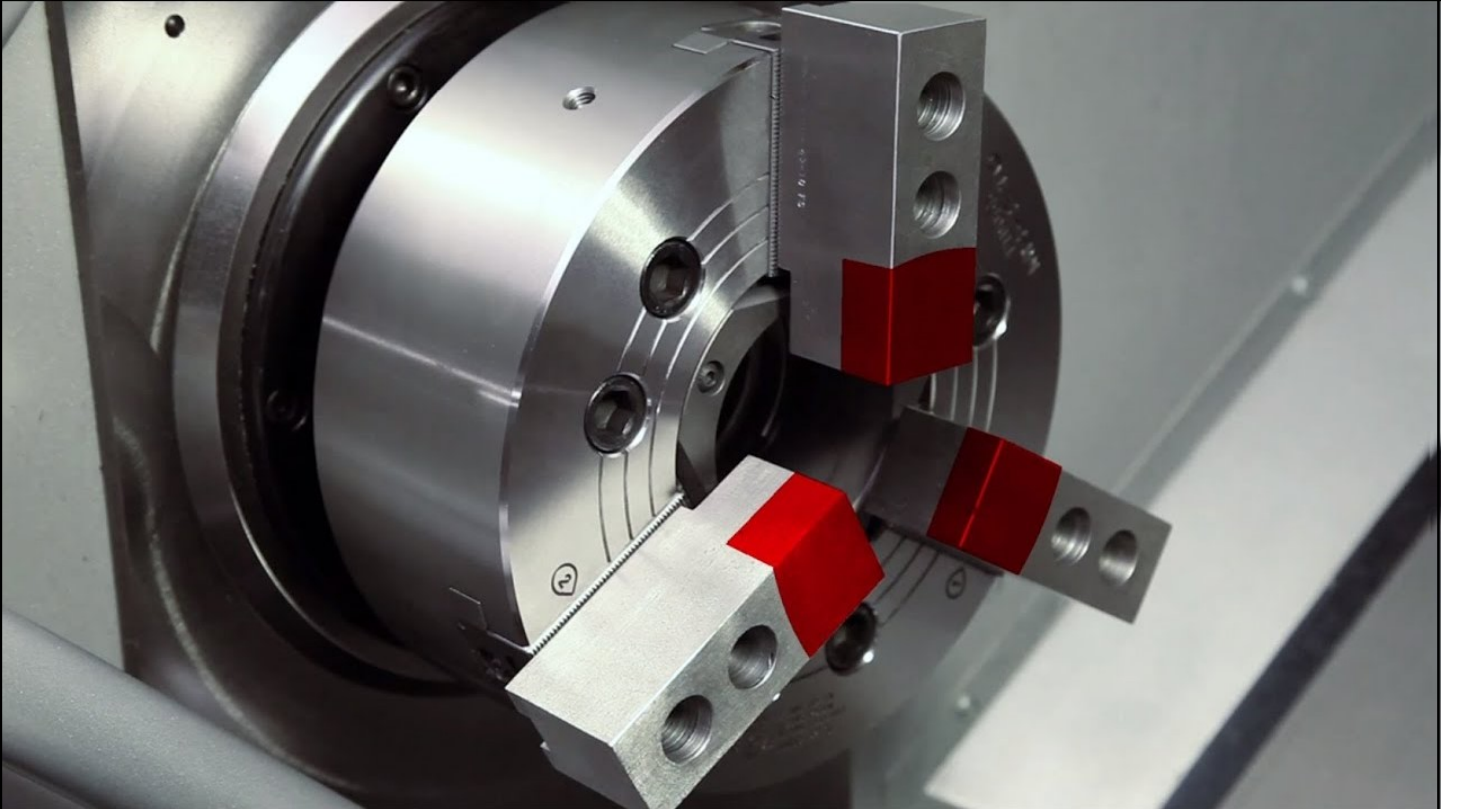


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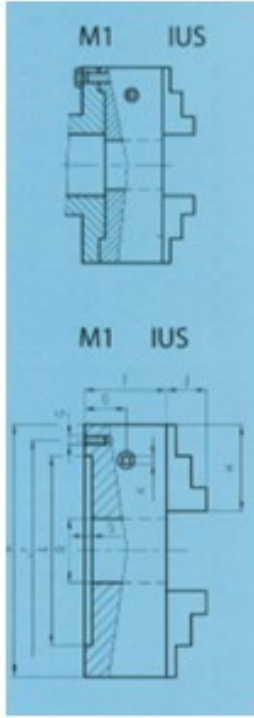
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www.tamtakim.com

➤TORNA AYNALARI VE YEDEK PARÇALARI



➤Telefon: 0532 266 2573

e-mail: info@tamtakim.com

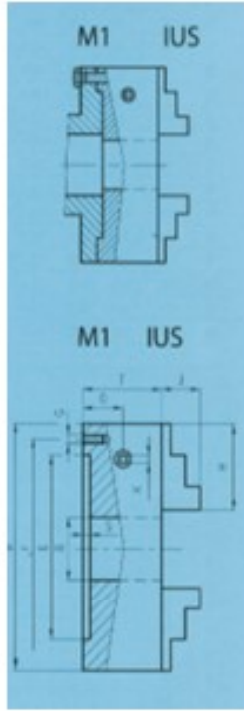


Ø	EH6	E±0,2	G	H	J	K	O	S	T	R
80	63	70	3xM5	35,5	13	6	16,5	3	45	17
100	80	90	3xM6	41,5	17	8	18,0	3	52	23
125	100	110	3xM8	51,5	19	8	22,0	4	58	28
160	130	143	3xM8	66,0	23	9	22,0	4	62	48
200	162	180	3xM10	74,0	29	11	27,5	5	76	52
250	210	226	3xM10	97,5	33	12	29,5	5	82	78
315	265	290	4xM12	123,0	40	14	35,0	6	100	108
400	350	375	6xM12	152,5	50	17	39,0	7	110	144



Tos Svitavy 3 Ayaklı Torna Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT EURO
T0803	80X3	
T1003	100X3	
T1253	125X3	
T1603	160X3	
T2003	200X3	
T2503	250X3	
T3153	315X3	
T4003	400X3	
T5003	500X3	



Ø	EW6	E+0,2	G	H	J	K	O	S	T	R
80	63	70	3xM5	35,5	13	6	16,5	3	45	17
100	80	90	3xM6	41,5	17	8	18,0	3	52	23
125	100	110	3xM8	51,5	19	8	22,0	4	58	28
160	130	143	3xM8	66,0	23	9	22,0	4	62	48
200	162	180	3xM10	74,0	29	11	27,5	5	76	52
250	210	226	3xM10	97,5	33	12	29,5	5	82	78
315	265	290	4xM12	122,0	40	14	35,0	6	100	108
400	350	375	6xM12	152,5	50	17	39,0	7	110	144



Tos Svitavy 4 Ayaklı Torna Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT EURO
T0804	80X4	
T1004	100X4	
T1254	125X4	
T1604	160X4	
T2004	200X4	
T2504	250X4	
T3154	315X4	
T4004	400X4	
T5004	500X4	



3 AYAKLI DÜZ YEDEK TAKIM

ÜRÜN KODU	Ölçü	Fiyat Euro
T90803	80x3	
T91003	100x3	
T91253	125x3	
T91603	160x3	
T92003	200x3	
T92503	250x3	
T93153	315x3	
T94003	400x3	
T95003	500X3	

3 AYAKLI TERS YEDEK TAKIM

ÜRÜN KODU	Ölçü	Fiyat Euro
T30803	80x3	
T31003	100x3	
T31253	125x3	
T31603	160x3	
T32003	200x3	
T32503	250x3	
T33153	315x3	
T34003	400x3	
T35003	500X3	

4 AYAKLI DÜZ YEDEK TAKIM

ÜRÜN KODU	Ölçü	Fiyat Euro
T90804	80x4	
T91004	100x4	
T91254	125x4	
T91604	160x4	
T92004	200x4	
T92504	250x4	
T93154	315x4	
T94004	400x4	
T95004	500X4	

4 AYAKLI TERS YEDEK TAKIM

ÜRÜN KODU	Ölçü	Fiyat Euro
T30804	80x4	
T31004	100x4	
T31254	125x4	
T31604	160x4	
T32004	200x4	
T32504	250x4	
T33154	315x4	
T34004	400x4	
T35004	500X4	



Düz Yedek Ayak



Ters Yedek Ayak

ÜRÜN KODU	Tos Svitavy Pinyon	FİYAT EURO
T5080	80	
T5100	100	
T5125	125	
T5160	160	
T5200	200	
T5250	250	
T5315	315	
T5400	400	
T5500	500	



ÜRÜN KODU	Tos Svitavy Yedek Anahtar	FİYAT EURO
T8080	80	
T8100	100	
T8125	125	
T8160	160	
T8200	200	
T8250	250	
T8315	315	
T8400	400	



ÜRÜN KODU	Tos Svitavy Salyangoz	FİYAT EURO
T7080	80	
T7100	100	
T7125	125	
T7160	160	
T7200	200	
T7250	250	
T7315	315	
T7400	400	





Tos Svitavy Yumuşak Ayak Takımı 3 Ayaklı

Ürün Kodu	Ölçü	Fiyat Euro
T61253	125X3	
T61603	160X3	
T62003	200X3	
T62503	250X3	
T63153	315X3	
T64003	400X3	
T64005	500X3	

Tos Svitavy Yumuşak Ayak Takımı 4 Ayaklı

Ürün Kodu	Ölçü	Fiyat Euro
T61254	125X4	
T61604	160X4	
T62004	200X4	
T62504	250X4	
T63154	315X4	
T64004	400X4	





Q	E H7	F-0,2	G	H	J	K	O	P	R	S
200	125	140	4XM10	75	32	12	44	4X11	50	4 2
250	200	224	4XM12	75	32	12	44	4X13	60	5
315	200	224	4XM12	100	36	14	49	4X13	75	5 0
400	260	286	4XM12	100	37	14	60	4X13	75	5

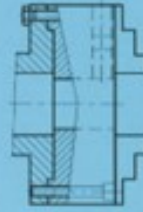


Tos Svitavy Kepenkli Torna Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT EURO
T42004	200X4	
T42504	250X4	
T43154	315X4	
T44004	400X4	

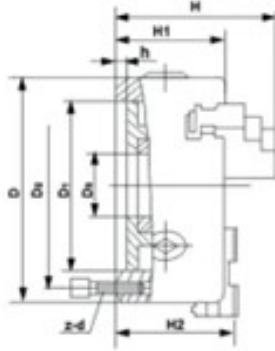


M2 LUD



M2 LUD





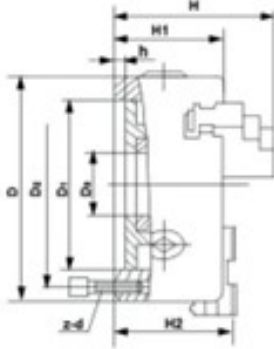
Çap(Ø)	D1	D2	D3	H	H1	h	z-d	Ağırlık
80	55	66	16	66,5	50	4	3-M6	2
100	72	84	22	74,5	53,5	3	3-M8	3
125	95	108	30	84,5	58	4	3-M8	5
160	130	142	45	94	65	5	3-M8	8,8
200	165	180	65	109	75	5	3-M10	13,8
250	206	226	80	120	80	5	3-M12	25
315	260	285	100	147,5	90	6	3-M16	47
400	340	368	130	173,5	100	6	3-M16	85
500	440	465	210	202	115	6	6-M16	119
630	545	586	252	220,5	135	7	6-M16	200

K11



Watano 3 Ayaklı Üniversal Torna Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
K11080	80X3	
K11100	100X3	
K11125	125X3	
K11160	160X3	
K11200	200X3	
K11250	250X3	
K11315	315X3	
K11400	400X3	
K11500	500X3	
K11630	630X3	



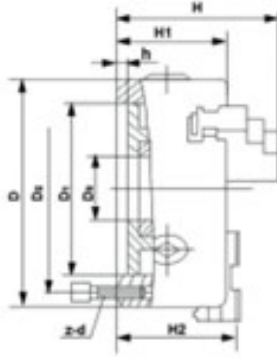
Çap(Ø)	D1	D2	D3	H	H1	h	z-d	Ağırlık
80	55	66	16	66,5	50	4	3-M6	2
100	72	84	22	74,5	53,5	3	3-M8	3
125	95	108	30	84,5	58	4	3-M8	5
160	130	142	45	94	65	5	3-M8	8,8
200	165	180	65	109	75	5	3-M10	13,8
250	206	226	80	120	80	5	3-M12	25
315	260	285	100	147,5	90	6	3-M16	47
400	340	368	130	173,5	100	6	3-M16	85
500	440	465	210	202	115	6	6-M16	119
630	545	586	252	220,5	135	7	6-M16	200

K12



Watano 4 Ayaklı Üniversal Torna Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
K12080	80X4	
K12100	100X4	
K12125	125X4	
K12160	160X4	
K12200	200X4	
K12250	250X4	
K12315	315X4	
K12400	400X4	
K12500	500X4	
K12630	630X4	



DÖNDÜRÜLEBİLİR AYAKLI TORNA AYNASI

Çap(Ø)	D1	D2	D3	H	H1	h	z-d
125	95	108	30	84.5	58	4	3-M8
160	130	142	45	94	65	5	3-M8
200	165	180	65	109	75	5	3-M10
250	206	226	80	120	80	5	3-M12
315	260	285	100	147.5	90	6	3-M16
400	340	368	130	173.5	100	6	3-M16
500	440	465	210	202	115	6	6-M16
630	560	595	260	194	130	7	6-M16



K11-A

Watano 3 Ayaklı İmalat Ayaklı Torna Aynası

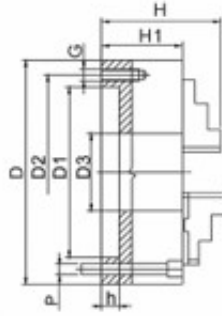
ÜRÜN KODU	ÖLÇÜ	FİYAT USD
K11125-A	125X3	
K11160-A	160X3	
K11200-A	200X3	
K11250-A	250X3	
K11315-A	315X3	
K11400-A	400X3	
K11500-A	500X3	
K11630-A	630X3	



K12-A

Watano 4 Ayaklı İmalat Ayaklı Torna Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
K12125-A	125X4	
K12160-A	160X4	
K12200-A	200X4	
K12250-A	250X4	
K12315-A	315X4	
K12400-A	400X4	
K12500-A	500X4	
K12630-A	630X4	



Çap(Ø)	D1	D2	D3	H	H1	h	Civata (G)	Civata (P)
125	95	108	30	84.5	58	4	3-M8	3-M8
160	130	142	45	94	65	5	3-M8	3-M8
200	165	180	65	109	75	5	3-M10	3-M10
250	206	226	80	120	80	5	3-M12	3-M12
315	260	285	100	147.5	90	6	3-M16	3-M16
400	340	368	130	173.5	100	6	3-M16	3-M16
500	440	465	210	202	115	6	6-M16	6-M16
630	560	595	260	194	130	7	6-M16	6-M16



K11-AF

Watano 3 Ayaklı Divizör Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
K11125-AF	125X3	
K11160-AF	160X3	
K11200-AF	200X3	
K11250-AF	250X3	
K11315-AF	315X3	
K11400-AF	400X3	
K11500-AF	500X3	
K11630-AF	630X3	

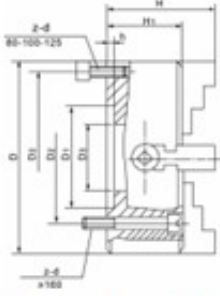


K12-AF

4 DELİKLİ TEK MODEL

Watano 4 Ayaklı Divizör Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
K12125-AF	125X4	
K12160-AF	160X4	
K12200-AF	200X4	
K12250-AF	250X4	
K12315-AF	315X4	
K12400-AF	400X4	
K12500-AF	500X4	
K12630-AF	630X4	



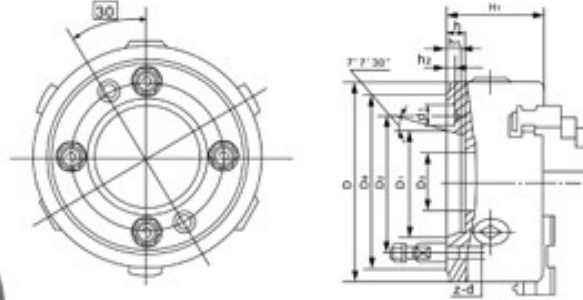
Çap(Ø)	D1	D2	D3	H	H1	h	z-d
160	65	95	45	96.5	65	5	4-M10
200	75	95	56	113	78	6	4-M10
250	100	120	65	116.5	82	6	4-M12
315	140	165	95	141.5	90	6	4-M16
400	160	185	125	143	95	8	4-M16
500	200	236	160	161	106	8	4-M20
630	220	258	180	181	116	10	4-M20
800	250	300	210	210	136	12	4-M20
1000	320	370	260	241	152	15	4-M20
1250	285	330.2	180	254	165	25	8-M24

Watano Kepenkli Torna Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
K720160	160X4	
K720200	200X4	
K720250	250X4	
K720315	315X4	
K720400	400X4	
K720500	500X4	
K720630	630X4	
K720800	800X4	
K721000	1000X4	
K721250	1250X4	



KENDİNDEN FLANŞLI TORNA AYNASI



- Flanşın aynanın kendisine merkezlenmiş olması, işleme sırasında yüksek doğruluk ve denge sağlayarak titreşimi azaltır, iş parçasının mükemmel biçimde sabitlenmesini ve işlenmesini sağlar.
- Flanş talep edildiğinde değiştirilmeye uygundur.

CİVATA BAĞLANTILI FLANŞLI AYNA

Ürün Kodu	Ölçü mm	Flanş Ölçü	D1	D2	D3	D4	H1	h	h1	h2	d1	z-d	Fiyat USD
K11250-C6	250	C-6	106	133	70	170	96	16	13	6.5	19,5	4-M12	499,90
K11315-C6	315	C-6	106	133	100	170	113	16	13	6.5	19,5	4-M12	830,00
K11315-C8	315	C-8	139	171	100	220	113	18	14	8.0	24,2	4-M16	830,00



CAMLOCK SAPLAMALI FLANŞLI AYNA

Ürün Kodu	Ölçü mm	Flanş Ölçü	D1	D2	D3	D4	H1	h	h1	z-d	Fiyat USD
K11250-D8	250	D-8	139	171	80	225	96	18	14	6-20X1,5	
K11315-D8	315	D-8	139	171	100	225	113	18	14	6-20X1,5	

WATANO TORNA AYNASI YEDEK PARÇALARI



Watano Düz Ayak

Watano Ters Ayak

3 Ayaklı Yedek Düz ve Ters Ayaklar

ÜRÜN KODU	ÖLÇÜ	FİYATI(USD)
WK11080	80X3	
WK11100	100X3	
WK11125	125X3	
WK11160	160X3	
WK11200	200X3	
WK11250	250X3	
WK11315	315X3	
WK11400	400X3	
WK11500	500X3	



Watano Düz Ayak

Watano Ters Ayak

4 Ayaklı Yedek Düz ve Ters Ayaklar

ÜRÜN KODU	ÖLÇÜ	FİYATI(US
WK12080	80X4	
WK12100	100X4	
WK12125	125X4	
WK12160	160X4	
WK12200	200X4	
WK12250	250X4	
WK12315	315X4	
WK12400	400X4	
WK12500	500X4	

WATANO TORNA AYNASI YEDEK PARÇALARI



YEDEK ANAHTAR			
ÜRÜN KODU	ÖLÇÜ	KARE ÖLÇÜ mm	FİYAT USD
W8080	80	6	
W8100	100	6	
W8125	125	8	
W8160	160	10	
W8200	200	12	
W8250	250	12	
W8315	315	13	
W8400	400	15	
W8500	500	17	



KEPENKLİ AYNA AYAK VİDASI		
Ürün Kodu	Uyumlu Ayna Çapı (ø)	Fiyat USD
OS-72-315	315	-
OS-72-400	400	-
OS-72-500	500	-
OS-72-630	630	-
OS-72-800	800	-



ÜRÜN KODU	PİNYON	
	ÖLÇÜ	FİYATI USD
W5080	80	
W5100	100	
W5125	125	
W5160	160	
W5200	200	
W5250	250	
W5315	315	
W5400	400	
W5500	500	



ÜRÜN KODU	SALYANGOZ	
	ÖLÇÜ	FİYATI USD
W7080	80	
W7100	100	
W7125	125	
W7160	160	
W7200	200	
W7250	250	
W7315	315	
W7400	400	
W7500	500	
W7630	630	

WATANO TORNA AYNASI YEDEK PARÇALARI



İMALAT AYAKLI VE DİVİZÖR AYNASI YEDEK AYAK

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
W121603	160X3	
W122003	200X3	
W122503	250X3	
W123153	315X3	
W124003	400X3	
W125003	500X3	
W121604	160X4	
W122004	200X4	
W122504	250X4	
W123154	315X4	
W124004	400X4	

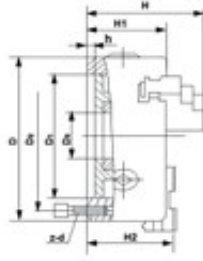


YUMUŞAK YEDEK AYAK

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
W131603	160x3	
W132003	200x3	
W132503	250x3	
W133153	315x3	
W134003	400x3	
W135003	500x3	
W131604	160x4	
W132004	200x4	
W132504	250x4	
W133154	315x4	
W134004	400x4	



SAN OU ÜNİVERSAL TORNA AYNALARI



SAN OU
C H U C K

Çap(Ø)	D1	D2	D3	H	H1	h	z-d	Ağırlık
80	55	66	16	66,5	50	4	3-M6	2
100	72	84	22	74,5	53,5	3	3-M8	3
125	95	108	30	84,5	58	4	3-M8	5
160	130	142	45	94	65	5	3-M8	8,8
200	165	180	65	109	75	5	3-M10	13,8
250	206	226	80	120	80	5	3-M12	25
315	260	285	100	147,5	90	6	3-M16	47
400	340	368	130	173,5	100	6	3-M16	85
500	440	465	210	202	115	6	6-M16	119
630	545	586	252	220,5	135	7	6-M16	200



San Ou 3 Ayaklı Üniversal Torna Aynası		
ÜRÜN KODU	ÖLÇÜ	FİYAT USD
C110503	50X3	
C110633	63X3	
C110803	80X3	
C111003	100X3	
C111253	125X3	
C111603	160X3	
C112003	200X3	
C112503	250X3	
C113153	315X3	
C114003	400X3	
C115003	500X3	
C116303	630X3	

San Ou 4 Ayaklı Üniversal Torna Aynası		
ÜRÜN KODU	ÖLÇÜ	FİYAT USD
C120504	50x4	
C120654	63x4	
C120804	80x4	
C121004	100x4	
C121254	125x4	
C121604	160x4	
C122004	200x4	
C122504	250x4	
C123154	315x4	
C124004	400x4	
C125004	500x4	
C126304	630x4	

SAN OU DÖNDÜRÜLEBİLİR AYAKLI VE DİVİZÖR AYNASI

SAN OU
C H U C K



**San Ou 3 Ayaklı İmalat Ayaklı
Torna Aynası**

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
C10111253	125x3	
C10111603	160x3	
C10112003	200x3	
C10112503	250x3	
C10113153	315x3	
C10114003	400x3	
C10115003	500x3	
C10116303	630x3	



**San Ou 4 Ayaklı İmalat Ayaklı
Torna Aynası**

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
C10121254	125x4	
C10121604	160x4	
C10122004	200x4	
C10122504	250x4	
C10123154	315x4	
C10124004	400x4	
C10125004	500x4	
C10126304	630x4	



San Ou 3 Ayaklı Divizör Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
C11111253	125x3	
C11111603	160x3	
C11112003	200x3	
C11112503	250x3	
C11113153	315x3	
C11114003	400x3	
C11115003	500x3	
C11116303	630x3	

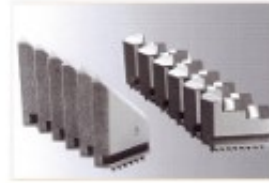
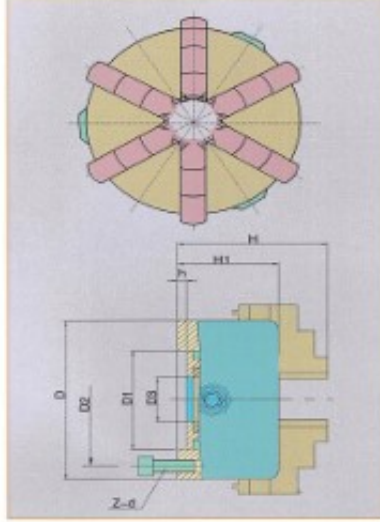


San Ou 4 Ayaklı Divizör Aynası

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
C11121254	125x4	
C11121604	160x4	
C11122004	200x4	
C11122504	250x4	
C11123154	315x4	
C11124004	400x4	
C11125004	500x4	
C11126304	630x4	

SAN OU 6 AYAKLI TORNA AYNALARI

SAN OU
C H U C K



6 AYAKLI TORNA AYNASI

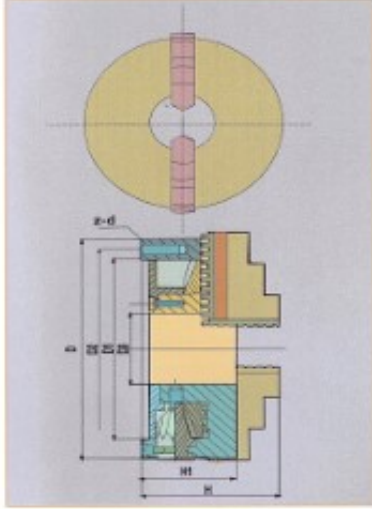
ölçü	D	D1	D2	D3	H	H1	h	z- d
100	100	72	84	26	73	53,5	3,5	3-M8
125	130	100	115	35	86	60	3,5	3-M8
160	165	130	145	42	96,5	66,5	4,5	3-M8
200	200	165	180	65	109	75	5	3-M10
250	252	206	226	80	120	80	5	3-M12

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
S13100	100 X 6	
S13125	125 X 6	
S13160	160 X 6	
S13200	200 X 6	
S13250	250 X 6	

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SAN OU 2 AYAKLI TORNA AYNALARI

SAN OU®
C H U C K



2 AYAKLI TORNA AYNASI

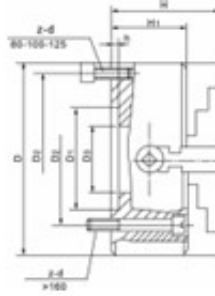
ölçü	D1	D2	D3	H	H1	h	z-d
100	100	115	30	99	60	3,5	3-M8
125	130	142	40	115	65	5	3-M8
160	165	180	65	132	75	5	3-M8
200	200	226	80	146	80	5	3-M10
250	252	296	100	184	96	12	3-M12

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
S10100	100 X 2	
S10125	125 X 2	
S10160	160 X 2	
S10200	200 X 2	
S10250	250 X 2	

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SAN OU 2 KEPENKLİ TORNA AYNALARI

SAN OU
C H U C K

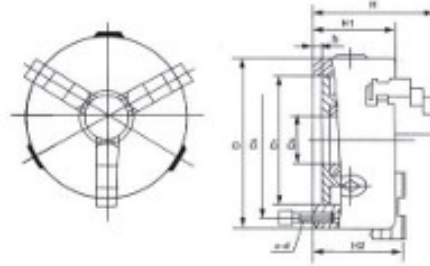


Çap(Ø)	D1	D2	D3	H	H1	h	z-d
160	65	95	45	96.5	65	5	4-M10
200	75	95	56	113	78	6	4-M10
250	100	120	65	116.5	82	6	4-M12
315	140	165	95	141.5	90	6	4-M16
400	160	185	125	143	95	8	4-M16
500	200	236	160	161	106	8	4-M20
630	220	258	180	181	116	10	4-M20
800	250	300	210	210	136	12	4-M20
1000	320	370	260	241	152	15	4-M20
1250	285	330.2	180	254	165	25	8-M24

San Ou Kepenkli Torna Aynası		
ÜRÜN KODU	ÖLÇÜ	FİYAT USD
SK720160	160X4	
SK720200	200X4	
SK720250	250X4	
SK720315	315X4	
SK720400	400X4	
SK720500	500X4	
SK720630	630X4	
SK720800	800X4	
SK721000	1000X4	
SK721250	1250X4	
SK721400	1400X4	

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SHARP ÜNİVERSAL TORNA AYNASI 3 AYAKLI VE 4 AYAKLI



Çap(Ø)	D1	D2	D3	H	H1	h	z-d	Ağırlık
80	55	66	16	66,5	50	4	3-M6	2
100	72	84	22	74,5	53,5	3	3-M8	3
125	95	108	30	84,5	58	4	3-M8	5
160	130	142	45	94	65	5	3-M8	8,8
200	165	180	65	109	75	5	3-M10	13,8
250	206	226	80	120	80	5	3-M12	25
315	260	285	100	147,5	90	6	3-M16	47
400	340	368	130	173,5	100	6	3-M16	85
500	440	465	210	202	115	6	6-M16	119
630	545	586	252	220,5	135	7	6-M16	200



SHARP 3 AYAKLI TORNA AYNASI		
ÜRÜN KODU	ÖLÇÜ	FİYAT USD
A11080	80X3	
A11100	100X3	
A11125	125X3	
A11160	160X3	
A11200	200X3	
A11250	250X3	
A11315	315X3	

SHARP 4 AYAKLI TORNA AYNASI		
ÜRÜN KODU	ÖLÇÜ	FİYAT USD
A12080	80X4	
A12100	100X4	
A12125	125X4	
A12160	160X4	
A12200	200X4	
A12250	250X4	
A12315	315X4	

SHARP TORNA AYNASI YEDEK PARÇALARI



SHARP 3 AYAKLI YEDEK DÜZ VE TERS AYAK TAKIMLARI

ÜRÜN KODU	ÖLÇÜ	FİYATI(USD)
SWK11080	80X3	
SWK11100	100X3	
SWK11125	125X3	
SWK11160	160X3	
SWK11200	200X3	
SWK11250	250X3	
SWK11315	315X3	
SWK11400	400X3	



SHARP 4 AYAKLI YEDEK DÜZ VE TERS AYAK TAKIMLARI

ÜRÜN KODU	ÖLÇÜ	FİYATI(USD)
SWK12080	80X4	
SWK12100	100X4	
SWK12125	125X4	
SWK12160	160X4	
SWK12200	200X4	
SWK12250	250X4	
SWK12315	315X4	
SWK12400	400X4	

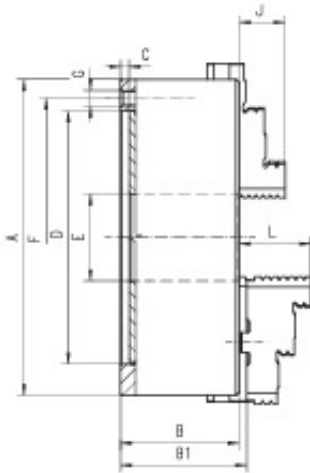


ÜRÜN KODU	PİNYON	
	ÖLÇÜ	FİYATI(USD)
SW5080	80	
SW5100	100	
SW5125	125	
SW5160	160	
SW5200	200	
SW5250	250	
SW5315	315	
SW5400	400	



ÜRÜN KODU	SALYANGOZ	
	ÖLÇÜ	FİYATI(USD)
SW7080	80 mm	
SW7100	100 mm	
SW7125	125 mm	
SW7160	160 mm	
SW7200	200 mm	
SW7250	250 mm	
SW7315	315 mm	
SW7400	400 mm	

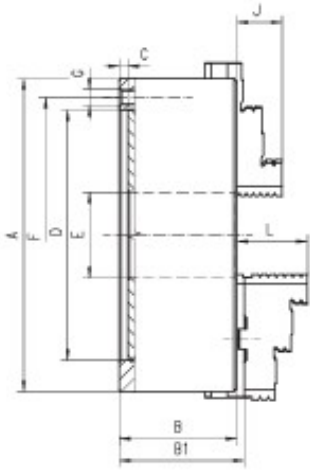
BİSON TORNA AYNASI - 3 AYAKLI



3204

ÜRDN KODU	A	B	B1	C	D	E	F	G	J	L	Kg	FIYAT EURO
3204-080	80	44	-	3	56	16	67	3xM6	13	-	1,5	
3204-100	100	50	-	3	70	20	83	3xM8	16	-	2,8	
3204-125	125	56	60,8	4	95	32	108	3xM8	20	40	5	
3204-160	160	64,5	69,3	4	125	42	140	6xM10	32	43	10	
3204-200	200	75	79,8	4	160	55	176	6xM10	29	45	17,5	
3204-250	250	85	88,8	5	200	76	224	6xM12	34	53	29	
3204-315	315	94	99,1	5	260	103	286	6xM16	43	57	50	
3204-400	400	105	113,8	5	330	136	362	6xM16	55	67	85	
3204-500	500	120	130,8	5	420	190	458	6x1M6	60	79	145	
3204-630	630	135	146,3	7	545	252	586	6xM16	70	87	250	
3204-800	800	150	160	8	600	280	600	6xM16	80	90	500	
3204-1000	1000	160	170	10	650	300	650	6xM16	100	100	700	

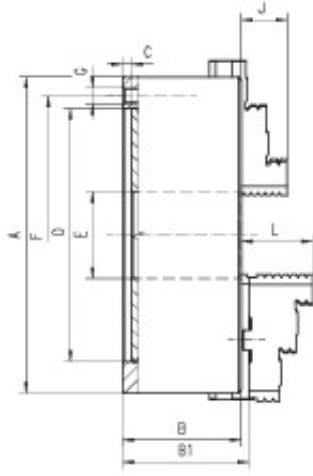
BİSON TORNA AYNASI - 3 AYAKLI



3604

ÜRÜN KODU	A	B	B1	C	D	E	F	G	J	L	Kg	FİYAT EURO
3604-125	125	56	60,8	4	95	32	108	3xM8	20	40	5	
3604-160	160	64,5	69,3	4	125	42	140	3xM10	32	43	10	
3604-200	200	75	79,8	4	160	55	176	3xM10	29	45	17,5	
3604-250	250	85	88,8	5	200	76	224	6xM12	34	53	29	
3604-315	315	94	99,1	5	260	103	286	6xM16	43	57	50	
3604-400	400	105	113,8	5	330	136	362	6xM16	55	67	85	
3604-500	500	120	130,8	5	420	190	458	6xM16	60	79	145	
3604-630	630	135	146,3	7	545	252	586	6xM16	70	87	250	

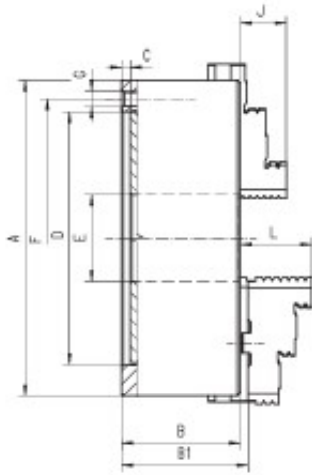
BİSON İMALAT DÖNDÜRÜLEBİLİR 3 AYAKLI TORNA AYNASI



3205

ÜRÜN KODU	A	B	B1	C	D	E	F	G	J	L	Kg	FİYAT EURO
-	80	44	-	3	56	16	67	3xM6	13	-	1,5	
-	100	50	-	3	70	20	83	3xM8	16	-	2,8	
3205-125	125	56	60,8	4	95	32	108	3xM8	20	40	5	
3205-160	160	64,5	69,3	4	125	42	140	6xM10	32	43	10	
3205-200	200	75	79,8	4	160	55	176	6xM10	29	45	17,5	
3205-250	250	85	88,8	5	200	76	224	6xM12	34	53	29	
3205-315	315	94	99,1	5	260	103	296	6xM16	43	57	50	
3205-400	400	105	113,8	5	330	136	362	6xM16	55	67	85	
3205-500	500	120	130,8	5	420	190	458	6xM16	60	79	145	
3205-630	630	135	146,3	7	545	252	586	6xM16	70	87	250	

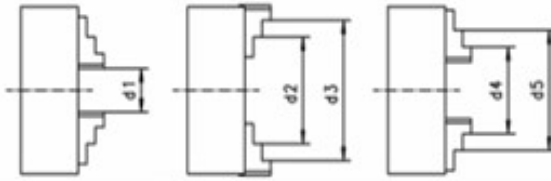
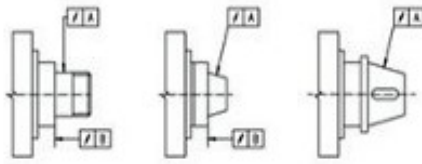
BİSON İMALAT DÖNDÜRÜLEBİLİR 4 AYAKLI TORNA AYNASI



3605

ÜRÜN KODU	A	B	B1	C	D	E	F	G	J	L	Kg	FİYAT EURO
3605-125	125	56	60,8	4	95	32	108	3xM8	20	40	5	
3605-160	160	64,5	69,3	4	125	42	140	3xM10	32	43	10	
3605-200	200	75	79,8	4	160	55	176	3xM10	29	45	17,5	
3605-250	250	85	88,8	5	200	76	224	6xM12	34	53	29	
3605-315	315	94	99,1	5	260	103	286	6xM16	43	57	50	
3605-400	400	105	113,8	5	330	136	362	6xM16	55	67	85	
3605-500	500	120	130,8	5	420	190	458	6xM16	60	79	145	
3605-630	630	135	146,3	7	545	252	586	6xM16	70	87	250	

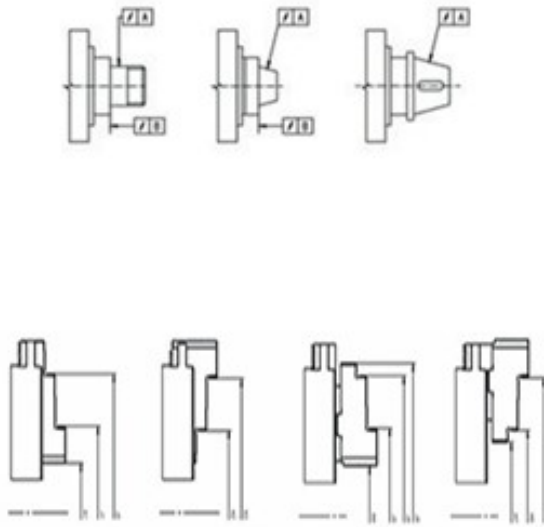
BISON ÖNDEN BAĞLANTILI DİVİZÖR AYNASI 3 AYAKLI



3275

ÖRÜN KODU	A	B	B1	C	D	E	F	G	J	L	Kg	FİYAT EURO
-	80	44	-	3	56	16	67	3xM6	13	-	1,5	
-	100	50	-	3	70	20	83	3xM8	16	-	2,8	
3275-125	125	56	60,8	4	95	32	108	3xM8	20	40	5	
3275-160	160	64,5	69,3	4	125	42	140	6xM10	32	43	10	
3275-200	200	75	79,8	4	160	55	176	6xM10	29	45	17,5	
3275-250	250	85	88,8	5	200	76	224	6xM12	34	53	29	
3275-315	315	94	99,1	5	260	103	286	6xM16	43	57	50	
3275-400	400	105	113,8	5	330	136	362	6xM16	55	67	85	
3275-500	500	120	130,8	5	420	190	458	6x1M6	60	79	145	
3275-630	630	135	146,3	7	545	252	586	6xM16	70	87	250	

BISON ÖNDEN BAĞLANTILI DİVİZÖR AYNASI 4 AYAKLI

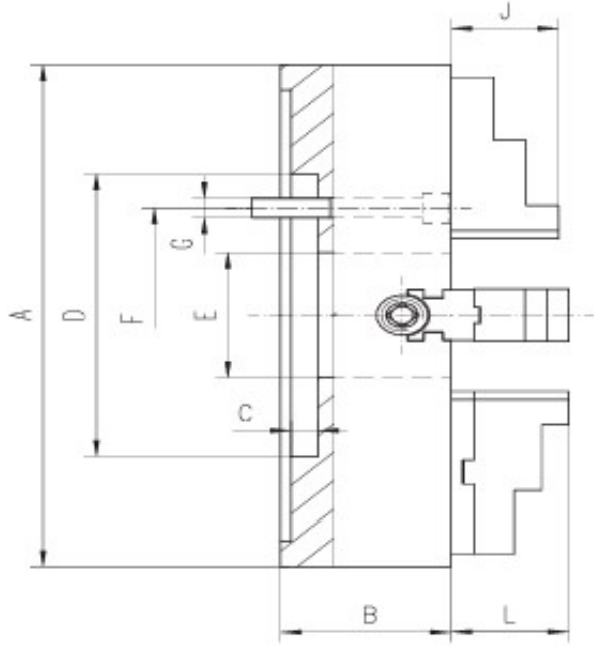


3675

ÜRÜN KODU	A	B	B1	C	D	E	F	G	J	L	Kg	FİYAT EURO
-	80	44	-	3	56	16	67	3xM6	13	-	1,5	
-	100	50	-	3	70	20	83	3xM8	16	-	2,8	
-	125	56	60,8	4	95	32	108	3xM8	20	40	5	
3675-160	160	64,5	69,3	4	125	42	140	6xM10	32	43	10	
3675-200	200	75	79,8	4	160	55	176	6xM10	29	45	17,5	
3675-250	250	85	88,8	5	200	76	224	6xM12	34	53	29	
3675-315	315	94	99,1	5	260	103	286	6xM16	43	57	50	
3675-400	400	105	113,8	5	330	136	362	6xM16	55	67	85	

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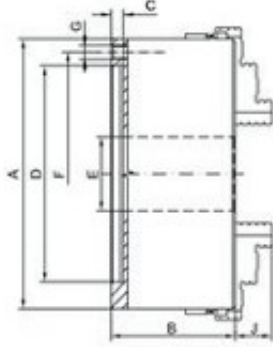
BİSON KEPENKLİ TORNA AYNASI



4304

ÜRÜN KODU	A	B	C	D	E	F	G	J	L	Kg	FİYAT EURO
4304-200	200	80	5	110	50	82,6	4xM10	40,3	46,4	14	
4304-250	250	85	7	150	65	104,8	4xM12	40,3	60,4	25	
4304-315	315	95	7	175	80	133,4	4xM16	49,8	60,9	39	
4304-400	400	105	10	200	100	171,4	4xM16	49,8	72,3	61	
4304-500	500	120	12	270	125	235	4xM20	59,8	97,8	105	
4304-630	630	140	12	270	160	235	4xM20	59,8	97,7	163	
4304-800	800	150	14	300	180	210	4xM20	60	98	300	
4304-1000	1000	150	14	300	180	210	4xM20	60	98	500	

BİSON AKILLI AYNA



4505

KEPENKLİ VE ÜNİVERSAL

- Hem kendi kendine merkezlenen kaydırma aynalarının hem de bağımsız aynaların özelliklerini bir araya getirir
- Ayna çeneleri, iş parçasının formuna göre ayrı ayrı ayarlanabilir.
- Kendi kendine merkezleme seçeneği.
- Bir dizi benzer işlem boyunca zaman verimli tekrarlanabilirliği sağlar

ÜRÜN KODU	A	B	B1	C	D	E	F	G	J	L	Kg	FİYAT EURO
-	80	44	-	3	56	16	67	3xM6	13	-	1,5	-
-	100	50	-	3	70	20	83	3xM8	16	-	2,8	-
4505-125	125	56	60,8	4	95	32	108	3xM8	20	40	5	-
4505-160	160	64,5	69,3	4	125	42	140	6xM10	32	43	10	-
4505-200	200	75	79,8	4	160	55	176	6xM10	29	45	17,5	-
4505-250	250	85	88,8	5	200	76	224	6xM12	34	53	29	-
4505-315	315	94	99,1	5	260	103	296	6xM16	43	57	50	-
4505-400	400	105	113,8	5	330	136	362	6xM16	55	67	85	-

BİSON TORNA AYNASI YEDEK PARÇALARI

3 AYAKLI DÜZ VE TERS YEDEK TAKIM

ÜRÜN KODU	Ölçü	Fiyat Euro
32000803	80x3	
32000103	100x3	
32001253	125x3	
32001603	160x3	
32002003	200x3	
32002503	250x3	
32003153	315x3	
32004003	400x3	
32005003	500x3	
32006303	630X3	



4 AYAKLI DÜZ VE TERS YEDEK TAKIM

ÜRÜN KODU	Ölçü	Fiyat Euro
36001253	125x4	
36001603	160x4	
36002003	200x4	
36002503	250x4	
36003153	315x4	
36004003	400x4	
36005003	500x4	



YEDEK PİYON

ÜRÜN KODU	Ölçü	Fiyat Euro
320080	80	
320100	100	
320125	125	
320160	160	
320200	200	
320250	250	
320315	315	
320400	400	
320500	500	



BİSON TORNA AYNASI YUMUŞAK AYAK TAKIMLARI



BİSON TORNA AYNASI YUMUŞAK AYAK TAKIMI 3 AYAKLI

ÜRÜN KODU	Ölçü	Fiyat Euro
32040080	80x3	
32040100	100x3	
32040125	125x3	
32040160	160x3	
32040200	200x3	
32040250	250x3	
32040315	315x3	
32040400	400x3	



BİSON TORNA AYNASI YUMUŞAK AYAK TAKIMI 4 AYAKLI

ÜRÜN KODU	Ölçü	Fiyat Euro
36040125	125x4	
36040160	160x4	
36040200	200x4	
36040250	250x4	
36040315	315x4	
36040400	400x4	



BİSON TORNA AYNASI YEDEK ANAHTAR & SALLYANGOZ DİŞLİSİ



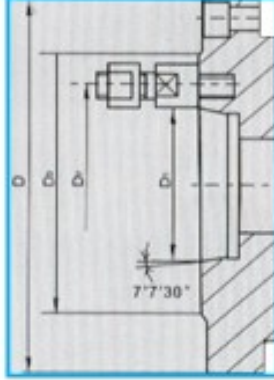
BİSON YEDEK ANAHTAR		
ÜRÜN KODU	Ölçü	Fiyat Euro
B08800	80	
B08100	100	
B08125	125	
B08160	160	
B08200	200	
B08250	250	
B08315	315	
B08400	400	
B08500	500	



BİSON SALLYANGOZ DİŞLİSİ		
ÜRÜN KODU	Ölçü	Fiyat Euro
B08080-S	80	
B08100-S	100	
B08125-S	125	
B08160-S	160	
B08200-S	200	
B08250-S	250	
B08315-S	315	
B08400-S	400	
B08500-S	500	
B08600-S	630	
B08800-S	800	



TORNA AYNASI FLANŞLARI



NO	5	6	8	11	15
D1	82,563	106,375	139,719	196,869	285,775
D2	104,8	133,4	171,4	235	330,2
D3	135	170	220	290	400



- Döküm gövdelidir.
- Saplama ve Somunları dahildir.

ÜRÜN KODU	ÖLÇÜ	FİYAT EURO
F0401	160/ C-6	
F0402	200/ C-5	
F0403	200/ C-6	
F0404	250/ C-6	
F0405	250/ C-8	
F0406	315/ C-6	
F0407	315/ C-8	
F0408	315/ C-11	
F0409	400/ C-6	
F0410	400/ C-8	
F0411	400/ C-11	
F0412	500/ C-6	
F0413	500/ C-8	
F0414	500/ C-11	
F0415	500/ C-15	

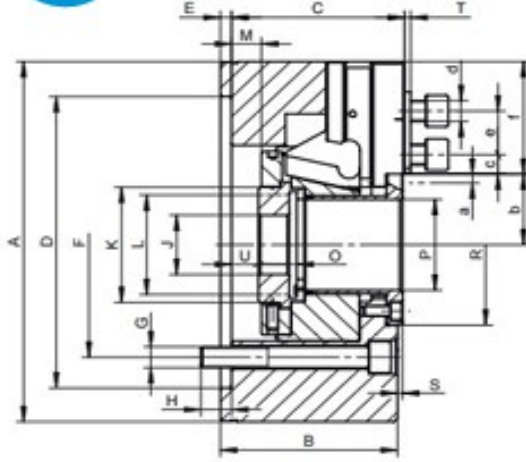
CAMLOCK SAPLAMALI MODEL



- Döküm gövdelidir.
- Saplama ve Somunları dahildir.

ÜRÜN KODU	ÖLÇÜ	FİYAT EURO
F0401-C	160/ C-6	
F0402-C	200/ C-5	
F0403-C	200/ C-6	
F0404-C	250/ C-6	
F0405-C	250/ C-8	
F0406-C	315/ C-6	
F0407-C	315/ C-8	
F0408-C	315/ C-11	
F0409-C	400/ C-6	
F0410-C	400/ C-8	
F0411-C	400/ C-11	
F0412-C	500/ C-6	
F0413-C	500/ C-8	
F0414-C	500/ C-11	
F0415-C	500/ C-15	

BİSON CNC-HİDROLİK AYNALAR



MADE IN POLAND

2405-K

ÜRÜN KODU	352405342500	352405352700	352405342500	352405372000	352405377400
Typ	2405-160-45K	2405-200-52K	2405-250-75K	2405-315-91K	2405-400-120K
A	169	210	254	315	400
B	81	95	106	108	130
C	79	93	104	106,5	126,5
Aufnahme Mounting	140	170	220	220	300
E	6	6	6	6	6
F	104,8	133,4	171,4	171,4	235,4
G	6xM10	6xM12	6xM16	6xM16	6xM20
H	13,5	16,5	18	27	28
J	20	20	25	25	60
K	60	66	94	108	140
L max.	M55x2,0	M60x2,0	M85x2,0	M100x2,0	M130x2,5
Max. Kolbenhup Max. Drawbar stroke	16(13/-3)	22,5(16/-6,5)	27(19,5/-7,5)	27(23/-4)	34(23/-11)
O	19	20,5	25	28	39
P	45	52	75	91	120
R	70	92	117	134	164
S	2,6	2,6	2,6	0,6	0,5
T	3	3	3	2,5	5
U min.	-5	-8	-18,5	-19	-23
U max.	11	14,5	8,5	8	11
Max. Backenhub Jaw stroke	3,5	5	6	6	7,85
Spitzverzahnung Serration	1,5x60	1,5x60	1,5x60	1,5x60	1,5x60

HİDROLİK AYNALAR

ÜRÜN KODU	Ölçü	Fiyat Euro
2405-160-45K	160X3	
2405-200-52K	200X3	
2405-250-75K	250X3	
2405-315-91K	315X3	
2405-400-120K	400X3	

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AUTOGRIP CNC HİDROLİK AYNA 2 AYAKLI



ÜRÜN KODU	Ölçü	Fiyat USD
T2H-04 A4	100X2	
T2H-05 A4	125X2	
T2H-06 A5	160X2	
T2H-08 A5	200X2	
T2H-08 A6	200X2	
T2H-10 A6	250X2	
T2H-10 A8	250X2	
T2H-12 A8	300X2	
T2H-15 A8	350X2	

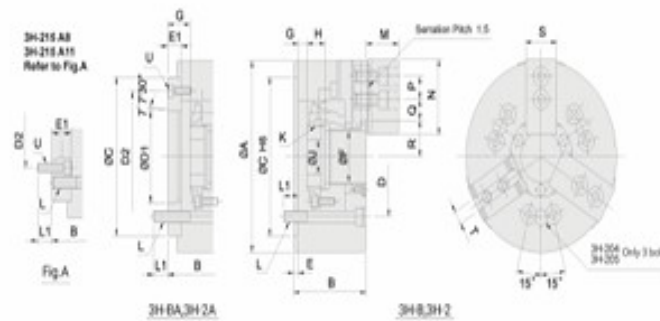
Model	-	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chuck Dia. Max. (mm)	Chuck Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min ⁻¹ (r.p.m.)
2H-204	A4	13	5.5	113	7	9.2 (940)	19.4 (1980)	8000
2H-205	A4	13	5.5	138	10	11.4 (1167)	32 (3260)	7000
2H-206	A5	14	6	170	13	15.5 (1580)	44.4 (4530)	6000
2H-208	A5	18	7.6	210	17	23.1 (2360)	57.3 (5840)	5000
2H-208	A6	18	7.6	210	17	23.1 (2360)	57.3 (5840)	5000

I	Weight (kg)	Weight (kg)	Matching cyl.	Max. pressure MPa (kgf/cm ²)
0.012	4.2	4.8	TK-A528	1.3(13)
0.02	6.8	7.6	TK-A533	1.6(16)
0.06	13.1	14.9	TK-A646	1.6(16)
0.17	21.3	24.2	TK-A853	1.8(18)
0.17	21.3	22.4	TK-A853	1.8(18)

AUTOGRIP CNC HİDROLİK 3 AYAKLI AÇIK MERKEZLİ

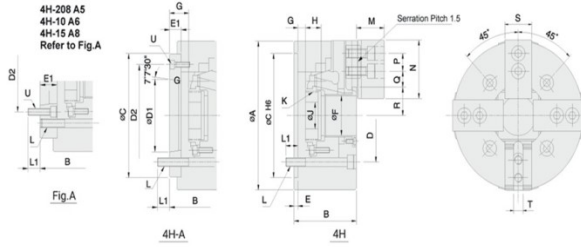


ÜRÜN KODU	ÖLÇÜ	FİYAT USD
T3H-04 A4	100X3	
T3H-05 A4	125X3	
T3H-06 A5	160X3	
T3H-08 A5	200X3	
T3H-08 A6	200X3	
T3H-10 A6	250X3	
T3H-10 A8	250X3	
T3H-12 A8	300X3	
T3H-15 A8	350X3	



Model	-	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chuck Dia. Max. (mm)	Chuck Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min ⁻¹ (r.p.m.)	I kgm ²	Weight (kg)	Weight (kg)
3H-204	A4	13	5.5	113	7	13.7 (1400)	36.0 (3670)	8000	0.012	4.22	5.34
3H-205	A4	13	5.5	138	10	17.2 (1750)	48.0 (4890)	7000	0.02	6.3	7.1
3H-206	A5	14	6	170	13	23.3 (2375)	66.8 (6810)	6000	0.06	13.1	14.9
3H-208	A6	18	7.6	210	17	31.9 (3250)	107.0 (10900)	5000	0.15	21.8	23.4
3H-210	A8	21	8.9	260	37	49 (5010)	152 (15500)	4500	0.32	37.5	43
3H-212	A11	25	10.6	315	43	58.8 (6000)	157 (16010)	3700	0.74	58.7	64.7
3H-215	A8	25	10.6	405	49	71 (7240)	180 (18350)	2500	2.8	127	149

AUTOGRIP CNC HİDROLİK 4 AYAKLI AÇIK MERKEZLİ



4 AYAKLI

ÜRÜN KODU	Ölçü	Fiyat USD
T4H-06 A5	160X4	
T4H-08 A5	200X4	
T4H-08 A6	200X4	
T4H-10 A6	250X4	
T4H-10 A8	250X4	
T4H-12 A8	300X4	
T4H-15 A8	350X4	
T4H-15A11	350X4	

Model	-	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chuck Dia. Max. (mm)	Chuck Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min ⁻¹ (r.p.m.)	I kg m ²
4H-206	A5	14	6.0	170	13	23.2 (2375)	66.7 (6810)	5000	0.06
4H-208	A5	18	7.6	210	17	34.3 (3500)	85.8 (8750)	4200	0.19
4H-208	A6	18	7.6	210	17	34.3 (3500)	85.8 (8750)	4200	0.19

Model	-	Plunger stroke (mm)	Jaw stroke (Dia.) (mm)	Chuck Dia. Max. (mm)	Chuck Dia. Min. (mm)	Max. D.B. pull kN (kgf)	Max. clamping force kN (kgf)	Max. speed min ⁻¹ (r.p.m.)	I kg m ²	Weight (kg)
4H-10	A6	19	8.8	254	25	42.6 (4380)	110.7 (11300)	3400	0.34	36.3
4H-10	A8	19	8.8	254	25	42.6 (4380)	110.7 (11300)	3400	0.34	36.3
4H-12	A8	25	10.6	304	34	54.9 (5600)	143.6 (14650)	2700	0.77	62
4H-15	A8	23	10.6	381	50	71 (7250)	179.8 (18350)	2000	2.5	123.7
4H-15	A11	23	10.6	381	50	71 (7250)	179.8 (18350)	2000	2.42	123.7
4H-18	A11	23	10.6	450	50	71 (7250)	179.8 (18350)	1700	4.85	170

HİDROLİK AYNA YEDEK AYAKLARI



STANDART SERT AYAK

ÜRÜN KODU	Ölçü	Fiyat USD	ÜRÜN KODU	Ölçü	Fiyat USD
T3H-04 A4	100X3		T4H-06 A5	160X4	
T3H-05 A4	125X3		T4H-08 A5	200X4	
T3H-06 A5	160X3		T4H-08 A6	200X4	
T3H-08 A5	200X3		T4H-10 A6	250X4	
T3H-08 A6	200X3		T4H-10 A8	250X4	
T3H-10 A6	250X3		T4H-12 A8	300X4	
T3H-10 A8	250X3		T4H-15 A8	350X4	
T3H-12 A8	300X3		T4H-15A11	350X4	
T3H-15 A8	350X3				



STANDART YUMUŞAK AYAK

ÜRÜN KODU	Ölçü	Fiyat USD	ÜRÜN KODU	Ölçü	Fiyat USD
T3H-04 A4	100X3	-	T4H-06 A5	160X4	-
T3H-05 A4	125X3	-	T4H-08 A5	200X4	-
T3H-06 A5	160X3	-	T4H-08 A6	200X4	-
T3H-08 A5	200X3	-	T4H-10 A6	250X4	-
T3H-08 A6	200X3	-	T4H-10 A8	250X4	-
T3H-10 A6	250X3	-	T4H-12 A8	300X4	-
T3H-10 A8	250X3	-	T4H-15 A8	350X4	-
T3H-12 A8	300X3	-	T4H-15A11	350X4	-
T3H-15 A8	350X3	-			



WATANO 3 AYAKLI CNC HİDROLİK AYNASI

WATANO



Watano 3 Ayaklı Hidrolik CNC Aynası

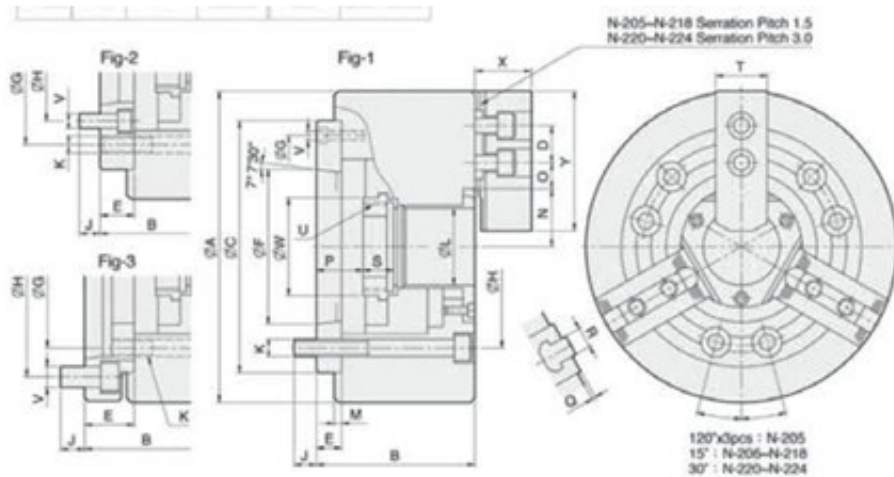
Ürün Kodu	Ölçü/Flanş	Fiyat USD
WT3H-05A5	5"/A6	
WT3H-06A5	6"/A5	
WT3H-06A6	6"/A6	
WT3H-08A5	8"/A6	
WT3H-08A6	8"/A6	
WT3H-10A6	10"/A6	
WT3H-10A8	10"/A8	
WT3H-12A6	12"/A6	
WT3H-12A8	12"/A8	
WT3H-15A8	15"/A8	
WT3H-15A11	15"/A11	

CE SERTİFİKALI

**ÇELİK
GÖVDE**

**ÇİFT
DELİKLİ**

Ürün Kodu	Ölçü	A	B	C(H6)	D	E	F	G	H	J	K
WT3H-05A5	5"/A5	135	88	110	14	32	82,56	82,55	104,8	14	3-M10
WT3H-06A5	6"/A5	169	91	140	20	15	82,56	116	104,8	16	6-M10
WT3H-06A6	6"/A6	169	111	140	20	35	106,4	104,8	133,4	16	6-M10
WT3H-08A5	8"/A6	210	109	170	25	23	82,56	133,4	104,8	13	6-M12
WT3H-08A6	8"/A6	210	103	170	25	17	106,4	150	133,4	18	6-M12
WT3H-10A6	10"/A6	254	112	190	30	25	106,4	171,5	133,4	18	6-M16
WT3H-10A8	10"/A8	254	113	200	30	18	139,7	190	171,5	24	6-M16
WT3H-12A6	12"/A6	304	122	220	30	20	139,7	171,5	133,4	18	6-M16
WT3H-12A8	12"/A8	304	122	220	30	20	139,7	171,5	171,5	24	6-M16
WT3H-15A8	15"/A8	381	160	300	30	22	196,9	260	235	24	6-M20
WT3H-15A11	15"/A11	381	149	300	43	22	196,9	260	235	24	6-M20



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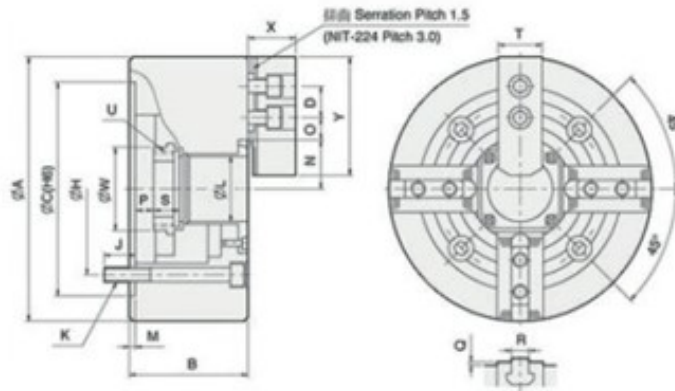
Watano 4 Ayaklı Hidrolik CNC Aynası

Ürün Kodu	Ölçü/Flanş	Fiyat USD
WT4H-06A6	6"/A6	
WT4H-08A6	8"/A6	
WT4H-10A6	10"/A6	
WT4H-12A8	12"/A8	
WT4H-15A8	15"/A11	

CE SERTİFİKALI

ÇELİK
GÖVDE

Ürün Kodu	Ölçü/Flanş	A	B	CH6	D	H	J	K
WT4H-06A6	6"/A6	169	81	140	20	104,78	16	6-M10
WT4H-08A6	8"/A6	210	91	170	25	133,35	20	6-M12
WT4H-10A6	10"/A6	254	100	220	30	171,45	22	6-M16
WT4H-12A8	12"/A8	304	110	220	30	171,45	23	6-M16
WT4H-15A8	15"/A11	381	133	300	43	235	35	6-M20



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WATANO HİDROLİK CNC AYNASI YEDEK AYAKLARI



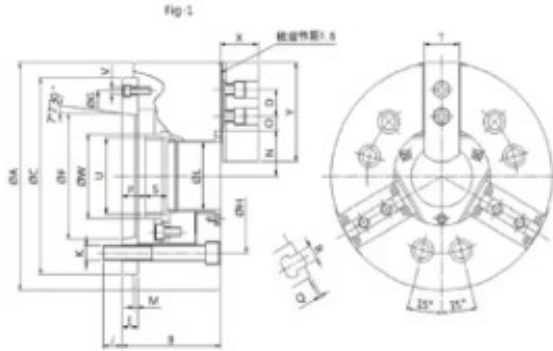
SERT YEDEK AYAK TAKIMI

Ürün Kodu	Ölçü	Fiyat USD
WT3HSJ-05	5"	
WT3HSJ-06	6"	
WT3HSJ-08	8"	
WT3HSJ-10	10"	
WT3HSJ-12	12"	
WT3HSJ-15	15"	

SAN OU HİDROLİK CNC AYNASI - 3 AYAKLI

SAN OU
C H U C K

**3 Mikron
Hassasiyet**



ÜRÜN KODU	A	B	C	D	E	F	G	H	J	K	L	M	N max.	O max.	P min.	P max.	P min.	Q	R	S	T	U max.	V	W	X	Y
3H-169A5	169	91	140	20	15	82.563	116	104.8	16	6-M10	45	5	32	22.75	9.25	26	14	2	12	19	31	M55x2	3-M6	60	37	73
3H-210A6	210	103	170	25	17	106.375	150	133.4	18	6-M12	52	5	39	29.75	11.75	31.5	15.5	2	14	20.5	35	M60x2	3-M6	66	39	95
3H-254A8	254	113	220	30	18	139.719	190	171.4	24	6-M16	75	5	51	33.75	14.25	26.5	7.5	2	16	25	40	M85x2	3-M8	94	43	110

ÜRÜN KODU	ÖLÇÜ	FİYAT USD
3H-169A5	160x3	
3H-210A6	200x3	
3H-254A8	250x3	



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