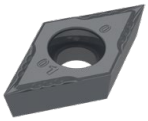
New products for machining technicians

NEW High precision finishing insert in “E” tolerance

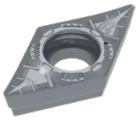


F05 – extremely sharp chip breaker ideal for fine finishing of superalloys and stainless steels.
New universal grade of the X7 line for machining almost all materials.

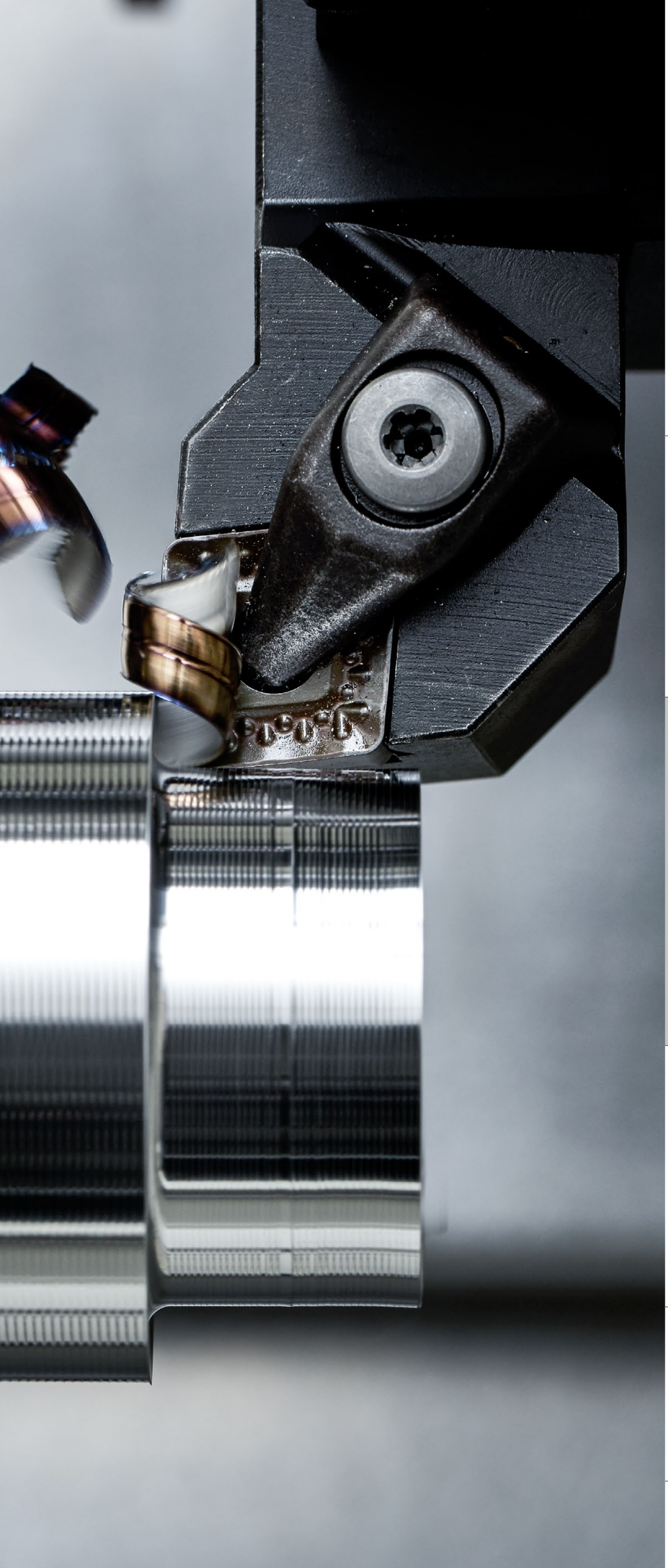
NEW New CBN grades CTB H15U and CTB H15C

Coated and uncoated CBN grade for smooth cutting from 32 HRC.

NEW Precision sintered insert with -29 chip breaker



Comprehensive aluminum turning insert with -29 chip breaker for medium to rough machining.
Uncoated and with proven AMZ coating.



Solid drilling and bore machining

1 HSS drilling
2 Solid carbide drilling
3 Indexable insert drilling
4 Reaming and Countersinking
5 Spindle Tooling

Threading

6 Taps and thread formers
7 Circular and Thread Milling
8 Thread turning

Turning

9 Turning Tools 9
10 EcoCut
11 Grooving Tools
12 Miniature turning tools

Milling

13 HSS Milling Cutters
14 Solid Carbide milling cutters
15 Milling tools with indexable inserts

Tool Clamping

16 Adapters
17 Accessories

18 Material examples and article no. index

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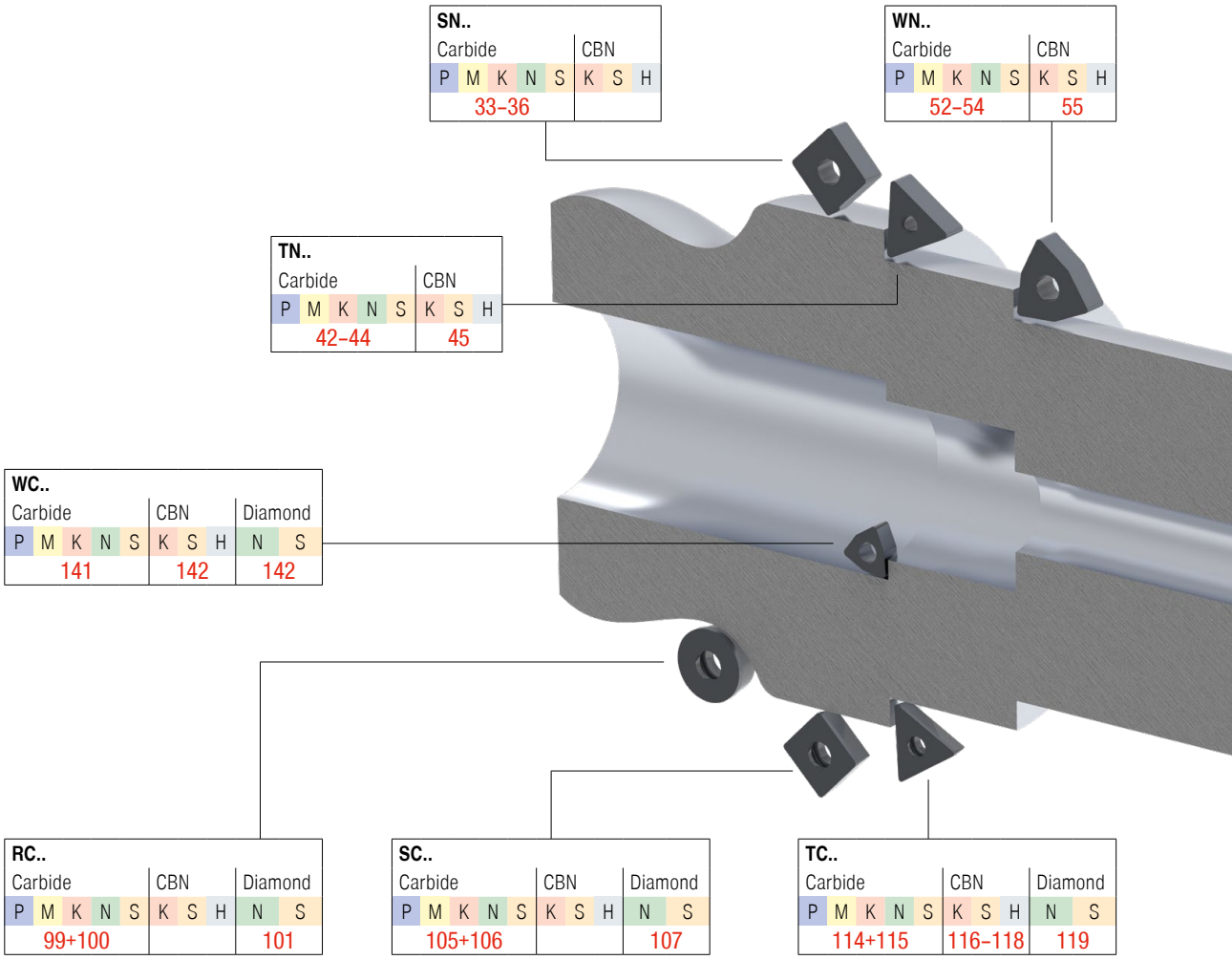
CERATIZIT \ Performance

Premium quality tools for high performance.

The premium quality tools from the **CERATIZIT Performance** product line have been designed for specific applications and are distinguished by their outstanding performance. If you make high demands on the performance of your production and want to achieve the very best results, we recommend the Premium tools in this product line.

Toolfinder – Application



Coding of the chip breakers

All new chip breakers are coded according to the following key:

-M50

Inserts - Basic Type	Application range	Material		Chip breaker width
	F = Fine	1 = Steel	5 = Heat Resistant alloys	1 = Narrow
0 | N = Negative Inserts	M = Medium	2 = Stainless steel	6 = Hard	
5 | P = Positive Inserts	R = Rough	3 = Cast Iron	7 = Universal	
		4 = Non Ferrous Metals		9 = Wide

-NM15

Detailed information on the chip breakers can be found in the technical appendix → **pages 168–175**

Symbol explanation

CTCP125

HCX1125

Carbide Grade

F	Fine Machining
M	Medium Machining
R	Rough Machining

	Smooth cut
	Irregular cutting depth
	Interrupted cut

A detailed overview of grades can be found in the technical appendix on → **Page 186**

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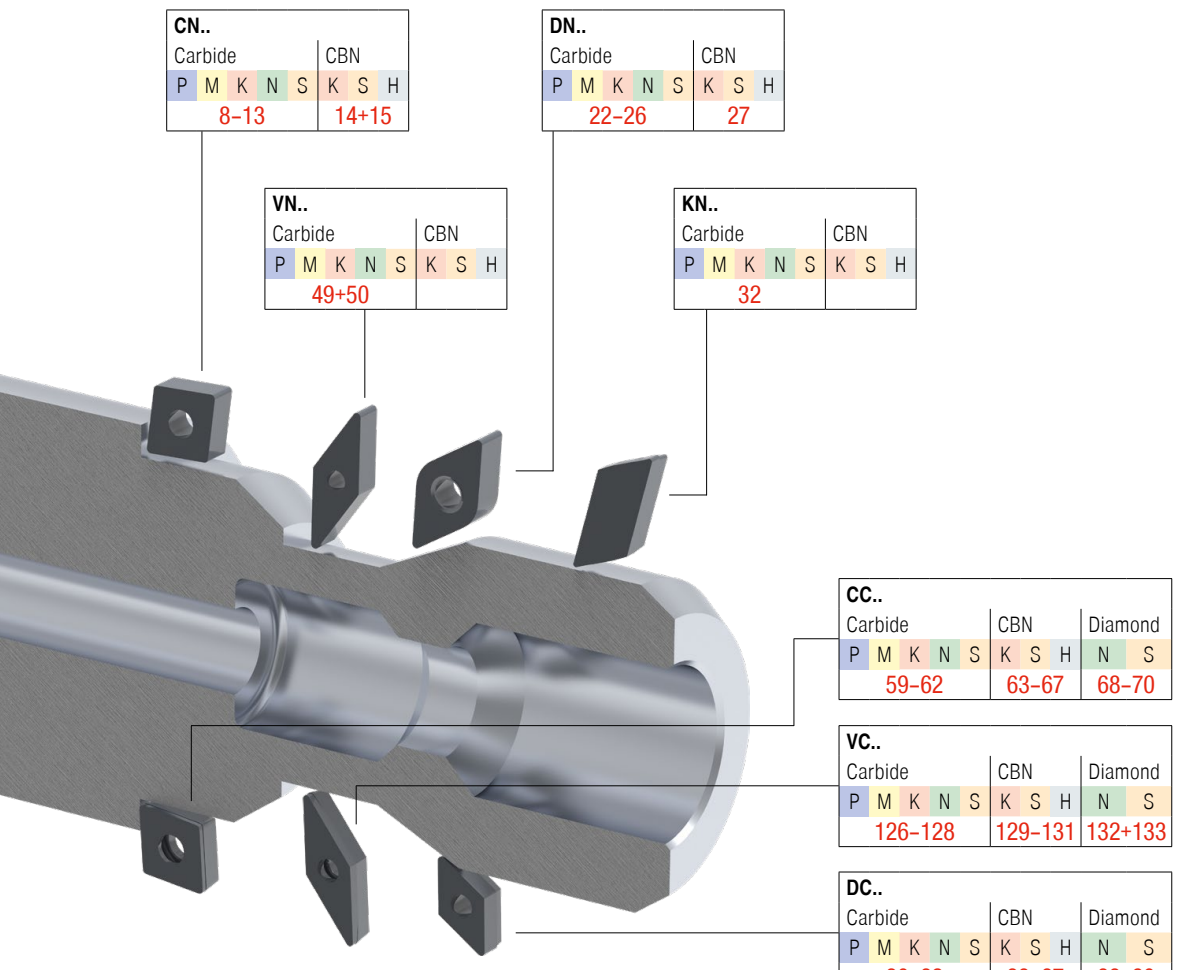


Toolfinder – negative inserts

				Steel P	Stainless steel M	Cast iron K	Non ferrous metals N	Heat resistant alloys S	Geometry CN..	DN..	KN..	SN..	TN..	VN..	WN..
Main application: **Steel and cast iron**	sharp ▲ stable ▼	Fine	-CF / -CF20 (-CF / -NF12)	●	○	○			8	22					52
			-F40	●	○	○								49	
			-F50 (-NF15)	●	○	○		○	8	22		33	42	49	52
			-TFQ	●	○	○			8+9	22+23					52
		Medium	-42	●	○			○	9						
			-XU	●	○	○			9	23				49	53
			-M40	●	○	○								49	
			-M50 (-NM15)	●	○	●		○	9+10	23+24		33	42	49	53
			-TMQ	●	○	○			10	24					53
			-M70 | -11, -12 (-NM19)	●	○	●		○	10+11	24	32	33+34	42+43		53
		Rough	.NMA			●			11	24		34+35	43		54
			-R28 (-NR14)	●	○	○		○	11	24		35	43		
			-R58 (-NR17)	●	○	○		○	12	24+25		35	43		
			-R88 (-NR19)	●	○	○		○	12			36			
Main application: **Stainless**	sharp ▲ stable ▼	Fine	-F30 (-NF23)	○	●				12	25		36	44	49	54
		Medium	-42	○	●			●	13						
			-M30 (-NM23)	○	●			○	13	25		36	44	49	54
			-M42	○	●			●	13	25		36	44		54
			-M60 (-NM26)	○	●			○	13	25		36	44		54
			-M70 (-NM19)	○	●			●	13	25		36	44		54
Main application: **Heat-resistant**	sharp ▲ stable ▼	Fine	-F32		●	○	○	●	13	25				49	
		Medium	-M34		○			●	13	26		36	44	49+50	54
			-M42	○	●	○	○	●	13	26			44		54
			-M52		○	○	○	●	13	26		36	44		54
			Suitable tool holders						16–19	28+29	32	37–40	46+47	51	56
			Suitable boring bars						20+21	30+31		41	48		57+58

Toolfinder – negative inserts

Main application				Cast iron K	Sintered steels P	Heat-resistant S	Hardened H	Geometry CN..	DN..	KN..	SN..	TN..	VN..	WN..
Cast iron, sintered steels, heat resistant, hardened	Fine	CTBS10U (PBC10) CTBS20C (PBC15-S)		●	●	●		14	27			45		55
		CTBH15U CTBH15C	< 32 HRC				●	14	27					
		CTBH21U (PBC25)	52–65 HRC				●	15	27			45		55
		CTBH20C (PBC25-S)	48–62 HRC											
		CTBH40U (PBC40)	54–65 HRC				●	15	27			45		55
		CTBH40C (PBC40-S)	48–65 HRC											
		Suitable tool holders						16–19	28+29			46+47		56
		Suitable boring bars						20+21	30+31			48		57+58

9

Toolfinder – positive inserts

				Steel P	Stainless steel M	Cast iron K	Non-ferrous metals N	Heat-resistant S	Geometry CC..	DC..	RC..	SC..	SP..	TC..	TP..	VC..	WC..
Main application: **Steel and cast iron**	sharp ↕ stable	Fine	-CF05 (-PF14)	●	○	○			59	80		105		114		126	
		Fine	-SF (-ZF)	●	○	○		○	59+60	80		105		114		126	
		Medium	-CF55 (-PF15)	●	○	○			60	80		105		114		126	
		Medium	-SMF	●	○	●		○	60	80	99	105		114+115		126+127	
		Medium	-SM (-ZM)	●	○	●		○	60	80+81	99	105		115		127	
		Medium	-SMQ	●	○	○			60+61	81							
			EN, EL, ER	●	○	●		○				105	113		123		
Main application: **Stainless**	sharp ↕ stable	Fine	-SF (-ZF)	○	●			●	61	81						127	141
		Fine	-F43	○	●			●	61	81				115			
		Fine	-M81		●		○		61	81						127	
		Medium	-M25 (-PF23)	○	●				61	81				115		127	
		Medium	-SM (-ZM)	○	●			●	61	81		105		115		127	
		Medium	-M55 (-PF26)	○	●				61	81		106		115		127	
Main application: **Non-ferrous metals**	sharp ↕ stable	Fine	-23P			○	●	○	61	82							
		Medium	-25P	○	○	○	●	○	61	82		106				127	
		Medium	-25Q	○	○	○	●	○	61	82						128	
		Medium	-27 (-AL)	○	○	○	●	○	61+62	82	99+100	106		115		128	
		Medium	-29	○	○	○	●	○	62	82						128	
		Diamond	-CB1				●	○	69+70	89+90	101	107		119		133	
		Diamond	-CB2				●	○	69+70	90	101	107		119		133	
		Diamond	-CB3				●	○	70	90		107		119		133	
		Diamond	Smooth				●	○	68+69	88–90				119		132	142
			Suitable tool holders						71–74	91–93	102–104	108–110		120+121	124	134–137	
			Suitable boring bars						75–79	94–98		111+112		122	125	138–140	143

Toolfinder – positive inserts

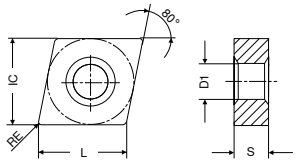
Main application					Steel P	Stainless steel M	Cast iron K	Non-ferrous metals N	Heat-resistant S	Geometry CC..	DC..	RC..	SC..	SP..	TC..	TP..	VC..	WC..
Main application: **Heat-resistant**	sharp ↕ stable	Fine	-F05 (-F05)		●	●	o	o	●		82						128	
			-F23 (-F23)			●	o	o	●	62	82						128	

Main application					Cast iron K	Sintered steels P	Heat-resistant S	Hardened H	CC..	DC..	RC..	SC..	SP..	TC..	TP..	VC..	WC..
Main application: **Cast iron, sintered steels, heat resistant, hardened**		Fine	CTBS10U (PBC10) CTBS20C (PBC15-S)		●	●	●		63+64	83+84				116		129+130	142
			CTBH15U CTBH15C	< 32 HRC				●	65	85				116–118		129+130	142
			CTBH21U (PBC25)	52–65 HRC				●	66	85–87				117+118		130+131	142
			CTBH20C (PBC25-S)	48–62 HRC													
			CTBH40U (PBC40)	54–65 HRC				●	67	85–87				117+118		130+131	142
			CTBH40C (PBC40-S)	48–65 HRC													
			Suitable tool holders						71–74	91–93	102–104	108–110		120+121	124	134–137	
			Suitable boring bars						75–79	94–98		111+112		122	125	138–140	143

9

CNMG / CNMA / CNMM / CNGP

Designation	L	S	D1	IC
	mm	mm	mm	mm
CNMG 0903..	9,7	3,18	3,81	9,52
CN.. 1204..	12,9	4,76	5,16	12,70
CNM. 1606..	16,1	6,35	6,35	15,87
CNM. 1906..	19,3	6,35	7,94	19,05
CNMM 2509..	25,8	9,52	9,12	25,40



CNMG

	-CF TCM10	-CF20 CTEP110	-F50 CTCP115	-F50 CTCP125	-F50 CTCP135	-TFQ CTEP110	-TFQ CTCP115
	-CF CWC10	-NF12 DCC1110	-NF15 HCX1115	-NF15 HCX1125	-NF15 HCR1135	-TFQ DCC1110	-TFQ HCX1115
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	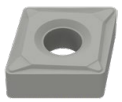	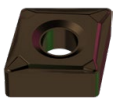					
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090308EN 0,8			318	518	718		
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120408EN 0,8	908	030	330	530	730	030	330
120412EN 1,2			332	532	732	032	320
Steel	●	●	●	●	●	●	●
Stainless steel		○	○	○	○	○	○
Cast iron	○	○	○	○		○	○
Non ferrous metals							
Heat resistant alloys					○		

CNMG

		-TFQ CTCP125	-42 CTCP135	-XU CTCP115	-XU CTCP125	-M50 CTCK110	-M50 CTCK120	-M50 CTCP115
		-TFQ HCX1125	-42 HCR1135	-XU HCX1115	-XU HCX1125	-NM15 DCX3110	-NM15 HCF3120	-NM15 HCX1115
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			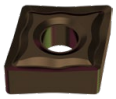			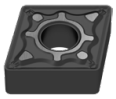	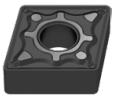	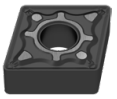
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120408EN	0,8	530	730	330	530	030	530	330
120412EN	1,2	532		332	532	032	532	320
120416EN	1,6							334
160608EN	0,8							342
160612EN	1,2							344
160616EN	1,6							346
Steel		●	●	●	●	●	●	●
Stainless steel		○	○	○	○	○		○
Cast iron		○		○	○	●	●	○
Non ferrous metals								
Heat resistant alloys			○					

9

CNMG

		-M50 CTCP125	-M50 CTCP135	-TMQ CTCP115	-TMQ CTCP125	-M70 CTCK110	-M70 CTCK120	-M70 CTCP115
		-NM15 HCX1125	-NM15 HCR1135	-TMQ HCX1115	-TMQ HCX1125	-NM19 DCX3110	-NM19 HCF3120	-NM19 HCX1115
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		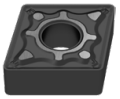	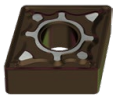	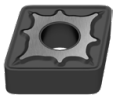	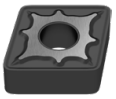	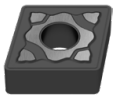	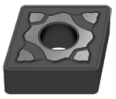	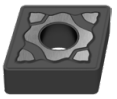
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120408EN	0,8	530	730		530	030	530	330
120412EN	1,2	532	732	320	532	032	532	320
120416EN	1,6	534	734			034	534	334
160608EN	0,8	542	742			042	542	342
160612EN	1,2	544	744			044	544	344
160616EN	1,6	546	746			046	546	346
160624EN	2,4							348
190608EN	0,8							354
190612EN	1,2					056	556	356
190616EN	1,6					058	558	358
190624EN	2,4							360
Steel		●	●	●	●	●	●	●
Stainless steel		○	○	○	○	○		○
Cast iron		○		○	○	●	●	○
Non ferrous metals								
Heat resistant alloys			○					

CNMG / CNMA / CNMM

	-M70 CTCP125	-M70 CTCP135	CTCK110	CTCK120	-R28 CTCP115	-R28 CTCP125	-R28 CTCP135
	-NM19 HCX1125	-NM19 HCR1135	DCX3110	HCF3120	-NR14 HCX1115	-NR14 HCX1125	-NR14 HCR1135
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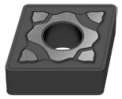
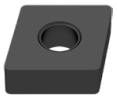
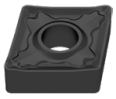
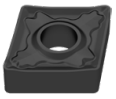
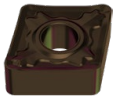
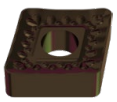
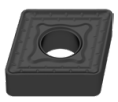
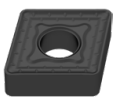
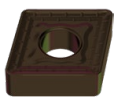
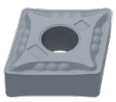
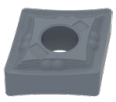
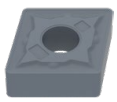
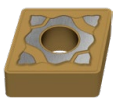
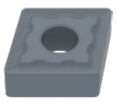
							
	M	M	R	R	R	R	R
	CNMG	CNMG	CNMA	CNMA	CNMM	CNMM	CNMM
ISO	RE mm	Article no. 76 119 ...	Article no. 76 119 ...	Article no. 70 100 ...	Article no. 70 100 ...	Article no. 76 114 ...	Article no. 76 114 ...	Article no. 76 114 ...
120404EN	0,4			028	528			
120408EN	0,8	530	730	030	530	330	530	
120412EN	1,2	532	732	032	532	332	532	732
120416EN	1,6	534	734	034	534	334	534	734
160608EN	0,8	542	742	042	542			
160612EN	1,2	544	744	044	544	344	544	744
160616EN	1,6	546	746	046	546	346	546	746
160624EN	2,4	548	748					
190608EN	0,8	554	754					
190612EN	1,2	556	756	056	556	356	556	756
190616EN	1,6	558	758	058	558	358	558	758
190624EN	2,4	560	760			360	560	760
250924EN	2,4					38400	58400	78400
Steel		●	●			●	●	●
Stainless steel		○	○			○	○	○
Cast iron		○		●	●	○	○	
Non ferrous metals								
Heat resistant alloys			○					○

9

CNMM / CNMG

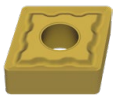
		-R58 CTCP115	-R58 CTCP125	-R58 CTCP135	-R88 CTCP115	-R88 CTCP125	-R88 CTCP135	-F30 CTPM125
		-NR17 HCX1115	-NR17 HCX1125	-NR17 HCR1135	-NR19 HCX1115	-NR19 HCX1125	-NR19 HCR1135	-NF23 HCN2125
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		R	R	R	R	R	R	F
		CNMM	CNMM	CNMM	CNMM	CNMM	CNMM	CNMG
ISO	RE mm	Article no. 76 115 ...	Article no. 76 115 ...	Article no. 76 115 ...	Article no. 76 133 ...	Article no. 76 133 ...	Article no. 76 133 ...	Article no. 75 010 ...
120404EN	0,4							280
120408EN	0,8	330	530	730				230
120412EN	1,2	332	532	732				
120416EN	1,6	334	534	734				
160612EN	1,2	344	544	744				
160616EN	1,6	346	546	746				
160624EN	2,4	348	548	748				
160624SN	2,4				348	548	748	
190612EN	1,2	356	556	756				
190616EN	1,6	358	558	758				
190616SN	1,6				358	558	758	
190624EN	2,4	360	524	760				
190624SN	2,4				360	560	760	
250924EN	2,4	384	584	784				
250924SN	2,4				384	584	784	
Steel		●	●	●	●	●	●	○
Stainless steel		○	○	○	○	○	○	●
Cast iron		○	○		○	○		
Non ferrous metals								
Heat resistant alloys				○			○	

CNMG / CNGP

	-42 CTC2135	-M30 CTPM125	-M42 CTC2135	-M60 CTPM125	-M70 CTC2135	-F32 CTP2120	-M34 CTP5110
	-42 CWN2135	-NM23 HCN2125	-M42 CWN2135	-NM26 HCN2125	-NM19 CWN2135	-F32 CCN2120	-M34 HCN5110
		DRAGONSKIN		DRAGONSKIN			DRAGONSKIN
							
	M CNMG	M CNMG	M CNMG	M CNMG	M CNMG	F CNGP	M CNMG
ISO / RE mm	Article no. 70 103 ...	Article no. 75 011 ...	Article no. 70 130 ...	Article no. 75 012 ...	Article no. 70 119 ...	Article no. 70 102 ...	Article no. 75 003 ...
120402FN 0,2						602	
120404EN 0,4			404				428
120404FN 0,4						604	
120408EN 0,8	462	230	408	230	430		430
120408FN 0,8						608	
120412EN 1,2		232	410	232	432		432
120416EN 1,6		234		234			
160612EN 1,2					442		
190612EN 1,2					456		
190616EN 1,6					458		
Steel	○	○	○	○	○		
Stainless steel	●	●	●	●	●	●	○
Cast iron						○	
Non ferrous metals						○	
Heat resistant alloys	●	○	●	○	●	●	●

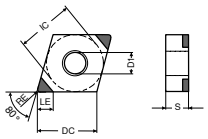
9

CNMG

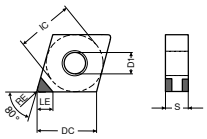
	-M34 CTP5115	-M42 CTP2120	-M52 CTP2120
	-M34 HCN5115	-M42 CCN2120	-M52 CCN2120
	DRAGONSKIN		
			
	M CNMG	M CNMG	M CNMG
ISO / RE mm	Article no. 75 003 ...	Article no. 70 130 ...	Article no. 70 117 ...
120404EN 0,4	528	604	604
120408EN 0,8	530	608	608
120412EN 1,2	532		
120416EN 1,6	534		
Steel			
Stainless steel	○	○	○
Cast iron		○	○
Non ferrous metals		○	○
Heat resistant alloys	●	●	●

CNGA

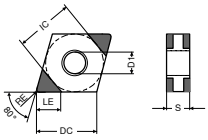
Designation	L	S	D1	IC
	mm	mm	mm	mm
CNGA 1204..	12,9	4,76	5,13	12,7



-B

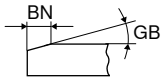


-K (-2SC)



-L (-4SC)

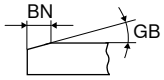
CNGA

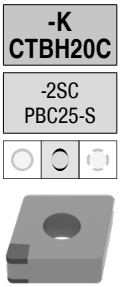


	-K CTBS20C	-L CTBS20C	-B CTBH15C	-B CTBH15C
	-2SC PBC15-S	-4SC PBC15-S		
	F	F	F	F
	CBN CNGA	CBN CNGA	CBN CNGA	CBN CNGA
			NEW	NEW
ISO	Article no. 71 400 ...	Article no. 71 401 ...	Article no. 71 003 ...	Article no. 71 005 ...

ISO	RE mm	GB °	BN mm	LE mm	-K CTBS20C -2SC PBC15-S	-L CTBS20C -4SC PBC15-S	-B CTBH15C	-B CTBH15C
120404SN	0,4	10	0,09	2,8		122		
120404SN	0,4	15	0,09	2,8		132		
120404SN	0,4	15	0,11	2,8	142			
120404SN	0,4	15	0,11	3,0			32814	
120404SN	0,4	20	0,09	2,8		152		
120404SN	0,4	20	0,14	2,8	162			
120404SN	0,4	25	0,13	3,0			32829	
120404SN	0,4	30	0,18	2,8	182	182		
120404RN	0,4			3,0			22800	
120408SN	0,8	10	0,09	2,5		124		
120408SN	0,8	15	0,09	2,5		134		
120408SN	0,8	15	0,11	2,5	144			
120408SN	0,8	15	0,11	2,7			33014	
120408SN	0,8	20	0,09	2,5		154		
120408SN	0,8	20	0,14	2,5	164			
120408SN	0,8	25	0,13	2,7			33029	
120408SN	0,8	30	0,18	2,5	184	184		
120408RN	0,8			2,7			23000	
120412SN	1,2	10	0,09	2,2		126		
120412SN	1,2	15	0,09	2,2		136		
120412SN	1,2	15	0,11	2,2	146			
120412SN	1,2	15	0,11	2,4				33214
120412SN	1,2	20	0,09	2,2		156		
120412SN	1,2	20	0,14	2,2	166			
120412SN	1,2	25	0,13	2,4				33229
120412SN	1,2	30	0,18	2,2	186	186		
120412RN	1,2			2,4				23200
Cast iron					●	●		
Sintered steels					●	●		
Heat resistant alloys					●	●		
hardened < 45 HRC							●	●
hardened 46–55 HRC							●	●
hardened 56–60 HRC							●	●
hardened 61–65 HRC								

CNGA





					F CBN CNGA	F CBN CNGA	F CBN CNGA	F CBN CNGA
ISO	RE	GB	BN	LE	Article no. 71 400 ...	Article no. 71 401 ...	Article no. 71 400 ...	Article no. 71 401 ...
	mm	°	mm	mm				
120404TN	0,4	15	0,09	2,8	222			
120404SN	0,4	20	0,09	2,8				332
120404SN	0,4	20	0,11	2,8		242		
120404TN	0,4	25	0,11	2,8	252			
120404SN	0,4	25	0,11	2,8			352	352
120404SN	0,4	25	0,13	2,8		262		
120404FN	0,4			2,8	212			
120404SN	0,4	30	0,14	2,8				372
120404SN	0,4	35	0,14	2,8			382	
120408TN	0,8	15	0,09	2,5	224			
120408TN	0,8	20	0,09	2,5	234			
120408SN	0,8	20	0,09	2,5				334
120408SN	0,8	20	0,11	2,5		244		
120408TN	0,8	25	0,11	2,5	254			
120408SN	0,8	25	0,11	2,5			354	354
120408SN	0,8	25	0,13	2,5		264		364
120408SN	0,8	30	0,14	2,5		274		374
120408SN	0,8	35	0,14	2,5			384	
120408EN	0,8			2,5			314	
120412TN	1,2	15	0,09	2,2	226			
120412SN	1,2	20	0,09	2,2				336
120412SN	1,2	20	0,11	2,2		246		
120412TN	1,2	25	0,11	2,2	256			
120412SN	1,2	25	0,11	2,2			356	356
120412SN	1,2	25	0,13	2,2		266		366
120412SN	1,2	30	0,14	2,2				376
120412SN	1,2	35	0,14	2,2			386	
120412FN	1,2			2,2	216			
Cast iron								
Sintered steels								
Heat resistant alloys								
hardened < 45 HRC								
hardened 46–55 HRC					●	●	●	●
hardened 56–60 HRC					●	●	●	●
hardened 61–65 HRC							●	●

For fast and efficient determination of the most appropriate edge preparation CNGA test inserts are available. → **Page 161**

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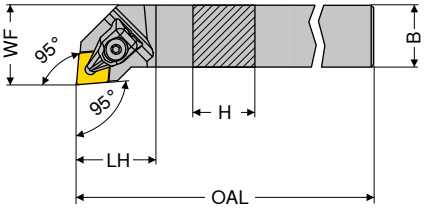
MaxiLock-D – DCLN 95° – Toolholder with top clamping



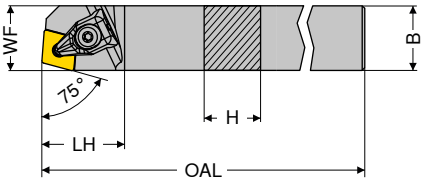
Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 509 ...	Right-hand Article no. 70 508 ...
	mm	mm	mm	mm	mm	Nm			
DCLN R/L 1616 H09	16	16	100	23	20	2	CN.. 0903	**516**	**516**
DCLN R/L 2020 K09	20	20	125	24	25	2	CN.. 0903	**520**	**520**
DCLN R/L 2020 K12	20	20	125	32	25	4	CN.. 1204	**620**	**620**
DCLN R/L 2525 M12	25	25	150	32	32	4	CN.. 1204	**625**	**625**
DCLN R/L 3225 P12	32	25	170	32	32	4	CN.. 1204	**632**	**632**
DCLN R/L 2525 M16	25	25	150	38	32	6,5	CN.. 1606	**725**	**725**
DCLN R/L 3232 P16	32	32	170	36	40	6,5	CN.. 1606	**732**	**732**
DCLN R/L 3232 P19	32	32	170	42	40	6,5	CN.. 1906	**832**	**832**
DCLN R/L 4040 S19	40	40	250	42	50	6,5	CN.. 1906	**940**	**940**
DCLN R/L 4040 S25	40	40	250	60	50	6,5	CN.. 2509	**440**	**440**

Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**

Spare parts	 XPress type Article no. 70 950 ...	Key D Article no. 80 950 ...	 Clamping screw Article no. 70 950 ...	 Carbide type C Article no. 70 950 ...
for Article no.				
70 508 516 / 70 509 516	**823**	T09 - IP **126**	M3x7 - IP **819**	**848**
70 508 520 / 70 509 520	**823**	T09 - IP **126**	M3x7 - IP **819**	**848**
70 508 620 / 70 509 620	**824**	T15 - IP **128**	M4,5x12 - IP **820**	**810**
70 508 625 / 70 509 625	**824**	T15 - IP **128**	M4,5x12 - IP **820**	**810**
70 508 632 / 70 509 632	**824**	T15 - IP **128**	M4,5x12 - IP **820**	**810**
70 508 725 / 70 509 725	**825**	T20 - IP **129**	M5x14 - IP **821**	**814**
70 508 732 / 70 509 732	**825**	T20 - IP **129**	M5x14 - IP **821**	**814**
70 508 832 / 70 509 832	**826**	T20 - IP **129**	M5x14 - IP **821**	**816**
70 508 940 / 70 509 940	**826**	T20 - IP **129**	M5x14 - IP **821**	**816**
70 508 440 / 70 509 440	**827**	T25 - IP **130**	M6x16 - IP **822**	**625**

MaxiLock-D – DCBN 75° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 501 ...	Right-hand Article no. 70 500 ...
	mm	mm	mm	mm	mm	Nm			
DCBN R/L 2525 M12	25	25	150	32	22	4	CN.. 1204	**825**	**825**


XPress type

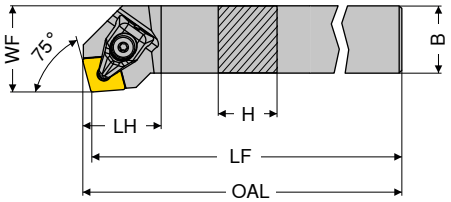
Key D


Clamping screw


Carbide type C

Spare parts	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
for Article no.								
70 501 825 / 70 500 825	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**		**810**	

MaxiLock-D – DCKN 75° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LF	LH	WF	torque moment	Insert	Left-hand Article no. 70 505 ...	Right-hand Article no. 70 504 ...
	mm	mm	mm	mm	mm	mm	Nm			
DCKN R/L 2525 M12	25	25	152,9	150	28,9	32	4	CN.. 1204	**825**	**825**


XPress type

Key D

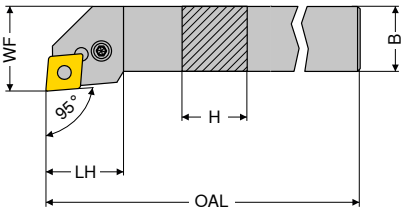

Clamping screw


Carbide type C

Spare parts	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
for Article no.								
70 505 825 / 70 504 825	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**		**810**	

9

MaxiLock-N – PCLN 95° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 509 ...	Right-hand Article no. 70 508 ...
	mm	mm	mm	mm	mm	Nm			
PCLN R/L 1616 H12	16	16	100	26,2	20	4	CN.. 1204	**016**	**016**
PCLN R/L 2020 K12	20	20	125	27,5	25	4	CN.. 1204	**020**	**020**
PCLN R/L 2525 M12	25	25	150	28,1	32	4	CN.. 1204	**025**	**025**
PCLN R/L 3225 P12	32	25	170	28,1	32	4	CN.. 1204	**032**	**032**
PCLN R/L 2525 M16	25	25	150	32,7	32	4	CN.. 1606	**125**	**125**
PCLN R/L 3232 P16	32	32	170	32,6	40	4	CN.. 1606	**132**	**132**
PCLN R/L 3232 P19	32	32	170	38,0	40	8	CN.. 1906	**232**	**232**
PCLN R/L 4040 S25	40	40	250	50,0	50	8	CN.. 2509	**340**	**340**


Key I


Shim

Assembly pin

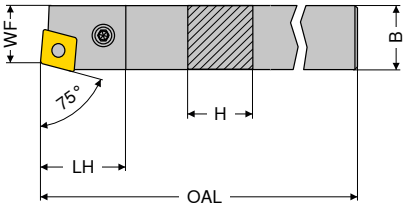

Lever


Clamping screw


Carbide type C

Spare parts for Article no.		Key I Article no. 70 950 ...	Shim Article no. 70 950 ...	Assembly pin Article no. 70 950 ...	Lever Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Carbide type C Article no. 70 950 ...
70 508 016 / 70 509 016	SW3	**176**	**198**	**192**	**187**	**209**	**233**
70 508 020 / 70 509 020	SW3	**176**	**198**	**192**	**187**	**209**	**233**
70 508 025 / 70 509 025	SW3	**176**	**198**	**192**	**187**	**209**	**233**
70 508 032 / 70 509 032	SW3	**176**	**198**	**192**	**187**	**209**	**233**
70 508 125 / 70 509 125	SW3	**176**	**391**	**394**	**385**	**388**	**380**
70 508 132 / 70 509 132	SW3	**176**	**391**	**394**	**385**	**388**	**380**
70 508 232 / 70 509 232	SW4	**396**	**392**	**395**	**386**	**389**	**381**
70 508 340 / 70 509 340	SW5	**265**	**621**	**623**	**620**	**622**	**624**

MaxiLock-N – PCBN 75° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 501 ...	Right-hand Article no. 70 500 ...
	mm	mm	mm	mm	mm	Nm			
PCBN R/L 2525 M12	25	25	150	27,70	22	4	CN.. 1204	**025**	**025**
PCBN R 2525 M16	25	25	150	31,81	22	4	CN.. 1606		**125**
PCBN R/L 3232 P19	32	32	170	38,00	27	8	CN.. 1906	**032**	**032**


Key I


Shim

Assembly pin

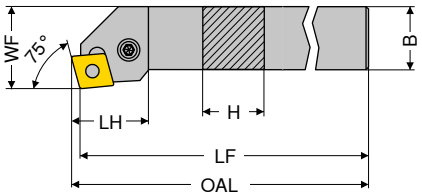

Lever


Clamping screw


Carbide type C

Spare parts for Article no.		Key I Article no. 70 950 ...	Shim Article no. 70 950 ...	Assembly pin Article no. 70 950 ...	Lever Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Carbide type C Article no. 70 950 ...
70 500 025 / 70 501 025	SW3	**176**	**198**	**192**	**187**	**209**	**233**
70 500 125	SW3	**176**	**391**	**394**	**385**	**388**	**380**
70 500 032 / 70 501 032	SW4	**396**	**392**	**395**	**386**	**389**	**381**

MaxiLock-N – PCKN 75° – Toolholder with lever clamping



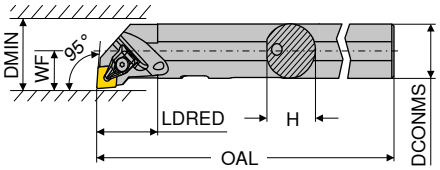
Illustrations show right-hand versions

ISO designation	H	B	OAL	LF	LH	WF	torque moment	Insert	Left-hand Article no. 70 505 ...	Right-hand Article no. 70 504 ...
	mm	mm	mm	mm	mm	mm	Nm			
PCKN R/L 2525 M12	25	25	153,07	150	31,4	32	4	CN.. 1204	**025**	**025**

Spare parts for Article no.		 Key I	 Shim	 Assembly pin	 Lever	 Clamping screw	 Carbide type C
		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 505 025 / 70 504 025	SW3	**176**	**198**	**192**	**187**	**209**	**233**

9

MaxiLock-D – DCLN 95° – Boring bar with top clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 557 ...	Right-hand Article no. 70 556 ...
A20Q DCLN R/L 09	20	19	180	35	13	25	2	CN.. 0903	**720**	**720**
A25R DCLN R/L 12	25	24	200	36	17	32	4	CN.. 1204	**825**	**825**
A32S DCLN R/L 12	32	31	250	40	22	40	4	CN.. 1204	**832**	**832**
A40T DCLN R/L 12	40	39	300	45	27	50	4	CN.. 1204	**840**	**840**

Tool holders with HSK-T interface can be found in → **Chapter 16.**


XPress type


Key D

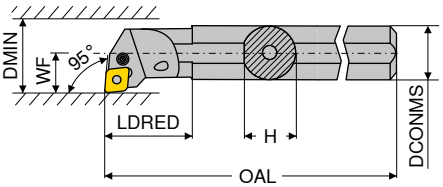

Clamping screw


Carbide type C

Spare parts for Article no.	XPress type Article no. 70 950 ...	Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...		Carbide type C Article no. 70 950 ...
70 556 720 / 70 557 720	**823**	T09 - IP	**126**	M3x7 - IP	**819**	**848**
70 556 825 / 70 557 825	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**	
70 556 832 / 70 557 832	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**	**810**
70 556 840 / 70 557 840	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**	**810**

MaxiLock-N – PCLN 95° – Boring bar with lever clamping

- A... = with thro' coolant
- S... = without thro' coolant



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 557 ...	Right-hand Article no. 70 556 ...
A25R PCLN R/L 12	25	23	200	36,0	17	32	4	CN.. 1204	**225**	**225**
S25T PCLN R/L 12	25	23	300	22,0	17	32	4	CN.. 1204	**025**	**025**
A32S PCLN R/L 12	32	30	250	50,0	22	40	4	CN.. 1204	**232**	**232**
S32U PCLN R/L 12	32	30	350	24,1	22	40	4	CN.. 1204	**032**	**032**
A40T PCLN R/L 12	40	38	300	60,0	27	50	4	CN.. 1204	**240**	**240**
S40V PCLN R/L 12	40	38	400	24,1	27	50	4	CN.. 1204	**040**	**040**
S50W PCLN R/L 16	50	47	450	31,0	35	63	4	CN.. 1606	**050**	**050**


Key I


Shim


Assembly pin


Lever

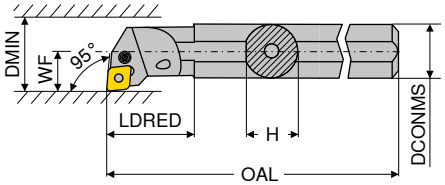

Clamping screw


Carbide type C

Spare parts for Article no.		Key I Article no. 70 950 ...		Shim Article no. 70 950 ...		Assembly pin Article no. 70 950 ...		Lever Article no. 70 950 ...		Clamping screw Article no. 70 950 ...		Carbide type C Article no. 70 950 ...
70 556 225 / 70 557 225	SW3	**176**		**198**		**192**		**187**		**205**		**233**
70 556 025 / 70 557 025	SW3	**176**		**198**		**192**		**187**		**205**		**233**
70 556 232 / 70 557 232	SW3	**176**		**198**		**192**		**187**		**205**		**233**
70 556 032 / 70 557 032	SW3	**176**		**198**		**192**		**187**		**205**		**233**
70 556 240 / 70 557 240	SW3	**176**		**198**		**192**		**187**		**209**		**233**
70 556 040 / 70 557 040	SW3	**176**		**198**		**192**		**187**		**209**		**233**
70 556 050 / 70 557 050	SW3	**176**		**391**		**394**		**385**		**388**		**380**

MaxiLock-N – PCLN 95° – Boring bar with lever clamping

▲ with carbide core



Illustrations show right-hand versions

ISO designation	DCONMS	H	OAL	LDRED	WF	DMIN	torque moment	Insert	Left-hand Article no. 70 559 ...	Right-hand Article no. 70 558 ...
	mm	mm	mm	mm	mm	mm	Nm			
E-A25R PCLN R/L 12	25	23	200	40	17	31	4	CN.. 1204	**025**	**025**
E-A32S PCLN R/L 12	32	30	250	50	22	39	4	CN.. 1204	**032**	**032**
E-A40T PCLN R/L 12	40	38	300	60	27	48	4	CN.. 1204	**040**	**040**


Key I


Shim


Assembly pin


Lever


Clamping screw

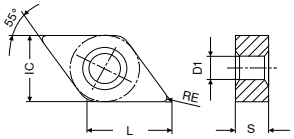

Carbide type C

Spare parts		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.							
70 558 025 / 70 559 025	SW3	**176**	**198**	**192**	**187**	**205**	**233**
70 558 032 / 70 559 032	SW3	**176**	**198**	**192**	**187**	**205**	**233**
70 558 040 / 70 559 040	SW3	**176**	**198**	**192**	**187**	**209**	**233**

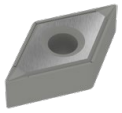
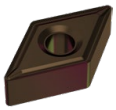
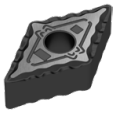
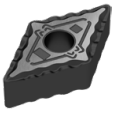
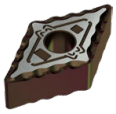
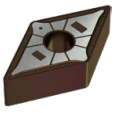
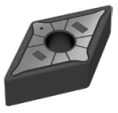
9

DNMG / DNMA / DNMM / DNGP

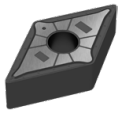
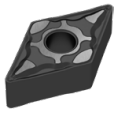
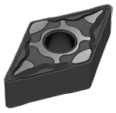
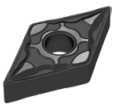
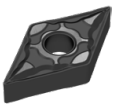
Designation	L	S	D1	IC
	mm	mm	mm	mm
DNMG 1104..	11,6	4,76	3,81	9,52
DN.. 1504..	15,5	4,76	5,16	12,70
DN.. 1506..	15,5	6,35	5,16	12,70



DNMG

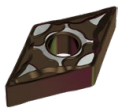
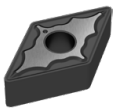
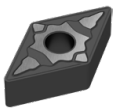
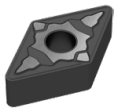
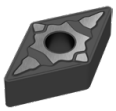
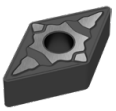
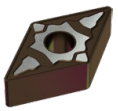
	-CF TCM10	-CF20 CTEP110	-F50 CTCP115	-F50 CTCP125	-F50 CTCP135	-TFQ CTEP110	-TFQ CTCP115
	-CF CWC10	-NF12 DCC1110	-NF15 HCX1115	-NF15 HCX1125	-NF15 HCR1135	-TFQ DCC1110	-TFQ HCX1115
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	F	F	F	F	F	F
	CERMET DNMG	CERMET DNMG	DNMG	DNMG	DNMG	CERMET DNMG	DNMG
ISO / RE mm	Article no. 70 155 ...	Article no. 76 102 ...	Article no. 76 134 ...	Article no. 76 134 ...	Article no. 76 134 ...	Article no. 76 153 ...	Article no. 76 153 ...
110402EN 0,2			302	502	702		
110404EN 0,4	904	004	304	504	704		
110408EN 0,8		006	306	506	706		
110412EN 1,2			308	508	708		
150404EN 0,4			316	516	716		
150408EN 0,8			318	518	718		
150412EN 1,2			320	520	720		
150604EN 0,4	914	028	328	528	728	028	32800
150608EN 0,8		030	330	530	730	030	330
150612EN 1,2		032	332	532	732		
Steel	●	●	●	●	●	●	●
Stainless steel		○	○	○	○	○	○
Cast iron	○	○	○	○		○	○
Non ferrous metals							
Heat resistant alloys					○		

DNMG

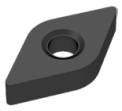
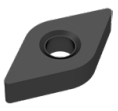
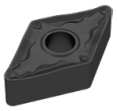
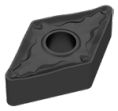
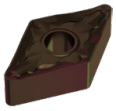
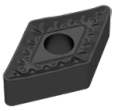
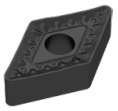
		-TFQ CTCP125	-XU CTCP115	-XU CTCP125	-M50 CTCK110	-M50 CTCK120	-M50 CTCP115	-M50 CTCP125
		-TFQ HCX1125	-XU HCX1115	-XU HCX1125	-NM15 DCX3110	-NM15 HCF3120	-NM15 HCX1115	-NM15 HCX1125
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		F	M	M	M	M	M	M
		DNMG	DNMG	DNMG	DNMG	DNMG	DNMG	DNMG
ISO	RE mm	Article no. 76 153 ...	Article no. 76 291 ...	Article no. 76 291 ...	Article no. 70 133 ...	Article no. 70 133 ...	Article no. 76 136 ...	Article no. 76 136 ...
110404EN	0,4						304	504
110408EN	0,8						306	506
110412EN	1,2						308	508
150404EN	0,4						316	514
150408EN	0,8				018	518	318	518
150412EN	1,2				020	520	320	516
150416EN	1,6						322	522
150604EN	0,4	528	328	528			328	528
150608EN	0,8	530	330	530	030	530	330	530
150612EN	1,2		332	532	032	532	332	532
150616EN	1,6						334	534
Steel		●	●	●	●	●	●	●
Stainless steel		○	○	○	○		○	○
Cast iron		○	○	○	●	●	○	○
Non ferrous metals								
Heat resistant alloys								

9

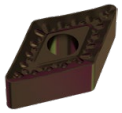
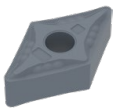
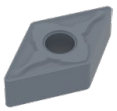
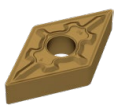
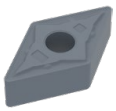
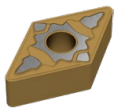
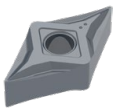
DNMG

	-M50 CTCP135	-TMQ CTCP125	-M70 CTCK110	-M70 CTCK120	-M70 CTCP115	-M70 CTCP125	-M70 CTCP135
	-NM15 HCR1135	-TMQ HCX1125	-NM19 DCX3110	-NM19 HCF3120	-NM19 HCX1115	-NM19 HCX1125	-NM19 HCR1135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	M	M	M	M	M	M	M
	DNMG	DNMG	DNMG	DNMG	DNMG	DNMG	DNMG
ISO / RE mm	Article no. 76 136 ...	Article no. 76 197 ...	Article no. 70 263 ...	Article no. 70 263 ...	Article no. 76 263 ...	Article no. 76 263 ...	Article no. 76 263 ...
110404EN 0,4	704						
110408EN 0,8	706				306	506	706
110412EN 1,2	708				308	508	708
150404EN 0,4	716						
150408EN 0,8	718		018	518	318	518	718
150412EN 1,2	720		020	520	320	520	720
150416EN 1,6	722				322	522	722
150604EN 0,4	728						
150608EN 0,8	730	530	030	530	330	530	730
150612EN 1,2	732	532	032	532	332	532	732
150616EN 1,6	734		034	534	334	534	734
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○		○	○	○
Cast iron		○	●	●	○	○	
Non ferrous metals							
Heat resistant alloys	○						○

DNMA / DNMM

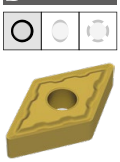
	CTCK110	CTCK120	-R28 CTCP115	-R28 CTCP125	-R28 CTCP135	-R58 CTCP115	-R58 CTCP125
	DCX3110	HCF3120	-NR14 HCX1115	-NR14 HCX1125	-NR14 HCR1135	-NR17 HCX1115	-NR17 HCX1125
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	R	R	R	R	R	R	R
	DNMA	DNMA	DNMM	DNMM	DNMM	DNMM	DNMM
ISO / RE mm	Article no. 70 156 ...	Article no. 70 156 ...	Article no. 76 165 ...	Article no. 76 165 ...	Article no. 76 165 ...	Article no. 76 166 ...	Article no. 76 166 ...
150408EN 0,8	018	518					
150412EN 1,2	020	520					
150608EN 0,8	030	530					
150612EN 1,2	032	532	332	532	732	332	532
150616EN 1,6			334	534	734	334	534
Steel			●	●	●	●	●
Stainless steel			○	○	○	○	○
Cast iron	●	●	○	○		○	○
Non ferrous metals							
Heat resistant alloys					○		

DNMM / DNMG / DNGP

	-R58 CTCP135	-F30 CTPM125	-M30 CTPM125	-M42 CTC2135	-M60 CTPM125	-M70 CTC2135	-F32 CTP2120
	-NR17 HCR1135	-NF23 HCN2125	-NM23 HCN2125	-M42 CWN2135	-NM26 HCN2125	-NM19 CWN2135	-F32 CCN2120
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN		
							
	R	F	M	M	M	M	F
	DNMM	DNMG	DNMG	DNMG	DNMG	DNMG	DNGP
ISO	RE mm	Article no. 76 166 ...	Article no. 75 013 ...	Article no. 75 014 ...	Article no. 70 158 ...	Article no. 75 015 ...	Article no. 70 263 ...	Article no. 70 118 ...
110404EN	0,4		204		600			
110408EN	0,8		206	206	602		406	
110412EN	1,2			208				
150402FN	0,2							602
150404EN	0,4				614			
150404FN	0,4							604
150408EN	0,8				618			
150408FN	0,8							608
150602FN	0,2							610
150604EN	0,4		228		620			
150604FN	0,4							612
150608EN	0,8		230	230	622	230		
150608FN	0,8							614
150612EN	1,2	732		232		232		
150616EN	1,6	734						
Steel		●	○	○	○	○	○	
Stainless steel		○	●	●	●	●	●	●
Cast iron								○
Non ferrous metals								○
Heat resistant alloys		○		○	●	○	●	●

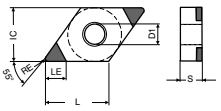
9

DNMG

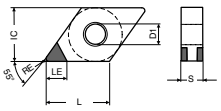
	-M34 CTP5110	-M34 CTP5115	-M42 CTP2120	-M52 CTP2120
	-M34 HCN5110	-M34 HCN5115	-M42 CCN2120	-M52 CCN2120
	DRAGONSKIN	DRAGONSKIN		
				
	M	M	M	M
	DNMG	DNMG	DNMG	DNMG
	Article no. 75 004 ...	Article no. 75 004 ...	Article no. 70 158 ...	Article no. 70 119 ...
ISO / RE mm				
150404EN / 0,4	416	516	604	
150408EN / 0,8	418	518		
150412EN / 1,2	420	520		
150604EN / 0,4			610	612
150608EN / 0,8	430	530	612	614
150612EN / 1,2	432	532		
Steel				
Stainless steel	○	○	○	○
Cast iron			○	○
Non ferrous metals			○	○
Heat resistant alloys	●	●	●	●

DNGA

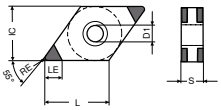
Designation	L	S	D1	IC
	mm	mm	mm	mm
DNGA 1506..	15,5	6,35	5,16	12,7



-B

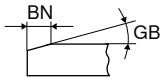


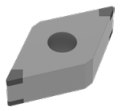
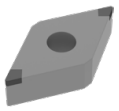
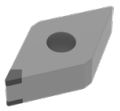
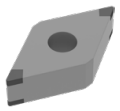
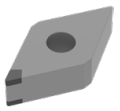
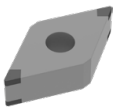
-K (-2SC)



-L (-4SC)

DNGA



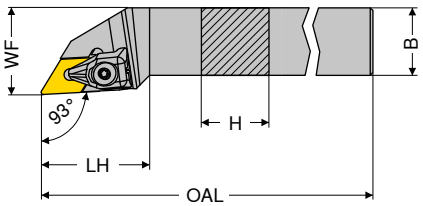
	-L CTBS20C	-B CTBH15C	-K CTBH20C	-L CTBH20C	-K CTBH40C	-L CTBH40C
	-4SC PBC15-S		-2SC PBC25-S	-4SC PBC25-S	-2SC PBC40-S	-4SC PBC40-S
						
						
	F	F	F	F	F	F
	CBN DNGA	CBN DNGA	CBN DNGA	CBN DNGA	CBN DNGA	CBN DNGA
		NEW				
	Article no. 71 403 ...	Article no. 71 017 ...	Article no. 71 402 ...	Article no. 71 403 ...	Article no. 71 402 ...	Article no. 71 403 ...

ISO	RE	GB	BN	LE												
	mm	°	mm	mm												
150604SN	0,4	10	0,09	2,8		122										
150604TN	0,4	15	0,09	2,8						222						
150604SN	0,4	15	0,09	2,8		132										
150604SN	0,4	15	0,11	2,8				32814								
150604SN	0,4	20	0,09	2,8		152										332
150604SN	0,4	20	0,11	2,8								242				
150604TN	0,4	25	0,11	2,8						252						
150604SN	0,4	25	0,11	2,8										352		352
150604SN	0,4	25	0,13	2,8				32829				262				
150604FN	0,4			2,8						212						
150604SN	0,4	30	0,14	2,8												372
150604SN	0,4	30	0,18	2,8		182										
150604SN	0,4	35	0,14	2,8										382		
150608FN	0,8			2,6						214						
150608SN	0,8	10	0,09	2,6		124										
150608SN	0,8	15	0,09	2,6		134										
150608TN	0,8	15	0,09	2,6						224						
150608SN	0,8	15	0,11	2,6				33014								
150608SN	0,8	20	0,09	2,6		154										334
150608SN	0,8	20	0,11	2,6								244				
150608TN	0,8	25	0,11	2,6						254						
150608SN	0,8	25	0,11	2,6										354		354
150608SN	0,8	25	0,13	2,6				33029				264				364
150608SN	0,8	30	0,14	2,6								274				374
150608SN	0,8	30	0,18	2,6		184										
150608SN	0,8	35	0,14	2,6										384		
150612SN	1,2	15	0,11	2,8				33214								
150612SN	1,2	25	0,13	2,8				33229								

Cast iron	●					
Sintered steels	●					
Heat resistant alloys	●					
hardened < 45 HRC		●				
hardened 46–55 HRC		●	●	●	●	●
hardened 56–60 HRC		●	●	●	●	●
hardened 61–65 HRC					●	●

9

MaxiLock-D – DDJN 93° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 541 ...	Right-hand Article no. 70 540 ...
	mm	mm	mm	mm	mm	Nm			
DDJN R/L 1616 H11	16	16	100	33	20	2	DN.. 1104	**816**	**816**
DDJN R/L 2020 K11	20	20	125	33	25	2	DN.. 1104	**820**	**820**
DDJN R/L 2525 M11	25	25	150	33	32	2	DN.. 1104	**825**	**825**
DDJN R/L 2020 K15	20	20	125	40	25	4	DN.. 1504 / 1506	**720**	**720**
DDJN R/L 2525 M15	25	25	150	40	32	4	DN.. 1504 / 1506	**725**	**725**
DDJN R/L 3225 P15	32	25	170	40	32	4	DN.. 1504 / 1506	**832**	**832**

Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**

When using DN.. 1504 indexable inserts, use insert seat article no. 70 950 40000.


XPress type

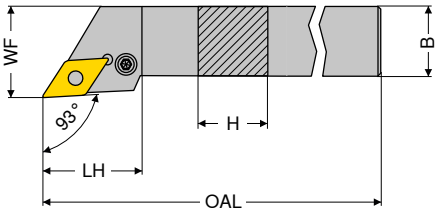

Key D

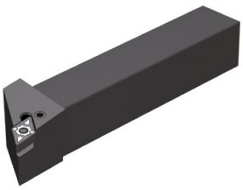

Clamping screw


Solid Carbide Seat D

Spare parts for Article no.	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
70 541 816 / 70 540 816	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**808**	
70 541 820 / 70 540 820	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**808**	
70 541 825 / 70 540 825	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**808**	
70 541 720 / 70 540 720	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**		**811**	
70 541 725 / 70 540 725	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**		**811**	
70 541 832 / 70 540 832	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**		**811**	

MaxiLock-N – PDJN 93° – Toolholder with lever clamping





Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 541 ...	Right-hand Article no. 70 540 ...
	mm	mm	mm	mm	mm	Nm			
PDJN R/L 1616 H11	16	16	100	30,0	20	3	DN.. 1104	**116**	**116**
PDJN R/L 2020 K11	20	20	125	30,0	25	3	DN.. 1104	**120**	**120**
PDJN R/L 2525 M11	25	25	150	30,0	32	3	DN.. 1104	**125**	**125**
PDJN R/L 2020 K15	20	20	125	34,9	25	3,2	DN.. 1506	**020**	**020**
PDJN R/L 2525 M15	25	25	150	35,4	32	3,2	DN.. 1506	**025**	**025**
PDJN R/L 3225 P15	32	25	170	35,4	32	3,2	DN.. 1506	**032**	**032**


Key I


Shim


Assembly pin

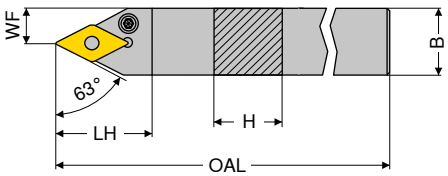

Lever


Clamping screw


Solid Carbide Seat D

Spare parts for Article no.		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
70 541 116 / 70 540 116	SW2,5	**175**		**122**		**191**		**121**		**208**	**120**
70 541 120 / 70 540 120	SW2,5	**175**		**122**		**191**		**121**		**208**	**120**
70 541 125 / 70 540 125	SW2,5	**175**		**122**		**191**		**121**		**208**	**120**
70 541 020 / 70 540 020	SW3	**176**		**198**		**192**		**188**		**388**	**236**
70 541 025 / 70 540 025	SW3	**176**		**198**		**192**		**188**		**388**	**236**
70 541 032 / 70 540 032	SW3	**176**		**198**		**192**		**188**		**388**	**236**

MaxiLock-N – PDNN 63° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 537 ...	Right-hand Article no. 70 536 ...
	mm	mm	mm	mm	mm	Nm			
PDNN R/L 2525 M11	25	25	150	30,0	12,5	3	DN.. 1104	**125**	**125**
PDNN R/L 2525 M15	25	25	150	36,5	12,5	3,2	DN.. 1506	**025**	**025**


Key I


Shim

Assembly pin

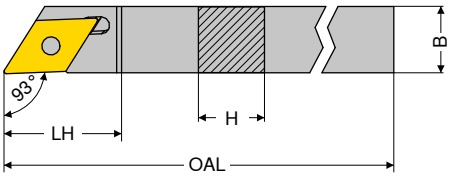

Lever

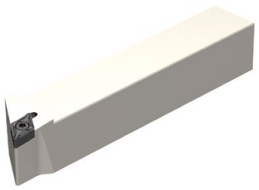

Clamping screw


Solid Carbide Seat D

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 537 125 / 70 536 125	SW2,5	**175**	**122**	**191**	**121**	**208**	**120**
70 537 025 / 70 536 025	SW3	**176**	**198**	**192**	**188**	**388**	**236**

MaxiLock-S – SDJN 93° – Toolholder with screw clamping





Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	torque moment	Insert	Left-hand Article no. 70 699 ...	Right-hand Article no. 70 698 ...
	mm	mm	mm	mm	Nm			
SDJN R/L 1012 H11	10	12	100	21,3	3,2	DNGU 1104	**010**	**010**
SDJN R/L 1212 H11	12	12	100	21,3	3,2	DNGU 1104	**012**	**012**
SDJN R/L 1616 K11	16	16	125	21,3	3,2	DNGU 1104	**016**	**016**
SDJN R/L 2020 K11	20	20	125	21,3	3,2	DNGU 1104	**020**	**020**
SDJN R/L 2525 M11	25	25	150	21,3	3,2	DNGU 1104	**025**	**025**

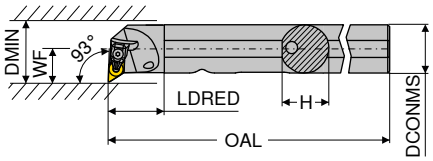

Key D


Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 72 950 ...
70 699 010 / 70 698 010	T15 - IP	**128**	M4x11	**007**
70 699 012 / 70 698 012	T15 - IP	**128**	M4x11	**007**
70 699 016 / 70 698 016	T15 - IP	**128**	M4x11	**007**
70 699 020 / 70 698 020	T15 - IP	**128**	M4x11	**007**
70 699 025 / 70 698 025	T15 - IP	**128**	M4x11	**007**

9

MaxiLock-D – DDUN 93° – Boring bar with top clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 569 ...	Right-hand Article no. 70 568 ...
A25R DDUN R/L 11	25	24	200	30	17	32	2	DN.. 1104	**725**	**725**
A32S DDUN R/L 11	32	31	250	40	22	40	2	DN.. 1104	**732**	**732**
A40T DDUN R/L 15	40	39	300	45	27	50	4	DN.. 1506	**840**	**840**

Tool holders with HSK-T interface can be found in → **Chapter 16.**


XPress type


Key D

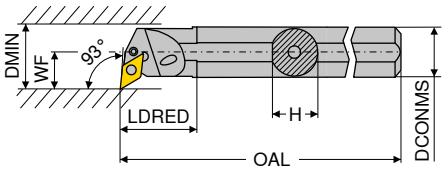

Clamping screw


Solid Carbide Seat D

Spare parts for Article no.	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
70 568 725 / 70 569 725	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**808**	
70 568 732 / 70 569 732	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**808**	
70 568 840 / 70 569 840	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**		**811**	

MaxiLock-N – PDUN 93° – Boring bar with lever clamping

- A... = with thro' coolant
- S... = without thro' coolant



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 569 ...	Right-hand Article no. 70 568 ...
A20Q PDUN R/L 11	20	18,5	180	36	16,0	28	3	DN.. 1104	**120**	**120**
A25R PDUN R/L 11	25	23,0	200	36	18,5	32	3	DN.. 1104	**125**	**125**
A32S PDUN R/L 11	32	30,0	250	36	22,0	40	3	DN.. 1104	**132**	**132**
A32S PDUN R/L 15	32	30,0	250	50	22,0	40	3,2	DN.. 1506	**232**	**232**
A40T PDUN R/L 15	40	38,0	300	60	27,0	50	3,2	DN.. 1506	**240**	**240**
S50W PDUN R/L 15	50	47,0	450	31	35,0	63	3,2	DN.. 1506	**050**	**050**


Key I


Shim


Assembly pin


Lever

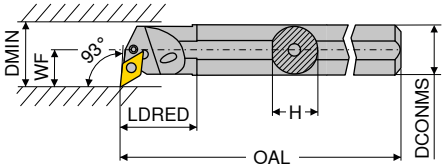

Clamping screw


Solid Carbide Seat D

Spare parts for Article no.		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
70 568 120 / 70 569 120	SW2,5	**175**				**125**		**126**			
70 568 125 / 70 569 125	SW2,5	**175**		**122**		**191**		**121**		**208**	
70 568 132 / 70 569 132	SW2,5	**175**		**122**		**191**		**121**		**208**	
70 568 232 / 70 569 232	SW3	**176**		**198**		**192**		**188**		**209**	
70 568 240 / 70 569 240	SW3	**176**		**198**		**192**		**188**		**209**	
70 568 050 / 70 569 050	SW3	**176**		**198**		**192**		**188**		**388**	

MaxiLock-N – PDUN 93° – Boring bar with lever clamping

▲ with carbide core



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 563 ...	Right-hand Article no. 70 562 ...
E-A25R PDUN R/L 11	25	23	200	40	17	31	3	DN.. 1104	**025**	**025**
E-A32S PDUN R/L 15	32	30	250	50	22	39	3,2	DN.. 1506	**032**	**032**
E-A40T PDUN R/L 15	40	38	300	60	27	48	3,2	DN.. 1506	**040**	**040**


Key I


Shim


Assembly pin


Lever


Clamping screw

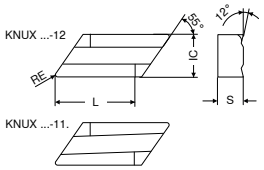

Solid Carbide Seat D

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 562 025 / 70 563 025	SW2,5	**175**	**122**	**191**	**121**	**208**	**120**
70 562 032 / 70 563 032	SW3	**176**	**198**	**192**	**188**	**388**	**236**
70 562 040 / 70 563 040	SW3	**176**	**198**	**192**	**188**	**388**	**236**

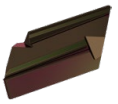
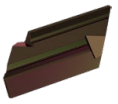
9

KNUX

Designation	L	S	IC
	mm	mm	mm
KNUX 1604..	16	4,76	9,52

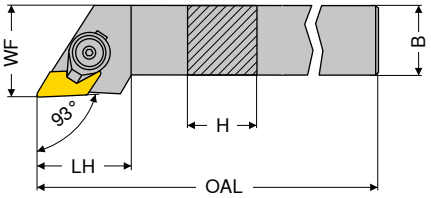


KNUX

	-11 CTCK110	-11 CTCK120	-11 CTCP135	-12 CTCP135
	-11 DCX3110	-11 HCF3120	-11 HCR1135	-12 HCR1135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
				
	F	F	F	M
	KNUX	KNUX	KNUX	KNUX

ISO	RE	Article no. 70 240 ...		Article no. 70 240 ...		Article no. 76 240 ...		Article no. 76 242 ...	
	mm								
160405EL	0,5		002		552		702		702
160405ER	0,5		000		500		700		700
160410EL	1,0						706		706
160410ER	1,0						704		704
Steel			●		●		●		●
Stainless steel			○				○		○
Cast iron			●		●				
Non ferrous metals									
Heat resistant alloys							○		○

Simplex – CKJN 93° – Toolholder with top clamping



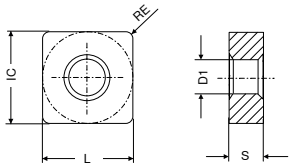
Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 799 ...	Right-hand Article no. 70 798 ...
	mm	mm	mm	mm	mm	Nm			
CKJN R/L 2525 M16	25	25	150	35	32	7	KNUX 1604	025	025

Spare parts	Clamp	Key I	Clamping screw	Countersunk head grooved pin	Carbide type C	Spring pin	Spring washer
							
for Article no.	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 798 025	612	396	615	603	613	616	617
70 799 025	618	396	615	603	614	616	617

SNMG / SNMA / SNMM

Designation	L	S	D1	IC
	mm	mm	mm	mm
SNMG 0903..	9,52	3,18	3,81	9,52
SNM. 1204..	12,70	4,76	5,16	12,70
SNM. 1506..	15,87	6,35	6,35	15,87
SNM. 1906..	19,05	6,35	7,94	19,05
SNMM 2507..	25,40	7,94	9,12	25,40
SNMM 2509..	25,40	9,52	9,12	25,40

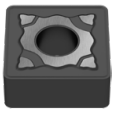


SNMG

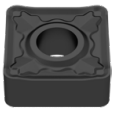
	-F50 CTCP115	-F50 CTCP125	-F50 CTCP135	-M50 CTCP115	-M50 CTCP125	-M50 CTCP135	-M70 CTCK110
	-NF15 HCX1115	-NF15 HCX1125	-NF15 HCR1135	-NM15 HCX1115	-NM15 HCX1125	-NM15 HCR1135	-NM19 DCX3110
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	F	F	M	M	M	M
	SNMG	SNMG	SNMG	SNMG	SNMG	SNMG	SNMG
ISO / RE mm	Article no. 76 140 ...	Article no. 76 140 ...	Article no. 76 140 ...	Article no. 76 137 ...	Article no. 76 137 ...	Article no. 76 137 ...	Article no. 70 225 ...
090308EN 0,8	306	506	706				
120404EN 0,4	316	516	716				
120408EN 0,8	318	518	718	318	518	718	018
120412EN 1,2	320	520	720	320	520	720	020
120416EN 1,6				322	522	722	022
150608EN 0,8				330	530	730	
150612EN 1,2				332	532	732	032
150616EN 1,6				334	534	734	034
190612EN 1,2							044
190616EN 1,6							046
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○	○	○	○	○
Cast iron	○	○		○	○		●
Non ferrous metals							
Heat resistant alloys			○			○	

9

SNMG / SNMA

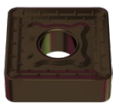
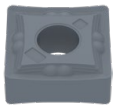
		-M70 CTCK120	-M70 CTCP115	-M70 CTCP125	-M70 CTCP135	CTCP125	CTCP135	CTCK110
		-NM19 HCF3120	-NM19 HCX1115	-NM19 HCX1125	-NM19 HCR1135	HCX1125	HCR1135	DCX3110
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		M	M	M	M	M	M	R
		SNMG	SNMG	SNMG	SNMG	SNMG	SNMG	SNMA
ISO	RE mm	Article no. 70 225 ...	Article no. 76 225 ...	Article no. 76 225 ...	Article no. 76 225 ...	Article no. 76 116 ...	Article no. 76 116 ...	Article no. 70 114 ...
090308EN	0,8					506	706	
120408EN	0,8	518	318	518	718			018
120412EN	1,2	520	320	520	720			020
120416EN	1,6	522	322	522	722			022
150612EN	1,2	532	332	532	732			032
150616EN	1,6	534	334	534	734			034
190612EN	1,2	544	344	544	744			044
190616EN	1,6	546	346	546	746			046
190624EN	2,4		348	548	748			
Steel		●	●	●	●	●	●	
Stainless steel			○	○	○	○	○	
Cast iron		●	○	○		○		●
Non ferrous metals								
Heat resistant alloys					○		○	

SNMA / SNMM

		CTCK120	-R28 CTCP115	-R28 CTCP125	-R28 CTCP135	-R58 CTCP115	-R58 CTCP125	-R58 CTCP135
		HCF3120	-NR14 HCX1115	-NR14 HCX1125	-NR14 HCR1135	-NR17 HCX1115	-NR17 HCX1125	-NR17 HCR1135
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
								
		R	R	R	R	R	R	R
		SNMA	SNMM	SNMM	SNMM	SNMM	SNMM	SNMM
ISO	RE mm	Article no. 70 114 ...	Article no. 76 128 ...	Article no. 76 128 ...	Article no. 76 128 ...	Article no. 76 129 ...	Article no. 76 129 ...	Article no. 76 129 ...
120408EN	0,8	518				318	518	718
120412EN	1,2	520				320	520	720
120416EN	1,6	522						
150612EN	1,2	532	332	532	732	332	532	732
150616EN	1,6	534	334	534	734	334	534	734
190612EN	1,2	544				344	544	744
190616EN	1,6	546	346	546	746	346	546	746
190624EN	2,4					348	548	748
250724EN	2,4				760	360	560	760
250924EN	2,4		370	570	770	370	570	770
Steel			●	●	●	●	●	●
Stainless steel			○	○	○	○	○	○
Cast iron		●	○	○		○	○	
Non ferrous metals								
Heat resistant alloys					○			○

9

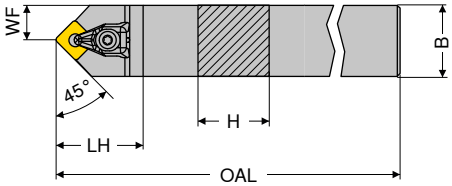
SNMM / SNMG

	-R88 CTCP115	-R88 CTCP125	-R88 CTCP135	-F30 CTPM125	-M30 CTPM125	-M42 CTC2135	-M60 CTPM125
	-NR19 HCX1115	-NR19 HCX1125	-NR19 HCR1135	-NF23 HCN2125	-NM23 HCN2125	-M42 CWN2135	-NM26 HCN2125
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN
							
	R	R	R	F	M	M	M
	SNMM	SNMM	SNMM	SNMG	SNMG	SNMG	SNMG
ISO / RE mm	Article no. 76 130 ...	Article no. 76 130 ...	Article no. 76 130 ...	Article no. 75 016 ...	Article no. 75 017 ...	Article no. 70 002 ...	Article no. 75 018 ...
120404EN 0,4				216			
120408EN 0,8				218	218	408	218
120412EN 1,2				220		412	210
120416EN 1,6							220
190616SN 1,6	346	546	746				
190624SN 2,4	348	548	748				
250724SN 2,4	36000	56000	760				
250924SN 2,4	37000	57000	770				
Steel	●	●	●	○	○	○	○
Stainless steel	○	○	○	●	●	●	●
Cast iron	○	○					
Non ferrous metals							
Heat resistant alloys			○		○	●	○

SNMG

	-M70 CTC2135	-M34 CTP5110	-M34 CTP5115	-M52 CTP2120
	-NM19 CWN2135	-M34 HCN5110	-M34 HCN5115	-M52 CCN2120
		DRAGONSKIN	DRAGONSKIN	
				
	M	M	M	M
	SNMG	SNMG	SNMG	SNMG
ISO / RE mm	Article no. 70 225 ...	Article no. 75 005 ...	Article no. 75 005 ...	Article no. 70 129 ...
120408EN 0,8	418	418	518	608
120412EN 1,2	420	420	520	
190616EN 1,6	446			
Steel	○			
Stainless steel	●	○	○	○
Cast iron				○
Non ferrous metals				○
Heat resistant alloys	●	●	●	●

MaxiLock-D – DSDN 45° – Toolholder with top clamping

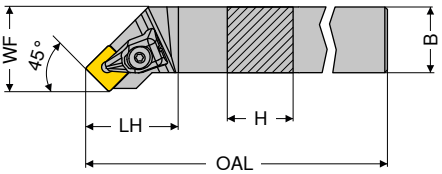


ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Neutral Article no. 70 516 ...
	mm	mm	mm	mm	mm	Nm		
DSDN N 2020 K12	20	20	125	38	10,3	4	SN.. 1204	**620**
DSDN N 2525 M12	25	25	150	38	12,5	4	SN.. 1204	**625**

Tool holders with HSK-T interface can be found in → **Chapter 16.**

	XPress type		Key D		Clamping screw		Solid Carbide support S	
Spare parts	**Article no. 70 950 ...**		**Article no. 80 950 ...**		**Article no. 70 950 ...**		**Article no. 70 950 ...**	
for Article no.								
70 516 620	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**			**813**
70 516 625	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**			**813**

MaxiLock-D – DSSN 45° – Toolholder with top clamping

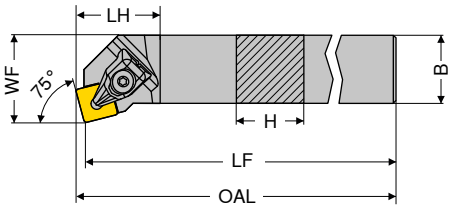


Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 513 ...	Right-hand Article no. 70 512 ...
	mm	mm	mm	mm	mm	Nm			
DSSN R/L 2020 K12	20	20	125	35	25	4	SN.. 1204	**620**	**620**
DSSN R/L 2525 M12	25	25	150	35	32	4	SN.. 1204	**625**	**625**
DSSN R/L 3225 P12	32	25	170	35	32	4	SN.. 1204	**632**	**632**

	XPress type		Key D		Clamping screw		Solid Carbide support S	
Spare parts	**Article no. 70 950 ...**		**Article no. 80 950 ...**		**Article no. 70 950 ...**		**Article no. 70 950 ...**	
for Article no.								
70 512 620 / 70 513 620	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**			**813**
70 512 625 / 70 513 625	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**			**813**
70 512 632 / 70 513 632	**824**	T15 - IP	**128**	M4,5x12 - IP	**820**			**813**

MaxiLock-D – DSKN 75° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LF	LH	WF	torque moment	Insert	Left-hand	Right-hand
	mm	mm	mm	mm	mm	mm	Nm		Article no. 70 525 ...	Article no. 70 524 ...
DSKN R/L 2525 M12	25	25	153,3	150	28	32	4	SN.. 1204	625	625


XPress type

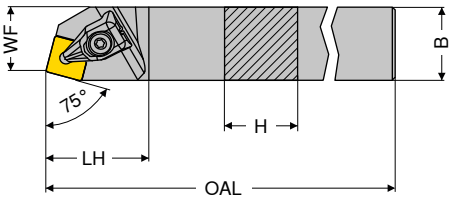
Key D


Clamping screw


Solid Carbide support S

Spare parts	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
for Article no.								
70 525 625 / 70 524 625	824	T15 - IP	128	M4,5x12 - IP	820		813	

MaxiLock-D – DSBN 75° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand	Right-hand
	mm	mm	mm	mm	mm	Nm		Article no. 70 521 ...	Article no. 70 520 ...
DSBN R/L 2020 K12	20	20	125	35	17	4	SN.. 1204	620	620
DSBN R/L 2525 M12	25	25	150	35	22	4	SN.. 1204	625	625
DSBN R/L 2525 M15	25	25	150	42	22	6,5	SN.. 1506	725	725
DSBN R/L 3232 P15	32	32	170	42	27	6,5	SN.. 1506	832	832
DSBN R/L 3232 P19	32	32	170	48	27	6,5	SN.. 1906	732	732
DSBN R/L 4040 S19	40	40	250	48	35	6,5	SN.. 1906	840	840
DSBN R/L 4040 S25	40	40	250	57	35	6,5	SN.. 2507 / SN.. 2509	940	940

When using SN.. 2509 indexable inserts, use insert seat article no. 70 950 40100.


XPress type

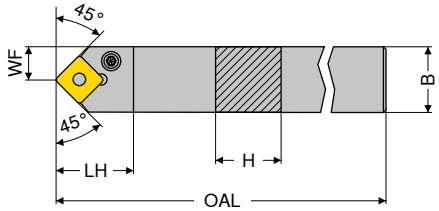
Key D

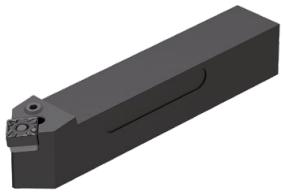

Clamping screw


Solid Carbide support S

Spare parts	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
for Article no.								
70 521 620 / 70 520 620	824	T15 - IP	128	M4,5x12 - IP	820		813	
70 521 625 / 70 520 625	824	T15 - IP	128	M4,5x12 - IP	820		813	
70 521 725 / 70 520 725	825	T20 - IP	129	M5x14 - IP	821		833	
70 521 832 / 70 520 832	825	T20 - IP	129	M5x14 - IP	821		833	
70 521 732 / 70 520 732	826	T20 - IP	129	M5x14 - IP	821		817	
70 521 840 / 70 520 840	826	T20 - IP	129	M5x14 - IP	821		817	
70 521 940 / 70 520 940	827	T25 - IP	130	M6x16 - IP	822		818	

MaxiLock-N – PSDN 45° – Toolholder with lever clamping





ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Neutral Article no. 70 516 ...
	mm	mm	mm	mm	mm	Nm		
PSDN N 1616 H09	16	16	100	21,0	8,3	3	SNM. 0903	016
PSDN N 2020 K12	20	20	125	27,6	10,3	4	SNM. 1204	020
PSDN N 2525 M12	25	25	150	27,6	12,8	4	SNM. 1204	025
PSDN N 3225 P19	32	25	170	40,4	12,5	8	SNM. 1906	03200
PSDN N 4040 S25	40	40	250	48,8	20,0	8	SNM. 2507 / 2509	04000

When using SN.. 2509 indexable inserts, use insert seat article no. 70 950 40200.


Key I


Shim


Assembly pin


Lever

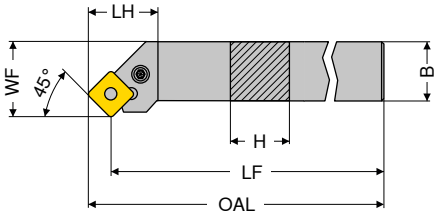

Clamping screw


Solid Carbide support S

Spare parts		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.							
70 516 016	SW2,5	175	197	191	185	208	229
70 516 020	SW3	176	198	192	187	209	230
70 516 025	SW3	176	198	192	187	209	230
70 516 03200	SW4	396	392	395	386	389	383
70 516 04000	SW5	265	621	623	620	622	27600

9

MaxiLock-N – PSSN 45° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LF	LH	WF	torque moment	Insert	Left-hand Article no. 70 513 ...	Right-hand Article no. 70 512 ...
	mm	mm	mm	mm	mm	mm	Nm			
PSSN R/L 1616 H09	16	16	106,7	100	21,2	20	3	SNM. 0903	016	016
PSSN R/L 2020 K12	20	20	134,0	125	29,3	25	4	SNM. 1204	020	020
PSSN R/L 2525 M12	25	25	159,0	150	29,3	32	4	SNM. 1204	025	025
PSSN R/L 3225 P12	32	25	179,0	170	32,0	32	4	SNM. 1204	032	032
PSSN R 2525 M15	25	25	161,2	150	29,3	32	4	SNM. 1506		125
PSSN R 3232 P15	32	32	181,2	170	32,0	40	4	SNM. 1506		132
PSSN R/L 3232 P19	32	32	183,5	170	40,2	40	8	SNM. 1906	232	232
PSSN R 4040 S25	40	40	268,0	250	48,8	50	8	SNM. 2507 / 2509		04000

When using SN.. 2509 indexable inserts, use insert seat article no. 70 950 40200.


Key I


Shim


Assembly pin

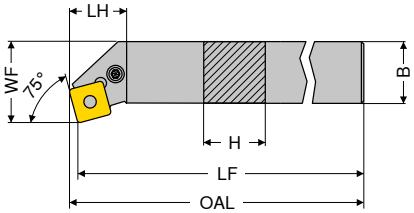

Lever


Clamping screw


Solid Carbide support S

Spare parts		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.							
70 512 016 / 70 513 016	SW2,5	175	197	191	185	208	229
70 512 020 / 70 513 020	SW3	176	198	192	187	209	230
70 512 025 / 70 513 025	SW3	176	198	192	187	209	230
70 512 032 / 70 513 032	SW3	176	198	192	187	209	230
70 512 125	SW3	176	391	394	385	388	382
70 512 132	SW3	176	391	394	385	388	382
70 512 232 / 70 513 232	SW4	396	392	395	386	389	383
70 512 04000	SW5	265	621	623	620	622	27600

MaxiLock-N – PSKN 75° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H	LF	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 525 ...	Right-hand Article no. 70 524 ...
	mm	mm	mm	mm	mm	mm	Nm			
PSKN R/L 1616 H09	16	100	16	102,5	18,7	20	3	SNM. 0903	**016**	**016**
PSKN R/L 2020 K12	20	125	20	128,3	22,7	25	4	SNM. 1204	**020**	**020**
PSKN R/L 2525 M12	25	150	25	153,3	22,7	32	4	SNM. 1204	**025**	**025**


Key I


Shim


Assembly pin

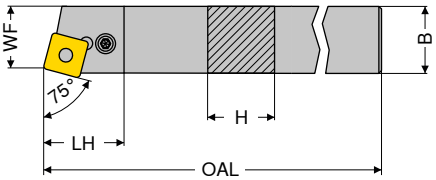

Lever


Clamping screw


Solid Carbide support S

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 525 016 / 70 524 016	SW2,5	**175**	**197**	**191**	**185**	**208**	**229**
70 525 020 / 70 524 020	SW3	**176**	**198**	**192**	**187**	**209**	**230**
70 525 025 / 70 524 025	SW3	**176**	**198**	**192**	**187**	**209**	**230**

MaxiLock-N – PSBN 75° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 521 ...	Right-hand Article no. 70 520 ...
	mm	mm	mm	mm	mm	Nm			
PSBN R/L 2020 K12	20	20	125	27,5	17	4	SNM. 1204	**020**	**020**
PSBN R/L 2525 M12	25	25	150	27,5	22	4	SNM. 1204	**025**	**025**
PSBN R/L 3225 P12	32	25	170	32,0	22	4	SNM. 1204	**032**	**032**
PSBN R/L 3232 P15	32	32	170	32,0	27	4	SNM. 1506	**132**	**132**
PSBN R/L 3232 P19	32	32	170	39,2	27	8	SNM. 1906	**232**	**232**
PSBN R/L 4040 S19	40	40	250	39,2	35	8	SNM. 1906	**04000**	**04000**
PSBN R/L 4040 S25	40	40	250	48,0	35	8	SNM. 2507 / 2509	**14000**	**14000**

When using SN.. 2509 indexable inserts, use insert seat article no. 70 950 40200.

Key I


Shim

Assembly pin

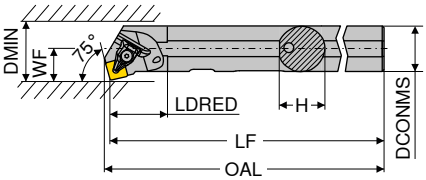

Lever

Clamping screw

Solid Carbide support S

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 520 020 / 70 521 020	SW3	**176**	**198**	**192**	**187**	**209**	**230**
70 520 025 / 70 521 025	SW3	**176**	**198**	**192**	**187**	**209**	**230**
70 520 032 / 70 521 032	SW3	**176**	**198**	**192**	**187**	**209**	**230**
70 520 132 / 70 521 132	SW3	**176**	**391**	**394**	**385**	**388**	**382**
70 520 232 / 70 521 232	SW4	**396**	**392**	**395**	**386**	**389**	**383**
70 520 04000 / 70 521 04000	SW4	**396**	**392**	**395**	**386**	**389**	**383**
70 520 14000 / 70 521 14000	SW5	**265**	**621**	**623**	**620**	**622**	**27600**

MaxiLock-D – DSKN 75° – Boring bar with top clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 561 ...	Right-hand Article no. 70 560 ...
A32S DSKN R/L 12	32	31	250	254,2	40	22	40	4	SN.. 1204	**832**	**832**

XPress type

Spare parts	Article no. 70 950 ...
for Article no.	
70 561 832 / 70 560 832	**824**

Key D

Article no. 80 950 ...
128

Clamping screw

Article no. 70 950 ...
820

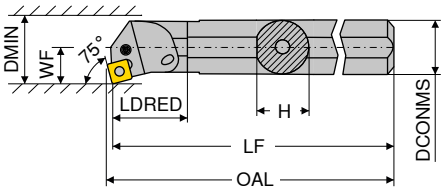
Solid Carbide support S

Article no. 70 950 ...
813

T15 - IP **128**

M4,5x12 - IP **820**

MaxiLock-N – PSKN 75° – Boring bar with lever clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 561 ...	Right-hand Article no. 70 560 ...
A25R PSKN R/L 12	25	23	200	203	15,5	17	32	4	SNM. 1204	**225**	**225**
A32S PSKN R/L 12	32	30	250	253	16,0	22	40	4	SNM. 1204	**232**	**232**
A40T PSKN R/L 12	40	38	300	303	23,0	27	50	4	SNM. 1204	**240**	**240**

Key I

Spare parts		Article no. 70 950 ...
for Article no.		
70 561 225 / 70 560 225	SW3	**176**
70 561 232 / 70 560 232	SW3	**176**
70 561 240 / 70 560 240	SW3	**176**

Shim

Article no. 70 950 ...
198
198
198

Assembly pin

Article no. 70 950 ...
192
192
192

Lever

Article no. 70 950 ...
187
187
187

Clamping screw

Article no. 70 950 ...
205
205
209

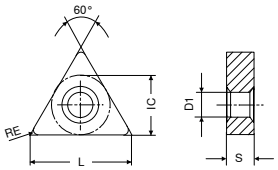
Solid Carbide support S

Article no. 70 950 ...
230
230
230

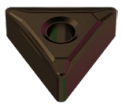
9

TNMG / TNMA / TNMM

Designation	L	S	D1	IC
	mm	mm	mm	mm
TNMG 1103..	11,0	3,18	2,26	6,35
TNM. 1604..	16,5	4,76	3,81	9,52
TNM. 2204..	22,0	4,76	5,16	12,70



TNMG

	-CF20 CTEP110	-F50 CTCP115	-F50 CTCP125	-F50 CTCP135	-M50 CTCP115	-M50 CTCP125	-M50 CTCP135
	-NF12 DCC1110	-NF15 HCX1115	-NF15 HCX1125	-NF15 HCR1135	-NM15 HCX1115	-NM15 HCX1125	-NM15 HCR1135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	F	F	F	M	M	M
	CERMET TNMG	TNMG	TNMG	TNMG	TNMG	TNMG	TNMG
ISO / RE mm	Article no. 76 149 ...	Article no. 76 146 ...	Article no. 76 146 ...	Article no. 76 146 ...	Article no. 76 138 ...	Article no. 76 138 ...	Article no. 76 138 ...
110304EN 0,4		304	504	704			
110308EN 0,8		306	506	706			
160404EN 0,4	016	316	516	716	316	516	716
160408EN 0,8	018	318	518	718	318	518	718
160412EN 1,2	020	320	520	720	320	520	720
220408EN 0,8					330	530	730
220412EN 1,2					332	532	732
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○	○	○	○	○
Cast iron	○	○	○		○	○	
Non ferrous metals							
Heat resistant alloys				○			○

TNMG

	-M70 CTCK110	-M70 CTCK120	-M70 CTCP115	-M70 CTCP125	-M70 CTCP135	CTCP125	CTCP135
	-NM19 DCX3110	-NM19 HCF3120	-NM19 HCX1115	-NM19 HCX1125	-NM19 HCR1135	HCX1125	HCR1135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	M TNMG	M TNMG	M TNMG	M TNMG	M TNMG	M TNMG	M TNMG
ISO / RE mm	Article no. 70 155 ...	Article no. 70 155 ...	Article no. 76 155 ...	Article no. 76 155 ...	Article no. 76 155 ...	Article no. 76 142 ...	Article no. 76 142 ...
110302EN 0,2							702
160404ER 0,4						516	716
160408EL 0,8						518	
160408EN 0,8	018	518	318	518	718		
160408ER 0,8						517	717
160412EN 1,2	020	520	320	520	720		
220404EN 0,4				528			
220408EN 0,8	030	530	330	530	730		
220412EN 1,2	032	532	332	532	732		
220416EN 1,6	034	534	334	534	734		
Steel	●	●	●	●	●	●	●
Stainless steel	○		○	○	○	○	○
Cast iron	●	●	○	○		○	
Non ferrous metals							
Heat resistant alloys					○		○

TNMA / TNMM

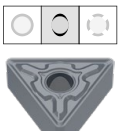
	CTCK110	CTCK120	-R28 CTCP115	-R28 CTCP125	-R28 CTCP135	-R58 CTCP115	-R58 CTCP125
	DCX3110	HCF3120	-NR14 HCX1115	-NR14 HCX1125	-NR14 HCR1135	-NR17 HCX1115	-NR17 HCX1125
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	R TNMA	M TNMA	R TNMM	R TNMM	R TNMM	R TNMM	R TNMM
ISO / RE mm	Article no. 70 134 ...	Article no. 70 134 ...	Article no. 76 154 ...	Article no. 76 154 ...	Article no. 76 154 ...	Article no. 76 152 ...	Article no. 76 152 ...
160408EN 0,8	018	518					
160412EN 1,2	020	520					
160416EN 1,6	022	522					
220408EN 0,8	030	530					
220412EN 1,2	032	532				332	532
220416EN 1,6	034	534	334	534	734		
Steel			●	●	●	●	●
Stainless steel			○	○	○	○	○
Cast iron	●	●	○	○		○	○
Non ferrous metals							
Heat resistant alloys					○		

9

TNMM / TNMG

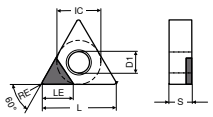
	-R58 CTCP135	-F30 CTPM125	-M30 CTPM125	-M42 CTC2135	-M60 CTPM125	-M70 CTC2135	-M34 CTP5115
	-NR17 HCR1135	-NF23 HCN2125	-NM23 HCN2125	-M42 CWN2135	-NM26 HCN2125	-NM19 CWN2135	-M34 HCN5115
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN		DRAGONSKIN
							
	R	F	M	M	M	M	M
	TNMM	TNMG	TNMG	TNMG	TNMG	TNMG	TNMG
ISO / RE mm	Article no. 76 152 ...	Article no. 75 019 ...	Article no. 75 020 ...	Article no. 70 148 ...	Article no. 75 021 ...	Article no. 70 155 ...	Article no. 75 006 ...
160404EN 0,4		216		404			
160408EN 0,8		218	218	408	218	418	516
160412EN 1,2			220		220		
220404EN 0,4							528
220408EN 0,8							530
220412EN 1,2	732						
220416EN 1,6							534
Steel	●	○	○	○	○	○	
Stainless steel	○	●	●	●	●	●	○
Cast iron							
Non ferrous metals							
Heat resistant alloys	○		○	●	○	●	●

TNMG

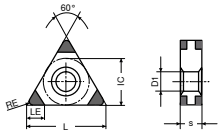
	-M42 CTP2120	-M52 CTP2120
	-M42 CCN2120	-M52 CCN2120
		
	M	M
	TNMG	TNMG
ISO / RE mm	Article no. 70 148 ...	Article no. 70 152 ...
160404EN 0,4		604
160408EN 0,8	608	608
Steel		
Stainless steel	○	○
Cast iron	○	○
Non ferrous metals	○	○
Heat resistant alloys	●	●

TNGA

Designation	L	S	D1	IC
	mm	mm	mm	mm
TNGA 1103..	11,0	3,18	2,26	6,35
TNGA 1604..	16,5	4,76	3,81	9,52

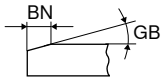


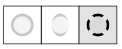
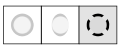
-A



-M (-6SC)

TNGA



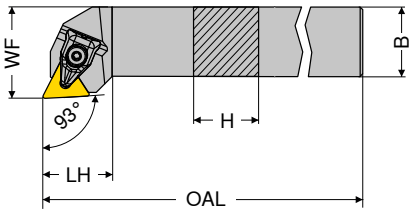
	-A CTBH21U	-M CTBH20C	-A CTBH40U	-M CTBH40C
	PBC25	-6SC PBC25-S	PBC40	-6SC PBC40-S
				
				
	F	F	F	F
	CBN TNGA	CBN TNGA	CBN TNGA	CBN TNGA
ISO	Article no. 71 108 ...	Article no. 71 404 ...	Article no. 71 108 ...	Article no. 71 404 ...

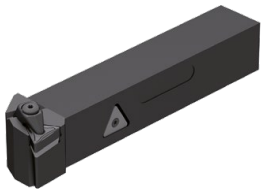
ISO	RE	GB	BN	LE	-A CTBH21U	-M CTBH20C	-A CTBH40U	-M CTBH40C
	mm	°	mm	mm				
110304TN	0,4	20	0,14	2,8	500			
110308FN	0,8			2,5			802 [1]	
110308TN	0,8	20	0,14	2,5	502			
160404FN	0,4			3,5	404 [1]		804 [1]	
160404TN	0,4	15	0,09	2,8		222		
160404SN	0,4	20	0,09	2,8				332
160404SN	0,4	20	0,11	2,8		242		342
160404TN	0,4	20	0,14	3,5	504			
160404SN	0,4	25	0,11	2,8				352
160404TN	0,4	25	0,11	2,8		252		
160404TN	0,4	25	0,12	3,5			904	
160404FN	0,4			2,8		212		
160404SN	0,4	25	0,13	2,8		262		
160404SN	0,4	30	0,14	2,8				372
160404SN	0,4	35	0,14	2,8				382
160408TN	0,8	15	0,09	2,5		224		
160408SN	0,8	15	0,09	2,5				324
160408SN	0,8	20	0,09	2,5				334
160408TN	0,8	20	0,09	2,5		234		
160408SN	0,8	20	0,11	2,5		244		344
160408TN	0,8	20	0,14	3,0	506			
160408SN	0,8	25	0,11	2,5				354
160408TN	0,8	25	0,11	2,5		254		
160408TN	0,8	25	0,12	3,0			906	
160408SN	0,8	25	0,13	2,5		264		364
160408SN	0,8	30	0,14	2,5				374
160408SN	0,8	35	0,14	2,5				384
160408FN	0,8			2,5		214		
160408FN	0,8			3,0	406 [1]			
160408EN	0,8			2,5				314
160412TN	1,2	15	0,09	2,2		226		
160412SN	1,2	20	0,09	2,2				336
160412SN	1,2	20	0,11	2,2		246		346
160412SN	1,2	25	0,11	2,2				356
160412TN	1,2	25	0,11	2,2		256		
160412SN	1,2	25	0,13	2,2		266		366
160412SN	1,2	30	0,14	2,2				376
160412SN	1,2	35	0,14	2,2				386
160412FN	1,2			2,2		216		
Cast iron								
Sintered steels								
Heat resistant alloys								
hardened < 45 HRC								
hardened 46–55 HRC					●	●	●	●
hardened 56–60 HRC					●	●	●	●
hardened 61–65 HRC							●	●

1) Machining to 60 HRC

9

MaxiLock-D – DTJN 93° – Toolholder with top clamping





Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 591 ...	Right-hand Article no. 70 590 ...
	mm	mm	mm	mm	mm	Nm			
DTJN R/L 2020 K16	20	20	125	23	25	2	TNM. 1604	**820**	**820**
DTJN R/L 2525 M16	25	25	150	24	32	2	TNM. 1604	**825**	**825**


XPress type

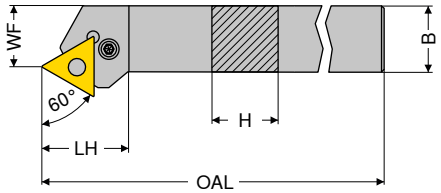
Key D


Clamping screw


Solid Carbide Seat T

Spare parts		XPress type Article no. 70 950 ...		Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...		Solid Carbide Seat T Article no. 70 950 ...
for Article no.								
70 590 820 / 70 591 820		**823**	T09 - IP	**126**	M3x7 - IP	**819**		**847**
70 590 825 / 70 591 825		**823**	T09 - IP	**126**	M3x7 - IP	**819**		**847**

MaxiLock-N – PTTN 60° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 529 ...	Right-hand Article no. 70 528 ...
	mm	mm	mm	mm	mm	Nm			
PTTN R/L 2020 K16	20	20	125	25,9	17	3	TNM. 1604	**020**	**020**
PTTN R/L 2525 M22	25	25	150	32,7	22	4	TNM. 2204	**025**	**025**


Key I


Shim

Assembly pin

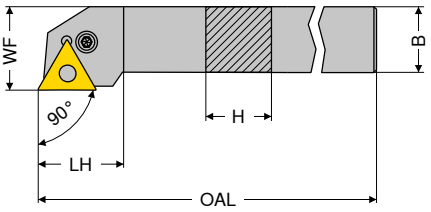

Lever


Clamping screw


Solid Carbide Seat T

Spare parts		Key I Article no. 70 950 ...		Shim Article no. 70 950 ...		Assembly pin Article no. 70 950 ...		Lever Article no. 70 950 ...		Clamping screw Article no. 70 950 ...		Solid Carbide Seat T Article no. 70 950 ...
for Article no.												
70 529 020 / 70 528 020	SW2,5	**175**		**197**		**191**		**185**		**208**		**225**
70 529 025 / 70 528 025	SW3	**176**		**198**		**192**		**187**		**209**		**226**

MaxiLock-N – PTGN 90° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 533 ...	Right-hand Article no. 70 532 ...
PTGN R/L 1616 H16	16	16	100	20	20	3	TNM. 1604	016	016
PTGN R/L 2020 K16	20	20	125	20	25	3	TNM. 1604	020	020
PTGN R/L 2525 M16	25	25	150	22	32	3	TNM. 1604	025	025
PTGN R/L 3225 P16	32	25	170	22	32	3	TNM. 1604	032	032
PTGN R/L 2525 M22	25	25	150	29	32	4	TNM. 2204	125	125
PTGN R/L 3232 P22	32	32	170	29	40	4	TNM. 2204	132	132


Key I


Shim


Assembly pin


Lever

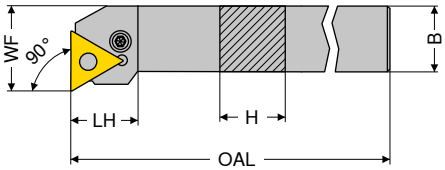

Clamping screw


Solid Carbide Seat T

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 532 016 / 70 533 016	SW2,5	175	197	191	185	208	225
70 532 020 / 70 533 020	SW2,5	175	197	191	185	208	225
70 532 025 / 70 533 025	SW2,5	175	197	191	185	208	225
70 532 032 / 70 533 032	SW2,5	175	197	191	185	208	225
70 532 125 / 70 533 125	SW3	176	198	192	187	209	226
70 532 132 / 70 533 132	SW3	176	198	192	187	209	226

9

MaxiLock-N – PTFN 90° – Toolholder with lever clamping



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 535 ...	Right-hand Article no. 70 534 ...
PTFN R/L 1616 H16	16	16	100	19,7	20	3	TNM. 1604	016	016
PTFN R/L 2020 K16	20	20	125	20,2	25	3	TNM. 1604	020	020
PTFN R/L 2525 M16	25	25	150	20,2	32	3	TNM. 1604	025	025
PTFN R/L 2525 M22	25	25	150	25,2	32	4	TNM. 2204	125	125
PTFN R/L 3225 P22	32	25	170	25,2	32	4	TNM. 2204	132	132


Key I


Shim


Assembly pin


Lever

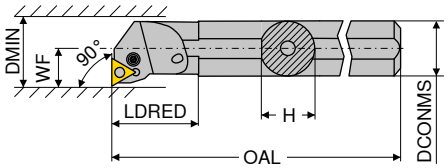

Clamping screw


Solid Carbide Seat T

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 534 016 / 70 535 016	SW2,5	175	197	191	185	208	225
70 534 020 / 70 535 020	SW2,5	175	197	191	185	208	225
70 534 025 / 70 535 025	SW2,5	175	197	191	185	208	225
70 534 125 / 70 535 125	SW3	176	198	192	187	209	226
70 534 132 / 70 535 132	SW3	176	198	192	187	209	226

MaxiLock-N – PTFN 90° – Boring bar with lever clamping

▲ A... = with thro' coolant
▲ S... = without thro' coolant



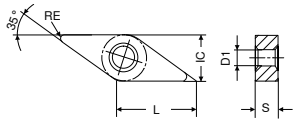
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 565 ...	Right-hand Article no. 70 564 ...
A16M PTFN R/L 11	16	15,0	150	14,0	11	20	2,2	TNM. 1103	**216**	**216**
A20Q PTFN R/L 11	20	18,5	180	14,0	13	25	2,2	TNM. 1103	**220**	**220**
A25R PTFN R/L 16	25	23,0	200	17,5	17	32	3	TNM. 1604	**225**	**225**
A32S PTFN R/L 16	32	30,0	250	18,0	22	40	3	TNM. 1604	**232**	**232**
A40T PTFN R/L 22	40	38,0	300	27,0	27	50	4	TNM. 2204	**240**	**240**
S50W PTFN R 22	50	47,0	450	35,0	35	63	4	TNM. 2204		**050**

Spare parts for Article no.	 Key I Article no. 70 950 ...	 Shim Article no. 70 950 ...	Assembly pin Article no. 70 950 ...	 Lever Article no. 70 950 ...	 Clamping screw Article no. 70 950 ...	 Solid Carbide Seat T Article no. 70 950 ...
70 564 216 / 70 565 216	**177**			**184**	**207**	
70 564 220 / 70 565 220	**177**			**184**	**207**	
70 564 225 / 70 565 225	**175**	**197**	**191**	**185**	**208**	**225**
70 564 232 / 70 565 232	**175**	**197**	**191**	**185**	**208**	**225**
70 564 240 / 70 565 240	**176**	**198**	**192**	**187**	**209**	**226**
70 564 050	**176**	**198**	**192**	**187**	**209**	**226**

VNMG / VNGP

Designation	L	S	D1	IC
	mm	mm	mm	mm
VN.. 1604..	16,6	4,76	3,81	9,52



VNMG

	-F40 CTCP125	-F50 CTCP115	-F50 CTCP125	-F50 CTCP135	-XU CTCP115	-XU CTCP125	-M40 CTCP125
	-F40 HCX1125	-NF15 HCX1115	-NF15 HCX1125	-NF15 HCR1135	-XU HCX1115	-XU HCX1125	-M40 HCX1125
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	F VNMG	F VNMG	F VNMG	F VNMG	M VNMG	M VNMG	M VNMG
ISO / RE mm	Article no. 76 000 ...	Article no. 76 156 ...	Article no. 76 156 ...	Article no. 76 156 ...	Article no. 76 294 ...	Article no. 76 294 ...	Article no. 76 001 ...
160404EN 0,4	516	316	516	716	316	516	516
160408EN 0,8	518	318	518	718	318	518	518
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○	○	○	○	○
Cast iron	○	○	○		○	○	○
Non ferrous metals							
Heat resistant alloys				○			

VNMG / VNGP

	-M50 CTCK120	-M50 CTCP115	-M50 CTCP125	-F30 CTPM125	-M30 CTPM125	-F32 CTP2120	-M34 CTP5110
	-NM15 HCF3120	-NM15 HCX1115	-NM15 HCX1125	-NF23 HCN2125	-NM23 HCN2125	-F32 CCN2120	-M34 HCN5110
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN
	M VNMG	M VNMG	M VNMG	F VNMG	M VNMG	F VNGP	M VNMG
ISO / RE mm	Article no. 70 131 ...	Article no. 76 131 ...	Article no. 76 131 ...	Article no. 75 022 ...	Article no. 75 023 ...	Article no. 70 167 ...	Article no. 75 009 ...
160402FN 0,2						602	
160404EN 0,4		316	516	216			416
160404FN 0,4						604	
160408EN 0,8	518	318	518	218	218		418
160412EN 1,2	520	320	520				420
Steel	●	●	●	○	○		
Stainless steel		○	○	●	●	●	○
Cast iron	●	○	○			○	
Non ferrous metals						○	
Heat resistant alloys					○	●	●

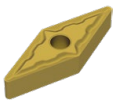
9

VNMG

-M34 CTP5115

-M34 HCN5115

DRAGONSKIN



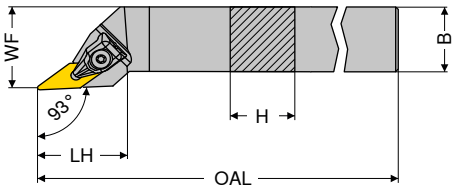
M

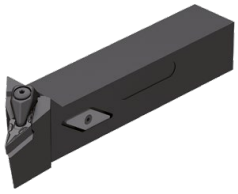
VNMG

ISO	RE mm	Article no. 75 009 ...
160404EN	0,4	**516**
160408EN	0,8	**518**
160412EN	1,2	**520**

Steel	
Stainless steel	○
Cast iron	
Non ferrous metals	
Heat resistant alloys	●

MaxiLock-D – DVJN 93° – Toolholder with top clamping





Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand	Right-hand
	mm	mm	mm	mm	mm	Nm		Article no. 70 503 ...	Article no. 70 502 ...
DVJN R/L 2020 K16	20	20	125	39	25	2	VN.. 1604	620	620
DVJN R/L 2525 M16	25	25	150	39	32	2	VN.. 1604	725	725

Tool holders with HSK-T interface can be found in → **Chapter 16.**


XPress type

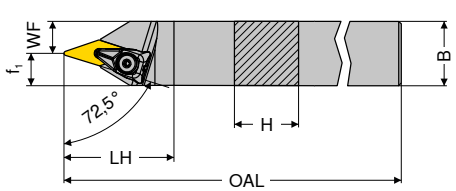
Key D


Clamping screw


Solid Carbide Seat V

Spare parts	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...
for Article no.							
70 502 620 / 70 503 620	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**806**
70 502 725 / 70 503 725	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**806**

MaxiLock-D – DVVN 72.5° – Toolholder with top clamping



ISO designation	H	B	OAL	LH	WF	f_1	torque moment	Insert	Neutral
	mm	mm	mm	mm	mm	mm	Nm		Article no. 70 506 ...
DVVN N 2020 K16	20	20	125	43	7,5	12,5	2	VN.. 1604	620
DVVN N 2525 M16	25	25	150	43	12,5	12,5	2	VN.. 1604	625


XPress type

Key D

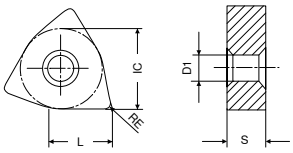

Clamping screw


Solid Carbide Seat V

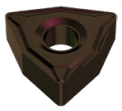
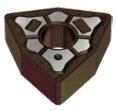
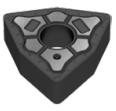
Spare parts	Article no. 70 950 ...		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...
for Article no.							
70 506 620	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**806**
70 506 625	**835**	T09 - IP	**126**	M3x7 - IP	**819**		**806**

WNMG / WNMA

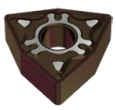
Designation	L	S	D1	IC
	mm	mm	mm	mm
WNMG 0604..	6,5	4,76	3,81	9,52
WNM. 0804..	8,6	4,76	5,16	12,70



WNMG

	-CF20 CTEP110	-F50 CTCP115	-F50 CTCP125	-F50 CTCP135	-TFQ CTEP110	-TFQ CTCP115	-TFQ CTCP125
	-NF12 DCC1110	-NF15 HCX1115	-NF15 HCX1125	-NF15 HCR1135	-TFQ DCC1110	-TFQ HCX1115	-TFQ HCX1125
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	F	F	F	F	F	F
	CERMET WNMG	WNMG	WNMG	WNMG	CERMET WNMG	WNMG	WNMG
ISO	Article no. 76 171 ...	Article no. 76 157 ...	Article no. 76 157 ...	Article no. 76 157 ...	Article no. 76 177 ...	Article no. 76 177 ...	Article no. 76 177 ...
RE mm							
060404EN 0,4	004	304	504	704		304	514
060408EN 0,8	006	306	506	706	006	306	506
080404EN 0,4		316	516	716	016		
080408EN 0,8	018	318	518	718	018	318	518
080412EN 1,2		320	520	720		320	520
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○	○	○	○	○
Cast iron	○	○	○		○	○	○
Non ferrous metals							
Heat resistant alloys				○			

WNMG

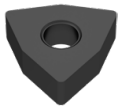
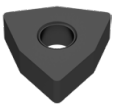
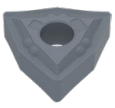
	-XU CTCP115	-XU CTCP125	-M50 CTCK110	-M50 CTCK120	-M50 CTCP115	-M50 CTCP125	-M50 CTCP135
	-XU HCX1115	-XU HCX1125	-NM15 DCX3110	-NM15 HCF3120	-NM15 HCX1115	-NM15 HCX1125	-NM15 HCR1135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	M WNMG	M WNMG	M WNMG	M WNMG	M WNMG	M WNMG	M WNMG
ISO / RE mm	Article no. 76 295 ...	Article no. 76 295 ...	Article no. 70 139 ...	Article no. 70 139 ...	Article no. 76 139 ...	Article no. 76 139 ...	Article no. 76 139 ...
060404EN 0,4					304	504	704
060408EN 0,8					306	506	706
060412EN 1,2					308	508	708
080404EN 0,4	316	516			316	516	716
080408EN 0,8	318	518	018	518	318	518	718
080412EN 1,2	320	520	020	520	320	520	720
080416EN 1,6					322	522	722
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○		○	○	○
Cast iron	○	○	●	●	○	○	
Non ferrous metals							
Heat resistant alloys							○

9

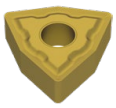
WNMG

	-TMQ CTCP115	-TMQ CTCP125	-M70 CTCK110	-M70 CTCK120	-M70 CTCP115	-M70 CTCP125	-M70 CTCP135
	-TMQ HCX1115	-TMQ HCX1125	-NM19 DCX3110	-NM19 HCF3120	-NM19 HCX1115	-NM19 HCX1125	-NM19 HCR1135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	M WNMG	M WNMG	M WNMG	M WNMG	M WNMG	M WNMG	M WNMG
ISO / RE mm	Article no. 76 198 ...	Article no. 76 198 ...	Article no. 70 273 ...	Article no. 70 273 ...	Article no. 76 273 ...	Article no. 76 273 ...	Article no. 76 273 ...
060408EN 0,8					306	506	706
060412EN 1,2					308	508	708
080408EN 0,8	31800	518	018	518	318	518	718
080412EN 1,2	320	520	020	520	320	520	720
080416EN 1,6			022	522	322	522	722
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○		○	○	○
Cast iron	○	○	●	●	○	○	
Non ferrous metals							
Heat resistant alloys							○

WNMA / WNMG

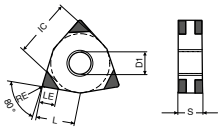
	CTCK110	CTCK120	-F30 CTPM125	-M30 CTPM125	-M42 CTC2135	-M60 CTPM125	-M70 CTC2135
	DCX3110	HCF3120	-NF23 HCN2125	-NM23 HCN2125	-M42 CWN2135	-NM26 HCN2125	-NM19 CWN2135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	
							
	R	R	F	M	M	M	M
	WNMA	WNMA	WNMG	WNMG	WNMG	WNMG	WNMG
ISO / RE mm	Article no. 70 169 ...	Article no. 70 169 ...	Article no. 75 024 ...	Article no. 75 025 ...	Article no. 70 178 ...	Article no. 75 026 ...	Article no. 70 273 ...
060404EN 0,4			204		400		
060408EN 0,8			206	206	402	206	
060412EN 1,2				208		208	
080404EN 0,4			216		404		
080408EN 0,8	018	518	218	218	406	218	418
080412EN 1,2	020	520		220	408	220	
080416EN 1,6	022	522					
Steel			○	○	○	○	○
Stainless steel			●	●	●	●	●
Cast iron	●	●					
Non ferrous metals							
Heat resistant alloys				○	●	○	●

WNMG

	-M34 CTP5110	-M34 CTP5115	-M42 CTP2120	-M52 CTP2120
	-M34 HCN5110	-M34 HCN5115	-M42 CCN2120	-M52 CCN2120
	DRAGONSKIN	DRAGONSKIN		
				
	M	M	M	M
	WNMG	WNMG	WNMG	WNMG
ISO / RE mm	Article no. 75 008 ...	Article no. 75 008 ...	Article no. 70 178 ...	Article no. 70 179 ...
060404EN 0,4				604
060408EN 0,8				608
080404EN 0,4				612
080408EN 0,8	418	518	608	614
080412EN 1,2	420	520		
Steel				
Stainless steel	○	○	○	○
Cast iron			○	○
Non ferrous metals			○	○
Heat resistant alloys	●	●	●	●

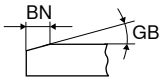
WNGA

Designation	L	S	D1	IC
	mm	mm	mm	mm
WNGA 0804..	8,5	4,76	5,13	12,7



-M (-6SC)

WNGA

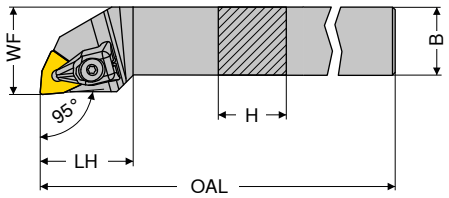


	-M CTBS20C	-M CTBH20C	-M CTBH40C
	-6SC PBC15-S	-6SC PBC25-S	-6SC PBC40-S
	F	F	F
	CBN WNGA	CBN WNGA	CBN WNGA
ISO	Article no. 71 405 ...	Article no. 71 405 ...	Article no. 71 405 ...
080404SN	122		
080404SN	132		
080404SN	152		332
080404SN		242	
080404SN			352
080404SN		262	
080404SN			372
080408SN	124		
080408SN	134		
080408SN	154		334
080408SN		244	
080408SN			354
080408SN		264	364
080408SN	174		
080408SN		274	376

Cast iron	●		
Sintered steels	●		
Heat resistant alloys	●		
hardened < 45 HRC			
hardened 46–55 HRC		●	●
hardened 56–60 HRC		●	●
hardened 61–65 HRC			●

9

MaxiLock-D – DWLN 95° – Toolholder with top clamping



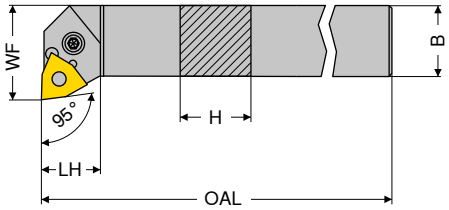
Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 543 ...	Right-hand Article no. 70 542 ...
	mm	mm	mm	mm	mm	Nm			
DWLN R/L 1616 H06	16	16	100	25	20	2	WN.. 0604	716	716
DWLN R/L 2020 K06	20	20	125	27	25	2	WN.. 0604	720	720
DWLN R/L 2525 M06	25	25	150	27	32	2	WN.. 0604	725	725
DWLN R/L 2020 K08	20	20	125	34	25	4	WN.. 0804	620	620
DWLN R/L 2525 M08	25	25	150	34	32	4	WN.. 0804	625	625

Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**

Spare parts		XPress type Article no. 70 950 ...	Key D Article no. 80 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat W Article no. 70 950 ...
for Article no.					
70 543 716 / 70 542 716		**823**	T09 - IP **126**	M3x7 - IP **819**	**807**
70 543 720 / 70 542 720		**823**	T09 - IP **126**	M3x7 - IP **819**	**807**
70 543 725 / 70 542 725		**823**	T09 - IP **126**	M3x7 - IP **819**	**807**
70 543 620 / 70 542 620		**824**	T15 - IP **128**	M4,5x12 - IP **820**	**812**
70 543 625 / 70 542 625		**824**	T15 - IP **128**	M4,5x12 - IP **820**	**812**

MaxiLock-N – PWLN 95° – Toolholder with lever clamping

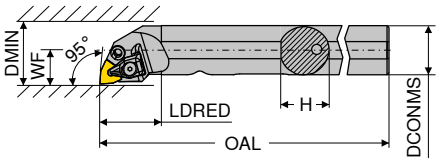


Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 543 ...	Right-hand Article no. 70 542 ...
	mm	mm	mm	mm	mm	Nm			
PWLN R/L 1616 H06	16	16	100	20	22,5	3	WNMG 0604	116	116
PWLN R/L 2020 K06	20	20	125	26	25,0	3	WNMG 0604	120	120
PWLN R/L 2525 M06	25	25	150	19	32,0	3	WNMG 0604	125	125
PWLN R/L 2020 K08	20	20	125	22	25,0	4	WNMG 0804	020	020
PWLN R/L 2525 M08	25	25	150	22	32,0	4	WNMG 0804	025	025
PWLN R/L 3225 P08	32	25	170	22	32,0	4	WNMG 0804	032	032

Spare parts		Key I Article no. 70 950 ...	Shim Article no. 70 950 ...	Assembly pin Article no. 70 950 ...	Lever Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat W Article no. 70 950 ...
for Article no.							
70 542 116 / 70 543 116	SW2,5	**175**	**122**	**191**	**185**	**208**	**127**
70 542 120 / 70 543 120	SW2,5	**175**	**122**	**191**	**185**	**208**	**127**
70 542 125 / 70 543 125	SW2,5	**175**	**122**	**191**	**185**	**208**	**127**
70 542 020 / 70 543 020	SW3	**176**	**198**	**192**	**187**	**209**	**235**
70 542 025 / 70 543 025	SW3	**176**	**198**	**192**	**187**	**209**	**235**
70 542 032 / 70 543 032	SW3	**176**	**198**	**192**	**187**	**209**	**235**

MaxiLock-D – DWLN 95° – Boring bar with top clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 573 ...	Right-hand Article no. 70 572 ...
A25R DWLN R/L 06	25	24	200	32	17	32	2	WN.. 0604	**725**	**725**
A32S DWLN R/L 08	32	31	250	40	22	40	4	WN.. 0804	**732**	**732**
A40T DWLN R 08	40	39	300	45	27	50	4	WN.. 0804		**640**

Tool holders with HSK-T interface can be found in → **Chapter 16.**


XPress type


Key D


Clamping screw

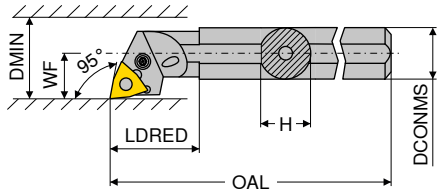

Hydrant


Solid Carbide Seat W

Spare parts for Article no.	XPress type Article no. 70 950 ...	Key D Article no. 80 950 ...	Clamping screw Article no. 70 950 ...	Hydrant Article no. 70 950 ...	Solid Carbide Seat W Article no. 70 950 ...
70 572 725 / 70 573 725	**823**	T09 - IP **126**	M3x7 - IP **819**	**834**	**807**
70 572 732 / 70 573 732	**824**	T15 - IP **128**	M4,5x12 - IP **820**	**834**	**812**
70 572 640	**824**	T15 - IP **128**	M4,5x12 - IP **820**	**834**	**812**

9

MaxiLock-N – PWLN 95° – Boring bar with lever clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 573 ...	Right-hand Article no. 70 572 ...
A16M PWLN R/L 06	16	15	150	20	11	20	3	WNMG 0604	**116**	**116**
A20Q PWLN R/L 06-1	20	19	180	30	13	25	3	WNMG 0604	**121**	**121**
A25R PWLN R/L 06	25	23	200	25	17	32	3	WNMG 0604	**125**	**125**
A32S PWLN R/L 06	32	30	250	50	22	40	3	WNMG 0604	**132**	**132**
A25R PWLN R/L 08	25	23	200	40	17	31	4	WNMG 0804	**225**	**225**
A32S PWLN R/L 08	32	30	250	50	22	40	4	WNMG 0804	**032**	**032**
A40T PWLN R/L 08	40	39	300	60	27	50	4	WNMG 0804	**040**	**040**


Key I


Shim


Assembly pin


Lever

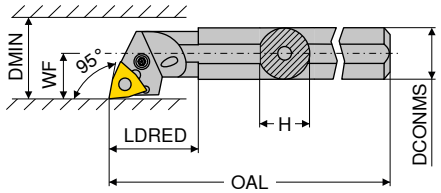

Clamping screw

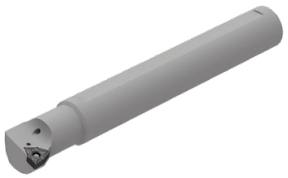

Solid Carbide Seat W

Spare parts for Article no.	Key I Article no. 70 950 ...	Shim Article no. 70 950 ...	Assembly pin Article no. 70 950 ...	Lever Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat W Article no. 70 950 ...
70 572 116 / 70 573 116	SW2 **177**			**129**	**217**	
70 572 121 / 70 573 121	SW2 **177**			**129**	**217**	
70 572 125 / 70 573 125	SW2,5 **175**	**122**	**191**	**185**	**208**	**127**
70 572 132 / 70 573 132	SW2,5 **175**	**122**	**191**	**185**	**208**	**127**
70 572 225 / 70 573 225	SW3 **176**			**187**	**205**	
70 572 032 / 70 573 032	SW3 **176**	**198**	**192**	**187**	**209**	**235**
70 572 040 / 70 573 040	SW3 **176**	**198**	**192**	**187**	**209**	**235**

MaxiLock-N – PWLN 95° – Boring bar with lever clamping

▲ with carbide core





Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 567 ...	Right-hand Article no. 70 566 ...
E-A16M PWLN R/L 06	16	15	150	24	11	20	3	WNMG 0604	**016**	**016**
E-A20Q PWLN R/L 06	20	18	180	29	13	27	3	WNMG 0604	**020**	**020**
E-A25R PWLN R/L 06	25	23	200	40	17	31	3	WNMG 0604	**025**	**025**
E-A25R PWLN R/L 08	25	23	200	40	17	31	4	WNMG 0804	**125**	**125**
E-A32S PWLN R/L 08	32	30	250	50	22	39	4	WNMG 0804	**032**	**032**
E-A40T PWLN R/L 08	40	38	300	60	27	48	4	WNMG 0804	**040**	**040**


Key I


Shim


Assembly pin


Lever

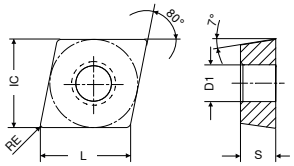

Clamping screw


Solid Carbide Seat W

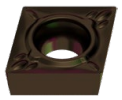
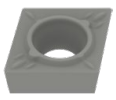
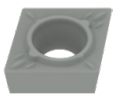
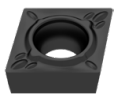
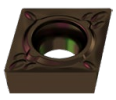
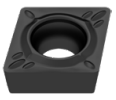
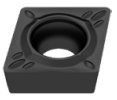
Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 566 016 / 70 567 016	SW2	**177**			**129**	**217**	
70 566 020 / 70 567 020	SW2	**177**			**129**	**217**	
70 566 025 / 70 567 025	SW2,5	**175**	**122**	**191**	**185**	**208**	**127**
70 566 125 / 70 567 125	SW3	**176**			**187**	**209**	
70 566 032 / 70 567 032	SW3	**176**	**198**	**192**	**187**	**209**	**235**
70 566 040 / 70 567 040	SW3	**176**	**198**	**192**	**187**	**209**	**235**

CCGT / CCMT / CCXT

Designation	L	S	D1	IC
	mm	mm	mm	mm
CC.T 0602..	6,4	2,38	2,8	6,35
CC.T 09T3..	9,7	3,97	4,4	9,52
CC.T 1204..	12,9	4,76	5,5	12,70

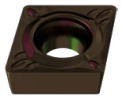
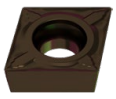
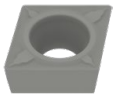
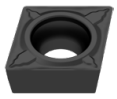
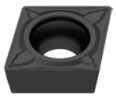
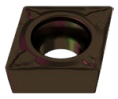
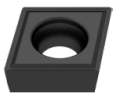


CCGT / CCMT

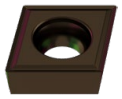
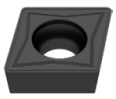
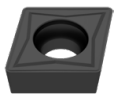
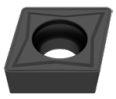
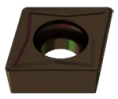
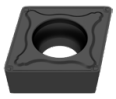
	-CF05 CTEP110	-SF TCM10	-SF TCM407	-SF CTCP125	-SF CTCP135	-SF CTCP115	-SF CTCP125
	-PF14 DCC1110	-ZF CWC10	-ZF CWC407	-ZF HCX1125	-ZF HCR1135	-ZF HCX1115	-ZF HCX1125
	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	F	F	F	F	F	F
	CERMET CCGT	CERMET CCGT	CERMET CCGT	CCGT	CCGT	CCMT	CCMT
ISO / RE mm	Article no. 76 247 ...	Article no. 70 251 ...	Article no. 70 251 ...	Article no. 76 251 ...	Article no. 76 251 ...	Article no. 76 253 ...	Article no. 76 253 ...
060202EN 0,2	002	900	850	502	702		
060204EN 0,4	004	902	852			304	504
09T302EN 0,2	014	904	854				
09T304EN 0,4	016	906				316	516
09T308EN 0,8	018	908				318	518
120404EN 0,4		910					528
120408EN 0,8							530
Steel	●	●	●	●	●	●	●
Stainless steel	○			○	○	○	○
Cast iron	○	○	○	○		○	○
Non ferrous metals							
Heat resistant alloys					○		

9

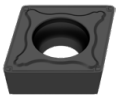
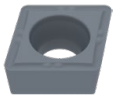
CCMT / CCGT

	-SF CTCP135	-CF55 CTEP110	-SMF TCM10	-SMF CTCP115	-SMF CTCP125	-SMF CTCP135	-SM CTCP125
	-ZF HCR1135	-PF15 DCC1110	-SMF CWC10	-SMF HCX1115	-SMF HCX1125	-SMF HCR1135	-ZM HCX1125
	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F	F	F	F	F	F	M
	CCMT	CERMET CCMT	CERMET CCMT	CCMT	CCMT	CCMT	CCGT
ISO / RE mm	Article no. 76 253 ...	Article no. 76 248 ...	Article no. 70 249 ...	Article no. 76 249 ...	Article no. 76 249 ...	Article no. 76 249 ...	Article no. 76 250 ...
060202EN 0,2							502
060204EN 0,4	704	004	900		504	704	
060208EN 0,8					506		
09T304EN 0,4	716	016	904	316	516	716	
09T308EN 0,8		018	906	318	518		
120404EN 0,4		028			528		
120408EN 0,8				330		730	
Steel	●	●	●	●	●	●	●
Stainless steel	○	○		○	○	○	○
Cast iron		○	○	○	○		○
Non ferrous metals							
Heat resistant alloys	○					○	

CCGT / CCMT

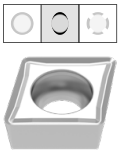
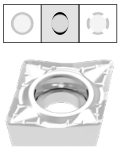
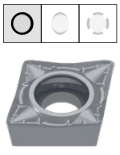
	-SM CTCP135	-SM CTCK110	-SM CTCK120	-SM CTCP115	-SM CTCP125	-SM CTCP135	-SMQ CTCP115
	-ZM HCR1135	-ZM DCX3110	-ZM HCF3120	-ZM HCX1115	-ZM HCX1125	-ZM HCR1135	-SMQ HCX1115
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	M	M	M	M	M	M	F
	CCGT	CCMT	CCMT	CCMT	CCMT	CCMT	CCMT
ISO / RE mm	Article no. 76 250 ...	Article no. 70 252 ...	Article no. 70 252 ...	Article no. 76 252 ...	Article no. 76 252 ...	Article no. 76 252 ...	Article no. 76 194 ...
060202EN 0,2	702						
060204EN 0,4		004	554	304	504	704	
060208EN 0,8		006	506	306		706	
09T304EN 0,4		016	516	316	516	716	31600
09T308EN 0,8		018	518	318	518	718	31800
09T312EN 1,2		020	520				
120404EN 0,4		028	528	328	528	728	32800
120408EN 0,8		030	530	330	530	730	330
120412EN 1,2					532		
Steel	●	●	●	●	●	●	●
Stainless steel	○	○		○	○	○	○
Cast iron		●	●	○	○		○
Non ferrous metals							
Heat resistant alloys	○					○	

CCMT / CCXT

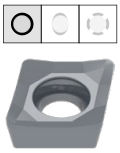
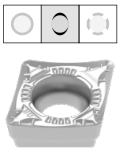
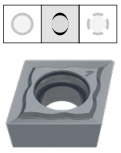
	-SMQ CTCP125	-SF CTC2135	-F43 CTC2135	-M81 CWN2120	-M25 CTPM125	-SM CTC2135	-M55 CTPM125
	-SMQ HCX1125	-ZF CWN2135	-F43 CWN2135		-PF23 HCN2125	-ZM CWN2135	-PF26 HCN2125
	DRAGONSKIN				DRAGONSKIN		DRAGONSKIN
							
	F CCMT	F CCMT	F CCMT	M CCXT	F CCMT	M CCMT	F CCMT
ISO / RE mm	Article no. 76 194 ...	Article no. 70 253 ...	Article no. 70 185 ...	Article no. 70 254 ...	Article no. 75 210 ...	Article no. 70 252 ...	Article no. 75 211 ...
060202FN 0,2				100			
060204EN 0,4		460			204	670	204
060204FN 0,4				102			
09T302FN 0,2				104			
09T304EN 0,4	516	464	460		216	674	216
09T304FN 0,4				106			
09T308EN 0,8	518		462		218	676	218
09T308FN 0,8				108			
120404EN 0,4	528					678	228
120408EN 0,8	530					680	230
Steel	●	○	○		○	○	○
Stainless steel	○	●	●	●	●	●	●
Cast iron	○						
Non ferrous metals				○			
Heat resistant alloys		●	●			●	

9

CCGT

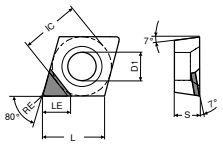
	-23P H216T	-25P H210T	-25P AMZ	-25Q H210T	-25Q AMZ	-27 H10T	-27 CWN15
	-23P CWK26	-25P CWK20	-25P AMZ	-25Q CWK20	-25Q AMZ	-AL CWK15	-AL CWN15
							
	F CCGT	F CCGT	F CCGT	M CCGT	M CCGT	M CCGT	M CCGT
ISO / RE mm	Article no. 70 255 ...	Article no. 70 248 ...	Article no. 70 248 ...	Article no. 70 248 ...	Article no. 70 248 ...	Article no. 70 254 ...	Article no. 70 254 ...
060202FN 0,2	652	636	556			600	300
060204FN 0,4	654	638	558	678	618	602	302
09T302FN 0,2		639	539			604	304
09T304FN 0,4	656	640	560	680	620	606	306
09T308FN 0,8	658	641	541	681	621	608	308
120402FN 0,2		643				610	310
120404FN 0,4		642	562	682	622	612	312
120408FN 0,8		644	564	686	626	614	314
Steel			○		○		
Stainless steel			○		○		○
Cast iron	○	○	○	○	○	○	
Non ferrous metals	●	●	●	●	●	●	●
Heat resistant alloys	○	○		○		○	

CCGT / CCMT

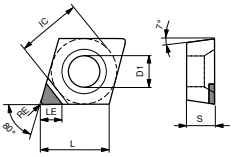
ISO	RE mm	-27 AMZ -AL AMZ	-29 H216T	-29 AMZ	-F23 CTP2120 -F23 CCN2120
					
		M CCGT	M CCMT	M CCMT	F CCGT
			NEW	NEW	
		Article no. 70 254 ...	Article no. 70 245 ...	Article no. 70 245 ...	Article no. 70 191 ...
060200FN	0,0				600
060201FN	0,1				602
060202FN	0,2	450			
060204EN	0,4		60400	40400	
060204FN	0,4	452			
09T300FN	0,0				604
09T301FN	0,1				606
09T302FN	0,2	454			
09T304EN	0,4		61600	41600	
09T304FN	0,4	456			
09T308EN	0,8		61800	41800	
09T308FN	0,8	458			
120402FN	0,2	460			
120404FN	0,4	462			
120408FN	0,8	464			
Steel		○		○	
Stainless steel		○		○	●
Cast iron		○	○	○	○
Non ferrous metals		●	●	●	○
Heat resistant alloys			○		●

CCGW / CCGT

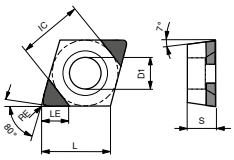
Designation	L	S	D1	IC
	mm	mm	mm	mm
CCG. 0602..	6,40	2,38	2,8	6,35
CCGW 09T3..	9,70	3,97	4,4	9,52
CCGW 1204..	12,90	4,76	5,5	12,70



CCGT -A

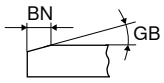


CCGW -A



CCGW-Q-B / -B
(CCGW -2MC / -2Q)

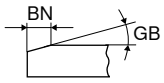
CCGW / CCGT



	-A CTBS10U	-A CTBS10U	-B CTBS20C	-Q-B CTBS20C
	PBC10	PBC10	-2MC PBC15-S	-2Q PBC15-S
	F	F	F	F
	CBN CCGW	CBN CCGT	CBN CCGW	CBN CCGW
ISO	Article no. 71 120 ...	Article no. 71 124 ...	Article no. 71 161 ...	Article no. 71 162 ...
060202SN				120
060202SN				130
060202TN	300			
060202TN				140
060202SN			150	150
060202TN			160	160
060202FN	200	200		
060202EN			110	110
060204SN			121	121
060204SN			131	131
060204TN	302			
060204TN			141	141
060204SN			151	151
060204TN			161	161
060204SN				171
060204FN	202	202		
060208SN			122	
060208SN			132	
060208TN			142	
060208TN			162	
060208SN			172	
060208SN			182	
060208EN			112	
09T302SN			123	
09T302SN			133	
09T302SN			153	
09T302TN			163	
09T302SN			173	
09T302EN			113	
Cast iron	●	●	●	●
Sintered steels	●	●	●	●
Heat resistant alloys	●	●	●	●
hardened < 45 HRC				
hardened 46–55 HRC				
hardened 56–60 HRC				
hardened 61–65 HRC				

9

CCGW / CCGT

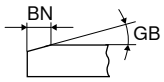


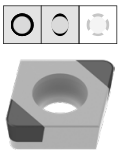
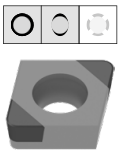
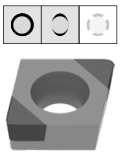
	-A CTBS10U	-A CTBS10U	-B CTBS20C	-Q-B CTBS20C
	PBC10	PBC10	-2MC PBC15-S	-2Q PBC15-S
				
				
	F	F	F	F
	CBN CCGW	CBN CCGT	CBN CCGW	CBN CCGW
ISO	Article no. 71 120 ...	Article no. 71 124 ...	Article no. 71 161 ...	Article no. 71 162 ...

ISO	RE mm	GB °	BN mm	LE mm	71 120 ...	71 124 ...	71 161 ...	71 162 ...
09T304EN	0,4			3,1			114	
09T304SN	0,4	10	0,09	3,1			124	124
09T304SN	0,4	15	0,11	3,1			134	134
09T304TN	0,4	20	0,14	2,8	304			
09T304TN	0,4	20	0,15	3,1			144	144
09T304SN	0,4	20	0,16	3,1			154	154
09T304TN	0,4	25	0,17	3,1			164	164
09T304SN	0,4	25	0,18	3,1			174	174
09T304SN	0,4	30	0,18	3,1			184	
09T304FN	0,4			2,8	204			
09T308SN	0,8	10	0,09	2,8			125	125
09T308SN	0,8	15	0,11	2,8				135
09T308TN	0,8	20	0,14	2,5	306			
09T308TN	0,8	20	0,15	2,8			145	145
09T308SN	0,8	20	0,16	2,8			155	155
09T308TN	0,8	25	0,17	2,8			165	165
09T308SN	0,8	25	0,18	2,8			175	
09T308SN	0,8	30	0,18	2,8			185	
09T308FN	0,8			2,5	206			
09T308EN	0,8			2,8				115
120404FN	0,4			3,1	208			
120404TN	0,4	20	0,14	3,1	308			
120408FN	0,8			2,8	210			
120408TN	0,8	20	0,14	2,8	310			

Cast iron	●	●	●	●
Sintered steels	●	●	●	●
Heat resistant alloys	●	●	●	●
hardened < 45 HRC				
hardened 46–55 HRC				
hardened 56–60 HRC				
hardened 61–65 HRC				

CCGW



					-B CTBH15U	-B CTBH15C	-Q-B CTBH15C
							
					F	F	F
					CBN CCGW	CBN CCGW	CBN CCGW
					NEW	NEW	NEW
ISO	RE	GB	BN	LE	Article no. 71 001 ...	Article no. 71 000 ...	Article no. 71 002 ...
	mm	°	mm	mm			
060202SN	0,2	15	0,11	3,4	30214	30214	
060202EN	0,2			3,4	00200	00200	
060204SN	0,4	15	0,11	3,1	30414	30414	
060204SN	0,4	25	0,13	3,1	30429	30429	
060204EN	0,4			3,1	00400	00400	
060208EN	0,8			2,8	00600	00600	
060208SN	0,8	15	0,11	2,8	30614	30614	
060208SN	0,8	25	0,13	2,8	30629	30629	
09T302SN	0,2	15	0,11	3,4		31414	
09T302SN	0,2	25	0,13	3,4		31429	
09T304SN	0,4	15	0,11	3,1		31614	31614
09T304SN	0,4	25	0,13	3,1		31629	31629
09T308SN	0,8	15	0,11	2,8		31814	31814
09T308SN	0,8	25	0,13	2,8		31829	31829
Cast iron							
Sintered steels							
Heat resistant alloys							
hardened < 45 HRC					●	●	●
hardened 46–55 HRC					●	●	●
hardened 56–60 HRC					●	●	●
hardened 61–65 HRC							

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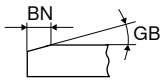
CCGW / CCGT



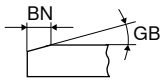
	-A CTBH21U	-A CTBH21U	-B CTBH21U	-Q-B CTBH21U	-B CTBH20C	-Q-B CTBH20C
	PBC25	PBC25	-2S PBC25	-2Q PBC25	-2MC PBC25-S	-2Q PBC25-S
						
	F	F	F	F	F	F
	CBN CCGW	CBN CCGT	CBN CCGW	CBN CCGW	CBN CCGW	CBN CCGW
	Article no. 71 120 ...	Article no. 71 124 ...	Article no. 71 121 ...	Article no. 71 123 ...	Article no. 71 161 ...	Article no. 71 162 ...

ISO	RE mm	GB °	BN mm	LE mm												
060202SN	0,2	10	0,09	3,4									230		230	
060202SN	0,2	15	0,11	3,4											240	
060202SN	0,2	20	0,09	3,4									250			
060202TN	0,2	20	0,14	3,4	500											
060202TN	0,2	25	0,14	3,4									260			
060202EN	0,2			3,4											220	
060202SN	0,2	25	0,15	3,4									270			
060202FN	0,2			3,4	400 1)		400								210	
060204EN	0,4			3,1									221			
060204SN	0,4	10	0,09	3,1									231		231	
060204SN	0,4	15	0,11	3,1									241		241	
060204SN	0,4	20	0,09	3,1									251		251	
060204TN	0,4	20	0,14	3,1	502											
060204TN	0,4	25	0,14	3,1									261		261	
060204FN	0,4			3,1	402 1)		402									
060204SN	0,4	25	0,15	3,1									271			
060208SN	0,8	10	0,09	2,8									232			
060208SN	0,8	20	0,09	2,8									252			
060208TN	0,8	25	0,14	2,8									262			
060208SN	0,8	30	0,18	2,8									282			
060208FN	0,8			2,8									212			
09T302SN	0,2	10	0,09	3,4									233			
09T302SN	0,2	15	0,11	3,4									243			
09T302SN	0,2	20	0,09	3,4									253			
09T302SN	0,2	25	0,15	3,4									273			
09T304SN	0,4	10	0,09	3,1									234			
09T304SN	0,4	15	0,11	3,1									244			
09T304SN	0,4	20	0,09	3,1									254			
09T304TN	0,4	20	0,14	2,8	504											
09T304TN	0,4	20	0,14	3,1				502		502						
09T304TN	0,4	25	0,14	3,1									264			
09T304SN	0,4	25	0,15	3,1									274			
09T304SN	0,4	30	0,18	3,1									284			
09T304EN	0,4			3,1									224			
09T304FN	0,4			3,1				402 1)								
09T304FN	0,4			2,8	404 1)											
09T308SN	0,8	10	0,09	2,8									235		235	
09T308SN	0,8	15	0,11	2,8									245		245	
09T308SN	0,8	20	0,09	2,8											255	
09T308TN	0,8	20	0,14	2,8				504		504						
09T308TN	0,8	20	0,14	2,5	506											
09T308TN	0,8	25	0,14	2,8									265		265	
09T308SN	0,8	25	0,15	2,8									275			
09T308FN	0,8			2,5	406 1)											
09T308EN	0,8			2,8											225	
09T308FN	0,8			2,8				404 1)		404 1)					215	
120404TN	0,4	20	0,14	3,1	508											
120408TN	0,8	20	0,14	2,8	510											

Cast iron						
Sintered steels						
Heat resistant alloys						
hardened < 45 HRC						
hardened 46–55 HRC	●	●	●	●	●	●
hardened 56–60 HRC	●	●	●	●	●	●
hardened 61–65 HRC						

1) Machining to 60 HRC

CCGW / CCGT

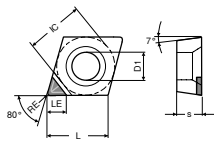


	-A CTBH40U	-A CTBH40U	-B CTBH40U	-Q-B CTBH40U	-B CTBH40C	-Q-B CTBH40C
	PBC40	PBC40	-2S PBC40	-2Q PBC40	-2MC PBC40-S	-2Q PBC40-S
						
	F	F	F	F	F	F
	CBN CCGW	CBN CCGT	CBN CCGW	CBN CCGW	CBN CCGW	CBN CCGW
ISO	Article no. 71 120 ...	Article no. 71 124 ...	Article no. 71 121 ...	Article no. 71 123 ...	Article no. 71 161 ...	Article no. 71 162 ...
RE mm / GB ° / BN mm / LE mm						
060202TN 0,2 20 0,09 3,4					320	
060202SN 0,2 20 0,09 3,4						330
060202SN 0,2 25 0,09 3,4					350	350
060202TN 0,2 25 0,11 3,4					340	340
060202TN 0,2 25 0,12 3,4	900					
060202TN 0,2 30 0,14 3,4					360	360
060202FN 0,2 3,4	800	800				
060204SN 0,4 20 0,09 3,1					331	
060204SN 0,4 25 0,09 3,1					351	351
060204TN 0,4 25 0,11 3,1					341	341
060204TN 0,4 25 0,12 3,1	902					
060204TN 0,4 30 0,14 3,1					361	361
060204SN 0,4 30 0,16 3,1					371	371
060204SN 0,4 35 0,17 3,1					381	381
060204FN 0,4 3,1	802	802				
060208TN 0,8 20 0,09 2,8					322	
060208SN 0,8 25 0,09 2,8					352	
060208TN 0,8 25 0,11 2,8					342	
060208TN 0,8 30 0,14 2,8					362	
060208SN 0,8 30 0,16 2,8					372	
060208SN 0,8 35 0,17 2,8					382	
09T302TN 0,2 20 0,09 3,4					323	
09T302SN 0,2 25 0,09 3,4					353	
09T302TN 0,2 25 0,11 3,4					343	
09T302SN 0,2 30 0,16 3,4					373	
09T302SN 0,2 35 0,17 3,4					383	
09T304SN 0,4 20 0,09 3,1					334	334
09T304TN 0,4 20 0,09 3,1					324	324
09T304SN 0,4 25 0,09 3,1					354	354
09T304TN 0,4 25 0,11 3,1					344	344
09T304TN 0,4 25 0,12 3,1			902	902		
09T304TN 0,4 25 0,12 2,8	904					
09T304TN 0,4 30 0,14 3,1					364	364
09T304SN 0,4 30 0,16 3,1					374	
09T304EN 0,4 3,1					314	
09T304SN 0,4 35 0,17 3,1					384	
09T304FN 0,4 3,1			802	802		
09T304FN 0,4 2,8	804					
09T308SN 0,8 20 0,09 2,8					335	335
09T308TN 0,8 20 0,09 2,8					325	325
09T308SN 0,8 25 0,09 2,8					355	355
09T308TN 0,8 25 0,11 2,8					345	345
09T308TN 0,8 25 0,12 2,8			904	904		
09T308TN 0,8 25 0,12 2,5	906					
09T308TN 0,8 30 0,14 2,8					365	365
09T308SN 0,8 30 0,16 2,8						375
09T308SN 0,8 35 0,17 2,8					385	
09T308FN 0,8 2,8			804	804		
09T308FN 0,8 2,5	806					
09T308EN 0,8 2,8						315
120404FN 0,4 3,1	808					
120404TN 0,4 25 0,12 3,1	908					
120408TN 0,8 25 0,12 2,8	910					
Cast iron						
Sintered steels						
Heat resistant alloys						
hardened < 45 HRC						
hardened 46–55 HRC	●	●	●	●	●	●
hardened 56–60 HRC	●	●	●	●	●	●
hardened 61–65 HRC	●	●	●	●	●	●

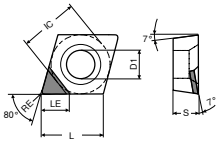
9

CCGW / CCGT

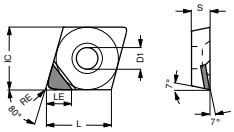
Designation	L	S	D1	IC
	mm	mm	mm	mm
CCG. 0602..	6,45	2,38	2,8	6,35
CCG. 09T3..	9,70	3,97	4,4	9,52
CCG. 1204..	12,90	4,76	5,5	12,70



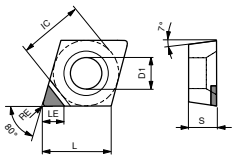
CCGW -Q-A



CCGT -A



CCGT -Q-A



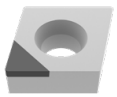
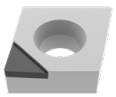
CCGW -A

CCGW / CCGT

	-A CTDMD05	-A CTDPD20	-A CTDPD20	-Q-A CTDPD20	-Q-A CTDPD20
	MDC	PDC	PDC	-2Q PDC	-2Q PDC
	F DIAMOND CCGW	F DIAMOND CCGW	F DIAMOND CCGT	F DIAMOND CCGW	F DIAMOND CCGT
ISO	Article no. 71 120 ...	Article no. 71 120 ...	Article no. 71 124 ...	Article no. 71 125 ...	Article no. 71 126 ...
RE mm / LE mm					
060201FN 0,1 3,4					101
060202FN 0,2 2,5	050				
060202FN 0,2 3,3				102	102
060202FN 0,2 3,4		100	100		
060204FN 0,4 2,5	052				
060204FN 0,4 3,1					104
060204FN 0,4 3,2		102	102	104	
09T301FN 0,1 4,5				111	111
09T302FN 0,2 4,4				112	112
09T304FN 0,4 2,5	054				
09T304FN 0,4 4,2				114	114
09T304FN 0,4 4,3		104	104		
09T308FN 0,8 2,5	056				
09T308FN 0,8 4,1		106	106		
120402FN 0,2 4,4				122	122
120404FN 0,4 4,2				124	124
120404FN 0,4 4,3		108	108		
120408FN 0,8 4,1		110	110		

Steel					
Stainless steel					
Cast iron					
Non ferrous metals	●	●	●	●	●
Heat resistant alloys	○				

CCGT / CCGW

			-A-CB1 CTDPD20	-A-CB1 CTDPD20	-Q-A CTDPS30	-Q-A CTDPS30	-A-CB2 CTDPS30	-A-Q-CB2 CTDPS30
			-CB1 PDC	-Q-CB1 PDC	-2Q PDC-S	-2Q PDC-S	-CB2 PDC-S	-Q-CB2 PDC-S
								
			F DIAMOND CCGT	F DIAMOND CCGT	F DIAMOND CCGW	F DIAMOND CCGT	M DIAMOND CCGT	M DIAMOND CCGT
ISO	RE	LE	Article no. 71 300 ...	Article no. 71 305 ...	Article no. 71 125 ...	Article no. 71 126 ...	Article no. 71 301 ...	Article no. 71 306 ...
	mm	mm						
060202FN	0,2	3,3			152	152		
060202EN	0,2	3,3						202
060202EN	0,2	3,4					202	
060202FN	0,2	3,4	102					
060204FN	0,4	3,1		104				
060204EN	0,4	3,1						204
060204EN	0,4	3,2					204	
060204FN	0,4	3,2	104					
060208EN	0,8	3,0					208	
09T302FN	0,2	4,4			162	162		
09T302EN	0,2	4,4						212
09T302EN	0,2	4,5					212	
09T302FN	0,2	4,5	112					
09T304FN	0,4	4,2		114				
09T304EN	0,4	4,2						214
09T304EN	0,4	4,3					214	
09T304FN	0,4	4,3	114					
09T308EN	0,8	4,1					218	
09T308FN	0,8	4,1	118					
120402FN	0,2	4,4				172		
120402EN	0,2	4,4						222
120404EN	0,4	4,2						224
120404FN	0,4	4,2		124		174		
120404EN	0,4	4,3					224	
120404FN	0,4	4,3	124					
120408EN	0,8	4,1					228	
120408FN	0,8	4,1	128					
Steel								
Stainless steel								
Cast iron								
Non ferrous metals			●	●	●	●	●	●
Heat resistant alloys					○	○	○	○

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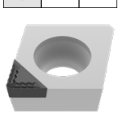
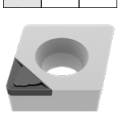
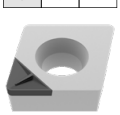
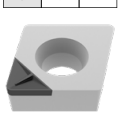
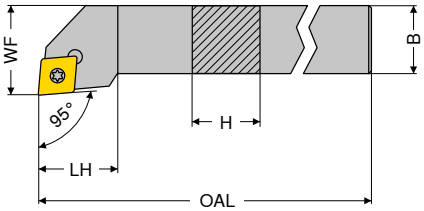
CCGT

			-A-CB3 CTDPU20	-A-CB1 CTDCD10	-A-CB2 CTDCD10	-A-Q-CB2 CTDCD10
			-CB3 PDC-S	-CB1 CVD	-CB2 CVD	-Q-CB2 CVD
						
			R DIAMOND CCGT	F DIAMOND CCGT	M DIAMOND CCGT	M DIAMOND CCGT
ISO	RE	LE	Article no. 71 302 ...	Article no. 71 300 ...	Article no. 71 301 ...	Article no. 71 306 ...
	mm	mm				
060202FN	0,2	2,4		302		
060204EN	0,4	2,1				304
060204FN	0,4	2,2		304		
060204EN	0,4	2,2			304	
060204EN	0,4	3,2	204			
09T304EN	0,4	2,1				314
09T304FN	0,4	2,2		314		
09T304EN	0,4	2,2			314	
09T304EN	0,4	4,3	214			
09T308EN	0,8	4,1	218			
120404EN	0,4	2,1				324
120408EN	0,8	2,1			328	
Steel						
Stainless steel						
Cast iron						
Non ferrous metals			●	●	●	●
Heat resistant alloys			○			

MaxiLock-S – SCLC 95° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 653 ...	Right-hand Article no. 70 652 ...
	mm	mm	mm	mm	mm	Nm			
SCLC R/L 0808 D06	8	8	60	9	10	1,2	CC.. 0602	**008**	**008**
SCLC R/L 1010 E06	10	10	70	9	12	1,2	CC.. 0602	**010**	**010**
SCLC R/L 1212 F09	12	12	80	15	16	3,2	CC.. 09T3	**012**	**012**
SCLC R/L 1616 H09	16	16	100	17	20	3,2	CC.. 09T3	**016**	**016**
SCLC R/L 2020 K09	20	20	125	17	25	3,2	CC.. 09T3	**020**	**020**
SCLC R/L 1616 H12	16	16	100	20	20	5	CC.. 1204	**116**	**116**
SCLC R/L 2020 K12	20	20	125	20	25	5	CC.. 1204	**120**	**120**
SCLC R/L 2525 M12	25	25	150	20	32	5	CC.. 1204	**125**	**125**
SCLC R/L 3225 P12	32	25	170	20	32	5	CC.. 1204	**132**	**132**

Tool holders with HSK-T interface can be found in → **Chapter 16.**

Spare parts	 Key D	 Combination Key	 Clamping screw	 Carbide type C	 Threaded sleeve
	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.					
70 653 008 / 70 652 008	**110**		**112**		
70 653 010 / 70 652 010	**110**		**112**		
70 653 012 / 70 652 012	**113**		**113**		
70 653 016 / 70 652 016		**398**	**113**	**165**	**171**
70 653 020 / 70 652 020		**398**	**113**	**165**	**171**
70 653 116 / 70 652 116		**398**	**114**	**166**	**170**
70 653 120 / 70 652 120		**398**	**114**	**166**	**170**
70 653 125 / 70 652 125		**398**	**114**	**166**	**170**
70 653 132 / 70 652 132		**398**	**114**	**166**	**170**

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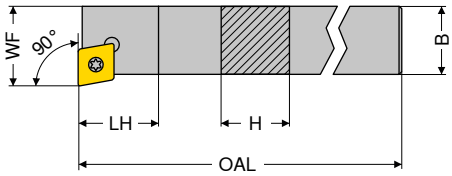
MaxiLock-S – SCFC 90° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand	Right-hand
	mm	mm	mm	mm	mm	Nm		Article no. 70 761 ...	Article no. 70 760 ...
SCFC R/L 0808 D06	8	8	60	10	10	1,2	CC.. 0602	008	008
SCFC R/L 1010 E06	10	10	70	10	12	1,2	CC.. 0602	010	010
SCFC R/L 1212 F09	12	12	80	13	16	3,2	CC.. 09T3	012	012
SCFC R/L 1616 H09	16	16	100	13	20	3,2	CC.. 09T3	016	016
SCFC R/L 2020 K12	20	20	125	17	25	5	CC.. 1204	020	020


Key D


Combination Key

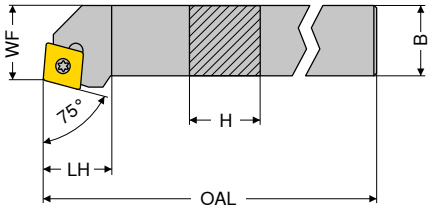

Clamping screw


Carbide type C


Threaded sleeve

Spare parts	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.					
70 761 008 / 70 760 008	110		112		
70 761 010 / 70 760 010	110		112		
70 761 012 / 70 760 012	113		113		
70 761 016 / 70 760 016		398	113	165	171
70 761 020 / 70 760 020		398	114	166	170

MaxiLock-S – SCRC 75° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand	Right-hand
	mm	mm	mm	mm	mm	Nm		Article no. 70 649 ...	Article no. 70 648 ...
SCRC R 1010 E06	10	10	70	10	11	1,2	CC.. 0602		010
SCRC R/L 1212 F09	12	12	80	16	13	3,2	CC.. 09T3	012	012
SCRC R/L 1616 H09	16	16	100	17	17	3,2	CC.. 09T3	016	016
SCRC R/L 2020 K09	20	20	125	17	22	3,2	CC.. 09T3	020	020
SCRC R/L 2020 K12	20	20	125	20	22	5	CC.. 1204	120	120
SCRC R/L 2525 M12	25	25	150	20	27	5	CC.. 1204	125	125


Key D


Combination Key

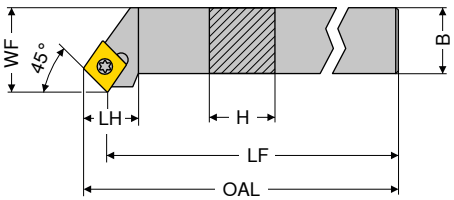

Clamping screw


Carbide type C


Threaded sleeve

Spare parts	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.					
70 648 010	110		112		
70 649 012 / 70 648 012	113		113		
70 649 016 / 70 648 016		398	113	165	171
70 649 020 / 70 648 020		398	113	165	171
70 649 120 / 70 648 120		398	114	166	170
70 649 125 / 70 648 125		398	114	166	170

MaxiLock-S – SCSC 45° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LF	LH	WF	torque moment	Insert	Left-hand Article no. 70 641 ...	Right-hand Article no. 70 640 ...
	mm	mm	mm	mm	mm	mm	Nm			
SCSC R 1616 H12	16	16	109,1	100	20	20	5	CC.. 1204		**016**
SCSC R/L 2020 K12	20	20	134,1	125	20	25	5	CC.. 1204	**020**	**020**
SCSC R/L 2525 M12	25	25	159,1	150	20	32	5	CC.. 1204	**025**	**025**


Combination Key


Clamping screw

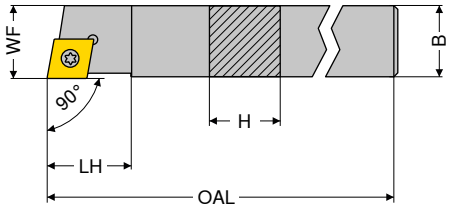

Carbide type C


Threaded sleeve

Spare parts		Combination Key Article no. 70 950 ...		Clamping screw Article no. 70 950 ...	Carbide type C Article no. 70 950 ...		Threaded sleeve Article no. 70 950 ...
for Article no.							
70 640 016	T15/SW	**398**	M4,5x12	**114**	**166**	M4,5	**170**
70 641 020 / 70 640 020	T15/SW	**398**	M4,5x12	**114**	**166**	M4,5	**170**
70 641 025 / 70 640 025	T15/SW	**398**	M4,5x12	**114**	**166**	M4,5	**170**

MaxiLock-S – SCAC 90° – Toolholder with screw clamping

▲ for sliding head lathes



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 757 ...	Right-hand Article no. 70 756 ...
	mm	mm	mm	mm	mm	Nm			
SCAC R/L 0808 K06	8	8	125	9	8	1,2	CC.. 0602	**108**	**108**
SCAC R/L 0808 D06	8	8	60	9	8	1,2	CC.. 0602	**008**	**008**
SCAC R/L 1010 M06	10	10	150	9	10	1,2	CC.. 0602	**110**	**110**
SCAC R/L 1010 E06	10	10	70	9	10	1,2	CC.. 0602	**010**	**010**
SCAC R/L 1212 M09	12	12	150	13	12	3,2	CC.. 09T3	**112**	**112**
SCAC R/L 1212 F09	12	12	80	13	12	3,2	CC.. 09T3	**012**	**012**
SCAC R/L 1414 M09	14	14	150	13	14	3,2	CC.. 09T3	**114**	**114**
SCAC R/L 1616 H09	16	16	100	13	16	3,2	CC.. 09T3	**116**	**116**
SCAC R/L 2020 K12	20	20	125	17	20	5	CC.. 1204	**120**	**120**


Key D


Combination Key


Clamping screw

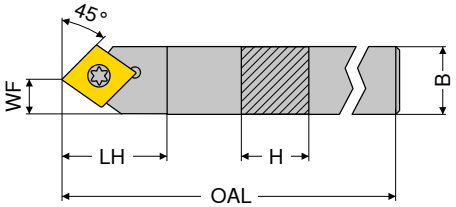

Carbide type C

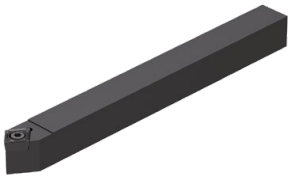

Threaded sleeve

Spare parts	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Carbide type C Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
for Article no.					
70 756 108 / 70 757 108	**110**		**112**		
70 756 008 / 70 757 008	**110**		**112**		
70 756 110 / 70 757 110	**110**		**112**		
70 756 010 / 70 757 010	**110**		**112**		
70 756 112 / 70 757 112	**113**		**113**		
70 756 012 / 70 757 012	**113**		**113**		
70 756 114 / 70 757 114	**113**		**113**		
70 756 116 / 70 757 116		**398**	**113**	**165**	**171**
70 756 120 / 70 757 120		**398**	**114**	**166**	**170**

9

MaxiLock-S – SCDC 45° – Toolholder with screw clamping





ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral Article no. 70 752 ...
SCDC L 0808 K06	8	8	125	13	4	1,2	CC.. 0602	**008**
SCDC L 1010 M06	10	10	150	13	5	1,2	CC.. 0602	**010**
SCDC L 1212 M09	12	12	150	18	6	3,2	CC.. 09T3	**012**
SCDC L 1414 M09	14	14	150	18	7	3,2	CC.. 09T3	**014**

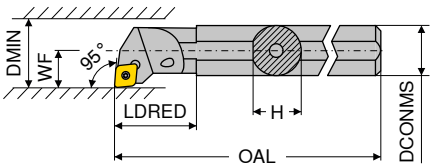
Key D

Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 752 008	T08	**110**	M2,5x6	**112**
70 752 010	T08	**110**	M2,5x6	**112**
70 752 012	T15	**113**	M3,5x11	**113**
70 752 014	T15	**113**	M3,5x11	**113**

MaxiLock-S – SCLC 95° – Boring bar with screw clamping

▲ A... = with thro' coolant
▲ S... = without thro' coolant



Illustrations show right-hand versions

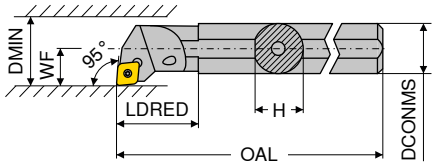
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 717 ...	Right-hand Article no. 70 716 ...
S08H SCLC R/L 06	8	7,2	100		5	11	1,2	CC.. 0602	**008**	**008**
A08F SCLC R/L 06	8	7,6	80	17	5	11	1,2	CC.. 0602	**208**	**208**
A10H SCLC R/L 06	10	9,5	100	19	7	13	1,2	CC.. 0602	**210**	**210**
S10K SCLC R/L 06	10	9,0	125		7	13	1,2	CC.. 0602	**010**	**010**
A12K SCLC R/L 06	12	11,5	125	22	9	16	1,2	CC.. 0602	**212**	**212**
S12Q SCLC R/L 06	12	11,0	180		9	16	1,2	CC.. 0602	**012**	**012**
A16M SCLC R/L 06	16	14,0	150	50	9	18	1,2	CC.. 0602	**116**	**116**
S16R SCLC R/L 09	16	14,5	200		11	20	3,2	CC.. 09T3	**016**	**016**
A16M SCLC R/L 09	16	15,0	150	29	11	20	3,2	CC.. 09T3	**216**	**216**
A20Q SCLC R/L 09	20	18,5	180	32	13	25	3,2	CC.. 09T3	**220**	**220**
S20S SCLC R/L 09	20	18,0	250		13	25	3,2	CC.. 09T3	**020**	**020**
S25T SCLC R/L 09	25	23,0	300		17	32	3,2	CC.. 09T3	**025**	**025**
A25R SCLC R/L 09	25	23,0	200	36	17	32	3,2	CC.. 09T3	**225**	**225**
A32S SCLC R/L 12	32	30,0	250	50	22	40	5	CC.. 1204	**232**	**232**
A40T SCLC R/L 12	40	38,0	300	60	27	50	5	CC.. 1204	**240**	**240**

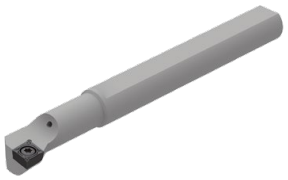
Tool holders with HSK-T or PSC interface can be found in→ **Chapter 16.**

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Carbide type C Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 716 008 / 70 717 008	**110**		**116**		
70 716 208 / 70 717 208	**110**		**116**		
70 716 210 / 70 717 210	**110**		**116**		
70 716 010 / 70 717 010	**110**		**116**		
70 716 212 / 70 717 212	**110**		**116**		
70 716 012 / 70 717 012	**110**		**116**		
70 716 116 / 70 717 116	**110**		**116**		
70 716 016 / 70 717 016	**113**		**110**		
70 716 216 / 70 717 216	**113**		**110**		
70 716 220 / 70 717 220	**113**		**304**		
70 716 020 / 70 717 020	**113**		**110**		
70 716 025 / 70 717 025	**113**		**113**		
70 716 225 / 70 717 225	**113**		**304**		
70 716 232 / 70 717 232		**398**	**114**	**166**	**170**
70 716 240 / 70 717 240		**398**	**114**	**166**	**170**

MaxiLock-S – SCLC 95° – Boring bar with screw clamping

▲ with carbide core





Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 719 ...	Right-hand Article no. 70 718 ...
E-A08F SCLC R/L 06	8	7,5	80	18	6	12	1,2	CC.. 0602	**208**	**208**
E-A10H SCLC R/L 06	10	9,0	100	20	7	14	1,2	CC.. 0602	**210**	**210**
E-A12K SCLC R/L 06	12	11,0	125	20	9	18	1,2	CC.. 0602	**212**	**212**
E-A16M SCLC R/L 09	16	15,0	150	28	11	22	3,2	CC.. 09T3	**216**	**216**
E-A20Q SCLC R/L 09	20	18,0	180	38	13	26	3,2	CC.. 09T3	**220**	**220**
E-A25R SCLC R/L 09	25	23,0	200	38	17	34	3,2	CC.. 09T3	**225**	**225**
E-A32S SCLC R/L 12	32	30,0	250	43	22	39	5	CC.. 1204	**232**	**232**

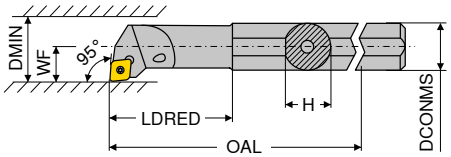
Key D

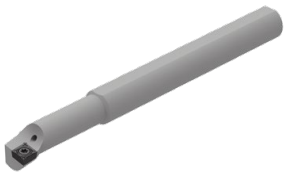
Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 718 208 / 70 719 208	T08	**110**	M2,5x5	**116**
70 718 210 / 70 719 210	T08	**110**	M2,5x5	**116**
70 718 212 / 70 719 212	T08	**110**	M2,5x5	**116**
70 718 216 / 70 719 216	T15	**113**	M4x9,5	**449**
70 718 220 / 70 719 220	T15	**113**	M4x9,5	**449**
70 718 225 / 70 719 225	T15	**113**	M4x9,5	**449**
70 718 232 / 70 719 232	T15	**113**	M4x11	**174**

MaxiLock-S – SCLC 95° – Boring bar with screw clamping

▲ with carbide core





Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 719 ...	Right-hand Article no. 70 718 ...
E-A0608F SCLC R/L 06	8	7,5	100	25	4	8	1,2	CC.. 0602	**308**	**308**
E-A0810H SCLC R/L 06	10	9,0	110	32	6	12	1,2	CC.. 0602	**310**	**310**
E-A1012K SCLC R/L 06	12	11,0	125	38	7	14	1,2	CC.. 0602	**312**	**312**
E-A1216M SCLC R/L 06	16	15,0	150	50	9	18	1,2	CC.. 0602	**316**	**316**

Key D

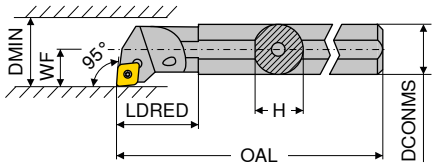
Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 718 308 / 70 719 308	**110**	**116**
70 718 310 / 70 719 310	**110**	**116**
70 718 312 / 70 719 312	**110**	**116**
70 718 316 / 70 719 316	**110**	**116**

9

MaxiLock-S – SCLC 95° – Boring bar with screw clamping

▲ Type: Solid carbide



Illustrations show right-hand versions

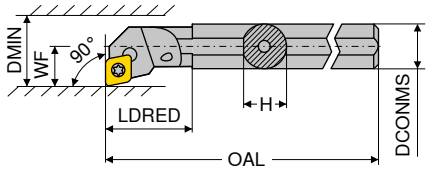
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 719 ...	Right-hand Article no. 70 718 ...
E08H SCLC R/L 06	8	7,6	100		5	11	1,2	CC.. 0602	**008**	**008**
E10K SCLC R/L 06	10	9,0	125	22	7	13	1,2	CC.. 0602	**010**	**010**
E12Q SCLC R/L 06	12	11,5	180	26	9	16	1,2	CC.. 0602	**012**	**012**
E16R SCLC R/L 09	16	15,0	200	34	11	20	3,2	CC.. 09T3	**016**	**016**
E20S SCLC R/L 09	20	18,5	250	38	13	25	3,2	CC.. 09T3	**020**	**020**
E25T SCLC R/L 09	25	23,0	300	43	17	32	3,2	CC.. 09T3	**025**	**025**

Key D

Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 719 008 / 70 718 008	T08	**110**	M2,5x5	**116**
70 719 010 / 70 718 010	T08	**110**	M2,5x5	**116**
70 719 012 / 70 718 012	T08	**110**	M2,5x5	**116**
70 719 016 / 70 718 016	T15	**113**	M3,5x7,2	**110**
70 719 020 / 70 718 020	T15	**113**	M3,5x8,6	**304**
70 719 025 / 70 718 025	T15	**113**	M3,5x11	**113**

MaxiLock-S – SCFC 90° – Boring bar with screw clamping



Illustrations show right-hand versions

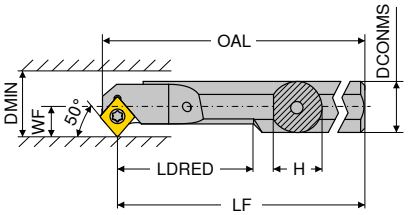
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 793 ...	Right-hand Article no. 70 792 ...
A08F SCFC R/L 06	8	7,6	80	17	5	11	1,2	CC.. 0602	**208**	**208**
A10H SCFC R/L 06	10	9,5	100	19	7	13	1,2	CC.. 0602	**210**	**210**
A12K SCFC R/L 06	12	11,5	125	22	9	16	1,2	CC.. 0602	**212**	**212**

Key D

Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 792 208 / 70 793 208	T08	**110**	M2,5x5	**116**
70 792 210 / 70 793 210	T08	**110**	M2,5x5	**116**
70 792 212 / 70 793 212	T08	**110**	M2,5x5	**116**

MaxiLock-S – SCMC 50° – Boring bar with screw clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LF mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 723 ...	Right-hand Article no. 70 722 ...
A08H SCMC R/L 06	8	7	104,15	100	20	5,5	10,5	1,2	CC.. 0602	**208**	**208**
A10H SCMC R/L 06	10	9	114,15	110	26	6,0	11,0	1,2	CC.. 0602	**210**	**210**
A12K SCMC R/L 06	12	11	129,15	125	32	7,0	13,0	1,2	CC.. 0602	**212**	**212**
A16M SCMC R/L 06	16	14	154,15	150	40	9,0	16,0	1,2	CC.. 0602	**216**	**216**

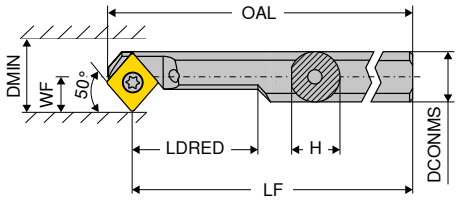
Key D

Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 723 208 / 70 722 208	T08	**110**	M2,5x5	**116**
70 723 210 / 70 722 210	T08	**110**	M2,5x5	**116**
70 723 212 / 70 722 212	T08	**110**	M2,5x5	**116**
70 723 216 / 70 722 216	T08	**110**	M2,5x5	**116**

MaxiLock-S – SCMC 50° – Boring bar with screw clamping

▲ with carbide core



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LF mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 707 ...	Right-hand Article no. 70 706 ...
E-A0608H SCMC R/L 06	8	7,5	104,15	100	20	5,5	10,5	1,2	CC.. 0602	**008**	**008**
E-A0810H SCMC R/L 06	10	9,0	114,15	110	26	6,0	11,0	1,2	CC.. 0602	**010**	**010**
E-A1012K SCMC R/L 06	12	11,0	129,15	125	32	7,0	13,0	1,2	CC.. 0602	**012**	**012**
E-A1216M SCMC R/L 06	16	15,0	154,15	150	40	9,0	16,0	1,2	CC.. 0602	**016**	**016**

Key D

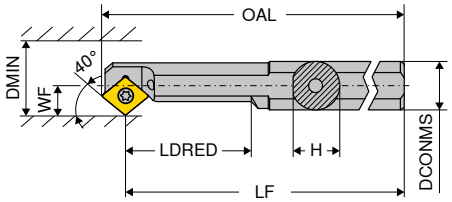
Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 706 008 / 70 707 008	**110**	**116**
70 706 010 / 70 707 010	**110**	**116**
70 706 012 / 70 707 012	**110**	**116**
70 706 016 / 70 707 016	**110**	**116**

9

MaxiLock-S – SCXC 40° – Boring bar with screw clamping

▲ with carbide core



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LF mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 715 ...	Right-hand Article no. 70 714 ...
E-A0608H SCXC R/L 06	8	7,5	105	100	20	5	9,5	1,2	CC.. 0602	**008**	**008**
E-A0810H SCXC R/L 06	10	9,0	115	110	26	6	11,0	1,2	CC.. 0602	**010**	**010**
E-A1012K SCXC R/L 06	12	11,0	130	125	32	7	13,0	1,2	CC.. 0602	**012**	**012**
E-A1216M SCXC R/L 06	16	15,0	155	150	40	9	16,0	1,2	CC.. 0602	**016**	**016**

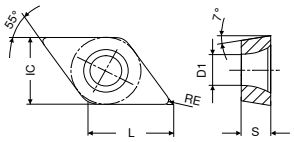
Key D

Clamping screw

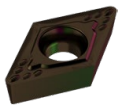
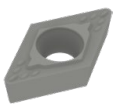
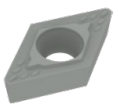
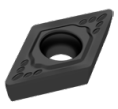
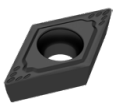
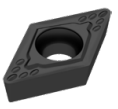
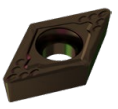
Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 714 008 / 70 715 008	**110**	**116**
70 714 010 / 70 715 010	**110**	**116**
70 714 012 / 70 715 012	**110**	**116**
70 714 016 / 70 715 016	**110**	**116**

DCGT / DCMT / DCXT / DCET

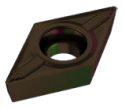
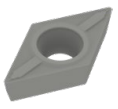
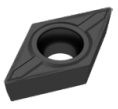
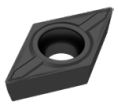
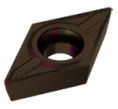
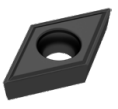
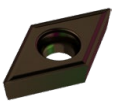
Designation	L	S	D1	IC
	mm	mm	mm	mm
DC.T 0702..	7,75	2,38	2,8	6,35
DC.T 11T3..	11,60	3,97	4,4	9,52



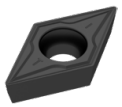
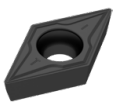
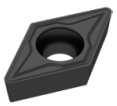
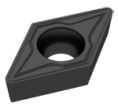
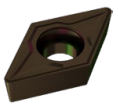
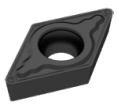
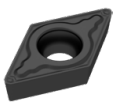
DCGT / DCMT

	-CF05 CTEP110	-SF TCM10	-SF TCM407	-SF CTCP125	-SF CTCP115	-SF CTCP125	-SF CTCP135
	-PF14 DCC1110	-ZF CWC10	-ZF CWC407	-ZF HCX1125	-ZF HCX1115	-ZF HCX1125	-ZF HCR1135
	DRAGONSKIN			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	○ ◌ ◌	○ ◌ ◌	○ ◌ ◌	◌ ◠ ◌	○ ◌ ◌	◌ ◠ ◌	◌ ◌ ◌
							
	F	F	F	F	F	F	F
	CERMET DCGT	CERMET DCGT	CERMET DCGT	DCGT	DCMT	DCMT	DCMT
ISO / RE mm	Article no. 76 245 ...	Article no. 70 257 ...	Article no. 70 257 ...	Article no. 76 257 ...	Article no. 76 259 ...	Article no. 76 259 ...	Article no. 76 259 ...
070201EN 0,1		898					
070202EN 0,2	002	900		502			
070204EN 0,4	004	902	852		304	504	704
11T302EN 0,2	014	904	854				
11T304EN 0,4	016	906	856		316	516	716
11T308EN 0,8	018	908	858		318	518	718
Steel	●	●	●	●	●	●	●
Stainless steel	○			○	○	○	○
Cast iron	○	○	○	○	○	○	
Non ferrous metals							
Heat resistant alloys							○

DCMT / DCGT

	-CF55 CTEP110	-SMF TCM10	-SMF CTCP115	-SMF CTCP125	-SMF CTCP135	-SM CTCP125	-SM CTCP135
	-PF15 DCC1110	-SMF CWC10	-SMF HCX1115	-SMF HCX1125	-SMF HCR1135	-ZM HCX1125	-ZM HCR1135
	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	○ ◌ ◌	○ ◌ ◌	○ ◌ ◌	◌ ◠ ◌	◌ ◌ ◌	◌ ◠ ◌	◌ ◌ ◌
							
	F	F	F	F	F	M	M
	CERMET DCMT	CERMET DCMT	DCMT	DCMT	DCMT	DCGT	DCGT
ISO / RE mm	Article no. 76 246 ...	Article no. 70 265 ...	Article no. 76 265 ...	Article no. 76 265 ...	Article no. 76 265 ...	Article no. 76 256 ...	Article no. 76 256 ...
070202EN 0,2	002	898				502	702
070204EN 0,4	004	900		504	704		
070208EN 0,8					706		
11T304EN 0,4	016	904	316	516	716		
11T308EN 0,8	018	906	318	518	718		
Steel	●	●	●	●	●	●	●
Stainless steel	○		○	○	○	○	○
Cast iron	○	○	○	○		○	
Non ferrous metals							
Heat resistant alloys					○		○

DCMT

	-SM CTCK110	-SM CTCK120	-SM CTCP115	-SM CTCP125	-SM CTCP135	-SMQ CTCP115	-SMQ CTCP125
	-ZM DCX3110	-ZM HCF3120	-ZM HCX1115	-ZM HCX1125	-ZM HCR1135	-SMQ HCX1115	-SMQ HCX1125
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	M DCMT	M DCMT	M DCMT	M DCMT	M DCMT	M DCMT	M DCMT
ISO / RE mm	Article no. 70 258 ...	Article no. 70 258 ...	Article no. 76 258 ...	Article no. 76 258 ...	Article no. 76 258 ...	Article no. 76 195 ...	Article no. 76 195 ...
070204EN 0,4	004	554	304	504	704	304	504
070208EN 0,8	006	506	306	506	706		
11T304EL 0,4							516
11T304EN 0,4	016	516	316	516	716		515
11T304ER 0,4							517
11T308EN 0,8	018	518	318	518	718		518
11T312EN 1,2				520			
Steel	●	●	●	●	●	●	●
Stainless steel	○		○	○	○	○	○
Cast iron	●	●	○	○		○	○
Non ferrous metals							
Heat resistant alloys					○		

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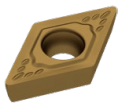
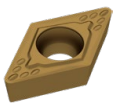
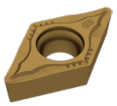
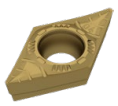
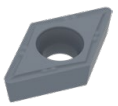
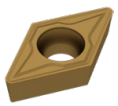
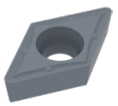
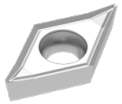
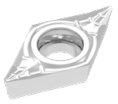
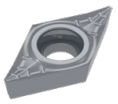
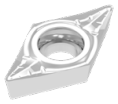
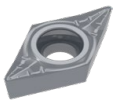
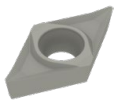
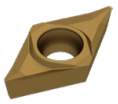
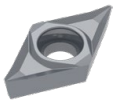
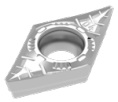
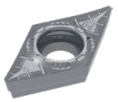
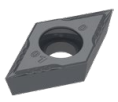
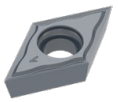
DCGT / DCMT / DCXT

	-SF CTC2135	-SF CTC2135	-F43 CTC2135	-M81 CWN2120	-M25 CTPM125	-SM CTC2135	-M55 CTPM125
	-ZF CWN2135	-ZF CWN2135	-F43 CWN2135		-PF23 HCN2125	-ZM CWN2135	-PF26 HCN2125
					DRAGONSKIN		DRAGONSKIN
							
	F DCGT	F DCMT	F DCMT	M DCXT	F DCMT	M DCMT	F DCMT
ISO / RE mm	Article no. 70 257 ...	Article no. 70 259 ...	Article no. 70 186 ...	Article no. 70 260 ...	Article no. 75 213 ...	Article no. 70 258 ...	Article no. 75 214 ...
070202EN 0,2	440		400		202		
070202FN 0,2				100			
070204EN 0,4		440	402		204	440	204
070204FN 0,4				102			
070208EN 0,8						442	206
11T302EN 0,2			404		214		
11T302FN 0,2				104			
11T304EN 0,4		444	406		216	444	216
11T304FN 0,4				106			
11T308EN 0,8		446	408		218	448	218
11T308FN 0,8				108			
Steel	○	○	○		○	○	○
Stainless steel	●	●	●	●	●	●	●
Cast iron							
Non ferrous metals				○			
Heat resistant alloys	●	●	●			●	

DCGT

	-23P H216T	-25P H210T	-25P AMZ	-25Q H210T	-25Q AMZ	-27 H10T	-27 CWN15
	-23P CWK26	-25P CWK20	-25P AMZ	-25Q CWK20	-25Q AMZ	-AL CWK15	-AL CWN15
							
	F DCGT	F DCGT	F DCGT	M DCGT	M DCGT	M DCGT	M DCGT
ISO / RE mm	Article no. 70 261 ...	Article no. 70 263 ...	Article no. 70 263 ...	Article no. 70 263 ...	Article no. 70 263 ...	Article no. 70 260 ...	Article no. 70 260 ...
070202FN 0,2		632	552			600	300
070204FN 0,4	654	634	554			602	302
11T302FN 0,2		635	535			604	304
11T304FL 0,4				670	620		
11T304FN 0,4	664	636	556	660	610	606	306
11T304FR 0,4				680	630		
11T308FL 0,8				672	622		
11T308FN 0,8	666	638	558	662	612	608	308
11T308FR 0,8				682	642		
Steel			○		○		
Stainless steel			○		○		○
Cast iron	○	○	○	○	○	○	
Non ferrous metals	●	●	●	●	●	●	●
Heat resistant alloys	○	○		○		○	

DCGT / DCMT / DCET

	-27 AMZ	-29 H216T	-29 AMZ	-F05 CTPX710	-F23 CTP2120
	-AL AMZ				-F23 CCN2120
				DRAGONSKIN	
					
	M DCGT	M DCMT	M DCMT	F DCET	F DCGT
		NEW	NEW	NEW	
ISO / RE mm	Article no. 70 260 ...	Article no. 70 246 ...	Article no. 70 246 ...	Article no. 76 254 ...	Article no. 70 192 ...
0702005FN 0,05				10200	
070200FN 0,00					600
0702015FN 0,15				10600	
070201FN 0,10				10400	602
070202FN 0,20	450			10800	
070204EN 0,40		60400	40400		
070204FN 0,40	452				
11T3005FN 0,05				11400	
11T300FN 0,00					604
11T3015FN 0,15				11800	
11T301FN 0,10				11600	606
11T302FN 0,20	454			12000	
11T304EN 0,40		61600	41600		
11T304FN 0,40	456				
11T304N 0,40				12200	
11T308EN 0,80		61800	41800		
11T308FN 0,80	458				
Steel	○		○	●	
Stainless steel	○		○	●	●
Cast iron	○	○	○	○	○
Non ferrous metals	●	●	●	○	○
Heat resistant alloys		○		●	●

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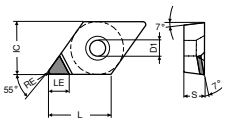
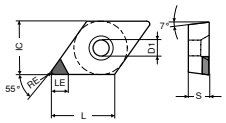
DCGW / DCGT

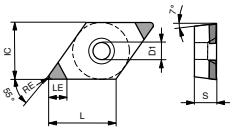
Designation	L	S	D1	IC
	mm	mm	mm	mm
DCG. 0702..	7,75	2,38	2,8	6,35
DCG. 11T3..	11,60	3,97	4,4	9,52



DCGT -A

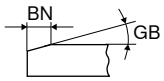


DCGW -A



DCGW-B

DCGW / DCGT

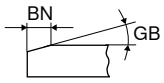


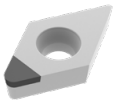
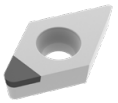
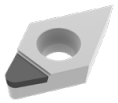
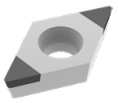
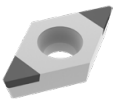
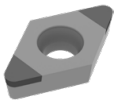
	-A CTBS10U	-A CTBS10U	-A CTBS10U	-B CTBS10U	-B CTBS10U	-B CTBS20C
	PBC10	PBC10	PBC10	-2S PBC10	-2S PBC10	-2MC PBC15-S
	F	F	F	F	F	F
	CBN DCGW	CBN DCGW	CBN DCGT	CBN DCGW	CBN DCGW	CBN DCGW

ISO	RE	GB	BN	LE	Article no. 71 130 ...	Article no. 71 130 ...	Article no. 71 134 ...	Article no. 71 131 ...	Article no. 71 131 ...	Article no. 71 163 ...
	mm	°	mm	mm						
070202SN	0,2	10	0,09	3,9						120
070202SN	0,2	15	0,11	3,9						130
070202TN	0,2	20	0,14	3,9		300				
070202TN	0,2	20	0,15	3,9						140
070202SN	0,2	20	0,16	3,9						150
070202TN	0,2	25	0,17	3,9						160
070202FN	0,2			3,9	200		200			
070204SN	0,4	10	0,09	3,5						121
070204SN	0,4	15	0,11	3,5						131
070204TN	0,4	20	0,14	3,5		302				
070204TN	0,4	20	0,15	3,5						141
070204SN	0,4	20	0,16	3,5						151
070204TN	0,4	25	0,17	3,5						161
070204SN	0,4	30	0,18	3,5						181
070204FN	0,4			3,5	202		202			
070208SN	0,8	15	0,11	3,0						132
070208TN	0,8	20	0,14	3,0		304				
070208TN	0,8	20	0,15	3,0						142
070208SN	0,8	20	0,16	3,0						152
070208TN	0,8	25	0,17	3,0						162
070208SN	0,8	25	0,18	3,0						172
070208EN	0,8			3,0						112
070208FN	0,8			3,0	204		204			
11T302SN	0,2	15	0,11	3,9						133
11T302TN	0,2	20	0,14	3,9		306			300	
11T302TN	0,2	20	0,15	3,9						143
11T302SN	0,2	20	0,16	3,9						153
Cast iron					●	●	●	●	●	●
Sintered steels					●	●	●	●	●	●
Heat resistant alloys					●	●	●	●	●	●
hardened < 45 HRC										
hardened 46–55 HRC										
hardened 56–60 HRC										
hardened 61–65 HRC										

9

DCGW / DCGT

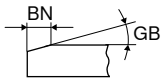


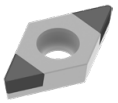
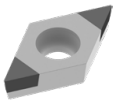
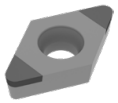
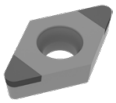
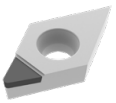
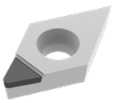
	-A CTBS10U	-A CTBS10U	-A CTBS10U	-B CTBS10U	-B CTBS10U	-B CTBS20C
	PBC10	PBC10	PBC10	-2S PBC10	-2S PBC10	-2MC PBC15-S
						
	F	F	F	F	F	F
	CBN DCGW	CBN DCGW	CBN DCGT	CBN DCGW	CBN DCGW	CBN DCGW
	Article no. 71 130 ...	Article no. 71 130 ...	Article no. 71 134 ...	Article no. 71 131 ...	Article no. 71 131 ...	Article no. 71 163 ...
ISO						
11T302TN						163
11T302FN			206		206	200		
11T302EN						113
11T304SN						124
11T304TN		308			302	
11T304TN						144
11T304SN						154
11T304TN						164
11T304SN						174
11T304SN						184
11T304FN			208		208	202		
11T308SN						135
11T308TN		310			304	
11T308TN						145
11T308SN						155
11T308TN						165
11T308SN						185
11T308FN			210		210	204		
11T308EN						115

RE mm	GB °	BN mm	LE mm
0,2	25	0,17	3,9
0,2			3,9
0,2			3,9
0,4	10	0,09	3,5
0,4	20	0,14	3,5
0,4	20	0,15	3,5
0,4	20	0,16	3,5
0,4	25	0,17	3,5
0,4	25	0,18	3,5
0,4	30	0,18	3,5
0,4			3,5
0,8	15	0,11	3,0
0,8	20	0,14	3,0
0,8	20	0,15	3,0
0,8	20	0,16	3,0
0,8	25	0,17	3,0
0,8	30	0,18	3,0
0,8			3,0
0,8			3,0

Cast iron	●	●	●	●	●	●
Sintered steels	●	●	●	●	●	●
Heat resistant alloys	●	●	●	●	●	●
hardened < 45 HRC						
hardened 46–55 HRC						
hardened 56–60 HRC						
hardened 61–65 HRC						

DCGW / DCGT



	-B CTBH15U	-B CTBH15U	-B CTBH15C	-B CTBH15C	-A CTBH21U PBC25	-A CTBH40U PBC40
						
	F	F	F	F	F	F
	CBN DCGW	CBN DCGW	CBN DCGW	CBN DCGW	CBN DCGT	CBN DCGT
	NEW	NEW	NEW	NEW		
ISO	Article no. 71 008 ...	Article no. 71 012 ...	Article no. 71 007 ...	Article no. 71 009 ...	Article no. 71 134 ...	Article no. 71 134 ...
RE mm / GB ° / BN mm / LE mm						
070202EN 0,2 / 3,9	00200		00200			
070202SN 0,2 / 15 / 0,11 / 3,9	30214		30214			
070202FN 0,2 / 3,9					400	800
070204EN 0,4 / 3,5	00400		00400			
070204SN 0,4 / 15 / 0,11 / 3,5	30414		30414			
070204SN 0,4 / 25 / 0,13 / 3,5	30429		30429			
070204FN 0,4 / 3,5					402	802
070208SN 0,8 / 15 / 0,11 / 3,0		30614		30614		
070208SN 0,8 / 25 / 0,13 / 3,0		30629		30629		
070208EN 0,8 / 3,0		00600		00600		
11T302SN 0,2 / 15 / 0,11 / 3,9			31414			
11T302RN 0,2 / 3,9			21400			
11T302SN 0,2 / 25 / 0,13 / 3,9			31429			
11T302FN 0,2 / 3,9					406	806
11T304SN 0,4 / 15 / 0,11 / 3,5			31614			
11T304SN 0,4 / 25 / 0,13 / 3,5			31629			
11T304RN 0,4 / 3,5			21600			
11T304FN 0,4 / 3,5					408	808
11T308RN 0,8 / 3,0				21800		
11T308SN 0,8 / 15 / 0,11 / 3,0				31814		
11T308SN 0,8 / 25 / 0,13 / 3,0				31829		
11T308FN 0,8 / 3,0					410	810
Cast iron						
Sintered steels						
Heat resistant alloys						
hardened < 45 HRC	●	●	●	●		
hardened 46–55 HRC	●	●	●	●	●	●
hardened 56–60 HRC	●	●	●	●	●	●
hardened 61–65 HRC						●

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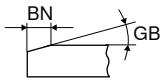
DCGW



ISO	RE	GB	BN	LE	-A CTBH21U PBC25 F CBN DCGW	-B CTBH21U -2S PBC25 F CBN DCGW	-B CTBH20C -2MC PBC25-S F CBN DCGW	-A CTBH40U PBC40 F CBN DCGW	-B CTBH40U -2S PBC40 F CBN DCGW	-B CTBH40C -2MC PBC40-S F CBN DCGW
	mm	°	mm	mm	Article no. 71 130 ...	Article no. 71 131 ...	Article no. 71 163 ...	Article no. 71 130 ...	Article no. 71 131 ...	Article no. 71 163 ...
070202FN	0,2			3,9	400 [1]			800		
070202SN	0,2	10	0,09	3,9			230			
070202SN	0,2	15	0,11	3,9			240			
070202SN	0,2	20	0,09	3,9			250			
070202TN	0,2	20	0,09	3,9						320
070202TN	0,2	20	0,14	3,9	500					
070202SN	0,2	25	0,09	3,9						350
070202TN	0,2	25	0,11	3,9						340
070202TN	0,2	25	0,12	3,9				900		
070202TN	0,2	25	0,14	3,9			260			
070202TN	0,2	30	0,14	3,9						360
070202SN	0,2	30	0,16	3,9						370
070202SN	0,2	35	0,17	3,9						380
070202EN	0,2			3,9						310
070204SN	0,4	10	0,09	3,5			231			
070204SN	0,4	15	0,11	3,5			241			
070204SN	0,4	20	0,09	3,5			251			331
070204TN	0,4	20	0,14	3,5	502					
070204SN	0,4	25	0,09	3,5						351
070204TN	0,4	25	0,11	3,5						341
070204TN	0,4	25	0,12	3,5				902		
070204TN	0,4	25	0,14	3,5			261			
070204SN	0,4	25	0,15	3,5			271			
070204TN	0,4	30	0,14	3,5						361
070204SN	0,4	30	0,16	3,5						371
070204SN	0,4	35	0,17	3,5						381
070204FN	0,4			3,5	402 [1]		211	802		
070208SN	0,8	10	0,09	3,0			232			
070208SN	0,8	20	0,09	3,0			252			332
070208TN	0,8	20	0,14	3,0	504					
070208SN	0,8	25	0,09	3,0						352
070208TN	0,8	25	0,11	3,0						342
070208TN	0,8	25	0,12	3,0				904		
070208TN	0,8	25	0,14	3,0			262			
070208TN	0,8	30	0,14	3,0						362
070208SN	0,8	30	0,16	3,0						372
070208SN	0,8	35	0,17	3,0						382
070208FN	0,8			3,0	404 [1]		212	804		
070208EN	0,8			3,0			222			312
11T302FN	0,2			3,9	406 [1]	400 [1]		806	800 [1]	
11T302SN	0,2	15	0,09	3,9			233			
11T302SN	0,2	15	0,11	3,9			243			
11T302SN	0,2	20	0,09	3,9			253			
11T302TN	0,2	20	0,09	3,9						323

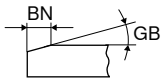
Cast iron							
Sintered steels							
Heat resistant alloys							
hardened < 45 HRC							
hardened 46–55 HRC	●	●	●	●	●	●	
hardened 56–60 HRC	●	●	●	●	●	●	
hardened 61–65 HRC				●	●	●	

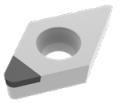
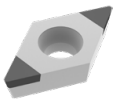
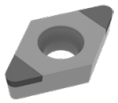
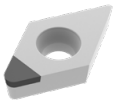
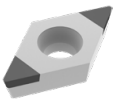
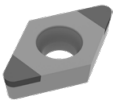
1) Machining to 60 HRC

→ v_c Page 160–167

Continued on next page

DCGW



ISO	RE	GB	BN	LE	-A CTBH21U PBC25	-B CTBH21U -2S PBC25	-B CTBH20C -2MC PBC25-S	-A CTBH40U PBC40	-B CTBH40U -2S PBC40	-B CTBH40C -2MC PBC40-S
										
					F CBN DCGW	F CBN DCGW	F CBN DCGW	F CBN DCGW	F CBN DCGW	F CBN DCGW
	mm	°	mm	mm	Article no. 71 130 ...	Article no. 71 131 ...	Article no. 71 163 ...	Article no. 71 130 ...	Article no. 71 131 ...	Article no. 71 163 ...
11T302TN	0,2	20	0,14	3,9	506	500				
11T302SN	0,2	25	0,09	3,9						353
11T302TN	0,2	25	0,11	3,9						343
11T302TN	0,2	25	0,12	3,9				906	900	
11T302TN	0,2	25	0,14	3,9			263			
11T302SN	0,2	25	0,15	3,9			273			
11T302TN	0,2	30	0,14	3,9						363
11T302SN	0,2	35	0,17	3,9						383
11T302EN	0,2			3,9						313
11T304FN	0,4			3,5	408 1)	402 1)	214	808	802 1)	
11T304SN	0,4	10	0,09	3,5			234			
11T304SN	0,4	15	0,11	3,5			244			
11T304SN	0,4	20	0,09	3,5			254			334
11T304TN	0,4	20	0,09	3,5						324
11T304TN	0,4	20	0,14	3,5	508	502				
11T304SN	0,4	25	0,09	3,5						354
11T304TN	0,4	25	0,11	3,5						344
11T304TN	0,4	25	0,12	3,5				908	902	
11T304TN	0,4	25	0,14	3,5			264			
11T304SN	0,4	25	0,15	3,5			274			
11T304TN	0,4	30	0,14	3,5						364
11T304SN	0,4	30	0,16	3,5						374
11T304SN	0,4	30	0,18	3,5			284			
11T304SN	0,4	35	0,17	3,5						384
11T304EN	0,4			3,5			224			314
11T308SN	0,8	15	0,11	3,0			245			
11T308SN	0,8	20	0,09	3,0			255			335
11T308TN	0,8	20	0,09	3,0						325
11T308TN	0,8	20	0,14	3,0	510	504				
11T308SN	0,8	25	0,09	3,0						355
11T308TN	0,8	25	0,11	3,0						345
11T308TN	0,8	25	0,12	3,0				910	904	
11T308TN	0,8	25	0,14	3,0			265			
11T308TN	0,8	30	0,14	3,0						365
11T308SN	0,8	30	0,16	3,0						375
11T308SN	0,8	30	0,18	3,0			285			
11T308SN	0,8	35	0,17	3,0						385
11T308EN	0,8			3,0			225			
11T308FN	0,8			3,0	410 1)	404 1)	215		804 1)	

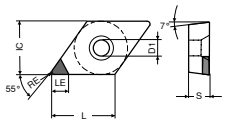
Cast iron										
Sintered steels										
Heat resistant alloys										
hardened < 45 HRC										
hardened 46–55 HRC					●	●	●	●	●	●
hardened 56–60 HRC					●	●	●	●	●	●
hardened 61–65 HRC								●	●	●

1) Machining to 60 HRC

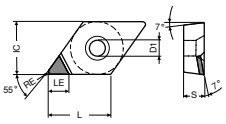
9

DCGW / DCGT

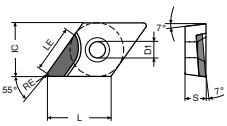
Designation	L	S	D1	IC
	mm	mm	mm	mm
DCG. 0702..	7,75	2,38	2,8	6,35
DCG. 11T3..	11,60	3,97	4,4	9,52



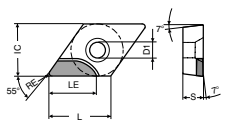
DCGW -A



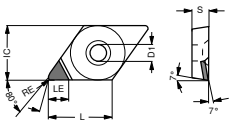
DCGT -A



DCGT-L



DCGT-R

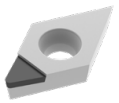
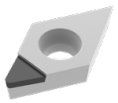
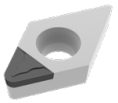
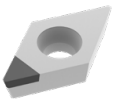
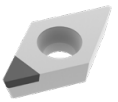


DCGT -Q-A (-2Q)

DCGW / DCGT

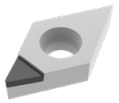
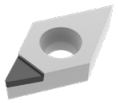
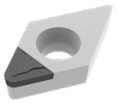
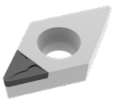
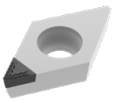
	-A CTDMD05	-A CTDMD05	-A CTDPD20	-A CTDPD20	-A CTDPD20	-A CTDPD20
	MDC	MDC	PDC	PDC	PDC	PDC
	F DIAMOND DCGW	F DIAMOND DCGT	F DIAMOND DCGW	F DIAMOND DCGT	F DIAMOND DCGT	F DIAMOND DCGT
ISO	Article no. 71 130 ...	Article no. 71 134 ...	Article no. 71 130 ...	Article no. 71 134 ...	Article no. 71 135 ...	Article no. 71 136 ...
RE mm / LE mm						
070202FN 0,2 / 2,5		050				
070202FN 0,2 / 3,7			100	100		
070204FN 0,4 / 2,5		052				
070204FN 0,4 / 3,4			102	102		
070204FRR 0,4 / 5,5					102	
070204FLL 0,4 / 5,5						102
070208FN 0,8 / 2,5		054				
070208FN 0,8 / 3,0			104	104		
070208FRR 0,8 / 5,0					104	
070208FLL 0,8 / 5,0						104
11T302FN 0,2 / 2,5		056				
11T302FN 0,2 / 3,0	056					
11T302FN 0,2 / 4,7			106	106		
11T304FN 0,4 / 2,5		058				
11T304FN 0,4 / 3,0	058					
11T304FN 0,4 / 4,3			108	108		
11T304FRR 0,4 / 7,5					108	
11T304FLL 0,4 / 7,5						108
11T308FN 0,8 / 2,5		060				
11T308FN 0,8 / 4,0			110	110		
11T308FRR 0,8 / 7,0					110	
11T308FLL 0,8 / 7,0						110
Steel						
Stainless steel						
Cast iron						
Non ferrous metals	●	●	●	●	●	●
Heat resistant alloys	○	○				

DCGT / DCGW

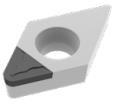
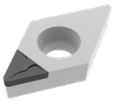
			-Q-A CTDPD20	-Q-A CTDPD20	-A-CB1 CTDPD20	-Q-A CTDPS30	-Q-A CTDPS30
			-2Q PDC	-2Q PDC	-CB1 PDC	-2Q PDC-S	-2Q PDC-S
							
			F	F	F	F	F
			DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGT	DIAMOND DCGW	DIAMOND DCGW
ISO	RE	LE	Article no. 71 144 ...	Article no. 71 145 ...	Article no. 71 310 ...	Article no. 71 138 ...	Article no. 71 139 ...
	mm	mm					
070202FN	0,2	3,7			102		
070204FL	0,4	3,0		104			
070204FR	0,4	3,0	104				
070204FN	0,4	3,4			104		
070208FN	0,8	3,0			108		
11T302FR	0,2	4,0				162	
11T302FN	0,2	4,7			112		
11T304FR	0,4	4,0	114			164	
11T304FL	0,4	4,0		114			164
11T304FN	0,4	4,3			114		
11T308FN	0,8	4,0			118		
Steel							
Stainless steel							
Cast iron							
Non ferrous metals			●	●	●	●	●
Heat resistant alloys						○	○

9

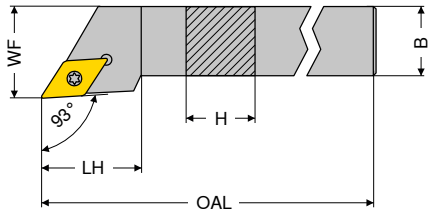
DCGT

			-Q-A CTDPS30	-Q-A CTDPS30	-A-CB1 CTDPS30	-A-CB2 CTDPS30	-A-CB3 CTDPU20
			-2Q PDC-S	-2Q PDC-S	-CB1 PDC-S	-CB2 PDC-S	-CB3 PDC-S
							
			F DIAMOND DCGT	F DIAMOND DCGT	F DIAMOND DCGT	M DIAMOND DCGT	R DIAMOND DCGT
ISO	RE	LE	Article no. 71 144 ...	Article no. 71 145 ...	Article no. 71 310 ...	Article no. 71 311 ...	Article no. 71 312 ...
	mm	mm					
070201FL	0,1	3,0		151			
070202FL	0,2	3,0		152			
070202FR	0,2	3,0	152				
070202FN	0,2	3,7			202		
070202EN	0,2	3,7				202	
070204FN	0,4	3,4			204		
070204EN	0,4	3,4				204	204
070208EN	0,8	3,0				208	
11T301FL	0,1	4,0		161			
11T301FR	0,1	4,0	161				
11T302FR	0,2	4,0	162				
11T302FL	0,2	4,0		162			
11T302FN	0,2	4,7			212		
11T302EN	0,2	4,7				212	
11T304FN	0,4	4,3			214		
11T304EN	0,4	4,3				214	214
11T308EN	0,8	4,0				218	218
11T308FN	0,8	4,0			218		
Steel							
Stainless steel							
Cast iron							
Non ferrous metals			●	●	●	●	●
Heat resistant alloys			○	○	○	○	○

DCGT

			-A-CB1 CTDCD10	-A-CB2 CTDCD10
			-CB1 CVD	-CB2 CVD
				
			F DIAMOND DCGT	M DIAMOND DCGT
ISO	RE	LE	Article no. 71 310 ...	Article no. 71 311 ...
	mm	mm		
070202FN	0,2	2,6	302	
070204FN	0,4	2,3	304	
070204EN	0,4	2,3		304
070208EN	0,8	2,0		308
11T304EN	0,4	2,3		314
11T304FN	0,4	2,3	314	
11T308EN	0,8	2,0		318
11T308FN	0,8	2,0	318	
Steel				
Stainless steel				
Cast iron				
Non ferrous metals			●	●
Heat resistant alloys				

MaxiLock-S – SDJC 93° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 685 ...	Right-hand Article no. 70 684 ...
SDJC R/L 0808 D07	8	8	60	13,0	10	1,2	DC.. 0702	008	008
SDJC R/L 1010 E07	10	10	70	13,0	12	1,2	DC.. 0702	010	010
SDJC R/L 1212 F07	12	12	80	14,5	16	1,2	DC.. 0702	012	012
SDJC R/L 1616 H11	16	16	100	20,0	20	3,2	DC.. 11T3	016	016
SDJC R/L 2020 K11	20	20	125	20,5	25	3,2	DC.. 11T3	020	020
SDJC R/L 2525 M11	25	25	150	21,5	32	3,2	DC.. 11T3	025	025
SDJC R/L 3225 P11	32	25	170	21,5	32	3,2	DC.. 11T3	032	032

Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**


Key D


Combination Key


Clamping screw


Solid Carbide Seat D

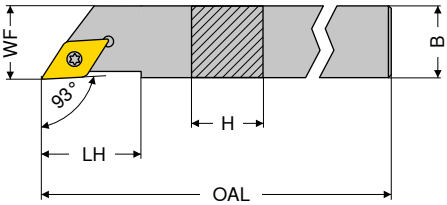

Threaded sleeve

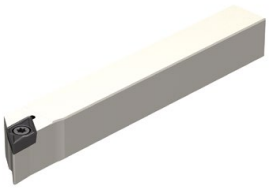
Spare parts	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
Insert					
DC.. 0702	110		112		
DC.. 11T3		398	113	106	171

9

MaxiLock-S – SDJC 93° – Toolholder with screw clamping

▲ for sliding head lathes





Illustrations show right-hand versions

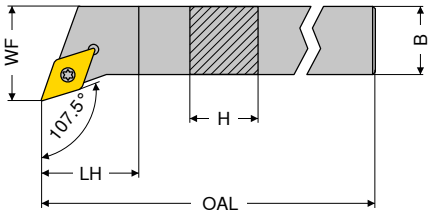
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 685 ...	Right-hand Article no. 70 684 ...
SDJC R/L 0808 H07	8	8	100	13,0	8	1,2	DC.. 0702	108	108
SDJC R/L 1010 H07	10	10	100	13,0	10	1,2	DC.. 0702	110	110
SDJC R/L 1212 H07	12	12	100	14,5	12	1,2	DC.. 0702	112	112
SDJC R/L 1616 K07	16	16	125	33,0	16	1,2	DC.. 0702	116	116
SDJC R/L 1212 H11	12	12	100	22,0	12	3,2	DC.. 11T3	212	212
SDJC R/L 1616 K11	16	16	125	33,0	16	3,2	DC.. 11T3	216	216


Key D


Clamping screw

Spare parts		Article no. 80 950 ...	Article no. 72 950 ...
Insert			
DC.. 0702	T08	110	002
DC.. 11T3	T15	113	006

MaxiLock-S – SDHC 107.5° – Toolholder with screw clamping



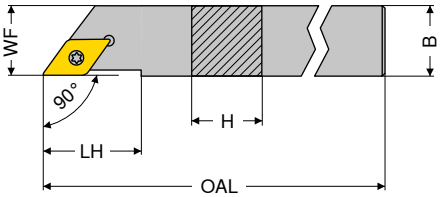
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 689 ...	Right-hand Article no. 70 688 ...
SDHC R/L 1010 E07	10	10	70	5,5	12	1,2	DC.. 0702	**010**	**010**
SDHC R/L 1212 F07	12	12	80	12,0	16	1,2	DC.. 0702	**012**	**012**
SDHC R/L 1616 H11	16	16	100	10,4	20	3,2	DC.. 11T3	**016**	**016**
SDHC R/L 2020 K11	20	20	125	14,0	32	3,2	DC.. 11T3	**020**	**020**
SDHC R/L 2525 M11	25	25	150	20,0	32	3,2	DC.. 11T3	**025**	**025**

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat D Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 689 010 / 70 688 010	**110**		**112**		
70 689 012 / 70 688 012	**110**		**112**		
70 689 016 / 70 688 016		**398**	**113**	**106**	**171**
70 689 020 / 70 688 020		**398**	**113**	**106**	**171**
70 689 025 / 70 688 025		**398**	**113**	**106**	**171**

MaxiLock-S – SDAC 90° – Toolholder with screw clamping

▲ for sliding head lathes

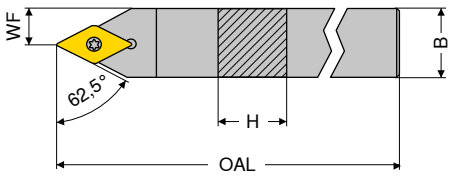


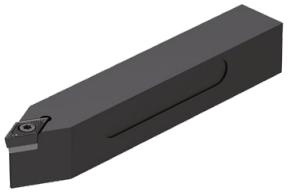
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 789 ...	Right-hand Article no. 70 788 ...
SDAC R/L 0808 K07	8	8	125	14	8	1,2	DC.. 0702	**008**	**008**
SDAC R/L 1010 M07	10	10	150	14	10	1,2	DC.. 0702	**010**	**010**
SDAC R/L 1212 M07	12	12	150	14	12	1,2	DC.. 0702	**012**	**012**
SDAC R/L 1414 M11	14	14	150	21	14	3,2	DC.. 11T3	**014**	**014**

Spare parts for Article no.	Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...	
70 788 008 / 70 789 008	T08	**110**	M2,5x6	**112**
70 788 010 / 70 789 010	T08	**110**	M2,5x6	**112**
70 788 012 / 70 789 012	T08	**110**	M2,5x6	**112**
70 788 014 / 70 789 014	T15	**113**	M3,5x11	**113**

MaxiLock-S – SDNC 62.5° – Toolholder with screw clamping





ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Neutral Article no. 70 680 ...
SDNC N 0808 D07	8	8	60	4,0	1,2	DC.. 0702	008
SDNC N 1010 E07	10	10	70	5,0	1,2	DC.. 0702	010
SDNC N 1212 F07	12	12	80	6,0	1,2	DC.. 0702	012
SDNC N 1616 H11	16	16	100	8,0	3,2	DC.. 11T3	016
SDNC N 2020 K11	20	20	125	10,0	3,2	DC.. 11T3	020
SDNC N 2525 M11	25	25	150	12,5	3,2	DC.. 11T3	025


Key D


Combination Key


Clamping screw

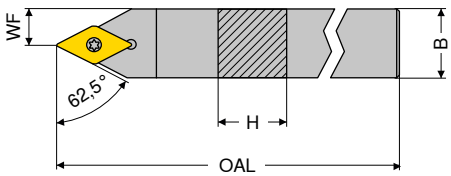

Solid Carbide Seat D


Threaded sleeve

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat D Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 680 008	110		112		
70 680 010	110		112		
70 680 012	110		112		
70 680 016		398	113	106	171
70 680 020		398	113	106	171
70 680 025		398	113	106	171

9

MaxiLock-S – SDNC 62.5° – Toolholder with screw clamping



ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Neutral Article no. 70 784 ...
SDNC N 0808 K07	8	8	125	4	1,2	DC.. 0702	008
SDNC N 1010 M07	10	10	150	5	1,2	DC.. 0702	010
SDNC N 1212 M07	12	12	150	6	1,2	DC.. 0702	012
SDNC N 1414 M11	14	14	150	7	3,2	DC.. 11T3	014

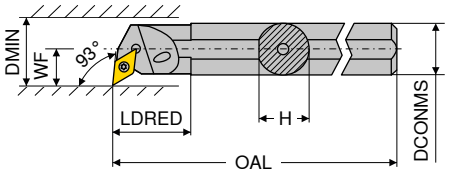

Key D


Clamping screw

Spare parts for Article no.		Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...
70 784 008	T08	110	M2,5x6	112
70 784 010	T08	110	M2,5x6	112
70 784 012	T08	110	M2,5x6	112
70 784 014	T15	113	M3,5x11	113

MaxiLock-S – SDUC 93° – Boring bar with screw clamping

▲ A... = with thro' coolant
▲ S... = without thro' coolant



Illustrations show right-hand versions

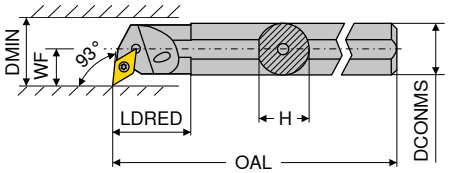
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 737 ...	Right-hand Article no. 70 736 ...
S12Q SDUC R/L 07	12	11,0	180		9	17	1,2	DC.. 0702	012	012
A12K SDUC R/L 07	12	11,5	125	22	9	16	1,2	DC.. 0702	212	212
A16M SDUC R/L 07	16	15,0	150	29	11	20	1,2	DC.. 0702	216	216
S16R SDUC R/L 07	16	15,0	200		11	21	1,2	DC.. 0702	016	016
A20Q SDUC R/L 07	20	18,5	180	32	13	25	1,2	DC.. 0702	220	220
S20S SDUC R 07	20	18,0	250		13	25	1,2	DC.. 0702		020
S20S SDUC R 11	20	18,0	250		13	25	3,2	DC.. 11T3		120
A20Q SDUC R/L 11	20	18,5	180	32	13	25	3,2	DC.. 11T3	320	320
A25R SDUC R/L 11	25	23,0	200	36	17	32	3,2	DC.. 11T3	325	325
S25T SDUC R/L 11	25	23,0	300		17	32	3,2	DC.. 11T3	125	125
A32S SDUC R/L 11	32	30,0	250	50	22	40	3,2	DC.. 11T3	332	332
S32U SDUC R 11	32	30,0	350		22	40	3,2	DC.. 11T3		132
A40T SDUC R/L 11	40	38,0	300	60	27	50	3,2	DC.. 11T3	340	340

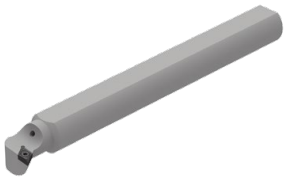
Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat D Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 736 012 / 70 737 012	110		112		
70 736 212 / 70 737 212	110		112		
70 736 216 / 70 737 216	110		112		
70 736 016 / 70 737 016	110		112		
70 736 220 / 70 737 220	110		112		
70 736 020	110		112		
70 736 120	113		110		
70 736 320 / 70 737 320	113		110		
70 736 325 / 70 737 325	113		113		
70 736 125 / 70 737 125		398	113	106	171
70 736 332 / 70 737 332		398	113	106	171
70 736 132		398	113	106	171
70 736 340 / 70 737 340		398	113	106	171

MaxiLock-S – SDUC 93° – Boring bar with screw clamping

▲ with carbide core





Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 739 ...	Right-hand Article no. 70 738 ...
E-A10H SDUC R/L 07	10	9	100	28	8	13	1,2	DC.. 0702	**210**	**210**
E-A12K SDUC R/L 07	12	11	125	18	9	18	1,2	DC.. 0702	**212**	**212**
E-A16M SDUC R/L 07	16	15	150	30	11	22	1,2	DC.. 0702	**216**	**216**
E-A20Q SDUC R/L 07	20	18	180	38	13	26	1,2	DC.. 0702	**220**	**220**
E-A20Q SDUC R/L 11	20	18	180	38	13	26	3,2	DC.. 11T3	**320**	**320**
E-A25R SDUC R/L 11	25	23	200	38	17	34	3,2	DC.. 11T3	**225**	**225**
E-A32S SDUC R/L 11	32	30	250	43	22	39	3,2	DC.. 11T3	**232**	**232**

Key D

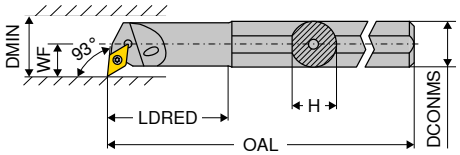
Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 738 210 / 70 739 210	**110**	**112**
70 738 212 / 70 739 212	**110**	**112**
70 738 216 / 70 739 216	**110**	**112**
70 738 220 / 70 739 220	**110**	**112**
70 738 320 / 70 739 320	**113**	**449**
70 738 225 / 70 739 225	**113**	**449**
70 738 232 / 70 739 232	**113**	**449**

9

MaxiLock-S – SDUC 93° – Boring bar with screw clamping

▲ with carbide core



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 739 ...	Right-hand Article no. 70 738 ...
E-A0810H SDUC R/L 07	10	9	100	22	7	12,5	1,2	DC.. 0702	**410**	**410**
E-A1012K SDUC R/L 07	12	11	125	28	9	15,5	1,2	DC.. 0702	**412**	**412**
E-A1216M SDUC R/L 07	16	15	150	36	11	19,5	1,2	DC.. 0702	**416**	**416**

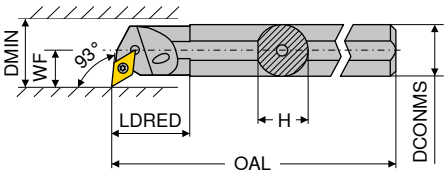
Key D

Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 738 410 / 70 739 410	**110**	**112**
70 738 412 / 70 739 412	**110**	**112**
70 738 416 / 70 739 416	**110**	**112**

MaxiLock-S – SDUC 93° – Boring bar with screw clamping

▲ Type: Solid carbide



Illustrations show right-hand versions

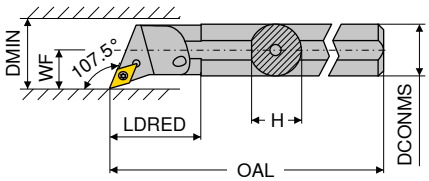
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 739 ...	Right-hand Article no. 70 738 ...
E12Q SDUC R/L 07	12	11,5	180	26	9	16	1,2	DC.. 0702	**012**	**012**
E16R SDUC R/L 07	16	15,0	200	34	11	20	1,2	DC.. 0702	**016**	**016**
E20S SDUC R/L 11	20	18,5	250	38	13	25	3,2	DC.. 11T3	**120**	**120**
E25T SDUC R/L 11	25	23,0	300	43	17	32	3,2	DC.. 11T3	**125**	**125**


Key D


Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 739 012 / 70 738 012	**110**	**112**
70 739 016 / 70 738 016	**110**	**112**
70 739 120 / 70 738 120	**113**	**304**
70 739 125 / 70 738 125	**113**	**113**

MaxiLock-S – SDQC 107.5° – Boring bar with screw clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 741 ...	Right-hand Article no. 70 740 ...
A10H SDQC R/L 07	10	9,0	100	22	7	12,5	1,2	DC.. 0702	**210**	**210**
A12K SDQC R/L 07	12	11,5	125	22	9	16,0	1,2	DC.. 0702	**212**	**212**
A16M SDQC R/L 07	16	15,0	150	29	11	20,0	1,2	DC.. 0702	**216**	**216**
A20Q SDQC R/L 07	20	18,5	180	32	13	25,0	1,2	DC.. 0702	**220**	**220**
A25R SDQC R/L 11	25	23,0	200	36	17	32,0	3,2	DC.. 11T3	**225**	**225**
A32S SDQC R/L 11	32	30,0	250	50	22	40,0	3,2	DC.. 11T3	**232**	**232**
A40T SDQC R/L 11	40	38,0	300	60	27	50,0	3,2	DC.. 11T3	**240**	**240**


Key D


Combination Key


Clamping screw

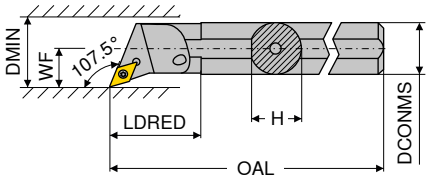

Solid Carbide Seat D

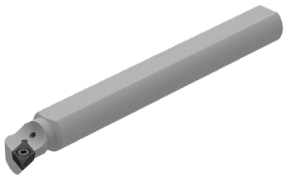

Threaded sleeve

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 740 210 / 70 741 210	**110**		**112**		
70 740 212 / 70 741 212	**110**		**112**		
70 740 216 / 70 741 216	**110**		**112**		
70 740 220 / 70 741 220	**110**		**112**		
70 740 225 / 70 741 225		**398**	**113**	**106**	**171**
70 740 232 / 70 741 232		**398**	**113**	**106**	**171**
70 740 240 / 70 741 240		**398**	**113**	**106**	**171**

MaxiLock-S – SDQC 107.5° – Boring bar with screw clamping

▲ with carbide core





Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 751 ...	Right-hand Article no. 70 750 ...
E-A12K SDQC R/L 07	12	11	125	24	9	18	1,2	DC.. 0702	**012**	**012**
E-A16M SDQC R/L 07	16	15	150	30	11	22	1,2	DC.. 0702	**016**	**016**
E-A20Q SDQC R/L 07	20	18	180	38	13	26	1,2	DC.. 0702	**020**	**020**
E-A20Q SDQC R/L 11	20	18	180	38	13	26	3,2	DC.. 11T3	**120**	**120**
E-A25R SDQC R/L 11	25	23	200	38	17	34	3,2	DC.. 11T3	**025**	**025**
E-A32S SDQC R/L 11	32	30	250	43	22	39	3,2	DC.. 11T3	**032**	**032**

Key D

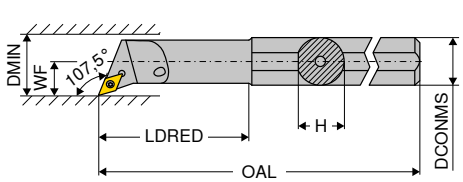
Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 750 012 / 70 751 012	**110**	**112**
70 750 016 / 70 751 016	**110**	**112**
70 750 020 / 70 751 020	**110**	**112**
70 750 120 / 70 751 120	**113**	**449**
70 750 025 / 70 751 025	**113**	**449**
70 750 032 / 70 751 032	**113**	**449**

9

MaxiLock-S – SDQC 107.5° – Boring bar with screw clamping

▲ with carbide core



Illustrations show right-hand versions

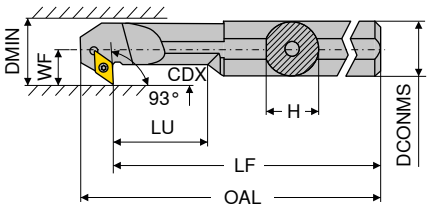
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 751 ...	Right-hand Article no. 70 750 ...
E-A0810H SDQC R/L 07	10	9	100	22	7	12,5	1,2	DC.. 0702	**210**	**210**
E-A1012K SDQC R/L 07	12	11	125	28	9	15,5	1,2	DC.. 0702	**212**	**212**
E-A1216M SDQC R/L 07	16	15	150	36	11	19,5	1,2	DC.. 0702	**216**	**216**

Key D

Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 750 210 / 70 751 210	**110**	**112**
70 750 212 / 70 751 212	**110**	**112**
70 750 216 / 70 751 216	**110**	**112**

MaxiLock-S – SDXC 93° – Boring bar with screw clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LU mm	WF mm	DMIN mm	CDX mm	torque moment Nm	Insert	Left-hand Article no. 70 733 ...	Right-hand Article no. 70 732 ...
A12K SDXC R/L 07	12	11,5	125	137,0	24	9	16	4,5	1,2	DC.. 0702	**212**	**212**
A16M SDXC R/L 07	16	15,0	150	162,0	36	11	20	4,5	1,2	DC.. 0702	**216**	**216**
A20Q SDXC R/L 11	20	18,5	180	196,5	40	13	25	6,5	3,2	DC.. 11T3	**220**	**220**
A25R SDXC R/L 11	25	23,0	200	216,8	50	17	32	9,5	3,2	DC.. 11T3	**225**	**225**

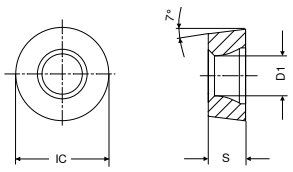
Key D

Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 733 212 / 70 732 212	**110**	**112**
70 733 216 / 70 732 216	**110**	**112**
70 733 220 / 70 732 220	**113**	**304**
70 733 225 / 70 732 225	**113**	**304**

RCMT / RCGT

Designation	S	D1	IC
	mm	mm	mm
RCGT 0602..	2,38	2,8	6
RCGT 0803..	3,18	3,4	8
RC.T 1003..	3,18	4,0	10
RCMT 1204..	4,76	4,9	12
RCMT 1606..	6,35	5,3	16
RCMT 2006..	6,35	6,5	20
RCMT 2507..	7,94	7,2	25



RCMT / RCGT

	-SMF CTCK110	-SM CTCP125	-SM CTCP135	-SM CTCP115	-SM CTCP125	-SM CTCP135	-27 H10T
	-SMF DCX3110	-ZM HCX1125	-ZM HCR1135	-ZM HCX1115	-ZM HCX1125	-ZM HCR1135	-AL CWK15
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
	F	M	M	M	M	M	M
	RCMT	RCGT	RCGT	RCMT	RCMT	RCMT	RCGT
ISO	RE mm	Article no. 70 188 ...	Article no. 76 262 ...	Article no. 76 262 ...	Article no. 76 264 ...	Article no. 76 264 ...	Article no. 76 264 ...	Article no. 70 266 ...
0602MOEN	3,0		502	702				
0602MOFN	3,0							600
0803MOEN	4,0		512	712				
0803MOFN	4,0							602
1003MOFN	5,0							604
1003MOSN	5,0					514	714	
1204MOSN	6,0				328	526	726	
1606MOEN	8,0	038						
1606MOSN	8,0				340	538	738	
2006MOSN	10,0					550	750	
2507MOSN	12,5				36200	562	762	
Steel		●	●	●	●	●	●	
Stainless steel		○	○	○	○	○	○	
Cast iron		●	○		○	○		○
Non ferrous metals								●
Heat resistant alloys				○			○	○

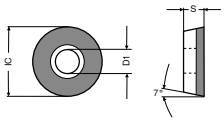
9

RCGT

		-27 CWN15	-27 AMZ
		-AL CWN15	-AL AMZ
			
		M	M
		RCGT	RCGT
ISO	RE mm	Article no. 70 266 ...	Article no. 70 266 ...
0602MOFN	3	300	
0803MOFN	4	302	502
Steel			○
Stainless steel		○	○
Cast iron			○
Non ferrous metals		●	●
Heat resistant alloys			

RCGT

Designation	S	D1	IC
	mm	mm	mm
RCGT 0602..	2,38	2,8	6
RCGT 10T3..	3,97	4,4	10



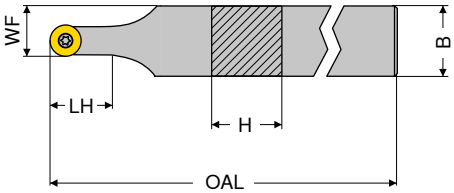
RCGT-F

RCGT

			-F-CB1 CTDPD20	-F-CB1 CTDPS30	-F-CB2 CTDPS30
			-CB1 PDC	-CB1 PDC-S	-CB2 PDC-S
					
			F	F	M
			DIAMOND RCGT	DIAMOND RCGT	DIAMOND RCGT
					NEW
ISO	RE	LE	Article no. 71 315 ...	Article no. 71 315 ...	Article no. 71 316 ...
	mm	mm			
0602M0EN	3	6			202
0602M0FN	3	6	102	202	
10T3M0EN	5	10			204
10T3M0FN	5	10	104	204	
Steel					
Stainless steel					
Cast iron					
Non ferrous metals			●	●	●
Heat resistant alloys				○	○

9

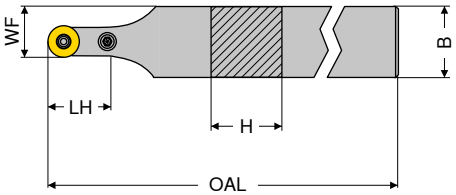
MaxiLock-S – SRDC 0° – Toolholder with screw clamping



ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral Article no. 70 708 ...
SRDC N 1212 F06	12	12	80	12,4	9,0	1,2	RC.. 0602 M0	012
SRDC N 1616 H06	16	16	100	12,4	11,0	1,2	RC.. 0602 M0	016
SRDC N 2020 K06	20	20	125	12,4	13,0	1,2	RC.. 0602 M0	020
SRDC N 2525 M06	25	25	150	12,4	15,5	1,2	RC.. 0602 M0	025
SRDC N 1616 H08	16	16	100	16,4	12,0	1,8	RC.. 0803 M0	116
SRDC N 2020 K08	20	20	125	16,4	14,0	1,8	RC.. 0803 M0	120
SRDC N 2525 M08	25	25	150	16,4	16,5	1,8	RC.. 0803 M0	125
SRDC N 1616 H10	16	16	100	20,3	13,0	3,2	RC.. 1003 M0	216
SRDC N 2020 K10	20	20	125	20,3	15,0	3,2	RC.. 1003 M0	220
SRDC N 2525 M10	25	25	150	20,3	17,5	3,2	RC.. 1003 M0	225

Spare parts for Article no.	 Key D Article no. 80 950 ...	 Combination Key Article no. 70 950 ...	 Clamping screw Article no. 70 950 ...	 Solid carbide support R Article no. 70 950 ...	 Threaded sleeve Article no. 70 950 ...
70 708 012	110		112		
70 708 016	110		112		
70 708 020	110		112		
70 708 025	110		112		
70 708 116	110		115		
70 708 120	110		115		
70 708 125	110		115		
70 708 216		398	113	117	171
70 708 220		398	113	117	171
70 708 225		398	113	117	171

MaxiLock-N – PRDC 0° – Toolholder with lever clamping



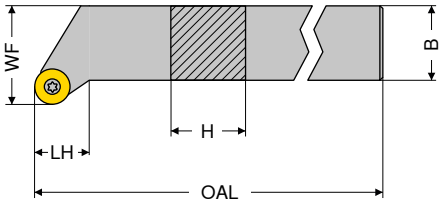
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral Article no. 70 544 ...
PRDC N 2525 M12	25	25	150	24	18,5	3	RCMT 1204	**025**
PRDC N 3225 P12	32	25	170	24	18,5	3	RCMT 1204	**032**
PRDC N 3225 P16	32	25	170	28	20,5	4	RCMT 1606	**132**
PRDC N 3225 P20	32	32	170	32	26,0	5	RCMT 2006	**23200**
PRDC N 4040 S25	40	40	250	42	32,5	6	RCMT 2507	**04000**

Tool holders with HSK-T interface can be found in → **Chapter 16.**

Spare parts for Article no.		 Key I Article no. 70 950 ...	 Shim Article no. 70 950 ...	Assembly pin Article no. 70 950 ...	 Lever Article no. 70 950 ...	 Clamping screw Article no. 70 950 ...	 Solid carbide support R Article no. 70 950 ...
70 544 025	SW2,5	**175**	**197**	**191**	**178**	**208**	**215**
70 544 032	SW2,5	**175**	**197**	**191**	**178**	**208**	**215**
70 544 132	SW3	**176**	**196**	**192**	**387**	**390**	**384**
70 544 23200	SW2	**177**	**391**	**394**	**28100**	**28500**	**27400**
70 544 04000	SW4	**396**	**392**	**395**	**28400**	**28600**	**27500**

9

MaxiLock-S – SRGC – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 713 ...	Right-hand Article no. 70 712 ...
SRGC R/L 1212 F06	12	12	80	10,0	16	1,2	RC.. 0602 M0	**012**	**012**
SRGC R 1616 H06	16	16	100	10,0	20	1,2	RC.. 0602 M0		**016**
SRGC R/L 2020 K06	20	20	125	11,5	25	1,2	RC.. 0602 M0	**020**	**020**
SRGC R/L 2525 M06	25	25	150	15,0	32	1,2	RC.. 0602 M0	**025**	**025**
SRGC R/L 1616 H08	16	16	100	11,0	20	1,8	RC.. 0803 M0	**116**	**116**
SRGC R 2020 K08	20	20	125	13,0	25	1,8	RC.. 0803 M0		**120**
SRGC R/L 2525 M08	25	25	150	16,0	32	1,8	RC.. 0803 M0	**125**	**125**
SRGC R/L 1616 H10	16	16	100	12,0	20	3,2	RC.. 1003 M0	**216**	**216**
SRGC R/L 2020 K10	20	20	125	13,5	25	3,2	RC.. 1003 M0	**220**	**220**
SRGC R/L 2525 M10	25	25	150	17,0	32	3,2	RC.. 1003 M0	**225**	**225**

Clamping screw

Solid carbide support R

Threaded sleeve

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...		Article no. 70 950 ...
70 712 012 / 70 713 012	M2,5x6	**112**			
70 712 016	M2,5x6	**112**			
70 712 020 / 70 713 020	M2,5x6	**112**			
70 712 025 / 70 713 025	M2,5x6	**112**			
70 712 116 / 70 713 116	M3x7,3	**115**			
70 712 120	M3x7,3	**115**			
70 712 125 / 70 713 125	M3x7,3	**115**			
70 712 216 / 70 713 216	M3,5x11	**113**	**117**	M3,5	**171**
70 712 220 / 70 713 220	M3,5x11	**113**	**117**	M3,5	**171**
70 712 225 / 70 713 225	M3,5x11	**113**	**117**	M3,5	**171**

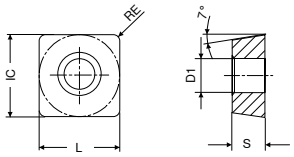
Key D

Combination Key

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 712 012 / 70 713 012	T08	**110**		
70 712 016	T08	**110**		
70 712 020 / 70 713 020	T08	**110**		
70 712 025 / 70 713 025	T08	**110**		
70 712 116 / 70 713 116	T08	**110**		
70 712 120	T08	**110**		
70 712 125 / 70 713 125	T08	**110**		
70 712 216 / 70 713 216			T15/SW	**398**
70 712 220 / 70 713 220			T15/SW	**398**
70 712 225 / 70 713 225			T15/SW	**398**

SCGT / SCMT / SCMX

Designation	L	S	D1	IC
	mm	mm	mm	mm
SC.T 09T3..	9,52	3,97	4,4	9,52
SC.. 1204..	12,70	4,76	5,5	12,70



SCGT / SCMT

	-CF05 CTEP110	-SF TCM10	-SF TCM407	-SF CTCP125	-CF55 CTEP110	-SMF CTCP115	-SMF CTCP135
	-PF14 DCC1110	-ZF CWC10	-ZF CWC407	-ZF HCX1125	-PF15 DCC1110	-SMF HCX1115	-SMF HCR1135
	DRAGONSKIN			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	F CERMET SCGT	F CERMET SCGT	F CERMET SCGT	F SCMT	F CERMET SCMT	F SCMT	F SCMT
ISO / RE mm	Article no. 76 261 ...	Article no. 70 271 ...	Article no. 70 271 ...	Article no. 76 269 ...	Article no. 76 260 ...	Article no. 76 267 ...	Article no. 76 267 ...
09T304EN 0,4	004	902		504	004	304	
09T308EN 0,8	006	904	852	506	006	306	
120408EN 0,8				518			718
Steel	●	●	●	●	●	●	●
Stainless steel	○			○	○	○	○
Cast iron	○	○	○	○	○	○	
Non ferrous metals							
Heat resistant alloys							○

SCMT / SCMX

	-SM CTCK110	-SM CTCK120	-SM CTCP115	-SM CTCP125	-SM CTCP135	CTCP135	-SM CTC2135
	-ZM DCX3110	-ZM HCF3120	-ZM HCX1115	-ZM HCX1125	-ZM HCR1135	HCR1135	-ZM CWN2135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
	M SCMT	M SCMT	M SCMT	M SCMT	M SCMT	M SCMX	M SCMT
ISO / RE mm	Article no. 70 268 ...	Article no. 70 268 ...	Article no. 76 268 ...	Article no. 76 268 ...	Article no. 76 268 ...	Article no. 76 182 ...	Article no. 70 268 ...
09T304EN 0,4	004	504	304	504	704		
09T308EN 0,8	006	506	306	506	706		442
120408EN 0,8	018	518	318	518	718	718	444
120412EN 1,2	020	520		520			
Steel	●	●	●	●	●	●	○
Stainless steel	○		○	○	○	○	●
Cast iron	●	●	○	○			
Non ferrous metals							
Heat resistant alloys					○	○	●

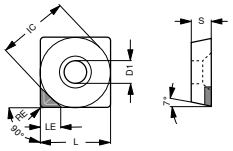
9

SCMT / SCGT

		-M55 CTPM125	-25P H210T	-25P AMZ	-27 H10T	-27 CWN15
		-PF26 HCN2125	-25P CWK20	-25P AMZ	-AL CWK15	-AL CWN15
		DRAGONSKIN				
						
		F	F	F	M	M
		SCMT	SCGT	SCGT	SCGT	SCGT
ISO	RE mm	Article no. 75 216 ...	Article no. 70 283 ...	Article no. 70 283 ...	Article no. 70 270 ...	Article no. 70 270 ...
09T304FN	0,4				600	300
09T308EN	0,8	206				
09T308FN	0,8				602	302
120408EN	0,8	218				
120408FN	0,8		634	554	604	304
Steel		○		○		
Stainless steel		●		○		○
Cast iron			○	○	○	
Non ferrous metals			●	●	●	●
Heat resistant alloys			○		○	

SCGT

Designation	L	S	D1	IC
	mm	mm	mm	mm
SCGT 09T3..	9,52	3,97	4,4	9,52



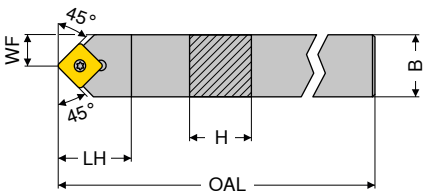
SCGT-A

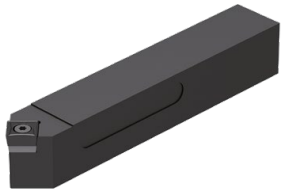
SCGT

ISO	RE	LE	-A-CB1 CTDPD20	-A-CB2 CTDPS30	-A-CB3 CTDPU20
			-CB1 PDC	-CB2 PDC-S	-CB3 PDC-S
					
			F DIAMOND SCGT	M DIAMOND SCGT	R DIAMOND SCGT
				NEW	
	mm	mm	Article no. 71 320 ...	Article no. 71 321 ...	Article no. 71 322 ...
09T304EN	0,4	4,4		214	214
09T304FN	0,4	4,4	114		
09T308EN	0,8	4,3		218	218
09T308FN	0,8	4,3	118		
Steel					
Stainless steel					
Cast iron					
Non ferrous metals			●	●	●
Heat resistant alloys				○	○

9

MaxiLock-S – SSDC 45° – Toolholder with screw clamping





ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Neutral Article no. 70 656 ...
	mm	mm	mm	mm	mm	Nm		
SSDC N 1212 F09	12	12	80	16	6,0	3,2	SC.. 09T3..	012
SSDC N 1616 H09	16	16	100	20	8,0	3,2	SC.. 09T3..	016
SSDC N 2020 K09	20	20	125	20	10,0	3,2	SC.. 09T3..	020
SSDC N 1616 H12	16	16	100	25	8,0	5	SC.. 1204..	116
SSDC N 2020 K12	20	20	125	25	10,0	5	SC.. 1204..	120
SSDC N 2525 M12	25	25	150	25	12,5	5	SC.. 1204..	125


Key D


Combination Key

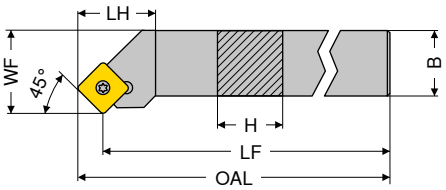

Clamping screw


Solid Carbide support S

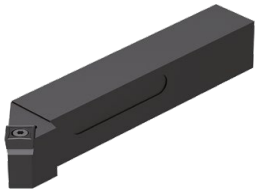

Threaded sleeve

Spare parts	Key D	Combination Key	Clamping screw	Solid Carbide support S	Threaded sleeve
for Article no.	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 656 012	113		113		
70 656 016		398	113	167	171
70 656 020		398	113	167	171
70 656 116		398	114	168	170
70 656 120		398	114	168	170
70 656 125		398	114	168	170

MaxiLock-S – SSSC 45° – Toolholder with screw clamping



Illustrations show right-hand versions



ISO designation	H	B	LF	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 661 ...	Right-hand Article no. 70 660 ...
	mm	mm	mm	mm	mm	mm	Nm			
SSSC R/L 1212 F09	12	12	80	86,40	18	16	3,2	SC.. 09T3..	012	012
SSSC R/L 1616 H09	16	16	100	106,40	20	20	3,2	SC.. 09T3..	016	016
SSSC R/L 2020 K09	20	20	125	131,40	20	25	3,2	SC.. 09T3..	020	020
SSSC R/L 1616 H12	16	16	100	108,63	25	20	5	SC.. 1204..	116	116
SSSC R/L 2020 K12	20	20	125	133,63	25	25	5	SC.. 1204..	120	120
SSSC R/L 2525 M12	25	25	150	158,63	25	32	5	SC.. 1204..	125	125
SSSC R 3225 P12	32	25	170	178,63	25	32	5	SC.. 1204..		132


Key D


Combination Key

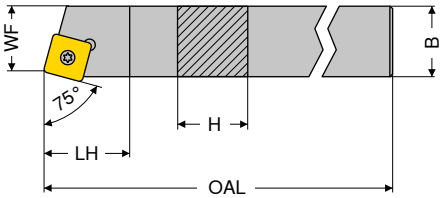

Clamping screw


Solid Carbide support S


Threaded sleeve

Spare parts	Key D	Combination Key	Clamping screw	Solid Carbide support S	Threaded sleeve
for Article no.	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
70 661 012 / 70 660 012	113		113		
70 661 016 / 70 660 016		398	113	167	171
70 661 020 / 70 660 020		398	113	167	171
70 661 116 / 70 660 116		398	114	168	170
70 661 120 / 70 660 120		398	114	168	170
70 661 125 / 70 660 125		398	114	168	170
70 660 132		398	114	168	170

MaxiLock-S – SSBC 75° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 665 ...	Right-hand Article no. 70 664 ...
	mm	mm	mm	mm	mm	Nm			
SSBC R/L 1616 H09	16	16	100	20	13	3,2	SC.. 09T3..	**016**	**016**
SSBC R 2020 K09	20	20	125	20	17	3,2	SC.. 09T3..		**020**
SSBC R/L 2020 K12	20	20	125	20	17	5	SC.. 1204..	**120**	**120**
SSBC R/L 2525 M12	25	25	150	20	22	5	SC.. 1204..	**125**	**125**


Key D


Combination Key


Clamping screw

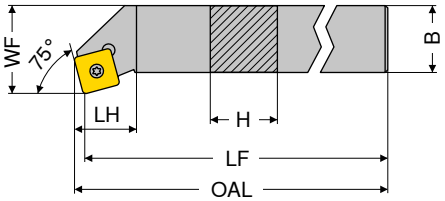

Solid Carbide support S


Threaded sleeve

Spare parts	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide support S Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
for Article no.					
70 665 016 / 70 664 016	**113**	**398**	**113**	**167**	**171**
70 664 020	**113**	**398**	**113**	**167**	**171**
70 665 120 / 70 664 120	**113**	**398**	**114**	**168**	**170**
70 665 125 / 70 664 125	**113**	**398**	**114**	**168**	**170**

9

MaxiLock-S – SSKC 75° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H	B	LF	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 669 ...	Right-hand Article no. 70 668 ...
	mm	mm	mm	mm	mm	mm	Nm			
SSKC R/L 1616 H09	16	16	100	102,3	22	20	3,2	SC.. 09T3..	**016**	**016**
SSKC R/L 2020 K09	20	20	125	127,3	22	25	3,2	SC.. 09T3..	**020**	**020**
SSKC R 2020 K12	20	20	125	127,3	23	25	5	SC.. 1204..		**120**
SSKC R 2525 M12	25	25	150	153,3	23	32	5	SC.. 1204..		**125**


Key D


Combination Key

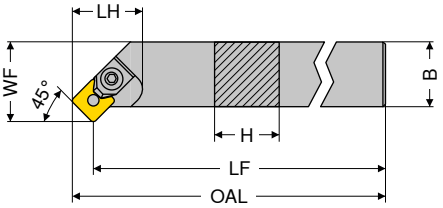

Clamping screw


Solid Carbide support S


Threaded sleeve

Spare parts	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide support S Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
for Article no.					
70 668 016 / 70 669 016	**113**	**398**	**113**	**167**	**171**
70 668 020 / 70 669 020	**113**	**398**	**113**	**167**	**171**
70 668 120	**113**	**398**	**114**	**168**	**170**
70 668 125	**113**	**398**	**114**	**168**	**170**

MaxiLock-P – MSSC 45° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	LF	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 589 ...	Right-hand Article no. 70 588 ...
	mm	mm	mm	mm	mm	mm	Nm			
MSSC R/L 2020 K12	20	20	125	133,65	32	25	5	SCMX 1204	**020**	**020**
MSSC R/L 2525 M12	25	25	150	158,65	28	32	5	SCMX 1204	**025**	**025**
MSSC R/L 3225 P12	32	25	170	178,65	28	32	5	SCMX 1204	**032**	**032**


Key D


Dowel pin

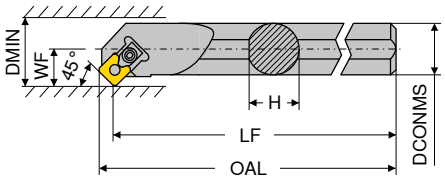

Clamping Element


Wedge


Solid Carbide support S

Spare parts		Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.						
70 588 020 / 70 589 020	T20	**114**	**153**	**159**	**150**	**140**
70 588 025 / 70 589 025	T20	**114**	**153**	**159**	**150**	**140**
70 588 032 / 70 589 032	T20	**114**	**153**	**159**	**150**	**140**

MaxiLock-P – MSSC 45° – Boring bar with top clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 625 ...	Right-hand Article no. 70 624 ...
S32S MSSC R/L 12	32	30	250	258	22	40	5	SCMX 1204	**032**	**032**


Key D


Dowel pin


Clamping Element

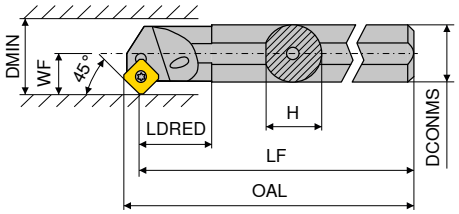

Wedge


Solid Carbide support S

Spare parts		Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.						
70 625 032 / 70 624 032	T20	**114**	**155**	**163**	**150**	**147**

MaxiLock-S – SSSC 45° – Boring bar with screw clamping

- ▲ A... = with thro' coolant
- ▲ S... = without thro' coolant



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 721 ...	Right-hand Article no. 70 720 ...
S16R SSSC R 09	16	15,00	200	206,0	13,97	11	20	3,2	SC.. 09T3..		**016**
A16M SSSC R/L 09	16	15,25	150	156,0	29,00	11	20	3,2	SC.. 09T3..	**216**	**216**
A20Q SSSC R/L 09	20	19,00	180	186,0	32,00	13	25	3,2	SC.. 09T3..	**220**	**220**
A25R SSSC R/L 09	25	24,50	200	206,0	36,00	17	32	3,2	SC.. 09T3..	**225**	**225**
A32S SSSC R/L 12	32	31,00	250	258,3	50,00	22	40	5	SC.. 1204..	**232**	**232**
A40T SSSC R/L 12	40	39,00	300	308,1	60,00	27	50	5	SC.. 1204..	**240**	**240**


Key D


Combination Key

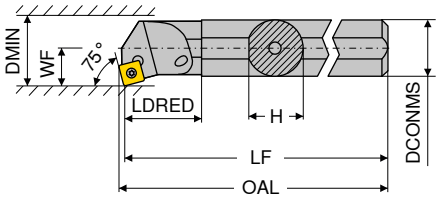

Clamping screw


Solid Carbide support S


Threaded sleeve

Spare parts		Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.						
70 720 016		**113**		**110**		
70 720 216 / 70 721 216		**113**		**110**		
70 720 220 / 70 721 220		**113**		**304**		
70 720 225 / 70 721 225		**113**		**304**		
70 720 232 / 70 721 232			**398**	**114**	**168**	**170**
70 720 240 / 70 721 240			**398**	**114**	**168**	**170**

MaxiLock-S – SSKC 75° – Boring bar with screw clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 725 ...	Right-hand Article no. 70 724 ...
A16M SSKC R/L 09	16	15,0	150	152,4	29	11	20	3,2	SC.. 09T3..	**216**	**216**
A20Q SSKC R/L 09	20	18,5	180	182,4	32	13	25	3,2	SC.. 09T3..	**220**	**220**
A25R SSKC R/L 09	25	23,0	200	202,4	36	17	32	3,2	SC.. 09T3..	**225**	**225**

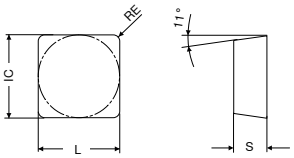
Key D

Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 724 216 / 70 725 216	T15	**113**	M3,5x7,2	**110**
70 724 220 / 70 725 220	T15	**113**	M3,5x8,6	**304**
70 724 225 / 70 725 225	T15	**113**	M3,5x8,6	**304**

SPMR / SPUN

Designation	L	S	IC
	mm	mm	mm
SPUN 0903..	9,52	3,18	9,52
SP.. 1203..	12,70	3,18	12,70



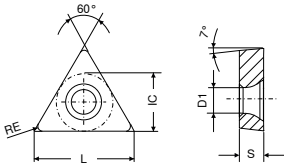
SPMR / SPUN

ISO	RE	M SPMR Article no. 76 208 ...	M SPUN Article no. 76 206 ...
	mm		
090304EN	0,4	704	
120304EN	0,4	716	
120308EN	0,8	718	718
120308ER	0,8	720	
Steel		●	●
Stainless steel		○	○
Cast iron			
Non ferrous metals			
Heat resistant alloys		○	○

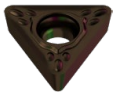
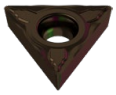
9

TCGT / TCMT

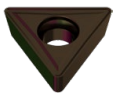
Designation	L	S	D1	IC
	mm	mm	mm	mm
TCMT 0902..	9,6	2,38	2,50	5,56
TC.T 1102..	11,0	2,38	2,80	6,35
TC.T 16T3..	16,5	3,97	4,40	9,52
TCMT 2204..	22,0	4,76	5,16	12,70



TCGT / TCMT

	-CF05 CTEP110	-SF TCM10	-SF CTCP125	-CF55 CTEP110	-SMF TCM10	-SMF CTCP115
	-PF14 DCC1110	-ZF CWC10	-ZF HCX1125	-PF15 DCC1110	-SMF CWC10	-SMF HCX1115
	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN		DRAGONSKIN
						
	F	F	F	F	F	F
	CERMET TCGT	CERMET TCGT	TCMT	CERMET TCMT	CERMET TCMT	TCMT
ISO / RE mm	Article no. 76 272 ...	Article no. 70 273 ...	Article no. 76 275 ...	Article no. 76 266 ...	Article no. 70 284 ...	Article no. 76 284 ...
110202EN 0,2	**014**	**900**				
110204EN 0,4	**016**	**902**	**516**	**016**	**902**	
110208EN 0,8	**018**		**518**			**318**
16T304EN 0,4	**028**	**906**	**528**			**328**
16T308EN 0,8			**530**	**030**		**330**
Steel	●	●	●	●	●	●
Stainless steel	○		○	○		○
Cast iron	○	○	○	○	○	○
Non ferrous metals						
Heat resistant alloys						

TCMT / TCGT

	-SMF CTCP135	-SM CTCP135	-SM CTCK110	-SM CTCK120	-SM CTCP115	-SM CTCP125	-SM CTCP135
	-SMF HCR1135	-ZM HCR1135	-ZM DCX3110	-ZM HCF3120	-ZM HCX1115	-ZM HCX1125	-ZM HCR1135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
							
	F TCMT	M TCGT	M TCMT	M TCMT	M TCMT	M TCMT	M TCMT
ISO / RE mm	Article no. 76 284 ...	Article no. 76 270 ...	Article no. 70 274 ...	Article no. 70 274 ...	Article no. 76 274 ...	Article no. 76 274 ...	Article no. 76 274 ...
090204EN 0,4						504	704
110202EN 0,2		714					
110204EN 0,4			016	516	316	516	716
110208EN 0,8	718		018	518	318		718
16T304EN 0,4			028	528	328	528	728
16T308EN 0,8			030	530	330	530	730
16T312EN 1,2			032	532			
220408EN 0,8						542	742
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○		○	○	○
Cast iron			●	●	○	○	
Non ferrous metals							
Heat resistant alloys	○	○					○

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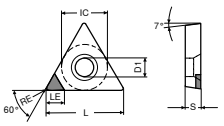
TCMT / TCGT

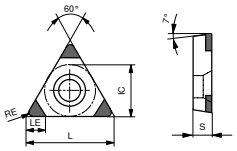
	-F43 CTC2135	-M25 CTPM125	-SM CTC2135	-M55 CTPM125	-27 H10T	-27 CWN15
	-F43 CWN2135	-PF23 HCN2125	-ZM CWN2135	-PF26 HCN2125	-AL CWK15	-AL CWN15
		DRAGONSKIN		DRAGONSKIN		
						
	F TCMT	F TCMT	M TCMT	F TCMT	M TCGT	M TCGT
ISO / RE mm	Article no. 70 187 ...	Article no. 75 217 ...	Article no. 70 274 ...	Article no. 75 218 ...	Article no. 70 276 ...	Article no. 70 276 ...
090204EN 0,4			398	204		
110202FN 0,2					600	300
110204EN 0,4	400	216	402	216		
110204FN 0,4					602	302
16T302FN 0,2					604	304
16T304EN 0,4	402	228				
16T304FN 0,4					606	306
16T308EN 0,8	404	230	396	230		
16T308FN 0,8					608	308
Steel	○	○	○	○		
Stainless steel	●	●	●	●		○
Cast iron					○	
Non ferrous metals					●	●
Heat resistant alloys	●		●		○	

TCGW

Designation	L	S	D1	IC
	mm	mm	mm	mm
TCGW 0902..	9,6	2,38	2,5	5,56
TCGW 1102..	11,0	2,38	2,8	6,35
TCGW 16T3..	16,5	3,97	4,4	9,52

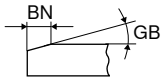


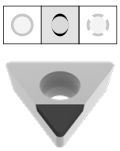
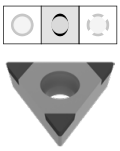
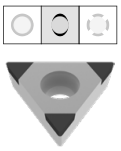
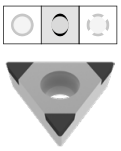
TCGW-A



TCGW-C

TCGW



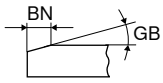
	-A CTBS10U	-C CTBS20C	-C CTBH15U	-C CTBH15U
	PBC10	-3MC PBC15-S		
				
	F	F	F	F
	CBN TCGW	CBN TCGW	CBN TCGW	CBN TCGW
			NEW	NEW
ISO	Article no. 71 140 ...	Article no. 71 164 ...	Article no. 71 028 ...	Article no. 71 029 ...

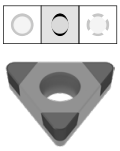
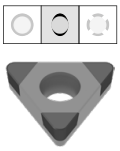
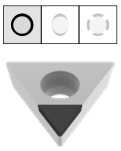
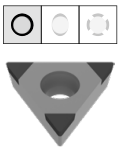
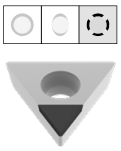
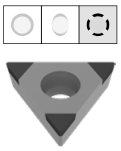
ISO	RE mm	GB °	BN mm	LE mm	-A CTBS10U	-C CTBS20C	-C CTBH15U	-C CTBH15U
090202SN	0,2	10	0,09	2,6		120		
090202SN	0,2	15	0,11	2,6		130		30214
090202TN	0,2	20	0,14	3,8	300			
090202TN	0,2	20	0,15	2,6		140		
090202SN	0,2	20	0,16	2,6		150		
090202EN	0,2			2,6				00200
090204SN	0,4	10	0,09	2,2		121		
090204SN	0,4	15	0,11	2,2		131	30414	
090204TN	0,4	20	0,14	3,5	302			
090204SN	0,4	20	0,16	2,2		151		
090204TN	0,4	25	0,17	2,2		161		
090204FN	0,4			3,5	202			
090204EN	0,4			2,2		111	00400	
090208SN	0,8	10	0,09	1,8		122		
090208SN	0,8	15	0,11	1,8		132	30614	
090208TN	0,8	20	0,15	1,8		142		
090208TN	0,8	25	0,17	1,8		162		
090208EN	0,8			1,8			00600	
110202SN	0,2	10	0,09	2,9		123		
110202SN	0,2	15	0,11	2,9		133		
110202TN	0,2	20	0,14	3,8	306			
110202TN	0,2	20	0,15	2,9		143		
110202SN	0,2	20	0,16	2,9		153		
110202FN	0,2			3,8	206			
110204SN	0,4	10	0,09	2,5		124		
110204SN	0,4	15	0,11	2,5		134		
110204TN	0,4	20	0,14	3,5	308			
110204TN	0,4	20	0,15	2,5		144		
110204SN	0,4	20	0,16	2,5		154		
110204TN	0,4	25	0,17	2,5		164		
110204FN	0,4			3,5	208			
110204EN	0,4			2,5		114		
110208SN	0,8	10	0,09	2,1		125		
110208SN	0,8	15	0,11	2,1		135		
110208TN	0,8	20	0,14	3,0	310			
110208TN	0,8	20	0,15	2,1		145		
110208TN	0,8	25	0,17	2,1		165		
110208FN	0,8			3,0	210			
16T304SN	0,4	10	0,09	3,2		126		
16T304SN	0,4	15	0,11	3,2		136		
16T308SN	0,8	10	0,09	2,7		127		
16T308SN	0,8	15	0,11	2,7		137		
16T308SN	0,8	20	0,16	2,7		157		
16T308TN	0,8	25	0,17	2,7		167		
16T308EN	0,8			2,7		117		

	-A CTBS10U	-C CTBS20C	-C CTBH15U	-C CTBH15U
Cast iron	●	●		
Sintered steels	●	●		
Heat resistant alloys	●	●		
hardened < 45 HRC			●	●
hardened 46–55 HRC			●	●
hardened 56–60 HRC			●	●
hardened 61–65 HRC				

→ v_c Page 160–167

TCGW

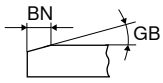


	-C CTBH15C	-C CTBH15C	-A CTBH21U	-C CTBH20C	-A CTBH40U	-C CTBH40C
			PBC25	-3MC PBC25-S	PBC40	-3MC PBC40-S
						
	F	F	F	F	F	F
	CBN TCGW	CBN TCGW	CBN TCGW	CBN TCGW	CBN TCGW	CBN TCGW
	NEW	NEW				
ISO	Article no. 71 027 ...	Article no. 71 034 ...	Article no. 71 140 ...	Article no. 71 164 ...	Article no. 71 140 ...	Article no. 71 164 ...
RE mm / GB ° / BN mm / LE mm						
090202FN 0,2 / / / 2,6				210		
090202SN 0,2 / 15 / 0,11 / 2,6		30214				
090202SN 0,2 / 20 / 0,09 / 2,6				250		330
090202TN 0,2 / 20 / 0,09 / 2,6						320
090202TN 0,2 / 20 / 0,14 / 3,8			500			
090202TN 0,2 / 25 / 0,11 / 2,6						340
090202TN 0,2 / 25 / 0,12 / 3,8					900	
090202EN 0,2 / / / 2,6		00200		220		
090202FN 0,2 / / / 3,8			400			
090204SN 0,4 / 15 / 0,11 / 2,2	30414			241		
090204TN 0,4 / 20 / 0,09 / 2,2						321
090204TN 0,4 / 20 / 0,14 / 3,5			502			
090204SN 0,4 / 25 / 0,09 / 2,2						351
090204TN 0,4 / 25 / 0,11 / 2,2						341
090204TN 0,4 / 25 / 0,12 / 3,5					902	
090204EN 0,4 / / / 2,2	00400			221		
090204FN 0,4 / / / 3,5			402		802	
090204TN 0,4 / 25 / 0,14 / 2,2				261		
090204SN 0,4 / 25 / 0,15 / 2,2				271		
090204TN 0,4 / 30 / 0,14 / 2,2						361
090204SN 0,4 / 30 / 0,16 / 2,2						371
090208SN 0,8 / 10 / 0,09 / 1,8				232		
090208SN 0,8 / 15 / 0,11 / 1,8	30614			242		
090208SN 0,8 / 20 / 0,09 / 1,8				252		
090208TN 0,8 / 20 / 0,14 / 1,8						362
090208TN 0,8 / 20 / 0,14 / 3,0			504			
090208SN 0,8 / 25 / 0,09 / 1,8						352
090208TN 0,8 / 25 / 0,11 / 1,8						342
090208TN 0,8 / 25 / 0,12 / 3,0					904	
090208EN 0,8 / / / 1,8	00600					312
110202SN 0,2 / 15 / 0,11 / 2,9		31414				
110202SN 0,2 / 20 / 0,09 / 2,9				253		333
110202TN 0,2 / 20 / 0,09 / 2,9						323
110202TN 0,2 / 20 / 0,14 / 3,8			506			
110202TN 0,2 / 25 / 0,11 / 2,9						343
110202TN 0,2 / 25 / 0,12 / 3,8					906	
110202EN 0,2 / / / 2,9				223		
110202FN 0,2 / / / 2,9				213		
110202FN 0,2 / / / 3,8			406		806	
110202SN 0,2 / 25 / 0,13 / 2,9		31429				
110202TN 0,2 / 30 / 0,14 / 2,9						363
110204FN 0,4 / / / 2,5				214		
110204SN 0,4 / 10 / 0,09 / 2,5				234		
110204EN 0,4 / / / 2,5				224		

Cast iron						
Sintered steels						
Heat resistant alloys						
hardened < 45 HRC	●	●				
hardened 46–55 HRC	●	●	●	●	●	●
hardened 56–60 HRC	●	●	●	●	●	●
hardened 61–65 HRC					●	●

9

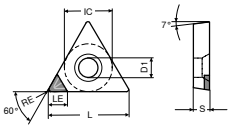
TCGW



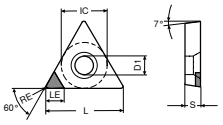
	-C CTBH15C	-C CTBH15C	-A CTBH21U	-C CTBH20C	-A CTBH40U	-C CTBH40C
			PBC25	-3MC PBC25-S	PBC40	-3MC PBC40-S
						
	F	F	F	F	F	F
	CBN TCGW	CBN TCGW	CBN TCGW	CBN TCGW	CBN TCGW	CBN TCGW
	NEW	NEW				
ISO	Article no. 71 027 ...	Article no. 71 034 ...	Article no. 71 140 ...	Article no. 71 164 ...	Article no. 71 140 ...	Article no. 71 164 ...
RE mm / GB ° / BN mm / LE mm						
110204SN 0,4 15 0,11 2,5		31614		244		
110204TN 0,4 20 0,09 2,5						324
110204TN 0,4 20 0,14 3,5			508			
110204SN 0,4 25 0,09 2,5						354
110204TN 0,4 25 0,11 2,5						344
110204TN 0,4 25 0,12 3,5					908	
110204SN 0,4 25 0,13 2,5		31629				
110204TN 0,4 25 0,14 2,5				264		
110204FN 0,4 3,5					808	
110204SN 0,4 25 0,15 2,5				274		
110204TN 0,4 30 0,14 2,5						364
110204SN 0,4 30 0,16 2,5						374
110208SN 0,8 10 0,09 2,1				235		
110208SN 0,8 15 0,11 2,1	31814			245		
110208SN 0,8 20 0,09 2,1				255		
110208TN 0,8 20 0,09 2,1						325
110208TN 0,8 20 0,14 3,0			510			
110208SN 0,8 25 0,09 2,1						355
110208TN 0,8 25 0,12 3,0					910	
110208EN 0,8 2,1						315
110208SN 0,8 25 0,13 2,1	31829					
110208TN 0,8 25 0,14 2,1				265		
110208TN 0,8 30 0,14 2,1						365
110208SN 0,8 30 0,16 2,1						375
110208FN 0,8 3,0			410			
16T304SN 0,4 20 0,09 3,2				256		336
16T304SN 0,4 25 0,09 3,2						356
16T304TN 0,4 25 0,11 3,2						346
16T304SN 0,4 25 0,15 3,2				276		
16T304TN 0,4 30 0,14 3,2						366
16T304SN 0,4 35 0,17 3,2						386
16T304FN 0,4 3,2				216		
16T304EN 0,4 3,2				226		
16T308SN 0,8 15 0,11 2,7				247		
16T308SN 0,8 20 0,09 2,7						337
16T308SN 0,8 25 0,09 2,7						357
16T308TN 0,8 25 0,11 2,7						347
16T308TN 0,8 25 0,14 2,7				267		
16T308SN 0,8 25 0,15 2,7				277		
16T308TN 0,8 30 0,14 2,7						367
16T308SN 0,8 30 0,16 2,7						377
16T308SN 0,8 30 0,18 2,7				287		
16T308EN 0,8 2,7				227		317
Cast iron						
Sintered steels						
Heat resistant alloys						
hardened < 45 HRC	●	●				
hardened 46–55 HRC	●	●	●	●	●	●
hardened 56–60 HRC	●	●	●	●	●	●
hardened 61–65 HRC					●	●

TCGW / TCGT

Designation	L	S	D1	IC
	mm	mm	mm	mm
TCG. 0902..	9,6	2,38	2,5	5,56
TCG. 1102..	11,0	2,38	2,8	6,35
TCG. 16T3..	16,5	3,97	4,4	9,52



TCGT-A-CB



TCGW-A

TCGW / TCGT

ISO	RE	LE	-A CTDPD20	-A-CB1 CTDPD20	-A-CB2 CTDPS30	-A-CB3 CTDPU20
			PDC	-CB1 PDC	-CB2 PDC-S	-CB3 PDC-S
			F DIAMOND TCGW	F DIAMOND TCGT	M DIAMOND TCGT	R DIAMOND TCGT
	mm	mm	Article no. 71 140 ...	Article no. 71 325 ...	Article no. 71 326 ...	Article no. 71 327 ...
090202FN	0,2	3,7	100	112		
090202EN	0,2	3,7			212	
090204FN	0,4	3,4	102	114		
090204EN	0,4	3,4			214	
090208FN	0,8	3,0	104			
110202FN	0,2	3,7	106	122		
110202EN	0,2	3,7			222	
110204FN	0,4	3,4	108	124		
110204EN	0,4	3,4			224	224
110208FN	0,8	3,0	110			
16T304FN	0,4	4,6	112	134		
16T304EN	0,4	4,6			234	
16T308FN	0,8	4,2	114			
16T308EN	0,8	4,2				238
Steel						
Stainless steel						
Cast iron						
Non ferrous metals			●	●	●	●
Heat resistant alloys					○	○

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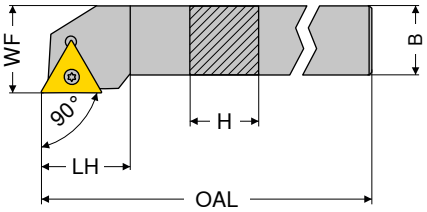
MaxiLock-S – STGC 90° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 677 ...	Right-hand Article no. 70 676 ...
	mm	mm	mm	mm	mm	Nm			
STGC R/L 1010 E09	10	10	70	12	12	1	TC.. 0902	**010**	**010**
STGC R/L 1212 F11	12	12	80	15	16	1,2	TC.. 1102	**012**	**012**
STGC R/L 1616 H16	16	16	100	22	20	3,2	TC.. 16T3	**016**	**016**
STGC R/L 2020 K16	20	20	125	22	25	3,2	TC.. 16T3	**020**	**020**
STGC R/L 2525 M16	25	25	150	22	32	3,2	TC.. 16T3	**025**	**025**


Key D


Combination Key


Clamping screw

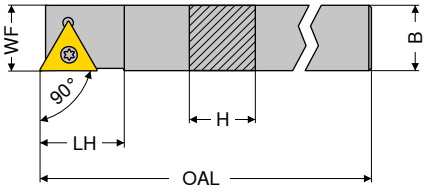

Solid Carbide Seat T


Threaded sleeve

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat T Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 676 010 / 70 677 010	**109**		**111**		
70 676 012 / 70 677 012	**110**		**112**		
70 676 016 / 70 677 016		**398**	**113**	**169**	**171**
70 676 020 / 70 677 020		**398**	**113**	**169**	**171**
70 676 025 / 70 677 025		**398**	**113**	**169**	**171**

MaxiLock-S – STAC 90° – Toolholder with screw clamping

▲ for sliding head lathes



Illustrations show right-hand versions

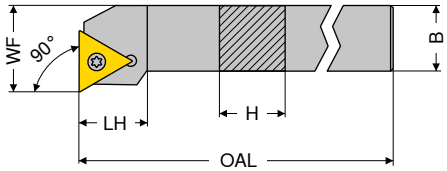
ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 769 ...	Right-hand Article no. 70 768 ...
	mm	mm	mm	mm	mm	Nm			
STAC R/L 1010 K09	10	10	125	12	10	1	TC.. 0902	**010**	**010**
STAC R/L 1212 K11	12	12	125	15	12	1,2	TC.. 1102	**012**	**012**
STAC R 1414 K11	14	14	125	15	14	1,2	TC.. 1102		**014**


Key D


Clamping screw

Spare parts for Article no.		Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...
70 769 010 / 70 768 010	T07	**109**	M2,2x5	**111**
70 769 012 / 70 768 012	T08	**110**	M2,5x6	**112**
70 768 014	T08	**110**	M2,5x6	**112**

MaxiLock-S – STFC 90° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 673 ...	Right-hand Article no. 70 672 ...
STFC R/L 1212 F11	12	12	80	15	16	1,2	TC.. 1102	**012**	**012**
STFC R/L 1616 H16	16	16	100	20	20	3,2	TC.. 16T3	**016**	**016**
STFC R/L 2020 K16	20	20	125	20	25	3,2	TC.. 16T3	**020**	**020**
STFC R/L 2525 M16	25	25	150	20	32	3,2	TC.. 16T3	**025**	**025**

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat T Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 673 012 / 70 672 012	**110**		**112**		
70 673 016 / 70 672 016		**398**	**113**	**169**	**171**
70 673 020 / 70 672 020		**398**	**113**	**169**	**171**
70 673 025 / 70 672 025		**398**	**113**	**169**	**171**

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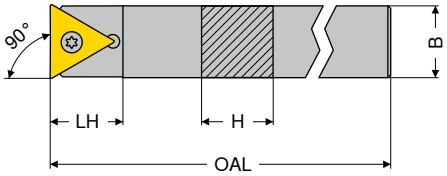
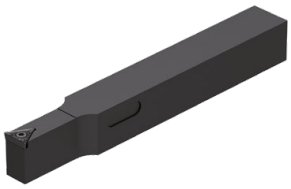
MaxiLock-S – STCC 90° – Toolholder with screw clamping



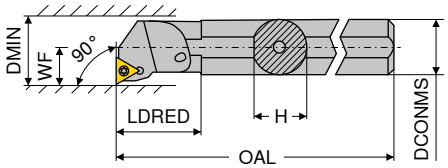


ISO designation	H mm	B mm	OAL mm	LH mm	torque moment Nm	Insert	Neutral Article no. 70 782 ...
STCC N 0808 K09	8	8	125	11	1	TC.. 0902	**008**
STCC N 1010 K11	10	10	125	15	1,2	TC.. 1102	**010**
STCC N 1212 K11	12	12	125	15	1,2	TC.. 1102	**012**
STCC N 1414 K11	14	14	125	21	1,2	TC.. 1102	**014**
STCC N 1616 K11	16	16	125	24	1,2	TC.. 1102	**016**

Spare parts for Article no.		Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...
70 782 008	T07	**109**	M2,2x5	**111**
70 782 010	T08	**110**	M2,5x6	**112**
70 782 012	T08	**110**	M2,5x6	**112**
70 782 014	T08	**110**	M2,5x6	**112**
70 782 016	T08	**110**	M2,5x6	**112**

MaxiLock-S – STFC 90° – Boring bar with screw clamping

▲ A... = with thro' coolant
▲ S... = without thro' coolant



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 729 ...	Right-hand Article no. 70 728 ...
A10H STFC R/L 09	10	9,5	100	19	7	13	1	TC.. 0902	**210**	**210**
A12K STFC R/L 11	12	11,5	125	22	9	16	1,2	TC.. 1102	**212**	**212**
A16M STFC R/L 11	16	15,0	150	29	11	20	1,2	TC.. 1102	**216**	**216**
S16R STFC R 11	16	15,0	200		11	21	1,2	TC.. 1102		**016**
A20Q STFC R/L 11	20	18,5	180	32	13	25	1,2	TC.. 1102	**220**	**220**
S20S STFC R 11	20	18,0	250		13	25	1,2	TC.. 1102		**020**
A25R STFC R/L 16	25	24,0	200	36	17	32	3,2	TC.. 16T3	**225**	**225**
A32S STFC R/L 16	32	31,0	250	50	22	40	3,2	TC.. 16T3	**232**	**232**
A40T STFC R/L 16	40	39,0	300	60	27	50	3,2	TC.. 16T3	**240**	**240**


Clamping screw


Solid Carbide Seat T


Threaded sleeve

Spare parts for Article no.		Article no. 70 950 ...	Article no. 70 950 ...		Article no. 70 950 ...
70 729 210 / 70 728 210	M2,2x5	**111**			
70 729 212 / 70 728 212	M2,5x6	**112**			
70 729 216 / 70 728 216	M2,5x6	**112**			
70 728 016	M2,5x6	**112**			
70 729 220 / 70 728 220	M2,5x6	**112**			
70 728 020	M2,5x6	**112**			
70 729 225 / 70 728 225	M3,5x11	**113**	**169**	M3,5	**171**
70 729 232 / 70 728 232	M3,5x11	**113**	**169**	M3,5	**171**
70 729 240 / 70 728 240	M3,5x11	**113**	**169**	M3,5	**171**

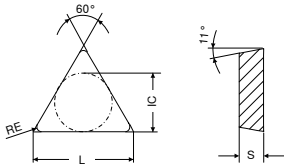

Key D


Combination Key

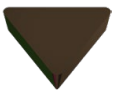
Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 729 210 / 70 728 210	T07	**109**		
70 729 212 / 70 728 212	T08	**110**		
70 729 216 / 70 728 216	T08	**110**		
70 728 016	T08	**110**		
70 729 220 / 70 728 220	T08	**110**		
70 728 020	T08	**110**		
70 729 225 / 70 728 225			T15/SW	**398**
70 729 232 / 70 728 232			T15/SW	**398**
70 729 240 / 70 728 240			T15/SW	**398**

TPMR / TPUN

Designation	L	S	IC
	mm	mm	mm
TPMR 1103..	11,0	3,18	6,35
TPMR 1603..	16,5	3,18	9,52
TPUN 2204..	22,0	4,76	12,70

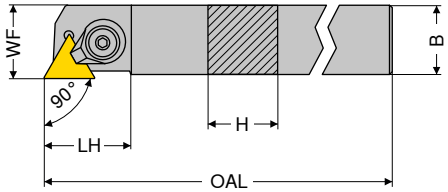


TPMR / TPUN

		CTCK110	CTCP135	CTCP135	CTCP135
		DCX3110	HCR1135	HCR1135	HCR1135
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		M	M	M	M
		TPMR	TPMR	TPMR	TPUN
ISO	RE	Article no. 70 189 ...	Article no. 76 228 ...	Article no. 76 232 ...	Article no. 76 212 ...
	mm				
110304EL	0,4			706	
110304EN	0,4		702		702
110304ER	0,4			704	
110308EN	0,8		704		
160304EL	0,4			714	
160304EN	0,4		706		720
160304ER	0,4			712	
160308EL	0,8			718	
160308EN	0,8	008	708		722
160308ER	0,8			716	
160312EN	1,2				724
220408EN	0,8				742
220412EN	1,2				744
Steel		●	●	●	●
Stainless steel		○	○	○	○
Cast iron		●			
Non ferrous metals					
Heat resistant alloys			○	○	○

9

Simplex – CTAP 90° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 797 ...	Right-hand Article no. 70 796 ...
	mm	mm	mm	mm	mm	Nm			
CTAP R/L 2020 K16	20	20	125	30	20,5	10	TP.. 1603	**020**	**020**
CTAP R/L 2525 M16	25	25	150	30	20,5	10	TP.. 1603	**025**	**025**


Clamp


Key I


Clamping screw

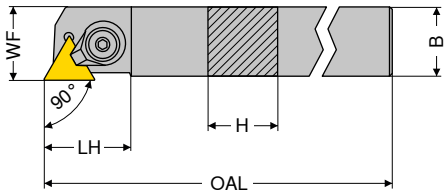

Countersunk head grooved pin


Solid Carbide Seat T


Spring washer

Spare parts	Clamp Article no. 70 950 ...	Key I Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Countersunk head grooved pin Article no. 70 950 ...	Solid Carbide Seat T Article no. 70 950 ...	Spring washer Article no. 70 950 ...
for Article no.						
70 796 020 / 70 797 020	**601**	SW4 **396**	M8x20 **604**	**603**	**602**	**605**
70 796 025 / 70 797 025	**601**	SW4 **396**	M8x20 **604**	**603**	**602**	**605**

Simplex – CTGP 90° – Toolholder with top clamping



Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 797 ...	Right-hand Article no. 70 796 ...
	mm	mm	mm	mm	mm	Nm			
CTGP R 1010 E11	10	10	70	16,5	12	5	TP.. 1103		**010**
CTGP R/L 1212 F11	12	12	80	16,5	16	5	TP.. 1103	**012**	**012**

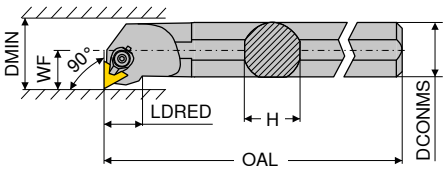

Clamp

Key D


Clamping screw

Spare parts	Clamp Article no. 70 950 ...	Key D Article no. 80 950 ...	Clamping screw Article no. 70 950 ...
for Article no.			
70 796 010	**600**	T15 **113**	M4x10 **477**
70 797 012 / 70 796 012	**600**	T15 **113**	M4x10 **477**

Simplex – CTFP 90° – Boring bar with top clamping



Illustrations show right-hand versions

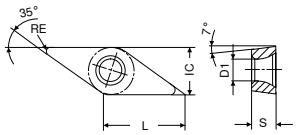
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 795 ...	Right-hand Article no. 70 794 ...
S12Q CTFP R/L 11	12	11,0	180	15	9	16	5	TP.. 1103	**012**	**012**
S16R CTFP R/L 11	16	14,5	200	15	11	20	5	TP.. 1103	**016**	**016**
S20S CTFP R/L 11	20	18,0	250	15	13	25	5	TP.. 1103	**020**	**020**
S25T CTFP R/L 16	25	23,0	300	20	17	32	10	TP.. 1603	**025**	**025**
S32U CTFP R/L 16	32	30,0	350	20	22	40	10	TP.. 1603	**032**	**032**

Spare parts	 Clamp Article no. 70 950 ...	 Key D Article no. 80 950 ...	 Clamping screw Article no. 70 950 ...	 Countersunk head grooved pin Article no. 70 950 ...	 Solid Carbide Seat T Article no. 70 950 ...
for Article no.					
70 794 012 / 70 795 012	**600**	T15 **113**	M4x10 **477**		
70 794 016 / 70 795 016	**600**	T15 **113**	M4x10 **477**		
70 794 020 / 70 795 020	**600**	T15 **113**	M4x10 **477**		
70 794 025 / 70 795 025	**606**	T20 **114**	M6x16,2 **596**	**603**	**602**
70 794 032 / 70 795 032	**606**	T20 **114**	M6x16,2 **596**	**603**	**602**

9

VCGT / VCMT / VCXT / VCET

Designation	L	S	D1	IC
	mm	mm	mm	mm
VCET 1103..	11,1	3,18	2,8	6,35
VC.T 1103..	11,1	3,18	2,9	6,35
VC.T 1604..	16,6	4,76	4,4	9,52
VCGT 2205..	22,1	5,56	5,5	12,70



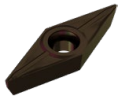
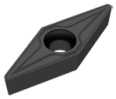
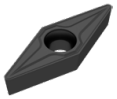
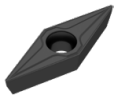
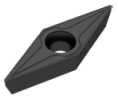
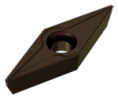
VCGT / VCMT

	-CF05 CTEP110	-SF TCM407	-SF TCM10	-SF CTCP115	-SF CTCP125	-SF CTCP135	-SF CTCP115
	-PF14 DCC1110	-ZF CWC407	-ZF CWC10	-ZF HCX1115	-ZF HCX1125	-ZF HCR1135	-ZF HCX1115
	DRAGONSKIN			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	F	F	F	F	F	F	F
	CERMET VCGT	CERMET VCGT	CERMET VCGT	VCGT	VCGT	VCGT	VCMT
ISO / RE mm	Article no. 76 276 ...	Article no. 70 277 ...	Article no. 70 277 ...	Article no. 76 277 ...	Article no. 76 277 ...	Article no. 76 277 ...	Article no. 76 279 ...
110301EN 0,1			892				
110302EN 0,2	014	844	894	314	514	714	
110304EN 0,4	016	846	896	316	516	716	
110308EN 0,8				318	518	718	
160404EN 0,4	028	850	900				328
160408EN 0,8	030		902				330
Steel	●	●	●	●	●	●	●
Stainless steel	○			○	○	○	○
Cast iron	○	○	○	○	○		○
Non ferrous metals							
Heat resistant alloys						○	

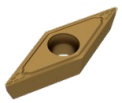
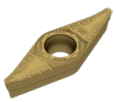
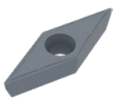
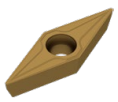
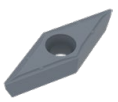
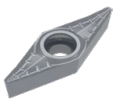
VCMT / VCGT

	-SF CTCP125	-SF CTCP135	-CF55 CTEP110	-SMF TCM10	-SMF CTCP135	-SMF CTCP115	-SMF CTCP125
	-ZF HCX1125	-ZF HCR1135	-PF15 DCC1110	-SMF CWC10	-SMF HCR1135	-SMF HCX1115	-SMF HCX1125
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	F	F	F	F	F	F	F
	VCMT	VCMT	CERMET VCMT	CERMET VCMT	VCGT	VCMT	VCMT
ISO / RE mm	Article no. 76 279 ...	Article no. 76 279 ...	Article no. 76 292 ...	Article no. 70 288 ...	Article no. 76 285 ...	Article no. 76 288 ...	Article no. 76 288 ...
110302EN 0,2					714		
110304EN 0,4			016	896		316	516
160404EN 0,4	528	728	028	900		328	528
160408EN 0,8	530		030	902		330	530
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○		○	○	○
Cast iron	○		○	○		○	○
Non ferrous metals							
Heat resistant alloys		○			○		

VCMT / VCGT

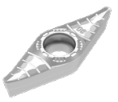
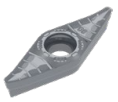
	-SMF CTCP135	-SM CTCK110	-SM CTCK120	-SM CTCP115	-SM CTCP125	-SM CTCP135	-SF CTC2135
	-SMF HCR1135	-ZM DCX3110	-ZM HCF3120	-ZM HCX1115	-ZM HCX1125	-ZM HCR1135	-ZF CWN2135
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	
							
	F	M	M	M	M	M	F
	VCMT	VCMT	VCMT	VCMT	VCMT	VCMT	VCGT
ISO / RE mm	Article no. 76 288 ...	Article no. 70 278 ...	Article no. 70 278 ...	Article no. 76 278 ...	Article no. 76 278 ...	Article no. 76 278 ...	Article no. 70 277 ...
110302EN 0,2							444
110304EN 0,4	716						446
160404EN 0,4	728	028	528	328	528	728	
160406EN 0,6				329			
160408EN 0,8	730	030	530	330	530	730	
160412EN 1,2		032	532	33200	53200	732	
Steel	●	●	●	●	●	●	○
Stainless steel	○	○		○	○	○	●
Cast iron		●	●	○	○		
Non ferrous metals							
Heat resistant alloys	○					○	●

VCMT / VCXT / VCGT

	-SF CTC2135	-M81 CWN2120	-M25 CTPM125	-SM CTC2135	-M55 CTPM125	-25P H210T	-25P AMZ
	-ZF CWN2135		-PF23 HCN2125	-ZM CWN2135	-PF26 HCN2125	-25P CWK20	-25P AMZ
			DRAGONSKIN		DRAGONSKIN		
							
	F	M	F	M	F	F	F
	VCMT	VCXT	VCMT	VCMT	VCMT	VCGT	VCGT
ISO / RE mm	Article no. 70 279 ...	Article no. 70 280 ...	Article no. 75 219 ...	Article no. 70 278 ...	Article no. 75 220 ...	Article no. 70 282 ...	Article no. 70 282 ...
110302FN 0,2						638	538
110304FN 0,4						640	540
160404EN 0,4	440		228	440	228		
160404FN 0,4		112				642	562
160408EN 0,8				442	230		
160408FN 0,8		114				644	564
160412FN 1,2						646	566
220530FN 3,0						648	568
Steel	○		○	○	○		○
Stainless steel	●	●	●	●	●		○
Cast iron						○	○
Non ferrous metals		○				●	●
Heat resistant alloys	●			●		○	

9

VCGT / VCMT

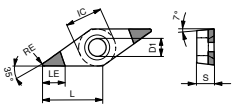
ISO	RE mm	-25Q H210T -25Q CWK20	-25Q AMZ -25Q AMZ	-27 H10T -AL CWK15	-27 CWN15 -AL CWN15	-27 AMZ -AL AMZ	-29 H216T	-29 AMZ
								
		M VCGT	M VCGT	M VCGT	M VCGT	M VCGT	M VCMT	M VCMT
							NEW	NEW
		Article no. 70 282 ...	Article no. 70 282 ...	Article no. 70 280 ...	Article no. 70 280 ...	Article no. 70 280 ...	Article no. 70 247 ...	Article no. 70 247 ...
110302FN	0,2			606	306	456		
110304FL	0,4	670	620					
110304FN	0,4			608	308	458		
110304FR	0,4	680	630					
110308FN	0,8			610	310			
160404EN	0,4						62800	42800
160404FN	0,4			612	312	462		
160408EN	0,8						63000	43000
160408FN	0,8			614	314	464		
160412EN	1,2						63200	43200
160412FN	1,2			616	316			
220530FN	3,0			618				
Steel			○			○		○
Stainless steel			○		○	○		○
Cast iron		○	○	○		○	○	○
Non ferrous metals		●	●	●	●	●	●	●
Heat resistant alloys		○		○			○	

VCET / VCGT

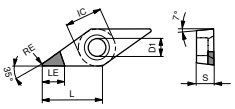
ISO	RE mm	-F05 CTPX710 DRAGONSKIN	-F23 CTP2120 -F23 CCN2120
			
		F VCET	F VCGT
		NEW	
		Article no. 76 255 ...	Article no. 70 193 ...
110300FN	0,00		600
1103015FN	0,15	11800	
110301FN	0,10	11600	602
113005FN	0,05	11400	
11302FN	0,20	12000	
11304FN	0,40	12200	
160401FN	0,10		606
Steel		●	
Stainless steel		●	●
Cast iron		○	○
Non ferrous metals		○	○
Heat resistant alloys		●	●

VCGW

Designation	L	S	D1	IC
	mm	mm	mm	mm
VCGW 1103..	11,1	3,18	2,9	6,35
VCGW 1604..	16,6	4,76	4,4	9,52

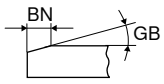


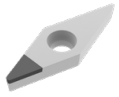
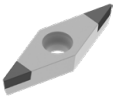
-B (-2MC)



-A

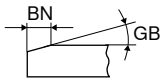
VCGW

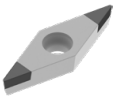


	-A CTBS10U	-B CTBS20C	-B CTBH15U	-B CTBH15C
	PBC10	-2MC PBC15-S		
				
	F	F	F	F
	CBN VCGW	CBN VCGW	CBN VCGW	CBN VCGW
			NEW	NEW
ISO	Article no. 71 160 ...	Article no. 71 165 ...	Article no. 71 036 ...	Article no. 71 035 ...
RE mm / GB ° / BN mm / LE mm				
110302SN 0,2 15 0,11 3,4			32014	32014
110302TN 0,2 20 0,14 4,7	300			
110302SN 0,2 25 0,13 3,4			32029	32029
110302FN 0,2 4,7	200			
110302EN 0,2 3,4			02000	02000
110304SN 0,4 10 0,09 3,1		121		
110304SN 0,4 15 0,11 3,1		131	32214	32214
110304TN 0,4 20 0,14 4,5	302			
110304TN 0,4 20 0,15 3,1		141		
110304SN 0,4 20 0,16 3,1		151		
110304SN 0,4 25 0,13 3,1				32229
110304SN 0,4 25 0,18 3,1		171		
110304FN 0,4 4,5	202			
110304EN 0,4 3,1			02200	02200
110308SN 0,8 10 0,09 2,5		122		
110308SN 0,8 15 0,11 2,5		132	32414	32414
110308TN 0,8 20 0,14 4,2	304			
110308SN 0,8 20 0,16 2,5		152		
110308SN 0,8 25 0,13 3,1			32229	
110308SN 0,8 25 0,13 2,5			32429	32429
110308TN 0,8 25 0,17 2,5		162		
110308SN 0,8 25 0,18 2,5		172		
110308FN 0,8 4,2	204			
110308EN 0,8 2,5		112	02400	02400
160402SN 0,2 15 0,11 3,4			33614	33614
160402TN 0,2 20 0,14 5,3	305			
160404SN 0,2 25 0,13 3,4			33629	
160402RN 0,2 3,4				23600
160402FN 0,2 5,3	205			
160402SN 0,2 25 0,13 3,4				33629
160404SN 0,4 10 0,09 3,1		125		
160404SN 0,4 15 0,11 3,1		135	33814	33814
160404TN 0,4 20 0,14 5,0	306			
160404TN 0,4 20 0,15 3,1		145		
160404SN 0,4 20 0,16 3,1		155		
160404RN 0,4 3,4			23600	
160404SN 0,4 25 0,13 3,1			33829	33829
160404SN 0,4 25 0,18 3,1		175		
160404FN 0,4 5,0	206			
160404RN 0,4 3,1			23800	23800
Cast iron	●	●		
Sintered steels	●	●		
Heat resistant alloys	●	●		
hardened < 45 HRC			●	●
hardened 46–55 HRC			●	●
hardened 56–60 HRC			●	●
hardened 61–65 HRC				

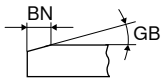
9

VCGW



	-A CTBS10U	-B CTBS20C	-B CTBH15U	-B CTBH15C
	PBC10	-2MC PBC15-S		
				
	F	F	F	F
	CBN VCGW	CBN VCGW	CBN VCGW	CBN VCGW
			NEW	NEW
ISO	Article no. 71 160 ...	Article no. 71 165 ...	Article no. 71 036 ...	Article no. 71 035 ...
RE mm / GB ° / BN mm / LE mm				
160408SN 0,8 10 0,09 2,5		126		
160408SN 0,8 15 0,11 2,5		136	34014	34014
160408TN 0,8 20 0,14 4,4	308			
160408SN 0,8 20 0,16 2,5		156		
160408SN 0,8 25 0,13 2,5			34029	34029
160408TN 0,8 25 0,17 2,5		166		
160408SN 0,8 25 0,18 2,5		176		
160408EN 0,8 2,5		116		
160408FN 0,8 4,4	208			
160408RN 0,8 2,5			24000	24000
Cast iron	●	●		
Sintered steels	●	●		
Heat resistant alloys	●	●		
hardened < 45 HRC			●	●
hardened 46–55 HRC			●	●
hardened 56–60 HRC			●	●
hardened 61–65 HRC				

VCGW

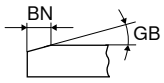


	-A CTBH21U	-B CTBH20C	-A CTBH40U	-B CTBH40C
	PBC25	-2MC PBC25-S	PBC40	-2MC PBC40-S
				
	F	F	F	F
	CBN VCGW	CBN VCGW	CBN VCGW	CBN VCGW
ISO	Article no. 71 160 ...	Article no. 71 165 ...	Article no. 71 160 ...	Article no. 71 165 ...
RE mm / GB ° / BN mm / LE mm				
110302TN 0,2 20 0,14 4,7	500			
110302TN 0,2 25 0,12 4,7			900	
110302FN 0,2 4,7	400 1)		800	
110304FN 0,4 4,5	402 1)		802	
110304SN 0,4 20 0,09 3,1		251		331
110304TN 0,4 20 0,14 4,5	502			
110304SN 0,4 25 0,09 3,1				351
110304TN 0,4 25 0,11 3,1				341
110304TN 0,4 25 0,12 4,5			902	
Cast iron				
Sintered steels				
Heat resistant alloys				
hardened < 45 HRC				
hardened 46–55 HRC	●	●	●	●
hardened 56–60 HRC	●	●	●	●
hardened 61–65 HRC			●	●

1) Machining to 60 HRC

→ v_c Page 160–167
Continued on next page

VCGW



ISO	RE	GB	BN	LE	-A CTBH21U PBC25 F CBN VCGW Article no. 71 160 ...	-B CTBH20C -2MC PBC25-S F CBN VCGW Article no. 71 165 ...	-A CTBH40U PBC40 F CBN VCGW Article no. 71 160 ...	-B CTBH40C -2MC PBC40-S F CBN VCGW Article no. 71 165 ...
	mm	°	mm	mm				
110304EN	0,4			3,1		221		
110304FN	0,4			3,1		211		
110304TN	0,4	25	0,14	3,1		261		
110304SN	0,4	25	0,15	3,1		271		
110304TN	0,4	30	0,14	3,1				361
110304SN	0,4	35	0,17	3,1				381
110308FN	0,8			4,2	404 [1]		804	
110308SN	0,8	15	0,11	2,5		242		
110308SN	0,8	20	0,09	2,5		252		332
110308TN	0,8	20	0,14	4,2	504			
110308SN	0,8	25	0,09	2,5				352
110308TN	0,8	25	0,11	2,5				342
110308TN	0,8	25	0,14	2,5		262		
110308SN	0,8	25	0,15	2,5		272		
110308TN	0,8	30	0,14	2,5				362
110308SN	0,8	30	0,16	2,5				372
110308SN	0,8	30	0,18	2,5		282		
110308SN	0,8	35	0,17	2,5				382
110308EN	0,8			2,5		222		312
160402FN	0,2			5,3	405 [1]		805	
160402TN	0,2	20	0,14	5,3	505			
160402TN	0,2	25	0,12	5,3			905	
160404FN	0,4			5,0	406 [1]		806	
160404SN	0,4	20	0,09	3,1		255		335
160404TN	0,4	20	0,14	5,0	506			
160404SN	0,4	25	0,09	3,1				355
160404TN	0,4	25	0,11	3,1				345
160404TN	0,4	25	0,12	5,0			906	
160404FN	0,4			3,1		215		
160404EN	0,4			3,1		225		
160404TN	0,4	25	0,14	3,1		265		
160404TN	0,4	30	0,14	3,1				365
160404SN	0,4	35	0,17	3,1				385
160408FN	0,8			4,4	408 [1]		808	
160408SN	0,8	15	0,11	2,5		246		
160408SN	0,8	20	0,09	2,5		256		336
160408TN	0,8	20	0,14	4,4	508			
160408SN	0,8	25	0,09	2,5				356
160408TN	0,8	25	0,11	2,5				346
160408TN	0,8	25	0,12	4,4			908	
160408TN	0,8	25	0,14	2,5		266		
160408SN	0,8	25	0,15	2,5		276		
160408TN	0,8	30	0,14	2,5				366
160408SN	0,8	30	0,16	2,5				376
160408SN	0,8	30	0,18	2,5		286		
160408SN	0,8	35	0,17	2,5				386
160408EN	0,8			2,5		226		316
160412TN	1,2	20	0,14	3,9	510			

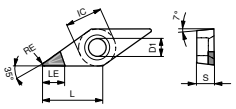
Cast iron				
Sintered steels				
Heat resistant alloys				
hardened < 45 HRC				
hardened 46–55 HRC	●	●	●	●
hardened 56–60 HRC	●	●	●	●
hardened 61–65 HRC			●	●

1) Machining to 60 HRC

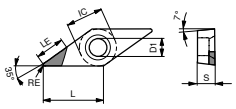
9

VCGW / VCGT

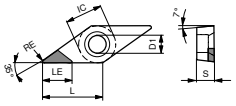
Designation	L	S	D1	IC
	mm	mm	mm	mm
VCG. 1103..	11,1	3,18	2,9	6,35
VCG. 1604..	16,6	4,76	4,4	9,52



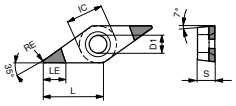
VCGT -A



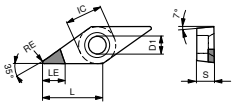
VCGT-L



VCGT-R



-B (-2MC)



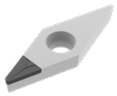
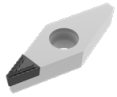
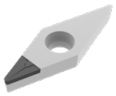
VCGW -A

VCGW / VCGT

	-A CTDMD05	-A CTDPD20	-A CTDPD20	-A CTDPD20	-A CTDPD20
	MDC	PDC	PDC	PDC	PDC
	F	F	F	F	F
	DIAMOND VCGW	DIAMOND VCGW	DIAMOND VCGT	DIAMOND VCGT	DIAMOND VCGT
ISO	Article no. 71 160 ...	Article no. 71 160 ...	Article no. 71 062 ...	Article no. 71 063 ...	Article no. 71 064 ...
110302FN	050				
110302FN		100	100		
110304FN	052				
110304FN		102	102		
110304FRR				102	
110304FLL					102
110308FN		104	104		
110308FRR				104	
110308FLL					104
160402FN		105	105		
160404FN		106	106		
160404FRR				106	
160404FLL					106
160408FN		108	108		
160408FRR				108	
160408FLL					108
160412FN		110	110		
160412FRR				110	
160412FLL					110

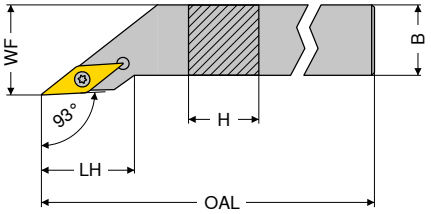
Steel					
Stainless steel					
Cast iron					
Non ferrous metals	●	●	●	●	●
Heat resistant alloys	○				

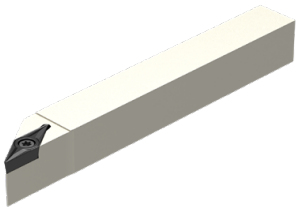
VCGT

			-A-CB1 CTDPD20	-A-CB1 CTDPS30	-A-CB2 CTDPS30	-A-CB3 CTDPU20	-A-CB1 CTDCD10	-A-CB2 CTDCD10
			-CB1 PDC	-CB1 PDC-S	-CB2 PDC-S	-CB3 PDC-S	-CB1 CVD	-CB2 CVD
								
			F DIAMOND VCGT	F DIAMOND VCGT	M DIAMOND VCGT	R DIAMOND VCGT	F DIAMOND VCGT	M DIAMOND VCGT
ISO	RE	LE	Article no. 71 330 ...	Article no. 71 330 ...	Article no. 71 331 ...	Article no. 71 332 ...	Article no. 71 330 ...	Article no. 71 331 ...
	mm	mm						
110302FN	0,2	3,0					312	
110302EN	0,2	3,0						312
110302EN	0,2	4,6			212			
110302FN	0,2	4,6	112					
110304FN	0,4	3,0					314	
110304EN	0,4	3,0						314
110304EN	0,4	3,9			214	214		
110304FN	0,4	3,9	114	214				
160404EN	0,4	3,0						334
160404EN	0,4	5,5			234	234		
160404FN	0,4	5,5	134	234				
160408EN	0,8	3,0						338
160408EN	0,8	5,0			238			
160408FN	0,8	5,0	138	238				
160412EN	1,2	4,5			242			
Steel								
Stainless steel								
Cast iron								
Non ferrous metals			●	●	●	●	●	●
Heat resistant alloys				○	○	○		

9

MaxiLock-S – SVJC 93° – Toolholder with screw clamping





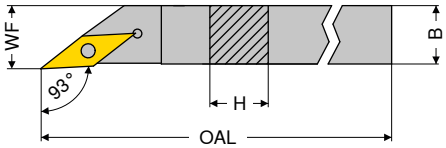
Illustrations show right-hand versions

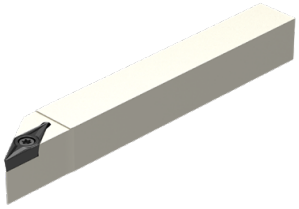
ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand Article no. 70 697 ...	Right-hand Article no. 70 696 ...
	mm	mm	mm	mm	mm	Nm			
SVJC R/L 1212 F11	12	12	80	21,5	16	1,2	VC.. 1103	**012**	**012**
SVJC R/L 1616 H11	16	16	100	21,5	20	1,2	VC.. 1103	**016**	**016**
SVJC R/L 2020 K11	20	20	125	23,0	25	1,2	VC.. 1103	**020**	**020**
SVJC R/L 2525 M11	25	25	150	25,5	32	1,2	VC.. 1103	**025**	**025**
SVJC R/L 2020 K16	20	20	125	29,5	25	3,2	VC.. 1604	**120**	**120**
SVJC R/L 2525 M16	25	25	150	32,5	32	3,2	VC.. 1604	**125**	**125**
SVJC R/L 3225 P16	32	25	170	32,5	32	3,2	VC.. 1604	**132**	**132**

Tool holders with HSK-T interface can be found in → **Chapter 16.**

Spare parts	 Key D	 Combination Key	 Clamping screw	 Solid Carbide Seat V	 Threaded sleeve
	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
Insert					
VC.. 1103	**110**		**112**		
VC.. 1604		**398**	**113**	**107**	**171**

MaxiLock-S – SVJC 93° – Toolholder with screw clamping



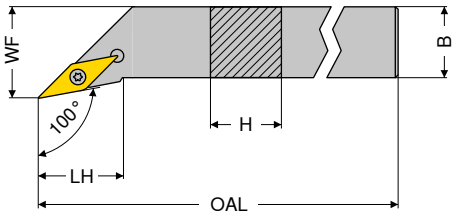


Illustrations show right-hand versions

ISO designation	H	B	OAL	WF	torque moment	Insert	Left-hand Article no. 70 697 ...	Right-hand Article no. 70 696 ...
	mm	mm	mm	mm	Nm			
SVJC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103	**008**	**008**
SVJC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103	**010**	**010**
SVJC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103	**112**	**112**
SVJC R/L 1616 K11	16	16	125	16	1,2	VC.. 1103	**116**	**116**

Spare parts	 Key D	 Clamping screw
	Article no. 80 950 ...	Article no. 70 950 ...
Insert		
VC.. 1103	**110**	**112**

MaxiLock-S – SVZC 100° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 701 ...	Right-hand Article no. 70 700 ...
SVZC R/L 2525 M16	25	25	150	28,5	32	3,2	VC.. 1604	**025**	**025**


Combination Key

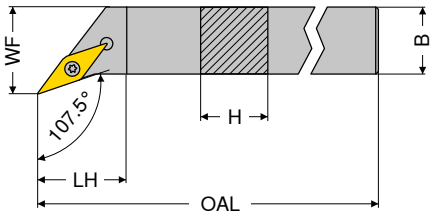

Clamping screw


Solid Carbide Seat V


Threaded sleeve

Spare parts for Article no.		Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat V Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 701 025 / 70 700 025	T15/SW	**398**	M3,5x11 **113**	**107**	M3,5 **171**

MaxiLock-S – SVHC 107.5° – Toolholder with screw clamping



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 705 ...	Right-hand Article no. 70 704 ...
SVHC R/L 1212 F11	12	12	80	11,4	16	1,2	VC.. 1103	**012**	**012**
SVHC R/L 1616 H11	16	16	100	11,4	20	1,2	VC.. 1103	**016**	**016**
SVHC R/L 2020 K11	20	20	125	14,6	25	1,2	VC.. 1103	**020**	**020**
SVHC R/L 2525 M11	25	25	150	20,9	32	1,2	VC.. 1103	**025**	**025**
SVHC R/L 2020 K16	20	20	125	13,2	25	3,2	VC.. 1604	**120**	**120**
SVHC R/L 2525 M16	25	25	150	19,6	32	3,2	VC.. 1604	**125**	**125**
SVHC R/L 3225 P16	32	25	170	19,6	32	3,2	VC.. 1604	**132**	**132**
SVHC R/L 2525 M22	25	25	150	19,6	32	5	VC.. 2205	**225**	**225**
SVHC R/L 3225 P22	32	25	170	19,6	32	5	VC.. 2205	**232**	**232**

Tool holders with HSK-T interface can be found in → **Chapter 16.**


Key D


Combination Key


Clamping screw

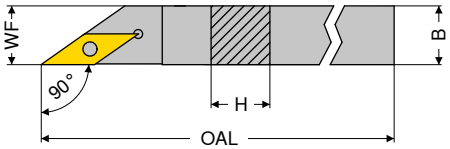

Solid Carbide Seat V

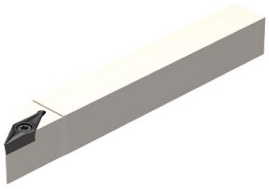

Threaded sleeve

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat V Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 704 012 / 70 705 012	**110**		**112**		
70 704 016 / 70 705 016	**110**		**112**		
70 704 020 / 70 705 020	**110**		**112**		
70 704 025 / 70 705 025	**110**		**112**		
70 704 120 / 70 705 120		**398**	**113**	**107**	**171**
70 704 125 / 70 705 125		**398**	**113**	**107**	**171**
70 704 132 / 70 705 132		**398**	**113**	**107**	**171**
70 704 225 / 70 705 225		**398**	**114**	**109**	**170**
70 704 232 / 70 705 232		**398**	**114**	**109**	**170**

MaxiLock-S – SVAC 90° – Toolholder with screw clamping

▲ for sliding head lathes





Illustrations show right-hand versions

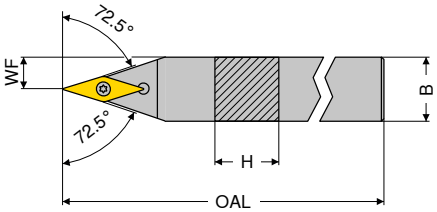
ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 695 ...	Right-hand Article no. 70 694 ...
SVAC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103	**008**	**008**
SVAC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103	**010**	**010**
SVAC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103	**012**	**012**

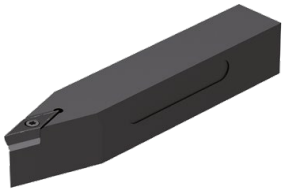

Key D


Clamping screw

Spare parts for Article no.	Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...	
70 694 008 / 70 695 008	T08	**110**	M2,5x6	**112**
70 694 010 / 70 695 010	T08	**110**	M2,5x6	**112**
70 694 012 / 70 695 012	T08	**110**	M2,5x6	**112**

MaxiLock-S – SVVC 72.5° – Toolholder with screw clamping





ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Neutral Article no. 70 692 ...
SVVC N 1212 F11	12	12	80	6,0	1,2	VC.. 1103	**012**
SVVC N 1616 H11	16	16	100	8,0	1,2	VC.. 1103	**016**
SVVC N 2020 K11	20	20	125	10,0	1,2	VC.. 1103	**020**
SVVC N 2525 M11	25	25	150	12,5	1,2	VC.. 1103	**025**
SVVC N 2020 K16	20	20	125	10,0	3,2	VC.. 1604	**120**
SVVC N 2525 M16	25	25	150	12,5	3,2	VC.. 1604	**125**
SVVC N 3225 P16	32	25	170	12,5	3,2	VC.. 1604	**132**


Key D


Combination Key


Clamping screw

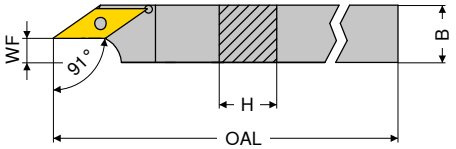

Solid Carbide Seat V

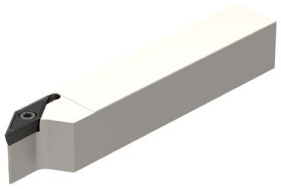

Threaded sleeve

Spare parts for Article no.	Key D Article no. 80 950 ...		Combination Key Article no. 70 950 ...		Clamping screw Article no. 70 950 ...		Solid Carbide Seat V Article no. 70 950 ...		Threaded sleeve Article no. 70 950 ...	
70 692 012		**110**				**112**				
70 692 016		**110**				**112**				
70 692 020		**110**				**112**				
70 692 025		**110**				**112**				
70 692 120				**398**		**113**		**107**		**171**
70 692 125				**398**		**113**		**107**		**171**
70 692 132				**398**		**113**		**107**		**171**

MaxiLock-S – SVXC 91° – Toolholder with screw clamping

▲ for sliding head lathes





Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Left-hand Article no. 70 691 ...	Right-hand Article no. 70 690 ...
SVXC R/L 1010 H11	10	10	100	3,4	1,2	VC.. 1103	**010**	**010**
SVXC R/L 1212 H11	12	12	100	5,4	1,2	VC.. 1103	**012**	**012**
SVXC R/L 1616 K11	16	16	125	8,9	1,2	VC.. 1103	**016**	**016**
SVXC R/L 2020 K16	20	20	125	10,4	3,2	VC.. 1604	**020**	**020**

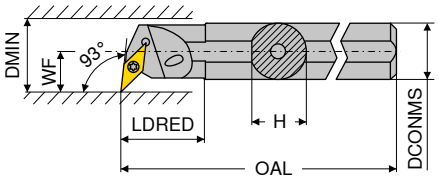
Key D

Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 691 010 / 70 690 010	T08	**110**	M2,5x6	**112**
70 691 012 / 70 690 012	T08	**110**	M2,5x6	**112**
70 691 016 / 70 690 016	T08	**110**	M2,5x6	**112**
70 691 020 / 70 690 020	T15	**113**	M3,5x11	**113**

9

MaxiLock-S – SVUC 93° – Boring bar with screw clamping



Illustrations show right-hand versions

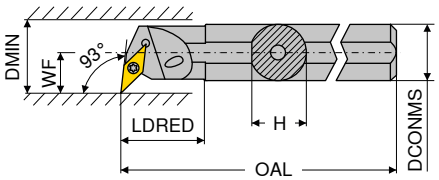
ISO designation	DCONMS	H	OAL	LDRED	WF	DMIN	torque moment	Insert	Left-hand	Right-hand
	mm	mm	mm	mm	mm	mm	Nm		Article no. 70 745 ...	Article no. 70 744 ...
A16M SVUC R/L 11	16	15,0	150	29	11	20	1,2	VC.. 1103	**216**	**216**
A20Q SVUC R/L 11	20	18,5	180	32	13	25	1,2	VC.. 1103	**220**	**220**
A25R SVUC R/L 11	25	23,0	200	36	17	32	1,2	VC.. 1103	**225**	**225**
A32S SVUC R/L 16	32	30,0	250	50	22	40	3,2	VC.. 1604	**232**	**232**
A40T SVUC R/L 16	40	38,0	300	60	27	50	3,2	VC.. 1604	**240**	**240**

Tool holders with HSK-T interface can be found in → **Chapter 16.**

Spare parts	Key D	Combination Key	Clamping screw	Solid Carbide Seat V	Threaded sleeve
	Article no. 80 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...	Article no. 70 950 ...
for Article no.					
70 744 216 / 70 745 216	**110**		**112**		
70 744 220 / 70 745 220	**110**		**112**		
70 744 225 / 70 745 225	**110**		**112**		
70 744 232 / 70 745 232		**398**	**113**	**107**	**171**
70 744 240 / 70 745 240		**398**	**113**	**107**	**171**

MaxiLock-S – SVUC 93° – Boring bar with screw clamping

▲ with carbide core



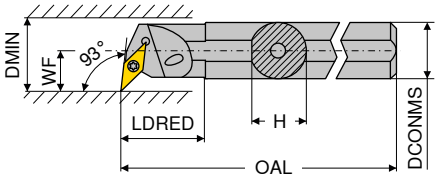
Illustrations show right-hand versions

ISO designation	DCONMS	H	OAL	LDRED	WF	DMIN	torque moment	Insert	Left-hand	Right-hand
	mm	mm	mm	mm	mm	mm	Nm		Article no. 70 747 ...	Article no. 70 746 ...
E-A16M SVUC R/L 11	16	15	150	16,5	11	21	1,2	VC.. 1103	**216**	**216**
E-A20Q SVUC R/L 11	20	18	180	20,5	13	25	1,2	VC.. 1103	**220**	**220**
E-A25R SVUC R/L 11	25	23	200	25,5	17	31	1,2	VC.. 1103	**225**	**225**
E-A25R SVUC R/L 16	25	23	200	25,5	17	31	3,2	VC.. 1604	**325**	**325**
E-A32S SVUC R/L 16	32	30	250	32,5	22	39	3,2	VC.. 1604	**232**	**232**

Spare parts	Key D	Clamping screw
	Article no. 80 950 ...	Article no. 70 950 ...
for Article no.		
70 746 216 / 70 747 216	**110**	**112**
70 746 220 / 70 747 220	**110**	**112**
70 746 225 / 70 747 225	**110**	**112**
70 746 325 / 70 747 325	**113**	**449**
70 746 232 / 70 747 232	**113**	**449**

MaxiLock-S – SVUC 93° – Boring bar with screw clamping

▲ Type: Solid carbide



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 747 ...	Right-hand Article no. 70 746 ...
E16R SVUC R/L 11	16	15,0	200	34	11	20	1,2	VC.. 1103	**016**	**016**
E20S SVUC R/L 11	20	18,5	250	38	13	25	1,2	VC.. 1103	**020**	**020**
E25T SVUC R/L 11	25	23,0	300	43	17	32	1,2	VC.. 1103	**025**	**025**

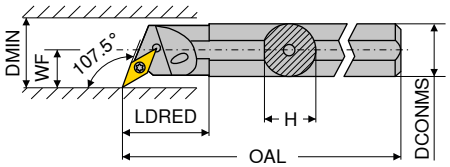
Key D

Clamping screw

Spare parts for Article no.		Key D Article no. 80 950 ...		Clamping screw Article no. 70 950 ...	
70 746 016 / 70 747 016	T08	**110**	M2,5x6	**112**	
70 746 020 / 70 747 020	T08	**110**	M2,5x6	**112**	
70 746 025 / 70 747 025	T08	**110**	M2,5x6	**112**	

MaxiLock-S – SVQC 107.5° – Boring bar with screw clamping

9



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 749 ...	Right-hand Article no. 70 748 ...
A16M SVQC R/L 11	16	15,0	150	29	11	20	1,2	VC.. 1103	**216**	**216**
A20Q SVQC R/L 11	20	18,5	180	32	13	25	1,2	VC.. 1103	**220**	**220**
A25R SVQC R/L 11	25	23,0	200	36	17	32	1,2	VC.. 1103	**225**	**225**
A32S SVQC R/L 16	32	30,0	250	50	22	40	3,2	VC.. 1604	**232**	**232**
A40T SVQC R/L 16	40	38,0	300	60	27	50	3,2	VC.. 1604	**240**	**240**

Tool holders with HSK-T or PSC interface can be found in→ **Chapter 16.**

Key D

Combination Key

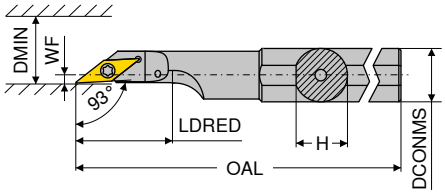
Clamping screw

Solid Carbide Seat V

Threaded sleeve

Spare parts for Article no.	Key D Article no. 80 950 ...	Combination Key Article no. 70 950 ...	Clamping screw Article no. 70 950 ...	Solid Carbide Seat V Article no. 70 950 ...	Threaded sleeve Article no. 70 950 ...
70 748 216 / 70 749 216	**110**		**112**		
70 748 220 / 70 749 220	**110**		**112**		
70 748 225 / 70 749 225	**110**		**112**		
70 748 232 / 70 749 232		**398**	**113**	**107**	**171**
70 748 240 / 70 749 240		**398**	**113**	**107**	**171**

MaxiLock-S – SVJC 93° – Boring bar with screw clamping



Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand Article no. 70 727 ...	Right-hand Article no. 70 726 ...
A16M SVJC R/L 11	16	15	150	30	2	22	1,2	VC.. 1103	**216**	**216**
A20M SVJC R/L 11	20	19	150	38	2	25	1,2	VC.. 1103	**220**	**220**
A25M SVJC R/L 16	25	24	150	44	2	28	3,2	VC.. 1604	**225**	**225**

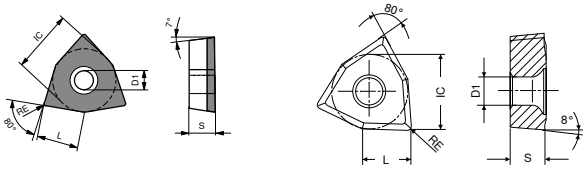
Key D

Clamping screw

Spare parts for Article no.	Article no. 80 950 ...	Article no. 70 950 ...
70 727 216 / 70 726 216	**110**	**112**
70 727 220 / 70 726 220	**110**	**112**
70 727 225 / 70 726 225	**113**	**174**

WCGT / WCGW

Designation	L	S	D1	IC
	mm	mm	mm	mm
WCGW 0201..	2,70	1,58	2,3	3,97
WCGT 0201..	2,71	1,59	2,1	3,97



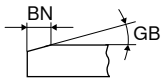
WCGW

WCGT

ISO	RE	-SF TCM10	-SF CTPP430	-SF H216T
		-ZF CWC10	-ZF HCN2430	-ZF CWK26
			DRAGONSKIN	
				
		F	F	F
		CERMET WCGT	WCGT	WCGT
		Article no. 70 287 ...	Article no. 70 287 ...	Article no. 70 287 ...
	mm			
020102EN	0,2	900	450	600
020104EN	0,4	902	452	602
Steel		●	●	
Stainless steel			●	
Cast iron		○	○	○
Non ferrous metals			○	●
Heat resistant alloys			●	○

9

WCGW



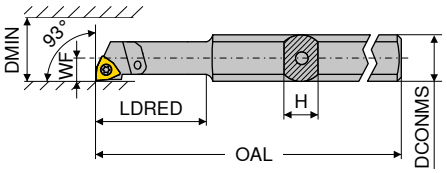
ISO	RE	GB	BN	LE	-F CTBS10U PBC10 F CBN WCGW	-F CTBH15U F CBN WCGW NEW	-F CTBH21U PBC25 F CBN WCGW	-F CTBH40U PBC40 F CBN WCGW
	mm	°	mm	mm	Article no. 71 154 ...	Article no. 71 037 ...	Article no. 71 154 ...	Article no. 71 154 ...
020102EN	0,2			2,7		00200		
020102SN	0,2	15	0,11	2,7		30214		
020102TN	0,2	20	0,14	2,7			500	
020102TN	0,2	25	0,12	2,7				900
020102FN	0,2			2,7	200		400 [1]	800
020104SN	0,4	15	0,11	2,7		30414		
020104TN	0,4	20	0,14	2,7			502	
020104FN	0,4			2,7			402 [1]	
020104EN	0,4			2,7		00400		
020104TN	0,4	25	0,12	2,7				902
Cast iron					●			
Sintered steels					●			
Heat resistant alloys					●			
hardened < 45 HRC						●		
hardened 46–55 HRC						●	●	●
hardened 56–60 HRC						●	●	●
hardened 61–65 HRC								●

1) Machining to 60 HRC

WCGW

ISO	RE	LE	-F CTDPD20 PDC F DIAMOND WCGW
	mm	mm	Article no. 71 154 ...
020102FN	0,2	2,7	100
020104FN	0,4	2,7	102
Steel			
Stainless steel			
Cast iron			
Non ferrous metals			●
Heat resistant alloys			

MaxiLock-S – SWUC 93° – Boring bar with screw clamping



Illustrations show right-hand versions

ISO designation	H	OAL	LDRED	WF	DCONMS	DMIN	torque moment	Insert	Left-hand Article no. 70 731 ...	Right-hand Article no. 70 730 ...
	mm	mm	mm	mm	mm	mm	Nm			
A0508H SWUC R/L 02	7	100	24	2,9	8	5,8	0,4	WC.. 0201..	**005**	**005**
A0608H SWUC R/L 02	7	100	24	3,9	8	7,8	0,4	WC.. 0201..	**006**	**006**
SET							0,4	WC.. 0201..	**999**	**999**

Set includes boring bars 70 731 005 and 70 731 006 or 70 730 005 and 70 730 006


Key D


Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 731 005 / 70 730 005	T06	**108**	M1,8x3,4	**334**
70 731 006 / 70 730 006	T06	**108**	M1,8x3,4	**334**

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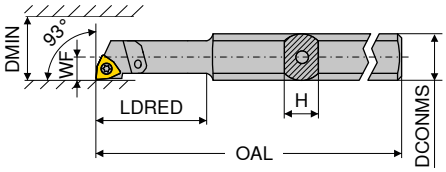
MaxiLock-S – SWUC 93° – Boring bar with screw clamping

▲ with carbide core



Illustrations show right-hand versions

ISO designation	H	OAL	LDRED	WF	DCONMS	DMIN	torque moment	Insert	Left-hand Article no. 70 743 ...	Right-hand Article no. 70 742 ...
	mm	mm	mm	mm	mm	mm	Nm			
E-A0508H SWUC R/L 02	7	100	24	2,9	8	5,8	0,4	WC.. 0201..	**005**	**005**
E-A0608H SWUC R/L 02	7	100	24	3,9	8	7,8	0,4	WC.. 0201..	**006**	**006**
SET							0,4	WC.. 0201..	**999**	**999**

Set includes boring bars 70 743 005 and 70 743 006 or 70 742 005 and 70 742 006


Key D


Clamping screw

Spare parts for Article no.		Article no. 80 950 ...		Article no. 70 950 ...
70 743 005 / 70 742 005	T06	**108**	M1,8x3,4	**334**
70 743 006 / 70 742 006	T06	**108**	M1,8x3,4	**334**

Material examples referring to the cutting data tables

	Index	Material	Strength N/mm² / HB / HRC	Material number	Material designation	Material number	Material designation	Material number	Material designation
P	1.1	General construction steel	< 800 N/mm²	1.0402	EN3B				
	1.2	Free cutting steel	< 800 N/mm²	1.0711	EN1A				
	1.3	Hardened steel, non alloyed	< 800 N/mm²	1.0401	EN32C				
	1.4	Alloyed hardened steel	< 1000 N/mm²	1.7325	25 CD4				
	1.5	Tempering steel, unalloyed	< 850 N/mm²	1.5752	EN36	1.0535	EN9		
	1.6	Tempering steel, unalloyed	< 1000 N/mm²	1.6582	EN24				
	1.7	Tempering steel, alloyed	< 800 N/mm²	1.7225	EN19				
	1.8	Tempering steel, alloyed	< 1300 N/mm²	1.8515	EN40B				
	1.9	Steel castings	< 850 N/mm²	0.9650	G-X 260 Cr 27	1.6750	GS-20 NiCrMo 3.7	1.6582	GS-34 CrNiMo 6
	1.10	Nitriding steel	< 1000 N/mm²	1.8509	EN41B				
	1.11	Nitriding steel	< 1200 N/mm²	1.1186	EN8	1.1160	EN14A		
	1.12	Roller bearing steel	< 1200 N/mm²	1.3505	534A99				
	1.13	Spring steel	< 1200 N/mm²		EN45		EN47		EN43
	1.14	High-speed steel	< 1300 N/mm²	1.3343	M2	1.3249	M34		
	1.15	Cold working tool steel	< 1300 N/mm²	1.2379	D2	1.2311	P20		
	1.16	Hot working tool steel	< 1300 N/mm²	1.2344	H13				
M	2.1	Cast steel and sulphured stainless steel	< 850 N/mm²	1.4581	318				
	2.2	Stainless steel, ferritic	< 750 N/mm²	1.4000	403				
	2.3	Stainless steel, martensitic	< 900 N/mm²	1.4057	EN57				
	2.4	Stainless steel, ferritic / martensitic	<1100 N/mm²	1.4028	EN56B				
	2.5	Stainless steel, austenitic / ferritic	< 850 N/mm²	1.4542	17-4PH				
	2.6	Stainless steel, austenitic	< 750 N/mm²	1.4305	303	1.4401	316	1.4301	304
	2.7	Heat resistant steel	< 1100 N/mm²	1.4876	Incoloy 800				
K	3.1	Grey cast iron with lamellar graphite	100–350 N/mm²	0.6015	Grade 150	0.6020	Grade 220	0.6025	Grade 260
	3.2	Grey cast iron with lamellar graphite	300–500 N/mm²	0.6030	Grade 300	0.6035	Grade 350	0.6040	Grade 400
	3.3	Gray cast iron with spheroidal graphite	300–500 N/mm²	0.7040	SG 400-12	0.7043	SG 370-17	0.7050	SG 500-7
	3.4	Gray cast iron with spheroidal graphite	500–900 N/mm²	0.7060	SG 600-3	0.7070	SG 700-2	0.7080	SG 800-2
	3.5	White malleable cast iron	270–450 N/mm²	0.8035	GTW-35	0.8045	GTW-45		
	3.6	White malleable cast iron	500–650 N/mm²	0.8055	GTW-55	0.8065	GTW-65		
	3.7	Black malleable cast iron	300–450 N/mm²	0.8135	GTS-35	0.8145	GTS-45		
	3.8	Black malleable cast iron	500–800 N/mm²	0.8155	GTS-55	0.8170	GTS-70		
N	4.1	Aluminium (non alloyed, low alloyed)	< 350 N/mm²	3.0255	1050 A	3.0275	1070 A	3.0285	1080 A (A8)
	4.2	Aluminium alloys < 0.5 % Si	< 500 N/mm²	3.1325	2017 A (AU4G)	3.4335	7005 (AZ5G)	3.4365	7075 (AZ5GU)
	4.3	Aluminium alloy 0.5–10 % Si	< 400 N/mm²	3.2315	A- G S1	3.2373	A-S9 G	3.2151	A-S 6 U4
	4.4	Aluminium alloys 10–15 % Si	< 400 N/mm²	3.2581	A-S12	3.2583	A-S12 U		
	4.5	Aluminum alloys > 15 % Si	< 400 N/mm²		A-S18	A-S17 U4			
	4.6	Copper (non alloyed, low alloyed)	< 350 N/mm²	2.0040	Cu-c1	2.0060	Cu-a1	2.0090	Cu-b1
	4.7	Copper wrought alloys	< 700 N/mm²	2.1247	Cub2 (Berylium Copper)	2.0855	CuN2S (Nickel Copper)	2.1310	CU-Fe2P
	4.8	Special copper alloys	< 200 HB	2.0916	Cu-A5	2.1525	Cu-S3 M		Ampco 8 (Cu-A6Fe2)
	4.9	Special copper alloys	< 300 HB	2.0978	Cu-Al11 Fe5 Ni5)		Ampco 18 (Cu- A10 Fe3)		
	4.10	Special copper alloys	> 300 HB	2.1247	Cu Be2		Ampco M4		
	4.11	Short-chipping brass, bronze, red bronze	< 600 N/mm²	2.0331	Cu Zn36 Pb1,5	2.0380	Cu Zn39 Pb2 (Ms 56)	2.0410	Cu Zn44 Pb2
	4.12	Long-chipping brass	< 600 N/mm²	2.0335	Cu Zn 36 (Ms63)	2.1293	Cu Cr1 Zr		
	4.13	Thermoplastics		PE	PVC	PS	Polystyrene		Plexiglas
	4.14	Duroplastics		PF	Bakelite		Pertinax		
	4.15	Fibre-reinforced plastics			Carbon Fibre		Fibreglass		Aramid Fibre (Kevlar)
	4.16	Magnesium and magnesium alloys	< 850 N/mm²	3.5812	Mg A7 Z1	3.5662	Mg A9	3.5105	Mg Tr3 Z2 Zn 1
	4.17	Graphite			R8500X		R8650		Technograph 15
	4.18	Tungsten and tungsten alloys			W-Ni Fe (Densimet)		W- Ni Cu (Inermet)		Denal
	4.19	Molybdenum and molybdenum alloys			TZM		MHQ		Mo W
S	5.1	Pure nickel		2.4066	Ni99 (Nickel 200)	2.4068	Lc Ni99 (Nickel 201)		
	5.2	Nickel alloys		1.3912	Fe-Ni36 (Invar)	1.3917	Fe -Ni42 (N42)	1.3922	Fe-Ni48 (N48)
	5.3	Nickel alloys	< 850 N/mm²	2.4375	Ni Cu30 Al (Monel K500)	2.4360	Ni Cu30Fe (Monel 400)	2.4668	
	5.4	Nickel molybdenum alloys		2.4600	Ni Mo30Cr2 (Hastelloy B4)	2.4617	Ni Mo28 (Hastelloy B2)	2.4819	Ni Mo16Cr16 Hastell. C276
	5.5	Nickel-chromium alloys	< 1300 N/mm²	2.4951	Ni Cr20TiAl (Nimonic 80A)	2.4858	Ni Cr21Mo (Inconel 825)	2.4856	Ni Cr22Mo9Nb Inconel 625
	5.6	Cobalt Chrome Alloys	< 1300 N/mm²	2.4964	Co Cr20 W15 Ni10		Co Cr20 Ni16 Mo7		Co Cr28 Mo 6
	5.7	Heat resistant alloys	< 1300 N/mm²	1.4718	Z45 C S 9-3	1.4747	Z80 CSN 20-02	1.4845	Z12 CN 25-20
	5.8	Nickel-cobalt-chromium alloys	< 1400 N/mm²	2.4851	Ni Cr23Fe (Inconel 601)	2.4668	Ni Cr19NbMo (Inconel 718)	2.4602	Ni Cr21Mo14 Hastelloy C22
	5.9	Pure titanium	< 900 N/mm²	3.7025	T35 (Titanium Grade 1)	3.7034	T40 (Titanium Grade 2)	3.7064	T60 (Titanium Grade 4)
	5.10	Titanium alloys	< 700 N/mm²		T-A6-Nb7 (367)		T-A5-Sn2-Mo4-Cr4 (Ti17)		T-A3-V2,5 (Gr18)
	5.11	Titanium alloys	< 1200 N/mm²	3.7165	T-A6-V4 (Ta6V)		T-A4-3V-Mo2-Fe2 (SP700)		T-A5-Sn1-Zr1-V1-Mo (Gr32)
H	6.1		< 45 HRC						
	6.2		46–55 HRC						
	6.3	Tempered steel	56–60 HRC						
	6.4		61–65 HRC						
	6.5		65–70 HRC						

Cutting data values for fine machining (F)

Chip breaker:	-CF	-F32	-CF20	-F30	-F40	//	-F23	-M25	-F43	-SF	-SMF	-CF05	-CF55
Chip breaker:	(-CF)	(-F32)	(-NF12)	(-NF23)	(-F40)	//	(-F23)	(-PF23)	(-F43)	(-ZF)	(-SMF)	(-PF14)	(-PF15)

	DRAGONSKIN			DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN			
	CTEP110 (DCC1110)	TCM407 (CWC407)	TCM10 (CWC10)	CTCK110 (DCX3110)	CTCK120 (HCF3120)	CTCP115 (HCX1115)	CTCP125 (HCX1125)	CTCP135 (HCR1135)	CTPM125 (HCN2125)	CTPX710 (CTPX710)	CTP2120 (CCN2120)	CTC2135 (CWN2135)
Index	v_c in m/min											
1.1	**300–370**	**290–340**	**230–270**	**270–340**	**230 –280**	**260–350**	**200–270**	**180–220**	120–260	**120–170**		170–220
1.2	**400–520**	**340–430**	**280–350**	**270–350**	**230 –310**	**280–360**	**230–280**	**190–240**	130–220	**140–200**		190–230
1.3	**350–400**	**300–370**	**280–350**	**250–340**	**210–280**	**220–350**	**240–290**	**170–210**	130–250	**110–160**		160–200
1.4	**300–370**	**240–310**	**170–330**	**250–330**	**210–270**	**240–320**	**200–270**	**180–220**	130–220	**90–150**		170–230
1.5	**400–440**	**230–280**	**180–340**	**240–320**	**200–260**	**230–300**	**220–260**	**160–210**	100–180	**90–150**		150–200
1.6	**350–410**	**230–270**	**170–320**	**230–310**	**190–270**	**210–270**	**210–250**	**170–230**	100–180	**100–130**		160–220
1.7	**250–300**	**250–310**	**180–280**	**200–280**	**160–230**	**240–320**	**210–280**	**170–210**	60–180	**80–140**		150–200
1.8	**300–360**	**230–290**	**160–250**	**210–270**	**170–220**	**200–280**	**190–240**	**150–190**	60–180	**80–130**		140–180
1.9	**200–320**			**230–310**	**190–260**	**200–300**	**170–240**	**170–200**	80–180	**80–120**		170–200
1.10	**250–320**	**250–310**	**180–270**	**230–290**	**190 –240**	**220–280**	**180–240**	**150–200**	100–180	**80–120**		140–170
1.11	**240–310**	**230–290**	**170–250**	**220–290**	**180–240**	**200–270**	**170–240**	**140–180**	100–180	**80–140**		140–180
1.12	**240–310**	**270–320**	**190–270**	**250–310**	**210–260**	**210–300**	**200–270**	**160–200**	80–180	**130–220**		160–200
1.13				**210–270**	**170–220**	**180–270**	**170–240**	**140–190**	60–180	**80–120**		130–180
1.14				**220–280**	**180–230**	**180–250**	**180–230**	**130–180**	80–180	**70–130**		130–180
1.15	**260–310**	**210–250**	**170–250**	**200–290**	**170–240**	**160–250**	**150–230**	**120–160**	80–150	**70–130**		120–160
1.16	**260–310**	**210–250**	**170–250**	**200–280**	**170–230**	**150–240**	**140–220**	**120–170**	80–150	**70–100**		110–160
2.1	250–320			190–310		200–280	200–280	160–210	**200–280**	**90–260**	**190–260**	**160–240**
2.2	250–320			190–320		200–280	200–280	160–210	**200–280**	**80–240**	**200–250**	**180–250**
2.3	300–350			180–300		190–260	190–260	130–200	**190–260**	**70–240**	**190–240**	**150–240**
2.4	210–250			200–300		190 -240	190–240	120–200	**190–240**	**40–220**	**140–210**	**160–230**
2.5								100–150	**100–220**	**60–230**	**110–190**	**150–230**
2.6	210–250							60–80	**100–220**	**40–170**	**80–160**	**120–170**
2.7	210–250							60–80	**40–100**	**40–160**	**80–140**	**120–160**
3.1	340–480			**260–310**	**220–260**	220–280	200–260			140–240	140–180	
3.2	260–360			**260–330**	**230–280**	200–270	190–250			100–190	110–170	
3.3	360–520	280–430	220–300	**330–450**	**320–410**	180–250	170–240			130–260	130–180	
3.4	300–400	250–380	180–250	**350–460**	**340–420**	180–260	140–190			100–250	160–240	
3.5	330–500	250–400	250–350	**380–460**	**360– 420**	260–320	240–290			160–240	160–230	
3.6	180–320	180–320	160–250	**270–370**	**250–330**	200– 320	170–290			130–200	130–190	
3.7	330–500	250–400	250–350	**350–430**	**320– 390**	240–320	240–290			150–240	150–220	
3.8	180–320	180–320	160–250	**260–350**	**240–310**	210–320	170–290			140–210	140–180	
4.1										300–3200	100–600	
4.2										200–2800	100–600	
4.3										400–2000	100–400	
4.4										40–2000	100–400	
4.5										200–1200	100–400	
4.6										250–1000	100–400	
4.7										200–1000	100–400	
4.8										200–1000	100–400	
4.9										200–1000	100–400	
4.10										200–1000	100–400	
4.11										150–800		
4.12										150–500		
4.13										100–250		
4.14										80–200		
4.15										80–220		
4.16												
4.17												
4.18										80–120		
4.19										100–140		
5.1								20–40		**30–140**	**15–30**	**20–40**
5.2								20–40		**30–110**	**15–40**	**20–40**
5.3								8–25		**30–110**	**20–35**	**15–35**
5.4								8–25		**30–110**	**13–30**	**15–35**
5.5								4–15		**30–110**	**15–35**	**8–25**
5.6								4–15		**30–110**	**15–35**	**4–15**
5.7								4–15		**30–110**	**60–100**	**4–15**
5.8								4–12		**30–110**	**20–40**	**4–15**
5.9								80–130		**30–140**	**80–140**	**80–130**
5.10								15–35		30–140	**25–45**	**15–35**
5.11								15–35		30–120	**25–45**	**15–35**
6.1												
6.2												
6.3												
6.4												
6.5												

The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type.
The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

9

Cutting data values for medium machining (M)

Chip breaker:	-M30	-M36	-M50	-M60	-M34	-M40	-42	-M42	-M52	-M70 // -M55	-SM	-SMQ	-M81
Chip breaker:	(-NM23)	(-XU)	(-NM15)	(-NM26)	(-M34)	(-M40)	(-42)	(-M42)	(-M52)	(-NM19) // (-PF26)	(-ZM)	(-SMQ)	(-M81)
	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN					DRAGONSKIN	DRAGONSKIN	
	CTCK110 (DCX3110)	CTCK120 (HCF3120)	CTCP115 (HCX1115)	CTCP125 (HCX1125)	CTCP135 (HCR1135)	CTPM125 (HCN2125)	CTP2120 (CCN2120)	CTC2135 (CWN2135)	CWN2120 (CWN2120)		CTP5110 (HCN5110)	CTP5115 (HCN5115)	
Index	v_c in m/min												
1.1	**260–330**	**220–270**	**250–340**	**200–260**	**170–210**	120-250		170-210					
1.2	**260–340**	**220–300**	**270–350**	**230–280**	**180–230**	120-220		180-230					
1.3	**230–320**	**190–260**	**220–350**	**240–290**	**160–200**	120-250		150-220					
1.4	**240–310**	**200–250**	**240–310**	**200–250**	**170–210**	130-200		170-210					
1.5	**230–310**	**190–250**	**230–300**	**210–250**	**150–200**	100-170		150-200					
1.6	**220–300**	**180–260**	**210–270**	**190–240**	**160–220**	100-170		150-210					
1.7	**190–270**	**150–210**	**240–300**	**200–270**	**160–200**	50- 160		150-200					
1.8	**190–250**	**150–200**	**190–270**	**180–230**	**140–180**	50- 160		130-170					
1.9	**210–290**	**170–240**	**190–280**	**160–220**	**160–190**	60- 160		160-190					
1.10	**210–270**	**170–220**	**200–260**	**180–230**	**140–190**	100-180		130-170					
1.11	**210–280**	**170–230**	**180–260**	**170–240**	**130–170**	80-180		130-170					
1.12	**230–290**	**190–240**	**200–280**	**190–260**	**150–200**	70-170		150-190					
1.13	**190–260**	**150–210**	**180–250**	**170–230**	**130–180**	60-170		120-180					
1.14	**210–270**	**170–220**	**170–230**	**170–210**	**120–160**	70-160		120-170					
1.15	**180–270**	**150–220**	**150–240**	**130–220**	**110–150**	60-120		100-150					
1.16	**180–260**	**150–210**	**130–220**	**130–220**	**110–150**	60-120		100-150					
2.1	150-270		200-280	200-280	150-210	**120–280**	**180–240**	**150–230**	**130–200**		180-260	180-260	
2.2	150-260		200-280	200-280	150-200	**120–280**	**180–230**	**170–250**	**120–220**		170-240	170-240	
2.3	140-250		190-260	190-260	120-200	**120–260**	**170–220**	**140–220**	**100–160**		170-220	170-220	
2.4	160-260		190 -240	190-240	110-190	**120–240**	**130–210**	**140–210**	**80–180**		130-220	130-220	
2.5					90-150	**100–220**	**100–180**	**120–210**	**90–140**		100-170	100-170	
2.6					60-80	**100–220**	**70–140**	**100–140**	**80–150**		80-150	80-150	
2.7					60-80	**40–100**	**70–110**	**100–140**	**80–120**		80-150	80-150	
3.1	**220–280**	**170–240**	140-240	120-210			120-170						
3.2	**210–270**	**170–230**	160-250	160-200			100-150						
3.3	**300–350**	**260–310**	150-220	150-200			120-170						
3.4	**270–330**	**230–320**	140-200	130-190			150-240						
3.5	**290–370**	**250–330**	200-260	160-230			150-220						
3.6	**250–310**	**210–270**	180-240	150-210			110-170						
3.7	**290–370**	**250–330**	180-280	160-230			140-220						
3.8	**250–370**	**210–330**	160-260	150-210			120-170						
4.1							100-600		400-2000				
4.2							100-600		400-2000				
4.3							100-400		400-2000				
4.4							100-400		200-1200				
4.5							100-400		200-1000				
4.6							100-400		250-1000				
4.7							100-400		250-1000				
4.8							100-400		250-1000				
4.9							100-400		250-1000				
4.10							100-400		250-1000				
4.11									150-800				
4.12									150-800				
4.13													
4.14													
4.15													
4.16													
4.17													
4.18													
4.19													
5.1					20-40		**15–30**	**20–40**			**30–120**		
5.2					20-40		**15–40**	**20–40**				**30–90**	
5.3					8-25		**20–35**	**15–35**				**30–90**	
5.4					8-25		**13–30**	**15–35**				**30–90**	
5.5					4-15		**15–35**	**8–25**				**30–90**	
5.6					4-15		**15–35**	**4–15**				**30–90**	
5.7					4-15		**60–100**	**4–15**				**30–90**	
5.8					4-12		**20–40**	**4–15**			**30–120**		
5.9					80-130	80-130	**80–140**	**80–130**			**30–120**		
5.10					15-35	25-45	**25–45**	**15–35**			**30–120**		
5.11					15-35		**25–45**	**15–35**			**30–120**		
6.1													
6.2													
6.3													
6.4													
6.5													

The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type.
The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

Cutting data values for rough machining (R)

Chip breaker: .NMA -R28 -R58 -R88
Chip breaker: (.NMA) (-NR14) (-NR17) (-NR19)

	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
	CTCK110 (DCX3110)	CTCK120 (HCF3120)	CTCP115 (HCX1115)	CTCP125 (HCX1125)	CTCP135 (HCR1135)
Index	v_c in m/min				
1.1			**220–320**	**180–240**	**160–200**
1.2			**270–350**	**230–280**	**170–220**
1.3			**220–350**	**240–290**	**150–190**
1.4			**240–310**	**180–250**	**160–200**
1.5			**230–300**	**200–240**	**140–190**
1.6			**210–270**	**190–240**	**150–210**
1.7			**240–300**	**180–260**	**150–190**
1.8			**190–270**	**150–210**	**130–170**
1.9			**190–280**	**140–200**	**150–180**
1.10			**200–260**	**170–220**	**130–180**
1.11			**180–260**	**160–220**	**120–160**
1.12			**200–280**	**170–240**	**140–190**
1.13			**180–250**	**160–230**	**120–170**
1.14			**170–230**	**150–190**	**110–150**
1.15			**150–240**	**150–210**	**100–140**
1.16			**130–220**	**150–190**	**100–140**
2.1			200–280	200–280	140–200
2.2			200–280	200–280	140–190
2.3			190–260	190–260	110–190
2.4			190 –240	190–240	100–180
2.5					80–150
2.6					55–75
2.7					55–75
3.1	**220–280**	**170–240**	140–220	130–180	
3.2	**210–270**	**170–230**	160–230	120–170	
3.3	**300–350**	**260–310**	150–200	130–180	
3.4	**270–330**	**230–320**	140–180	100–160	
3.5	**290–370**	**250–330**	200–240	150–200	
3.6	**250–310**	**210–270**	180–220	130–180	
3.7	**290–370**	**250–330**	180–260	150–200	
3.8	**250–370**	**210–330**	160–240	130–180	
4.1					
4.2					
4.3					
4.4					
4.5					
4.6					
4.7					
4.8					
4.9					
4.10					
4.11					
4.12					
4.13					
4.14					
4.15					
4.16					
4.17					
4.18					
4.19					
5.1					20–40
5.2					20–40
5.3					8–25
5.4					8–25
5.5					4–15
5.6					4–15
5.7					4–15
5.8					4–12
5.9					80–130
5.10					15–35
5.11					15–35
6.1					
6.2					
6.3					
6.4					
6.5					

The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type. The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

Cutting data values for aluminum-chip breakers

Chip breaker:	-23P	-25P	-25Q	-27	-29
Chip breaker:	(-23P)	(-25P)	(-25Q)	(-AL)	(-29)

	H10T (CWK15)	H210T (CWK20)	H216T (CWK26)	AMZ (AMZ)	CWN15 (CWN15)
Index	v_c in m/min				
1.1				90–140	
1.2				110–160	
1.3				90–130	
1.4				80–120	
1.5				80–120	
1.6				90–110	
1.7				90–110	
1.8				70–90	
1.9				90–110	
1.10				70–90	
1.11				70–90	
1.12				70–110	
1.13				150–200	
1.14					
1.15				70–110	
1.16				70–110	
2.1				100–150	80–140
2.2					80–140
2.3					70–120
2.4					40–60
2.5					60–100
2.6				90–140	40–60
2.7					40–60
3.1	120–160	140–200	120–160	180–220	
3.2	90–140	100–160	90–140	140–180	
3.3	130–170	160–200	130–170	160–220	
3.4	90–130	110–150	90–130	120–180	
3.5	140–200	160–220	140–200	180–240	
3.6	120–160	140–180	120–160	160–200	
3.7	140–200	160–220	140–200	180–240	
3.8	120–160	140–180	120–160	160–200	
4.1	**300–2500**	**300–3200**	**300–2500**	**300–3200**	**300–3200**
4.2	**200–2500**	**400–1500**	**200–2000**	**200–2800**	**200–2800**
4.3	**400–2000**	**300–1000**	**400–1500**	**400–2000**	**400–2000**
4.4	**400–1800**	**200–500**	**400–1500**	**40–2000**	**40–2000**
4.5	**200–1000**	**200–500**	**200–800**	**200–1200**	**200–1200**
4.6	**150–300**	**150–400**	**150–300**	**250–1000**	**250–1000**
4.7	**250–600**	**250–800**	**150–400**	**200–1000**	**200–1000**
4.8	**150–400**	**250–800**	**150–400**	**200–1000**	**200–1000**
4.9	**150–400**	**250–800**	**150–400**	**200–1000**	**200–1000**
4.10	**150–400**	**250–800**	**150–400**	**200–1000**	**200–1000**
4.11	**150–300**	**200–800**	**200–600**	**150–800**	**150–800**
4.12	**130–350**	**150–400**	**150–400**	**150–500**	**150–500**
4.13	**100–200**	**80–320**	**100–200**	**100–250**	**100–250**
4.14	**80–180**	**80–320**	**80–180**	**80–200**	**80–200**
4.15	**60–150**	**80–200**	**60–150**	**80–220**	**80–220**
4.16					
4.17					
4.18	**60–140**				
4.19		**100–140**	**100–140**		
5.1		25–40	30–45		
5.2		25–40	20–35		
5.3		25–40	20–35		
5.4		20–30	15–25		
5.5		25–40	15–25		
5.6		20–30	15–25		
5.7		20–30	15–25		
5.8		15–25	15–25		
5.9	60–120	80–140	60–120		
5.10	30–80	40–100	30–80		
5.11	30–80	40–100	30–80		
6.1					
6.2					
6.3					
6.4					
6.5					

The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type. The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

Cutting data for machining non ferrous metals with carbide inserts

	Material group	Material examples			Machinability of aluminium alloys *	Comments	Cutting speed v_c in m/min
N	Pure aluminium	non hardenable	Al 99,5	W7	5	▲ Snarl chips ▲ Possibly bad surface ▲ Excessive built-up edge ▲ Long tool life ▲ Use coolant emulsion	300–3200
			Al 99,5	F13	4		
			Al 99	W8	5		
			Al 99	F14	4		
	Aluminium wrought alloys	non hardenable	Al Mn	W10	5	▲ Snarl, continuous or fragmented chip ▲ Large feed rates necessary for good swarf control ▲ Built-up edge ▲ Long tool life ▲ Emulsion coolant is advantageous	300–2500
			Al Mn	F16	4		
			Al Mg 1	W10	5		
			Al Mg 1	F19	4		
			Al Mg 3	W18	4		
			Al Mg 3	F25	3		
			Al Mg 5	W25	4		
			AL Mg 5	F28	2		
			Al Mg 4,5 Mn	W27	4		
			Al Mg 4,5 Mn	G35	3		
		hardenable	Al Mg Si 0,5	W	4	▲ Good swarf control with higher feed rates	200–2000
			Al Mg Si 0,5	F13-25	3		
			Al Mg Si 1	W	4		
			Al Mg Si 1	F21-30	3		
			Al Mg Si Pb	F20-28	2	▲ Very good swarf control ▲ No built up edge ▲ Very good surface quality	
			Al Cu Si Pb	F28-37	1		
			Al Cu Mg Pb	F34-37	1		
			Al Cu Mg 1	W	3	▲ Good swarf control ▲ Good surface quality ▲ Little built-up edge	
			Al Cu Mg 1	F33-40	2		
			Al Cu Mg 2	W	3		
			Al Cu Mg 2	F40-47	2		
			Al Cu Si Mn	W	3		
			Al Cu Si Mn	F43-46	2		
			Al Zn Mg Cu 1,5	F50-52	2		
			Al Sn 6 Cu		1		
	Cast Aluminium Alloys	non hardenable	G-Al Si 12		3	▲ Good swarf control ▲ Built-up edge ▲ Higher Si content results in lower tool life	Si content < 12 % 400–1500
			G-Al Si 10 Mg		3		
			G-Al Si 5 Mg		2		Si content ~ 12.5 % 300–1000
			G-Al Si 7 Mg (9 Mg)		2		
			G-Al Si Cu 3		2	▲ High wear of the carbide	Si content > 13 % 200–500
			G-Al Si 6 Cu 4		2		
			G-Al Mg 3 (Mg 5)		2	▲ Good swarf control ▲ Good surface quality ▲ Long tool life	200–1500
			G-Al Mg 9		2		
			G-Al Mg 10		2		
			G-Al Mg 3 Si (5 Si)		2		
			G-Al Cu 4 Ti (Mg)		2		
			G-Al Si 12 Cu Mg Ni		2		
	Copper wrought alloys		Cu Ag				300–1200
			Cu As				
			Cu Cd				
			Cu Cd Sn				
			Cu Mg				
			Cu Mn				
		brass	Cu Zn Al				300–1000
		bronze	Cu Sn				300–800
			Cu Sn Zn				
			Cu Ni				
			Cu Ni Fe				
			Cu Al				
	Non metal materials	Duroplastics					80–320
		Fibre-reinforced plastics					
		hard rubber					

* 1 = good machinability, 5 = bad machinability

The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type.
The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

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Cutting data standard values for negative inserts

	Designation	-NF12 (Cermet)						-F50 (-NF15)					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		mm/rev.			mm			mm/rev.			mm		
	CN.. 090304							0,06	**0,15**	0,25	0,2	**0,5**	1,5
	CN.. 090308							0,10	**0,20**	0,30	0,4	**1,0**	2,0
	CN.. 120404	0,05	**0,15**	0,25	0,3	**0,5**	1,5	0,06	**0,15**	0,25	0,2	**0,6**	1,5
	CN.. 120408	0,07	**0,15**	0,25	0,3	**0,5**	1,5	0,10	**0,20**	0,30	0,4	**1,0**	2,0
	CN.. 120412							0,14	**0,25**	0,35	0,6	**1,4**	2,6
	CN.. 120416												
	CN.. 160608												
	CN.. 160612												
	CN.. 160616												
	CN.. 160624												
	CN.. 190608												
	CN.. 190612												
	CN.. 190616												
	CN.. 190624												
	CN.. 250924												
	DN.. 110402							0,04	**0,10**	0,20	0,1	**0,4**	2,3
	DN.. 110404	0,05	**0,15**	0,25	0,3	**0,5**	1,5	0,06	**0,15**	0,25	0,2	**0,6**	1,5
	DN.. 110408	0,07	**0,15**	0,25	0,3	**0,5**	1,5	0,10	**0,20**	0,30	0,4	**1,0**	2,0
	DN.. 110412							0,14	**0,25**	0,35	0,6	**1,4**	2,6
	DN.. 150404							0,06	**0,15**	0,25	0,2	**0,6**	1,5
	DN.. 150408							0,10	**0,20**	0,30	0,4	**1,0**	2,0
	DN.. 150412							0,14	**0,25**	0,35	0,6	**1,4**	2,6
	DN.. 150416												
	DN.. 150604	0,05	**0,15**	0,25	0,3	**0,5**	1,5	0,06	**0,15**	0,25	0,2	**0,6**	1,5
	DN.. 150608	0,07	**0,15**	0,25	0,3	**0,5**	1,5	0,10	**0,20**	0,30	0,4	**1,0**	2,0
	DN.. 150612	0,10	**0,20**	0,30	0,5	**0,7**	1,5	0,14	**0,25**	0,35	0,6	**1,4**	2,6
	DN.. 150616												
	SN.. 090308							0,10	**0,20**	0,30	0,4	**1,0**	2,0
	SN.. 120404							0,06	**0,15**	0,25	0,2	**0,6**	1,5
	SN.. 120408							0,10	**0,20**	0,30	0,4	**1,0**	2,0
	SN.. 120412							0,14	**0,25**	0,35	0,6	**1,4**	2,6
	SN.. 120416												
	SN.. 150608												
	SN.. 150612												
	SN.. 150616												
	SN.. 190612												
	SN.. 190616												
	SN.. 190624												
	SN.. 250724												
	SN.. 250924												
	TN.. 110304							0,06	**0,15**	0,25	0,2	**0,6**	1,5
	TN.. 110308							0,10	**0,20**	0,30	0,4	**1,0**	2,0
	TN.. 160404	0,05	**0,15**	0,25	0,3	**0,5**	1,5	0,06	**0,15**	0,25	0,2	**0,6**	1,5
	TN.. 160408	0,07	**0,15**	0,25	0,3	**0,5**	1,5	0,10	**0,20**	0,30	0,4	**1,0**	2,0
	TN.. 160412	0,10	**0,20**	0,30	0,5	**0,7**	1,5	0,14	**0,25**	0,35	0,6	**1,4**	2,6
	TN.. 220404												
	TN.. 220408												
	TN.. 220412												
	TN.. 220416												
	VN.. 160404							0,06	**0,15**	0,25	0,2	**0,6**	1,5
	VN.. 160408							0,10	**0,20**	0,30	0,4	**1,0**	2,0
	VN.. 160412												
	WN.. 060404	0,05	**0,15**	0,25	0,3	**0,5**	1,5	0,06	**0,15**	0,25	0,2	**0,6**	1,5
	WN.. 060408	0,07	**0,15**	0,25	0,3	**0,5**	1,5	0,10	**0,20**	0,30	0,4	**1,0**	2,0
	WN.. 060412												
	WN.. 080404							0,06	**0,15**	0,25	0,2	**0,6**	1,5
	WN.. 080408	0,07	**0,15**	0,25	0,3	**0,5**	1,5	0,10	**0,20**	0,30	0,4	**1,0**	2,0
	WN.. 080412							0,14	**0,25**	0,35	0,6	**1,4**	2,6
	WN.. 080416												

sharp ◄——————————————————————————► stable

The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-TFQ (-TFQ)						-XU (-XU)						-M50 (-NM15)					
	f			a_p			f			a_p			f			a_p		
	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.
	mm/rev.			mm			mm/rev.			mm			mm/rev.			mm		
CN.. 090304																		
CN.. 090308																		
CN.. 120404	0,10	**0,15**	0,35	0,4	**1,0**	3,0	0,08	**0,15**	0,25	0,3	**1,5**	2,5	0,10	**0,20**	0,30	0,4	**2,0**	5,0
CN.. 120408	0,10	**0,25**	0,50	0,5	**1,5**	4,0	0,13	**0,25**	0,35	0,6	**2,0**	3,0	0,15	**0,25**	0,40	0,6	**2,0**	5,0
CN.. 120412	0,15	**0,30**	0,70	0,8	**2,0**	5,0	0,15	**0,30**	0,45	0,9	**2,0**	3,5	0,20	**0,30**	0,50	1,0	**2,0**	5,0
CN.. 120416													0,25	**0,40**	0,60	1,4	**2,0**	5,0
CN.. 160608													0,15	**0,25**	0,40	0,6	**3,0**	8,0
CN.. 160612													0,20	**0,30**	0,50	1,0	**3,0**	8,0
CN.. 160616													0,25	**0,40**	0,60	1,4	**3,0**	8,0
CN.. 160624																		
CN.. 190608																		
CN.. 190612																		
CN.. 190616																		
CN.. 190624																		
CN.. 250924																		
DN.. 110402																		
DN.. 110404													0,10	**0,20**	0,30	0,4	**1,5**	4,0
DN.. 110408													0,15	**0,25**	0,40	0,6	**1,5**	4,0
DN.. 110412													0,20	**0,30**	0,50	1,0	**1,5**	4,0
DN.. 150404													0,10	**0,20**	0,30	0,4	**2,0**	5,0
DN.. 150408													0,15	**0,25**	0,40	0,6	**2,0**	5,0
DN.. 150412													0,20	**0,30**	0,50	1,0	**2,0**	5,0
DN.. 150416													0,25	**0,40**	0,60	1,4	**2,0**	5,0
DN.. 150604	0,10	**0,15**	0,30	0,4	**1,0**	3,0	0,08	**0,15**	0,25	0,3	**1,5**	2,5	0,10	**0,20**	0,30	0,4	**2,0**	5,0
DN.. 150608	0,10	**0,25**	0,40	0,5	**1,5**	4,0	0,13	**0,25**	0,35	0,6	**2,0**	3,0	0,15	**0,25**	0,40	0,6	**2,0**	5,0
DN.. 150612							0,15	**0,25**	0,40	0,9	**2,0**	3,5	0,20	**0,30**	0,50	1,0	**2,0**	5,0
DN.. 150616													0,25	**0,40**	0,60	1,4	**2,0**	5,0
SN.. 090308																		
SN.. 120404																		
SN.. 120408													0,15	**0,25**	0,40	0,6	**2,0**	5,0
SN.. 120412													0,20	**0,30**	0,50	1,0	**2,0**	5,0
SN.. 120416													0,25	**0,40**	0,60	1,4	**2,0**	5,0
SN.. 150608													0,15	**0,25**	0,40	0,6	**3,0**	8,0
SN.. 150612													0,20	**0,30**	0,50	1,0	**3,0**	8,0
SN.. 150616													0,25	**0,40**	0,60	1,4	**3,0**	8,0
SN.. 190612																		
SN.. 190616																		
SN.. 190624																		
SN.. 250724																		
SN.. 250924																		
TN.. 110304																		
TN.. 110308																		
TN.. 160404													0,10	**0,20**	0,30	0,4	**2,0**	5,0
TN.. 160408													0,15	**0,25**	0,40	0,6	**2,0**	5,0
TN.. 160412													0,20	**0,30**	0,50	1,0	**2,0**	5,0
TN.. 220404																		
TN.. 220408													0,15	**0,25**	0,40	0,6	**3,0**	8,0
TN.. 220412													0,20	**0,30**	0,50	1,0	**3,0**	8,0
TN.. 220416																		
VN.. 160404							0,08	**0,15**	0,20	0,3	**1,0**	1,8	0,10	**0,20**	0,30	0,4	**1,0**	4,0
VN.. 160408							0,13	**0,20**	0,30	0,6	**1,5**	2,5	0,15	**0,25**	0,40	0,6	**1,0**	4,0
VN.. 160412													0,20	**0,30**	0,50	1,0	**1,0**	4,0
WN.. 060404	0,10	**0,18**	0,35	0,4	**0,8**	3,0							0,10	**0,20**	0,30	0,4	**1,0**	3,0
WN.. 060408	0,10	**0,20**	0,50	0,5	**1,5**	3,0							0,15	**0,25**	0,40	0,6	**1,0**	3,0
WN.. 060412													0,20	**0,30**	0,50	1,0	**1,0**	3,0
WN.. 080404							0,08	**0,15**	0,25	0,3	**1,5**	2,5	0,10	**0,20**	0,30	0,4	**1,5**	4,0
WN.. 080408	0,10	**0,25**	0,50	0,5	**1,5**	4,0	0,13	**0,22**	0,35	0,6	**2,0**	3,0	0,15	**0,25**	0,40	0,6	**1,5**	4,0
WN.. 080412	0,15	**0,30**	0,70	0,8	**2,0**	5,0	0,15	**0,25**	0,45	0,9	**2,0**	3,5	0,20	**0,30**	0,50	1,0	**1,5**	4,0
WN.. 080416													0,25	**0,40**	0,60	1,4	**1,5**	4,0

sharp ← → stable

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page 168–175**

Cutting data standard values for negative inserts

	Designation	-TMQ (-TMQ)						-M70 (-NM19)					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		mm/rev.			mm			mm/rev.			mm		
	CN.. 090304												
	CN.. 090308												
	CN.. 120404												
	CN.. 120408	0,20	**0,40**	0,65	0,8	**3,0**	5,0	0,20	**0,30**	0,45	0,8	**3,0**	6,0
	CN.. 120412	0,25	**0,50**	0,85	1,0	**3,0**	6,0	0,25	**0,40**	0,60	1,2	**3,0**	6,0
	CN.. 120416							0,30	**0,45**	0,70	1,6	**3,0**	6,0
	CN.. 160608							0,20	**0,30**	0,45	0,8	**4,0**	8,0
	CN.. 160612							0,25	**0,40**	0,60	1,2	**4,0**	8,0
	CN.. 160616							0,30	**0,45**	0,70	1,6	**4,0**	8,0
	CN.. 160624							0,40	**0,70**	1,20	2,4	**4,0**	8,0
	CN.. 190608							0,20	**0,30**	0,45	0,8	**4,5**	9,0
	CN.. 190612							0,25	**0,40**	0,60	1,2	**4,5**	9,0
	CN.. 190616							0,30	**0,45**	0,70	1,6	**4,5**	9,0
	CN.. 190624							0,40	**0,70**	1,20	2,4	**4,5**	9,0
	CN.. 250924							0,40	**0,70**	1,20	2,4	**6,0**	13,0
	DN.. 110402												
	DN.. 110404												
	DN.. 110408							0,20	**0,25**	0,45	0,8	**2,0**	5,0
	DN.. 110412							0,25	**0,35**	0,60	1,2	**2,0**	5,0
	DN.. 150404												
	DN.. 150408							0,20	**0,25**	0,45	0,8	**2,5**	6,0
	DN.. 150412							0,25	**0,35**	0,60	1,2	**2,5**	6,0
	DN.. 150416							0,30	**0,40**	0,70	1,6	**2,5**	6,0
	DN.. 150604												
	DN.. 150608	0,15	**0,30**	0,50	0,8	**2,5**	5,0	0,20	**0,25**	0,45	0,8	**2,5**	6,0
	DN.. 150612	0,20	**0,40**	0,60	1,0	**3,0**	5,0	0,25	**0,35**	0,60	1,2	**2,5**	6,0
	DN.. 150616							0,30	**0,40**	0,70	1,6	**2,5**	6,0
	SN.. 090308												
	SN.. 120404												
	SN.. 120408							0,20	**0,30**	0,50	0,8	**3,0**	6,0
	SN.. 120412							0,25	**0,40**	0,65	1,2	**3,0**	6,0
	SN.. 120416							0,30	**0,45**	0,70	1,6	**3,0**	6,0
	SN.. 150608												
	SN.. 150612							0,25	**0,40**	0,65	1,2	**4,0**	8,0
	SN.. 150616							0,30	**0,45**	0,75	1,6	**4,0**	8,0
	SN.. 190612							0,25	**0,40**	0,65	1,2	**4,5**	9,0
	SN.. 190616							0,30	**0,45**	0,75	1,6	**4,5**	9,0
	SN.. 190624							0,40	**0,70**	1,20	2,4	**4,5**	9,0
	SN.. 250724												
	SN.. 250924							0,40	**0,70**	1,20	2,4	**6,0**	13,0
	TN.. 110304												
	TN.. 110308												
	TN.. 160404												
	TN.. 160408							0,20	**0,25**	0,45	0,8	**2,5**	6,0
	TN.. 160412							0,25	**0,35**	0,60	1,2	**2,5**	6,0
	TN.. 220404							0,15	**0,20**	0,30	0,4	**3,0**	7,0
	TN.. 220408							0,20	**0,25**	0,45	0,8	**3,0**	7,0
	TN.. 220412							0,25	**0,35**	0,60	1,2	**3,0**	7,0
	TN.. 220416							0,30	**0,40**	0,70	1,6	**3,0**	7,0
	VN.. 160404												
	VN.. 160408												
	VN.. 160412												
	WN.. 060404												
	WN.. 060408							0,20	**0,30**	0,45	0,8	**2,0**	4,0
	WN.. 060412							0,25	**0,40**	0,60	1,2	**2,0**	4,0
	WN.. 080404												
	WN.. 080408	0,20	**0,30**	0,65	0,8	**3,0**	5,0	0,20	**0,30**	0,45	0,8	**2,5**	5,0
	WN.. 080412	0,25	**0,40**	0,85	1,0	**3,0**	6,0	0,25	**0,40**	0,60	1,2	**2,5**	5,0
	WN.. 080416							0,30	**0,45**	0,70	1,6	**2,5**	5,0

sharp ◄——————————————————————► stable

The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-R28 (-NR14)						-R58 (-NR17)						-R88 (-NR19)					
	f			a_p			f			a_p			f			a_p		
	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.
	mm/rev.			mm			mm/rev.			mm			mm/rev.			mm		
CN.. 090304																		
CN.. 090308																		
CN.. 120404																		
CN.. 120408	0,25	**0,35**	0,55	0,8	**3,0**	7,0	0,25	**0,45**	0,70	1,0	**3,0**	7,0						
CN.. 120412	0,30	**0,45**	0,70	1,0	**3,0**	7,0	0,30	**0,55**	0,85	1,5	**3,0**	7,0						
CN.. 120416	0,30	**0,60**	0,90	1,5	**3,0**	7,0	0,35	**0,65**	1,00	2,0	**3,0**	7,0						
CN.. 160608																		
CN.. 160612	0,30	**0,45**	0,70	1,0	**4,0**	9,0	0,30	**0,55**	0,85	1,5	**4,0**	9,0						
CN.. 160616	0,35	**0,60**	0,90	1,5	**4,0**	9,0	0,35	**0,65**	1,00	2,0	**4,0**	9,0						
CN.. 160624							0,40	**0,75**	1,20	2,5	**4,0**	9,0	0,40	**0,70**	1,20	2,0	**5,0**	9,0
CN.. 190608																		
CN.. 190612	0,30	**0,45**	0,70	1,0	**5,5**	12,0	0,35	**0,55**	0,85	1,5	**5,5**	12,0						
CN.. 190616	0,35	**0,60**	0,90	1,5	**5,5**	12,0	0,40	**0,65**	1,00	2,0	**5,5**	12,0	0,40	**0,70**	1,00	2,0	**5,0**	12,0
CN.. 190624	0,35	**0,65**	1,00	2,0	**5,5**	12,0	0,40	**0,75**	1,20	2,5	**5,5**	12,0	0,40	**0,70**	1,20	2,0	**5,0**	12,0
CN.. 250924							0,45	**0,80**	1,30	2,5	**8,0**	16,0	0,60	**1,00**	1,50	3,5	**10,0**	18,0
DN.. 110402																		
DN.. 110404																		
DN.. 110408																		
DN.. 110412																		
DN.. 150404																		
DN.. 150408																		
DN.. 150412																		
DN.. 150416																		
DN.. 150604																		
DN.. 150608																		
DN.. 150612	0,25	**0,45**	0,70	1,0	**2,5**	6,0	0,30	**0,50**	0,80	1,5	**2,5**	6,0						
DN.. 150616	0,30	**0,60**	0,85	1,5	**2,5**	6,0	0,35	**0,60**	0,90	2,0	**2,5**	6,0						
SN.. 090308																		
SN.. 120404																		
SN.. 120408							0,25	**0,45**	0,70	1,0	**3,0**	7,0						
SN.. 120412							0,30	**0,55**	0,85	1,5	**3,0**	7,0						
SN.. 120416																		
SN.. 150608																		
SN.. 150612	0,30	**0,35**	0,70	1,0	**4,0**	9,0	0,30	**0,55**	0,85	1,5	**4,0**	9,0						
SN.. 150616	0,35	**0,60**	0,90	1,5	**4,0**	9,0	0,35	**0,65**	1,00	2,0	**4,0**	9,0						
SN.. 190612							0,35	**0,55**	0,85	1,5	**5,5**	12,0						
SN.. 190616	0,35	**0,60**	0,90	1,5	**5,5**	12,0	0,40	**0,65**	1,00	2,0	**5,5**	12,0	0,40	**0,70**	1,00	2,0	**5,0**	12,0
SN.. 190624							0,40	**0,75**	1,20	2,0	**5,5**	12,0	0,40	**0,70**	1,20	2,0	**5,0**	12,0
SN.. 250724	0,35	**0,65**	1,00	2,0	**7,0**	16,0	0,45	**0,80**	1,30	2,5	**8,0**	16,0	0,60	**1,00**	1,50	3,5	**10,0**	18,0
SN.. 250924	0,35	**0,65**	1,00	2,0	**7,0**	16,0	0,45	**0,80**	1,30	2,5	**8,0**	16,0	0,60	**1,00**	1,50	3,5	**10,0**	18,0
TN.. 110304																		
TN.. 110308																		
TN.. 160404																		
TN.. 160408																		
TN.. 160412																		
TN.. 220404																		
TN.. 220408																		
TN.. 220412							0,30	**0,50**	0,80	1,5	**3,0**	7,0						
TN.. 220416	0,30	**0,55**	0,85	1,5	**3,0**	7,0												
VN.. 160404																		
VN.. 160408																		
VN.. 160412																		
WN.. 060404																		
WN.. 060408																		
WN.. 060412																		
WN.. 080404																		
WN.. 080408																		
WN.. 080412																		
WN.. 080416																		

sharp ← → stable

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page 168–175**

Cutting data standard values for negative inserts

	Designation	-F30 (-NF23)						-M30 (-NM23)					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		mm/rev.			mm			mm/rev.			mm		
	CN.. 090304												
	CN.. 090308												
	CN.. 120404	0,05	**0,15**	0,25	0,4	**1,0**	2,0						
	CN.. 120408	0,10	**0,22**	0,35	0,8	**1,5**	2,5	0,15	**0,25**	0,40	1,0	**2,0**	4,5
	CN.. 120412							0,20	**0,30**	0,50	1,2	**2,5**	5,0
	CN.. 120416							0,25	**0,35**	0,55	1,6	**2,5**	5,0
	CN.. 160608												
	CN.. 160612												
	CN.. 160616												
	CN.. 160624												
	CN.. 190608												
	CN.. 190612												
	CN.. 190616												
	CN.. 190624												
	CN.. 250924												
	DN.. 110402												
	DN.. 110404	0,05	**0,15**	0,25	0,4	**1,0**	2,0						
	DN.. 110408	0,10	**0,20**	0,35	0,8	**1,5**	2,5	0,15	**0,25**	0,40	1,0	**2,0**	4,5
	DN.. 110412							0,20	**0,30**	0,50	1,2	**2,0**	4,5
	DN.. 150404												
	DN.. 150408												
	DN.. 150412												
	DN.. 150416												
	DN.. 150604	0,05	**0,15**	0,25	0,4	**1,0**	2,0						
	DN.. 150608	0,10	**0,20**	0,35	0,8	**1,5**	2,5	0,15	**0,25**	0,40	1,0	**2,0**	5,5
	DN.. 150612							0,20	**0,30**	0,50	1,2	**2,0**	5,5
	DN.. 150616												
	SN.. 090308												
	SN.. 120404	0,10	**0,15**	0,30	0,4	**1,0**	2,0						
	SN.. 120408	0,15	**0,20**	0,40	0,8	**1,5**	2,5	0,20	**0,25**	0,45	1,0	**2,0**	4,5
	SN.. 120412	0,15	**0,20**	0,40	1,2	**1,8**	2,5	0,25	**0,30**	0,50	1,2	**2,0**	5,0
	SN.. 120416												
	SN.. 150608												
	SN.. 150612												
	SN.. 150616												
	SN.. 190612												
	SN.. 190616												
	SN.. 190624												
	SN.. 250724												
	SN.. 250924												
	TN.. 110304												
	TN.. 110308												
	TN.. 160404	0,05	**0,15**	0,25	0,4	**1,0**	2,0						
	TN.. 160408	0,10	**0,15**	0,35	0,8	**1,5**	2,5	0,15	**0,25**	0,40	1,0	**2,0**	4,5
	TN.. 160412							0,20	**0,30**	0,50	1,2	**2,0**	4,5
	TN.. 220404												
	TN.. 220408												
	TN.. 220412												
	TN.. 220416												
	VN.. 160404	0,08	**0,10**	0,20	0,4	**1,0**	2,0						
	VN.. 160408	0,10	**0,15**	0,30	0,8	**1,5**	2,5	0,15	**0,25**	0,40	1,0	**1,5**	4,0
	VN.. 160412												
	WN.. 060404	0,05	**0,15**	0,25	0,4	**1,0**	2,0						
	WN.. 060408	0,10	**0,20**	0,30	0,8	**1,5**	2,5	0,15	**0,25**	0,40	1,0	**1,5**	3,5
	WN.. 060412							0,20	**0,30**	0,45	1,2	**1,5**	4,0
	WN.. 080404	0,05	**0,15**	0,25	0,4	**1,0**	2,0						
	WN.. 080408	0,10	**0,20**	0,35	0,8	**1,5**	2,5	0,15	**0,25**	0,40	1,0	**2,0**	4,5
	WN.. 080412							0,20	**0,30**	0,50	1,2	**2,0**	5,0
	WN.. 080416												

sharp ◄——————————————————————► stable

The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-M60 (-NM26)						-M34 (-M34)					
	f			a_p			f			a_p		
	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.
	mm/rev.			mm			mm/rev.			mm		
CN.. 090304												
CN.. 090308												
CN.. 120404							0,08	**0,12**	0,18	1,0	**1,5**	3,0
CN.. 120408	0,25	**0,30**	0,50	1,5	**2,5**	6,0	0,10	**0,15**	0,35	1,0	**1,8**	3,5
CN.. 120412	0,30	**0,35**	0,55	2,0	**3,0**	6,0	0,13	**0,20**	0,40	1,5	**2,0**	4,0
CN.. 120416	0,30	**0,40**	0,60	2,0	**3,0**	6,0	0,15	**0,25**	0,45	2,0	**3,0**	4,5
CN.. 160608												
CN.. 160612	0,30	**0,35**	0,55	2,0	**3,0**	8,0						
CN.. 160616												
CN.. 160624												
CN.. 190608												
CN.. 190612												
CN.. 190616												
CN.. 190624												
CN.. 250924												
DN.. 110402												
DN.. 110404												
DN.. 110408												
DN.. 110412												
DN.. 150404							0,08	**0,12**	0,18	0,8	**1,2**	2,5
DN.. 150408							0,10	**0,15**	0,30	1,0	**1,8**	3,5
DN.. 150412							0,13	**0,20**	0,38	1,5	**2,0**	4,0
DN.. 150416												
DN.. 150604												
DN.. 150608	0,25	**0,30**	0,45	1,5	**2,5**	6,0	0,10	**0,15**	0,30	1,0	**1,8**	3,5
DN.. 150612	0,30	**0,40**	0,55	1,5	**2,5**	6,0	0,13	**0,20**	0,38	1,5	**2,0**	4,0
DN.. 150616												
SN.. 090308												
SN.. 120404												
SN.. 120408	0,30	**0,35**	0,50	1,5	**2,0**	6,0	0,15	**0,25**	0,40	1,0	**2,0**	4,0
SN.. 120412	0,30	**0,40**	0,55	2,0	**2,5**	6,0	0,15	**0,25**	0,45	1,5	**2,5**	4,5
SN.. 120416	0,30	**0,40**	0,60	2,0	**2,5**	6,0						
SN.. 150608												
SN.. 150612												
SN.. 150616												
SN.. 190612												
SN.. 190616												
SN.. 190624												
SN.. 250724												
SN.. 250924												
TN.. 110304												
TN.. 110308												
TN.. 160404												
TN.. 160408	0,25	**0,25**	0,45	1,5	**2,5**	5,0	0,10	**0,15**	0,35	1,0	**2,0**	4,0
TN.. 160412	0,30	**0,30**	0,55	2,0	**2,5**	5,5						
TN.. 220404							0,10	**0,15**	0,35	1,0	**2,0**	4,0
TN.. 220408							0,13	**0,20**	0,40	1,5	**2,5**	4,0
TN.. 220412												
TN.. 220416							0,15	**0,25**	0,45	2,0	**2,5**	4,5
VN.. 160404							0,07	**0,10**	0,18	0,8	**1,2**	2,0
VN.. 160408							0,10	**0,15**	0,20	1,0	**1,5**	2,5
VN.. 160412							0,13	**0,18**	0,25	1,5	**1,8**	3,0
WN.. 060404												
WN.. 060408	0,25	**0,30**	0,45	1,5	**2,0**	4,0						
WN.. 060412	0,30	**0,35**	0,50	2,0	**2,5**	4,5						
WN.. 080404												
WN.. 080408	0,25	**0,30**	0,50	1,5	**2,0**	5,0	0,10	**0,15**	0,35	1,0	**2,0**	4,0
WN.. 080412	0,30	**0,35**	0,55	2,0	**2,5**	5,5	0,13	**0,20**	0,40	1,5	**2,0**	4,0
WN.. 080416												

sharp ← → stable

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page 168–175**

Cutting data values for positive inserts

	Designation	-CF05 (-PF14)						-SF (-ZF)					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		mm/rev.			mm			mm/rev.			mm		
	CC.. 060200							0,02	**0,035**	0,05	0,1	**0,4**	1,5
	CC.. 060201							0,02	**0,035**	0,05	0,2	**0,4**	1,5
	CC.. 060202	0,03	**0,08**	0,12	0,1	**0,3**	1,3	0,03	**0,1**	0,15	0,2	**0,4**	1,5
	CC.. 060204	0,05	**0,10**	0,12	0,1	**0,3**	1,3	0,05	**0,1**	0,2	0,2	**0,6**	1,5
	CC.. 060208							0,05	**0,125**	0,2	0,2	**1**	1,5
	CC.. 09T300							0,02	**0,035**	0,05	0,2	**0,75**	2
	CC.. 09T301							0,02	**0,035**	0,05	0,2	**0,75**	2
	CC.. 09T302	0,03	**0,08**	0,12	0,1	**0,3**	1,3	0,05	**0,075**	0,1	0,2	**0,75**	2
	CC.. 09T304	0,05	**0,10**	0,22	0,2	**0,4**	1,3	0,05	**0,12**	0,2	0,2	**0,75**	2
	CC.. 09T308	0,06	**0,13**	0,25	0,2	**0,4**	1,3	0,05	**0,125**	0,25	0,4	**1**	2
	CC.. 09T312												
	CC.. 120402							0,05	**0,075**	0,1	0,2	**0,8**	2,5
	CC.. 120404							0,05	**0,12**	0,2	0,2	**1**	2,5
	CC.. 120408							0,08	**0,15**	0,25	0,4	**1**	2,5
	CC.. 120412							0,08	**0,15**	0,25	0,4	**1,5**	2,5
	DC.. 0702005												
	DC.. 070201												
	DC.. 0702015												
	DC.. 070202	0,03	**0,08**	0,12	0,1	**0,3**	1,3	0,03	**0,1**	0,15	0,1	**0,4**	1,5
	DC.. 070204	0,05	**0,10**	0,22	0,2	**0,4**	1,3	0,05	**0,12**	0,2	0,2	**0,6**	1,5
	DC.. 070208												
	DC.. 11T3005												
	DC.. 11T301												
	DC.. 11T3015												
	DC.. 11T302	0,03	**0,08**	0,12	0,1	**0,3**	1,3						
	DC.. 11T304	0,05	**0,10**	0,22	0,2	**0,4**	1,3	0,05	**0,12**	0,2	0,2	**0,7**	2
	DC.. 11T308	0,06	**0,13**	0,25	0,2	**0,4**	1,3	0,08	**0,15**	0,25	0,4	**1**	2
	DC.. 11T312												
	RC.. 0602M0												
	RC.. 0803M0												
	RC.. 1003M0												
	RC.. 1204M0												
	RC.. 1606M0												
	RC.. 2006M0												
	RC.. 2507M0												
	SC.. 09T304	0,05	**0,10**	0,22	0,2	**0,4**	1,3	0,05	**0,12**	0,2	0,2	**0,7**	2
	SC.. 09T308	0,06	**0,13**	0,25	0,2	**0,4**	1,3	0,08	**0,15**	0,25	0,4	**1**	2
	SC.. 120408							0,08	**0,15**	0,25	0,4	**1**	2,5
	SC.. 120412												
	TC.. 090204												
	TC.. 110202	0,03	**0,08**	0,12	0,1	**0,3**	1,3						
	TC.. 110204	0,05	**0,10**	0,22	0,2	**0,4**	1,3	0,05	**0,12**	0,2	0,2	**0,7**	2
	TC.. 110208	0,06	**0,13**	0,25	0,2	**0,4**	1,3	0,08	**0,15**	0,25	0,4	**1**	2
	TC.. 16T302												
	TC.. 16T304	0,05	**0,10**	0,22	0,2	**0,4**	1,3	0,05	**0,12**	0,2	0,2	**0,8**	2,5
	TC.. 16T308							0,08	**0,15**	0,25	0,4	**1**	2,5
	TC.. 16T312												
	TC.. 220408												
	VC.. 1103005												
	VC.. 110301												
	VC.. 1103015												
	VC.. 110302	0,03	**0,06**	0,12	0,1	**0,3**	1,3	0,02	**0,08**	0,15	0,1	**0,4**	1,5
	VC.. 110304	0,05	**0,08**	0,22	0,2	**0,4**	1,3	0,05	**0,1**	0,2	0,2	**0,6**	1,5
	VC.. 110308							0,08	**0,12**	0,22	0,4	**1**	1,5
	VC.. 160402												
	VC.. 160404	0,05	**0,08**	0,22	0,2	**0,4**	1,3	0,05	**0,1**	0,2	0,2	**0,7**	2
	VC.. 160408	0,06	**0,10**	0,22	0,2	**0,4**	1,3	0,08	**0,12**	0,22	0,4	**1**	2
	VC.. 160412												
	VC.. 220530												
	WC.. 020102							0,02	**0,075**	0,1	0,1	**0,4**	1
	WC.. 020104							0,02	**0,1**	0,2	0,1	**0,6**	1,5

sharp ◄——————————————————————► stable

The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-CF55 (-PF15)						-SMF (-SMF)						-SM (-ZM)					
	f			a_p			f			a_p			f			a_p		
	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.
	mm/rev.			mm			mm/rev.			mm			mm/rev.			mm		
CC.. 060200																		
CC.. 060201																		
CC.. 060202													0,04	**0,12**	0,2	0,2	**0,6**	2,5
CC.. 060204	0,05	**0,12**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,25	0,3	**0,7**	2	0,08	**0,17**	0,3	0,4	**0,8**	2,5
CC.. 060208							0,1	**0,17**	0,27	0,6	**1**	2	0,12	**0,2**	0,35	0,8	**1**	2,5
CC.. 09T300																		
CC.. 09T301																		
CC.. 09T302																		
CC.. 09T304	0,05	**0,12**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,25	0,3	**0,8**	2,5	0,08	**0,17**	0,3	0,4	**1**	3
CC.. 09T308	0,06	**0,15**	0,25	0,2	**0,5**	1,3	0,1	**0,17**	0,27	0,6	**1**	2,5	0,12	**0,2**	0,35	0,8	**1,2**	3
CC.. 09T312													0,15	**0,22**	0,4	1,2	**1,5**	3
CC.. 120402																		
CC.. 120404	0,05	**0,12**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,25	0,3	**1**	3	0,08	**0,17**	0,3	0,4	**1,2**	3,5
CC.. 120408							0,1	**0,17**	0,27	0,6	**1,2**	3	0,12	**0,2**	0,35	0,8	**1,5**	3,5
CC.. 120412													0,15	**0,22**	0,4	1,2	**2**	3,5
DC.. 0702005																		
DC.. 070201																		
DC.. 0702015																		
DC.. 070202	0,03	**0,10**	0,12	0,1	**0,4**	1,3							0,04	**0,12**	0,2	0,2	**0,6**	2,5
DC.. 070204	0,05	**0,12**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,25	0,3	**0,7**	2	0,08	**0,17**	0,3	0,4	**0,8**	2,5
DC.. 070208							0,1	**0,17**	0,27	0,6	**1**	2	0,12	**0,2**	0,3	0,8	**1**	2,5
DC.. 11T3005																		
DC.. 11T301																		
DC.. 11T3015																		
DC.. 11T302																		
DC.. 11T304	0,05	**0,12**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,25	0,3	**0,8**	2,5	0,8	**0,17**	0,3	0,4	**1**	3
DC.. 11T308	0,06	**0,15**	0,25	0,2	**0,5**	1,3	0,1	**0,17**	0,27	0,6	**1,2**	2,5	0,12	**0,2**	0,35	0,8	**1,2**	3
DC.. 11T312													0,15	**0,22**	0,4	1,2	**1,7**	3
RC.. 0602M0													0,2	**0,3**	0,5	0,2	**0,5**	1,5
RC.. 0803M0													0,2	**0,3**	0,6	0,2	**0,6**	2
RC.. 1003M0													0,25	**0,4**	0,7	0,2	**0,7**	2,5
RC.. 1204M0													0,3	**0,5**	0,8	0,2	**0,8**	3
RC.. 1606M0							0,15	**0,3**	0,6	0,25	**2**	3,5	0,4	**0,6**	1	0,3	**1**	3,5
RC.. 2006M0													0,5	**0,8**	1,2	0,4	**1,2**	4
RC.. 2507M0													0,6	**0,9**	1,4	0,6	**2**	5
SC.. 09T304	0,05	**0,12**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,25	0,3	**0,8**	2,5	0,08	**0,17**	0,3	0,4	**1**	3
SC.. 09T308	0,06	**0,15**	0,25	0,2	**0,5**	1,3	0,1	**0,17**	0,27	0,6	**1**	2,5	0,12	**0,2**	0,35	0,8	**1,2**	3
SC.. 120408							0,1	**0,17**	0,27	0,6	**1,2**	3	0,12	**0,2**	0,35	0,8	**1,5**	3,5
SC.. 120412													0,15	**0,22**	0,4	1,2	**2**	3,5
TC.. 090204													0,08	**0,12**	0,2	0,4	**0,8**	2
TC.. 110202													0,08	**0,1**	0,2	0,4	**0,6**	3
TC.. 110204	0,05	**0,12**	0,22	0,2	**0,5**	1,3							0,12	**0,2**	0,35	0,8	**1,2**	3
TC.. 110208							0,1	**0,17**	0,27	0,6	**1**	2,5	0,12	**0,2**	0,35	0,8	**1,2**	3
TC.. 16T302																		
TC.. 16T304							0,07	**0,15**	0,25	0,3	**1**	3	0,08	**0,17**	0,3	0,4	**1,2**	3,5
TC.. 16T308	0,06	**0,15**	0,25	0,2	**0,5**	1,3	0,1	**0,17**	0,27	0,6	**1,2**	3	0,12	**0,2**	0,35	0,8	**1,5**	3,5
TC.. 16T312													0,15	**0,22**	0,4	1,2	**1,7**	3,5
TC.. 220408													0,12	**0,2**	0,35	0,8	**2,5**	6
VC.. 1103005																		
VC.. 110301																		
VC.. 1103015																		
VC.. 110302							0,05	**0,1**	0,18	0,2	**0,5**	2						
VC.. 110304	0,05	**0,10**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,23	0,3	**0,7**	2						
VC.. 110308																		
VC.. 160402																		
VC.. 160404	0,05	**0,10**	0,22	0,2	**0,5**	1,3	0,07	**0,15**	0,23	0,3	**0,8**	2,5	0,08	**0,17**	0,25	0,4	**1**	3
VC.. 160408	0,06	**0,12**	0,22	0,2	**0,5**	1,3	0,1	**0,17**	0,27	0,6	**1**	2,5	0,12	**0,2**	0,3	0,8	**1,2**	3
VC.. 160412													0,15	**0,22**	0,32	1,2	**1,5**	3
VC.. 220530																		
WC.. 020102																		
WC.. 020104																		

sharp ←→ stable

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Information on the cutting data of chip breakers not included in this overview, can be found on → **Page 168–175**

Cutting data values for positive inserts

	Designation	-SMQ (-SMQ)						-M25 (-PF23)					
		f			a_p			f			a_p		
		min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.	min.	Recommended	max.
		mm/rev.			mm			mm/rev.			mm		
	CC.. 060200												
	CC.. 060201												
	CC.. 060202												
	CC.. 060204							0,06	**0,13**	0,20	0,2	**1,1**	2,0
	CC.. 060208												
	CC.. 09T300												
	CC.. 09T301												
	CC.. 09T302												
	CC.. 09T304	0,10	**0,25**	0,4	0,4	**2**	4	0,06	**0,14**	0,22	0,2	**1,2**	2,2
	CC.. 09T308	0,15	**0,30**	0,5	0,8	**2**	4	0,10	**0,20**	0,30	0,4	**1,8**	3,2
	CC.. 09T312												
	CC.. 120402												
	CC.. 120404	0,10	**0,25**	0,4	0,4	**2**	4						
	CC.. 120408	0,15	**0,30**	0,5	0,8	**2**	4						
	CC.. 120412												
	DC.. 0702005												
	DC.. 070201												
	DC.. 0702015												
	DC.. 070202							0,04	**0,09**	0,13	0,1	**0,9**	1,6
	DC.. 070204	0,10	**0,18**	0,25	0,4	**1,5**	3	0,06	**0,12**	0,18	0,2	**1,1**	2,0
	DC.. 070208												
	DC.. 11T3005												
	DC.. 11T301												
	DC.. 11T3015												
	DC.. 11T302							0,04	**0,10**	0,16	0,1	**1,1**	2,0
	DC.. 11T304	0,10	**0,25**	0,4	0,4	**2**	4	0,06	**0,14**	0,22	0,2	**1,2**	2,2
	DC.. 11T308	0,15	**0,30**	0,5	0,8	**2**	4	0,10	**0,20**	0,30	0,4	**1,8**	3,2
	DC.. 11T312												
	RC.. 0602M0												
	RC.. 0803M0												
	RC.. 1003M0												
	RC.. 1204M0												
	RC.. 1606M0												
	RC.. 2006M0												
	RC.. 2507M0												
	SC.. 09T304												
	SC.. 09T308												
	SC.. 120408												
	SC.. 120412												
	TC.. 090204												
	TC.. 110202												
	TC.. 110204							0,06	**0,13**	0,20	0,2	**1,2**	2,2
	TC.. 110208												
	TC.. 16T302												
	TC.. 16T304							0,06	**0,14**	0,22	0,2	**1,6**	3,0
	TC.. 16T308							0,10	**0,20**	0,30	0,4	**1,9**	3,4
	TC.. 16T312												
	TC.. 220408												
	VC.. 1103005												
	VC.. 110301												
	VC.. 1103015												
	VC.. 110302												
	VC.. 110304												
	VC.. 110308												
	VC.. 160402												
	VC.. 160404							0,06	**0,13**	0,20	0,2	**1,2**	2,2
	VC.. 160408							0,10	**0,15**	0,25	0,4	**1,4**	3,0
	VC.. 160412												
	VC.. 220530												
	WC.. 020102												
	WC.. 020104												

sharp ◄——————————————————————————► stable

The data shows reference values. An adjustment to the actual conditions may be required.

Designation	-M55 (-PF26)						-F05					
	f			a_p			f			a_p		
	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.
	mm/rev.			mm			mm/rev.			mm		
CC.. 060200												
CC.. 060201												
CC.. 060202												
CC.. 060204	0,06	**0,13**	0,20	0,4	**1,5**	2,6						
CC.. 060208												
CC.. 09T300												
CC.. 09T301												
CC.. 09T302												
CC.. 09T304	0,08	**0,16**	0,24	0,4	**1,7**	3,0						
CC.. 09T308	0,12	**0,24**	0,35	0,8	**2,4**	4,0						
CC.. 09T312												
CC.. 120402												
CC.. 120404	0,08	**0,18**	0,28	0,4	**2,2**	4,0						
CC.. 120408	0,12	**0,26**	0,40	0,8	**2,8**	4,8						
CC.. 120412												
DC.. 0702005							0,02	**0,025**	0,04	0,1	**1**	2
DC.. 070201							0,02	**0,03**	0,05	0,1	**1**	2
DC.. 0702015							0,02	**0,04**	0,075	0,1	**1**	2
DC.. 070202							0,02	**0,05**	0,1	0,1	**1**	2
DC.. 070204	0,06	**0,14**	0,22	0,4	**1,3**	2,2						
DC.. 070208	0,08	**0,16**	0,24	0,8	**1,6**	2,4						
DC.. 11T3005							0,02	**0,025**	0,04	0,1	**1,25**	2,5
DC.. 11T301							0,02	**0,03**	0,05	0,1	**1,25**	2,5
DC.. 11T3015							0,02	**0,04**	0,075	0,1	**1,25**	2,5
DC.. 11T302							0,02	**0,075**	0,1	0,1	**1,25**	2,5
DC.. 11T304	0,08	**0,16**	0,24	0,4	**1,7**	3,0	0,02	**0,1**	0,25	0,1	**1,25**	2,5
DC.. 11T308	0,12	**0,24**	0,35	0,8	**2,4**	4,0						
DC.. 11T312												
RC.. 0602M0												
RC.. 0803M0												
RC.. 1003M0												
RC.. 1204M0												
RC.. 1606M0												
RC.. 2006M0												
RC.. 2507M0												
SC.. 09T304	0,12	**0,24**	0,35	0,8	**2,4**	4,0						
SC.. 09T308	0,12	**0,26**	0,40	0,8	**2,8**	4,8						
SC.. 120408												
SC.. 120412												
TC.. 090204	0,06	**0,12**	0,18	0,4	**1,3**	2,2						
TC.. 110202												
TC.. 110204	0,06	**0,14**	0,22	0,4	**1,4**	2,4						
TC.. 110208												
TC.. 16T302												
TC.. 16T304												
TC.. 16T308	0,12	**0,24**	0,35	0,8	**2,6**	4,4						
TC.. 16T312												
TC.. 220408												
VC.. 1103005							0,02	**0,025**	0,04	0,1	**1,25**	2,5
VC.. 110301							0,02	**0,03**	0,05	0,1	**1,25**	2,5
VC.. 1103015							0,02	**0,04**	0,075	0,1	**1,25**	2,5
VC.. 110302							0,02	**0,075**	0,1	0,1	**1,25**	2,5
VC.. 110304							0,02	**0,15**	0,25	0,1	**1,25**	2,5
VC.. 110308												
VC.. 160402												
VC.. 160404	0,08	**0,14**	0,20	0,4	**1,7**	3,0						
VC.. 160408	0,12	**0,21**	0,30	0,8	**2,1**	3,4						
VC.. 160412												
VC.. 220530												
WC.. 020102												
WC.. 020104												

sharp ◄——————————————————————► stable

Information on the cutting data of chip breakers not included in this overview, can be found on → **Page 168–175**

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Cutting data standard values for diamond cutting materials CTD PD20 / PS30 / PU20 / CD10

Material group			a_p = 0,04–0,4 mm Surface roughness R_z in µm 2,5–5,0	a_p = 0,04–0,4 mm Surface roughness R_z in µm 5,0–10	a_p = 0,4–1,0 mm Surface roughness R_z in µm 2,5–5,0	a_p = 0,4–1,0 mm Surface roughness R_z in µm 5,0–10	a_p = 0,4–2,5 mm Surface roughness R_z in µm 2,5–5,0	a_p = 0,4–2,5 mm Surface roughness R_z in µm 5,0–10
			CTD ...	CTD ...	CTD ...	CTD ...	CTD ...	CTD ...
Aluminium wrought alloys without Si f=0.05–0.5 mm/rev.	○	Grade v_c in m/min	PD20 / PU20 / CD10 **400–2500**	PD20 / PU20 / CD10 **400–2500**	PD20 / PU20 / CD10 **400–2000**	PD20 / PU20 / CD10 **400–2000**	PD20 / PU20 / CD10 **400–1600**	PD20 / PU20 / CD10 **400–1600**
	◔	Grade v_c in m/min		PD20 / CD10 **400–2500**		PD20 / CD10 **400–2000**		PD20 / CD10 **400–1600**
	◌	Grade v_c in m/min	PD20 / PU20 **400–2500**	PD20 / PU20 **400–2500**	PD20 / PU20 **400–2000**	PD20 / PU20 **400–2000**	PD20 / PU20 **400–1600**	PD20 / PU20 **400–1600**
Aluminium cast alloys Si=2–12 % f=0.05–0.5 mm/rev.	○	Grade v_c in m/min	PS30 / PU20 / CD10 **600–2000**	PS30 / PU20 / CD10 **600–2200**	PS30 / PU20 / CD10 **600–1800**	PS30 / PU20 / CD10 **600–2000**	PS30 / PU20 / CD10 **600–1500**	PS30 / PU20 / CD10 **600–1800**
	◔	Grade v_c in m/min	PD20 / PU20 / CD10 **400–2000**	PD20 / PU20 / CD10 **400–2200**	PD20 / PU20 / CD10 **400–1800**	PS30 / PU20 / CD10 **600–2000**	PS30 / PU20 / CD10 **400–1500**	PS30 / PU20 / CD10 **400–1800**
	◌	Grade v_c in m/min	PS30 **600–2000**	PS30 **600–2200**	PS30 **600–1800**	PS30 **600–2000**	PS30 **600–1500**	
Aluminium cast alloys Si=12–20 % f=0.05–0.5 mm/rev.	○	Grade v_c in m/min	PU20 / CD10 **800-1200**	PU20 / CD10 **400–1800**	PU20 / CD10 **700–1000**	PU20 / CD10 **400–1500**	PU20 / CD10 **600–900**	PU20 / CD10 **400–1200**
	◔	Grade v_c in m/min		PU20 / CD10 **600–1800**		PU20 / CD10 **600–1500**		PU20 / CD10 **600–1200**
	◌	Grade v_c in m/min		PU20 **600–1800**		PU20 **600–1500**		
Copper and copper wrought alloys f=0.05–0.5 mm/rev.	○	Grade v_c in m/min	PD20 / PU20 / CD10 **400–1800**	PD20 / PU20 / CD10 **300–1600**	PD20 / PU20 / CD10 **400–1600**	PS30 / PU20 / CD10 **300–1600**	PD20 / PU20 / CD10 **400–1400**	PD20 / PU20 / CD10 **400–1500**
	◔	Grade v_c in m/min	PU20 / CD10 **300–1500**	PD20 / PU20 / CD10 **300–1500**	PD20 / PU20 / CD10 **400–1600**	PS30 / PU20 / CD10 **300–1500**	PD20 / PU20 / CD10 **400–1500**	PD20 / PU20 / CD10 **300–1400**
	◌	Grade v_c in m/min		PD20 / PU20 **300–1800**		PS30 / PU20 **300–1700**	PD20 / PU20 **300–1600**	PS30 / PU20 **200–1300**
Plastic materials without reinforcement (acrylic glass) f=0.05–0.7 mm/rev.	○	Grade v_c in m/min		PD20 / CD10 **400–1200**		PD20 / CD10 **300–1000**		PD20 / CD10 **200–1000**
	◔	Grade v_c in m/min		PD20 / CD10 **300–1200**		PD20 / CD10 **200–1000**		PS30 / CD10 **200–900**
	◌	Grade v_c in m/min		PD20 / CD10 **400–1200**		PD20 / CD10 **300–1000**		PD20 / CD10 **200–1000**
Plastic materials with reinforcement (glass-fibre, carbon-fibre reinforced) f=0.05–0.7 mm/rev.	○	Grade v_c in m/min	PS30 / PU20 / CD10 **500–1000**		PS30 / PU20 / CD10 **400–900**	PS30 / PU20 / CD10 **300–900**	PS30 / PU20 / CD10 **300–800**	PS30 / PU20 / CD10 **200–1200**
	◔	Grade v_c in m/min	PS30 / PU20 / CD10 **400–900**		PS30 / PU20 / CD10 **300–800**	PS30 / PU20 / CD10 **200–900**	PS30 / PU20 / CD10 **200–800**	PS30 / PU20 / CD10 **200–1400**
	◌	Grade v_c in m/min	PU20 **500–1000**		PU20 **400–800**	PU20 **300–1000**	PU20 **300–800**	

○ **Smooth cut**	◔ **Irregular cutting depth**	◌ **Interrupted cut**

Application range of CBN grades

Cutting material grade	Cutting material designation		Properties		Application range	Interrupted cut	Material suitability/ ISO hardness			
	New	Old	PcBN content	Main binder			K	S	H	Sintered steels
High PcBN content	**CTB S10U**	PBC 10	95 %		Grey cast iron, sintered steels, super alloys	Smooth to medium interrupted cut	10	10		10
	CTB S20C	PBC 15-S	90 %		Spheroidal graphite cast iron, sintered steels, super alloys		20	20		20
Low PcBN content	**CTB H15C**	–	40 %	TiN	32 HRC and above	Smooth cut			15	
	CTB H15U	–	40 %	TiN		Smooth to slightly interrupted cut			15	
	CTB H20C	PBC 25-S	65 %	TiCN	48–62 HRC				20	
	CTB H21U	PBC 25	65 %	TiCN	52–65 HRC				20	
	CTB H40C	PBC 40-S	55 %	TiN	48–65 HRC	Interrupted cut			40	
	CTB H40U	PBC 40	65 %	TiN	54–65 HRC				40	

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CBN – The Next Generation

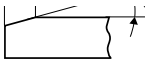
The ‚Sandwich' Technology

The singular system (patent), to apply CBN segments on a tungsten carbide base in a single process reduces the edge price significantly and opens up the possibility for the development of different CBN grades.

Specialized edge preperations! To achieve the highest efficiency for each application, the new CBN sandwich inserts are available with up to 8 edge preperations.

CBN Test Insert

The type CNGA test insert was specifically used, in order to identify the **quickest and most effective** type.
The insert is manufactured with four edge preperations for trial. The cutting edge with highest performance gives the correct chamfer style.



Article No.	Designation	Chamfers (BN x GB)				Price / €
71 499 ...						
290	CNGA 120408-X-**CTB S20C**	**A** F (sharp)	**B** 009B (0,09mm x 10°)	**C** 009C (0,09mm x 15°)	**E** 009D (0,09mm x 20°)	
292	CNGA 120408-X-**CTB H20C**	**B** 009C (0,09mm x 15°)	**C** 009D (0,09mm x 20°)	**E** 011E (0,11mm x 25°)	**G** 014F (0,14mm x 30°)	
294	CNGA 120408-X-**CTB H40C**	**C** 009D (0,09mm x 20°)	**E** 011E (0,11mm x 25°)	**G** 014F (0,14mm x 30°)	**H** 014G (0,14mm x 35°)	

Cutting data values for CBN inserts

			CTB S10U (PBC 10)					
	Cutting edges code negative insert*		**EN** (A)			**F**		
	Cutting edges code positive insert*		**EN** (A)			**TN–D** (F)		
Index	**Material**	**Strength**	v_c	f	a_p	v_c	f	a_p
	Sintered steels (< HV300)		150–350	0,02–0,25	0,02–0,4	100–220	0,08–0,35	0,1–0,4
	General sintered steel (> HV300)		250–750	0,02–0,25	0,02–0,4	210–550	0,08–0,35	0,1–0,4
	High density sintered steel (> HV600)		200–700	0,02–0,25	0,02–0,4	150–400	0,08–0,35	0,1–0,4
3.1	Grey cast iron with lamellar graphite	100–350 N/mm²	900–1600	0,02–0,25	0,05–0,25	700–1200	0,08–0,35	0,08–0,4
3.2	Grey cast iron with lamellar graphite	300–500 N/mm²	900–1600	0,02–0,25	0,05–0,25	700–1200	0,08–0,35	0,08–0,4
3.3	Cast iron with spheroidal graphite	300–500 N/mm²	1000–1750	0,02–0,25	0,02–0,25	800–1250	0,08–0,35	0,08–0,4
3.4	Cast iron with spheroidal graphite	500–900 N/mm²	1000–1750	0,02–0,25	0,02–0,25	800–1250	0,08–0,35	0,08–0,4
3.5	White malleable cast iron	270–450 N/mm²						
3.6	White malleable cast iron	500–650 N/mm²						
3.7	Black malleable cast iron	300–450 N/mm²						
3.8	Black malleable cast iron	500–800 N/mm²						
5.1	Pure nickel							
5.2	Nickel alloys							
5.3	Nickel alloys	< 850 N/mm²						
5.4	Nickel molybdenum alloys		300–700	0,02–0,25	0,02–0,4	250–400	0,08–0,35	0,08–0,4
5.5	Nickel-chromium alloys	< 1300 N/mm²	300–700	0,02–0,25	0,02–0,4	250–400	0,08–0,35	0,08–0,4
5.6	Cobalt Chrome Alloys	< 1300 N/mm²	300–700	0,02–0,25	0,02–0,4	250–400	0,08–0,35	0,08–0,4
5.7	Heat resistant alloys	< 1300 N/mm²	300–700	0,02–0,25	0,02–0,4	250–400	0,08–0,35	0,08–0,4
5.8	Nickel-cobalt-chromium alloys	< 1400 N/mm²	300–700	0,02–0,25	0,02–0,4	250–400	0,08–0,35	0,08–0,4
5.9	Pure titanium	< 900 N/mm²						
5.10	Titanium alloys	< 700 N/mm²						
5.11	Titanium alloys	< 1200 N/mm²						

			CTB S20C (PBC 15S)					
	Cutting edges code negative insert*		**SN–C** (D)			**SN–D** (E)		
	Cutting edges code positive insert*		**TN–D**			**SN–D**		
Index	**Material**	**Strength**	v_c	f	a_p	v_c	f	a_p
	Sintered steels (< HV300)		130–300	0,05–0,35	0,06–0,4	120–250	0,06–0,35	0,08–0,4
	General sintered steel (> HV300)		250–600	0,05–0,35	0,06–0,4	220–580	0,06–0,35	0,08–0,4
	High density sintered steel (> HV600)		180–550	0,05–0,35	0,06–0,4	170–510	0,06–0,35	0,08–0,4
3.1	Grey cast iron with lamellar graphite	100–350 N/mm²	650–1100	0,05–0,35	0,06–0,4	600–1000	0,06–0,35	0,08–0,5
3.2	Grey cast iron with lamellar graphite	300–500 N/mm²	650–1100	0,05–0,35	0,06–0,4	600–1000	0,06–0,35	0,08–0,5
3.3	Cast iron with spheroidal graphite	300–500 N/mm²	750–1300	0,05–0,35	0,06–0,4	700–1250	0,06–0,35	0,08–0,5
3.4	Cast iron with spheroidal graphite	500–900 N/mm²	750–1300	0,05–0,35	0,06–0,4	700–1250	0,06–0,35	0,08–0,5
3.5	White malleable cast iron	270–450 N/mm²						
3.6	White malleable cast iron	500–650 N/mm²						
3.7	Black malleable cast iron	300–450 N/mm²						
3.8	Black malleable cast iron	500–800 N/mm²						
5.1	Pure nickel							
5.2	Nickel alloys							
5.3	Nickel alloys	< 850 N/mm²						
5.4	Nickel molybdenum alloys		180–500	0,05–0,4	0,06–0,4	180–450	0,06–0,5	0,08–0,5
5.5	Nickel-chromium alloys	< 1300 N/mm²	180–500	0,05–0,4	0,06–0,4	180–450	0,06–0,5	0,08–0,5
5.6	Cobalt Chrome Alloys	< 1300 N/mm²	180–500	0,05–0,4	0,06–0,4	180–450	0,06–0,5	0,08–0,5
5.7	Heat resistant alloys	< 1300 N/mm²	180–500	0,05–0,4	0,06–0,4	180–450	0,06–0,5	0,08–0,5
5.8	Nickel-cobalt-chromium alloys	< 1400 N/mm²	180–500	0,05–0,4	0,06–0,4	180–450	0,06–0,5	0,08–0,5
5.9	Pure titanium	< 900 N/mm²						
5.10	Titanium alloys	< 700 N/mm²						
5.11	Titanium alloys	< 1200 N/mm²						

* Note chamfer width: The wider the chamfer, the more stable the cutting edge.

The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type.
The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

Cutting data values for CBN inserts

CTB S20C (PBC 15S)								
EN (A)			**SN–B** (B)			**SN–C** (C)		
EN (A)			**SN–B** (B)			**SN–C** (C)		
v_c	f	a_p	v_c	f	a_p	v_c	f	a_p
150-350	0,02-0,25	0,02-0,4	150-350	0,04-0,25	0,03-0,4	150-350	0,05-0,25	0,06-0,4
250-750	0,02-0,25	0,02-0,4	250-700	0,04-0,25	0,03-0,4	250-650	0,05-0,25	0,06-0,4
200-700	0,02-0,25	0,02-0,4	200-700	0,04-0,25	0,03-0,4	200-600	0,05-0,25	0,06-0,4
800-1450	0,02-0,25	0,05-0,25	700-1400	0,04-0,25	0,05-0,25	650-1300	0,05-0,25	0,06-0,4
800-1450	0,02-0,25	0,05-0,25	700-1400	0,04-0,25	0,05-0,25	650-1300	0,05-0,25	0,06-0,4
900-1600	0,02-0,25	0,05-0,25	800-1600	0,04-0,25	0,05-0,25	780-1400	0,05-0,25	0,06-0,4
900-1600	0,02-0,25	0,05-0,25	800-1600	0,04-0,25	0,05-0,25	780-1400	0,05-0,25	0,06-0,4
200-600	0,02-0,25	0,02-0,4	200-550	0,04-0,25	0,03-0,4	200-550	0,05-0,25	0,06-0,4
200-600	0,02-0,25	0,02-0,4	200-550	0,04-0,25	0,03-0,4	200-550	0,05-0,25	0,06-0,4
200-600	0,02-0,25	0,02-0,4	200-550	0,04-0,25	0,03-0,4	200-550	0,05-0,25	0,06-0,4
200-600	0,02-0,25	0,02-0,4	200-550	0,04-0,25	0,03-0,4	200-550	0,05-0,25	0,06-0,4
200-600	0,02-0,25	0,02-0,4	200-550	0,04-0,25	0,03-0,4	200-550	0,05-0,25	0,06-0,4

CTB S20C (PBC 15S)								
SN–D (F)			**SN–E** (G)			**SN–F** (H)		
TN–E			**SN–E**			**SN–F**		
v_c	f	a_p	v_c	f	a_p	v_c	f	a_p
100-220	0,08-0,35	0,1-0,4	100-200	0,1-0,35	0,1-0,4	80-150	0,12-0,35	0,12-0,4
210-550	0,08-0,35	0,1-0,4	200-520	0,1-0,35	0,1-0,4	180-480	0,12-0,35	0,12-0,4
150-400	0,08-0,35	0,1-0,4	130-350	0,1-0,35	0,1-0,4	80-250	0,12-0,35	0,12-0,4
550-1000	0,08-0,35	0,08-0,4	550-950	0,1-0,35	0,1-0,4	500-850	0,12-0,35	0,12-0,4
550-1000	0,08-0,35	0,08-0,4	550-950	0,1-0,35	0,1-0,4	500-850	0,12-0,35	0,12-0,4
700-1200	0,08-0,35	0,08-0,4	700-1100	0,1-0,35	0,1-0,4	650-1000	0,12-0,35	0,12-0,4
700-1200	0,08-0,35	0,08-0,4	700-1100	0,1-0,35	0,1-0,4	650-1000	0,12-0,35	0,12-0,4
150-350	0,08-0,35	0,08-0,4	150-320	0,1-0,35	0,1-0,4	130-300	0,12-0,35	0,12-0,4
150-350	0,08-0,35	0,08-0,4	150-320	0,1-0,35	0,1-0,4	130-300	0,12-0,35	0,12-0,4
150-350	0,08-0,35	0,08-0,4	150-320	0,1-0,35	0,1-0,4	130-300	0,12-0,35	0,12-0,4
150-350	0,08-0,35	0,08-0,4	150-320	0,1-0,35	0,1-0,4	130-300	0,12-0,35	0,12-0,4
150-350	0,08-0,35	0,08-0,4	150-320	0,1-0,35	0,1-0,4	130-300	0,12-0,35	0,12-0,4

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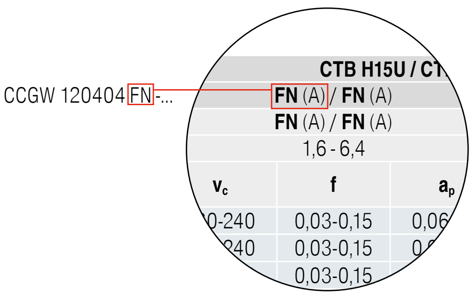


Cutting data values for CBN inserts

					CTB H15U / CTB H15C (BHT02RU / BHT02R)					
		Cutting edge code negative insert*			FN (A) / FN (A)			EN (B) / EN (B)		
		Cutting edges code positive insert*			FN (A) / FN (A)			EN (B) / EN (B)		
			Ra (theo.)		1,6 – 6,4			1,0 – 3,2		
Index	Material	Strength			v_c	f	a_p	v_c	f	a_p
6.1		< 45 HRC								
6.2		46–55 HRC	x		160–240	0,03–0,15	0,06–0,3	160–240	0,03–0,15	0,06–0,3
6.3	Tempered steel	56–60 HRC	x		160–240	0,03–0,15	0,06–0,3	160–240	0,03–0,15	0,06–0,3
6.4		61–65 HRC								
6.5		65–70 HRC								

					CTB H21U / CTB H20C (PBC 25 / PBC 25S)					
		Cutting edge code negative insert*			FN (A) / FN (A)			TN-C (B)		
		Cutting edges code positive insert*			EN (A) / FN (A)			EN (B)		
			Ra (theo.)		1,6 – 6,4			1,0 – 4,5		
Index	Material	Strength			v_c	f	a_p	v_c	f	a_p
6.1		< 45 HRC								
6.2		46–55 HRC	x		300–380	0,04–0,25	0,05–0,5	280–350	0,04–0,15	0,05–0,5
6.3	Tempered steel	56–60 HRC	x		300–380	0,04–0,25	0,05–0,5	280–350	0,04–0,15	0,05–0,5
6.4		61–65 HRC								
6.5		65–70 HRC								

					CTB H21U / CTB H20C (PBC 25 / PBC 25S)					
		Cutting edge code negative insert*			TN-E (F)/ SN-E (F)			SN-F (G)		
		Cutting edges code positive insert*			TN-E (F)			SN-E (G)		
			Ra (theo.)		0,35 – 1,6			0,2 – 0,8		
Index	Material	Strength			v_c	f	a_p	v_c	f	a_p
6.1		< 45 HRC								
6.2		46–55 HRC	x		210–260	0,05–0,15	0,1–0,5	180–230	0,06–0,20	0,1–0,5
6.3	Tempered steel	56–60 HRC	x		210–260	0,05–0,15	0,1–0,5	180–230	0,06–0,20	0,1–0,5
6.4		61–65 HRC								
6.5		65–70 HRC								

					CTB H40U / CTB H40C (PBC 40 / PBC 40S)					
		Cutting edge code negative insert*			FN (A) / EN (A)			SN-C (B)		
		Cutting edges code positive insert*			FN (A) / EN (A)			TN-D (B)		
			Ra (theo.)		1,0 – 3,2			0,8 – 3,0		
Index	Material	Strength			v_c	f	a_p	v_c	f	a_p
6.1		< 45 HRC								
6.2		46–55 HRC	x		190–250	0,03–0,15	0,03–0,5	180–240	0,04–0,15	0,03–0,5
6.3	Tempered steel	56–60 HRC	x		190–250	0,03–0,15	0,03–0,5	180–240	0,04–0,15	0,03–0,5
6.4		61–65 HRC	x		190–250	0,03–0,15	0,03–0,5	180–240	0,04–0,15	0,03–0,5
6.5		65–70 HRC								

					CTB H40U / CTB H40C (PBC 40 / PBC 40S)					
		Cutting edge code negative insert*			SN-E (F)			SN-F (G)		
		Cutting edges code positive insert*			TN-F (F)			SN-F (G)		
			Ra (theo.)		0,4 – 1,0			0,2 – 0,8		
Index	Material	Strength			v_c	f	a_p	v_c	f	a_p
6.1		< 45 HRC								
6.2		46–55 HRC	x		180–230	0,05–0,25	0,1–0,5	130–200	0,04–0,15	0,1–0,5
6.3	Tempered steel	56–60 HRC	x		180–230	0,05–0,25	0,1–0,5	130–200	0,04–0,15	0,1–0,5
6.4		61–65 HRC	x		180–230	0,05–0,25	0,1–0,5	130–200	0,04–0,15	0,1–0,5
6.5		65–70 HRC								

* Note chamfer width: The wider the chamfer, the more stable the cutting edge.

The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type.
The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

Cutting data values for CBN inserts

CTB H15U / CTB H15C (BHT02RU / BHT02R)								
SN-C (D) / **SN-C** (D)			**SN-E** (F) / **SN-E** (F)			**RN / RN** (Rounded chamfer)		
SN-C (D) / **SN-C** (D)			**SN-E** (F) / **SN-E** (F)			**RN / RN** (Rounded chamfer)		
0,5 – 1,6			0,1 – 0,8			0,1 – 0,8		
v_c	f	a_p	v_c	f	a_p	v_c	f	a_p
140–200	0,06–0,2	0,08–0,3	120–180	0,06–0,25	0,1–0,4	130–210	0,06–0,2	0,08–0,3
140–200	0,06–0,2	0,08–0,3	120–180	0,06–0,25	0,1–0,4	130–210	0,06–0,2	0,08–0,3
140–200	0,06–0,2	0,08–0,3	120–180	0,06–0,25	0,1–0,4	130–210	0,06–0,2	0,08–0,3

CTB H21U / CTB H20C (PBC 25 / PBC 25S)								
TN-D (C)			**TN-D** (D) / **SN-D** (D)			**TN-E** (E)		
SN-B (C)			**TN-D** (D) / **SN-C** (D)			**SN-D** (E)		
0,8 – 3,0			0,5 – 2,0			0,35 – 2,5		
v_c	f	a_p	v_c	f	a_p	v_c	f	a_p
270–330	0,06–0,25	0,05–0,5	250–320	0,06–0,25	0,08–1,0	220–290	0,05–0,15	0,08–0,5
270–330	0,06–0,25	0,05–0,5	250–320	0,06–0,25	0,08–1,0	220–290	0,05–0,15	0,08–0,5

CTB H21U / CTB H20C (PBC 25 / PBC 25S)		
SN-G (H)		
SN-F (H)		
0,1 – 0,5		
v_c	f	a_p
160–200	0,05–0,12	0,1–0,5
160–200	0,05–0,12	0,1–0,5

CTB H40U / CTB H40C (PBC 40 / PBC 40S)								
SN-D (C)			**SN-D** (D)			**EN-T** (E)/ **SN-E** (E)		
SN-D (C)			**TN-D** (D)			**EN-T** (E)/ **SN-E** (E)		
0,8 – 2,0			0,5 – 1,6			0,5 – 1,6		
v_c	f	a_p	v_c	f	a_p	v_c	f	a_p
160–220	0,04–0,15	0,03–0,5	150–210	0,04–0,25	0,08–0,5	140–200	0,05–0,15	0,08–0,5
160–220	0,04–0,15	0,03–0,5	150–210	0,04–0,25	0,08–0,5	140–200	0,05–0,15	0,08–0,5
160–220	0,04–0,15	0,03–0,5	150–210	0,04–0,25	0,08–0,5	140–200	0,05–0,15	0,08–0,5

CTB H40U / CTB H40C (PBC 40 / PBC 40S)		
SN-G (H)		
SN-G (H)		
0,1 – 0,5		
v_c	f	a_p
120–190	0,04–0,12	0,1–0,5
120–190	0,04–0,12	0,1–0,5
120–190	0,04–0,12	0,1–0,5

CCGW 120404 FN –...

CTB H15U / CT		
FN (A) / **FN** (A)		
FN (A) / **FN** (A)		
1,6 – 6,4		
v_c	f	a_p
0–240	0,03–0,15	0,06
240	0,03–0,15	0,0
	0,03–0,15	

9

Diamond as a cutting material

Ensures

- optimal surface quality
- burr-free workpieces
- high service lives
- lowest cutting forces
- high Process Security

Complete programme of roughing, finishing and wiper inserts for machining aluminium, non ferrous metals, plastics, ...

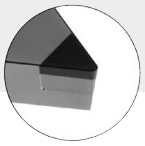
The cutting materials

	CTD CD10 (CVD)	CTD PD20 (PKD)	CTD PU20 (PKD)	CTD CD10 (CVD)
	Fine grain Size (N10)	Fine grain grade (N20)	Coarse grain grade (N20)	Coarse grain Size (N30)
Properties	▲ perfect sharp edges ▲ no cutting pressure ▲ very close tolerances ▲ highest abrasion resistance with highest toughness ▲ very high heat conductivity	▲ high sharpness ▲ lower cutting pressure than PDC-S ▲ close tolerance ▲ lower abrasion resistance with increased toughness	▲ very sharp cutting edge ▲ reduced cutting pressure ▲ tight tolerances ▲ very high level of wear resistance and toughness	▲ high sharpness ▲ lower cutting pressure ▲ close tolerance ▲ lower abrasion resistance than with the PDC, with increased toughness
Material	suitable for superfinishing and semi-finishing of all non ferrous metals and NE-composite materials with small to high levels of abrasiveness	suitable for fine machining of all NE materials with low abrasiveness	suitable for finishing to roughing non-ferrous metals and non-ferrous materials with highly abrasive alloying element. High chip removal on fibre-reinforced plastics such as CFRP and GFRP.	suitable for fine machining of all NE-materials and non-ferrous metals with low to very high levels of abrasiveness

Cutting Geometries

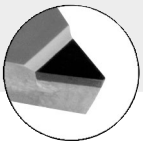
Neutral rake angle:

- higher cuting force
- higher temperature
- improved surface quality
- for stable workpieces



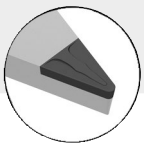
Positive rake angle:

- lower cutting force
- lower temperature
- reduction in surface quality
- for unstable workpieces
- improved accuracy



CB chip breaker geometries:

- reliable chip control
- ideal for low-alloy aluminium
- for F | M | R applications

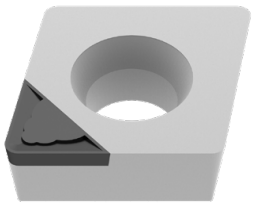


Notes on diamond usage

- coolant is not generally needed, however it facilitates chip removal
- note the chemical reaction to carbide-forming elements (PCD)
- note the thermal interaction and critical temperature:
  PCD: 600 °C, CVD: 700 °C
  Depending on the material, use cooling.

Cutting data standard values for the CB chip breaker geometries

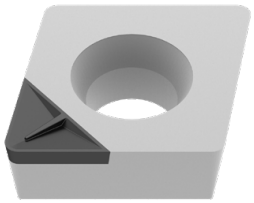
-CB1



3D-Chip Breaker -CB1				
Corner Radius	a_p in mm		f_z in mm/rev.	
	min.	max.	min.	max.
0,1 mm	0,05	0,30	0,02	0,05
0,2 mm	0,06	0,40	0,03	0,08
0,4 mm	0,10	0,80	0,04	0,15
0,8 mm	0,15	1,00	0,08	0,20
1,2 mm	0,30	1,50	0,12	0,25

- Finish and Superfinish
- Extremely sharp cutting edge geometry
- Depth of Cut a_p: 0,05–1,5 mm
- Smallest cutting pressure for highest accuracies
- For machining of thin-walled and unstable workpieces

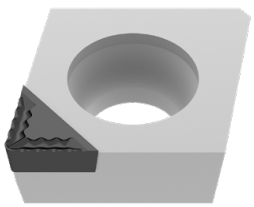
-CB2



3D-Chip Breaker -CB2				
Corner Radius	a_p in mm		f_z in mm/rev.	
	min.	max.	min.	max.
0,2 mm	0,50	0,80	0,08	0,12
0,4 mm	0,60	1,50	0,08	0,20
0,8 mm	0,70	1,50	0,15	0,30
1,2 mm	0,80	2,00	0,20	0,40

- Semi-finish and Finish machining
- Negative edge preperation
- Cutting Depth a_p: 0,5–2,0 mm
- High surface quality and tight tolerances
- Machining of solid workpieces under stable conditions

-CB3



3D-Chip Breaker -CB3				
Corner Radius	a_p in mm		f_z in mm/rev.	
	min.	max.	min.	max.
0,4 mm	1,00	3,00	0,10	0,20
0,8 mm	1,00	3,00	0,15	0,35

- Medium and rough machining
- Highly aggressive chip breaker
- Cutting depth a_p: 1,0–3,0 mm
- Stable component conditions necessary
- Cooling must be ensured

Standard chip breakers / application notes

Negative

Main application steel and cast iron, secondary application stainless steels

Model	Smooth cut ○	Irregular cutting depth ◌	Interrupted cut ◌	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
-CF / -CF20 (-CF / -NF12) ▲ Fine finishing ▲ Sharp cutting edge for low cutting forces ▲ Good chip control even at small depths of cut	**CTEP110 / TCM10 (DCC1110 / CWC10)** CTEP110 / TCM10 (DCC1110 / CWC10) CTEP110 / TCM10 (DCC1110 / CWC10)			0,30–1,50	0,07–0,25	CN.. DN.. TN.. WN..
F						
-F40 (-F40) ▲ Fine turning chip breaker for machining steels ▲ Good chip control ▲ Ideal for copy turning work	**CTCP125 (HCX1125)** CTCP125 (HCX1125) CTCP125 (HCX1125)	**CTCP125 (HCX1125)** CTCP125 (HCX1125) CTCP125 (HCX1125)		0,50–2,00	0,10–0,30	VN..
F						
-F50 (-NF15) ▲ Fine turning chip breaker for fine machining ▲ Steel and stainless steels ▲ Excellent chip control ▲ High surface quality	**CTCP125 (HCX1125)** CTCP115 / CTCP125 (HCX115 / HCX1125)	**CTCP115 / CTCP125 / CTCP135 (HCX1115 / HCX1125 / HCX1135)** CTCP125 / CTCP135 (HCX1125 / HCX1135)	**CTCP135 (HCX1135)** CTCP135 (HCX1135)	0,10–2,60	0,06–0,35	CN.. DN.. SN.. TN.. VN.. WN..
F						
-TFQ (-TFQ) ▲ Wiper geometry ▲ Finishing to medium machining ▲ Very high feedrate ▲ High surface quality	**CTEP110 / CTCP115 (DCC1110 / HCX1115)** CTEP110 / CTCP115 (DCC1110 / HCX 1115) CTEP110 / CTCP115 (DCC1110 / HCX 1115)	**CTCP115 / CTCP125 (HCX1115 / HCX1125)** CTCP115 / CTCP125 (HCX1115 / HCX1125) CTCP115 / CTCP125 (HCX1115 / HCX1125)		0,50–5,00	0,10–0,60	CN.. DN.. WN..
F						
-42 (-42) ▲ Extremely soft-cutting chip breaker ▲ For small and medium widths of cut ▲ Suitable for thin-walled parts	**CTC2135 (CWN2135)** CTC2135 (CWN2135)	**CTC2135 (CWN2135)** CTC2135 (CWN2135)		0,50–4,50	0,05–0,35	CN..
F **M**	**CTC2135 (CWN2135)**	**CTC2135 (CWN2135)**				
-XU (-XU) ▲ Finishing to light roughing ▲ Universal chip breaker ▲ Copy turning ▲ Excellent chip formation ▲ Low cutting forces	**CTCP115 / CTCP125 (HCX1115 / HCX1125)** CTCP125 (HCX1125) CTCP115 (HCX1115)	CTCP115 / **CTCP125 (HCX1115 / HCX1125)** CTCP125 (HCX1125) CTCP115 / CTCP125 (HCX1115 / HCX1125)	CTCP125 (HCX1125)	0,40–4,50	0,12–0,40	CN.. DN.. VN.. WN..
M						

Standard chip breakers / application notes

Negative

Main application steel and cast iron, secondary application stainless steels

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
-M40 (-M40) ▲ Stable geometry ▲ Medium feed rates ▲ Can be used for any application ▲ Good chip control	**CTCP125 (HCX1125)** CTCP125 (HCX1125) CTCP125 (HCX1125)	**CTCP125 (HCX1125)** CTCP125 (HCX1125) CTCP125 (HCX1125)		0,50–3,00	0,10–0,35	VN..
-M50 (-NM15) ▲ Medium machining ▲ First choice for steel machining ▲ Universal application ▲ Wide range of applications	**CTCP115 / CTCP125 / CTCK110 / CTCK120 (HCX1115 / HCX1125 / DCX3110 / HCF3120)** CTCP125 (HCX1125) **CTCP115 / CTCP125 / CTCK110 / CTCK120 (HCX1115 / HCX1125 / DCX3110 / HCF3120)**	CTCP115 / **CTCP125 (HCX1115 / HCX1125)** CTCP115 / **CTCP125 / CTCK110 / CTCK120** (HCX1115 / **HCX1125 / DCX3110 / HCF3120)**	**CTCP125 (HCX1125)** **CTCP125 / CTCK120 (HCX1125 / HCF3120)**	0,50–5,00	0,12–0,40	CN.. DN.. SN.. TN.. VN.. WN..
-TMQ (-TMQ) ▲ Wiper geometry ▲ Light to medium rough machining ▲ Very high feedrate ▲ High surface quality	**CTCP115 (HCX1115)** CTCP125 (HCX1125) CTCP125 (HCX1125)	**CTCP125 (HCX1125)** CTCP125 (HCX1125) CTCP125 (HCX1125)		0,80–6,00	0,20–0,85	CN.. DN.. WN..
-M70 (-NM19) ▲ Light to medium rough machining ▲ Cast crust and forging skin ▲ Stable cutting edge ▲ Interrupted cut ▲ Raw materials and forgings	**CTCK110 / CTCK120 / CTCP115 (DCX3110 / HCF3120 / HCX1115)** **CTCP125 / CTC2135 (HCX1125 / CWN2135)** **CTCK110 / CTCK120 / CTCP115** / CTCP125 **(DCX3110 / HCF3120 / HCX1115 /** HCX1125) CTC2135 / CTCP125 (CWN2135 / HCX1125)	CTCP115 / **CTCP125** (HCX1115 / **HXC1125)** **CTC2135 /** CTCP135 **CWN2135 /** HCR1135 **CTCK120 /** CTCP125 **(HCF3120 /** HCX1125) CTC2135 / CTCP125 (CWN2135 / HCX1125)	**CTCP125 / CTCP135 (HCX1125 / HCR1135)** CTCP135 / **CTC2135** HCR1135 / **CWN2135** **CTCP125 /** CTCK120 **(HCX1125 /** HCF3120)	1,50–4,50	0,20–0,80	CN.. DN.. SN.. TN.. WN..
.NMA ▲ Rough machining ▲ Stable cutting edge ▲ For short-chipping materials ▲ First choice for grey cast iron	**CTCK110 (DCX3110)**	**CTCK110 / CTCK120 (DCX3110 / HFC3120)**	**CTCK120 HFC3120**	1,50–4,50	0,20–0,80	CN.. DN.. SN.. TN.. WN..
-R28 (-NR14) ▲ Single sided roughing geometry ▲ Longitudinal, face and copy turning ▲ Varying depths of cut ▲ Steels with low tensile strength (800 N/mm²) ▲ Good chip control	**CTCP115** / CTCP125 **(HCX1115** / HCX1125) **CTCP115 / CTCP125 (HCX1115 / HCX1125)** CTCP115 (HCX1115) CTCP125 / CTCP135 (HCX1125 / HCR1135)	CTCP115 / CTCP135 / CTCP125 (HCX1115 / HCR1135 / HCX1125) **CTCP125 / CTCP135 (HCX1125 / HCR1135)** CTCP115 / CTCP125 (HCX1115 / HCX1125) CTCP135 (HCR1135)	**CTCP135 (HCR1135)** **CTCP135 (HCR1135)** CTCP125 (HCX1125) CTCP135 (HCR1135)	1,00–12,00	0,25–0,80	CN.. DN.. SN..

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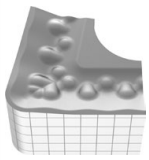
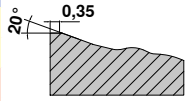
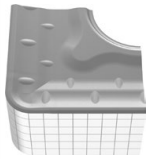
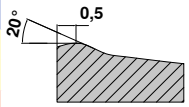
Standard chip breakers / application notes

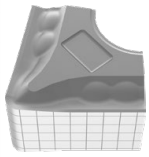
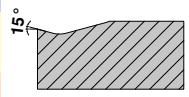
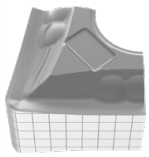
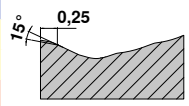
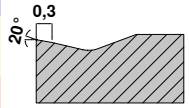
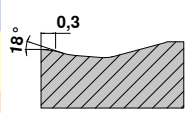
Negative

Main application steel and cast iron, secondary application stainless steels

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
-R58 (-NR17) ▲ Single sided roughing geometry ▲ Longitudinal and face turning ▲ Light interrupted cut ▲ Low cutting forces ▲ Unstable machines						
 **R**	**CTCP115** / CTCP125 **(HCX1115** / HCX1125)	**CTCP115 / CTCP135 / CTCP125** **(HCX1115 / HCR1135 / HCX1125)**	**CTCP135** **(HCR1135)**			CN.. DN.. SN.. TN..
	CTCP115 / CTCP125 **(HCX1115 / HCX1125)**	**CTCP125 / CTCP135** **(HCX1125 / HCR1135)**	**CTCP135** **(HCR1135)**			
	CTCP115 (HCX1115)	CTCP115 / CTCP125 (HCX1115 / HCX1125)	CTCP125 (HCX1125)			
				1,50–12,00	0,30–1,20	
	CTCP125 / CTCP135 (HCX1125 / HCR1135)	CTCP135 (HCR1135)	CTCP135 (HCR1135)			
-R88 (-NR19) ▲ Single sided roughing geometry ▲ Longitudinal and face turning ▲ High feedrate ▲ Large depths of cut ▲ Heavily interrupted cut						
 **R**	**CTCP115** / CTCP125 **(HCX1115** / HCX1125)	CTCP115 / CTCP125 / CTCP135 (HCX1115 / HCX1125 / HCR1135)	**CTCP135** **(HCR1135)**			SN..
	CTCP115 / CTCP125 (HCX1115 / HCX1125)	CTCP115 / CTCP125 (HCX1115 / HCX1125)	CTCP135 (HCR1135)			
	CTCP115 **HCX1115**	**CTCP115** / CTCP125 **(HCX1115** / HCX1125)	**CTCP125** **(HCX1125)**			
				3,50–16,00	0,50–1,50	
	CTCP125 / CTCP135 (HCX1125 / HCR1135)	CTCP135 (HCR1135)	CTCP135 (HCR1135)			

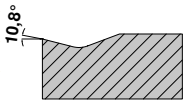
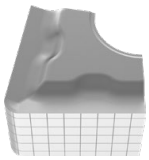
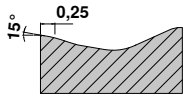
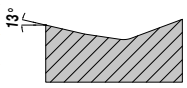
Negative

Main application stainless steels, secondary application steel and super alloys

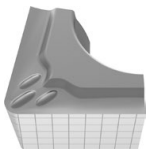
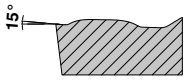
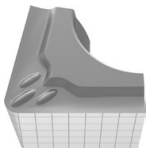
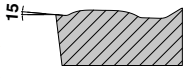
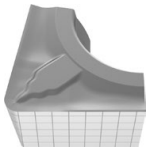
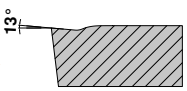
Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
-F30 (-NF23) ▲ Finishing of stainless steels ▲ Continous cut ▲ High surface quality ▲ Good swarf control						
 **F**	CTPM125 (HCN2125)	CTPM125 (HCN2125)				CN.. DN.. SN.. TN.. VN.. WN..
	CTPM125 **(HCN2125)**	**CTPM125** **(HCN2125)**				
				0,08–2,5	0,10–0,35	
-M30 (-NM23) ▲ Option for stainless steel machining ▲ Good swarf control ▲ Little edg build up ▲ Low cutting forces ▲ Little built-up edge ▲ Applicable on unstable machines						
 **F** **M**	CTPM125 (HCN2125)	CTPM125 (HCN2125)	CTPM125 (HCN2125)			CN.. DN.. SN.. TN.. VN.. WN..
	CTPM125 **(HCN2125)**	**CTPM125** **(HCN2125)**	**CTPM125** **(HCN2125)**			
				1,00-4,50	0,15-0,40	
	CTPM125 (HCN2125)	CTPM125 (HCN2125)				
-M42 (-M42) ▲ For medium machining of stainless steels ▲ Also by application on general steels and superalloys						
 **M**	**CTP2120 / CTC2135** **(CCN2120 / CWN2135)**	**CTP2120 / CTC2135** **(CCN2120 / CWN2135)**	**CTC2135** **(CWN2135)**			CN.. DN.. SN.. TN.. WN..
	CTP2120 / CTC2135 **(CCN2120 / CWN2135)**	**CTP2120 / CTC2135** **(CCN2120 / CWN2135)**				
				1,00–4,00	0,20–0,40	
-M60 (-NM26) ▲ Light to medium roughing ▲ Stable cutting edge ▲ Interrupted cut ▲ Forged skin and cast crust						
 **M** **R**	CTPM125 (HCN2125)	CTPM125 (HCN2125)	CTPM125 (HCN2125)			CN.. DN.. SN.. TN.. WN..
	CTPM125 **(HCN2125)**	**CTPM125** **(HCN2125)**	**CTPM125** **(HCN2125)**			
				1,50–6,00	0,25–0,50	
		CTPM125 (HCN2125)	CTPM125 (HCN2125)			

Standard chip breakers / application notes

Negative

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
Main application super alloys, secondary application stainless steels						
-F32 (-F32) ▲ Streamlined geometry for finishing superalloys ▲ For finishing stainless steels						
F	**CTP2120 (CCN2120)**	**CTP2120 (CCN2120)**				CN.. DN.. VN..
	CTP2120 (CCN2120)	CTP2120 (CCN2120)		0,05–4,0	0,05–0,25	
	CTP2120 (CCN2120)					
-M34 (-M34) ▲ First choice for superalloys ▲ Light cutting geometry ▲ Little built-up edge ▲ Low cutting forces						
M	**CTP5110 / CTP5115 (HCN5110 / HCN5115)**	**CTP5110 / CTP5115 (HCN5110 / HCN5115)**				CN.. DN.. SN.. VN.. WN..
	CTP5110 / CTP5115 (HCN5110 / HCN5115)	**CTP5110 / CTP5115 (HCN5110 / HCN5115)**		0,80–3,0	0,10–0,30	
-M52 (-M52) ▲ Universal geometry for machining superalloys and stainless steels						
M	**CTP2120 (CCN2120)**	**CTP2120 (CCN2120)**				CN.. DN.. SN.. TN.. WN..
	CTP2120 (CCN2120)	CTP2120 (CCN2120)		1,50–4,00	0,20–0,38	

Positive

Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
Main application steel and cast iron, secondary application stainless steels and super alloys						
-CF05 (-PF14) ▲ Fine finishing ▲ For all common steel materials, stainless steels and GGG ▲ Good swarf control ▲ High surface quality						
F	**CTEP110 / TCM407 (DCC1110 / CWC407)**	TCM10 / TCM407 (CWC10 / CWC407)				CC.. DC.. SC.. TC.. VC..
	CTEP110 (DCC1110)					
	CTEP110 (DCC1110)	TCM10 / TCM407 (CWC10 / CWC407)		0,20–1,30	0,06–0,25	
-SF (-ZF) ▲ Finishing / contour turning ▲ Good swarf control ▲ High surface quality ▲ Low cutting forces						
F	CTC2135 / **CTCP115** (CWN2135 / **HCX1115**)	**CTCP125 (HCX1125)**	**CTCP125 / CTCP135 (HCX1125 / HCR1135)**			CC.. DC.. SC.. TC.. VC.. WC..
	CTC2135 / **CTCP125** (CWN2135 / **HCX1125**)	CTCP125 / **CTC2135** (HCX1125 / **CWN2135**)	**CTC2135 (CWN2135)**			
		CTCP125 (HCX1125)	**CTCP125 (HCX1125)**			
	CTC2135 / CTCP125 (CWN2135 / HCX1125)	CTC2135 (CWN2135)		0,05–2,50	0,05–0,25	
-CF55 (-PF15) ▲ Finishing to medium machining ▲ Suitable for general and stainless steels ▲ Low cutting forces ▲ Good swarf control ▲ High surface quality						
F M	**CTEP110 (DCC1110)**	**TCM10** / CTEP110 **(CWC10** / DCC1110)				CC.. DC.. SC.. TC.. VC..
	CTEP110 (DCC1110)	CTEP110 (DCC1110)				
	CTEP110 (DCC1110)	CTEP110 (DCC1110)		0,20–1,30	0,06–0,25	

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Standard chip breakers / application notes

Positive

Main application steel and cast iron, secondary application stainless steels and super alloys

Model	Smooth cut	Irregular cutting depth	Interrupted cut	sectional illustration a_p mm	sectional illustration f mm	Geometry
-SMF (-SMF) ▲ Finishing to medium machining ▲ Low cutting forces ▲ Good swarf control ▲ High surface quality	**CTEP110 /** CTCP115 **(DCC1110 /** HCX1115) CTCP115 / CTCP125 / CTEP110 (HCX1115 / HCX1125 / DCC1110) CTEP110 (DCC1110)	**TCM10 /** CTCP125 / CTCP115 **(CWC10 /** HCX1125 / HCX1115) CTCP125 / CTCP135 (HCX1125 / HCR1135)	CTCP135 HCR1135 CTCP135 HCR1135	0,20–1,30	0,06–0,25	CC.. DC.. SC.. TC.. VC..
F **M**	CTCP115 / CTCP135 (HCX1115 / HCR1135)	CTCP135 HCR1135				
-SM (-ZM) ▲ Medium machining ▲ Universal application ▲ Stable cutting edge ▲ Varying depths of cut ▲ Wide range of applications	**CTCP115 / CTCP125** **(HCX1115 / HCX1125)** **CTCP125** **(HCX1125)** **CTCP115 /** CTCK110 / CTCK120 **(HCX1115 /** DCX3110 / HCF3120)	**CTCP125 / CTCP135 /** CTCP115 **(HCX1125 / HCR1135 /** HCX1115) **CTCP125 / CTCP135** **(HCX1125 / HCR1135)** **CTCP125 /** CTCK110 / CTCK120 **(HCX1125 /** DCX3110 / HCF3120)	**CTCP125 / CTCP135** **(HCX1125 / HCR1135)** **CTCP135** **(HCR1135)** CTCK120 / CTCP125 HCF3120 / HCX1125	0,05–5,00	0,15–0,45	CC.. DC.. RC.. SC.. TC.. VC..
M	CTCP115 / CTCP125 (HCX1115 / HCX1125)	CTCP135 HCR1135				
-SMQ (-SMQ) ▲ Positive wiper geometry ▲ Finishing to medium machining ▲ Very high feedrate ▲ High surface quality	**CTCP115** **(HCX1115)** **CTCP115** **(HCX1115)** CTCP125 / CTCP115 (HCX1125 / HCX1115)	CTCP125 (HCX1125) CTCP125 (HCX1125) CTCP125 (HCX1125)	CTCP125 (HCX1125) CTCP125 (HCX1125)	1,00–4,00	0,15–0,45	CC.. DC..
M						

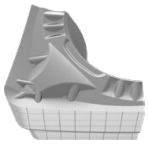
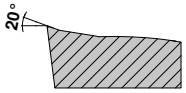
Positive

Main application stainless steels

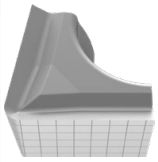
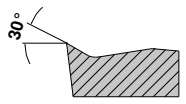
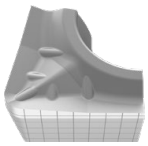
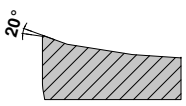
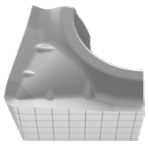
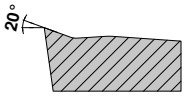
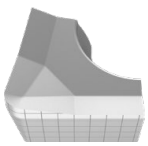
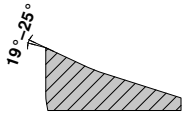
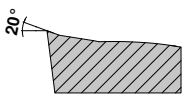
Model	Smooth cut	Irregular cutting depth	Interrupted cut	sectional illustration a_p mm	sectional illustration f mm	Geometry
-F43 (-F43) ▲ For the light to medium machining of all stainless steels, general steels and superalloys	CTC2135 (CWN2135) **CTC2135** **(CWN2135)**	CTC2135 (CWN2135) **CTC2135** **(CWN2135)**	CTC2135 (CWN2135) **CTC2135** **(CWN2135)**	0,50 –2,50	0,05–0,25	CC.. DC.. TC..
F	CTC2135 (CWN2135)	CTC2135 (CWN2135)				
-M25 (-PF23) ▲ First choice for medium machining of stainless steels ▲ High surface quality ▲ Little built-up edge	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**		0,40–3,20	0,10–0,30	CC.. DC.. TC.. VC..
F **M**						
-M55 (-PF26) ▲ First choice for medium machining to roughing of stainless steels ▲ Smooth to lightly interrupted cut ▲ Good swarf control ▲ Stable cutting edge	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**	CTPM125 (HCN2125) CTPM125 (HCN2125)	0,40–4,80	0,06–0,35	CC.. DC.. SC.. TC.. VC..
M	CTPM125 (HCN2125)	CTPM125 (HCN2125)				

Standard chip breakers / application notes

Positive

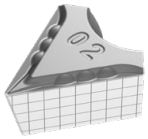
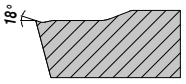
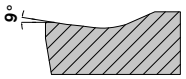
Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
Main application stainless steels						
-M81 (-M81) ▲ Directly pressed insert ▲ Positive rake angle ▲ Good swarf control ▲ For medium to rough machining						
 **M**	**CWN2120 (CWN2120)** CWN2120 (CWN2120)	CWN2120 (CWN2120)	CWN2120 (CWN2120)	 1,00–6,00	0,25–0,60	CC.. DC.. VC..

Positive

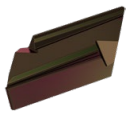
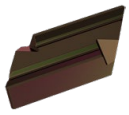
Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
Main application non-ferrous metals, secondary application stainless steels, steels, super alloys, cast iron						
-23P (-23P) ▲ Low adhesion ▲ Good chip control with soft aluminium alloys						
 **F**	H216T (CWK26) H216T (CWK26) H216T (CWK26)	H216T (CWK26) H216T (CWK26) H216T (CWK26)	H216T (CWK26)	 0,2–4,0	0,05–0,3	CC.. DC..
-25P (-25P) ▲ Sharp cutting edge ▲ Good swarf control on soft aluminium alloys ▲ Low adhesion						
 **F** **M**	AMZ (AMZ) AMZ (AMZ) **AMZ (AMZ)** **H216T (CWK26)** **AMZ (AMZ)**	AMZ (AMZ) AMZ (AMZ) **AMZ (AMZ)** **H216T (CWK26)** **AMZ (AMZ)**	**H216T (CWK26)**	 0,50–4,50	0,05–0,60	CC.. DC.. SC.. VC..
-25Q (-25Q) ▲ Wiper geometry ▲ High feed rates ▲ High surface quality ▲ Good swarf control on soft aluminium alloys ▲ Low adhesion						
 **M**	H210T / AMZ (CWK20 / AMZ) **H210T / AMZ (CWK20 / AMZ)** **H210T / AMZ (CWK20 / AMZ)** **H210T / AMZ (CWK20 / AMZ)**	H210T / AMZ (CWK20 / AMZ) **H210T / AMZ (CWK20 / AMZ)** **H210T / AMZ (CWK20 / AMZ)** **H210T / AMZ (CWK20 / AMZ)**	**H210T / AMZ (CWK20 / AMZ)**	 0,05–6,50	0,05–0,60	CC.. DC.. VC..
-27 (-27) ▲ The universal Alu geometry ▲ Sharp cutting edge ▲ Extremely positive rake angle ▲ Low adhesion ▲ High feed rates						
 **M** **R**	AMZ (AMZ) AMZ (AMZ) **AMZ (AMZ)** **H10T (CWK15)**	AMZ (AMZ) AMZ (AMZ) **AMZ (AMZ)** **H10T (CWK15)**	**H216T (CWK26)** **H10T (CWK15)**	 1,00–10,00	0,10–0,75	CC.. DC.. RC.. SC.. TC.. VC..
-29 (-29) ▲ Direct sintered aluminium geometry ▲ Positive rake angle ▲ Good chip control ▲ For medium to rough machining						
 **F** **R**	AMZ (AMZ) AMZ (AMZ) **AMZ (AMZ)** **H216T / AMZ (CWK26 / AMZ)**	AMZ (AMZ) AMZ (AMZ) **AMZ (AMZ)** **H216T / AMZ (CWK26 / AMZ)**	**H216T (CWK26)** **H216T (CWK26)**	 1,00–6,00	0,25–0,60	CC.. DC.. VC..

9

Standard chip breakers / application notes

Positive	Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
Main application super alloys and stainless steels, secondary application steels and non-ferrous metals							
-F05 (-F05) ▲ Maximum tolerance class ▲ Outstanding chip control, even with the smallest cutting depths ▲ Very low cutting forces	 F	**CTPX710**			 0,10–2,50	0,02–0,25	DC.. VC..
		CTPX710					
		CTPX710					
		CTPX710					
		CTPX710					
-F23 (-F23) ▲ Fine finishing (ground edge) ▲ Very high surface quality ▲ High repeatability ▲ Low depths of cut	 F	**CTP2120 (CCN2120)**	**CTP2120 (CCN2120)**		 0,10–2,00	0,06–0,13	CC.. DC.. VC..
		CTP2120 (CCN2120)					
		CTP2120 (CCN2120)					
		CTP2120 (CCN2120)	**CTP2120 (CCN2120)**				

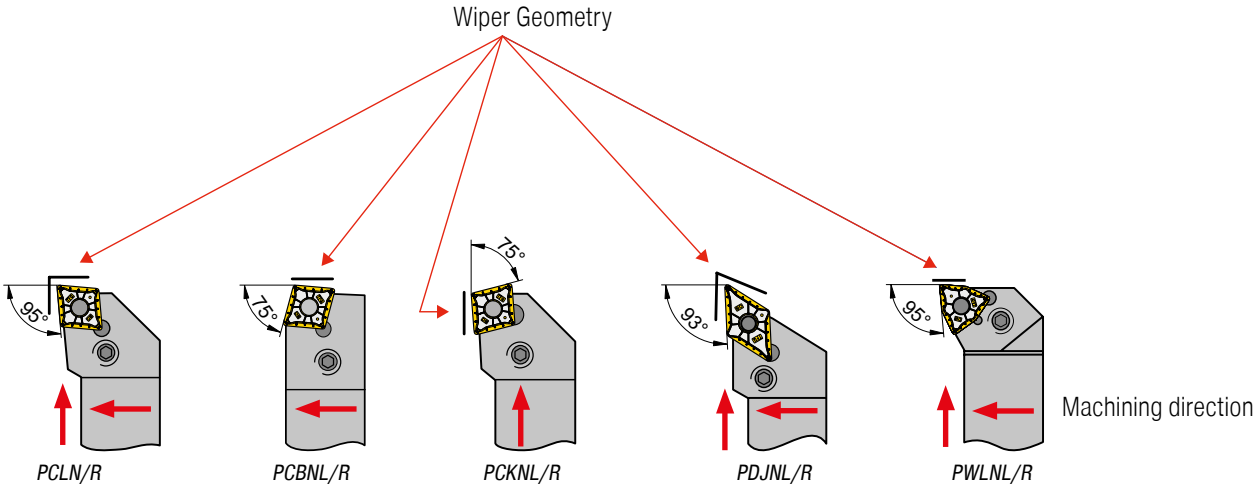
Supplementary chip breakers / application notes

Negative	Model	Smooth cut ○	Irregular cutting depth ◔	Interrupted cut ◌
-11 (-11) ▲ For copy machining in finishing operations ▲ On general steels, stainless steels and cast iron ▲ Can be used on less powerful machines	 **F**		**CTCP125 (HCX1125)**	**CTCP135 (HCR1135)**
-12 (-12) ▲ For copy machining in the medium machining range ▲ On general steels, stainless steels and cast iron	 **M**		**CTCP125 (HCX1125)**	**CTCP135 (HCR1135)**
-EN (-EN) ▲ Universal chip breaker for general steels	 **M**	**CTCP115 HCX1115** CTCP125 (HCX1125) **CTCK110 DCX3110**	**CTCP125 (HCX1125)** CTCP135 (HCR1135) **CTCK120 HCF3120**	**CTCP135 (HCR1135)** CTCP135 (HCR1135) CTCP125 (HCX1125)
-ER|EL (-ER|EL) ▲ A problem solver for unstable conditions ▲ Can be used on less powerful machines ▲ Can be used for general steels and on stainless materials as a secondary application	 **M**		**CTCP125 (HCX1125)**	**CTCP135 (HCR1135)**

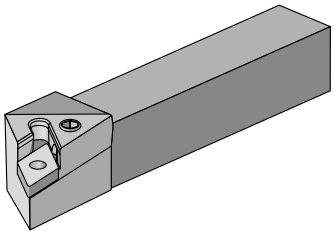
9

Masterfinish – wiper geometry – notes

Through the use of indexable inserts with wiper edge (-TFQ; -TMQ; -SMQ; -25Q) high quality surfaces can be produced economically.

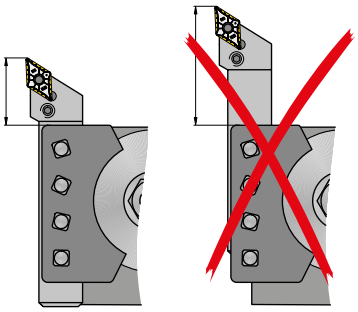


All turning inserts with wiper cutting edge are clamped in standard ISO tool holders

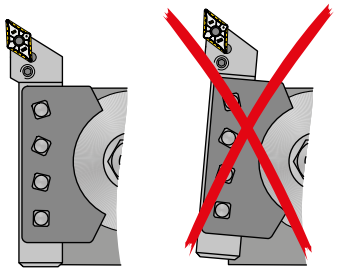


Check toolholder:

- Insert seat
- Shim
- Clamping Lever



Short tool overhang



Ensure correct tool alignment

Feed rate guide values for surface finish quality

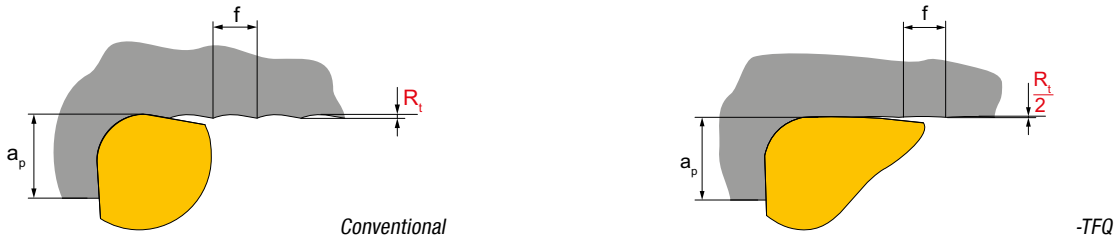
Roughness range R_z in µm	$R_{t\,max.}$	Corresponds to R_a	Roughness index	ISO 1302	Corner radius r_ε in mm and feed rate f in mm/rev.			
					r_ε = 0,4	r_ε = 0,8	r_ε = 1,2	r_ε = 1,6
63–100	R_t100	12,5–25	N11	25		0,51	0,69	0,88
40–63	R_t63	6,3–25	N10	12,5	0,27	0,43	0,56	0,68
31,5–40	R_t40	4,9–6,3	N9	6,3	0,25	0,37	0,49	0,57
25–31,5	R_t31,5	4,0–4,9			0,22	0,32	0,41	0,47
16–25	R_t25	2,5–4,0	N8	3,2	0,20	0,28	0,36	0,39
10–16	R_t16	1,6–2,5			0,15	0,22	0,29	0,31
6,3–10	R_t10	1,0–1,6	N7	1,6	0,10	0,13	0,18	0,20

Masterfinish – wiper geometry – functional principle

Relationship of feed rate to surface roughness

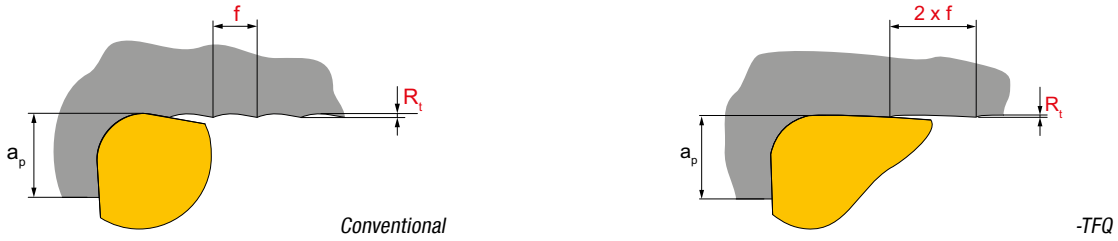
Improved Surface Quality

With the same feed rate an insert with wiper cutting edge reaches a roughness value R_t which is many times better than a conventional insert.



Shorter machining time

To achieve the same R_t-value as with a standard insert, double the feed rate can be applied for the insert with wiper cutting edge
(= shorter production time per component!))



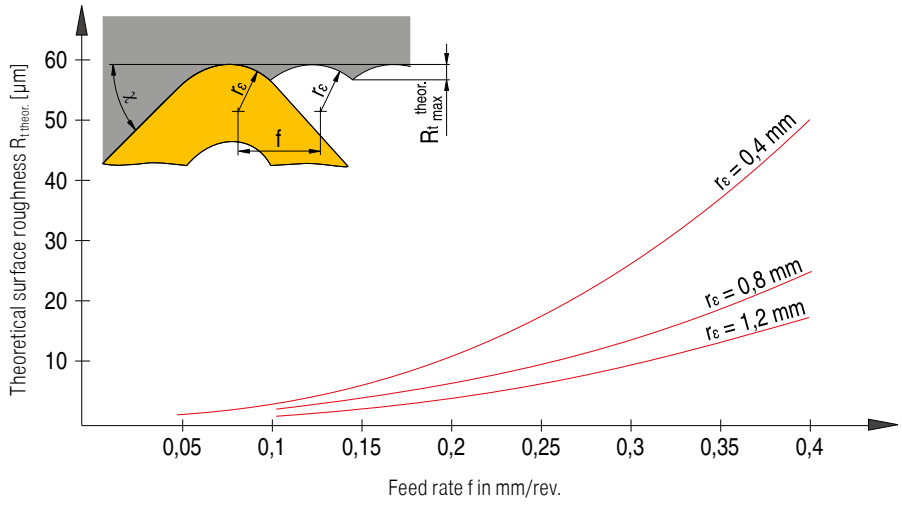
Theoretical Surface Quality

The maximum theoretical surface roughness with turning $Rt_{theor.}$ is the combination of feed rate and corner radius:

$$Rt_{theor.} = \left(r_\varepsilon - \sqrt{r_\varepsilon^2 - \frac{f^2}{4}}\right) \cdot 1000$$

or approximately:

$$Rt_{theor.} = \frac{125 \cdot f^2}{r\varepsilon} \quad [\mu m]$$



9

ISO designation system for inserts

Indexable inserts – metric

C	N	M	G	12	04	08	E	N	-	M50
1	2	3	4	5	6	7	8	9		13

Indexable inserts – inch

C	N	M	G	4	3	2	E	N	-	M50
1	2	3	4	5	6	7	8	9		13

Indexable inserts, CBN, ceramic – metric

C	N	G	A	12	04	08	S	N	-	020D	_	B	3	-	Q
1	2	3	4	5	6	7	8	9		10		11	12		13

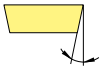
Indexable inserts, CBN, ceramic – inch

C	N	G	A	4	3	2	S	N	-	020D	_	B	3	-	Q
1	2	3	4	5	6	7	8	9		10		11	12		13

1 Insert shape

V	35°	Included angle
D	55°	
E	75°	
C	80°	
M	86°	
K	55°	Included angle
B	82°	
A	85°	
L	90°	Other shapes
P	108°	
H	120°	
O	135°	
R	-	
S	90°	
T	60°	
W	80°	

2 Clearance angle



	α		α
A	3°	F	25°
B	5°	G	30°
C	7°	N	0°
D	15°	P	11°
E	20°		

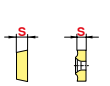
O — Clearance angles not included within the standard for which particular information is necessary.

3 Tolerances

	IC±		BS		S	
	mm	inch	mm	inch	mm	inch
A	0,025	.0010	0,005	.0002	0,025	.001
F	0,013	.0005	0,005	.0002	0,025	.001
C	0,025	.0010	0,013	.0005	0,025	.001
H	0,013	.0005	0,013	.0005	0,025	.001
E	0,025	.0010	0,025	.0010	0,025	.001
G	0,025	.0010	0,025	.0010	0,13	.005
J	0,05-0,15*	.002-.006*	0,005	.0002	0,025	.001
K	0,05-0,15*	.002-.006*	0,013	.0005	0,025	.001
L	0,05-0,15*	.002-.006*	0,025	.0010	0,025	.001
M	0,05-0,15*	.002-.006*	0,05-0,20*	.003-.008*	0,13	.005
N	0,05-0,15*	.002-.006*	0,05-0,20*	.003-.008*	0,025	.001
U	0,08-0,25*	.003-.010*	0,13-0,38*	.005-.015*	0,13	.005

* Depends on insert size

6 Insert thickness



		Code	
mm	inch	mm	inch
1,59	1/16	01	1
2,38	3/32	02	
3,18	1/8	03	2
3,97	5/32	T3	
4,76	3/16	04	3
5,56	7/32	05	
6,35	1/4	06	4
7,94	5/16	07	5
9,52	3/8	09	6

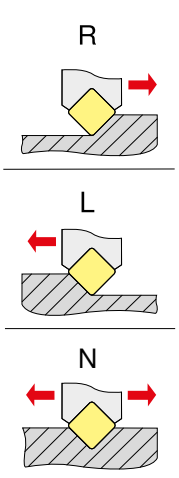
7 Corner radius

		Code		RN **00** RC **MO**
mm	inch	mm	inch	
≤ 0,05	.0015	00	X0	
0,1	.004	01	0	
0,2	.008	02	.5	
0,4	1/64	04	1	
0,8	1/32	08	2	
1,2	3/64	12	3	
1,6	1/16	16	4	
2,0	5/64	20	5	
2,4	3/32	24	6	
2,8	7/64	28	7	
3,2	1/8	32	8	

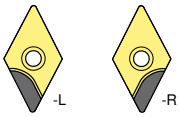
8 Cutting edge

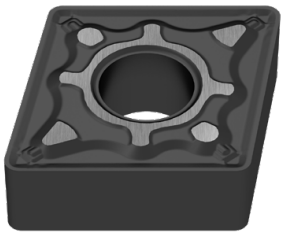
F	Sharp
E	Honed
T	Chamfered
S	Chamfered and honed
K	Double-chamfered
P	Double-chamfered and honed
R	Round chamfer

9 Direction of cut



CBN and PCD segment orientation





4 Characteristics

N	
R	
F	
A	
M, P	
G, P	
W	
T	
Q	
U	
B	
H	
C	
J	
X	Special version

inch

Change at inscribed circle IK < 1/4"

IK > 1/4"	IK < 1/4"
N / R / F	E
A / M / G	D
X	X

5 Cutting length

Type	ISO	ANSI	L mm	L inch	IC mm	IC inch
C	06	2	6,4	.250	6,35	.250
	09	3	9,7	.382	9,525	.375
	12	4	12,9	.508	12,70	.500
	16	5	16,1	.634	15,875	.625
	19	6	19,3	.760	19,05	.750
	25	8	25,8	1.016	25,4	1.000
	32	12	35,24	1.269	31,75	1.250
S	06	2	6,35	.250	6,35	.250
	09	3	9,525	.375	9,525	.375
	12	4	12,7	.500	12,7	.500
	15	5	15,875	.625	15,875	.625
	19	6	19,05	.750	19,05	.750
	25	8	25,4	1.000	25,4	1.000
	31	10	31,75	1.250	31,75	1.250
D	07	2	7,7	.303	6,35	.250
	11	3	11,6	.457	9,525	.375
	15	4	15,5	.610	12,70	.500
V	11	2	11,1	.437	6,35	.250
	16	3	16,6	.653	9,525	.375
	22	4	22,10	.870	12,70	.500

* inch version

Type	ISO	ANSI	L mm	L inch	IC mm	IC inch
T	06	1.2	6,9	.272	3,97	.156
	09	1.8	9,6	.378	5,56	.219
	11	2	11,0	.433	6,35	.250
	16	3	16,5	.650	9,525	.375
	22	4	22,	.079	12,70	.039
	27	5	27,5	1.083	15,875	.625
	33	6	33,0	1.299	19,05	.750
W	06	3	6,5	.256	9,525	.375
	08	4	8,7	.331	12,70	.039
	10	5	10,9	.429	15,875	.625
R	06	2	6,35	.250	6,35	.250
	08	-	8,0	.315	8,0	.315
	09	3	9,52	.375	9,52	.375
	10	-	10,0	.394	10,0	.394
	12*	-	12,0	.472	12,0	.472
	12	4	12,7	.488	12,70	.488
	15	5	15,875	.625	15,875	.625
	16	-	16,0	.630	16,0	.630
	19	6	19,05	.750	19,05	.750
	25	8	25,0	.984	25,0	.984
	25*	-	25,4	1.000	25,4	1.000
	31	10	31,75	1.250	31,75	1.250
	32	-	32,0	1.260	32,0	1.260

9

10 Chamfer type

T / S K / P [1]

	mm	inch		
015	0,15	.006	A	05°
020	0,20	.008	B	10°
025	0,25	.010	C	15°
050	0,50	.020	D	20°
075	0,75	.030	E	25°
100	1,00	.040	F	30°
			G	35°

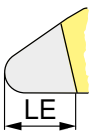
1) Two letters are assigned for double-chamfered cutting edges
e.g. BE =
chamfer angle 1 (y_1) = 10°
chamfer angle 2 (y_2) = 25°

11 Number of cutting edges

Single sided		Complete insert thickness	
A		T	
B		U	
C		V	
D		W	
G		X	
H		Y	

Double sided		Entire clamping flat	
K		S	
L		F	
M		E	
N			
P			
Q			

12 Segment length



Approx. specification in mm

13 Chip breaker designation

You can find a comprehensive chip breaker overview on
→ **page 168–175**

ISO designation system for tool holders

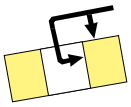
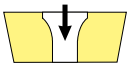
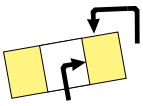
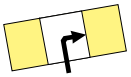
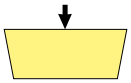
	P	C	L	N	R	20	20	K	12	- T
	1	2	3	4	5	6	7	8	9	10
UT50	- P	C	L	N	R				-12	
0	1	2	3	4	5	6	7	8	9	10
HSK-T63	- D	C	L	N	R				-12	
0	1	2	3	4	5	6	7	8	9	10

0 System/size

UT = UTS
according to ISO 26622
UT40 = UTS 40 mm
UT50 = UTS 50 mm
UT63 = UTS 63 mm

HSK-T
according to ISO 12164
HSK-T63 = 63 mm
HSK-T100 = 100 mm

1 Tool holder

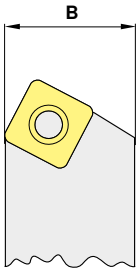
D  Retained from above and via bore	**S**  Retained via centre screw
M  Retained from above and via bore	**P**  Retained via the bore
C  Retained from above	**X** Special version

2 Insert shape

V	35°	Included angle
D	55°	
E	75°	
C	80°	
M	86°	
K	55°	Included angle
B	82°	
A	85°	
L	90°	Other shapes
P	108°	
H	120°	
O	135°	
R	-	
S	90°	
T	60°	
W	80°	

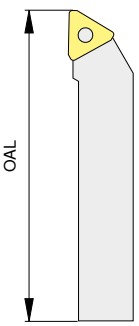
6 Shank height

7 Shank width



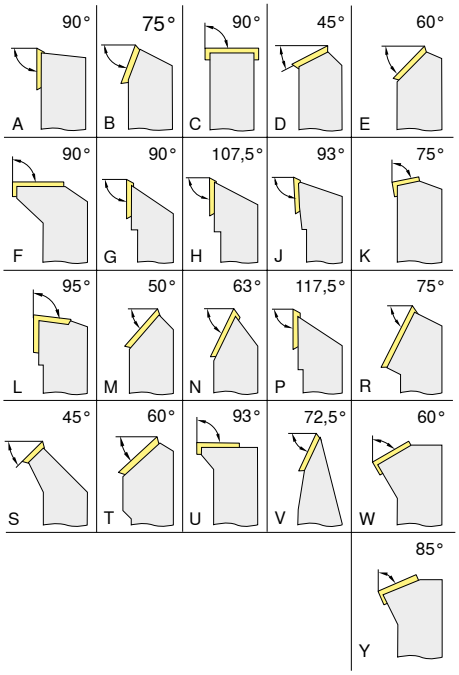
8 Tool length

OAL mm	OAL inch		OAL mm	OAL inch	
32	4.000	**A**	160	4.500	**N**
40	4.500	**B**	170	5.500	**P**
50	5.000	**C**	180	–	**Q**
60	6.000	**D**	200	6.000	**R**
70	7.000	**E**	250	7.000	**S**
80	8.000	**F**	300	8.000	**T**
90	5.500	**G**	350	5.500	**U**
100	5.625	**H**	400	3.500	**V**
110	5.300	**J**	450	3.500	**W**
125	14.000	**K**	500	3.750	**Y**
140	6.800	**L**	Special version		**X**
150	4.400	**M**			



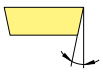
3

Style



4

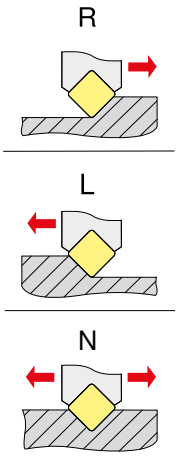
Clearance angle



	α		α
A	3°	**F**	25°
B	5°	**G**	30°
C	7°	**N**	0°
D	15°	**P**	11°
E	20°		
O	Clearance angles not included within the standard for which particular information is necessary.		

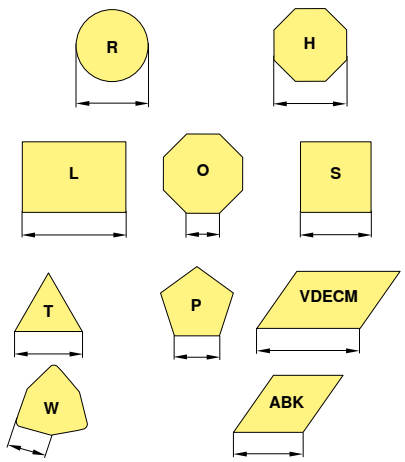
5

Direction of cut



9

Cutting length



10

Manufacturer specification

T = Toggle
Special length (mm)
Insert thickness (deviating from standard)
Special version (X..)
Machine manufacturer (specific)

ISO designation system for boring bars

		A	25	R		P	C	L	N	R	12	
		1	2	3		4	5	6	7	8	9	10
UT40	-		25	G	-	P	C	L	N	R	-	12
0		1	2	3		4	5	6	7	8	9	10
HSK-T63	-		50	Q	-	D	C	L	N	R	-	12
0		1	2	3		4	5	6	7	8	9	10

0 System/size

UT = UTS
according to ISO 26622
UT40 = UTS 40 mm
UT50 = UTS 50 mm
UT63 = UTS 63 mm

HSK-T
according to ISO 12164
HSK-T63 = 63 mm
HSK-T100 = 100 mm

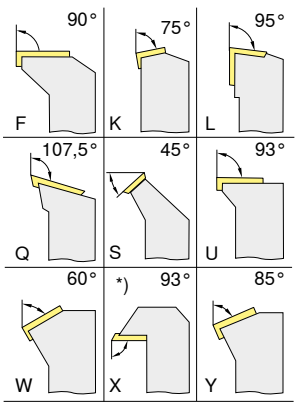
1 Shank type

S	Steel shank	**E**	As C with coolant hole
A	Steel shank with coolant hole	**F**	As C with antivibration system
B	Steel shank with antivibration system	**G**	As C with coolant hole and antivibration system
D	Steel shank with coolant hole and antivibration system	**H**	Heavy metal
C	Carbide shank with steel head	**J**	Heavy metal with coolant hole

5 Insert shape

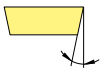
V	35°	Included angle
D	55°	
E	75°	
C	80°	
M	86°	
K	55°	Included angle
B	82°	
A	85°	
L	90°	Other shapes
P	108°	
H	120°	
O	135°	
R	-	
S	90°	
T	60°	
W	80°	

6 Style



*) CERATIZIT factory standard

7 Clearance angle

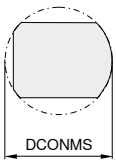


	α		α
A	3°	**F**	25°
B	5°	**G**	30°
C	7°	**N**	0°
D	15°	**P**	11°
E	20°		
O	Clearance angles not included within the standard for which particular information is necessary.		

2

Shank diameter

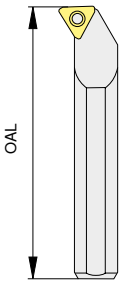
DCONMS mm	DCONMS inch
08	A two-digit figure indicating the boring bar diameter in 1/16 of an inch.
10	
12	
16	
20	
25	
32	
40	
50	
60	



3

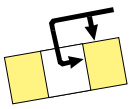
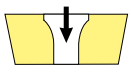
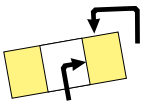
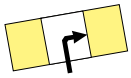
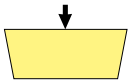
Tool length

OAL mm	OAL inch	
80	3	F
100	3,5	H
110	4	J
125	4,5	K
140	5	L
150	5,5	M
160	6	N
170	6,5	P
180	6,75	Q
200	7	R
250	8	S
300	10	T
350	12	U
400	14	V
450	16	W
500	18	Y
	20	
Special version		X



4

Clamping method

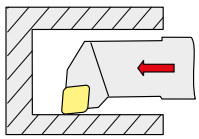
D  Retained from above and via bore	**S**  Retained via centre screw
M  Retained from above and via bore	**P**  Retained via the bore
C  Retained from above	**X** Special version

9

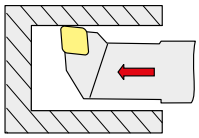
8

Direction of cut

R

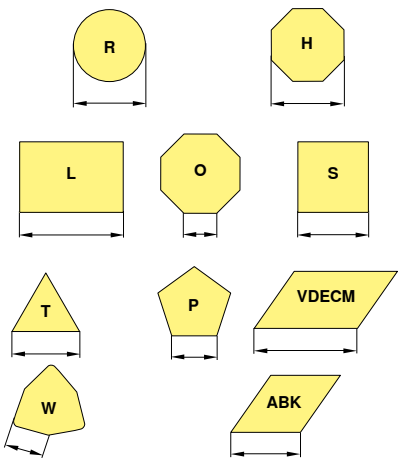


L



9

Cutting length



10

Manufacturer specification

T = Toggle
Special length (mm)
Insert thickness (deviating from standard)
Special version (X..)
Machine manufacturer (specific)

Types of wear

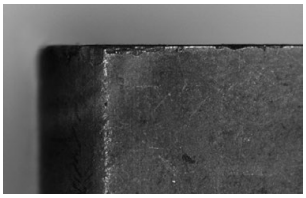
Wear on clearance face

Abrasion on flank: normal wear after a certain machining time

Cause
- Too high cutting speed
- Carbide grade with too low wear resistance
- Feed rate not adapted

Remedy
- Reduce cutting speed
- Use grade with higher wear resistance
- Adapt feed rate to cutting speed and cutting depth

Edge chipping

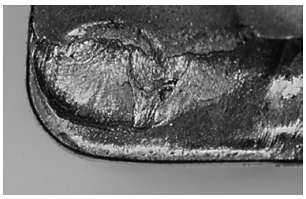


Through excessive mechanical stress at the cutting edge fracture and chipping can occur.

Cause
- Grade with too high wear resistance
- Vibration
- Too high cutting speed and / or feed rate
- Interrupted cut
- Swarf damage

Remedy
- Use tougher grade
- Use negative cutting edge geometry with chip groove
- Improve stability (tool, work piece)

Cratering

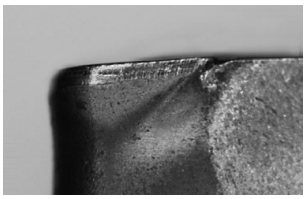


The hot chip which is being evacuated causes cratering at the rake face of the cutting edge.

Cause
- Too high cutting speed and / or feed rate
- Rake angle too shallow
- Grade with insufficient wear resistance
- Insufficient coolant supply

Remedy
- Reduce cutting speed and / or feed rate
- Use grade with higher wear resistance
- Increase coolant quantity and / or pressure, optimise coolant supply
- Use grade which is more resistant to cratering

Plastic deformation

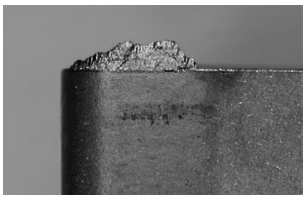


High machining temperature and simultaneous mechanical stress can lead to plastic deformation.

Cause
- Too high machining temperature resulting in softening of substrate
- Damage of coating
- Grade with insufficient wear resistance
- Insufficient coolant supply

Remedy
- Reduce cutting speed
- Use grade with higher wear resistance
- Provide cooling

Built-up edge

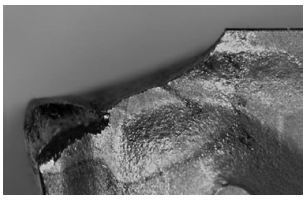


Built-up material / edges occur when the chip is not evacuated properly due to insufficient cutting temperature.

Cause
- Insufficient cutting speed
- Rake angle too shallow
- Wrong cutting material
- Lack of cooling / lubrication

Remedy
- Increase cutting speed
- Increase rake angle
- Apply TiN coating
- Use emulsion with higher concentration

Insert breakage

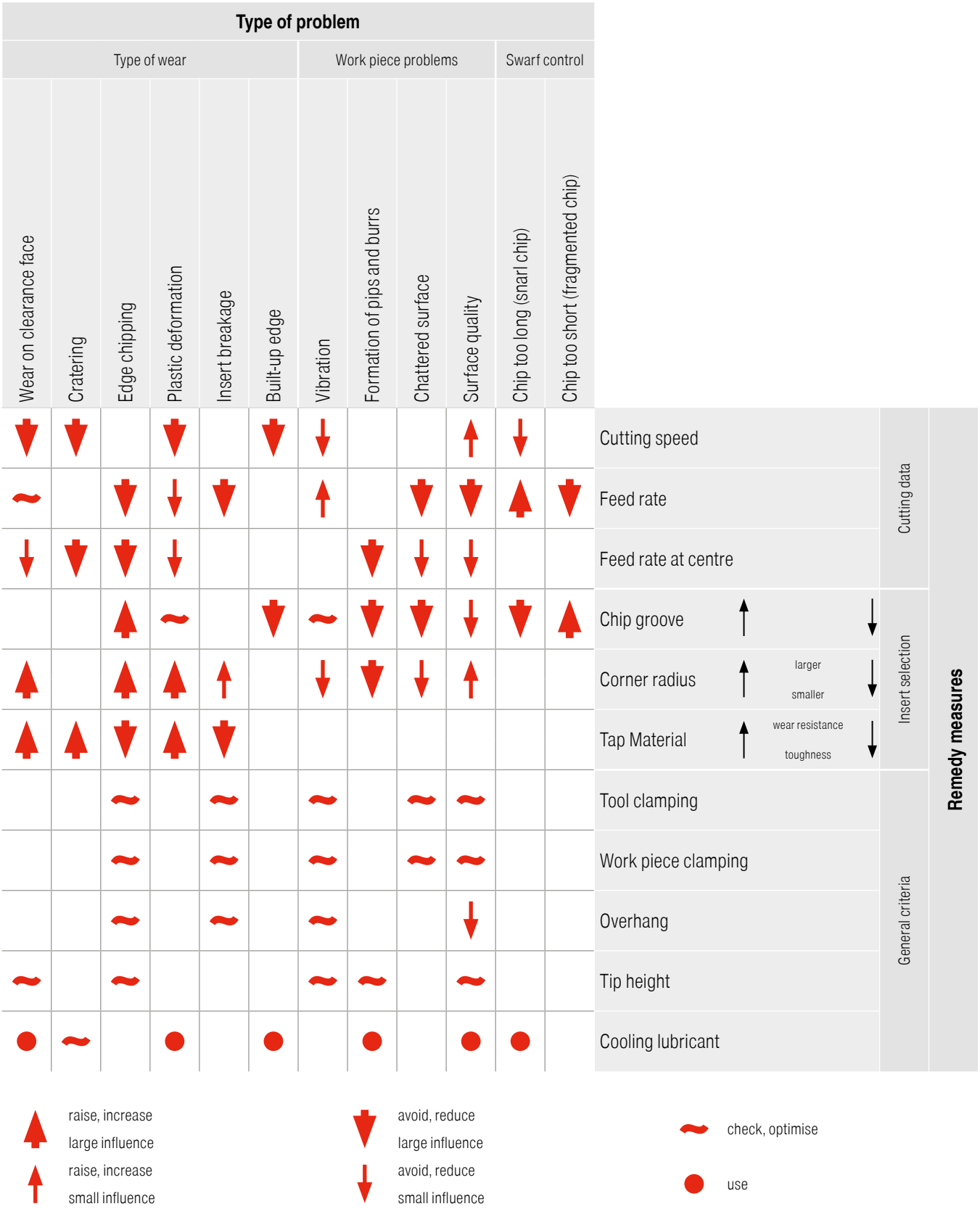


Excessive stress of the insert causes breakage.

Cause
- Excessive stress of cutting material
- Lack of stability
- Clearance angle too small

Remedy
- Use tougher grade
- Use protective edge chamfer
- Increase edge hone
- Use geometry with higher stability

Recommendation for Optimum Results



Grades Overview

	Grade designation	Standard designation	ISO application range	Steel P	Stainless steel M	Cast iron K	Non ferrous metals N	Heat resistant alloys S
	Turning							
Main application: **Steel and cast iron**	CTEP110 (DCC1110)	HC-P10 HC-M10 HC-K05		●	○	○		
	CTCK110 (DCX3110)	HC-P05 HC-K10		●	○	●		
	CTCK120 (HCF3120)	HC-P10 HC-K20		●		●		
	CTCP115 (HCX1115)	HC-P15 HC-M10 HC-K25		●	○	○		
	CTCP125 (HCX1125)	HC-P25 HC-M20 HC-K30		●	○	○		
	CTCP135 (HCR1135)	HC-P35 HC-M25 HC-S25		●	○			○
Main application: **Stainless**	CWN2120	HC-M20 HC-N20			●		○	
	CTPM125 (HCN2125)	HC-P35 HC-M25		○	●			○
	CTC2135 (CWN2135)	HC-P35 HC-M20 HC-S20		○	●			●
Main application: **Non-ferrous metals**	H210T (CWK20)	HW-K10 HW-N10 HW-S10				○	●	○
	H216T (CWK26)	HW-K15 HW-N15 HW-S15				○	●	○
	H10T (CWK15)	HW-K15 HW-N15 HW-S15				○	●	○
	AMZ	HC-P15 HC-M15 HC-K20 HC-N20		○	○	○	●	
	CWN15	HC-M20 HC-N20			○		●	
Main application: **Heat-resistant**	CTPX710	HC-P10 HC-M10 HC-K10 HC-N10 HC-S15		●	●	○	○	●
	CTP5110 (HCN5110)	HC-N10 HC-S10			○			●
	CTP5115 (HCN5115)	HC-N15 HC-S15			○			●
	CTP2120 (CCN2120)	HC-P20 HC-M20 HC-K15 HC-N20 HC-S20			●	○	○	●

ISO application range: 01 05 10 15 20 25 30 35 40 45 50

● **Main Application**
○ Extended application

wear-resistant v_c+ ⟷ v_c− tough

Grade description

TCM407 / CWC407
- Cermet, uncoated
- ISO | **P10** | M05 | K05
- The uncoated cermet grade for super-fine finishing steel materials

CTEP110 / DCC1110
- Cermet, TiCN-Al_2O_3-coated
- ISO | **P10** | M10 | K05
- The cermet grade with reserves of toughness for finish machining at high cutting speeds

TCM10 / CWC10
- Cermet, uncoated
- ISO | **P15** | **M10** | K10
- The uncoated cermet grade for finish machining stainless and hardened steel
- Particularly wear resistant thanks to high heat resistance

CTCP115 / HCX1115
- Carbide, TiCN-Al_2O_3-coated
- ISO | **P15** | M10 | **K25**
- The wear-resistant high-performance grade for stable conditions and a continuous cut

CTCP125 / HCX1125
- Carbide, TiCN-Al_2O_3-coated
- ISO | **P25** | M20 | **K30**
- The first choice for universal machining of steels

CTCP135 / HCR1135
- Carbide, TiCN-Al_2O_3-coated
- ISO | **P35** | M25 | S25
- The tough alternative for heavily interrupted cut and unstable conditions

CTP2120 / CCN2120
- Carbide, TiAlN-coated
- ISO | **M20** | K20 | N20 | **S20**
- The universal carbide grade for stainless steel and super alloys

CWN2120 / CWN2120
- Carbide, TiN-coated
- ISO | **M20** | K20 | N20
- The universal carbide grade for machining stainless steel

CTPM125 / HCN2125
- ISO | **P35** | **M25** | S25
- The universal carbide grade with maximum toughness, without affecting the necessary hot hardness and wear resistance for stainless machining

CTC2135 / CWN2135
- Carbide, TiCN-TiNB-coated
- ISO | P35 | **M30** | S35
- The turning grade for general stainless machining

CTCK110 / DCX3110
- Carbide, TiCN-Al_2O_3-coated
- ISO | P05 | **K10**
- The wear-resistant grade for machining cast iron materials at high cutting speeds in a continuous cut

CTCK120 / HCF3120
- Carbide, TiCN-Al_2O_3-coated
- ISO | P10 | **K20**
- The grade for cast iron machining, with high toughness reserves for difficult conditions and interrupted cuts

H10T / CWK15
- Carbide, uncoated
- ISO | **K15** | **N15**
- The uncoated carbide grade for machining aluminium and other non-ferrous metals

H210T / CWK20
- Carbide, uncoated
- ISO | **N10** | **S10** | K10
- The wear-resistant carbide grade for machining aluminium and other non-ferrous metals

H216T / CWK26
- Carbide, uncoated
- ISO | **K15** | **N15**
- The uncoated carbide grade for machining aluminium and other non-ferrous metals
- Also highly suitable for HSC machining

CWN15 / CWN15
- Carbide, TiN-coated
- ISO | **K15**
- Special carbide grade for abrasive aluminium alloys

AMZ / AMZ
- Carbide, TiAlN-coated
- ISO | P10 | K10 | **N10** | S10
- The coated carbide grade for aluminium machining

CTP5110 / HCN5110
- Carbide, TiAlN-coated
- ISO | M15 | **S15**
- The alternative for machining heat-resistant materials

CTP5115 / HCN5115
- Carbide, TiAlN-TiN-coated
- ISO | M15 | **S15**
- The first choice for machining heat-resistant materials

CTPX710
- Carbide, AlTiN-coated
- ISO | **P10** | **M10** | K10 | N10 | **S15**
- Universal multi-material grade from the X7 line for highest machining requirements

Grade description

C	T	C	P	1	2	5
H	C	X	1	1	2	5

(Example)

Main application – material

1|P	Steel
2|M	Stainless steel
3|K	Cast iron
4|N	Light and non ferrous metals
5|S	Super alloys, titanium
6|H	Hard materials
7|X	Universal application

Application

1	Turning
2	Milling
3	Grooving
4	Drilling
5	Thread turning
6	Others
7	Several processes

Degree of hardness

05	ISO 05
10	ISO 10
15	ISO 15
	...