)	A	D(mm)
6284-1	Çelik	13.5	M1.6X0.2	1
6284-2	Çelik	13.5	M1.6X0.2	2
6284-3	Elmas	13.5	M1.6X0.2	2
6284-4		13.5	M1.6X0.2	2
6284-5	Çelik	13.5	M1.6X0.2	3

Dereceli Gönye



Kod	Ölçüler
4799-180	80 x 120 mm
4799-1120	120 x 150 mm
4799-1150	150 x 200 mm
4799-1200	200 x 300 mm
4799-1300	300 x 500 mm

Dereceli Mercekli Gönye



Kod : 2372-360 Açı : 360°

90° Kıl Gönye

Kod	Ölçüler
4795-50	50x40mm
4795- 75	75x50mm
4795- 100	100x70mm
4795- 150	150x100mm
4795- 200	200x130mm



90° Gönye

Kod	Ölçüler
4791-50	50x40mm
4791-75	75x50mm
4791-100	100x70mm
4791-150	150x100mm
4791-200	200x130mm
4791-250	250x165mm
4791-300	300x200mm



90° Şapkalı Gönye

Kod	Ölçüler
4793-50	50x40mm
4793-75	75x50mm
4793- 100	100x70mm
4793- 150	150x100mm
4793- 200	200x130mm
4793- 250	250x165mm
4793- 300	300x200mm



Filler Çakısı



Kod	Ölçüler	Adet
4602-8	0.05-0.50mm	8pcs
4602-10	0.05-0.80mm	10pcs
4602-13	0.05-1.00mm	13pcs
4602-17	0.02-1.00mm	17pcs
4602-20	0.05-1.00mm	20pcs
4602-32	0.03-1.00mm	32pcs

Diş Tarağı



Kod	Ölçüler	Adet
4820-121	0.4-7.0mm	21pcs
4820-124	0.25-7.0mm	24pcs
4820-230	4-42TPI	30pcs
4820-223	4-62TPI	23pcs

Kod	Ölçüler	Adet
4820-330	4-42TPI	30pcs
4820-328	4-62TPI	28pcs
4820-452	4-62TPI	28pcs
	0.25-6.0mm	24pcs

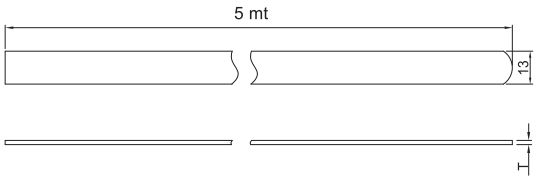
Radus Mastarı



Kod	Ölçüler	Adet
4801-17	1-7mm	17pcs
4801-16	7.5-15mm	16pcs
4801-15	15.5-25mm	15pcs

Layner Bant





Kod	T
4621-02	0.02mm
4621-03	0.03mm
4621-04	0.04mm
4621-05	0.05mm
4621-06	0.06mm
4621-07	0.07mm
4621-08	0.08mm
4621-09	0.09mm
4621-10	0.10mm
4621-12	0.12mm

Kod	T
4621-15	0.15mm
4621-18	0.18mm
4621-20	0.20mm
4621-25	0.25mm
4621-30	0.30mm
4621-35	0.35mm
4621-40	0.40mm
4621-45	0.45mm
4621-50	0.50mm
4621-55	0.55mm

Kod	T
4621-60	0.60mm
4621-65	0.65mm
4621-70	0.70mm
4621-75	0.75mm
4621-80	0.80mm
4621-85	0.85mm
4621-90	0.90mm
4621-95	0.95mm
4621-100	1.00mm

Hassas Su Terazisi



Kod	Ölçüler	Hassasiyet
4901-150	150mm	0.02mm/m
4901-200	200mm	0.02mm/m
4901-250	250mm	0.02mm/m
4901-300	300mm	0.02mm/m

Düz Uçlu Pergel



Kod	Ölçüler
7250-125	125mm/5"
7250-150	150mm/6"
7250-175	175mm/7"
7250-200	200mm/8"
7250-250	250mm/10"

Kod	Ölçüler
7250-300	300mm/12"
7250-400	400mm/16"
7250-500	500mm/20"
7250-600	600mm/24"

Merkezleme Komparatörü



Kod : 2385 - 3
Direnç : 0-3mm

Kod : 2385-12
Direnç : 0-0.15''

Manyetik İletken V Blok



Kod : 6892 - 1 **Ebat :** 110x60x48mm

V Blok



Kod	Ölçüler	Kapasite
6895-1	35x35x45mm	25mm
6895-2	40x40x50mm	35mm
6895-3	41x35x44mm	35mm
6895-4	51x45x50mm	40mm

Manyetik V Blok



Kod	Ölçüler	Kapasite
6890-701	70x54x73mm	38mm/1.5"
6890-702	70x60x73mm	44mm/1.7"
6890-703	80x56x73mm	40mm/1.6"

Kod	Ölçüler	Kapasite
6890-704	124x60x73mm	44mm/1.7"
6890-705	127x60x73mm	38mm/1.5"
6890-706	101x76x78mm	56mm/2.2"

10 Parça Açılı Mastar Seti



KOD	ÖLÇÜ
C326-130	1°/2°/3°/4°/5°/10°/15°/20°/25°/30°

103 Parça Johnson Mastar Seti



KOD	ÖLÇÜ
C327-103-2	1,005-100 mm Gr2

Pim Mastar Seti



KOD	ÖLÇÜ (mm)	SET ADEDİ	SERTLİK	BOY (mm)
C995-091	1-10	91 PARÇA	60-62 HRC	50
C995-273	0,99-10,01	273 PARÇA	60-62 HRC	50

Paralel Set



KOD	ÖLÇÜ
C328-7	150 mm 7 ÇİFT 6X10-6X12-8X14-12X18-12X24-16X36-16X38
C328-14X5	150X5 mm 14 ÇİFT 14-16-18-20-22-24-26-28-30-32-35-40-45-50
C328-14X10	150X10 mm 14 ÇİFT 14-16-18-20-22-24-26-28-30-32-35-40-45-50

Vida Mastarı (Erkek)



Kod	Ölçü	Hatve
4130-1	M1.0	0.25
4130-1D1	M1.1	0.25
4130-1D2	M1.2	0.25
4130-1D4	M1.4	0.30
4130-1D6	M1.6	0.35
4130-1D8	M1.8	0.35
4130-2	M2.0	0.40
4130-2D2	M2.2	0.45
4130-2D5	M2.5	0.45
4130-3	M3.0	0.50
4130-3D5	M3.5	0.60
4130-4	M4.0	0.70

4130-5	M5.0	0.80
4130-6	M6.0	1.00
4130-8	M8.0	1.25
4130-10	M10.0	1.50
4130-12	M12.0	1.75
4130-14	M14.0	2.00
4130-16	M16.0	2.00
4130-18	M18.0	2.50
4130-20	M20.0	2.50
4130-22	M22.0	2.50
4130-24	M24.0	3.00
4130-27	M27.0	3.00
4130-30	M30.0	3.50

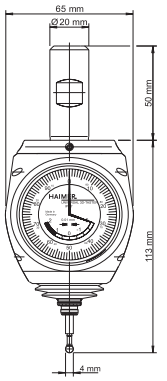
Vida Mastarı (Dişi)



Kod	Ölçü	Hatve
4120-1N	M1.0	0.25
4120-1D1N	M1.1	0.25
4120-1D2N	M1.2	0.25
4120-1D4N	M1.4	0.30
4120-1D6N	M1.6	0.35
4120-1D8N	M1.8	0.35
4120-2N	M2.0	0.40
4120-2D2N	M2.2	0.45
4120-2D5N	M2.5	0.45
4120-3N	M3.0	0.50
4120-3D5N	M3.5	0.60
4120-4N	M4.0	0.70

4120-5N	M5.0	0.80
4120-6N	M6.0	1.00
4120-8N	M8.0	1.25
4120-10N	M10.0	1.50
4120-12N	M12.0	1.75
4120-14N	M14.0	2.00
4120-16N	M16.0	2.00
4120-18N	M18.0	2.50
4120-20N	M20.0	2.50
4120-22N	M22.0	2.50
4120-24N	M24.0	3.00
4120-27N	M27.0	3.00
4120-30N	M30.0	3.50

3 Boyutlu Ölçüm İçin 3D Teaster





KOD	HASSASİYET	KOMPLE BOY (SAPSIZ)	AÇIKLAMA
HEIM-8036000	0,01 mm	113 mm	3D TESTER MEKANİK
HEIM-8036200	-	-	Ø4 KISA UÇ
HEIM-8036300	-	-	Ø8 UZUN UÇ

Sertlik Ölçüm Cihazı

STANDART AKSESUARLAR

- ELMAS KONİK BAŞLIK	1 ADET
- V ÇUBUĞU	1 ADET
- KÜÇÜK DÜZ ÇUBUK	1 ADET
- BÜYÜK DÜZ ÇUBUK	1 ADET
- ROCKWELL STANDART	5 ADET
- 1/16" ÇELİK BİLYE BAŞLI	1 ADET
- KULLANMA KILAVUZU	1 ADET



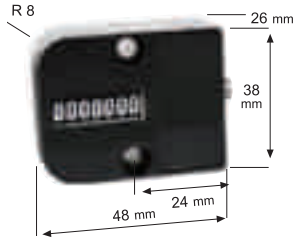
AS-640-01-0 AS-640-02-0

ARALIK	TEST YÜKSEKLİĞİ	BOĞAZ DERİNLİĞİ
20-88HRA, 20-100HRB, 20-70HRC	170 mm	135 mm
20-88HRA, 20-100HRB, 20-70HRC	400 mm	160 mm

Press Kalıp Sayacı 5 Haneli

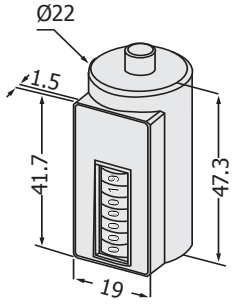


Plastik Kalıp Sayacı 7 haneli

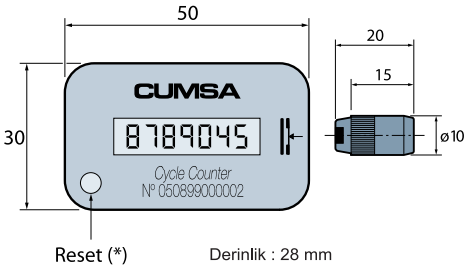


Plastik Kalıp Sayacı 7 haneli

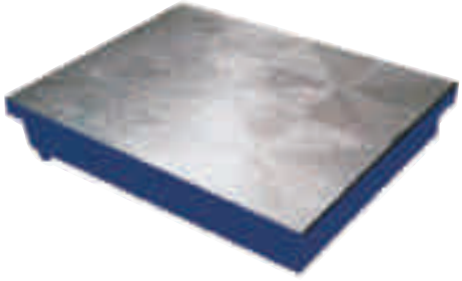




Diijital Kalıp Sayacı 7 haneli



Döküm Pleyt



KOD	BOY (mm)	EN (mm)	YÜKSEKLİK (mm)	AĞIRLIK (kg)
C002-4030D	400	300	85	15
C002-6040D	600	400	95	35
C002-8050D	800	500	100	65
C002-1075D	1000	750	170	120

Granit Pleyt



KOD	BOY (mm)	EN (mm)	YÜKSEKLİK (mm)	AĞIRLIK (kg)
C002-4025	400	250	80	30
C002-6340	630	400	100	80
C002-8050	800	500	130	150
C002-1063	1000	630	150	280
C002-1280	1200	800	160	360
C002-1610	1600	1000	200	1080
C002-2020	2000	1000	200	1360

Çelik Rakam Takımı



SİYAH

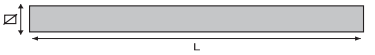


NİKEL

KOD	ÖLÇÜ (mm)	⊠ (mm)	L (mm)
M240010	1	6	65
M240015	1,5	6	65
M240020	2	6	65
M240025	2,5	6	65
M240030	3	6	65
M240040	4	7	65
M240050	5	8	65
M240060	6	9	75

KOD	ÖLÇÜ (mm)	⊠ (mm)	L (mm)
M240080	8	11	76
M240100	10	12	80
M240120	12	14	80
M240150	15	16	85
M240160	16	16	85
M240180	18	15x25	101
M240200	20	15x25	101

Ters Çelik Rakam Takımı



KOD	ÖLÇÜ (mm)	⊠ (mm)	L (mm)
M260010	1	6	65
M260015	1,5	6	65
M260020	2	6	65
M260025	2,5	6	65
M260030	3	6	65
M260040	4	7	65
M260050	5	8	65
M260060	6	9	75
M260080	8	11	76
M260100	10	12	80
M260120	12	14	80

Çelik Harf Takımı



SİYAH

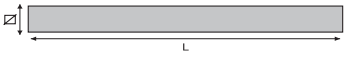


NİKEL

KOD	ÖLÇÜ (mm)	⊠ (mm)	L (mm)
M245010	1	6	65
M245015	1,5	6	65
M245020	2	6	65
M245025	2,5	6	65
M245030	3	6	65
M245040	4	7	65
M245050	5	8	65
M245060	6	9	75

KOD	ÖLÇÜ (mm)	⊠ (mm)	L (mm)
M245080	8	11	76
M245100	10	12	80
M245120	12	14	80
M245150	15	16	85
M245160	16	16	85
M245180	18	15x25	101
M245200	20	15x25	101

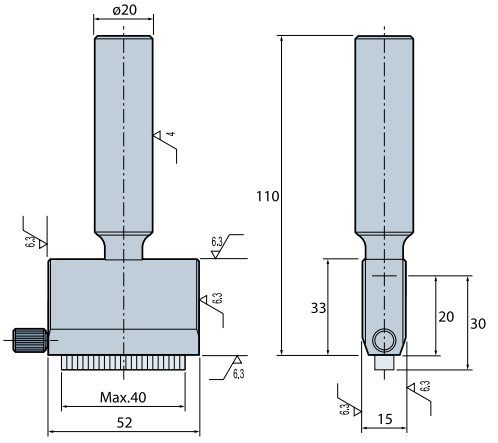
Ters Çelik Harf Takımı



KOD	ÖLÇÜ (mm)	⊠ (mm)	L (mm)
M265010	1	6	65
M265015	1,5	6	65
M265020	2	6	65
M265025	2,5	6	65
M265030	3	6	65
M265040	4	7	65
M265050	5	8	65
M265060	6	9	75
M265080	8	11	76
M265100	10	12	80
M265120	12	14	80

Çelik Numaratör Tutucu (SE)





Ürün Kodu	A	Takım İçeriği
SE.521520-SET-15	1.5	SE.521520 + BOX
SE.521520-SET-20	2	SE.521520 + BOX
SE.521520-SET-25	2.5	SE.521520 + BOX
SE.521520-SET-30	3	SE.521520 + BOX

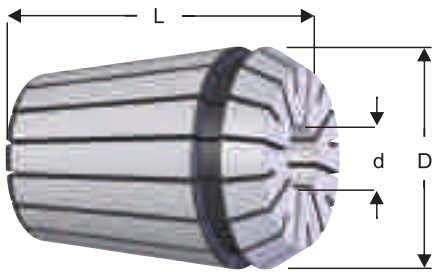
BOX Contents (82 characters)	Qty.
A E I L 1 2 3 4 0	3
B C D F G H M N O P R S T U 5 6 7 8 9	2
J K Q V W X Y Z . - / < >	1
Blank	3

TAKIM TUTUCULAR

- Pens Grubu
- ISO Pens Başlıkları
- ISO Mandren Adaptörü
- ISO Kamalı Mors Adaptörü
- ISO Pens Takımları
- ISO Veldon Tutucu
- ISO Kombine Tarama Başlığı
- Silindirik Şaftlı Pens Başlığı
- Silindirik Saplı Redüksiyon Kovanı
- Silindirik Saplı Mors Adaptörü
- Ay Anahtarlar
- Pullstudlar
- BT - BBT Pens Başlıkları
- BT - BBT Kombine Tarama Başlığı
- BT - BBT Veldon Tutucu
- BT - BBT Rulmanlı Pens Tutucu
- BT - BBT Klavuz Çekme Başlığı
- BT - BBT Vidalı Takım Tutucu
- BT - BBT Mandren Adaptörü
- BT - BBT Mandren Tutucu
- BT - BBT Kamalı Mors Adaptörü
- BT - BBT Pens Takımları
- SK Takımlar
- Kapaklar



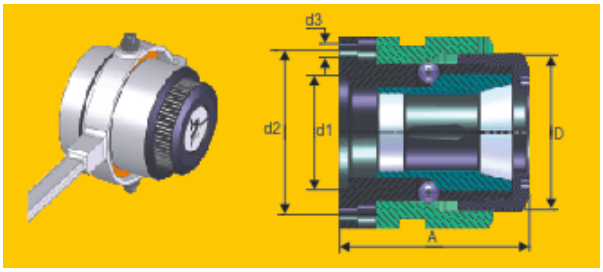
DEĞERLİ®





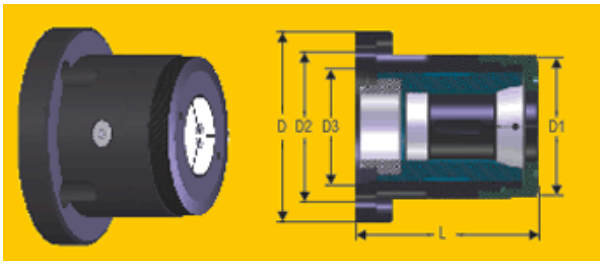
ÜRÜN KODU	KAPASİTE (d)					D	L
ER - 11	1 mm	2 mm	3 mm	4 mm	5 mm	12	18
	6 mm	7 mm	——	——	——		
ER - 16	2 mm	3 - 2 mm	4 - 3 mm	5 - 4 mm	6 - 5 mm	17	27,5
	7 - 6 mm	8 - 7 mm	9 - 8 mm	10 - 9 mm	——		
ER - 20	2 mm	3 - 2 mm	4 - 3 mm	5 - 4 mm	6 - 5 mm	21	31,5
	7 - 6 mm	8 - 7 mm	9 - 8 mm	10 - 9 mm	11 - 10 mm		
	12 - 11 mm	13 - 12 mm	——	——	——		
ER - 25	2 mm	3 - 2 mm	4 - 3 mm	5 - 4 mm	6 - 5 mm	26	34
	7 - 6 mm	8 - 7 mm	9 - 8 mm	10 - 9 mm	11 - 10 mm		
	12 - 11 mm	13 - 12 mm	14 - 13 mm	15 - 14 mm	16 - 15 mm		
ER - 32	2 mm	3 - 2 mm	4 - 3 mm	5 - 4 mm	6 - 5 mm	33	40
	7 - 6 mm	8 - 7 mm	9 - 8 mm	10 - 9 mm	11 - 10 mm		
	12 - 11 mm	13 - 12 mm	14 - 13 mm	15 - 14 mm	16 - 15 mm		
	17 - 16 mm	18 - 17 mm	19 - 18 mm	20 - 19 mm	——		
ER - 40	4 - 3 mm	5 - 4 mm	6 - 5 mm	7 - 6 mm	8 - 7 mm	41	46
	9 - 8 mm	10 - 9 mm	11 - 10 mm	12 - 11 mm	14 - 13 mm		
	16 - 15 mm	18 - 17 mm	20 - 19 mm	22 -21 mm	24 - 23 mm		
	26 - 25 mm	——	——	——	——		
462E	4 - 3,5 mm	5 - 4,5 mm	6 - 5,5 mm	8 - 7,5 mm	9 - 8,5 mm	35,05	52
	10 - 9,5 mm	11 - 10,5 mm	12 - 11,5 mm	14 - 13,5 mm	16 - 15,5 mm		
	18 - 17,5 mm	20 - 19,5 mm	22 - 21,5 mm	24 - 23,5 mm	24 - 23 mm		
	25 - 24,5 mm	——	——	——	——		
467E	5 - 4,5 mm	6 - 5,5 mm	7 - 6,5 mm	8 - 7,5 mm	9 - 8,5 mm	43,7	60
	10 - 9,5 mm	11 - 10,5 mm	12 - 11,5 mm	14 - 13,5 mm	16 - 15,5 mm		
	18 - 17,5 mm	20 - 19,5 mm	22 - 21,5 mm	24 - 23,5 mm	25 - 24,5 mm		
	28 - 27,5 mm	30 - 29,5mm	32 - 31,5 mm	——	——		



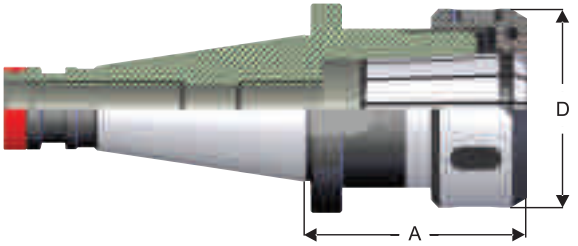


SİPARİŞ KODU	ÜRÜN ADI	MAX. DEVİR	D	d1	d2	d3	A
92040	MBPA / 40 - S / 173 D	2000	96	70	101	6 x 8,5	130



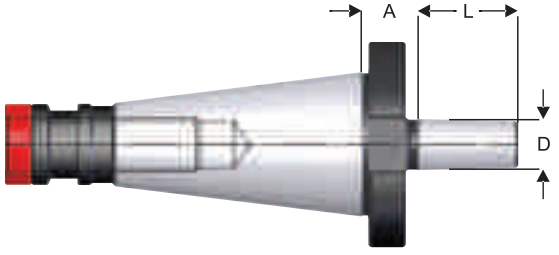


SİPARİŞ KODU	ÜRÜN ADI	MAX. DEVİR	D	d1	d2	d3	A	PENS KODU
93040	H.P.A. 40 / 5	5000	135	132	100	6"	104,8	173 D
93140	H.P.A. 40 / 6	5000	165	134	118	8"	133,4	173 D
93060	H.P.A. 60 / 6	4500	165	151	122	8"	133,4	185 D
93160	H.P.A. 60 / 8	4000	208	154	138	10"	171,4	185 D



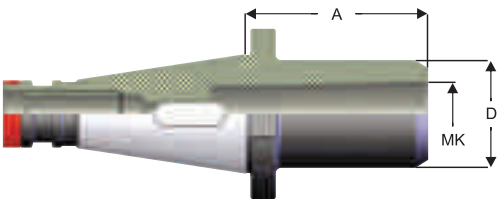


SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	D	A
210462	ISO 30 / 462 PENS BAŞLIĞI	2.....25 mm	60	80
211462	ISO 40 / 462 PENS BAŞLIĞI	2.....25 mm	60	66
211467	ISO 40 / 467 PENS BAŞLIĞI	3.....32 mm	72	95
215462	ISO 50 / 462 PENS BAŞLIĞI	2.....25 mm	60	71
215467	ISO 50 / 467 PENS BAŞLIĞI	3.....32mm	72	73
210430	ISO 30 / ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	50
210470	ISO 30 / ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	50
210472	ISO 30 / ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	65
211430	ISO 40 / ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	50
211470	ISO 40 / ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	50
211472	ISO 40 / ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	80
215470	ISO 50 / ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	63
215472	ISO 50 / ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	63





SİPARİŞ KODU	ÜRÜN ADI	D	A	L
273012	ISO 30 MANDREN ADAPTÖRÜ	B12	13,5	18,5
273016	ISO 30 MANDREN ADAPTÖRÜ	B16	15,5	24
274012	ISO 40 MANDREN ADAPTÖRÜ	B12	15	18,5
274016	ISO 40 MANDREN ADAPTÖRÜ	B16	17	24
274018	ISO 40 MANDREN ADAPTÖRÜ	B18	17	32
275016	ISO 50 MANDREN ADAPTÖRÜ	B16	20	24
275018	ISO 50 MANDREN ADAPTÖRÜ	B18	20	32



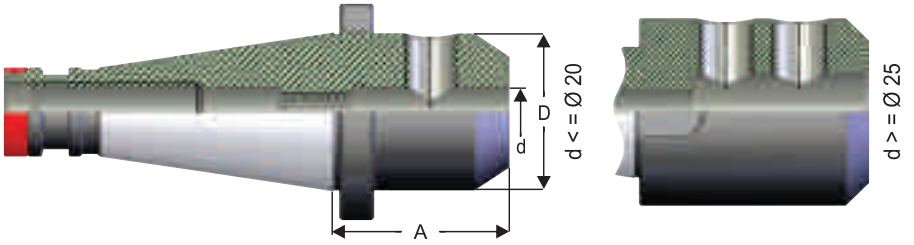


SİPARİŞ KODU	ÜRÜN ADI	MK	A	D
253001	ISO 30 KAMALI MORS ADAPTÖRÜ	1	50	25
253002	ISO 30 KAMALI MORS ADAPTÖRÜ	2	50	32
253003	ISO 30 KAMALI MORS ADAPTÖRÜ	3	75	40
254001	ISO 40 KAMALI MORS ADAPTÖRÜ	1	50	25
254002	ISO 40 KAMALI MORS ADAPTÖRÜ	2	50	32
254003	ISO 40 KAMALI MORS ADAPTÖRÜ	3	65	40
254004	ISO 40 KAMALI MORS ADAPTÖRÜ	4	95	48
255001	ISO 50 KAMALI MORS ADAPTÖRÜ	1	45	25
255002	ISO 50 KAMALI MORS ADAPTÖRÜ	2	60	32
255003	ISO 50 KAMALI MORS ADAPTÖRÜ	3	65	40
255004	ISO50 KAMALI MORS ADAPTÖRÜ	4	70	48
255005	ISO 50 KAMALI MORS ADAPTÖRÜ	5	105	63

SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	PENS ADEDİ
293462	ISO 30 / 462 PENS TAKIMI	4....25 mm	16
294462	ISO 40 / 462 PENS TAKIMI	4....25 mm	16
294467	ISO 40 / 467 PENS TAKIMI	5....32 mm	16
295462	ISO 50 / 462 PENS TAKIMI	4.....25 mm	16
295467	ISO 50 / 467 PENS TAKIMI	5....32 mm	16
293430	ISO 30 / ER 25 / 430 PENS TAKIMI	3....16 mm	14
293470	ISO 30 / ER 32 / 470 PENS TAKIMI	3....20 mm	14
293472	ISO 30 / ER 40 / 472 PENS TAKIMI	4....26 mm	16
294430	ISO 40 / ER 25 / 430 PENS TAKIMI	3....16 mm	14
294470	ISO 40 / ER 32 / 470 PENS TAKIMI	3....20 mm	14
294472	ISO 40 / ER 40 / 472 PENS TAKIMI	4....26 mm	16
295470	ISO 50 / ER 32 / 470 PENS TAKIMI	3....20 mm	14
295472	ISO 50 / ER 40 / 472 PENS TAKIMI	4.....26 mm	16

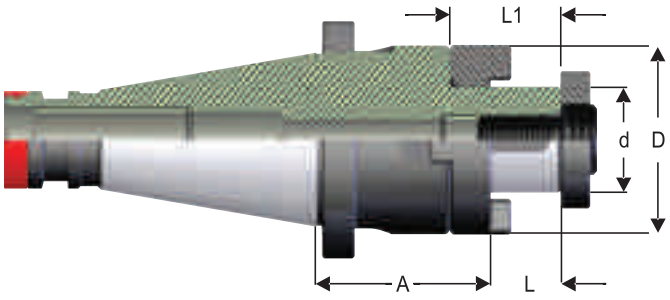




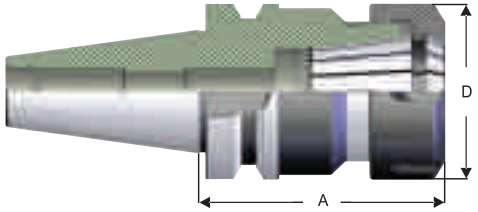


SİPARİŞ KODU	ÜRÜN ADI	d	D	A
244006	ISO 40 WELDON	6	25	50
244008	ISO 40 WELDON	8	28	50
244010	ISO 40 WELDON	10	35	50
244012	ISO 40 WELDON	12	42	50
244014	ISO 40 WELDON	14	44	50
244016	ISO 40 WELDON	16	48	63
244018	ISO 40 WELDON	18	50	63
244020	ISO 40 WELDON	20	52	63
244025	ISO 40 WELDON	25	63	80
244032	ISO 40 WELDON	32	72	80
244040	ISO 40 WELDON	40	79	90
245006	ISO 50 WELDON	6	25	63
245008	ISO 50 WELDON	8	28	63
245010	ISO 50 WELDON	10	35	63
245012	ISO 50 WELDON	12	42	63
245014	ISO 50 WELDON	14	44	63
245016	ISO 50 WELDON	16	48	63
245018	ISO 50 WELDON	18	50	63
245020	ISO 50 WELDON	20	52	63
245025	ISO 50 WELDON	25	65	80
245032	ISO 50 WELDON	32	72	80
245040	ISO 50 WELDON	40	80	90





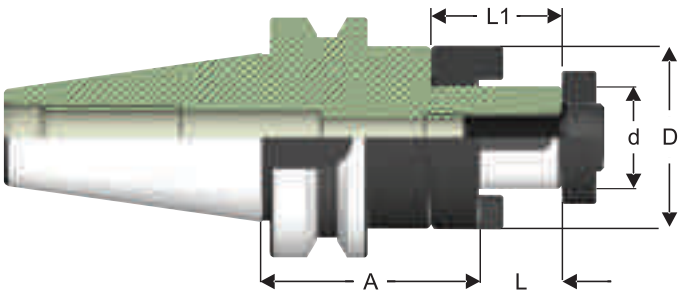
SİPARİŞ KODU	ÜRÜN ADI	d	D	A	L	L1
223016	ISO 30 / K.T.B. 16	16	32	35	17	27
223022	ISO 30 / K.T.B. 22	22	40	35	19	31
223027	ISO 30 / K.T.B. 27	27	48	35	21	33
223032	ISO 30 / K.T.B. 32	32	58	50	24	38
224016	ISO 40 / K.T.B. 16	16	32	52	17	27
224022	ISO 40 / K.T.B. 22	22	40	52	19	31
224027	ISO 40 / K.T.B. 27	27	48	52	21	33
224032	ISO 40 / K.T.B. 32	32	58	52	24	38
224040	ISO 40 / K.T.B. 40	40	70	52	27	41
225016	ISO 50 / K.T.B. 16	16	32	55	17	27
225022	ISO 50 / K.T.B. 22	22	40	55	19	31
225027	ISO 50 / K.T.B. 27	27	48	55	21	33
225032	ISO 50 / K.T.B. 32	32	58	55	24	38
225040	ISO 50 / K.T.B. 40	40	70	55	27	41



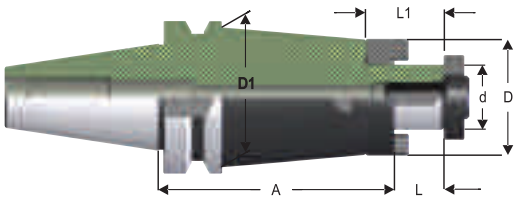


SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	D	A
310462	BT30 / 462 PENS BAŞLIĞI	2.....25 mm	60	80
311462	BT40 / 462 PENS BAŞLIĞI	2.....25 mm	60	70
311467	BT40 / 467 PENS BAŞLIĞI	3.....32 mm	72	90
315462	BT50 / 462 PENS BAŞLIĞI	2.....25 mm	60	85
315467	BT50 / 467 PENS BAŞLIĞI	3.....32 mm	72	90
310426	BT30 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	70
310430	BT30 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	70
310470	BT30 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	70
310472	BT30 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	70
311426	BT40 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	63
311430	BT40 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	60
311470	BT40 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	70
311472	BT40 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	80
315426	BT50 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	70
315430	BT50 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	70
315470	BT50 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	70
315472	BT50 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	80
310426-1	BT30 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	100
310430-1	BT30 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	100
310470-1	BT30 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	100
310472-1	BT30 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	100
312426	BT40 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	100
312426-1	BT40 ER 16 / 426 PENS BAŞLIĞI (mini)	2.....10 mm	22	100
312430	BT40 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	100
312470	BT40 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	100
312472	BT40 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	100
316426	BT50 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	100
316430	BT50 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	100
316470	BT50 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	100
316472	BT50 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	100
313426	BT40 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	160
313426-1	BT40 ER 16 / 426 PENS BAŞLIĞI (mini)	2.....10 mm	22	160
313430	BT40 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	160
313470	BT40 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	160
313472	BT40 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	160
317426	BT50 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	160
317426-1	BT50 ER 16 / 426 PENS BAŞLIĞI (mini)	2.....10 mm	22	160
317430	BT50 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	160
317470	BT50 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	160
317472	BT50 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	160



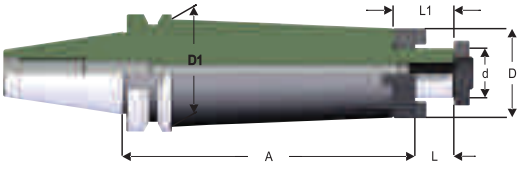


SİPARİŞ KODU	ÜRÜN ADI	d	D	A	L	L1
323016	BT 30 / K.T.B. 16	16	32	45	17	27
323022	BT 30 / K.T.B. 22	22	40	47	19	31
323027	BT 30 / K.T.B. 27	27	48	49	21	33
324016	BT 40 / K.T.B. 16	16	32	55	17	27
324022	BT 40 / K.T.B. 22	22	40	55	19	31
324027	BT 40 / K.T.B. 27	27	48	55	21	33
324032	BT 40 / K.T.B. 32	32	58	60	24	38
324040	BT 40 / K.T.B. 40	40	70	60	27	41
325016	BT 50 / K.T.B. 16	16	32	70	17	27
325022	BT 50 / K.T.B. 22	22	40	70	19	31
325027	BT 50 / K.T.B. 27	27	48	70	21	33
325032	BT 50 / K.T.B. 32	32	58	70	24	38
325040	BT 50 / K.T.B. 40	40	70	70	27	41





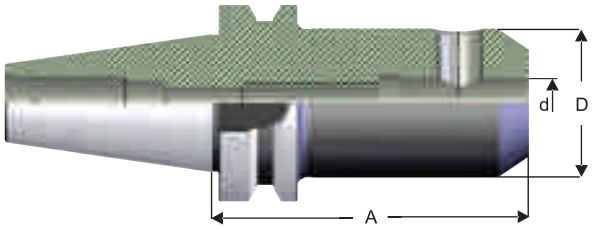
SİPARİŞ KODU	ÜRÜN ADI	d	D	A	L	L1	D1
324116	BT 40 / K.T.B. 16	16	32	100	17	27	38
324122	BT 40 / K.T.B. 22	22	40	100	19	31	48
324127	BT 40 / K.T.B. 27	27	48	100	21	33	58
324132	BT 40 / K.T.B. 32	32	58	100	24	38	61
324140	BT 40 / K.T.B. 40	40	70	100	27	41	70
325116	BT 50 / K.T.B. 16	16	32	100	17	27	38
325122	BT 50 / K.T.B. 22	22	40	100	19	31	48
325127	BT 50 / K.T.B. 27	27	48	100	21	33	58
325132	BT 50 / K.T.B. 32	32	58	100	24	38	68
325140	BT 50 / K.T.B. 40	40	70	100	27	41	80



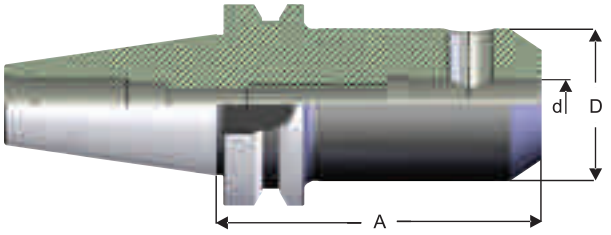


SİPARİŞ KODU	ÜRÜN ADI	d	D	A	L	L1	D1
324116-1	BT 40 / K.T.B. 16	16	32	160	17	27	38
324122-1	BT 40 / K.T.B. 22	22	40	160	19	31	48
324127-1	BT 40 / K.T.B. 27	27	48	160	21	33	58
324132-1	BT 40 / K.T.B. 32	32	58	160	24	38	61
324140-1	BT 40 / K.T.B. 40	40	70	160	27	41	70
325116-1	BT 50 / K.T.B. 16	16	32	160	17	27	38
325122-1	BT 50 / K.T.B. 22	22	40	160	19	31	48
325127-1	BT 50 / K.T.B. 27	27	48	160	21	33	58
325132-1	BT 50 / K.T.B. 32	32	58	160	24	38	68
325140-1	BT 50 / K.T.B. 40	40	70	160	27	41	80



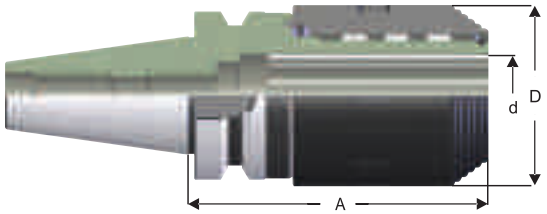


SİPARİŞ KODU	ÜRÜN ADI	d	D	A
343006	BT 30 WELDON	6	25	50
343008	BT 30 WELDON	8	28	50
343010	BT 30 WELDON	10	35	50
343012	BT 30 WELDON	12	42	50
343014	BT 30 WELDON	14	44	50
343016	BT 30 WELDON	16	48	63
343018	BT 30 WELDON	18	50	63
343020	BT 30 WELDON	20	52	63
344006	BT 40 WELDON	6	25	50
344008	BT 40 WELDON	8	28	50
344010	BT 40 WELDON	10	35	63
344012	BT 40 WELDON	12	42	63
344014	BT 40 WELDON	14	44	63
344016	BT 40 WELDON	16	48	63
344018	BT 40 WELDON	18	50	63
344020	BT 40 WELDON	20	52	63
344025	BT 40 WELDON	25	63	90
344032	BT 40 WELDON	32	72	100
344040	BT 40 WELDON	40	79	120
344105	BT 40 WELDON	5	25	100
344106	BT 40 WELDON	6	25	100
344108	BT 40 WELDON	8	28	100
344110	BT 40 WELDON	10	35	100
344112	BT 40 WELDON	12	42	100
344114	BT 40 WELDON	14	44	100
344116	BT 40 WELDON	16	48	100
344118	BT 40 WELDON	18	50	100
344120	BT 40 WELDON	20	52	100



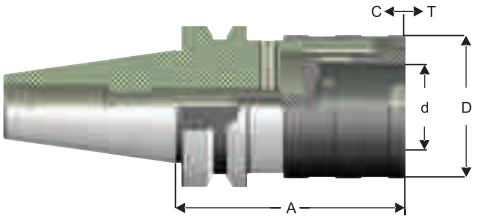


SİPARİŞ KODU	ÜRÜN ADI	d	D	A
344106-1	BT 40 WELDON	6	25	160
344108-1	BT 40 WELDON	8	28	160
344110-1	BT 40 WELDON	10	35	160
344112-1	BT 40 WELDON	12	42	160
344114-1	BT 40 WELDON	14	44	160
344116-1	BT 40 WELDON	16	48	160
344118-1	BT 40 WELDON	18	50	160
344120-1	BT 40 WELDON	20	52	160
344125-1	BT 40 WELDON	25	63	160
344132-1	BT 40 WELDON	32	72	160
345006	BT 50 WELDON	6	25	63
345008	BT 50 WELDON	8	28	63
345010	BT 50 WELDON	10	35	63
345012	BT 50 WELDON	12	42	80
345014	BT 50 WELDON	14	44	80
345016	BT 50 WELDON	16	48	80
345018	BT 50 WELDON	18	50	80
345020	BT 50 WELDON	20	52	80
345025	BT 50 WELDON	25	65	100
345032	BT 50 WELDON	32	72	105
345040	BT 50 WELDON	40	80	110
345106	BT 50 WELDON	6	25	160
345108	BT 50 WELDON	8	28	160
345110	BT 50 WELDON	10	35	160
345112	BT 50 WELDON	12	42	160
345116	BT 50 WELDON	16	48	160
345120	BT 50 WELDON	20	52	160
345125	BT 50 WELDON	25	65	160
345132	BT 50 WELDON	32	72	160
345140	BT 50 WELDON	40	80	160



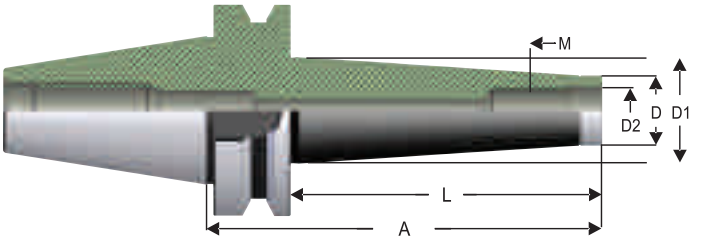


SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	D	A
318420	BT 40 RULMANLI PENS TUTUCU	6.....20	75	49
318432	BT 40 RULMANLI PENS TUTUCU	6.....32	90	68
319520	BT 50 RULMANLI PENS TUTUCU	6.....20	90	49
319532	BT 50 RULMANLI PENS TUTUCU	6.....32	95	68



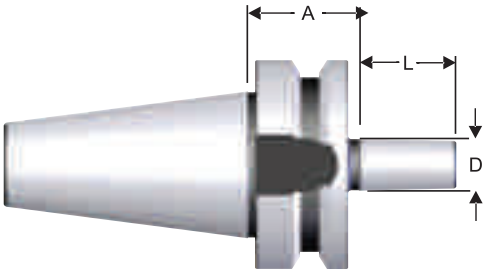


SİPARİŞ KODU	ÜRÜN ADI	d	A	D	C	T
376214	BT 30 M2 / M14 EM.TİP KLV.ÇEK.BAŞ.	19	64	38	7	7
376524	BT 30 M5 / M24 EM.TİP.KLV.ÇEK.BAŞ.	31	95	54	12	12
377214	BT 40 M2 / M14 EM.TİP.KLV.ÇEK.BAŞ.	19	67	38	7	7
377524	BT 40 M5 / M24 EM.TİP.KLV.ÇEK.BAŞ.	31	93	54	12	12
3771436	BT 40 M14 / M36 EM.TİP.KLV.ÇEK.BAŞ.	48	136	78	17,5	17,5
378214	BT 50 M2 / M14 EM.TİP.KLV.ÇEK.BAŞ.	19	82	38	7	7
378524	BT 50 M5 / M24 EM.TİP.KLV.ÇEK.BAŞ.	31	102	54	12	12
3781436	BT 50 M14 / M36 EM.TİP.KLV.ÇEK.BAŞ.	48	142	78	17,5	17,5



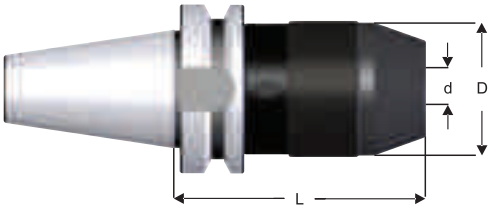


SİPARİŞ KODU	ÜRÜN ADI	M	D	D1	A	L	D2
384008	BT 40 VİDALI TAKIM TUTUCU	M8	13	23	77	50	8.5
384008-1	BT 40 VİDALI TAKIM TUTUCU	M8	13	25	127	100	8.5
384008-2	BT 40 VİDALI TAKIM TUTUCU	M8	13	30	177	150	8.5
384010	BT 40 VİDALI TAKIM TUTUCU	M10	18	23	77	50	10.5
384010-1	BT 40 VİDALI TAKIM TUTUCU	M10	18	32	127	100	10.5
384010-2	BT 40 VİDALI TAKIM TUTUCU	M10	18	36	177	150	10.5
384012	BT 40 VİDALI TAKIM TUTUCU	M12	21	25	77	50	12.5
384012-1	BT 40 VİDALI TAKIM TUTUCU	M12	21	32	127	100	12.5
384012-2	BT 40 VİDALI TAKIM TUTUCU	M12	21	40	177	150	12.5
384016	BT 40 VİDALI TAKIM TUTUCU	M16	29	34	102	75	17
384016-1	BT 40 VİDALI TAKIM TUTUCU	M16	29	40	152	125	17
385008	BT 50 VİDALI TAKIM TUTUCU	M8	13	25	138	100	8.5
385008-1	BT 50 VİDALI TAKIM TUTUCU	M8	13	30	188	150	8.5
385010	BT 50 VİDALI TAKIM TUTUCU	M10	18	32	138	100	10.5
385010-1	BT 50 VİDALI TAKIM TUTUCU	M10	18	36	188	150	10.5
385012	BT 50 VİDALI TAKIM TUTUCU	M12	21	33	138	100	12.5
385012-1	BT 50 VİDALI TAKIM TUTUCU	M12	21	40	188	150	12.5
385016	BT 50 VİDALI TAKIM TUTUCU	M16	29	36	138	100	17
385016-1	BT 50 VİDALI TAKIM TUTUCU	M16	29	42	188	150	17





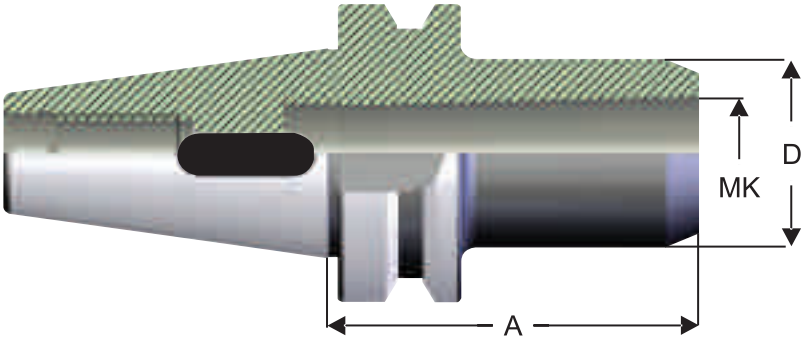
SİPARİŞ KODU	ÜRÜN ADI	D	A	L
373012	BT 30 MANDREN ADAPTÖRÜ	B12	25	18,5
373016	BT 30 MANDREN ADAPTÖRÜ	B16	25	24
374012	BT 40 MANDREN ADAPTÖRÜ	B12	32	18,5
374016	BT 40 MANDREN ADAPTÖRÜ	B16	32	24
374018	BT 40 MANDREN ADAPTÖRÜ	B18	32	32
375016	Bt50 MANDREN ADAPTÖRÜ	B16	43	24
375018	BT 50 MANDREN ADAPTÖRÜ	B18	43	32





SİPARİŞ KODU	ÜRÜN ADI	D	A	L
373116	BT 30 NC MANDREN TUTUCU	1.....16	51	112
374116	BT 40 NC MANDREN TUTUCU	1.....16	51	97
375116	BT 50 NC MANDREN TUTUCU	1.....16	51	108



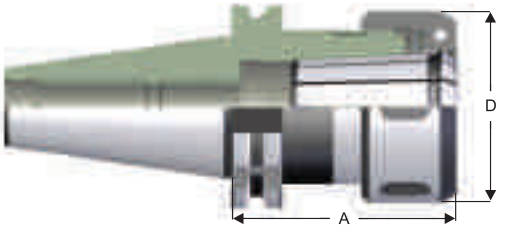


SİPARİŞ KODU	ÜRÜN ADI	MK	D	A
353001	BT 30 KAMALI MORS ADAPTÖRÜ	1	25	45
353002	BT 30 KAMALI MORS ADAPTÖRÜ	2	32	60
353003	BT 30 KAMALI MORS ADAPTÖRÜ	3	40	75
354001	BT 40 KAMALI MORS ADAPTÖRÜ	1	25	50
354002	BT 40 KAMALI MORS ADAPTÖRÜ	2	32	50
354003	BT 40 KAMALI MORS ADAPTÖRÜ	3	40	70
354004	BT 40 KAMALI MORS ADAPTÖRÜ	4	48	95
355001	BT 50 KAMALI MORS ADAPTÖRÜ	1	25	45
355002	BT 50 KAMALI MORS ADAPTÖRÜ	2	32	60
355003	BT 50 KAMALI MORS ADAPTÖRÜ	3	40	65
355004	BT 50 KAMALI MORS ADAPTÖRÜ	4	48	95
355005	BT 50 KAMALI MORS ADAPTÖRÜ	5	63	105



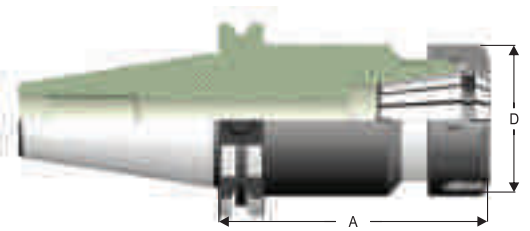
SİPARİŞ KODU	ÜRÜN ADI	MK	D
393462	BT 30 / 462 PENS TAKIMI	4.....25 mm	16
394462	BT 40 / 462 PENS TAKIMI	4.....25 mm	16
394467	BT 40 / 467 PENS TAKIMI	5.....32 mm	16
395462	BT 50 / 462 PENS TAKIMI	4.....25 mm	16
395467	BT 50 / 467 PENS TAKIMI	5.....32 mm	16
393430	BT 30 ER25 / 430 PENS TAKIMI	3.....16 mm	14
393470	BT 30 ER 32 / 470 PENS TAKIMI	3.....20 mm	14
393472	BT 30 ER 40 / 472 PENS TAKIMI	4.....26 mm	16
394430	BT 40 ER 25 / 430 PENS TAKIMI	3.....16 mm	14
394470	BT 40 ER 32 / 470 PENS TAKIMI	3.....20 mm	14
394472	BT 40 ER 40 / 472 PENS TAKIMI	4.....26 mm	16
395430	BT 50 ER 25 / 430 PENS TAKIMI	3.....16 mm	14
395470	BT 50 ER 32 / 470 PENS TAKIMI	3.....20 mm	14
395472	BT 50 ER 40 / 472 PENS TAKIMI	4.....26 mm	16
398420	BT 40 RULMANLI PENS TAKIMI	6.....20 mm	5
398432	BT 40 RULMANLI PENS TAKIMI	6.....32 mm	7
399520	BT 50 RULMANLI PENS TAKIMI	6.....20 mm	5
399532	BT 50 RULMANLI PENS TAKIMI	6.....32 mm	7





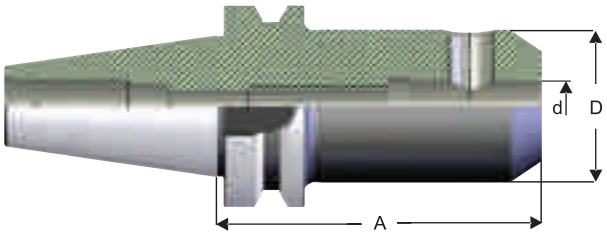
SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	D	A
510462	SK 30 / 462 PENS BAŞLIĞI	2.....25 mm	60	80
511462	SK 40 / 462 PENS BAŞLIĞI	2.....25 mm	60	70
511467	SK 40 / 467 PENS BAŞLIĞI	3.....32 mm	72	90
515462	SK 50 / 462 PENS BAŞLIĞI	2.....25 mm	62	70
515467	SK 50 / 467 PENS BAŞLIĞI	3.....32 mm	72	80
510426	SK 30ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	70
510430	SK 30 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	70
510470	SK 30 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	70
510472	SK 30 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	70
511426	SK 40 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	63
511430	SK 40 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	60
511470	SK 40 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	70
511472	SK 40 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	80
515426	SK 50 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	63
515430	SK 50 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	60
515470	SK 50 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	70
515472	SK 50 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	80





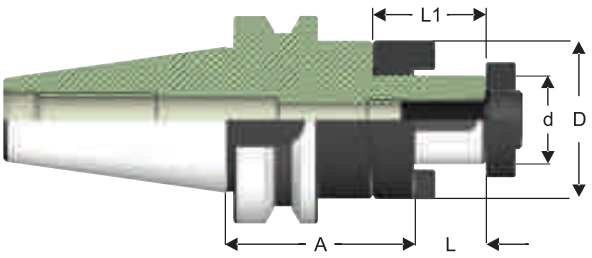
SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	D	A
510426.1	SK 30 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	100
510430.1	SK 30 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	100
510470.1	SK 30 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	100
512426.1	SK 40 ER 16 / 426 PENS BAŞLIĞI (mini)	2.....10 mm	22	100
512426	SK 40 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	100
512430	SK 40 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	100
512470	SK 40 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	100
512472	SK 40 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	100
516426	SK 50 ER 16 / 426 PENS BAŞLIĞI	2.....10 mm	32	100
516426.1	SK 50 ER 16 / 426 PENS BAŞLIĞI (mini)	2.....10 mm	22	100
516430	SK 50 ER 25 / 430 PENS BAŞLIĞI	2.....16 mm	42	100
516470	SK 50 ER 32 / 470 PENS BAŞLIĞI	2.....20 mm	50	100
516472	SK 50 ER 40 / 472 PENS BAŞLIĞI	2.....26 mm	63	100



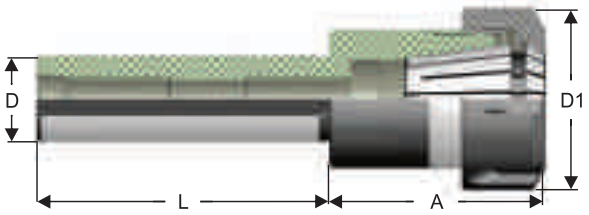


SİPARİŞ KODU	ÜRÜN ADI	d (h5)	D	A
544006	SK 40 WELDON	6	25	50
544008	SK 40 WELDON	8	28	50
544010	SK 40 WELDON	10	35	50
544012	SK 40 WELDON	12	42	50
544014	SK 40 WELDON	14	44	50
544016	SK 40 WELDON	16	48	63
544018	SK 40 WELDON	18	50	63
544020	SK 40 WELDON	20	52	63
544025	SK 40 WELDON	25	63	100
544032	SK 40 WELDON	32	72	100
544040	SK 40 WELDON	40	79	120



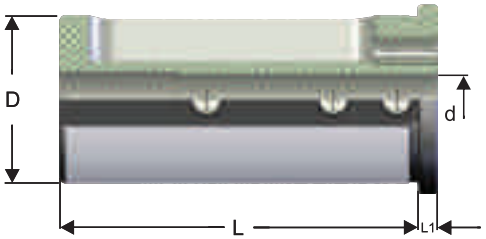


SİPARİŞ KODU	ÜRÜN ADI	d (h6)	D	A	L	L1
524016	SK 40 / K.T.B.-16	16	32	55	17	27
524022	SK 40 / K.T.B.-22	22	40	55	19	31
524027	SK 40 / K.T.B.-27	27	48	55	21	33
524032	SK 40 / K.T.B.-32	32	58	60	24	38
524040	SK 40 / K.T.B.-40	40	70	60	27	41
525016	SK 50 / K.T.B.-16	16	32	55	17	27
525022	SK 50 / K.T.B.-22	22	40	55	19	31
525027	SK 50 / K.T.B.-27	27	48	55	21	33
525032	SK 50 / K.T.B.-32	32	58	55	24	38
525040	SK 50 / K.T.B.-40	40	70	55	27	41



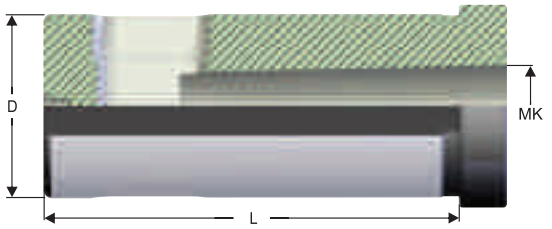


SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	ŞAFT (D)	L	A	D1
420426	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	20	70	30	32
420426.1	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	20	100	30	32
420426.2	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	20	100	30	22
420426.3	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	20	150	30	22
420426.4	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	20	150	30	32
420426.5	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	20	200	30	22
420428	SİLİNDİR ŞAFTLI ER 20 / 428 PENS TUTUCU	2.....12 mm	20	70	45	34
420428.1	SİLİNDİR ŞAFTLI ER 20 / 428 PENS TUTUCU	2.....12 mm	20	70	45	34
420428.2	SİLİNDİR ŞAFTLI ER 20 / 428 PENS TUTUCU	2.....12 mm	20	150	45	34
420430	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	20	70	52	42
420430.1	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	20	150	52	42
420470	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	20	70	55	50
420470.1	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	20	150	55	50
425426	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	25	70	32	32
425426.1	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	25	150	32	32
425428	SİLİNDİR ŞAFTLI ER 20 / 428 PENS TUTUCU	2.....12 mm	25	70	35	34
425428.1	SİLİNDİR ŞAFTLI ER 20 / 428 PENS TUTUCU	2.....12 mm	25	150	35	34
425430	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	25	70	50	42
425430.1	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	25	150	50	42
425470	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	25	70	55	50
425470.1	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	25	150	55	50
432426	SİLİNDİR ŞAFTLI ER 16 / 426 PENS TUTUCU	2.....10 mm	32	80	32	32
432430	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	32	80	32	42
432430.1	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	32	150	32	42
432470	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	32	80	52	50
432470.1	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	32	150	52	50
432472	SİLİNDİR ŞAFTLI ER 40 / 472 PENS TUTUCU	2.....26 mm	32	80	63	63
432472.1	SİLİNDİR ŞAFTLI ER 40 / 472 PENS TUTUCU	2.....26 mm	32	150	63	63
440430	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	40	85	32	42
440430.1	SİLİNDİR ŞAFTLI ER 25 / 430 PENS TUTUCU	2.....16 mm	40	150	32	42
440470	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	40	85	35	50
440470.1	SİLİNDİR ŞAFTLI ER 32 / 470 PENS TUTUCU	2.....20 mm	40	150	35	50
440472	SİLİNDİR ŞAFTLI ER 40 / 472 PENS TUTUCU	2.....26 mm	40	85	45	63
440472.1	SİLİNDİR ŞAFTLI ER 40 / 472 PENS TUTUCU	2.....26 mm	40	150	45	63





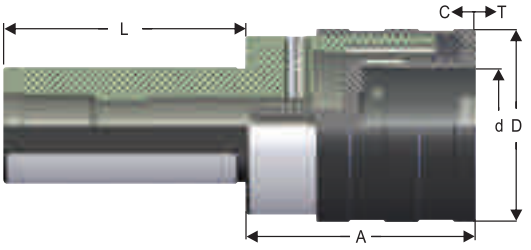
SİPARİŞ KODU	ÜRÜN ADI	d	ŞAFT (D)	L	L1
42006	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	6	20	40	5
42008	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	8	20	40	5
42010	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	10	20	40	5
42012	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	12	20	40	5
42016	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	16	20	40	5
42506	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	6	25	45	5
42508	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	8	25	45	5
42510	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	10	25	45	5
42512	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	12	25	45	5
42516	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	16	25	45	5
42520	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	20	25	45	5
43206	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	6	32	65	5
43208	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	8	32	65	5
43210	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	10	32	65	5
43212	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	12	32	65	5
43216	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	16	32	65	5
43220	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	20	32	65	5
43225	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	25	32	65	5
44008	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	8	40	75	5
44010	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	10	40	75	5
44012	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	12	40	75	5
44016	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	16	40	75	5
44020	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	20	40	75	5
44025	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	25	40	75	5
44032	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	32	40	75	5
45008	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	8	50	90	5
45010	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	10	50	90	5
45012	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	12	50	90	5
45016	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	16	50	90	5
45020	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	20	50	90	5
45025	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	25	50	90	5
45032	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	32	50	90	5
45040	SİLİNDİR ŞAFTLI REDÜKSİYON KOVANI	40	50	90	5





SİPARİŞ KODU	ÜRÜN ADI	MORS (MK)	ŞAFT (D)	L
43201	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	1	32	75
43202	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	2	32	80
43203	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	3	32	80
44001	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	1	40	75
44002	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	2	40	85
44003	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	3	40	85
44004	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	4	40	85
45001	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	1	50	75
45002	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	2	50	88
45003	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	3	50	90
45004	SİLİNDİRİK ŞAFTLI MORS ADAPTÖRÜ	4	50	90

SİLİNDİRİK ŞAFTLI KLAVUZ ÇEKME BAŞLIĞI





SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	A	D	d	C	T	L
4825214	SİLİNDİRİK ŞAFTLI EM. TIP KLAVUZ ÇEKME B.	M2....M14	45	38	19	7	7	70
4825524	SİLİNDİRİK ŞAFTLI EM. TIP KLAVUZ ÇEKME B.	M5....M24	71	54	31	12	12	70
4832214	SİLİNDİRİK ŞAFTLI EM. TIP KLAVUZ ÇEKME B.	M2....M14	45	38	19	7	7	80
4832524	SİLİNDİRİK ŞAFTLI EM. TIP KLAVUZ ÇEKME B.	M5....M24	71	54	31	12	12	80
4840214	SİLİNDİRİK ŞAFTLI EM. TIP KLAVUZ ÇEKME B.	M2....M14	45	38	19	7	7	85
4840524	SİLİNDİRİK ŞAFTLI EM. TIP KLAVUZ ÇEKME B.	M5....M24	71	54	31	12	12	85



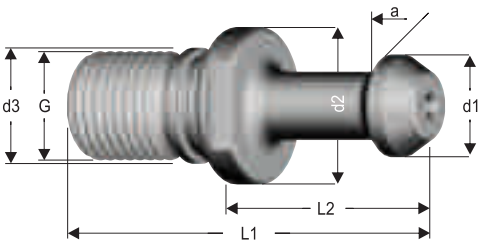
SİPARİŞ KODU	ÜRÜN ADI	d	D
904042	AY ANAHTARI / 415	40	42
904550	AY ANAHTARI RULMANLI TAKIM İÇİN (6...20 mm)	45	50
904550	AY ANAHTARI / 440	45	50
905862	AY ANAHTARI / 462	58	62
906875	AY ANAHTARI / 467	68	75
906875	AY ANAHTARI RULMANLI TAKIM İÇİN (6...32 mm)	68	75
908590	AY ANAHTARI / 468	85	90



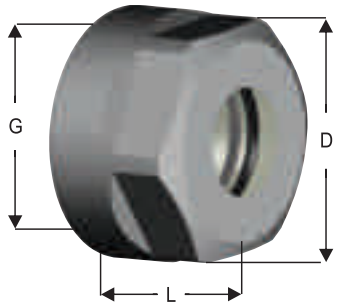


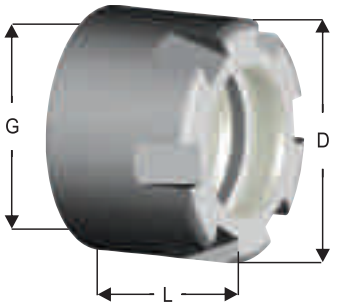
SİPARİŞ KODU	ÜRÜN ADI	D (KAPASİTE)
9022426	426 (ER 16) KAPAK ANAHTARI	22
9032426	426 (ER 16) KAPAK ANAHTARI	32
9035428	428 (ER 20) KAPAK ANAHTARI	35
9042430	430 (ER 25) KAPAK ANAHTARI	42
9050470	470 (ER 32) KAPAK ANAHTARI	50
9063472	472 (ER 40) KAPAK ANAHTARI	63

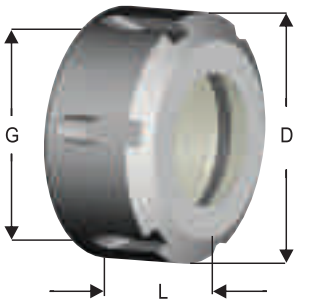




SİPARİŞ KODU	ÜRÜN ADI	d1	d2	L1	L2	G	a
21445	CAT 40 MAZAK PULLSTAD	18,80	22,00	41,25	16,10	M16	45°
21445.1	BT 40 MAZAK PULLSTAD	18,80	22,50	44,10	19,10	M16	45°
22545	CAT 50 MAZAK PULLSTAD	29,10	37,00	65,50	25,55	M24	45°
23015	SK 30 PULLSTAD	13,00	17,00	44,00	24,00	M12	15°
24015	SK 40 PULLSTAD	19,00	23,00	54,00	26,00	M16	15°
25015	SK 50 PULLSTAD	28,00	36,00	74,00	34,00	M24	15°
23045	BT 30 PULLSTAD	11,00	16,50	43,00	23,00	M12	45°
24045	BT 40 PULLSTAD	15,00	23,00	60,00	35,00	M16	45°
25045	BT 50 PULLSTAD	23,00	38,00	85,00	45,00	M24	45°
24145	BT 40 İ.S.V PULLSTAD	15,00	23,00	60,00	35,00	M16	45°
25145	BT 50 İ.S.V PULLSTAD	23,00	38,00	85,00	45,00	M24	45°







SİPARİŞ KODU	ÜRÜN ADI	KAPASİTE	D	G	L
40407	407 KAPAK	2.....12 mm	35	M27 x 1,5	20
40415	415 KAPAK	2.....16 mm	43	M33 x 1,5	24
40440	440 KAPAK	2.....20 mm	50	M42 x 2	28
40462	462 KAPAK	2.....25 mm	60	M48 x 2	30
40467	467 KAPAK	3.....32 mm	72	M60 x 2,5	33,5
40468	468 KAPAK	3.....40 mm	85	M68 x 2,5	37
40426	ER 16 / 426 KAPAK	2.....10 mm	28	M22 x 1,5	17,5
41426	ER 16 / 426 MİNİ KAPAK	2.....10 mm	22	M19 x 1	18
42426	ER 16 / 426 KAPAK	2.....10 mm	32	M22 x 1,5	17,5
40428	ER 20 / 428 KAPAK	2.....12 mm	34	M25 x 1,5	19
41428	ER 20 / 428 MINI KAPAK	2.....12 mm	28	M24 x 1	19
40430	ER 25 / 430 KAPAK	2.....16 mm	42	M32 x 1,5	20
40470	ER 32 / 470 KAPAK	2.....20 mm	50	M40 x 1,5	22,5
40472	ER 40 / 472 KAPAK	2.....26 mm	63	M50 x 1,5	25,5



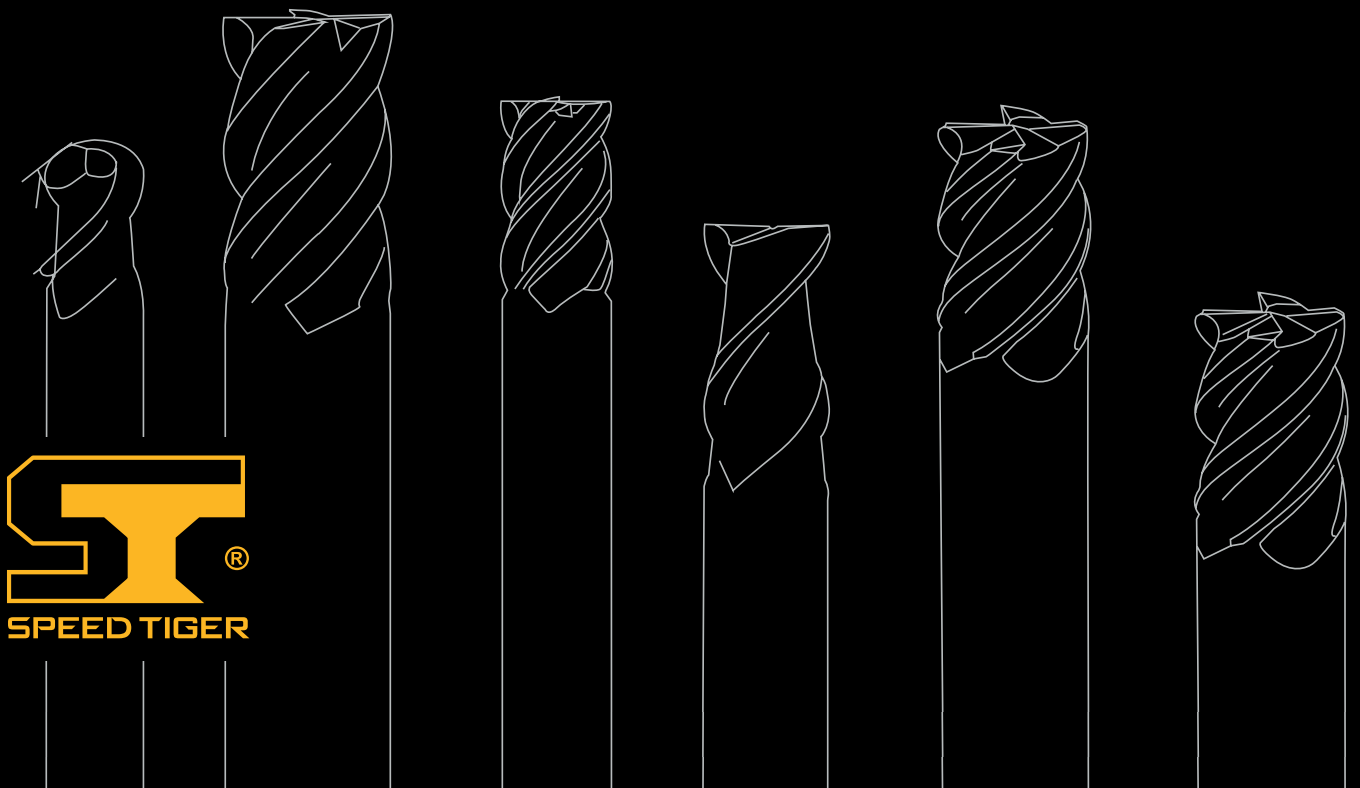


SİPARİŞ KODU	ÜRÜN ADI
65030	ISO / BT 30 ALUMİNYUM MONTAJ APARATI
65040	ISO / BT 40 ALUMİNYUM MONTAJ APARATI
65050	ISO / BT 50 ALUMİNYUM MONTAJ APARATI
55030	ISO / BT 30 ÇELİK MONTAJ APARATI
55040	ISO / BT 40 ÇELİK MONTAJ APARATI
55050	ISO / BT 50 ÇELİK MONTAJ APARATI

KARBÜR FREZELER



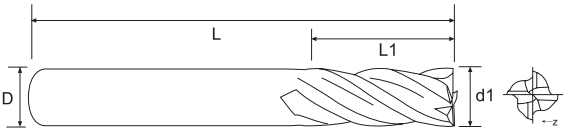
- Düz Karbür Frezeler
- Küre Karbür Frezeler
- Köşe Radius Karbür Frezeler
- Düz Rif Kanal Micro Karbür Frezeler
- Küre Rif Kanal Micro Karbür Frezeler
- Karbür Matkap Uçları
- Karbür Raybalar
- Karbür Pantoraf Kalemleri



SPEED TIGER







WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

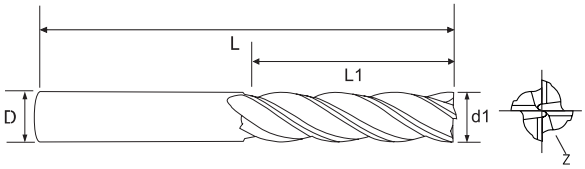
KOD	d1 (Çap)	L1 (Kesme Boyu)	L (Boy)	D (Şaft)
MSE0104 - TİSİN	1 mm	3 mm	50 mm	4 mm
MSE0154 - TİSİN	1.5 mm	4 mm	50 mm	4 mm
MSE0204 - TİSİN	2.0 mm	6 mm	50 mm	4 mm
MSE0254 - TİSİN	2.5 mm	8 mm	50 mm	4 mm
MSE0304 - TİSİN	3.0 mm	8 mm	50 mm	4 mm
MSE0354 - TİSİN	3.5 mm	10 mm	50 mm	4 mm
MSE0404 - TİSİN	4 mm	11 mm	50 mm	4 mm
SE0404 - TİSİN	4 mm	11 mm	50 mm	6 mm
SE0454 - TİSİN	4.5mm	13 mm	50 mm	6 mm
SE0504 - TİSİN	5 mm	13 mm	50 mm	6 mm
SE0554 - TİSİN	5.5 mm	13 mm	50 mm	6 mm
SE0604 - TİSİN	6 mm	16 mm	50 mm	6 mm
SE0654 - TİSİN	6.5 mm	16 mm	60 mm	8 mm
SE0704 - TİSİN	7 mm	16 mm	60 mm	8 mm
SE0754 - TİSİN	7.5 mm	19 mm	60 mm	8 mm
SE0804 - TİSİN	8 mm	20 mm	60 mm	8 mm
SE0854 - TİSİN	8.5 mm	20 mm	75 mm	10 mm
SE0904 - TİSİN	9 mm	20 mm	75 mm	10 mm
SE0954 - TİSİN	9.5 mm	25 mm	75 mm	10 mm
SE1004 - TİSİN	10 mm	30 mm	75 mm	10 mm
SE1104 - TİSİN	11 mm	30 mm	75 mm	12 mm
SE1204 - TİSİN	12 mm	32 mm	75 mm	12 mm
SE1404 - TİSİN	14 mm	40 mm	100 mm	16 mm
SE1604 - TİSİN	16 mm	40 mm	100 mm	16 mm
SE1804 - TİSİN	18 mm	45 mm	100 mm	20 mm
SE2004 - TİSİN	20 mm	45 mm	100 mm	20 mm

Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
○	◎	◎	○			○		







WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

KOD	d1 (Çap)	L1 (Kesme Boyu)	L (Boy)	D (Şaft)
LET0104 - TİSİN	1 mm	6 mm	50 mm	4 mm
LET0154 - TİSİN	1.5 mm	9 mm	50 mm	4 mm
LET0204 - TİSİN	2.0 mm	12 mm	50 mm	4 mm
LET0254 - TİSİN	2.5 mm	12 mm	50 mm	4 mm
LET0304 - TİSİN	3.0 mm	15 mm	60 mm	6 mm
LET0354 - TİSİN	3.5 mm	15 mm	60 mm	6 mm
LET0404 - TİSİN	4 mm	20 mm	75 mm	6 mm
LET0454 - TİSİN	4.5mm	20 mm	75 mm	6 mm
LET0504 - TİSİN	5 mm	25 mm	75 mm	6 mm
LET0554 - TİSİN	5.5 mm	25 mm	75 mm	6 mm
LET0604 - TİSİN	6 mm	30 mm	75 mm	6 mm
LET0704 - TİSİN	7 mm	30 mm	100 mm	8 mm
LET0804 - TİSİN	8 mm	40 mm	100 mm	8 mm
LET0904 - TİSİN	9 mm	40 mm	100 mm	10 mm
LET1004 - TİSİN	10 mm	40 mm	100 mm	10 mm
LET1104 - TİSİN	11 mm	40 mm	100 mm	12 mm
LET1204 - TİSİN	12 mm	50 mm	100 mm	12 mm
LET1404 - TİSİN	14 mm	50 mm	150 mm	16 mm
LET1604 - TİSİN	16 mm	60 mm	150 mm	16 mm
LET2004 - TİSİN	20 mm	90 mm	200 mm	20 mm

HRC ▶ 40
HRC ▶ 45
HRC ▶ 50
HRC ▶ 55
HRC ▶ 60
HRC ▶ 65

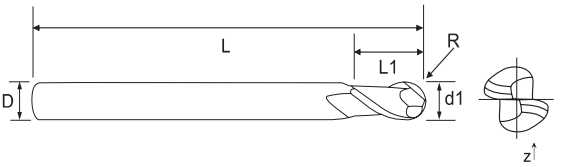
Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
○	◎	◎	○			○		

HRC ▶ 40
HRC ▶ 45
HRC ▶ 50
HRC ▶ 55
HRC ▶ 60
HRC ▶ 65



600 Nano | HRC ▶ 55 | 35° | TiSiN



WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

KOD	d1 (Çap)	R (Radius)	L1 (Kesme Boyu)	L (Boy)	D (Şaft)
MSB0102 - TİSİN	1 mm	0.5 mm	2 mm	50 mm	4 mm
MSB0152 - TİSİN	1.5 mm	0.75 mm	3 mm	50 mm	4 mm
MSB0202 - TİSİN	2.0 mm	1 mm	4 mm	50 mm	4 mm
MSB0252 - TİSİN	2.5 mm	1.25 mm	5 mm	50 mm	4 mm
MSB0302 - TİSİN	3.0 mm	1.5 mm	6 mm	50 mm	4 mm
MSB0352 - TİSİN	3.5 mm	1.75 mm	7 mm	50 mm	4 mm
MSB0402 - TİSİN	4 mm	2 mm	8 mm	50 mm	4 mm
SB0402 - TİSİN	4 mm	2 mm	8 mm	50 mm	6 mm
SB0452 - TİSİN	4.5mm	2.25 mm	9 mm	50 mm	6 mm
SB0502 - TİSİN	5 mm	2.5 mm	10 mm	50 mm	6 mm
SB0552 - TİSİN	5.5 mm	2.75 mm	11 mm	50 mm	6 mm
SB0602 - TİSİN	6 mm	3 mm	12 mm	50 mm	6 mm
SB0702 - TİSİN	7 mm	3.5 mm	14 mm	60 mm	8 mm
SB0802 - TİSİN	8 mm	4 mm	16 mm	60 mm	8 mm
SB0902 - TİSİN	9 mm	4.5 mm	18 mm	75 mm	10 mm
SB1002 - TİSİN	10 mm	5 mm	20 mm	75 mm	10 mm
SB1102 - TİSİN	11 mm	5.5 mm	22 mm	75 mm	12 mm
SB1202 - TİSİN	12 mm	6 mm	24 mm	75 mm	12 mm
SB1402 - TİSİN	14 mm	7 mm	28 mm	100 mm	16 mm
SB1602 - TİSİN	16 mm	8 mm	32 mm	100 mm	16 mm
SB1802 - TİSİN	18 mm	9 mm	36 mm	100 mm	20 mm
SB2002 - TİSİN	20 mm	10 mm	40 mm	100 mm	20 mm

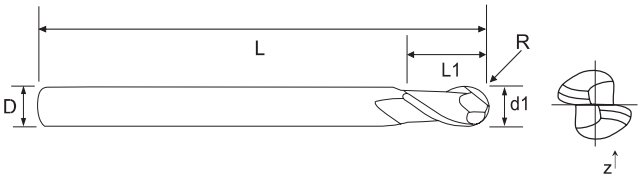
Uygulama / Application ◎ **Tavsiye /** Recommend ○ **Uygun /** Suitable X **Tavsiye Edilmez /** Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
○	◎	◎	○			○		

Küre Uzun 2 Ağız Karbür Freze



600 Nano | HRC ▶55 | 35° | TiSiN



WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

KOD	d1 (Çap)	R (Radius)	L1 (Kesme Boyu)	L (Boy)	D (Şaft)
SLB0102 - TİSİN	1 mm	0.5 mm	2 mm	75 mm	6 mm
MLB0102 - TİSİN	1 mm	0.5 mm	2 mm	100 mm	6 mm
SLB0152 - TİSİN	1.5 mm	0.75 mm	3 mm	75 mm	6 mm
MLB0152 - TİSİN	1.5 mm	0.75 mm	3 mm	100 mm	6 mm
SLB0202 - TİSİN	2 mm	1 mm	4 mm	75 mm	6 mm
MLB0202 - TİSİN	2 mm	1 mm	4 mm	100 mm	6 mm
SLB0252 - TİSİN	2.5 mm	1.25 mm	5 mm	75 mm	6 mm
MLB0252 - TİSİN	2.5 mm	1.25 mm	5 mm	100 mm	6 mm
SLB0302 - TİSİN	3 mm	1.5 mm	6 mm	75 mm	6 mm
MLB0302 - TİSİN	3 mm	1.5 mm	6 mm	100 mm	6 mm
MLB0352 - TİSİN	3.5 mm	1.75 mm	7 mm	100 mm	6 mm
SLB0402 - TİSİN	4 mm	2 mm	8 mm	75 mm	6 mm
MLB0402 - TİSİN	4 mm	2 mm	8 mm	100 mm	6 mm
SLB0502 - TİSİN	5 mm	2.5 mm	10 mm	75 mm	6 mm
MLB0502 - TİSİN	5 mm	2.5 mm	10 mm	100 mm	6 mm
SLB0602 - TİSİN	6 mm	3 mm	12 mm	75 mm	6 mm
MLB0602 - TİSİN	6 mm	3 mm	12 mm	100 mm	6 mm
LLB0602 - TİSİN	6 mm	3 mm	12 mm	150 mm	6 mm
SLB0802 - TİSİN	8 mm	4 mm	16 mm	75 mm	8 mm
MLB0802 - TİSİN	8 mm	4 mm	16 mm	100 mm	8 mm
LLB0802 - TİSİN	8 mm	4 mm	16 mm	150 mm	8 mm
MLB1002 - TİSİN	10 mm	5 mm	20 mm	100 mm	10 mm
LLB1002 - TİSİN	10 mm	5 mm	20 mm	150 mm	10 mm
XLB1002 - TİSİN	10 mm	5 mm	20 mm	200 mm	10 mm
MLB1202 - TİSİN	12 mm	6 mm	24 mm	100 mm	12 mm
LLB1202 - TİSİN	12 mm	6 mm	24 mm	150 mm	12 mm
XLB1202 - TİSİN	12 mm	6 mm	24 mm	200 mm	12 mm
LLB1602 - TİSİN	16 mm	8 mm	32 mm	150 mm	16 mm
XLB1602 - TİSİN	16 mm	8 mm	32 mm	200 mm	16 mm

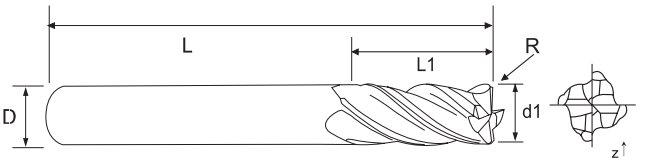
Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
○	◎	◎	○			○		

HRC ▶ 40
HRC ▶ 45
HRC ▶ 50
HRC ▶ 55
HRC ▶ 60
HRC ▶ 65



600 Nano | HRC ▶ 55 | 35° | R | TiSiN



WC=90 Co=10 HV30=1571 Rupture=3750N/mm² Grain Size=0.6 m

KOD	d1 (Çap)	R (Radius)	L1 (Kesme Boyu)	L (Boy)	D (Şaft)
RTA020024 - TİSİN	2 mm	0.2 mm	6 mm	50 mm	4 mm
RTA020034 - TİSİN	2 mm	0.3 mm	6 mm	50 mm	4 mm
RTA020054 - TİSİN	2 mm	0.5 mm	6 mm	50 mm	4 mm
RTA025024 - TİSİN	2.5 mm	0.2 mm	8 mm	50 mm	4 mm
RTA030024 - TİSİN	3 mm	0.2 mm	8 mm	50 mm	3 mm
RTA030034 - TİSİN	3 mm	0.3 mm	8 mm	50 mm	3 mm
RTA030054 - TİSİN	3 mm	0.5 mm	8 mm	50 mm	3 mm
RTA030104 - TİSİN	3 mm	1 mm	8 mm	50 mm	3 mm
RTA430024 - TİSİN	3 mm	0.2 mm	8 mm	50 mm	4 mm
RTA430034 - TİSİN	3 mm	0.3 mm	8 mm	50 mm	4 mm
RTA430054 - TİSİN	3 mm	0.5 mm	8 mm	50 mm	4 mm
RTA430104 - TİSİN	3 mm	1 mm	8 mm	50 mm	4 mm
RTA040024 - TİSİN	4 mm	0.2 mm	10 mm	50 mm	4 mm
RTA040034 - TİSİN	4 mm	0.3 mm	10 mm	50 mm	4 mm
RTA040054 - TİSİN	4 mm	0.5 mm	10 mm	50 mm	4 mm
RTA040104 - TİSİN	4 mm	1 mm	10 mm	50 mm	4 mm
RTA040154 - TİSİN	4 mm	1.5 mm	10 mm	50 mm	4 mm
RTA050024 - TİSİN	5 mm	0.2 mm	13 mm	50 mm	6 mm
RTA050034 - TİSİN	5 mm	0.3 mm	13 mm	50 mm	6 mm
RTA050054 - TİSİN	5 mm	0.5 mm	13 mm	50 mm	6 mm
RTA050104 - TİSİN	5 mm	1 mm	13 mm	50 mm	6 mm
RTA060024 - TİSİN	6 mm	0.2 mm	15 mm	50 mm	6 mm
RTA060034 - TİSİN	6 mm	0.3 mm	15 mm	50 mm	6 mm
RTA060054 - TİSİN	6 mm	0.5 mm	15 mm	50 mm	6 mm

Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
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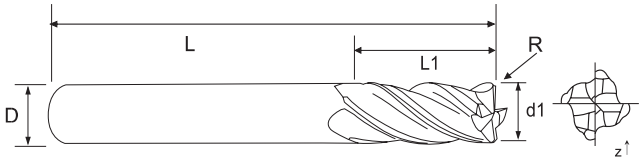


WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

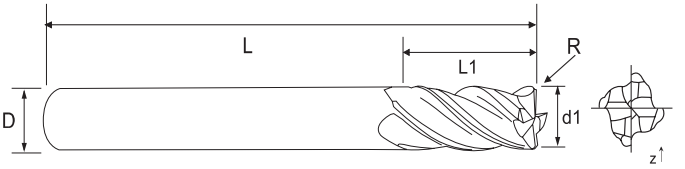
KOD	d1 (Çap)	R (Radius)	L1 (Kesme Boyu)	L (Boy)	D (Şaft)
RTA060104 - TİSİN	6 mm	1 mm	15 mm	50 mm	6 mm
RTA060154 - TİSİN	6 mm	1.5 mm	15 mm	50 mm	6 mm
RTA060204 - TİSİN	6 mm	2 mm	15 mm	50 mm	6 mm
RTA080034 - TİSİN	8 mm	0.3 mm	20 mm	60 mm	8 mm
RTA080054 - TİSİN	8 mm	0.5 mm	20 mm	60 mm	8 mm
RTA080104 - TİSİN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

Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
○	◎	◎	○			○		







WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

KOD	d1 (Çap)	R (Radius)	L1 (Kesme Boyu)	L (Boy)	D (Şaft)
LRTA030034 - TİSİN	3 mm	0.3 mm	8 mm	75 mm	3 mm
LRTA030054 - TİSİN	3 mm	0.5 mm	8 mm	75 mm	3 mm
LRTA030104 - TİSİN	3 mm	1 mm	8 mm	75 mm	3 mm
LRTA040034 - TİSİN	4 mm	0.3 mm	10 mm	75 mm	4 mm
LRTA040054 - TİSİN	4 mm	0.5 mm	10 mm	75 mm	4 mm
LRTA040104 - TİSİN	4 mm	1 mm	10 mm	75 mm	4 mm
LRTA040154 - TİSİN	4 mm	1.5 mm	10 mm	75 mm	4 mm
LRTA060034 - TİSİN	6 mm	0.3 mm	15 mm	100 mm	6 mm
LRTA060054 - TİSİN	6 mm	0.5 mm	15 mm	100 mm	6 mm
LRTA060104 - TİSİN	6 mm	1 mm	15 mm	100 mm	6 mm
LRTA060154 - TİSİN	6 mm	1.5 mm	15 mm	100 mm	6 mm
LRTA060204 - TİSİN	6 mm	2 mm	15 mm	100 mm	6 mm
LRTA080034 - TİSİN	8 mm	0.3 mm	20 mm	100 mm	8 mm
LRTA080054 - TİSİN	8 mm	0.5 mm	20 mm	100 mm	8 mm
LRTA080104 - TİSİN	8 mm	1 mm	20 mm	100 mm	8 mm
LRTA080154 - TİSİN	8 mm	1.5 mm	20 mm	100 mm	8 mm
LRTA080204 - TİSİN	8 mm	2 mm	20 mm	100 mm	8 mm
LRTA080254 - TİSİN	8 mm	2.5 mm	20 mm	100 mm	8 mm
LRTA080304 - TİSİN	8 mm	3 mm	20 mm	100 mm	8 mm
LRTA100034 - TİSİN	10 mm	0.3 mm	25 mm	100 mm	10 mm
LRTA100054 - TİSİN	10 mm	0.5 mm	25 mm	100 mm	10 mm
LRTA100104 - TİSİN	10 mm	1 mm	25 mm	100 mm	10 mm
LRTA100154 - TİSİN	10 mm	1.5 mm	25 mm	100 mm	10 mm
LRTA100204 - TİSİN	10 mm	2 mm	25 mm	100 mm	10 mm
LRTA100254 - TİSİN	10 mm	2.5 mm	25 mm	100 mm	10 mm
LRTA100304 - TİSİN	10 mm	3 mm	25 mm	100 mm	10 mm
LRTA120034 - TİSİN	12 mm	0.3 mm	30 mm	100 mm	12 mm
LRTA120054 - TİSİN	12 mm	0.5 mm	30 mm	100 mm	12 mm
LRTA120104 - TİSİN	12 mm	1 mm	30 mm	100 mm	12 mm
LRTA120154 - TİSİN	12 mm	1.5 mm	30 mm	100 mm	12 mm
LRTA120204 - TİSİN	12 mm	2 mm	30 mm	100 mm	12 mm
LRTA120254 - TİSİN	12 mm	2.5 mm	30 mm	100 mm	12 mm
LRTA120304 - TİSİN	12 mm	3 mm	30 mm	100 mm	12 mm

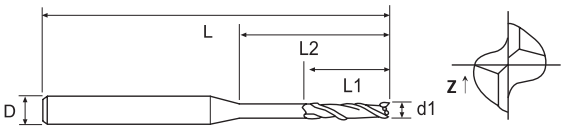
Uygulama / Application

◎ **Tavsiye /** Recommend ○ **Uygun /** Suitable X **Tavsiye Edilmez /** Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
○	◎	◎	○			○		







WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

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

Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
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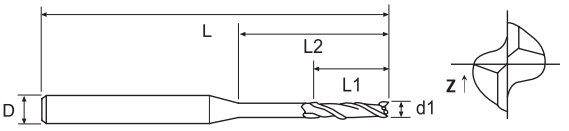
600 Nano | HRC ▶ 55 | 35° | TiSiN



WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

KOD	d1 (Çap)	L1 (Kesme Boyu)	L2	L (Boy)	D (Şaft)
LNT05022 - TİSİN	0.5 mm	0.75 mm	2 mm	50 mm	4 mm
LNT05042 - TİSİN	0.5 mm	0.75 mm	4 mm	50 mm	4 mm
LNT05062 - TİSİN	0.5 mm	0.75 mm	6 mm	50 mm	4 mm
LNT06022 - TİSİN	0.6 mm	0.9 mm	2 mm	50 mm	4 mm
LNT06042 - TİSİN	0.6 mm	0.9 mm	4 mm	50 mm	4 mm
LNT06062 - TİSİN	0.6 mm	0.9 mm	6 mm	50 mm	4 mm
LNT08042 - TİSİN	0.8 mm	1.2 mm	4 mm	50 mm	4 mm
LNT08062 - TİSİN	0.8 mm	1.2 mm	6 mm	50 mm	4 mm
LNT08082 - TİSİN	0.8 mm	1.2 mm	8 mm	50 mm	4 mm
LNT10062 - TİSİN	1 mm	1.5 mm	6 mm	50 mm	4 mm
LNT10082 - TİSİN	1 mm	1.5 mm	8 mm	50 mm	4 mm
LNT10102 - TİSİN	1 mm	1.5 mm	10 mm	50 mm	4 mm
LNT10122 - TİSİN	1 mm	1.5 mm	12 mm	50 mm	4 mm
LNT10162 - TİSİN	1 mm	1.5 mm	16 mm	50 mm	4 mm
LNT15062 - TİSİN	1.5 mm	2.3 mm	6 mm	50 mm	4 mm
LNT15082 - TİSİN	1.5 mm	2.3 mm	8 mm	50 mm	4 mm
LNT15102 - TİSİN	1.5 mm	2.3 mm	10 mm	50 mm	4 mm
LNT15122 - TİSİN	1.5 mm	2.3 mm	12 mm	50 mm	4 mm
LNT15142 - TİSİN	1.5 mm	2.3 mm	14 mm	50 mm	4 mm
LNT15162 - TİSİN	1.5 mm	2.3 mm	16 mm	50 mm	4 mm
LNT15182 - TİSİN	1.5 mm	2.3 mm	18 mm	50 mm	4 mm
LNT15202 - TİSİN	1.5 mm	2.3 mm	20 mm	50 mm	4 mm
LNT20082 - TİSİN	2 mm	3 mm	8 mm	50 mm	4 mm
LNT20102 - TİSİN	2 mm	3 mm	10 mm	50 mm	4 mm
LNT20122 - TİSİN	2 mm	3 mm	12 mm	50 mm	4 mm
LNT20142 - TİSİN	2 mm	3 mm	14 mm	50 mm	4 mm
LNT20162 - TİSİN	2 mm	3 mm	16 mm	50 mm	4 mm
LNT20182 - TİSİN	2 mm	3 mm	18 mm	50 mm	4 mm
LNT20202 - TİSİN	2 mm	3 mm	20 mm	50 mm	4 mm
LNT25082 - TİSİN	2.5 mm	4 mm	8 mm	50 mm	4 mm
LNT25102 - TİSİN	2.5 mm	4 mm	10 mm	50 mm	4 mm
LNT25122 - TİSİN	2.5 mm	4 mm	12 mm	50 mm	4 mm
LNT25142 - TİSİN	2.5 mm	4 mm	14 mm	50 mm	4 mm
LNT25162 - TİSİN	2.5 mm	4 mm	16 mm	50 mm	4 mm
LNT25202 - TİSİN	2.5 mm	4 mm	20 mm	50 mm	4 mm
LNT30102 - TİSİN	3 mm	4.5 mm	10 mm	50 mm	6 mm
LNT30122 - TİSİN	3 mm	4.5 mm	12 mm	50 mm	6 mm
LNT30162 - TİSİN	3 mm	4.5 mm	16 mm	60 mm	6 mm
LNT30202 - TİSİN	3 mm	4.5 mm	20 mm	60 mm	6 mm
LNT30252 - TİSİN	3 mm	4.5 mm	25 mm	75 mm	6 mm

Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
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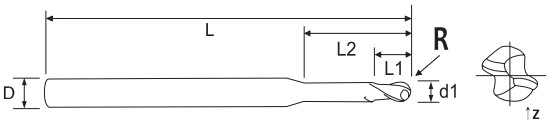


WC=90 Co=10 HV30=1571 Rupture=3750N/mm^2 Grain Size=0.6 m

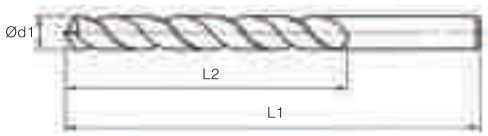
KOD	d1 (Çap)	R (Radius)	L1 (Kesme Boyu)	L2	L (Boy)	D (Şaft)
LNBT05022 - TİSİN	0.5 mm	0.25 mm	0.75 mm	2 mm	50 mm	4 mm
LNBT05042 - TİSİN	0.5 mm	0.25 mm	0.75 mm	4 mm	50 mm	4 mm
LNBT05062 - TİSİN	0.5 mm	0.25 mm	0.75 mm	6 mm	50 mm	4 mm
LNBT06022 - TİSİN	0.6 mm	0.3 mm	0.9 mm	2 mm	50 mm	4 mm
LNBT06042 - TİSİN	0.6 mm	0.3 mm	0.9 mm	4 mm	50 mm	4 mm
LNBT06062 - TİSİN	0.6 mm	0.3 mm	0.9 mm	6 mm	50 mm	4 mm
LNBT08042 - TİSİN	0.8 mm	0.4 mm	1.2 mm	4 mm	50 mm	4 mm
LNBT08062 - TİSİN	0.8 mm	0.4 mm	1.2 mm	6 mm	50 mm	4 mm
LNBT08082 - TİSİN	0.8 mm	0.4 mm	1.2 mm	8 mm	50 mm	4 mm
LNBT10062 - TİSİN	1 mm	0.5 mm	1.5 mm	6 mm	50 mm	4 mm
LNBT10082 - TİSİN	1 mm	0 5 mm	1 5 mm	8 mm	50 mm	4 mm
LNBT10102 - TİSİN	1 mm	0.5 mm	1.5 mm	10 mm	50 mm	4 mm
LNBT10122 - TİSİN	1 mm	0.5 mm	1.5 mm	12 mm	50 mm	4 mm
LNBT15062 - TİSİN	1.5 mm	0.75 mm	2.3 mm	6 mm	50 mm	4 mm
LNBT15082 - TİSİN	1.5 mm	0.75 mm	2.3 mm	8 mm	50 mm	4 mm
LNBT15102 - TİSİN	1.5 mm	0.75 mm	2.3 mm	10 mm	50 mm	4 mm
LNBT15122 - TİSİN	1.5 mm	0.75 mm	2.3 mm	12 mm	50 mm	4 mm
LNBT15142 - TİSİN	1.5 mm	0.75 mm	2.3 mm	14 mm	50 mm	4 mm
LNBT15162 - TİSİN	1.5 mm	0.75 mm	2.3 mm	16 mm	50 mm	4 mm
LNBT15182 - TİSİN	1.5 mm	0.75 mm	2.3 mm	18 mm	50 mm	4 mm
LNBT15202 - TİSİN	1.5 mm	0.75 mm	2.3 mm	20 mm	50 mm	4 mm
LNBT20082 - TİSİN	2 mm	1 mm	3 mm	8 mm	50 mm	4 mm
LNBT20102 - TİSİN	2 mm	1 mm	3 mm	10 mm	50 mm	4 mm
LNBT20122 - TİSİN	2 mm	1 mm	3 mm	12 mm	50 mm	4 mm
LNBT20142 - TİSİN	2 mm	1 mm	3 mm	14 mm	50 mm	4 mm
LNBT20162 - TİSİN	2 mm	1 mm	3 mm	16 mm	50 mm	4 mm
LNBT20182 - TİSİN	2 mm	1 mm	3 mm	18 mm	50 mm	4 mm
LNBT20202 - TİSİN	2 mm	1 mm	3 mm	20 mm	50 mm	4 mm
LNBT25082 - TİSİN	2.5 mm	1.25 mm	4 mm	8 mm	50 mm	4 mm
LNBT25122 - TİSİN	2.5 mm	1.25 mm	4 mm	12 mm	50 mm	4 mm
LNBT25162 - TİSİN	2.5 mm	1.25 mm	4 mm	16 mm	50 mm	4 mm
LNBT25202 - TİSİN	2.5 mm	1.25 mm	4 mm	20 mm	50 mm	4 mm
LNBT30102 - TİSİN	3 mm	1.5 mm	4.5 mm	10 mm	50 mm	6 mm
LNBT30122 - TİSİN	3 mm	1.5 mm	4.5 mm	12 mm	50 mm	6 mm
LNBT30162 - TİSİN	3 mm	1.5 mm	4.5 mm	16 mm	60 mm	6 mm
LNBT30202 - TİSİN	3 mm	1.5 mm	4.5 mm	20 mm	60 mm	6 mm
LNBT30252 - TİSİN	3 mm	1.5 mm	4.5 mm	25 mm	75 mm	6 mm

Uygulama / Application ◎ **Tavsiye** / Recommend ○ **Uygun** / Suitable X **Tavsiye Edilmez** / Not Recommend

Karbon Çelik, Alaşımlı Çelik carbon steel, Alloy steel	Önceden Sertleştirilmiş Çelik Pre-harden steel	Yüksek Sertleştirilmiş High-hardened				**Paslanmaz Çelik** Stainless steel	**Bakır Alaşım** Copper alloy	**Alüminyum Alaşım** Aluminun alloy
	~45HRC	~50HRC	~55HRC	~60HRC	~65HRC			
○	◎	◎	○			○		

STANDART BOY



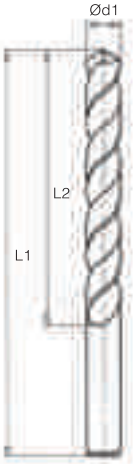


d1 (mm)	L2	L1
0.5	3	20
1.0	6	26
1.5	9	32
2.0	12	38
2.1	12	38
2.2	13	40
2.3	13	40
2.4	13	40
2.5	13	43
2.6	14	43
2.7	14	46
2.8	16	46
2.9	16	46
3.0	16	46
3.1	18	49
3.2	18	49
3.3	18	49
3.4	20	52
3.5	20	52
3.6	20	52
3.7	20	52
3.8	22	55
3.9	22	55
4.0	22	55
4.1	22	55
4.2	22	55
4.3	24	58
4.4	24	58
4.5	24	58
4.6	24	58
4.7	24	58
4.8	24	58
4.9	24	58
5.0	56	62

d1 (mm)	L2	L1
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
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

d1 (mm)	L2	L1
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
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

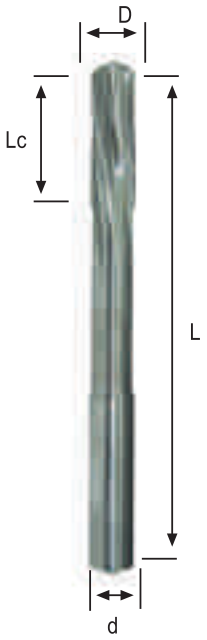
UZUN BOY



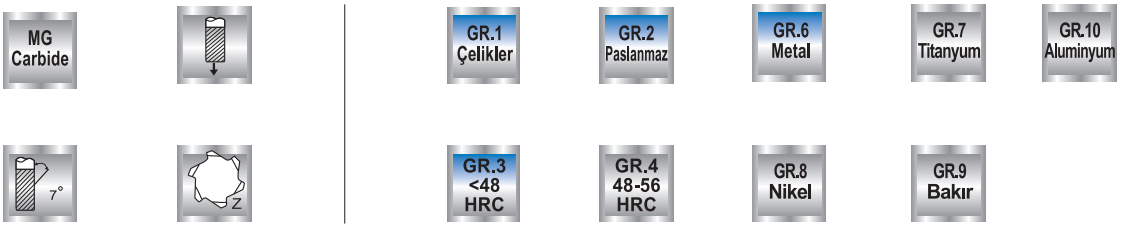
d1 (mm)	L2	L1
1	12	34
1.5	18	40
2	24	49
2.5	30	57
3	33	61
3.5	39	70
4	43	75
4.5	47	80
5	52	86
5.5	57	93
6	57	93
6.5	63	101
7	69	109
7.5	69	109
8	75	117
8.5	75	117
9	81	125

d1 (mm)	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

Model : HJMR



Sipariş Kodu	D (çap)	Lc (Kesme Boyu)	L (Tam Boy)	Z (Ağız Adedi)
HJMR 1	1,0	6	34	4
HJMR 1,5	1,5	8	40	4
HJMR 2	2,0	11	49	4
HJMR 2,5	2,5	14	57	4
HJMR 3	3,0	15	61	4
HJMR 4	4,0	19	75	4
HJMR 5	5,0	23	86	6
HJMR 6	6,0	26	93	6
HJMR 8	8,0	33	117	6
HJMR 10	10,0	38	133	6
HJMR 12	12,0	44	151	6



Karbür Pantoraf Kalemi

BÖHLER

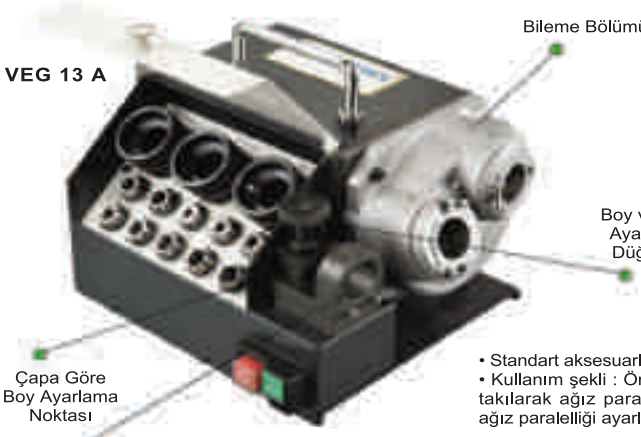
Model : HJP



Sipariş Kodu	D (çap)	L (Tam Boy)
HJP 1	1,0	100
HJP 1,5	1,5	100
HJP 2	2,0	100
HJP 2,5	2,5	100
HJP 3	3,0	100
HJP 4	4,0	100
HJP 5	5,0	100
HJP 6	6,0	100
HJP 8	8,0	100
HJP 10	10,0	100
HJP 12	12,0	100

Karbür (Elmas) Freze Bileme Makinası

VEG 13 A





• 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.

Bileme Noktaları



Freze Tutucular



KOD	BİLEME TAŞI	KULLANILACAĞI MAZEME	AĞIRLIK (kg)
VEG-13BS	CBN 300x1 (4 ~ 6mm için)	H.S.S	0.35
VEG-13BL	CBN 270x1 (7 ~ 13mm için)	H.S.S	0.35
VEG-13DS	SDC 270x1 (4 ~ 6mm için)	KARBÜR	0.35
VEG-13DL	SDC 270x1 (7 ~ 13mm için)	KARBÜR	0.35
VEG-25BS	CBN 150x1 (12 ~ 25mm için)	H.S.S	-
VEG-25DS	SDC 150x1 (12 ~ 25mm için)	KARBÜR	-

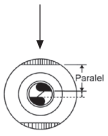
Elmas Freze Bağlama Şekli



Matkap Ucu Bileme Makinası

VDG





• Kullanım şekli : Matkap ucu pens ile birlikte tutucunun içine bağlanır. Çap ve paralellik ayarlama bölümünde yandaki şekilde paralellik ayarlanır ve bileme bölümünde işlem gerçekleştirebilir.

ÇANAK TAŞ

KOD	BİLENECEK MALZEME	TANE BÜYÜKLÜĞÜ
VDG-13B	HSS	CBN200
VDG-13D	KARBÜR	SDC200
VDG-20B	HSS	CBN200
VDG-20D	KARBÜR	SDC200
VDG-25B	HSS	CBN200
VDG-25D	KARBÜR	SDC200

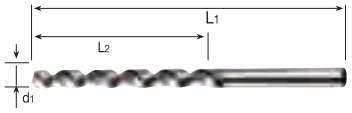
MODEL	VDG 13 A	VDG 20	VDG 25
Bileme Çapı	2 mm - 13 mm	8 mm - 20 mm	12 mm - 26 mm
Merkez Derece Nokt.	90° - 140°	90° - 140°	100° - 136°
Motor Devri	5100 Rpm	3280 Rpm	5300 Rpm
Standart Ürünler	**ER20 :** 3 - 4 - 5 - 6 -7 - 8 - 9 10 - 11 - 12 - 13 mm pensler **1 Adet pens tutucu**	**ER32 :** 8 -9 - 10 - 11 - 12 - 13 14 - 15 - 16 - 17 - 18 - 19 - 20 mm pensler ve **1 Adet pens tutucu**	**ER40 :** 12 - 13 - 14 - 15 - 16 - 17 18 - 19 - 20 - 21 - 22 - 23 - 24 - 26 mm pensler ve **1 Adet pens tutucu**

HSS KESİCİ TAKIMLAR ve KATER GRUBU

- Matkap Uçları (Uzun - Kısa)
- Matkap Uçları
- Mors Konik Saplı Matkap Uçları
- Punta Matkabı
- Düz Kanallı Makina Klavuzu
- Helis Kanallı Makina Klavuzu
- İnce Diş Makina Klavuzu
- UNC - Düz Makina Klavuzu
- UNF - Düz Makina Klavuzu
- Withworth Düz Makina Klavuzu
- Somun Klavuzu
- Trapez Torna Kalemi
- Manyetik Matkap Ucu
- Boru Vİdalı Düz Makina Klavuzu
- Atlamalı Makina Klavuzu
- Ovalama Makina Klavuzu
- Havşa Frezesi 90°
- Pafta
- Pafta İnce Diş
- El ve Makina Raybaları
- T Yarık Freze
- Pim Raybası
- Ayarlı Rayba
- Pantoraf Kalemi
- Torna Kalemi
- Klavuz Kolu
- Pafta Kolu
- Delikli Havşa Frezesi
- Sabit Pilotlu Havşa Freze
- Köşe Yuvarlama Frezesi
- Ters Klavuz Seti
- Silindir Saplı Makina Raybası
- Mors Konik Saplı Makina Raybası
- Kısa - Uzun Parmak Freze
- Kaba Talaş Parmak Freze
- Otm. Klavuz Çekme Aparatı
- Ayarlı Delik Baraları
- Kollu Hassas Bara Takımları
- Tarama Başlıkları
- Saplı Tarama Başlıkları
- Vidalı Tarama Başlıkları
- Torna Katerleri (Sağ - Sol)
- Delik Katerleri
- Udrill Matkap
- Kanal Açma - Kesme Katerleri
- Kater Yedek Parçaları
- Daire Testereler

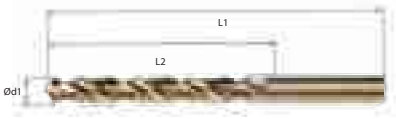


MAKİNA TAKIM



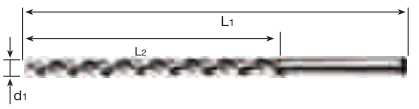
DIN 338 HSS MATKAP

d1 (mm)	L1	L2
0.4	20	5
0.5	22	6
0.6	24	7
0.7	28	9
0.8	30	10
0.9	32	11
1.0	34	12
1.1	36	14
1.2 - 1.3	38	16
1.4 - 1.5	40	18
1.6 - 1.7	43	20
1.8 - 1.9	46	22
2.0 - 2.1	49	24
2.2 - 2.3	53	27
2.4 - 2.6	57	30
2.7 - 3.0	61	33
3.1 - 3.3	65	36
3.4 - 3.7	70	39
3.8 - 4.2	75	43
4.3 - 4.7	80	47
4.8 - 5.3	86	52
5.4 - 6.0	93	57
6.1 - 6.7	101	63
6.8 - 7.5	109	69
7.6 - 8.5	117	75
8.6 - 9.5	125	81
9.6 - 10.6	133	87
10.7 - 11.8	142	94
11.9 - 13.2	151	101
13.3 - 14.0	160	108
14.1 - 15.0	169	114
15.1 - 16.0	178	120
16.5 - 17.0	184	125
17.5 - 18.0	191	130
18.5 - 19.0	198	135
19.5 - 20.0	205	140
20.5 - 21.0	213	145
21.5 - 22.0	221	150
22.5 - 23.0	229	155
23.5	229	155
24.0	236	160
24.5 - 25.0	236	160



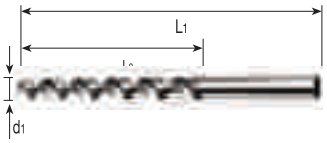
DIN 338 HSS-E ALTIN SERİ MATKAP

d1 (mm)	L1	L2
1.0	34	12
1.1	36	14
1.2 - 1.3	38	16
1.4 - 1.5	40	18
1.6 - 1.7	43	20
1.8 - 1.9	46	22
2.0 - 2.1	49	24
2.2 - 2.3	53	27
2.4 - 2.6	57	30
2.7 - 3.0	61	33
3.1 - 3.3	65	36
3.4 - 3.7	70	39
3.8 - 4.2	75	43
4.3 - 4.7	80	47
4.8 - 5.3	86	52
5.4 - 6.0	93	57
6.1 - 6.7	101	63
6.8 - 7.5	109	69
7.6 - 8.5	117	75
8.6 - 9.5	125	81
9.6 - 10.6	133	87
10.7 - 11.8	142	94
11.9 - 13.2	151	101
13.3 - 14.0	160	108
14.1 - 15.0	169	114
15.1 - 16.0	178	120
16.5 - 17.0	184	125
17.5 - 18.0	191	130
18.5 - 19.0	198	135
19.5 - 20.0	205	140
20.5 - 21.0	213	145
21.5 - 22.0	221	150
22.5 - 23.0	229	155
23.5	229	155
24.0	236	160
24.5 - 25.0	236	160



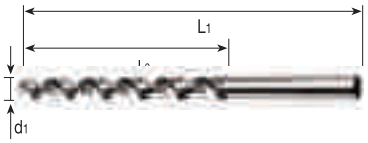
DIN 340 HSS UZUN MATKAP

d1 (mm)	L1	L2
1.0	56	33
1.1 - 1.4	65	41
1.5	70	45
1.6 - 1.9	80	53
2.0	85	56
2.1 - 2.4	95	62
2.5	95	62
2.6 - 2.9	100	66
3.0	100	66
3.1 - 3.4	112	73
3.5	112	73
3.6 - 3.9	119	78
4.0	119	78
4.1 - 4.4	119	78
4.5	126	82
4.6 - 4.9	132	87
5.0	132	87
5.1 - 5.4	139	91
5.5	139	91
5.6 - 5.9	139	91
6.0	139	91
6.1 - 6.4	148	97
6.5	148	97
6.6 - 6.9	156	102
7.0	156	102
7.1 - 7.4	156	102
7.5	156	102
7.6 - 7.9	165	109
8.0	165	109
8.1 - 8.4	165	109
8.5	165	109
8.6 - 8.9	175	115
9.0	175	115
9.1 - 9.4	175	115
9.5	175	115
9.6 - 9.9	184	121
10.0	184	121
10.1 - 10.4	184	121
10.5	184	121
11.0	195	128
11.5	195	128
12.0	205	134
12.5	205	134
13.0	205	134
13.5	214	140
14.0	214	140
14.5	220	144
15.0	220	144
15.5	227	149
16.0	227	149
16.5 - 17.0	235	154
17.5 - 18.0	241	158
18.5 - 19.0	247	162
19.5 - 20.0	254	166
22.0	268	176
23.0	275	180
24.0	282	185
25.0	282	185



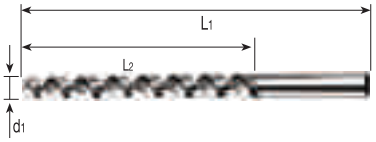
DIN 1869/1 HSS EKSTRA UZUN MATKAP

d1 (mm)	L1	L2
2.0	125	85
2.5	140	95
3.0	150	100
3.5	165	115
4.0	175	120
4.5	185	125
5.0	195	135
5.5	205	140
6.0	205	140
6.5	215	150
7.0	225	155
7.5	225	155
8.0	240	165
8.5	240	165
9.0	250	175
9.5	250	175
10.0	265	185
10.5	265	185
11.0	280	195
11.5	280	195
12.0	295	205
12.5	295	205
13.0	295	205



DIN 1869/2 HSS EKSTRA UZUN MATKAP

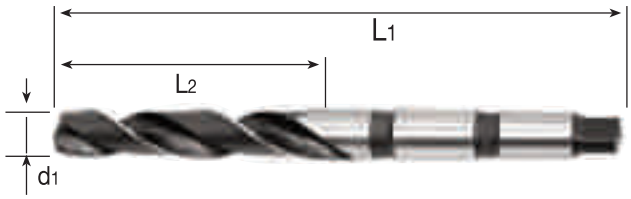
d1 (mm)	L1	L2
3.0	190	130
3.5	210	145
4.0	220	150
4.5	235	160
5.0	245	170
5.5	260	180
6.0	260	180
6.5	275	190
7.0	290	200
7.5	290	200
8.0	305	210
8.5	305	210
9.0	320	220
9.5	320	220
10.0	340	235
10.5	340	235
11.0	365	250
11.5	365	250
12.0	375	260
12.5	375	260
13.0	375	260



DIN 1869/3 HSS EKSTRA UZUN MATKAP

d1 (mm)	L1	L2
3.5	265	180
4.0	280	190
4.5	295	200
5.0	315	210
5.5	330	225
6.0	330	225
6.5	350	235
7.0	370	250
7.5	370	250
8.0	390	265
8.5	390	265
9.0	410	280
9.5	410	280
10.0	430	295
10.5	430	295
11.0	455	310
11.5	455	310
12.0	480	330
12.5	480	330
13.0	480	330

DIN 345
HSS MORS KONİK SAPLI
MATKAP UCU

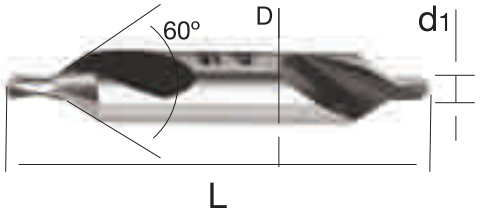


d1 (mm)	L1	L2
8.0	156	75
8.5	156	75
9.0	162	81
9.5	162	81
10.0	168	87
10.5	168	87
11.0	175	94
11.5	175	94
12.0	182	101
12.5	182	101
13.0	182	101
13.5	189	108
14.0	189	108
14.5	212	114
15.0	212	114
15.5	218	120
16.0	218	120
16.5	223	125
17.0	223	125
17.5	228	130
18.0	228	130
18.5	233	135
19.0	233	135
19.5	238	140
20.0	238	140

d1 (mm)	L1	L2
20.5	243	145
21.0	243	145
21.5	248	150
22.0	248	150
22.5	253	155
23.0	253	155
23.5	276	155
24.0	281	160
24.5	281	160
25.0	281	160
25.5	286	165
26.0	286	165
26.5	286	165
27.0	291	170
27.5	291	170
28.0	291	170
28.5	296	175
29.0	296	175
29.5	296	175
30.0	296	175
30.5	301	180
31.0	301	180
31.5	301	180
32.0	334	185
32.5	334	185

d1 (mm)	L1	L2
33.0	334	185
33.5	334	185
34.0	339	190
34.5	339	190
35.0	339	190
35.5	339	190
36.0	344	195
36.5	344	195
37.0	344	195
37.5	344	195
38.0	349	200
38.5	349	200
39.0	349	200
39.5	349	200
40.0	349	205
41.0	354	205
42.0	354	205
43.0	359	210
44.0	359	210
45.0	359	210
46.0	364	215
47.0	364	215
48.0	369	220
49.0	369	220
50.0	369	220

DIN 333 A
HSS PUNTA MATKABI



Normal Tip

d1	D	L
1.0	3.15	31.5
1.25	3.15	31.5
1.6	4.0	35.5
2.0	5.0	40.0
2.5	6.3	45.0
3.15	8.0	50.0
4.0	10.0	56.0
5.0	12.5	63.0

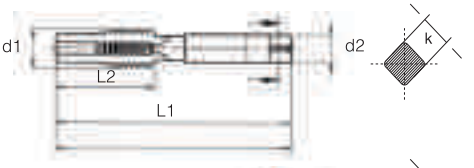
Uzun Tip (İthal)

d1	D	L
2.0	5.0	76
2.5	6.3	102
3.15	8.0	102
4.0	10.0	127
5.0	12.5	127
6.3	16.0	127

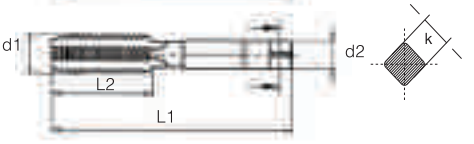
DIN 352
HSS 3'LÜ TAKIM KLAVUZ



ÖN



ORTA

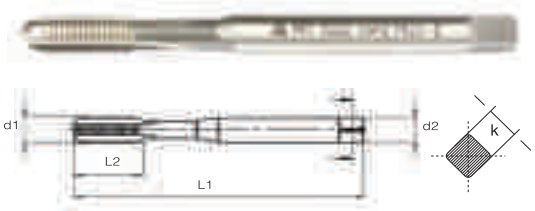


SON



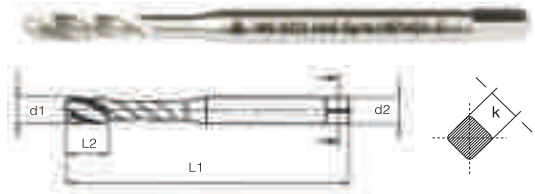
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M2	0.4	40	8	2,8	2,1
M2,5	0.45	40	9	2,8	2,1
M3	0.5	40	11	3,5	2,7
M3,5	0.6	45	13	4,0	3,0
M4	0.7	45	13	4,5	3,4
M4.5	0.75	50	16	6,0	4,9
M5	0.8	50	16	6,0	4,9
M6	1	50	19	6,0	4,9
M7	1	50	19	6,0	4,9
M8	1.25	56	22	6,0	4,9
M9	1.25	63	22	7,0	5,5
M10	1.5	70	24	7,0	5,5
M11	1.5	70	24	8,0	6,2
M12	1.75	75	29	9,0	7,0
M14	2	80	30	11,0	9,0
M16	2	80	32	12,0	9,0
M18	2.5	95	40	14,0	11,0
M20	2.5	95	40	16,0	12,0
M22	2.5	100	40	18,0	14,5
M24	3	110	50	18,0	14,5
M27	3	110	50	20,0	16,0
M30	3.5	125	56	22,0	18,0
M33	3.5	125	56	25,0	20,0
M36	4	150	63	28,0	22,0
M39	4	150	63	32,0	24,0
M42	4.5	150	63	32,0	24,0
M45	4.5	160	70	36,0	29,0
M48	5	180	75	36,0	29,0

DÜZ KANALLI MAKİNA KLAVUZU
DIN 371/C HSS - E



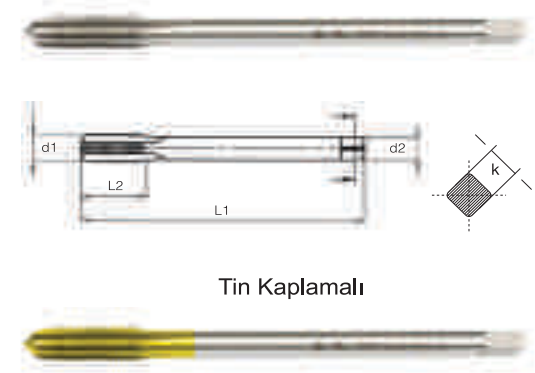
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M3	0.5	56	10	3,5	2,7
M3,5	0.6	56	12	4,0	3,0
M4	0.7	63	12	4,5	3,4
M5	0.8	70	14	6,0	4,9
M6	1	80	16	6,0	4,9
M8	1.25	90	18	8,0	6,2
M10	1.5	100	20	10,0	8,0
M12	1.75	110	24	12,0	9,0

HELİS KANALLI MAKİNA KLAVUZU
DIN 371/C HSS - E



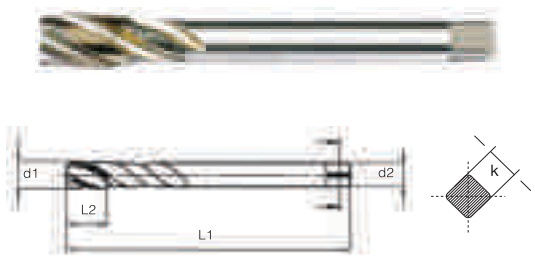
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M3	0.5	56	6	3,5	2,7
M4	0.7	63	7	4,5	3,4
M5	0.8	70	8	6,0	4,9
M6	1	80	10	6,0	4,9
M8	1.25	90	12	8,0	6,2
M10	1.5	100	14	10,0	8,0
M12	1.75	110	16	12,0	9,0

DÜZ KANALLI MAKİNA KLAVUZU
DIN 376/C HSS - E



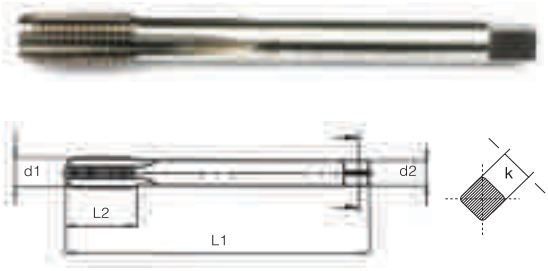
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M3	0.5	56	10	2,2	-
M4	0.7	63	12	2,8	2,1
M5	0.8	70	14	3,5	2,7
M6	1	80	16	4,5	3,4
M8	1.25	90	18	6,0	4,9
M9	1.25	90	18	7,0	5,5
M10	1.5	100	20	7,0	5,5
M11	1.5	100	20	8,0	6,2
M12	1.75	110	24	9,0	7,0
M14	2	110	26	11,0	9,0
M16	2	110	28	12,0	9,0
M18	2.5	125	30	14,0	11,0
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
M27	3	160	38	20,0	16,0
M30	3.5	180	45	22,0	18,0

HELİS KANALLI MAKİNA KLAVUZU
DIN 376/C HSS - E



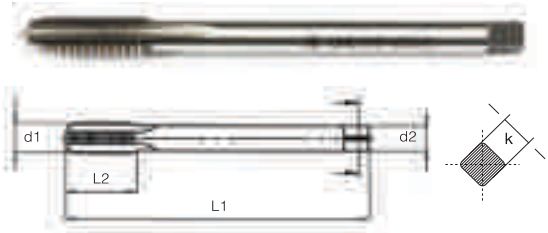
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M3	0.5	56	10	2,2	-
M4	0.7	63	12	2,8	2,1
M5	0.8	70	14	3,5	2,7
M6	1	80	16	4,5	3,4
M8	1.25	90	18	6,0	4,9
M9	1.25	90	18	7,0	5,5
M10	1.5	100	20	7,0	5,5
M11	1.5	100	20	8,0	6,2
M12	1.75	110	24	9,0	7,0
M14	2	110	26	11,0	9,0
M16	2	110	28	12,0	9,0
M18	2.5	125	30	14,0	11,0
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
M27	3	160	38	20,0	16,0
M30	3.5	180	45	22,0	18,0

İNCE DİŞ MAKİNA KLAVUZU
DIN 374/C HSS - E



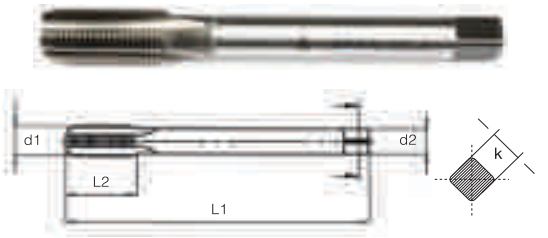
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M6	0.75	80	14	4,5	3,4
M8	1	90	16	6,0	4,9
M10	1	90	20	7,0	5,5
M10	1.25	90	20	7,0	5,5
M12	1	100	22	9,0	7,0
M12	1.25	100	22	9,0	7,0
M12	1.5	100	22	9,0	7,0
M14	1	100	22	11,0	9,0
M14	1.25	100	22	11,0	9,0
M14	1.5	100	22	11,0	9,0
M16	1.5	100	22	12,0	9,0
M18	1.5	110	25	14,0	11,0
M20	1.5	125	25	16,0	12,0
M22	1.5	125	25	18,0	14,5
M24	1.5	140	28	18,0	14,5

UNC - DÜZ MAKİNA KLAVUZU
DIN 2183/C HSS - E



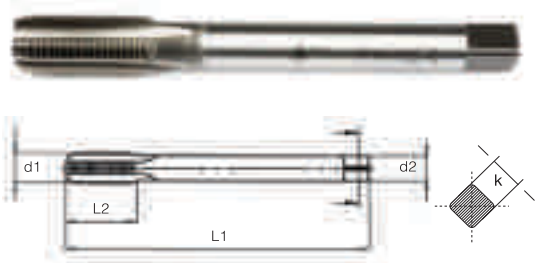
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
1/4"	20	80	19	4,5	3,4
5/16"	18	90	22	6,0	4,9
3/8"	16	100	24	7,0	5,5
7/16"	14	100	24	8,0	6,2
1/2"	13	110	29	9,0	7,0
9/16"	12	110	30	11,0	9,0
5/8"	11	110	32	12,0	9,0
3/4"	10	125	34	14,0	11,0
7/8"	9	140	34	18,0	14.5

UNF - DÜZ MAKİNA KLAVUZU
DIN 2183/C HSS - E



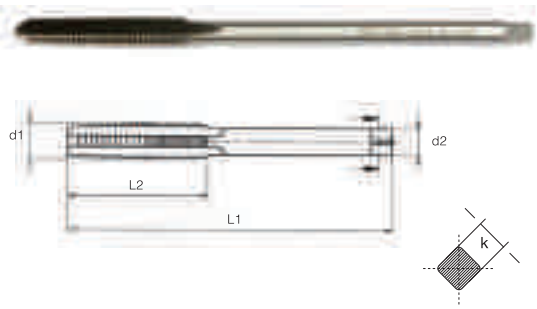
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
1/4"	28	80	19	4,5	3,4
5/16"	24	90	22	6,0	4,9
3/8"	24	100	24	7,0	5,5
7/16"	20	100	24	8,0	6,2
1/2"	20	110	29	9,0	7,0
9/16"	18	110	30	11,0	9,0
5/8"	18	110	32	12,0	9,0
3/4"	16	125	34	14,0	11,0
7/8"	14	140	34	18,0	14.5

WHITWORTH DÜZ MAKİNA KLAVUZU
DIN 2183/C HSS - E



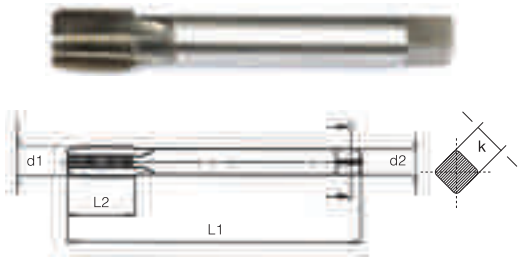
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
W 1/8"	40	56	11	3.5	2.7
W 5/32"	32	63	13	4.5	3.4
W 3/16"	24	70	16	6,0	4.9
W 7/32"	24	70	16	6,0	4.9
W 1/4"	20	80	19	6,0	4.9
W 5/16"	18	90	22	6,0	6.2
W 3/8"	16	100	24	10,0	8,0
W 7/16"	14	100	26	11,0	9,0
W 1/2"	12	110	28	12,0	9,0

SOMUN KLAVUZU
DIN 357 HSS



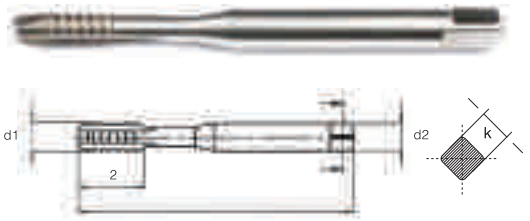
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M3	0.5	70	22	2.2	-
M4	0.7	90	25	2.8	2.1
M5	0.8	100	28	3.5	2.7
M6	1	110	32	4.5	3.4
M8	1.25	125	40	6,0	4.9
M10	1.5	140	45	7,0	5.5
M12	1.75	180	50	9,0	7,0
M14	2	200	56	11,0	11,0
M16	2	200	63	12,0	12,0
M18	2.5	220	63	14,0	14,0
M20	2.5	250	70	16,0	16,0
M22	2.5	280	80	18,0	18,0
M24	3	280	80	18,0	18,0
M27	3	315	90	20,0	20,0

BORU VİDALI (G) DÜZ MAKİNA KLAVUZU
DIN 5156 C



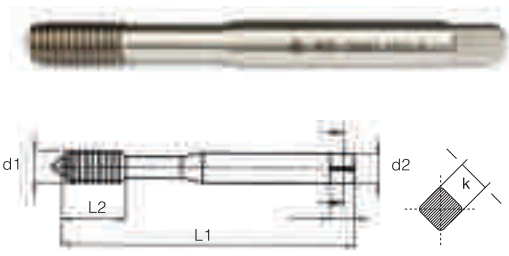
d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
G 1/8"	28	90	20	7,0	5,5
G 1/4"	19	100	22	11,0	9,0
G 3/8"	19	100	22	12,0	9,0
G 1/2"	14	125	25	16,0	12,0
G 3/4"	14	140	28	20,0	16,0

ATLAMALI MAKİNA KLAVUZU
DIN 371 / C HSS - E



d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M3	0.5	56	10	3,5	2,7
M4	0.7	63	12	4,5	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

OVALAMA MAKİNA KLAVUZU
DIN 371 / C HSS - E

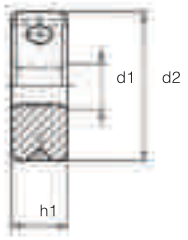


d1 mm	P adım	L1 mm	L2 mm	d2 mm	k (h12) mm
M3	0.5	56	10	3.5	2.7
M4	0.7	63	12	4,5	3,4
M5	0.8	70	14	6,0	4,9
M6	1	80	16	6,0	4,9
M8	1.25	90	18	8,0	6,2
M10	1.5	100	20	10,0	8,0
M12	1.75	110	24	12,0	9,0

PAFTA
DIN 223 / B HSS



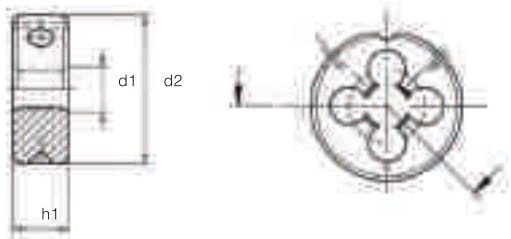




d1 mm	P adım	d2 mm	h1 mm
M2	0.4	16	5
M2,5	0.45	16	5
M3	0.5	20	5
M3,5	0.6	20	5
M4	0.7	20	5
M5	0.8	20	7
M6	1	20	7
M7	1	25	9
M8	1.25	25	9
M9	1.25	25	9
M10	1.5	30	11
M12	1.75	38	14
M14	2	38	14
M16	2	45	18
M18	2.5	45	18
M20	2.5	45	18
M22	2.5	55	22
M24	3	55	22
M27	3	65	25
M30	3.5	65	25
M33	3.5	65	25
M36	4	65	25
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

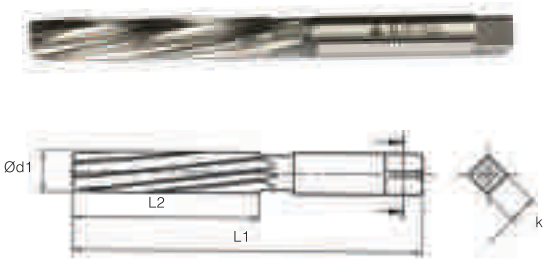
PAFTA İNCE DİŞ
DIN 223 / B HSS





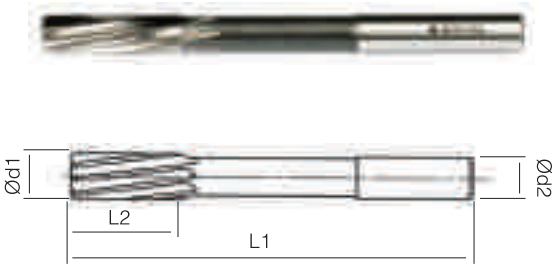
d1 mm	P adım	d2 mm	h1 mm
M 6	0.75	20	5
M 8	1	25	9
M 10	1	30	11
M 10	1.25	30	11
M 12	1	38	10
M 12	1.25	38	10
M 12	1.5	38	10
M 14	1	38	10
M 14	1.25	38	10
M 14	1.5	38	10
M 16	1	45	14
M 16	1.5	45	14
M 18	1.5	45	14
M 20	1.5	45	14
M 22	1.5	55	16
M 24	1.5	55	16
M 30	1.5	65	18

EL RAYBASI H7
DIN 206 / B HSS



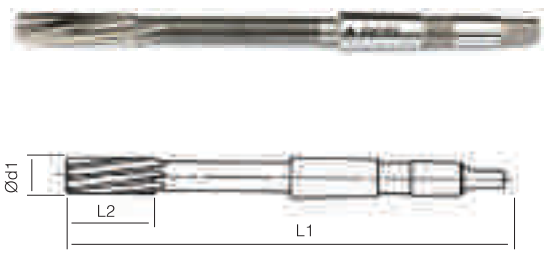
d1 mm	L1 mm	L2 mm	k mm
3,0	62	31	2,24
4,0	76	38	3,15
4,5	81	41	3,55
5,0	87	44	4,00
5,5	93	47	4,50
6,0	93	47	4,50
6,5	100	50	5,00
7,0	107	54	5,60
8,0	115	58	6,30
8,5	115	58	6,30
9,0	124	62	7,10
10,0	133	66	8,00
11,0	142	71	9,00
12,0	152	76	10,00
13,0	152	76	10,00
14,0	163	81	11,20
15,0	163	81	11,20
16,0	175	87	12,50
17,0	175	87	12,50
18,0	188	93	14,00
20,0	201	100	16,00
22.0	215	107	18.00
24.0	231	115	20.00
26.0	231	115	20.00
30.0	247	124	22.40
32.0	265	133	25.00
35.0	284	142	28.00
40.0	305	152	31.50

SİLİNDİR SAPLI MAKİNA RAYBASI H7
DIN 212 / D HSS



d1 mm	d2 (h9) mm	L1 mm	L2 mm
3	3,0	61	15
4	4,0	75	19
5	5,0	86	23
6	5,6	93	26
7	7,1	109	31
8	8,0	117	33
10	10,0	133	38
12	10,0	151	44
14	12,5	160	47
16	12,5	170	52
18	14,0	182	56
20	16,0	195	60

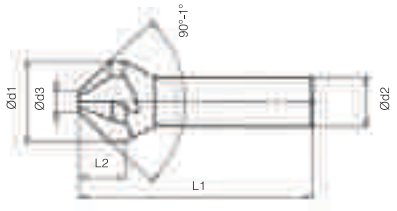
MORS KONİK SAPLI MAKİNA RAYBASI H7
DIN 208 / B HSS



d1 mm	L1 mm	L2 mm	Mors Konik No
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
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
45	336	83	4
50	344	86	4

HAVŞA FREZESİ 90°
DIN 335 C HSS

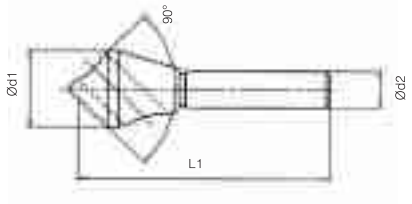




d1 mm	d2 mm	d3 mm	L1 mm	L2 mm
6,3	5.0	1.5	45	5.0
8,3	6.0	2	50	6.0
10,4	6,0	2.5	50	7.1
12,4	8.0	2.8	56	8.0
16,5	10.0	3.2	60	10.0
20,5	10,0	3.5	63	12.5
25,0	10.0	3.8	67	15.0
31,5	12.0	4.2	71	18.0

DELİKLİ HAVŞA FREZESİ 90°





Çalışma Aralığı	d1 mm	d2 mm	L mm
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

PARMAK FREZE KISA
DIN 844 HSS - E Co. %8

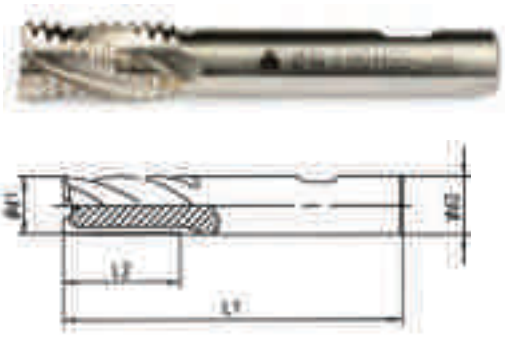




d1 mm	d2 mm	L1 mm	L2 mm	z kanal sayısı
2,0	6	51	7	3
2,5	6	52	8	3
3,0	6	52	8	3
4,0	6	55	11	4
5,0	6	57	13	4
6,0	6	57	13	4
7,0	10	66	16	4
8,0	10	69	19	4
9,0	10	69	19	4
10,0	10	72	22	4
11,0	12	79	22	4
12,0	12	83	26	4
13,0	12	83	26	4
14,0	12	83	26	4
15,0	12	83	26	4
16,0	16	92	32	4
17,0	16	92	32	4
18,0	16	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

KABATALAŞ PARMAK FREZE KISA

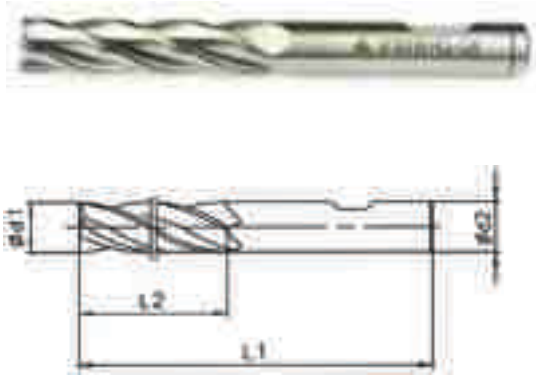
DIN 844 HSS - E Co. %8



d1 mm	d2 mm	L1 mm	L2 mm	z kanal sayısı
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
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

PARMAK FREZE UZUN

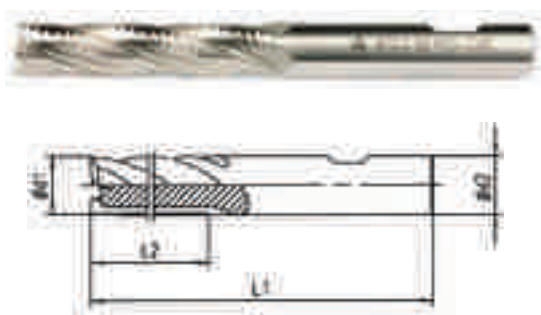
DIN 844 HSS - E Co. %8



d1 mm	d2 mm	L1 mm	L2 mm	z kanal sayısı
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
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

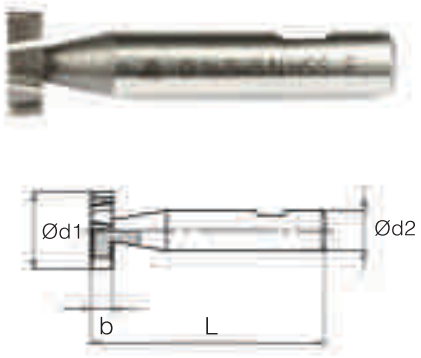
KABA TALAŞ PARMAK FREZE UZUN

DIN 844 HSS - E Co. %8



d1 mm	d2 mm	L1 mm	L2 mm	z kanal sayısı
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
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

T YARIK FREZE
DIN 1833 / C HSS - E



d1 mm	b (e8) mm	d2 mm	L1 mm
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
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	10	71
32,5	10	12	71
45,5	10	12	71

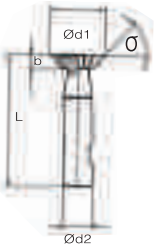
T YARIK FREZE
DIN 850 / D HSS - E

FORM A



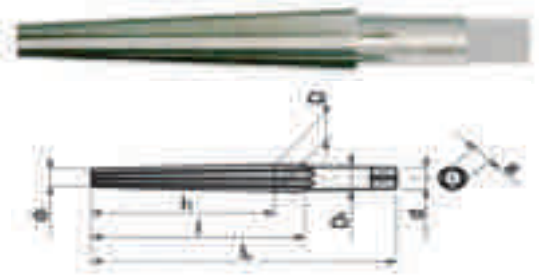
FORM B





d1 mm	b mm	L mm	d2 mm	d1 mm	b mm	L mm	d2 mm
16 X 45°	4,0	60	12	16 X 60°	6,3	60	12
20 X 45°	5,0	63	12	20 X 60°	8,0	63	12
25 X 45°	6,3	67	12	25 X 60°	10,0	67	12
32 X 45°	8,0	71	16	32 X 60°	12,5	71	16

Pim Raybası 1:10 Konik



d_1 (mm)	D (mm)	D_1 (mm)	L (mm)	l (mm)	d (mm)	a (mm)
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

Muslukçu Raybası 1:50 Konik



D (H7)	D_1 (mm)	L (mm)	l (mm)	d (mm)	a (mm)
3	4.06	80	58	4.0	3.15
4	5.26	93	68	5.0	4.00
5	6.36	100	73	6.3	5.00
6	8.00	135	105	8.0	6.30
8	10.80	180	145	10.0	8.00
10	13.40	215	175	12.5	10.00
12	16.00	255	210	14.0	11.20
14	18.00	255	210	14.0	11.20
16	20.40	280	230	18.0	14.00
20	24,80	310	250	22.4	18.00
25	30,70	370	300	28.0	22.40
30	36,10	400	320	31.5	25.00

SABİT PİLOTLU HAVŞA FREZESİ (IMBUS FREZE)





CİVATA	D (mm)	d_1 (mm)	d_2 (mm)	L (mm)	l (mm)	l1 (mm)
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

KÖŞE YUVARLAMA FREZESİ



Plakaların köşelerine pah kırmak için kullanılır.

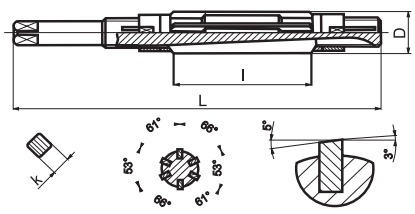


R H11	D js 16	L
1	8	60
1,5	10	60
1,6	10	60
2	10	60
2,5	10	60
3	12	60
3,5	14	60
4	14	60
4,5	15	60
5	16	60
5,5	21	67
6	21	67
6,5	24	71
7	24	71
7,5	24	71

R H11	D js 16	L
8	24	71
8,5	28	85
9	28	85
9,5	28	85
10	28	85
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

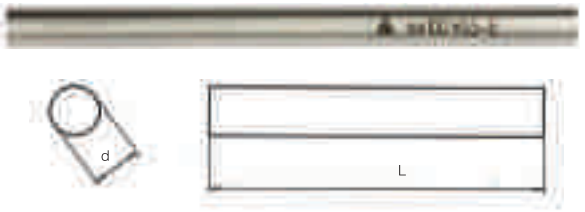
AYARLI RAYBA DÜZ - KOVANLI





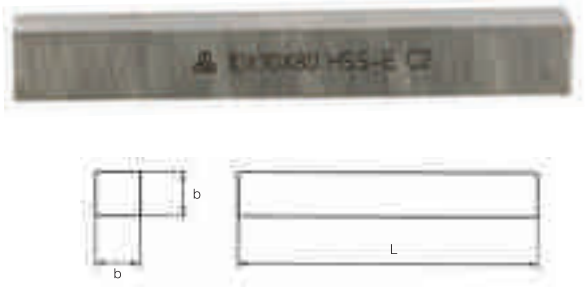
ÖLÇÜ (mm)	D (mm)	L (mm)	l (mm)	k (mm)	BIÇAK AD.
7,00-8,00	6	91	25	3	4
8,00-8,70	7	96	30	3,5	4
8,70-9,50	8	101	35	4	4
9,50-10,25	9	106	40	5	4
10,25-11,00	9,5	115	40	5	6
11,00-12,00	10	118	40	5	6
12,00-13,50	11	126	40	5	6
13,50-15,00	12	142	45	6	6
15,00-16,50	13	150	50	7	6
16,5-18,25	15	157	55	8	6
18,25-19,75	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 KALEMİ HSS - E (Co. %10)



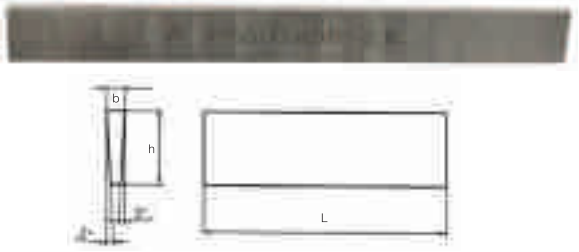
d1 mm	L mm	d1 mm	L mm
4	80	10	125
4	100	12	100
5	80	12	125
5	100	12	160
6	100	14	100
8	100	14	125
8	125	16	125
10	100	20	160

TORNA KALEMİ HSS - E (Co. %10)



b mm	b mm	L mm	b mm	b mm	L mm
4	4	63	10	10	160
4	4	80	10	10	200
5	5	63	12	12	100
5	5	80	12	12	125
6	6	63	12	12	160
6	6	80	12	12	200
6	6	100	14	14	125
8	8	100	14	14	160
8	8	125	16	16	125
8	8	160	16	16	160
8	8	200	20	20	160
10	10	100	20	20	200
10	10	125			

TRAPEZ TORNA KALEMİ HSS - E (Co. %10)



h Inch	b Inch	L Inch	h Inch	b Inch	L Inch
3/8"	3/32"	4"	7/8"	3/16"	6"
1/2"	1/8"	6"	7/8"	3/16"	8"
5/8"	5/32"	5"	1"	7/32"	6"
5/8"	5/32"	6"	1"	7/32"	8"
3/4"	3/16"	6"			

MANYETİK MATKAP UCU



Boy : 30 - 50 mm
Sap Çapı : 19 mm

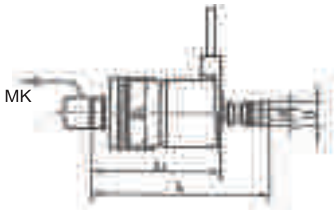


Manyetik
Matkap Motoru

ÇAP	ÇAP	ÇAP	ÇAP
12 mm	25 mm	38 mm	51 mm
13 mm	26 mm	39 mm	52 mm
14 mm	27 mm	40 mm	53 mm
15 mm	28 mm	41 mm	54 mm
16 mm	29 mm	42 mm	55 mm
17 mm	30 mm	43 mm	56 mm
18 mm	31 mm	44 mm	57 mm
19 mm	32 mm	45 mm	58 mm
20 mm	33 mm	46 mm	59 mm
21 mm	34 mm	47 mm	60 mm
22 mm	35 mm	48 mm	
23 mm	36 mm	49 mm	
24 mm	37 mm	50 mm	

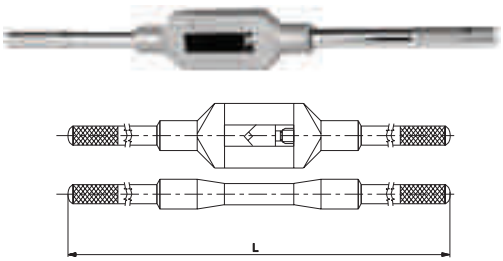
OTOMATİK KLAVUZ ÇEKME APARATI





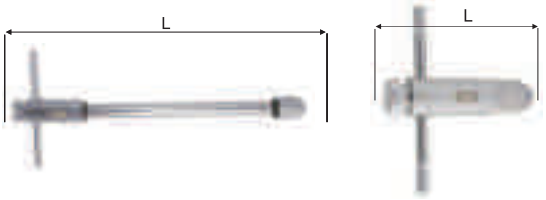
ÖLÇÜ	d(mm)	D (mm)	D_1 (mm)	L (mm)	L_1 (mm)	MK
M2-M7	2.5-6.5	23	55	135	95	MK2-MK3
M5-M12	3.5-10	28	75	164	114,5	MK3-MK4
M8-M20	6.3-14	38	90,5	205	135	MK3-MK4

KLAVUZ KOLU



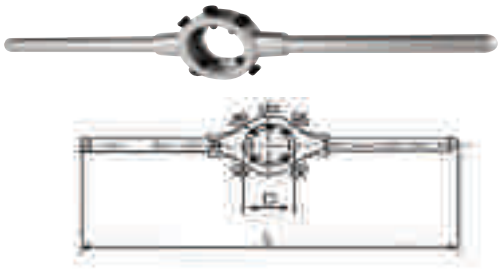
Kod	L (mm)	ÖLÇÜ
No 0	170	(M1 - M8)
No 1	200	(M1 - M12)
No 2	255	(M4 - M12)
No 3	345	(M5 - M20)
No 4	425	(M9 - M27)
No 5	765	(M13 - M32)
No 6	870	(M20 - M40)

CIRCIRLI KLAVUZ KOLU



Kod	L (mm)	ÖLÇÜ (mm)
No 0	85	1 (M3 - M8)
No 1	110	2 (M5 -M12)
No 2	250	10 (M3 - M8)
No 3	310	20 (M5 -M12)

PAFTA KOLU



ÖLÇÜ	D (mm) × h1(mm)	L (mm)
M2 / M2,5	16 × 5	
M3 / M3,5 / M4	20 × 5	170
M5 / M6	20 × 7	170
M7 / M8 / M9	25 × 9	210
M10	30 × 11	270
M12 / M14	38 × 14	325
M16 / M18 / M20	45 × 18	400
M22 / M24	55 × 22	475
M27 / M30 / M33 / M36	65 × 25	555

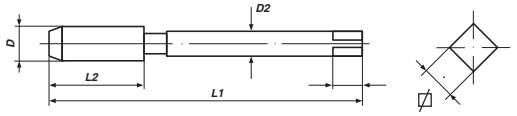
TERS KLAVUZ SETİ



ADET	ÖLÇÜ
5 PARÇA	M3-M6/M6-M8/M8-M11/ M11-14/M14-M18
6 PARÇA	M3-M6/M6-M8/M8-M11/M11-14/ M14-M18/M18-24
8 PARÇA	M3-M6/M6-M8/M8-M11/M11-14/ M14-M18/M18-24/M24-M30/M30-M40

YEŞİL HALKALI DÜZ MAKİNA KLAVUZU

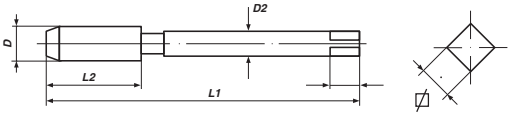




KOD	Ø D	D2	⍁	L1	L2
35326	M3 x 0.5	3.5	2.7	56	11
35330	M4 x 0.7	4.5	3.4	63	13
35334	M5 x 0.8	6	4.9	70	16
35338	M6 x 1	6	4.9	80	19
35342	M8 x 1.25	8	6.2	90	22
35346	M10 x 1.5	10	8.0	100	24
35350	M12 x 1.75	9	7.0	110	29

BEYAZ HALKALI DÜZ MAKİNA KLAVUZU

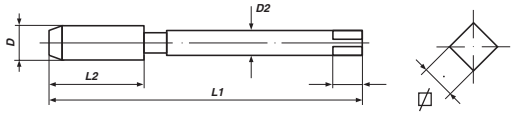




KOD	Ø D	D2	⍁	L1	L2
35226	M3 x 0.5	3.5	2.7	56	11
35230	M4 x 0.7	4.5	3.4	63	13
35234	M5 x 0.8	6	4.9	70	16
35238	M6 x 1	6	4.9	80	19
35242	M8 x 1.25	8	6.2	90	22
35246	M10 x 1.5	10	8.0	100	24
35250	M12 x 1.75	9	7.0	110	29

OVALAMA MAKİNA KLAVUZU

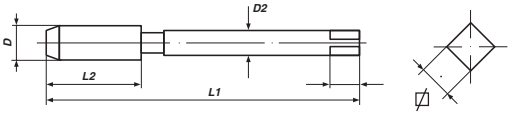




KOD	Ø D	D2	⍁	L1	L2
35510	M3 x 0.5	3.5	2.7	56	11
35512	M4 x 0.7	4.5	3.4	63	13
35513	M5 x 0.8	6	4.9	70	16
35514	M6 x 1	6	4.9	80	19
35515	M8 x 1.25	8	6.2	90	22
35516	M10 x 1.5	10	8.0	100	24
35517	M12 x 1.75	9	7.0	110	29

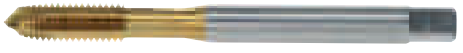
MAVİ HALKALI DÜZ MAKİNA KLAVUZU

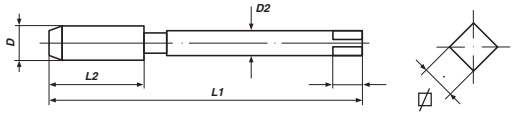




KOD	Ø D	D2	⍁	L1	L2
35426	M3 x 0.5	3.5	2.7	56	11
35430	M4 x 0.7	4.5	3.4	63	13
35434	M5 x 0.8	6	4.9	70	16
35438	M6 x 1	6	4.9	80	19
35442	M8 x 1.25	8	6.2	90	22
35446	M10 x 1.5	10	8.0	100	24
35450	M12 x 1.75	9	7.0	110	29

TİTANYUM KAPLI DÜZ MAKİNA KLAVUZU

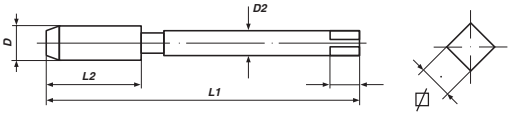




KOD	Ø D	D2	⍁	L1	L2
31526	M3 x 0.5	3.5	2.7	56	11
31530	M4 x 0.7	4.5	3.4	63	13
31534	M5 x 0.8	6	4.9	70	16
31538	M6 x 1	6	4.9	80	19
31542	M8 x 1.25	8	6.2	90	22
31546	M10 x 1.5	10	8.0	100	24

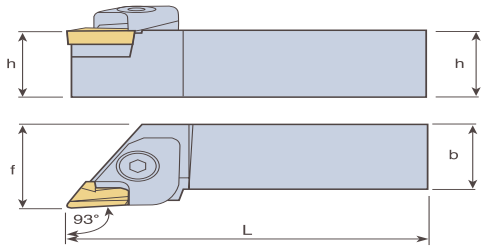
SİYAH HALKALI DÜZ MAKİNA KLAVUZU





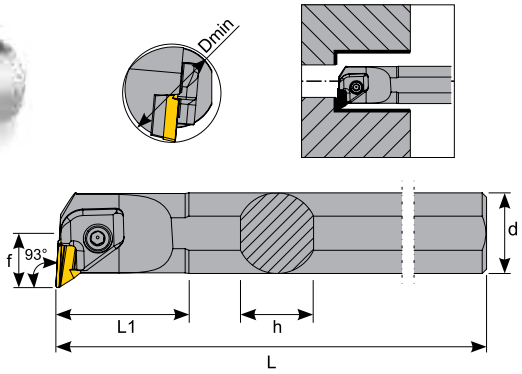
KOD	Ø D	D2	⍁	L1	L2
35426	M3 x 0.5	3.5	2.7	56	11
35430	M4 x 0.7	4.5	3.4	63	13
35434	M5 x 0.8	6	4.9	70	16
35438	M6 x 1	6	4.9	80	19
35442	M8 x 1.25	8	6.2	90	22
35446	M10 x 1.5	10	8.0	100	24
35450	M12 x 1.75	9	7.0	110	29





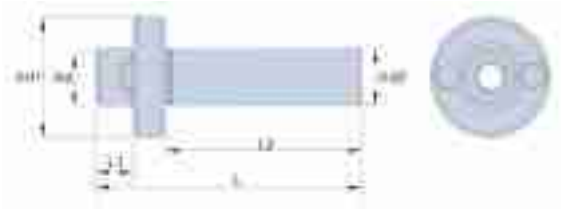
Ürün Kodu	Ölçüler (mm)				Kullanılan Uç	Altlık
	h	b	L	f		
CKJNR/L 2020 K 16	20	20	125	25	KNUX 16 04..	AKS - 16 - R AKS - 16 - L
CKJNR/L 2525 M 16	25	25	150	32		
CKJNR/L 3232 P 16	32	32	170	40		
CKJNR/L 4040 S 16	40	40	250	50		





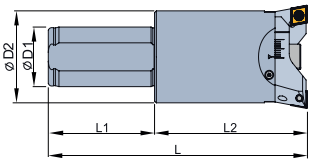
Sipariş Kodu	Ürün Kodu	Ölçüler (mm)						Kullanılan Uç
		Dmin	d	L	L1	f	h	
RK 750	S25S CKUNR 16	32	25	250	52	17	23	KNUX 16 04..
RK 752	S28T CKUNR 16	35	28	300	52	19	25	
RK 754	S32U CKUNR 16	40	32	350	52	22	29	
RK 756	S40V CKUNR 16	50	40	400	55	27	37	
RK 758	S45V CKUNR 16	54	45	400	60	29	43	
RK 760	S50W CKUNR 16	63	50	450	60	35	47	

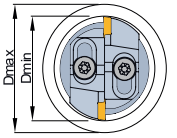




Sipariş Kodu	Ürün Kodu	Ölçüler (mm)					
		d	d1	d2	L	L1	L2
M300	16 - 25	16	38	25	95	15	60
M302	22 - 25	22	47	25	97	17	60
M304	27 - 25	27	59	25	97	20	60
M306	32 - 25	32	65	25	98	23	60

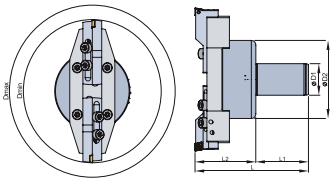




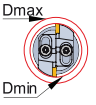


SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						
		Dmin	Dmax	ØD1	ØD2	L	L1	L2
TKB 088	16-20 L100	16	20	16	16	100	50	50
TKB 090	16-20 L150	16	20	16	16	150	50	100
TKB 092	16-20 L200	16	20	16	16	200	50	150
TKB 094	19-23 L100	19	23	16	16	100	50	50
TKB 096	19-23 L150	19	23	16	16	150	50	100
TKB 098	19-23 L200	19	23	16	16	200	50	150
TKB 100	23-28 L100	23	28	20	20	100	50	50
TKB 102	23-28 L150	23	28	20	20	150	50	100
TKB 104	23-28 L230	23	28	20	20	230	50	180
TKB 106	28-38 L105	28	38	20	25	105	50	55
TKB 108	28-38 L155	28	38	20	25	155	50	105
TKB 110	23-38 L230	28	38	20	25	230	50	180
TKB 112	37-48 L120	37	48	25	32	120	55	65
TKB 114	37-48 L170	37	48	25	32	170	55	115
TKB 116	37-48 L255	37	48	25	32	255	55	200
TKB 118	45-56 L126	45	56	32	40	126	60	66
TKB 120	45-56 L176	45	56	32	40	176	60	116
TKB 122	45-56 L260	45	56	32	40	260	60	200
TKB 124	55-75 L145	55	75	32	50	145	60	85
TKB 126	55-75 L195	55	75	32	50	195	60	135
TKB 128	55-75 L280	55	75	32	50	280	60	220
TKB 130	70-90 L145	70	90	32	63	145	60	85
TKB 132	70-90 L195	70	90	32	63	195	60	135
TKB 134	70-90 L280	70	90	40	63	280	60	220
TKB 136	90-130 L175	90	130	32	75	175	60	115
TKB 138	90-130 L225	90	130	32	75	225	60	165



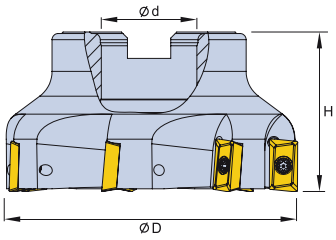


KOLLU HASSAS BARA TAKIMLARI

KARTUŞLAR	Dmin-Dmax	KULLANILAN UÇ	SIKMA CİVATASI	SABİTLEME CİVATASI
				
KR 100	23-28	CC □□ 0602	TC 060 M2.5	M5x25
KR 102	28-38	CC □□ 09T3	TC 070 M3.5	M5x25
KR 104	37-48	CC □□ 09T3	TC 070 M3.5	M6x30
KR 106	45-56	CC □□ 09T3	TC 070 M3.5	M8x30
KR 108	55-75	CC □□ 09T3	TC 070 M3.5	M8x30
KR 110	70-90	CC □□ 09T3	TC 070 M3.5	M8x30
KR 112	90-130	CC □□ 09T3	TC 070 M3.5	M8x30
KR 114	120-170	CC □□ 09T3	TC 070 M3.5	M8x30
KR 120	170-250	CC □□ 09T3	TC 070 M3.5	M8x30
KR 122	240-350	CC □□ 09T3	TC 070 M3.5	M8x30

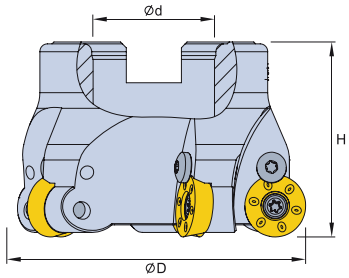
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)				KULLANILAN UÇ
		ØD	Ød	Z	H	
T176	D040-16 Z05 AP10	40	16	5	40	AP □□1003
T177	D050-22 Z06 AP10	50	22	6	40	
T178	D063-22 Z07 AP 10	63	22	7	40	
T179	D080-32 Z08 AP 10	80	32	8	50	
T180	D040-16 Z03 AP16	40	16	3	45	AP □□1604
T181	D040-16 Z04 AP16	40	16	4	45	
T182	D050-22 Z04 AP16	50	22	4	45	
T183	D050-22 Z05 AP16	50	22	5	45	
T184	D063-22 Z05 AP16	63	22	5	45	
T185	D063-22 Z06 AP16	63	22	6	45	
T186	D080-32 Z06 AP16	80	32	6	52	
T187	D080-32 Z07 AP16	80	32	7	52	
T188	D100-32 Z07 AP16	100	32	7	52	
T189	D100-32 Z08 AP16	100	32	8	52	
T190	D125-40 Z09 AP16	125	40	9	62	
T192	D160-40 Z10 AP16	160	40	10	62	





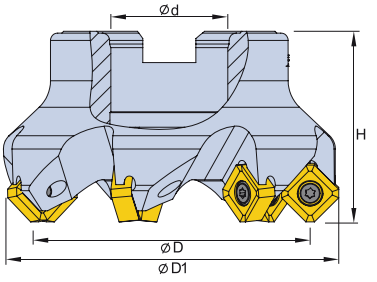
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)				KULLANILAN UÇ
		ØD	Ød	Z	H	
T288	D040-16 Z03 RD10	40	16	3	40	RD □□1003
T289	D040-16 Z04 RD10	40	16	4	40	
T290	D050-22 Z04 RD10	50	22	4	40	
T291	D050-22 Z05 RD10	50	22	5	40	
T292	D063-22 Z05 RD10	63	22	5	40	
T293	D063-22 Z06 RD10	63	22	6	40	
T294	D080-32 Z06 RD10	80	32	6	50	
T294-1	D080-32 Z07 RD10	80	32	7	50	
T295	D100-32 Z07 RD10	100	32	7	50	
T295-1	D100-32 Z08 RD10	100	32	8	50	
T280	D040-16 Z03 RD12	40	16	3	40	RD □□12T3
T281	D040-16 Z04 RD12	40	16	4	40	
T282	D050-22 Z04 RD12	50	22	4	40	
T283	D050-22 Z05 RD12	50	22	5	40	
T284	D063-22 Z05 RD12	63	22	5	40	
T285	D063-22 Z06 RD12	63	22	6	40	
T286	D080-32 Z06 RD12	80	32	6	50	
T286-1	D080-32 Z07 RD12	80	32	7	50	
T287	D100-32 Z07 RD12	100	32	7	50	
T287-1	D100-32 Z08 RD12	100	32	8	50	
T296	D063-22 Z04 RD16	63	22	4	45	RD □□1605
T297	D080-32 Z05 RD16	80	32	5	50	
T298	D100-32 Z06 RD16	100	32	6	50	





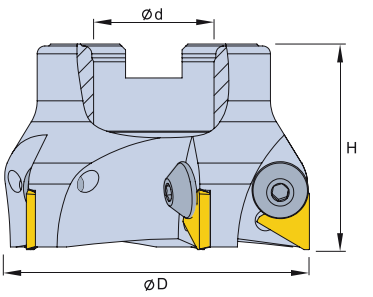
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ
		ØD	ØD1	Ød	Z	H	
T300	D063-22 Z05 SD12	63	76	22	5	45	SD □□ 1204
T302	D080-32 Z06 SD12	80	93	32	6	52	
T304	D100-32 Z07 SD12	100	113	32	7	60	
T305	D125-40 Z07 SD12	125	138	40	7	62	





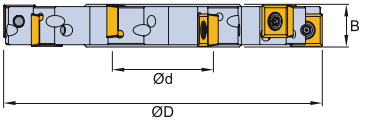
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ
		ØD	Ød	Z	H	E	
T114	D042-16 Z03 TP16	42	16	3	44	--	TPKN 1603
T116	D050-22 Z03 TP16	50	22	3	44	--	
T118	D063-22 Z03 TP16	63	22	3	44	--	
T120	D063-22 Z04 TP16	63	22	4	44	--	
T122	D080-32 Z05 TP16	80	32	5	52	--	
T124	D100-32 Z06 TP16	100	32	6	52	--	
T126	D063-22 Z03 TP22	63	22	3	50	--	TPKN 2204
T128	D080-32 Z04 TP22	80	32	4	52	--	
T130	D100-32 Z05 TP22	100	32	5	52	--	
T132	D125-40 Z06 TP22	125	40	6	62	--	
T134	D160-40 Z07 TP22	160	40	7	62	66.7	
T136	D200-60 Z08 TP22	200	60	8	62	101.6	
T138	D250-60 Z09 TP22	250	60	9	62	101.6	





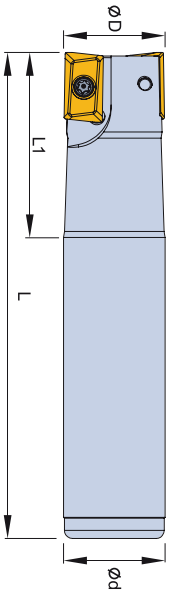
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		ØD	Ød	Z	Ap	A	B	
DF 100	125-Z10-10-SC09	125	40	10	32	10	10.5	SCMT 09
DF 102	125-Z10-12-SC09	125	40	10	32	10	12.5	
DF 104	125-Z10-16-SC12	125	40	10	32	16	16.5	SCMT 12
DF 106	125-Z10-20-SC12	125	40	10	32	20	20.5	
DF 110	160-Z12-12-SC09	160	40	12	50	12	12.5	SCMT 09
DF 112	160-Z12-16-SC12	160	40	12	50	16	16.5	SCMT 12
DF 114	160-Z12-20-SC12	160	40	12	50	20	20.5	

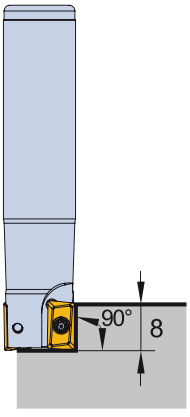






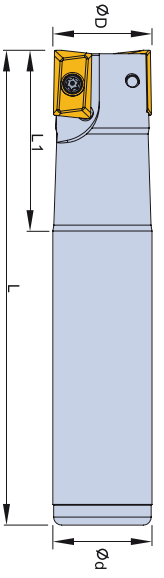
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ
		ØD	Ød	Z	L	L1	
S136	12-01-100-AP10	12	12	1	100	27	
S138	14-01-100-AP10	14	14	1	100	27	
S140	16-02-100-AP10	16	16	2	100	30	
S142	18-02-100-AP10	18	16	2	100	30	
S144	20-03-100-AP10	20	20	3	100	30	
S146	22-03-100-AP10	22	20	3	100	30	
S148	25-03-100-AP10	25	25	3	100	35	
S150	30-04-100-AP10	30	25	4	100	35	
S152	32-04-100-AP10	32	25	4	100	35	
S154	35-04-100-AP10	35	25	4	100	35	
S156	40-05-100-AP10	40	25	5	100	35	APKT 1003
S158	12-01-120-AP10	12	12	1	120	27	
S160	14-01-120-AP10	14	14	1	120	30	
S162	16-02-120-AP10	16	16	2	120	40	
S164	18-02-120-AP10	18	16	2	120	40	
S166	20-03-120-AP10	20	20	3	120	40	
S168	22-03-120-AP10	22	20	3	120	40	
S169	25-03-120-AP10	25	25	3	120	40	
S170	30-04-120-AP10	30	25	4	120	40	
S171	35-04-120-AP10	35	25	4	120	40	
S172	40-05-120-AP10	40	25	5	120	40	
S173	16-02-150-AP10	16	16	2	150	50	
S174	18-02-150-AP10	18	16	2	150	50	
S176	20-03-150-AP10	20	20	3	150	60	
S178	22-03-150-AP10	22	20	3	150	60	
S180	25-03-150-AP10	25	25	3	150	60	
S180-1	30-04-150-AP10	30	25	4	150	60	
S181	32-04-150-AP10	32	25	4	150	60	
S182	16-02-200-AP10	16	16	2	200	60	
S184	18-02-200-AP10	18	16	2	200	60	APKT 1003
S186	20-03-200-AP10	20	20	3	200	60	
S187	22-03-200-AP10	22	20	3	200	70	
S188	25-03-200-AP10	25	25	3	200	60	
S188-1	30-04-200-AP10	30	25	4	200	50	
S189	32-03-200-AP10	32	32	4	200	60	
S190	16-02-250-AP10	16	16	2	250	70	
S192	20-03-250-AP10	20	20	3	250	70	
S194	25-03-250-AP10	25	25	3	250	70	





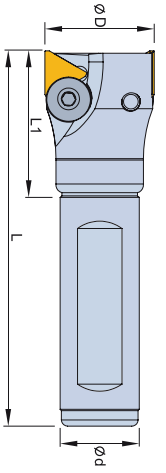
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ
		ØD	Ød	Z	L	L1	
S256	25-02-120-AP16	25	25	2	120	45	
S258	30-02-120-AP16	30	25	2	120	45	
S260	32-03-120-AP16	32	25	3	120	45	
S262	35-03-120-AP16	35	25	3	120	45	
S264	40-04-120-AP16	40	25	4	120	45	
S266	25-02-150-AP16	25	25	2	150	55	
S268	30-02-150-AP16	30	25	2	150	55	
S270	32-03-150-AP16	32	25	3	150	55	
S272	35-03-150-AP16	35	25	3	150	55	
S274	40-04-150-AP16	40	25	4	150	55	
S276	25-02-200-AP16	25	25	2	200	55	
S278	30-02-200-AP16	30	25	2	200	55	
S280	32-03-200-AP16	32	25	3	200	55	APKT 1604
S282	35-03-200-AP16	35	32	3	200	55	
S283	40-04-200-AP16	40	32	4	200	55	
S432	25-02-250-AP16	25	25	2	250	60	
S434	30-02-250-AP16	30	25	2	250	60	
S436	32-03-250-AP16	32	32	3	250	60	
S438	35-03-250-AP16	35	32	3	250	60	
S440	40-04-250-AP16	40	32	4	250	60	
S442	25-02-300-AP16	25	25	2	300	70	
S444	30-02-300-AP16	30	25	2	300	70	
S446	32-03-300-AP16	32	32	3	300	70	
S448	35-03-300-AP16	35	32	3	300	70	
S450	40-04-300-AP16	40	32	4	300	70	
S453	32-03-350-AP16	32	32	3	350	70	
S454	35-03-350-AP16	35	32	3	350	70	
S456	40-04-350-AP16	40	32	4	350	70	





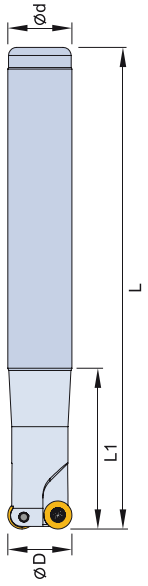
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ
		ØD	Ød	Z	L	L1	
S116	22-02-120-TP11	22	20	2	120	45	
S118	25-02-120-TP11	25	25	2	120	45	
S120	28-02-120-TP11	28	25	2	120	45	
S122	30-03-120-TP11	30	25	3	120	45	TPKN 1103
S124	32-03-120-TP11	32	25	3	120	45	
S126	35-03-120-TP11	35	25	3	120	45	
S128	35-02-120-TP16	35	25	2	120	45	
S130	40-03-120-TP16	40	25	3	120	45	TPKN 1603
S132	45-03-120-TP16	45	25	3	120	45	
S134	50-03-120-TP22	50	32	3	120	55	TPKN 2204



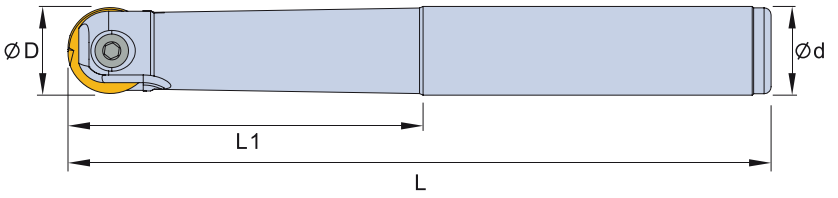


SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ
		ØD	Ød	Z	L	L1	
R162	16-02-120-RD08	16	16	2	120	50	RD □□0803
R164	18-02-120-RD08	18	16	2	120	50	
R166	20-03-120-RD08	20	20	3	120	50	
R168	16-02-150-RD08	16	16	2	150	60	
R170	16-02-150-RD08	18	16	2	150	60	
R172	20-03-150-RD08	20	20	3	150	60	
R174	16-02-200-RD08	16	16	2	200	70	
R176	18-08-200-RD08	18	16	2	200	70	
R178	20-03-200-RD08	20	20	3	200	70	
R190	20-02-120-RD10	20	20	2	120	40	RD □□1003
R192	25-03-120-RD10	25	25	3	120	40	
R193	30-03-120-RD10	30	25	3	120	40	
R194	32-03-120-RD10	32	25	3	120	40	
R196	35-03-120-RD10	35	25	3	120	40	
R198	40-03-120-RD10	40	25	3	120	40	
R200	20-02-150-RD10	20	20	2	150	60	
R202	25-03-150-RD10	25	25	3	150	60	
R203	30-03-150-RD10	30	25	3	150	60	
R204	32-03-150-RD10	32	25	3	150	60	
R206	35-03-150-RD10	35	25	3	150	60	
R208	40-03-150-RD10	40	25	3	150	60	
R210	20-02-200-RD10	20	20	2	200	70	
R212	25-03-200-RD10	25	25	3	200	70	
R213	30-03-200-RD10	30	25	3	200	70	
R214	32-03-200-RD10	32	32	3	200	70	
R216	35-03-200-RD10	35	32	3	200	70	
R218	40-03-200-RD10	40	32	3	200	70	
R228	25-02-120-RD12	25	25	2	120	40	RD □□12T3
R229	30-02-120-RD12	30	25	2	120	40	
R230	32-03-120-RD12	32	25	3	120	40	
R232	35-03-120-RD12	35	25	3	120	40	
R234	40-03-120-RD12	40	25	3	120	40	
R236	25-02-150-RD12	25	25	2	150	60	
R237	30-02-150-RD12	30	25	2	150	60	
R238	32-03-150-RD12	32	25	3	150	60	
R240	35-03-150-RD12	35	25	3	150	60	
R242	40-03-150-RD12	40	25	3	150	60	
R244	25-02-200-RD12	25	25	2	200	70	
R245	30-02-200-RD12	30	25	2	200	70	
R246	32-03-200-RD12	32	32	3	200	70	
R248	35-03-200-RD12	35	32	3	200	70	
R250	40-03-200-RD12	40	32	3	200	70	
R251	40-03-250-RD12	40	32	3	250	70	
R252	50-04-250-RD12	50	32	4	250	70	
R254	25-02-300-RD12	25	25	2	300	70	
R255	30-02-300-RD12	30	25	2	300	70	
R256	32-03-300-RD12	32	32	3	300	70	
R258	35-03-300-RD12	35	32	3	300	70	
R259	40-03-300-RD12	40	32	3	300	70	
R260	35-03-350-RD12	35	32	3	350	70	
R261	40-03-350-RD12	40	32	3	350	70	
R270	40-03-300-RD16	40	32	3	300	70	RD □□1604
R272	50-03-300-RD16	50	32	3	300	70	





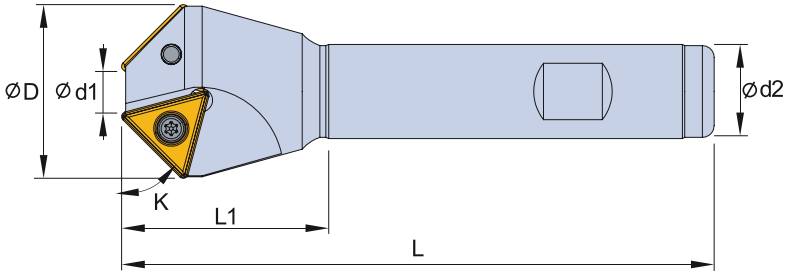
Küre Saplı Tarama Başlığı





SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)				KULLANILAN UÇ
		ØD	Ød	L	L1	
S370	08-10-130	8	10	130	50	P3201 D08
S372	10-12-130	10	12	130	60	P3201 D10
S374	12-12-150	12	12	150	70	P3201 D12
S376	16-16-175	16	16	175	80	P3201 D16
S378	20-20-200	20	20	200	100	P3201 D20
S380	25-25-200	25	25	200	100	P3201 D25
S381	30-32-200	30	32	200	90	P3201 D30
S382	32-32-200	32	32	200	90	P3201 D32

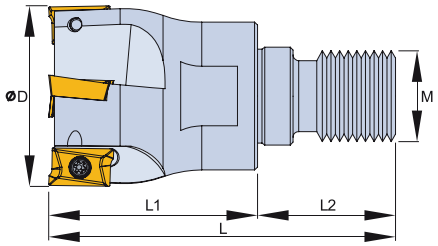
Açılı Saplı Tarama Başlığı





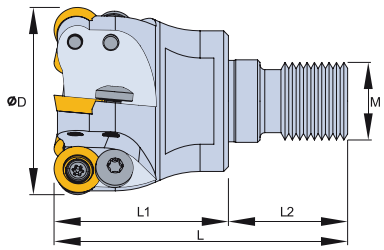
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)							KULLANILAN UÇ
		ØD	Ød1	Ød2	Z	L	L1	K	
S335	02-16-Z2-TC11	16	2	16	2	100	35	30°	TCMT 1102
S334	04-15-Z1-TC11	15	4	16	1	100	35	45°	
S339	10-31-Z2-TC16	31	10	16	2	100	35	30°	
S336	10-31-Z2-TC16	31	10	16	2	100	35	45°	TCMT 16T3
S338	14-35-Z2-TC16	35	14	20	2	100	35	45°	
S340	22-43-Z3-TC16	43	22	25	3	100	35	45°	
S342	32-53-Z3-TC16	53	32	25	3	100	35	45°	
S343	24-39-Z2-TC16	39	24	20	2	100	35	60°	





SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		ØD	M	Z	L	L1	L2	
VT 138	20-03-M10-AP10	20	M10	3	55	38	17	 APKT 1003
VT 140	25-03-M12-AP10	25	M12	3	55	33	22	
VT 143	32-04-M16-AP10	32	M16	4	60	36	24	
VT 146	35-04-M16-AP10	35	M16	4	60	36	24	
VT 148	40-05-M16-AP10	40	M16	5	60	36	24	
VT 150	42-05-M16-AP10	42	M16	5	60	36	24	
VT 160	25-02-M12-AP16	25	M12	2	55	33	22	 APKT 1604
VT 163	32-03-M16-AP16	32	M16	3	60	36	24	
VT 166	35-03-M16-AP16	35	M16	3	60	36	24	
VT 168	40-04-M16-AP16	40	M16	4	60	36	24	
VT 170	42-04-M16-AP16	42	M16	4	60	36	24	

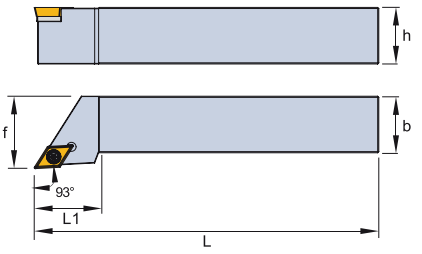




SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		ØD	M	Z	L	L1	L2	
VT 098	20-02-M10-RD10	20	M10	2	55	35	20	 RDMT 1003
VT 100	25-03-M12-RD10	25	M12	3	55	33	22	
VT 103	32-03-M16-RD10	32	M16	3	60	36	24	
VT 106	35-04-M16-RD10	35	M16	4	60	36	24	
VT 108	40-05-M16-RD10	40	M16	5	60	36	24	
VT 110	42-05-M16-RD10	42	M16	5	60	36	24	
VT 120	25-02-M12-RD12	25	M12	2	55	33	22	 RDMT 12T3
VT 123	32-03-M16-RD12	32	M16	3	60	36	24	
VT 126	35-03-M16-RD12	35	M16	3	60	36	24	
VT 128	40-04-M16-RD12	40	M16	4	60	36	24	
VT 130	42-04-M16-RD12	42	M16	4	60	36	24	
VT 132	45-04-M16-RD12	45	M16	4	60	36	24	

93° SDJC - SDJCL

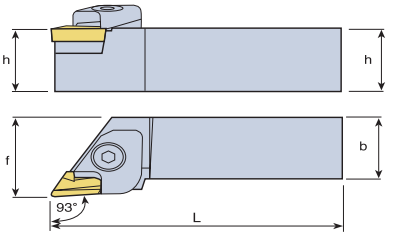




SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ	ALTLIK
		L	L1	h	f	b		
D220	SDJCR 1010 J07	110	12	10	10	10		
D222	SDJCR 1212 J11	110	18	12	12	12		
D224	SDJCR 1616 H11	100	24	16	20	16		
D226	SDJCR 2020 K11	125	24	20	25	20		
D228	SDJCR 2525 M11	150	30	25	32	25		
D360	SDJCL 1010 J07	110	12	10	10	10	DC □□ 0702	-----
D362	SDJCL 1212 J11	110	18	12	12	12	DCMT 11T3	-----
D364	SDJCL 1616 H11	100	24	16	20	16		TA 030
D366	SDJCL 2020 K11	125	24	20	25	20	DCMT 11T3	
D368	SDJCL 2525 M11	150	30	25	32	25		

93° CKJNR R-L

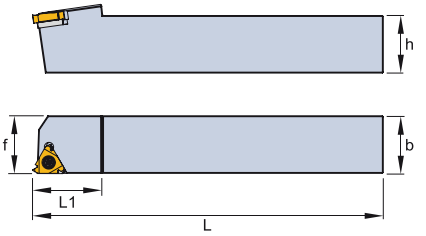




ÜRÜN KODU	ÖLÇÜLER (mm)				KULLANILAN UÇ	ALTLIK
	h	b	L	f		
CKJNR/L 2020 K 16	20	20	125	25		
2525 M16	25	25	150	32		
3232 P 16	32	32	170	40		AKS-16-R
4040 S 16	40	40	250	50	KNUX 16 04..	AKS-16-L

Dış Çap Diş Kateri R-L

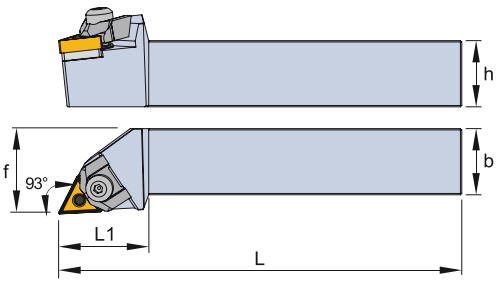




SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ	ALTLIK
		L	L1	h	f	b		
D261	AL 12-3	110	20	12	12	12		
D259	AL 16-3	100	22	16	16	16		
D258	AL 20-3	125	25	20	20	20		TA
D260	AL 25-3	150	30	25	25	25	16 ER	044
D266	AL 25-4	150	36	25	25	25	22 ER	-----
D262	AL 32-3	170	30	32	32	32	16 ER	TA 044
D268	AL 20-3 SOL	125	25	20	20	20		TA
D269	AL 25-3 SOL	150	30	25	25	25	16 ER	044

93º DDJNR - DDJNL

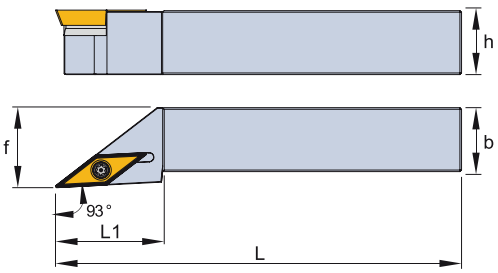




SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ	ALTLIK	BASKI
		L	L1	h	f	b			
D167	DDJNR 2020 K11	125	35	20	25	20	DN □□ 1104	TA 030	BK 021
D168	DDJNR 2525 M11	150	35	25	32	25			
D170	DDJNR 2020 K15	125	38	20	25	20			
D172	DDJNR 2525 M15	150	38	25	32	25	DN □□ 1506	TA 014	BK 020
D174	DDJNR 3232 P15	170	38	32	40	32			
D307-1	DDJNL 2020 K11	125	35	20	25	20	DN □□ 1104	TA 030	BK 021
D308	DDJNL 2525 M11	150	35	25	32	25			
D310	DDJNL 2020 K15	125	38	20	25	20			
D312	DDJNL 2525 M15	150	38	25	32	25	DN □□ 1506	TA 014	BK 020
D314	DDJNL 3232 P15	170	38	32	40	32			

93º SVJBR - SVJBL

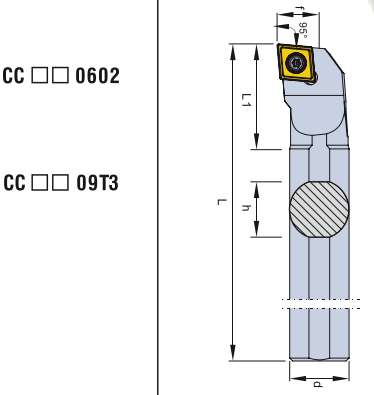




SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)					KULLANILAN UÇ	ALTLIK
		L	L1	h	f	b		
D230	SVJBR 1010 J11	110	21	10	10	10	VB □□ 1103	-----
D232	SVJBR 1212 J11	110	21	12	12	12		
D234	SVJBR 1616 H11	110	21	16	16	16		
D235	SVJBR 1616 H16	100	27	16	20	16		
D236	SVJBR 2020 K16	125	33	20	25	20	VBMT 1604	TA 034
D238	SVJBR 2525 M16	150	39	25	32	25		
D370	SVJBL 1010 J11	110	21	10	10	10	VB □□ 1103	-----
D372	SVJBL 1212 J11	110	21	12	12	12		
D373	SVJBL 1616 H11	110	21	16	16	16		
D374	SVJBL 1616 H16	100	27	16	20	16		
D380	SVJBL 2020 K16	125	33	20	25	20	VBMT 1604	TA 034
D382	SVJBL 2525 M16	150	39	25	32	25		

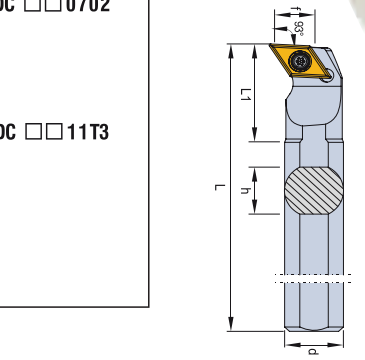
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		Dmin	d	L	L1	f	h	
K100	S06-08H SCLCR 06	8	8	100	25	4.3	7	
K102	S08H SCLCR 06	11	8	100	20	5.5	7	
K104	S10J SCLCR 06	13	10	110	20	6	9	
K105	S10K SCLCR 06	13	10	125	20	6	9	
K106	S12K SCLCR 06	16	12	125	24	9	11	
K107	S12Q SCLCR 06	16	12	180	24	9	11	
K108	S14-16Q SCLCR 09	19	16	180	45	10	15	
K110	S16Q SCLCR 09	20	16	180	30	11	15	
K111	S16R SCLCR 09	20	16	200	30	11	15	
K112	S18-20Q SCLCR 09	24	20	180	37	12	18	
K114	S20Q SCLCR 09	25	20	180	37	13	18	
K115	S20S SCLCR 09	25	20	250	37	13	18	
K116	S25R SCLCR 09	32	25	200	40	17	23	CC □□ 0602
K117	S25T SCLCR 09	32	25	300	40	17	23	
K230	S06-08H SCLCL 06	8	8	100	25	7	7	
K232	S08H SCLCL 06	11	8	100	20	7	7	
K234	S10J SCLCL 06	13	10	110	20	9	9	CC □□ 09T3
K236	S12K SCLCL 06	16	12	125	24	11	11	
K238	S14-16Q SCLCL 09	19	16	180	45	15	15	
K240	S16Q SCLCL 09	20	16	180	30	15	15	
K241	S16R SCLCL 09	20	16	200	30	15	15	
K244	S20Q SCLCL 09	25	20	180	37	18	18	
K245	S20S SCLCL 09	25	20	250	37	18	18	
K246	S25R SCLCL 09	32	25	200	40	23	23	





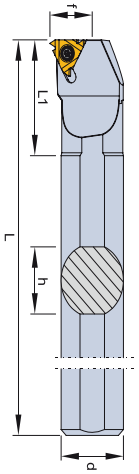
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		Dmin	d	L	L1	f	h	
K120	S10J SDUCR 07	14	10	110	20	7	9	
K122	S12K SDUCR 07	17	12	125	24	9	11	
K124	S14-16Q SDUCR 07	20	16	180	40	10.5	15	
K126	S16Q SDUCR 07	21	16	180	27	11	15	
K125	S14-16Q SDUCR 11	20	16	180	45	10.5	15	
K128	S16Q SDUCR 11	21	16	180	30	11	15	
K130	S20Q SDUCR 11	25	20	180	32	13	18	DC □□0702
K132	S25R SDUCR 11	32	25	200	40	17	23	
K134	S32T SDUCR 11	40	32	300	45	22	30	
K250	S10J SDUCL 07	14	10	110	20	7	9	
K252	S12K SDUCL 07	17	12	125	24	9	11	
K254	S14-16Q SDUCL 07	20	16	180	40	10.5	15	DC □□11T3
K256	S16Q SDUCL 07	21	16	180	27	11	15	
K258	S16Q SDUCL 11	21	16	180	30	11	15	
K260	S20Q SDUCL 11	25	20	180	32	13	18	
K262	S25R SDUCL 11	32	25	200	40	17	23	
K263	S32T SDUCL 11	40	32	300	45	22	30	





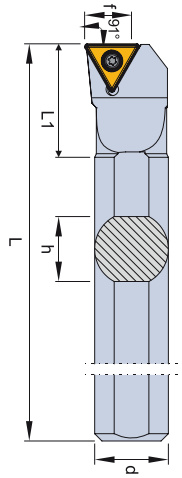


SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		Dmin	d	L	L1	f	h	
K348	S10J STIR 11	12	10	110	20	6	7	
K350	S12K STIR 11	14	12	125	24	7.2	11	
K352	S16Q STIR 16	20	16	180	40	11	15	
K354	S20Q STIR 16	24	20	180	40	13	18	
K356	S25R STIR 16	29	25	200	40	16	23	11 IR
K358	S32T STIR 16	36	32	300	40	19.5	30	
K359	S25R STIR 22	32	25	200	40	17	23	16 IR
K360	S32T STIR 22	39	32	300	40	22	30	
K360-1	S40T STIR 22	50	40	300	60	24.5	38	22 IR
K361	S16Q STIL 16	20	16	180	40	11	15	
K362	S20Q STIL 16	24	20	180	40	13	18	
K363	S25R STIL 16	29	25	200	40	16	23	



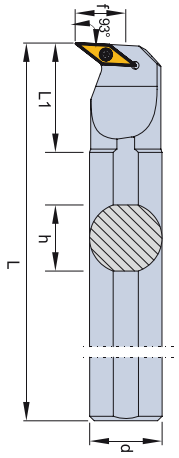


SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		Dmin	d	L	L1	f	h	
K160	S12K STFCR 11	17	12	125	24	9	11	
K161	S16Q STFCR 11	21	16	180	30	11	15	
K162	S16Q STFCR 16	21	16	180	30	11	15	TCMT 1102
K164	S20Q STFCR 16	25	20	180	30	13	18	
K166	S25R STFCR 16	32	25	200	37	16	23	TCMT 16T3

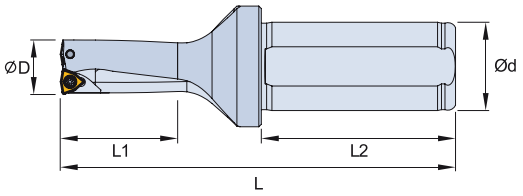




SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		Dmin	d	L	L1	f	h	
K206	S16Q SVUBR 11	21	16	180	30	11	15	
K207	S20Q SVUBR 11	25	20	180	30	13	18	
K208	S25R SVUBR 16	32	25	200	40	17	23	VBMT 1103
K209	S32T SVUBR 16	40	32	300	50	22	30	
K210	S40T SVUBR 16	49	40	300	55	27	38	VBMT 1604

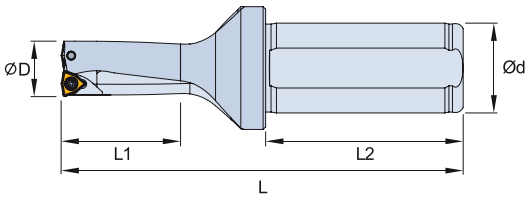






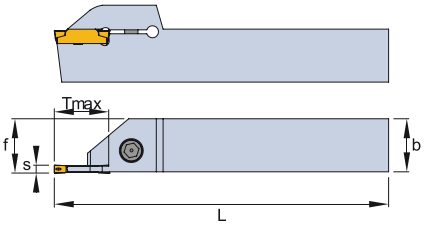
SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		D	d	d1	L	L1	L2	
U104	D2 16 WCMX 03	16	25	34	115	32	55	WCMX 0302
U105	D2 17 WCMX 03	17	25	34	118	34	55	
U106	D2 18 WCMX 03	18	25	34	120	36	55	
U107	D2 19 WCMX 03	19	25	34	123	38	55	
U108	D2 20 WCMX 04	20	25	34	125	40	55	WCMX 0402
U110	D2 21 WCMX 04	21	25	34	129	42	55	
U112	D2 22 WCMX 04	22	25	34	131	44	55	
U114	D2 23 WCMX 04	23	25	34	134	46	55	
U116	D2 24 WCMX 05	24	25	34	136	48	55	WCMX 0503
U118	D2 25 WCMX 05	25	25	34	138	50	55	
U120	D2 26 WCMX 05	26	25	34	147	52	55	
U122	D2 27 WCMX 05	27	25	34	149	54	55	
U124	D2 28 WCMX 05	28	25	34	152	56	55	
U126	D2 29 WCMX 05	29	25	34	154	58	55	
U128	D2 30 WCMX 06	30	32	44	156	60	58	WCMX 06T3
U130	D2 31 WCMX 06	31	32	44	161	62	58	
U132	D2 32 WCMX 06	32	32	44	163	64	58	
U134	D2 33 WCMX 06	33	32	44	165	66	58	
U136	D2 34 WCMX 06	34	32	44	168	68	58	
U137	D2 35 WCMX 06	35	32	44	170	70	58	
U138	D2 36 WCMX 06	36	32	44	172	72	58	
U139	D2 37 WCMX 06	37	32	44	174	74	58	
U140	D2 38 WCMX 06	38	32	44	176	76	58	
U141	D2 39 WCMX 06	39	32	44	178	78	58	
U142	D2 40 WCMX 06	40	32	44	180	80	58	
U143	D3 16 WCMX 03	16	25	34	131	48	55	WCMX 0302
U144	D3 17 WCMX 03	17	25	34	135	51	55	
U146	D3 18 WCMX 03	18	25	34	138	54	55	
U148	D3 19 WCMX 03	19	25	34	142	57	55	
U150	D3 20 WCMX 04	20	25	34	145	60	55	WCMX 0402
U152	D3 21 WCMX 04	21	25	34	150	63	55	
U154	D3 22 WCMX 04	22	25	34	153	66	55	
U156	D3 23 WCMX 04	23	25	34	157	69	55	
U158	D3 24 WCMX 05	24	25	34	160	72	55	WCMX 0503
U160	D3 25 WCMX 05	25	25	34	163	75	55	
U162	D3 26 WCMX 05	26	25	34	173	78	55	
U164	D3 27 WCMX 05	27	25	34	176	81	55	
U166	D3 28 WCMX 05	28	25	34	180	84	55	
U168	D3 29 WCMX 05	29	25	34	183	87	55	
U170	D3 30 WCMX 06	30	32	44	186	90	58	WCMX 06T3
U172	D3 31 WCMX 06	31	32	44	192	93	58	
U174	D3 32 WCMX 06	32	32	44	195	96	58	
U176	D3 33 WCMX 06	33	32	44	198	99	58	
U178	D3 34 WCMX 06	34	32	44	202	102	58	
U179	D3 35 WCMX 06	35	32	44	205	105	58	
U180	D3 36 WCMX 06	36	32	44	208	108	58	
U181	D3 37 WCMX 06	37	32	44	211	111	58	





SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		D	d	d1	L	L1	L2	
U182	D3 38 WCMX 06	38	32	44	214	114	58	 WCMX 06T3
U183	D3 39 WCMX 06	39	32	44	217	117	58	
U184	D3 40 WCMX 06	40	32	44	220	120	58	
U186	D3 41 WCMX 06	41	32	49	220	123	58	
U188	D3 42 WCMX 06	42	32	49	220	126	58	
U190	D3 43 WCMX 06	43	32	49	225	129	58	
U192	D3 44 WCMX 06	44	32	49	225	132	58	
U194	D3 45 WCMX 06	45	32	49	225	135	58	
U196	D3 46 WCMX 08	46	40	59	230	138	68	 WCMX 0804
U198	D3 47 WCMX 08	47	40	59	230	141	68	
U200	D3 48 WCMX 08	48	40	59	230	144	68	
U201	D3 49 WCMX 08	49	40	59	235	147	68	
U202	D3 50 WCMX 08	50	40	59	235	150	68	
U203	D3 51 WCMX 08	51	40	59	235	153	68	
U205	D3 52 WCMX 08	52	40	59	245	156	68	
U207	D3 53 WCMX 08	53	40	59	245	159	68	
U209	D3 54 WCMX 08	54	40	59	245	162	68	
U211	D3 55 WCMX 08	55	40	59	255	165	68	
U600	D4 16 WCMX 03	16	25	34	139	64	55	WCMX 0302
U602	D4 17 WCMX 03	17	25	34	143	68	55	
U604	D4 18 WCMX 03	18	25	34	148	72	55	
U606	D4 19 WCMX 03	19	25	34	152	76	55	
U608	D4 20 WCMX 04	20	25	34	158	80	55	WCMX 0402
U610	D4 21 WCMX 04	21	25	34	162	84	55	
U612	D4 22 WCMX 04	22	25	34	166	88	55	
U614	D4 23 WCMX 04	23	25	34	171	92	55	
U616	D4 24 WCMX 05	24	25	34	175	96	55	WCMX 0503
U618	D4 25 WCMX 05	25	25	34	180	100	55	
U620	D4 26 WCMX 05	26	25	34	184	104	55	
U622	D4 27 WCMX 05	27	25	34	189	108	55	
U624	D4 28 WCMX 05	28	25	34	194	112	55	
U626	D4 29 WCMX 05	29	25	34	198	116	55	
U628	D4 30 WCMX 06	30	32	44	209	120	58	 WCMX 06T3
U631	D4 31 WCMX 06	31	32	44	215	124	58	
U632	D4 32 WCMX 06	32	32	44	219	128	58	
U633	D4 33 WCMX 06	33	32	44	223	132	58	
U634	D4 34 WCMX 06	34	32	44	227	136	58	
U635	D4 35 WCMX 06	35	32	44	231	140	58	
U636	D4 36 WCMX 06	36	32	44	235	144	58	
U637	D4 37 WCMX 06	37	32	44	239	148	58	
U638	D4 38 WCMX 06	38	32	44	241	152	58	
U639	D4 39 WCMX 06	39	32	44	245	156	58	
U640	D4 40 WCMX 06	40	32	44	250	160	58	

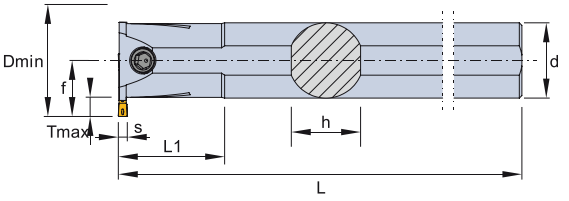




SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)						KULLANILAN UÇ
		L	Tmax	h	b	f	s	
D658	1212 2C-R JD KORLOY	125	16	12	12	12	2	2C JD KORLOY
D660	1616 2C-R JD KORLOY	125	16	16	16	16	2	
D662	2020 2C-R JD KORLOY	125	16	20	20	20	2	
D664	2525 2C-R JD KORLOY	150	16	25	25	25	2	
D666	3232 2C-R JD KORLOY	170	18	32	32	32	2	
D667	1212 3C-R JD KORLOY	125	18	12	12	12	3	3C JD KORLOY
D668	1616 3C-R JD KORLOY	125	18	16	16	16	3	
D670	2020 3C-R JD KORLOY	125	18	20	20	20	3	
D672	2525 3C-R JD KORLOY	150	18	25	25	25	3	
D674	3232 3C-R JD KORLOY	170	20	32	32	32	3	
D675	1616 4C-R JD KORLOY	125	18	16	16	16	4	4C JD KORLOY
D676	2020 4C-R JD KORLOY	125	18	20	20	20	4	
D678	2525 4C-R JD KORLOY	150	18	25	25	25	4	
D680	3232 4C-R JD KORLOY	170	20	32	32	32	4	
D682	2020 5C-R JD KORLOY	125	18	20	20	20	5	5C JD KORLOY
D684	2525 5C-R JD KORLOY	150	24	25	25	25	5	
D686	3232 5C-R JD KORLOY	170	24	32	32	32	5	
D687	2525 6C-R JD KORLOY	150	24	25	25	25	6	6C JD KORLOY
D687-1	3232 6C-R JD KORLOY	170	24	32	32	32	6	

İç Çap Kanal Kateri





SİPARİŞ KODU	ÜRÜN KODU	ÖLÇÜLER (mm)								KULLANILAN UÇ
		Dmin	Tmax	L	L1	d	h	f	s	
K600	S16Q 2C JD KORLOY	20	4.90	180	35	16	15	12.5	2	2C JD KORLOY
K602	S20Q 2C JD KORLOY	25	5.70	180	35	20	18	15.5	2	
K603	S25R 2C JD KORLOY	31	5.70	200	35	25	23	18.6	2	
K604	S20Q 3C JD KORLOY	25	6	180	35	20	18	15.8	3	
K606	S25R 3C JD KORLOY	31	6.70	200	40	25	23	19	3	3C JD KORLOY
K608	S32S 3C JD KORLOY	37	6.70	250	45	32	30	21.5	3	
K609	S40T 3C JD KORLOY	45	7.40	300	60	40	38	27	3	
K610	S20Q 4C JD KORLOY	25	6	180	35	20	18	15.8	4	
K612	S25R 4C JD KORLOY	31	6	200	40	25	23	19	4	4C JD KORLOY
K614	S32S 4C JD KORLOY	37	6	250	65	32	30	21.5	4	
K616	S40T 4C JD KORLOY	45	7.40	300	60	40	38	27	4	
K618	S25R 5C JD KORLOY	31	7	200	40	25	23	19.4	5	
K620	S32S 5C JD KORLOY	37	7	250	60	32	30	21.5	5	5C JD KORLOY
K622	S40T 5C JD KORLOY	45	7.40	300	60	40	38	27	5	

TORK CİVATALAR / Torx Screws



TC 090
M1.6
T6



TC 051
M1.8
T6 / 54 Ncm



TC 058
M2
T6 / 65 Ncm



TC 059
M2.2x5
T7 / 85 Ncm



TC 060
M2.2x5.5
T8 / 130 Ncm



TC 063
M2.5x7
T8 / 135 Ncm



TC 065
M3x7
T8 / 235 Ncm



TC 066
M3x10
T8 / 240 Ncm



TC 068
M3.5x6
T15 / 140 Ncm



TC 070
M3.5x8.5
T15 / 350 Ncm



TC 072
M3.5x11
T15 / 355 Ncm



TC 074
M4x10 (K.BAŞLI)
T15 / 500 Ncm



TC 075
M4x10 (K.BAŞLI)
T15 / 500 Ncm



TC 078
M4x11 (B.BAŞLI)
T15 / 520Ncm



TC 080
M4.5x11
T15 / 760 Ncm



TC 083
M5x12
T20 / 1050 Ncm

ALTLIKLAR / Underlay Plate



TA 010
TPKN 16



TA 012
TPKN 22



TA 014
DNMG 15



TA 015
CCMT 09



TA 016
CNMG 12



TA 017
CNMG 19



TA 018
TNMG 16



TA 019
MTJNR



TA 020
WNMG 08



TA 021
WNMG 06



TA 022
CNMG 16



TA 030
DCMT 11



TA 032
VCMT 16



TA 034
VBMT 16



TA 040
16'LIK IR-ER



TA 045
MTJNR 22



TA 050
SNMG 12



TA 046
KNUX 16 (SAĞ)



TA 048
KNUX 16 (SOL)

BASKI KEPLERİ / Clamp



BK 018
CNMG 19



BK 020
D TİPİ



BK 021
CNMG 16



BK 022
MTJNR 16



BK 023
MTJNR 22

BK 024
D TİPİ (KÜÇÜK)

BK 026
MWLNR 08

BK 028
KNUX (SAĞ)

BK 030
KNUX (SOL)

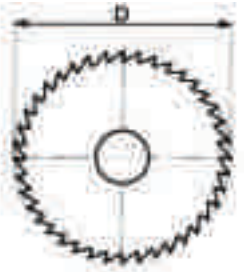
BK 031
KNUX (SAĞ)

BK 032
KNUX (SOL)

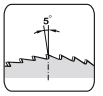
BK 036
TPKN 16

BK 038
TPKN 22









HSS

DIN 1837A

D x S	D	Z (Diş Sayısı)
25X0,4	8	48
25X0,6	8	48
25X1,0	8	48
25X1,2	8	48
25X1,5	8	48
25X1,6	8	48
25X2,0	8	48
32X1,0	8	48
32X1,2	8	48
32X1,5	8	48
32X1,6	8	48
32X2,0	8	48
32X4,0	8	32
32X5,0	8	32
40X0,2	10	128/160
40X0,25	10	100/160
40X0,3	10	100/160
40X0,4	10	128/160
40X0,5	10	80
40X0,6	10	80
40X0,7	10	80
40X0,8	10	80
40X0,9	10	80
40X1,0	10	64
40X1,2	10	64
40X1,5	10	64
40X1,6	10	64
40X2,0	10	48
40X2,5	10	48
40X3,0	10	48
50X0,2	13	128/200
50X0,25	13	128/200
50X0,3	10/13	128/160/200
50X0,4	13	100/200
50X0,5	13	100/200
50X0,6	13	100
50X0,7	13	100
50X0,8	13	80
50X0,9	13	80
50X1,0	13	80
50X1,2	13	80

D x S	D	Z (Diş Sayısı)
50X1,5	13	64
50X1,6	13	64
50X2,0	13	64
50X2,5	13	64
50X3,0	13	48
50X4,0	13	48
50X5,0	13	48
63X0,2	10/13/16	128/200
63X0,25	13/16	150/200
63X0,3	10/13/16	128/200
63X0,4	10/13/16	128/200
63X0,5	13/16	128/200
63X0,6	16	100
63X0,7	16	100
63X0,8	16	100
63X0,9	16	100
63X1,0	16	100
63X1,2	16	100
63X1,5	16	80
63X1,6	16	80
63X2,0	16	80
63X2,5	16	64
63X3,0	16	64
63X3,5	16	64
63X4,0	16	64
63X5,0	16	48
63X6,0	16	48
80X0,3	22	160
80X0,4	22	160
80X0,5	22	128
80X0,6	22	128
80X0,7	22	128
80X0,8	22	128
80X0,9	22	128
80X1,0	22	100
80X1,2	22	100
80X1,4	22	100
80X1,5	22	100
80X1,6	22	100
80X2,0	22	80
80X2,5	22	80

D x S	D	Z (Diş Sayısı)
80X3,0	22	80
80X3,5	22	80
80X4,0	22	64
80x5,0	22	64
80x6,0	22	64
100X0,5	22	160
100X0,6	22	160
100X0,7	22	160
100X0,8	22	128
100X0,9	22	128
100X1,0	22	128
100X1,2	22	128
100X1,5	22	128
100X1,6	22	100
100X2,0	22	100
100X2,5	22	100
100X3,0	22	80
100X3,5	22	80
100X4,0	22	80
100X5,0	22	80
100X6,0	22	64
125X0,6	22/27	160
125X0,8	22/27	160
125X1,0	22/27	160
125X1,2	22/27	128
125X1,5	22/27	128
125X1,6	22/27	128
125X2,0	22/27	64/128
125X2,5	22/27	64/100
125X3,0	22/27	100
125X3,5	22/27	100
125X4,0	22/27	100
125X5,0	22/27	80
125X6,0	22/27	80

D x S	D	Z (Diş Sayısı)
160X1,0	32	160
160X1,2	32	80/100/160
160X1,4	32	80
160X1,6	32	80/100/160
160X2,0	32	128
160X2,5	32	128
160X3,0	32	128
160X3,5	32	64/128
160X4,0	32	64/100
160X5,0	32	100
160X6,0	32	100
200X1,0	32	100/200
200X1,2	32	100/200
200X1,5	32	160/200
200X1,6	32	100/160/200
200X2,0	32	80/160
200X2,5	32	160
200X3,0	32	128
200X3,5	32	128
200X4,0	32	128
200X4,5	32	128
200X5,0	32	128
200X6,0	32	100
250X2,0	32	200
250X2,5	32	160/200
250X3,0	32	160/200
250X4,0	32	160
250X5,0	32	160
275X3,0	32	160
275X4,0	32	160
275X5,0	32	160
300X3,0	32	160
300X4,0	32	160
300X5,0	32	160

TEZGAH AKSESUARLARI

- Divizörler
- Paralel Setler
- Döner Tablalar
- Takım Sıfırlamalar
- Makina Ekipmanları
- Sinüs Açılı Tablalar
- Hassas CNC Mengeneleri
- Manyetik Tablalar
- Freze Mengeneleri
- Manyetik kaldıraçlar
- Pim Kesme Makinası
- Üniversal Takım Bilemeler
- Köşe Kırma Makinaları
- Manyetik Alma Makinaları





Elektromanyetik Güçlü Tip Tabla
(CNC İçin)



KONTROL ÜNİTESİ

CNC ve Kalıpçı Freze tezgahları için önerilir.
Pano manyetik tablanın standart aksesuarıdır.



Kullanım Şekli

Elektrik panoya, pano kablosu tablaya bağlanır ve akım sağlanır. Panodaki 'on' tuşu ile sıkma gerçekleştirilir ve kablo manyetik tabladan çıkarılır. (Şoklama sistemi) Manyetik tabla üzerindeki işlem bittikten sonra, pano kablosu tekrar tablaya bağlanır. 'off' Tuşu kullanılarak, tabla üzerindeki akım biter parça kolaylıkla alınabilir.



Tabla Özellikleri

- Çok Yüksek Tutma Kuvveti (160N/cm²)
- *220 - 380 V Enerji Aralığında Çalışır*
- *Çalışma Esnasında Enerji Tüketmez*
- *5 Farklı Yüzeyde İşleme Yapılabilir.*
- *Soketler Su Geçirmezdir.*
- *Kablo Sistemleri Yüksek Isıya Dayanıklıdır*
- *Dizaynı Tam Yalıtım Sağlayacak Şekildedir.*



Yeni Nesil Manyetik Tabla Dizaynı, Talaş'ın Tabla Üzerine Yapışma Sorununu Ortadan Kaldırmıştır.

Kod	Ölçüler	Yükseklik	Manyetik Aralığı	Çekim Kuvveti	Yakalama Kuvveti
	400 x 440 mm	61 mm	40 mm	16 Kg/cm²	19 TON
	400 x 600 mm	61 mm	40 mm	16 Kg/cm²	22 TON
	400 x 800 mm	61 mm	40 mm	16 Kg/cm²	28 TON



Marka ve Fiyat İçin İrtibata Geçiniz..

Elektromanyetik Mödüler Tip Tabla (Genel Amaçlı)



CNC, Kalıpçı Freze tezgahları, Enjeksiyon Makinaları Hızlı Bağlantı gerektiren her türlü durum için önerilir.

Mödüler Tabla Özellikleri

- Açık konumuna geldiğinde ikinci bir uyarıya kadar manyetik güç uygular.
- *Çalışma Esnasında Enerji Tüketmez*
- *220 - 380 V Enerji Aralığında Çalışır*
- Demir içerikli malzemelerde kullanıma uygundur.
- *5 Farklı Yüzeyde İşleme Yapılabilir.*
- *Titreşimi minimum seviyeye indirger.*
- *Parça ebadına göre gereken güç hesaplanarak gerektiği adet montaj yapılmalıdır.*
- *Delik işleme işlemlerinde son derece başarılıdır.*
- *Kesici takımların ömrünü uzatır.*
- *Parça bağlama süresini minimuma indirger. Pratiktir.*
- *Esnektir, çok çeşitli bağlantı operasyonalrında kullanılabilir.*
- *Konvensiyonel bağlamadan çok daha güçlüdür.*
- *Montajı basit ve kullanımı çok kolaydır.*





Elektromanyetik Düz Modül



Elektromanyetik Yuvarlak Modül





Yeni Nesil Manyetik Tabla Dizaynı, Talaş'ın Tabla Üzerine Yapışma Sorununu Ortadan Kaldırmıştır.

Kod	Ölçüler	Yükseklik	Manyetik Aralığı	Çekim Kuvveti	Yakalama Kuvveti
	Ø 120 mm	61 mm	40 mm	16 Kg/cm²	750 Kg
	150x400 mm	61 mm	40 mm	16 Kg/cm²	4 TON



Marka ve Fiyat İçin İrtibata Geçiniz..

Manyetik Tablalar

- Küçük ve ince parçalar için idealdir.
- Erezyon ve taşlama tezgahları için önerilir.
- Manyetik sıkma şekli kol iledir.
- Tipi ince çizgilidir.

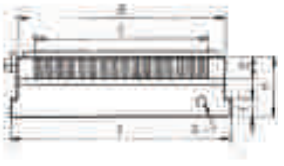

KONTROL ÜNİTESİ

VGF



19 Kgf / 680 Gaus





MODEL	EBAT	TABLA ÖLÇÜSÜ			P	G	E	F	H	Kg	Kod
		A	B	C							
VGF 1530 B	150 x 300	150	300	256	5 (1+4)	8	320	15	50	19	2015 - 162
VGF 2040 B	200 x 400	200	400	356	5 (1+4)	8	420	15	50	32	2015 - 165
VGF 2045 B	200 x 450	200	450	406	5 (1+4)	8	470	15	50	46	2015 - 166

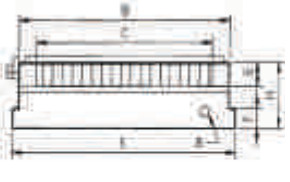
VG



18 Kgf / 650 Gaus

- Büyük ve kalın parçalar için idealdir.
- Erezyon ve taşlama tezgahları için önerilir.
- Manyetik sıkma şekli kol iledir.
- Tipi kalın çizgilidir.





MODEL	EBAT	TABLA ÖLÇÜSÜ			P	G	E	F	H	Kg	Kod
		A	B	C							
VG 407	100 x 175	100	175	146	8 (2+6)	8	187	15	50	7	2015 - 110
VG 510	125 x 250	125	250	206	8 (2+6)	8	262	15	50	12	2015 - 111
VG 612	150 x 300	150	300	256	8 (2+6)	8	318	15	50	18	2015 - 112
VG 816	200 x 400	200	400	365	8 (2+6)	8	418	15	50	31	2015 - 115
VG 1020	250 x 500	250	500	456	8 (2+6)	8	518	15	50	48	2015 - 119

VRTW



21 Kgf / 700 Gaus

- Çok küçük ve Çok ince parçalar için idealdir.
- Erezyon ve taşlama tezgahları için önerilir.
- Manyetik sıkma şekli kol iledir.
- Tipi çok ince çizgilidir.





MODEL	EBAT	TABLA ÖLÇÜSÜ			P	E	F	H	Kg	Kod
		A	B	C						
VRTW -1530 A	150 x 300	150	300	256	2,5 (1+1,5)	320	15	50	19	2015 - 132
VRTW -2040 A	200 x 400	200	400	356	2,5 (1+1,5)	420	15	50	32	2015 - 137

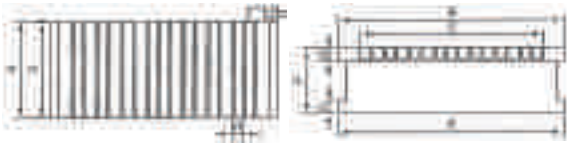
Elektromanyetik Tablalar

VLZ - WEM V - WEM Z



600 - 1200 Gaus

- VLZ tip ta•lama tezgahları için uygundur.
- VEM V tip küçük ve ince parçalarda taşlama tezgahı için uygundur.
- VEM Z tip çok güçlü CNC tezgahlarda kullanıbilir.
- Tamamının voltaj çıkışı DC 90 V dir.
- Kontrol panosu ile kullanılmalıdır.



MODEL	EBAT	TABLA ÖLÇÜSÜ			P	D	G	F	H	Kg	Kod	
		A	B	C								
VLZ 816	200 x 400	200	400	332	15 (3+12)	20	194	20	70	38	2015 - 224	
VLZ 1224	300 x 600	300	600	529	15 (3+12)	20	290	20	70	97	2015 - 227	
VEM 3060 W	300 x 600	300	600	520	4 (1+3)	25	246	20	100	135	2015 - 239	*600 G*
VEM 3060 Z	300 x 600	300	600	545	45 (10+35)	20	290	20	120	130	2015 - 259	*1200 G*

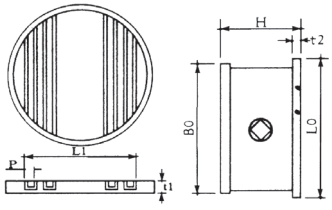
Manyetik Tabla Yuvarlak

VGD



18Kgf / 650 Gaus

- Yuvarlak manyetik tablalar taşlama tezgahlarında, erezyon tezgahlarında kullanıma uygundur.
- Küçük ve ince parçaları bağlamak için idealdir.
- Manyetik sıkma şekli kol iledir.



MODEL	B0	t1	L1	t2	L0	H	Kod
VGD 06	150	21	101	18	200	78	2015 - 150
VGD 08	200	21	137	18	200	78	2015 - 151
VGD 10	250	21	191	18	250	78	2015 - 152
VGD 12	300	21	227	18	305	78	2015 - 153

Manyetik Alıcılar

VDM 68



VDM 8 - VDM 11



VDM 9





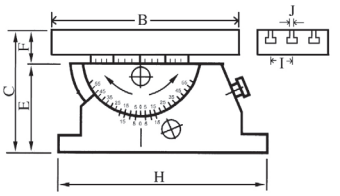
- VDM 11 Güçlü masa tipi manyetik alıcıdır. Sürekli kullanıma uygundur.
- VDM 68 Güçlü masa tipi manyetik alıcıdır. Sürekli kullanıma uygundur.
- VDM 8 Ekonomik tip manyetik alıcıdır. İşi bittiği anda elektrik ile irtibatı kesilmelidir.
- VDM 9 Büyük ve taşınması zor kalıplar için idealdir. Isı derecesi yükseldiğinde elektrik akımını keserek devreden çıkar.

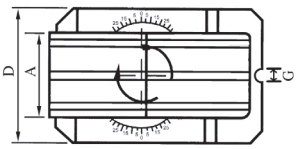
MODEL	Ölçüler	Kapasite	Yükseklik	Kg
VDM 11	200 x 280	550 VA	130	15
VDM 68	150 x 200	330 VA	100	8,5
VDM 8	160 x 110	210 VA	100	5
VDM 9	123 x 83	110 VA	83	1,8

Universal Açılı Tabla

VUA





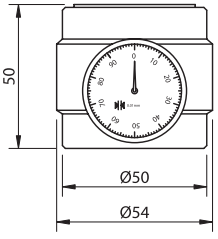


MODEL	A	B	C	D	E	F	G	H	I	J	Kg	Kod
VUA - 408	100	200	125	110	82	50	16	182	30	12	15	2003 - 055
VUA - 510	126	250	125	110	82	50	16	182	40	12	18	2003 - 056

Takım 'Z' Sıfırlama Aparatı

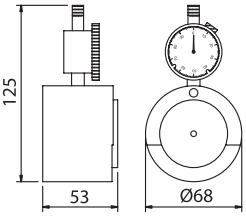
HP-50AM





HP-50B



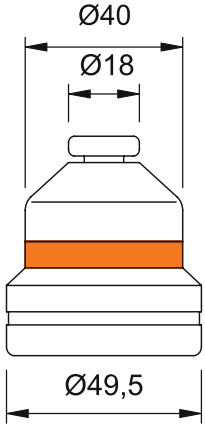


• Takım sıfırlamayı tabla üzerine yerleştirdikten sonra üzerine düz bir parça koyup saati el ile çevirerek '0' konumuna getirin. Daha sonra kesici takımı, takım sıfırlamaya değdirin. Saat '0' konumuna geldiğinde tabla ile kesici takım arası mesafe 50 mm dir.

KOD	YÜKSEKLİK	STİL	AĞIRLIK
HP-50AM	50 mm	STANDART TİP	1,1
HP-50B	50 mm	STANDART TİP	1,7

HP-50Z





HP-50Z PİL
LR4476AG13
1SET/2ADET

YÜKSEKLİK 50mm.
MANYETİK TABANLI
DOKUNDUĞUNDA KIRMIZI IŞIK YANAR
HASSASİYET 0,005mm.
YATAY VE DİKEY HİZALAMA TEK ALETTE
AĞIRLIK: 0,7 kg

HP-50ZM



HP-50ZM
LR44
1SET/2ADET

KOD	STANDART TİP	MANYETİK TABANLI
	HP-50Z	HP-50ZM

Dereceli Manyetik Tablalar

V - MSF



• Çift açılı manyetik tabla iki farklı derecede aynı anda çalışabilir.
• Küçük ve ince parçalarda taşlama ve erezyon tezgahları için idealdir.



MODEL	A	C	B	P	Derece	Kod
V-66 MSF	150	150	122	2,5	0º - 60º	2015 - 071
V-612 MSF	150	300	122	(1+1,5)	0º - 60º	2015 - 072

VLU - VLV





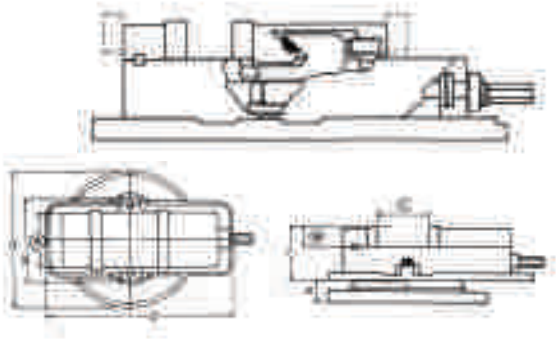
• VLU 612 B manyetik tipi kalın çizgili, manyetik sıkma şekli kol iledir.
• VLV 612 S manyetik tipi ince çizgili, manyetik sıkma şekli elektriklidir Pano ile kullanılmalıdır.
• Her iki tipde taşlama ve erezyon tezgahı için idealdir.

MODEL	B	L	P	H	L1	a	Derece	Kod
VLU 612 B	150	300	8,5 (2,5+6)	150	430	50	0º - 90º	2015 - 081
VLV 612 S	150	300	2,0 (1+1,5)	150	430	50	0º - 90º	2015 - 092

Hassas Tezgah Mengeneleri

VA - VD





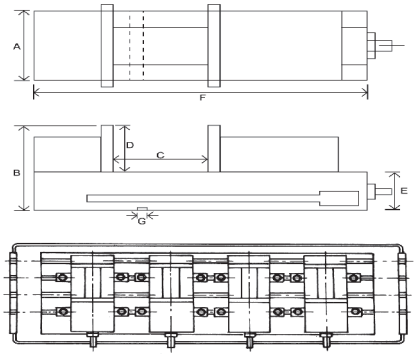
• Çeneler sulanmış ve taşlanlanmıştır.
• Çeneler değiştirilebilir
• 360º Dönerli hassas tezgah mengenesidir.

MODEL	A	C	B	a	k	c	d	e	kg	Kod
VD 690	155	230	46	450	288	118	326	40	43	1002 - 035
VD 675	160	190	49	445	295	121	296	47	42	1002 - 034
VA 5	135	112	36	359	193	101	246	32	30	1002 - 031
VA 6	155	143	46	422	209	118	288	39	42	1002 - 032
VA 8	210	220	60	553	295	145	355	45	80	1002 - 033

Hassas Tezgah Mengeneleri

VMC 4
VMC 6





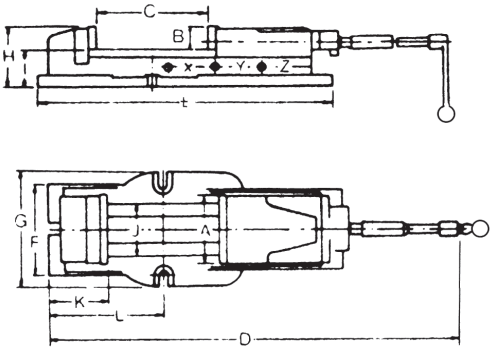
- Tüm yüzeyleri taşlanmış olması sebebi ile dik ve yatay pozisyonda bağlanabilir.
- Çeneleri sertleştirilmiş ve taşlanmıştır.

MODEL	A	C	B	F	D	Kg	Kod
VMC 4	108	100	100	285	37	14	1002 - 185
VMC 6	156	142	120	368	46	31	1002 - 186

Pimli Hassas Tezgah Mengenesi

VJ 600



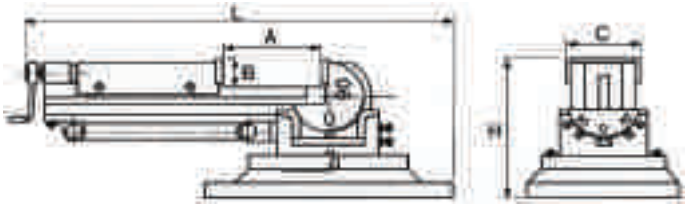


MODEL	Çene Genişliği (A)	Açma Kapasitesi (C)	B	D	E	F	G	H	I	J	K	Kg	Kod
VJ - 600	154	310	56	695	540	186	255	131	78	116	90	46	1002-052

3 Açılı Tezgah Mengeneleri

VW





- Mengene 360° dönerlidir.
- Yatay ve dikey olarak 90° yatırılabilir.
- Sağ ve Sol'a 45° yatırılabilir.
- Hassas taşlanmış çeneler değiştirebilir.

MODEL	Çene Genişliği (C)	Max. Açılım (A)	B	H	L	Max. Dik Pozisyon	Kg	Kod
VW - 3	80	85	31	157	370	385	17	1002 - 080
VW - 4	110	115	38	190	497	470	33	1002 - 081
VW - 5	135	150	40	210	580	590	50	1002 - 082

2 Açılı Tezgah Mengeneleri

VWT



- Mengene 360º dönerlidir.
- Yatay ve dikey olarak 90º yatırılabilir.
- Hassas taşlanmış çeneler değiştirebilir.

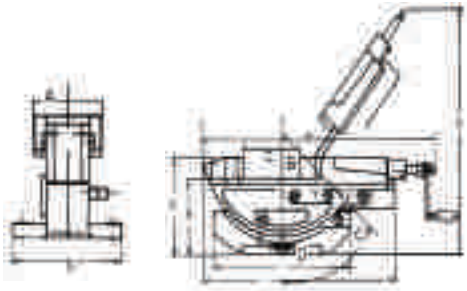
MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği	Kg	Kod
VWT - 5	130	95	46	32	1002 - 090
VWT - 6A	160	125	51	47	1002 - 091

2 Açılı Hidrolik Tezgah Mengeneleri

VHT



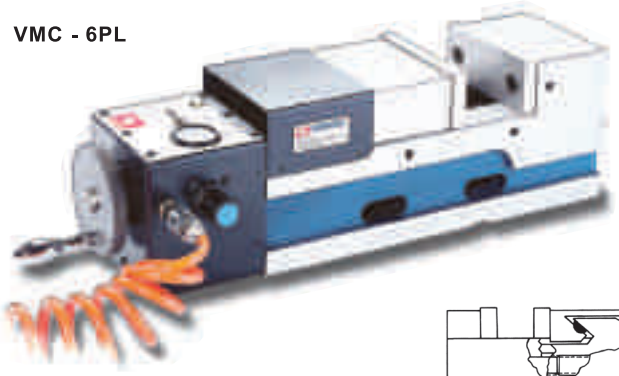
- Hidrolik mekanizması ve aşağı doğru sıkan hidrolik sistemi ile kuvvetli sıkma gerçekleştirir.
- Çeneleri taşlanmış ve sertleştirilmiştir.
- En büyük 2 açılı dereceli mengenedir.

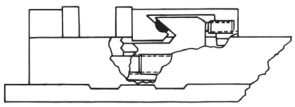


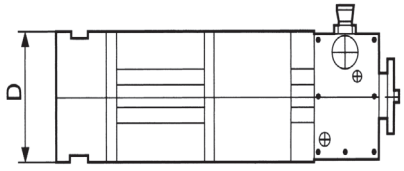
MODEL	A	Açma Kapasitesi	B	D	a	b	c	d max	e	Kuvvet	Kg	Kod
VHT 4	110	170	36	14	500	165	191	450	155	2500Kgf	32	1002-020
VHT 6	154	300	54	14	800	225	250	580	197	4500Kgf	80	1002-021

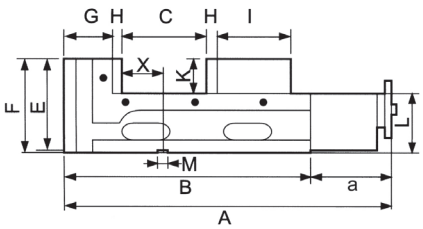
Pnömatik Hassas CNC Mengenesi

VMC - 6PL









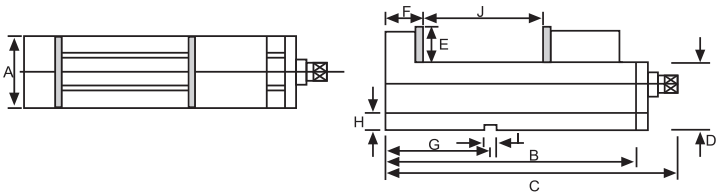
- Yüksek kaliteli çelik yüzeyler sertleştirilmiş ve taşlanmıştır.
- 1,5 sn gibi kısa bir sürede açıp kapanma özelliğine sahiptir.
- Uygulanmak istenen güç ayar tuşu ile kontrol edilip tek hareketle sıkma gerçekleştirilebilir.
- Manuel Kol sayesinde güç kontrol edilip, sıkma yapılabilir.

MODEL	Çene Genişliği (D)	Max. Açılım (J)	A	B	C	E	F	G	H	I	K	L	M	Sıkma Kuvveti	Kod
VMC - 6PL	160	250	630	490	140	160	163	86	15	120	58	105	18	6000 Kgf	4005 - 072

Hidrolik Tezgah Mengenesi (Güçlü Tip)

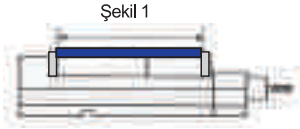
VMC HV



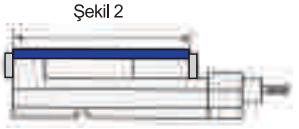


- Hidrolik mekanizması ve aşağı doğru sıkan hidrolik sistemi ile kuvvetli sıkma gerçekleştirir.
- Tüm yüzeyleri taşlanmış ve sertleştirilmiştir.
- Tüm yüzeyleri taşlanmış olması sebebi ile dik ve yatay pozisyonda bağlanabilir.
- Aşağıdaki şekillerde 4 ayrı biçimde çeneler değiştirilerek bağlama alanı genişletilir.

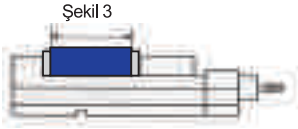
Şekil 1



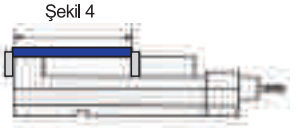
Şekil 2



Şekil 3



Şekil 4



MODEL	A	B	C	D	E	F	G	Şekil 1	Şekil 2	Şekil 3	Şekil 4	Kuvvet	K g	K o d
VMC 130 HV	131	405	535	95	55	85	150	290	380	180	240	5000Kgf	40	4005-061
VMC 160 HV	161	495	625	105	58	100	165	360	470	240	320	6500Kgf	58	4005-062
VMC 200 HV	201	570	700	110	63	108	190	420	540	280	360	8000Kgf	87	4005-063

Hidrolik Tezgah Mengenesi (Güçlü Tip)

VHO





- Hidrolik mekanizması ve aşağı doğru sıkan hidrolik sistemi ile kuvvetli sıkma gerçekleştirir.
- Çeneleri taşlanmış ve sertleştirilmiştir.
- Pimli hidrolik mengene bağlama şekli çok seridir.

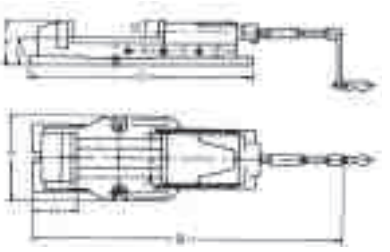
MODEL	Çene Genişliği	Açma Kapasitesi	B	C	D	E	F	G	H	I	K	h	Kuvvet	K o d
VHO 5	130	220	570	130	190	505	180	160	250	105	260	55	3500Kgf	1002-220
VHO 6	160	300	625	160	240	625	208	196	300	125	320	58	4000Kgf	1002-221
VHO 8	200	310	725	200	280	700	265	240	360	165	365	63	6000Kgf	1002-228

Hidrolik Tezgah Mengenesi (Ekonomik Tip)

VH



- Çeneler sertleştirilmiş ve taşlanmıştır.
- Hidrolik pimli hidrolik mengene 360° Dönerli ekonomik tiptir.



MODEL	A	Açma Kapasitesi	B	C	D	F	G	H	Kuvvet	k g	KOD
VH 4	108	175	36	525	440	95	58	95	2500Kgf	28	1002 - 001
VH 5	132	220	48	670	550	120	70	107	4500Kgf	47	1002 - 002
VH 6	151	300	52	800	620	135	82	117	4500Kgf	63	1002 - 003

Pimli Hassas Taşlanmış Mengeneler

VMV



- Mengene yatay ve dikey bağlama yapılabilir.
- Her yüzeyi taşlanmıştır.
- Hassasiyeti 0.005'dir.
- Malzeme sertliği 56-58 Hrc'dir.

MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği	Tam Boy	Kod
VMV - 15	36	40	20	100	2003 - 010
VMV - 20	48	75	30	150	2003 - 011
VMV - 25	63	90	35	170	2003 - 012
VMV - 30	73	100	35	190	2003 - 013
VMV - 35	88	125	45	225	2003 - 014
VMV - 40	98	125	45	230	2003 - 015
VMV - 50	125	150	50	287	2003 - 016
VMV - 60	150	200	50	330	2003 - 017

Pimli Hassas Dereceli Taşlanmış Mengeneler

SVB



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği	Tam Boy	Kod
SVB - 20	48	80	30	155	2003 - 030
SVB - 25	63	90	35	175	2003 - 031
SVB - 30	73	90	35	180	2003 - 032

- Maksimum 45º açıda çalışabilir.
- Her yüzeyi taşlanmıştır.
- Hassasiyeti 0.005'dir.
- Malzeme sertliği 56-58 Hrc'dir.

Vidalı Hassas Dereceli Taşlanmış Mengeneler

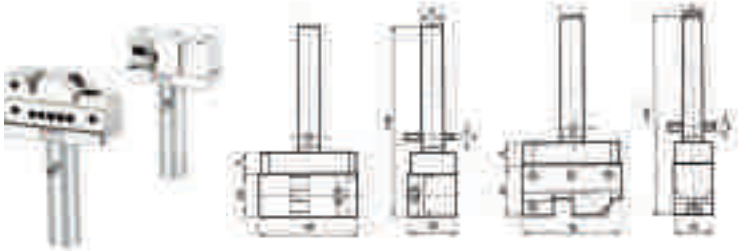
SVD



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği	Tam Boy	Kod
SVD - 200	48	60	25	155	2003 - 040
SVD - 250	63	68	30	176	2003 - 041
SVD - 300	73	72	30	180	2003 - 042

- Maksimum 45º açıda çalışabilir.
- Her yüzeyi taşlanmıştır.
- Hassasiyeti 0.005'dir.
- Malzeme sertliği 56-58 Hrc'dir.

Elektrod Mengenesi (EDM)



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği	Kod
VEH - 20	25	20	10	2008-001
VMV - 10	25	20	10	2003-001

- VEH 20 saplı elektrod mengenesidir.
- VMV 10 yanlız mengenesidir.

Vidalı Hassas Taşlanmış Mengeneler

V-VE



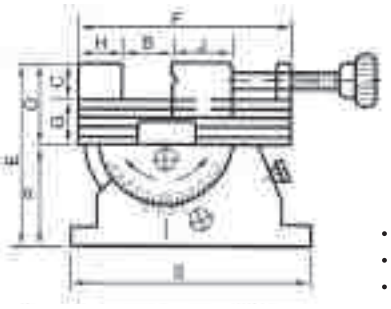
MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği	Tam Boy	Kod
V-VE 20	60	32	25	90	2003 - 080
V-VE 25	70	80	30	160	2003 - 081
V-VE 30	73	95	32	175	2003 - 082

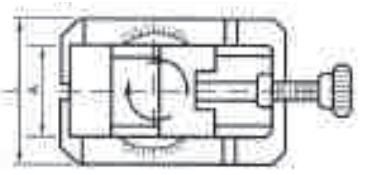
- Mengene yatay ve dikey bağlama yapılabilir.
- Her yüzeyi taşlanmıştır.
- Hassasiyeti 0.005'dir.
- Malzeme sertliği 56-58 Hrc'dir.

Universal Çok Açılı Hassas Taşlanmış Mengeneler

VUA







- Mengene 360º dönerlidir.
- Her yüzeyi taşlanmıştır.
- Hassasiyeti 0.003'dür.
- Her açıda çalışabilir, yatay 60º - dikey 45º

MODEL	A	B	C	E	F	G	H	J	L	O	P	S	Kod
VUA - 3	70	80	31	158	173	32	32	45	110	63	75	182	2003 - 050
VUA - 4	88	110	35	166	200	32	36	56	110	67	99	182	2003 - 051

Vidalı Hassas Taşlanmış Mengeneler

- Mengene yatay ve dikey bağlama yapılabilir.
- Her yüzeyi taşlanmıştır.
- Hassasiyeti 0.005'dir.
- Malzeme sertliği 56-58 Hrc'dir.

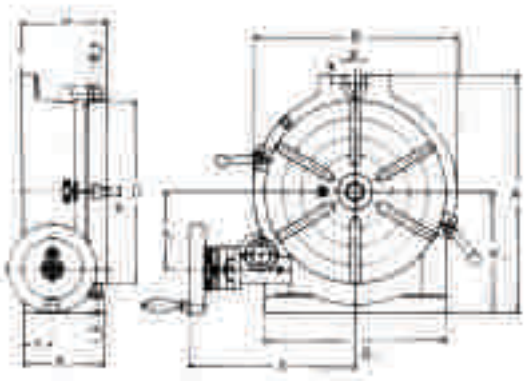
VDV



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği	Tam Boy	Kod
VDV - 20	48	60	25	155	2003 - 020
VDV - 25	63	75	30	176	2003 - 021
VDV - 30	73	71	30	181	2003 - 022
VDV - 35	88	125	38	250	2003 - 023
VDV - 40	98	125	38	250	2003 - 024

Yatay Dikey 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

MODEL	D	A 1	H	A	B	e	Mors	H 1	Ayna Çapı	K g	KOD
HV 4	110	58	72	138	115	11	MT-2	85	100	7,5	1001-000
HV 6	150	78	80	205	160	11	MT-2	100	125	13	1001-001
HV 8	205	100	102	265	220	14	MT-3	135	160	28	1001-002
HV 10	254	106	109	321	280	14	MT-3	165	200	37	1001-003
HV 12	305	123	125	388	330	16	MT-4	195	250	63	1001-004
HV 14	353	123	125	445	380	16	MT-4	230	300	81	1001-005
HV 16	406	128	130	503	430	16	MT-4	255	400	122	1001-006

Döner Tabla Aksesuarları

Divizör Plakalar



KOD	UYGUN OLDUĞU MODEL	AĞIRLIK (kg)
DP-1	HV-4, HV-6, VU-100,150, VUT-6	1.4
DP-2	HV-8, VU-200	4.5
DP-3	HV -10,12,14,16, VUT-10-12	4.6
DP-4	CS -6,8	4.6
DP-5	VU -300	4.6

Karşı Punta



KOD	AYAR ARALIĞI		UYGUN OLDUĞU MODEL	BRÜT AĞIRLIK (kg)
	EN YÜKSEK	EN DÜŞÜK		
TS-1	108	80	HV-4, HV-6, VSI-4, VSI-5, BS-0, VUT-6, VU-100, VU-150	3.9
TS-2	145	115	BS-1, CC-6 CS-6, HV-8	5.5
TS-3	200	130	CS-8, HV-10, HV-12, CC-8, VUT-10, VUT-12, VU-200	8.1
TS-4	260	190	HV-14 HV-16	11.9

VU Tip Dereceli Döner Tablalar

VU 150
VU 200



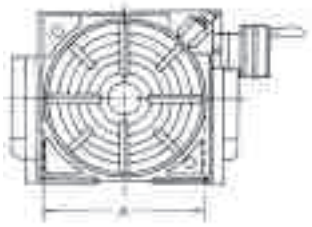


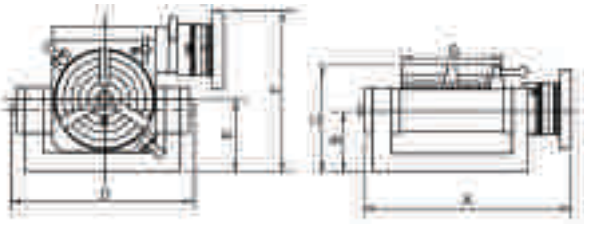
VU 300

• VU 150 Ayna Çapı 160 mm'dir.

• VU 200 Ayna Çapı 200 mm'dir.

• VU 300 Ayna Çapı 250 mm'dir.





• Tabla eğilim mesafesi 90° dir. • Dişli oranı 90:1

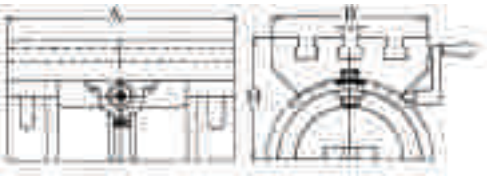
• Güçlü tip

MODEL	A	B	C	D	E	F	G	Kg	Kod
VU 150	266	75	140	246	90	216	150	21	1001 - 012
VU 200	429	111	177	432	141	283	205	50	1001 - 013
VU 300	300	185	370	208				93	1001 - 010

Sinüs Dereceli Tablalar

VP





• Öne ve Arkaya ölçü cetveli ile 45° açı verilebilir.
• Kalıpçı freze ve CNC için uygundur.

MODEL	TABLA			T Kanal	Kg	Kod
	A	B	H			
VP 180	185	132	95	13	7,5	1004 - 089
VP 250	255	180	136	116	22,5	1004 - 090
VP 380	380	255	181	16	69	1004 - 091
VP 600	600	300	202	16	100	1004 - 092

VP - S (Dereceli)





• Öne ve Arkaya ölçü cetveli ile 45° açı verilebilir.
• Kalıpçı freze ve CNC için uygundur.
• 360° dönerlidir.

MODEL	TABLA			T KANAL			Kg	Kod
	A	B	H	e	C	D		
VP 250 S	243	230	177	10	50	90	40	1004 - 100
VP 380 S	360	270	233	12	68	127	76	1004 - 101

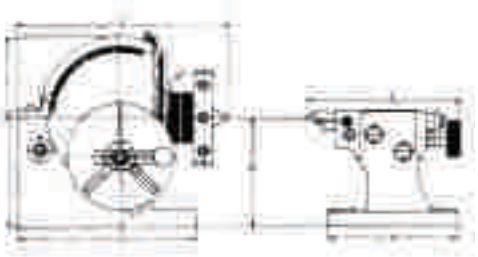
BS Tip Üniversal Divizörler

BS 0 - BS 1



BS 0 J - BS 1 J



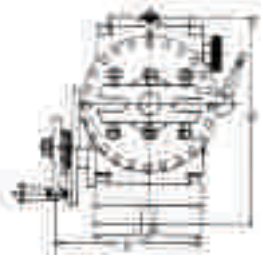




Standart Aksesuarlar







- BS Tip üniversal divizördür
- İstenilen açıdan işleme yapılabilir.
- Dikey 10º Yatay 90º altında kitlenebilir.
- Kol bir tur çevrildiğinde 9º döner.
- Kol 40 tur çevrildiğinde 360º'i tamamlamış olur
- Dişli oranı 40:1

BS 0 Ayna Çapı 100 mm'dir.
BS 1 Ayna Çapı 125 - 160 mm'dir.

MODEL	A	B	H	h	a	KOD
BS 0	189	140	173	100	160	1001-050
BS 1	293	156	220	128	207	1001-051

MODEL	A	B	H	h	a	KOD
BS 0 - J	189	140	173	100	160	1001-053
BS 1 - J	293	156	220	128	207	1001-054

BS 2 Tip Üniversal Divizörler

Standart Aksesuarlar

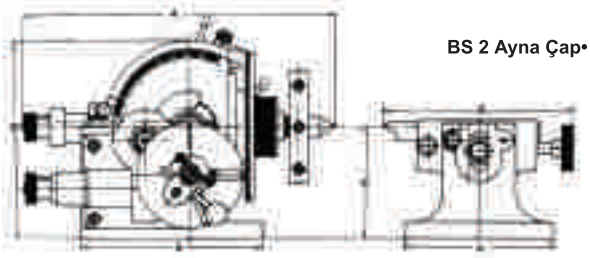
BS 2



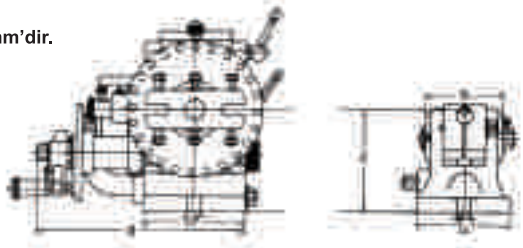


BS 2 J





BS 2 Ayna Çap• 200 mm'dir.



- BS Tip üniversal divizördür
- İstenilen açıdan işleme yapılabilir.
- Dikey 10º Yatay 90º altında kitlenebilir.
- Kol bir tur çevrildiğinde 9º döner.
- Kol 40 tur çevrildiğinde 360º'i tamamlamış olur
- Dişli oranı 40:1
- Arka kısmındaki malafası sayesinde tezgahtan hareket alarak komplike çalışabilir. Dişli açılabilir.

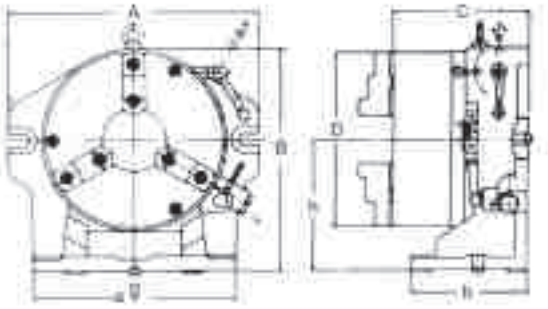
MODEL	A	B	H	h	a	KOD
BS 2	365	272	236	132,7	213	1001-052

MODEL	A	B	H	h	a	KOD
BS 2 J	365	272	236	132,7	213	1001-055

Yatay Dikey İndex Divizör

CC 6 - CC 8





CS 6 Ayna Çap• 160 mm'dir.
CS 8 Ayna Çap• 200 mm'dir.





- Bölüntülü 7 ad. plakaya sahiptir.
- 180 - 120 - 90 - 60 - 45 - 30 - 15º'lerde sabitlenerek çalışabilir.
- Çalışma şekli manueldir.
- Dişli oranı 90:1

MODEL	A	B	C	D	a	b	h	g	Delik Ölçüsü	kg	KOD
CC 6	260	218	156,2	167	220	130	123	16	36	36	1001 - 062
CC 8	312	257	173,3	200	258	148	155	16	63	51	1001 - 063

Yatay Dikey Süper İndex Divizör

CS 6
CS 8

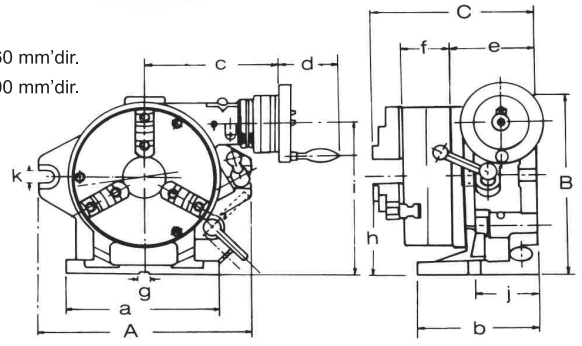




Standart Aksesuarlar



CS 6 Ayna Çapı 160 mm'dir.
CS 8 Ayna Çapı 200 mm'dir.



Özel Aksesuarlar





- Standart döner tabla aksesuarı sayesinde döner tabla olarak kullanılabilir.
- Bölüntülü 7 ad. plakaya sahiptir.
- 180 - 120 - 90 - 60 - 45 - 30 - 15º'lerde sabitlenerek çalışabilir.
- Dişli oranı 90:1

MODEL	A	B	C	a	b	c	d	e	f	g	h	i	j	k	kg	KOD
CS 6	250	235	221	220	150	184	82	112	66	16	123	186	80	18	50	1001 - 060
CS 8	310	285	243	225	160	201	82	125	75	16	155	232	90	18	79	1001 - 061

Mekanik Proplar

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 5mm mesafededir.

Işıklı ve Işıklı Sesli Proplar

VPS 20 (Işıklı Prop)



VPS 20 B (Işıklı - Sesli Prop)



- Işıklı ve ışıklı sesli proplar iş parçası kenarı ve takım merkezi arasındaki mesafeyi ışık veya ses yardımı ile bulmak için kullanılır. iş parçası manyetik yüklü olmamalıdır.



MODEL	D	d1	d2	L	l1	l2	Gram	Kod
VPS 20	20	16	10	157	77	35	320	3402 - 003
VPS 20 B	20	18	10	160	79	41	350	3402 - 001

Manyetik Seperatör

VMS 9 B



VMS 7 B



MODEL	Boy x En x Yüks.	Kg	Kod
VMS 7 B	180 x 170 x 75	2,7	2015 - 450
VMS 9 B	239 x 220 x 65	4,0	2015 - 451

- Manyetik seperatörler plastik enjeksiyon makinalarının ham madde giriş bölümüne monte edilip, plastik içerisindeki metal parçaları üzerine çekerek hammaddeden ayrışarak temizlenmesini sağlar.

Büyüteçli Lamba



KOD	AĞIRLIK (kg)
VHL-30TEB	3.5
VHL-30MEB	2.9
VHL-30LEB	2.9

Tezgah Lambaları



KOD	KOL UZUNLIĞI L x	AĞIRLIK (kg)
VHL-300L	430x400	2.4
VHL-300M	250x200	2.1
VHL-300S	1 DİRSEK	2.3

Manyetik Tabanlı Ürünler (Manyetik Ayaklar)



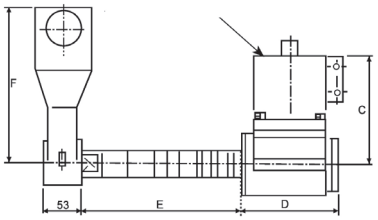


Üniversal Freze Başlıkları

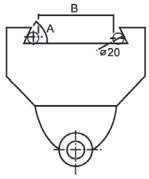
VRA NT-40



- VRA Tip yanlızca üniversal tarama başlığıdır.
- VHA Tip üniversal malafası ve yatağı ile birliktedir.
- Her iki tipde 5 farklı pinol çapı çeşitleri mevcuttur.

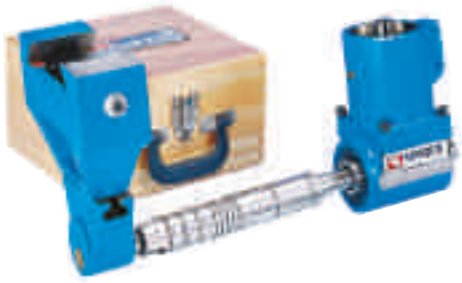


- Pinol çapları ;
  85,725 - 2 / 3 Numara kalıpçı frezeler.
  100-105 3 / 4 Numara kalıpçı frezeler.
  110-115 5 / 6 Numara kalıpçı frezeler.
  (Örn. Gentiger Kalıpçı Freze)



Sipariş esnasında model ile birlikte lütfen freze tezgahınızın pinol çapını belirtiniz.

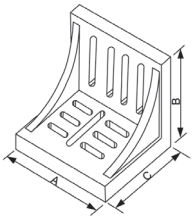
VHA NT-40



MODEL	C	D	E	F	Kod
VHA NT-40	183	190	270	233	1008 - 012
VRA NT-40	183	190			1008 - 003

Tezgah Gönyesi





- Yüksek kaliteli sfero dökümden imal edilmiştir.
- Yüzeyler hassas taşlanmış ve sertleştirilmiştir.
- 0,01 hassasiyete sahiptir.

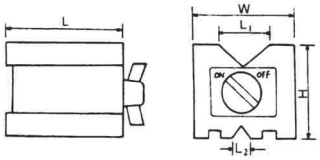
MODEL	YÜZEY ÖLÇÜLERİ			Kg	Kod
	A	B	C		
VR 6	150	126	115	3,5	1013 - 010
VR 8	202	150	126	7	1013 - 011
VR 10	250	202	126	12	1013 - 012
VR 12	300	228	202	25	1013 - 013

Manyetik 'V' Bloklar


VCP 27

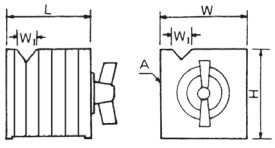

VCP 26


VCP 25



MODEL	H	W	L	L1	L2	Kg	Manyetik Kuvvet	Kod
VCP 25	95	70	102	50	20	4	70 Kgs	2015 - 501
VCP 26	73	54	70	38		2,1	30 Kgs	2015 - 510
VCP 27	73	60	125	38		3,5	35 Kgs	2015 - 511


VCP 31
VCP 32

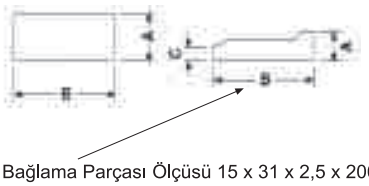


MODEL	H	W	L	W1	Manyetik Kuvvet	"V" Kuvvet	Kod
VCP 31	100	100	100	26	50 Kgs	25 Kgs	2015 - 530
VCP 32	150	150	150	32	140 Kgs	50 Kgs	2015 - 531

Taşlanmış Paralel Setler

VP 100





18 Parçalı taşlanmış paralel set

Bağlama Parçası Ölçüsü 15 x 31 x 2,5 x 200 mm 2 adetdir.

Kod: 1004 - 001

A	B	L	Adet
5	16	100	2
6	18	100	2
8	24	100	2
10	30	100	2

A	B	L	Adet
12	36	150	2
14	48	150	2
18	60	150	2
22	62	150	2

VP 128 A





28 Parçalı taşlanmış paralel set

Kod: 1004 - 020

W	H	L	Adet
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

W	H	L	Adet
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 Üniversal Bileme Makinası



Spindle 3600 Rpm
Motor 1/3 Hp
Max. pens çapı 18mm

Standart Aksesuarlar
- EKR Taşlama Taşı
- 5 Adet Pens
  4 - 6 - 8 - 10 - 12
- Taş Düzeltme Elması
- Aydınlatma Lambası
- Taş Bağlama Ekipmanı

• U2 Pantoragraf bileme makinası ince ve hassas işlemlerde elmas pantoraf kalemleri üzerinde yapılacak her türlü bileme ve şekil verme işlemleri için dizayn edilmiştir.



U2 - E
Freze Bileme Aparatı



U2 - T
Matkap Bileme Aparatı



U2 Bileme Pensleri



U2 - D
Elmas Çanak Taş

Uç Profilleri



Motorlu Pim ve Zımba Taşlama Kademe Boy Ayar Aparatı

V - PGM

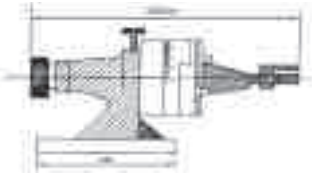


- Taşlama makinasına bağlanarak kullanılır.
- Taşlama çapı 1,5 - 25 mm'dir.
- Boy mesafesi 20 - 120 mm'dir.
- Form verme ve radius işlemleri için idealdir.
- Çift ruleli ünite uzun pim ve zımba taşlamak içindir.

Taşlama Taşına Form Verme Aparatı

V - TDB





- Satıh taşlama tezgahlarında taşlama taşına açı ve radius vermek için kullanılır
- Toplam 360º dönme açısı ile eşit 4 parça bölümlüdür (4x90º)
- Her çizgi arası 6 dakikadır.

Zımba Kademe ve Form Verme Aparatı

V - PB





- 2 Eksen dönüş hareketi ile 360º eksenel dönüş yapabilir.
- Eksantirik 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.

Dijital Koordinat Okuma Sistemi



Freze tezgahları için 3 eksen
Torna ve taşlama tezgahları için 2 eksen
Dijital Koordinat Okuma Sistemleri
Eksen cetvelleri ayrıca temin edilebilir.

Eksen Motoru



Freze tezgahları için ekstra güçlü tip SX500 - SY500 - SZ500 olarak üç ayrı çeşittir.
Sipariş esnasında lütfen hangi eksende kullanılacağını belirtiniz. (X-Y-Z)

Otomatik Yağlama Sistemi



Otomatik yağlama sistemi;
Kalıpçı freze, Eksantrik presler için kullanıma uygundur.
30 dakikada bir içindeki dişli çark sayesinde otomatik olarak yağlama yapar.

Manuel Yağlama Pompası



Manuel yağlama pompası; Kalıpçı freze, Eksantrik presle için kullanıma uygundur. El ile manuel olarak istenilen sürede yağlama yapılabilir.

Pim Kesme Makinası

VEG 500 G



MODEL	VEC 500 G
Kesme Çapı	1 - 25 mm
Kesme Boyu	0 - 300 mm
Devir	3600 Rpm
Motor Gücü	3/4 HP - 110 / 220V
Kg	105,5 Kg
Makina Ölçüleri	430 x 360 x 500

Kesme Şekli



Sıkma Şekli



• Pim kesme makinası CE emniyetlidir. Kapak kaldırıldığında swich otomatik olarak makinanın elektrik akımı keserek durmasını sağlar.
• Kesim esnasında iticinin uç kısmında oluşan çapaklar EKR taşı ile alınabilir.

Pah Kırma Makinaları

VCF 500 W



MODEL	Köşe Radius	Devir	Pah Kapasitesi	Motor	Kod
VCF 500 W	45°	3500 Rpm	0 - 3	220W	1023 - 002

VCF 500 F



MODEL	Köşe Radius	Devir	Pah Kapasitesi	Motor	Kod
VCF 500 F	45°	3500 Rpm	0 - 3	220W	1023 - 003

VCF 500



MODEL	Köşe Radius	Devir	Pah Kapasitesi	Motor	Kod
VCF 500	15°-45°	3500 Rpm	0 - 3	220W	1023 - 001

VCF 600

Köşe Kırma Elmas Uç

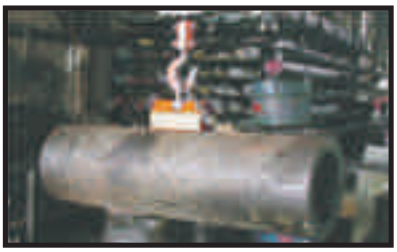


• Taşınması zor olan kalıplar için idealdir.
• Yüksek devirli ve seridir.
• Yedek aparatı sayesinde delik pah kırmada yapabilir.

MODEL	Köşe Radius	Devir	Pah Kapasitesi	Kg	Kod
VCF 600	45°	12000 Rpm	0 - 3	3.7	1023 - 005

JBT 2000 JBT 1000 JBT 600 JBT 300 JBT 100





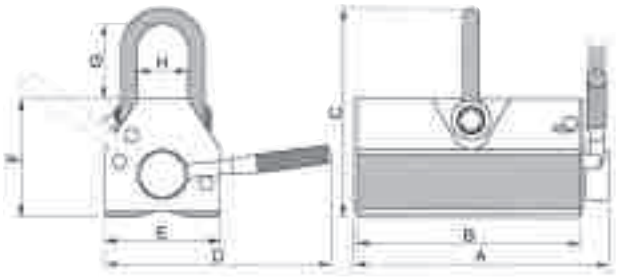




KAPALI AÇIK







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 gösterilmelidir.

MODEL	Kapasite	A	B	C	D	E	F	G	H	Kg	Kod
JBT 100	100 Kg	107	84	120	125	60	71	41	30	3	2018 - 060
JBT 300	300 Kg	180	155	156	185	90	93	51	41	9	2018 - 061
JBT 600	600 Kg	255	224	212	260	115	120	77	52	21	2018 - 062
JBT 1000	1000 Kg	280	245	286	371	165	169	97	87	54	2018 - 063
JBT 2000	2000 Kg	422	380	348	512	216	215	105	121	128	2018 - 064

Her Kaldıraç Kendi Kapasitesinin 3 Katı Ağırlığında Malzeme ile Test Edilmiştir. Verilen Değerler Dahilinde Güvenle Kullanabilirsiniz.

MODEL	Düz Malzeme		Yuvarlak Malzeme		Maksimum Uzunluk
	Max. Taşıma Kapasitesi	Min. Malzeme İnceliği	Max. Taşıma Kapasitesi	Minimum Çap	
JBT 100	100 Kg	15 mm	45 Kg	150 mm	1000 mm
JBT 300	300 Kg	25 mm	135 Kg	250 mm	1500 mm
JBT 600	600 Kg	30 mm	270 Kg	350 mm	2000 mm
JBT 1000	1000 Kg	40 mm	450 Kg	450 mm	2500 mm
JBT 2000	2000 Kg	55 mm	900 Kg	550 mm	3000 mm

2 A 100



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği
2 A 100	126	100	40

G 120



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği
G - 120	100	120	40

G 160



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği
G - 160	130	160	42

M 200



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği
M - 200	147	200	61

M 250



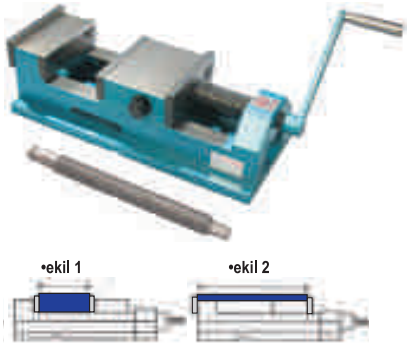
MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği
Y - 250	190	250	61

M 400



MODEL	Çene Genişliği	Max. Açılım	Çene Yüksekliği
M - 400	250	400	72

CNC 200 - CNC 300



MODEL	Çene Genişliği	Max. Açılım		Çene Yüksekliği
		Şekil 1	Şekil 2	
CNC 200	150	200	400	50
CNC 300	200	300	550	64

Matkap Mengeneleri



MODEL	Çene Genişliği	Max. Açılım
MT 100	100	100
MT 125	110	125
MT 150	140	150

Masa Mengeneleri



Çene Genişliği	
100 mm	150 mm
125 mm	175 mm
135 mm	200 mm

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Micro D
Sabit



MODEL	Tabla Ölçüleri	Tabla Yüks.	X - Y Hareketi	'T' Kanal Adedi	'T' Kanal Genişliği	Tambur Turu	Kg
Micro D	230x145	155	160x120	3	9x19	2,5	25
Micro D2	320x145	155	260x120	3	9x19	2,5	29

Micro S
Dönerli



MODEL	Tabla Ölçüleri	Tabla Yüks.	X - Y Hareketi	'T' Kanal Adedi	'T' Kanal Genişliği	Tambur Turu	Kg
Micro S	230x145	125	160x105	3	9x19	2,5	21
Micro S2	320x145	125	260x105	3	9x19	2,5	25

Micro SP
Sabit



MODEL	Tabla Ölçüleri	Tabla Yüks.	X - Y Hareketi	'T' Kanal Adedi	'T' Kanal Genişliği	Tambur Turu	Kg
Micro SP	190x125	105	115x100	3	9x19	2,5	13

Micro
Tek Yönlü Sabit



MODEL	Tabla Ölçüleri	Tabla Yüks.	X - Y Hareketi	'T' Kanal Adedi	'T' Kanal Genişliği	Tambur Turu	Kg
Micro 1	230x145	100	160	3	9x19	2,5	15
Micro 2	320x145	100	260	3	9x19	2,5	19

S
Dönerli



MODEL	Tabla Ölçüleri	Tabla Yüks.	X - Y Hareketi	'T' Kanal Adedi	'T' Kanal Genişliği	Tambur Turu	Kg
S 1	360x210	180	210x160	2	12x22	4	48
S 2	435x245	200	260x170	3	12x22	4	63
S 3	520x275	220	335x265	3	12x22	4	103
S 4	610x275	220	425x265	3	12x22	4	109
S 5	705x280	215	435x275	3	12x22	4	124
S 6	1000x325	235	700x235	5	12x22	4	232

SU
Sabit



MODEL	Tabla Ölçüleri	Tabla Yüks.	X - Y Hareketi	'T' Kanal Adedi	'T' Kanal Genişliği	Tambur Turu	Kg
SU 1	310x200	122	170x100	2	12x22	4	29
SU 2	365x220	145	215x110	2	12x22	4	45
SU 3	520x280	160	340x140	3	12x22	4	72
SU 4	610x275	200	425x265	3	12x22	4	110

MSK
PORTO
METABO

Elle Sıkma Mandren (Supra)



Sıkma Kapasitesi (mm)	Bağlantı Tipi
0-10	B12
0-10	3/8-24 UNF
0-10	1/2-20 UNF
1-13	B16
1-13	3/8-24 UNF
1-13	1/2-20 UNF
1-16	B16
1-16	B18
1-16	1/2-20 UNF
1-16	5/8-16 UNF
5-20	B22

Anahtarlı Mandren





Sıkma Kapasitesi (mm)	Bağlantı Tipi
1-16	B16
1-16	B18
1-20	B22
1-26	B24

Mandren Koniği



MK DIN 228 - B	KONİK	MK DIN 228 - B	KONİK
MK1	B10	MK3	B16
MK1	B12	MK3	B18
MK2	B10	MK3	B22
MK2	B12	MK3	B24
MK2	B16	MK4	B16
MK2	B18	MK4	B18
MK3	B12	MK4	B22
		MK4	B24

Mors Kovanı



Dış Konik	İç Konik
MK2	MK1
MK3	MK1
MK3	MK2
MK4	MK1
MK4	MK2
MK4	MK3
MK5	MK1
MK5	MK2
MK5	MK3
MK5	MK4
MK6	MK5

Döner Punta





MK	D (mm)	d (mm)	L (mm)	l (mm)	Max. İş Parça Ağırlığı
MK1	34	17	114	21,5	40
MK2	36	22	125	25,5	340
MK3	47	30	162	32	400
MK4	55	35	194	37,5	1300
MK5	70	45	240	47	2000
MK6	90	60	318	62	4000

CNC Döner Punta

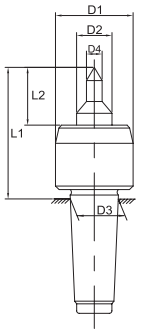




MK	D (mm)	d (mm)	L (mm)	l (mm)	Max. İş Parça Ağırlığı
MK2	36	22	128	30	270
MK3	47	30	167	37	320
MK4	55	35	207,5	51	1000
MK5	69,5	45	259	66	1600

CNC Döner Punta

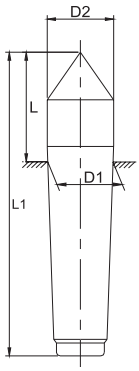




Konik	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	L1 (mm)	L2 (mm)	Parça Ağırlığı Kg
MK4	70	32	31.267	12	115	51	300
MK5	90	40	44.399	15	140	60	600

Sabit Punta

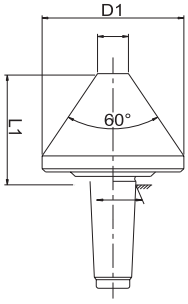




Konik	D1 (mm)	D2 (mm)	L (mm)	L1 (mm)
MK2	17.780	18	36	100
MK3	23.825	24.1	44	125
MK4	31.267	31.6	57.5	160
MK5	44.399	44.7	70.5	200
MK6	63.348	63.8	88	270

Boru Puntası





Konik	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	Devir d/d (max)	Parça Ağırlığı Kg
MK3	80	25	23.825	70	3000	300
MK3	100	32	23.825	85	2400	500
MK4	120	38	31.267	90	2400	500
MK5	120	38	44.399	90	2400	500
MK4	140	40	31,267	105	1800	600
MK5	140	40	44,399	105	1800	600
MK5	170	50	44.399	100	1500	1000

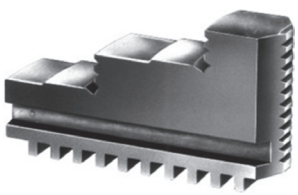
Tırnaklı Punta



3 ADET YEDEK TIRNAK İLE BİRLİKTE TESLİM EDİLİR.
MİL VE TIRNAKLARDA SERTLİK: 60-63 Hrc

Konik	d1 (mm)	d2 (mm)	d3 (mm)	d4 (mm)	TORNALAMA ÇAPI (mm) min	TORNALAMA ÇAPI (mm) max	D (mm)	L1 (mm)	L2 (mm)	L3 (mm)	TIRNAK SAYISI
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

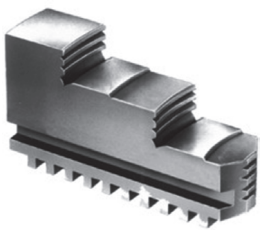
Düz Yedek Ayak Takımı



TOS
BİSON
KOMTAŞ

EBAT	
80 x 3	80 x 4
100 x 3	100 x 4
125 x 3	125 x 4
160 x 3	160 x 4
200 x 3	200 x 4
250 x 3	250 x 4
315 x 3	315 x 4
400 x 3	400 x 4
500 x 3	500 x 4
630 x 3	630 x 4
800 x 3	800 x 4

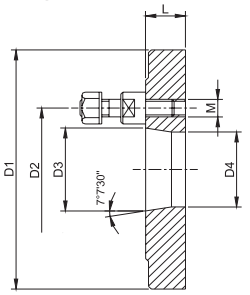
Ters Yedek Ayak Takımı



EBAT	
80 x 3	80 x 4
100 x 3	100 x 4
125 x 3	125 x 4
160 x 3	160 x 4
200 x 3	200 x 4
250 x 3	250 x 4
315 x 3	315 x 4
400 x 3	400 x 4
500 x 3	500 x 4
630 x 3	630 x 4
800 x 3	800 x 4

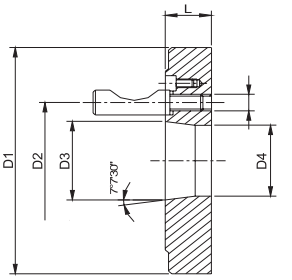
Ayna Flanşı





Camlock Ayna Flanşı

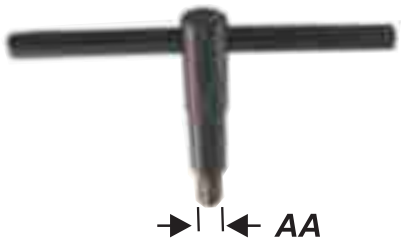




D1 (mm)	NO	D2 (mm)	D3 (mm)	D4 (mm)	L (mm)	M (mm)
160	4	85	63,525	60,6	25	M10
	5	104,8	82,563	79,4	25	M10
	6	133,4	106,375	103	25	M12
200	5	104,8	82,563	79,4	25	M10
	6	133,4	106,375	103	25	M12
	8	171,4	139,719	136	25	M16
250	5	104,8	82,563	79,4	30	M10
	6	133,4	106,375	103	30	M12
	8	171,4	139,719	136	30	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

D1 (mm)	NO	D2 (mm)	D3 (mm)	D4 (mm)	L (mm)	M (mm)
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

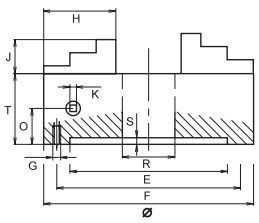
Universal Torna Aynası İçin Anahtar



EBAT	AA
80	8
100	8
125	10
160	10
200	12

EBAT	AA
250	12
315	13
400	-
500	-
630	-
800	-

3 Ayaklı Aynalar

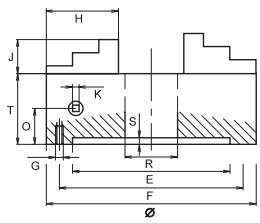




- 3 Ayaklı merkezi sıkmalı üniversal torna aynası
- Yüksek kaliteli döküm gövde
- Torna tezgahlarında, freze, divizör ve döner tablalarda kullanılır.

KOD	Ø	E H6	F±0,2	S	T	R	max d/d
TOS.IUS.	80	63	70	3	45	17	6000
TOS.IUS.	100	80	90	3	52	23	5300
TOS.IUS.	125	100	110	4	58	28	4500
TOS.IUS.	160	130	143	4	62	48	3500
TOS.IUS.	200	162	180	5	76	52	3000
TOS.IUS.	250	210	226	5	82	78	2800
TOS.IUS.	315	265	290	6	100	108	1800
TOS.IUS.	400	350	375	7	110	144	1300
TOS.IUS.	500	420	458	8	120	190	1100

4 Ayaklı Aynalar

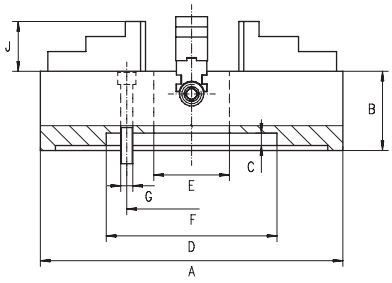


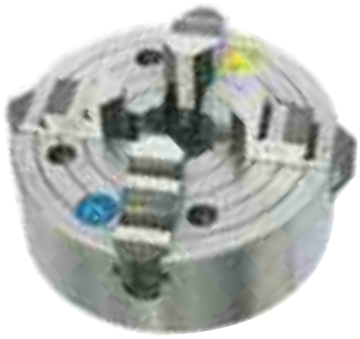


- 4 Ayaklı merkezi sıkmalı üniversal torna aynası
- Yüksek kaliteli döküm gövde
- Torna tezgahlarında, freze, divizör ve döner tablalarda kullanılır.

KOD	Ø	E H6	F±0,2	S	T	R	max d/d
TOS.IUS.	80	63	70	3	45	17	6000
TOS.IUS.	100	80	90	3	52	23	5300
TOS.IUS.	125	100	110	4	58	28	4500
TOS.IUS.	160	130	143	4	62	48	3500
TOS.IUS.	200	162	180	5	76	52	3000
TOS.IUS.	250	210	226	5	82	78	2800
TOS.IUS.	315	265	290	6	100	108	1800
TOS.IUS.	400	350	375	7	110	144	1300
TOS.IUS.	500	420	458	8	120	190	1100

Kepenkli Aynalar





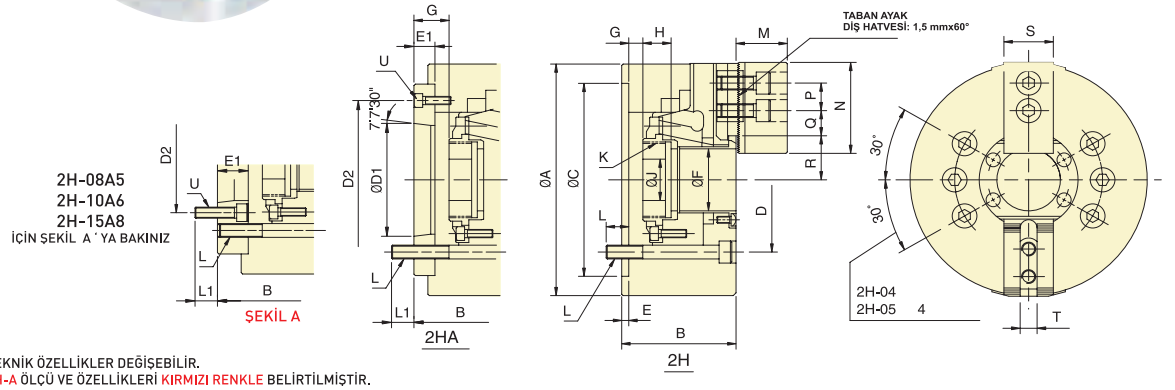
- 4 Ayaklı her bir ayak bağımsız olarak ayarlanabilir
- Yüksek kaliteli döküm gövde
- Üniversal tornalar, freze, divizör ve döner tablalarda kullanılabilir.

ØA	160	200	250	320	400	500	630	800	1000
B	65	80	90	90	95	106	118	132	150
C	5	6	6	6	8	8	10	12	15
D H7	75	80	110	140	160	200	220	250	320
E	45	56	75	95	125	160	180	210	260
F	95	112	130	165	185	236	258	300	370
G	4XM10	4XM10	4XM12	4XM16	4XM16	4XM20	4XM20	8XM20	8XM120
J	24	27	30	44	48	55	62	70	80

2 Ayaklı Açık Merkezli Hidrolik Ayna / 2H



- Açık merkezli 2 ayaklı tipdir.
- Tüm hareketli parçalar sertleştirilmiş ve taşlanmıştır.
- Ayna üzerinde yumuşak ayaklar montajlı olarak sevk edilir.
- Sert ayaklar ayrıca sipariş edilmesi gerekir, fiyata dahil değildir.
- Yüksek hassasiyetli ve yüksek mukavemetli tasarıma sahiptir.



TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.
2H-A ÖLÇÜ VE ÖZELLİKLERİ KIRMIZI RENKLE BELİRTİLMİŞTİR.

Özellik / MODEL/ADAPTÖR	Piston Stroku (mm)	Ayak Stroku (mm)	SIKMA ÇAPI (mm) max	SIKMA ÇAPI (mm) min	Max Çekme Kuvveti Kgf	Max Sıkma Kuvveti Kgf	Max Devir d / d	Atalet Moment GD² Kg	Ağırlık Kg		Uygun Silindir Modeli	Max Hidrolik Basıncı (kgf/cm ²)
2H-04	10	5.4	110	7	9.2(940)	18.9(1930)	8000	0.01	3.8		TH-536	1.6(16)
2H-05 A4			135	12	11.7(1190)	23.9(2440)	7000	0.02	6.5	7,3		2.0(20)
2H-06 A5	12	5.5	168	15	14.4(1470)	37.9(3870)	6000	0.06	11.5	13,3	TH-646	1.9(19)
2H-08 A5	16	7.4	210	13	23.1(2360)	57.2(5840)	5000	0.17	21.3	24,2	TH-852	1.9(19)
A6										22,4		
2H-10 A6	19	8.8	254	31	28.4(2900)	73.9(7540)	4200	0.31	33.5	40,5	TH-1075	1.8(18)
A8										39		
2H-12 A8	23	10.6	304	34	36.7(3740)	95.8(9780)	3300	0.70	59.7	62,7	TH-1291	1.8(18)
2H-15 A8			381	50	46.9(4790)	119.6(12200)	2500	2.42	115	129	TH-1512	1.7(17)
A11								2.34		122		

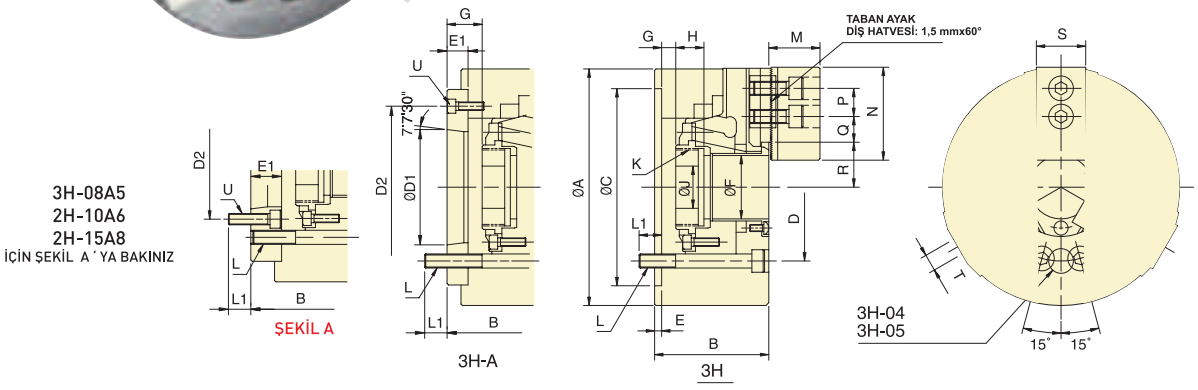
Özellik / MODEL/ADAPTÖR	A	B		C (H6)	D	D1	D2	E	E1	F	G (max)		G (min)		H	J
2H-04	110	59		85	70.6	-	-	4	-	26	3.5		-6.5		17.5	12
2H-05 A4	135	60	71	110	82.6	63.51	96		15	33	1	16	-9	6	20	
2H-06 A5	168	68	91	140	104.8	82.56	116	5		45	11	26	-1	14	15	20
2H-08 A5	210	91	109	170	133.4		104.8		23	52	14.5	37.5	-1.5	21.5	20.5	30
A6			103			106.38	150		17			31.5		15.5		
2H-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		
2H-12 A8	304	110	122					6		91	8	26	-15	3	28	50
2H-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		

Özellik / MODEL/ADAPTÖR	K (max)	L	L1		M	N	P	Q (max)	Q (min)	R (max)	R (min)	S	T	U
2H-04	M 32X1.5	4~M10	16		24	52	14	11.3	6.8	23	20.3	25	10	-
2H-05 A4	M 40x1.5		15	15	31	62		19.8	7.8	26,5	23.8			3~M6
2H-06 A5	M 55x2	6~M10	16	16	37	73	20	22.8	9.3	32	29.3	31	12	
2H-08 A5	M 60x2	6~M12	20	17	38	95	25	29.8	14.8	38,7	35	35	14	6~M10
A6				18										3~M6
2H-10 A6	M 85x2	6~M16	22		43	110	30	33.8	14.3	51	46.6	40	16	6~M12
A8				24										3~M8
2H-12 A8	M 100x2		23	25	51	130		45.8	15.8	61.3	56	50	21	
2H-15 A8	M 130x2	6~M20	30	24	63	165	43	47.3	18.2	80	74.7	62	25.5 ya da 22	6~M16
A11				28										3~M10



3 Ayaklı Açık Merkezli Hidrolik Ayna / 3H

- Açık merkezli 3 ayaklı tipdir.
- Tüm hareketli parçalar sertleştirilmiş ve taşlanmıştır.
- Ayna üzerinde yumuşak ayaklar montajlı olarak sevk edilir.
- Sert ayaklar ayrıca sipariş edilmesi gerekir, fiyata dahil değildir.
- Yüksek hassasiyetli ve yüksek mukavemetli tasarıma sahiptir.

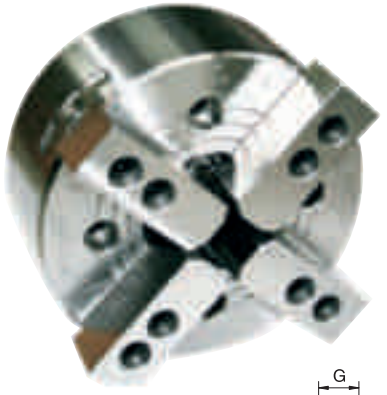


TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.
3H-A ÖLÇÜ VE ÖZELLİKLERİ KIRMIZI RENKLE BELİRTİLMİŞTİR.

Özellik / MODEL/ADAPTÖR	Piston Stroku (mm)	Ayak Stroku (mm)	SIKMA ÇAPI (mm) max	SIKMA ÇAPI (mm) min	Max Çekme Kuvveti Kgf	Max Sıkma Kuvveti Kgf	Max Devir d / d	Atalet Moment GD² Kg	Ağırlık Kg		Uygun Silindir Modeli	Max Hidrolik Basıncı (kgf/cm ²)
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)
3H-08 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)
3H-10 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)
3H-15 A11								2,39		127		
3H-18 A11			450				2000	4,78	164	178		

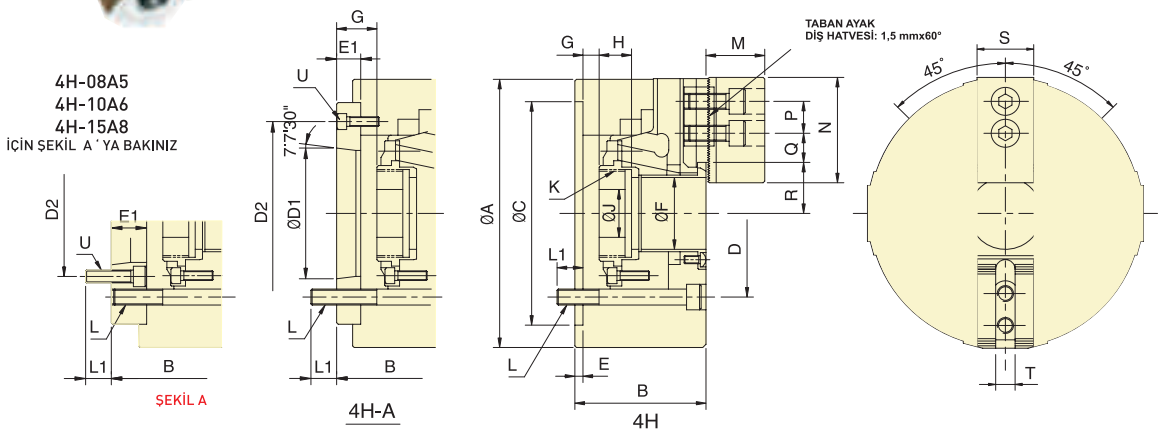
Özellik / MODEL/ADAPTÖR	A	B		C (H6)	D	D1	D2	E	E1	F	G (max)		G (min)		H	J
3H-04	110	59		85	70.6	-	-	4	-	26	3.5		-6.5		17.5	12
3H-05 A4	135	60	71	110	82.6	63.51	96		15	33	1	16	-9	6	20	
3H-06 A5	168	81	91	140	104.8	82.56	116	5		45	11	26	-1	14	19	20
3H-08 A5	210	91	109	170	133.4		104.8		23	52	14.5	37.5	-1.5	21.5	20.5	30
3H-08 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
3H-10 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
3H-15 A11			149			196.87	260		22			33		10		
3H-18 A11	450															

Özellik / MODEL/ADAPTÖR	K (max)	L	L1		M	N	P	Q(max)	Q (min)	R (max)	R (min)	S	T	U
3H-04	M 32X1.5	3~M10	16		24	52	14	11.3	6.8	23	20.3	25	10	-
3H-05 A4	M 40x1.5		15	15	31	62		19.8	7.8	265	23.8			3~M6
3H-06 A5	M 55x2	6~M10	16	16	37	73	20	22.8	9.3	32	29.3	31	12	
3H-08 A5	M 60x2	6~M12	20	17	38	95	25	29.8	14.8	387	35	35	14	6~M10
3H-08 A6				18										3~M6
3H-10 A6	M 85x2	6~M16	22		43	110	30	33.8	14.3	51	46.6	40	16	6~M12
3H-10 A8				24										
3H-12 A8	M 100x2		23	25	51	130		45.8	15.8	61.3	56	50	21	3~M8
3H-15 A8	M 130x2	6~M20	30	24	63	165	43	47.3	18.2	80	74.7	62	25.5 yada 22	6~M12
3H-15 A11				28				79.2						3~M10
3H-18 A11														



4 Ayaklı Açık Merkezli Hidrolik Ayna / 4H

- Açık merkezli 4 ayaklı tipdir.
- Tüm hareketli parçalar sertleştirilmiş ve taşlanmıştır.
- Ayna üzerinde yumuşak ayaklar montajlı olarak sevk edilir.
- Sert ayaklar ayrıca sipariş edilmesi gerekir, fiyata dahil değildir.
- Yüksek hassasiyetli ve yüksek mukavemetli tasarıma sahiptir.



TEKNİK ÖZELLİKLER DEĞİŞEBİLİR.
4H-A ÖLÇÜ VE ÖZELLİKLERİ KIRMIZI RENKLE BELİRTİLMİŞTİR.

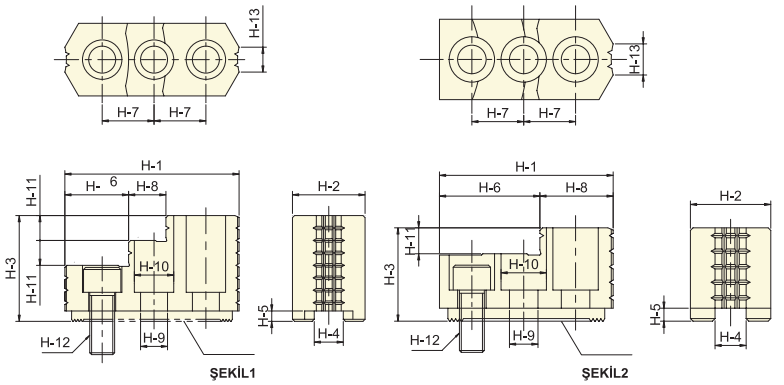
Özellik		Piston Stroku (mm)	Ayak Stroku (mm)	SIKMA ÇAPI (mm)		Max Çekme Kuvveti Kgf	Max Sıkma Kuvveti Kgf	Max Devir d / d	Atalet Moment GD² Kg	Ağırlık Kg		Uygun Silindir Modeli	Max Hidrolik Basıncı (kgf/cm ²)
MODEL/ADAPTÖR				max	min								
4H-06	A5	12	5.5	168	15	21.6(2000)	56.8(5800)	6000	0.07	12.5	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-1291	2.7(27)
4H-15	A8			381	50	71(7250)	179.8(18350)	2500	2.50	123.7	137.7	TH-1512	2.4(24)
	A11								2.42		130.7		
4H-18	A11			450				2000	4.85	170	184		

Özellik		A	B		C (H6)	D	D1	D2	E	E1	F	G (max)		G (min)		H	J
MODEL/ADAPTÖR																	
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	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		
4H-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		
4H-12	A8	304	110	122					6		91	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															

Özellik		K (max)	L	L1		M	N	P	Q(max)	Q (min)	R (max)	R (min)	S	T	U
MODEL/ADAPTÖR															
4H-06	A5	M55X2	4~M10	16	16	37	73	20	22.8	9.3	32	29.3	31	12	3~M6
4H-08	A5	M60X2	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	M85X2	4~M16	22		43	110	30	33.8	14,3	51	46.6	40	16	6~M12
	A8				24										3~M8
4H-12	A8	M100X2		23	25	51	130		45.8	15,8	61,3	56	50	21	
4H-15	A8	M130X2	4~M20	30	24	63	165	43	47,3	18.2	80	74.7	62	25,5	6~M16
	A11				28				79.2						
4H-18	A11														3~M10

Standart Sert Ayak

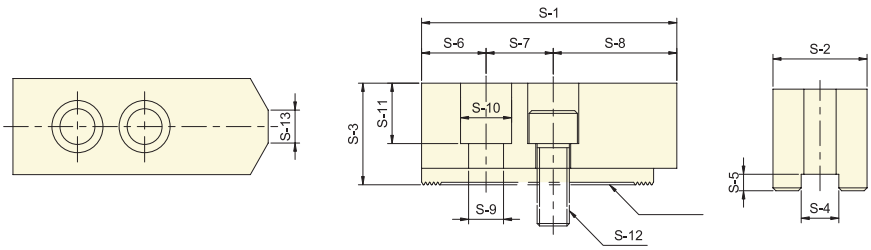




ÖLÇÜ / MODEL	H-1	H-2	H-3	H-4	H-5	H-6	H-7	H-8	H-9	H-10	H-11	H-12	H-13	Diş Hatvesi	UYGUN AYNA	Referans Şekli	2 AYAKLI SET KODU	3 AYAKLI SET KODU	4 AYAKLI SET KODU
HJ05	56	23	27.5	10	4	30.5	14	22.5	8.5	13.5	10	M8	6	1.5x60°	3H-04,3H-05	ŞEKİL-2	14140	14149	14158
HJ06	67	31	35	12		39	20	28	11	17	12	M10	10		3H-06,3P-06		14141	14150	14159
HJ08	86	35	51	14		31	25	18	13	19		M12	12		3H-08,3P-08	ŞEKİL-1	14142	14151	14160
HJ10	99.5	40	54	16	5	43	30	17			13		15		3H-10,3P-10		14143	14152	14161
HJ12H	103	50	52	21		62.5		40.5	17	25	17	M16	30		3H-12,3P-12	ŞEKİL-2	14144	14153	14162
HJ12P				18					15	22		M14			3P-12		14145	14154	14163
HJ15H	149	62	86	22	8	63	43	34	21	32	20	M20	43		3H-15,3H-18	ŞEKİL-1	14146	14155	14164
HJ15P				25.5	6										3H-15,3H-15 3P-15,3P-18-15		14147	14156	14165
HJ21	159.5	80	90	25	9	104.5	50	55			40		55	3.0x60°	3H-21,3H-24 3P-21,3P-24	ŞEKİL-2	14148	14157	14166

Standart Yumuşak Ayak





ÖLÇÜ / MODEL	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10	S-11	S-12	S-13	Diş Hatvesi	UYGUN AYNA	2 AYAKLI SET FİYAT	3 AYAKLI SET FİYAT	4 AYAKLI SET FİYAT
SJ04	52	23	23	10	4	10	14	28	9	14	13	M8	5	1.5x60°	3H-04,3P-04	14167	14177	14187
SJ05	62	25	30					38			16				3H-05,3L-05 3P-05,3M-05	14168	14178	14188
SJ06	73	31	36	12	5	15	20		11	17	20	M10	14		3H-06,3L-06 3P-06,3M-06	14169	14179	14189
SJ18	95	35	37	14		24	25	46	13	19	22	M12	16		3H-08,3L-08 3P-08,3M-08	14170	14180	14190
SJ10	110	40	42	16		30	30	50			27		18		3H-10,3L-10 3P-10,3M-10	14171	14181	14191
SJ12H	130	50	50	21		39		60	18	26	30	M16			3H-12,3L-12 3P-12,3M-12	14172	14182	14192
SJ12P				18					16	23		M14			3P-12	14173	14183	14193
SJ15H	165	62	62	22	8	37	43	85	21	32	38	M20	-		3H-15,3H-18	14174	14184	14194
SJ15P				25.5	6										3H-15,3H-18,3L-15 3P-15,3P-18	14175	14185	14195
SJ21	180	65	70	25	9	40	60	80			45			3.0x60°	3H-21,3H-24 3P-21,3P-24	14176	14186	14196

Havalı Klavuz Çekme Makinası



KOD	KAPASİTE	DEVİR (rpm)	AĞIRLIK (kg)	ÇALIŞMA MESAFESİ
VAT-1608	M2~M8 TC-312	700	16.9	Rmax 1600mm Rmin 500mm
VAT-1612	M3~M12 TC-312	400	17	Rmax 1600mm Rmin 500mm
VAT-1616	M3~M16 TC-820	250	21.1	Rmax 1600mm Rmin 500mm
VAT-1908	M2~M8 TC-312	700	19.7	Rmax 1900mm Rmin 200mm
VAT-1912	M3~M12 TC-312	400	23.9	Rmax 1900mm Rmin 200mm
VAT-1916	M3~M16 TC-820	250	23.5	Rmax 1900mm Rmin 200mm
VAT-1920	M3-M20	180/200	26	Rmax 1900mm Rmin 200mm
VAT-1922	M3-M22	185/205	26	Rmax 1900mm Rmin 200mm
VAT-1924	M3-M24	90/100	28	Rmax 1900mm Rmin 200mm

Klavuz Çekme Başlıkları

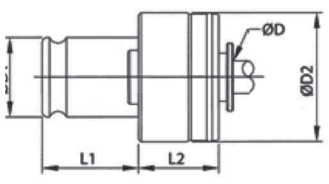


KOD	KAPASİTE	DEVİR (rpm)	ÇALIŞMA MESAFESİ
VAT-SP08	M3-M8	630/700	Ø38.5 (1 1/2")
VAT-SP12	M3-M12	350/400	Ø38.5 (1 1/2")
VAT-SP16	M3-M16	230/250	Ø61.3 (2 13/32")
VAT-SP20	M3-M20	180/200	Ø61.3 (2 13/32")
VAT-SP22	M3-M22	185/205	Ø61.3 (2 13/32")
VAT-SP24	M3-M24	90/100	Ø61.3 (2 13/32")

Klavuz Adaptörleri



KOD	ÖLÇÜ	TC312 DIN 371 KLAVUZ	KLAVUZ SAPI ØD	KLAVUZ SAPI □	KAPASİTE	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)
312-01D	TC 312 DIN 371	M1~M1.8	2.5	2.1	M3~M14	22.5	25	19	32
312-02D		M2~M2.5	2.8	2.1					
312-03D		M3	3.5	2.7					
312-04D		M3.5	4.0	3.0					
312-05D		M4	4.5	3.4					
312-06D		M4.5	6.0	4.9					
312-07D		M5	6.0	4.9					
312-08D		M6	6.0	4.9					
312-09D		M8	8.0	6.2					
312-10D		M10	10.0	8.0					



KOD	ÖLÇÜ	TC312 DIN 371 KLAVUZ	KLAVUZ SAPI ØD	KLAVUZ SAPI □	KAPASİTE	L1 (m/m)	L2 (m/m)	ØD1 (m/m)	ØD2 (m/m)
312-21D	TC 312 DIN 376	M3.5	2.5	2.1	M3~M14	22.5	25	19	32
312-22D		M4	2.8	2.1					
312-23D		M4.5	3.5	2.7					
312-24D		M5	3.5	2.7					
312-25D		M6	4.5	3.4					
312-26D		M7	5.5	4.3					
312-27D		M8	6.0	4.9					
312-28D		M10	7.0	5.5					
312-29D		M12	9.0	7.0					
312-30D		M14	11.0	9.0					
312-31D		M16	12.0	9.0					

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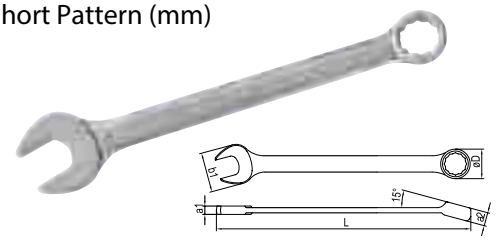
EL ALETLERİ GRUBU ve ATÖLYE EKİPMANLARI



0320

Kombine Anahtar Kısa Boy (mm)
Combination Wrench
Short Pattern (mm)

TS 3794 • DIN 3113



Krom vanadyum, Krom kaplı
Chrom vanadium, Chrom plated

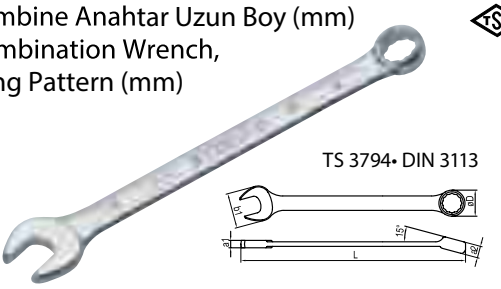
KOD CODE	mm	L mm	a1 mm	a2 mm	b1 mm	øD mm	g
0320 02 0005	5	100	3.4	5.1	14	10	15
0320 02 0055	5.5	100	3.4	5.1	14	10	15
0320 02 0006	6	100	3.4	5.1	14	10	15
0320 02 0007	7	110	3.6	5.5	16	11	20
0320 02 0008	8	120	3.8	5.9	18	13	25
0320 02 0009	9	130	4	6.3	20	14	30
0320 02 0010	10	140	4.3	6.9	22	15.5	40
0320 02 0011	11	150	4.5	7.3	24	17	45
0320 02 0012	12	160	4.9	7.7	26	18.5	55
0320 02 0013	13	170	5.2	7.9	28	19.5	60
0320 02 0014	14	180	5.5	8.7	30	21.5	75
0320 02 0015	15	190	5.8	9.1	32	22.5	90
0320 02 0016	16	200	6.1	9.6	34	24	105
0320 02 0017	17	210	6.4	9.8	36	25.5	120
0320 02 0018	18	220	6.8	10.4	38	27	145
0320 02 0019	19	232	7	11	40	28.5	170
0320 02 0020	20	240	7.2	11.4	42	30	195
0320 02 0021	21	250	7.4	12	44	31.5	190
0320 02 0022	22	260	8.2	12.6	46	33	275
0320 02 0023	23	270	8.3	13	48	35	255
0320 02 0024	24	280	8.5	13.6	50	36.5	320
0320 02 0025	25	290	8.8	14	52	39	320
0320 02 0026	26	300	9	14.8	54	41	400
0320 02 0027	27	310	9.3	15	56	41.5	400
0320 02 0028	28	320	9.4	15.4	57.5	42.5	380
0320 02 0029	29	330	10	15.6	59	43.5	510
0320 02 0030	30	340	10.3	16	61.5	44	505
0320 02 0032	32	370	10.5	16.2	65.5	47	560
0320 02 0034	34	400	10.7	16.8	71	50	675



0330

Kombine Anahtar Uzun Boy (mm)
Combination Wrench,
Long Pattern (mm)

TS 3794• DIN 3113



Krom vanadyum, Krom kaplı
Chrom vanadium, Chrom plated

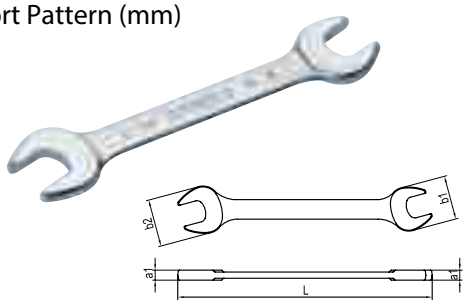
KOD CODE	mm	L mm	a1 mm	a2 mm	b1 mm	øD mm	g
0330 02 0005	5	95	3.2	5.2	12.5	9	20
0330 02 0055	5.5	100	3.4	5.4	13.5	9.5	20
0330 02 0006	6	105	3.8	5.6	14	10.5	20
0330 02 0007	7	117	4	6.1	16	12	20
0330 02 0008	8	130	4.2	6.6	18	13.5	30
0330 02 0009	9	141	4.5	7	20	15	40
0330 02 0010	10	154	4.7	7.6	22	16	50
0330 02 0011	11	166	5	8.2	24	17.5	60
0330 02 0012	12	178	5.2	8.7	26	19	70
0330 02 0013	13	190	5.6	9.2	28	20.5	80
0330 02 0014	14	203	5.8	9.7	30	22	100
0330 02 0015	15	215	6.4	10.1	32	23.5	115
0330 02 0016	16	227	6.4	10.8	34	25	135
0330 02 0017	17	239	6.6	11.4	36	26.5	160
0330 02 0018	18	250	7	12	38	28	186
0330 02 0019	19	263	7.3	12.7	40	29.5	205
0330 02 0020	20	275	7.7	13.2	42	31	235
0330 02 0021	21	288	8.1	13.3	44	31.5	260
0330 02 0022	22	300	8.5	13.7	46	34	300
0330 02 0023	23	315	8.8	14.2	48	35.5	300
0330 02 0024	24	330	9	14.2	50	37	390
0330 02 0025	25	340	9.3	14.7	52	38.5	380
0330 02 0026	26	350	9.7	14.7	54	40	475
0330 02 0027	27	360	10	15.2	56	41	475
0330 02 0028	28	370	10.4	15.7	57.5	43	475
0330 02 0029	29	390	10.8	16.2	59	44	610
0330 02 0030	30	410	11.2	16.6	61.5	45	610
0330 02 0032	32	420	11.5	17.1	65.5	48	755
0330 02 0034	34	430	11.8	17.4	71	51	735
0330 02 0036	36	440	12.2	17.7	76	53	1000
0330 02 0038	38	450	12.5	18.7	80	56	1000
0330 02 0041	41	480	13.5	19.7	87	61	1240
0330 02 0046	46	505	14.7	20.7	95	67.5	1635
0330 02 0050	50	540	15.9	22.7	104	73.5	2100



0100

İki Ağız Anahtar Kısa Boy (mm)
Double Ended Open Jaw Wrench
Short Pattern (mm)

TS 81 • DIN 895

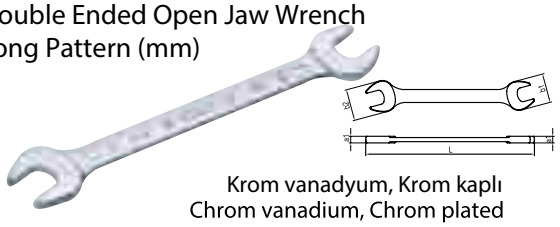


Krom vanadyum, Krom kaplı
Chrom vanadium, Chrom plated

KOD CODE	mm	L mm	a1 mm	b1 mm	b2 mm	g
0100 01 0405	04x05	97	3.5	11	12.5	15
0100 01 0607	06x07	97	3.5	14	16	18
0100 01 0608	06x08	108	3.5	14	18	20
0100 01 0708	07x08	108	3.5	16	18	20
0100 01 0709	07x09	108	4	16	20	25
0100 01 0809	08x09	108	4	18	20	30
0100 01 0810	08x10	117	4.6	18	22	33
0100 01 0910	09x10	120	4.6	20	22	30
0100 01 0911	09x11	120	4.6	20	24	30
0100 01 1011	10x11	120	4.6	22	24	41
0100 01 1012	10x12	120	4.6	22	26	35
0100 01 1013	10x13	120	4.6	22	28	38
0100 01 1014	10x14	133	5.2	22	30	50
0100 01 1113	11x13	133	5.2	26	28	50
0100 01 1114	11x14	133	5.2	24	30	50
0100 01 1213	12x13	133	5.2	26	28	57
0100 01 1214	12x14	147	5.2	26	30	59
0100 01 1314	13x14	147	5.2	28	30	66
0100 01 1315	13x15	147	5.8	28	32	65
0100 01 1415	14x15	147	5.8	30	32	78
0100 01 1317	13x17	162	6.2	28	36	80
0100 01 1417	14x17	162	6.2	30	36	90
0100 01 1617	16x17	162	6.2	34	36	109
0100 01 1719	17x19	178	7	36	40	143
0100 01 1819	18x19	178	7	38	40	144
0100 01 1820	18x20	178	7	38	42	125
0100 01 1822	18x22	195	7.4	38	46	160
0100 01 1722	17x22	195	7.4	36	46	160
0100 01 1922	19x22	195	7.4	40	46	175
0100 01 2022	20x22	195	7.4	42	46	196
0100 01 1924	19x24	213	7.7	40	50	200
0100 01 2123	21x23	213	7.7	44	48	230
0100 01 2224	22x24	213	8	46	50	239
0100 01 2226	22x26	232	8	46	54	250
0100 01 2227	22x27	232	8.2	46	56	260
0100 01 2426	24x26	232	8.2	50	54	297
0100 01 2427	24x27	232	8.2	50	56	296
0100 01 2528	25x28	248	8.6	52	57.5	366
0100 01 2430	24x30	265	9	50	62	370
0100 01 2730	27x30	265	9	56	62	380
0100 01 2732	27x32	265	9	56	66	415
0100 01 3032	30x32	265	9	62	66	465

0130

İki Ağız Anahtar Uzun Boy (mm)
Double Ended Open Jaw Wrench
Long Pattern (mm)



Krom vanadyum, Krom kaplı
Chrom vanadium, Chrom plated

KOD CODE	mm	L mm	a1 mm	b1 mm	b2 mm	g
0130 01 0555	5x5.5	125	3.5	14	16	15
0130 01 0607	6x7	125	3.5	14	16	24
0130 01 0608	6x8	125	3.5	14	18	20
0130 01 0708	7x8	125	3.5	16	18	20
0130 01 0709	7x9	140	4	16	20	30
0130 01 0809	8x9	140	4	18	20	35
0130 01 0810	8x10	140	4	18	22	36
0130 01 0910	9x10	155	4.5	20	22	45
0130 01 0911	9x11	155	4.5	20	24	45
0130 01 1011	10x11	155	4.5	22	24	47
0130 01 1012	10x12	162	4.7	22	26	57
0130 01 1013	10x13	162	4.7	22	28	61
0130 01 1014	10x14	172	5	22	30	65
0130 01 1113	11x13	172	5	24	28	70
0130 01 1114	11x14	172	5	24	30	65
0130 01 1213	12x13	172	5	26	28	67
0130 01 1214	12x14	172	5	26	30	65
0130 01 1314	13x14	188	5.5	28	30	85
0130 01 1315	13x15	188	5.5	30	32	93
0130 01 1415	14x15	188	5.5	30	32	91
0130 01 1317	13x17	205	6.2	28	36	111
0130 01 1417	14x17	205	6.2	30	36	106
0130 01 1617	16x17	205	6.2	34	36	120
0130 01 1618	16x18	220	7	34	38	165
0130 01 1719	17x19	220	7	36	40	160
0130 01 1819	18x19	220	7	38	40	161
0130 01 1722	17x22	235	7.5	36	46	190
0130 01 1921	19x21	235	7.5	40	44	195
0130 01 1922	19x22	235	7.5	40	46	195
0130 01 2022	20x22	235	7.5	42	46	195
0130 01 1724	17x24	248	8.3	36	50	240
0130 01 1924	19x24	248	8.3	40	50	235
0130 01 2123	21x23	248	8.3	44	48	235
0130 01 2224	22x24	248	8.3	46	50	235
0130 01 2227	22x27	265	8.8	46	56	300
0130 01 2426	24x26	265	8.8	50	54	300
0130 01 2427	24x27	265	8.8	50	56	300
0130 01 2430	24x30	282	9.3	50	61.5	380
0130 01 2528	25x28	282	9.3	52	57.5	390
0130 01 2729	27x29	300	9.8	56	59	400
0130 01 2730	27x30	300	9.8	56	61.5	440
0130 01 2732	27x32	300	9.8	56	65.5	460
0130 01 3032	30x32	300	9.8	61.5	65.5	480
0130 01 3036	30x36	325	10.4	61.5	76	645
0130 01 3236	32x36	325	10.4	65.5	76	680
0130 01 3436	34x36	330	10.4	71	76	690
0130 01 3641	36x41	360	12	76	87	955
0130 01 4146	41x46	400	12.5	87	98	1300
0130 01 4650	46x50	450	13	98	107	1635

0320

Kombine Anahtar Takımı Kısa Boy (mm)
Combination Wrench Short Pattern Set (mm)



KOD CODE	İÇERİK CONTENTS	g
0320 00 2106	8 - 9 - 11 - 13 - 17 - 19	460
0320 00 2108	6 - 7 - 8 - 9 - 10 - 13 - 17 - 19	475
0320 00 2110	8 - 9 - 10 - 11 - 12 - 13 - 14 - 17 - 19 - 22	1015
0320 00 2112	8 - 9 - 10 - 11 - 12 - 13 - 14 - 15 - 16 17 - 19 - 22	1190
0320 00 2117	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22	1760
0320 00 2121	6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 24 - 27 - 30 - 32	3650

0330

Kombine Anahtar Takımı Uzun Boy (mm)
Combination Wrench
Long Pattern Set (mm)



KOD CODE	İÇERİK CONTENTS	g
0330 00 2106	8 - 9 - 11 - 13 - 17 - 19	615
0330 00 2108	6 - 7 - 8 - 9 - 10 - 13 17 - 19	665
0330 00 2110	8 - 9 - 10 - 11 - 12 - 13 14 - 17 - 19 - 22	1230
0330 00 2112	8 - 9 - 10 - 11 - 12 13 - 14 - 15 - 16 17 - 19 - 22	1780
0330 00 2117	6 - 7 - 8 - 9 - 10 - 11 12 - 13 - 14 - 15 - 16 17 - 18 - 19 - 20 - 21 22	2170
0330 00 2121	6 - 7 - 8 - 9 - 10 - 11 12 - 13 - 14 - 15 - 16 17 - 18 - 19 - 20 - 21 22 - 24 - 27 - 30 - 32	4465

0100

İki Ağız Anahtar Takımı Kısa Boy (mm)
Double Ended Open Jaw Wrench
Short Pattern Set (mm)



KOD CODE	İÇERİK CONTENTS	g
0100 00 2106	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17	406
0100 00 2108	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17 18x19 - 20x22	736
0100 00 2110	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17 18x19 - 20x22 - 21x23 24x26	1254
0100 00 2112	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17 18x19 - 20x22 - 21x23 24x26 - 25x28 - 30x32	2110

0130

İki Ağız Anahtar Takımı Uzun Boy (mm)
Double Ended Open Jaw Wrench
Long Pattern Set (mm)

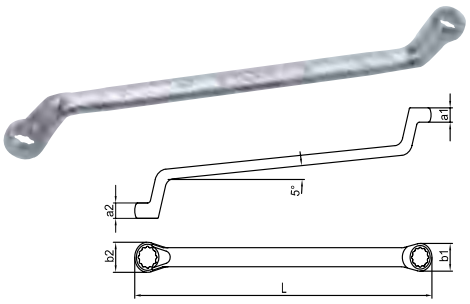


KOD CODE	İÇERİK CONTENTS	g
0130 00 2106	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17	450
0130 00 2108	6x7 - 8x9 - 10x11 12x13 14x15 - 16x17 18x19 20x22	815
0130 00 2110	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17 18x19 - 20x22 - 21x23 24x26	1435
0130 00 2112	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17 18x19 - 20x22 - 21x23 24x26 - 25x28 - 27x32	2315

0430

Yıldız İki Ağız Anahtar (mm)
Double Ended Ring Wrench (mm)

TS 3794• DIN 838

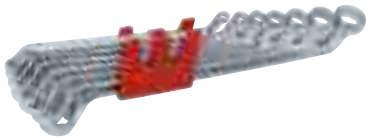


Krom vanadyum, Krom kaplı
Chrom vanadium, Chrom plated

KOD CODE	mm	L mm	a1 mm	a2 mm	b1 mm	b2 mm	g
0430 03 0607	6x7	176	5.6	6	10	11.5	55
0430 03 0809	8x9	190	6.4	6.8	13	14.5	75
0430 03 0810	8x10	190	6.4	7.3	13	15.5	70
0430 03 1011	10x11	206	7.3	7.6	15.5	17	105
0430 03 1012	10x12	206	7.3	8.5	15.5	18.5	105
0430 03 1013	10x13	220	7.3	9	15.5	20	120
0430 03 1014	10x14	220	7.3	9.5	15.5	21.5	120
0430 03 1113	11x13	220	7.6	9	17	20	130
0430 03 1213	12x13	220	8.5	9	18.5	20	135
0430 03 1214	12x14	220	8.5	9.5	18.5	21.5	145
0430 03 1315	13x15	236	9	10	20	23	170
0430 03 1415	14x15	236	9.5	10	21.5	23	180
0430 03 1317	13x17	250	9	11.5	20	26.5	215
0430 03 1417	14x17	250	9.5	11.5	21.5	26.5	210
0430 03 1617	16x17	250	10.8	11.5	25	26.5	220
0430 03 1618	16x18	250	10.8	12	25	27.5	210
0430 03 1719	17x19	271	11.5	12.5	26.5	29	270
0430 03 1819	18x19	271	12	12.5	27.5	29	270
0430 03 1922	19x22	291	12.5	13.5	29	33	330
0430 03 1924	19x24	311	12.5	14.2	29	36.5	345
0430 03 2022	20x22	291	12.9	13.5	30.5	33	330
0430 03 2123	21x23	311	13.1	14	32	35	410
0430 03 2224	22x24	321	13.5	14.2	33	36.5	410
0430 03 2227	22x27	331	14.2	15	36.5	40.5	500
0430 03 2426	24x26	331	14.2	14.6	36.5	39.5	495
0430 03 2427	24x27	331	14.2	15	36.5	40.5	495
0430 03 2430	24x30	352	14.2	16.7	36.5	40	530
0430 03 2528	25x28	352	14.5	15.5	38	42.5	550
0430 03 2729	27x29	371	15	16.7	40.5	45	660
0430 03 2730	27x30	371	15	16.7	40.5	45	660
0430 03 2732	27x32	371	15	16.7	40.5	47.5	660
0430 03 3032	30x32	371	16.4	16.7	45	47.5	660
0430 03 3034	30x34	379	16.4	16.9	45	50	690
0430 03 3036	30x36	402	16.4	17.5	45	53	880
0430 03 3236	32x36	402	16.7	17.5	47.5	53	890
0430 03 3436	34x36	420	17.1	17.5	50	53	1000
0430 03 3641	36x41	438	17.5	19.5	53	61	1150
0430 03 4146	41x46	485	19.5	20.5	61	67.5	1430
0430 03 4650	46x50	535	20.5	22.4	67.5	73.5	1960

0430

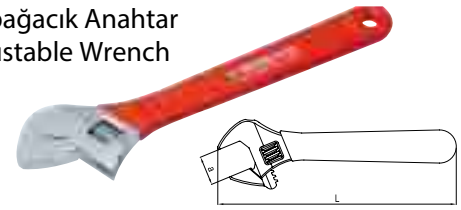
Yıldız İki Ağız Anahtar Takımı (mm)
Double Ended Ring Wrench Set (mm)



KOD CODE	İÇERİK CONTENTS	g
0430 00 2106	6x7 - 8x9 - 10x11 12x13 - 14x15 - 16x17	820
0430 00 2108	6x7 - 8x9 - 10x11 - 12x13 - 14x15 16x17 - 18x19 - 20x22	1450
0430 00 2110	6x7 - 8x9 - 10x11 - 12x13 - 14x15 16x17 18x19 - 20x22 - 21x23-24x26	2405
0430 00 2112	6x7 - 8x9 - 10x11 - 12x13 - 14x15 16x17 - 18x19 - 20x22 - 21x23 24x26 - 25x28 - 27x32	3610

0600

Kurbağacık Anahtar
Adjustable Wrench



Krom vanadyum, Krom kaplı, PVC izoleli
Chrom vanadium, Chrom plated, PVC insulated

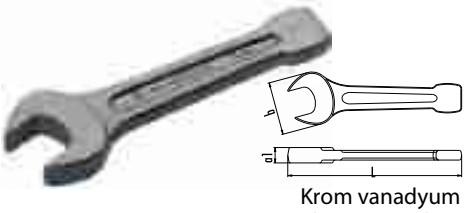
KOD CODE	L mm	L inch	a mm	g
0600 01 1006	160	6"	18	120
0600 01 1008	208	8"	23	230
0600 01 1010	260	10"	28	400
0600 01 1012	308	12"	34	670
0600 01 1015	388	15"	43	1555



0700

Çatal Çakma Anahtar (mm)
Slugging Open Jaw Wrench (mm)

TS 81 • DIN 133



Krom vanadyum
Chrom vanadium

KOD CODE	mm	L mm	a1 mm	b mm	g
0700 05 0024	24	160	15	42	280
0700 05 0027	27	180	16	45	385
0700 05 0030	30	190	17	50	525
0700 05 0032	32	190	17	50	530
0700 05 0036	36	205	19	58	755
0700 05 0038	38	205	19	58	760
0700 05 0041	41	225	20	62	920
0700 05 0042	42	225	20	62	930
0700 05 0046	46	240	22	72	1305
0700 05 0047	47	240	22	72	1320
0700 05 0050	50	255	23	78	1565
0700 05 0055	55	272	25	88	2305
0700 05 0060	60	272	25	88	2310
0700 05 0065	65	300	28	98	3300
0700 05 0070	70	330	32	108	4555
0700 05 0075	75	330	32	108	4460
0700 05 0080	80	360	35	126	6115
0700 05 0085	85	360	35	126	5740
0700 05 0090	90	390	40	140	8040
0700 05 0095	95	390	40	140	8160
0700 05 0100	100	420	44	148	12355
0700 05 0105	105	420	44	148	11785
0700 05 0110	110	450	48	166	15000
0700 05 0115	115	450	48	166	14830
0700 05 0120	120	490	54	178	18865
0700 05 0125	125	490	54	178	17250
0700 05 0130	130	518	59	196	20000
0700 05 0135	135	518	59	196	19700
0700 05 0140	140	518	59	196	19400
0700 05 0145	145	580	62	223	28000
0700 05 0150	150	580	62	223	27600

0750

Yıldız Çakma Anahtar (mm)
Slugging Ring Wrench (mm)

TS 3794• DIN 7444



Krom vanadyum
Chrom vanadium

KOD CODE	mm	L mm	a1 mm	b mm	g
0750 05 0024	24	160	15	42	235
0750 05 0027	27	180	16	46	325
0750 05 0030	30	190	17	52	435
0750 05 0032	32	190	17	52	425
0750 05 0036	36	205	19	59	550
0750 05 0038	38	205	19	59	530
0750 05 0041	41	225	20	64	730
0750 05 0042	42	225	20	64	700
0750 05 0046	46	240	22	73	970
0750 05 0047	47	240	22	73	930
0750 05 0050	50	255	23	78	1160
0750 05 0055	55	272	25	88	1520
0750 05 0060	60	272	25	88	1460
0750 05 0065	65	300	28	100	2025
0750 05 0070	70	330	32	109	2890
0750 05 0075	75	330	32	109	2755
0750 05 0080	80	360	35	123	4000
0750 05 0085	85	360	35	123	3620
0750 05 0090	90	390	40	142	5465
0750 05 0095	95	390	40	142	5250
0750 05 0100	100	420	44	152	6755
0750 05 0105	105	420	44	152	6445
0750 05 0110	110	450	46	165	8500
0750 05 0115	115	450	46	165	8460
0750 05 0120	120	480	48	185	11425
0750 05 0125	125	543	54	254	17250
0750 05 0130	130	570	55	275	20000
0750 05 0135	135	570	55	275	19700
0750 05 0140	140	570	55	275	19400
0750 05 0145	145	640	60	307	28000
0750 05 0150	150	640	60	307	27600
0750 05 0155	155				
0750 05 0165	165				
0750 05 0170	170				
0750 05 0180	180				

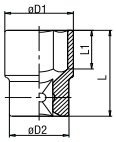




1107

1/4" Altı Köşe Lokma Anahtar (mm)
Socket Wrench 6 Points (mm)





1/4"

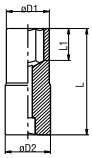
Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	mm	ø D1 mm	ø D2 mm	L mm	L1 mm	g
1107 06 0004	4	6.8	11.8	24.5	4	10
1107 06 0045	4.5	7.4	11.8	24.5	5	10
1107 06 0005	5	8	11.8	24.5	6	10
1107 06 0055	5.5	8.7	11.8	24.5	6	10
1107 06 0006	6	9.2	11.8	24.5	7	10
1107 06 0007	7	10.3	11.8	24.5	7	10
1107 06 0008	8	11.4	11.8	24.5	8	10
1107 06 0009	9	12.9	12.2	24.5	8	15
1107 06 0010	10	14.3	13	24.5	9	20
1107 06 0011	11	15.8	14.2	24.5	9	20
1107 06 0012	12	16.8	15.5	24.5	9	25
1107 06 0013	13	17.8	16.5	24.5	9	30

1107

1/4" Altı Köşe Derin Lokma Anahtar (mm)
Deep Socket Wrench 6 Points (mm)





1/4"

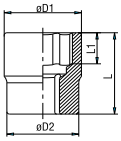
Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	mm	ø D1 mm	ø D2 mm	L mm	L1 mm	g
1107 06 4004	4	6.8	11.8	50	6	10
1107 06 4045	4.5	7.4	11.8	50	7	10
1107 06 4005	5	8	11.8	50	7	20
1107 06 4055	5.5	8.7	11.8	50	9	20
1107 06 4006	6	9.2	11.8	50	9	25
1107 06 4007	7	10.3	11.8	50	15	25
1107 06 4008	8	11.8	11.8	50	15	25
1107 06 4009	9	13	13	50	15	30
1107 06 4010	10	14.5	14.5	50	15	40
1107 06 4011	11	15.8	15.8	50	21	45
1107 06 4012	12	16.8	16.8	50	21	50
1107 06 4013	13	17.8	17.8	50	21	55

1207

1/4" Sekiz Köşe Lokma Anahtar (mm)
Socket Wrench 8 Points (mm)





1/4"

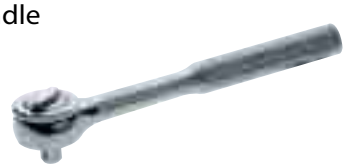
Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	mm	ø D1 mm	ø D2 mm	L mm	L1 mm	g
1207 06 8008	8	12.2	12.2	24.5	6	15
1207 06 8010	10	14.7	14.7	24.5	7	25

1507

1/4" Cırcır Kolu
Ratchet Handle

TS ISO 3315 • DIN 3122



1/4"

KOD CODE	L mm	g
1507 06 0140	140	140

1507

1/4" Ara Kol
Extension Bar

TS ISO 1174 • DIN 3123



1/4"

KOD CODE	L mm	g
1507 06 0050	50	25
1507 06 0100	100	45

1507

1/4" Mafsal
Universal Joint

TS ISO 1174 • DIN 3123



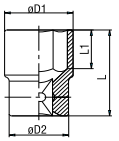
1/4"

KOD CODE	L mm	g
1507 06 0038	38	25

1110

3/8" Altı Köşe Lokma Anahtar (mm)
Socket Wrench 6 Points (mm)





3/8"

Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	mm	ø D1 mm	ø D2 mm	L mm	L1 mm	g
1110 06 0006	6	9.8	17.8	27	9	25
1110 06 0007	7	10.8	17.8	27	9	25
1110 06 0008	8	12	17.8	27	9	25
1110 06 0009	9	13.2	17.8	27	9	25
1110 06 0010	10	14.5	17.8	27	9	25
1110 06 0011	11	15.8	17.8	27	9	30
1110 06 0012	12	16.8	17.8	27	9	30
1110 06 0013	13	17.8	16.8	27	9	30
1110 06 0014	14	19.6	17.5	29	11	35
1110 06 0015	15	20.8	18	29	11	45
1110 06 0016	16	21.8	19	29	11	45
1110 06 0017	17	23.4	20	29	11	55
1110 06 0018	18	24.7	21	29	13	60
1110 06 0019	19	25.8	22	29	13	65
1110 06 0020	20	27.1	24	32	13	75
1110 06 0021	21	27.8	24	32	13	80
1110 06 0022	22	29.7	26	32	15	85
1110 06 0023	23	29.7	26	32	15	90

1110

3/8" Buji Lokma Anahtar Lastikli
Spark Plug Socket with Rubber



3/8"

KOD CODE	mm	L mm	g
1110 06 9208	21	70	145



1510

3/8" Cırcır Kolu
Ratchet Handle

TS ISO 3315 • DIN 3122



3/8"

Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	L mm	g
1510 06 0200	200	295

1510

3/8" Ara Kol
Extension Bar

TS ISO 1174 • DIN 3123



3/8"

Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	L mm	g
1510 06 0075	75	75
1510 06 0150	150	145

1510

3/8" Mafsal
Universal Joint

TS ISO 1174 • DIN 3123



3/8"

Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	L mm	g
1510 06 0056	56.5	60

1510

3/8" T Kol
Sliding T - Handle

TS ISO 3315 • DIN 3122



3/8"

Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	L mm	g
1510 06 1200	200	180

1513

1/2" Lokma Adaptörü
Adapter

TS ISO 1174 • DIN 3123



1/2"

KOD CODE	inch	g
1513 06 0002	1/2"Fx3/8"M	55
1513 06 0003	1/2"Fx3/4"M	115

1513

1/2" Cırcır Kolu (32 Diş)
Ratchet Handle

TS ISO 3315 • DIN 3122



1/2"

KOD CODE	L mm	g
1513 06 0032	250	580

1513

1/2" Cırcır Kolu (72 Diş)
Max Gear Raichet Handle

TS ISO 3315 • DIN 3122



1/2"

KOD CODE	L mm	g
1513 06 0072	250	460

1513

1/2" Ara Kol
Extension Bar

TS ISO 1174 • DIN 3123



1/2"

KOD CODE	L mm	g
1513 06 4125	125	215
1513 06 4250	250	420

1513

1/2" Mafsal
Universal Joint

TS ISO 1174 • DIN 3123



1/2"

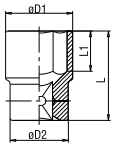
Krom vanadyum, Krom kaplı , Polisajlı
Chrom vanadium, Chrom plated, Polished

KOD CODE	L mm	g		TL/Ad.
1513 06 4070	70	140	5	43,97

1113

1/2" Altı Köşe Lokma Anahtar (mm)
Socket Wrench 6 Points (mm)





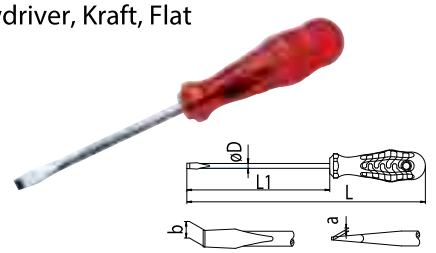
1/2"

Krom vanadyum, Krom kaplı
Chrom vanadium, Chrom plated,

KOD CODE	mm	ø D1 mm	ø D2 mm	L mm	L1 mm	g
1113 06 1008	8	13.2	21.8	38	7	55
1113 06 1009	9	14	21.8	38	7	55
1113 06 1010	10	15	23.3	38	8	55
1113 06 1011	11	16.4	23.3	38	8	60
1113 06 1012	12	17.8	23.3	38	9	60
1113 06 1013	13	19	23.3	38	10	65
1113 06 1014	14	20.4	23.3	38	11	65
1113 06 1015	15	21.6	23.3	38	11	65
1113 06 1016	16	22.9	24	38	11	70
1113 06 1017	17	24	22.5	38	12	70
1113 06 1018	18	25.2	23	38	13	75
1113 06 1019	19	26.8	23	38	13	75
1113 06 1020	20	28	23	38	13	80
1113 06 1021	21	29.2	23	38	13	85
1113 06 1022	22	30.2	24	40	15	95
1113 06 1023	23	31.4	25	40	15	100
1113 06 1024	24	32.6	26	42	17	115
1113 06 1025	25	34	27	42	17	125
1113 06 1026	26	35.3	28	42	17	135
1113 06 1027	27	36.6	28	42	19	140
1113 06 1028	28	37.8	30	42	20	160
1113 06 1029	29	39	30	44	21	170
1113 06 1030	30	40	29.5	44	21	180
1113 06 1032	32	42.5	30	44	23	190

4100

Kraft Seri Düz Uçlu Tornavida
Screwdriver, Kraft, Flat

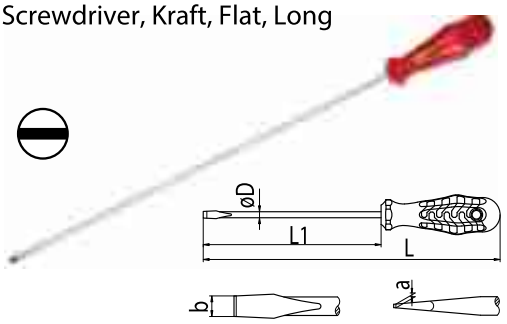


Krom vanadyum, Krom kaplı,
Ucu siyah oksit, Selüloz asetat saplı
Chrom vanadium, Chrom plated and black tips,
Cellulose acetate handle.

KOD CODE	øDxL1 mm	a mm	b mm	L mm	g
4100 17 0340	3x40	0.5	3	110	20
4100 17 0380	3x80	0.5	3	155	35
4100 17 0480	4x80	0.8	4	165	50
4100 17 4100	4x100	0.8	4	185	50
4100 17 0580	5x80	1.0	5.5	175	70
4100 17 5100	5x100	1.0	5.5	195	75
4100 17 5125	5x125	1.0	5.5	220	80
4100 17 5150	5x150	1.0	5.5	245	80
4100 17 6100	6x100	1.2	6.5	195	85
4100 17 6125	6x125	1.2	6.5	220	90
4100 17 6150	6x150	1.2	6.5	245	95
4100 17 6175	6x175	1.2	6.5	270	100
4100 17 7125	7x125	1.2	8	230	120
4100 17 7150	7x150	1.2	8	255	130
4100 17 7175	7x175	1.2	8	280	135
4100 17 8150	8x150	1.6	10	255	145
4100 17 8175	8x175	1.6	10	280	150
4100 17 8200	8x200	1.6	10	305	160
4100 17 9200	9x200	2.0	12	305	190
4100 17 1125	11x250	2.5	14	365	305

4100

Kraft Seri Süngüsü Uzun Düz Uçlu Tornavida
Screwdriver, Kraft, Flat, Long



Krom vanadyum, Krom kaplı,
Ucu siyah oksit, Selüloz asetat saplı
Chrom vanadium, Chrom plated and black tips,
Cellulose acetate handle.

KOD CODE	øDxL1 mm	a mm	b mm	L mm	g
4100 17 3150	3x150	0.5	3	225	35
4100 17 3250	3x250	0.5	3	325	40
4100 17 4250	4x250	0.8	4	335	65
4100 17 4300	4x300	0.8	4	385	70
4100 17 5200	5x200	1.0	5.5	295	90
4100 17 5250	5x250	1.0	5.5	345	95
4100 17 5300	5x300	1.0	5.5	395	105
4100 17 5350	5x350	1.0	5.5	445	115
4100 17 6350	6x350	1.2	6.5	445	125
4100 17 6400	6x400	1.2	6.5	495	145
4100 17 6450	6x450	1.2	6.5	545	160
4100 17 1130	11x300	2.5	14	415	345

4100

Kraft Seri Düz Uçlu Tornavida Seti (8 Parça)
Screwdriver, Flat, Kraft Set (8 Pcs)



KOD CODE	İÇERİK CONTENTS	g
4100 00 8108	3x80 - 4x80 - 4x100 5x100 - 5x125 - 6x100 6x125 - 6x150 Düz uçlu/Flat	550

4100

Kraft Seri Tornavida Seti (7 parça)
Screwdriver, Kraft Set (7 Pcs)



KOD CODE	İÇERİK CONTENTS	g
4100 00 8107	3x80 - 4x80 - 4x100 5x125 - 6x150 Düz uçlu/Flat 4.5x80 - 6x100 Yıldız uçlu/Phillips	445

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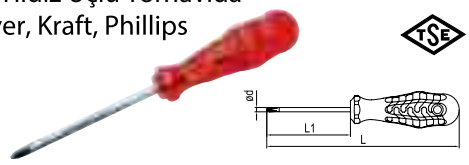
4120

Kraft Seri Yıldız Uçlu Tornavida
Screwdriver, Kraft, Phillips

TS 59 • DIN ISO 8764

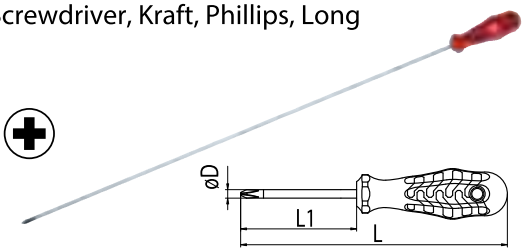


Krom vanadyum, Krom kaplı,
Ucu siyah oksit, Selüloz asetat saplı
Chrom vanadium, Chrom plated and black tips,
Cellulose acetate handle.

KOD CODE	ødxL1 mm		L mm	g
4120 18 0360	3x60	Ph0	135	30
4120 18 4580	4.5x80	Ph1	165	55
4120 18 5100	4.5x100	Ph1	185	55
4120 18 5150	4.5x150	Ph1	235	60
4120 18 6100	6x100	Ph2	195	85
4120 18 6150	6x150	Ph2	245	95
4120 18 6200	6x200	Ph2	295	105
4120 18 8150	8x150	Ph3	255	150
4120 18 1200	10x200	Ph4	315	240

4120

Kraft Seri Süngüsü Uzun Yıldız Uçlu Tornavida
Screwdriver, Kraft, Phillips, Long



Krom vanadyum, Krom kaplı,
Ucu siyah oksit, Selüloz asetat saplı
Chrom vanadium, Chrom plated and black tips,
Cellulose acetate handle.

KOD CODE	øDxL1 mm		L mm	g
4120 18 5300	4.5x300	Ph1	385	80
4120 18 5500	4.5x500	Ph1	585	105
4120 18 6300	6x300	Ph2	395	125
4120 18 6500	6x500	Ph2	595	165



4120

Kraft Seri Yıldız Uçlu Tornavida Seti (6 parça)
Screwdriver, Kraft, Phillips, Set (6 Pcs)

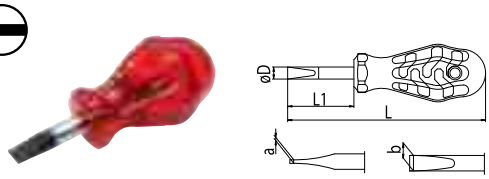


KOD CODE	İÇERİK CONTENTS	g
4120 00 8106	3x60 - 4.5x80 4.5x100 - 4.5x150 6x100 - 6x150 Yıldız uçlu/Phillips	380

4110

Kraft Seri Düz Uçlu Topaç Tornavida
Screwdriver, Kraft, Stubby, Flat

TS 59 • DIN 5264 • DIN 5265

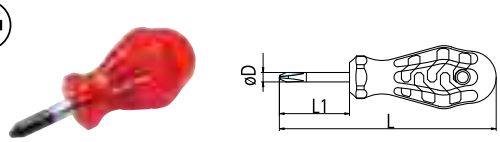


KOD CODE	øDxL1 mm	a mm	b mm	L mm	g
4110 17 5525	5.5x25	1	5.5	70	30
4110 17 5540	5.5x40	1	5.5	105	45
4110 17 6525	6.5x25	1.2	6.5	70	35
4110 17 6540	6.5x40	1.2	6.5	105	50
4110 17 0825	8x25	1.2	8	70	40
4110 17 0840	8x40	1.2	8	105	60

4130

Kraft Seri Yıldız Uçlu Topaç Tornavida
Screwdriver, Kraft, Stubby, Phillips

TS 59 • DIN ISO 8764



KOD CODE	øDxL1 mm		L mm	g
4130 18 4525	4.5x25	Ph1	70	30
4130 18 4540	4.5x40	Ph1	105	40
4130 18 0625	6x25	Ph2	70	30
4130 18 0640	6x40	Ph2	105	50

4770

Lokma Uçlu Tornavida Seti (8 Parça, mm)
Nut Spinner Set (8 Pcs, mm)

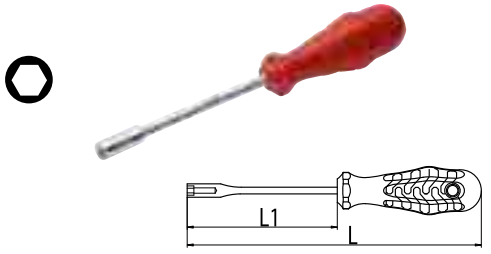


KOD CODE	İÇERİK CONTENTS	g
4770 00 8108	6 - 7 - 8 - 9 - 10 11 - 12 - 13	2145

4770

Lokma Uçlu Tornavida (mm)
Nut Spinner (mm)

TS 3793 • DIN 3125



Krom vanadyum, Krom kaplı,PP Saplı
Chrom vanadium, Chrom plated,PP insulated

KOD CODE	mm	L mm	L1 mm	g
4770 19 0030	3	210	125	80
4770 19 0035	3.5	210	125	80
4770 19 0040	4	220	125	80
4770 19 0045	4.5	220	125	80
4770 19 0050	5	220	125	80
4770 19 0055	5.5	220	125	80
4770 19 0060	6	220	125	80
4770 19 0070	7	230	125	100
4770 19 0080	8	230	125	110
4770 19 0090	9	230	125	115
4770 19 0100	10	230	125	115
4770 19 0110	11	230	125	130
4770 19 0120	12	230	125	135
4770 19 0130	13	230	125	140
4770 19 0140	14	230	125	140

4790

Üniversal Bits Adaptörü (Manyetik)
Screwdriver Universal Bit Holder (Magnetic)

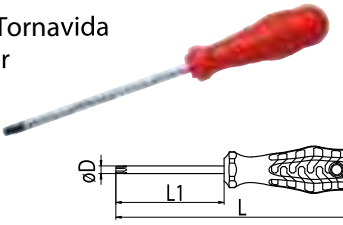
TS 8748 • DIN 3126 • DIN 7427



KOD CODE	mm	mm	L mm	g
4790 26 6360	6.3	6.3	60	25

4775

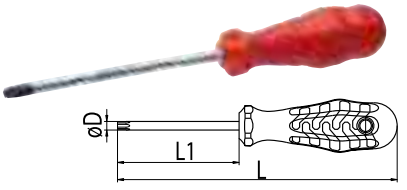
Torx® Uçlu Tornavida
Torx® Driver



KOD CODE	øDxL1 mm		L mm	g
4775 18 0010	4x80	T10	165	35
4775 18 0015	4x80	T15	165	35
4775 18 0020	4x100	T20	185	40
4775 18 0025	4.5x100	T25	185	40
4775 18 0027	5x125	T27	220	60
4775 18 0030	6x125	T30	220	70
4775 18 0040	7x125	T40	230	100
4775 18 0045	8x125	T45	230	120

4776

Delikli Torx® Uçlu Tornavida
Torx® Screwriver / tamper Resistance



KOD CODE	øDxL1 mm		L mm	g
4776 18 0009	4x60	TR9	145	35
4776 18 0010	4x80	TR10	165	35
4776 18 0015	4x80	TR15	165	40
4776 18 0020	4x100	TR20	185	40
4776 18 0025	4.5x100	TR25	185	45
4776 18 0027	5x125	TR27	220	60
4776 18 0030	6x125	TR30	220	70
4776 18 0040	7x125	TR40	230	100

4810

Düz Bits
Flat Bit

TS 8748 • DIN 3127



Krom vanadyum
Chrom vanadium

KOD CODE	⊖	L mm	g
4810 20 0645	0.6x4.5	25	5
4810 20 0855	0.8x5.5	25	5
4810 20 1265	1.2x6.5	25	5
4810 20 5645	0.6x4.5	50	10
4810 20 5855	0.8x5.5	50	10
4810 20 5265	1.2x6.5	50	10

4820

Yıldız Bits
Phillips Bit

TS 8748 • DIN 3128



Krom vanadyum
Chrom vanadium

KOD CODE	✚	L mm	g
4820 21 0001	Ph1	25	5
4820 21 0002	Ph2	25	5
4820 21 0003	Ph3	25	5
4820 21 0011	Ph1	50	10
4820 21 0012	Ph2	50	10
4820 21 0013	Ph3	50	10

4800

7'li Bits Set
Bit Set (7 pcs)



KOD CODE	İÇERİK CONTENTS	g
4800 00 7107	⊖ 0.6x4.5 - 0.8x5.5	90
	✚ Ph1 - Ph2 - Ph3	
	✪ T27	
	6.3 x 6.0 Adaptör	

4820

Yıldız Bits Set (25 mm)
Phillips Bit Set (25 mm)



KOD CODE	✚	g
4820 00 0001	Ph1	50
4820 00 0002	Ph2	50
4820 00 0003	Ph3	55

4830

Torx® Bits
Torx® Bit

TS 8748 • DIN 3127

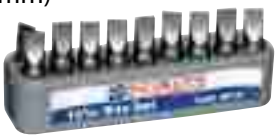


Krom vanadyum
Chrom vanadium

KOD CODE	✸	L mm	g
4830 21 0025	T25	25	5
4830 21 0027	T27	25	5
4830 21 0030	T30	25	5
4830 21 0040	T40	25	5
4830 21 0125	T25	50	10
4830 21 0127	T27	50	10
4830 21 0130	T30	50	10
4830 21 0140	T40	50	10

4810

Düz Bits Set (25 mm)
Flat Bit Set (25 mm)

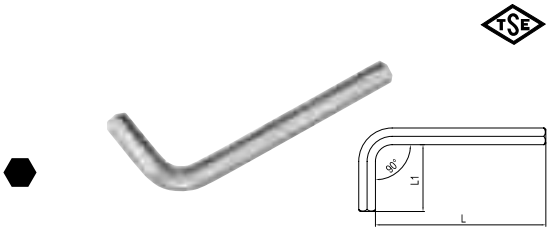


KOD CODE	⊖	g
4810 00 0645	06x4.5	45
4810 00 0855	0.8x5.5	50
4810 00 1265	1.2x6.5	55

4900

Allen Anahtar Altı Köşe (mm)
Hex Key Wrench (mm)

TS ISO 2936



Krom vanadyum, Nikel kaplı
Chrom vanadium, Nickel Plated

KOD CODE	mm	L mm	L1 mm	g
4900 22 0015	1.5	45	14	1.5
4900 22 0020	2	50	16	2
4900 22 0025	2.5	56	18	4
4900 22 0030	3	63	20	6
4900 22 0035	3.5	66	22	8
4900 22 0040	4	70	25	10
4900 22 0050	5	80	28	20
4900 22 0060	6	90	32	30
4900 22 0070	7	95	34	40
4900 22 0080	8	100	36	55
4900 22 0090	9	105	38	75
4900 22 0100	10	112	40	100
4900 22 0120	12	125	45	160
4900 22 0140	14	140	56	250
4900 22 0160	16	152	60	375
4900 22 0170	17	160	63	425
4900 22 0190	19	180	70	610

4900

Allen Anahtar Takım Altı Köşe (mm)
Hex Key Wrench Set (mm)



KOD CODE	İÇERİK CONTENTS	g
4900 00 3110	2 - 2.5 - 3 - 4 - 5 - 6 7 - 8 - 9 - 10	400
4900 22 3112	2 - 2.5 - 3 - 3.5 - 4 - 5 6 - 7 - 8 - 9 - 10 - 12	565

4903

Allen Anahtar Altı Köşe Uzun Boy (mm) TS ISO 2936
Hex Key Wrench Long Pattern (mm)



Krom vanadyum, Nikel kaplı
Chrom vanadium, Nickel Plated

KOD CODE	mm	L mm	L1 mm	g
4903 22 0020	2	100	16	3
4903 22 0025	2.5	112	18	5
4903 22 0030	3	126	20	10
4903 22 0035	3.5	136.5	22	15
4903 22 0040	4	140	25	20
4903 22 0050	5	160	28	30
4903 22 0060	6	180	32	50
4903 22 0070	7	190	34	80
4903 22 0080	8	200	36	100
4903 22 0090	9	210	38	145
4903 22 0100	10	224	40	180
4903 22 0120	12	250	45	285
4903 22 0140	14	280	56	460
4903 22 0160	16	300	60	625
4903 22 0170	17	320	63	750
4903 22 0190	19	360	70	1100

4903

Allen Anahtar Takım Altı Köşe Uzun Boy (mm)
Hex Key Wrench Set Long Pattern (mm)



KOD CODE	İÇERİK CONTENTS	g
4903 00 3110	2 - 2.5 - 3 - 4 - 5 - 6 7 - 8 - 9 - 10	660
4903 00 3112	2 - 2.5 - 3 - 3.5 - 4 - 5 6 - 7 - 8 - 9 - 10 - 12	940



4905

Yuvarlak Başlı Allen Anahtar (mm)
Hex Key Wrench Ballpoint (mm)



Krom vanadyum, Siyah oksit kaplı
Chrom vanadium, Black finish

KOD CODE	mm	L mm	L1 mm	g
4905 22 0020	2	50	16	3
4905 22 0025	2.5	56	18	4
4905 22 0030	3	63	20	5
4905 22 0040	4	70	25	10
4905 22 0050	5	80	28	20
4905 22 0060	6	90	32	30
4905 22 0080	8	100	36	55
4905 22 0100	10	112	40	100

4905

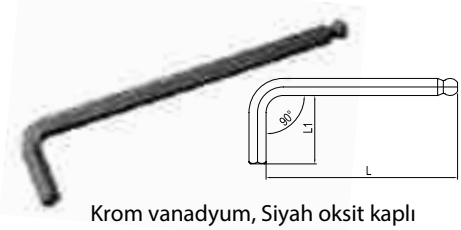
Yuvarlak Başlı Allen Anahtar Takımı (8 Parça, mm)
Hex Key Wrench Ballpoint Set (8 Pcs, mm)



KOD CODE	İÇERİK CONTENTS	g
4905 00 7108	2 - 2.5 - 3 - 4 5 - 6 - 8 - 10	275

4906

Yuvarlak Başlı Allen Anahtar Uzun Boy (mm)
Hex Key Wrench Ballpoint Long Pattern (mm)



Krom vanadyum, Siyah oksit kaplı
Chrom vanadium, Black finish

KOD CODE	mm	L mm	L1 mm	g
4906 22 0015	1.5	79	12	1.5
4906 22 0020	2	84	16	3
4906 22 0025	2.5	89	16	5
4906 22 0030	3	99	18	7
4906 22 0040	4	109	23	13
4906 22 0050	5	125	26	25
4906 22 0060	6	150	28	42
4906 22 0080	8	167	33	85
4906 22 0100	10	190	37	150

4906

Yuvarlak Başlı Allen Anahtar Takım Altı Köşe Uzun Boy (mm)
Hex Key Wrench Ballpoint Long Pattern Set (mm)



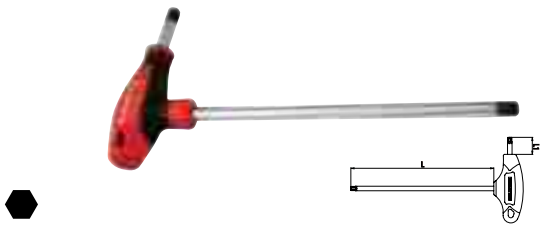
KOD CODE	İÇERİK CONTENTS	g
4906 00 3109	1.5 -2 - 2.5 - 3 - 4 - 5 - 6 8 - 10	355





4920

T Tipi Allen Anahtar (mm)
Hex Key Wrench T - Handle (mm)

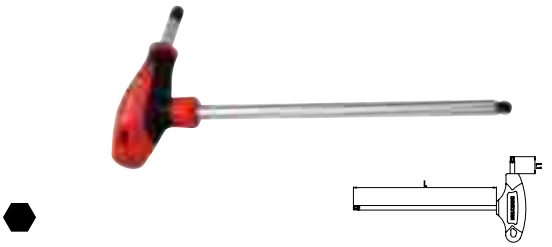


Krom vanadyum, Krom kaplı, PP saplı
Chrom vanadium, Chrom plated, PP handle

KOD CODE	mm	L mm	L1 mm	g
4920 22 0025	2.5	110	14	20
4920 22 0030	3	125	17	23
4920 22 0040	4	140	20	45
4920 22 0050	5	155	23	58
4920 22 0060	6	170	26	100
4920 22 0070	7	185	30	125
4920 22 0080	8	200	34	150
4920 22 0100	10	220	40	240

4921

Yuvarlak Başlı T Tipi Allen Anahtar (mm)
Hex Key Wrench T - Handle Ballpoint (mm)



Krom vanadyum, Krom kaplı, PP saplı
Chrom vanadium, Chrom plated, PP handle

KOD CODE	mm	L mm	L1 mm	g
4921 22 0025	2.5	110	14	20
4921 22 0030	3	125	17	23
4921 22 0040	4	140	20	45
4921 22 0050	5	155	23	58
4921 22 0060	6	170	26	100
4921 22 0070	7	185	30	125
4921 22 0080	8	200	34	150
4921 22 0100	10	220	40	235

4920

T Tipi Allen Anahtar Takımı (8 Parça, mm)
Hex Key Wrench T - Handle Set (8 Pcs, mm)



KOD CODE	İÇERİK CONTENTS	g
4920 00 8108	2.5 - 3 - 4 - 5 6 - 7 - 8 - 10	760

4921

Yuvarlak Başlı T Tipi Allen Anahtar Takımı (8 Parça, mm)
Hex Key Wrench T - Handle Ballpoint Set (8 Pcs, mm)



KOD CODE	İÇERİK CONTENTS	g
4921 00 8108	2.5 - 3 - 4 5 - 6 - 7 - 8 - 10	755

3020

Kombine Pense Opak
Combination Pliers

TS 60 • TS 11068 • DIN ISO 5744
DIN ISO 5746

TSE



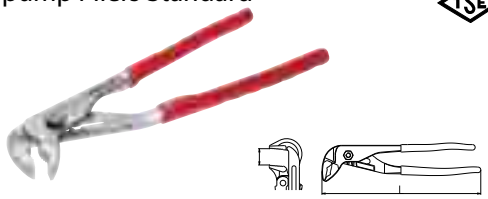
KOD CODE	L mm	L inch	MODEL	g
3020 12 2160	160	6 1/4"	OPAK	205
3020 12 2180	180	7 1/8"	OPAK	275
3020 12 2200	200	8"	OPAK	315

2405

Standart Fort Pense
Waterpump Pliers Standard

TS 60 • DIN ISO 89

TSE



Krom vanadyum, Krom kaplı, PVC izoleli
Chrom vanadium, Chrom plated, PVC insulated

KOD CODE	L mm	L inch	mm	g
2405 11 0160	160	6 1/4"	24	125
2405 11 0240	240	9 1/2"	30	295
2405 11 0315	315	12 1/2"	50	525

3220

Uzun Kargaburun Düz Uçlu Opak
Long Nose Pliers (Flat)

TS 60 • TS 11067

TSE

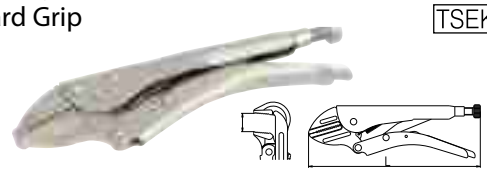


KOD CODE	L mm	L inch	MODEL	g
3220 13 2140	140	5 1/2"	OPAK	110
3220 13 2160	160	6 1/4"	OPAK	135
3220 13 2180	180	7 1/8"	OPAK	170
3220 13 2200	200	8"	OPAK	205

2505

Standart Ayarlı Pense
Standard Grip

TSEK



Çeneler krom vanadyum çeliğinden dövülmüştür, Nikel kaplama
Kullanım sahası: Düz malzemeler
Jaws, Chrom vanadium forged, Nickel plated
Applicatation field : Flat materials

KOD CODE	L mm	L inch	mm	g
2505 11 0250	250	10"	30	535

3700

Yan Keski Opak
Side Cutting Pliers

TS 60 • DIN ISO 5749

TSE



KOD CODE	L mm	L inch	MODEL	g
3700 16 2140	140	5 1/2"	OPAK	165
3700 16 2160	160	6 1/4"	OPAK	230
3700 16 2180	180	7 1/8"	OPAK	230

6801

Kuyumcu Makası (Eğri)
Jeweller's Snips (Curved)

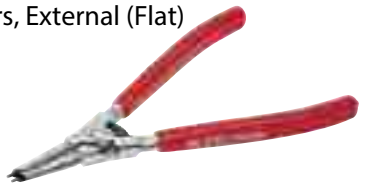


KOD CODE	L mm	L inch	g
6801 27 0180	180	7 1/8"	140

3301

Dış Segman Pense (Yaylı Düz)
Circlip Pliers, External (Flat)

TS 60 • DIN 5254

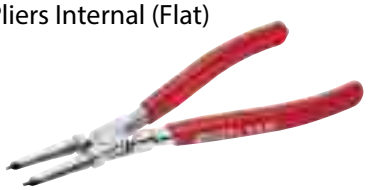


KOD CODE	L mm		g
3301 12 0140	140	10 - 25	90
3301 12 0180	180	19 - 60	195
3301 12 0225	225	40 - 100	235
3301 12 0295	295	85 - 165	445

3321

İç Segman Pensi (Yaysız Düz)
Circlip Pliers Internal (Flat)

TS 60 • DIN 525



KOD CODE	L mm		g
3321 12 0140	140	8 - 25	100
3321 12 0180	180	19 - 60	185
3321 12 0225	225	40 - 100	250
3321 12 0310	310	85 - 165	445

3311

Dış Segman Pense (Yaylı Eğri)
Circlip Pliers, External (Bent)

TS 60 • DIN 525



KOD CODE	L mm		g
3311 12 0125	125	10 - 25	105
3311 12 0170	170	19 - 60	190
3311 12 0210	210	40 - 100	250
3311 12 0275	275	85 - 165	445

3331

İç Segman Pensi (Yaysız Eğri)
Circlip Pliers Internal (Bent)

TS 60 • DIN 5256

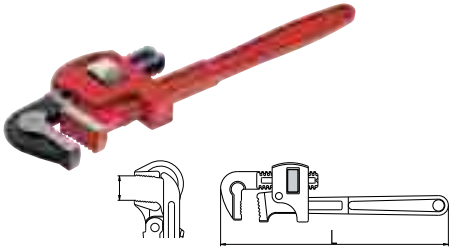


KOD CODE	L mm		g
3331 12 0130	130	8 - 25	105
3331 12 0170	170	19 - 60	185
3331 12 0210	210	40 - 100	250
3331 12 0290	290	85 - 165	440

2100

Stilson Boru Anahtarı
Pipe Wrench, Stilson

TS 3796

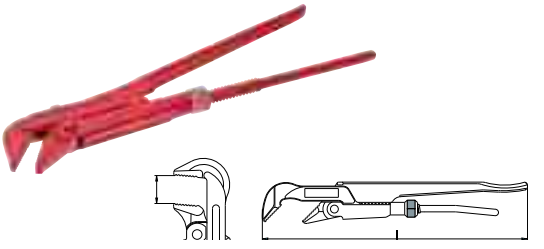


KOD CODE	L mm	L inch	mm	ÖLÇÜ SIZE Inch	g
2100 10 0008	200	8"	27	3/4"	280
2100 10 0010	250	10"	34	1"	550
2100 10 0012	300	12"	42	1 1/4"	725
2100 10 0014	350	14"	50	1 1/2"	1030
2100 10 0018	450	18"	60	2"	1775
2100 10 0024	600	24"	76	2 1/2"	2775
2100 10 0036	900	36"	100	3 1/2"	6000

2200

Maşalı Boru Anahtarı (45^0)
Pipe Wrench (45^0)

DIN 5234



KOD CODE	L mm	mm	ÖLÇÜ SIZE Inch	g
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

6210

Kaportacı Makası (Sağ)
Punch Snip (Right)

DIN 6438



KOD CODE	L mm	L inch	g
6210 27 0250	250	10"	555
6210 27 0275	275	11"	600
6210 27 0300	300	12"	640

6211

Kaportacı Makası (Sol)
Punch Snip (Left)

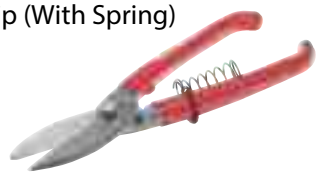
DIN 6438



KOD CODE	L mm	L inch	g
6211 27 0250	250	10"	535
6211 27 0275	275	11"	605
6211 27 0300	300	12"	665

6821

Tenekeci Makası (Yaylı)
Tinman's Snip (With Spring)



KOD CODE	L mm	L inch	g
6821 27 0250	250	10"	575
6821 27 0300	300	12"	895

6350

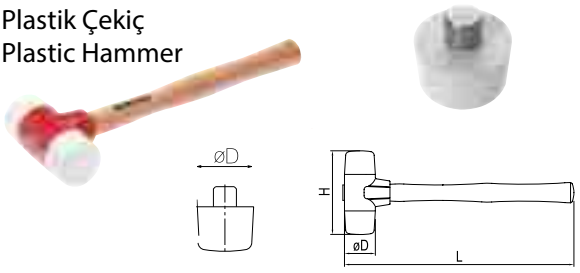
Levye Oluklu
Tyre Lever, Straight



KOD CODE	L mm	L inch	g
6350 26 0300	300	12"	265
6350 26 0400	400	16"	440
6350 26 0500	500	20"	675
6350 26 0600	600	24"	900

5850

Plastik Çekiç
Plastic Hammer

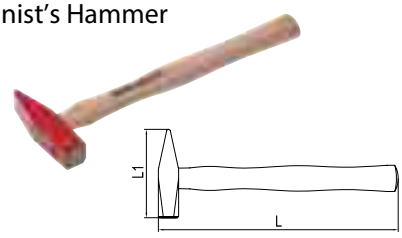


KOD CODE	L mm	øD mm	H mm	g
5850 25 0030	300	30	100	345
5850 25 0040	320	40	110	645
5850 25 0050	350	50	120	1015

5800

Tesviyeci Çekiç
Machinist's Hammer

TS 5 • DIN 1041



KOD CODE	L mm	L1 mm	g	g
5800 25 0100	260	82	100	160
5800 25 0200	280	95	200	260
5800 25 0300	300	105	300	395
5800 25 0500	320	118	500	600
5800 25 0800	350	130	800	950
5800 25 1000	360	135	1000	1095
5800 25 1500	380	145	1500	1630
5800 25 2000	400	155	2000	2100

6225

Madeni Yağdanlık (Flexible Uçlu)
Oiler With Flexible Spout



KOD CODE	ÖLÇÜ SIZE cc	g
6225 26 0200	200	170
6225 26 0300	300	200
6225 26 0500	500	225

1107

1/4" Karbüratör Lokma Takımı (18 parça, mm)
Socket Wrench Set (18 pcs, mm)



1/4"

KOD CODE	LOKMALAR Sockets	AVADANLIKLAR Accessories	g
1107 00 6018	4 - 5 - 6 7 - 8 - 9 - 10 11 - 12 - 13 Altı Köşe Six Points 8 - 10 Sekiz Köşe Eight Points	1/4" Cırcır kolu Ratchet Handle 1/4" Mafsal Universal Joint 1/4" T Kol Sliding T Handle 1/4" Ara Kol Extension Bar 50 mm 1/4" Ara Kol Extension Bar 100 mm 1/4" Mafsallı Kol Flexible Handle	960

1110

3/8" Altı Köşe Lokma Takımı (20 parça, mm)
6 Points Socket Wrench Set (20 Pcs, mm)



3/8"

KOD CODE	LOKMALAR Sockets	AVADANLIKLAR Accessories	g
1110 00 6020	6 - 7 - 8 - 9 - 10 11 - 12 - 13 -14 17 - 19 - 21 22 Altı Köşe Six Points 20.8 Buji Lokma Lastikli Altı Köşe Rubber Six Points	3/8" Cırcır Kolu Ratchet Handle 3/8" Mafsal Universal Joint 3/8" T Kol Sliding T Handle 3/8" Ara Kol Extension Bar 75 mm 3/8" Ara Kol Extension Bar 150 mm 3/8" Mafsallı Kol Flexible Handle	2500

1113

1/2" Altı Köşe Lokma Anahtar Takımı (24 Parça, mm
Socket Wrench Set 1/2" 6 Points (24 pcs, mm)

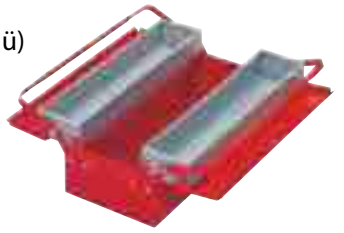


1/2"

KOD CODE	LOKMALAR Sockets	AVADANLIKLAR Accessories	g
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 Ratchet Handle 1/2" Mafsal Universal Joint 1/2" T Kol Sliding T Handle 1/2" Ara Kol Extension Bar 125 mm 1/2" Ara Kol Extension Bar 250 mm	3650

8410

Takım Çantası (3 Gözlü)
Tool Box (3 Trays)



KOD CODE	ÖLÇÜ SIZE mm	g
8410 33 6103	190x300x150	2400
8410 33 6203	190x420x150	3000
8410 00 6036	DOLU / FULL	

KOD CODE	İÇERİK CONTENTS
0130 00 2108	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 18x19 - 20x22
0430 00 2108	6x7 - 8x9 - 10x11 - 12x13 - 14x15 - 16x17 18x19 - 20x22
1841 07 0021	21 mm
2400 11 0240	240 mm
3020 12 3180	180 mm
3700 16 3160	160 mm
4100 17 5100	5x100
4120 18 4580	4.5x80
4900 00 3110	2 - 2.5 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10
5500 23 0150	150 mm
5540 24 4120	4x120
3800 15 0180	180 mm
5800 25 0030	300 gr

Çapak Alma Raspa Uçları











S10
BS1010



S10 LH
BS1011



S10 TİN
BS1012



S10 C
BS1016



S10 C
BS2010



S20
BS2015



S30
BS3010



S35
BS3510



S60
BS6010



S100
BS1018



S101
BS1010



S101 LH
BS1011



S101 TİN
BS1012



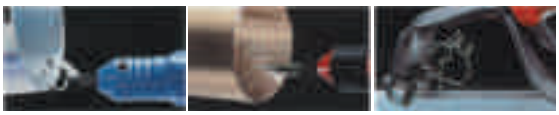
S150
BS3000



S202
BS2010



Uçlar 10'lu paket halindedir.



Yolluk Kesme Makasları

30º Yolluk Kesme Makası



45º Yolluk Kesme Makası



90º Yolluk Kesme Makası



Plastik Çapak Alma Bıçağı



GWS 7-115
Avuç Taşlama



Giriş gücü
720 W
Boştaki devir sayısı
2.800 – 11.000 dev/dak
Disk çapı
115 mm

GWS 9-115
Avuç Taşlama



Giriş gücü
900 W
Boştaki devir sayısı
11.500 dev/dak
Disk çapı
115 mm

GWS 22-180
Taşlama



Giriş gücü
2.200 W
Boştaki devir sayısı
8.500 dev/dak
Disk çapı
180 mm

GWS 24-230 H
Taşlama



Giriş gücü
2.400 W
Boştaki devir sayısı
6.500 dev/dak
Disk çapı
230 mm

GGS 28 LCE
Delik Taşlama



Aksesuarlar



Giriş gücü
650 W
Boştaki devir sayısı
10.000 – 28.000 dev/dak
Uç girişi
8 mm'ye kadar penset

DREMEL 3000 1/25
Spiral Taşlama



Giriş gücü
130 W
Boştaki devir sayısı
33.000 dev/dak
Uç girişi
3 mm'ye kadar pens

GUS 10,8 V-LI
Akülü Saç Kesme



Akü gerilimi
10,8 V
Strok sayısı, boşta
700 dev/dak
Akü ile birlikte ağırlığı
1,0 kg

GSC 160
Saç Kesme



Giriş gücü
500 W
Kesme kapasitesi
çelik (400 N/mm²), max
1,6 mm
Strok sayısı, boşta
5.000 dev/dak

GBM 13-2RE
Darbeli Matkap



Giriş gücü
550 W
Ahşapta delme çapı
32 / 20 mm
Çelikte delme çapı
13 / 8 mm

GBM 10 RE
Matkap



Giriş gücü : 600 W
Ahşapta delme çapı : 25 mm
Çelikte delme çapı :10 mm

GDS 18 E
Darbeli Somun Sıkma



Giriş gücü
500 W
Maks. tork (sert vidalama)
250 Nm
Maks. tork (yumuşak vidalama)
160 Nm
Uç girişi
1/2" dış dörtgen

GDS 18 V-LI
Akülü Darbeli Somun Sıkma



Akü gerilimi
14,4 V
Maks. tork (sert vidalama)
170 Nm
Vida çapı
M 6 – M 16

GBM 32-4
Matkap



Giriş gücü : 1500 W
Ahşapta delme çapı : 70 mm
Çelikte delme çapı : 32 mm

GBM 32-4
Manyetik Matkap Tezgahı



Manyetik tutma gücü
25 kN
Germe flanşı çapı
65 mm
Çalışma uzunluğu, Z ekseni
223 mm

GSB 14,4 - 2
Akülü Matkap



Akü gerilimi
14,4 V
Duvarda delme çapı, maks.
10 mm
Vida çapı, maks.
8 mm

GLM 50
Mesafe Ölçüm Aleti



Ölçme aralığı
0,05 – 50 m
Ölçüm hassasiyeti, tipik
± 1,5 mm
Ölçüm süresi, tipik
< 0,5 s

Önemli Not : ***BOSCH*** *Elektrikli El Aletleri Grubunun Tamamı Profösyonel Seridir.*



Üniversal
Tulumba Pres

- Konfeksiyon
- Sanayiinde ve kasül
- Düğmeye kumaş kaplar
- Rivet ve kuş gözü çıt çıt



Manuel Darbeli Pres
4122

Darbe Gücü:
max.1300 kg \ cm²
Parça Yüksekliği
320 mm
Tablo Genişliği
70 x 30 mm

- Konfeksiyon
- Sanayiinde ve kasül
- Düğmeye kumaş kaplar
- Rivet ve kuş gözü çıt çıt



Elektrikli
Darbe Presi
4388

Darbe Gücü
2.500 kg. / cm^2
(Dijital ayarlanabilir)
Pens Deliği
Ø 9 mm.
Kapasite
Dakikada 25 vuruş

- Konfeksiyon sanayiin de kot çakmada
- Ayakkabı ve terlik sanayiin de kanca ve kuş gözü çakmada



Pnömatik Darbeli
Markalama Presi
4241

Darbe Gücü
1.300 kg / cm^2
(Yay değiştirilerek ayarlanabilir.)
Parça Yüksekliği
320 mm
Tablo Genişliği
160 x 160

- Konfeksiyon sanayiinde kot düğme, rivet, çıt çıt çakmada
- Ayakkabı ve terlik sanayiinde kanca ve kuş gözü çakmada
- Elektrik, elektronik sanayiinde kullanılır.
- Kozmetik sanayiinde kullanılır.
- Otomotiv sanayiinde kullanılır.



Hassas Masa
Matkabı
4156

Mandren Devri
Max. 2810 dev. / dak.
Delme Gücü
Max. 6.5 mm.

- Zamak, toka, çanta aksesuarlarını sıvamada
- Elektrik ve elektronik montaj sanayisine
- Kuyumculuk sektöründe



Hassas Masa
Matkabı
4152

Motor Gücü: 200 W
Mandren Devri :
max. 25.000 dev / dak.
Delme Gücü:
max. 5 mm
Tablo Genişliği
160 x 160 mm.

- Emprimecilerde, hassas delik delmede
- Kuyumcu sektöründe verimliliği sağlar.
- Toka, çanta, zamak perçinlerini sıvamada
- Elektrik elektronik sanayinde.

M-13



Tek Devir Matkap Tezgahı

Motor Gücü	0,55 Kw 1400 D / dk
Matkap Devri	450 - 4500 Devir Arası 5 Kademe
Delme Kapasitesi	13 mm
Delme Derinlik Mesafesi	90 mm
Mors Mili Koniği	B 16
Tabla ile Mandren Arasındaki Max. Yükseklik Mesafesi	350 mm
Sütun Mili ile Mandren Ucu Mesafesi	170 mm
Tabla Kullanım Alanı	245 x 300
Tabla T Kanal Ölçüsü	T-Papuç M10 x 12

DK-13

Tek Devir Klavuz Çeken Matkap Tezgahı



Motor Gücü	0,55 Kw 900 D / dk
Matkap Devri	280 - 2880 Devir Arası 5 Kademe
Delme Kapasitesi	16 mm
Diş Çekme Kapasitesi	M 12
Delme Derinlik Mesafesi	90 mm
Tabla ile Mandren Arasındaki Max. Yükseklik Mesafesi	350 mm
Sütun Mili ile Mandren Ucu Mesafesi	170 mm
Tabla Kullanım Alanı	245 x 300
Tabla T Kanal Ölçüsü	T-Papuç M10 x 12

Motor Gücü	0,55 Kw 1400 D / dk
Matkap Devri	450 - 4500 Devir Arası 5 Kademe
Delme Kapasitesi	13 mm
Diş Çekme Kapasitesi	M 10
Delme Derinlik Mesafesi	90 mm
Tabla ile Mandren Arasındaki Max. Yükseklik Mesafesi	350 mm
Sütun Mili ile Mandren Ucu Mesafesi	170 mm
Tabla Kullanım Alanı	245 x 300
Tabla T Kanal Ölçüsü	T-Papuç M10 x 12

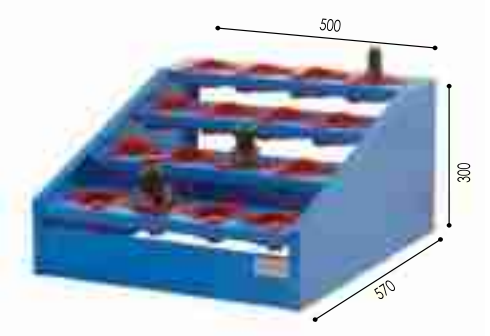
2DK-13



Çift Devir Klavuz Çeken Matkap Tezgahı

Motor Gücü	0,35 Kw 0,55 Kw 700 / 1400 D / dk
Matkap Devri	200 - 4500 Devir Arası 10 Kademe
Delme Kapasitesi	13 mm - 16 mm
Diş Çekme Kapasitesi	M 12
Delme Derinlik Mesafesi	90 mm
Mors Mili Koniği	B 16
Tabla ile Mandren Arasındaki Max. Yükseklik Mesafesi	350 mm
Sütun Mili ile Mandren Ucu Mesafesi	170 mm
Tabla Kullanım Alanı	245 x 300
Tabla T Kanal Ölçüsü	T-Papuç M10 x 12

2755 CNC Sehpası



2750 CNC Sehpalı 4 Çekmeceli Takım Dolabı



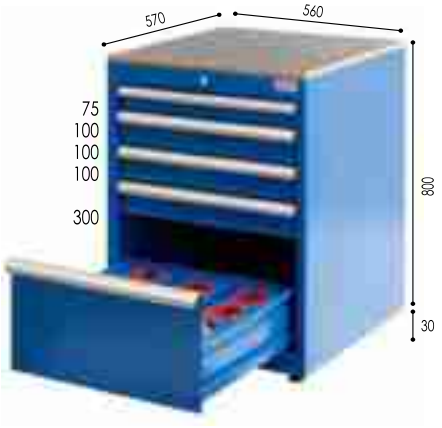
2700 CNC Sehpalı 5 Çekmeceli Takım Dolabı



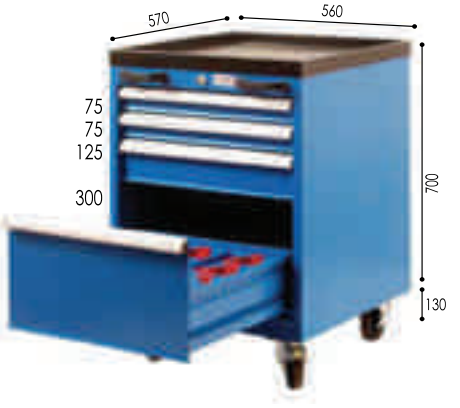
2600 CNC Sehpalı ve Üzeri Raflı Takım Arabası



2650 5 Çekmeceli Takım Dolabı (1 CNC Çekmeceli)



2740 4 Çekmeceli Takım Arabası (1 CNC Çekmeceli)



2300 *CNC Arabası*



2150 *5 CNC Raflı Malzeme Dolabı*



6051 *Soyunma Dolabı*



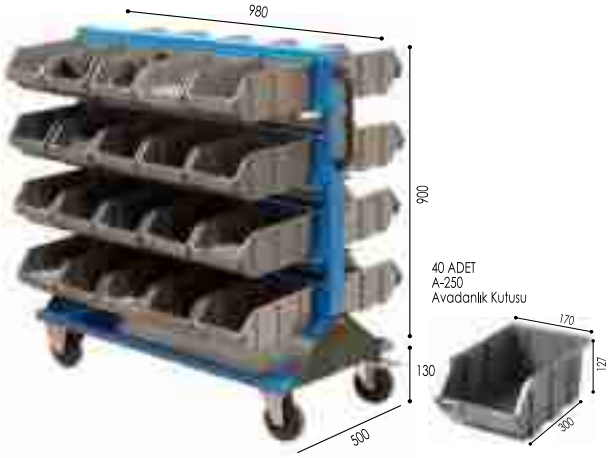
6052 *Soyunma Dolabı*



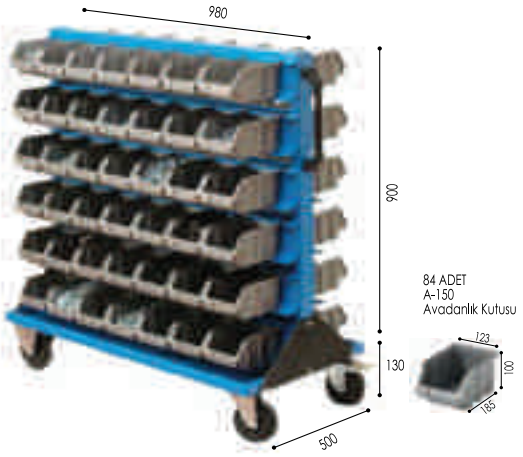
6053 *Soyunma Dolabı*



4086 *Çift Yönlü Avadanlık Arabası*



4089 *Çift Yönlü Avadanlık Arabası*



20949 *10 Raflı Avadanlık Standı*



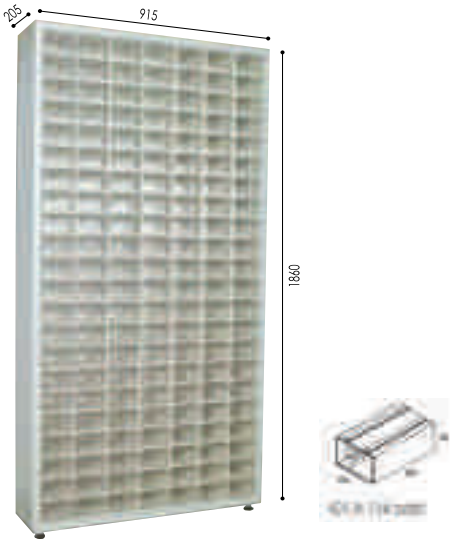
MT401-180 *180 Kutulu Dönerli Stand*



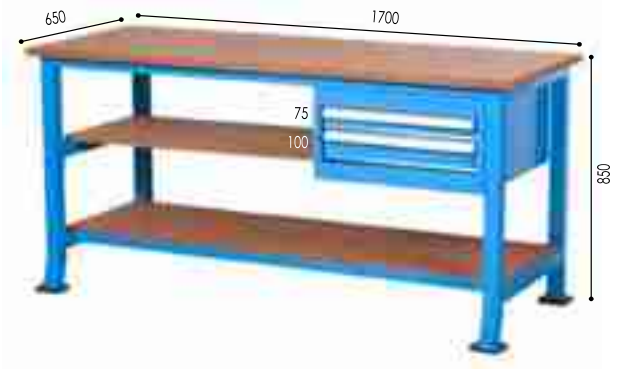
3750 *Askı Panolu Çekmecesiz Çalışma Masası*



ÇKTS 401 *154 Çekmeceli Stand*



3705 *İki Çekmeceli Panosuz Çalışma Masası*



8075 *5 Çekmeceli Takım Arabası*



8072 *2 Çekmeceli Raflı Takım Arabası*



8074 *4 Çekmeceli Takım Arabası*



8027 *5 Çekmeceli Panolu Çalışma Arabası*



8040 *3 Raflı Taşıma Sehpahası*



8026 *2 Raflı Çalışma Arabası*



8045 *1 Çekmeceli 3 Raflı Taşıma Sehpahası*





102

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	85	120	40 mm
İç / İnt	75	115	35 mm



102-D

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	85	120	80 mm
İç / İnt	75	115	35 mm



202

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	100	140	52 mm
İç / İnt	89	130	44 mm



322

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	96	140	125 mm
İç / İnt	89	130	58 mm



132

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	83	134	103 mm
İç / İnt	74	128	45 mm



133

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	83	134	103 mm
İç / İnt	74	128	30 mm



136

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	83	134	103 mm
İç / İnt	32	128	29 mm



132, 133 ve 136 birbirine monte edilebilir

132, 133 and 136 conbinations can be created



141

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	103	134	83 mm
İç / İnt	92	127	75 mm



142

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	103	134	83 mm
İç / İnt	92	127	35 mm



144

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	103	134	83 mm
İç / İnt	42	127	35 mm



141, 142 ve 144 birbirine monte edilebilir

141, 142 and 144 conbinations can be created



302

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	106	122	62 mm
İç / İnt	102	118	59 mm



301

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	106	122	62 mm
İç / İnt	102	118	25 mm



305

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	106	122	62 mm
İç / İnt	42	118	24 mm



301, 302 ve 305 birbirine monte edilebilir

301, 302 and 305 conbinations can be created



351

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	110	170	65 mm
İç / İnt	96	160	55 mm



321

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	125	140	96 mm
İç / İnt	114	130	84 mm



325

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	125	140	96 mm
İç / İnt	56	130	42 mm



321 ve 325 birbirine monte edilebilir

321 and 325 conbinations can be created



390

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	132	205	63 mm
İç / İnt	120	197	52 mm



410

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	132	205	83 mm
İç / İnt	120	197	75 mm



420

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	132	205	132 mm
İç / İnt	120	197	124 mm



390, 410 ve 420 birbirine monte edilebilir

390, 410 and 420 conbinations can be created



401-A

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	120	200	80 mm
İç / İnt	110	197	70 mm



500-A

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	132	230	98 mm
İç / İnt	125	221	85 mm



451

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	173	230	110 mm
İç / İnt	162	220	100 mm



501-A

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	212	306	126 mm
İç / İnt	197	297	112 mm



501-2

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	212	306	126 mm
İç / İnt	94	297	112 mm



501-D

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	212	306	126 mm
İç / İnt	197	297	55 mm



501-A, 501-D ve 501-2 birbirine monte edilebilir

501-A, 501-D and 501-2 conbinations can be created



501-AB

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	212	306	126 mm
İç / İnt	197	297	112 mm



510

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	260	340	150 mm
İç / İnt	245	331	137 mm



510-2

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	260	340	150 mm
İç / İnt	119	331	137 mm



512

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	260	340	150 mm
İç / İnt	245	331	65 mm



513

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	260	340	150 mm
İç / İnt	245	331	43 mm



510, 510-2 ve 513 birbirine monte edilebilir

510, 510-2 and 513 conbinations can be created





401-3

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	360	200	155 mm
İç / İnt	110	195	143 mm



401-3D

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	125	200	155 mm
İç / İnt	110	195	143 mm





401-6

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	360	200	155 mm
İç / İnt	110	195	70 mm



401-6D

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	125	200	155 mm
İç / İnt	110	195	70 mm





401-9

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	360	200	155 mm
İç / İnt	110	195	44 mm



401-9D

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	125	200	155 mm
İç / İnt	110	195	44 mm





401-4

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	360	200	155 mm
İç / İnt	170	195	70 mm



401-3, 401-4 ve 401-9 birbirine monte edilebilir.
401-3, 401-4 end 401-9 conbinations can be created.

410-3D, 401-6D ve 401-9D birbirine monte edilebilir.
410-3D, 401-6D end 401-9D conbinations can be created.



450-G

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	173	230	110 mm
İç / İnt	160	218	100 mm



501-G

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	212	306	126 mm
İç / İnt	193	290	110 mm



511

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	260	340	150 mm
İç / İnt	246	325	135 mm



401-G

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	120	200	80 mm
İç / İnt	110	190	70 mm



500-G

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	140	230	98 mm
İç / İnt	124	217	85 mm



451-G

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	173	230	110 mm
İç / İnt	160	218	100 mm



MS-1 **MS-1 K**

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	100	80	110 mm
İç / İnt	80	70	100 mm



MS-2 **MS-2 K**

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	120	110	160 mm
İç / İnt	100	95	145 mm



MS-3 **MS-3 K**

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	150	140	205 mm
İç / İnt	125	130	187 mm







A-400

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	310	490	190 mm



A-350

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	260	420	170 mm



A-300

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	215	355	152 mm



A-250

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	172	305	130 mm



A-200

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	150	240	122 mm



A-175

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	125	253	98 mm



A-150

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	125	190	98 mm



A-100

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	102	170	74 mm



Kod / Code	Separator
B-300	A-300
B-350	A-350
B-400	A-400



Kod / Code	Separator
B-400D	A-400



A-500

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	490	390	305 mm
İç / Inner	430	325	300 mm



A-530

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	600	400	400 mm
İç / Inner	530	330	395 mm



A-530-T

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	600	400	470 mm
İç / Inner	530	330	395 mm

A-500 ve A-530 içiçe geçerek yerden tasarruf Sağlar.
Aparatları takılı iken üst üste durmaktadır.

It saves space by crossing inside of A-500 and A-530 .
Each item stands on top when the appliances are attached.



Yasal Uyarı / Legal Warning

Tasarım tescil no: 2007 06461
A-500 ve A-530 kodlu ürünler;
Tasarım Tescil Belgesi ile Koruma altındadır.
Kopyalanamaz ve çoğaltılamaz.

Design registration No; 2007 06461 A-500 and A-530 Code Products are protected under regarding designing Registration Document and can not be copied or reproduced .



AV-550

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	340	510	250 mm



AV-540

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	340	510	200 mm



AV-520

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	255	400	200 mm



AV-515

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	255	400	150 mm



AV-415

Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	175	400	150 mm



AV-315

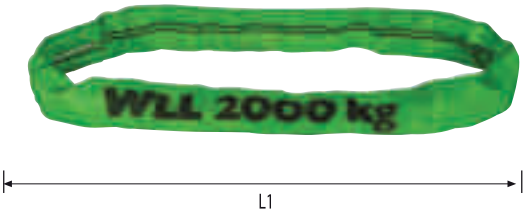
Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	175	300	150 mm



AV-210

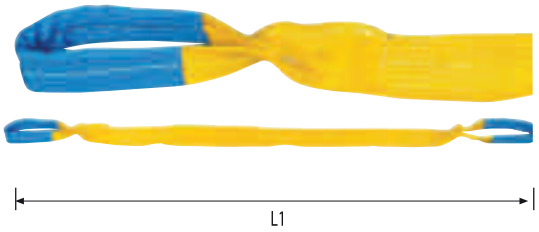
Ebat / Size	En / W	Boy / L	Yük / H
Dış / Ext	130	200	100 mm

Taşıyıcı Sonsuz Sapan



Düz kaldırma kapasitesi (WLL)	Sonsuz Halat Uzunlukları (L1) m					
	2 m	3 m	4 m	5 m	6 m	8 m
1.000 kg	✓	✓	✓	✓	✓	✓
2.000 kg	✓	✓	✓	✓	✓	✓
3.000 kg	✓	✓	✓	✓	✓	✓
4.000 kg	✓	✓	✓	✓	✓	✓
5.000 kg	✓	✓	✓	✓	✓	✓
6.000 kg	✓	✓	✓	✓	✓	✓
8.000 kg	✓	✓	✓	✓	✓	✓
10.000 kg	✓	✓	✓	✓	✓	✓

Taşıyıcı Sapan



Düz kaldırma kapasitesi (WLL)	Sonsuz Halat Uzunlukları (L1) m					
	2 m	3 m	4 m	5 m	6 m	8 m
1.000 kg	✓	✓	✓	✓	✓	✓
2.000 kg	✓	✓	✓	✓	✓	✓
3.000 kg	✓	✓	✓	✓	✓	✓
4.000 kg	✓	✓	✓	✓	✓	✓
5.000 kg	✓	✓	✓	✓	✓	✓
6.000 kg	✓	✓	✓	✓	✓	✓

Transpalet



Model		TL-DM 20	TL-DF 25	TL-DM 20-80
Tip		Hidrolik Transpalet	Hidrolik Transpalet	Hidrolik Kısa Transpalet (80 cm)
Kaldırma Kapasitesi	kg.	2000	2500	2000 (yük merkezinde)
Maksimum Çatal Yüksekliği	mm	190	195	190
Minimum Çatal Yüksekliği	mm	75	85	75
Yön Tekerleği	mm	160X70	180 x 70	160 x 70
Yük Tekerleği	mm	70X70	80 x 70	70 x 70
Çatal Genişliği	mm	520	520	520
Çatal Uzunluğu	mm	1150	1150	800
Tekerlekler		KIRMIZI POLİÜRETAN	KIRMIZI POLİÜRETAN	KIRMIZI POLİÜRETAN
Transpalet Ağırlığı	kg.	55-60	65 - 70	55 - 60

Garaj Vinci



Model	SDJ 2
Kaldırma kapasitesi	500-2000
Min.-Maks. Bom uzunluğu	960-1500
Min.-Maks. Bom yüksekliği	350-1840
Net ağırlık	92

Terazili Transpalet



Model		TL-BFC 20	TL-BFC 6-II
Tip		Terazili Transpalet	Terazili-Yazıcılı Transpalet
Kaldırma Kapasitesi	kg.	2000	2000
Maksimum Çatal Yüksekliği	mm	205	205
Minimum Çatal Yüksekliği	mm	85	85
Yön Tekerleği	mm	160 x 70	160x70
Yük Tekerleği	mm	70 x 70	70x70
Çatal Genişliği	mm	540	540
Çatal Uzunluğu	mm	1150	1150
Tekerlekler		KIRMIZI POLİÜRETAN	KIRMIZI POLİÜRETAN
Transpalet Ağırlığı	kg.	135	135

Manuel İstifleme



Yarı Akülü İstifleme



Model		TL-SDJ 1030	TL-CDD15B 25
Kaldırma Kapasitesi	kg.	1000 (yük merkezinde)	1500
Tip		Manuel İstif Makinası - 3000 mm	Yarı manuel İstif Makinası 2500 mm
Minumum Makina Yüksekliği	mm	3000	1840
Minumum Çatal Yüksekliği	mm	90	90
Kaldırma Yüksekliği	mm	550	2500
Yön Tekerliği	mm	1100	180x50
Yük Tekerleği	mm	1655	80x70
Çatal Genişliği	mm	2080	580
Çatal Boyu	mm	860	1070
Akü	volt		24
Ağırlık	kg.	307	660

Tek Makaslı Platform



Model		TL-CZ 503	TL-SPS 800	TL-SPB 1000	TL-SP 1500
Tip		Makaslı Yük Platformu	Makaslı Yük Platformu	Makaslı Yük Platformu	Makaslı Yük Platformu
Kaldırma Kapasitesi	kg.	500	800 (yük merkezinde)	1000 (yük merkezinde)	1500
Maksimum Tabla Yüksekliği	mm	920	1500		1000
Minimum Tabla Yüksekliği	mm	320	475	1000	420
Tabla Ölçüleri	mm	900x60x35	1220x610x60	1016x515x60	1220X610X60
Platform Ağırlığı	kg.	75	172	115	135

Çift Makaslı Platform



Model		TL-SP 350	TL-SPF 680	TL-SPS 800
Tip		Makaslı Yük Platformu	Makaslı Yük Platformu	Makaslı Yük Platformu
Kaldırma Kapasitesi	kg.	350 (yük merkezinde)	680	800 (yük merkezinde)
Maksimum Tabla Yüksekliği	mm	1300	1500	1500
Minimum Tabla Yüksekliği	mm	350	475	475
Tabla Ölçüleri	mm	910X500X52	1220x610x55	1220x610x60
Platform Ağırlığı	kg.	110	185	172

Makaslı Transpalet



Model		TL-JF 7
Tip		Makaslı Transpalet
Kaldırma Kapasitesi	kg.	1000 (yük merkezinde)
Maksimum Çatal Yüksekliği	mm	810
Minimum Çatal Yüksekliği	mm	85
Yön Tekerleği	mm	180x50
Yük Tekerleği	mm	74x50
Çatal Genişliği	mm	550
Çatal Uzunluğu	mm	1220





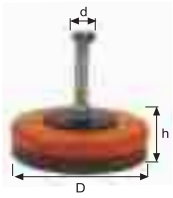
Zincirli Ceraskal

Kapasite (ton)	S.W.L Güvenli Çalışma Yükü (kg)	Test Yükü (ton)	Standart Kaldırma Yüksekliği (m)	Ceraskal Yüksekliği (mm)	Net Ağırlık (kg)
0.5	500	0.75	2.5	305	10.3
1	1000	1.50	2.5	340	11.1
1.5	1500	2.25	2.5	385	15.5
2	2000	3.0	3.0	420	19.7
3	3000	4.50	3.0	465	23.4
3	3000	4.50	3.0	550	30.7
5	5000	7.5	3.0	575	37.8
10	10000	15	3.0	660	69.3

Elektrikli Vinç

Model	W 200-400	W 500-1000
Kaldırma kapasitesi / Tek-Çift hat	200 - 400	500 - 1000
Kaldırma yüksekliği / Tek-Çift hat	12/ 6	12 / 6
Koruma sınıfı	IP 54	IP 54
Kaldırma hızı / Tek-Çift hat	10/ 5	10/ 5
Halat uzunluğu	12	12
Halat çapı	3.6	6
Motor gücü	930	1650
Voltaj / Tek-Çift hat	230/ 50	230/ 50

Tezgah Tamponu



MODEL	D	d	h	Ayar Mesafesi	Taşıma Kg - Adet
ES 1	80	M12 x 1,5	45	12	100 - 400
ES 2	120	M16 x 1,5	45	14	400 - 600
ES 3	160	M16 x 1,5	45	16	600 - 900
ES 4	160	M20 x 1,5	45	16	900 - 1200
ES 5	200	M16 x 2,5	55	25	1000 - 4000
ES 6	200	M16 x 2,5	55	25	1000 - 4000
ES 7	240	M16 x 3,0	60	25	1500 - 5000

Kauçuk Takoz



MODEL	WxL (mm)	H (mm)	Taşıma
EK100 20	100x100	20	500
EK100 30	100x100	30	500
EK120 20	120x120	20	750
EK120 30	120x120	30	750
EK150 20	150x150	20	1,250
EK150 30	150x150	30	1,250
EK200 20	200x200	20	1,250
EK125 20	125x200	20	1,250
EK125 30	125x200	30	1,250
EK300 13	300x300	13	4,000
EK300 20	300x300	20	4,000
EK500 20	300x500	20	6,000

Bor Yağı Hortumu



Kod	Ağız	h	Ayar Mesafesi
ESK	Yuvarlak	300	1/4
ESB	Yuvarlak	400	3/8
ESK G	Geniş	300	1/4
ESB G	Geniş	400	3/8
ESB 1/2	Yuvarlak	400	1/2
ESB 1/2G	Geniş	400	1/2
Musluk	Hortum fiyatına eklenir		

Kollu Gres Pompası

Yedek Uç



500 Ml

İnce Yağ Pompası Dişi - Erkek



Freze Çektirme Mili

ISO 40 M 16



ISO 30 M 12



Freze Talaş Koruma Körükleri

Ön Körük



450 x 500 cm

Arka Körük



500 x 700 cm

Gres Kovası



Varil Pompası







Model	Jupiter
Taban	Jupiter Taban
ISO	EN ISO 20345:2011
Ürün Kodu	157-01 Gray
Koruma	S1/S1P
Kalıp	JUPITER
Saya	Süet Deri
Astar	Ter emici nefes alabilen astar
İç Taban	Nefes alan iç tabanlık
Taban	PU/PU Çift Densite SRC
Burun Koruma	Çelik Burun
Ara Taban	Çelik Taban
Numara	36-46





Model	Jeriko
Taban	Jeriko Taban
ISO	EN ISO 20345:2011
Ürün Kodu	232-03 Black
Koruma	S1/S1P
Kalıp	JERIKO
Saya	Vidala Deri
Astar	3D Hava Geçirgen File
İç Taban	Soft-Walk
Taban	PU/PU Çift Densite SRC
Burun Koruma	Çelik Burun
Ara Taban	Multi Protection Kewlar Taban
Numara	36-47

KALIP ve MAKİNA KİMYASALLARI

- Kalıp Koruyucu Spreyler
- Genel Amaçlı Pas Sökücüler
- Endüstriyel Amaçlı Yağlayıcılar
- Kesme ve Klavuz Çekme Yağları
- Kalıp Ayırıcı Silikonlar
- Sıvı Gressler
- Sızdırmazlık Elemanları
- Genel Amaçlı Yapıştırıcılar
- Hidrolik Yağları
- Bor Yağları
- Kızak Yağları
- Kesme Sıvıları
- Gress Yağlar
- Taşlama Sıvısı
- Elektro Erezyon Sıvıları
- Kompresör Yağları



Kuvvetli Pas Sökücü Sprey

Özellikleri
Üstün özelliklere ve ileri teknolojiye sahip bir pas sökücüdür. Yüzeye çok iyi işleme özelliğine sahiptir. Sıkışmış cıvata ve somunları anında gevşetir.

Kullanım Alanı
Her türlü metal ve otomotiv endüstrisinde, paslanmış bölgelerin çözülmesinde kullanılır.



400 Ml

Multi Signum Sprey

Özellikleri
Bu sprey 5 işi bir arada yapar; korozyona karşı korur, pası çözer, yağlar, temizler ve tekrar kirlenmesini engeller.
-30°C - 100°C ısıya dayanıklıdır.
Vanilya kokuludur

Kullanım Alanı
Otomotiv sektörü, metal, makine bakım ve onarımı yapılan yerlerde kullanılır.



400 Ml

WW 3000 Sprey (Sıvı Gress)

Özellikleri
Yüksek basınca dayanıklı yağlama malzemesidir.
Suya, 180°C ısıya ve korozyona karşı dayanıklıdır.
Tutunma özelliği fazladır.
Akma ve damlama yapmaz.
Şeffaf renktedir ve kalıcı yağlama yapar.

Kullanım Alanı
Otomotiv sektöründe, ağır iş makineleri, forklift zincirleri, kalıp aparatları vb. için kullanılır.



500 Ml

WW 3000 (Sıvı Gress)

Özellikleri
Yüksek basınca dayanıklı tutunma özelliği vardır.
180°C ısıya, su ve tuzlu suya dayanıklıdır.

Kullanım Alanı
Tüm kalıp yüzeylerinde koruma amaçlı, forklift zincirlerinde, açık dişlilerde, konveyör hatlarında, mafsal, menteşe yerlerinde vb. kullanılır.



30 - 60 Lt

Fren Balata ve Parça Temizleyici Sprey

Özellikleri
Bütün metallerde yağ, kir, is ve reçineyi çabuk ve iz bırakmadan temizler.

Kullanım Alanı
Havalandırma sistemlerinde her türlü kalıp, makine zincir ve frenlerde temizlik amaçlı kullanılır.



500 Ml

Parça Temizleyici

Özellikleri
Solvent bazlı uçucu temizlik maddesidir.
Temizleme işleminden sonra buharlaşarak kaybolur.

Kullanım Alanı
Otomobil, makine kalıp, zincir gibi yerlerde genel temizleyici olarak kullanılır.



30 Lt

El Temizleme Kremi

Özellikleri
Alkali ve çözücü maddeler içermez.
Dermatolojik açıdan sakıncası olmayan ürünlerin bileşiminden oluşur.
Ürünün içerisinde bulunan işlenmiş nce pütürlü maddeler eldeki gözeneklerde derinlemesine temizlik ve koruma sağlar.

Kullanım Alanı
Temizleme kremi, mekanik, boyalı ve yapışkan tüm endüstriyel kirlerde, yağ, katran, zift, PU köpüğü, cila tozu ve kömür artığı gibi tüm zor kirleri elinizden kolaylıkla çıkarır



3 - 30 Lt

Yüzey Pas Temizleme Kremi

Özellikleri
Direk uygulanır. Yüzeydeki pası mikron bazında aşındırarak yüzeyi pastan arındırır.

Kullanım Alanı
Tüm metal yüzeylerde pas sökücü olarak kullanılır.



30 Lt

Polisaj (Parlatma) Pastası
Özellikleri
Üretimdeki kalıplarımızın baskı öncesi ve sonrasında yüzeylerini temizler, talaş kaldırmaz. Sadece parlatır. Ayrıca tüm paslanmaz ürünlerde kullanılır.



Sun - Fix Kaynak Macun
Özellikleri
Yapıştırmada, sızdırmazlıkda, çatlak onarımında ve dolgu maddesi olarak kullanılır. Çift kompenantlı 3 saat kuruduktan sonra zımparalama, boyanabilir, delinebilir.



Genel Amaçlı Gress Yağı

Özellikleri
Lityum esaslı olup devirli çalışan her türlü dişli ve rulmanlarda kullanılır. Basınca, suya, 180°C ısıya dayanıklıdır.

Kullanım Alanı
Yüksek sıcaklığa dayanıklı yapısı sayesinde demir, çelik, çimento, maden, kimya ve kağıt sektöründe kullanılır.



1 - 25 kg

WINCUT Kesme Yağı

Özellikleri
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.

Kullanım Alanı
Tüm metallerde sürtünmeyi azaltır. Kılavuz ve matkap ömrünü uzatır. Kusursuz diş çekme ve delme işlemi sağlar.



460 ml

Kesme Yağı

Özellikleri
Yüksek basınca ve sıcağa dayanabilen özel katkılarla kuvvetlendirilmiş kesme yağıdır.

Kullanım Alanı
Cıvata ve vida makinelerinde, diş açmalarda, ovalamalarda, baş yarma, broşlama vb. operasyonlarda kullanılır.



5 - 30 Lt

Taşlama Sıvısı

Özellikleri
Sentetik esaslı kesme ve taşlama sıvısıdır. Su ile karıştırılır. Film tabakası oluşturarak aşınma ve sürtünmeleri minimize eder. Çalışma sırasında pas önleme özelliği vardır. Tamamen doğada parçalanır. Ekonomiktir.

Kullanım Alanı
Bütün taşlama tezgahlarında kullanılır.



30 - 60 Lt

İtici Yağlama Gresi

Özellikleri
Metal ve grafit içermeyen montaj pastasıdır. - 180ºC / + 1400ºC ısıya ayrıca 220N/mm² basınca dayanıklıdır. İleri teknolojiye sahip seramik yapılı ve yüksek ısıya dayanıklı parçaların üzerinde çok iyi verimlilik sağlar. Korozyonu engeller.

Kullanım Alanı
Kalıp iticilerinde yağlama amaçlı kullanılır.



1 Kg

Sentetik Soğutma Sıvısı

Özellikleri
Sentetik bazda CNC soğutma sıvısıdır.
Konsantrasyonu düşüktür.
Bakterileşme ve yosunlaşma yapmaz.
Cilde zarar vermez.

Kullanım Alanı
Bütün CNC ve manuel tezgahlarda kullanılır.



30 Lt
60 Lt

Erozyon Yağı

Özellikleri
Daldırma erozyon makinelerinde kullanılan soğutma maddesidir. Özellikle bakırda oluşan yanma kokusu yoktur.
Yanma sırasında sıvı etkilenmez, bu sayede süzüldükten sonra da defalarca kullanılabilir.

Kullanım Alanı
Daldırma erozyon tezgahlarında kullanılır.



30 - 60 Lt

Erektroerozyon Sıvıları

Özellikleri
Özel hidrokarbon bileşiklerinden oluşan su berraklığında, kokusuz ve saf ürünlerdir. Oksidasyona karşı son derece dayanıklı olduklarından yaşlanma mukavemetleri yüksektir, uzun bir çalışma ömrüne sahiptirler. Fizyolojik olarak tamamen zararsızdırlar.

Kullanım Alanı
İnce ve Kaba Pasolu Uygulamalar İçin Genel Amaçlı



50 - 170 Kg

Kesme Sıvıları

Özellikleri
özellikle alüminyum için dizayn edilmiştir. Aletlerin ömrünü uzatır ve tutukluk yapmasını önler, üretimi hızlandırır, maliyetleri azaltır ve yüzey rötuşlarını iyileştirir.
Alüminyum üzerinde diş açma, delme, kılavuz çekme, yuva genişletme veya yüzey iyileştirme işlemlerinde güvenle kullanılabilir.

Kullanım Alanı
Paso verme işlemlerinde, testerelerde, tornada, kesme işlemlerinde, rayba salmada, oymacılıkta, matkapla delmede, taşlamada, şekillendirme işlemlerinde, metal kıvırma makinelerinde, diş açmada, delmede, yuva genişletmede, kılavuz çekmede.



473 Ml - 208 Lt

K1000 Kalıp Ayırıcı Sprey

Özellikleri
Kalıp ayırıcı ve yağlayıcı gazaltı kaynaklarında torc ucunda curuf bırakmaz, kaynakta sağlıklı devamlılık sağlar.
Karton plastik ve metal levhaların ayrılmasını sağlayan kaydırıcı bir maddedir.
Sıcakda yapılan kalıplama işleminde plastiğin yapışmasını önler.
Gıda sanayiinde makinaların az yağlanan kısımlarında özellikle plastik yataklarda kullanılır.



400 Ml

K2000 Kalıp Ayırıcı Sprey

Özellikleri
Yüksek ve düşük ısılarda mükemmel sonuç veren silikon bazlı ayırıcı malzemedir.
Plastik imalatında enjeksiyon makinalarında kullanılır malzemenin kalıba yapışmasını önler.
! Sıkıştırılmış gaz yanıcıdır.



400 Ml

Force 801 Süper (Japon) Yapıştırıcı

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.



20 - 50 Ml

Force TL - 22 Civata Sabitleyici

Özellikleri
Yumuşak metal ve komponentlerde 1/4" (6 mm.) den küçük dişliler ve ayar gerektiren yerlerde kullanılan, tekrar sökülmesi kolay olan bir anaerobik yapıştırıcıdır.



10 - 250 Ml

Force TL - 43 Civata Sabitleyici

Özellikleri
Orta mukavemetli, sökülebilir, genel amaçlı anaerobik bir üründür.
Tüm cıvata ve somun boylarında kullanılabilir. Yapıştırıldıktan sonra damlama ve akma yapmaz.
Kolay uygulanabilir ve sızdırmazlık özelliğine sahiptir. Makine ayar cıvatalarında, hidrolik sistem cıvatalarında, rulman yataklarının cıvatalarında, taşıyıcı konveyör bant cıvatalarında kullanılır.



10 - 250 Ml

Force TL - 70 Civata Sabitleyici

Özellikleri
1"(25 mm.) ' e kadar cıvata, saplama ve somunların sökülmemesinin istendiği yerlerde kullanılır. Genel olarak motor saplamaları, su pompa kaplin bağlantıları ve beyaz eşya sanayiinde kullanılır.



10 - 250 Ml

RT-01 Rulman Kenetleyici

Özellikleri
Tek komponentli, düşük viskoziteli, hızlı 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.



10 - 50 - 250 ml

RT-20 Rulman Kenetleyici

Özellikleri
Silindirik 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 parçaların ileride sökümün istenmediği yerlerde güvenle kullanılabilir. Yeşil renkte, yüksek mukavemetlidir. Yüksek ısı ile tekrar sökülmesi mümkündür.



10 - 50 - 250 ml

RT-38 Rulman Kenetleyici

Özellikleri
Tek komponentli, yüksek viskoziteli, 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.



10 - 50 - 250 ml

HP-42 Hidrolik ve Pnömatik Sızdırmazlık

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 dayanır.



10 - 50 - 250 ml

Genel Amaçlı Sprey - WD40

Özellikleri
Bu Sprey 5 işi bir arada yapar;korozyona karşı korur;pası çözer,yağlar,temizler ve tekrar kirlenmesini engeller.

Kullanım Alanı
Otomotiv sektörü, metal, makine bakım ve onarımı yapılan yerlerde kullanılır.

200 ml WD40 - 400 ml WD40 - 5 lt WD40



BEST MP61 Kalıp Koruyucu

Özellikleri
Best® kalıp koruyucu yapışkan olmayan bir üründür ve korozyonu önler pas ve kirlenmeye karşı uzun süreli koruma sağlar. Bu balmumu bazlı koruyucu ürün tüm alanalara nüfus eder ve kalıpların yerleştirmesi esnasında kolaylık sağlar. Berrak opak benzeri rengi ile etki alanını belirlemenizde yardımcı olur. Gerekli olan şey ince bir tabaka...



Würth Balata Temizleme Spreyi

Özellikleri
Taşıtlar, diskli ve kampanalı frenler, motor ve şanzıman gövdeleri vs. gibi yerlerde yağlı/ gresli artıkların, kurumun, fren tozunun hızlı bir şekilde giderilmesin kullanılır. Kurum, yağ, fren tozları ve yağlı artıkların hızlı ve efektif uzaklaştırılmasını sağlar. Hızlı havalanma özelliği ve yüksek temizleme performansı. Artık bırakmaz. AOX ve silikon içermez. Aseton içermez.



Würth HHS 2000

Özellikleri
Çok yüksek basınçlara dayanıklı, kısmen sentetik yağ Yüksek basınca dayanıklı Mükemmel ses ve titreşim emici, sıradışı yırtılmaya dayanıklı şerit tabaka. Nüfuz etme özelliği, Dar toleranslarda çok iyi yağlama özelliğine sahiptir. Bu sayede korozyona karşı güvenilir koruma sağlar. Silikon, reçine ve asit içermez. Uygulama ısı aralığı -35°Cile +180 °C arası k ısa süre için +200 °C'ye kadar



LPS TKX
Genel Amaçlı Pas Çözücü

Özellikleri

TKX genel amaçlı, nüfuz edici, yağlayıcı ve koruyucu bir üründür. Nem ile yer değiştirerek yüzeyden nemi atar. Pastan kitlenmiş parçaları çözer ve korozyona karşı korur. TKX özellikle kablo, şanzıman ve zincirler için mükemmel bir yağlayıcıdır. TKX cihazlar ve makineler üzerinde kurumayan, yağlı bir film tabakası oluşturur.
TKX'in alev alma derecesi yüksektir (79°C). Parlamanın potansiyel tehlike olabileceği yerlerde ideal üründür.
TKX klorlu solventler veya silikon içermez, pek çok yüzeyde güvenle kullanılabilir.



360 ml

LPS HDX
Ağır Şartlar İçin Temizleyici

Özellikleri

LPS HDX yanıcı olmayan, hızlı etki eden, parçalar ve cihazlar üzerindeki en zor kirleri dahi temizleyebilen bir solventtir.
Yağ, gres, balmumu, kir, nem, katran, fren hidrolik yağı ve diğer kirleri hızla temizler. HDX hızlı buharlaşır ancak artık madde bırakmaz.
Yanıcılığın potansiyel problem olabileceği her uygulamada HDX ideal üründür.



360 ml

LPS 1
Kuru Film Yağlayıcı - Su, Nem Kovucu

Özellikleri

LPS 1 özel formülü sayesinde kuru, ince ve yağlayıcı bir film tabakası oluşturur. En derin yarıklara dahi dakikalar içerisinde nüfuz eder. Yağa karşı dirençlidir, toz ve kirin yeniden oluşumuna karşı direnir. Nemle yer değiştirdiğinden özellikle elektrikli/ elektronik cihaz ve parçalardaki nemi giderir ve kuru bir yüzey oluşturur. LPS 1 parça ve cihazlardan yağı ve kiri uzaklaştıran özel maddeler içerir.
LPS 1 klorlu solvent içermez. Bu yüzden kauçuk, boya ve plastikler üzerinde güvenle kullanılabilir. LPS 1'de itici gaz olarak yanıcı olmayan karbondioksit kullanılmıştır.



360 ml

LPS 2
Endüstriyel Amaçlı Yağlayıcı

Özellikleri

LPS-2 Çabuk etki gösteren, derinlemesine nüfuz ederek yağlama ve koruma yapabilen bir üründür. LPS-2 hafif yağlı bir film tabakası oluşturur. İç ve dış mekanlardaki ekipmanlarda kullanılabilir. Hızlı nüfuz etme özelliği sayesinde ulaşılması e zor noktalara erişir ve kitlenmiş civata-somun vida ve diğer parçaları çözer. LPS-2 iç mekanlarda yer alan ekipmanları 1 yıl ve daha fazla süre korozyona karşı korur.
LPS-2 zararlı klorlu solvent içermez ve kumaş, kauçuk, boya ve plastiklerde güvenle kullanılabilir. LPS-2'de itici gaz olarak yanıcı olmayan karbondioksit kullanılmıştır.



360 ml

LPS TAPMATIC TriCut
Metal Kesme Sıvısı

Özellikleri

Düzenli olarak hem soğutma hem de yağlama yapan bir kesme sıvısıdır. Sürtünmeyi azaltır ve özellikle diş açmada, delmede, yuva genişletmede ve kılavuz çekmede çıkan talaşların tekrar kaynamasını önler. Ekstra performans sağlayan özel katkıları sayesinde aletlerin ömrünü uzatır ve işlerinizin temiz bitmesini sağlar. Su ve etkisiz dolgu maddeleri içermez. Bilinen kesme sıvılarına göre daha az sarfedilir. Çeliğin tüm tipleri için idealdir. Özellikle paslanmaz çelik ve titanyum gibi sert metaller ve alaşımları için geliştirilmiştir. Her türlü diş açma, delme, kılavuz çekme, yuva genişletme, toma ve kesme işlemlerinde kullanılabilir. Alüminyum ve sarı metallerde kullanılması tavsiye edilmez.



473 ml

LPS TAPMATIC Dual Action
Alüminyum Kesme Sıvısı

Özellikleri

LPS Tapmatic Dual Action Plus #2 kesme sıvısı özellikle alüminyum için dizayn edilmiştir. Aletlerin ömrünü uzatır ve tutukluk yapmasını önler, üretimi hızlandırır, maliyetleri azaltır ve yüzey rötuşlarını iyileştirir. Alüminyum üzerinde diş açma, delme, kılavuz çekme, yuva genişletme veya yüzey iyileştirme işlemlerinde güvenle kullanılabilir. Alüminyum ve alaşımların işlenmesinde maksimum basınçlarda dahi mükemmel yağlama sağlar. Sürtünmeyi azaltır, işlem esnasında açığa çıkan talaşların kesici takımlara ve yüzeye sarmasını engeller.



473 ml

PS 77 Boru Sızdırmazlık Elemanı
TEFLON KATKILI

Özellikleri

Yüksek viskoziteli sızdırmazlık ürünü olan PS-77 kolay uygulanabilen ve ilk uygulandığında dahi 7 bar basınca dayanıklı bir üründür.
Solvent içermez, damlamaz. Tam kurumada 700 bar basınca dayanır.
Anaerobik olarak sızdırmazlık sağlar.
Kullanımdan sonra geçen uzun süreye, sarsıntıya ve vibrasyona karşı dayanıklılığını ve sızdırmazlığını korur. Her türlü sıvı, yağ, gres ve birçok kimyasalın geçtiği boru dişlilerinde ve yaygın olarak basınçlı kaplarda, hava kompresörlerinde, hidrolik sistem ve tanklarda, vibrasyona karşı mukavemet gerektiren yerlerde kullanılır.



50 - 250 ml

GM-10 Yüksek Sıcaklığa
Dayanıklı Conta

Özellikleri

Kırmızı renkli, yüksek sıcaklığa dayanıklı, hızlı oluşum gösteren sıvı contadır. Tüm metal parçalarda sıvı conta olarak 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 hızlı sertleşme isteniyorsa aktivatör kullanımı önerilir.



50 - 250 ml

Shell Tellus 37 Hidrolik Yağı



Özellikleri

Yüksek sıcaklıkların söz konusu olabileceği modern hidrolik sistemlerde termal kararlılığı çok yüksektir. Tellus hidrolikyağlar yüksek sıcaklıklarda dahi çamurumsu ürünler oluşturmayaraksistemde temiz ve güvenilir bir çalışma sağlar

Shell Gress Yağı



Özellikleri

Daha uzun rulman ömrü düşük bakım maliyeti Ağır çalışma koşulları çin uygunluk Kurşun içermez.Shell Alvania RT3, ağır yüklerin söz konusu olduğu durumlarda -20°C ile 120°C sıcaklık aralığında güvenle kullanılabilir.

Shell Dromus Bor Yağı



Özellikleri

Suyla karıştırıldığı zaman beyaz opak görünümlü emülsiyon meydana getiren bir kesme yağıdır. Dromus BA fenol nitrit içermez. Çok iyi rafine edilmiş baz yağları paslanmaya karşı koruma sağlayan ve yağlayıcı özelliğ olan uygun bir katkı paketi ve emülsiyon yapıcı maddelerden oluşturulmuştur.

Mobil Vectra Oil No : 2 Kızak Yağı



Özellikleri

Günümüz yüksek verimli takım tezgahlarının gerektirdiği hassasiyet ve parça yüzey kalitesi gereksinimlerini tam olarak karşılayacak şekilde özel olarak tasarlanmış üstün kaliteli yağlardır. Yüksek kaliteli baz yağlar ve performansı dengelenmiş düşük sürtünme özelliği, korozyondan üstün koruma sağlar ince yağ filminde tuttu-kaydılı areketi ve sesi önler. soğutucu sıvıların yağlanan yüzeylerde yaptığı korozif etkiyi minimumda tutacak şekilde formüle edilmiştir.

Mobil Vectra Oil No : 4 Kızak Yağı



Özellikleri

Baz yağ ve katık paketi kızakların korunması için özenle seçilmiş ve aynı zamanda üstün filtre edilebilme özelliğine sahip olması sağlanmıştır. Bu husus, yağ akışının az olması veya yağ filtrelerinin tıkanması tuttu-kaydılı harekete ve sese yol açması, aşınmayı artırması nedeniyle önemlidir. Yağın yüzeye yayılması ve içerdiği yapışkanlık sağlayıcı katıklar, makine çalışmadığında kızak yüzeylerine gelen statik yükle aradan yağın kaçmasına karşı koymaktadır.

Mobil Rarus shc1000 Kompresör Yağı



Özellikleri

Serisi üstün performanslı yağlar esas olarak ağır hizmet rotari vidalı ve kanatlı hava kompresörlerini yağlama amacıyla geliştirilmiş bir seridir. Bu yağlar, özellikle mineral bazlı ürünlerin yüksek son kompresyon sıcaklıkları altındaki güç çalışma uygulamaları veya yağ değiştirme aralıklarının uzatılması taleplerini karşılayamadığı durumlar için uygundur

PO Kızak Yağı



Özellikleri

Her tip takım tezgahının yatay ve dikey kızaklarının yağlanmasında kullanılır. Önerildiği takdirde tezgâhların hidrolik sistemlerinde de kullanılabilirkesme yağları ve alkali maddelerin mevcut olduğu ortamlarda jel oluşumuna karşı dirençlidir.Yapışkan özellikte katık içermesi nedeniyle metal yüzeylere çok iyi yapışır, yağın sistemden sızmasını önler.Tezgâhın pürüzsüz, atlamasız ve titreşimsiz hareketini sağlar.Hassas tezgâhlarda küçük toleranslarda çalışma olanağı sağlar Aşınma ve korozyona karşı koruyucu özellikleri ile tezgâh ömrünü uzatır, bakım maliyetlerini düşürür.

PO Bor Yağı



Özellikleri

Çeşitli metallerin kesme ve taşlama işlerinde maksimum soğutma ve yağlama sağlayan, su ile emülsiyon yaparak kullanılan parafinik esaslı kesme yağlarıdır. Alüminyum ve bakır alaşımları, yumuşak çelik ve dökme demir gibi metallerin hafif ve ağır talaş kaldırma işlemlerinde ve alüminyum çubukların sıcak çekilmesinde yağlayıcı ve soğutucu olarak kullanılır.

Klora Kauçuklu Gress Yağı



Özellikleri

Kolay pompalanabilen, suya dayanıklı, pas ve oksidasyona karşı dirençli, üstün kaliteli greslerdir. Çalışma sıcaklığının çok yüksek olmadığı, orta devirli, normal yüklü, düz yataklarda, otomotiv tip ekipmanlarda, endüstriyel uygulamalarda, tarım ve yol makinelerinde genel gresleme işlerinde kullanmak için ideal greslerdir.

TOLERANS TABLOSU (Mikron Değerler / 0,001mm)

NOMİNAL DELİK / İÇ ÖLÇÜSÜ mm (ISO 286 -2)

Üzeri>	3	6	10	18	30	40	50	65	80	100
Altı<	6	10	18	30	40	50	65	80	100	120
E6	+28 +20	+34 +25	+43 +32	+53 +40	+66 +50		+76 +60		+94 +72	
E7	+32 +20	+40 +25	+50 +32	+61 +40	+75 +50		+90 +60		+107 +72	
E11	+95 +20	+115 +25	+142 +32	+170 +40	+210 +50		+250 +60		+292 +72	
E12	+140 +20	+175 +25	+212 +32	+250 +40	+300 +50		+360 +60		+422 +72	
E13	+200 +20	+245 +25	+302 +32	+370 +40	+440 +50		+520 +60		+612 +72	
F6	+18 +10	+22 +13	+27 +16	+33 +20	+41 +2		+49 +30		+58 +36	
F7	+22 +10	+28 +13	+34 +16	+41 +20	+50 +25		+60 +30		+71 +36	
F8	+28 +10	+35 +13	+43 +16	+53 +20	+64 +25		+76 +30		+90 +36	
G6	+12 +4	+14 +5	+17 +6	+20 +7	+25 +9		+29 +10		+32 +12	
G7	+16 +4	+20 +5	+24 +6	+28 +7	+34 +9		+40 +10		+47 +12	
G8	+22 +4	+27 +5	+33 +6	+40 +7	+48 +9		+56 +10		+66 +12	
H6	+8 0	+9 0	+11 0	+13 0	+16 0		+19 0		+22 0	
H7	+12 0	+15 0	+18 0	+21 0	+25 0		+30 0		+35 0	
H8	+18 0	+22 0	+27 0	+33 0	+39 0		+46 0		+54 0	
H9	+30 0	+36 0	+43 0	+52 0	+62 0		+74 0		+87 0	
H10	+48 0	+58 0	+70 0	+84 0	+100 0		+120 0		+140 0	
H11	+75 0	+90 0	+110 0	+130 0	+160 0		+190 0		+220 0	
J6	+5 -3	+5 -4	+6 -5	+8 -5	+10 -6		+13 -6		+16 -6	
J7	+6 -6	+8 -7	+10 -8	+12 -9	+14 -11		+18 -12		+22 -13	
J8	+10 -8	+12 -10	+15 -12	+20 -13	+24 -15		+28 -18		+34 -20	
JS6	+4 -4	+4.5 -4.5	+5.5 -5.5	+6.5 -6.5	+8 -8		+9.5 -9.5		+11 -11	
JS7	+6 -6	+7.5 -7.5	+9 -9	+10.5 -10.5	+12.5 -12.5		+15 -15		+17.5 -17.5	
JS8	+9 -9	+11 -11	+13.5 -13.5	+16.5 -16.5	+19.5 -19.5		+23 -23		+27 -27	
K6	+2 -6	+2 -7	+2 -9	+2 -11	+3 -13		+4 -15		+4 -18	
K7	+3 -9	+5 -10	+6 -12	+6 -15	+7 -18		+9 -21		+10 -25	
K8	+5 -13	+16 -16	8 -19	+10 -23	+12 -27		+14 -32		+16 -38	
M6	-1 -9	+3 -12	-4 -15	-4 -17	-4 -20		-5 -24		-6 -28	
M7	0 -12	0 -15	0 -18	0 -21	0 -25		0 -30		0 -35	
M8	+2 -16	+1 -21	+2 -25	+4 -29	+5 -34		+5 -41		+6 -48	
N6	-5 -13	-7 -16	-9 -20	-11 -24	-12 -28		-14 -33		-16 -38	
N7	-4 -16	-4 -19	-5 -23	-7 -28	-8 -33		-9 -39		-10 -45	
N8	-2 -20	-3 -25	-3 -30	-3 -36	-3 -42		-4 -50		-4 -58	
P6	-9 -17	-12 -21	-15 -26	-18 -31	-21 -37		-26 -45		-30 -52	
P7	-8 -20	-9 -24	-11 -29	-14 -35	-17 -42		-21 -51		-24 -59	
P8	-12 -30	-15 -37	-18 -45	-22 -55	-26 -65		-32 -78		-37 -91	
R6	-12 -20	-16 -25	-20 -31	-24 -37	-29 -45		-35 -54	-37 -56	-44 -66	-47 -69
R7	-11 -23	-13 -28	-16 -34	-20 -41	-25 -50		-30 -60	-32 -62	-38 -73	-41 -76

TOLERANS TABLOSU (Mikron Değerler / 0,001mm)

NOMİNAL MİL / DIŞ ÖLÇÜSÜ mm (ISO 286 -2)

Üzeri>	3	6	10	18	30	40	50	65	80	100
Altı<	6	10	18	30	40	50	65	80	100	120
a12	-270 -390	-280 -430	-290 -470	-300 -510	-310 -560	-320 -570	-340 -640	-360 -660	-380 -730	-410 -760
d6	-30 -38	-40 -49	-50 -61	-65 -78	-80 -96		-100 -119		-120 -142	
e6	-20 -28	-25 -34	-32 -43	-40 -53	-50 -66		-60 -79		-72 -94	
e13	-220	-270	-334	-410 -440	-50		-60 -520		-72 -612	
f5	-25	-32	-40	-49 -36	-25		-30 -43		-36 -51	
f6	-10 -18	-13 -22	-16 -27	-20 -33	-25 -41		-30 -49		-36 -58	
f7	-10 -22	-13 -28	-16 -34	-20 -41	-25 -50		-30 -60		-36 -71	
g5	-4 -9	-5 -11	-6 -14	-7 -16	-9 -20		-10 -23		-12 -27	
g6	-4 -12	-5 -14	-6 -17	-7 -20	-9 -25		-10 -29		-12 -34	
g7	-4 -16	-5 -20	-6 -24	-7 -28	-9 -34		-10 -40		-12 -47	
h4	0 -4	0 -4	0 -5	0 -6	0 -7		0 -8		0 -10	
h5	0 -5	0 -6	0 -8	0 -9	0 11		0 13		0 15	
h6	0 -8	0 -9	0 -11	0 -13	0 -16		0 -19		0 -22	
h7	0 -12	0 -15	0 -18	0 -21	0 -25		0 -30		0 -35	
h8	0 -18	0 -22	0 -27	0 -33	0 -39		0 -46		0 -54	
h9	0 -30	0 -36	0 -43	0 -52	0 -62		0 -74		0 -87	
h10	0 -48	0 -58	0 -70	0 -84	0 -100		0 -120		0 -140	
h11	0 -75	0 -90	0 -110	0 -130	0 -160		0 -190		0 -220	
h12	0 -120	0 -150	0 -180	0 -210	0 -250		0 -300		0 -350	
j5	+3 -2	+4 -2	+5 -3	+5 -4	+6 -5		+6 -7		+6 -9	
j6	+6 -2	+7 -2	+8 -3	+9 -4	+11 -5		+12 -7		+13 -9	
j7	+8 -4	+10 -5	+12 -16	+13 -8	+15 -10		+18 -22		+20 -15	
js5	+2.5 -5	+3 -3	+4 -4	+4.5 -4.5	+5.5 -5.5		+6.5 -6.5		+7.5 -7.5	
js6	+4 -4	+4.5 -4.5	+5.5 -5.5	+6.5 -6.5	+8 -8		+9.5 -9.5		+11 -11	
js7	+6 -6	+7.5 -7.5	+9 -9	+10.5 -10.5	+12.5 -12.5		+15 -15		+17.5 -17.5	
k5	+6 +1	+7 +1	+9 +1	+11 +2	+13 +2		+15 +2		+18 +3	
k6	+9 +1	+10 +1	+12 +1	+15 +2	+18 +2		+21 +2		+25 +3	
k7	+13 +1	+16 +1	+19 +1	+23 +2	+27 +2		+32 +2		+38 +3	
m5	+9 +4	+12 +6	+15 +7	+17 +8	+20 +9		+24 +11		+28 +13	
m6	+12 +4	+15 +6	+18 +7	+21 +8	+25 +9		+30 +11		+35 +13	
m7	+16 +4	+21 +6	+25 +7	+29 +8	+34 +9		+41 +11		+48 +13	
n5	+13 +8	+16 +10	+20 +12	+24 +15	+28 +17		+33 +20		+38 +23	
n6	+16 +8	+19 +10	+23 +12	+28 +15	+33 +17		+39 +20		+45 +23	
n7	+20 +8	+25 +10	+30 +12	+36 +15	+42 +17		+50 +20		+58 +23	
p5	+17 +12	+21 +15	+26 +18	+31 +22	+37 +26		+45 +32		+52 +37	
p6	+20 +12	+24 +15	+29 +18	+35 +22	+42 +26		+51 +32		+59 +37	
r6	+23 +15	+28 +19	+34 +23	+41 +28	+50 +34		+60 +41	+62 +43	+73 +51	+76 +54

METRİK VİDA NORMAL

ANMA ÇAPI	VİDA ADIMI	MATKAP ÇAPI	ANAHTAR AĞZI
1	0.25	0.75	
1.1	0.25	0.85	
1.2	0.25	0.95	
1.4	0.30	1.10	
1.6	0.35	1.25	
1.7	0.35	1.30	
1.8	0.35	1.45	
2	0.40	1.60	
2.2	0.45	1.75	
2.3	0.40	1.90	
2.5	0.45	2.05	
2.6	0.45	2.10	
3	0.50	2.50	5.5
3.5	0.60	2.90	
4	0.70	3.30	7
4.5	0.75	3.80	
5	0.80	4.20	8
6	1.00	5.00	10
7	1.00	6.00	
8	1.25	6.80	13
9	1.25	7.80	
10	1.50	8.50	17
11	1.50	9.50	
12	1.75	10.20	19
14	2.00	12.00	22
16	2.00	14.00	24
18	2.50	15.50	27
20	2.50	17.50	30
22	2.50	19.50	32
24	3.00	21.00	36
27	3.00	24.00	41
30	3.50	26.50	46
33	3.50	29.50	50
36	4.00	32.00	55
39	4.00	35.00	

WHİTWORTH VİDA NORMAL (BSW)

ANMA ÇAPI	DİŞ ADEDİ	DIŞ ÇAPI	MATKAP ÇAPI
1/16	60	1.587	1.20
3/32	48	2.381	1.90
1/8	40	3.175	2.50
5/32	32	3.969	3.20
3/16	24	4.762	3.60
7/32	24	5.556	4.50
1/4	20	6.350	5.10
5/16	18	7.938	6.50
3/8	16	9.525	7.90
7/16	14	11.113	9.20
1/2	12	12.700	10.50
9/16	11	14.287	12.10
5/8	11	15.876	13.50
3/4	10	19.051	16.50
7/8	9	22.226	19.25
1	8	25.400	22.00
1 1/8	7	28.576	24.50
1 1/4	7	31.751	27.50
1 3/8	6	34.926	30.50

WHİTWORTH VİDA NORMAL (BSW)

ANMA ÇAPI	DİŞ ADEDİ	DIŞ ÇAPI	MATKAP ÇAPI
3/16	32	4.762	3.90
7/32	28	5.656	4.50
1/4	26	6.350	5.30
9/32	26	7.142	6.10
5/16	22	7.938	6.70
3/8	20	9.525	8.20
7/16	18	11.113	9.60
1/2	16	12.700	11.00
9/16	16	14.288	12.50
5/8	14	15.875	14.00
1 1/16	14	17.463	15.50
3/4	12	19.050	16.75
7/8	11	22.225	19.75
1	10	25.400	22.75

AMERİKAN KABA VİDA (UNC)

ANMA ÇAPI	DİŞ ADEDİ	DIŞ ÇAPI	MATKAP ÇAPI
1	64	1.854	1.50
2	56	2.184	1.80
3	48	2.515	2.05
4	40	2.845	2.30
5	40	3.175	2.60
6	32	3.505	2.75
8	32	4.166	3.50
10	24	4.826	3.80
12	24	5.486	4.50
1/4	20	6.350	5.10
5/16	18	7.938	6.50
3/8	16	9.525	7.90
7/16	14	11.112	9.30
1/2	13	12.700	10.80
9/16	12	14.288	12.30
5/8	11	15.875	13.50
3/4	10	19.050	16.50
7/8	9	22.225	19.50
1	8	25.400	22.25

6.8 / 8.8 / 10.9 / 12.9 KALİTE CİVATA NEDİR?

Birinci rakam 100 ile çarpılınca, çıkan değer malzemenin ÇEKME MUKAVEMETİNİ (dayanımını) verir.
Örnek:
8.8 için 8 x 100 = 800 Newton / mm²
10.9 için 10 x 100 = 1.000 Newton / mm²
6.8 için 6 x 100 = 600 Newton / mm²
1 Kg = 9.81 Newton'dur.
(Yaklaşık bir hesap için 1 kg = 10 Newton)
800 Newton / mm² = 80 Kg / mm²

İkinci rakam (8.8'in 8'i gibi) 8 = 0.8'dir. Yani ikinci rakam yukarıda bulunan çekme dayanımı ile çarpılarak çeliğin veya malzemenin AKMA GERİLME SINIRI veya ORANTISIZ UZAMAN GERİLMESİ bulunur.
800 x 0.8 = 640 Newton / mm² veya
yaklaşık 640/10 = 64 Kg/mm²

MATKAP ÇAPI SEÇİMİ

Metrik vidalar için :
Anma Çapı - Vida Adımı = Matkap Çapı
Inch vidalar için :
Anma Çapı - (25.4/Diş Adedi) = Matkap Çapı

AMERİKAN WHİTWORTH BORU VİDA

ANMA ÇAPI	DİŞ ADEDİ	DIŞ ÇAPI	MATKAP ÇAPI
1/8	28	9.728	8.70
1/4	19	13.157	11.60
3/8	19	16.662	15.25
1/2	14	20.955	19.00
5/8	14	22.911	21.00
3/4	14	26.441	24.50
7/8	14	30.201	28.00
1	11	33.249	30.50
1 1/8	11	37.897	35.50
1 1/4	11	41.910	39.50
1 3/8	11	44.323	42.00
1 1/2	11	47.803	45.00
1 3/4	11	53.746	51.00
2	11	59.614	57.00

AMERİKAN İNCE VİDA (UNF)

ANMA ÇAPI	DİŞ ADEDİ	DIŞ ÇAPI	MATKAP ÇAPI
0	80	1.524	1.20
1	72	1.854	1.50
2	64	2.184	1.80
3	56	2.515	2.10
4	48	2.845	2.40
5	44	3.175	2.65
6	40	3.505	2.90
8	36	4.166	3.50
10	32	4.826	4.10
12	28	5.486	4.60
1/4	28	6.350	5.50
5/16	24	7.938	6.90
3/8	24	9.525	8.50
7/16	20	11.112	9.90
1/2	20	12.700	11.50
9/16	18	14.288	13.00
5/8	18	15.875	14.50
3/4	16	19.050	17.50
7/8	14	22.225	20.50
1	12	25.400	23.50

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