

# Drehen *Turning*

# 1

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

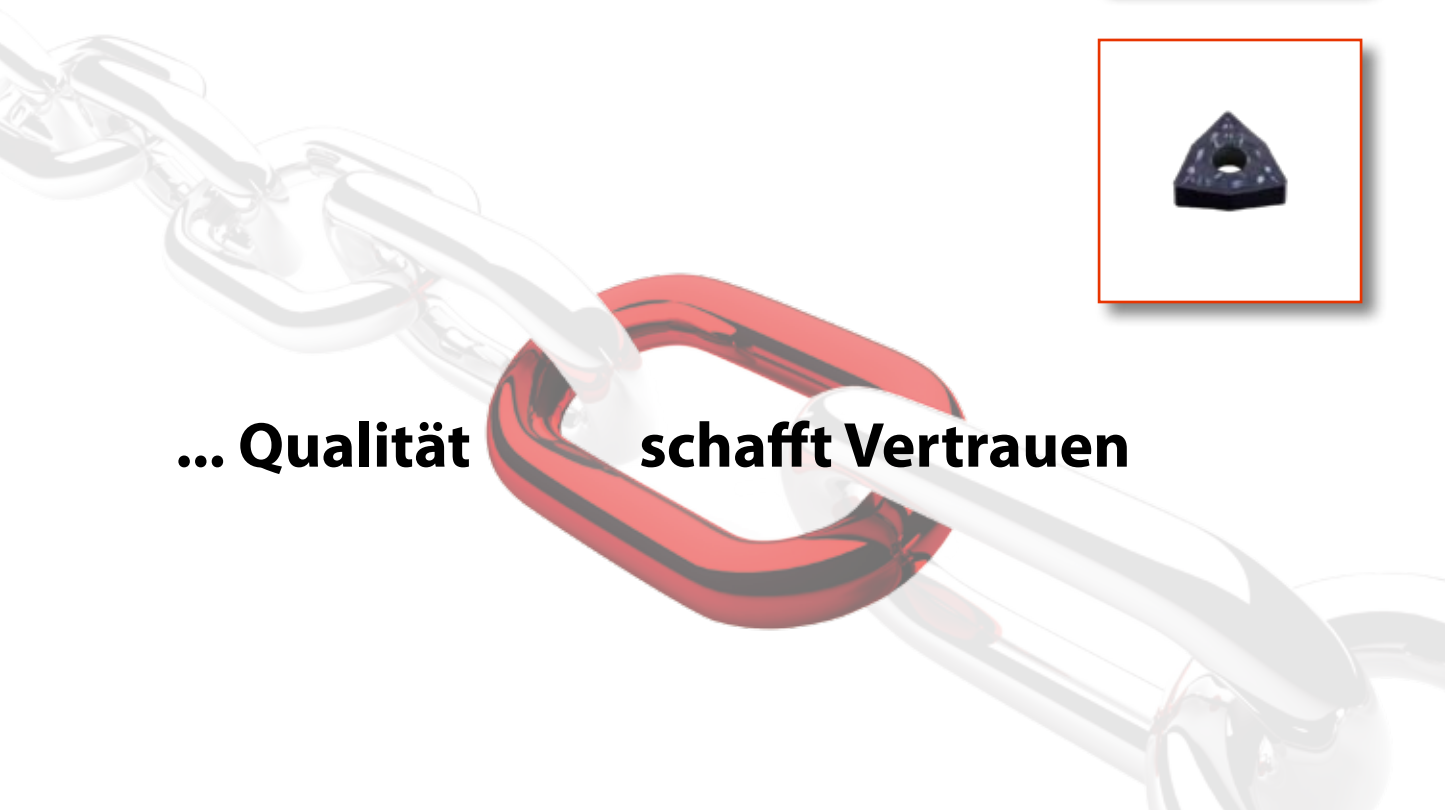
Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills



**... Qualität schafft Vertrauen**



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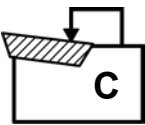
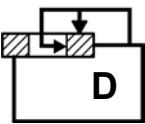
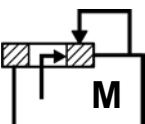
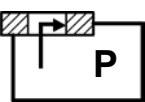

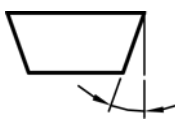
Wendepplattenbohrer  
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# ISO - Bezeichnungssystem für Klemmhalter / ISO Designation System for Toolholders

- Drehen  
Turning
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Solid Carbide Drills

 Von oben geklemmt <i>Top clamping</i>	 Von oben und über Bohrung geklemmt <i>Top and hole clamping</i>	 Von oben und über Bohrung geklemmt <i>Top and hole clamping</i>	 Über Bohrung geklemmt <i>Hole clamping</i>	 Durch Bohrung aufgeschraubt <i>With screw through hole</i>	80° C 55° D 75° E 86° M 35° V 85° A 82° B 55° K H L O P R S T W	90° A 75° B 90° C 45° D 60° E 90° F 90° G 107.5° H 93° J 75° K 95° L 50° M 63° N 75° R 45° S 60° T 93° U 72.5° V 60° W 85° Y	 3° A 5° B 7° C 15° D 20° E 25° F 30° G 0° N 11° P Sonstige Others O	R L N
S	C	L	C	R				
Klemmsystem <i>Clamping Method</i>	Plattenform <i>Shape</i>	Halterform <i>Style</i>	Freiwinkel <i>Clearance Angle</i>	Halteausführung <i>Holder Execution</i>				

ISO - Bezeichnungssystem für Klemmhalter / ISO Designation System for Toolholders

Höhe der Schneidenecke  
"h1" in mm

Height of cutting edge  
"h1" in mm

Schaftbreite "b" in mm

Width "b" in mm

L1 (mm)		L1 (mm)
32	<b>A</b>	150 <b>M</b>
40	<b>B</b>	160 <b>N</b>
50	<b>C</b>	170 <b>P</b>
60	<b>D</b>	180 <b>Q</b>
70	<b>E</b>	200 <b>R</b>
80	<b>F</b>	250 <b>S</b>
90	<b>G</b>	300 <b>T</b>
100	<b>H</b>	350 <b>U</b>
110	<b>J</b>	400 <b>V</b>
125	<b>K</b>	450 <b>W</b>
140	<b>L</b>	500 <b>Y</b>
Sonderlänge Special Length		<b>X</b>

d (mm)			
06			
08			
10			
12			
16			
20			
25			
32			

(mm)	d		(mm)
	(inch)	(mm)	
<b>06</b>	5/32	3.96	<b>03</b>
<b>09</b>	7/32	5.55	<b>05</b>
<b>11</b>	1/4	6.35	<b>06</b>
<b>16</b>	3/8	9.52	<b>09</b>
<b>22</b>	1/2	12.7	<b>12</b>
<b>27</b>	5/8	15.8	<b>15</b>
<b>33</b>	3/4	19.0	<b>19</b>
<b>44</b>	1	25.4	<b>25</b>

**25**

**25**

**M**

**12**

Schafthöhe  
Height of Shank

Schaftbreite  
Width of Shank

Halterlänge  
Length of Holder

Schneidenlänge  
Length of Cutting Edge

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# Übersicht - Außendrehen Overview - External Turning

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

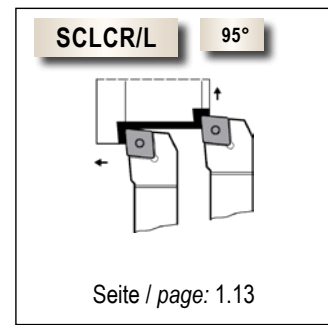
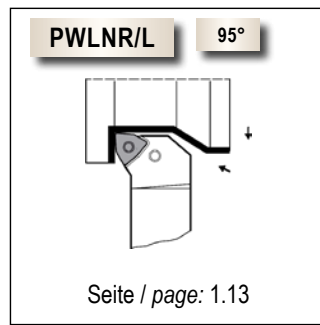
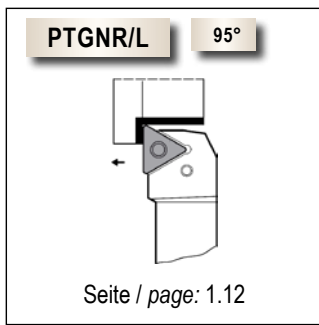
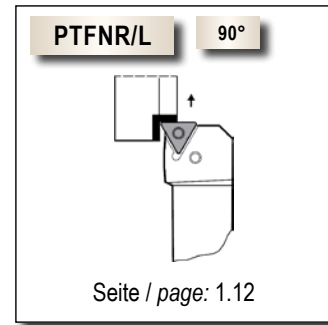
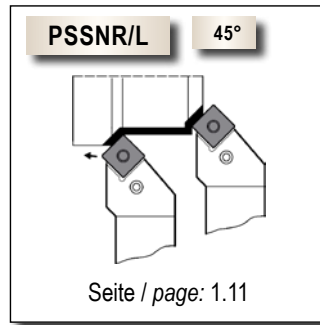
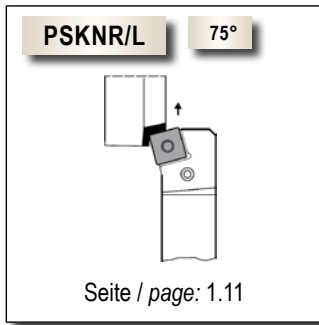
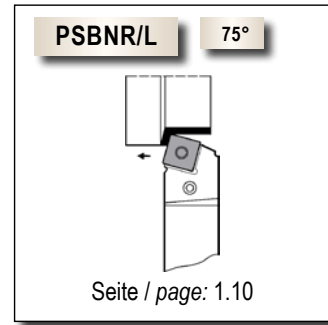
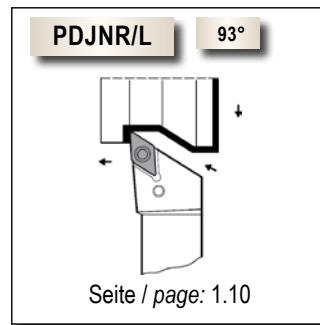
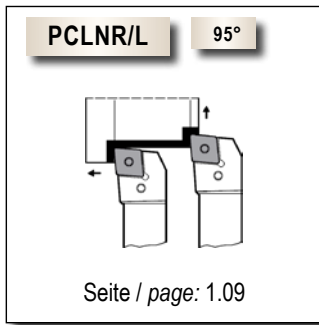
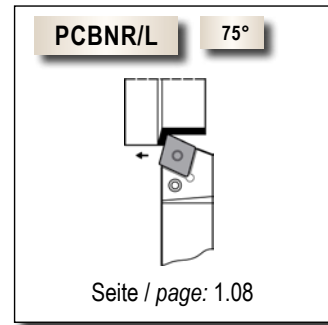
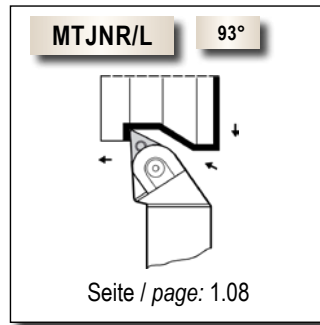
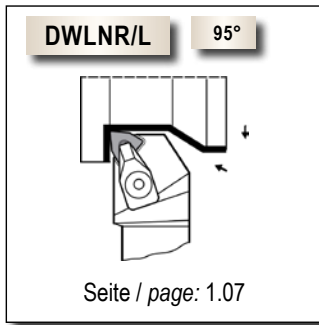
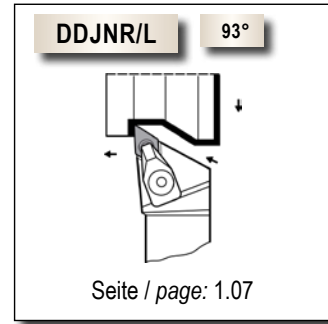
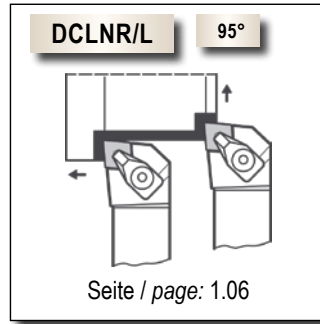
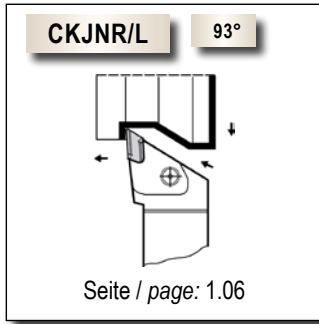
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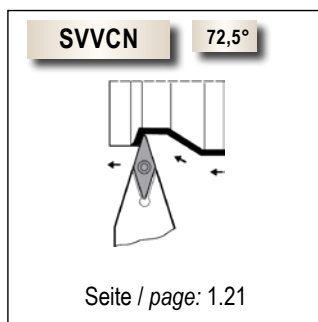
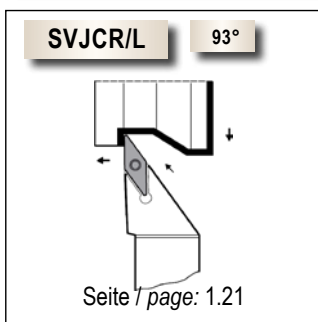
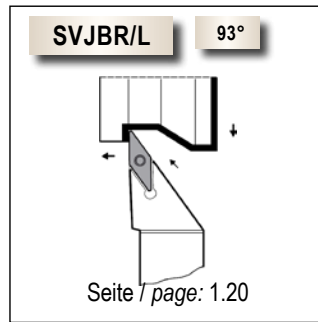
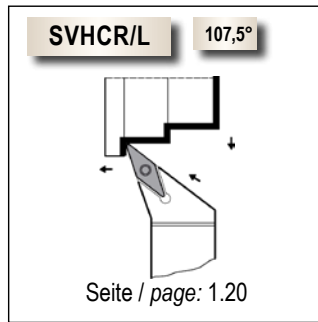
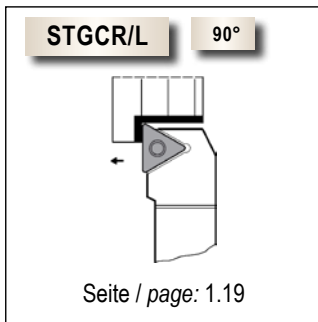
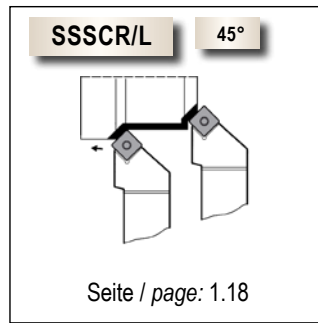
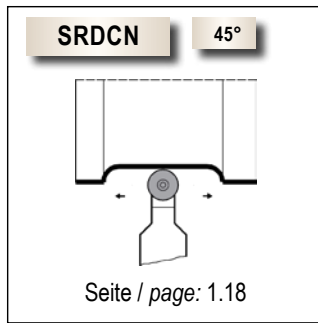
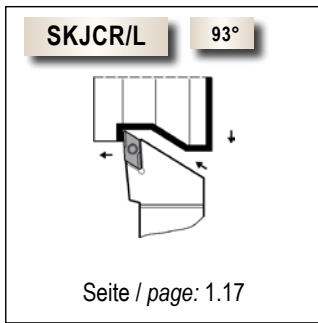
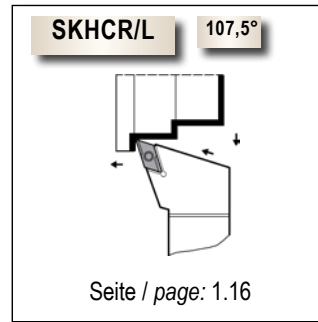
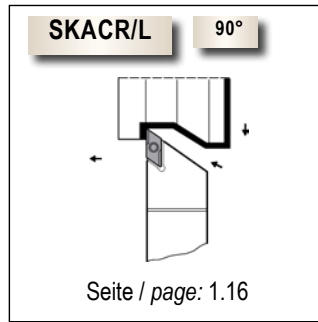
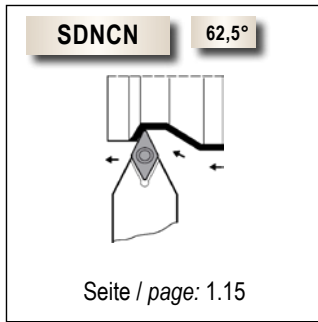
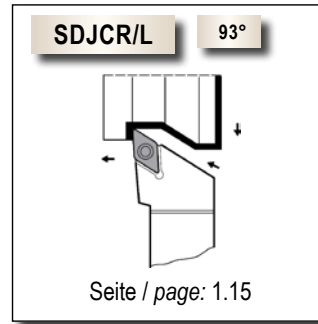
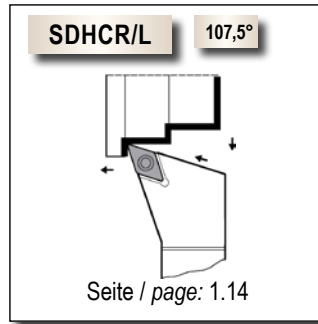
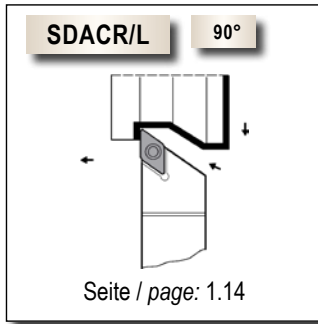
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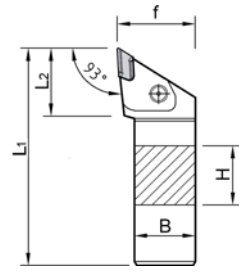
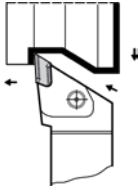
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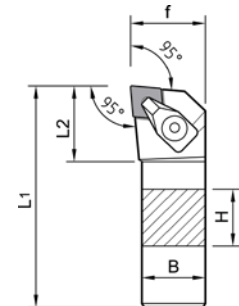
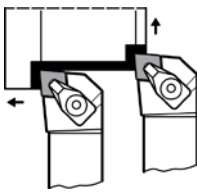


## CKJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts							
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f									
<b>CKJNR 2020 K16</b>	○		20	20	125	32	25	KNUX 1604→R	48.11.705	48.11.105	48.12.606 (SW4)	48.11.503	48.11.500 + 48.11.504	48.11.208	48.11.301	48.12.605 (SW2)
<b>2525 M16</b>	○		25	25	150	32	32									
<b>3232 P16</b>	○		32	32	170	32	40							48.11.209		
<b>CKJNL 2020 K16</b>		○	20	20	125	32	25	KNUX 1604→L	48.11.706	48.11.105	48.12.606 (SW4)	48.11.503	48.11.500 + 48.11.504	48.11.301	48.12.605 (SW2)	
<b>2525 M16</b>		○	25	25	150	32	32									
<b>3232 P16</b>		○	32	32	170	32	40							48.11.209		

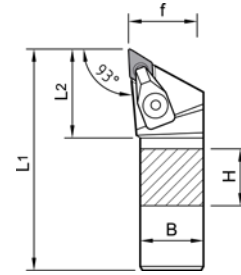
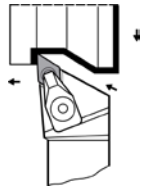
## DCLNR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts							
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f									
<b>DCLNR/L 2020 K12</b>	○	○	20	20	125	30	25	CN → 1204 →	48.34.701	48.34.101	48.12.606 (SW4)	48.33.501	48.33.502	48.33.201	48.34.102	48.12.604 (SW2,5)
<b>2525 M12</b>	○	○	25	25	150	32	32									
<b>3232 P12</b>	○	○	32	32	170	32	40									

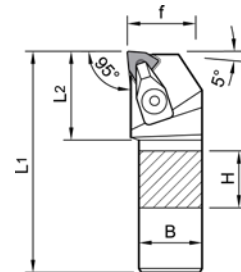
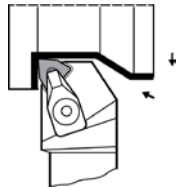


# DDJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.48	Ersatzteile Spare Parts								
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f										
<b>DDJNR/L 2020 K15</b>	●	○	20	20	125	38	25	DN ** 1506 **									
<b>2525 M15</b>	●	○	25	25	150	38	32										
<b>3232 P15</b>	○	○	32	32	170	38	40										48.34.701

# DWLNR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.59	Ersatzteile Spare Parts								
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f										
<b>DWLNR/L 2020 K08</b>	○	○	20	20	125	35	25	WN ** 0804 **									
<b>2525 M08</b>	○	○	25	25	150	35	32										
																	48.34.701

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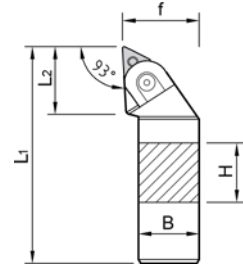
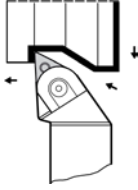
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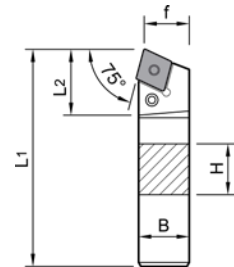
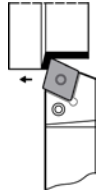
Wendplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

# MTJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.54	Ersatzteile Spare Parts						
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f								
<b>MTJNR/L 2020 K16</b>	●	○	20	20	125	35	25	TN .. 1604 ..	48.10.707	48.10.510	48.10.205	48.10.105	48.33.501	48.10.503	48.12.603 (SW3)
<b>2525 M16</b>	●	●	25	25	150	35	32								
<b>3232 P16</b>	○	○	32	32	170	35	40								
<b>2525 M22</b>	●	●	25	25	150	40	32	TN .. 2204 ..	48.10.708	48.10.511	48.10.206	48.34.101	48.33.502	48.12.606 (SW4)	
<b>3232 P22</b>	○	○	32	32	170	40	40								

# PCBNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts				
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f						
<b>PCBNR/L 2020 K12</b>	○	○	20	20	125	27	17	CN .. 1204 ..	48.12.414	48.12.113	48.33.201	48.12.901	48.12.603 (SW3)
<b>2525 M12</b>	○	○	25	25	150	27	22						
<b>3232 P12</b>			32	32	170	27	22						
<b>2525 M16</b>	○		25	25	150	33	22	CN .. 1606 ..	48.12.415	48.12.114	48.12.202	48.12.902	48.12.606 (SW4)
<b>3232 P16</b>			32	32	170	33	27						
<b>3232 P19</b>	○		32	32	170	40	27	CN .. 1906 ..	48.12.416	48.12.115	48.12.203	48.12.903	48.12.606 (SW4)
<b>4040 S19</b>			40	40	250	40	35						

# PCLNR/L 95°



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

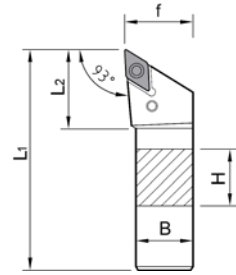
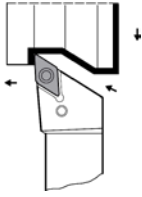
Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

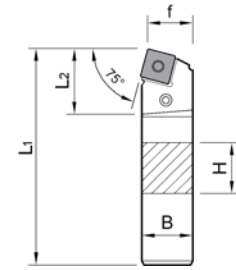
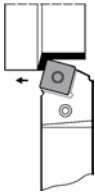
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts					
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f							
<b>PCLNR/L 1616 H09</b>	○	○	16	16	100	20	20	CN .. 0903 ..						48.12.604 (SW2,5)
<b>2020 K09</b>	○	○	20	20	125	22	25							
<b>2525 M09</b>	○	○	25	25	150	22	32							
<b>1616 H12</b>	●	●	16	16	100	28	20	CN .. 1204 ..						48.12.603 (SW3)
<b>2020 K12</b>	●	●	20	20	125	28	25							
<b>2525 M12</b>	●	●	25	25	150	28	32							
<b>3232 P12</b>	○	○	32	32	170	28	32							
<b>2525 M16</b>	○	○	25	25	150	33	32	CN .. 1606 ..						48.12.902
<b>3232 P16</b>	○	○	32	32	170	33	40							
<b>3232 P19</b>	○	○	32	32	170	38	40	CN .. 1906 ..						48.12.903
<b>4040 S19</b>	○	○	40	40	250	38	50							

# PDJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.48	Ersatzteile Spare Parts									
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f											
<b>PDJNR/L 1616 H11</b>	●	○	16	16	100	25	20	DN ** 1104 **										
<b>2020 K11</b>	●	●	20	20	125	25	25							48.12.417	48.12.116	48.12.204	48.12.905	48.12.604 (SW2,5)
<b>2525 M11</b>	○	○	25	25	150	30	32											
<b>2020 K15</b>	●	●	20	20	125	35	25	DN ** 1506 **										
<b>2525 M15</b>	●	●	25	25	150	35	32							48.12.418	48.12.113	48.33.202	48.12.901	48.12.603 (SW3)
<b>3232 P15</b>	○	○	32	32	170	35	40											

# PSBNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.52	Ersatzteile Spare Parts									
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f											
<b>PSBNR/L 2020 K12</b>			20	20	125	28	17	SN ** 1204 **										
<b>2525 M12</b>			25	25	150	28	22							48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
<b>3232 P12</b>			32	32	170	28	27											
<b>2525 M15</b>			25	25	150	35	22	SN ** 1506 **										
<b>3232 P15</b>			32	32	170	37	27							48.12.415	48.12.114	48.12.206	48.12.902	
<b>3232 P19</b>			32	32	170	40	27											
<b>4040 S19</b>			40	40	250	40	35	SN ** 1906 **						48.12.606 (SW4)				

# PSKNR/L 75°



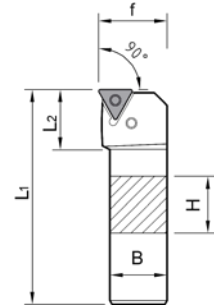
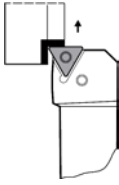
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.52	Ersatzteile Spare Parts					
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>		f					
<b>PSKNR/L 2020 K12</b>			20	20	125	26	25	SN .. 1204 ..	48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
<b>2525 M12</b>			25	25	150	26	32						
<b>2525 M15</b>			25	25	150	32	32	SN .. 1506 ..	48.12.415	48.12.114	48.12.206	48.12.902	
<b>3232 P15</b>			32	32	170	32	40						
<b>3232 P19</b>			32	32	170	40	40	SN .. 1906 ..	48.12.416	48.12.115	48.12.236	48.12.903	48.12.606 (SW4)
<b>4040 S19</b>			40	40	250	50	50						

# PSSNR/L 45°



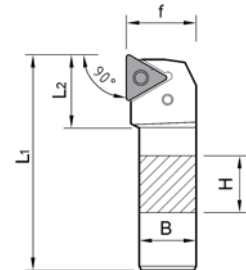
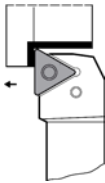
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.52	Ersatzteile Spare Parts					
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>		f					
<b>PSSNR/L 2020 K12</b>	●	○	20	20	125	30	25	SN .. 1204 ..	48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
<b>2525 M12</b>	●	○	25	25	150	30	32						
<b>2525 M15</b>			25	25	150	30	32	SN .. 1506 ..	48.12.415	48.12.114	48.12.206	48.12.902	
<b>3232 P15</b>			32	32	170	40	40						
<b>3232 P19</b>	○	○	32	32	170	40	40	SN .. 1906 ..	48.12.416	48.12.115	48.12.236	48.12.903	48.12.606 (SW4)
<b>4040 S19</b>			40	40	250	40	50						

# PTFNR/L 90°



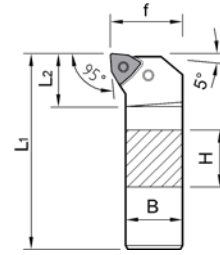
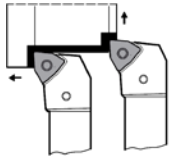
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.54	Ersatzteile Spare Parts				
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f						
<b>PTFNR/L 1616 H16</b>	○	○	16	16	100	20	20	TN ** 1604 **	48.12.417	48.12.116	48.12.229	48.12.905	48.12.604 (SW2,5)
<b>2020 K16</b>	○	○	20	20	125	20	25						
<b>2525 M16</b>	○	○	25	25	150	20	32						
<b>2525 M22</b>	○	○	25	25	150	25	32	TN ** 2204 **	48.12.414	48.12.113	48.12.230	48.12.901	48.12.603 (SW3)
<b>3232 P22</b>			32	32	170	25	40						
<b>3232 P27</b>			32	32	170	33	40	TN ** 2706 **	48.12.415	48.12.114	48.12.231	48.12.902	
<b>4040 S27</b>			40	40	250	33	50						

# PTGNR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.54	Ersatzteile Spare Parts				
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f						
<b>PTGNR/L 1616 H16</b>			16	16	100	20	20	TN ** 1604 **	48.12.417	48.12.116	48.12.229	48.12.905	48.12.604 (SW2,5)
<b>2020 K16</b>	○	○	20	20	125	20	25						
<b>2525 M16</b>	○	○	25	25	150	20	32						
<b>3232 P16</b>			32	32	170	20	40	TN ** 2204 **	48.12.414	48.12.113	48.12.230	48.12.901	48.12.603 (SW3)
<b>2525 M22</b>	○	○	25	25	150	28	32						
<b>3232 P22</b>			32	32	170	28	40	TN ** 2706 **	48.12.415	48.12.114	48.12.231	48.12.902	
<b>3232 P27</b>			32	32	170	33	40						
<b>4040 S27</b>			40	40	250	33	50						

# PWLNR/L 95°



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

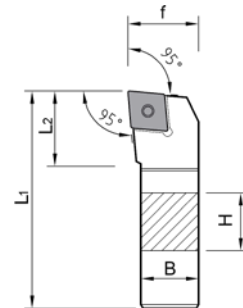
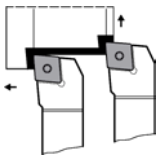
Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendelplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.59	Ersatzteile Spare Parts					
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>		f					
<b>PWLNR/L 1616 H06</b>	○	○	16	16	100	20	20	WN-0604-..					
<b>2020 K06</b>	○	○	20	20	125	20	25						
<b>2525 M06</b>	○	○	25	25	150	20	32						
<b>2020 K08</b>	●	●	20	20	125	26	25	WN-0804-..					
<b>2525 M08</b>	●	●	25	25	150	26	32						
<b>3232 P08</b>	○	○	32	32	170	26	40						

# SCLCR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.42	Ersatzteile Spare Parts				
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>		f				
<b>SCLCR/L 0808 D06</b>	●	○	8	8	60	12	10	CC-0602-..				
<b>1010 F06</b>	●	○	10	10	80	12	12					
<b>1212 F09</b>	●	●	12	12	80	16	16					
<b>1616 H09</b>	●	●	16	16	100	16	20	CC-09T3-..				
<b>2020 K09</b>	●	●	20	20	125	25	25					
<b>1616 H12</b>	○	○	16	16	100	20	20					
<b>2020 K12</b>	●	●	20	20	125	25	25	CC-1204-..				
<b>2525 M12</b>	●	●	25	25	150	25	32					
<b>3232 P12</b>	○	○	32	25	170	25	40					

## SDACR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.46	Ersatzteile Spare Parts							
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f									
<b>SDACR/L 0808 K07</b>			8	8	125	14	8.5	DC -- 0702 --								
<b>1010 M07</b>			10	10	150	14	10.5						48.24.107	-	-	56.33.612 (T08)
<b>1212 M07</b>			12	12	150	14	12.5									
<b>1212 M11</b>			12	12	150	21	12.5	DC -- 11T3 --								
<b>2525 M11</b>			25	25	150	21	25.5						48.24.108 48.13.102	- 48.13.203	- 48.13.301	56.33.613 (T15)

## SDHCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.46	Ersatzteile Spare Parts							
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f									
<b>SDHCR/L 1010 E07</b>	○		10	10	70	15	12	DC -- 0702 --								
<b>1212 F07</b>	○	○	12	12	80	15	16						48.24.107	-	-	56.33.612 (T08)
<b>1616 H11</b>	●	○	16	16	100	16	20	DC -- 11T3 --								
<b>2020 K11</b>	●	●	20	20	125	21	25						48.13.102	48.13.203	48.13.301	56.33.613 (T15)
<b>2525 M11</b>	●	●	25	25	150	22	32									



# SDJCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>		f				
<b>SDJCR/L 1010 E07</b>	○		10	10	70	15	12	DC..0702..	48.24.107	-	-	56.33.612 (T08)
<b>1212 F07</b>	●	○	12	12	80	15	16					
<b>1616 H11</b>	●	●	16	16	100	26	20	DC..11T3..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
<b>2020 K11</b>	●	●	20	20	125	26	25					
<b>2525 M11</b>	●	●	25	25	150	29	32					

# SDNCN 62,5°



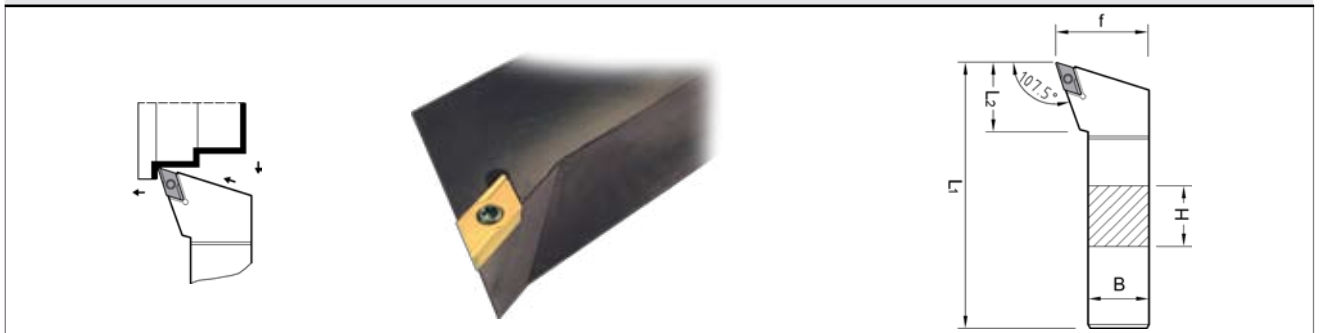
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>		f				
<b>SDNCN 1010 E07</b>	○		10	10	70	20	5	DC..0702..	48.24.107	-	-	56.33.612 (T08)
<b>1212 F07</b>	○		12	12	80	20	6					
<b>1212 M07</b>			12	12	150	20	6					
<b>1212 M11</b>			12	12	150	30	6	DC..11T3..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
<b>1616 H11</b>	●		16	16	100	30	8					
<b>2020 K11</b>	●		20	20	125	30	10					
<b>2525 M11</b>	○		25	25	150	30	12.5					

## SKACR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts			
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>SKACR/L 1212 M11</b>	○	●	12	12	150	-	10.5	KC-X 1103 ..	48.13.104	-	-	56.33.612 (T08)
<b>1616 M11</b>	○	●	16	16	150	-	12.5					
<b>2020 M11</b>	○	○	20	20	150	-	16.5					

## SKHCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts			
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>SKHCR/L 1212 F11</b>	○	●	12	12	80	15	16	KC-X 1103 ..	48.13.104	-	-	56.33.612 (T08)
<b>1616 H11</b>	○	●	16	16	100	24	20					
<b>2020 K11</b>	○	●	20	20	125	24	25					
<b>2525 M11</b>	○	●	25	25	150	29	32					

# SKJCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile <i>Spare Parts</i>			
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>SKJCR/L 1212 F11</b>	○		12	12	80	15	16	KC-X 1103 -- R/L	48.13.104	-	-	56.33.612 (T08)
<b>1616 H11</b>	○	○	16	16	100	24	20					
<b>2020 K11</b>	○	○	20	20	125	24	25					
<b>2525 M11</b>	○	○	20	25	150	29	32					

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM- Fräser  
HDS-/ Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

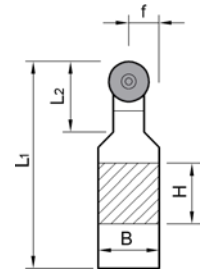
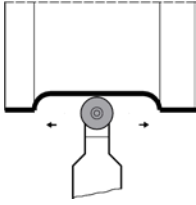
Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

# SRDCN

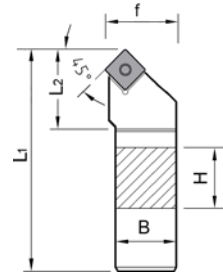
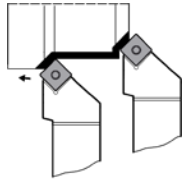
45°



Bezeichnung Part Number	Lager Stock	Maße [mm] Dimensions					Seite / Page: 1.50	Ersatzteile Spare Parts			
		H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>SRDCN 1212 F06</b>		12	12	80	12	6	RC-T 0602 ..	48.24.107	-	-	56.33.612 (T08)
<b>1616 H06</b>		16	16	100	12	8					
<b>2020 K06</b>	○	20	20	125	12	10					
<b>2525 M06</b>	○	25	25	150	12	12.5	RC-T 0803 ..	48.13.105	-	-	56.33.613 (T15)
<b>1616 H08</b>		16	16	100	16	8					
<b>2020 K08</b>	○	20	20	125	16	10					
<b>2525 M08</b>	○	25	25	150	16	12.5	RC-T 1003 ..	48.13.102	48.13.204	48.13.301	56.33.613 (T15)
<b>1616 H10</b>		16	16	100	20	8					
<b>2020 K10</b>		20	20	125	20	10					
<b>2525 M10</b>	○	25	25	150	20	12.5					

# SSSCR/L

45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.51	Ersatzteile Spare Parts			
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>SSSCR/L 1212 F09</b>	●		12	12	80	18	16	SC .. 09T3 ..	48.13.102	-	-	56.33.613 (T15)
<b>1616 H09</b>	●	○	16	16	100	20	20					
<b>2020 K09</b>	●	○	20	20	125	22	25					
<b>1616 H12</b>			16	16	100	25	20	SC .. 1204 ..	48.13.103	48.13.206	48.13.302	56.33.613 (T15)
<b>2020 K12</b>	●	○	20	20	125	25	25					
<b>2525 M12</b>	●	○	25	25	150	25	32					
<b>3225 P12</b>			32	25	170	25	38					

# STGCR/L 90°



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

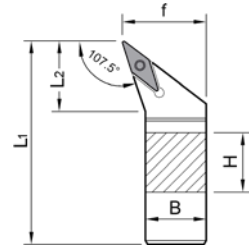
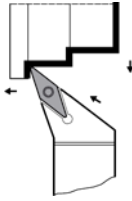
Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					 Seite / Page: 1.53	Ersatzteile <i>Spare Parts</i>			
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>STGCR/L 0808 D09</b>	○		8	8	60	8	10	TC.. 0902..	L60M2.2x5	-	-	75.20.621 (T06)
<b>1010 E09</b>	○		10	10	70	10	12					
<b>1212 F11</b>			12	12	80	15	16	TC.. 1102..	48.24.107	-	-	56.33.612 (T08)
<b>1616 H11</b>	○		16	16	100	15	20					
<b>1616 H16</b>			16	16	100	22	20					
<b>2020 K16</b>	○		20	20	125	22	25	TC.. 16T3..	48.13.102	48.13.207	48.13.301	56.33.613 (T15)
<b>2525 M16</b>	○		25	25	150	22	32					

# SVHCR/L 107,5°

Drehen  
Turning

Fräswerkzeuge  
Milling Tools



HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

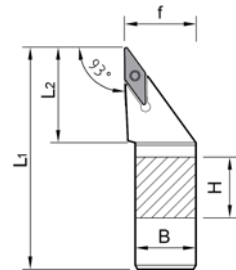
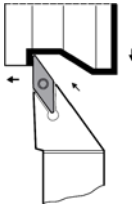
Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>SVHCR/L 1212 F11</b>			12	12	80	11.5	16	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
<b>1616 H11</b>			16	16	100	11.5	20					
<b>2020 K11</b>			20	20	125	14.5	25					
<b>2525 M11</b>			25	25	150	20.0	32	VC .. 1604 ..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
<b>1616 H16</b>			16	16	100	13.5	20					
<b>2020 K16</b>	●		20	20	125	13.5	25					
<b>2525 M16</b>	●		25	25	150	20.0	32					

# SVJBR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.56	Ersatzteile Spare Parts			
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>	f					
<b>SVJBR/L 1212 F11</b>	○		12	12	80	11.5	16	VB .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
<b>1616 M11</b>	○	○	16	16	100	11.5	20					
<b>2020 K11</b>			20	20	125	14.5	25					
<b>2525 M11</b>			25	25	150	20.0	32	VB .. 1604 ..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
<b>1616 H16</b>			16	16	100	29.5	20					
<b>2020 K16</b>	●	●	20	20	125	29.5	25					
<b>2525 M16</b>	●	○	25	25	150	32.5	32					

# SVJCR/L 93°



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendelplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.57	Ersatzteile Spare Parts							
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>									
<b>SVJCR/L 1010 E11</b>	○		10	10	70	14.5	VC .. 1103 ..								
<b>1212 F11</b>	●	○	12	12	80	22.0						48.24.107	-	-	56.33.612 (T08)
<b>1616 H11</b>	●	●	16	16	100	25.0									
<b>2020 K11</b>	●	○	20	20	125	32.0									
<b>2525 M11</b>	●	○	25	25	150	38.0									
<b>1616 H16</b>	●	○	16	16	100	29.5	VC .. 1604 ..								
<b>2020 K16</b>	●	●	20	20	125	29.5						48.13.102	48.13.209	48.13.301	56.33.613 (T15)
<b>2525 M16</b>	●	●	25	25	150	32.5									
<b>3225 P16</b>	○	○	32	25	170	35.0									

# SVVCN 72,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.57	Ersatzteile Spare Parts							
	R	L	H	B	L <sub>1</sub>	L <sub>2</sub>									
<b>SVVCN 1010 E11</b>	○		10	10	70	18	VC .. 1103 ..								
<b>1212 F11</b>	○		12	12	80	27						48.24.107	-	-	56.33.612 (T08)
<b>1616 H11</b>			16	16	100	27									
<b>2020 K11</b>	○		20	20	125	27									
<b>2525 M11</b>			25	25	150	41									
<b>1616 H16</b>	○		16	16	100	36	VC .. 1604 ..								
<b>2020 K16</b>	○		20	20	125	41						48.13.102	48.13.209	48.13.301	56.33.613 (T15)
<b>2525 M16</b>	○		25	25	150	41									

# ISO - Bezeichnungssystem für Bohrstangen / ISO Designation System for Boring Bars

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepaltenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

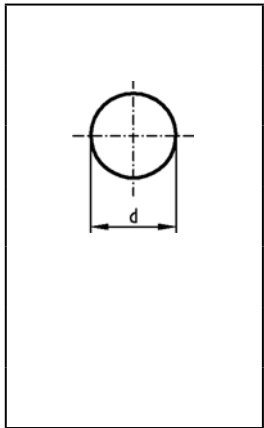
**A**  
Stahlschaft mit  
Kühlbohrung  
*Steel shank with  
coolant hole*

**B**  
Stahlschaft mit  
Dämpfung  
*Steel shank with  
vibration clamping*

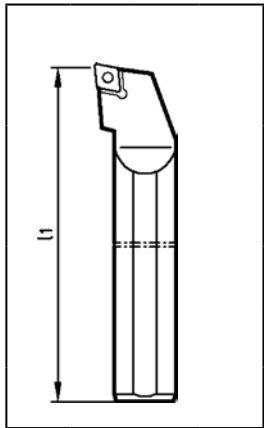
**C**  
Hartmetallschaft mit  
Stahlkopf  
*Hardmetal shank with  
steel head*

**E**  
Hartmetallschaft mit  
Stahlkopf und  
Kühlbohrung  
*Hardmetal shank with  
steel head and coolant  
hole*

**S**  
Stahlschaft  
*Steel shank*



D <sub>1</sub> (mm)
08
10
12
16
20
25
32
40
50
60



L <sub>1</sub> (mm)		L <sub>1</sub> (mm)	
32	<b>A</b>	150	<b>M</b>
40	<b>B</b>	160	<b>N</b>
50	<b>C</b>	170	<b>P</b>
60	<b>D</b>	180	<b>Q</b>
70	<b>E</b>	200	<b>R</b>
80	<b>F</b>	250	<b>S</b>
90	<b>G</b>	300	<b>T</b>
100	<b>H</b>	350	<b>U</b>
110	<b>J</b>	400	<b>V</b>
125	<b>K</b>	450	<b>W</b>
140	<b>L</b>	500	<b>Y</b>
Sonderlänge <i>Special length</i>			<b>X</b>

Von oben geklemmt  
*Top clamping*

Von oben und über  
Bohrung geklemmt  
*Top and hole clamping*

Von oben und über  
Bohrung geklemmt  
*Top and hole clamping*

Über Bohrung geklemmt  
*Hole clamping*

Durch Bohrung  
aufgeschraubt  
*With screw through hole*

**A**

**32**

**S**

**P**

Schaftausführung  
*Type of Shank*


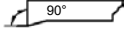

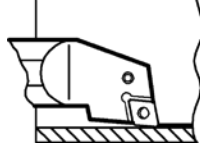
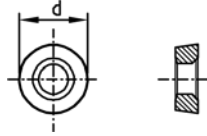
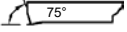
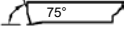
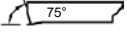
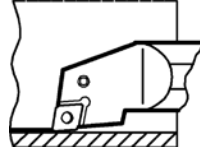
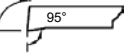
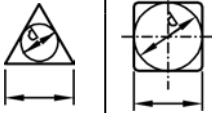
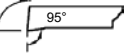
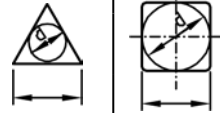
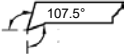
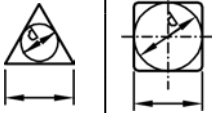
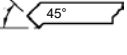
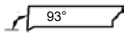
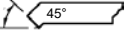
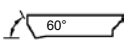
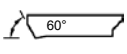
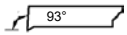


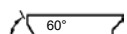


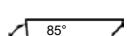

Schaft- Ø  
*Shank- Ø*

Halterlänge  
*Length*

Klemmsystem  
*Clamping Method*



ISO - Bezeichnungssystem für Bohrstangen / ISO Designation System for Boring Bars

	80° <b>C</b>	 <b>F</b>																																											
	55° <b>D</b>																																												
	75° <b>E</b>	 <b>K</b>	 <b>B</b>		<table border="1"> <tr><th>d (mm)</th></tr> <tr><td>06</td></tr> <tr><td>08</td></tr> <tr><td>10</td></tr> <tr><td>12</td></tr> <tr><td>16</td></tr> <tr><td>20</td></tr> <tr><td>25</td></tr> <tr><td>32</td></tr> </table>	d (mm)	06	08	10	12	16	20	25	32																															
	d (mm)																																												
06																																													
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32																																													
86° <b>M</b>																																													
	35° <b>V</b>	 <b>L</b>	3° <b>A</b>																																										
	85° <b>A</b>		5° <b>B</b>																																										
	82° <b>B</b>	 <b>Q</b>	7° <b>C</b>		<table border="1"> <tr><th colspan="4">d</th></tr> <tr><th>(mm)</th><th>(inch)</th><th>(mm)</th><th>(mm)</th></tr> <tr><td>06</td><td>5/32</td><td>3.96</td><td>03</td></tr> <tr><td>09</td><td>7/32</td><td>5.55</td><td>05</td></tr> <tr><td>11</td><td>1/4</td><td>6.35</td><td>06</td></tr> <tr><td>16</td><td>3/8</td><td>9.52</td><td>09</td></tr> <tr><td>22</td><td>1/2</td><td>12.7</td><td>12</td></tr> <tr><td>27</td><td>5/8</td><td>15.8</td><td>15</td></tr> <tr><td>33</td><td>3/4</td><td>19.0</td><td>19</td></tr> <tr><td>44</td><td>1</td><td>25.4</td><td>25</td></tr> </table>	d				(mm)	(inch)	(mm)	(mm)	06	5/32	3.96	03	09	7/32	5.55	05	11	1/4	6.35	06	16	3/8	9.52	09	22	1/2	12.7	12	27	5/8	15.8	15	33	3/4	19.0	19	44	1	25.4	25
	d																																												
(mm)	(inch)	(mm)	(mm)																																										
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09	7/32	5.55	05																																										
11	1/4	6.35	06																																										
16	3/8	9.52	09																																										
22	1/2	12.7	12																																										
27	5/8	15.8	15																																										
33	3/4	19.0	19																																										
44	1	25.4	25																																										
55° <b>K</b>			15° <b>D</b>																																										
		 <b>S</b>	20° <b>E</b>																																										
						25° <b>F</b>																																							
		 <b>U</b>	30° <b>G</b>																																										
						0° <b>N</b>																																							
		 <b>W</b>	11° <b>P</b>																																										
		 <b>Y</b>	Sonstige Others <b>O</b>																																										
		Sonderform Special Style <b>X</b>																																											

<b>C</b>	<b>L</b>	<b>N</b>	<b>L</b>	<b>12</b>
Plattenform Shape	Halterform Style	Freiwinkel Clearance Angle	Halterausführung Holder Execution	Schneidenlänge Length of Cutting Edge

# Übersicht - Innendrehen Overview - Internal Turning

Drehwerkzeuge  
Turning Tools

Fräswerkzeuge  
Milling Tools

VHM-Fräser  
Solid Carbide  
Endmills

Stechdreh-  
werkzeuge  
Grooving Tools

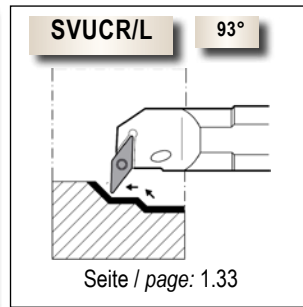
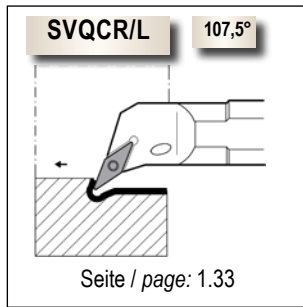
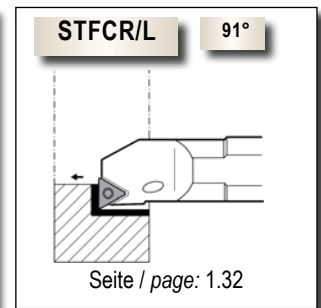
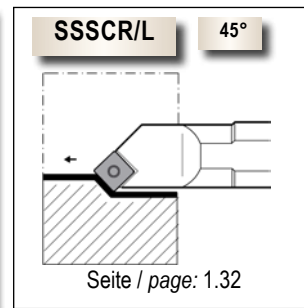
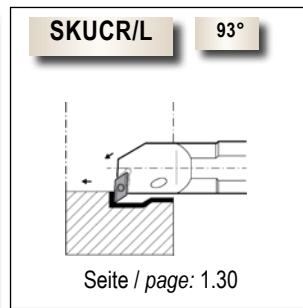
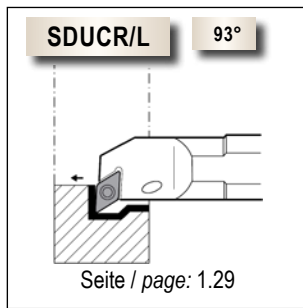
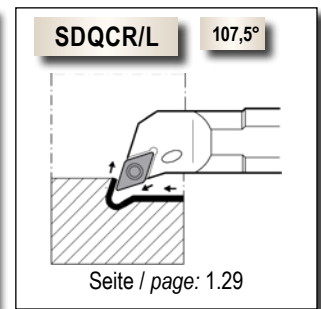
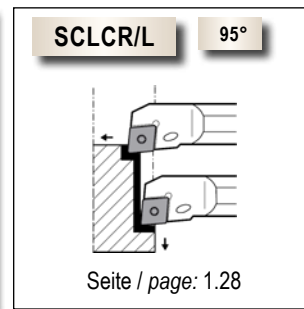
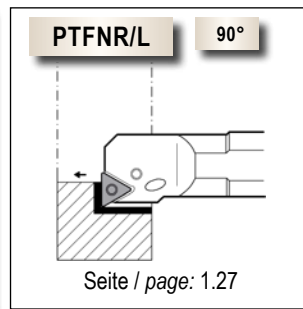
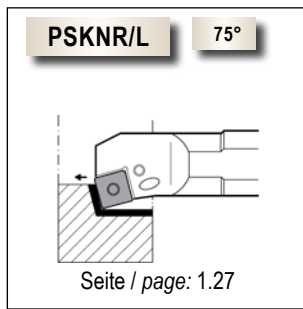
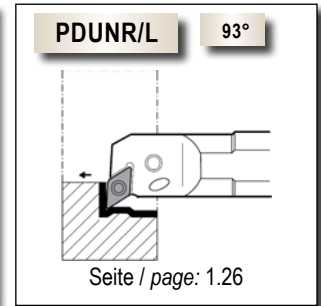
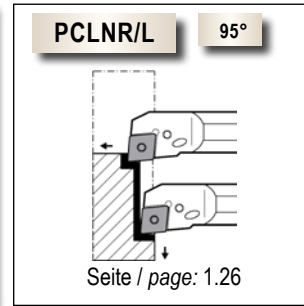
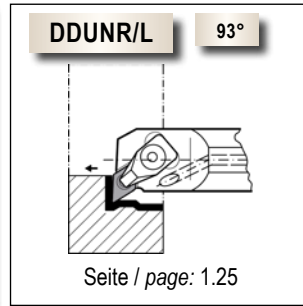
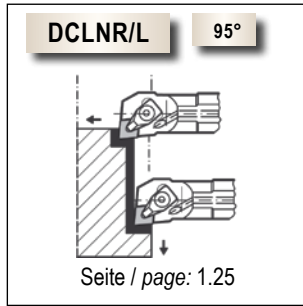
Mini  
Schneidwerkzeuge  
Mini Tools

Micro  
Schneidwerkzeuge  
Micro Tools

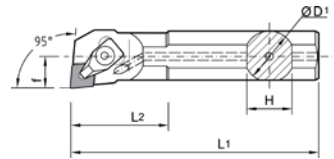
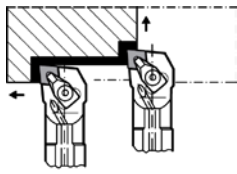
Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
Indexable Drills

VHM-Bohrer  
Solid Carbide Drills



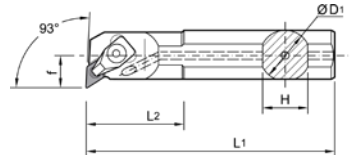
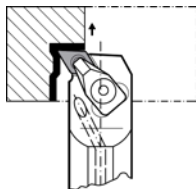
# DCLNR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts							
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>		f							
<b>A25R DCLNR/L 12</b>	●	●	32	25	23	200	50	17	CN ↔ 1204 ↔							
<b>A32S DCLNR/L 12</b>	○	○	40	32	30	250	60	22								
<b>A40T DCLNR/L 12</b>			50	40	37	300	60	27								
<b>A50U DCLNR/L 12</b>			63	50	47	350	65	35								

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

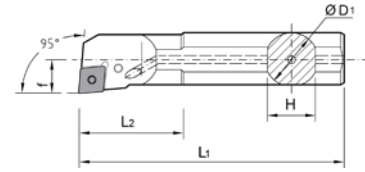
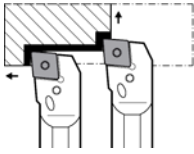
# DDUNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.48	Ersatzteile Spare Parts							
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>		f							
<b>A32S DDUNR/L 15</b>			40	32	30	250	55	22	DN ↔ 1506 ↔							
<b>A40T DDUNR/L 15</b>			50	40	37	300	55	27								

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

## PCLNR/L 95°

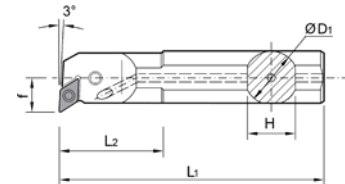
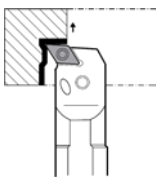


Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.44	Ersatzteile Spare Parts				
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f						
<b>A25R PCLNR/L 12</b>	●	●	32	25	24	200	40	17	CN .. 1204 ..	48.23.103	48.23.402	-	-	48.12.604 (SW2,5)
<b>A32T PCLNR/L 12</b>	●	●	40	32	30	300	50	22		48.12.113	48.12.414	48.33.204	-	48.12.603 (SW3)
<b>A40T PCLNR/L 12</b>	●	○	54	40	38.5	300	55	27		-	-	48.23.201	48.12.901	-
<b>A50U PCLNR/L 12</b>	○	○	63	50	48.5	350	56	35		-	-	-	-	-

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

S : Stahlschaft / Steel Shank

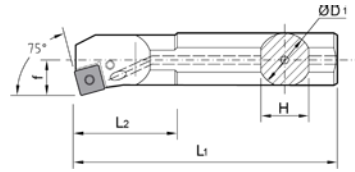
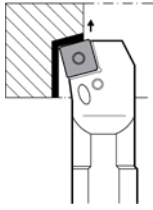
## PDUNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.48	Ersatzteile Spare Parts				
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f						
<b>A20Q PDUNR/L 11</b>	●	○	25	20	19	180	-	16	DN .. 1104 ..	48.23.102	48.23.403	-	-	48.12.605 (SW2)
<b>A25R PDUNR/L 11</b>	○	○	31.5	25	24	200	-	18.5		48.12.116	48.12.417	48.12.204	48.12.905	-
<b>A32S PDUNR/L 11</b>	○	○	40	32	31	250	-	22		-	-	-	-	-
<b>A32S PDUNR/L 15</b>	●	○	40	32	31	250	50	22	DN .. 1506 ..	48.12.113	48.12.418	48.33.202	48.12.901	48.12.603 (SW3)
<b>A40T PDUNR/L 15</b>	●	○	50	40	38.5	300	50	27		-	-	-	-	-

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

# PSKNR/L 75°



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

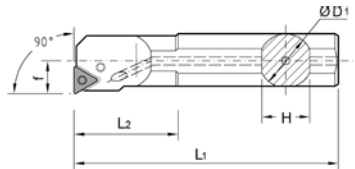
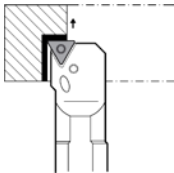
Gewinde-  
werkzeuge  
Threading Tools

Wendelplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.52	Ersatzteile Spare Parts				
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f						
<b>A25R PSKNR/L 12</b>	○	○	32	25	24	200	42	17	SN .. 1204 ..			-	-	
<b>A32S PSKNR/L 12</b>	○	○	44	32	31	250	50	22				48.23.203	48.12.901	
<b>A40T PSKNR/L 12</b>	○	○	54	40	38.5	300	55	27				48.12.113	48.12.414	

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

# PTFNR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.54	Ersatzteile Spare Parts				
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f						
<b>S16R PTFNR/L 11</b>	○	○	21	16	15	150	-	11	TN .. 1103 ..			-	-	
<b>S20S PTFNR/L 11</b>	○	○	25	20	19	180	-	13				48.23.102	48.23.406	
<b>A25R PTFNR/L 16</b>	○	○	32	25	24	200	40	17	TN .. 1604 ..			-	-	
<b>A32S PTFNR/L 16</b>	○	○	44	32	31	250	50	22				48.23.202	48.12.905	
<b>A40T PTFNR/L 16</b>	○	○	54	40	38.5	300	55	27				48.12.116	48.12.417	

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

S : Stahlschaft / Steel Shank

# SCLCR/L 95°

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

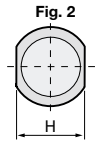
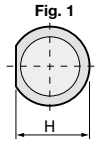
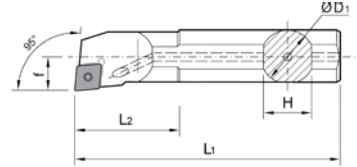
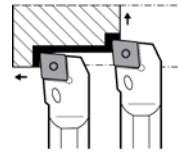
HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

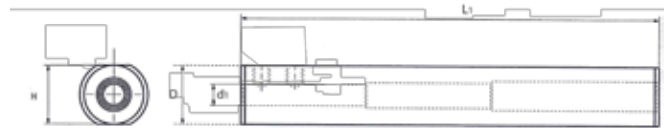
Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.	Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f						
<b>E04G SCLCR/L 0305</b>	●	●	5	4	3.8	90	-	2.5	1	CCET 0301 ..	48.24.142	-	-	75.20.621 (T06)
<b>E05H SCLCR/L 0306</b>	●	○	6	5	4.4	100	-	3.0						
<b>E06J SCLCR/L 0307</b>	○	●	7	6	5.7	110	-	3.5						
<b>E06J SCLCR/L 0407</b>	●	●	7	6	5.7	110	-	3.5		CCET 0401 ..	48.24.143	-	-	
<b>E07K SCLCR/L 0408</b>	●	●	8	7	6.4	125	-	4.0						
<b>A0608H SCLCR/L 06</b>	●	●	8	8	7	100	25	4.5	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)
<b>A0810J SCLCR/L 06</b>	●	●	11	10	9	110	32	6.0						
<b>A1012K SCLCR/L 06</b>	●	●	13	12	11	125	38	7.0						
<b>A1216M SCLCR/L 06</b>	●	●	16	16	15	150	50	9.0						
<b>A08F SCLCR/L 06</b>	●	●	11	8	7	80	16	5.5						
<b>A10H SCLCR/L 06</b>	●	●	13	10	9	100	20	6.0	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)
<b>A12K SCLCR/L 06</b>	●	●	17	12	11	125	23	9.0						
<b>A16M SCLCR/L 09</b>	●	●	21	16	15	150	30	11.0						
<b>A20Q SCLCR/L 09</b>	●	●	25	20	18	180	38	13.0						
<b>A25R SCLCR/L 09</b>	●	●	32	25	23	200	39	17.0						
<b>A32S SCLCR/L 12</b>	○	○	40	32	31	250	50	22.0	1	CC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)
<b>A40T SCLCR/L 12</b>	○	○	50	40	38.5	300	60	27.0						
<b>E08K SCLCR/L 06</b>	●	●	11	8	7.5	125	-	5.0						
<b>E10M SCLCR/L 06</b>	●	●	14	10	9.5	150	-	6.0						
<b>E12Q SCLCR/L 06</b>	●	●	17	12	11.5	180	-	9.0						
<b>E16R SCLCR/L 09</b>	●	●	21	16	15.5	200	32	11.0	1	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)
<b>E20S SCLCR/L 09</b>	●	●	25	20	19	250	38	13.0						
<b>E25T SCLCR/L 09</b>	●	●	32	25	24	300	45	17.0						
<b>E32T SCLCR/L 12</b>	○	○	40	32	30	300	50	22.0						
<b>E40T SCLCR/L 12</b>	○	○	50	40	38	300	60	27.0						

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant  
 E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant  
 S : Stahlschaft / Steel Shank

## Schafthülsen Sleeves for Shanks



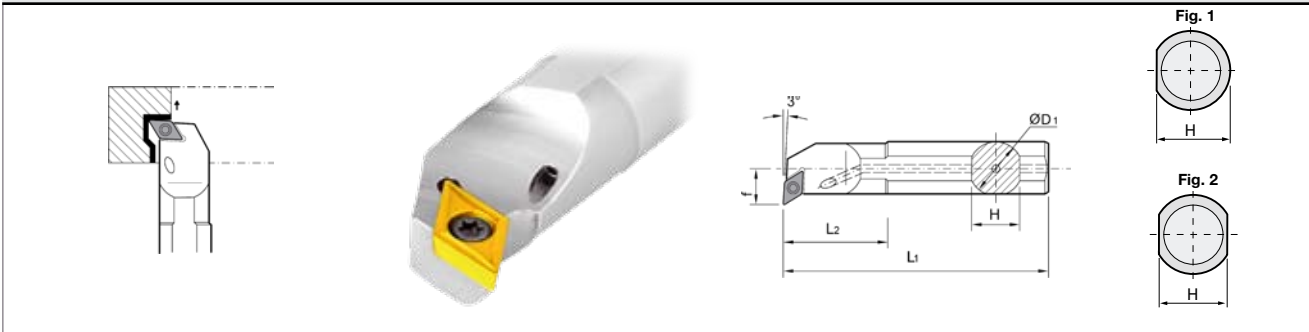
Bezeichnung Part Number	Lager Stock	Maße [mm] Dimensions				Ersatzteile Spare Parts		Passende Bohrstangen Suitable Boring Bars
		D	d <sub>1</sub>	H	L <sub>1</sub>			
<b>SH 0416</b>	●	16	4	14	100	32.35.101	48.12.605	<b>E04G SCLCR/L 0305</b> <b>E05H SCLCR/L 0306</b>
<b>SH 0516</b>	●		5					

# SDQCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.		Ersatzteile Spare Parts								
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f											
A10H SDQCR/L 07	●	●	12.5	10	9	100	20	7	2	Seite / Page: 1.46									
A12K SDQCR/L 07	●	●	17	12	11	125	24	9							DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
A16M SDQCR/L 07	●	●	21	16	15	150	30	11							DC .. 11T3 ..	48.24.108	-	-	56.33.613 (T15)
A20Q SDQCR/L 07	●	●	25	20	18	180	32	13											
A16Q SDQCR/L 11	●	●	21	16	15	180	32	11											
A20Q SDQCR/L 11	●	●	25	20	18	180	32	13											
A25R SDQCR/L 11	●	●	32	25	23	200	40	17	1	Seite / Page: 1.46									
E10M SDQCR/L 07	●	●	14	10	9.5	150	-	7							DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
E12Q SDQCR/L 07	●	●	17	12	11.5	180	-	9											
E16R SDQCR/L 07	●	●	21	16	15.5	200	-	11							DC .. 11T3 ..	48.24.108	-	-	56.33.612 (T08)
E20S SDQCR/L 07	●	○	25	20	19	250	-	13											
E25T SDQCR/L 11	●	○	32	25	24	300	-	17							DC .. 11T3 ..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
E32T SDQCR/L 11	○	○	40	32	30	300	50	22											
E40T SDQCR/L 11	○	○	50	40	38	300	60	27											

# SDUCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.		Ersatzteile Spare Parts								
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f											
A0810H SDUCR/L 07	●	●	12.5	10	9	100	22	7	2	Seite / Page: 1.46									
A1012K SDUCR/L 07	●	●	15.5	12	11	125	28	9							DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
A1216M SDUCR/L 07	●	●	19.5	16	15	150	36	11											
A10H SDUCR/L 07	●	●	14	10	9	100	20	7											
A12K SDUCR/L 07	●	●	17	12	11	125	24	9											
A16M SDUCR/L 07	●	●	21	16	15	150	30	11											
A16M SDUCR/L 11	○	○	20	16	15	150	30	11											
A20Q SDUCR/L 11	●	●	25	20	18	180	32	13											
A25R SDUCR/L 11	●	●	32	25	23	200	40	17											
A32S SDUCR/L 11	●	○	40	32	31	250	50	22											
A40T SDUCR/L 11	○	○	50	40	37	300	60	27	1	Seite / Page: 1.46									
E10M SDUCR/L 07	●	●	14	10	9.5	150	-	7							DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
E12Q SDUCR/L 07	●	●	17	12	11.5	180	-	9											
E16R SDUCR/L 07	●	●	21	16	15.5	200	-	11							DC .. 11T3 ..	48.24.108	-	-	56.33.612 (T08)
E20S SDUCR/L 11	●	○	25	20	19	250	-	13											
E25T SDUCR/L 11	●	○	32	25	24	300	-	17							DC .. 11T3 ..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
E32T SDUCR/L 11	○	○	40	32	31	300	50	22											
E40T SDUCR/L 11	○	○	50	40	38	300	60	27											

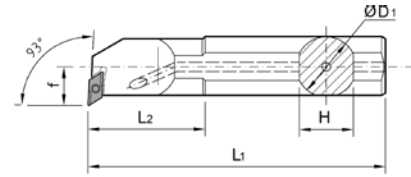
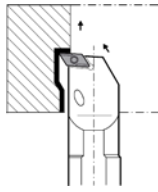
A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant

● JD-Lager / JD-Stock  
○ begrenzte Lagerhaltung - auf Anfrage / limited stock - upon request

# SKUCR/L 93°

Drehen  
Turning



Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.49	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f					
<b>A12K SKUCR/L 11</b>	●	●	17	12	11.5	125	-	9.3	KC-X 1103 **	48.13.104	-	-	56.33.612 (T08)
<b>A16M SKUCR/L 11</b>	●	●	21	16	15	150	-	11.3					
<b>A20Q SKUCR/L 11</b>	●	●	25	20	19	180	-	13.5					
<b>A25R SKUCR/L 11</b>	●	●	32	25	24	200	-	17.0					

A: Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

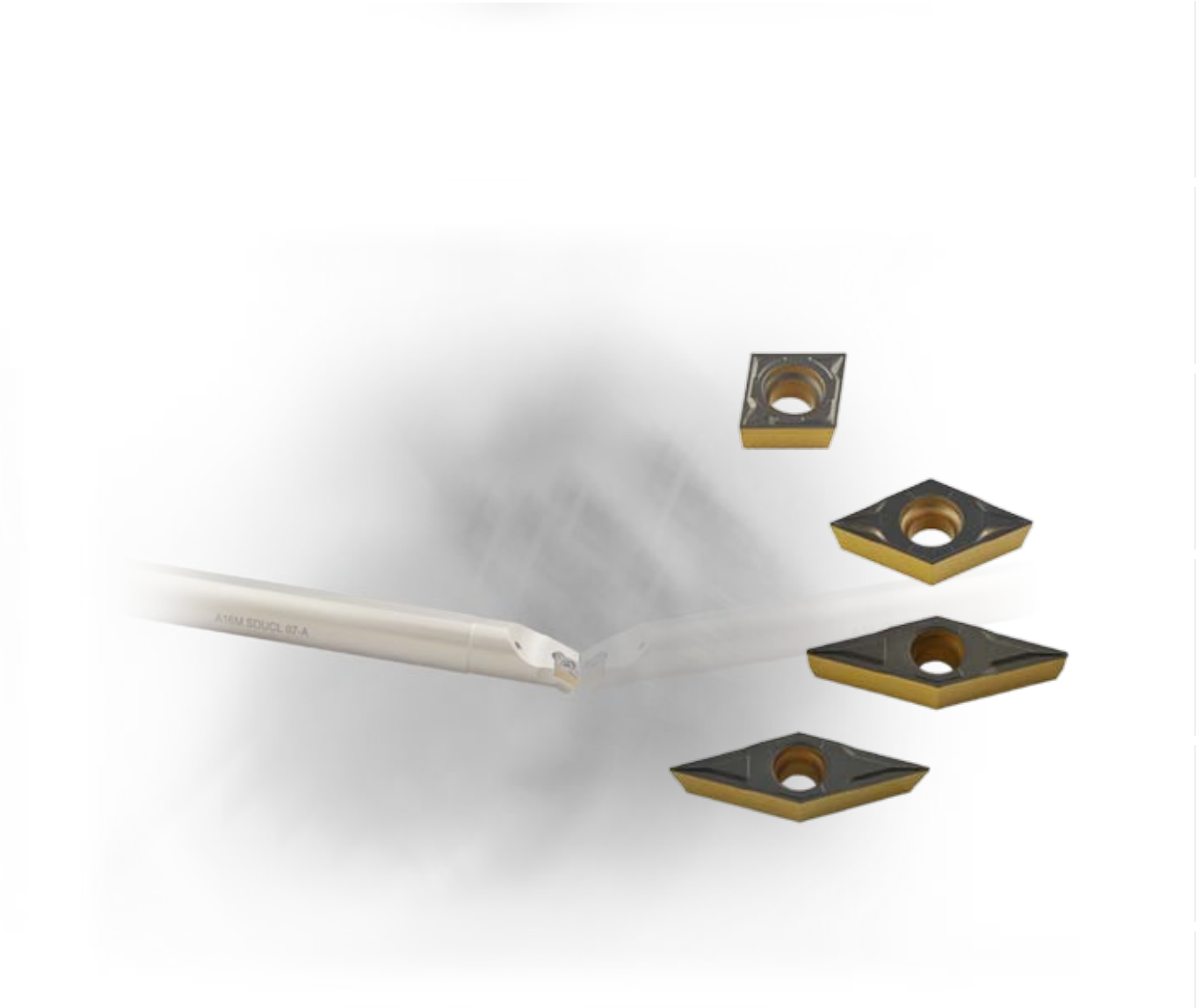
Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

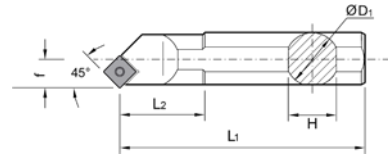
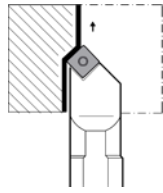
Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills





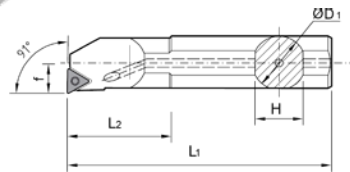
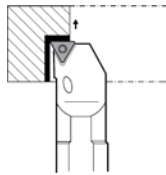
# SSSCR/L 45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.51	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f					
<b>A16M SSSCR/L 09</b>			21	16	15	150	30	11	SC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)
<b>A20Q SSSCR/L 09</b>	●	○	25	20	18	180	32	13					
<b>A25R SSSCR/L 09</b>			32	25	23	200	36	17					
<b>A32S SSSCR/L 12</b>			40	32	31	250	50	22	SC .. 1204 ..	48.13.103	48.13.206	48.13.302	
<b>A40T SSSCR/L 12</b>			49	40	39	300	60	27					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

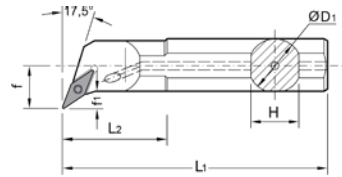
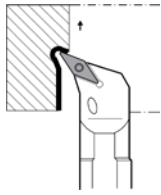
# STFCR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.53	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f					
<b>A12K STFCR/L 11</b>			17	12	11	125	30	9	TC .. 1102 ..	48.24.107	-	-	56.33.612 (T08)
<b>A16Q STFCR/L 11</b>			21	16	15	180	35	11					
<b>A20Q STFCR/L 11</b>			25	20	18	180	36	13					
<b>A25R STFCR/L 16</b>			32	25	23	200	49	17	TC .. 16T3 ..	48.13.102	48.13.207	48.13.301	56.33.613 (T15)
<b>A32S STFCR/L 16</b>			40	32	31	250	50	22					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

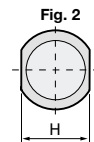
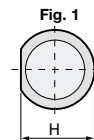
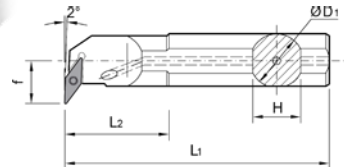
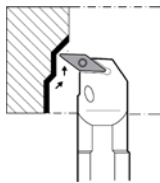
# SVQCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f					
<b>A16Q SVQCR/L 11</b>	●		21	16	15	180	30	11	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
<b>A20Q SVQCR/L 11</b>	○		25	20	18	180	32	13					
<b>A25R SVQCR/L 11</b>	○		32	25	23	200	36	17					
<b>A32S SVQCR/L 16</b>			40	32	30	250	50	22	VC .. 1604 ..	48.13.102	48.13.208	48.13.301	56.33.613 (T15)

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

# SVUCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.	Seite / Page: 1.57	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f						
<b>A16Q SVUCR/L 11</b>	●	○	21	16	15	180	30	11	2	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
<b>A20Q SVUCR/L 11</b>	●	○	25	20	18	180	32	13						
<b>A25R SVUCR/L 11</b>	○	○	32	25	23	200	36	17						
<b>E16R SVUCR/L 11</b>	○	○	21	16	15.5	200	16	11	1	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
<b>E20S SVUCR/L 11</b>	○	○	25	20	19	250	20	13						
<b>E25T SVUCR/L 11</b>	○	○	32	25	24	300	25	17						

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant

# SET A08H-A16M SCLCR/L 95°

## Bohrstangen mit IK Boring Bars with IC



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.42	Ersatzteile Spare Parts				
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>		f				
<b>A08H SCLCR/L 06</b>			10	8	7	100	16	5	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
<b>A10J SCLCR/L 06</b>	•	•	12	10	9	110	20	7					
<b>A12K SCLCR/L 06</b>	•	•	16	12	11	125	22	9					
<b>A16M SCLCR/L 09</b>			20	16	15	150	30	11	CC.. 09T3..	48.24.108			56.33.613 (T15)

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

# SET A10J-A16M SDQCR/L 107,5°

## Bohrstangen mit IK Boring Bars with IC



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>		f				
<b>A10J SDQCR/L 07</b>			12	10	9	110	20	7	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)
<b>A12K SDQCR/L 07</b>	•	•	16	12	11	125	22	9					
<b>A16M SDQCR/L 07</b>			20	16	15	150	30	11					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

# SET A10J-A16M SDUCR/L 93°

Bohrstangen mit IK  
Boring Bars with IC



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f					
<b>A10J SDUCR/L 07</b>			12	10	9	110	20	7	DC-- 0702--	48.24.107	-	-	56.33.612 (T08)
<b>A12K SDUCR/L 07</b>	●	●	16	12	11	125	24	9					
<b>A16M SDUCR/L 07</b>			20	16	15	150	30	11					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM- Fräser  
HDS-/ Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

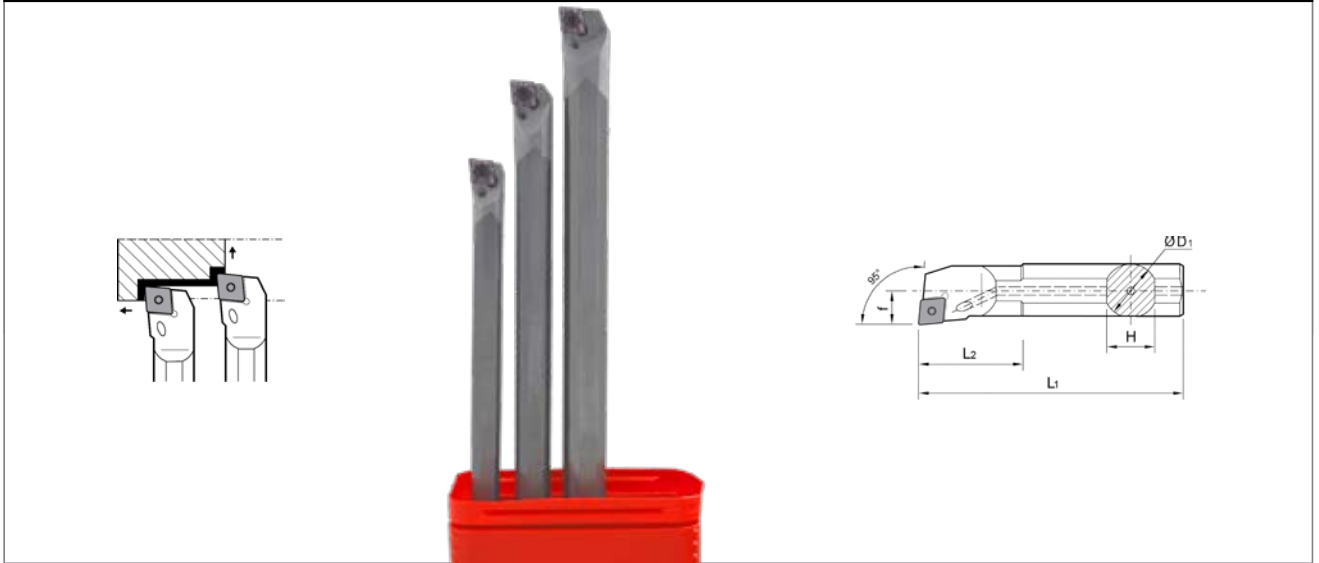
Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

# SET E-SCLCR/L 95°

Hartmetall Bohrstangen mit IK  
Carbide Boring Bars with IC



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:					Seite / Page: 1.42	Ersatzteile Spare Parts								
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>		f								
<b>E08K SCLCR/L 06</b>			11	8	7.5	125	17	5	CC.. 0602..								
<b>E10M SCLCR/L 06</b>	●	●	14	10	9.5	150	20	6						48.24.107	-	-	56.33.612 (T08)
<b>E12Q SCLCR/L 06</b>			17	12	11.5	180	22	9									

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant  
Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

# SET E-SDUCR/L 93°

Hartmetall Bohrstangen mit IK  
Carbide Boring Bars with IC



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:					Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>		f				
<b>E10M SDUCR/L 07</b>			14	10	9.5	150	-	7	DC.. 0702..				
<b>E12Q SDUCR/L 07</b>	●	●	17	12	11.5	180	-	9					

E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant  
Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

# SET A0608H-A1216M SLCR/L 06<sup>95</sup> Abgesetzte Bohrstangen mit IK Boring Bars with IC



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f					
<b>A0608H SLCR/L 06</b>			8	8	7	100	25.0	4.5	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
<b>A0810J SLCR/L 06</b>	●	●	11	10	9	110	32.0	6.0					
<b>A1012K SLCR/L 06</b>			13	12	11	125	38.0	7.0					
<b>A1216M SLCR/L 06</b>			16	16	15	150	50.0	9.0					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

# SET A0810H-A1216M SDUCR/L 07<sup>93</sup> Abgesetzte Bohrstangen mit IK Boring Bars with IC

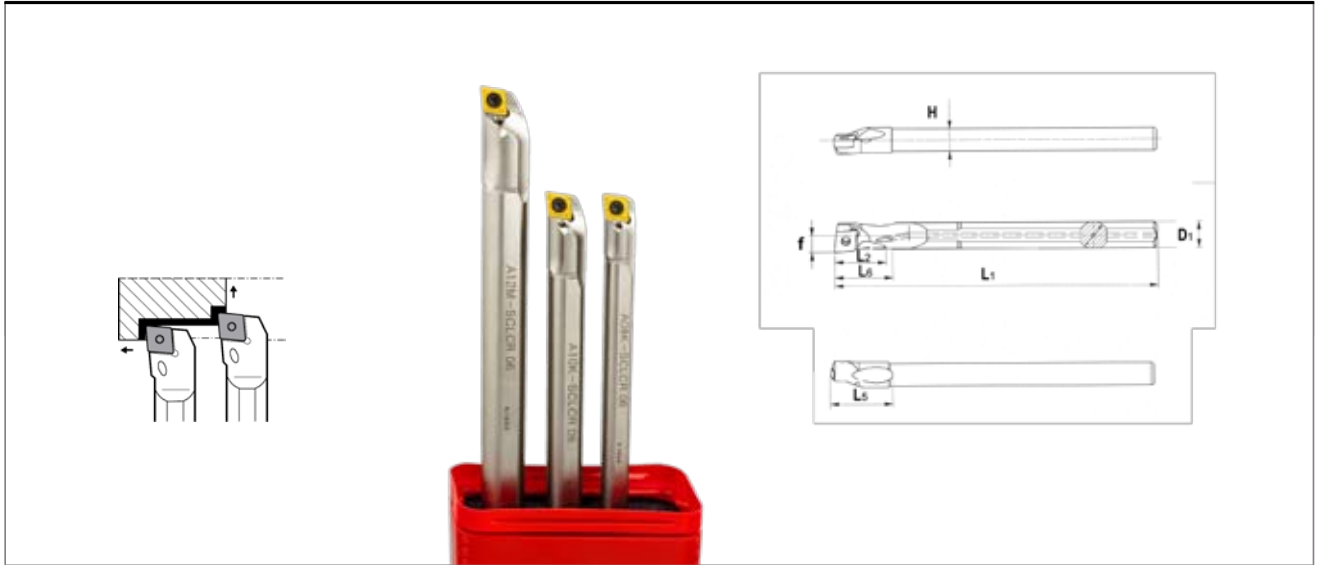


Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f					
<b>A0810H SDUCR/L 07</b>			12.5	10	9	100	22	7	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)
<b>A1012K SDUCR/L 07</b>	●	●	15.5	12	11	125	28	9					
<b>A1216M SDUCR/L 07</b>			19.5	16	15	150	36	11					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

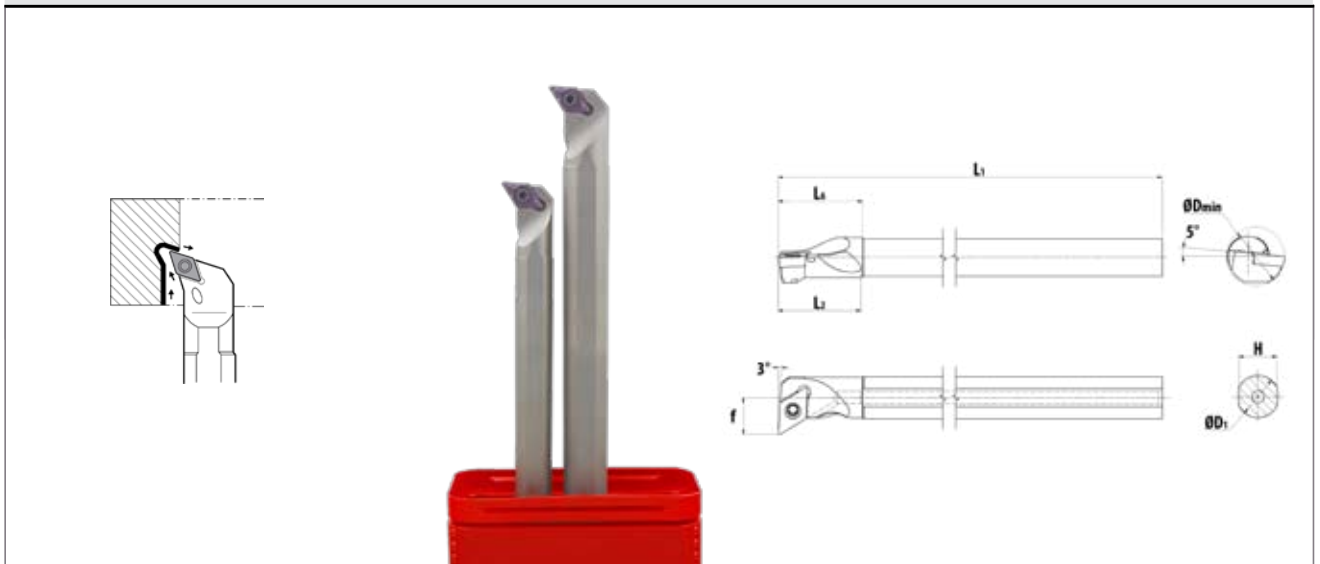
# SET A08K-A12M SCLCR/L 06-CB <sup>95°</sup>Vibrationsreduzierte Bohrstangen Anti Vibration Bars



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:								Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f	L <sub>3</sub>	L <sub>6</sub>					
<b>A08K SCLCR/L 06-CB</b>			10	8	7	125	16	5	20	17	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
<b>A10K SCLCR/L 06-CB</b>	•	•	12	10	9	125	20	6	25	21					
<b>A12M SCLCR/L 06-CB</b>			14	12	11	150	24	7	30	25					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant  
 Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.

# SET A10K-A12M SDUCR/L 07-CB <sup>93°</sup>Vibrationsreduzierte Bohrstangen Anti Vibration Bars



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:								Seite / Page: 1.46	Ersatzteile Spare Parts			
	R	L	Dmin	D <sub>1</sub>	H	L <sub>1</sub>	L <sub>2</sub>	f	L <sub>3</sub>	L <sub>6</sub>					
<b>A10K SDUCR/L 07-CB</b>	•	•	14	10	9	125	20	9	22	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)	
<b>A12M SDUCR/L 07-CB</b>			16	12	11	150	21	11	24						

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant  
 Bitte wählen Sie linkes oder rechtes Set. Please choose left or right set.





# ISO - Bezeichnungssystem für Wendschneidplatten

## ISO Designation System for Indexable Inserts

- Drehen  
Turning
- Fräswerkzeuge  
Milling Tools
- HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills
- Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools
- Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools
- Gewinde-  
werkzeuge  
Threading Tools
- Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 10px;"> <p>80° <b>C</b></p> <p>55° <b>D</b></p> <p>75° <b>E</b></p> <p>86° <b>M</b></p> <p>35° <b>V</b></p> </div> <div style="margin-top: 10px;"> <p>85° <b>A</b></p> <p>82° <b>B</b></p> <p>55° <b>K</b></p> </div> <div style="margin-top: 10px;"> <p><b>H</b></p> <p><b>L</b></p> <p><b>O</b></p> <p><b>P</b></p> <p><b>R</b></p> <p><b>S</b></p> <p><b>T</b></p> <p><b>W</b></p> </div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-top: 20px;"> <p>3° <b>A</b></p> <p>5° <b>B</b></p> <p>7° <b>C</b></p> <p>15° <b>D</b></p> <p>20° <b>E</b></p> <p>25° <b>F</b></p> <p>30° <b>G</b></p> <p>0° <b>N</b></p> <p>11° <b>P</b></p> <p>Sonstige Others <b>O</b></p> </div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <p>Grenzabmaße (mm) Range of tolerance</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>d +/-</th> <th>m +/-</th> <th>s +/-</th> <th>Klasse Class</th> </tr> </thead> <tbody> <tr><td>0.025</td><td>0.005</td><td>0.025</td><td><b>A</b></td></tr> <tr><td>0.025</td><td>0.013</td><td>0.025</td><td><b>C</b></td></tr> <tr><td>0.025</td><td>0.025</td><td>0.025</td><td><b>E</b></td></tr> <tr><td>0.013</td><td>0.005</td><td>0.025</td><td><b>F</b></td></tr> <tr><td>0.025</td><td>0.025</td><td>0.05-0.13</td><td><b>G</b></td></tr> <tr><td>0.013</td><td>0.013</td><td>0.025</td><td><b>H</b></td></tr> <tr><td>0.05-0.15</td><td>0.005</td><td>0.025</td><td><b>J</b></td></tr> <tr><td>0.05-0.15</td><td>0.013</td><td>0.025</td><td><b>K</b></td></tr> <tr><td>0.05-0.15</td><td>0.025</td><td>0.025</td><td><b>L</b></td></tr> <tr><td>0.05-0.15</td><td>0.08-0.2</td><td>0.05-0.13</td><td><b>M</b></td></tr> <tr><td>0.05-0.15</td><td>0.08-0.2</td><td>0.025</td><td><b>N</b></td></tr> <tr><td>0.08-0.25</td><td>0.13-0.38</td><td>0.13</td><td><b>U</b></td></tr> </tbody> </table> </div>	d +/-	m +/-	s +/-	Klasse Class	0.025	0.005	0.025	<b>A</b>	0.025	0.013	0.025	<b>C</b>	0.025	0.025	0.025	<b>E</b>	0.013	0.005	0.025	<b>F</b>	0.025	0.025	0.05-0.13	<b>G</b>	0.013	0.013	0.025	<b>H</b>	0.05-0.15	0.005	0.025	<b>J</b>	0.05-0.15	0.013	0.025	<b>K</b>	0.05-0.15	0.025	0.025	<b>L</b>	0.05-0.15	0.08-0.2	0.05-0.13	<b>M</b>	0.05-0.15	0.08-0.2	0.025	<b>N</b>	0.08-0.25	0.13-0.38	0.13	<b>U</b>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-top: 10px;"> <p><b>A</b></p> <p><b>C</b></p> <p><b>F</b></p> <p><b>G</b></p> <p><b>H</b></p> <p><b>J</b></p> <p><b>M</b></p> <p><b>N</b></p> <p><b>Q</b></p> <p><b>R</b></p> <p><b>T</b></p> <p><b>U</b></p> <p><b>W</b></p> <p>Sonderausführung Special Shape <b>X</b></p> </div> </div>
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Plattenform <i>Shape</i>	Freiwinkel <i>Clearance Angle</i>	Toleranzen <i>Tolerances</i>	Plattentyp <i>Type of Inserts</i>																																																				

**ISO - Bezeichnungssystem für Wendeschneidplatten**  
**ISO Designation System for Indexable Inserts**

							<p><b>F</b></p> <p>Scharf <i>Sharp</i></p>		<p><b>R</b></p>																																																						
<table border="1"> <thead> <tr> <th colspan="3">d (mm)</th> </tr> </thead> <tbody> <tr><td>06</td></tr> <tr><td>08</td></tr> <tr><td>10</td></tr> <tr><td>12</td></tr> <tr><td>16</td></tr> <tr><td>20</td></tr> <tr><td>25</td></tr> <tr><td>32</td></tr> </tbody> </table>			d (mm)			06	08	10	12	16	20	25	32	<table border="1"> <thead> <tr> <th>s (mm)</th> <th>Kennzahl Index</th> </tr> </thead> <tbody> <tr><td>1.59</td><td>01</td></tr> <tr><td>1.98</td><td>T1</td></tr> <tr><td>2.38</td><td>02</td></tr> <tr><td>3.18</td><td>03</td></tr> <tr><td>3.97</td><td>T3</td></tr> <tr><td>4.76</td><td>04</td></tr> <tr><td>5.56</td><td>05</td></tr> <tr><td>6.35</td><td>06</td></tr> <tr><td>7.94</td><td>07</td></tr> <tr><td>9.52</td><td>09</td></tr> <tr><td>11.11</td><td>11</td></tr> <tr><td>12.70</td><td>12</td></tr> </tbody> </table>		s (mm)	Kennzahl Index	1.59	01	1.98	T1	2.38	02	3.18	03	3.97	T3	4.76	04	5.56	05	6.35	06	7.94	07	9.52	09	11.11	11	12.70	12	<table border="1"> <thead> <tr> <th>r (mm)</th> <th>Kennzahl Index</th> </tr> </thead> <tbody> <tr><td>0.2</td><td>02</td></tr> <tr><td>0.4</td><td>04</td></tr> <tr><td>0.8</td><td>08</td></tr> <tr><td>1.2</td><td>12</td></tr> <tr><td>1.6</td><td>16</td></tr> <tr><td>2.4</td><td>24</td></tr> <tr><td>0</td><td>00</td></tr> </tbody> </table> <p>00: Runde Platte (Zoll) <i>Round Insert (inch)</i></p> <p>MO: Runde Platte (metr.) <i>Round Insert (metr.)</i></p>		r (mm)	Kennzahl Index	0.2	02	0.4	04	0.8	08	1.2	12	1.6	16	2.4	24	0	00	<p><b>E</b></p> <p>Gerundet <i>Rounded</i></p>		<p><b>L</b></p>	
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12.70	12																																																														
r (mm)	Kennzahl Index																																																														
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(mm)	(inch)	(mm)	(mm)																																																												
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44	1	25.4	25																																																												

16	04	04	E	R
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Schneidenlänge <i>Length of Cutting Edge</i>	Plattendicke <i>Thickness of Insert</i>	Eckenradius <i>Corner Radius</i>	Schneidkante <i>Cutting Edge</i>	Schneidrichtung <i>Cutting Direction</i>
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Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

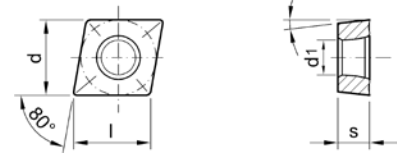
Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

CC

Drehen  
Turning



Fräswerkzeuge  
Milling Tools

Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	○
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>03 01 02 L</b>					●								○	3.30	3.50	1.39	1.90	0,01~0,05	0,10~0,30
	<b>03 01 02 R</b>					○								○	3.30	3.50	1.39	1.90	0,01~0,10	0,10~0,30
	<b>04 01 02 L</b>					○								○	4.10	4.30	1.79	2.30	0,01~0,10	0,10~0,50
	<b>04 01 02 R</b>					○								○	4.10	4.30	1.79	2.30	0,01~0,10	0,10~0,50

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	○
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

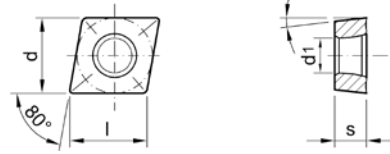
Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]	
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s
	<b>06 02 02 - ALX</b>	●	●									●	●	6.20	6.35	2.38	2.80	0,01~0,30	0,05~3,00
	<b>06 02 04 - ALX</b>	●	●									●	●	6.00	6.35	2.38	2.80	0,02~0,40	0,10~3,00
	<b>09 T3 02 - ALX</b>	●	●									●	●	9.40	9.52	3.97	4.40	0,01~0,30	0,05~3,00
	<b>09 T3 04 - ALX</b>	●	●									●	●	9.20	9.52	3.97	4.40	0,02~0,40	0,10~4,00
	<b>09 T3 08 - ALX</b>	●	●									●	●	8.80	9.52	3.97	4.40	0,03~0,50	0,10~5,00
	<b>12 04 02 - ALX</b>	○	●									●	●	12.60	12.70	4.76	5.50	0,01~0,30	0,50~5,00
	<b>12 04 04 - ALX</b>	●	●									●	●	12.40	12.70	4.76	5.50	0,02~0,40	0,10~5,00
	<b>12 04 08 - ALX</b>	●	●									●	●	12.00	12.70	4.76	5.50	0,03~0,50	0,10~5,00

Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

CC



80°



Werkstück / Workpiece	Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H														○

Machinentyp / Machining types  
 ● Hauptanwendung / Main application  
 ○ Nebenanwendung / Additional application

Wendepplatten / Inserts	Bezeichnung / Part Number	Beschichtet / Coated											Unbeschichtet / Uncoated	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]			
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TW 5725	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>m</sub> (mm/rev)
	<b>06 02 02 -F30</b>															6.30	6.35	2.38	2.80	0,03~0,11	0,06~1,70
	<b>06 02 04 -F30</b>															6.00	6.35	2.38	2.80	0,05~0,17	0,10~1,70
	<b>09 T3 02 -F30</b>															9.50	9.52	3.97	4.40	0,04~0,15	0,08~2,00
	<b>09 T3 04 -F30</b>															9.20	9.52	3.97	4.40	0,06~0,23	0,11~2,00
	<b>12 04 02 -F30</b>															12.70	12.70	4.76	5.50	0,05~0,15	0,10~2,00
	<b>12 04 04 -F30</b>															12.40	12.70	4.76	5.50	0,07~0,27	0,14~2,00
	<b>06 02 04 -JTM</b>																			0,06~0,20	0,20~2,00
	<b>06 02 08 -JTM</b>																			0,08~0,30	0,20~2,00
	<b>09 T3 04 -JTM</b>																			0,06~0,20	0,20~3,00
	<b>09 T3 08 -JTM</b>																			0,10~0,30	0,30~3,00
	<b>12 04 04 -JTM</b>																			0,05~0,25	0,20~1,50
	<b>12 04 08 -JTM</b>																			0,20~0,40	0,80~3,50
	<b>06 02 04 -M30</b>				●											6.00	6.35	2.38	2.80	0,05~0,20	0,40~1,00
	<b>06 02 08 -M30</b>																			0,05~0,25	0,40~1,00
	<b>09 T3 04 -M30</b>				●															0,05~0,20	0,40~1,50
	<b>09 T3 08 -M30</b>				●															0,05~0,25	0,40~1,50
	<b>12 04 04 -M30</b>				●															0,05~0,20	0,50~2,00
	<b>12 04 08 -M30</b>				●															0,05~0,25	0,50~2,00
	<b>06 02 04 -MD</b>															6.00	6.35	2.38	2.80	0,06~0,17	0,20~2,30
	<b>06 02 08 -MD</b>																			0,08~0,23	0,40~2,30
	<b>09 T3 04 -MD</b>																			0,06~0,17	0,20~2,50
	<b>09 T3 08 -MD</b>																			0,08~0,23	0,30~2,50
	<b>12 04 04 -MD</b>																			0,06~0,17	0,30~3,50
	<b>12 04 08 -MD</b>																			0,08~0,23	0,50~3,50

Drehen / Turning

Fräswerkzeuge / Milling Tools

HDS-/VHM-Fräser / Solid Carbide Endmills

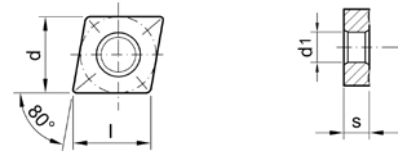
Stech- und Abstechwerkzeuge / Grooving and Parting off Tools

Mini/ Micro Schneidwerkzeuge / Mini/ Micro Tools

Gewinde- werkzeuge / Threading Tools

Wendepplattenbohrer / VHM-Bohrer / Indexable Drills / Solid Carbide Drills

CN



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Werkstück/Worpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]				
	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○							
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○							
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○							
Gehärteter Stahl / Hardened steel	H													○							

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Wendepplatten Inserts	Bezeichnung Part Number	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025	TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
	<b>CNGG-A20</b> 12 04 04 - A20	○	●	●											●	12.40	12.70	4.76	5.16	0,05~0,28	0,23~4,80
	12 04 08 - A20	○	●	●											●	12.00	12.70	4.76	5.16	0,10~0,40	0,80~3,50

Werkstück/Worpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]				
	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○							
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○							
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○							
Gehärteter Stahl / Hardened steel	H													○							

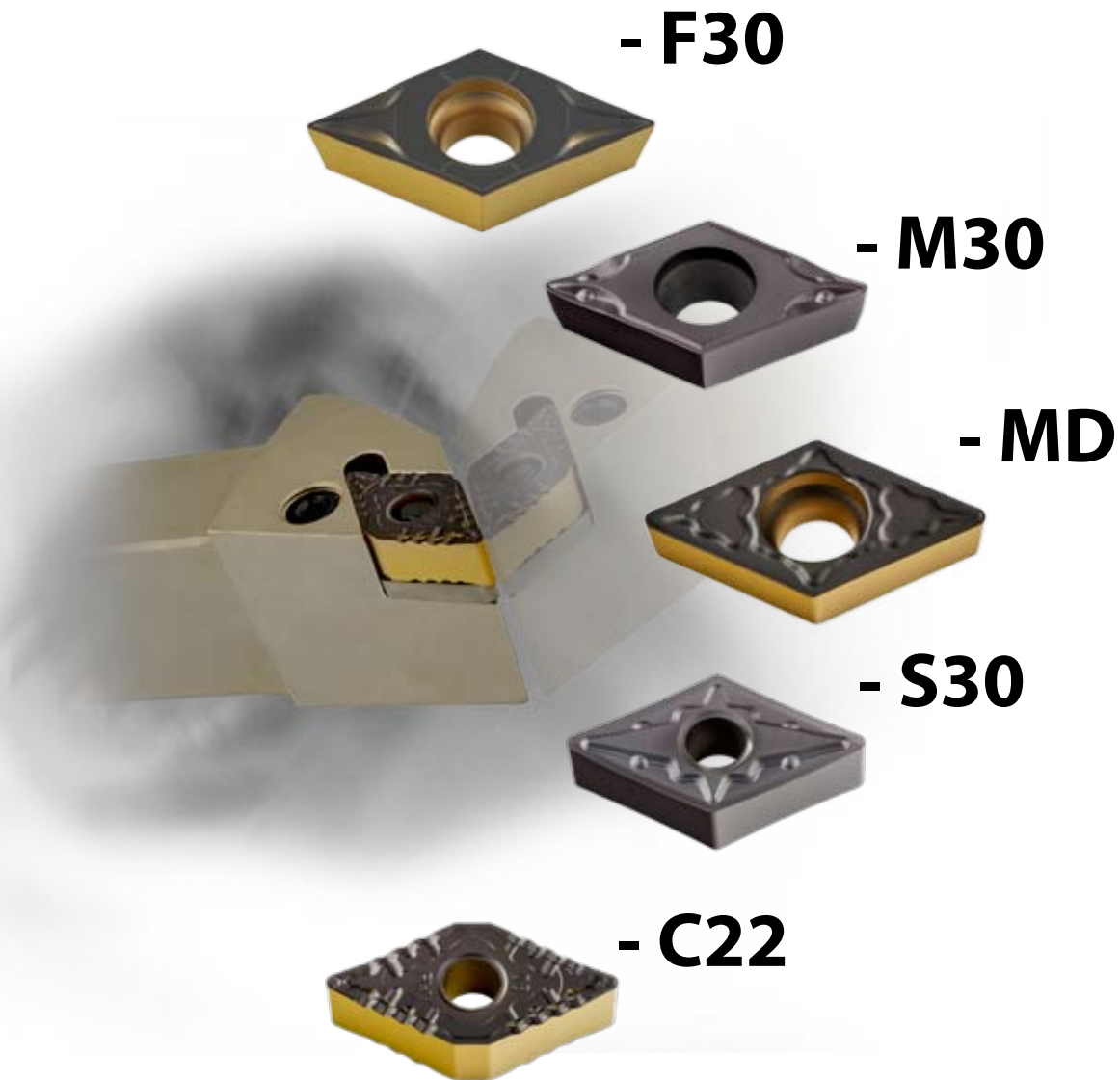
**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Wendepplatten Inserts	Bezeichnung Part Number	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025	TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
	<b>CNMG-C22</b> 12 04 04 - C22										●					12.40	12.70	4.76	5.16	0,05~0,30	0,60~3,50
	12 04 08 - C22										●					12.00	12.70	4.76	5.16	0,10~0,40	0,80~4,00
	<b>CNMG-JBF</b> 12 04 04 - JBF													●		12.40	12.70	4.76	5.16	0,08~0,18	0,10~2,00
	12 04 08 - JBF													●		12.00	12.70	4.76	5.16	0,10~0,35	0,10~2,50
	<b>CNMG-JBM</b> 12 04 04 - JBM													●		12.40	12.70	4.76	5.16	0,10~0,25	0,35~3,00
	12 04 08 - JBM													●		12.00	12.70	4.76	5.16	0,10~0,40	0,40~3,50
	12 04 12 - JBM													●		11.60	12.70	4.76	5.16	0,13~0,50	0,40~3,50
	<b>CNMG-JBR</b> 12 04 04 - JBR													●		12.40	12.70	4.76	5.16	0,15~0,40	0,40~4,50
	12 04 08 - JBR													●		12.00	12.70	4.76	5.16	0,25~0,55	1,20~5,00
	12 04 12 - JBR													○		11.60	12.70	4.76	5.16	0,25~0,70	1,75~8,00
	<b>CNMG-MD</b> 12 04 04 - MD										●					12.40	12.70	4.76	5.16	0,05~0,35	0,80~4,50
	12 04 08 - MD										●					12.00	12.70	4.76	5.16	0,08~0,45	1,00~4,50
	12 04 12 - MD										○					11.60	12.70	4.76	5.16	0,10~0,50	1,20~4,50
	<b>CNMG-S30</b> 12 04 04 - S30			●												12.40	12.70	4.76	5.16	0,05~0,25	0,50~4,50
	12 04 08 - S30			●												12.00	12.70	4.76	5.16	0,10~0,40	0,50~4,50

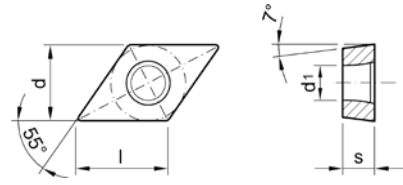
# Unsere bewährten Geometrien

## *Our well known geometries*



# DC □ □

Drehen  
Turning



Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>DCGT-ALX</b> 07 02 02 - ALX	●	●										●	●	7.50	6.35	2.38	2.80	0,01~0,30	0,05~3,00
	07 02 04 - ALX	●	○											●	7.30	6.35	2.38	2.80	0,02~0,40	0,10~4,00
	07 02 08 - ALX		○												6.80	6.35	2.38	2.80	0,02~0,40	0,10~4,00
	11 T3 02 - ALX	●	●											●	11.40	9.52	3.97	4.40	0,02~0,30	0,05~4,00
	11 T3 04 - ALX	●	●											●	11.20	9.52	3.97	4.40	0,03~0,50	0,10~5,00
	11 T3 08 - ALX	●	●											●	10.80	9.52	3.97	4.40	0,03~0,50	0,10~5,00
	<b>DCMT-F30</b> 07 02 02 - F30												●		7.50	6.35	2.38	2.80	0,03~0,11	0,06~1,50
	07 02 04 - F30												●		7.30	6.35	2.38	2.80	0,05~0,17	0,10~1,50
	11 T3 02 - F30												●		11.60	9.52	3.97	4.40	0,04~0,15	0,08~2,00
	11 T3 04 - F30												●		11.20	9.52	3.97	4.40	0,06~0,23	0,11~2,00
	<b>DCMT-JTM</b> 07 02 04 - JTM												●		7.30	6.35	2.38	2.80	0,06~0,20	0,20~2,00
	07 02 08 - JTM												●		7.10	6.35	2.38	2.80	0,08~0,30	0,20~2,00
	11 T3 04 - JTM												●		11.20	9.52	3.97	4.40	0,08~0,25	0,30~3,00
	11 T3 08 - JTM												●		10.80	9.52	3.97	4.40	0,10~0,35	0,30~3,00
	11 T3 12 - JTM												○		10.40	9.52	3.97	4.40	0,05~0,25	0,20~1,50
	<b>DCMT-M30</b> 07 02 04 - M30				●								●		7.30	6.35	2.38	2.80	0,05~0,20	0,20~1,50
	07 02 08 - M30				●								●		7.10	6.35	2.38	2.80	0,05~0,25	0,20~1,50
	11 T3 04 - M30				●								●		11.20	9.52	3.97	4.40	0,08~0,23	0,25~2,00
	11 T3 08 - M30				●								●		10.80	9.52	3.97	4.40	0,08~0,25	0,25~2,00
	<b>DCMT-MD</b> 07 02 04 - MD												●		7.30	6.35	2.38	2.80	0,06~0,17	0,20~2,40
	11 T3 04 - MD												●		11.20	9.52	3.97	4.40	0,06~0,17	0,30~3,00
	11 T3 08 - MD												●		10.80	9.52	3.97	4.40	0,08~0,23	0,50~3,00



# Unsere neuen Geometrien

## *Our new geometries*

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

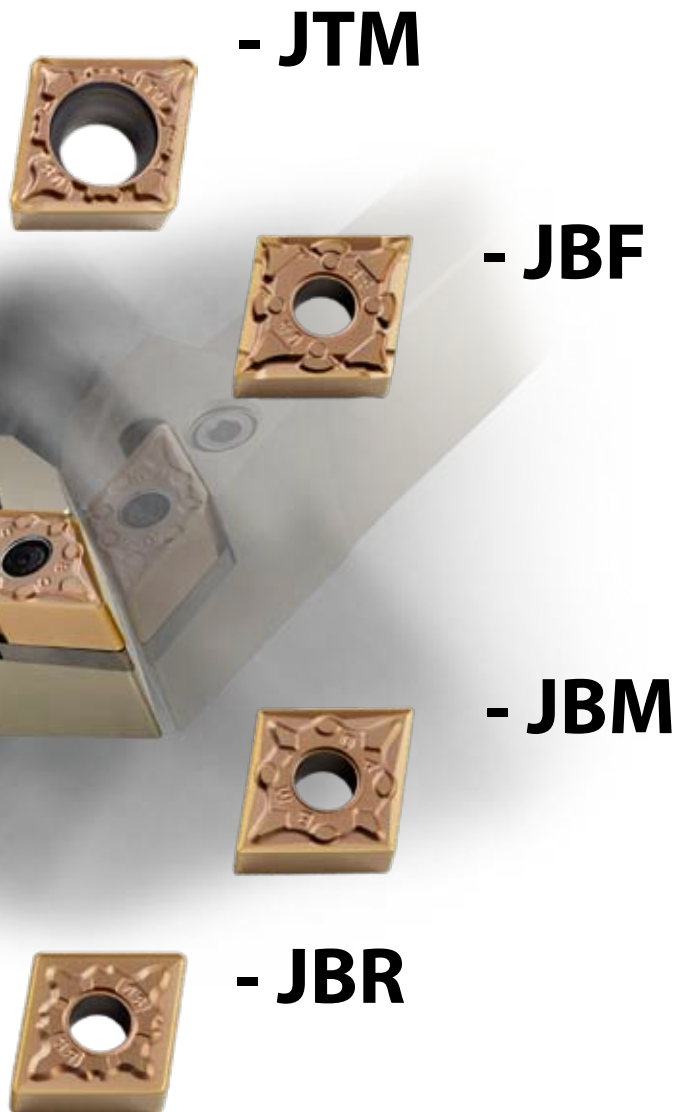
HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

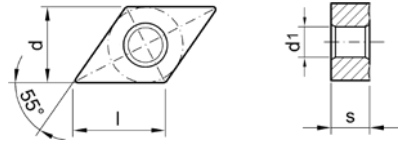
Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills



DN

Drehen  
Turning



Fräswerkzeuge  
Milling Tools

Werkstück/Worpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]				
	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○							
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○							
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○							
Gehärteter Stahl / Hardened steel	H													○							
<b>DNGG-A20</b> 	<b>15 06 04 - A20</b>	○	●	●										●	15.50	12.70	6.35	5.16	0,05~0,25	0,80~3,50	
	<b>15 06 08 - A20</b>	○	●	●										●	15.50	12.70	6.35	5.16	0,05~0,40	0,80~3,50	

Machinentyp  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Werkstück/Worpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]				
	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○							
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○							
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○							
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○							
Gehärteter Stahl / Hardened steel	H													○							
<b>DNMG-C22</b> 	<b>15 06 04 - C22</b>													○	12.70	12.70	6.35	5.16	0,05~0,30	0,50~3,50	
	<b>15 06 08 - C22</b>													●	12.40	12.70	6.35	5.16	0,10~0,40	0,70~4,00	
<b>DNMG-JBF</b> 	<b>15 06 04 - JBF</b>													○	15.10	12.70	6.35	5.16	0,08~0,18	0,10~2,00	
	<b>15 06 08 - JBF</b>													○	14.70	12.70	6.35	5.16	0,10~0,35	0,10~2,50	
<b>DNMG-JBM</b> 	<b>15 04 04 - JBM</b>													○	15.10	12.70	4.76	3.81	0,10~0,25	0,35~3,00	
	<b>15 04 08 - JBM</b>													○	14.70	12.70	4.76	3.81	0,10~0,40	0,40~3,50	
	<b>15 06 12 - JBM</b>													○	14.40	12.70	4.76	5.16	0,13~0,50	0,80~4,50	
	<b>15 06 04 - JBM</b>													●	15.10	12.70	6.35	5.16	0,10~0,25	0,40~3,00	
	<b>15 06 08 - JBM</b>													●	14.70	12.70	6.35	5.16	0,10~0,40	0,50~5,50	
	<b>15 06 12 - JBM</b>													○	14.40	12.70	6.35	5.16	0,10~0,55	0,80~5,00	
<b>DNMG-MD</b> 	<b>11 04 04 - MD</b>													●	11.20	9.52	4.76	3.81	0,05~0,35	0,80~5,00	
	<b>11 04 08 - MD</b>													●	10.80	9.52	4.76	3.81	0,05~0,35	0,80~5,00	
	<b>15 06 04 - MD</b>													●	15.10	12.70	6.35	5.16	0,05~0,35	0,80~5,00	
	<b>15 06 08 - MD</b>													●	14.70	12.70	6.35	5.16	0,08~0,45	1,00~5,00	
	<b>15 06 12 - MD</b>													○	14.40	12.70	6.35	5.16	0,10~0,50	1,20~5,00	
<b>DNMG-S30</b> 	<b>15 06 04 - S30</b>			●											15.10	12.70	6.35	5.16	0,05~0,25	0,50~4,00	
	<b>15 06 08 - S30</b>			●											14.70	12.70	6.35	5.16	0,10~0,40	1,00~4,50	

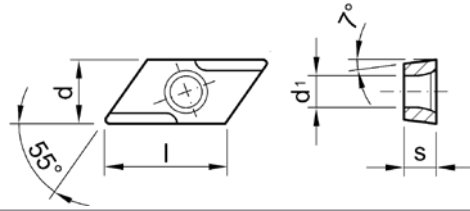
Machinentyp  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

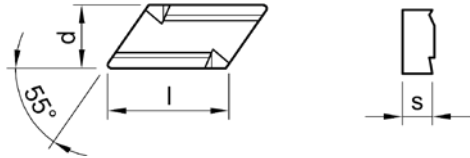
Wendelplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

**KC**  


Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d <sub>1</sub>
	<b>KCGX-FL</b>		○											○	11.60	6.35	3.18	2.80	0,05~0,10	0,10~1,50
	<b>11 03 01 - FL</b>		○											○	11.60	6.35	3.18	2.80	0,07~0,10	0,30~3,00
	<b>11 03 02 - FL</b>	●												●	11.60	6.35	3.18	2.80	0,07~0,20	0,50~3,00
	<b>11 03 04 - FL</b>	●												●	11.60	6.35	3.18	2.80	0,10~0,40	0,50~3,50
	<b>11 03 08 - FL</b>	●												●	11.60	6.35	3.18	2.80	0,10~0,40	0,50~3,50
	<b>KCGX-FR</b>		○											○	11.60	6.35	3.18	2.80	0,05~0,10	0,10~1,50
	<b>11 03 01 - FR</b>		○											○	11.60	6.35	3.18	2.80	0,07~0,10	0,30~3,00
	<b>11 03 02 - FR</b>	●												●	11.60	6.35	3.18	2.80	0,07~0,20	0,50~3,00
	<b>11 03 04 - FR</b>	●												●	11.60	6.35	3.18	2.80	0,07~0,20	0,50~3,00
	<b>11 03 08 - FR</b>	●												●	11.60	6.35	3.18	2.80	0,10~0,40	0,50~3,00

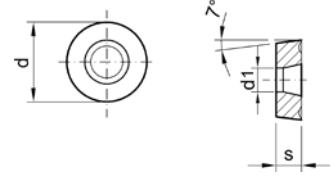
**KN**  


Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>KNUX-11</b>				●										19.20	9.52	4.76	-	0,20~0,35	1,00~6,00
	<b>16 04 05 - L11</b>									○	●				19.20	9.52	4.76	-	0,20~0,35	1,00~6,00
	<b>16 04 05 - R11</b>									○					18.80	9.52	4.76	-	0,30~0,60	1,50~6,00
	<b>16 04 10 - L11</b>									○					18.80	9.52	4.76	-	0,30~0,60	1,50~6,00
	<b>16 04 10 - R11</b>									○					18.80	9.52	4.76	-	0,30~0,60	1,50~6,00
	<b>KNUX-12</b>									○					19.20	9.52	4.76	-	0,25~0,35	1,50~6,00
	<b>16 04 05 - R12</b>									○					18.80	9.52	4.76	-	0,40~0,70	1,50~6,00
	<b>16 04 10 - L12</b>									○					18.80	9.52	4.76	-	0,40~0,70	1,50~6,00
	<b>16 04 10 - R12</b>									○					18.80	9.52	4.76	-	0,40~0,70	1,50~6,00

# RC



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendelplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
	TK 5310	TK 5510	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○						
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○						
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○						
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○						
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○	○						
Gehärteter Stahl / Hardened steel	H													○						

Wendeplatten Inserts	Bezeichnung Part Number	TK 5310	TK 5510	TK 5710	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025	TP 5345	TWS7225	TK 1210	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)	
	<b>RCGT-ALX</b>														●	10.00	3.18	4.00	4.00	0,10~0,30	1,00~3,00	
	<b>10 03 MO - ALX</b>	○		●													12.00	4.76	4.40	4.40	0,10~0,35	1,00~3,50
	<b>12 04 MO - ALX</b>	○		●											●							

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	○						
Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○						
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○						
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○						
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	○	○	○	○	○	○	○	○	○	○	○						
Gehärteter Stahl / Hardened steel	H													○						

Wendeplatten Inserts	Bezeichnung Part Number	TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025	TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
	<b>RCMT</b>																6.00	2.38	-	0,04-0,17	0,50-2,40
	<b>06 02 MO - JCP</b>																8.00	3.18	-	0,10-0,80	0,80-3,20
	<b>08 03 MO - JST</b>																10.00	3.97	-	0,16-1,40	1,00-4,00
	<b>10 T3 MO - JST</b>																12.00	4.76	-	0,20-1,80	1,20-4,80
	<b>12 04 MO - JST</b>																				

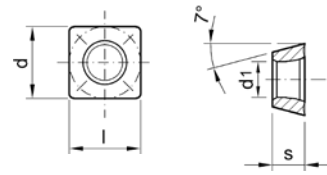
**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

SC



90°



Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>09 T3 02 - ALX</b>													○	9.30	9.52	3.97	4.40	0,02~0,40	0,10~4,00
	<b>09 T3 04 - ALX</b>	●		●										●	9.10	9.52	3.97	4.40	0,02~0,40	0,10~4,00
	<b>09 T3 08 - ALX</b>	●		●										●	8.70	9.52	3.97	4.40	0,03~0,50	0,10~5,00
	<b>12 04 04 - ALX</b>	●		●										●	12.30	12.70	4.76	5.50	0,02~0,40	0,10~5,00
	<b>12 04 08 - ALX</b>	○		●										●	11.90	12.70	4.76	5.50	0,03~0,50	0,10~5,00

Werkstück/Worpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		

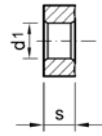
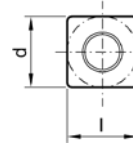
Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>09 T3 04 - F30</b>													○	9.10	9.52	3.97	4.40	0,06~0,23	0,11~2,00
	<b>12 04 04 - F30</b>													○	12.30	12.70	4.76	5.50	0,07~0,27	0,14~2,00
	<b>09 T3 04 - JTM</b>													●	9.10	9.52	3.97	4.40	0,08~0,25	0,30~3,00
	<b>09 T3 08 - JTM</b>													●	8.70	9.52	3.97	4.40	0,10~0,30	0,30~3,00
	<b>12 04 04 - JTM</b>													●	12.30	12.70	4.76	5.56	0,10~0,25	0,30~3,50
	<b>12 04 08 - JTM</b>													●	11.90	12.70	4.76	5.56	0,15~0,35	0,30~4,00
	<b>12 04 12 - JTM</b>													○	11.50	12.70	4.76	5.56	0,05~0,25	0,20~1,50
	<b>12 04 08 - M30</b>				●								●	11.90	12.70	4.76	5.56	0,08~0,25	0,25~2,00	
	<b>09 T3 04 - MD</b>													●	9.10	9.52	3.97	4.40	0,06~0,17	0,20~2,50
	<b>09 T3 08 - MD</b>													○	8.70	9.52	3.97	4.40	0,08~0,23	0,30~2,50
	<b>12 04 08 - MD</b>													○	11.90	12.70	4.76	5.50	0,08~0,23	0,50~3,50

SN

Drehen  
Turning



90°



Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

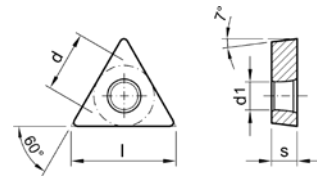
Werkstück/Worpiece	Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
Gehärteter Stahl / Hardened steel	H															○	

Machinentyp  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+		TP 5025	TP 5345	TW 5725	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>SNMG-JBF</b> 12 04 04 - JBF													●	12.30	12.70	4.76	5.16	0,08~0,18	0,10~2,00
	12 04 08 - JBF													●	11.90	12.70	4.76	5.16	0,10~0,40	0,30~5,50
	<b>SNMG-JBM</b> 12 04 04 - JBM													●	12.30	12.70	4.76	5.16	0,10~0,25	0,40~3,00
	12 04 08 - JBM													●	11.90	12.70	4.76	5.16	0,10~0,40	0,40~3,50
	12 04 12 - JBM													●	11.50	12.70	4.76	5.16	0,13~0,50	0,80~4,50
	<b>SNMG-JBR</b> 12 04 08 - JBR													●	11.90	12.70	4.76	5.16	0,15~0,40	0,40~4,50
	12 04 12 - JBR													●	11.50	12.70	4.76	5.16	0,25~0,55	1,20~4,50

# TC



Werkstück/Workpiece	Stahl / Steel	A (P)																
	Rostfreier Stahl / Stainless steel	R (M)																
	Guss / Cast iron	F (K)																
	Nichtmet. Werkstoffe / Non-fer. metall.	N																
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																
Gehärteter Stahl / Hardened steel	H																	

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TW57225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
	<b>11 02 02 - ALX</b>	○		●											●	10.50	6.35	2.38	2.80	0,01~0,30	0,05~5,50
	<b>11 02 04 - ALX</b>	○		●											●	10.00	6.35	2.38	2.80	0,02~0,40	0,10~4,00
	<b>11 02 08 - ALX</b>	○		●											●	9.00	6.35	2.38	2.80	0,03~0,50	0,10~5,00
	<b>16 T3 02 - ALX</b>	○		○											○	15.00	9.52	3.97	4.40	0,01~0,30	0,05~4,50
	<b>16 T3 04 - ALX</b>	○		●											●	15.50	9.52	3.97	4.40	0,02~0,40	0,10~5,00
<b>16 T3 08 - ALX</b>	○		●											●	14.50	9.52	3.97	4.40	0,03~0,50	0,10~5,00	

Werkstück/Workpiece	Stahl / Steel	A (P)																
	Rostfreier Stahl / Stainless steel	R (M)																
	Guss / Cast iron	F (K)																
	Nichtmet. Werkstoffe / Non-fer. metall.	N																
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																
Gehärteter Stahl / Hardened steel	H																	

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TW57225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
	<b>09 02 04 - F30</b>															9.00	5.56	2.38	2.50	0,05~0,19	0,10~1,70
	<b>11 02 04 - F30</b>															10.00	6.35	3.18	2.80	0,05~0,19	0,10~1,70
	<b>16 T3 04 - F30</b>															15.50	9.52	3.97	4.40	0,06~0,23	0,11~2,00
	<b>11 02 04 - JTM</b>														○	10.00	6.35	2.38	2.80	0,08~0,25	0,30~3,00
	<b>11 02 08 - JTM</b>														○	9.00	6.35	2.38	2.80	0,10~0,30	0,30~3,00
	<b>16 T3 04 - JTM</b>														●	15.50	9.52	3.97	4.40	0,05~0,25	0,20~1,50
	<b>16 T3 08 - JTM</b>														●	14.50	9.52	3.97	4.40	0,10~0,30	0,30~3,00
	<b>16 T3 12 - JTM</b>														○	13.50	9.52	3.97	4.40	0,05~0,25	0,20~1,50

# TN

Drehen  
Turning



Fräswerkzeuge  
Milling Tools

Werkstück/Worpiece	Stahl / Steel	A (P)																	
	Rostfreier Stahl / Stainless steel	R (M)																	
	Guss / Cast iron	F (K)																	
	Nichtmet. Werkstoffe / Non-fer. metall.	N																	
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																	
Gehärteter Stahl / Hardened steel	H																		

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]				
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)
	<b>16 04 04 - A20</b>																15.50	9.52	4.76	3.80	0,12~0,30	1,00~3,50
	<b>16 04 08 - A20</b>																	14.50	9.52	4.76	3.80	0,15~0,35

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Werkstück/Worpiece	Stahl / Steel	A (P)																	
	Rostfreier Stahl / Stainless steel	R (M)																	
	Guss / Cast iron	F (K)																	
	Nichtmet. Werkstoffe / Non-fer. metall.	N																	
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																	
Gehärteter Stahl / Hardened steel	H																		

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]						
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)		
	<b>16 04 04 - JBF</b>																	15.50	9.52	4.76	3.81	0,08~0,18	0,10~2,00	
	<b>16 04 08 - JBF</b>																		14.50	9.52	4.76	3.81	0,10~0,35	0,10~2,50
	<b>16 04 12 - JBF</b>																							

Gewinde-  
werkzeuge  
Threading Tools

	<b>16 04 04 - JBM</b>																		15.50	9.52	4.76	3.81	0,10~0,25	0,40~3,00	
	<b>16 04 08 - JBM</b>																			14.50	9.52	4.76	3.81	0,10~0,40	0,40~3,50
	<b>16 04 12 - JBM</b>																			13.50	9.52	4.76	3.81	0,13~0,50	0,80~4,50

Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

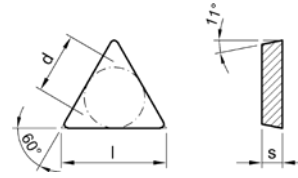
	<b>16 04 08 - JBR</b>																		14.50	9.52	4.76	3.81	0,14~0,40	0,40~4,50
	<b>16 04 12 - JBR</b>																			13.50	9.52	4.76	3.81	0,25~0,55

	<b>16 04 04 - MD</b>																		15.50	9.52	4.76	3.81	0,05~0,35	0,80~4,50	
	<b>16 04 08 - MD</b>																			14.50	9.52	4.76	3.81	0,08~0,45	1,00~4,50
	<b>22 04 08 - MD</b>																			20.80	12.70	4.76	5.16	0,10~0,50	1,00~6,00

	<b>16 04 04 - ER</b>																		15.50	9.52	4.76	3.81	0,10~0,30	0,80~3,00
	<b>16 04 08 - ER</b>																			14.50	9.52	4.76	3.81	0,12~0,35



# TP



Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	○	Machinentyp / Machining types	Maße / Dimensions [mm]		Schnittdaten / Cutting Data [mm]			
	Rostfreier Stahl / Stainless steel	R (M)	○	●	○	○	○	○	○	○	○	○		●	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	15.50	9.52	3.18	-	0,08~0,25	0,50~4,00
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	15.50	9.52	3.18	-	0,08~0,25	0,50~4,00
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○						
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○						

Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	●	●	●	●	●	●	○	Machinentyp / Machining types	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]	
	Rostfreier Stahl / Stainless steel	R (M)	○	●	○	○	○	○	○	○	○	○		●	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	15.50	9.52	3.18	-	0,08~0,25	1,00~5,00
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○						
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○						
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○						

Drehen / Turning

Fräswerkzeuge / Milling Tools

HDS-/VHM-Fräser / Solid Carbide Endmills

Stech- und Abstechwerkzeuge / Grooving and Parting off Tools

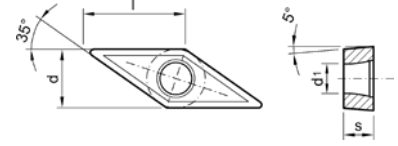
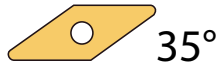
Mini/ Micro Schneidwerkzeuge / Mini/ Micro Tools

Gewinde- werkzeuge / Threading Tools

Wendeplattenbohrer / VHM-Bohrer / Indexable Drills / Solid Carbide Drills

# VB

Drehen  
Turning



Fräswerkzeuge  
Milling Tools

Werkstück/Worpiece	Stahl / Steel	A (P)																		
	Rostfreier Stahl / Stainless steel	R (M)																		
	Guss / Cast iron	F (K)																		
	Nichtmet. Werkstoffe / Non-fer. metall.	N																		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																		
Gehärteter Stahl / Hardened steel	H																			

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]																	
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)													
	<b>11 03 02 - ALX</b>																																		
	<b>11 03 04 - ALX</b>																																		
	<b>16 04 04 - ALX</b>																																		
	<b>16 04 08 - ALX</b>																																		

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Werkstück/Worpiece	Stahl / Steel	A (P)																		
	Rostfreier Stahl / Stainless steel	R (M)																		
	Guss / Cast iron	F (K)																		
	Nichtmet. Werkstoffe / Non-fer. metall.	N																		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																		
Gehärteter Stahl / Hardened steel	H																			

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]																
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)	a <sub>p</sub> (mm)												
	<b>16 04 04 - F30</b>																																	

Gewinde-  
werkzeuge  
Threading Tools

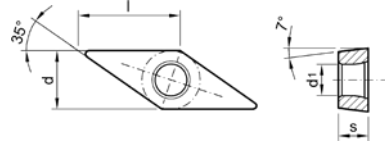
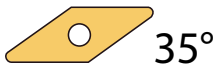
	<b>11 03 04 - JTM</b>																																		
	<b>11 03 08 - JTM</b>																																		
	<b>16 04 04 - JTM</b>																																		
	<b>16 04 08 - JTM</b>																																		
	<b>16 04 12 - JTM</b>																																		

Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

	<b>11 03 04 - M30</b>																																		
	<b>16 04 04 - M30</b>																																		
	<b>16 04 08 - M30</b>																																		

	<b>16 04 04 - MD</b>																																	
	<b>16 04 08 - MD</b>																																	

# VC



Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	●	Hauptanwendung / Main application	○	Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○		○	○	○	
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		

Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
	<b>11 03 02 - ALX</b>	●		●										●		10.50	6.35	3.18	2.80	0,01~0,30	0,05~3,50
	<b>11 03 04 - ALX</b>	○		●										●		10.00	6.35	3.18	2.80	0,02~0,40	0,10~4,00
	<b>11 03 08 - ALX</b>	○		●										●		9.00	6.35	3.18	2.80	0,03~0,50	0,10~5,00
	<b>13 03 02 - ALX</b>	○		●										●		10.50	7.94	3.18	3.40	0,01~0,30	0,10~4,50
	<b>13 03 04 - ALX</b>	○		●										●		10.00	7.94	3.18	3.40	0,02~0,40	0,10~4,50
	<b>16 04 02 - ALX</b>	○		●										●		16.10	9.52	4.76	4.40	0,01~0,30	0,05~4,50
	<b>16 04 04 - ALX</b>	○		●										●		15.60	9.52	4.76	4.40	0,02~0,40	0,10~5,00
	<b>16 04 08 - ALX</b>	○		●										●		14.00	9.52	4.76	4.40	0,03~0,50	0,10~5,00
	<b>16 04 12 - ALX</b>	○		●										●		13.60	9.52	4.76	4.40	0,03~0,50	0,10~5,00
	<b>22 05 30 - ALX</b>	○		●										●		14.30	12.70	5.56	5.60	0,08~1,00	0,15~7,00

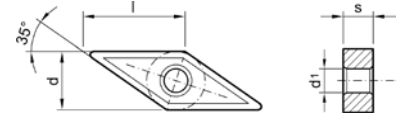
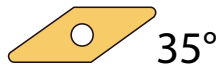
Werkstück / Workpiece	Stahl / Steel	A (P)	○	○	○	○	○	○	○	○	○	○	○	○	Machinentyp Machining types	●	Hauptanwendung / Main application	○	Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○		○	○	○	
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		

Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP 4025+	TP 5025		TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>	f <sub>n</sub> (mm/rev)
	<b>11 03 02 - F30</b>													○		10.50	6.35	3.18	2.80	0,03~0,13	0,07~1,50
	<b>11 03 04 - F30</b>													○		10.00	6.35	3.18	2.80	0,05~0,19	0,10~1,50
	<b>16 04 04 - F30</b>													●		15.60	9.52	4.76	4.40	0,05~0,20	0,10~1,80
	<b>11 03 04 - JTM</b>													●		10.00	6.35	3.18	2.80	0,06~0,20	0,20~2,00
	<b>11 03 08 - JTM</b>													●		9.00	6.35	3.18	2.80	0,08~0,30	0,20~2,00
	<b>16 04 04 - JTM</b>													●		15.60	9.52	4.76	4.40	0,08~0,25	0,30~3,00
	<b>16 04 08 - JTM</b>													●		14.00	9.52	4.76	4.40	0,10~0,30	0,30~3,00
	<b>16 04 12 - JTM</b>													○		13.60	9.52	4.76	4.40	0,05~0,25	0,20~1,50
	<b>16 04 04 - M30</b>				●								●		15.60	9.52	4.76	4.40	0,05~0,20	0,30~2,50	
	<b>16 04 04 - M30</b>				●								●		14.00	9.52	4.76	4.40	0,05~0,25	0,30~2,50	
	<b>11 03 04 - MD</b>													●		10.00	6.35	3.18	2.80	0,06~0,19	0,20~2,50
	<b>16 04 04 - MD</b>													●		15.60	9.52	4.76	4.40	0,06~0,19	0,30~2,70
	<b>16 04 08 - MD</b>													●		14.00	9.52	4.76	4.40	0,09~0,23	0,50~2,70

# VN

Drehen  
Turning



Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendelplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Werkstück/Worpiece	Stahl / Steel	A (P)	●	○	○	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	●	●	○	○	○	○	○	○	○	○	○
Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○
Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○
Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○

Wendeplatten Inserts	Bezeichnung Part Number	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]			
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+		TP 5025	TP 5345	TWS7225	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>VNMG-JBF</b>													○	15.60	9.52	4.76	3.80	0,08~0,18	0,10~2,00
	<b>16 04 08 - JBF</b>													●	14.60	9.52	4.76	3.80	0,10~0,35	0,10~2,50
	<b>VNMG-JBM</b>													●	15.60	9.52	4.76	3.80	0,08~0,18	0,10~2,00
	<b>16 04 08 - JBM</b>													●	14.60	9.52	4.76	3.80	0,10~0,35	0,10~2,50
	<b>16 04 12 - JBM</b>													○	13.60	9.52	4.76	3.80	0,13~0,50	0,80~4,50
	<b>VNMG-S30</b>			○											16.60	9.52	4.76	3.81	0,08~0,35	0,50~4,00
	<b>16 04 08 - S30</b>			●											16.20	9.52	4.76	3.81	0,10~0,40	1,00~4,50

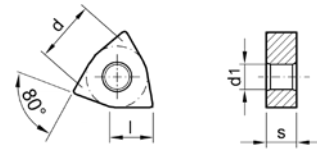
**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

WN



80°



Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Werkstück / Workpiece	Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	●	○
	Rostfreier Stahl / Stainless steel	R (M)	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Guss / Cast iron	F (K)	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Nichtmet. Werkstoffe / Non-fer. metall.	N	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Gehärteter Stahl / Hardened steel	H	○	○	○	○	○	○	○	○	○	○	○	○	○	○

Machinentyp  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		
		TK 5410	TK 5510	TK 5810	TM 5125	TM 5130	TP 2135	TP 2235	TP 3020	TP 3120	TP4025+	TP 5025		TP 5345	TW 5725	TK 1310	l	Ø d	s	Ø d <sub>1</sub>
	<b>06 04 04 - A20</b>	○	○											○	6.20	9.52	4.76	3.80	0,10~0,30	0,50~3,00
	<b>06 04 08 - A20</b>	○	○											○	6.10	9.52	4.76	3.80	0,10~0,40	0,80~3,50
	<b>08 04 04 - A20</b>	○	○	●		●								●	8.40	12.70	4.76	5.20	0,10~0,45	0,50~4,50
	<b>08 04 08 - A20</b>	○	○	●		●								●	8.30	12.70	4.76	5.20	0,10~0,45	0,50~4,50
	<b>08 04 12 - A20</b>	○	○	○		○								○	8.20	12.70	4.76	5.20	0,10~0,50	0,50~4,50
	<b>08 04 04 - C22</b>													○	8.40	12.70	4.76	5.16	0,05~0,30	0,80~4,00
	<b>08 04 08 - C22</b>													●	8.30	12.70	4.76	5.16	0,10~0,40	0,80~4,00
	<b>08 04 04 - JBF</b>													●	8.40	12.70	4.76	5.16	0,08~0,18	0,10~2,00
	<b>08 04 08 - JBF</b>													●	8.30	12.70	4.76	5.16	0,10~0,35	0,10~2,50
	<b>06 04 12 - JBM</b>													○	6.20	9.52	3.81	3.81	0,13~0,50	0,80~4,50
	<b>06 T3 12 - JBM</b>													○	6.10	9.52	3.81	3.81	0,13~0,50	0,80~4,50
	<b>08 04 04 - JBM</b>													●	8.40	12.70	4.76	5.16	0,10~0,25	0,40~3,00
	<b>08 04 08 - JBM</b>													●	8.30	12.70	4.76	5.16	0,10~0,40	0,40~3,50
	<b>08 04 12 - JBM</b>													○	8.20	12.70	4.76	5.16	0,13~0,50	0,80~4,50
	<b>08 04 08 - JBR</b>													●	8.30	12.70	4.76	5.16	0,15~0,40	0,40~4,50
	<b>08 04 12 - JBR</b>													●	8.20	12.70	4.76	5.16	0,25~0,55	1,20~5,00
	<b>06 04 04 - MD</b>													○	6.20	9.52	4.76	3.81	0,05~0,30	0,80~3,00
	<b>06 04 08 - MD</b>													●	6.10	9.52	4.76	3.81	0,10~0,35	1,00~3,00
	<b>08 04 04 - MD</b>													●	8.40	12.70	4.76	5.16	0,05~0,35	0,80~4,00
	<b>08 04 08 - MD</b>													●	8.30	12.70	4.76	5.16	0,08~0,45	1,00~4,00
	<b>06 04 08 - S30</b>			●											6.40	9.52	3.97	3.81	0,10~0,25	1,00~3,50
	<b>08 04 04 - S30</b>			●											8.40	12.70	4.76	5.16	0,05~0,25	0,50~3,50
	<b>08 04 08 - S30</b>			●											8.30	12.70	4.76	5.16	0,10~0,40	1,00~4,00

# ALUMINIUM



**Für jede Anwendung  
die richtige Sorte.**

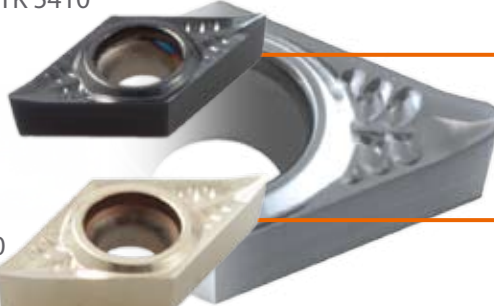
***For each application  
the best grade.***

DCGT-TK 1310



Unbeschichtet *uncoated*  
(Feinstkorn Micrograin)  
für for Aluminium

DCGT-TK 5410



**Saphitec** für for  
Aluminium, HRSA, GFK, CFK,

DCGT-TK 5810



**Goldtec** ZrN-beschichtet *coated*  
Aluminium + Sonderlegierungen  
*Special Alloys*

DCGT-TP 5345



für for  
Niro Stainless Steel

# CBN



**CCMW CNMA CPMW**

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	●	Hauptanwendung / Main application
	Rostfreier Stahl / Stainless steel	R (M)				○	Nebenanwendung / Additional application
	Guss / Cast iron	F (K)					
	Nichtmet. Werkstoffe / Non-fer. metall.	N					
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S					
	Gehärteter Stahl / Hardened steel	H					
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09				
			F	T			
<b>CCMW</b>  	<b>06 02 02</b>	○	○				
	<b>06 02 04</b>	○	○				
	<b>06 02 08</b>	○	○				
	<b>09 T3 02</b>	○	○				
	<b>09 T3 04</b>	○	○				
	<b>09 T3 08</b>	○	○				
	<b>12 04 02</b>	○	○				
	<b>12 04 04</b>	○	○				
	<b>12 04 08</b>	○	○				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09				
			F	T			
<b>CNMA</b>  	<b>09 03 02</b>	○	○				
	<b>09 03 04</b>	○	○				
	<b>09 03 08</b>	○	○				
	<b>12 04 02</b>	○	○				
	<b>12 04 04</b>	○	○				
	<b>12 04 08</b>	○	○				
	<b>12 04 12</b>	○	○				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09				
			F	T			
<b>CPMW</b>  	<b>05 02 02</b>	○	○				
	<b>05 02 04</b>	○	○				
	<b>06 02 02</b>	○	○				
	<b>06 02 04</b>	○	○				
	<b>09 T3 02</b>	○	○				
	<b>09 T3 04</b>	○	○				
	<b>09 T3 08</b>	○	○				
	<b>12 04 02</b>	○	○				
	<b>12 04 04</b>	○	○				
	<b>12 04 08</b>	○	○				

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

● JD-Lager / JD-Stock  
○ begrenzte Lagerhaltung - auf Anfrage / limited stock - upon request

Trägerwerkzeuge : 1.06, 1.08, 1.09, 1.13, 1.25, 1.26, 1.28, 1.34-1.38  
Toolholders

# CBN



**DCMW DNMA**



**EPMW**

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
Guss / Cast iron	F (K)			
Nichtmet. Werkstoffe / Non-fer. metall.	N			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Machinentyp Machining types
		F	T	
	<b>07 02 02</b>	○	○	
	<b>07 02 04</b>	○	○	
	<b>07 02 08</b>	○	○	
	<b>11 T3 02</b>	○	○	
	<b>11 T3 04</b>	○	○	
	<b>11 T3 08</b>	○	○	

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
Guss / Cast iron	F (K)			
Nichtmet. Werkstoffe / Non-fer. metall.	N			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Machinentyp Machining types
		F	T	
	<b>15 04 02</b>	○	○	
	<b>15 04 04</b>	○	○	
	<b>15 04 08</b>	○	○	
	<b>15 06 02</b>	○	○	
	<b>15 06 04</b>	○	○	
	<b>15 06 08</b>	○	○	
	<b>15 06 12</b>	○	○	

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
Guss / Cast iron	F (K)			
Nichtmet. Werkstoffe / Non-fer. metall.	N			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Machinentyp Machining types
		F	T	
	<b>05 02 02</b>	○	○	
	<b>05 02 04</b>	○	○	
	<b>06 02 02</b>	○	○	
	<b>06 02 04</b>	○	○	
	<b>08 03 02</b>	○	○	
	<b>08 03 04</b>	○	○	
	<b>08 03 08</b>	○	○	

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version



# CBN



90°

**SCMW SNMA SNMN**

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)				
	Guss / Cast iron	F (K)				
	Nichtmet. Werkstoffe / Non-fer. metall.	N				
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S				
	Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09			
			F	T		
<b>SCMW</b>  		<b>09 03 02</b>	○	○		
		<b>09 03 04</b>	○	○		
		<b>09 03 08</b>	○	○		
		<b>09 T3 02</b>	○	○		
		<b>09 T3 04</b>	○	○		
		<b>09 T3 08</b>	○	○		
		<b>12 04 02</b>	○	○		
		<b>12 04 04</b>	○	○		
	<b>12 04 08</b>	○	○			

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)				
	Guss / Cast iron	F (K)				
	Nichtmet. Werkstoffe / Non-fer. metall.	N				
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S				
	Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09			
			F	T		
<b>SNMA</b>  		<b>12 03 02</b>	○	○		
		<b>12 04 02</b>	○	○		
		<b>12 04 08</b>	○	○		

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	Rostfreier Stahl / Stainless steel	R (M)				
	Guss / Cast iron	F (K)				
	Nichtmet. Werkstoffe / Non-fer. metall.	N				
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S				
	Gehärteter Stahl / Hardened steel	H				
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09			
			F	T		
<b>SNMN</b>  		<b>12 03 04</b>	○	○		
		<b>12 03 08</b>	○	○		
		<b>12 04 04</b>	○	○		

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

# CBN


**SPMN**

**TCMW TNMA**

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
	<b>09 03 02</b>	○	○
	<b>09 03 04</b>	○	○
	<b>09 03 08</b>	○	○
	<b>12 03 02</b>	○	○
	<b>12 03 04</b>	○	○
	<b>12 03 08</b>	○	○

**Machinentyp**  
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
	<b>09 02 02</b>	○	○
	<b>09 02 04</b>	○	○
	<b>09 02 08</b>	○	○
	<b>11 02 02</b>	○	○
	<b>11 02 04</b>	○	○
	<b>11 02 08</b>	○	○
	<b>16 T3 02</b>	○	○
	<b>16 T3 04</b>	○	○
	<b>16 T3 08</b>	○	○

**Machinentyp**  
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
	<b>16 04 02</b>	○	○
	<b>16 04 04</b>	○	○
	<b>16 04 08</b>	○	○

**Machinentyp**  
Machining types

- Hauptanwendung / Main application
- Nebenanwendung / Additional application

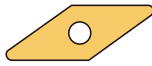
**Bitte angeben / Please state :** F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

# CBN



60°

**TPMN**



35°

**VBMW VCMW**

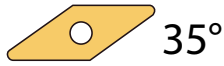
Werkstück Workpiece	Stahl / Steel	A (P)			<b>Machinentyp</b> <b>Machining types</b> <ul style="list-style-type: none"> <li>● Hauptanwendung / Main application</li> <li>○ Nebenanwendung / Additional application</li> </ul>
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09		
			F	T	
<b>TPMN</b> 		<b>11 03 02</b>	○	○	
		<b>11 03 04</b>	○	○	
		<b>11 02 08</b>	○	○	

Werkstück Workpiece	Stahl / Steel	A (P)			<b>Machinentyp</b> <b>Machining types</b> <ul style="list-style-type: none"> <li>● Hauptanwendung / Main application</li> <li>○ Nebenanwendung / Additional application</li> </ul>
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09		
			F	T	
<b>VBMW</b> 		<b>16 04 02</b>	○	○	
		<b>16 04 04</b>	○	○	
		<b>16 04 08</b>	○	○	

Werkstück Workpiece	Stahl / Steel	A (P)			<b>Machinentyp</b> <b>Machining types</b> <ul style="list-style-type: none"> <li>● Hauptanwendung / Main application</li> <li>○ Nebenanwendung / Additional application</li> </ul>
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	Ecke Corner EW CDX 09		
			F	T	
<b>VCMW</b> 		<b>11 03 02</b>	○	○	
		<b>11 03 04</b>	○	○	
		<b>11 03 08</b>	○	○	
		<b>16 04 02</b>	○	○	
		<b>16 04 04</b>	○	○	
		<b>16 04 08</b>	○	○	

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

# CBN



**VNMA**

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09	
		F	T
	<b>16 04 02</b>	<input type="radio"/>	<input type="radio"/>
	<b>16 04 04</b>	<input type="radio"/>	<input type="radio"/>
	<b>16 04 08</b>	<input type="radio"/>	<input type="radio"/>

**Machinentyp**  
**Machining types**

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

# PKD



80°

CCMW CNMA



55°

DCMW

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD	
		F	T
<b>CCMW</b> 	<b>06 02 01</b>		
	<b>06 02 02</b>		
	<b>06 02 04</b>		
	<b>09 T3 02</b>		
	<b>09 T3 04</b>		
	<b>09 T3 08</b>		
	<b>12 04 04</b> <b>12 04 08</b>		

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD	
		F	T
<b>CNMA</b> 	<b>12 04 04</b>		
	<b>12 04 08</b>		

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
	Gehärteter Stahl / Hardened steel	H		

Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD	
		F	T
<b>DCMW</b> 	<b>07 02 01</b>		
	<b>07 02 02</b>		
	<b>07 02 04</b>		
	<b>11 T3 02</b>		
	<b>11 T3 04</b>		
	<b>11 T3 08</b>		

**Machinentyp**  
Machining types

● Hauptanwendung / Main application  
○ Nebenanwendung / Additional application

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

# PKD


**DNMA**

**RCMW**

**TCMW**

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		Machinentyp Machining types
		F	T	
	<b>11 04 04</b>	<input type="radio"/>	<input type="radio"/>	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	<b>11 04 08</b>	<input type="radio"/>	<input type="radio"/>	
	<b>15 06 04</b>	<input type="radio"/>	<input type="radio"/>	
	<b>15 06 08</b>	<input type="radio"/>	<input type="radio"/>	

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
Gehärteter Stahl / Hardened steel	H			

Wendeplatten Inserts	Bezeichnung Part Number	Fullface TY 1110 PKD		Machinentyp Machining types
		F	T	
	<b>06 02 00</b>	<input type="radio"/>	<input type="radio"/>	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	<b>08 03 00</b>	<input type="radio"/>	<input type="radio"/>	
	<b>10 03 00</b>	<input type="radio"/>	<input type="radio"/>	
	<b>12 T3 00</b>	<input type="radio"/>	<input type="radio"/>	

Werkstück Workpiece	Stahl / Steel	A (P)		
	Rostfreier Stahl / Stainless steel	R (M)		
	Guss / Cast iron	F (K)		
	Nichtmet. Werkstoffe / Non-fer. metall.	N		
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S		
Gehärteter Stahl / Hardened steel	H			

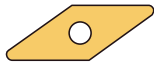
Wendeplatten Inserts	Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		Machinentyp Machining types
		F	T	
	<b>09 02 01</b>	<input type="radio"/>	<input type="radio"/>	● Hauptanwendung / Main application ○ Nebenanwendung / Additional application
	<b>09 02 02</b>	<input type="radio"/>	<input type="radio"/>	
	<b>09 02 04</b>	<input type="radio"/>	<input type="radio"/>	
	<b>11 02 02</b>	<input type="radio"/>	<input type="radio"/>	
	<b>11 02 04</b>	<input type="radio"/>	<input type="radio"/>	
	<b>11 02 08</b>	<input type="radio"/>	<input type="radio"/>	
	<b>16 T3 04</b>	<input type="radio"/>	<input type="radio"/>	
	<b>16 T3 08</b>	<input type="radio"/>	<input type="radio"/>	

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

# PKD



60°



35°

**TNMA**

**VCMW**

Werkstück Workpiece	Stahl / Steel	A (P)			<b>Machinentyp</b> <b>Machining types</b> <ul style="list-style-type: none"> <li>● Hauptanwendung / Main application</li> <li>○ Nebenanwendung / Additional application</li> </ul>
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		
			F	T	
 <b>TNMA</b>		<b>16 04 02</b>			
		<b>16 04 04</b>			
		<b>16 04 08</b>			

Werkstück Workpiece	Stahl / Steel	A (P)			<b>Machinentyp</b> <b>Machining types</b> <ul style="list-style-type: none"> <li>● Hauptanwendung / Main application</li> <li>○ Nebenanwendung / Additional application</li> </ul>
	Rostfreier Stahl / Stainless steel	R (M)			
	Guss / Cast iron	F (K)			
	Nichtmet. Werkstoffe / Non-fer. metall.	N			
	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S			
	Gehärteter Stahl / Hardened steel	H			
Wendeplatten Inserts		Bezeichnung Part Number	1 Ecke / Corner TY 1110 PKD		
			F	T	
 <b>VCMW</b>		<b>11 03 02</b>			
		<b>11 03 04</b>			
		<b>11 03 08</b>			
		<b>16 04 02</b>			
		<b>16 04 04</b>			
		<b>16 04 08</b>			

Bitte angeben / Please state : F: scharfe Ausführung / sharp version T: gefaste Ausführung / chamfered version

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendeplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

## Schneidstoffsorten-Übersicht zum Drehen Description of Carbide Grades for Turning

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

ISO	P						M				K					Gehärtet Hardened		
	hoch high		mittel medium		niedrig low	unterbrochener Schnitt intermittent cutting	hoch high	mittel medium		niedrig low	hoch high	mittel medium		niedrig low		niedrig low		
	P01	P10	P20	P30	P40	P50	M10	M20	M30	M40	K01	K10	K20	K30	K40			
Hartmetall beschichtet Coated Carbide			TWS 7225					TWS 7225				TK 5510						
		TP 3020						TM 5125				TK 5410						
			TP 2135 TP 2235						TM 5130				TK 5810					
				TP 5345														
			TP 4025+															
				TP 3120					TP 4025+									
		TP 5025							TP 5025				TP 5025					
CBN																	CDX09	
Hartmetall unbeschichtet Uncoated Carbide												TK 1210 TK 1310						



**Schneidstoffsorten-Schlüssel zum Drehen**  
**Code Explanation of Carbide Grades for Turning**

# C N M G 120404 - A20



Anwendung 1 Application 1	T	Drehen / Turning
	M	Fräsen / Milling
	G	Stechen / Grooving
	T	Gewinde / Threading
	D	Bohren / Drilling

Anwendung 2 Application 2	P	Stahl / Steel
	M	Niro / Stainless Steel
	K	Nichteisen, Kunststoff, Aluminium Non Metallic Materials
	S	warmfeste Legierungen / Heat Resistant Alloys
	H	gehärteter Stahl / Hardened Steel
	U	universell / all-purpose
	W	DIA
	X	CBN
	Y	PKD
	Z	Cermet
	D	DLC
	C	Keramik / Ceramics

Serien-Nr. Serial-No.	11-20	unbeschichtet / uncoated
	21-50	CVD
	51-99	PVD

ISO	10	
	20	
	30	
	40	
	50	
	...	

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills


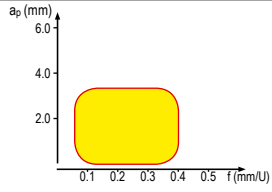

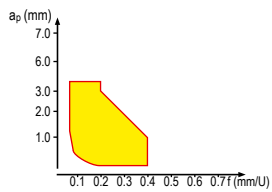

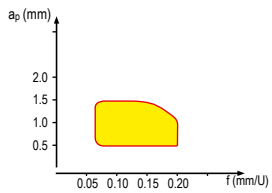

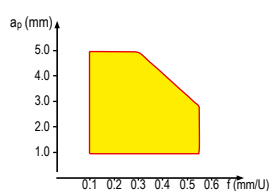

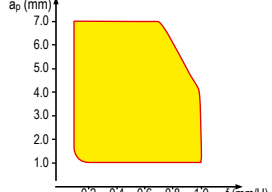

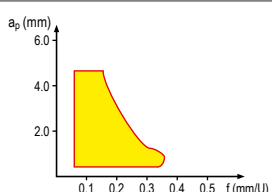

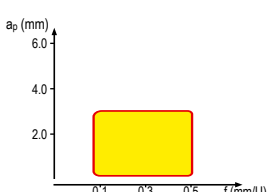
Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

## Spanleitstufen zum Drehen / Chipbreakers for Turning

Spanleitstufe Chipbreaker	Anwendungsbereich Application Range	Highlights	Highlights
<b>A20</b> 		<ul style="list-style-type: none"> <li>Alu-Legierungen, Niro, St 37</li> <li>scharfe Schneidkanten ( Umfangschliff)</li> <li>extrem großer Spanwinkel</li> </ul>	<ul style="list-style-type: none"> <li>Alu-alloys, stainless steel</li> <li>Sharp cutting edge (ground circumference)</li> <li>Extremely high helix</li> </ul>
<b>C22</b> 		<ul style="list-style-type: none"> <li>hervorragende Spankontrolle beim Kopierdrehen und der Innenbearbeitung</li> <li>sehr gute Oberflächen beim Plandrehen</li> </ul>	<ul style="list-style-type: none"> <li>Excellent chip control while copy turning and internal machining</li> <li>Very good surface while face turning</li> </ul>
<b>JBF</b> 		<ul style="list-style-type: none"> <li>hohe Oberflächengüte durch gute Spankontrolle bei geringen Schnitttiefen</li> </ul>	<ul style="list-style-type: none"> <li>High quality surface due to good chip control while low cutting depths</li> </ul>
<b>JBM</b> 		<ul style="list-style-type: none"> <li>weiter Anwendungsbereich bei der mittleren Schlichtbearbeitung bis hin zur mittleren Schruppbearbeitung</li> <li>typischer Einsatz in der universellen Anwendung auf CNC- Maschinen</li> </ul>	<ul style="list-style-type: none"> <li>Wide range of application while middle finishing up to middle roughing</li> <li>Typical usage in universal working on CNC machines</li> </ul>
<b>JBR</b> 		<ul style="list-style-type: none"> <li>erste Wahl für unterbrochenen Schnitt und Schruppen im P- und M- Anwendungsbereich</li> </ul>	<ul style="list-style-type: none"> <li>First choice for interrupted cut and roughing of P- and M- application range</li> </ul>
<b>MD</b> 		<p>Standard-Geometrie im mittleren Bereich</p> <ul style="list-style-type: none"> <li>vor allem CNC-Bearbeitung</li> <li>sehr gute Spankontrolle</li> <li>geeignet für Niro - Bearbeitung</li> </ul>	<p>Medium cutting</p> <ul style="list-style-type: none"> <li>Wide range of chip control from medium-finishing to medium-roughing</li> <li>Chip breaker especially for CNC machining</li> <li>Suitable for stainless steel machining</li> </ul>
<b>S30</b> 		<ul style="list-style-type: none"> <li>scharfe, stabile Schneidkante</li> <li>hervorragende Spankontrolle auch bei langspanenden, weichen, rostfreien Stählen und Baustählen</li> </ul>	<ul style="list-style-type: none"> <li>Sharp, strong cutting edge</li> <li>Excellent chip control also at long-chipping soft stainless and mild steels</li> </ul>

Negative Wendeschneidplatten / Negative Inserts

Drehen  
Turning

Fräswerkzeuge  
Milling Tools

HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills


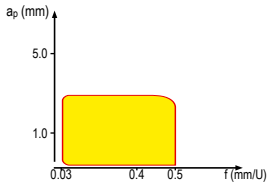

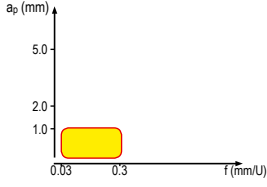

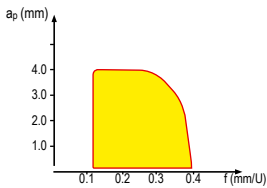

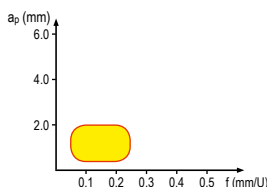

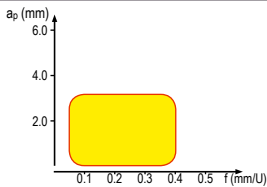
Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

Mini/Micro  
Schneidwerkzeuge  
Mini/Micro Tools

Gewinde-  
werkzeuge  
Threading Tools

Wendepaltenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

## Spanleitstufen zum Drehen / Chipbreakers for Turning

Spanleitstufe Chipbreaker	Anwendungsbereich Application Range	Highlights	Highlights
<b>ALX</b> 		<b>Aluminiumbearbeitung</b> <ul style="list-style-type: none"> <li>• sehr großer Spanwinkel, geschliffene Schneidkante</li> <li>• Bearbeitung von Aluminium, Kunststoffen, Feinstbearbeitung von Niro</li> </ul>	<b>Aluminium cutting</b> <ul style="list-style-type: none"> <li>• Exclusive chipbreaker for aluminium and aluminium alloy, finishing of stainless steel</li> <li>• High rake angle, precision - ground cutting edge</li> </ul>
<b>F30</b> 		<b>Schlichtbearbeitung</b> <ul style="list-style-type: none"> <li>• großer Spanwinkel, scharfe Schneidkante</li> <li>• hohe Oberflächengüten, auch bei der Innenbearbeitung</li> </ul>	<b>Finishing</b> <ul style="list-style-type: none"> <li>• High helix, sharp cutting edge</li> <li>• Very good surface quality, also in case of internal machining</li> </ul>
<b>JTM</b> 		<ul style="list-style-type: none"> <li>• universelle Geometrie für die mittlere Bearbeitung im P-, M- und S-Anwendungsbereich</li> <li>• exzellente Spankontrolle über einen sehr großen Vorschubbereich</li> </ul>	<ul style="list-style-type: none"> <li>• Universal geometry for the middle machining in P-, M-, and S-application range</li> <li>• Excellent chip control for a wide range of feeds</li> </ul>
<b>M30</b> 		<b>Mittlere Bearbeitung bis Schlichten</b> <ul style="list-style-type: none"> <li>• optimale Spankontrolle auch bei zähen Zerspanung Materialien</li> <li>• hohe Oberflächengüte durch scharfe Schneidkante und geringe Schnittkräfte</li> </ul>	<b>Medium cutting</b> <ul style="list-style-type: none"> <li>• Optimized chipcontrol at ductile materials</li> <li>• Very good surface due to sharp cutting edge and marginal cutting force</li> </ul>
<b>MD</b> 		<b>Mittlere Bearbeitung</b> <ul style="list-style-type: none"> <li>• auf antriebschwachen Maschinen und Bohrungsbearbeitung</li> </ul>	<b>Medium cutting</b> <ul style="list-style-type: none"> <li>• Excellent chip control at wide range of cutting conditions</li> <li>• Suitable for stainless steel cutting</li> </ul>

Positive Wendeschneidplatten / Positive Inserts

 Drehen  
Turning

 Fräswerkzeuge  
Milling Tools

 HDS-/VHM-Fräser  
HDS-/Solid Carbide  
Endmills

 Stech- und  
Abstechwerkzeuge  
Grooving and  
Parting off Tools

 Mini/ Micro  
Schneidwerkzeuge  
Mini/ Micro Tools

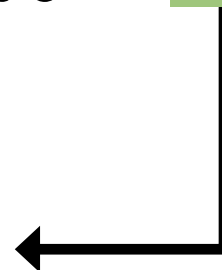
 Gewinde-  
werkzeuge  
Threading Tools

 Wendplattenbohrer  
VHM-Bohrer  
Indexable Drills  
Solid Carbide Drills

Anwendung / Application

# C N M G 120408 M ...

A	Aluminium / Aluminium
C	Kopieren / Copying
F	Schlichten / Finishing
H	Schweres Schruppen / Heavy Roughing
M	Mittlere Bearbeitung / Medium Cutting
R	Schruppen / Roughing
S	Mittlere Bearbeitung für Niro / Medium Cutting of Stainless Steel



## Schnittdaten-Empfehlungen zum Drehen - allgemein Cutting Data Recommendations for Turning - in general

	Werkstückwerkstoff Material	Legierung Alloy	Brinell-Härte hardness HB	VDI 3323 Gruppe	Schnittgeschwindigkeiten / Cutting speeds $v_c$ [m/min]				
					TK 1210 TK 1310 (K10)	TK 5410 (K10C)	TK5510 (K10)	TK 5810 (K10C)	
Drehen Turning	A (P)	unlegierter Stahl / mild steel	geglüht / annealed $\leq 0,15\% C$	125	1			100 - 150	
			geglüht / annealed 0,15% - 0,45% C	150-250	2			80 - 140	
			vergütet / heat treated $\geq 0,45\% C$	300	3			70 - 110	
		niedriglegierter Stahl / lower alloyed steel	geglüht / annealed	180	6			80 - 130	
			vergütet / heat treated	275	7			70 - 120	
			vergütet / heat treated	300	8			60 - 90	
			vergütet / heat treated	350	9				
		hochlegierter Stahl / highly alloyed steel	geglüht / annealed	200	10			80 - 110	
			vergütet / heat treated	350	11				
		nichtrostender Stahl / corrosion-resistant steel	geglüht / annealed	200	12			130 - 180	
vergütet / heat treated	350		13						
Fräswerkzeuge Milling Tools	R (M)	rostfreier Stahl / stainless steel	ferritisch, martensitisch, geglüht / ferritic, martensitic, annealed	200	14				
			austenitisch / austenitic	180	14			90 - 130	
			Duplex	230-260	14				
			austenitisch, ferritisch / austenitic, ferritic	330	14				
HDS-/VHM-Fräser HDS-/Solid Carbide Endmills	F (K)	Grauguss / grey cast iron	perlitisch, ferritisch / pearlitic, ferritic	180	15	140 - 200		160 - 220	
			perlitisch, martensitisch / pearlitic, martensitic	260	16	100 - 160		130 - 180	
		Grauguss mit Kugelgraphit / nodular cast iron	ferritisch / ferritic	160	17	160 - 200		150 - 220	
			perlitisch / pearlitic	250	18	110 - 150		120 - 170	
		Temperguss / malleable cast iron	ferritisch / ferritic	130	19	160 - 220		160 - 220	
			perlitisch / pearlitic	230	20	140 - 180		140 - 200	
Stech- und Abstechwerkzeuge Grooving and Parting off Tools	N	Aluminium - Knetlegierungen / forging alloy	nicht aushärtbar / not hardenable	60	21	300 - 3000		250 - 2800	
			aushärtbar / hardenable	100	22	200 - 2000		180 - 2500	
		Aluminium - Gusslegierungen / casting alloy	nicht aushärtbar / not hardenable < 12% Si	80	23	400 - 2000		300 - 1800	
			aushärtbar / hardenable < 12% Si	90	24	400 - 1100		300 - 1800	
			nicht aushärtbar / not hardenable > 12% Si	130	25	200 - 1000		170 - 1000	
		Kupfer und Kupfer-Legierungen (Bronze, Messing) / copper and copper alloys (bronze, brass)	Automatenlegierungen / free cutting alloys (1% Pb)		26	250 - 800		220 - 900	
			Messing, Rotguss / brass, red bronze		27	200 110		190 - 800	
			Bronze / bronze	90	28	150 - 600		150 - 650	
			bleifreies Kupfer und Elektrolytkupfer / unleaded copper	100	29	150 - 400		130 - 500	
		Gewinde- werkzeuge Threading Tools	nichtmetallische Werkstoffe / non metallic materials	Duroplaste / thermoset	100	29	100 - 220		70 - 200
faserverstärkte Kunststoffe / fiber reinforced plastic				29	80 - 200		70 - 220		
Hartgummi / ebonite				30	100 - 300		90 - 280		
Wendepplattenbohrer VHM-Bohrer Indexable Drills Solid Carbide Drills	S	warmfeste Legierungen / heat resistant alloys	Fe-Basis/base, geglüht / annealed	200	31		40 - 80	30 - 80	30 - 60
			Fe-Basis/base(Incoloy), ausgehärtet / hardened	280	32		35 - 55	20 - 55	20 - 50
			Ni-Basis/base (Inconel), geglüht / annealed	250	33		30 - 60	20 - 60	20 - 50
			Ni- oder Co-Basis, ausgehärtet / hardened	30-58 HRC	24		25 - 35	20 - 35	20 - 40
			Ni- oder Co-Basis, gegossen / cast	1500-2200 Nmm <sup>2</sup>	35		20 - 40	20 - 40	20 - 30
		Titanlegierungen / titanium alloys	Reintitanium / Pure titanium	Rm 400	36		70 - 160	60 - 150	60 - 150
			Alpha- + Beta-Legierungen / alloys	Rm 1050	37		50 - 130	30 - 90	30 - 70
Mini/Micro Schneidwerkzeuge Mini/Micro Tools	H	gehärteter Stahl / hardened steel	gehärtet und angelassen / hardened and tempered	55 HRC	38				
			gehärtet und angelassen / hardened and tempered	60 HRC	39				
		Hartguss / chilled cast iron	gegossen / cast	400	40				
HDS-/VHM-Fräser HDS-/Solid Carbide Endmills	Gehärtetes Gusseisen / hardened cast iron	gehärtet und angelassen / hardened and tempered	55 HRC	40					

## Schnittdaten-Empfehlungen zum Drehen - allgemein

### Cutting Data Recommendations for Turning - in general

Schnittgeschwindigkeiten / Cutting speeds $v_c$ [m/min]										
TM 5125 (M25C)	TM 5130 (M30C)	TP 2135 TP 2235 (P35C)	TP 3020 (P10/P30C)	TP 3120 (P25C)	TP 4025+ (P25/M20C)	TP 5025 (P25C)	TP 5345 (P45C)	TWS 7225 (M25/P30C)	CDX09 (CBN)	TY 1110 (PKD)
120 - 280	80 - 150	170 - 230	180 - 300	180 - 300	120 - 280	120 - 280	180 - 240	190 - 280		
130 - 250	70 - 130	150 - 180	150 - 220	150 - 220	130 - 250	130 - 250	150 - 200	170 - 240		
100 - 180	70 - 120	110 - 150	120 - 200	120 - 200	100-180	100 - 180	150 - 200	130 - 200		
80 - 200		160 - 190	160 - 250	160 - 250	100 - 230	100 - 230	170 - 200	170 - 250		
60 - 180		80 - 140	90 - 180	90 - 180	80 - 200	80 - 200	100 - 160	100 - 190		
		70 - 130	80 - 170	80 - 170	60 - 180	60 - 180	90 - 150	90 - 170		
		60 - 120	120 - 190	120 - 190	50 - 130	50 - 130	80 - 140	80 - 160		
		110 - 200	80 - 160	80 - 160	80 - 180	80 - 180	130 - 170	130 - 200		
		40 - 80	120 - 180	120 - 180	50 - 120	50 - 120	80 - 130	80 - 150		
100 - 180	70 - 120	130 - 170	100 - 170	100 - 170	100 - 180	100 - 180	140 - 180	130 - 210		
70 - 150	60 - 100	100 - 160	90 - 180	90 - 180	70 - 150	70 - 150	115 - 170	110 - 190		
120 - 220	70 - 120	130 - 200	140 - 200	140 - 200	120 - 220	100 - 250	140 - 200	140 - 200		
80 - 200	80 - 150	90 - 190	90 - 180	90 - 180	100 - 200	90 - 150	110 - 190	90 - 200		
60 - 140	60 - 120	70 - 150				60 - 90	80 - 150	80 - 130		
50 - 120	50 - 100	40 - 60	60 - 90	60 - 90		50 - 80	55 - 75	80 - 100	80 - 150	
					130 - 280				300 - 1000	
					120 - 270				300 - 800	
					110 - 260				300 - 450	
					100 - 250				250 - 350	
					90 - 250					
					90 - 250					
							100 - 500			250 - 3500
							100 - 400			250 - 1300
							100 - 350			250 - 3500
							100 - 800			250 - 1500
							80 - 250			200 - 500
										100 - 600
										100 - 1300
										250 - 2500
										60 - 320
										80 - 250
										60 - 180
							40 - 70	80 - 110		
							30 - 60	60 - 100		
							30 - 60	35 - 80		
							20 - 30	30 - 40		
								20 - 35		
								60 - 100		
								30 - 60		
									80 - 200	
									40 - 180	
									40 - 180	

Drehen  
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HDS-/Solid Carbide  
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