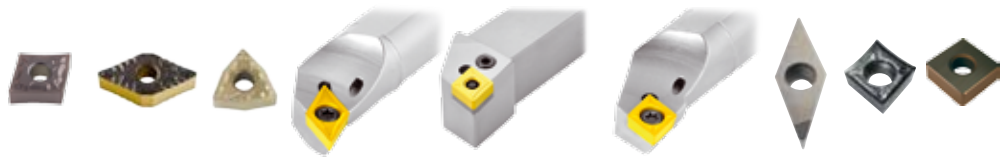


Gesamtübersicht *General View*

1

Drehen
Turning



Drehen
Turning

2

Fräswerkzeuge
Milling Tools



Fräswerkzeuge
Milling Tools

3

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



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

4

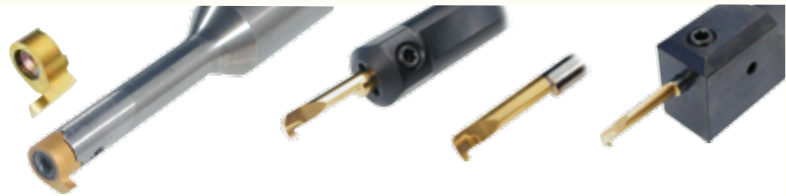
Stech- und Abstechwerkzeuge
Grooving and Parting off Tools



Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

5

Mini-/Micro -Werkzeuge
Mini-/ Micro Tools



Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

6

Gewindewerkzeuge
Threading Tools



Gewinde-
werkzeuge
Threading Tools

7

Wendeplattenbohrer VHM-Bohrer
Indexable Drills Solid Carbide Drills



Wendeplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

8

Alphanumerischer Index
Alphanumeric Index

Allgemeine Liefer- und Verkaufsbedingungen
General Delivery and Sales Conditions

Diverses
Diverse

Drehen *Turning*

1

Drehen
Turning

Fräswerkzeuge
Milling Tools

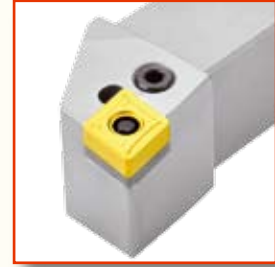
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

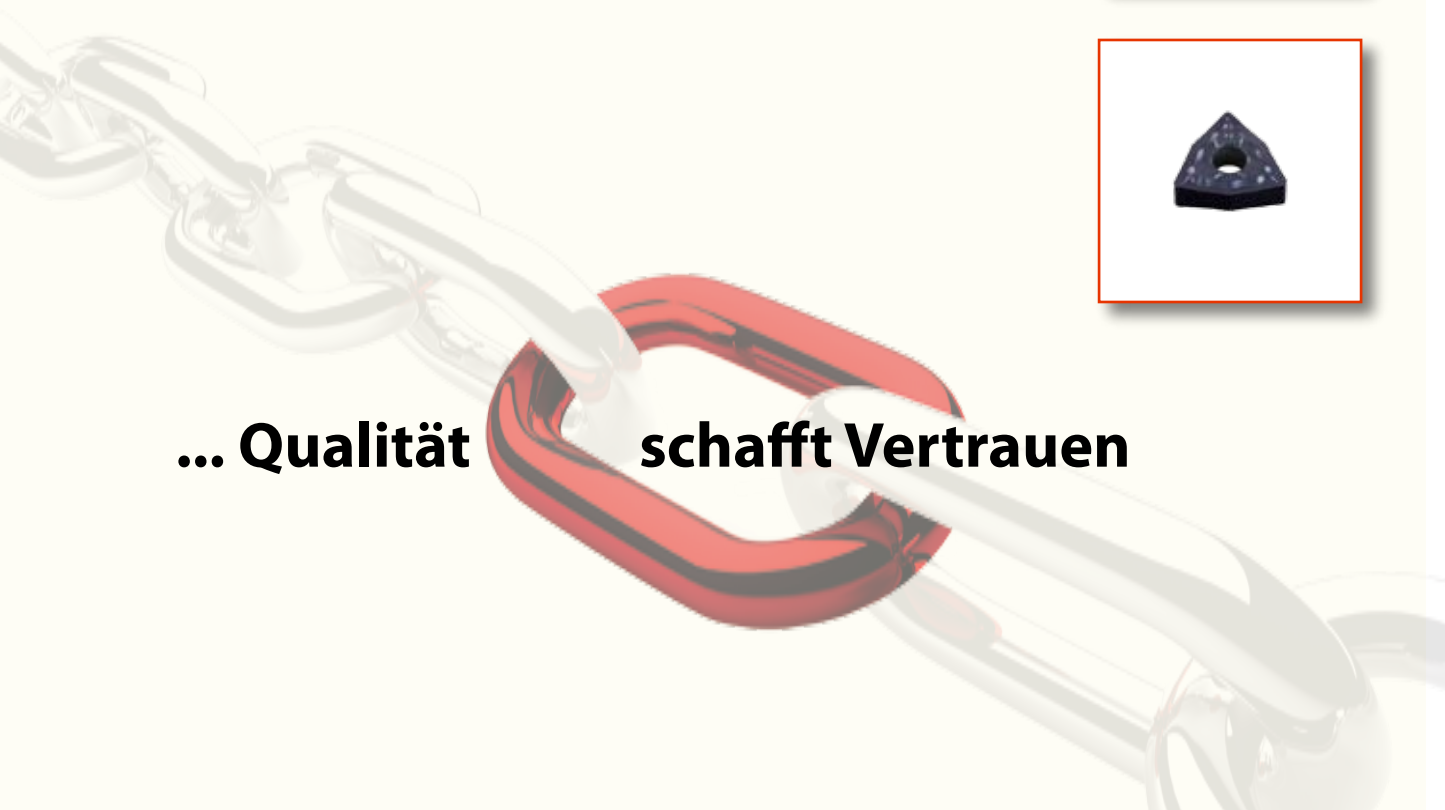
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



... Qualität schafft Vertrauen



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

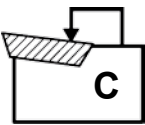
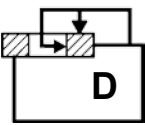
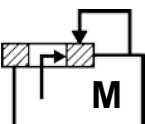
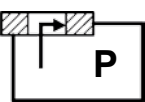









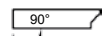
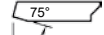
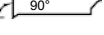
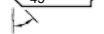




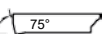
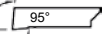
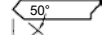
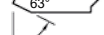
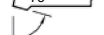


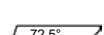
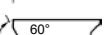
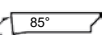
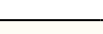


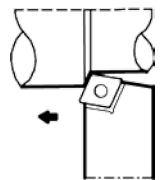
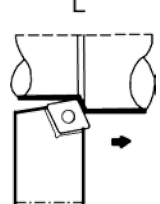
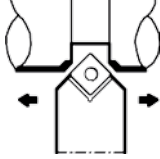
Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

		Seite Page
ISO - Bezeichnungssystem für Klemmhalter <i>Designation System for Toolholders</i>	S C L C R 25 25 M 12	1.02
Drehwerkzeuge für Außenbearbeitung <i>External Turning Tools</i>		1.04
ISO - Bezeichnungssystem für Bohrstangen <i>Designation System for Boring Bars</i>	A 32 S P C L N L 12	1.20
Drehwerkzeuge für Innenbearbeitung <i>Internal Turning Tools</i>		1.22
Bohrstangen - Sets <i>Boring Bar - Sets</i>		1.30
ISO - Bezeichnungssystem für Wende- schneidplatten zum Drehen <i>Designation System for Indexable Inserts for Turning</i>	T N M G 16 04 04 E R	1.36
Wendeschneidplatten zum Drehen <i>Indexable Inserts for Turning</i>		1.38
Wendeschneidplatten zum Drehen CBN, PKD, Keramik <i>Indexable Inserts for Turning</i>		1.57
Schneidstoffsorten-Übersicht zum Drehen <i>Description of Carbide Grades for Turning</i>		1.66
Schneidstoffsorten-Schlüssel zum Drehen <i>Code Explanation of Carbide Grades for Turning</i>		1.67
Spanleitstufen zum Drehen <i>Chipbreakers for Turning</i>		1.68
Schnittdaten-Empfehlungen zum Drehen <i>Cutting Data Recommendations for Turning</i>		1.70

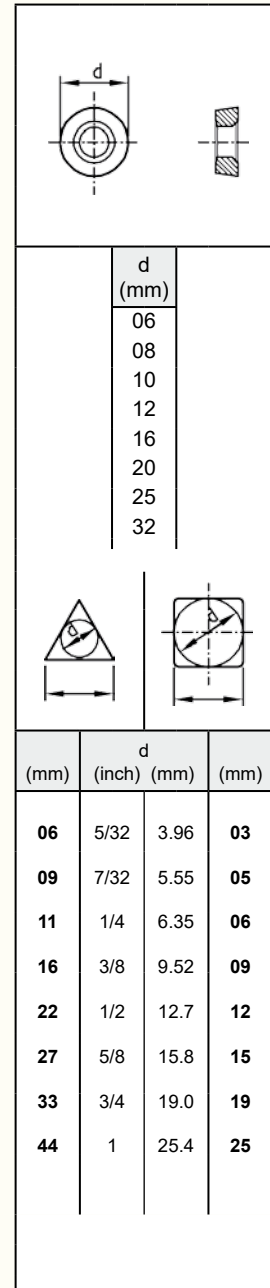
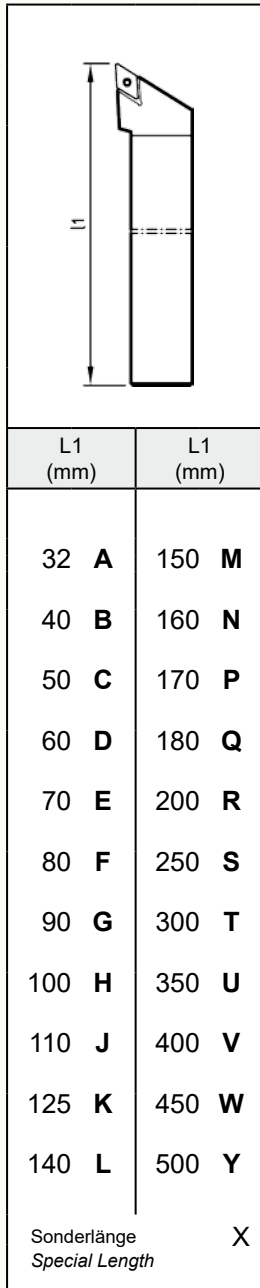
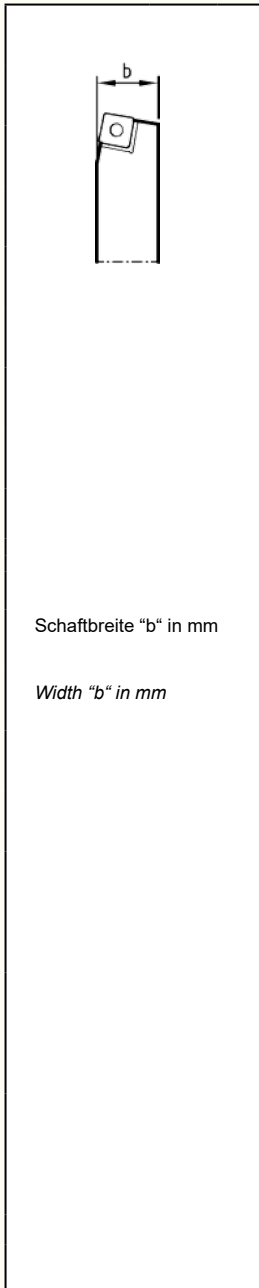
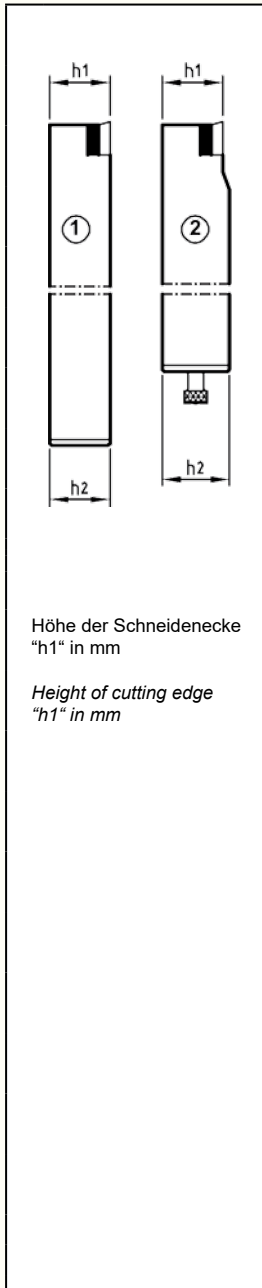
ISO - Bezeichnungssystem für Klemmhalter / ISO Designation System for Toolholders

- 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

 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	 A  B  C  D  E  F  G  H  J  K  L  M  N  R  S  T  U  V  W  Y	 3° A 5° B 7° C 15° D 20° E 25° F 30° G 0° N 11° P Sonstige <i>Others</i> O	  
---	--	--	--	---	--	---	---	---

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



25

25

M

12

Schafthöhe
Height of Shank

Schaftbreite
Width of Shank

Halterlänge
Length of Holder

Schneidenlänge
Length of Cutting Edge

Drehen
Turning

Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
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Stech- und
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Mini/ Micro Tools

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werkzeuge
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Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Übersicht - Außendrehen Overview - External Turning

Drehen
Turning

Fräswerkzeuge
Milling Tools

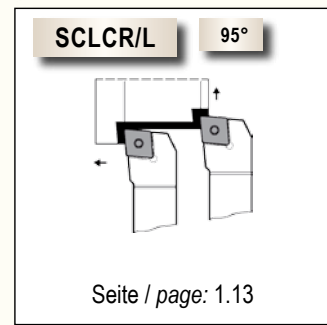
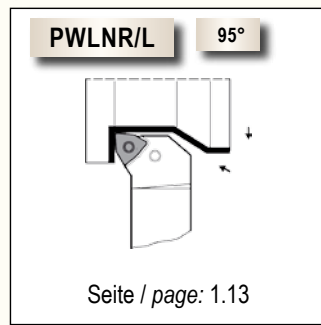
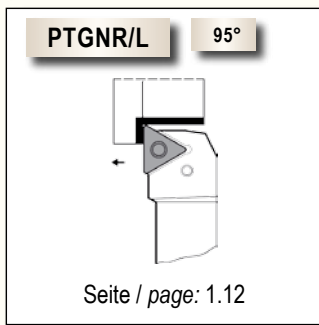
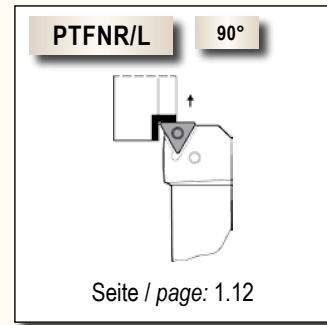
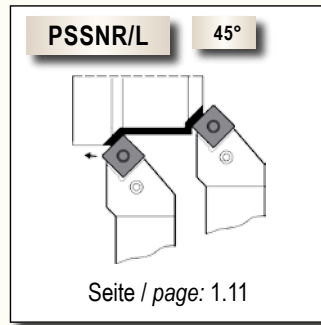
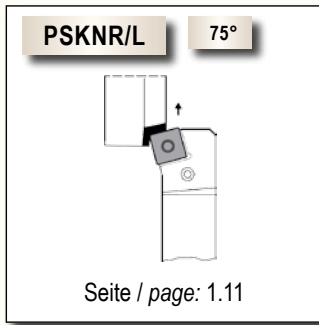
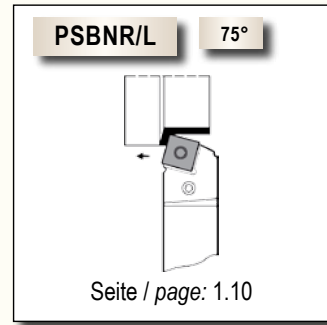
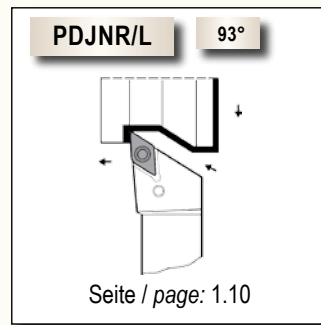
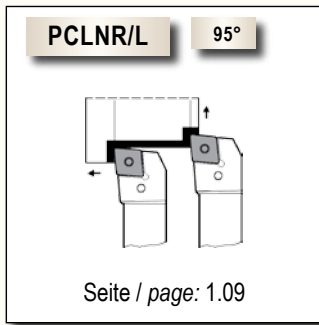
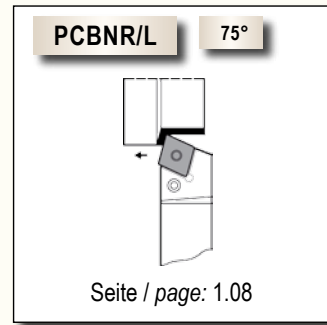
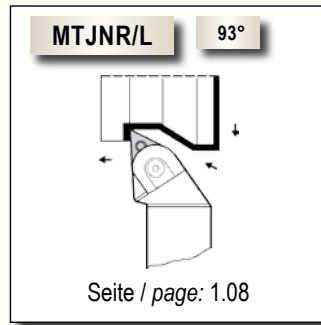
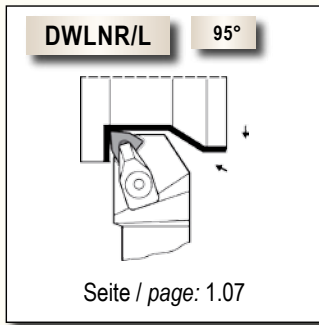
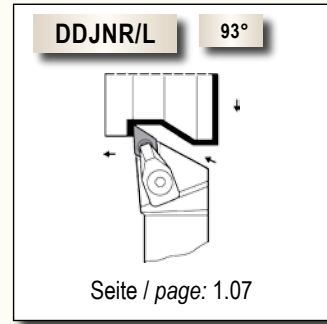
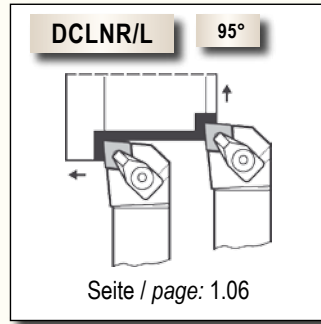
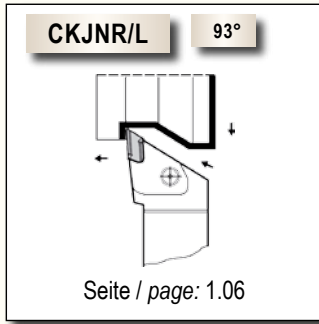
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

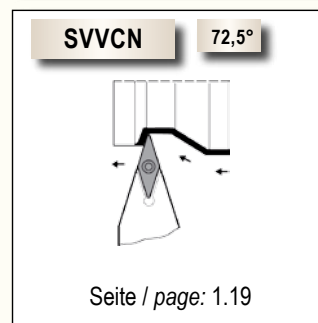
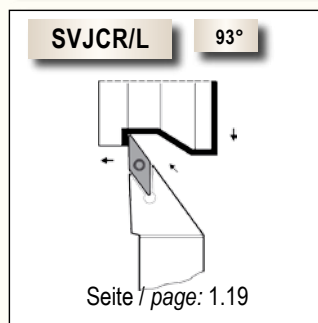
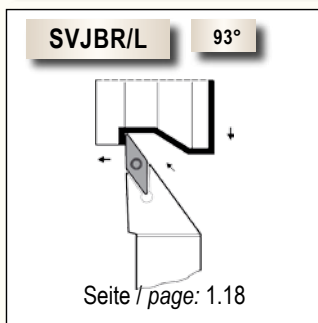
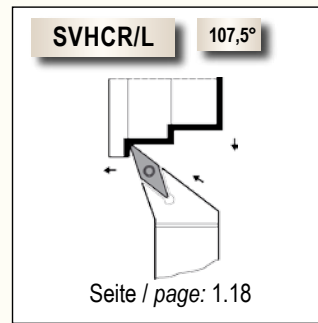
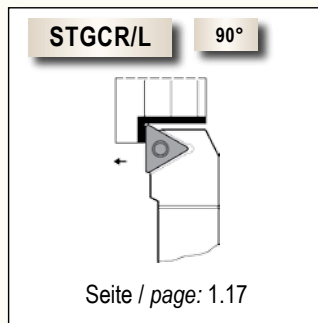
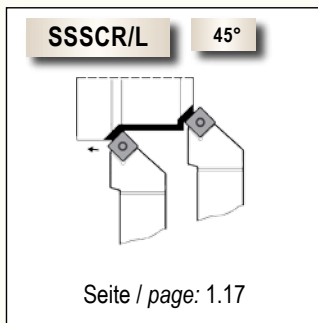
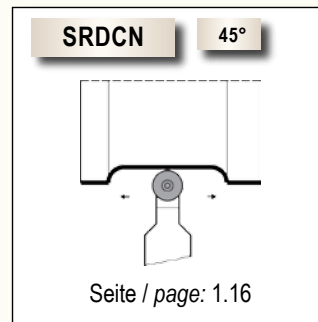
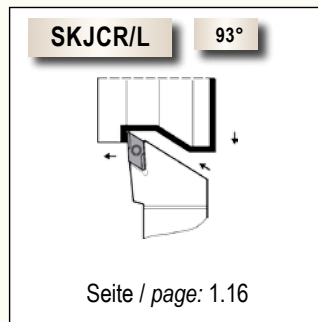
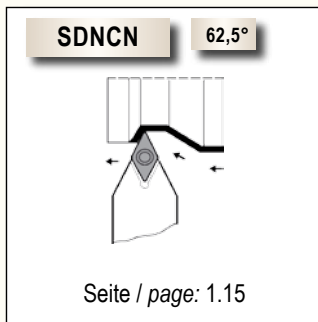
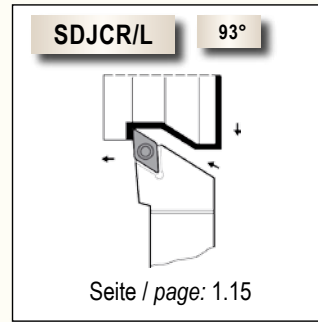
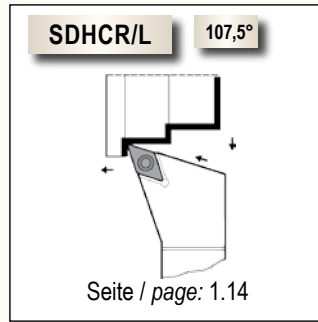
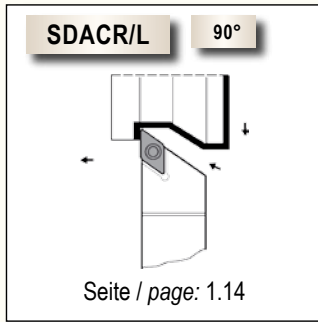
Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



Übersicht - Außendrehen Overview - External Turning



Drehen
Turning

Fräswerkzeuge
Milling Tools

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

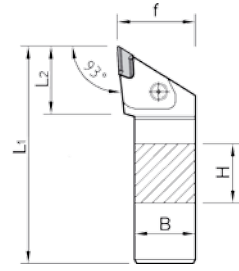
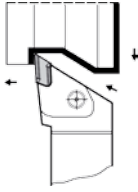
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

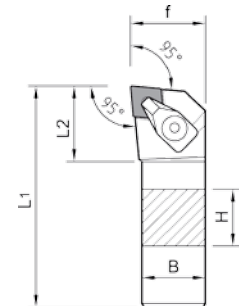
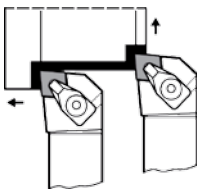
Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

CKJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts							
	R	L	H	B	L ₁	L ₂	f									
CKJNR 2020 K16	○		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)
2525 M16	○		25	25	150	32	32									
3232 P16	○		32	32	170	32	40									
CKJNL 2020 K16	○		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	48.11.209	48.11.301	48.12.605 (SW2)
2525 M16	○		25	25	150	32	32									
3232 P16	○		32	32	170	32	40									

DCLNR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.40	Ersatzteile Spare Parts							
	R	L	H	B	L ₁	L ₂	f									
DCLNR/L 2020 K12	●	○	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)
2525 M12	●	○	25	25	150	32	32									
3232 P12	○	○	32	32	170	32	40									

DDJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.43	Ersatzteile Spare Parts							
	R	L	H	B	L ₁	L ₂	f									
DDJNR/L 2020 K15	●	○	20	20	125	38	25	DN ** 1506 **								
2525 M15	●	○	25	25	150	38	32									
3232 P15	○	○	32	32	170	38	40									

DWLNR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.54	Ersatzteile Spare Parts							
	R	L	H	B	L ₁	L ₂	f									
DWLNR/L 2020 K08	●	○	20	20	125	35	25	WN ** 0804 **								
2525 M08	●	○	25	25	150	35	32									

Drehen
Turning

Fräswerkzeuge
Milling Tools

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

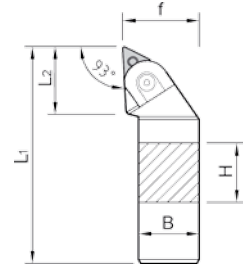
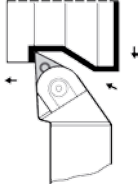
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

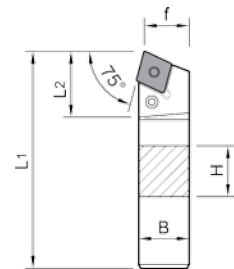
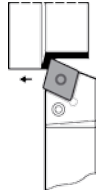
Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

MTJNR/L 93°



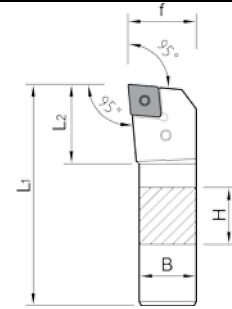
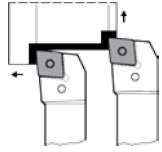
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts													
	R	L	H	B	L ₁	L ₂	f															
MTJNR/L 2020 K16	●	○	20	20	125	35	25	TN .. 1604 ..														
2525 M16	●	●	25	25	150	35	32									48.10.707	48.10.510	48.10.205	48.10.105	48.33.501	48.10.503	48.12.603 (SW3)
3232 P16	○	○	32	32	170	35	40									48.10.708	48.10.511	48.10.206	48.34.101		48.33.502	48.12.606 (SW4)
2525 M22	●	●	25	25	150	40	32	TN .. 2204 ..														
3232 P22	○	○	32	32	170	40	40									48.10.708	48.10.511	48.10.206	48.34.101	48.33.502	48.12.606 (SW4)	

PCBNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.40	Ersatzteile Spare Parts										
	R	L	H	B	L ₁	L ₂	f												
PCBNR/L 2020 K12	○	○	20	20	125	27	17	CN .. 1204 ..											
2525 M12	○	○	25	25	150	27	22								48.12.414	48.12.113	48.33.201	48.12.901	48.12.603 (SW3)
3232 P12	○	○	32	32	170	27	22								48.12.415	48.12.114	48.12.202	48.12.902	
2525 M16	○	○	25	25	150	33	22	CN .. 1606 ..											
3232 P16	○	○	32	32	170	33	27								48.12.416	48.12.115	48.12.203	48.12.903	
3232 P19	○	○	32	32	170	40	27	CN .. 1906 ..											
4040 S19	○	○	40	40	250	40	35								48.12.416	48.12.115	48.12.203	48.12.903	48.12.606 (SW4)

PCLNR/L 95°



Drehen
Turning

Fräswerkzeuge
Milling Tools

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

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

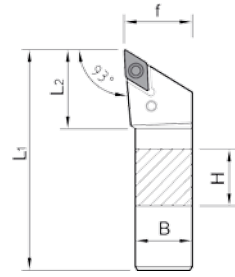
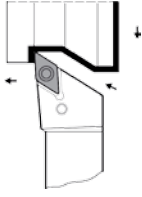
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

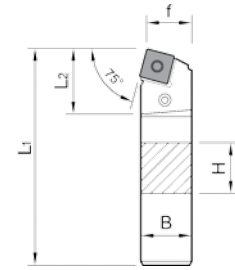
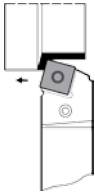
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.40	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PCLNR/L 1616 H09	○	○	16	16	100	20	20	CN .. 0903 ..	48.12.417	48.12.116	48.12.201	48.12.904	48.12.604 (SW2,5)
2020 K09	○	○	20	20	125	22	25						
2525 M09	○	○	25	25	150	22	32						
1616 H12	●	●	16	16	100	28	20	CN .. 1204 ..	48.12.414	48.12.113	48.33.201	48.12.901	48.12.603 (SW3)
2020 K12	●	●	20	20	125	28	25						
2525 M12	●	●	25	25	150	28	32						
3232 P12	○	○	32	32	170	28	32	CN .. 1606 ..	48.12.415	48.12.114	48.12.202	48.12.902	48.12.606 (SW4)
2525 M16	○	○	25	25	150	33	32						
3232 P16	○	○	32	32	170	33	40						
3232 P19	○	○	32	32	170	38	40	CN .. 1906 ..	48.12.416	48.12.115	48.12.235	48.12.903	48.12.606 (SW4)
4040 S19	○	○	40	40	250	38	50						

PDJNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.43	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PDJNR/L 1616 H11	●	○	16	16	100	25	20	DN ** 1104 **					
2020 K11	●	●	20	20	125	25	25						
2525 M11	○	○	25	25	150	30	32						
2020 K15	●	●	20	20	125	35	25	DN ** 1506 **					
2525 M15	●	●	25	25	150	35	32						
3232 P15	○	○	32	32	170	35	40						

PSBNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.47	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PSBNR/L 2020 K12			20	20	125	28	17	SN ** 1204 **					
2525 M12			25	25	150	28	22						
3232 P12			32	32	170	28	27						
2525 M15			25	25	150	35	22	SN ** 1506 **					
3232 P15			32	32	170	37	27						
3232 P19			32	32	170	40	27						
4040 S19			40	40	250	40	35	SN ** 1906 **					

PSKNR/L 75°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.47	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PSKNR/L 2020 K12			20	20	125	26	25	SN .. 1204 ..	48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
2525 M12			25	25	150	26	32						
2525 M15			25	25	150	32	32	SN .. 1506 ..	48.12.415	48.12.114	48.12.206	48.12.902	48.12.606 (SW4)
3232 P15			32	32	170	32	40						
3232 P19			32	32	170	40	40	SN .. 1906 ..	48.12.416	48.12.115	48.12.234	48.12.903	48.12.606 (SW4)
4040 S19			40	40	250	50	50						

PSSNR/L 45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.47	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PSSNR/L 2020 K12	●	○	20	20	125	30	25	SN .. 1204 ..	48.12.414	48.12.113	48.12.205	48.12.901	48.12.603 (SW3)
2525 M12	●	○	25	25	150	30	32						
2525 M15			25	25	150	30	32	SN .. 1506 ..	48.12.415	48.12.114	48.12.206	48.12.902	48.12.606 (SW4)
3232 P15			32	32	170	40	40						
3232 P19	○	○	32	32	170	40	40	SN .. 1906 ..	48.12.416	48.12.115	48.12.234	48.12.903	48.12.606 (SW4)
4040 S19	○	○	40	40	250	40	50						

Drehen
Turning

Fräswerkzeuge
Milling Tools

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

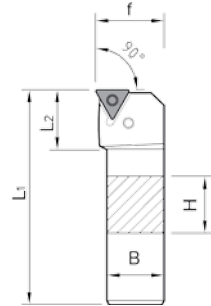
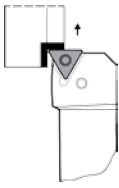
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

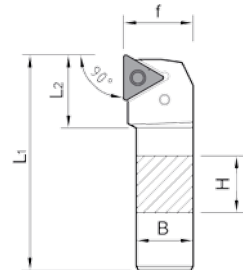
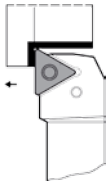
Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

PTFNR/L 90°



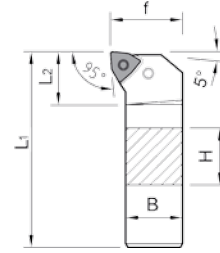
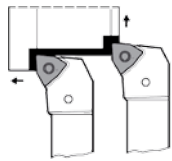
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PTFNR/L 1616 H16	○	○	16	16	100	20	20	TN ** 1604 **					
2020 K16	○	○	20	20	125	20	25						
2525 M16	○	○	25	25	150	20	32						
2525 M22	○	○	25	25	150	25	32	TN ** 2204 **					
3232 P22			32	32	170	25	40						
3232 P27			32	32	170	33	40						
4040 S27			40	40	250	33	50	TN ** 2706 **					

PTGNR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.49	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂	f						
PTGNR/L 1616 H16			16	16	100	20	20	TN ** 1604 **					
2020 K16	○	○	20	20	125	20	25						
2525 M16	○	○	25	25	150	20	32						
3232 P16			32	32	170	20	40	TN ** 2204 **					
2525 M22	○	○	25	25	150	28	32						
3232 P22			32	32	170	28	40						
3232 P27			32	32	170	33	40	TN ** 2706 **					
4040 S27			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

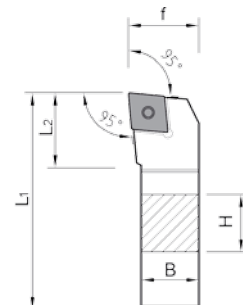
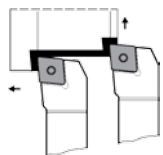
Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

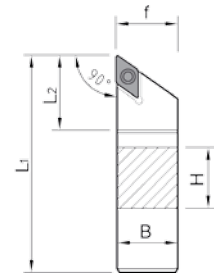
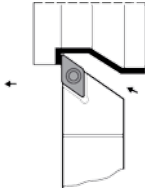
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.54	Ersatzteile Spare Parts					
	R	L	H	B	L ₁	L ₂		f					
PWLNR/L 1616 H06	○	○	16	16	100	20	20	WN-0604-..					
2020 K06	○	○	20	20	125	20	25						
2525 M06	○	○	25	25	150	20	32						
2020 K08	●	●	20	20	125	26	25	WN-0804-..					
2525 M08	●	●	25	25	150	26	32						
3232 P08	○	○	32	32	170	26	40						

SCLCR/L 95°



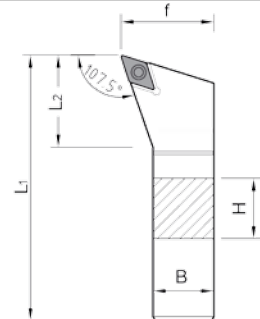
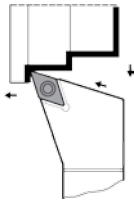
Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.38	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂		f				
SCLCR/L 0808 D06	●	○	8	8	60	12	10	CC-0602-..				
1010 F06	●	○	10	10	80	12	12					
1212 F09	●	●	12	12	80	16	16					
1616 H09	●	●	16	16	100	16	20	CC-09T3-..				
2020 K09	●	●	20	20	125	25	25					
1616 H12	○	○	16	16	100	20	20					
2020 K12	●	●	20	20	125	25	25	CC-1204-..				
2525 M12	●	●	25	25	150	25	32					
3232 P12	○	○	32	25	170	25	40					

SDACR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SDACR/L 0808 K07			8	8	125	14	8.5	DC -- 0702 --	48.24.107	-	-	56.33.612 (T08)
1010 M07			10	10	150	14	10.5					
1212 M07			12	12	150	14	12.5					
1212 M11			12	12	150	21	12.5	DC -- 11T3 --	48.24.108	-	-	56.33.613 (T15)
2525 M11			25	25	150	21	25.5		48.13.102	48.13.203	48.13.301	

SDHCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SDHCR/L 1010 E07	○		10	10	70	15	12	DC -- 0702 --	48.24.107	-	-	56.33.612 (T08)
1212 F07	○	○	12	12	80	15	16					
1616 H11	●	○	16	16	100	16	20	DC -- 11T3 --	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
2020 K11	●	●	20	20	125	21	25					
2525 M11	●	●	25	25	150	22	32					

SDJCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SDJCR/L 1010 E07	○		10	10	70	15	12	DC..0702..	48.24.107	-	-	56.33.612 (T08)
1212 F07	●	○	12	12	80	15	16					
1616 H11	●	●	16	16	100	26	20	DC..11T3..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
2020 K11	●	●	20	20	125	26	25					
2525 M11	●	●	25	25	150	29	32					

SDNCN 62,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.42	Ersatzteile Spare Parts			
	H	B	L ₁	L ₂	f							
SDNCN 1010 E07	○		10	10	70	20	5	DC..0702..	48.24.107	-	-	56.33.612 (T08)
1212 F07	○		12	12	80	20	6					
1212 M07			12	12	150	20	6					
1212 M11			12	12	150	30	6	DC..11T3..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
1616 H11	●		16	16	100	30	8					
2020 K11	●		20	20	125	30	10					
2525 M11	○		25	25	150	30	12.5					

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

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

SKJCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.44	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SKJCR/L 1212 F11	○		12	12	80	15	16	KC · X 1103 ·· R/L	48.13.104	-	-	56.33.612 (T08)
1616 H11	○	○	16	16	100	24	20					
2020 K11	○	○	20	20	125	24	25					
2525 M11	○		20	25	150	29	32					

SRDCN 45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.45	Ersatzteile Spare Parts			
	H	B	L ₁	L ₂	f							
SRDCN 1212 F06			12	12	80	12	6	RC · T 0602 ··	48.24.107	-	-	56.33.612 (T08)
1616 H06			16	16	100	12	8					
2020 K06	○		20	20	125	12	10					
2525 M06	○		25	25	150	12	12.5					
1616 H08			16	16	100	16	8	RC · T 0803 ··	48.13.105	-	-	56.33.612 (T08)
2020 K08	○		20	20	125	16	10					
2525 M08	○		25	25	150	16	12.5					
1616 H10			16	16	100	20	8					
2020 K10			20	20	125	20	10	RC · T 1003 ··	48.13.102	48.13.204	48.13.301	56.33.613 (T15)
2525 M10	○		25	25	150	20	12.5					

SSSCR/L 45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂		f				
SSSCR/L 1212 F09	●		12	12	80	18	16	SC.. 09T3 ..	48.13.102	-	-	56.33.613 (T15)
1616 H09	●	○	16	16	100	20	20					
2020 K09	●	○	20	20	125	22	25					
1616 H12			16	16	100	25	20	SC.. 1204 ..	48.13.103	48.13.206	48.13.302	56.33.613 (T15)
2020 K12	●	○	20	20	125	25	25					
2525 M12	●	○	25	25	150	25	32					
3225 P12			32	25	170	25	38					

STGCR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.48	Ersatzteile Spare Parts				
	R	L	H	B	L ₁	L ₂		f				
STGCR/L 0808 D09	○		8	8	60	8	10	TC.. 0902 ..	L60M2.2x5	-	-	75.20.621 (T06)
1010 E09	○		10	10	70	10	12					
1212 F11			12	12	80	15	16	TC.. 1102 ..	48.24.107	-	-	56.33.612 (T08)
1616 H11			16	16	100	15	20					
1616 H16			16	16	100	22	20					
2020 K16	○		20	20	125	22	25	TC.. 16T3 ..	48.13.102	48.13.207	48.13.301	56.33.613 (T15)
2525 M16	○		25	25	150	22	32					

Drehen
Turning

Fräswerkzeuge
Milling Tools

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

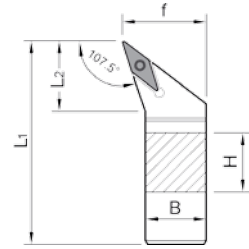
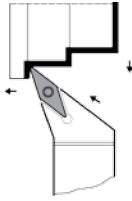
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

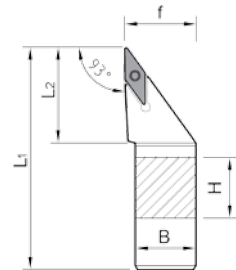
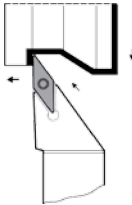
Wendplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

SVHCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.52	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SVHCR/L 1212 F11			12	12	80	11.5	16	VC .. 1103 ..				
1616 H11			16	16	100	11.5	20					
2020 K11			20	20	125	14.5	25					
2525 M11			25	25	150	20.0	32					
1616 H16			16	16	100	13.5	20	VC .. 1604 ..				
2020 K16	●		20	20	125	13.5	25					
2525 M16	●		25	25	150	20.0	32					

SVJBR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.51	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂	f					
SVJBR/L 1212 F11	○		12	12	80	11.5	16	VB .. 1103 ..				
1616 M11	○	○	16	16	100	11.5	20					
2020 K11			20	20	125	14.5	25					
2525 M11			25	25	150	20.0	32					
1616 H16			16	16	100	29.5	20	VB .. 1604 ..				
2020 K16	●	●	20	20	125	29.5	25					
2525 M16	●	○	25	25	150	32.5	32					

SVJCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.52	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂					
SVJCR/L 1010 E11	○		10	10	70	14.5	VC.. 1103..	48.24.107	-	-	56.33.612 (T08)
1212 F11	●	○	12	12	80	22.0					
1616 H11	●	●	16	16	100	25.0					
2020 K11	●	○	20	20	125	32.0					
2525 M11	●	○	25	25	150	38.0	VC.. 1604..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
1616 H16	●	○	16	16	100	29.5					
2020 K16	●	●	20	20	125	29.5					
2525 M16	●	●	25	25	150	32.5					
3225 P16	○	○	32	25	170	35.0					

SVVCN 72,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions				Seite / Page: 1.52	Ersatzteile Spare Parts			
	R	L	H	B	L ₁	L ₂					
SVVCN 1010 E11	○		10	10	70	18	VC.. 1103..	48.24.107	-	-	56.33.612 (T08)
1212 F11	○		12	12	80	27					
1616 H11			16	16	100	27					
2020 K11	○		20	20	125	27					
2525 M11			25	25	150	41	VC.. 1604..	48.13.102	48.13.209	48.13.301	56.33.613 (T15)
1616 H16	○		16	16	100	36					
2020 K16	○		20	20	125	41					
2525 M16	○		25	25	150	41					

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

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

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

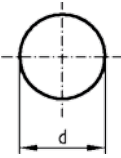
A
Stahlschaft mit
Kühlbohrung
*Steel shank with
coolant hole*

B
Stahlschaft mit
Dämpfung
*Steel shank with
vibration clamping*

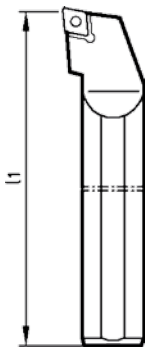
C
Hartmetallschaft mit
Stahlkopf
*Hardmetal shank with
steel head*

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

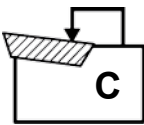
S
Stahlschaft
Steel shank



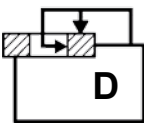
D₁ (mm)
08
10
12
16
20
25
32
40
50
60



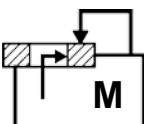
L₁ (mm)	A	L₁ (mm)	M
32	A	150	M
40	B	160	N
50	C	170	P
60	D	180	Q
70	E	200	R
80	F	250	S
90	G	300	T
100	H	350	U
110	J	400	V
125	K	450	W
140	L	500	Y
Sonderlänge Special length			X



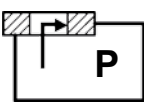
Von oben geklemmt
Top clamping




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° C	F																																										
	55° D	K				3° A																																						
	75° E	K	5° B																																									
	86° M	L	7° C																																									
	35° V	L	15° D																																									
	85° A	Q	20° E																																									
	82° B	Q	25° F																																									
	55° K	S	30° G																																									
	85° A	S	0° N																																									
	82° B	U	11° P																																									
	55° K	U	Sonstige O																																									
	H	W	Others																																									
	L	W																																										
	O	Y																																										
	P	Y																																										
	R	X																																										
	S	X																																										
	T																																											
	W																																											
				<table border="1"> <thead> <tr> <th colspan="4">d</th> </tr> <tr> <th colspan="4">(mm)</th> </tr> </thead> <tbody> <tr><td>06</td><td></td><td></td><td></td></tr> <tr><td>08</td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td></tr> <tr><td>16</td><td></td><td></td><td></td></tr> <tr><td>20</td><td></td><td></td><td></td></tr> <tr><td>25</td><td></td><td></td><td></td></tr> <tr><td>32</td><td></td><td></td><td></td></tr> </tbody> </table>	d				(mm)				06				08				10				12				16				20				25				32			
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				<table border="1"> <thead> <tr> <th colspan="4">d</th> </tr> <tr> <th>(mm)</th> <th>(inch)</th> <th>(mm)</th> <th>(mm)</th> </tr> </thead> <tbody> <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> </tbody> </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
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(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																																									

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

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Übersicht - Innendrehen Overview - Internal Turning

Drehwerkzeuge
Turning Tools

Fräswerkzeuge
Milling Tools

VHM-Fräser
Solid Carbide
Endmills

Stechdreh-
werkzeuge
Grooving Tools

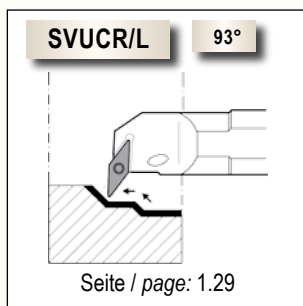
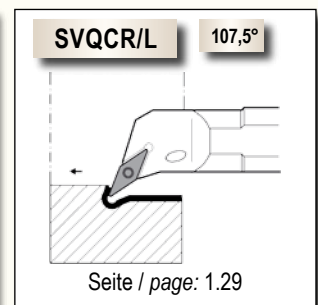
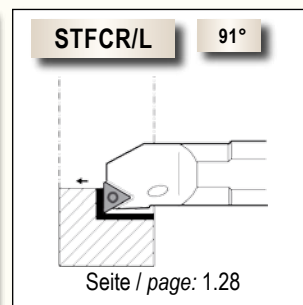
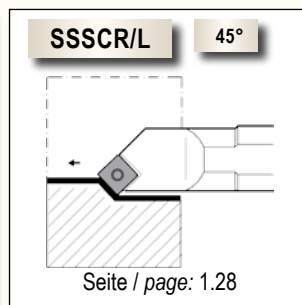
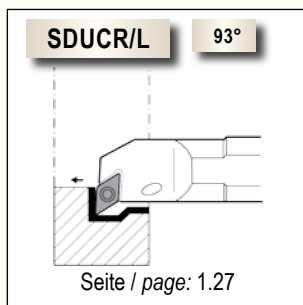
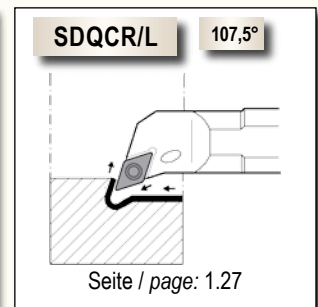
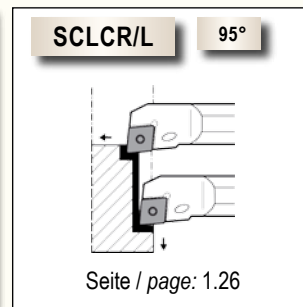
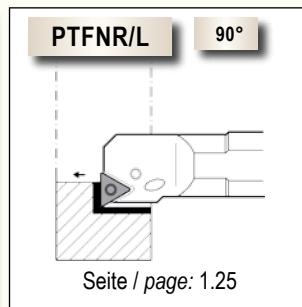
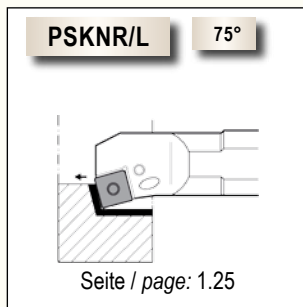
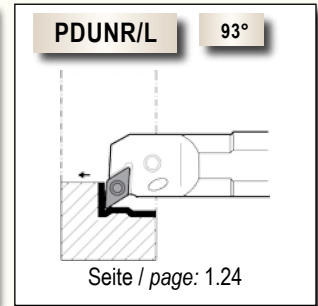
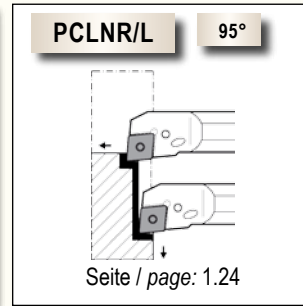
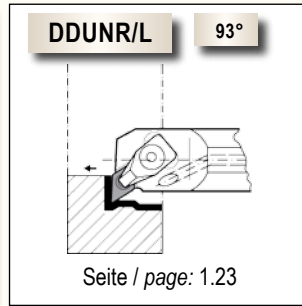
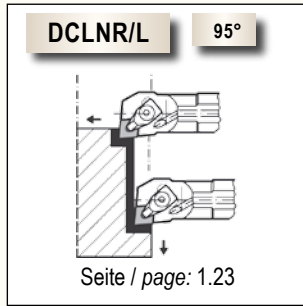
Mini
Schneidwerkzeuge
Mini Tools

Micro
Schneidwerkzeuge
Micro Tools

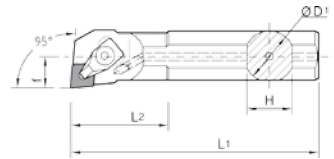
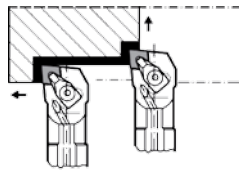
Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
Indexable Drills

VHM-Bohrer
Solid Carbide Drills



DCLNR/L 95°



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

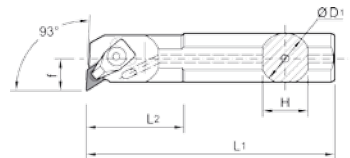
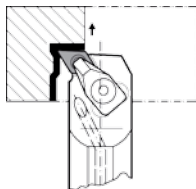
Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.40	Ersatzteile Spare Parts																	
	R	L	Dmin	D ₁	H	L ₁	L ₂		f																	
A25R DCLNR/L 12	●	●	32	25	23	200	50	17	CN ↔ 1204 ↔																	
A32S DCLNR/L 12	○	○	40	32	30	250	60	22										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)	
A40T DCLNR/L 12			50	40	37	300	60	27																		
A50U DCLNR/L 12			63	50	47	350	65	35																		

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

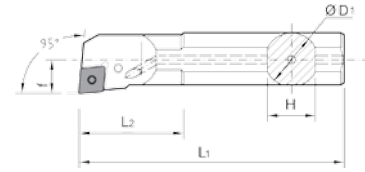
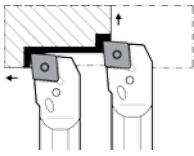
DDUNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.43	Ersatzteile Spare Parts								
	R	L	Dmin	D ₁	H	L ₁	L ₂		f								
A32S DDUNR/L 15	○	○	40	32	30	250	55	22	DN ↔ 1506 ↔								
A40T DDUNR/L 15			50	40	37	300	55	27									

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

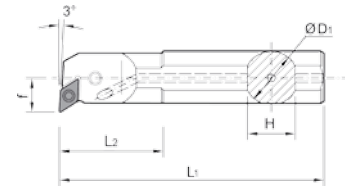
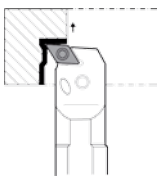
PCLNR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.40	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
S16R PCLNR/L 09	○	○	21	16	15	150	-	11	CN .. 0903 ..					
S20S PCLNR/L 09			25	20	19	180	-	13						
S25T PCLNR/L 09			32	25	24	300	-	17						
A25R PCLNR/L 12	●	●	32	25	24	200	40	17	CN .. 1204 ..					
A32S PCLNR/L 12	●	●	44	32	31	250	50	22						
A40T PCLNR/L 12	●	○	54	40	38.5	300	55	27						
A50U PCLNR/L 12	○	○	63	50	48.5	350	56	35						

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

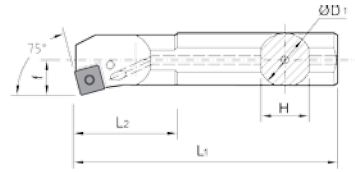
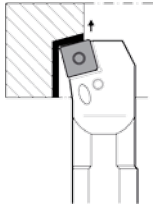
PDUNR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.43	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A20Q PDUNR/L 11	●	○	25	20	19	180	-	16	DN .. 1104 ..					
A25R PDUNR/L 11	○	○	31.5	25	24	200	-	18.5						
A32S PDUNR/L 11	○	○	40	32	31	250	-	22						
A32S PDUNR/L 15	●	○	40	32	31	250	50	22	DN .. 1506 ..					
A40T PDUNR/L 15	●	○	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

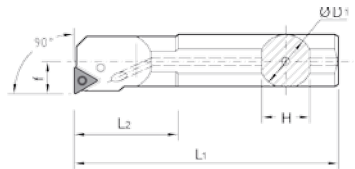
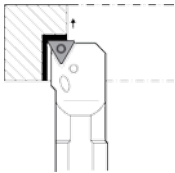
Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.47	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A25R PSKNR/L 12	○	○	32	25	24	200	42	17	SN .. 1204 ..			-	-	
A32S PSKNR/L 12	○	○	44	32	31	250	50	22		48.23.103	48.23.402	-	-	48.12.604 (SW2,5)
A40T PSKNR/L 12	○	○	54	40	38.5	300	55	27		48.12.113	48.12.414	48.23.203	48.12.901	48.12.603 (SW3)

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

PTFNR/L 90°

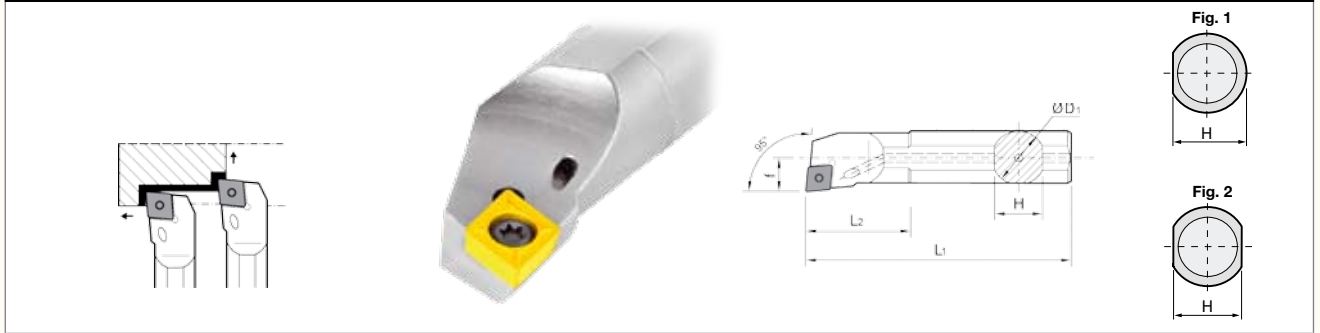


Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.49	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
S16R PTFNR/L 11	○	○	21	16	15	150	-	11	TN .. 1103 ..			-	-	
S20S PTFNR/L 11	○	○	25	20	19	180	-	13		48.23.102	48.23.406	-	-	48.12.605 (SW2)
A25R PTFNR/L 16	○	○	32	25	24	200	40	17	TN .. 1604 ..			-	-	
A32S PTFNR/L 16	○	○	44	32	31	250	50	22		48.23.102	48.23.404	-	-	48.12.605 (SW2)
A40T PTFNR/L 16	○	○	54	40	38.5	300	55	27		48.12.116	48.12.417	48.23.202	48.12.905	48.12.604 (SW2,5)

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

S : Stahlschaft / Steel Shank

SCLCR/L 95°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions							Fig.	Seite / Page: 1.38	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f							
E04G SCLCR/L 0305	●	●	5	4	3.8	90	-	2.5	1	CCET 0301 ..	48.24.142	-	-	75.20.621 (T06)	
E05H SCLCR/L 0306	●	○	6	5	4.4	100	-	3.0							
E06J SCLCR/L 0307	○	○	7	6	5.7	110	-	3.5	1	CCET 0401 ..	48.24.143	-	-	75.20.621 (T06)	
E06J SCLCR/L 0407	●	●	7	6	5.7	110	-	3.5							
E07K SCLCR/L 0408	●	○	8	7	6.4	125	-	4.0	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)	
S08K SCLCR/L 06	●	○	10	8	7	125	18	5.5							
S10K SCLCR/L 06	●	○	12	10	9	125	-	6.0	2	CC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)	
S12Q SCLCR/L 06	●	○	15	12	11	180	24	9.0							
S16R SCLCR/L 09	●	○	20	16	15	200	30	11.0	2	CC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)	
S20S SCLCR/L 09	●	○	23	20	18	250	30	13.0							
S25T SCLCR/L 09	○	○	32	25	23	300	40	17.0	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)	
A0608H SCLCR/L 06	●	●	8	8	7	100	25	4.5							
A0810J SCLCR/L 06	●	●	11	10	9	110	32	6.0	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)	
A1012K SCLCR/L 06	●	●	13	12	11	125	38	7.0							
A1216M SCLCR/L 06	●	●	16	16	15	150	50	9.0	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)	
A08F SCLCR/L 06	●	●	11	8	7	80	16	5.5							
A10H SCLCR/L 06	●	●	13	10	9	100	20	6.0	2	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)	
A12K SCLCR/L 06	●	●	17	12	11	125	23	9.0							
A16M SCLCR/L 09	●	●	21	16	15	150	30	11.0	2	CC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)	
A20Q SCLCR/L 09	●	●	25	20	18	180	38	13.0							
A25R SCLCR/L 09	●	●	32	25	23	200	39	17.0	2	CC .. 1204 ..	48.13.103	48.13.202	48.13.302	56.33.613 (T15)	
A32S SCLCR/L 12	●	○	40	32	31	250	50	22.0							
A40T SCLCR/L 12	○	○	50	40	38.5	300	60	27.0	1	CC .. 0602 ..	48.24.107	-	-	56.33.612 (T08)	
E08K SCLCR/L 06	●	●	11	8	7.5	125	-	5.0							
E10M SCLCR/L 06	●	●	14	10	9.5	150	-	6.0	1	CC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)	
E12Q SCLCR/L 06	●	●	17	12	11.5	180	-	9.0							
E16R SCLCR/L 09	●	●	21	16	15.5	200	32	11.0	1	CC .. 1204 ..	48.13.103	48.13.202	48.13.302	56.33.613 (T15)	
E20S SCLCR/L 09	●	●	25	20	19	250	38	13.0							
E25T SCLCR/L 09	●	●	32	25	24	300	45	17.0	1	CC .. 1204 ..	48.13.103	48.13.202	48.13.302	56.33.613 (T15)	
E32T SCLCR/L 12	○	○	40	32	30	300	50	22.0							
E40T SCLCR/L 12	○	○	50	40	38	300	60	27.0	1	CC .. 1204 ..	48.13.103	48.13.202	48.13.302	56.33.613 (T15)	
E40T SCLCR/L 12	○	○	50	40	38	300	60	27.0							

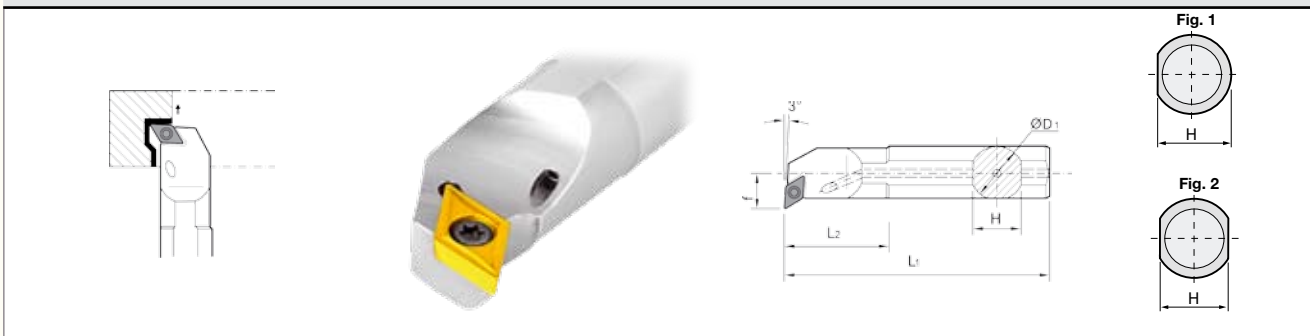
A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant
 E : Hartmetallschaft mit Innenkühlung / Carbide Shank with inner coolant
 S : Stahlschaft / Steel Shank

SDQCR/L 107,5°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.	Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A10H SDQCR/L 07	●	●	12.5	10	9	100	20	7	2	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
A12K SDQCR/L 07	●	●	17	12	11	125	24	9						
A16Q SDQCR/L 07	●	●	21	16	15	180	30	11						
A20Q SDQCR/L 07	●	●	25	20	18	180	32	13						
A16Q SDQCR/L 11	●	●	21	16	15	180	32	11	1	DC .. 11T3 ..	48.24.108	-	-	56.33.613 (T15)
A20Q SDQCR/L 11	●	●	25	20	18	180	32	13						
A25R SDQCR/L 11	●	●	32	25	23	200	40	17						
E10M SDQCR/L 07	●	●	14	10	9.5	150	-	7						
E12Q SDQCR/L 07	●	●	17	12	11.5	180	-	9	1	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
E16R SDQCR/L 07	●	●	21	16	15.5	200	-	11						
E20S SDQCR/L 07	●	○	25	20	19	250	-	13						
E25T SDQCR/L 11	●	●	32	25	24	300	-	17						
E32T SDQCR/L 11	○	○	40	32	30	300	50	22	1	DC .. 11T3 ..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
E40T SDQCR/L 11	○	○	50	40	38	300	60	27						

SDUCR/L 93°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.	Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A0810H SDUCR/L 07	●	●	12.5	10	9	100	22	7	2	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
A1012K SDUCR/L 07	●	●	15.5	12	11	125	28	9						
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	1	DC .. 11T3 ..	48.24.108	-	-	56.33.613 (T15)
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	1	DC .. 0702 ..	48.24.107	-	-	56.33.612 (T08)
A32S SDUCR/L 11	●	○	40	32	31	250	50	22						
A40T SDUCR/L 11	○	○	50	40	37	300	60	27						
E10M SDUCR/L 07	●	●	14	10	9.5	150	-	7						
E12Q SDUCR/L 07	●	●	17	12	11.5	180	-	9	1	DC .. 11T3 ..	48.24.108	-	-	56.33.613 (T15)
E16R SDUCR/L 07	●	●	21	16	15.5	200	-	11						
E20S SDUCR/L 11	●	●	25	20	19	250	-	13						
E25T SDUCR/L 11	●	●	32	25	24	300	-	17						
E32T SDUCR/L 11	○	○	40	32	31	300	50	22	1	DC .. 11T3 ..	48.13.102	48.13.203	48.13.301	56.33.613 (T15)
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

Drehen
Turning

Fräswerkzeuge
Milling Tools

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

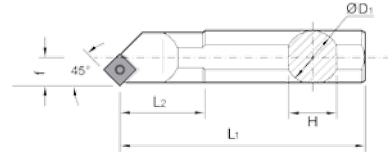
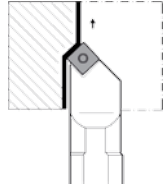
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

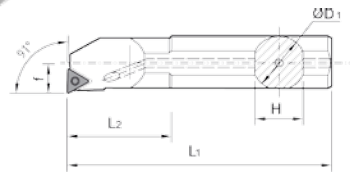
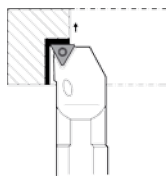
SSSCR/L 45°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.46	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A16M SSSCR/L 09			21	16	15	150	30	11	SC .. 09T3 ..	48.24.108	-	-	56.33.613 (T15)
A20Q SSSCR/L 09	●	○	25	20	18	180	32	13					
A25R SSSCR/L 09			32	25	23	200	36	17					
A32S SSSCR/L 12			40	32	31	250	50	22	SC .. 1204 ..	48.13.103	48.13.206	48.13.302	56.33.613 (T15)
A40T SSSCR/L 12			49	40	39	300	60	27					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

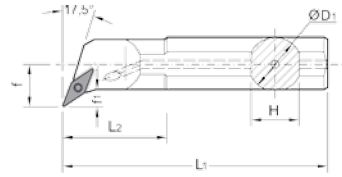
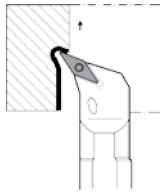
STFCR/L 90°



Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.48	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A12K STFCR/L 11			17	12	11	125	30	9	TC .. 1102 ..	48.24.107	-	-	56.33.612 (T08)
A16M STFCR/L 11			21	16	15	150	35	11					
A20Q STFCR/L 11			25	20	18	180	36	13					
A25R STFCR/L 16			32	25	23	200	49	17	TC .. 16T3 ..	48.13.102	48.13.207	48.13.301	56.33.613 (T15)
A32S STFCR/L 16			40	32	31	250	50	22					

A : Stahlschaft mit Innenkühlung / Steel Shank with inner coolant

SVQCR/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

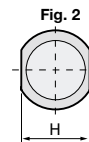
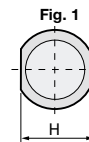
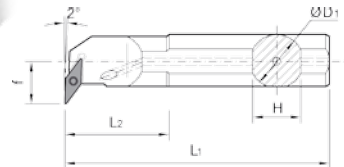
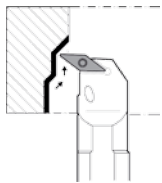
Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bezeichnung Part Number	Lager Stock		Maße [mm] Dimensions						Fig.	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A16Q SVQCR/L 11	●		21	16	15	180	30	11	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
A20Q SVQCR/L 11	○		25	20	18	180	32	13					
A25R SVQCR/L 11	○		32	25	23	200	36	17					
A32S SVQCR/L 16			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.	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂	f						
A16M SVUCR/L 11	●	○	21	16	15	150	30	11	2	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
A20Q SVUCR/L 11	●	○	25	20	18	180	32	13						
A25R SVUCR/L 11	○	○	32	25	23	200	36	17						
E16R SVUCR/L 11	○	○	21	16	15.5	200	16	11	1	VC .. 1103 ..	48.24.107	-	-	56.33.612 (T08)
E20S SVUCR/L 11	○	○	25	20	19	250	20	13						
E25T SVUCR/L 11	○	○	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°

Drehen
Turning

Fräswerkzeuge
Milling Tools

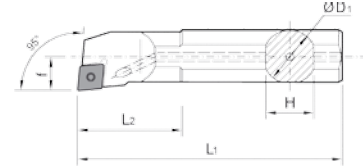
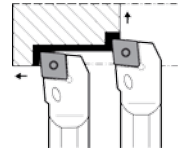
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

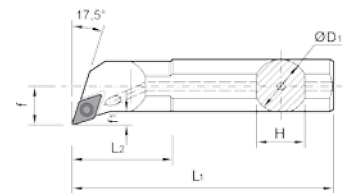
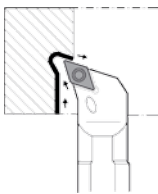
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.38	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A08H SCLCR/L 06			10	8	7	100	16	5	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
A10J SCLCR/L 06	•	•	12	10	9	110	20	7					
A12K SCLCR/L 06			16	12	11	125	22	9	CC.. 09T3..	48.24.108	-	-	56.33.613 (T15)
A16M SCLCR/L 09			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 SDQCR/L 107,5°



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions					Seite / Page: 1.42	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
A10J SDQCR/L 07			12	10	9	110	20	7	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)
A12K SDQCR/L 07	•	•	16	12	11	125	22	9					
A16M SDQCR/L 07			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°



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

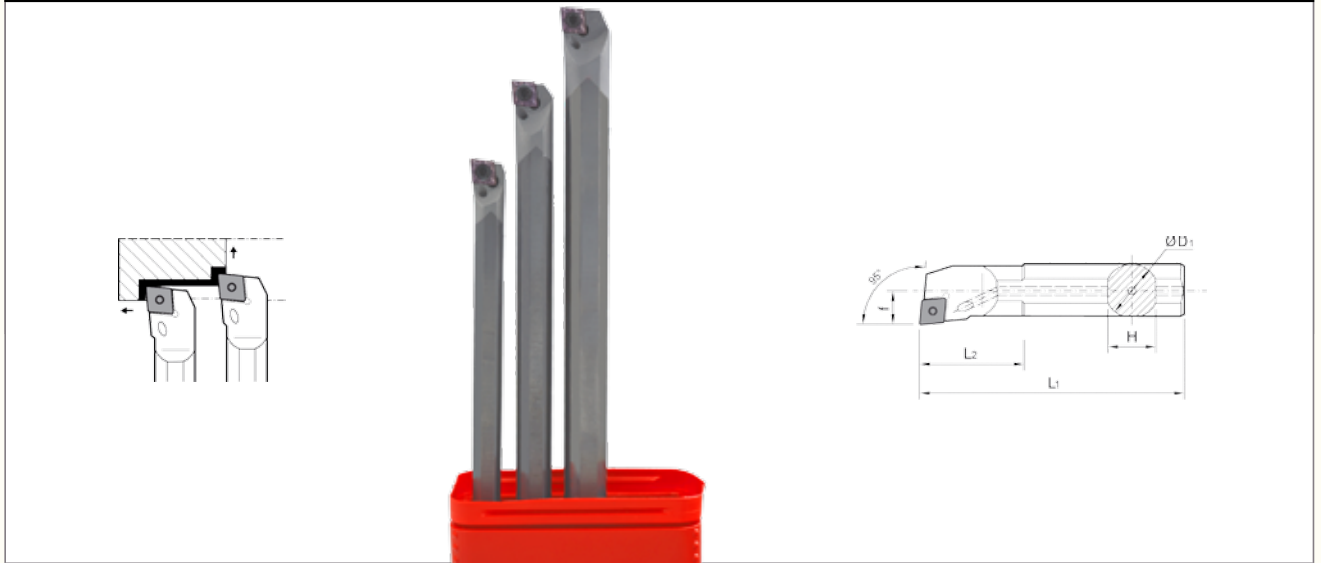
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A10J SDUCR/L 07			12	10	9	110	20	7	DC-- 0702--	48.24.107	-	-	56.33.612 (T08)
A12K SDUCR/L 07	●	●	16	12	11	125	24	9					
A16M SDUCR/L 07			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 E-SCLCR/L

95°


Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:					Seite / Page: 1.38	Ersatzteile Spare Parts								
	R	L	Dmin	D ₁	H	L ₁	L ₂		f								
E08K SCLCR/L 06			11	8	7.5	125	17	5	CC.. 0602..								
E10M SCLCR/L 06	•	•	14	10	9.5	150	20	6						48.24.107	-	-	56.33.612 (T08)
E12Q SCLCR/L 06			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°


Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:					Seite / Page: 1.42	Ersatzteile Spare Parts				
	R	L	Dmin	D ₁	H	L ₁	L ₂		f				
E10M SDUCR/L 07			14	10	9.5	150	-	7	DC.. 0702..				
E12Q SDUCR/L 07	•	•	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 SCLCR/L 06 95°



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.38	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A0608H SCLCR/L 06			8	8	7	100	25.0	4.5	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
A0810J SCLCR/L 06	•	•	11	10	9	110	32.0	6.0					
A1012K SCLCR/L 06			13	12	11	125	38.0	7.0					
A1216M SCLCR/L 06			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 93°



Bestehend aus: Consisting of:	Lager Stock		Maße [mm] Dimensions						Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f					
A0810H SDUCR/L 07			12.5	10	9	100	22	7	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)
A1012K SDUCR/L 07	•	•	15.5	12	11	125	28	9					
A1216M SDUCR/L 07			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.

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

SET A08K-A12M SCLCR/L 06-CB 95°

Drehen
Turning

Fräswerkzeuge
Milling Tools

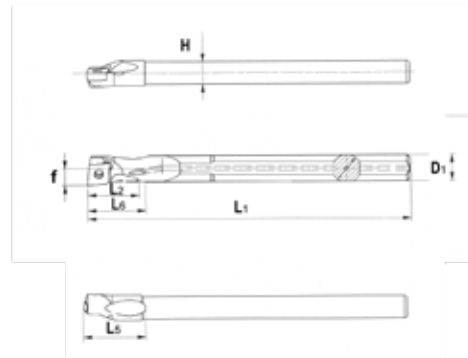
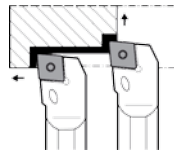
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

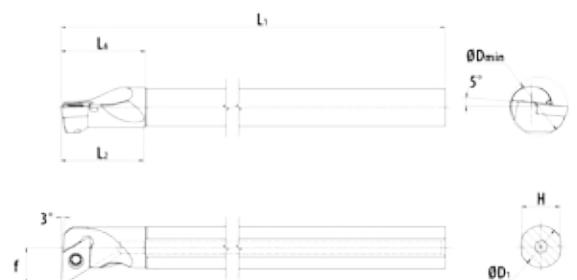
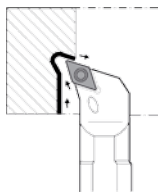
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:								Seite / Page: 1.38	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f	L ₃	L ₆					
A08K SCLCR/L 06-CB			10	8	7	125	16	5	20	17	CC.. 0602..	48.24.107	-	-	56.33.612 (T08)
A10K SCLCR/L 06-CB	•	•	12	10	9	125	20	6	25	21					
A12M SCLCR/L 06-CB			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 93°



Bezeichnung Part Number	Lager Stock		Bestehend aus: Consisting of:								Seite / Page: 1.42	Ersatzteile Spare Parts			
	R	L	Dmin	D ₁	H	L ₁	L ₂	f	L ₃	L ₆					
A10K SDUCR/L 07-CB	•	•	14	10	9	125	20	9	22	DC.. 0702..	48.24.107	-	-	56.33.612 (T08)	
A12M SDUCR/L 07-CB			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

<p style="text-align: center;">80° C</p> <p style="text-align: center;">55° D</p> <p style="text-align: center;">75° E</p> <p style="text-align: center;">86° M</p> <p style="text-align: center;">35° V</p> <p style="text-align: center;">3° A</p> <p style="text-align: center;">85° A</p> <p style="text-align: center;">82° B</p> <p style="text-align: center;">55° K</p> <p style="text-align: center;">H</p> <p style="text-align: center;">L</p> <p style="text-align: center;">O</p> <p style="text-align: center;">P</p> <p style="text-align: center;">R</p> <p style="text-align: center;">S</p> <p style="text-align: center;">T</p> <p style="text-align: center;">W</p>	<p style="text-align: center;">5° B</p> <p style="text-align: center;">7° C</p> <p style="text-align: center;">15° D</p> <p style="text-align: center;">20° E</p> <p style="text-align: center;">25° F</p> <p style="text-align: center;">30° G</p> <p style="text-align: center;">0° N</p> <p style="text-align: center;">11° P</p> <p style="text-align: center;">O</p> <p style="text-align: center;">Sonstige Others</p>	<p style="text-align: center;">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 rowspan="2">Klasse Class</th> </tr> </thead> <tbody> <tr> <td>0.025</td> <td>0.005</td> <td>0.025</td> <td>A</td> </tr> <tr> <td>0.025</td> <td>0.013</td> <td>0.025</td> <td>C</td> </tr> <tr> <td>0.025</td> <td>0.025</td> <td>0.025</td> <td>E</td> </tr> <tr> <td>0.013</td> <td>0.005</td> <td>0.025</td> <td>F</td> </tr> <tr> <td>0.025</td> <td>0.025</td> <td>0.05-0.13</td> <td>G</td> </tr> <tr> <td>0.013</td> <td>0.013</td> <td>0.025</td> <td>H</td> </tr> <tr> <td>0.05-0.15</td> <td>0.005</td> <td>0.025</td> <td>J</td> </tr> <tr> <td>0.05-0.15</td> <td>0.013</td> <td>0.025</td> <td>K</td> </tr> <tr> <td>0.05-0.15</td> <td>0.025</td> <td>0.025</td> <td>L</td> </tr> <tr> <td>0.05-0.15</td> <td>0.08-0.2</td> <td>0.05-0.13</td> <td>M</td> </tr> <tr> <td>0.05-0.15</td> <td>0.08-0.2</td> <td>0.025</td> <td>N</td> </tr> <tr> <td>0.08-0.25</td> <td>0.13-0.38</td> <td>0.13</td> <td>U</td> </tr> </tbody> </table>	d +/-	m +/-	s +/-	Klasse Class	0.025	0.005	0.025	A	0.025	0.013	0.025	C	0.025	0.025	0.025	E	0.013	0.005	0.025	F	0.025	0.025	0.05-0.13	G	0.013	0.013	0.025	H	0.05-0.15	0.005	0.025	J	0.05-0.15	0.013	0.025	K	0.05-0.15	0.025	0.025	L	0.05-0.15	0.08-0.2	0.05-0.13	M	0.05-0.15	0.08-0.2	0.025	N	0.08-0.25	0.13-0.38	0.13	U	<p style="text-align: center;">A</p> <p style="text-align: center;">C</p> <p style="text-align: center;">F</p> <p style="text-align: center;">G</p> <p style="text-align: center;">H</p> <p style="text-align: center;">J</p> <p style="text-align: center;">M</p> <p style="text-align: center;">N</p> <p style="text-align: center;">Q</p> <p style="text-align: center;">R</p> <p style="text-align: center;">T</p> <p style="text-align: center;">U</p> <p style="text-align: center;">W</p> <p style="text-align: center;">Sonderausführung Special Shape</p> <p style="text-align: center;">X</p>
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ISO - Bezeichnungssystem für Wendeschneidplatten
ISO Designation System for Indexable Inserts

							<p>F</p> <p>Scharf <i>Sharp</i></p>		<p>R</p>																																																						
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16 04 04 E R

Schneidenlänge
Length of Cutting Edge

Plattendicke
Thickness of Insert

Eckenradius
Corner Radius

Schneidkante
Cutting Edge

Schneidrichtung
Cutting Direction

Drehen
Turning

Fräswerkzeuge
Milling Tools

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

Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
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Threading Tools

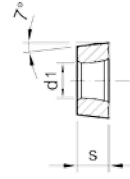
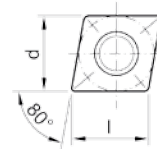
Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

CC

Drehen
Turning



80°



Fräswerkzeuge
Milling Tools

HDS-/VHM-Fräser
HDS-/Solid Carbide
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Stech- und
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Solid Carbide Drills

Werkstück / Workpiece	Beschichtet / Coated											Unbeschichtet / Uncoated	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]		Passende Trägerwerkzeuge / Suitable Toolholders						
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	3.30	3.50	1.39	1.90	0,01~0,05	0,10~0,30	SCLC R/L / 1.26	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	4.10	4.30	1.79	2.30	0,01~0,10	0,10~0,50		
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

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Werkstück / Workpiece	Beschichtet / Coated											Unbeschichtet / Uncoated	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]		Passende Trägerwerkzeuge / Suitable Toolholders						
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	6.20	6.35	2.38	2.80	0,01~0,30	0,05~3,00	SCLC R/L / 1.13	SCLC R/L / 1.26
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	6.00	6.35	2.38	2.80	0,02~0,40	0,10~3,00		
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	9.40	9.52	3.97	4.40	0,01~0,30	0,05~3,00		
Nichtmet. Werkstoffe / Non-fer. metall.	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	9.20	9.52	3.97	4.40	0,02~0,40	0,10~4,00		
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	8.80	9.52	3.97	4.40	0,03~0,50	0,10~5,00		
Gehärteter Stahl / Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○	12.60	12.70	4.76	5.50	0,01~0,30	0,50~5,00		
		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	12.40	12.70	4.76	5.50	0,02~0,40	0,10~5,00		
		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	12.00	12.70	4.76	5.50	0,03~0,50	0,10~5,00		

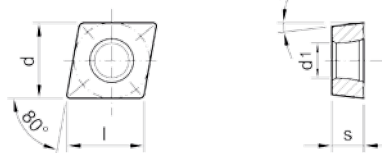
Machinentyp
Machining types

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

CC □ □

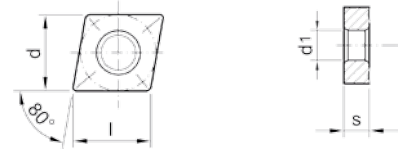


80°



Werkstück / Workpiece	Stahl / Steel	A (P)																Machinentyp Machining types
	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]		Passende Trägerwerkzeuge Suitable Toolholders				
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)
 CCMT-F19	06 02 02 -F19																6.20	6.35	2.38	2.80	0,03~0,11	0,06~1,70	SCLC R/L / 1.13	SCLC R/L / 1.26
	06 02 04 -F19																6.00	6.35	2.38	2.80	0,05~0,17	0,10~1,70		
	09 T3 02 -F19																9.40	9.52	3.97	4.40	0,04~0,15	0,08~2,00		
	09 T3 04 -F19																9.20	9.52	3.97	4.40	0,06~0,23	0,11~2,00		
	12 04 04 -F19																12.40	12.70	4.76	5.50	0,07~0,27	0,14~2,00		
 CCMT-F30	06 02 02 -F30											●					6.30	6.35	2.38	2.80	0,03~0,11	0,06~1,70	SCLC R/L / 1.13	SCLC R/L / 1.26
	06 02 04 -F30											●					6.00	6.35	2.38	2.80	0,05~0,17	0,10~1,70		
	09 T3 02 -F30											●					9.50	9.52	3.97	4.40	0,04~0,15	0,08~2,00		
	09 T3 04 -F30											●					9.20	9.52	3.97	4.40	0,06~0,23	0,11~2,00		
	12 04 02 -F30											●					12.70	12.70	4.76	5.50	0,05~0,15	0,10~2,00		
 CCMT-M18	06 02 04 -M18		○													●	6.00	6.35	2.38	2.80	0,06~0,25	0,10~2,00	SCLC R/L / 1.13	SCLC R/L / 1.26
	09 T3 04 -M18		○													●	9.40	9.52	3.97	4.40	0,06~0,25	0,20~3,00		
	09 T3 08 -M18		○													●	8.80	9.52	3.97	4.40	0,07~0,35	0,20~3,00		
	12 04 04 -M18		○													●	12.40	12.70	4.76	5.50	0,06~0,25	0,20~3,00		
	12 04 08 -M18		○													●	12.00	12.70	4.76	5.50	0,07~0,35	0,20~3,00		
 CCMT-M30	06 02 04 -M30					●						●					6.00	6.35	2.38	2.80	0,05~0,20	0,40~1,00	SCLC R/L / 1.13	SCLC R/L / 1.26
	06 02 08 -M30					●						●					5.70	6.35	2.38	2.80	0,05~0,25	0,40~1,00		
	09 T3 04 -M30					●						●					9.40	9.52	3.97	4.40	0,05~0,20	0,40~1,50		
	09 T3 08 -M30					●						●					8.80	9.52	3.97	4.40	0,05~0,25	0,40~1,50		
	12 04 04 -M30					●						●					12.40	12.70	4.76	5.56	0,05~0,20	0,50~2,00		
 CCMT-MD	06 02 04 -MD											●		○			6.00	6.35	2.38	2.80	0,06~0,17	0,20~2,30	SCLC R/L / 1.13	SCLC R/L / 1.26
	06 02 08 -MD											●		○			5.60	6.35	2.38	2.80	0,08~0,23	0,40~2,30		
	09 T3 04 -MD											●		○			9.20	9.52	3.97	4.40	0,06~0,17	0,20~2,50		
	09 T3 08 -MD											●		○			8.80	9.52	3.97	4.40	0,08~0,23	0,30~2,50		
	12 04 04 -MD											●		○			12.40	12.70	4.76	5.50	0,06~0,17	0,30~3,50		
12 04 08 -MD											●		○			12.00	12.70	4.76	5.50	0,08~0,23	0,50~3,50			

CN □ □


Werkstück/Worpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders								
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page		
Stahl / Steel	A (P)											•	12.40	12.70	4.76	5.16	0,05~0,28	0,23~4,80	DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24							
Rostfreier Stahl / Stainless steel	R (M)											•	12.00	12.70	4.76	5.16	0,10~0,40	0,80~3,50									
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

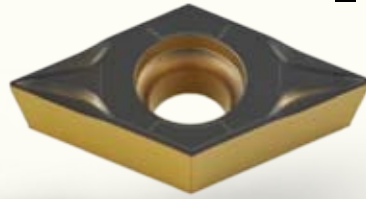
- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Werkstück/Worpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders							
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page	
Stahl / Steel	A (P)											•	12.40	12.70	4.76	5.16	0,05~0,30	0,60~3,50	DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24						
Rostfreier Stahl / Stainless steel	R (M)											•	12.00	12.70	4.76	5.16	0,10~0,40	0,80~4,00								
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																									
CNMG-C22 	A (P)											•	12.40	12.70	4.76	5.16	0,07~0,35	0,20~3,00	DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24						
	R (M)											•	12.00	12.70	4.76	5.16	0,18~0,45	0,30~5,00								
	H											•	11.60	12.70	4.76	5.16	0,23~0,60	0,50~5,00								
CNMG-M15 	A (P)											•	12.40	12.70	4.76	5.16	0,05~0,35	0,80~4,50	DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24						
	R (M)											•	12.00	12.70	4.76	5.16	0,08~0,45	1,00~4,50								
	H											•	11.60	12.70	4.76	5.16	0,10~0,50	1,20~4,50								
CNMG-MD 	A (P)											•	12.40	12.70	4.76	5.16	0,05~0,35	0,80~4,50	DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24						
	R (M)											•	12.00	12.70	4.76	5.16	0,08~0,45	1,00~4,50								
	H											•	11.60	12.70	4.76	5.16	0,10~0,50	1,20~4,50								
CNMG-S30 	A (P)											•	12.40	12.70	4.76	5.16	0,05~0,25	0,50~4,50	DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24						
	R (M)											•	12.00	12.70	4.76	5.16	0,10~0,40	0,50~4,50								
	H											•	12.00	12.70	4.76	5.16	0,10~0,40	0,50~4,50								

Unsere neuen Geometrien

Our new geometries

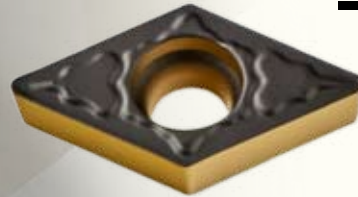
- F30



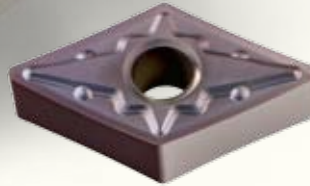
- M30



- MD



- S30

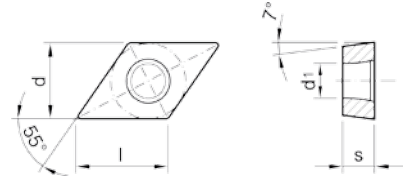


- C22



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

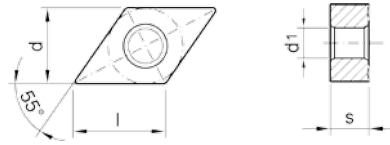
Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück / Workpiece	Beschichtet / Coated											Unbeschichtet / Uncoated	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]		Passende Trägerwerkzeuge / Suitable Toolholders					
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page
Stahl / Steel	A (P)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	7.50	6.35	2.38	2.80	0,01~0,30	0,05~3,00	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	7.30	6.35	2.38	2.80	0,02~0,40	0,10~4,00			
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	6.80	6.35	2.38	2.80	0,02~0,40	0,10~4,00			
Nichtmet. Werkstoffe / Non-fer. metall.	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	11.40	9.52	3.97	4.40	0,02~0,30	0,05~4,00			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	11.20	9.52	3.97	4.40	0,03~0,50	0,10~5,00			
Gehärteter Stahl / Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.80	9.52	3.97	4.40	0,03~0,50	0,10~5,00			
DCGT-ALX	07 02 02 - ALX	●	○										●		●	7.50	6.35	2.38	2.80	0,01~0,30	0,05~3,00	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27	
	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			
DCMT-F19	07 02 02 - F19					○							○			7.50	6.35	2.38	2.80	0,03~0,11	0,06~1,50	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27	
	07 02 04 - F19					○							○			7.30	6.35	2.38	2.80	0,05~0,17	0,08~1,50			
	11 T3 02 - F19					○							○			11.40	9.52	3.97	4.40	0,04~0,15	0,08~2,00			
	11 T3 04 - F19					○							○			11.20	9.52	3.97	4.40	0,06~0,23	0,11~2,00			
	11 T3 08 - F19					○							○			10.80	9.52	3.97	4.40	0,08~0,30	0,15~2,00			
	07 02 02 - F30												●			7.50	6.35	2.38	2.80	0,03~0,11	0,06~1,50			
DCMT-F30	07 02 04 - F30												●			7.30	6.35	2.38	2.80	0,05~0,17	0,10~1,50	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27	
	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			
	11 T3 08 - F30												●			10.80	9.52	3.97	4.40	0,06~0,23	0,11~2,00			
DCMT-M18	07 02 04 - M18		○										●			7.30	6.35	2.38	2.80	0,06~0,25	0,10~2,00	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27	
	11 T3 04 - M18		○										●			11.20	9.52	3.97	4.40	0,06~0,25	0,20~3,00			
	11 T3 08 - M18		○										●			10.80	9.52	3.97	4.40	0,07~0,35	0,20~3,00			
DCMT-M30	07 02 04 - M30				●								●			7.30	6.35	2.38	2.80	0,05~0,20	0,20~1,50	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27	
	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			
DCMT-MD	07 02 04 - MD												●	○		7.30	6.35	2.38	2.80	0,06~0,17	0,20~2,40	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27	
	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			

Machinentyp / Machining types

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

DN



Werkstück / Workpiece	Stahl / Steel	A (P)																	Machinentyp / Machining types					
	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]		Passende Trägerwerkzeuge / Suitable Toolholders			
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220		TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)
	15 06 04 - A20	○		●	●											●	15.50	12.70	6.35	5.16	0,05~0,25	0,80~3,50	DDJN R/L / 1.07 PDJN R/L / 1.10	DDUN R/L / 1.23 PDUN R/L / 1.24
	15 06 08 - A20	○		●	●											●	15.50	12.70	6.35	5.16	0,05~0,40	0,80~3,50		
	15 06 04 - C22										○						12.70	12.70	6.35	5.16	0,05~0,30	0,50~3,50	DDJN R/L / 1.07 PDJN R/L / 1.10	DDUN R/L / 1.23 PDUN R/L / 1.24
	15 06 08 - C22										●						12.40	12.70	6.35	5.16	0,10~0,40	0,70~4,00		
	11 04 04 - M15		○													●	11.20	9.52	4.76	3.81	0,07~0,35	0,20~3,00	DDJN R/L / 1.07 PDJN R/L / 1.10	DDUN R/L / 1.23 PDUN R/L / 1.24
	11 04 08 - M15		○													●	10.80	9.52	4.76	3.81	0,15~0,45	0,30~5,00		
	15 06 04 - M15		○													●	15.10	12.70	6.35	5.16	0,07~0,35	0,20~3,00		
	15 06 08 - M15		○													●	14.70	12.70	6.35	5.16	0,15~0,45	0,50~5,00		
	15 06 04 - MD										●		○			○	15.10	12.70	6.35	5.16	0,05~0,35	0,80~5,00	DDJN R/L / 1.07 PDJN R/L / 1.10	DDUN R/L / 1.23 PDUN R/L / 1.24
	15 06 08 - MD										●		○			○	14.70	12.70	6.35	5.16	0,08~0,45	1,00~5,00		
	15 06 12 - MD								○		○		○				14.40	12.70	6.35	5.16	0,10~0,50	1,20~5,00		
	15 06 04 - S30				●												15.10	12.70	6.35	5.16	0,05~0,25	0,50~4,00	DDJN R/L / 1.07 PDJN R/L / 1.10	DDUN R/L / 1.23 PDUN R/L / 1.24
	15 06 08 - S30				●												14.70	12.70	6.35	5.16	0,10~0,40	1,00~4,50		

Drehen / Turning

Fräswerkzeuge / Milling Tools

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

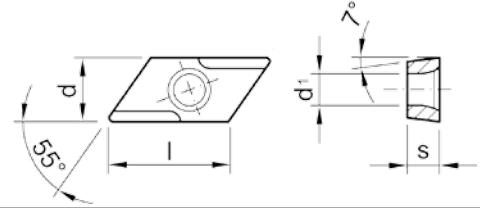
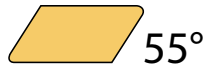
Stech- und Abstechwerkzeuge / Grooving and Parting off Tools

Mini/Micro Schneidwerkzeuge / Mini/Micro Tools

Gewindewerkzeuge / Threading Tools

Wendeplattenbohrer VHM-Bohrer / Indexable Drills Solid Carbide Drills

KC

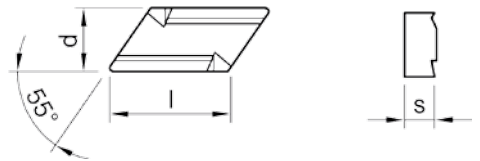


Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders							
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page	
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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
	11 03 02 - FL							○									11.60	6.35	3.18	2.80	0,07~0,40	0,30~3,00	SKJC R/L / 1.16			
	11 03 02 - FLX	○															11.60	6.35	3.18	2.80	0,07~0,40	0,50~3,00				
	11 03 04 - FL							●									11.60	6.35	6.35	2.80	0,10~0,50	0,50~3,00				
	11 03 04 - FLX	○															11.60	6.35	3.18	2.80	0,10~0,50	0,50~3,00				
	11 03 08 - FL	○															11.60	6.35	3.18	2.80	0,13~0,50	0,50~3,00				
	11 03 02 - FR							●									11.60	6.35	3.18	2.80	0,07~0,40	0,30~3,00	SKJC R/L / 1.16			
	11 03 02 - FRX	○															11.60	6.35	3.18	2.80	0,07~0,40	0,50~3,00				
	11 03 04 - FR							●									11.60	6.35	6.35	2.80	0,10~0,50	0,50~3,00				
	11 03 04 - FRX	○															11.60	6.35	3.18	2.80	0,10~0,50	0,50~3,00				
	11 03 08 - FR	○															11.60	6.35	3.18	2.80	0,13~0,50	0,50~3,00				
11 03 08 - FRX	○															11.60	6.35	3.18	2.80	0,13~0,50	0,50~3,00					

Machinentyp Machining types

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✘ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

KN

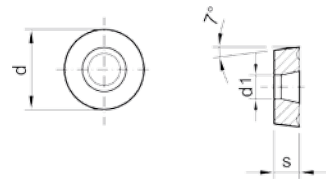


Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders								
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page		
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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●											
	16 04 05 - L11							●									19.20	9.52	4.76	-	0,20~0,35	1,00~6,00	CKJN R/L / 1.06				
	16 04 05 - R11-M15													●			19.20	9.52	4.76	-	0,20~0,35	1,00~6,00					
	16 04 05 - R11								●								19.20	9.52	4.76	-	0,20~0,35	1,00~6,00					
	16 04 10 - L11							○									18.80	9.52	4.76	-	0,30~0,60	1,50~6,00					
	16 04 10 - R11							○									18.80	9.52	4.76	-	0,30~0,60	1,50~6,00					
	16 04 05 - R12							○									19.20	9.52	4.76	-	0,25~0,35	1,50~6,00	CKJN R/L / 1.06				
	16 04 10 - L12							○									18.80	9.52	4.76	-	0,40~0,70	1,50~6,00					
	16 04 10 - R12							○									18.80	9.52	4.76	-	0,40~0,70	1,50~6,00					

Machinentyp Machining types

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✘ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

RC □ □



Werkstück / Workpiece	Stahl / Steel	A (P)												Machinentyp Machining types									
	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											Maße Dimensions [mm]	Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders							
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	10 03 MO - ALX	○	○	○											●	10.00	3.18	4.00	0,10~0,30	1,00~3,00	SRDCN	/ 1.16	
	12 04 MO - ALX	○	○	○											●	12.00	4.76	4.40	0,10~0,35	1,00~3,50			

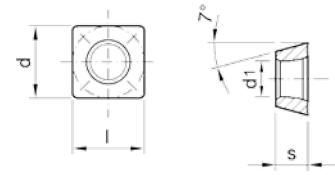
Werkstück / Workpiece	Stahl / Steel	A (P)												Machinentyp Machining types									
	Rostfreier Stahl / Stainless steel	R (M)																					
Guss / Cast iron	F (K)																						
Nichtmet. Werkstoffe / Non-fer. metall.	N																						
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S																						
Gehärteter Stahl / Hardened steel	H																						
Wendepplatten Inserts	Bezeichnung Part Number	Beschichtet Coated											Maße Dimensions [mm]	Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders							
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)
	06 02 MO - M18		○												●	6.00	2.38	-	0,05~0,20	0,50~2,00	SRDCN	/ 1.16	
	08 03 MO - M18		○												●	8.00	3.18	-	0,05~0,25	0,50~2,50			
	10 T3 MO - M18		○												●	10.00	3.97	-	0,15~0,40	1,00~3,50			
	12 04 MO - M18		○												●	12.00	4.76	-	0,20~0,50	2,00~4,50			

- 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

SC



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

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück/Workpiece	Beschichtet Coated										Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders										
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120		TP 4025	TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page			
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										+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
SCGT-ALX 	09 T3 02 - ALX										○																	
	09 T3 04 - ALX										●	9.30	9.52	3.97	4.40	0,02~0,40	0,10~4,00											
	09 T3 08 - ALX										○	9.10	9.52	3.97	4.40	0,02~0,40	0,10~4,00											
	12 04 04 - ALX										●	8.70	9.52	3.97	4.40	0,03~0,50	0,10~5,00	SSSC R/L / 1.17	SSSC R/L / 1.28									
	12 04 08 - ALX										○	12.30	12.70	4.76	5.50	0,02~0,40	0,10~5,00											
SCMT-F19 	09 T3 04 - F19											9.10	9.52	3.97	4.40	0,06~0,23	0,11~2,00											
	09 T3 08 - F19											8.70	9.52	3.97	4.40	0,08~0,30	0,15~2,00											
	12 04 08 - F19											11.90	12.70	4.76	5.50	0,07~0,27	0,14~2,00	SSSC R/L / 1.17	SSSC R/L / 1.28									
	09 T3 04 - M18										○	9.10	9.52	3.97	4.40	0,06~0,25	0,20~3,00											
	09 T3 08 - M18										○	8.70	9.52	3.97	4.40	0,07~0,35	0,20~3,00	SSSC R/L / 1.17	SSSC R/L / 1.28									
SCMT-M18 																												
SCMT-M30 	12 04 08 - M30										●	11.90	12.70	4.76	5.56	0,08~0,25	0,25~2,00											
SCMT-MD 	09 T3 04 - MD											9.10	9.52	3.97	4.40	0,06~0,17	0,20~2,50											
	09 T3 08 - MD											8.70	9.52	3.97	4.40	0,08~0,23	0,30~2,50											
	12 04 04 - MD											12.30	12.70	4.76	5.50	0,06~0,17	0,30~3,50	SSSC R/L / 1.17	SSSC R/L / 1.28									
	12 04 08 - MD											11.90	12.70	4.76	5.50	0,08~0,23	0,50~3,50											

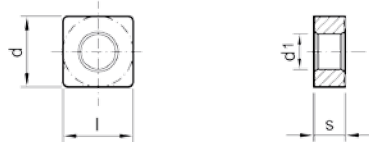
**Machinentyp
Machining types**

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✘ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

SN



90°

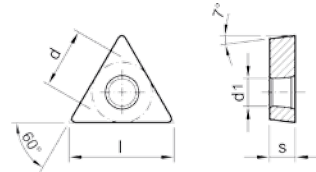


Werkstück / Workpiece	Stahl / Steel	A (P)																			Machinentyp Machining types					
	Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		<ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ● Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 				
	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	●																							
Wendelplatten Inserts	Bezeichnung Part Number	Beschichtet Coated																	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders	
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page	
	SNMG-M15 12 04 08 - M15 12 04 12 - M15			○												●	11.90	12.70	4.76	5.16	0,23~0,60	0,50~5,00	PSBN R/L / 1.10 PSKN R/L / 1.11 PSSN R/L / 1.11	PSKN R/L / 1.25		

TC

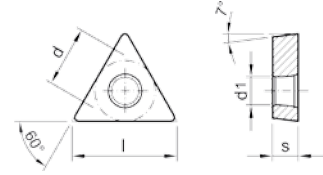


60°



Werkstück / Workpiece	Stahl / Steel	A (P)																			Machinentyp Machining types					
	Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		<ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ● Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 				
	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	●																							
Wendelplatten Inserts	Bezeichnung Part Number	Beschichtet Coated																	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders	
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page	
	TCGT-ALX 11 02 02 - ALX 11 02 04 - ALX 11 02 08 - ALX 16 T3 02 - ALX 16 T3 04 - ALX 16 T3 08 - ALX		○		○											●	10.50	6.35	2.38	2.80	0,01~0,30	0,05~5,50	STGC R/L / 1.17	STFC R/L / 1.28		
			○													●	10.00	6.35	2.38	2.80	0,02~0,40	0,10~4,00				
			○													●	9.00	6.35	2.38	2.80	0,03~0,50	0,10~5,00				
			○													○	15.00	9.52	3.97	4.40	0,01~0,30	0,05~4,50				
			○		○											●	15.50	9.52	3.97	4.40	0,02~0,40	0,10~5,00				
			○													●	14.50	9.52	3.97	4.40	0,03~0,50	0,10~5,00				

TC



Drehen
Turning

Fräswerkzeuge
Milling Tools

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

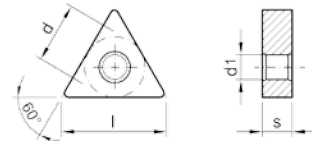
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/Micro
Schneidwerkzeuge
Mini/Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück/Werkpiece	Stahl / Steel	A (P)																Machinentyp Machining types							
	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											Maße Dimensions [mm]	Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders									
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page
	09 02 02 - F19																	9.10	5.56	2.38	2.50	0,03~0,13	0,06~1,70	STGC R/L / 1.17	STFC R/L / 1.28
	09 02 04 - F19																	8.60	5.56	2.38	2.50	0,05~0,19	0,10~1,70		
	11 02 02 - F19																	10.50	6.35	2.38	2.80	0,03~0,13	0,06~1,70		
	11 02 04 - F19																	10.00	6.35	2.38	2.80	0,05~0,19	0,10~1,70		
	11 02 08 - F19																	9.00	6.35	2.38	2.80	0,07~0,26	0,13~1,70		
	11 03 02 - F19																	10.50	6.35	3.18	3.40	0,03~0,13	0,06~1,70		
	11 03 04 - F19																	10.00	6.35	3.18	3.40	0,05~0,19	0,10~1,70		
	11 03 08 - F19																	9.00	6.35	3.18	3.40	0,07~0,26	0,13~1,70		
16 T3 04 - F19																	15.50	9.52	3.97	4.40	0,06~0,23	0,11~2,00			
	11 02 04 - M18																10.00	6.35	2.38	2.80	0,07~0,25	0,20~2,50	STGC R/L / 1.17	STFC R/L / 1.28	
	11 02 08 - M18																9.00	6.35	2.38	2.80	0,10~0,30	0,30~2,50			
	16 T3 04 - M18																15.50	9.52	3.97	4.40	0,07~0,25	0,30~2,50			
	16 T3 08 - M18																14.50	9.52	3.97	4.40	0,10~0,30	0,50~2,50			
	16 T3 12 - M18																13.50	9.52	3.97	4.40	0,12~0,35	0,70~2,50			

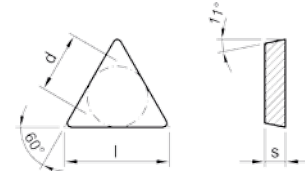
TN


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]		Passende Trägerwerkzeuge Suitable Toolholders					
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page
	16 04 04 - A20		○														○	15.50	9.52	4.76	3.80	0,12~0,30	1,00~3,50	MTJN R/L / 1.08 PTFN R/L / 1.12 PTGN R/L / 1.12	PTFN R/L / 1.25
	16 04 08 - A20		○														○	14.50	9.52	4.76	3.80	0,15~0,35	1,30~3,50		

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]		Passende Trägerwerkzeuge Suitable Toolholders					
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page
	16 04 04 - M15			○													●	15.50	9.52	4.76	3.81	0,08~0,23	0,20~3,50	MTJN R/L / 1.08 PTFN R/L / 1.12 PTGN R/L / 1.12	PTFN R/L / 1.25
	16 04 08 - M15			○													●	14.50	9.52	4.76	3.81	0,15~0,45	0,50~5,00		
	16 04 12 - M15			○													○	13.50	9.52	4.76	3.81	0,23~0,60	0,50~6,00		
	16 04 04 - MD																○	15.50	9.52	4.76	3.81	0,05~0,35	0,80~4,50	MTJN R/L / 1.08 PTFN R/L / 1.12 PTGN R/L / 1.12	PTFN R/L / 1.25
	16 04 08 - MD															○	14.50	9.52	4.76	3.81	0,08~0,45	1,00~4,50			
	22 04 08 - MD															●	20.80	12.70	4.76	5.16	0,10~0,50	1,00~6,00			
	16 04 04 - ER																●	15.50	9.52	4.76	3.81	0,10~0,30	0,80~3,00	MTJN R/L / 1.08 PTFN R/L / 1.12 PTGN R/L / 1.12	PTFN R/L / 1.25
	16 04 08 - ER																●	14.50	9.52	4.76	3.81	0,12~0,35	1,00~3,50		

TP

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	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders						
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
TPMR-EL	16 03 04 - EL							○									15.50	9.52	3.18	-	0,08~0,25	0,50~4,00			
TPMR-ER	16 03 04 - ER							○									15.50	9.52	3.18	-	0,08~0,25	0,50~4,00			
TPMR-M18	16 03 04 - M18 16 03 08 - M18		○												○		15.50	9.52	3.18	-	0,07~0,25	0,30~2,50			
																	14.50	9.52	3.18	-	0,10~0,30	0,50~2,50			

**Machinentyp
Machining types**

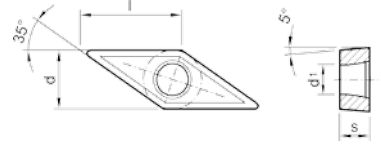
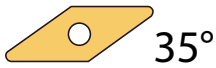
- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✘ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders						
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
TPUN-EN	16 03 04 - EN							○									15.50	9.52	3.18	-	0,08~0,25	1,00~5,00			

**Machinentyp
Machining types**

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✘ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

VB □ □



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

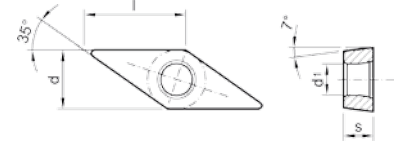
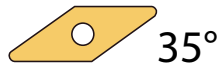
Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Werkstück / Workpiece	Stahl / Steel		Machinentyp / Machining types														Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]		Passende Trägerwerkzeuge / Suitable Toolholders								
	A (P)	R (M)															l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite / Toolholder / Page	Bohrstange / Seite / Boring Bar / Page							
	Rostfreier Stahl / Stainless steel	Guss / Cast iron	Nichtmet. Werkstoffe / Non-fer. metall.	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	Gehärteter Stahl / Hardened steel	H	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	Ungeschichtet / Uncoated								
Stahl / Steel	A (P)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	15.6	9.52	4.76	4.40	0,02~0,40	0,10~5,00	SVJB R/L / 1.18	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	14.6	9.52	4.76	4.40	0,02~0,40	0,10~5,00			
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	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●									

Werkstück / Workpiece	Stahl / Steel		Machinentyp / Machining types														Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]		Passende Trägerwerkzeuge / Suitable Toolholders							
	A (P)	R (M)															l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite / Toolholder / Page	Bohrstange / Seite / Boring Bar / Page						
	Rostfreier Stahl / Stainless steel	Guss / Cast iron	Nichtmet. Werkstoffe / Non-fer. metall.	Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	Gehärteter Stahl / Hardened steel	H	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	Ungeschichtet / Uncoated							
Stahl / Steel	A (P)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.50	6.35	3.18	2.80	0,03~0,13	0,06~1,70	SVJB R/L / 1.18	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.00	6.35	3.18	2.80	0,05~0,19	0,10~1,70			
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	9.00	6.35	3.18	2.80	0,07~0,26	0,13~1,70			
Nichtmet. Werkstoffe / Non-fer. metall.	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	16.10	9.52	4.76	4.40	0,04~0,14	0,07~1,70			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	15.60	9.52	4.76	4.40	0,05~0,20	0,10~1,80			
Gehärteter Stahl / Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	14.60	9.52	4.76	4.40	0,07~0,27	0,14~1,80			
Stahl / Steel	A (P)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.50	6.35	3.18	2.80	0,03~0,13	0,06~1,70	SVJB R/L / 1.18	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.00	6.35	3.18	2.80	0,05~0,19	0,10~1,70			
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	15.60	9.52	4.76	4.40	0,05~0,20	0,10~1,80			
Stahl / Steel	A (P)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.00	6.35	3.18	2.80	0,07~0,25	0,20~2,50	SVJB R/L / 1.18	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	15.60	9.52	4.76	4.40	0,07~0,25	0,30~2,50			
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	14.60	9.52	4.76	4.40	0,10~0,30	0,50~2,50			
Stahl / Steel	A (P)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	11.00	6.35	3.18	2.80	0,05~0,20	0,30~2,00	SVJB R/L / 1.18	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	16.64	9.52	4.76	4.40	0,05~0,20	0,30~2,50			
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	16.64	9.52	4.76	4.40	0,05~0,25	0,30~2,50			
Stahl / Steel	A (P)		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	15.60	9.52	4.76	4.40	0,09~0,19	0,30~2,70	SVJB R/L / 1.18	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	14.60	9.52	4.76	4.40	0,09~0,23	0,50~2,70			

VC

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

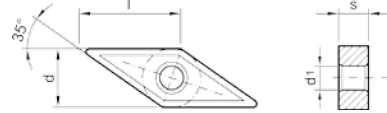
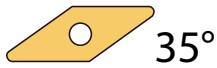
Werkstück / Workpiece	Beschichtet / Coated											Unbeschichtet / Uncoated	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]		Passende Trägerwerkzeuge / Suitable Toolholders					
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page
Stahl / Steel	A (P)																10.50	6.35	3.18	2.80	0,01~0,30	0,05~3,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.00	6.35	3.18	2.80	0,02~0,40	0,10~4,00			
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	9.00	6.35	3.18	2.80	0,03~0,50	0,10~5,00			
Nichtmet. Werkstoffe / Non-fer. metall.	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.50	7.94	3.18	3.40	0,01~0,30	0,10~4,50			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.00	7.94	3.18	3.40	0,02~0,40	0,10~4,50			
Gehärteter Stahl / Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	16.10	9.52	4.76	4.40	0,01~0,30	0,05~4,50			
																15.60	9.52	4.76	4.40	0,02~0,40	0,10~5,00			
																14.00	9.52	4.76	4.40	0,03~0,50	0,10~5,00			
																13.60	9.52	4.76	4.40	0,03~0,50	0,10~5,00			
																14.30	12.70	5.56	5.60	0,08~1,00	0,15~7,00			

**Machinentyp
Machining types**

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Werkstück / Workpiece	Beschichtet / Coated											Unbeschichtet / Uncoated	Maße / Dimensions [mm]				Schnittdaten / Cutting Data [mm]		Passende Trägerwerkzeuge / Suitable Toolholders					
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page
Stahl / Steel	A (P)															10.50	6.35	3.18	2.80	0,03~0,13	0,07~1,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29	
Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	10.00	6.35	3.18	2.80	0,05~0,20	0,10~1,50			
Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	16.10	9.52	4.76	4.40	0,04~0,14	0,07~1,80			
Nichtmet. Werkstoffe / Non-fer. metall.	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	15.60	9.52	4.76	4.40	0,05~0,20	0,10~1,80			
Warmf. Leg., Titanleg. / Heat res. alloys, Titan. all.	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	14.00	9.52	4.76	4.40	0,07~0,27	0,14~1,80			
Gehärteter Stahl / Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
																10.50	6.35	3.18	2.80	0,03~0,13	0,07~1,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29	
																10.00	6.35	3.18	2.80	0,05~0,19	0,10~1,50			
																16.10	9.52	4.76	4.40	0,04~0,14	0,07~1,80			
																15.60	9.52	4.76	4.40	0,05~0,20	0,10~1,80			
																14.00	9.52	4.76	4.40	0,07~0,27	0,14~1,80			
																15.60	9.52	4.76	4.40	0,07~0,25	0,30~2,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29	
																14.00	9.52	4.76	4.40	0,10~0,30	0,50~2,50			
																15.60	9.52	4.76	4.40	0,05~0,20	0,30~2,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29	
																14.00	9.52	4.76	4.40	0,05~0,25	0,30~2,50			
																10.00	6.35	3.18	2.80	0,06~0,19	0,20~2,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29	
																15.60	9.52	4.76	4.40	0,06~0,19	0,30~2,70			
																14.00	9.52	4.76	4.40	0,09~0,23	0,50~2,70			

VN



Werkstück / Workpiece	Stahl / Steel	A (P)																					
	Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Guss / Cast iron	F (K)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Werkstück / Workpiece	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]		Passende Trägerwerkzeuge Suitable Toolholders			
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345	TU 3015		TU 5525	TK 1210	l	Ø d	s	Ø d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
			16 04 04 - M15 16 04 08 - M15			○													●	15.60	9.52	4.76	3.80	0,08~0,23	0,20~3,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19
	16 04 04 - S30 16 04 08 - S30					●											16.60	9.52	4.76	3.81	0,08~0,35 0,10~0,40	0,50~4,00 1,00~4,50	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29		

**Machinentyp
Machining types**
 ● Gute Bearbeitungsbedingungen / Continuous cutting
 ● Normale Bearbeitungsbedingungen / General cutting
 ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Drehen
Turning

Fräswerkzeuge
Milling Tools

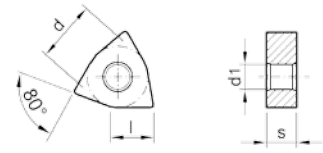
HDS-/VHM-Fräser
HDS-/Solid Carbide
Endmills

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

WN □ □


Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders																			
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page													
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 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	WNMG-A20		○		○											○	6.20	9.52	4.76	3.80	0,10~0,30	0,50~3,00	DWLN R/L / 1.07 PWLN R/L / 1.13		
	06 04 04 - A20		○		○											○	6.10	9.52	4.76	3.80	0,10~0,40	0,80~3,50			
	08 04 04 - A20		○		●		●									●	8.40	12.70	4.76	5.16	0,10~0,45	0,50~4,50			
	08 04 08 - A20		○		●		●									●	8.30	12.70	4.76	5.16	0,10~0,45	0,50~4,50			

**Machinentyp
Machining types**

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

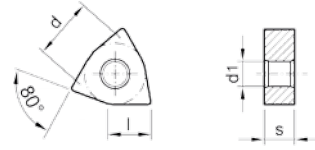
Werkstück/Workpiece	Beschichtet Coated											Unbeschichtet Uncoated	Maße Dimensions [mm]				Schnittdaten Cutting Data [mm]		Passende Trägerwerkzeuge Suitable Toolholders																			
	TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025		TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page													
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 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345	TU 3015	TU 5525	TK 1210	l	∅ d	s	∅ d ₁	f _n (mm/rev)	a _p (mm)	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	WNMG-A20															○	6.20	9.52	4.76	3.81	0,10~0,30	0,50~3,00	PWLN R/L / 1.13		
	06 04 04 - A20															○	8.40	12.70	4.76	5.16	0,05~0,25	0,80~3,50			
	08 04 08 - A20															○	8.30	12.70	4.76	5.16	0,10~0,40	0,80~3,50			
	WNMG-C22									●							8.40	12.70	4.76	5.16	0,05~0,30	0,80~4,00	DWLN R/L / 1.07 PWLN R/L / 1.13		
	08 04 08 - C22									●							8.30	12.70	4.76	5.16	0,10~0,40	0,80~4,00			
	WNMG-M15															○	6.20	9.52	4.76	3.81	0,08~0,23	0,20~3,00	DWLN R/L / 1.07 PWLN R/L / 1.13		
	06 04 08 - M15															○	6.10	9.52	4.76	3.81	0,15~0,45	0,50~3,50			
	08 04 04 - M15															●	8.40	12.70	4.76	5.16	0,08~0,23	0,20~3,00			
	08 04 08 - M15															●	8.30	12.70	4.76	5.16	0,08~0,45	1,00~5,00			
	08 04 12 - M15																	8.20	12.70	4.76	5.16	0,12~0,35			1,00~5,00
	WNMG-MD																6.20	9.52	4.76	3.81	0,05~0,30	0,80~3,00	DWLN R/L / 1.07 PWLN R/L / 1.13		
	06 04 08 - MD															○	6.10	9.52	4.76	3.81	0,10~0,35	1,00~3,00			
	08 04 04 - MD									○							8.40	12.70	4.76	5.16	0,05~0,35	0,80~4,00			
	08 04 08 - MD															○	8.30	12.70	4.76	5.16	0,08~0,45	1,00~4,00			
	08 04 12 - MD										○					○	8.20	12.70	4.76	5.16	0,10~0,50	1,20~4,00			

WN



80°



Werkstück / Workpiece	Stahl / Steel	A (P)																
	Rostfreier Stahl / Stainless steel	R (M)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Guss / Cast iron	F (K)	●	●														
Werkstück / Workpiece	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]		Passende Trägerwerkzeuge Suitable Toolholders			
		TK 5210	TK 5310	TK 5515	TK 5710	TM 5125	TM 5130	TM 5220	TP 2135	TP 3020	TP 3120	TP 4025	TP 5220	TP 5345		TU 3015	TU 5525	TK 1210	l	Ø d	s	Ø d _i	f _n (mm/rev)	a _p (mm)	Klemhalter / Seite Toolholder / Page
	06 04 08 - S30					●												6.40	9.52	3.97	3.81	0.10~0.25	1.00~3.50	DWLN R/L / 1.07 PWLN R/L / 1.13	
	08 04 04 - S30					●												8.40	12.70	4.76	5.16	0.05~0.25	0.50~3.50		
	08 04 08 - S30					●												8.30	12.70	4.76	5.16	0.10~0.40	1.00~4.00		

Machinentyp
Machining types

- Gute Bearbeitungsbedingungen / Continuous cutting
- Normale Bearbeitungsbedingungen / General cutting
- ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

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

ALUMINIUM



**Für jede Anwendung
die richtige Sorte.**

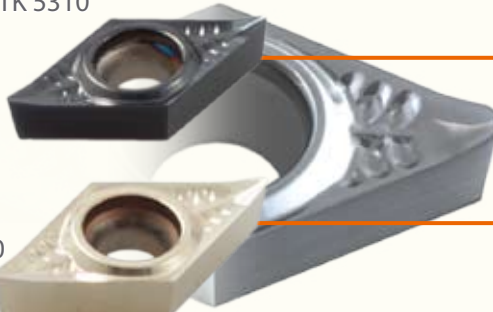
***For each application
the best grade.***

DCGT-TK 1210



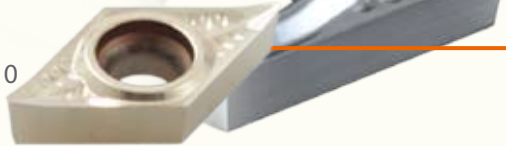
Unbeschichtet *uncoated*
(Feinstkorn Micrograin)
für for Aluminium

DCGT-TK 5310



Saphitec für for
Aluminium, HRSA, GFK, CFK,

DCGT-TK 5710



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

DCGT-TP 5345



für for
Niro Stainless Steel

CBN



CCMW CNMA CPMW

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ⊖ Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 		
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
	CCMW	06 02 02	○	○	SCLC R/L / 1.13	SCLC R/L / 1.26	
		06 02 04	○	○			
		06 02 08	○	○			
		09 T3 02	○	○			
		09 T3 04	○	○			
		09 T3 08	○	○			
		12 04 02	○	○			
		12 04 04	○	○			
	12 04 08	○	○				

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ⊖ Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 		
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
	CNMA	09 03 02	○	○	DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24	
		09 03 04	○	○			
		09 03 08	○	○			
		12 04 02	○	○			
		12 04 04	○	○			
		12 04 08	○	○			
		12 04 12	○	○			

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ⊖ Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 		
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
	CPMW	05 02 02	○	○			
		05 02 04	○	○			
		06 02 02	○	○			
		06 02 04	○	○			
		09 T3 02	○	○			
		09 T3 04	○	○			
		09 T3 08	○	○			
		12 04 02	○	○			
		12 04 04	○	○			
		12 04 08	○	○			

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

CBN



DCMW DNMA



EPMW

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types		
	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	Passende Trägerwerkzeuge / Suitable Toolholders		
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
		07 02 02	○	○	SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15		SDQC R/L / 1.27 SDUC R/L / 1.27
		07 02 04	○	○			
		07 02 08	○	○			
		11 T3 02	○	○			
		11 T3 04	○	○			
		11 T3 08	○	○			

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types		
	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	Passende Trägerwerkzeuge / Suitable Toolholders		
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
		15 04 02	○	○	DDJN R/L / 1.07 PDJN R/L / 1.10		DDUN R/L / 1.23 PDUN R/L / 1.24
		15 04 04	○	○			
		15 04 08	○	○			
		15 06 02	○	○			
		15 06 04	○	○			
		15 06 08	○	○			
15 06 12	○	○					

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types		
	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	Passende Trägerwerkzeuge / Suitable Toolholders		
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
		05 02 02	○	○			
		05 02 04	○	○			
		06 02 02	○	○			
		06 02 04	○	○			
		08 03 02	○	○			
		08 03 04	○	○			
08 03 08	○	○					

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

CBN



90°

SCMW SNMA SNMN

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ⊕ Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 		
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
SCMW 	09 03 02	○	○	SSSC R/L / 1.17		SSSC R/L / 1.28	
	09 03 04	○	○				
	09 03 08	○	○				
	09 T3 02	○	○				
	09 T3 04	○	○				
	09 T3 08	○	○				
	12 04 02	○	○				
	12 04 04	○	○				
12 04 08	○	○					

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ⊕ Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 		
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
SNMA 	12 03 02	○	○	PSBN R/L / 1.10 PSKN R/L / 1.25 PSSN R/L / 1.11		PSKN R/L / 1.25	
	12 04 02	○	○				
	12 04 08	○	○				

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / Continuous cutting ⊕ Normale Bearbeitungsbedingungen / General cutting ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting 		
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page		Bohrstange / Seite Boring Bar / Page	
SNMN 	12 03 04	○	○	PSBN R/L / 1.10 PSKN R/L / 1.25 PSSN R/L / 1.11		PSKN R/L / 1.25	
	12 03 08	○	○				
	12 04 04	○	○				

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

CBN



90°

SPMN


60°

TCMW TNMA

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	SPMN				
	09 03 02	○	○		
	09 03 04	○	○		
	09 03 08	○	○		
	12 03 02	○	○		
	12 03 04	○	○		
12 03 08	○	○			

- Gute Bearbeitungsbedingungen / Continuous cutting
- ⊕ Normale Bearbeitungsbedingungen / General cutting
- ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	TCMW				
	09 02 02	○	○		
	09 02 04	○	○		
	09 02 08	○	○		
	11 02 02	○	○		
	11 02 04	○	○		
	11 02 08	○	○		
	16 T3 02	○	○		
	16 T3 04	○	○		
16 T3 08	○	○			

- Gute Bearbeitungsbedingungen / Continuous cutting
- ⊕ Normale Bearbeitungsbedingungen / General cutting
- ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

STGC R/L / 1.17

STFC R/L / 1.28

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	TNMA				
	16 04 02	○	○		
	16 04 04	○	○		
	16 04 08	○	○		

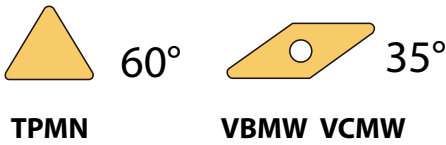
- Gute Bearbeitungsbedingungen / Continuous cutting
- ⊕ Normale Bearbeitungsbedingungen / General cutting
- ⊕ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

 MTJN R/L / 1.08
PTFN R/L / 1.12
PTGN R/L / 1.12

PTFN R/L / 1.25

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

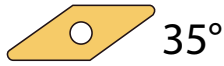
CBN



Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types	● Gute Bearbeitungsbedingungen / Continuous cutting ● Normale Bearbeitungsbedingungen / General cutting ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting
	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		Passende Trägerwerkzeuge / Suitable Toolholders		
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page	
TPMN 	11 03 02	○	○			
	11 03 04	○	○			
	11 02 08	○	○			
Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Passende Trägerwerkzeuge / Suitable Toolholders		
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page	
VBMW 	16 04 02	○	○	SVJB R/L / 1.18		
	16 04 04	○	○			
	16 04 08	○	○			
Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX 09		Passende Trägerwerkzeuge / Suitable Toolholders		
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page	
VCMW 	11 03 02	○	○	SVHC R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19		
	11 03 04	○	○			
	11 03 08	○	○			
	16 04 02	○	○			
	16 04 04	○	○			
	16 04 08	○	○			
	16 04 12	○	○			

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

CBN



VNMA

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp <i>Machining types</i> <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / <i>Continuous cutting</i> ⊕ Normale Bearbeitungsbedingungen / <i>General cutting</i> ⊗ Ungünstige Bearbeitungsbedingungen / <i>Interrupted cutting</i>
	Rostfreier Stahl / <i>Stainless steel</i>	R (M)			
	Guss / <i>Cast iron</i>	F (K)	●	⊕	
	Nichtmet. Werkstoffe / <i>Non-fer. metall.</i>	N			
	Warmf. Leg., Titanleg. / <i>Heat res. alloys, Titan. all.</i>	S		●	
	Gehärteter Stahl / <i>Hardened steel</i>	H	●	⊕	
Wendeplatten Inserts	Bezeichnung Part Number	Ecke Corner EW CDX.09		Passende Trägerwerkzeuge / <i>Suitable Toolholders</i>	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
<p>VNMA</p>	16 04 02	○	○		
	16 04 04	○	○		
	16 04 08	○	○		

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)			Machinentyp <i>Machining types</i> <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / <i>Continuous cutting</i> ⊕ Normale Bearbeitungsbedingungen / <i>General cutting</i> ⊗ Ungünstige Bearbeitungsbedingungen / <i>Interrupted cutting</i> 	
	Rostfreier Stahl / <i>Stainless steel</i>	R (M)				
	Guss / <i>Cast iron</i>	F (K)				
	Nichtmet. Werkstoffe / <i>Non-fer. metall.</i>	N	●	⊕		
	Warmf. Leg., Titanleg. / <i>Heat res. alloys, Titan. all.</i>	S				
Gehärteter Stahl / <i>Hardened steel</i>	H					
Wendeplatten Inserts		Bezeichnung Part Number		1 Ecke / Corner TY 1110 PKD	Passende Trägerwerkzeuge / <i>Suitable Toolholders</i>	
		F	T		Klemmhalter / Seite <i>Toolholder / Page</i>	Bohrstange / Seite <i>Boring Bar / Page</i>
CCMW 		06 02 01			SCLC R/L / 1.13	SCLC R/L / 1.26
		06 02 02				
		06 02 04				
		09 T3 02				
		09 T3 04				
		09 T3 08				
		12 04 04				
12 04 08						

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp <i>Machining types</i> <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / <i>Continuous cutting</i> ⊕ Normale Bearbeitungsbedingungen / <i>General cutting</i> ⊗ Ungünstige Bearbeitungsbedingungen / <i>Interrupted cutting</i> 	
	Rostfreier Stahl / <i>Stainless steel</i>	R (M)				
	Guss / <i>Cast iron</i>	F (K)				
	Nichtmet. Werkstoffe / <i>Non-fer. metall.</i>	N	●	⊕		
	Warmf. Leg., Titanleg. / <i>Heat res. alloys, Titan. all.</i>	S				
Gehärteter Stahl / <i>Hardened steel</i>	H					
Wendeplatten Inserts		Bezeichnung Part Number		1 Ecke / Corner TY 1110 PKD	Passende Trägerwerkzeuge / <i>Suitable Toolholders</i>	
		F	T		Klemmhalter / Seite <i>Toolholder / Page</i>	Bohrstange / Seite <i>Boring Bar / Page</i>
CNMA 		12 04 04			DCLN R/L / 1.06 PCBN R/L / 1.08 PCLN R/L / 1.09	DCLN R/L / 1.23 PCLN R/L / 1.24
		12 04 08				

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp <i>Machining types</i> <ul style="list-style-type: none"> ● Gute Bearbeitungsbedingungen / <i>Continuous cutting</i> ⊕ Normale Bearbeitungsbedingungen / <i>General cutting</i> ⊗ Ungünstige Bearbeitungsbedingungen / <i>Interrupted cutting</i> 	
	Rostfreier Stahl / <i>Stainless steel</i>	R (M)				
	Guss / <i>Cast iron</i>	F (K)				
	Nichtmet. Werkstoffe / <i>Non-fer. metall.</i>	N	●	⊕		
	Warmf. Leg., Titanleg. / <i>Heat res. alloys, Titan. all.</i>	S				
Gehärteter Stahl / <i>Hardened steel</i>	H					
Wendeplatten Inserts		Bezeichnung Part Number		1 Ecke / Corner TY 1110 PKD	Passende Trägerwerkzeuge / <i>Suitable Toolholders</i>	
		F	T		Klemmhalter / Seite <i>Toolholder / Page</i>	Bohrstange / Seite <i>Boring Bar / Page</i>
DCMW 		07 02 01			SDAC R/L / 1.14 SDHC R/L / 1.14 SDJC R/L / 1.15 SDNCN / 1.15	SDQC R/L / 1.27 SDUC R/L / 1.27
		07 02 02				
		07 02 04				
		11 T3 02				
		11 T3 04				
		11 T3 08				

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PKD



DNMA



RCMW



TCMW

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	11 04 04 11 04 08 15 06 04 15 06 08	○	○	DDJN R/L / 1.07 PDJN R/L / 1.10	DDUN R/L / 1.23 PDUN R/L / 1.24

- Gute Bearbeitungsbedingungen / Continuous cutting
- ⊕ Normale Bearbeitungsbedingungen / General cutting
- ⊗ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	06 02 00 08 03 00 10 03 00 12 T3 00			SRDCN / 1.16	

- Gute Bearbeitungsbedingungen / Continuous cutting
- ⊕ Normale Bearbeitungsbedingungen / General cutting
- ⊗ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
	09 02 01 09 02 02 09 02 04 11 02 02 11 02 04 11 02 08 16 T3 04 16 T3 08			STGC R/L / 1.17	STFC R/L / 1.28

- Gute Bearbeitungsbedingungen / Continuous cutting
- ⊕ Normale Bearbeitungsbedingungen / General cutting
- ⊗ Ungünstige Bearbeitungsbedingungen / Interrupted cutting

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PKD



60°



35°

TNMA
VCMW

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types ● Gute Bearbeitungsbedingungen / Continuous cutting ● Normale Bearbeitungsbedingungen / General cutting ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
TNMA 	16 04 02 16 04 04 16 04 08			MTJN R/L / 1.08 PTFN R/L / 1.12 PTGN R/L / 1.12	PTFN R/L / 1.25

Werkstück Workpiece	Stahl / Steel	A (P)			Machinentyp Machining types ● Gute Bearbeitungsbedingungen / Continuous cutting ● Normale Bearbeitungsbedingungen / General cutting ✚ Ungünstige Bearbeitungsbedingungen / Interrupted cutting
	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		Passende Trägerwerkzeuge / Suitable Toolholders	
		F	T	Klemmhalter / Seite Toolholder / Page	Bohrstange / Seite Boring Bar / Page
VCMW 	11 03 02 11 03 04 11 03 08 16 04 02 16 04 04 16 04 08			SVHC R/L / 1.18 SVJB R/L / 1.18 SVJC R/L / 1.19 SVVCN / 1.19	SVQC R/L / 1.29 SVUC R/L / 1.29

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

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		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			TU 5525					TU 5525				TK 5210									
		TP 3020						TM 5125					TU 5525								
			TP 2135					TP 2135					TK 5310								
				TP 5245					TM 5130					TK 5515							
				TP 5345																	
		TP 4025						TM 5220													
		TU 3015											TU 3015								
				TP 3120																	
			TP 5220																		
	CBN																				CDX09
Hartmetall unbeschichtet Uncoated Carbide													TK 1210								

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


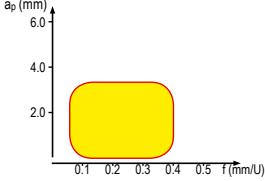

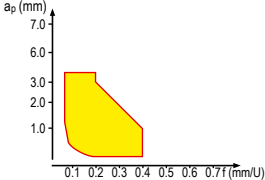

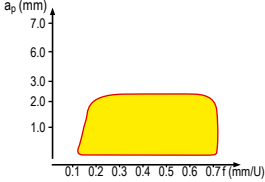

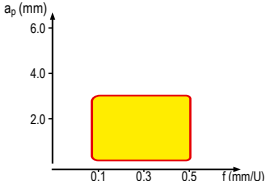

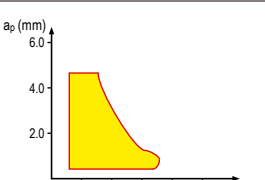
Stech- und
Abstechwerkzeuge
Grooving and
Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools


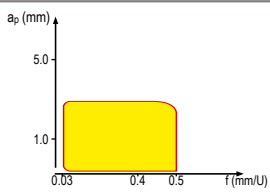

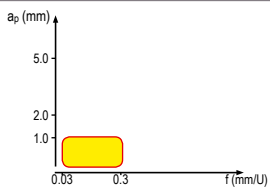

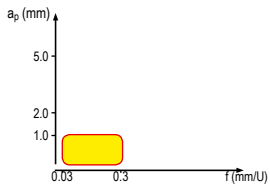

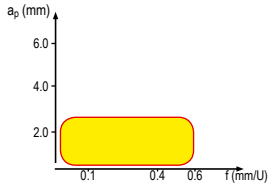
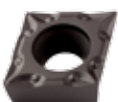
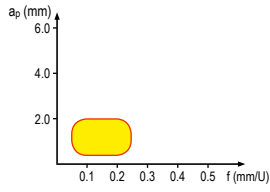
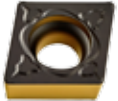
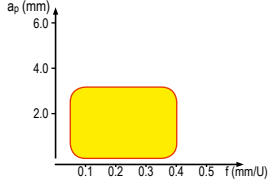
Gewinde-
werkzeuge
Threading Tools

Wendepplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Spanleitstufen zum Drehen / Chipbreakers for Turning

Spanleitstufe Chipbreaker	Anwendungsbereich Application Range	Highlights	Highlights
A20 		<ul style="list-style-type: none"> Alu-Legierungen, Niro, St 37 scharfe Schneidkanten (Umfangsschliff) extrem großer Spanwinkel 	<ul style="list-style-type: none"> Alu-alloys, stainless steel Sharp cutting edge (ground circumference) Extremely high helix
C22 		<ul style="list-style-type: none"> hervorragende Spankontrolle beim Kopierdrehen und der Innenbearbeitung sehr gute Oberflächen beim Plandrehen 	<ul style="list-style-type: none"> Excellent chipcontrol while copy turning and internal machining Very good surface while face turning
M15 		<ul style="list-style-type: none"> Universelle Geometrie im mittleren Bereich spezielles Substrat für höchste Verschleiß – beständigkeit breites Anwendungsspektrum durch PVD-Mehrlagenbeschichtung 	<ul style="list-style-type: none"> Universal geometry for medium range Special substrate for highest wear resistance Wide field of stainless steel machining
MD 		<ul style="list-style-type: none"> Standard-Geometrie im mittleren Bereich vor allem CNC-Bearbeitung sehr gute Spankontrolle geeignet für Niro - Bearbeitung 	<ul style="list-style-type: none"> Medium cutting Wide available chip control range from medium-finishing to medium-roughing Suitable chip breaker for CNC machining Suitable for stainless steel machining
S30 		<ul style="list-style-type: none"> scharfe, stabile Schneidkante hervorragende Spankontrolle auch bei langspanenden, weichen, rostfreien Stählen und Baustählen 	<ul style="list-style-type: none"> Sharp, stron cutting edge Excellent chip control also at long-chipping soft stainless and mild steels

Spanleitstufen zum Drehen / Chipbreakers for Turning

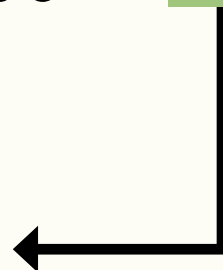
Spanleitstufe Chipbreaker	Anwendungsbereich Application Range	Highlights	Highlights
ALX 		Aluminiumbearbeitung <ul style="list-style-type: none"> • sehr großer Spanwinkel, geschliffene Schneidkante • Bearbeitung von Aluminium, Kunststoffen, Feinstbearbeitung von Niro 	Aluminium cutting <ul style="list-style-type: none"> • Exclusive chipbreaker for aluminium and aluminium alloy, finishing of stainless steel • High rake angle, precision - ground cutting edge
F19 		Schlichtbearbeitung <ul style="list-style-type: none"> • großer Spanwinkel, scharfe Schneidkante • hohe Oberflächengüten, auch bei der Innenbearbeitung 	Finishing <ul style="list-style-type: none"> • High helix, sharp cutting edge • Very good surface quality, also in case of internal machining
F30 		Schlichtbearbeitung <ul style="list-style-type: none"> • großer Spanwinkel, scharfe Schneidkante • hohe Oberflächengüten, auch bei der Innenbearbeitung 	Finishing <ul style="list-style-type: none"> • High helix, sharp cutting edge • Very good surface quality, also in case of internal machining
M18 		Universelle Geometrie im mittleren Bereich <ul style="list-style-type: none"> • spezielles Substrat für höchste Verschleißbeständigkeit • breites Anwendungsspektrum durch PVD-Mehrschichtbeschichtung 	Universal geometry for medium range <ul style="list-style-type: none"> • Special substrate for highest wear resistance • Wide field of applications through PVD-Multilayer-coating
M30 		Mittlere Bearbeitung bis Schlichten <ul style="list-style-type: none"> • optimale Spankontrolle auch bei zähen Zerspanung Materialien • hohe Oberflächengüte durch scharfe Schneidkante und geringe Schnittkräfte 	Medium cutting <ul style="list-style-type: none"> • optimized chipcontrol at ductile materials • very good surface due to sharp cutting edge and marginal cutting force
MD 		Mittlere Bearbeitung <ul style="list-style-type: none"> • auf antriebsschwachen Maschinen und Bohrungsbearbeitung 	Medium cutting <ul style="list-style-type: none"> • Excellent chip control at wide range of cutting conditions • Suitable for stainless steel cutting

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



Drehen
Turning

Fräswerkzeuge
Milling Tools

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HDS-/Solid Carbide
Endmills

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Abstechwerkzeuge
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Parting off Tools

Mini/ Micro
Schneidwerkzeuge
Mini/ Micro Tools

Gewinde-
werkzeuge
Threading Tools

Wendelplattenbohrer
VHM-Bohrer
Indexable Drills
Solid Carbide Drills

Schnittdaten-Empfehlungen zum Drehen Cutting Data Recommendations for Turning

Werkstückwerkstoff Material	Legierung Alloy	Brinell-Härte hardness HB	VDI 3323 Gruppe	Schnittgeschwindigkeiten / Cutting speeds v_c [m/min]				
				TK 1210 K10	TK 5310 K10C	TK 5515 K15C	TK 5710 K10C	
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					
R (M)	rostfreier Stahl / stainless steel	ferritisch, martensitisch, geglüht / ferritic, martensitic, annealed	200	14		130 - 200		
		austenitisch / austenitic	180	14		90 - 190	90 - 130	
		Duplex	230-260	14				
		austenitisch, ferritisch / austenitic, ferritic	330	14				
F (K)	Grauguss / grey cast iron	perlitisch, ferritisch / pearlitic, ferritic	180	15	140 - 200	100 - 200	180 - 280	160 - 220
		perlitisch, martensitisch / pearlitic, martensitic	260	16	100 - 160	100 - 220	170 - 230	130 - 180
	Grauguss mit Kugelgraphit / nodular cast iron	ferritisch / ferritic	160	17	160 - 200	120 - 200	150 - 230	150 - 220
		perlitisch / pearlitic	250	18	110 - 150	120 - 250	120 - 180	120 - 170
	Temperguss / malleable cast iron	ferritisch / ferritic	130	19	160 - 220	120 - 200	180 - 300	160 - 220
		perlitisch / pearlitic	230	20	140 - 180	100 - 200	180 - 250	140 - 200
N	Aluminium - Knetlegierungen / forging alloy	nicht aushärtbar / not hardenable	60	21	300 - 3000	250 - 3000		250 - 2800
		aushärtbar / hardenable	100	22	200 - 2000	250 - 2500		180 - 2500
	Aluminium - Gusslegierungen / casting alloy	nicht aushärtbar / not hardenable < 12% Si	80	23	400 - 2000	400 - 2000		300 - 1800
		aushärtbar / hardenable < 12% Si	90	24	400 - 1100	300 - 1200		300 - 1800
		nicht aushärtbar / not hardenable > 12% Si	130	25	200 - 1000	200 - 700		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
	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	
S	warmfeste Legierungen / heat resistant alloys	Fe-Basis/base, geglüht / annealed	200	31	35 - 50			30 - 60
		Fe-Basis/base(Incoloy), ausgehärtet / hardened	280	32	25 - 40			20 - 50
		Ni-Basis/base (Inconel), geglüht / annealed	250	33	25 - 40			20 - 50
		Ni- oder Co-Basis, ausgehärtet / hardened	30-58 HRC	24	20 - 30			20 - 40
		Ni- oder Co-Basis, gegossen / cast	1500-2200 Nmm ²	35	15 - 25			20 - 30
	Titanlegierungen / titanium alloys	Reintitan / Pure titanium	Rm 400	36	80 - 150			60 - 150
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				
Gehärtetes Gusseisen / hardened cast iron	gehärtet und angelassen / hardened and tempered	55 HRC	40					

Schnittdaten-Empfehlungen zum Drehen Cutting Data Recommendations for Turning

Schnittgeschwindigkeiten / Cutting speeds v_c [m/min]												
TM 5125 M25C	TM 5130 M30C	TM 5220 M20C	TP 2135 P35C	TP 3020 P20/K15C	TP 3120 P25C	TP 4025 P25/M20C	TP 5220 P20C	TP 5245 TP 5345 P45C	TU 3015 P/K/H15C	TU 5525 P/M25C	CDX09	TY1110 PKD
120 - 280			170 - 230	180 - 300	180 - 300	120 - 280	120 - 280	180 - 240	250 - 450	180 - 400		
130 - 250			150 - 180	150 - 220	150 - 220	130 - 250	130 - 250	150 - 200	220 - 400	170 - 350		
100 - 180			110 - 150	120 - 200	120 - 200	100 - 180	100 - 180	150 - 200	180 - 280	140 - 200		
80 - 200			160 - 190	160 - 250	160 - 250	100 - 230	100 - 230	170 - 200	240 - 400	120 - 300		
60 - 180			80 - 140	90 - 180	90 - 180	80 - 200	80 - 200	100 - 160	160 - 290	120 - 210		
			70 - 130	80 - 170	80 - 170	60 - 180	60 - 180	90 - 150	140 - 270	110 - 200		
			60 - 120	120 - 190	120 - 190	50 - 130	50 - 130	80 - 140	120 - 250	100 - 180		
			110 - 200	80 - 160	80 - 160	80 - 180	80 - 180	130 - 170	180 - 300	70 - 200		
			40 - 80	120 - 180	120 - 180	50 - 120	50 - 120	80 - 130	100 - 250	70 - 130		
100 - 180			130 - 170	100 - 170	100 - 170	100 - 180	100 - 180	140 - 180	160 - 300	80 - 200		
70 - 150			100 - 160	90 - 180	90 - 180	70 - 150	70 - 150	115 - 170	150 - 260	80 - 180		
120 - 220	100 - 200	120 - 220	130 - 200	140 - 200	140 - 200	120 - 220		140 - 200	200 - 260	170 - 250		
80 - 200	60 - 180	80 - 200	90 - 190	90 - 180	90 - 180	100 - 200		110 - 190		170 - 270		
60 - 140	40 - 90	60 - 140	70 - 150					80 - 150		120 - 210		
50 - 120		50 - 120	40 - 60	60 - 90	60 - 90			55 - 75		100 - 180	80 - 150	
				100 - 200	100 - 200	130 - 280			140 - 350	170 - 280	300 - 1000	
				90 - 180	90 - 180	120 - 270			130 - 300	170 - 250	300 - 800	
				100 - 180	100 - 180	110 - 260			190 - 390	150 - 230	300 - 450	
						100 - 250			120 - 250	150 - 190	250 - 350	
				150 - 220	150 - 220	90 - 250			180 - 450	120 - 230		
				100 - 180	100 - 180	90 - 250			150 - 300	120 - 190		
								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
20 - 40			20 - 45							20 - 40		
			20 - 40							15 - 36		
			8 - 22							10 - 30		
			4 - 16							5 - 20		
			4 - 16							5 - 20		
			80 - 140							80 - 140		
			15 - 35							20 - 40		
											80 - 200	
											40 - 180	
											40 - 180	

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