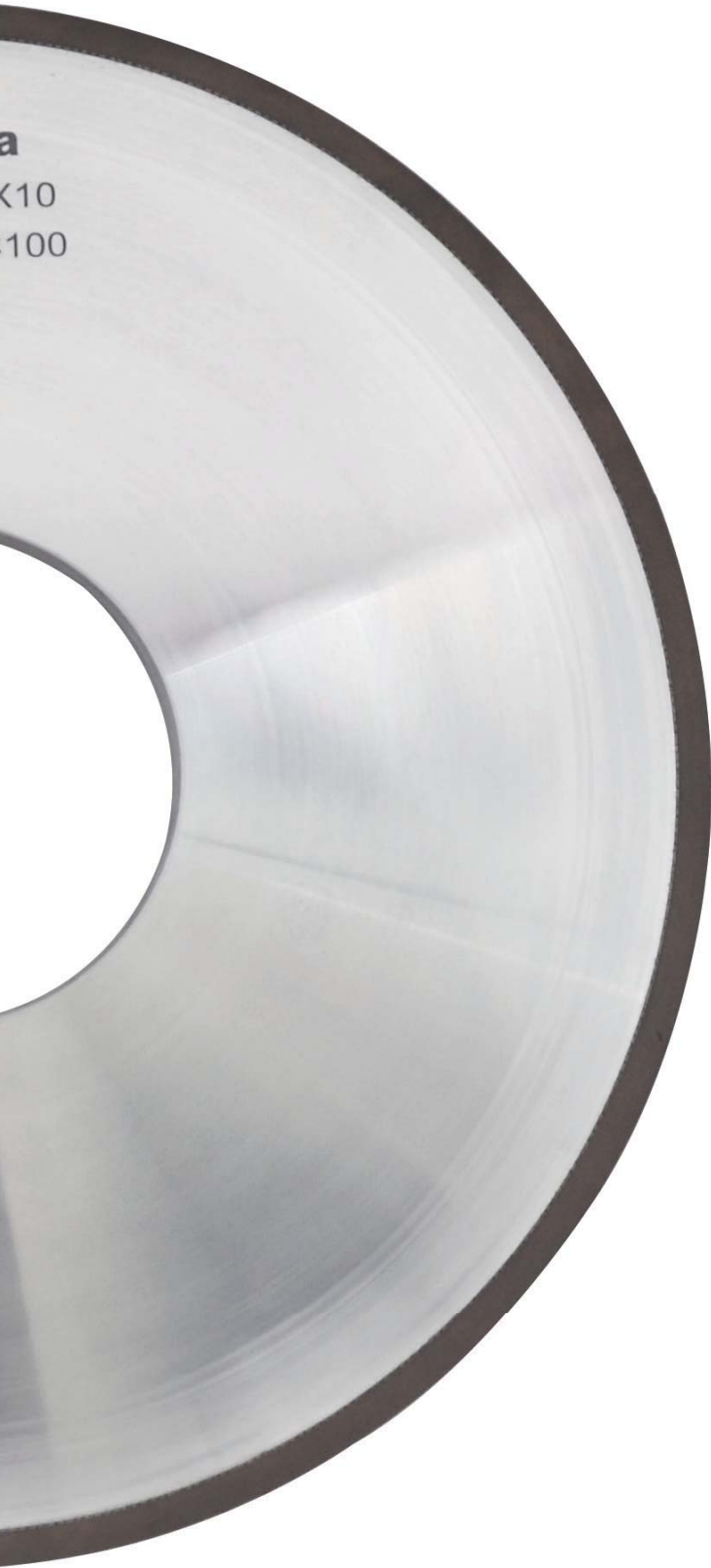


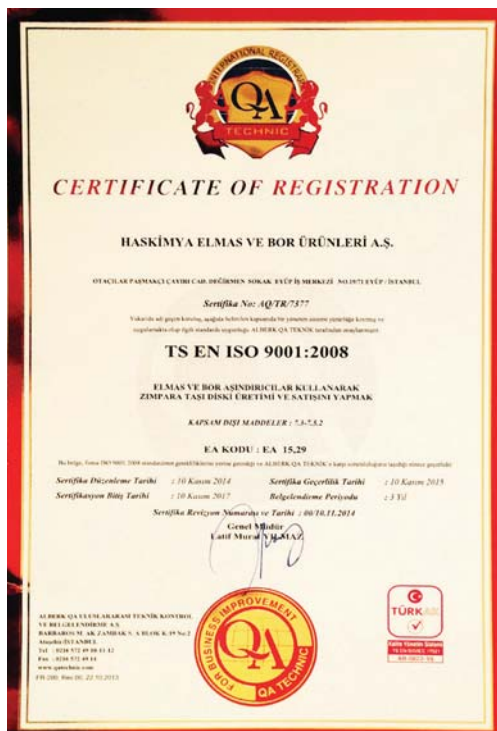


haskimya
Elmas ve Bor Ürünleri A.Ş.

Has Kimya 1957 yılında ilk yerli fenolik reçineyi üreterek, reçine bağlantılı zımpara taşı imalatıyla Türk Sanayiinde ilklere imza atmaya başladı. Ürettiği mermer testereleri ile Türk mermerciliğinin ilk hamleleri filizlendi. Bunun peşinden, silme taşları cilalar ve mermer yapıştırıcılarına kadar, tamamlayıcı her ürünü yerli olarak başardı. 1973 yılında ilk elmas mermer testerisini üretti ve bunu diğer elmas kesici, aşındırıcılar takip etti. 1985 yılında Avusturya'ya elmas aşındırıcılar konusunda knowhow satan ilk Türk şirketi ünvanını kazandı. Orada silikon Wafer taşıması için arge yaparak, dünyadaki ilk büyük tekparça disk imalatını gerçekleştirdi. Konumuzda birçok yeniliğe imza atarak “Türkler Bunu Üretebiliyor” dedirten nadir firmalardan biriyiz. Amacımız ülkemize barışta ve savaşta, özellikle savunma sanayimizde, yabancılara ihtiyaç duyulmadan üretmeye devam ettirebilmek.

Has Kimyanın varlığından, ekonomimizi düşünen her müşterimiz ve Türkiye fayda görmektedir. İleriki nesiller, bu yıllardır süre gelen başarılı teknolojimizi devam ettirirlerken, hatırladığımızı hep hissedeceğiz.

Ali Demir ATASAGUN



DIAMANT UND CBN SCHLEIFSCHEIBEN

DIAMOND AND CBN GRINDING WHEELS

ELMAS VE CBN TAŞLAMA DİSKLERİ

von **haskimya** sind in der Zusammensetzung sowie in Maß- und Rundlauftoleranzen Präzisionswerkzeuge. Entsprechend eingesetzt ergeben sich damit ökonomische Vorteile gegenüber allen anderen Schleifmitteln. Ständiges Forschen nach neuen Bindungssystemen sowie Weiterentwickeln der Fertigungstechnologien in unseren Laboratorien ermöglicht, stets die Lösung Ihrer aktuellen Bearbeitungsaufgaben anbieten zu können.

haskimya diamond and CBN wheels are precision abrasive tools expertly balanced and manufactured to assure constant/repeatable quality. When correctly used they offer notable advantages over traditional wheels. The continuous research of new bonds and the steady development of our laboratory technologies guarantee solutions to all your grinding problems.

KORNGRÖSSE TABELLE

GRIT-SIZE CHART



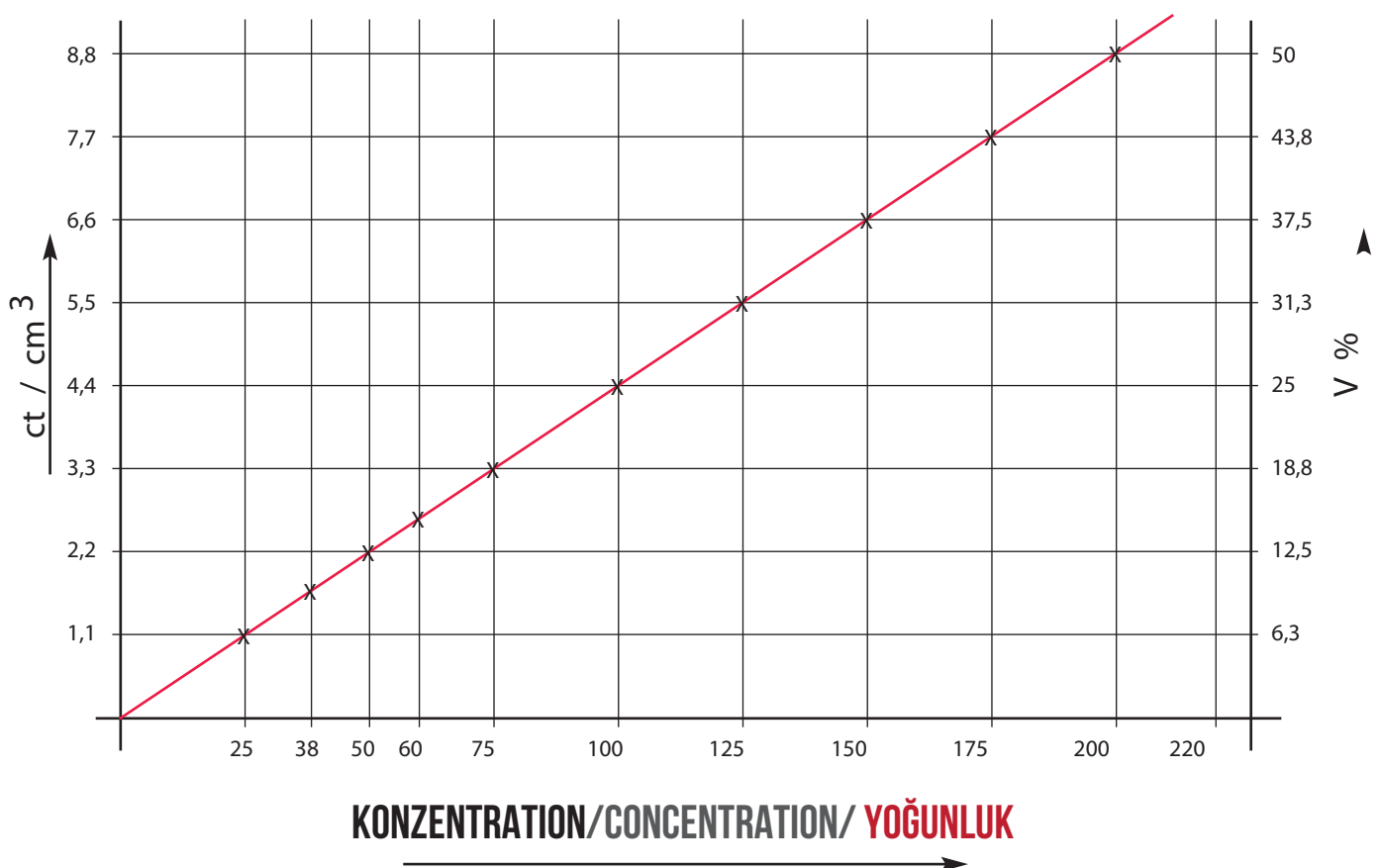
KUM İRİLİKLERİ TABLOSU

haskimya F.E.P.A. DIAMANT / DIAMOND Elmas		haskimya F.E.P.A. CBN Bor		haskimya US-Standard ASTM-E-11-70		Nennmaschen- weite nach DIN 848 (1980) ISO 6106 Nominal mesh width according to DIN 848 (1980) ISO 6106	DIN 848 (1965)	
eng close dar	weit large geniş	eng close dar	weit large geniş	eng close dar	weit large geniş		eng close dar	weit large geniş
D 301	D 252	D 301	D 252	50/60		300/250	D 280	D 250
D 251		D 251		60/70		250/212	D 220	
D 213		D 213		70/80		212/180		
D 181		D 181		80/100		180/150	D 180	D 150
D 151		D 151		100/120		150/125	D 140	
D 126		D 126		120/140		125/106	D 110	D 100
D 107		D 107		140/170		106/90	D 90	
D 91		D 91		170/200		90/75		D 70
D 76		D 76		200/230		75/63	D 65	
D 64		D 64		230/270		63/53	D 55	D 50
D 54		D 54		270/325		53/45	D 45	
D 46		D 46		325/400		45/38	D 35	D 30

KONZENTRATION/CONCENTRATION/ YOĞUNLUK

Die Konzentrationsangabe beschreibt den Diamant- oder CBN-Gehalt des Schleifbelages und ist eines seiner wichtigsten Qualitätsmerkmale. Üblicherweise werden mit steigenden Konzentrationen höhere Schleifleistungen erzielt, die Scheibe wirkt härter, d. h. verschleißfester. Ein Volumenanteil von 25 % im Schleifbelag wird als Basiswert für Konzentration 100 angenommen und beinhaltet 4,4 Karat Körnung pro Schleifbelag (1 Karat = 0,2 g). Davon ausgehend werden von uns folgende Abstufungen getroffen.

The concentration shows the quantity of diamond or CBN in the rim and is one of the most important factors. A high concentration means the wheel lasts longer, is harder and more wear resistant. The concentration value 100 is equal to 25 % of the rim volume; each cm³ in the rim contains 4,4 grit carats (1 carat = 0,2 g). Starting from this, we can draw the following chart:



KUNSTHARZ GEBUNDENE DIAMANT UND CBN SCHLEIFSCHEIBEN

RESIN BONDED DIAMOND AND CBN GRINDING WHEELS

REÇİNE BAĞLANTILI ELMAS VE CBN TAŞLAMA DİSKLERİ



KUNSTHARZBINDUNGEN / RESINOID BONDS / REÇİNE BAĞLANTI

Als Bindemittel werden Kunststoffe mit unterschiedlichen Eigenschaften eingesetzt. Üblicherweise werden Phenol-Formaldehyd Kondensationsprodukte und Polyimide verwendet. Hohe Abtragsleistungen, geringe Wärmeentwicklung und daraus resultierende kurze Schleifzeiten sind Vorteile gegenüber den anderen Bindungssystemen, sodaß über 50 % der verwendeten Schleifwerkzeuge mit dieser Bindung ausgeführt sind. Das Verschleißverhalten unserer Bindungen wird durch gezielte Kunstharzmodifikation und Zugabe von schleifaktiven Substanzen an die gegebenen Einsatzparameter angepaßt. Eine umfassende Reihe unterschiedlicher Bindungen ermöglicht die Auswahl der jeweils wirksamsten.

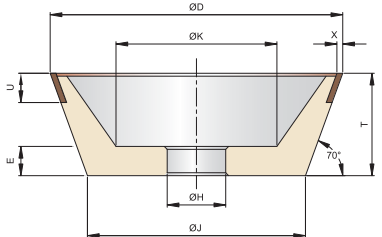
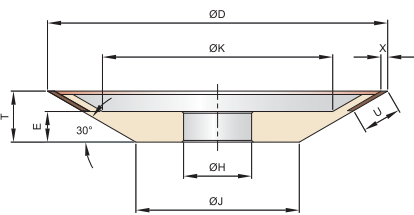
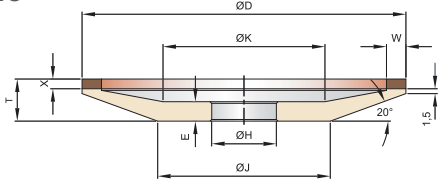
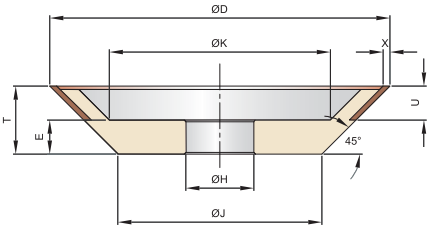
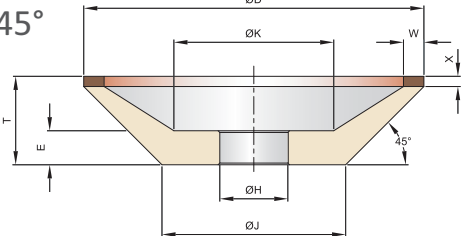
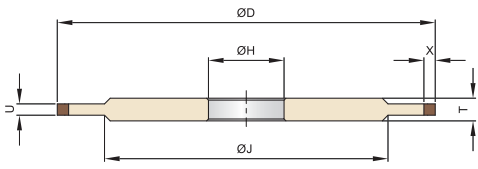
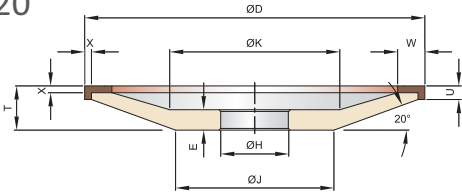
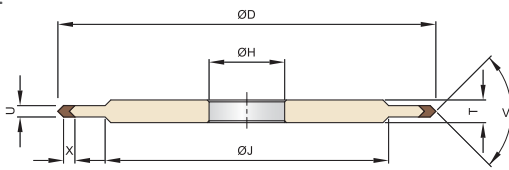
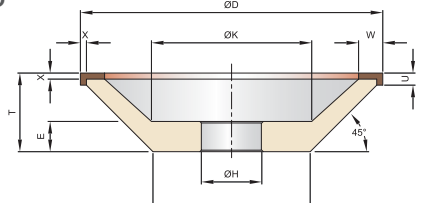
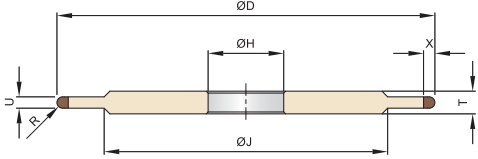
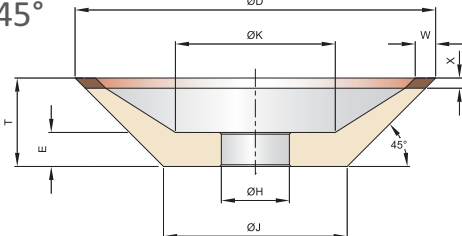
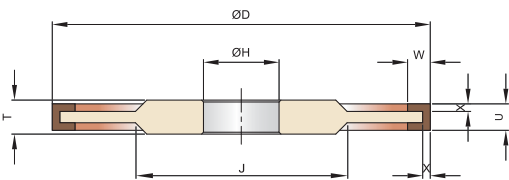
These bonds are prepared with synthetic materials of various characteristics. Products based on phenol-formaldehyde, resins and polyimide. High removal, dry grinding and short grinding times are the advantages of this bond: more than 50 % of the abrasive tools used today are made with this bond. The bond type is chosen and modified or integrated according to the working requirements. A wide range of bonds allows the optimum choice for individual applications.

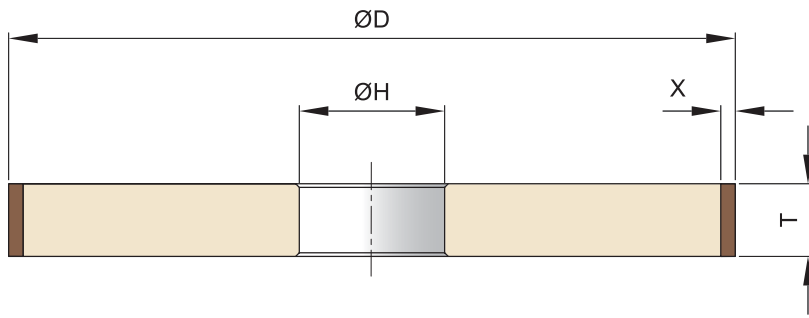
FORMENÜBERSICHT

SHAPE OVERVIEW

ŞEKİLLER

1A1	4BT9
1A1R	4ET9
1A8W	6A2
1FF1	6A9
1V1	9A3
3A1	11A2
4A2	11V2

11V9 	12V9-30° 
12A2-20° 	12V9-45° 
12A2-45° 	14A1 
12C9-20° 	14EE1 
12C9-45° 	14F1 
12V2-45° 	14U1 

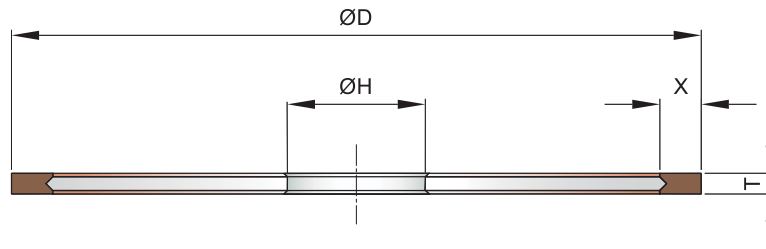


D	T	X	H	D	T	X	H
15	3 - 15	2,3	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	90	3 - 20	3.5,6,10	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.
18	3 - 12	2		100	5 - 25	3,4,5,6,7,8 10,12.5	
20	3 - 15	2,3,4		125	5 - 25	3,4,5,6,7,8 10,12.5,15	
25	3 - 20	2,3,4,5		150	5 - 30	3,4,5,6,8 10,12.5,15	
30	3 - 20	2,3,4,5		175	8 - 30	3,4,5,6,8 10,12.5,15	
35	3 - 20	2,3,4,5,6		200	8 - 30	3,4,5,6,8 10,12.5,15	
40	3 - 20	2,3,4,5,6		225	10 - 30	3,4,5,6,10 12.5	
45	3 - 20	2,3,4,5,6		250	10 - 30	3,4,5,6,7,8 10,12.5,15	
50	3 - 20	3,4,5,6		300	12 - 40	3,4,6,10	
55	3 - 20	3,4,5,6		350	15 - 40	3,4,6,10	
60	3 - 20	3,4,5,6,10		400	15 - 40	3,4,6,10	
65	3 - 20	3,4,5,6					Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.
70	3 - 20	3,4,5,6,8					
75	3 - 25	3,4,5,6,7,8, 10,12.5					
80	3 - 20	3,4,5,6,10					
85	3 - 20	3,5					

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	1A1
Dimension / Dimensions / Ölçüler	D - T - X - H : 30 - 20 - 3 - 127
Qualität / Quality / Kalite	D126 RC490 C75

1A1R

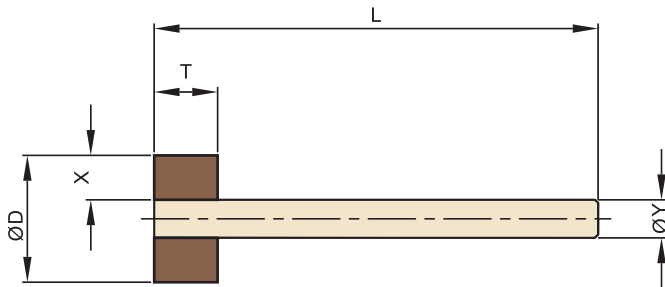


D	T	X	H
150	0,8 - 3	6	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.
200	0,8 - 3	6	
250	1,2 - 2	8	

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	1A1R
Dimension / Dimensions / Ölçüler	D - T - X - Y: 125 - 1 - 6 - 20
Qualität / Quality / Kalite	D151 RC490 C100

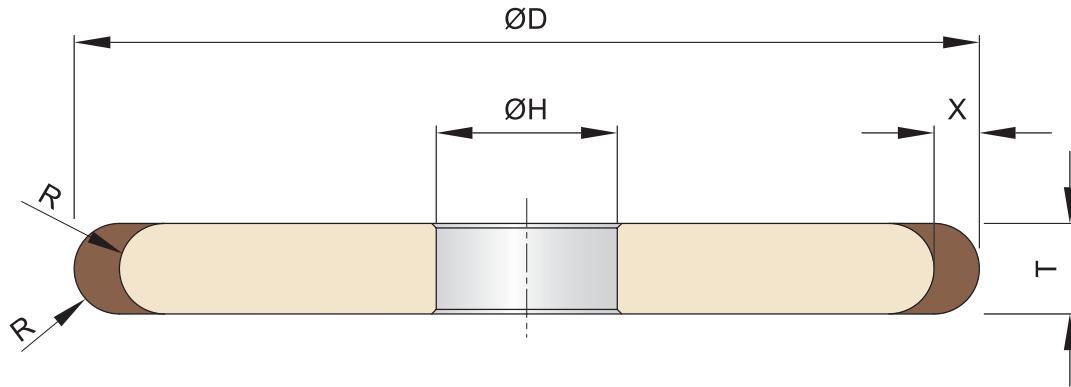
1A8W



Bestellbeispiel / Order specimen / Sipariş Örneği

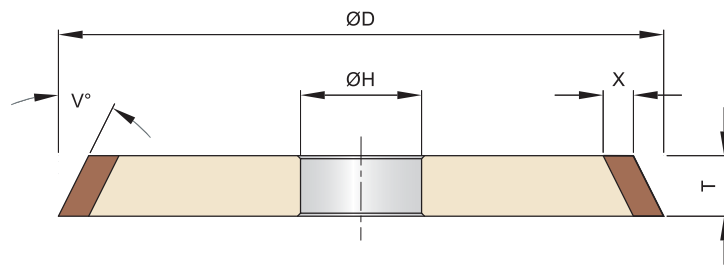
Form / Shape / Şekil	1A8W
Dimension / Dimensions / Ölçüler	D - T - X - Y: 20 - 10 - 7 - 6
Qualität / Quality / Kalite	B126 BZ98 V240

D	T	X	Y	L-T
10	6	2	6	66
10	10	2	6	70
12	6	3	6	66
12	10	3	6	70
15	6	4,5	6	66
15	10	4,5	6	70
18	6	6	6	66
18	10	6	6	70
20	6	7	6	66
20	10	7	6	70



D	T	X	H	D	T	X	H		
75 100	5	3.5,5.5,7.5	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	125	12	4,6,5	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.		
	6	3,5,7			13	6			
					14	5.5			
					15	5			
	7	4.5,6.5			16	4.5			
					18	3.5			
	8	4,6		150	5	2.5,3.5,5.5,7.5			
9	3.5,5.5	6			2,3,5,7				
		7			4.5,6.5				
		8			4,6				
10	3,5	9			3.5,5.5				
		10			3,5,7.5				
		12			4,6.5				
12	4	13			6,8.5				
		14			5.5,8				
		15			5,7.5				
125	5	3.5,5.5,7.5			R=T/2	22		4.5,7	
	6	3,5,7						18	3.5,6
								20	5
								4	
	7	4.5,6.5		Bestellbeispiel / Order specimen / Sipariş Örneği					
				Form / Shape / Şekil 1FF1					
				Dimension / Dimensions / Ölçüler D - T- X- H : 125 - 10 - 5 - 20					
9	3.5,5.5	Qualität / Quality / Kalite D126 RC1077 C100							
		10		3,5,7.5					

1V1

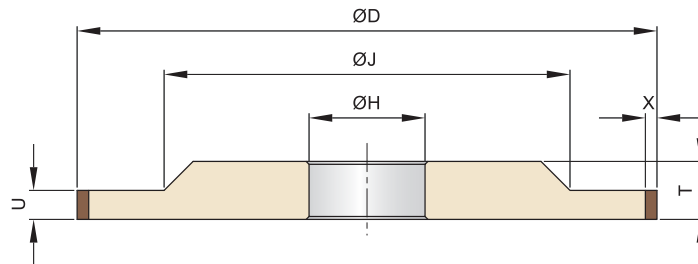


D	T	X	H	V	D	T	X	H	V
75	5-15	4,5,6	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.		150	6-20	4,5,6,8	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	5, 10, 15, 20, 25, 30, 35, 40, 45
100	5-25	4,5,6,8							
125	5-25	4,5,6,8							

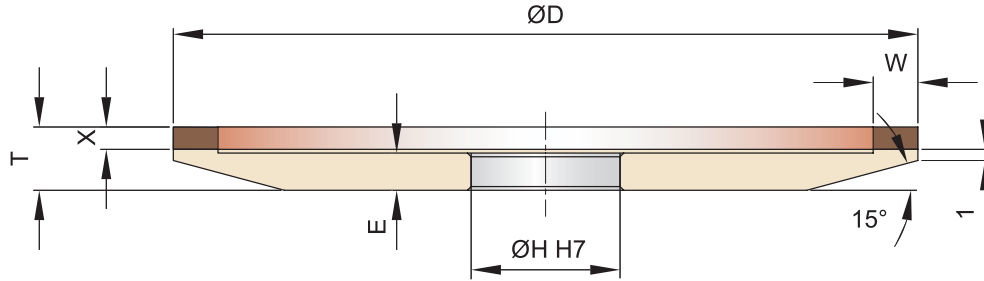
Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
1V1	D - T - X - H : 125 - 1 - 6 - 20	D64 RC490 C100

3A1



D	U	X	H	T _{min}	J	D	T	X	H	T _{min}	J	
15	2-15	2,3	Bohrungsdurchmesser angeben Please give bore diameter Lüften merkez delik çapını bildiriniz.	6	11	100	2-25	3,4,5,6,7,8 10,12,5,15,18	Bohrungsdurchmesser angeben Please give bore diameter Lüften merkez delik çapını bildiriniz.	10	75	
18	2-12	2		6	11	108	2-20	3,6		10	85	
20	2-15	2,3,4		6	13	125	2-25	3,4,5,6,7,8 10,12,5,15,20		10	100	
25	2-20	2,3,4,5		6	15	150	2-30	3,4,5,6,7,8 10,12,5,15,20		10	120	
30	2-20	2,3,4,5		6	18	175	2-30	3,4,5,6,7,8 10,12,5,15,20		10	140	
35	2-20	2,3,4,5,6		6	20	200	2-30	3,4,5,6,7,8 10,12,5,15,20		12	160	
40	2-20	2,3,4,5,6		6	25	225	2-30	3,4,5,6,7,8 12,5		12	180	
45	2-20	3,5,5		6	30	250	2-30	3,4,5,6,7,8 10,12,5,15,20		12	200	
50	2-20	2,3,4,5,6,8,10		6	35	300	5-30	3,4,5,6,10		15	250	
55	2-20	3		6	40	350	5-30	3,4,5,6,10		15	300	
60	2-20	3,4		6	45	400	10-30	3,4,6	20	350		
70	2-20	3,5,6		6	50	Bestellbeispiel / Order specimen / Sipariş Örneği						
75	2-25	3,4,5,6,7,8,1,20		6	55	Form / Shape / Şekil			3A1			
80	2-20	3,4,5,10		8	60	Dimension / Dimensions / Ölçüler			D - U- X- H : 125 - 10 - 5 - 20			
85	2-20	5		8	60	Qualität / Quality / Kalite			D107 RZKS C100			
90	2-20	3.5,6,10		10	65							

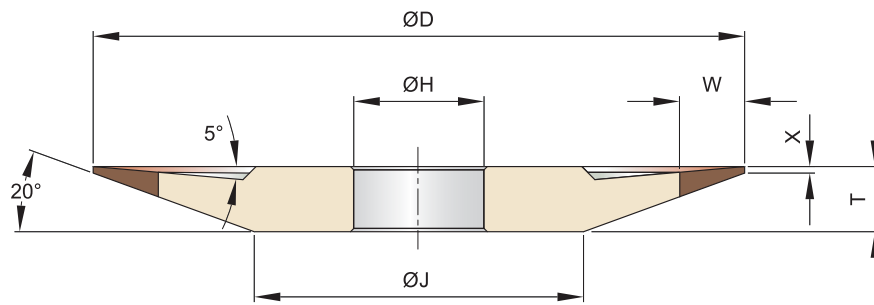


D	W	X	H	T-X	T	E	J
50	2,3,4,5,6	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	5	3 - 20	234.5	
75	2,3,4,5,6,8,10			6	5 - 25	415.5	
100	3,4,5,6,8,10 12.5,15			6	5 - 25	665.5	
125	3,4,5,6,8,10 12.5,15,20			7	5 - 30	846.5	
150	3,4,5,6,8,10 12.5,15,20 25,30			9	8 - 30	948.5	
175	3,4,5,6,8,10 12.5,15,20 25,30			10	8 - 30	9.5	111
200	3,4,5,6,8,10 12.5,15,20 25,30			11	10 - 30	10.5	129

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
4A2	D - W - X - H : 125 - 5 - 3 - 20	D91 RC398 C75

4BT9



D	W	X	H	T	J
75	6,10	1,2	Bohrungsdurchmesser angeben Please give bore diameter Lüften merkez delik çapını bildiriniz.	8	37
100	6,10	1,2		10	50
125	6,10	1,2		12	65
150	6,10	1,2,3		14	90
175	10	1,2,3		15	105

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

4BT9

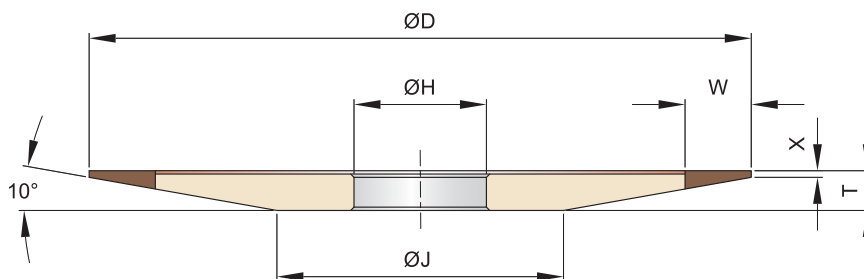
Dimension /
Dimensions / Ölçüler

D - W - X - H : 125 - 10 - 2 - 20

Qualität / Quality / Kalite

D91 RC490 C100

4ET9



D	W	X	H	T	J
75	6	1,2	Bohrungsdurchmesser angeben Please give bore diameter Lüften merkez delik çapını bildiriniz.	6	35
100	6,10	1,2		6	43
125	6,10	1,2		8	57
150	6,10	1,2,3		10	59
175	10	1,2,3		12	61

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

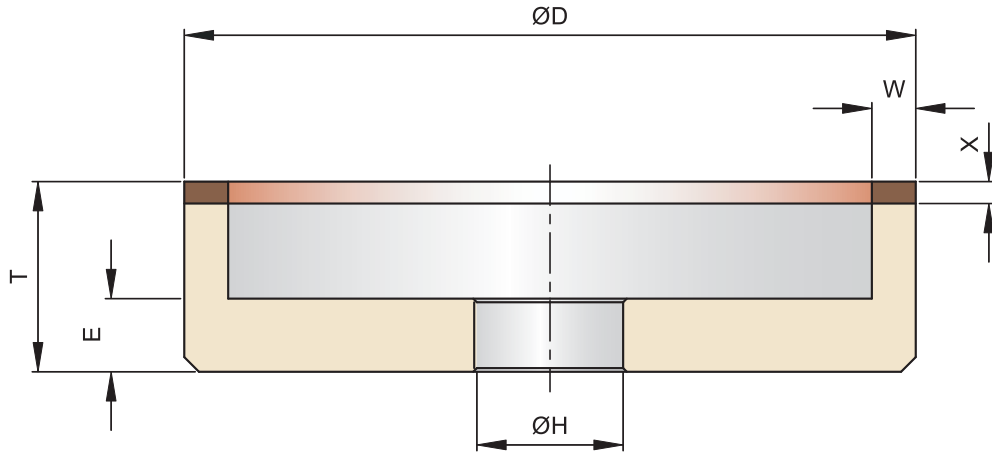
4ET9

Dimension /
Dimensions / Ölçüler

D - W - X - H : 125 - 10 - 2 - 20

Qualität / Quality / Kalite

D107 RC490 C100

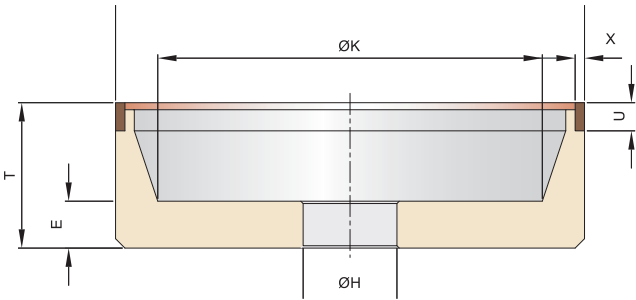


D	W	X	H	T-X	T	E
50	2,3,4,5,6	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	20	3 - 20	10
75	2,3,4,5,6,8,10			20	5 - 25	10
100	3,4,5,6,8,10 12.5,15			23	5 - 25	10
125	3,4,5,6,8,10 12.5,15,20			23	5 - 30	10
150	3,4,5,6,8,10 12.5,15,20 25,30			23	8 - 30	10
175	3,4,5,6,8,10 12.5,15,20 25,30			25	8 - 30	13
200	3,4,5,6,8,10 12.5,15,20 25,30			25	10 - 30	13

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
6A2	D - W - X - H : 125 - 1 - 2 - 20	D107 RC498 C100

6A9



D	U	X	H	T	E	K
75	5-10	2,3,4	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	25	10	61
100	5-10	2,3,4		30	10	82
125	5-10	2,3,4		30	10	108
150	5-10	2,3,4		35	10	129
175	5-12	3,4,5		35	10	154
200	5-12	3,4,5		40	10	175

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

6A9

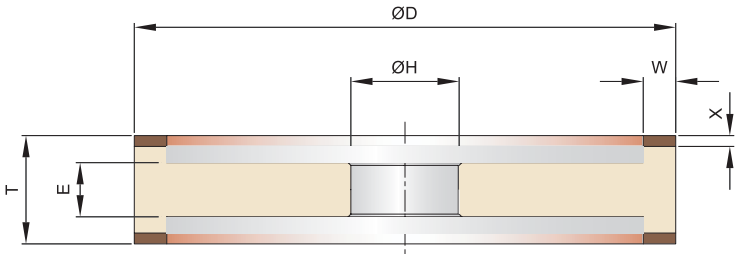
Dimension /
Dimensions / Ölçüler

D - U - X - H : 100 - 10 - 3 - 20

Qualität / Quality / Kalite

B151 RZKS V240

9A3



D	W	X	H	T	E
100	3,4,5,6,8,10	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	22	10
125	3,4,5,6,8,10			22	10
150	3,4,5,6,8,10			25,35	14
175	3,4,5,6,8,10			25,35	14
200	4,5,6,8,10			30	18

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

9A3

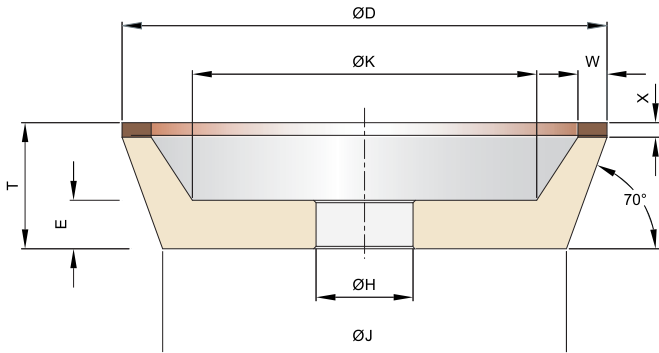
Dimension /
Dimensions / Ölçüler

D - W - X - H : 175 - 6 - 3 - 20

Qualität / Quality / Kalite

B126 RZKS V240

11A2



D	W	X	H	T-X	E	K	J
50	2,3,4,5,6	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	20	10	36	37
75	2,3,4,5,6,8,10			20	10	46	62
100	3,4,5,6,8,10 12.5,15			23	10	71	87
125	3,4,5,6,8,10 12.5,15,20			23	10	91	110
150	3,4,5,6,8,10 12.5,15,20 25,30			23	10	111	137
175	3,4,5,6,8,10 12.5,15,20 25,30			23	13	135	160

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

11A2

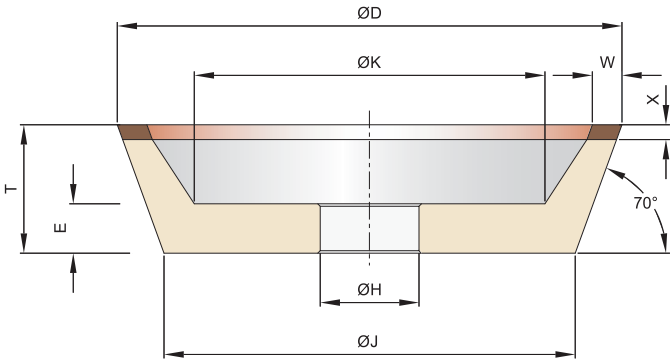
Dimension /
Dimensions / Ölçüler

D-W-X-H : 125 - 5 - 3 - 20

Qualität / Quality / Kalite

B126 RC490 V240

11V2



D	W	X	H	T-X	E	K
50	2,3,4,5,6	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	20	10	36
75	2,3,4,5,6,8,10			20	10	46
100	2,3,4,5,6,8 10,12.5,15			23	10	71
125	2,3,4,5,6,8 10,12.5,15,20			23	10	91
150	2,3,4,5,6,8 10,12.5,15, 20,25,30			23	10	111
175	2,3,4,5,6,8 10,12.5,15 20,25,30			23	13	135

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

11V2

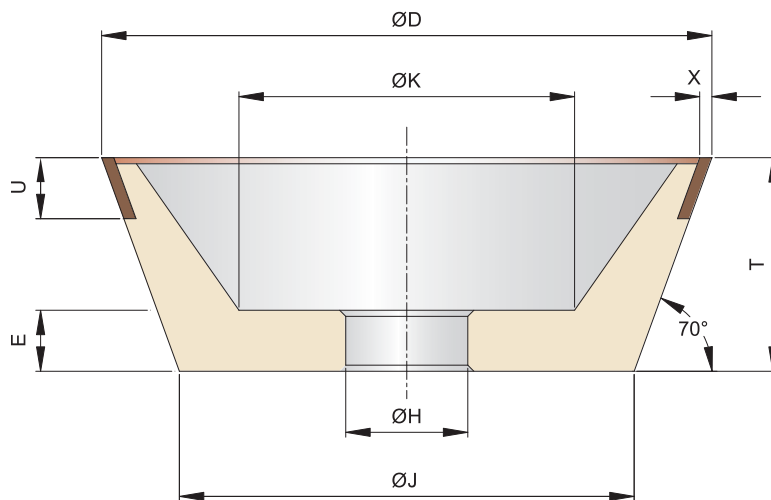
Dimension /
Dimensions / Ölçüler

D-W-X-H : 125 - 5 - 3 - 20

Qualität / Quality / Kalite

B126 RZKS V240

11V9

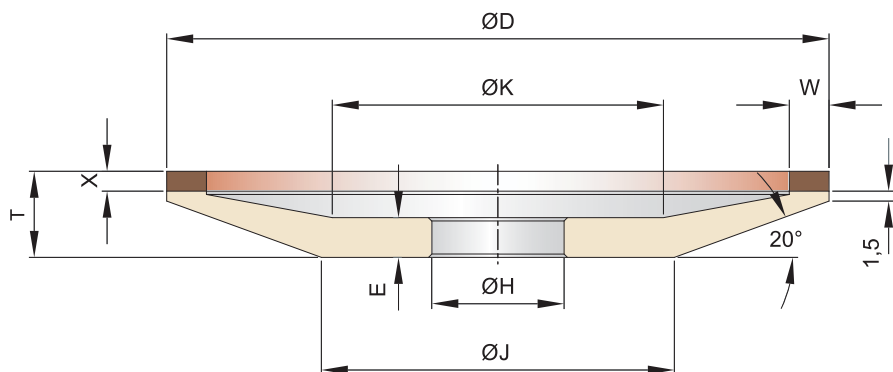


D	U	X	H	T	E	K	J
40	6	2	Bohrungsdurchmesser angeben Please give bore diameter Lüftung merkezz delik çapını bildiriniz.	23	10	22	23
50	8	2		25	10	29	31
75	10	1.5,2,3,4		30	10	40	53
100	10	1.5,2,3		35	10	55	75
125	10	1.5,2,3		40	10	75	96
150	10	1.5,2,3		50	13	90	114

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
11V9	D - U - X - H : 100 - 10 - 3 - 20	D64 RC490 C125

12A2-20°

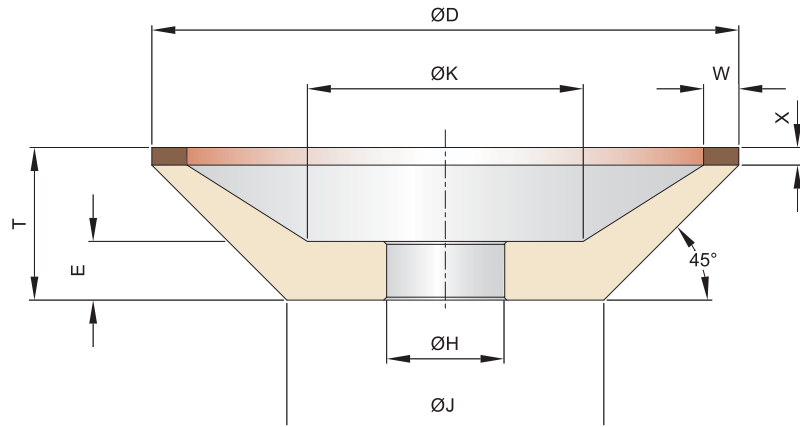


D	W	X	H	T-X	E	K	J
50	2,3,4,5,6	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	8	5	23	14
75	2,3,4,5,6,8,10			8	5	33	37
100	3,4,5,6,8,10 12,5,15			10	6	50	51
125	3,4,5,6,8,10 12,5,15,20			14	8	54	54
150	3,4,5,6,8,10 12,5,15,20 25,30			16	9	68	68
175	3,4,5,6,8,10 12,5,15,20 25,30			18	10	82	82
200	3,4,5,6,8,10 12,5,15,20 25,30			20	11	96	98

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
12A2-20°	D-W-X-H : 125 - 5 - 3 - 20	D151 RZKS C75

12A2-45°

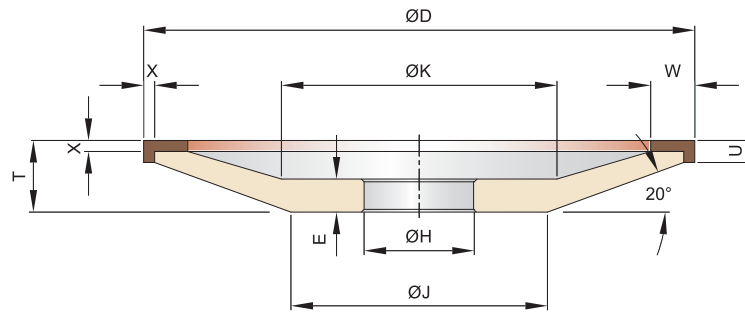


D	W	X	H	T-X	E	K	J
50	2,3,4,5,6	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	15	8	20	22
75	2,3,4,5,6,8,10			20	10	35	37
100	3,4,5,6,8,10 12.5,15			23	10	47	56
125	3,4,5,6,8,10 12.5,15,20			23	10	72	81
150	3,4,5,6,8,10 12.5,15,20 25,30			23	10	94	104
175	3,4,5,6,8,10 12.5,15,20 25,30			25	12	123	127
200	3,4,5,6,8,10 12.5,15,20 25,30			25	12	138	150

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
12A2-45°	D - W - X - H : 125 - 5 - 3 - 20	D107 RZKS C75

12C9-20°

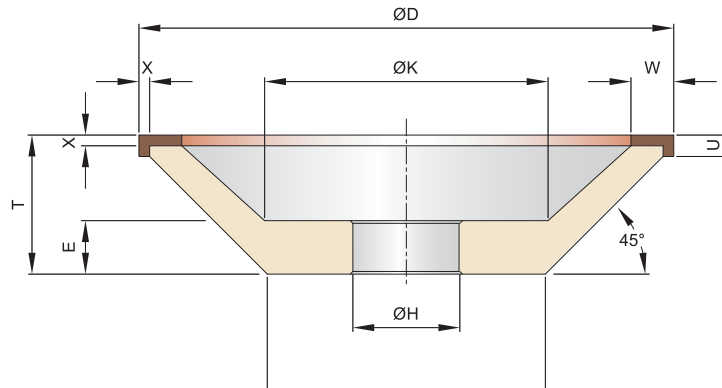


D	W	U	H	X	T	E	K	J
75	4,5,6,8,10	4	Bohrungsdurchmesser angeben Please give bore diameter Lüften merkez delik çapını bildiriniz.	2	10	5	33	37
		6		3	11			
100	4,5,6,8,10 12.5,15	4		2	12	6	50	51
		6		3	13			
125	4,5,6,8,10 12.5,15,20	4		2	16	8	54	54
		6		3	17			
150	4,5,6,8,10 12.5,15,20	4		2	18	9	68	68
		6		3	19			

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
12C9-20°	D - W- X - H : 125 - 5 - 4 - 20	B126 RC490 V240

12C9-45°

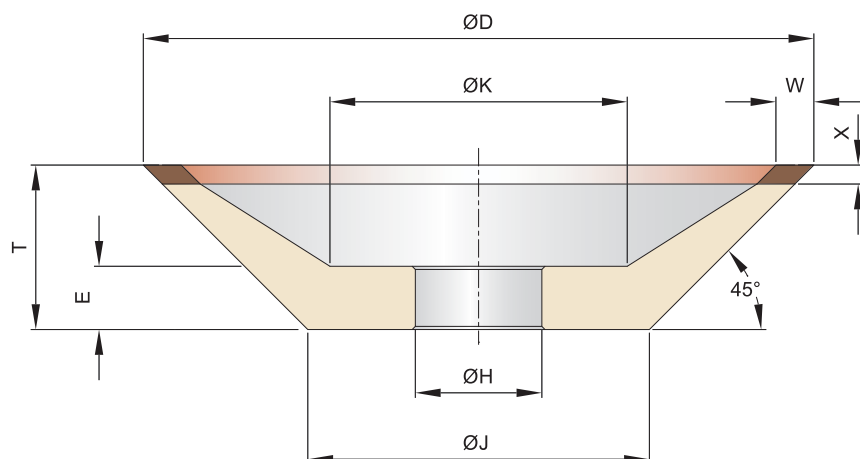


D	W	U	H	X	T	E	K	J
75	4,5,6,8,10	4	Bohrungsdurchmesser angeben Please give bore diameter Lüften merkez delik çapını bildiriniz.	2	22	10	35	37
		6		3	23			
100	4,5,6,8,10 12.5,15	4		2	25	10	47	56
		6		3	26			
125	4,5,6,8,10 12.5,15,20	4		2	25	10	72	81
		6		3	26			
150	4,5,6,8,10 12.5,15,20	4		2	25	10	94	104
		6		3	26			

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
12C9-45°	D - W- X - H : 125 - 5 - 4 - 20	D126 RC490 C100

12V2-45°

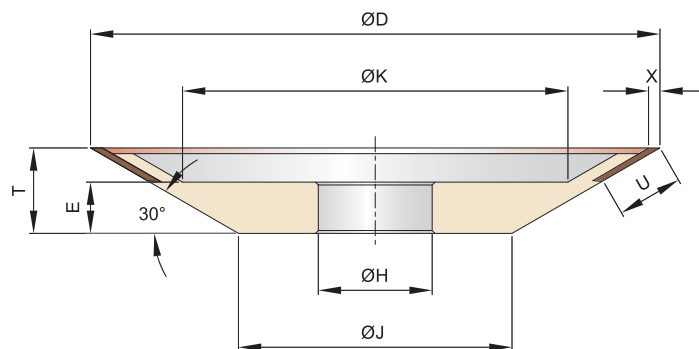


D	W	X	H	T-X	E	K	J
50	3,4,5,6	min. 2mm - max. W	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	15	8	17	18
75	3,4,5,6,8,10			20	10	31	31
100	3,4,5,6,8,10 12,5,15			23	10	43	50
125	3,4,5,6,8,10 12,5,15,20			23	10	69	75
150	3,4,5,6,8,10 12,5,15,20 25,30			23	10	90	100
175	3,4,5,6,8,10 12,5,15,20 25,30			25	12	119	121
200	3,4,5,6,8,10 12,5,15,20 25,30			25	12	134	146

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
12V2-45°	D - W - X - H : 125 - 6 - 3 - 20	B126 RZKS V240

12V9-30°



D	U	X	H	T	E	K	J
50	6	2	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	9	5	25	30
75	10	2,3		12	8	42	33
100	10	2,3		15	9	62	48
125	10	2,3		18	10	70	63
150	10	2,3		19	10	90	84

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

12V9-30°

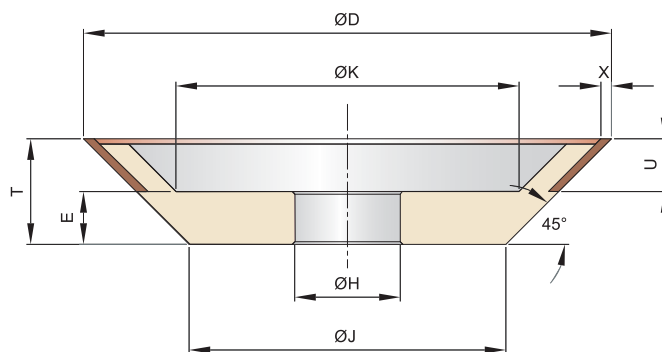
Dimension /
Dimensions / Ölçüler

D -U- X- H : 100 - 10 -3 - 20

Qualität / Quality / Kalite

D64 RC490 C100

12V9-45°



D	U	X	H	T	E	K	J
50	6	2	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	20	6	20	30
75	10	2,3		20	10	40	35
100	10	2,3		20 27	10	64	58
125	10	2,3		25 30	10	75	75
150	10	2,3		25	10	95	100

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

12V9-45°

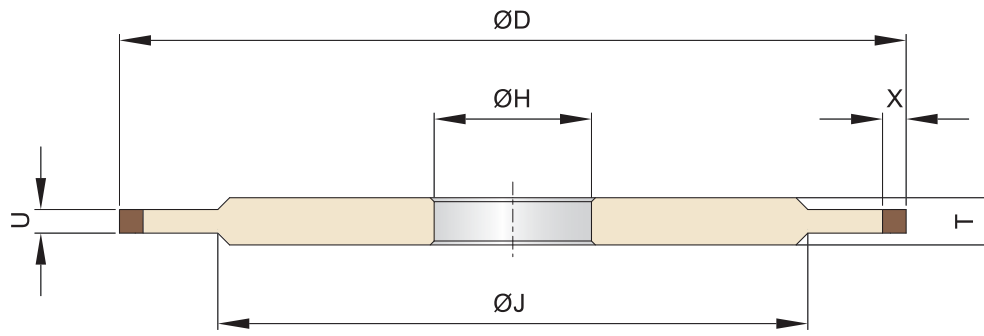
Dimension /
Dimensions / Ölçüler

D -U- X- H : 100 - 10 -3 - 20

Qualität / Quality / Kalite

D64 RC490 C100

14A1



D	U	X	H	T _{min}	J
50	2-10	2,3,4,5,6,8,10	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	6	35
75	2-10	3,4,5,6,7,8 10,20		6	55
80	2-10	3,4,5,10		8	60
85	2-10	5		8	60
90	2-10	3.5,6,10		8	65
100	2-10	3,4,5,6,7,8 10,12.5,15,18		8	75
125	2-15	3,4,5,6,7,8 10,12.5,15,20		10	100
150	2-15	3,4,5,6,8 10,12.5,15,20		10	120
175	2-20	3,4,5,6,8 10,12.5,15,20		10	140
200	2-20	3,4,5,6,8 10,12.5,15,20		12	160
225	2-25	3,4,5,6,10 12.5		12	180
250	2-25	3,4,5,6,8 10,12.5,15,20		12	200

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

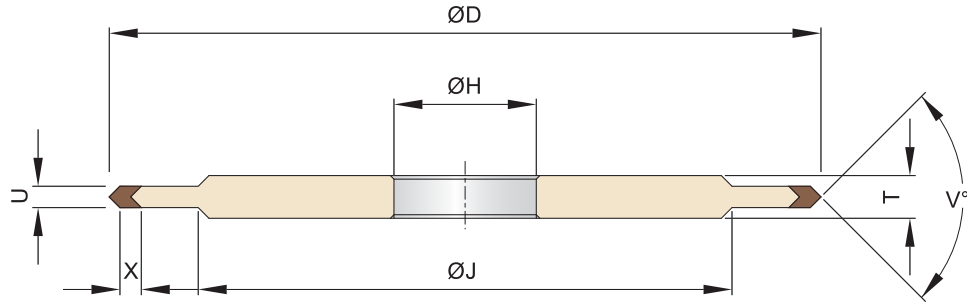
14A1

Dimension /
Dimensions / Ölçüler

D -U- X- H : 300 - 10 -3 - 127

Qualität / Quality / Kalite

D126 RC490 C100

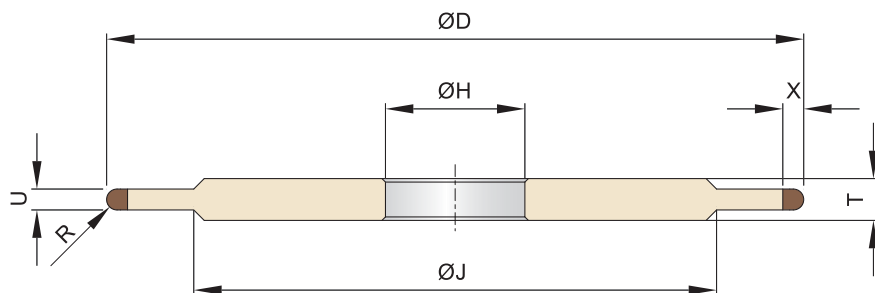


D	U	X	V°	H	J	T
75	3-10	3,4,5,6	20° - 120°	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	55	8
100	3-10	3,4,5,6			75	10
125	3-10	3,4,5,6			100	10
150	3-10	3,4,5,6			120	10
175	3-10	3,4,5,6			140	10
200	3-10	3,4,5,6			160	12

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
14EE1	D - U- X - H : 100 - 4 - 4 - 20	D91 RC1077 C125

14F1



D	U	X	H	T	R	J
50	2-10	3,4,5,6,8,10	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	6	R=U/2	35
60	2-6	3,4		6	R=U/2	45
70	2-10	3,5,6		6	R=U/2	50
75	2-10	3,4,5,6,7,8 10,20		6	R=U/2	55
80	2-10	3,4,5,10		8	R=U/2	60
85	2-10	5		8	R=U/2	60
90	2-10	3.5,6,10		8	R=U/2	65
100	2-10	3,4,5,6,7,8 10,12.5,15		8	R=U/2	75
125	2-10	3,4,5,6,7,8 10,12.5,15		10	R=U/2	100
150	2-10	3,4,5,6,8 10,12.5,15		10	R=U/2	120
175	2-10	3,4,5,6,8 10,12.5,15		10	R=U/2	140
200	2-10	3,4,5,6,10, 12.5		10	R=U/2	160
225	2-10	3,4,5,6,10, 12.5		10	R=U/2	180
250	2-10	3,4,5,6,8 10,12.5,15		10	R=U/2	200

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

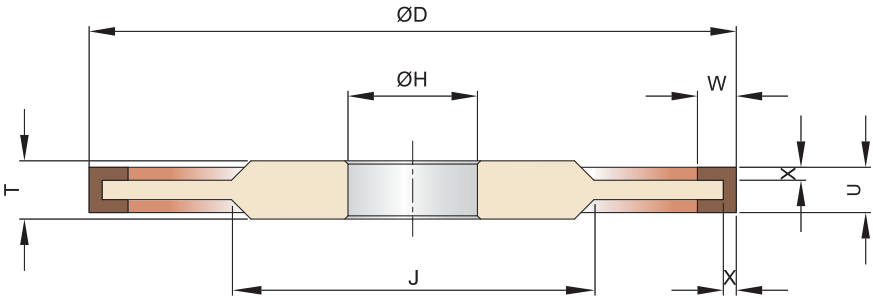
14F1

Dimension /
Dimensions / Ölçüler

D - U - X - H : 100 - 3 - 6 - 20

Qualität / Quality / Kalite

B107 RC490 V240



D	W	U	H	X	J	T
100	6,8,10	5,6,8,10	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	2,3	50	T=U+2
125	6,8,10	5,6,8,10		2,3	65	T=U+2
150	6,8,10	5,6,8,10		2,3	80	T=U+2

Bestellbeispiel / Order specimen / Sipariş Örneği

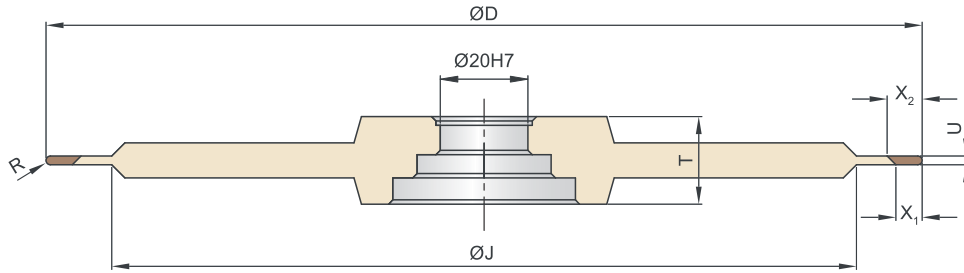
Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
14U1	D - W - U - H : 125 - 6 - 6 - 20	D64 RC1070 C100



CBN SCHLEIFSCHEIBEN FÜR SCHÄRFEN VON METALLKREISSÄGEN

CBN WHEELS FOR SHARPENING METAL CIRCULAR SAWS

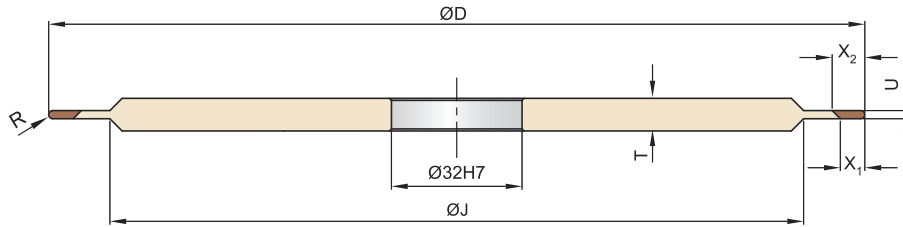
CBN METAL TESTERE BİLEME DİSKLERİ



D	U	X (=X ₁)	X ₂	H	J	T	R
150	1.3, 1.6	6.0	8.0	20	20	120	U/2
150	2.0, 2.5	6.0	8.0	20	20	120	
150	3.0	6.0	10.0	20	20	115	
150	3.5, 4.0	8.0	12.5	20	20	105	
150	5.0, 6.0, 7.0	10.0	15.0	20	20	105	
200	1.3, 1.6	6.0	8.0	20	20	175	
200	2.0, 2.5	6.0	8.0	20	20	165	
200	3.0	6.0	10.0	20	20	160	
200	3.5	8.0	12.5	20	20	160	
200	4.0	8.0	12.5	20	20	155	
200	5.0, 6.0, 7.0	10.0	15.0	20	20	155	

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
TS	D-U-X-H: 150-3-6-20	B126 RC1077 V240

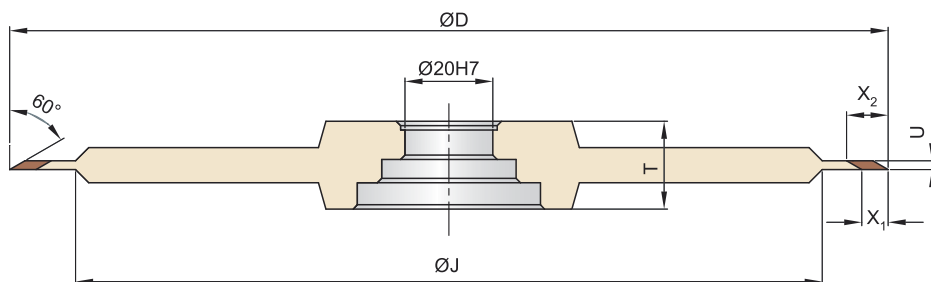


D	U	X (=X ₁)	X ₂	H	J	T	R
150	1.3, 1.6	6.0	8.0	32	20	120	U/2
150	2.0, 2.5	6.0	8.0	32	20	120	
150	3.0	6.0	10.0	32	20	115	
150	3.5, 4.0	8.0	12.5	32	20	105	
150	5.0, 6.0, 7.0	10.0	15.0	32	20	105	
200	1.3, 1.6	6.0	8.0	32	20	175	
200	2.0, 2.5	6.0	8.0	32	20	165	
200	3.0	6.0	10.0	32	20	160	
200	3.5	8.0	12.5	32	20	160	
200	4.0	8.0	12.5	32	20	155	
200	5.0, 6.0, 7.0	10.0	15.0	32	20	155	

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
L	D-U-X-H: 150-3-6-20	B126 RC1077 V240

TS 60°



D	U	X (=X ₁)	X ₂	H	J	T
150	2.0	6.0	8.0	20	20	120
150	3.0	6.0	10.0	20	20	115
200	2.0	6.0	8.0	20	20	165
200	3.0	6.0	10.0	20	20	160

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

TS-60°

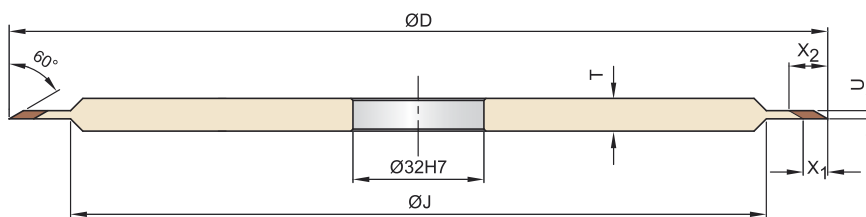
Dimension /
Dimensions / Ölçüler

D-U-X-H : 150-3-6-20

Qualität / Quality / Kalite

B126 RC1077 V240

L 60°



D	U	X (=X ₁)	X ₂	H	J	T
200	2.0	6.0	8.0	32	8	165
200	3.0	6.0	10.0	32	8	160

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

L-60°

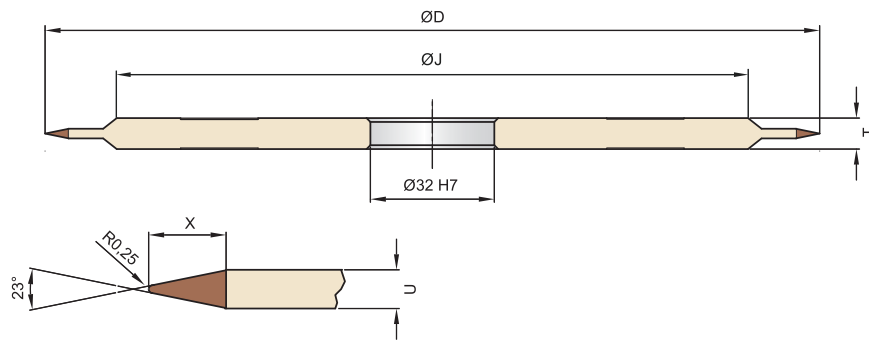
Dimension /
Dimensions / Ölçüler

D-U-X-H : 200-2-6-32

Qualität / Quality / Kalite

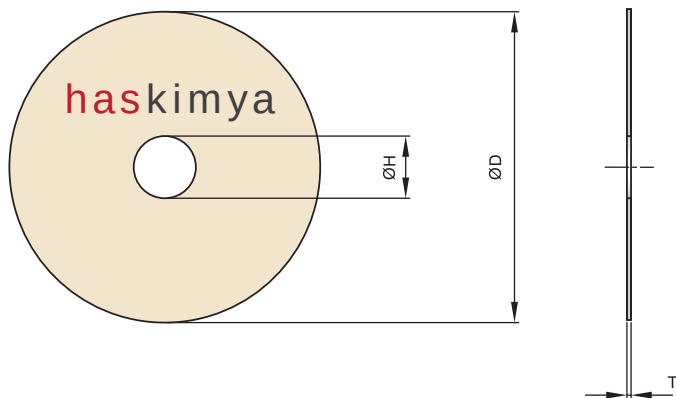
B126 RC1077 V240

14E1-23°



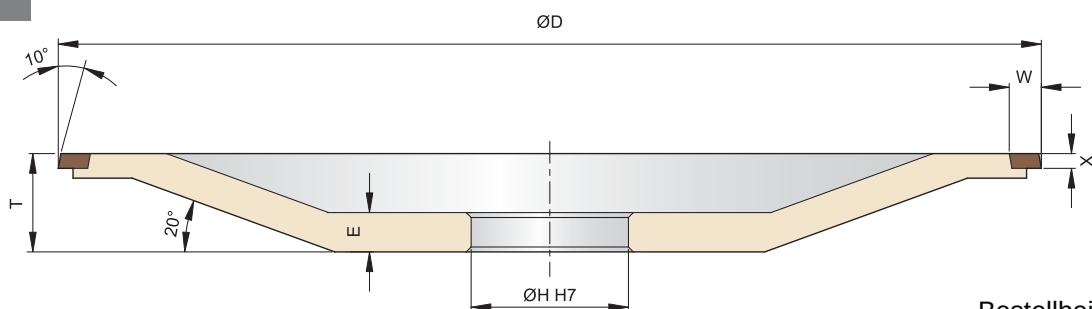
D	U	X	H	J	T	Bestellbeispiel / Order specimen / Sipariş Örneği		
						Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
200	2.5	6	32	160	8	14E1-23°	D -U- X - H : 200 - 2.5 - 6 - 32	B126 RC1077 V240

1A1



D	T	H	Bestellbeispiel / Order specimen / Sipariş Örneği	
			Form / Shape / Şekil	
			1A1	
			Dimension / Dimensions / Ölçüler	
30	0.3	6.0	D -T- H : 30 - 0.3- 6	
			Qualität / Quality / Kalite	
30	0.3	8.0	B126 RC1077 V240	

12A9



Form / Shape / Şekil	Dimension / Dimensions / Ölçüler				
	D	W	X	H	T
12A9-002	200	10	2	20	20

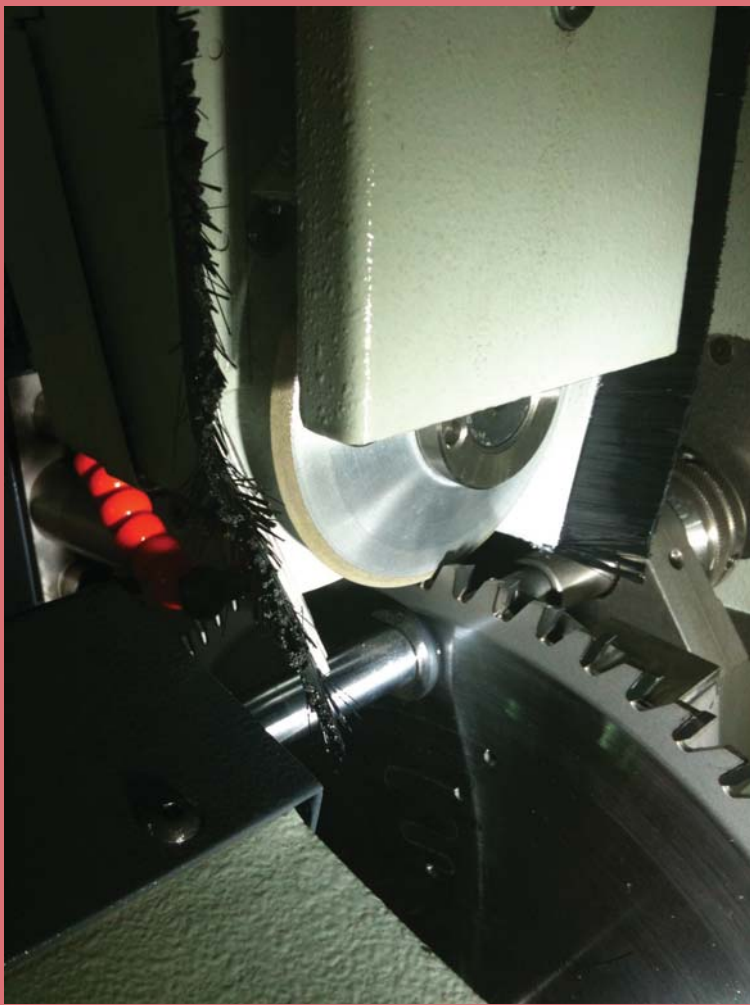
Bestellbeispiel / Order specimen / Sipariş Örneği	
Form / Shape / Şekil	12A9
Dimension / Dimensions / Ölçüler	D -W- X-H : 200 - 10 - 2- 6
Qualität / Quality / Kalite	B151 RC490 V240



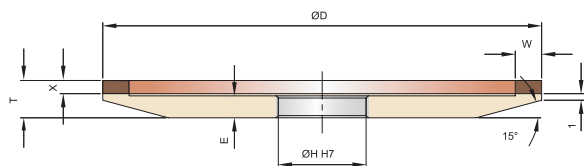
DIAMANT UND CBN SCHLEIFSCHEIBEN FÜR DIE HOLZBEARBEITUNG

DIAMOND AND CBN GRINDING WHEELS FOR WOODWORKING TOOLS

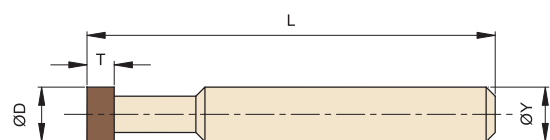
ELMAS VE CBN AHŞAP TAKIM BİLEME TAŞLARI



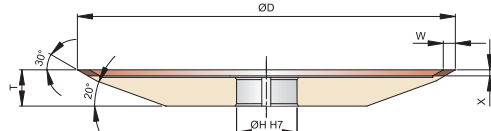
4A2



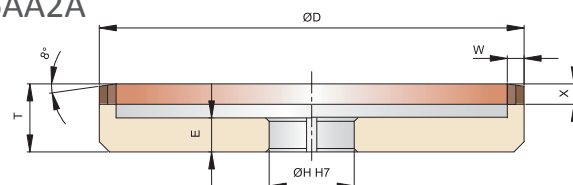
1A8W



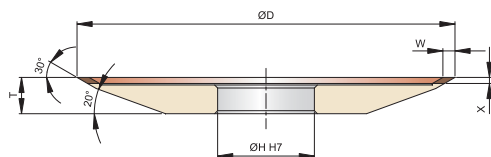
4V2A



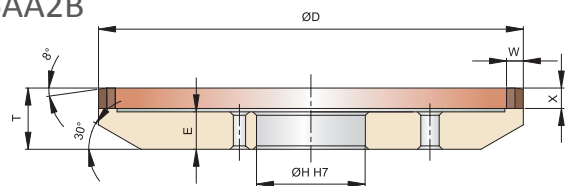
6AA2A



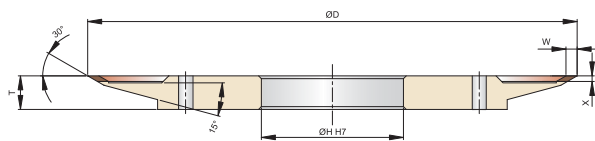
4V2B



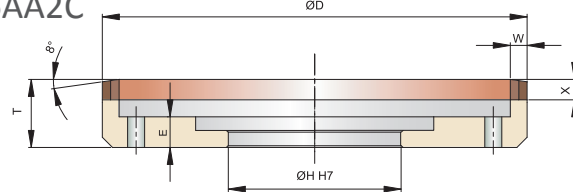
6AA2B



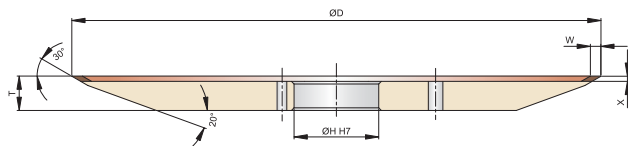
4V2C



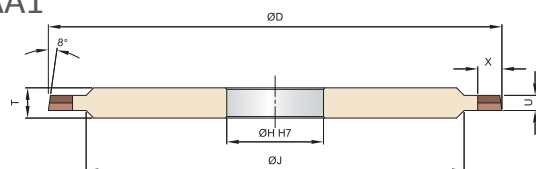
6AA2C

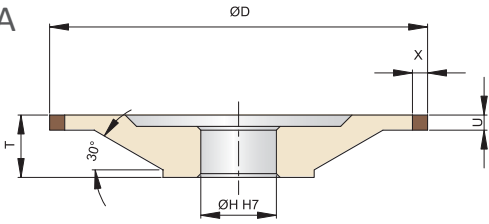
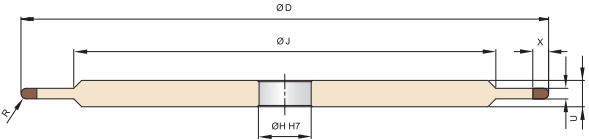
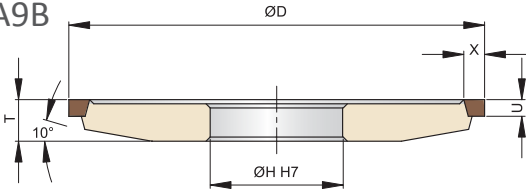
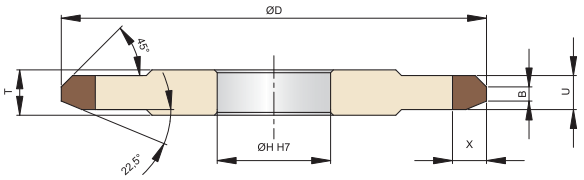
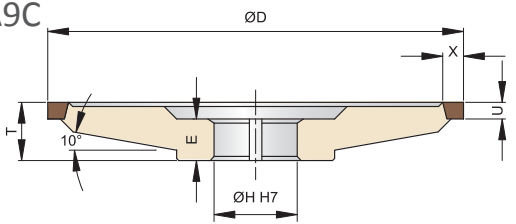
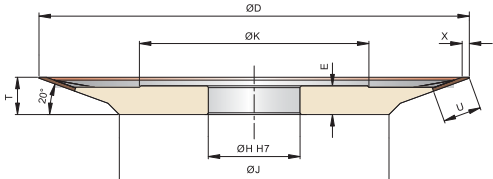
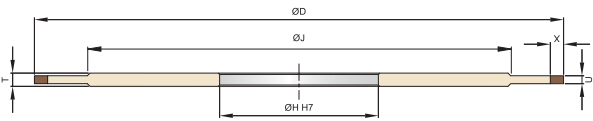
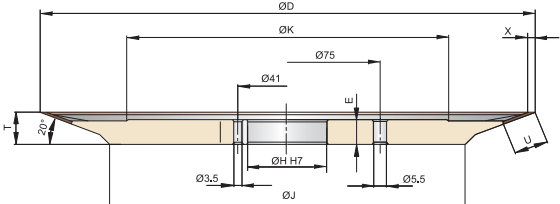
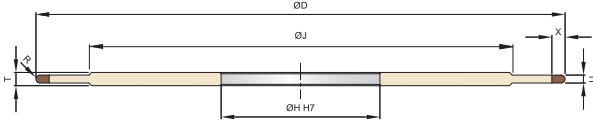


4V2D

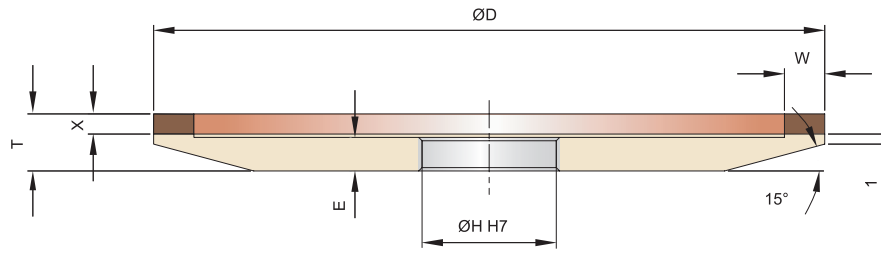


14AA1



12A9A 	14F1 
12A9B 	1B0 
12A9C 	12V9A 
14A1 	12V9B 
14F1 	

4A2

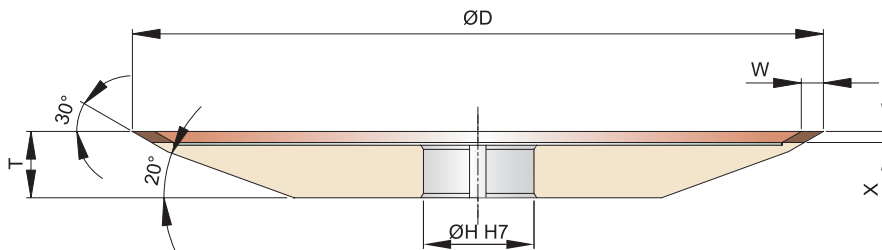


Form Shape Şekil	D	W	X	H	T-X	E
4A2	100	4,5,6	2,3,4	20	6	5.5
4A2	125	4,5,6	2,3,4	20	7	6.5
4A2	150	4,5,6	2,3,4	20	9	8.5

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil
4A2
Dimension / Dimensions / Ölçüler
D-W-X-H : 100-5-3-20
Qualität / Quality / Kalite
D54 RC490 C100

4V2A

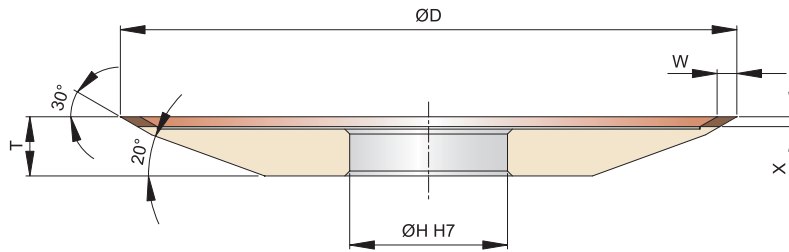


Form Shape Şekil	D	W	X	H	T
4V2A-642	100	4	2	25	10
4V2A-742	125	4	2	25	12
4V2A-842	150	4	2	25	13

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil
4V2A-842
Dimension / Dimensions / Ölçüler
D-W-X-H : 150-4-2-25
Qualität / Quality / Kalite
D54 RC398 C100

4V2B



Form Shape Şekil	D	W	X	H	T
4V2B-742	125	4	2	20	12
4V2B-742	125	4	2	32	12
4V2B-842	150	4	2	20	13
4V2B-842	150	4	2	32	13

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

4V2B-842

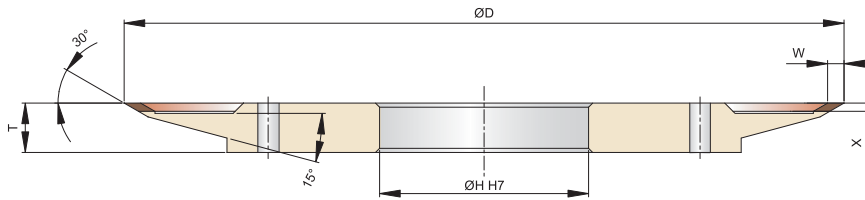
Dimension /
Dimensions / Ölçüler

D - W - X - H : 125 - 4 - 2 - 20

Qualität / Quality / Kalite

D54 RC398 C100

4V2C



Form Shape Şekil	D	W	X	H	T
4V2C-942	175	4	2	50.8	12

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil

Dimension / Dimensions / Ölçüler

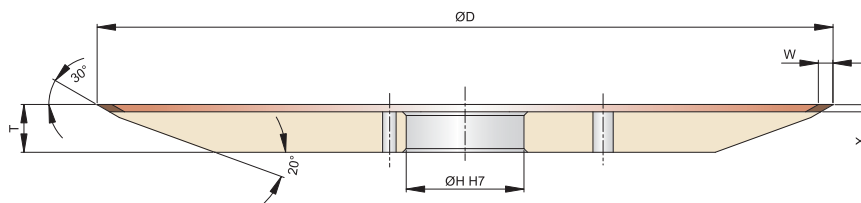
Qualität / Quality / Kalite

4V2C-942

D - W - X - H : 175 - 4 - 2 - 50.8

D54 RC398 C100

4V2D



Form Shape Şekil	D	W	X	H	T
4V2D-042	200	4	2	32	13

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil

Dimension / Dimensions / Ölçüler

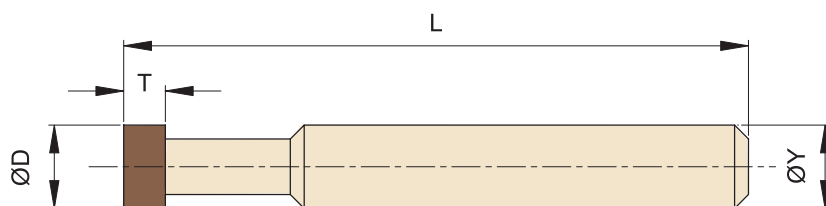
Qualität / Quality / Kalite

4V2D-022

D - W - X - H : 196 - 2 - 2 - 32

D54 RC398 C100

1A8W

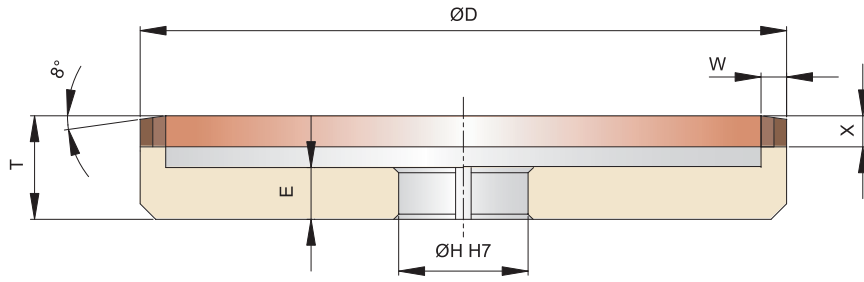


Form Shape Şekil	D	W	X	Y	L
1A8W	6.5	3	1.75	6	45
1A8W	6.5	6	1.75	6	48

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
1A8W	D-T - X - Y : 6.5 - 3 - 1.75 - 6	D91 RC398 C100

6AA2A



Form Shape Şekil	D	W	X	H	T	E
6AA2A	100	5	6	25	20	8
6AA2A	100	5	10	25	24	8
6AA2A	125	5	6	25	20	8
6AA2A	125	5	10	25	24	8

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

6AA2A

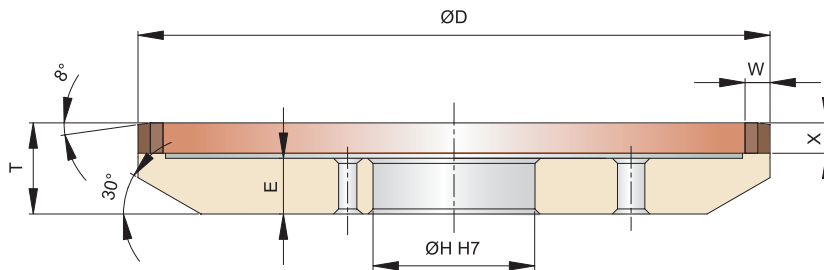
Dimension /
Dimensions / Ölçüler

D-W-X-H : 100 - 5 - 6 - 25

Qualität / Quality / Kalite

D126/54 RC398 C100/75

6AA2B



Form Shape Şekil	D	W	X	H	T	E
6AA2B	125	5	6	32	18	11
6AA2B	125	5	10	32	21	11

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

6AA2B

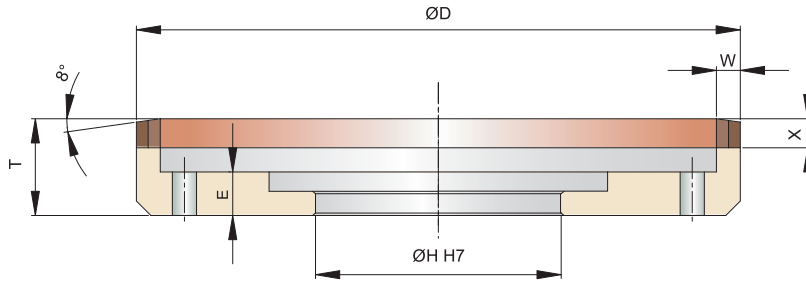
Dimension /
Dimensions / Ölçüler

D-W-X-H : 125 - 5 - 6 - 32

Qualität / Quality / Kalite

D126/54 RC398 C100/75

6AA2C

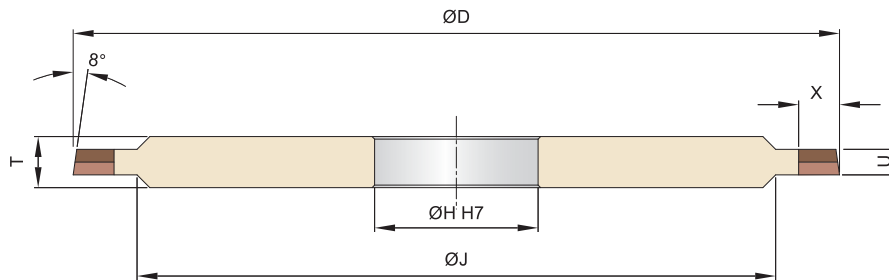


Form Shape Şekil	D	W	X	H	T	E
6AA2C	125	5	6	50.8	20	9
6AA2	125	5	10	50.8	20	9

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil
6AA2C
Dimension / Dimensions / Ölçüler
D - W - X - H : 125 - 5 - 10 - 50.8
Qualität / Quality / Kalite
D126/54 RC398 C100/75

14AA1

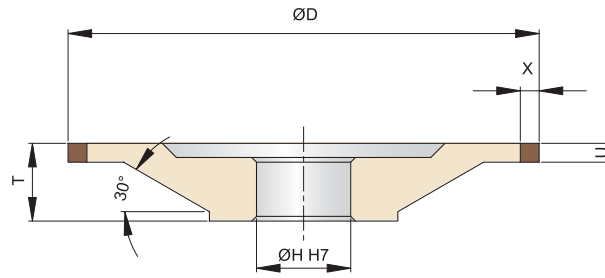


Form Shape Şekil	D	U	X	H	T	J
14AA1	127	5	7	32	8	100
14AA1	150	5	8	32	10	125
14AA1	175	5	8	32	10	150
14AA1	200	5	8	32	10	175

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil
14AA1
Dimension / Dimensions / Ölçüler
D - U - X - H : 127 - 5 - 7 - 32
Qualität / Quality / Kalite
D126/54 RC398 C100/75

12A9A



Bestellbeispiel /
Order specimen /
Sipariş Örneği

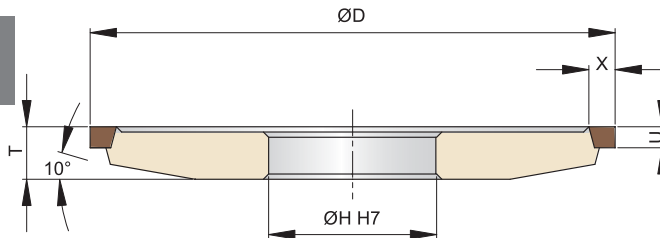
Form / Shape / Şekil
12A9A

Dimension /
Dimensions / Ölçüler
D-U-X-H : 100 - 4 - 4 - 20

Qualität / Quality / Kalite
D151 RC490 C100

Form Shape Şekil	D	U	X	H	T
12A9A	100	4	4	20	16.5

12A9B



Bestellbeispiel /
Order specimen /
Sipariş Örneği

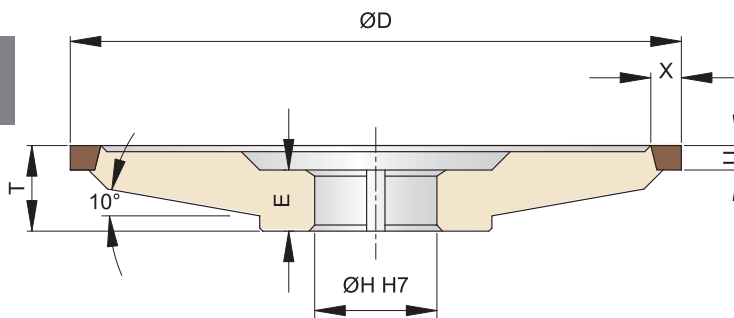
Form / Shape / Şekil
12A9BA

Dimension /
Dimensions / Ölçüler
D-U-X-H : 100 - 4 - 5 - 32

Qualität / Quality / Kalite
D151 RC490 C100

Form Shape Şekil	D	U	X	H	T
12A9B	100	4	5	32	10

12A9C



Bestellbeispiel /
Order specimen /
Sipariş Örneği

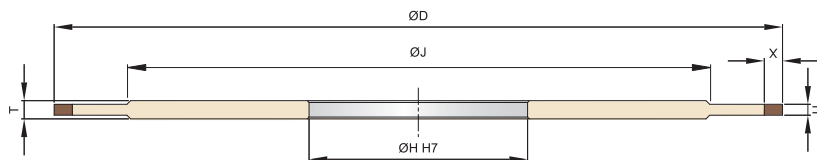
Form / Shape / Şekil
12A9C

Dimension /
Dimensions / Ölçüler
D-U-X-H : 100 - 4 - 4 - 20

Qualität / Quality / Kalite
D151 RC490 C100

Form Shape Şekil	D	U	X	H	T	E
12A9C	100	4	5	20	14	10
12A9C	100	4	7	20	14	10

14A1



Form Shape Şekil	D	U	X	H	T	J
14A1	200	3	5	60	5	145

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

14A1-035

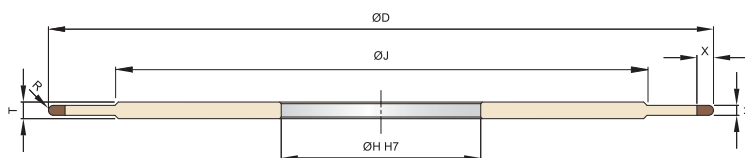
Dimension /
Dimensions / Ölçüler

D - U - X - H : 200 - 3 - 5 - 60

Qualität / Quality / Kalite

D91 RC490 C100

14F1A



Form Shape Şekil	D	U	X	H	T	J
14F1A	200	3	5	60	5	145
14F1A	200	4	5	60	5	145

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

14F1A-035

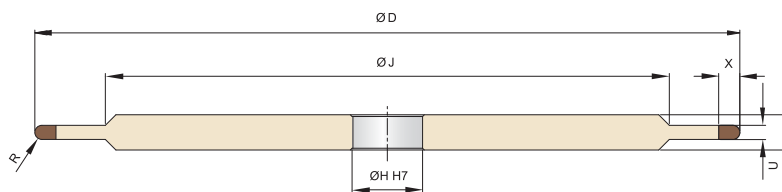
Dimension /
Dimensions / Ölçüler

D - U - X - H : 200 - 3 - 5 - 60

Qualität / Quality / Kalite

D91 RC490 C100

14F1B



Form Shape Şekil	D	U	X	H	T	R	J
14F1B	200	2	5,6	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	10	U/2	160
14F1B	200	3	5,6		10	U/2	160
14F1B	200	4	5,6		10	U/2	160
14F1B	200	5	6,8		10	U/2	160

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

14F1B

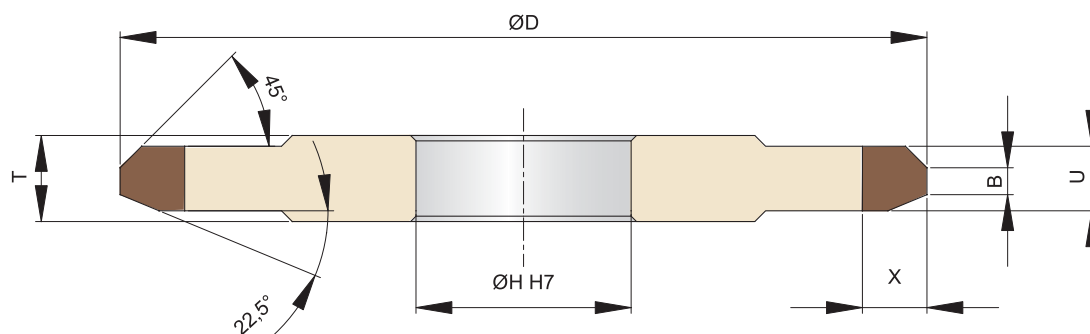
Dimension /
Dimensions / Ölçüler

D - U - X - H : 200 - 3 - 5 - H

Qualität / Quality / Kalite

D91 RC490 C100

1B

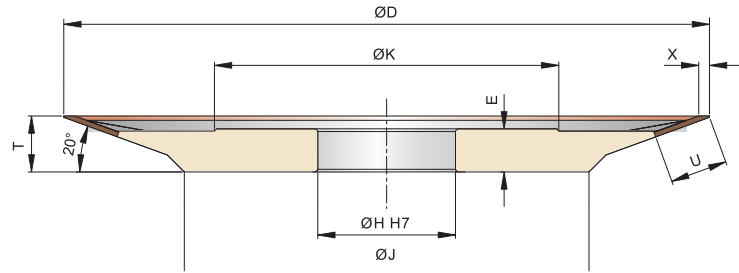


Form Shape Şekil	D	U	B	X	H	T	Bohrerdurchmesser / Drill diameter /
1B	75	4.5	0.9	6	20	8	4
1B	75	4.5	1.9	6	20	8	6
1B	75	5	2.8	6	20	8	8
1B	75	6	3.7	6	20	10	10
1B	75	7	4.5	6	20	10	12
1B	75	8	5.5	6	20	12	14
1B	100	4.5	0.9	6	20	8	4
1B	100	4.5	1.9	6	20	8	6
1B	100	5	2.8	6	20	8	8
1B	100	6	3.7	6	20	10	10
1B	100	7	4.5	6	20	10	12
1B	100	8	5.5	6	20	12	14

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
1B	D-U-X-H: 75-4.5-6 B=0.9	D91 RC490 C100

12V9A

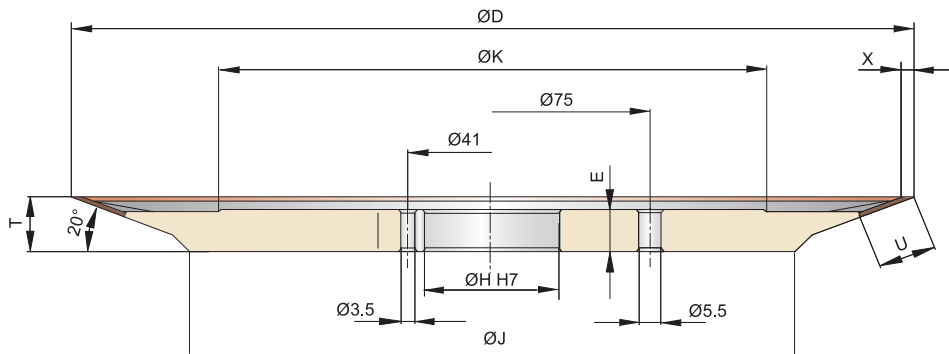


Form Shape Şekil	D	U	X	H	T	E	K	J
12V9A	125	10	2.5	32	13	10	55	69
12V9A	150	10	2.5	32	13	10	80	94

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
12V9A	D - U - X - H : 125 - 10 - 2.5 - 32	D54 RC1070 C100

12V9B



Form Shape Şekil	D	U	X	H	T	E	K	J
12V9B	200	10	2.5	32	13	10	130	144

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
12V9B	D - U - X - H : 200 - 10 - 2.5 - 32	D54 RC1070 C100



CNC METAL GEBUNDENE DIAMANT UND CBN SCHLEIFSCHEIBEN

CNC METAL BONDED DIAMOND AND CBN GRINDING WHEELS

CNC METAL BAĞLANTILI ELMAS VE CBN TAŞLAMA DISKLERİ

1A1/14A1/1V1/11V9/12V9



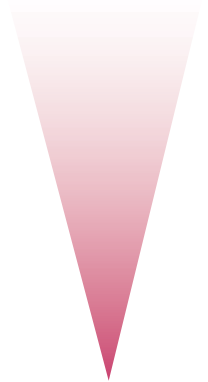
M4H

M4T

M4

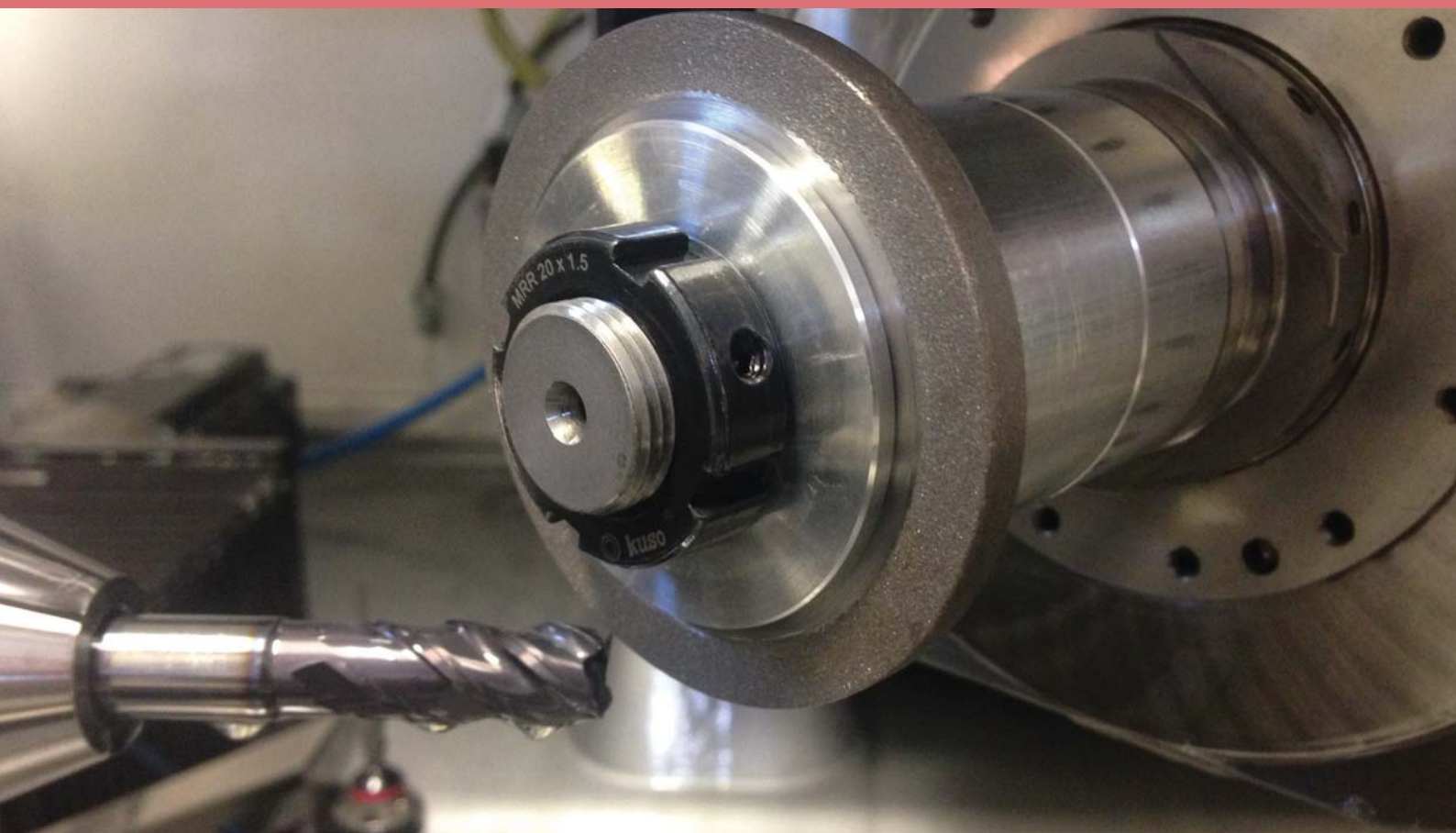
M4K

SOFT



HARD

The M4 series covers most common grinding applications on CNC machines.



haskimya RPK10

haskimya's neue Schleifscheibe für Flute und Kanten politur.

haskimya's grinding wheel generation for flute-and cutting edge polishing.

haskimya'nın yeni kanal ve köşe parlatma diskisi.

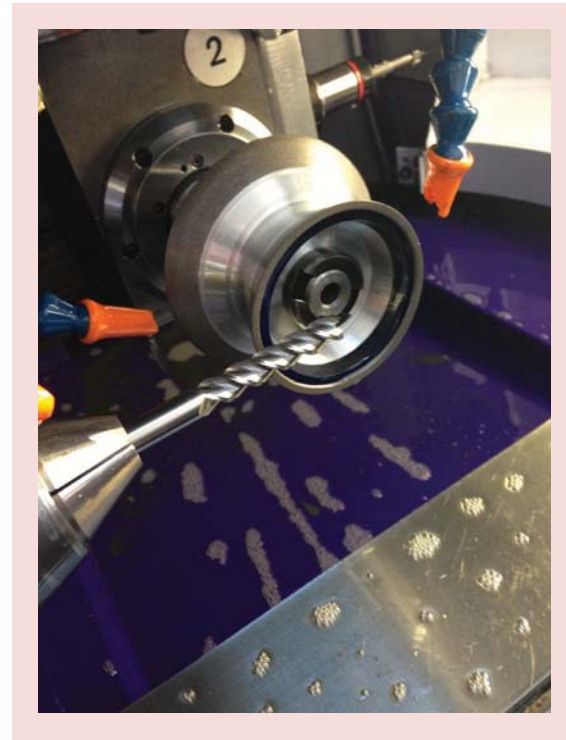
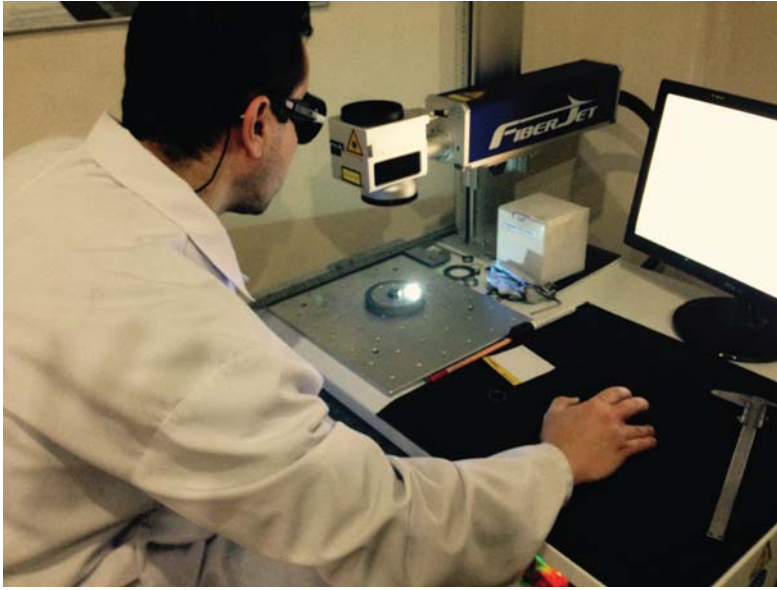


Nicht poliert
Not polished
Parlatılmamış



Poliert mit **haskimya** RPK10
Polished with **haskimya** RPK10
haskimya RPK10 ile parlatılmış



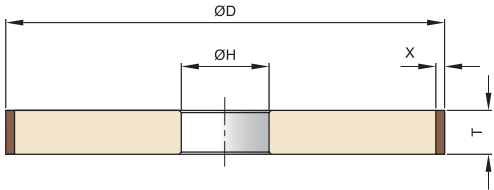
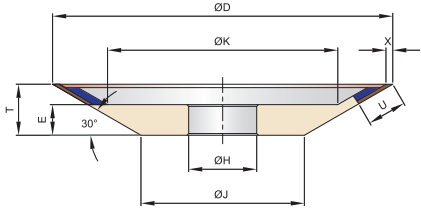
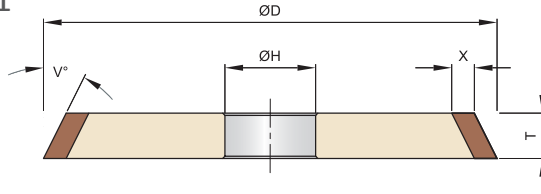
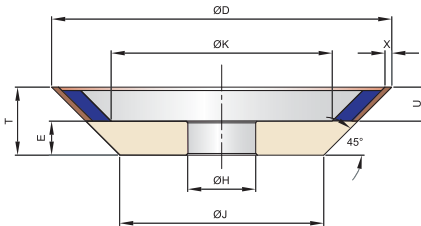
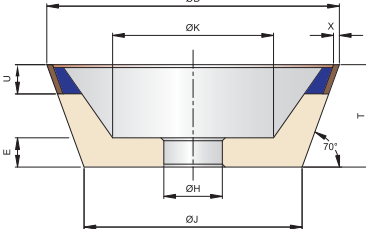
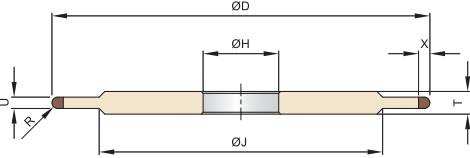


KALKULASION TABELLE VON UMDREHUNG ZUR GESCHWINDIGKEIT

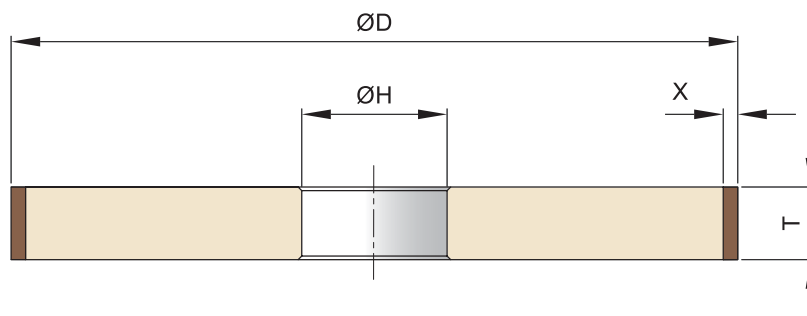
CALCULATION CHART FROM RPM TO CUTTING SPEED

DEVİRDEN KESME HIZINA DÖNÜŞTÜRME TABLOSU

Wheel Ø	10 m/s	15 m/s	20 m/s	25 m/s	30 m/s	35 m/s	40 m/s	45 m/s	50 m/s	60 m/s	70 m/s
5	38200										
10	19100	28600	38200								
15	12700	19100	25500	31800	38200						
20	9500	14300	19100	23900	28600	33500	38200				
25	7600	11500	15300	19100	22900	26800	30500	34400	38200		
30	6400	9550	12700	15900	19100	22300	25500	28650	31800	38200	44600
40	4800	7200	9500	11950	14300	16700	19100	21500	23900	28600	33500
50	3800	5700	7600	9550	11500	13400	15300	17200	.	22900	26750
75	2500	3800	5100	6400	7600	8900	10200	11450	12700	15300	17800
100	1900	2900	3800	4800	5700	6700	7650	8600	9550	11500	13400
125	1500	2300	3050	3800	4600	5350	6100	6900	7650	9200	10700
150	1300	1900	2550	3200	3800	4450	5100	5700	6400	7600	8900
175	1100	1650	2200	2700	3200	3800	4350	4900	5450	6550	7650
200	950	1400	1900	2400	2900	3350	3800	4300	4800	5700	6700

1A1 	12V9-30° 
1V1 	12V9-45° 
11V9 	14F1 

1A1

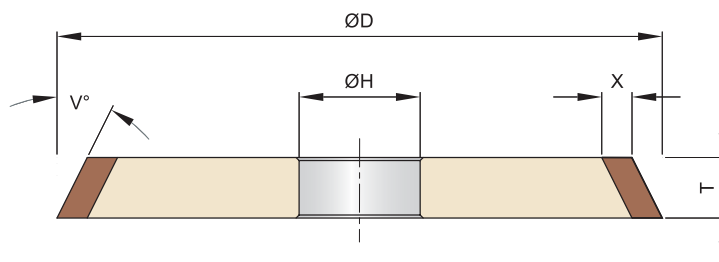


D	T	X	H
60	3 - 20	3,4,5,6,10	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.
75	3 - 25	3,4,5,6,7,8,10,12.5	
100	5 - 25	3,4,5,6,7,8,10,12.5	
125	5 - 25	3,4,5,6,7,8,10,12.5,15	
150	5 - 30	3,4,5,6,8,10,12.5,15	

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	1A1
Dimension / Dimensions / Ölçüler	D - T - X - H : 30 - 20 - 3 - 127
Qualität / Quality / Kalite	M4H D64 C125

1V1

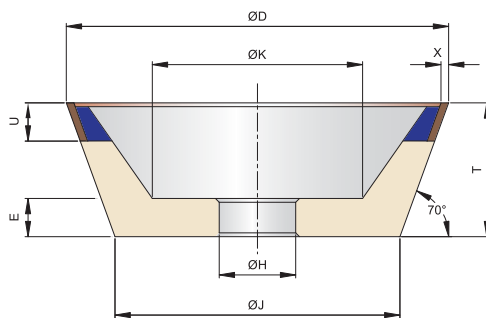


D	T	X	H	V
75	5-15	4,5,6	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	5,10,15,20,25,30,35,40,45
100	5-25	4,5,6,8		
125	5-25	4,5,6,8		
150	6-20	4,5,6,8		

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	1V1
Dimension / Dimensions / Ölçüler	D - T - X - H : 125 - 1 - 6 - 20
Qualität / Quality / Kalite	M4H D64 C100

11V9

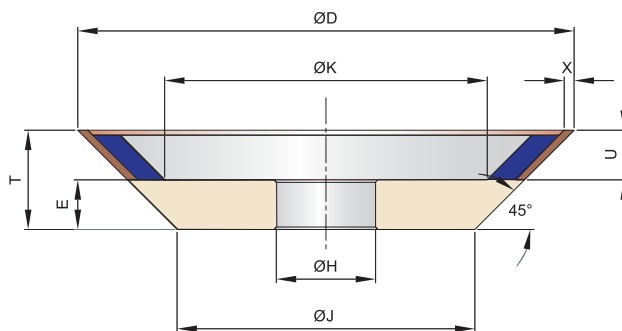


D	U	X	H	T	E	K	J
50	8	2	Bohrungsdurchmesser angeben Please give bore diameter Lüften merke delik çapını bildiriniz.	25	10	29	31
75	10	2,3,4		30	10	40	53
100	10	2,3,4		35	10	55	75
125	10	2,3,4		40	10	75	96

Bestellbeispiel / Order specimen / Sipariş Örneği

Form / Shape / Şekil	Dimension / Dimensions / Ölçüler	Qualität / Quality / Kalite
11V9	D - U - X - H : 100 - 10 - 3 - 20	M4K D64 C100

12V9-30°

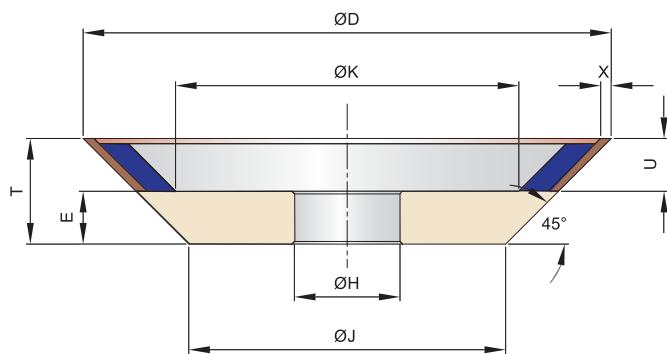


D	U	X	H	T	E	K	J
75	6,10	2,3	Bohrungsdurchmesser angeben Please give bore diameter Lüften merke delik çapını bildiriniz.	12	8	42	33
100	10	2,3		15	9	62	48
125	10	2,3		18	10	70	63
150	10	2,3		19	10	90	84

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil
12V9-30°
Dimension / Dimensions / Ölçüler
D - U - X - H : 100 - 10 - 3 - 20
Qualität / Quality / Kalite
M4K D64 C100

12V9-45°



D	U	X	H	T	E	K	J
75	10	2,3	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	20	10	40	35
100	10 15	2,3		20 27	10	64	58
125	10 15	2,3		25 30	10	75	75
150	10	2,3		25	10	95	100

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

12V9-45°

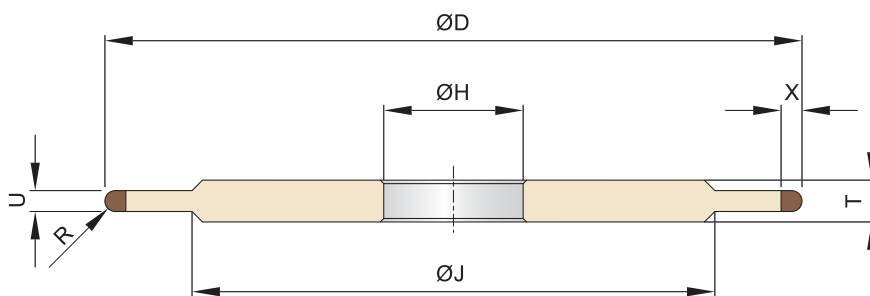
Dimension /
Dimensions / Ölçüler

D - U - X - H : 100 - 10 - 3 - 20

Qualität / Quality / Kalite

M4K D64 C100

14F1



D	U	X	H	T	R	J
50	2-10	3,4,5,6,8,10	Bohrungsdurchmesser angeben Please give bore diameter Lütfen merkez delik çapını bildiriniz.	6	R=U/2	35
60	2-6	3,4		6	R=U/2	45
70	2-10	3,5,6		6	R=U/2	50
75	2-10	3,4,5,6,7,8 10,20		6	R=U/2	55
80	2-10	3,4,5,10		8	R=U/2	60
85	2-10	5		8	R=U/2	60
90	2-10	3.5,6,10		8	R=U/2	65
100	2-10	3,4,5,6,7,8 10,12.5,15		8	R=U/2	75

Bestellbeispiel /
Order specimen /
Sipariş Örneği

Form / Shape / Şekil

14F1

Dimension /
Dimensions / Ölçüler

D - U - X - H : 100 - 3 - 6 - 20

Qualität / Quality / Kalite

M4H D64 C100

haskimya

Elmas ve Bor Ürünleri A.Ş.

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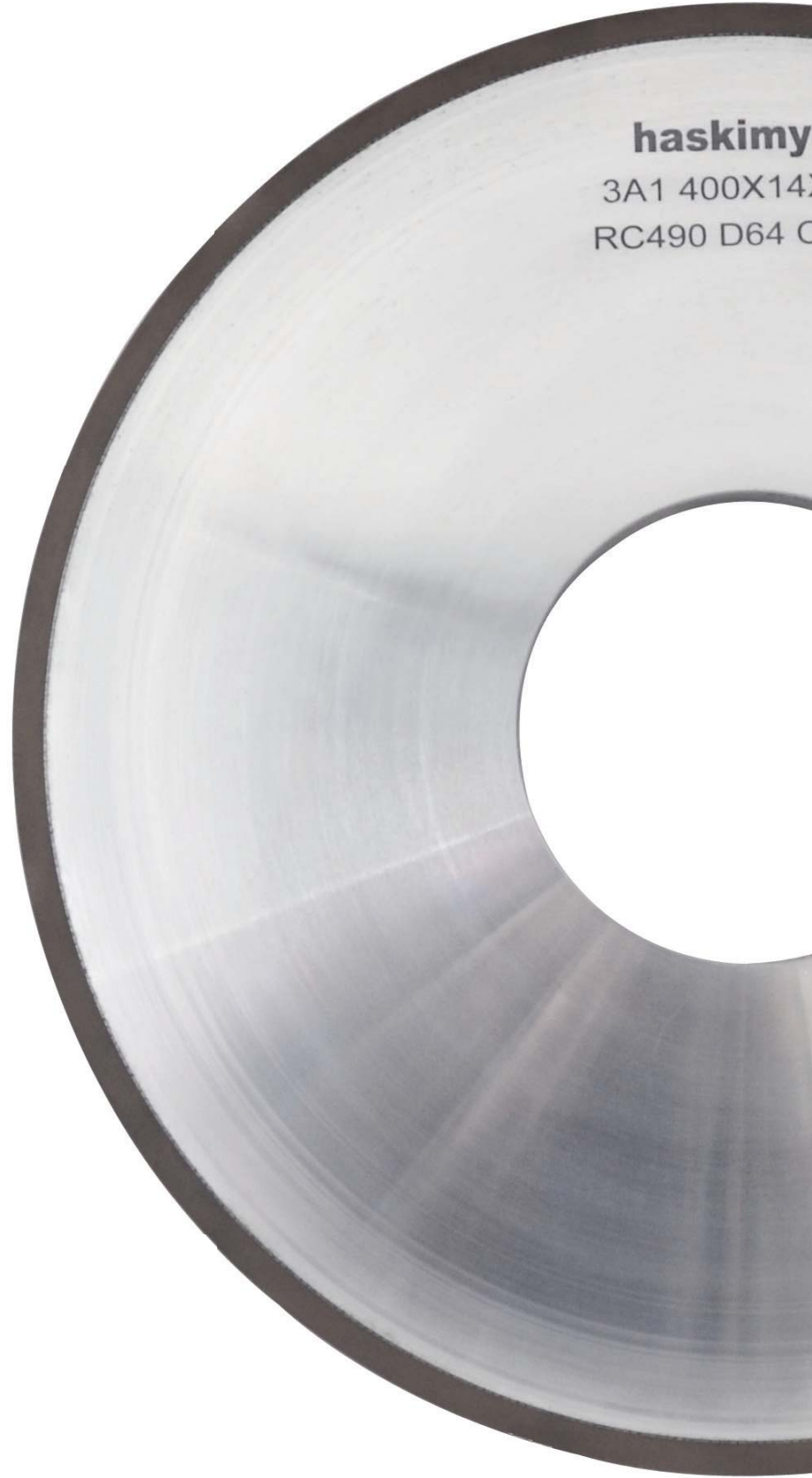
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3A1 400X14

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