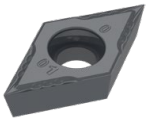
New products for machining technicians

NEW High precision finishing insert in “E” tolerance

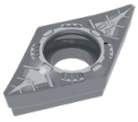


F05 – extremely sharp chip breaker ideal for fine finishing of superalloys and stainless steels.
New universal grade of the X7 line for machining almost all materials.

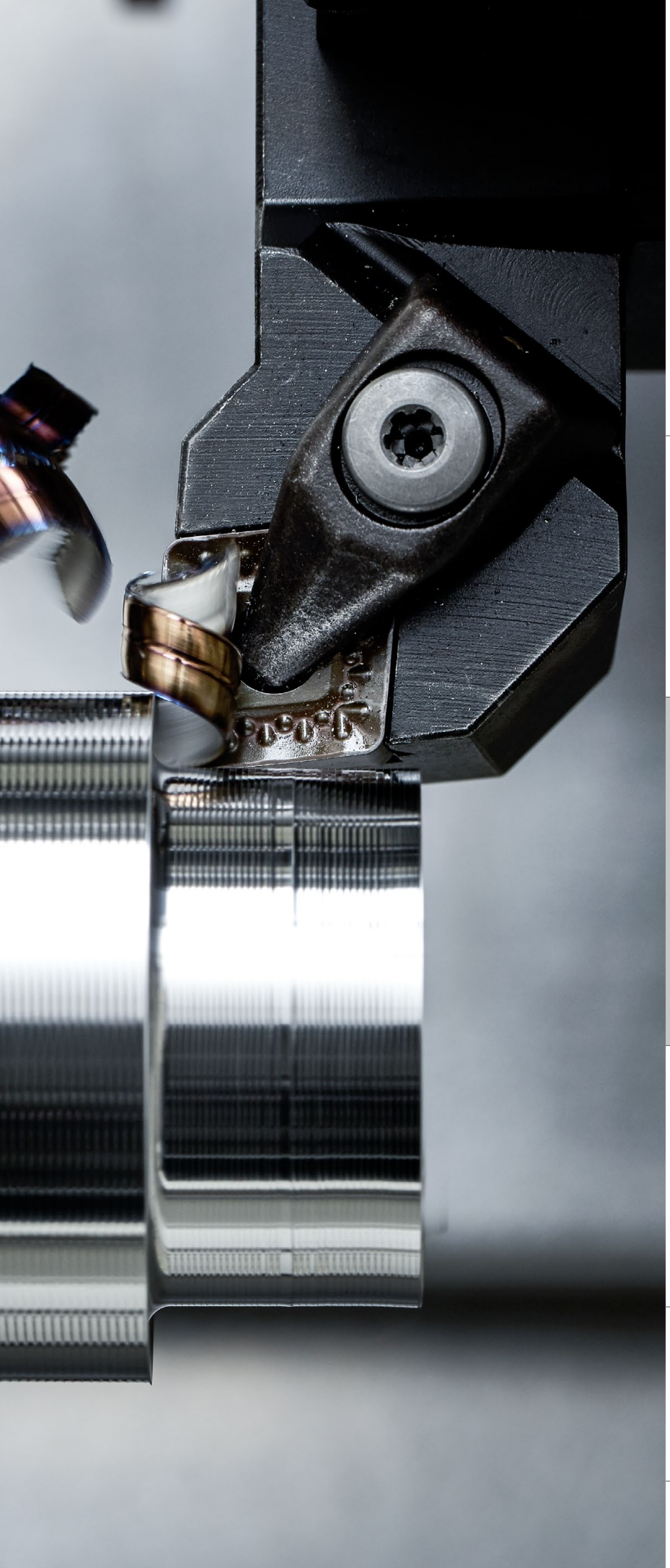
NEW New CBN grades CTB H15U and CTB H15C

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

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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Toolfinder – negative inserts	4+5
Toolfinder – positive inserts	6+7
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Technical Information	
Cutting Data	144–167
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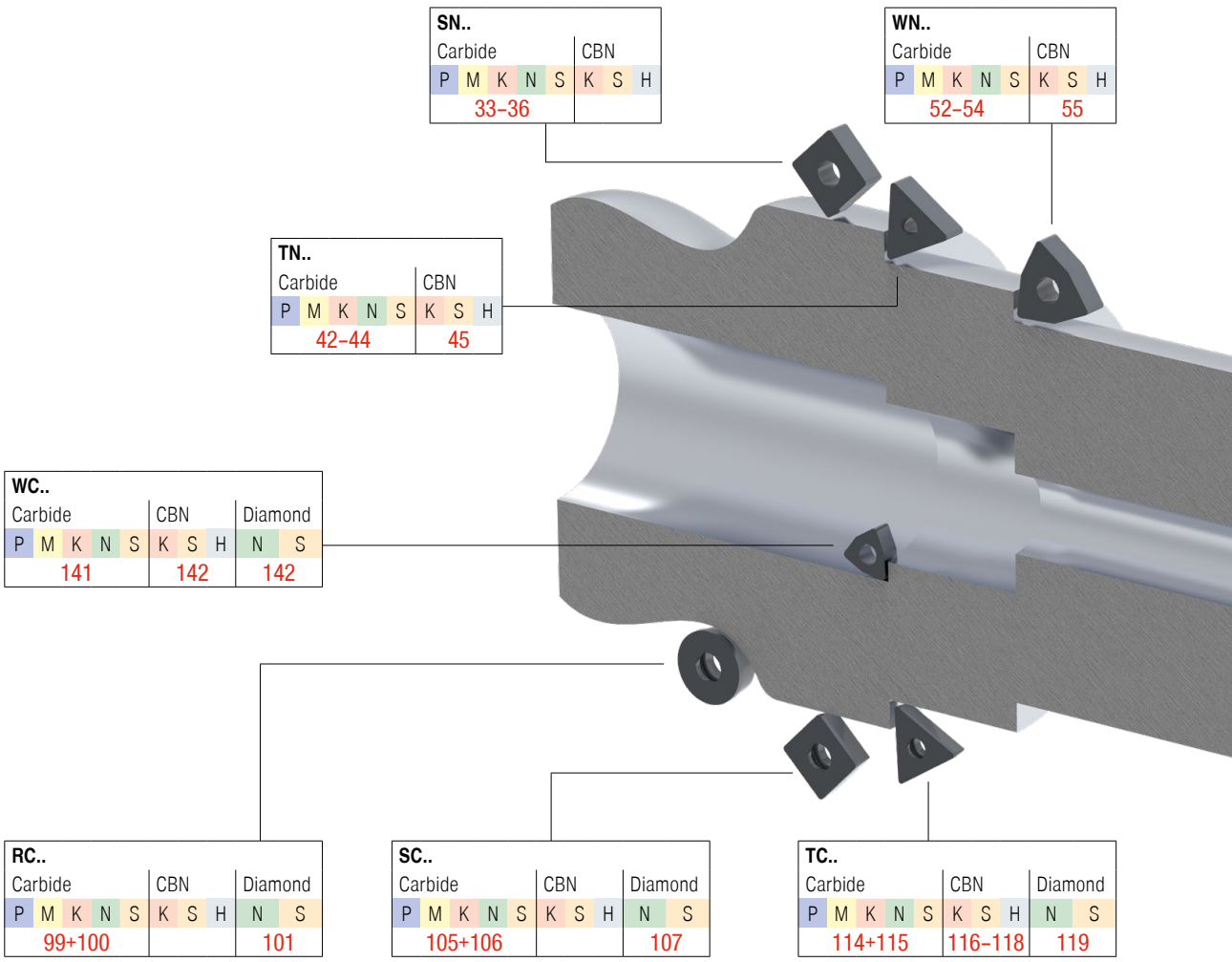
Grades Overview	186+187

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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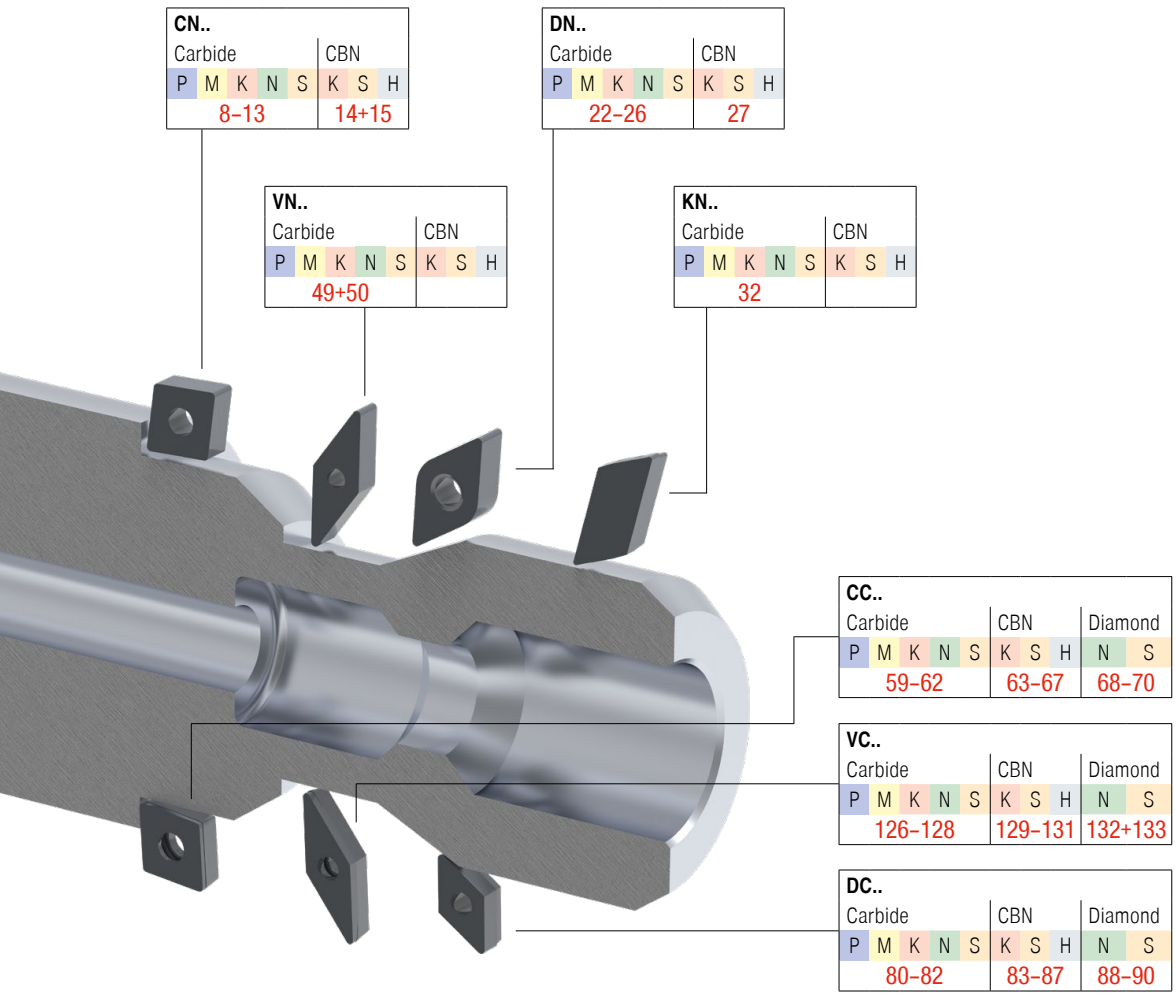


Toolfinder – negative inserts

				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
	Fine	-F40		●	○	○								49	
	Fine	-F50 (-NF15)		●	○	○		○	8	22		33	42	49	52
	Fine	-TFQ		●	○	○			8+9	22+23					52
	Medium	-42		●	○			○	9						
	Medium	-XU		●	○	○			9	23				49	53
	Medium	-M40		●	○	○								49	
	Medium	-M50 (-NM15)		●	○	●		○	9+10	23+24		33	42	49	53
	Medium	-TMQ		●	○	○			10	24					53
	Medium	-M70 | -11, -12 (-NM19)		●	○	●		○	10+11	24	32	33+34	42+43		53
	Rough	.NMA				●			11	24		34+35	43		54
	Rough	-R28 (-NR14)		●	○	○		○	11	24		35	43		
	Rough	-R58 (-NR17)		●	○	○		○	12	24+25		35	43		
	Rough	-R88 (-NR19)		●	○	○		○	12			36			
Main application: **Stainless** (sharp – stable)	Fine	-F30 (-NF23)		○	●				12	25		36	44	49	54
	Medium	-42		○	●			●	13						
	Medium	-M30 (-NM23)		○	●			○	13	25		36	44	49	54
	Medium	-M42		○	●			●	13	25		36	44		54
	Medium	-M60 (-NM26)		○	●			○	13	25		36	44		54
	Medium	-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
	Medium	-M42		○	●	○	○	●	13	26			44		54
	Medium	-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

				Cast iron K	Sintered steels P	Heat-resistant S	Hardened H	Geometry CN..	DN..	KN..	SN..	TN..	VN..	WN..
Main application: **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

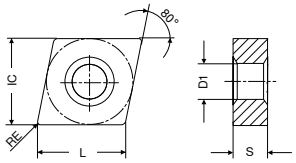
Main application:				Steel P	Stainless steel M	Cast iron K	Non-ferrous metals N	Heat-resistant S	Geometry CC..	DC..	RC..	SC..	SP..	TC..	TP..	VC..	WC..
Heat-resistant (sharp – stable)	Fine	-F05 (-F05)		●	●	○	○	●		82						128	
	Fine	-F23 (-F23)			●	○	○	●	62	82						128	

Main application:				Cast iron K	Sintered steels P	Heat-resistant S	Hardened H	CC..	DC..	RC..	SC..	SP..	TC..	TP..	VC..	WC..
Cast iron, sintered steels, heat resistant, hardened	Fine	CTBS10U (PBC10) CTBS20C (PBC15-S)		●	●	●		63+64	83+84				116		129+130	142
	Fine	CTBH15U CTBH15C	< 32 HRC				●	65	85				116–118		129+130	142
	Fine	CTBH21U (PBC25)	52–65 HRC				●	66	85–87				117+118		130+131	142
	Fine	CTBH20C (PBC25-S)	48–62 HRC													
	Fine	CTBH40U (PBC40)	54–65 HRC				●	67	85–87				117+118		130+131	142
	Fine	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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		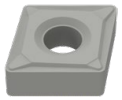		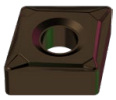											
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090308EN	0,8					7,42	318	7,45	518	7,42	718				
120404EN	0,4	9,68	904	10,11	028	11,42	328	11,42	528	11,42	728	11,75	028	13,09	328
120408EN	0,8	9,68	908	10,11	030	11,42	330	11,42	530	11,42	730	11,75	030	13,09	330
120412EN	1,2					11,42	332	11,42	532	11,42	732	11,75	032	13,09	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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				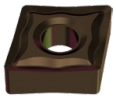						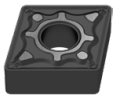		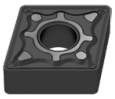		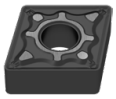	
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120408EN	0,8	13,09	530	11,42	730	11,46	330	11,46	530	11,42	030	11,42	530	11,42	330
120412EN	1,2	13,09	532			11,46	332	11,46	532	11,42	032	11,42	532	11,42	320
120416EN	1,6													11,42	334
160608EN	0,8													18,46	342
160612EN	1,2													18,46	344
160616EN	1,6													18,46	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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		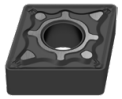		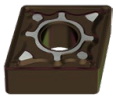		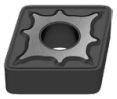		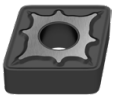		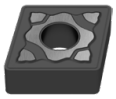		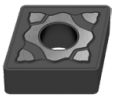		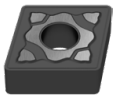	
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	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
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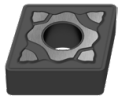
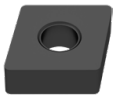
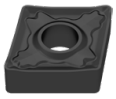
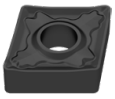
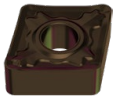
120408EN	0,8	11,42	530	11,42	730			13,09	530	11,42	030	11,42	530	11,42	330
120412EN	1,2	11,42	532	11,42	732	13,09	320	13,09	532	11,42	032	11,42	532	11,42	320
120416EN	1,6	11,42	534	11,42	734					11,42	034	11,42	534	11,42	334
160608EN	0,8	18,46	542	18,46	742					18,46	042	18,46	542	18,46	342
160612EN	1,2	18,46	544	18,46	744					18,46	044	18,46	544	18,46	344
160616EN	1,6	18,46	546	18,46	746					18,46	046	18,46	546	18,46	346
160624EN	2,4													18,46	348
190608EN	0,8													26,07	354
190612EN	1,2									26,07	056	26,07	556	26,07	356
190616EN	1,6									26,07	058	26,07	558	26,07	358
190624EN	2,4													26,07	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	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
															
		M		M		R		R		R		R		R	
		CNMG		CNMG		CNMA		CNMA		CNMM		CNMM		CNMM	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
120404EN	0,4					11,42	028	11,42	528						
120408EN	0,8	11,42	530	11,42	730	11,42	030	11,42	530	11,63	330	11,63	530		
120412EN	1,2	11,42	532	11,42	732	11,42	032	11,42	532	11,63	332	11,63	532	11,63	732
120416EN	1,6	11,42	534	11,42	734	11,42	034	11,42	534	11,63	334	11,63	534	11,63	734
160608EN	0,8	18,46	542	18,46	742	18,46	042	18,46	542						
160612EN	1,2	18,46	544	18,46	744	18,46	044	18,46	544	18,46	344	18,46	544	18,46	744
160616EN	1,6	18,46	546	18,46	746	18,46	046	18,46	546	18,46	346	18,46	546	18,46	746
160624EN	2,4	18,46	548	18,46	748										
190608EN	0,8	26,07	554	26,07	754										
190612EN	1,2	26,07	556	26,07	756	26,07	056	26,07	556	26,07	356	26,07	556	26,07	756
190616EN	1,6	26,07	558	26,07	758	26,07	058	26,10	558	26,07	358	26,07	558	26,07	758
190624EN	2,4	26,07	560	26,07	760					26,07	360	26,07	560	26,07	760
250924EN	2,4									60,18	38400	60,18	58400	60,18	78400
Steel			●		●						●		●		●
Stainless steel			○		○						○		○		○
Cast iron			○				●		●		○		○		
Non ferrous metals															
Heat resistant alloys					○										○

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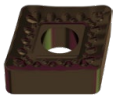
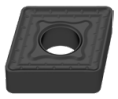
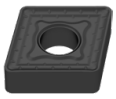
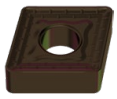
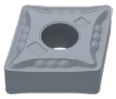
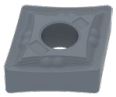
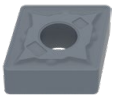
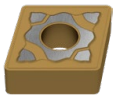
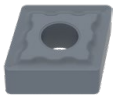
CNMM / CNMG

		-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	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
120404EN	0,4													11,42	280
120408EN	0,8	11,63	330	11,63	530	11,63	730							11,42	230
120412EN	1,2	11,63	332	11,63	532	11,63	732								
120416EN	1,6	11,63	334	11,63	534	11,63	734								
160612EN	1,2	18,46	344	18,46	544	18,46	744								
160616EN	1,6	18,46	346	18,46	546	18,46	746								
160624EN	2,4	18,46	348	18,46	548	18,46	748								
160624SN	2,4							18,46	348	18,46	548	18,46	748		
190612EN	1,2	26,07	356	26,07	556	26,07	756								
190616EN	1,6	26,07	358	26,07	558	26,07	758								
190616SN	1,6							26,07	358	26,07	558	26,07	758		
190624EN	2,4	26,07	360	26,07	524	26,07	760								
190624SN	2,4							26,07	360	26,07	560	26,07	760		
250924EN	2,4	60,18	384	60,18	584	60,18	784								
250924SN	2,4							60,18	384	60,18	584	60,18	784		
Steel			●		●		●		●		●		●		○
Stainless steel			○		○		○		○		○		○		●
Cast iron			○		○				○		○				
Non ferrous metals															
Heat resistant alloys							○						○		

CNMG / CNGP

ISO	RE mm	-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	M	M	M	M	F	M
		CNMG 1A/08	CNMG 1A/08	CNMG 1A/08	CNMG 1A/08	CNMG 1A/08	CNGP 1A/08	CNMG 1A/08
		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 ...
		EUR	EUR	EUR	EUR	EUR	EUR	EUR
120402FN	0,2						15,33 602	
120404EN	0,4			10,23 404				10,75 428
120404FN	0,4						15,33 604	
120408EN	0,8	10,23 462	11,42 230	10,23 408	11,42 230	10,23 430		10,75 430
120408FN	0,8						15,33 608	
120412EN	1,2		11,42 232	10,23 410	11,42 232	10,23 432		10,75 432
120416EN	1,6		11,42 234		11,42 234			
160612EN	1,2					18,46 442		
190612EN	1,2					26,07 456		
190616EN	1,6					26,07 458		
Steel		○	○	○	○	○		
Stainless steel		●	●	●	●	●	●	○
Cast iron							○	
Non ferrous metals							○	
Heat resistant alloys		●	○	●	○	●	●	●

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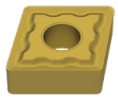
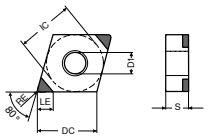
CNMG

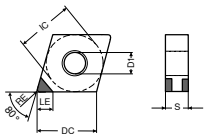
ISO	RE mm	-M34 CTP5115	-M42 CTP2120	-M52 CTP2120
		-M34 HCN5115	-M42 CCN2120	-M52 CCN2120
		DRAGONSKIN		
				
		M	M	M
		CNMG 1A/08	CNMG 1A/08	CNMG 1A/08
		Article no. 75 003 ...	Article no. 70 130 ...	Article no. 70 117 ...
		EUR	EUR	EUR
120404EN	0,4	10,75 528	10,23 604	10,23 604
120408EN	0,8	10,75 530	10,23 608	10,23 608
120412EN	1,2	10,75 532		
120416EN	1,6	10,75 534		
Steel				
Stainless steel		○	○	○
Cast iron			○	○
Non ferrous metals			○	○
Heat resistant alloys		●	●	●

CNGA

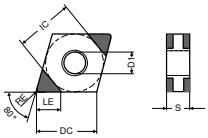
Designation	L	S	D1	IC
	mm	mm	mm	mm
CNGA 1204..	12,9	4,76	5,13	12,7



-B

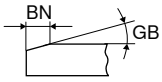


-K (-2SC)



-L (-4SC)

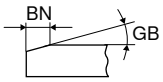
CNGA



					-K CTBS20C -2SC PBC15-S		-L CTBS20C -4SC PBC15-S		-B CTBH15C		-B CTBH15C	
					F		F		F		F	
					CBN CNGA		CBN CNGA		CBN CNGA		CBN CNGA	
					Y0		Y0		NEW Y0		NEW Y0	
ISO	RE	GB	BN	LE	Article no. 71 400 ...		Article no. 71 401 ...		Article no. 71 003 ...		Article no. 71 005 ...	
	mm	°	mm	mm	EUR		EUR		EUR		EUR	
120404SN	0,4	10	0,09	2,8			57,23	122				
120404SN	0,4	15	0,09	2,8			57,23	132				
120404SN	0,4	15	0,11	2,8	34,98	142						
120404SN	0,4	15	0,11	3,0					66,91	32814		
120404SN	0,4	20	0,09	2,8			57,23	152				
120404SN	0,4	20	0,14	2,8	34,98	162						
120404SN	0,4	25	0,13	3,0					66,91	32829		
120404SN	0,4	30	0,18	2,8	34,98	182	57,23	182				
120404RN	0,4			3,0					66,91	22800		
120408SN	0,8	10	0,09	2,5			57,23	124				
120408SN	0,8	15	0,09	2,5			57,23	134				
120408SN	0,8	15	0,11	2,5	34,98	144						
120408SN	0,8	15	0,11	2,7					66,91	33014		
120408SN	0,8	20	0,09	2,5			57,23	154				
120408SN	0,8	20	0,14	2,5	34,98	164						
120408SN	0,8	25	0,13	2,7					66,91	33029		
120408SN	0,8	30	0,18	2,5	34,98	184	57,23	184				
120408RN	0,8			2,7					66,91	23000		
120412SN	1,2	10	0,09	2,2			57,23	126				
120412SN	1,2	15	0,09	2,2			57,23	136				
120412SN	1,2	15	0,11	2,2	34,98	146						
120412SN	1,2	15	0,11	2,4							66,91	33214
120412SN	1,2	20	0,09	2,2			57,23	156				
120412SN	1,2	20	0,14	2,2	34,98	166						
120412SN	1,2	25	0,13	2,4							66,91	33229
120412SN	1,2	30	0,18	2,2	34,98	186	57,23	186				
120412RN	1,2			2,4							66,91	23200
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

CNGA



ISO	RE mm	GB °	BN mm	LE mm	-K CTBH20C -2SC PBC25-S F CBN CNGA Y0 Article no. 71 400 ... EUR		-L CTBH20C -4SC PBC25-S F CBN CNGA Y0 Article no. 71 401 ... EUR		-K CTBH40C -2SC PBC40-S F CBN CNGA Y0 Article no. 71 400 ... EUR		-L CTBH40C -4SC PBC40-S F CBN CNGA Y0 Article no. 71 401 ... EUR	
120404TN	0,4	15	0,09	2,8	34,98	222						
120404SN	0,4	20	0,09	2,8							57,23	332
120404SN	0,4	20	0,11	2,8			57,23	242				
120404TN	0,4	25	0,11	2,8	34,98	252						
120404SN	0,4	25	0,11	2,8					34,98	352	57,23	352
120404SN	0,4	25	0,13	2,8			57,23	262				
120404FN	0,4			2,8	34,98	212						
120404SN	0,4	30	0,14	2,8							57,23	372
120404SN	0,4	35	0,14	2,8					34,98	382		
120408TN	0,8	15	0,09	2,5	34,98	224						
120408TN	0,8	20	0,09	2,5	34,98	234						
120408SN	0,8	20	0,09	2,5							57,23	334
120408SN	0,8	20	0,11	2,5			57,23	244				
120408TN	0,8	25	0,11	2,5	34,98	254						
120408SN	0,8	25	0,11	2,5					34,98	354	57,23	354
120408SN	0,8	25	0,13	2,5			57,23	264			57,23	364
120408SN	0,8	30	0,14	2,5			57,23	274			57,23	374
120408SN	0,8	35	0,14	2,5					34,98	384		
120408EN	0,8			2,5					34,98	314		
120412TN	1,2	15	0,09	2,2	34,98	226						
120412SN	1,2	20	0,09	2,2							57,23	336
120412SN	1,2	20	0,11	2,2			57,23	246				
120412TN	1,2	25	0,11	2,2	34,98	256						
120412SN	1,2	25	0,11	2,2					34,98	356	57,23	356
120412SN	1,2	25	0,13	2,2			57,23	266			57,23	366
120412SN	1,2	30	0,14	2,2							57,23	376
120412SN	1,2	35	0,14	2,2					34,98	386		
120412FN	1,2			2,2	34,98	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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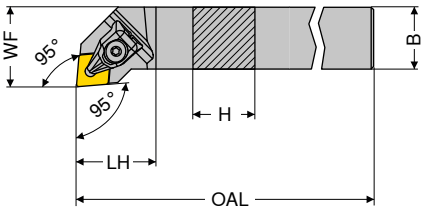
MaxiLock-D – DCLN 95° – Toolholder with top clamping



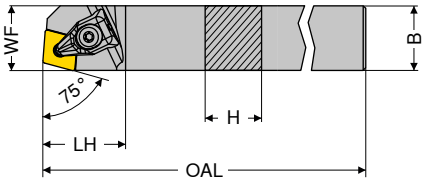
Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand 2A/24 Article no. 70 509 ...		Right-hand 2A/24 Article no. 70 508 ...	
	mm	mm	mm	mm	mm	Nm		EUR		EUR	
DCLN R/L 1616 H09	16	16	100	23	20	2	CN.. 0903	76,33	**516**	76,33	**516**
DCLN R/L 2020 K09	20	20	125	24	25	2	CN.. 0903	85,04	**520**	85,04	**520**
DCLN R/L 2020 K12	20	20	125	32	25	4	CN.. 1204	85,04	**620**	85,04	**620**
DCLN R/L 2525 M12	25	25	150	32	32	4	CN.. 1204	87,97	**625**	87,97	**625**
DCLN R/L 3225 P12	32	25	170	32	32	4	CN.. 1204	94,37	**632**	94,37	**632**
DCLN R/L 2525 M16	25	25	150	38	32	6,5	CN.. 1606	87,97	**725**	87,97	**725**
DCLN R/L 3232 P16	32	32	170	36	40	6,5	CN.. 1606	118,80	**732**	118,80	**732**
DCLN R/L 3232 P19	32	32	170	42	40	6,5	CN.. 1906	118,80	**832**	118,80	**832**
DCLN R/L 4040 S19	40	40	250	42	50	6,5	CN.. 1906	147,70	**940**	147,70	**940**
DCLN R/L 4040 S25	40	40	250	60	50	6,5	CN.. 2509	147,70	**440**	147,70	**440**

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

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR	
70 508 516 / 70 509 516	24,10	**823**	T09 - IP	11,24	**126**	M3x7 - IP	3,14	**819**	7,12	**848**
70 508 520 / 70 509 520	24,10	**823**	T09 - IP	11,24	**126**	M3x7 - IP	3,14	**819**	7,12	**848**
70 508 620 / 70 509 620	23,77	**824**	T15 - IP	11,89	**128**	M4,5x12 - IP	2,98	**820**	7,89	**810**
70 508 625 / 70 509 625	23,77	**824**	T15 - IP	11,89	**128**	M4,5x12 - IP	2,98	**820**	7,89	**810**
70 508 632 / 70 509 632	23,77	**824**	T15 - IP	11,89	**128**	M4,5x12 - IP	2,98	**820**	7,89	**810**
70 508 725 / 70 509 725	26,69	**825**	T20 - IP	12,54	**129**	M5x14 - IP	4,23	**821**	12,05	**814**
70 508 732 / 70 509 732	26,69	**825**	T20 - IP	12,54	**129**	M5x14 - IP	4,23	**821**	12,05	**814**
70 508 832 / 70 509 832	29,19	**826**	T20 - IP	12,54	**129**	M5x14 - IP	4,23	**821**	12,91	**816**
70 508 940 / 70 509 940	29,19	**826**	T20 - IP	12,54	**129**	M5x14 - IP	4,23	**821**	12,91	**816**
70 508 440 / 70 509 440	45,47	**827**	T25 - IP	14,50	**130**	M6x16 - IP	8,04	**822**	24,75	**625**

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

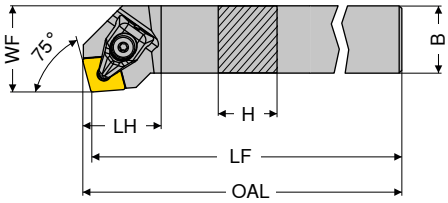


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 501 ... EUR		Right-hand 2A/24 Article no. 70 500 ... EUR	
DCBN R/L 2525 M12	25	25	150	32	22	4	CN.. 1204	85,04	825	85,04	825

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR	
70 501 825 / 70 500 825	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	810

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

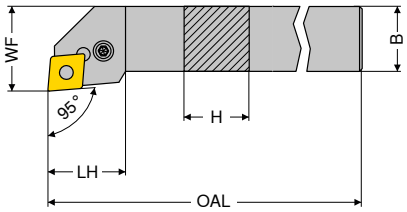


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LF mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 505 ... EUR		Right-hand 2A/24 Article no. 70 504 ... EUR	
DCKN R/L 2525 M12	25	25	152,9	150	28,9	32	4	CN.. 1204	85,04	825	85,04	825

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR	
70 505 825 / 70 504 825	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	810

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

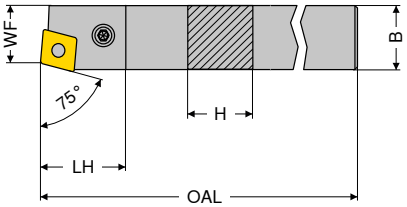


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 509 ... EUR		Right-hand 2A/24 Article no. 70 508 ... EUR	
PCLN R/L 1616 H12	16	16	100	26,2	20	4	CN.. 1204	76,33	016	76,33	016
PCLN R/L 2020 K12	20	20	125	27,5	25	4	CN.. 1204	85,04	020	85,04	020
PCLN R/L 2525 M12	25	25	150	28,1	32	4	CN.. 1204	87,97	025	87,97	025
PCLN R/L 3225 P12	32	25	170	28,1	32	4	CN.. 1204	94,37	032	94,37	032
PCLN R/L 2525 M16	25	25	150	32,7	32	4	CN.. 1606	87,97	125	87,97	125
PCLN R/L 3232 P16	32	32	170	32,6	40	4	CN.. 1606	118,80	132	118,80	132
PCLN R/L 3232 P19	32	32	170	38,0	40	8	CN.. 1906	118,80	232	118,80	232
PCLN R/L 4040 S25	40	40	250	50,0	50	8	CN.. 2509	147,70	340	147,70	340

Spare parts for Article no.		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR	
70 508 016 / 70 509 016	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	7,89	233
70 508 020 / 70 509 020	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	7,89	233
70 508 025 / 70 509 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	7,89	233
70 508 032 / 70 509 032	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	7,89	233
70 508 125 / 70 509 125	SW3	2,45	176	1,12	391	1,22	394	12,48	385	3,80	388	12,48	380
70 508 132 / 70 509 132	SW3	2,45	176	1,12	391	1,22	394	12,48	385	3,80	388	12,48	380
70 508 232 / 70 509 232	SW4	2,57	396	1,76	392	1,22	395	19,11	386	3,80	389	19,21	381
70 508 340 / 70 509 340	SW5	3,68	265	1,12	621	1,89	623	25,83	620	2,28	622	24,75	624

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

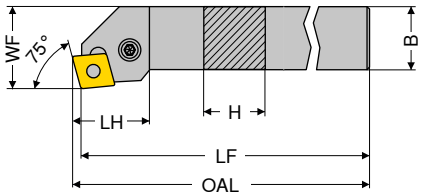


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 501 ... EUR		Right-hand 2A/24 Article no. 70 500 ... EUR	
PCBN R/L 2525 M12	25	25	150	27,70	22	4	CN.. 1204	85,04	025	85,04	025
PCBN R 2525 M16	25	25	150	31,81	22	4	CN.. 1606			85,04	125
PCBN R/L 3232 P19	32	32	170	38,00	27	8	CN.. 1906	118,80	032	118,80	032

Spare parts for Article no.		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR	
70 500 025 / 70 501 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	7,89	233
70 500 125	SW3	2,45	176	1,12	391	1,22	394	12,48	385	3,80	388	12,48	380
70 500 032 / 70 501 032	SW4	2,57	396	1,76	392	1,22	395	19,11	386	3,80	389	19,21	381

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



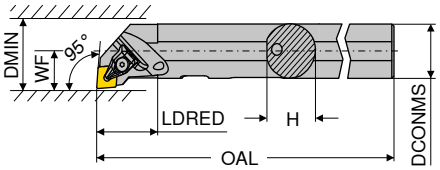
Illustrations show right-hand versions

ISO designation	H	B	OAL	LF	LH	WF	torque moment	Insert	Left-hand 2A/24 Article no. 70 505 ...		Right-hand 2A/24 Article no. 70 504 ...	
	mm	mm	mm	mm	mm	mm	Nm		EUR		EUR	
PCKN R/L 2525 M12	25	25	153,07	150	31,4	32	4	CN.. 1204	85,04	**025**	85,04	**025**

Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 Carbide type C	
for Article no.		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR	
70 505 025 / 70 504 025	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	7,89	**233**

9

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



Illustrations show right-hand versions

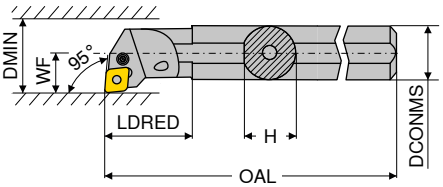
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 557 ... EUR		Right-hand 2A/24 Article no. 70 556 ... EUR	
A20Q DCLN R/L 09	20	19	180	35	13	25	2	CN.. 0903	199,40	**720**	199,40	**720**
A25R DCLN R/L 12	25	24	200	36	17	32	4	CN.. 1204	222,20	**825**	222,20	**825**
A32S DCLN R/L 12	32	31	250	40	22	40	4	CN.. 1204	229,80	**832**	229,80	**832**
A40T DCLN R/L 12	40	39	300	45	27	50	4	CN.. 1204	256,00	**840**	256,00	**840**

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

Spare parts	2A/28 XPress type Article no. 70 950 ...		Y7 Key D Article no. 80 950 ...		2A/28 Clamping screw Article no. 70 950 ...		2A/28 Carbide type C Article no. 70 950 ...	
for Article no.	EUR		EUR		EUR		EUR	
70 556 720 / 70 557 720	24,10	**823**	T09 - IP	11,24	**126**	M3x7 - IP	3,14	**819**	7,12	**848**
70 556 825 / 70 557 825	23,77	**824**	T15 - IP	11,89	**128**	M4,5x12 - IP	2,98	**820**		
70 556 832 / 70 557 832	23,77	**824**	T15 - IP	11,89	**128**	M4,5x12 - IP	2,98	**820**	7,89	**810**
70 556 840 / 70 557 840	23,77	**824**	T15 - IP	11,89	**128**	M4,5x12 - IP	2,98	**820**	7,89	**810**

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

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



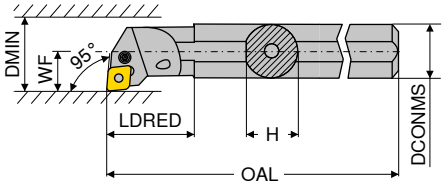
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 557 ... EUR		Right-hand 2A/24 Article no. 70 556 ... EUR	
A25R PCLN R/L 12	25	23	200	36,0	17	32	4	CN.. 1204	222,20	**225**	222,20	**225**
S25T PCLN R/L 12	25	23	300	22,0	17	32	4	CN.. 1204	222,20	**025**	222,20	**025**
A32S PCLN R/L 12	32	30	250	50,0	22	40	4	CN.. 1204	229,80	**232**	229,80	**232**
S32U PCLN R/L 12	32	30	350	24,1	22	40	4	CN.. 1204	229,80	**032**	229,80	**032**
A40T PCLN R/L 12	40	38	300	60,0	27	50	4	CN.. 1204	256,00	**240**	256,00	**240**
S40V PCLN R/L 12	40	38	400	24,1	27	50	4	CN.. 1204	256,00	**040**	256,00	**040**
S50W PCLN R/L 16	50	47	450	31,0	35	63	4	CN.. 1606	316,80	**050**	316,80	**050**

Spare parts		2A/28 Key I Article no. 70 950 ...		2A/28 Shim Article no. 70 950 ...		2A/28 Assembly pin Article no. 70 950 ...		2A/28 Lever Article no. 70 950 ...		2A/28 Clamping screw Article no. 70 950 ...		2A/28 Carbide type C Article no. 70 950 ...	
for Article no.		EUR		EUR		EUR		EUR		EUR		EUR	
70 556 225 / 70 557 225	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	4,28	**205**	7,89	**233**
70 556 025 / 70 557 025	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	4,28	**205**	7,89	**233**
70 556 232 / 70 557 232	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	4,28	**205**	7,89	**233**
70 556 032 / 70 557 032	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	4,28	**205**	7,89	**233**
70 556 240 / 70 557 240	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	7,89	**233**
70 556 040 / 70 557 040	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	7,89	**233**
70 556 050 / 70 557 050	SW3	2,45	**176**	1,12	**391**	1,22	**394**	12,48	**385**	3,80	**388**	12,48	**380**

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

▲ with carbide core



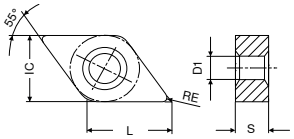
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 559 ... EUR		Right-hand 2A Article no. 70 558 ... EUR	
E-A25R PCLN R/L 12	25	23	200	40	17	31	4	CN.. 1204	709,60	**025**	709,60	**025**
E-A32S PCLN R/L 12	32	30	250	50	22	39	4	CN.. 1204	936,70	**032**	936,70	**032**
E-A40T PCLN R/L 12	40	38	300	60	27	48	4	CN.. 1204	1.118,00	**040**	1.118,00	**040**

Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 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 ...	
for Article no.		EUR		EUR		EUR		EUR		EUR		EUR	
70 558 025 / 70 559 025	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	4,28	**205**	7,89	**233**
70 558 032 / 70 559 032	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	4,28	**205**	7,89	**233**
70 558 040 / 70 559 040	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	7,89	**233**

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

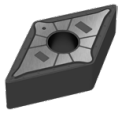
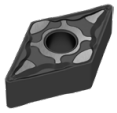
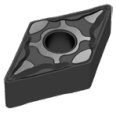
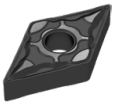
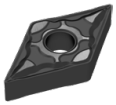


DNMG

	-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 1A/78	CERMET DNMG 1A/78	DNMG 1A/08	DNMG 1A/08	DNMG 1A/08	CERMET DNMG 1A/78	DNMG 1A/08
ISO / RE mm	Article no. 70 155 ... EUR	Article no. 76 102 ... EUR	Article no. 76 134 ... EUR	Article no. 76 134 ... EUR	Article no. 76 134 ... EUR	Article no. 76 153 ... EUR	Article no. 76 153 ... EUR
110402EN 0,2			12,19 302	12,19 502	12,19 702		
110404EN 0,4	11,63 904	12,19 004	12,19 304	12,19 504	12,19 704		
110408EN 0,8		12,19 006	12,19 306	12,19 506	12,19 706		
110412EN 1,2			12,19 308	12,19 508	12,19 708		
150404EN 0,4			14,77 316	14,77 516	14,77 716		
150408EN 0,8			14,77 318	14,77 518	14,77 718		
150412EN 1,2			14,77 320	14,77 520	14,77 720		
150604EN 0,4	15,23 914	16,00 028	16,00 328	16,00 528	16,00 728	17,79 028	18,46 32800
150608EN 0,8		16,00 030	16,00 330	16,00 530	16,00 730	17,79 030	18,46 330
150612EN 1,2		16,00 032	16,00 332	16,00 532	16,00 732		
Steel	●	●	●	●	●	●	●
Stainless steel		○	○	○	○	○	○
Cast iron	○	○	○	○		○	○
Non ferrous metals							
Heat resistant alloys					○		

→ v_c Page 144–159

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	
															
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		DNMG		DNMG		DNMG		DNMG		DNMG		DNMG		DNMG	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
110404EN	0,4											12,19	304	12,19	504
110408EN	0,8											12,19	306	12,19	506
110412EN	1,2											12,19	308	12,19	508
150404EN	0,4											14,77	316	14,77	514
150408EN	0,8							14,77	018	14,77	518	14,77	318	14,77	518
150412EN	1,2							14,77	020	14,77	520	14,77	320	14,77	516
150416EN	1,6											14,77	322	14,77	522
150604EN	0,4	18,46	528	16,00	328	16,00	528					16,00	328	16,00	528
150608EN	0,8	18,46	530	16,00	330	16,00	530	16,00	030	16,00	530	16,00	330	16,00	530
150612EN	1,2			16,00	332	16,00	532	16,00	032	16,00	532	16,00	332	16,00	532
150616EN	1,6											16,00	334	16,00	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	
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		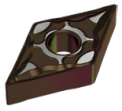		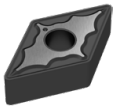		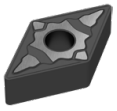		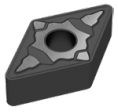		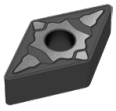		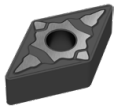		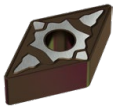	
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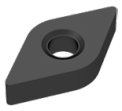
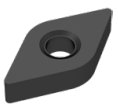
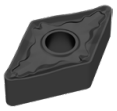
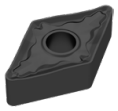
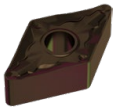
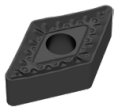
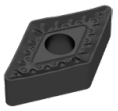
		DNMG		DNMG		DNMG		DNMG		DNMG		DNMG		DNMG	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	Article no. 76 136 ...		Article no. 76 197 ...		Article no. 70 263 ...		Article no. 70 263 ...		Article no. 76 263 ...		Article no. 76 263 ...		Article no. 76 263 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
110404EN	0,4	12,19	704												
110408EN	0,8	12,19	706							12,19	306	12,19	506	12,19	706
110412EN	1,2	12,19	708							12,19	308	12,19	508	12,19	708
150404EN	0,4	14,77	716												
150408EN	0,8	14,77	718			14,77	018	14,77	518	14,77	318	14,77	518	14,77	718
150412EN	1,2	14,77	720			14,77	020	14,77	520	14,77	320	14,77	520	14,77	720
150416EN	1,6	14,77	722							14,77	322	14,77	522	14,77	722
150604EN	0,4	16,00	728												
150608EN	0,8	16,00	730	18,46	530	16,00	030	16,00	530	16,00	330	16,00	530	16,00	730
150612EN	1,2	16,00	732	18,46	532	16,00	032	16,00	532	16,00	332	16,00	532	16,00	732
150616EN	1,6	16,00	734			16,00	034	16,00	534	16,00	334	16,00	534	16,00	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	
															
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		DNMA		DNMA		DNMM		DNMM		DNMM		DNMM		DNMM	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
150408EN	0,8	14,77	018	14,77	518										
150412EN	1,2	14,77	020	14,77	520										
150608EN	0,8	16,00	030	16,00	530										
150612EN	1,2	16,00	032	16,00	532	16,00	332	16,00	532	16,00	732	16,00	332	16,00	532
150616EN	1,6					16,00	334	16,00	534	16,00	734	16,00	334	16,00	534
Steel						●		●		●		●		●	
Stainless steel						○		○		○		○		○	
Cast iron		●		●		○		○				○		○	
Non ferrous metals															
Heat resistant alloys										○					

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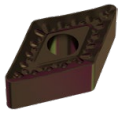
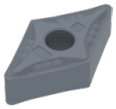
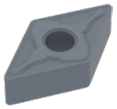
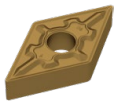
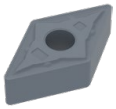
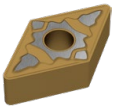
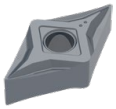
DNMM / DNMG / DNGP

		-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	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
110404EN	0,4			12,19	204			12,19	600						
110408EN	0,8			12,19	206	12,19	206	12,19	602			12,19	406		
110412EN	1,2					12,19	208								
150402FN	0,2													19,57	602
150404EN	0,4							14,77	614						
150404FN	0,4													19,57	604
150408EN	0,8							14,77	618						
150408FN	0,8													19,57	608
150602FN	0,2													21,37	610
150604EN	0,4			16,00	228			16,00	620						
150604FN	0,4													21,37	612
150608EN	0,8			16,00	230	16,00	230	16,00	622	16,00	230				
150608FN	0,8													21,37	614
150612EN	1,2	16,00	732			16,00	232			16,00	232				
150616EN	1,6	16,00	734												

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

9

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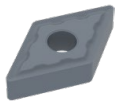
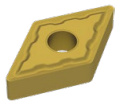
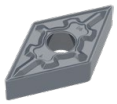
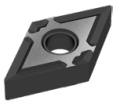
DNMG

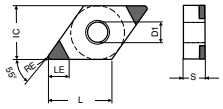
		-M34 CTP5110		-M34 CTP5115		-M42 CTP2120		-M52 CTP2120	
		-M34 HCN5110		-M34 HCN5115		-M42 CCN2120		-M52 CCN2120	
		DRAGONSKIN		DRAGONSKIN					
									
		M		M		M		M	
		DNMG		DNMG		DNMG		DNMG	
		1A/08		1A/08		1A/08		1A/08	
ISO	RE	Article no. 75 004 ...		Article no. 75 004 ...		Article no. 70 158 ...		Article no. 70 119 ...	
	mm	EUR		EUR		EUR		EUR	
150404EN	0,4	15,43	416	15,43	516	14,77	604		
150408EN	0,8	15,43	418	15,43	518				
150412EN	1,2	15,43	420	15,43	520				
150604EN	0,4					16,00	610	16,00	612
150608EN	0,8	16,90	430	16,90	530	16,00	612	16,00	614
150612EN	1,2	16,90	432	16,90	532				

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

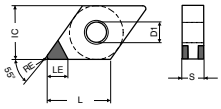
→ v_c Page 144–159

DNGA

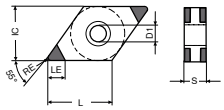
Designation	L	S	D1	IC
	mm	mm	mm	mm
DNGA 1506..	15,5	6,35	5,16	12,7



-B

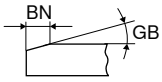


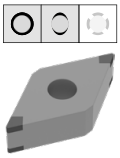
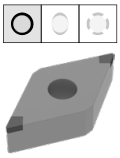
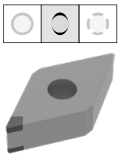
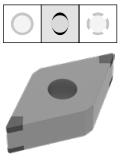
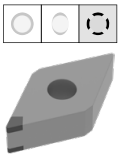
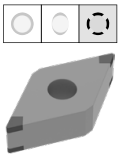
-K (-2SC)



-L (-4SC)

DNGA



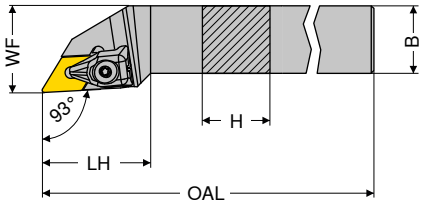
	-L CTBS20C	-B CTBH15C	-K CTBH20C	-L CTBH20C	-K CTBH40C	-L CTBH40C
	-4SC PBC15-S		-2SC PBC25-S	-4SC PBC25-S	-2SC PBC40-S	-4SC PBC40-S
						
	F	F	F	F	F	F
	CBN DNGA	CBN DNGA	CBN DNGA	CBN DNGA	CBN DNGA	CBN DNGA
	Y0	NEW Y0	Y0	Y0	Y0	Y0
	Article no. 71 403 ...	Article no. 71 017 ...	Article no. 71 402 ...	Article no. 71 403 ...	Article no. 71 402 ...	Article no. 71 403 ...
	EUR	EUR	EUR	EUR	EUR	EUR

ISO	RE	GB	BN	LE	-L CTBS20C		-B CTBH15C		-K CTBH20C		-L CTBH20C		-K CTBH40C		-L CTBH40C	
	mm	°	mm	mm	EUR		EUR		EUR		EUR		EUR		EUR	
150604SN	0,4	10	0,09	2,8	57,23	122										
150604TN	0,4	15	0,09	2,8					34,98	222						
150604SN	0,4	15	0,09	2,8	57,23	132										
150604SN	0,4	15	0,11	2,8			66,91	32814								
150604SN	0,4	20	0,09	2,8	57,23	152									57,23	332
150604SN	0,4	20	0,11	2,8							57,23	242				
150604TN	0,4	25	0,11	2,8					34,98	252						
150604SN	0,4	25	0,11	2,8									34,98	352	57,23	352
150604SN	0,4	25	0,13	2,8			66,91	32829			57,23	262				
150604FN	0,4			2,8					34,98	212						
150604SN	0,4	30	0,14	2,8											57,23	372
150604SN	0,4	30	0,18	2,8	57,23	182										
150604SN	0,4	35	0,14	2,8									34,98	382		
150608FN	0,8			2,6					34,98	214						
150608SN	0,8	10	0,09	2,6	57,23	124										
150608SN	0,8	15	0,09	2,6	57,23	134										
150608TN	0,8	15	0,09	2,6					34,98	224						
150608SN	0,8	15	0,11	2,6			66,91	33014								
150608SN	0,8	20	0,09	2,6	57,23	154									57,23	334
150608SN	0,8	20	0,11	2,6							57,23	244				
150608TN	0,8	25	0,11	2,6					34,98	254						
150608SN	0,8	25	0,11	2,6									34,98	354	57,23	354
150608SN	0,8	25	0,13	2,6			66,91	33029			57,23	264			57,23	364
150608SN	0,8	30	0,14	2,6							57,23	274			57,23	374
150608SN	0,8	30	0,18	2,6	57,23	184										
150608SN	0,8	35	0,14	2,6									34,98	384		
150612SN	1,2	15	0,11	2,8			66,91	33214								
150612SN	1,2	25	0,13	2,8			66,91	33229								

	-L CTBS20C	-B CTBH15C	-K CTBH20C	-L CTBH20C	-K CTBH40C	-L CTBH40C
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

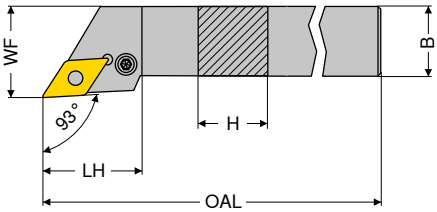
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 541 ... EUR		Right-hand 2A/24 Article no. 70 540 ... EUR	
DDJN R/L 1616 H11	16	16	100	33	20	2	DN.. 1104	76,33	816	76,33	816
DDJN R/L 2020 K11	20	20	125	33	25	2	DN.. 1104	85,04	820	85,04	820
DDJN R/L 2525 M11	25	25	150	33	32	2	DN.. 1104	87,97	825	87,97	825
DDJN R/L 2020 K15	20	20	125	40	25	4	DN.. 1504 / 1506	85,04	720	85,04	720
DDJN R/L 2525 M15	25	25	150	40	32	4	DN.. 1504 / 1506	87,97	725	87,97	725
DDJN R/L 3225 P15	32	25	170	40	32	4	DN.. 1504 / 1506	94,37	832	94,37	832

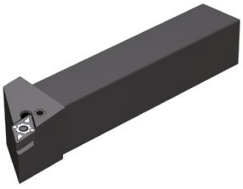
Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**

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

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR		Y7 Key D Article no. 80 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat D Article no. 70 950 ... EUR	
70 541 816 / 70 540 816	28,76	835	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,53	808
70 541 820 / 70 540 820	28,76	835	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,53	808
70 541 825 / 70 540 825	28,76	835	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,53	808
70 541 720 / 70 540 720	23,77	824	T15 - IP 11,89	128	M4,5x12 - IP 2,98	820	7,89	811
70 541 725 / 70 540 725	23,77	824	T15 - IP 11,89	128	M4,5x12 - IP 2,98	820	7,89	811
70 541 832 / 70 540 832	23,77	824	T15 - IP 11,89	128	M4,5x12 - IP 2,98	820	7,89	811

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



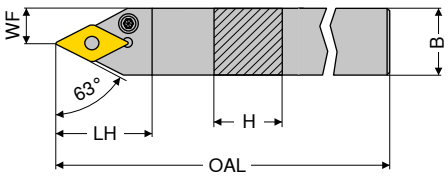


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 541 ... EUR		Right-hand 2A/24 Article no. 70 540 ... EUR	
PDJN R/L 1616 H11	16	16	100	30,0	20	3	DN.. 1104	76,33	116	76,33	116
PDJN R/L 2020 K11	20	20	125	30,0	25	3	DN.. 1104	85,04	120	85,04	120
PDJN R/L 2525 M11	25	25	150	30,0	32	3	DN.. 1104	87,97	125	87,97	125
PDJN R/L 2020 K15	20	20	125	34,9	25	3,2	DN.. 1506	85,04	020	85,04	020
PDJN R/L 2525 M15	25	25	150	35,4	32	3,2	DN.. 1506	87,97	025	87,97	025
PDJN R/L 3225 P15	32	25	170	35,4	32	3,2	DN.. 1506	94,37	032	94,37	032

Spare parts for Article no.		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat D Article no. 70 950 ... EUR	
70 541 116 / 70 540 116	SW2,5	2,45	175	2,06	122	1,22	191	14,97	121	3,19	208	7,21	120
70 541 120 / 70 540 120	SW2,5	2,45	175	2,06	122	1,22	191	14,97	121	3,19	208	7,21	120
70 541 125 / 70 540 125	SW2,5	2,45	175	2,06	122	1,22	191	14,97	121	3,19	208	7,21	120
70 541 020 / 70 540 020	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,80	388	7,89	236
70 541 025 / 70 540 025	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,80	388	7,89	236
70 541 032 / 70 540 032	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,80	388	7,89	236

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

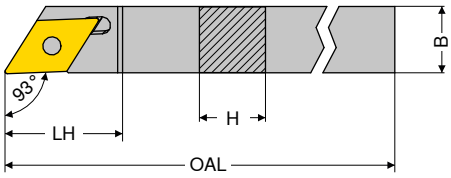


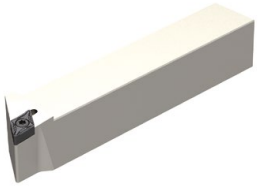
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 537 ... EUR		Right-hand 2A/24 Article no. 70 536 ... EUR	
PDNN R/L 2525 M11	25	25	150	30,0	12,5	3	DN.. 1104	87,97	**125**	87,97	**125**
PDNN R/L 2525 M15	25	25	150	36,5	12,5	3,2	DN.. 1506	87,97	**025**	87,97	**025**

Spare parts		2A/28 Key I Article no. 70 950 ...		2A/28 Shim Article no. 70 950 ...		2A/28 Assembly pin Article no. 70 950 ...		2A/28 Lever Article no. 70 950 ...		2A/28 Clamping screw Article no. 70 950 ...		2A/28 Solid Carbide Seat D Article no. 70 950 ...	
for Article no.		EUR		EUR		EUR		EUR		EUR		EUR	
70 537 125 / 70 536 125	SW2,5	2,45	**175**	2,06	**122**	1,22	**191**	14,97	**121**	3,19	**208**	7,21	**120**
70 537 025 / 70 536 025	SW3	2,45	**176**	1,76	**198**	1,22	**192**	13,68	**188**	3,80	**388**	7,89	**236**

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



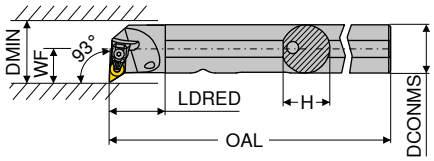


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	torque moment Nm	Insert	Left-hand X0 Article no. 70 699 ... EUR		Right-hand X0 Article no. 70 698 ... EUR	
SDJN R/L 1012 H11	10	12	100	21,3	3,2	DNGU 1104	97,42	**010**	97,42	**010**
SDJN R/L 1212 H11	12	12	100	21,3	3,2	DNGU 1104	97,42	**012**	97,42	**012**
SDJN R/L 1616 K11	16	16	125	21,3	3,2	DNGU 1104	105,90	**016**	105,90	**016**
SDJN R/L 2020 K11	20	20	125	21,3	3,2	DNGU 1104	105,90	**020**	105,90	**020**
SDJN R/L 2525 M11	25	25	150	21,3	3,2	DNGU 1104	122,70	**025**	122,70	**025**

Spare parts		Y7 Key D Article no. 80 950 ...			2A Clamping screw Article no. 72 950 ...	
for Article no.		EUR			EUR	
70 699 010 / 70 698 010	T15 - IP	11,89	**128**	M4x11	4,80	**007**
70 699 012 / 70 698 012	T15 - IP	11,89	**128**	M4x11	4,80	**007**
70 699 016 / 70 698 016	T15 - IP	11,89	**128**	M4x11	4,80	**007**
70 699 020 / 70 698 020	T15 - IP	11,89	**128**	M4x11	4,80	**007**
70 699 025 / 70 698 025	T15 - IP	11,89	**128**	M4x11	4,80	**007**

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



Illustrations show right-hand versions

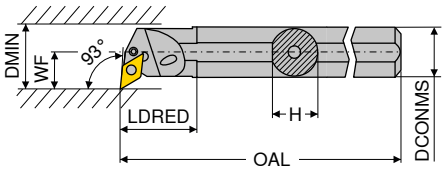
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 569 ... EUR		Right-hand 2A/24 Article no. 70 568 ... EUR	
A25R DDUN R/L 11	25	24	200	30	17	32	2	DN.. 1104	222,20	725	222,20	725
A32S DDUN R/L 11	32	31	250	40	22	40	2	DN.. 1104	229,80	732	229,80	732
A40T DDUN R/L 15	40	39	300	45	27	50	4	DN.. 1506	256,00	840	256,00	840

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

Spare parts	2A/28 XPress type Article no. 70 950 ...		Y7 Key D Article no. 80 950 ...		2A/28 Clamping screw Article no. 70 950 ...		2A/28 Solid Carbide Seat D Article no. 70 950 ...	
for Article no.	EUR		EUR		EUR		EUR	
70 568 725 / 70 569 725	28,76	835	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,53	808
70 568 732 / 70 569 732	28,76	835	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,53	808
70 568 840 / 70 569 840	23,77	824	T15 - IP 11,89	128	M4,5x12 - IP 2,98	820	7,89	811

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

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



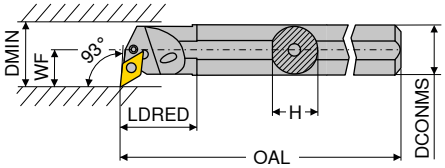
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 569 ... EUR		Right-hand 2A/24 Article no. 70 568 ... EUR	
A20Q PDUN R/L 11	20	18,5	180	36	16,0	28	3	DN.. 1104	199,40	120	199,40	120
A25R PDUN R/L 11	25	23,0	200	36	18,5	32	3	DN.. 1104	222,20	125	222,20	125
A32S PDUN R/L 11	32	30,0	250	36	22,0	40	3	DN.. 1104	229,80	132	229,80	132
A32S PDUN R/L 15	32	30,0	250	50	22,0	40	3,2	DN.. 1506	229,80	232	229,80	232
A40T PDUN R/L 15	40	38,0	300	60	27,0	50	3,2	DN.. 1506	256,00	240	256,00	240
S50W PDUN R/L 15	50	47,0	450	31	35,0	63	3,2	DN.. 1506	316,80	050	316,80	050

Spare parts		2A/28 Key I Article no. 70 950 ...		2A/28 Shim Article no. 70 950 ...		2A/28 Assembly pin Article no. 70 950 ...		2A/28 Lever Article no. 70 950 ...		2A/28 Clamping screw Article no. 70 950 ...		2A/28 Solid Carbide Seat D Article no. 70 950 ...	
for Article no.		EUR		EUR		EUR		EUR		EUR		EUR	
70 568 120 / 70 569 120	SW2,5	2,45	175					14,97	125	2,17	126		
70 568 125 / 70 569 125	SW2,5	2,45	175	2,06	122	1,22	191	14,97	121	3,19	208	7,21	120
70 568 132 / 70 569 132	SW2,5	2,45	175	2,06	122	1,22	191	14,97	121	3,19	208	7,21	120
70 568 232 / 70 569 232	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,50	209	7,89	236
70 568 240 / 70 569 240	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,50	209	7,89	236
70 568 050 / 70 569 050	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,80	388	7,89	236

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

▲ with carbide core



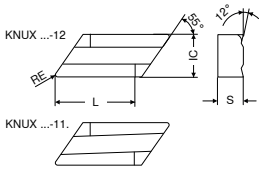
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 563 ... EUR		Right-hand 2A Article no. 70 562 ... EUR	
E-A25R PDUN R/L 11	25	23	200	40	17	31	3	DN.. 1104	709,60	025	709,60	025
E-A32S PDUN R/L 15	32	30	250	50	22	39	3,2	DN.. 1506	936,70	032	936,70	032
E-A40T PDUN R/L 15	40	38	300	60	27	48	3,2	DN.. 1506	1.118,00	040	1.118,00	040

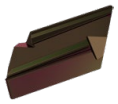
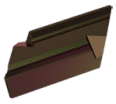
Spare parts for Article no.		2A/28 Key l Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat D Article no. 70 950 ... EUR	
70 562 025 / 70 563 025	SW2,5	2,45	175	2,06	122	1,22	191	14,97	121	3,19	208	7,21	120
70 562 032 / 70 563 032	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,80	388	7,89	236
70 562 040 / 70 563 040	SW3	2,45	176	1,76	198	1,22	192	13,68	188	3,80	388	7,89	236

KNUX

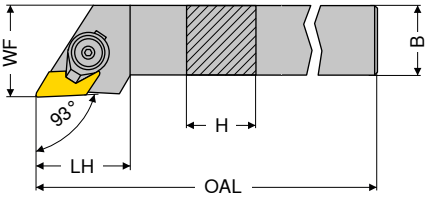
Designation	L	S	IC
	mm	mm	mm
KNUX 1604..	16	4,76	9,52



KNUX

ISO	RE mm	-11 CTCK110 / -11 DCX3110 / DRAGONSKIN	-11 CTCK120 / -11 HCF3120 / DRAGONSKIN	-11 CTCP135 / -11 HCR1135 / DRAGONSKIN	-12 CTCP135 / -12 HCR1135 / DRAGONSKIN
					
		F	F	F	M
		KNUX 1A/13	KNUX 1A/13	KNUX 1A/13	KNUX 1A/13
		Article no. 70 240 ...	Article no. 70 240 ...	Article no. 76 240 ...	Article no. 76 242 ...
		EUR	EUR	EUR	EUR
160405EL	0,5	14,77 002	14,77 552	14,77 702	14,77 702
160405ER	0,5	14,77 000	14,77 500	14,77 700	14,77 700
160410EL	1,0			14,77 706	14,77 706
160410ER	1,0			14,77 704	14,77 704
Steel		●	●	●	●
Stainless steel		○		○	○
Cast iron		●	●		
Non ferrous metals					
Heat resistant alloys				○	○

Simplex – CKJN 93° – Toolholder with top clamping



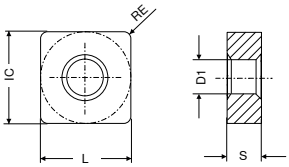
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/23 Article no. 70 799 ... EUR	Right-hand 2A/23 Article no. 70 798 ... EUR
CKJN R/L 2525 M16	25	25	150	35	32	7	KNUX 1604	140,80 025	140,80 025

Spare parts for Article no.	2A/28 Clamp	2A/28 Key I	2A/28 Clamping screw	2A/28 Countersunk head grooved pin	2A/28 Carbide type C	2A/28 Spring pin	2A/28 Spring washer
	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 ...
	EUR	EUR	EUR	EUR	EUR	EUR	EUR
70 798 025	17,04 612	2,57 396	5,59 615	1,10 603	11,28 613	2,45 616	1,10 617
70 799 025	17,04 618	2,57 396	5,59 615	1,10 603	11,28 614	2,45 616	1,10 617

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 1A/08		SNMG 1A/08		SNMG 1A/08		SNMG 1A/08		SNMG 1A/08		SNMG 1A/08		SNMG 1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
090308EN	0,8	7,42	306	7,42	506	7,42	706								
120404EN	0,4	11,63	316	11,63	516	11,63	716								
120408EN	0,8	11,63	318	11,63	518	11,63	718	11,63	318	11,63	518	11,63	718	11,63	018
120412EN	1,2	11,63	320	11,63	520	11,63	720	11,63	320	11,63	520	11,63	720	11,63	020
120416EN	1,6							11,63	322	11,63	522	11,63	722	11,63	022
150608EN	0,8							18,46	330	18,46	530	18,46	730		
150612EN	1,2							18,46	332	18,46	532	18,46	732	18,46	032
150616EN	1,6							18,46	334	18,46	534	18,46	734	18,46	034
190612EN	1,2													26,07	044
190616EN	1,6													26,07	046
Steel			●		●		●		●		●		●		●
Stainless steel			○		○		○		○		○		○		○
Cast iron			○		○				○		○				●
Non ferrous metals															
Heat resistant alloys							○						○		

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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	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
090308EN	0,8									7,42	506	7,42	706		
120408EN	0,8	11,63	518	11,63	318	11,63	518	11,63	718					11,63	018
120412EN	1,2	11,63	520	11,63	320	11,63	520	11,63	720					11,63	020
120416EN	1,6	11,63	522	11,63	322	11,63	522	11,63	722					11,63	022
150612EN	1,2	18,46	532	18,46	332	18,46	532	18,46	732					18,46	032
150616EN	1,6	18,46	534	18,46	334	18,46	534	18,46	734					18,46	034
190612EN	1,2	26,07	544	26,07	344	26,07	544	26,07	744					26,07	044
190616EN	1,6	26,07	546	26,07	346	26,07	546	26,07	746					26,07	046
190624EN	2,4			26,07	348	26,07	548	26,07	748						
Steel		●		●		●		●		●		●			
Stainless steel				○		○		○		○		○			
Cast iron		●		○		○				○				●	
Non ferrous metals															
Heat resistant alloys								○				○			

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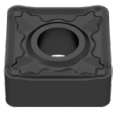
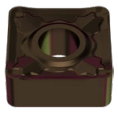
SNMA / SNMM

		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	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
120408EN	0,8	11,63	518							11,63	318	11,63	518	11,63	718
120412EN	1,2	11,63	520							11,63	320	11,63	520	11,63	720
120416EN	1,6	11,63	522												
150612EN	1,2	18,46	532	18,46	332	18,46	532	18,46	732	18,46	332	18,46	532	18,46	732
150616EN	1,6	18,46	534	18,46	334	18,46	534	18,46	734	18,46	334	18,46	534	18,46	734
190612EN	1,2	26,07	544							26,07	344	26,07	544	26,07	744
190616EN	1,6	26,07	546	26,07	346	26,07	546	26,07	746	26,07	346	26,07	546	26,07	746
190624EN	2,4									26,07	348	26,07	548	26,07	748
250724EN	2,4							51,24	760	51,24	360	51,24	560	51,24	760
250924EN	2,4			60,18	370	60,18	570	60,18	770	60,18	370	60,18	570	60,18	770
Steel					●		●		●		●		●		●
Stainless steel					○		○		○		○		○		○
Cast iron			●		○		○				○		○		
Non ferrous metals															
Heat resistant alloys									○						○

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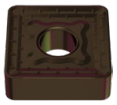
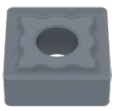
SNMM / SNMG

ISO	RE mm	-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	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
		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 ...	
		EUR		EUR		EUR		EUR		EUR		EUR		EUR	
120404EN	0,4							11,63	216						
120408EN	0,8							11,63	218	11,63	218	11,63	408	11,63	218
120412EN	1,2							11,63	220			11,63	412	11,63	210
120416EN	1,6													11,63	220
190616SN	1,6	26,07	346	26,07	546	26,07	746								
190624SN	2,4	26,07	348	26,07	548	26,07	748								
250724SN	2,4	51,24	36000	51,24	56000	51,24	760								
250924SN	2,4	60,18	37000	60,18	57000	60,18	770								
Steel			●		●		●		○		○		○		○
Stainless steel			○		○		○		●		●		●		●
Cast iron			○		○										
Non ferrous metals															
Heat resistant alloys							○				○		●		○

SNMG

ISO	RE mm	-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	
		1A/08		1A/08		1A/08		1A/08	
		Article no. 70 225 ...		Article no. 75 005 ...		Article no. 75 005 ...		Article no. 70 129 ...	
		EUR		EUR		EUR		EUR	
120408EN	0,8	11,63	418	12,19	418	12,19	518	11,63	608
120412EN	1,2	11,63	420	12,19	420	12,19	520		
190616EN	1,6	26,07	446						
Steel			○						
Stainless steel			●		○		○		○
Cast iron									○
Non ferrous metals									○
Heat resistant alloys			●		●		●		●

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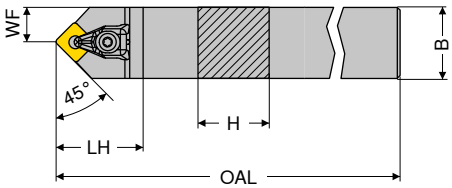
MaxiLock-D – DSDN 45° – Toolholder with top clamping

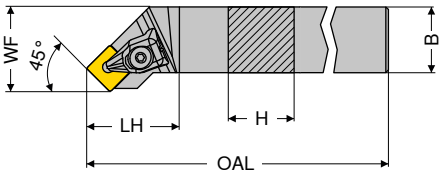


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 516 ... EUR	
DSDN N 2020 K12	20	20	125	38	10,3	4	SN.. 1204	85,04	620
DSDN N 2525 M12	25	25	150	38	12,5	4	SN.. 1204	87,97	625

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

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide support S Article no. 70 950 ... EUR	
70 516 620	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813
70 516 625	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813

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

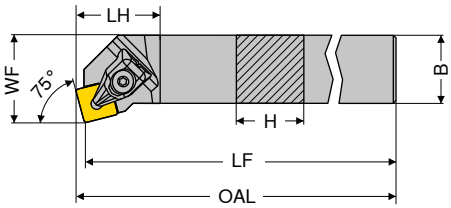


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 513 ... EUR		Right-hand 2A/24 Article no. 70 512 ... EUR	
DSSN R/L 2020 K12	20	20	125	35	25	4	SN.. 1204	85,04	620	85,04	620
DSSN R/L 2525 M12	25	25	150	35	32	4	SN.. 1204	87,97	625	87,97	625
DSSN R/L 3225 P12	32	25	170	35	32	4	SN.. 1204	94,37	632	94,37	632

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide support S Article no. 70 950 ... EUR	
70 512 620 / 70 513 620	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813
70 512 625 / 70 513 625	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813
70 512 632 / 70 513 632	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813

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

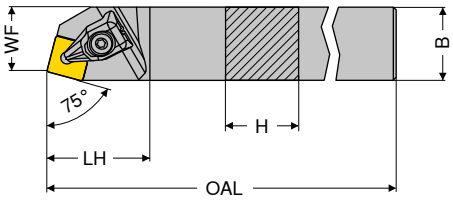


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LF mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 525 ... EUR		Right-hand 2A/24 Article no. 70 524 ... EUR	
DSKN R/L 2525 M12	25	25	153,3	150	28	32	4	SN.. 1204	87,97	625	87,97	625

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide support S Article no. 70 950 ... EUR	
70 525 625 / 70 524 625	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813

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



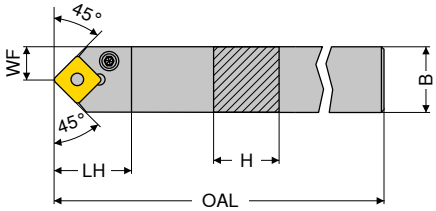
Illustrations show right-hand versions

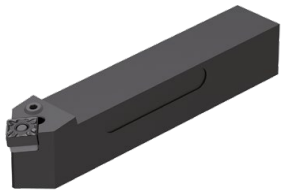
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 521 ... EUR		Right-hand 2A/24 Article no. 70 520 ... EUR	
DSBN R/L 2020 K12	20	20	125	35	17	4	SN.. 1204	85,04	620	85,04	620
DSBN R/L 2525 M12	25	25	150	35	22	4	SN.. 1204	87,97	625	87,97	625
DSBN R/L 2525 M15	25	25	150	42	22	6,5	SN.. 1506	87,97	725	87,97	725
DSBN R/L 3232 P15	32	32	170	42	27	6,5	SN.. 1506	118,80	832	118,80	832
DSBN R/L 3232 P19	32	32	170	48	27	6,5	SN.. 1906	118,80	732	118,80	732
DSBN R/L 4040 S19	40	40	250	48	35	6,5	SN.. 1906	147,70	840	147,70	840
DSBN R/L 4040 S25	40	40	250	57	35	6,5	SN.. 2507 / SN.. 2509	147,70	940	147,70	940

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

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide support S Article no. 70 950 ... EUR	
70 521 620 / 70 520 620	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813
70 521 625 / 70 520 625	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813
70 521 725 / 70 520 725	26,69	825	T20 - IP	12,54	129	M5x14 - IP	4,23	821	12,05	833
70 521 832 / 70 520 832	26,69	825	T20 - IP	12,54	129	M5x14 - IP	4,23	821	12,05	833
70 521 732 / 70 520 732	29,19	826	T20 - IP	12,54	129	M5x14 - IP	4,23	821	12,91	817
70 521 840 / 70 520 840	29,19	826	T20 - IP	12,54	129	M5x14 - IP	4,23	821	12,91	817
70 521 940 / 70 520 940	45,47	827	T25 - IP	14,50	130	M6x16 - IP	8,04	822	24,10	818

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





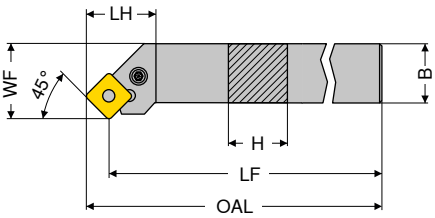
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 516 ... EUR	
PSDN N 1616 H09	16	16	100	21,0	8,3	3	SNM. 0903	76,33	016
PSDN N 2020 K12	20	20	125	27,6	10,3	4	SNM. 1204	85,04	020
PSDN N 2525 M12	25	25	150	27,6	12,8	4	SNM. 1204	87,97	025
PSDN N 3225 P19	32	25	170	40,4	12,5	8	SNM. 1906	94,37	03200
PSDN N 4040 S25	40	40	250	48,8	20,0	8	SNM. 2507 / 2509	147,70	04000

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

Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 Solid Carbide support S	
		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.		EUR		EUR		EUR		EUR		EUR		EUR	
70 516 016	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,11	229
70 516 020	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 516 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 516 03200	SW4	2,57	396	1,76	392	1,22	395	19,11	386	3,80	389	19,21	383
70 516 04000	SW5	3,68	265	1,12	621	1,89	623	25,83	620	2,28	622	39,51	27600

9

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



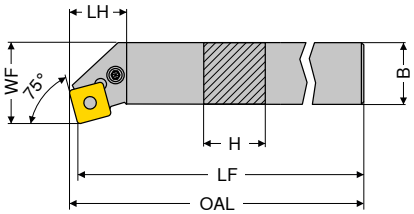
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LF mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 513 ... EUR		Right-hand 2A/24 Article no. 70 512 ... EUR	
PSSN R/L 1616 H09	16	16	106,7	100	21,2	20	3	SNM. 0903	76,33	016	76,33	016
PSSN R/L 2020 K12	20	20	134,0	125	29,3	25	4	SNM. 1204	85,04	020	85,04	020
PSSN R/L 2525 M12	25	25	159,0	150	29,3	32	4	SNM. 1204	87,97	025	87,97	025
PSSN R/L 3225 P12	32	25	179,0	170	32,0	32	4	SNM. 1204	94,37	032	94,37	032
PSSN R 2525 M15	25	25	161,2	150	29,3	32	4	SNM. 1506			87,97	125
PSSN R 3232 P15	32	32	181,2	170	32,0	40	4	SNM. 1506			118,80	132
PSSN R/L 3232 P19	32	32	183,5	170	40,2	40	8	SNM. 1906	118,80	232	118,80	232
PSSN R 4040 S25	40	40	268,0	250	48,8	50	8	SNM. 2507 / 2509			144,90	04000

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

Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 Solid Carbide support S	
		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.		EUR		EUR		EUR		EUR		EUR		EUR	
70 512 016 / 70 513 016	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,11	229
70 512 020 / 70 513 020	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 512 025 / 70 513 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 512 032 / 70 513 032	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 512 125	SW3	2,45	176	1,12	391	1,22	394	12,48	385	3,80	388	12,48	382
70 512 132	SW3	2,45	176	1,12	391	1,22	394	12,48	385	3,80	388	12,48	382
70 512 232 / 70 513 232	SW4	2,57	396	1,76	392	1,22	395	19,11	386	3,80	389	19,21	383
70 512 04000	SW5	3,68	265	1,12	621	1,89	623	25,83	620	2,28	622	39,51	27600

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

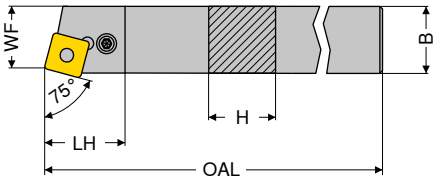


Illustrations show right-hand versions

ISO designation	H	LF	B	OAL	LH	WF	torque moment	Insert	Left-hand 2A/24 Article no. 70 525 ...		Right-hand 2A/24 Article no. 70 524 ...	
	mm	mm	mm	mm	mm	mm	Nm		EUR		EUR	
PSKN R/L 1616 H09	16	100	16	102,5	18,7	20	3	SNM. 0903	76,33	016	76,33	016
PSKN R/L 2020 K12	20	125	20	128,3	22,7	25	4	SNM. 1204	85,04	020	85,04	020
PSKN R/L 2525 M12	25	150	25	153,3	22,7	32	4	SNM. 1204	87,97	025	87,97	025

Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 Solid Carbide support S	
		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.		EUR		EUR		EUR		EUR		EUR		EUR	
70 525 016 / 70 524 016	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,11	229
70 525 020 / 70 524 020	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 525 025 / 70 524 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230

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



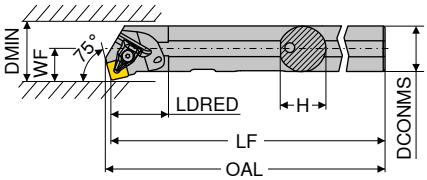
Illustrations show right-hand versions

ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand 2A/24 Article no. 70 521 ...		Right-hand 2A/24 Article no. 70 520 ...	
	mm	mm	mm	mm	mm	Nm		EUR		EUR	
PSBN R/L 2020 K12	20	20	125	27,5	17	4	SNM. 1204	85,04	020	85,04	020
PSBN R/L 2525 M12	25	25	150	27,5	22	4	SNM. 1204	87,97	025	87,97	025
PSBN R/L 3225 P12	32	25	170	32,0	22	4	SNM. 1204	94,37	032	94,37	032
PSBN R/L 3232 P15	32	32	170	32,0	27	4	SNM. 1506	118,80	132	118,80	132
PSBN R/L 3232 P19	32	32	170	39,2	27	8	SNM. 1906	118,80	232	118,80	232
PSBN R/L 4040 S19	40	40	250	39,2	35	8	SNM. 1906	147,70	04000	147,70	04000
PSBN R/L 4040 S25	40	40	250	48,0	35	8	SNM. 2507 / 2509	147,70	14000	147,70	14000

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

Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 Solid Carbide support S	
		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.		EUR		EUR		EUR		EUR		EUR		EUR	
70 520 020 / 70 521 020	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 520 025 / 70 521 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 520 032 / 70 521 032	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230
70 520 132 / 70 521 132	SW3	2,45	176	1,12	391	1,22	394	12,48	385	3,80	388	12,48	382
70 520 232 / 70 521 232	SW4	2,57	396	1,76	392	1,22	395	19,11	386	3,80	389	19,21	383
70 520 04000 / 70 521 04000	SW4	2,57	396	1,76	392	1,22	395	19,11	386	3,80	389	19,21	383
70 520 14000 / 70 521 14000	SW5	3,68	265	1,12	621	1,89	623	25,83	620	2,28	622	39,51	27600

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

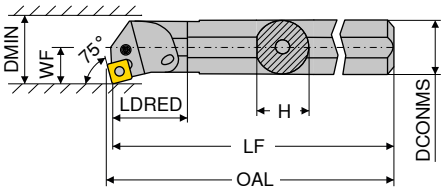


Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 561 ... EUR		Right-hand 2A/24 Article no. 70 560 ... EUR	
A32S DSKN R/L 12	32	31	250	254,2	40	22	40	4	SN.. 1204	229,80	832	229,80	832

Spare parts	2A/28 XPress type		Y7 Key D		2A/28 Clamping screw		2A/28 Solid Carbide support S	
for Article no.	Article no. 70 950 ... EUR		Article no. 80 950 ... EUR			Article no. 70 950 ... EUR		Article no. 70 950 ... EUR	
70 561 832 / 70 560 832	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	7,89	813

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



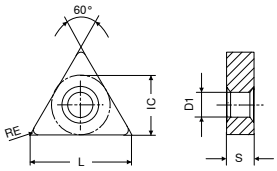
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 561 ... EUR		Right-hand 2A/24 Article no. 70 560 ... EUR	
A25R PSKN R/L 12	25	23	200	203	15,5	17	32	4	SNM. 1204	222,20	225	222,20	225
A32S PSKN R/L 12	32	30	250	253	16,0	22	40	4	SNM. 1204	229,80	232	229,80	232
A40T PSKN R/L 12	40	38	300	303	23,0	27	50	4	SNM. 1204	256,00	240	256,00	240

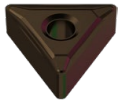
Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 Solid Carbide support S	
for Article no.		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR	
70 561 225 / 70 560 225	SW3	2,45	176	1,76	198	1,22	192	12,59	187	4,28	205	6,11	230
70 561 232 / 70 560 232	SW3	2,45	176	1,76	198	1,22	192	12,59	187	4,28	205	6,11	230
70 561 240 / 70 560 240	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	6,11	230

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 1A/78		TNMG 1A/08		TNMG 1A/08		TNMG 1A/08		TNMG 1A/08		TNMG 1A/08		TNMG 1A/08	
ISO	RE mm	Article no. 76 149 ... EUR		Article no. 76 146 ... EUR		Article no. 76 146 ... EUR		Article no. 76 146 ... EUR		Article no. 76 138 ... EUR		Article no. 76 138 ... EUR		Article no. 76 138 ... EUR	
110304EN	0,4			6,44	304	6,44	504	6,44	704						
110308EN	0,8			6,44	306	6,44	506	6,44	706						
160404EN	0,4	10,11	016	10,20	316	10,20	516	10,20	716	10,20	316	10,20	516	10,20	716
160408EN	0,8	10,11	018	10,20	318	10,20	518	10,20	718	10,20	318	10,20	518	10,20	718
160412EN	1,2	10,11	020	10,20	320	10,20	520	10,20	720	10,20	320	10,20	520	10,20	720
220408EN	0,8									13,76	330	13,76	530	13,76	730
220412EN	1,2									13,76	332	13,76	532	13,76	732
Steel		●		●		●		●		●		●		●	
Stainless steel		○		○		○		○		○		○		○	
Cast iron		○		○		○				○		○			
Non ferrous metals															
Heat resistant alloys								○						○	

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TNMG

ISO	RE mm	-M70 CTCK110 -NM19 DCX3110 DRAGONSKIN		-M70 CTCK120 -NM19 HCF3120 DRAGONSKIN		-M70 CTCP115 -NM19 HCX1115 DRAGONSKIN		-M70 CTCP125 -NM19 HCX1125 DRAGONSKIN		-M70 CTCP135 -NM19 HCR1135 DRAGONSKIN		CTCP125 HCX1125 DRAGONSKIN		CTCP135 HCR1135 DRAGONSKIN	
		M TNMG 1A/08		M TNMG 1A/08		M TNMG 1A/08		M TNMG 1A/08		M TNMG 1A/08		M TNMG 1A/08		M TNMG 1A/08	
		Article no. 70 155 ... EUR		Article no. 70 155 ... EUR		Article no. 76 155 ... EUR		Article no. 76 155 ... EUR		Article no. 76 155 ... EUR		Article no. 76 142 ... EUR		Article no. 76 142 ... EUR	
110302EN	0,2													6,44	702
160404ER	0,4											10,20	516	10,20	716
160408EL	0,8											10,20	518		
160408EN	0,8	10,20	018	10,20	518	10,20	318	10,20	518	10,20	718				
160408ER	0,8											10,20	517	10,20	717
160412EN	1,2	10,20	020	10,20	520	10,20	320	10,20	520	10,20	720				
220404EN	0,4							13,76	528						
220408EN	0,8	13,76	030	13,76	530	13,76	330	13,76	530	13,76	730				
220412EN	1,2	13,76	032	13,76	532	13,76	332	13,76	532	13,76	732				
220416EN	1,6	13,76	034	13,76	534	13,76	334	13,76	534	13,76	734				
Steel			●		●		●		●		●		●		●
Stainless steel			○				○		○		○		○		○
Cast iron			●		●		○		○				○		
Non ferrous metals															
Heat resistant alloys											○				○

9

TNMA / TNMM

ISO	RE mm	CTCK110 DCX3110 DRAGONSKIN		CTCK120 HCF3120 DRAGONSKIN		-R28 CTCP115 -NR14 HCX1115 DRAGONSKIN		-R28 CTCP125 -NR14 HCX1125 DRAGONSKIN		-R28 CTCP135 -NR14 HCR1135 DRAGONSKIN		-R58 CTCP115 -NR17 HCX1115 DRAGONSKIN		-R58 CTCP125 -NR17 HCX1125 DRAGONSKIN	
		R TNMA 1A/08		M TNMA 1A/08		R TNMM 1A/08		R TNMM 1A/08		R TNMM 1A/08		R TNMM 1A/08		R TNMM 1A/08	
		Article no. 70 134 ... EUR		Article no. 70 134 ... EUR		Article no. 76 154 ... EUR		Article no. 76 154 ... EUR		Article no. 76 154 ... EUR		Article no. 76 152 ... EUR		Article no. 76 152 ... EUR	
160408EN	0,8	10,20	018	10,20	518										
160412EN	1,2	10,20	020	10,20	520										
160416EN	1,6	10,20	022	10,20	522										
220408EN	0,8	13,76	030	13,76	530										
220412EN	1,2	13,76	032	13,76	532							13,76	332	13,76	532
220416EN	1,6	13,76	034	13,76	534	13,76	334	13,76	534	13,76	734				
Steel							●		●		●		●		●
Stainless steel							○		○		○		○		○
Cast iron			●		●		○		○				○		○
Non ferrous metals															
Heat resistant alloys											○				

TNMM / TNMG

ISO	RE mm	-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	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
		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 ...	
		EUR		EUR		EUR		EUR		EUR		EUR		EUR	
160404EN	0,4			10,20	216			10,11	404						
160408EN	0,8			10,20	218	10,20	218	10,11	408	10,20	218	10,11	418	10,11	516
160412EN	1,2					10,20	220			10,20	220				
220404EN	0,4													14,55	528
220408EN	0,8													14,55	530
220412EN	1,2	13,76	732												
220416EN	1,6													14,55	534
Steel			●		○		○		○		○		○		
Stainless steel			○		●		●		●		●		●		○
Cast iron															
Non ferrous metals															
Heat resistant alloys			○				○		●		○		●		●

TNMG

ISO	RE mm	-M42 CTP2120		-M52 CTP2120	
		-M42 CCN2120		-M52 CCN2120	
		M		M	
		TNMG		TNMG	
		1A/08		1A/08	
		Article no. 70 148 ...		Article no. 70 152 ...	
		EUR		EUR	
160404EN	0,4			10,11	604
160408EN	0,8	10,11	608	10,11	608
Steel					
Stainless steel			○		○
Cast iron			○		○
Non ferrous metals			○		○
Heat resistant alloys			●		●

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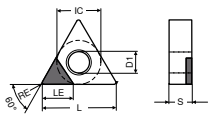
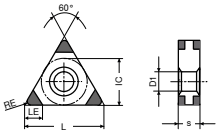
TNGA

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

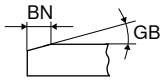


-A



-M (-6SC)

TNGA



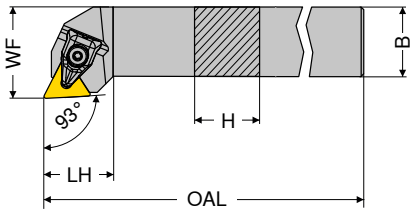
ISO	RE	GB	BN	LE	-A CTBH21U PBC25		-M CTBH20C -6SC PBC25-S		-A CTBH40U PBC40		-M CTBH40C -6SC PBC40-S	
					F CBN TNGA Y0		F CBN TNGA Y0		F CBN TNGA Y0		F CBN TNGA Y0	
	mm	°	mm	mm	Article no. 71 108 ... EUR		Article no. 71 404 ... EUR		Article no. 71 108 ... EUR		Article no. 71 404 ... EUR	
110304TN	0,4	20	0,14	2,8	34,44	500						
110308FN	0,8			2,5					34,44	802 [1]		
110308TN	0,8	20	0,14	2,5	34,44	502						
160404FN	0,4			3,5	32,43	404 [1]			32,43	804 [1]		
160404TN	0,4	15	0,09	2,8			93,26	222				
160404SN	0,4	20	0,09	2,8							93,26	332
160404SN	0,4	20	0,11	2,8			93,26	242			93,26	342
160404TN	0,4	20	0,14	3,5	32,43	504						
160404SN	0,4	25	0,11	2,8							93,26	352
160404TN	0,4	25	0,11	2,8			93,26	252				
160404TN	0,4	25	0,12	3,5					32,43	904		
160404FN	0,4			2,8			93,26	212				
160404SN	0,4	25	0,13	2,8			93,26	262				
160404SN	0,4	30	0,14	2,8							93,26	372
160404SN	0,4	35	0,14	2,8							93,26	382
160408TN	0,8	15	0,09	2,5			93,26	224				
160408SN	0,8	15	0,09	2,5							93,26	324
160408SN	0,8	20	0,09	2,5							93,26	334
160408TN	0,8	20	0,09	2,5			93,26	234				
160408SN	0,8	20	0,11	2,5			93,26	244			93,26	344
160408TN	0,8	20	0,14	3,0	32,43	506						
160408SN	0,8	25	0,11	2,5							93,26	354
160408TN	0,8	25	0,11	2,5			93,26	254				
160408TN	0,8	25	0,12	3,0					32,43	906		
160408SN	0,8	25	0,13	2,5			93,26	264			93,26	364
160408SN	0,8	30	0,14	2,5							93,26	374
160408SN	0,8	35	0,14	2,5							93,26	384
160408FN	0,8			2,5			93,26	214				
160408FN	0,8			3,0	32,43	406 [1]						
160408EN	0,8			2,5							93,26	314
160412TN	1,2	15	0,09	2,2			93,26	226				
160412SN	1,2	20	0,09	2,2							93,26	336
160412SN	1,2	20	0,11	2,2			93,26	246			93,26	346
160412SN	1,2	25	0,11	2,2							93,26	356
160412TN	1,2	25	0,11	2,2			93,26	256				
160412SN	1,2	25	0,13	2,2			93,26	266			93,26	366
160412SN	1,2	30	0,14	2,2							93,26	376
160412SN	1,2	35	0,14	2,2							93,26	386
160412FN	1,2			2,2			93,26	216				

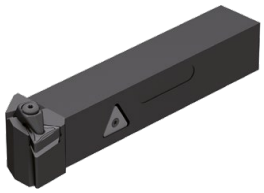
Cast iron				
Sintered steels				
Heat resistant alloys				
hardened < 45 HRC				
hardened 46–55 HRC	●	●	●	●
hardened 56–60 HRC	●	●	●	●
hardened 61–65 HRC			●	●

1) Machining to 60 HRC

9

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



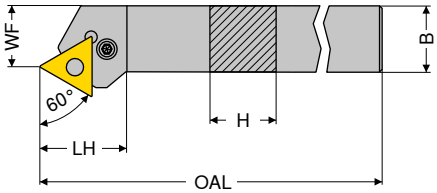


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 591 ... EUR		Right-hand 2A/24 Article no. 70 590 ... EUR	
DTJN R/L 2020 K16	20	20	125	23	25	2	TNM. 1604	85,04	820	85,04	820
DTJN R/L 2525 M16	25	25	150	24	32	2	TNM. 1604	87,97	825	87,97	825

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR	
70 590 820 / 70 591 820	24,10	823	T09 - IP	11,24	126	M3x7 - IP	3,14	819	6,94	847
70 590 825 / 70 591 825	24,10	823	T09 - IP	11,24	126	M3x7 - IP	3,14	819	6,94	847

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

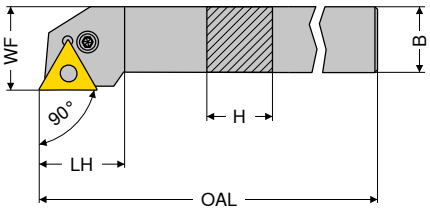


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 529 ... EUR		Right-hand 2A/24 Article no. 70 528 ... EUR	
PTTN R/L 2020 K16	20	20	125	25,9	17	3	TNM. 1604	85,04	020	85,04	020
PTTN R/L 2525 M22	25	25	150	32,7	22	4	TNM. 2204	87,97	025	87,97	025

Spare parts for Article no.		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR	
70 529 020 / 70 528 020	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 529 025 / 70 528 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	9,93	226

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

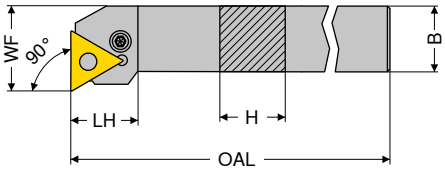


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 533 ... EUR		Right-hand 2A/24 Article no. 70 532 ... EUR	
PTGN R/L 1616 H16	16	16	100	20	20	3	TNM. 1604	76,33	016	76,33	016
PTGN R/L 2020 K16	20	20	125	20	25	3	TNM. 1604	85,04	020	85,04	020
PTGN R/L 2525 M16	25	25	150	22	32	3	TNM. 1604	87,97	025	87,97	025
PTGN R/L 3225 P16	32	25	170	22	32	3	TNM. 1604	94,37	032	94,37	032
PTGN R/L 2525 M22	25	25	150	29	32	4	TNM. 2204	87,97	125	87,97	125
PTGN R/L 3232 P22	32	32	170	29	40	4	TNM. 2204	118,80	132	118,80	132

Spare parts for Article no.		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR	
70 532 016 / 70 533 016	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 532 020 / 70 533 020	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 532 025 / 70 533 025	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 532 032 / 70 533 032	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 532 125 / 70 533 125	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	9,93	226
70 532 132 / 70 533 132	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	9,93	226

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



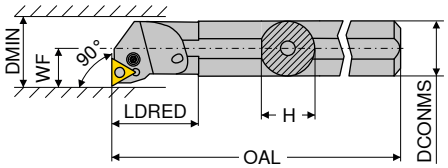
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 535 ... EUR		Right-hand 2A/24 Article no. 70 534 ... EUR	
PTFN R/L 1616 H16	16	16	100	19,7	20	3	TNM. 1604	76,33	016	76,33	016
PTFN R/L 2020 K16	20	20	125	20,2	25	3	TNM. 1604	85,04	020	85,04	020
PTFN R/L 2525 M16	25	25	150	20,2	32	3	TNM. 1604	87,97	025	87,97	025
PTFN R/L 2525 M22	25	25	150	25,2	32	4	TNM. 2204	87,97	125	87,97	125
PTFN R/L 3225 P22	32	25	170	25,2	32	4	TNM. 2204	94,37	132	94,37	132

Spare parts for Article no.		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR	
70 534 016 / 70 535 016	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 534 020 / 70 535 020	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 534 025 / 70 535 025	SW2,5	2,45	175	1,76	197	1,22	191	12,48	185	3,19	208	6,94	225
70 534 125 / 70 535 125	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	9,93	226
70 534 132 / 70 535 132	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	9,93	226

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

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



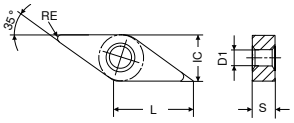
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 565 ... EUR		Right-hand 2A/24 Article no. 70 564 ... EUR	
A16M PTFN R/L 11	16	15,0	150	14,0	11	20	2,2	TNM. 1103	147,70	**216**	147,70	**216**
A20Q PTFN R/L 11	20	18,5	180	14,0	13	25	2,2	TNM. 1103	199,40	**220**	199,40	**220**
A25R PTFN R/L 16	25	23,0	200	17,5	17	32	3	TNM. 1604	222,20	**225**	222,20	**225**
A32S PTFN R/L 16	32	30,0	250	18,0	22	40	3	TNM. 1604	229,80	**232**	229,80	**232**
A40T PTFN R/L 22	40	38,0	300	27,0	27	50	4	TNM. 2204	256,00	**240**	256,00	**240**
S50W PTFN R 22	50	47,0	450	35,0	35	63	4	TNM. 2204			316,80	**050**

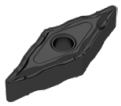
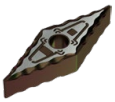
Spare parts for Article no.	2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR	
70 564 216 / 70 565 216	2,45	**177**					12,59	**184**	2,12	**207**		
70 564 220 / 70 565 220	2,45	**177**					12,59	**184**	2,12	**207**		
70 564 225 / 70 565 225	2,45	**175**	1,76	**197**	1,22	**191**	12,48	**185**	3,19	**208**	6,94	**225**
70 564 232 / 70 565 232	2,45	**175**	1,76	**197**	1,22	**191**	12,48	**185**	3,19	**208**	6,94	**225**
70 564 240 / 70 565 240	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	9,93	**226**
70 564 050	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	9,93	**226**

VNMG / VNGP

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

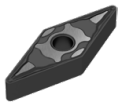
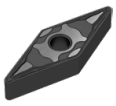
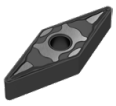
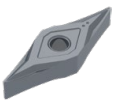


VNMG

		-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		F		F		F		M		M		M	
		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08	
ISO	RE mm	Article no. 76 000 ... EUR		Article no. 76 156 ... EUR		Article no. 76 156 ... EUR		Article no. 76 156 ... EUR		Article no. 76 294 ... EUR		Article no. 76 294 ... EUR		Article no. 76 001 ... EUR	
160404EN	0,4	20,58	516	20,58	316	20,58	516	20,58	716	20,54	316	20,54	516	20,58	516
160408EN	0,8	20,58	518	20,58	318	20,58	518	20,58	718	20,54	318	20,54	518	20,58	518
Steel		●		●		●		●		●		●		●	
Stainless steel		○		○		○		○		○		○		○	
Cast iron		○		○		○				○		○		○	
Non ferrous metals															
Heat resistant alloys								○							

9

VNMG / VNGP

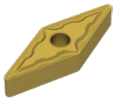
		-M50 CTCK120		-M50 CTCP115		-M50 CTCP125		-F30 CTPM125		-M30 CTPM125		-F32 CTP2120		-M34 CTP5110	
		-NM15 HCF3120		-NM15 HCX1115		-NM15 HCX1125		-NF23 HCN2125		-NM23 HCN2125		-F32 CCN2120		-M34 HCN5110	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN				DRAGONSKIN	
															
		M		M		M		F		M		F		M	
		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08		VNMG 1A/08		VNGP 1A/08		VNMG 1A/08	
ISO	RE mm	Article no. 70 131 ... EUR		Article no. 76 131 ... EUR		Article no. 76 131 ... EUR		Article no. 75 022 ... EUR		Article no. 75 023 ... EUR		Article no. 70 167 ... EUR		Article no. 75 009 ... EUR	
160402FN	0,2											27,41	602		
160404EN	0,4			20,58	316	20,58	516	20,58	216					19,57	416
160404FN	0,4											27,41	604		
160408EN	0,8	20,58	518	20,58	318	20,58	518	20,58	218	20,58	218			19,57	418
160412EN	1,2	20,58	520	20,58	320	20,58	520							19,57	420
Steel		●		●		●		○		○					
Stainless steel				○		○		●		●		●		○	
Cast iron		●		○		○						○			
Non ferrous metals												○			
Heat resistant alloys										○		●		●	

VNMG

-M34
CTP5115

-M34
HCN5115

DRAGONSKIN



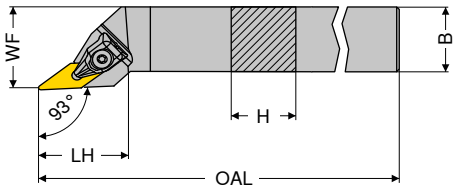
M
VNMG
1A/08

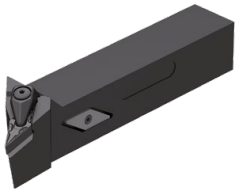
ISO	RE mm	Article no. 75 009 ... EUR	
160404EN	0,4	19,57	516
160408EN	0,8	19,57	518
160412EN	1,2	19,57	520

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

→ v_c Page 144–159

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





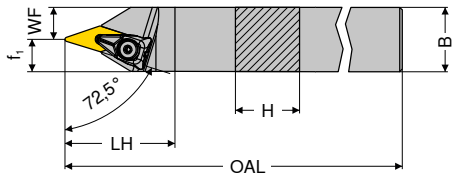
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 503 ... EUR		Right-hand 2A/24 Article no. 70 502 ... EUR	
DVJN R/L 2020 K16	20	20	125	39	25	2	VN.. 1604	97,83	620	97,83	620
DVJN R/L 2525 M16	25	25	150	39	32	2	VN.. 1604	103,80	725	103,80	725

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

Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR	
70 502 620 / 70 503 620	28,76	835	T09 - IP	11,24	126	M3x7 - IP	3,14	819	5,59	806
70 502 725 / 70 503 725	28,76	835	T09 - IP	11,24	126	M3x7 - IP	3,14	819	5,59	806

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

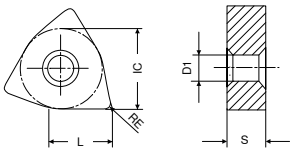


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	f_1 mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 506 ... EUR	
DVVN N 2020 K16	20	20	125	43	7,5	12,5	2	VN.. 1604	97,83	620
DVVN N 2525 M16	25	25	150	43	12,5	12,5	2	VN.. 1604	103,80	625

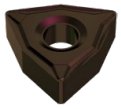
Spare parts for Article no.	2A/28 XPress type Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR	
70 506 620	28,76	835	T09 - IP	11,24	126	M3x7 - IP	3,14	819	5,59	806
70 506 625	28,76	835	T09 - IP	11,24	126	M3x7 - IP	3,14	819	5,59	806

WNMG / WNMA

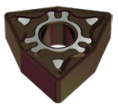
Designation	L	S	D1	IC
	mm	mm	mm	mm
WNMG 0604..	6,5	4,76	3,81	9,52
WNM. 0804..	8,6	4,76	5,16	12,70



WNMG

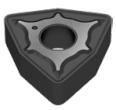
		-CF20 CTEP110		-F50 CTCP115		-F50 CTCP125		-F50 CTCP135		-TFQ CTEP110		-TFQ CTCP115		-TFQ CTCP125	
		-NF12 DCC1110		-NF15 HCX1115		-NF15 HCX1125		-NF15 HCR1135		-TFQ DCC1110		-TFQ HCX1115		-TFQ HCX1125	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
															
		F		F		F		F		F		F		F	
		CERMET WNMG 1A/78		WNMG 1A/08		WNMG 1A/08		WNMG 1A/08		CERMET WNMG 1A/78		WNMG 1A/08		WNMG 1A/08	
ISO	RE mm	Article no. 76 171 ... EUR		Article no. 76 157 ... EUR		Article no. 76 157 ... EUR		Article no. 76 157 ... EUR		Article no. 76 177 ... EUR		Article no. 76 177 ... EUR		Article no. 76 177 ... EUR	
060404EN	0,4	9,68	004	9,95	304	9,95	504	9,95	704			11,52	304	11,52	514
060408EN	0,8	9,68	006	9,95	306	9,95	506	9,95	706	11,52	006	11,52	306	11,52	506
080404EN	0,4			12,53	316	12,53	516	12,53	716	14,42	016				
080408EN	0,8	12,53	018	12,53	318	12,53	518	12,53	718	14,42	018	14,42	318	14,42	518
080412EN	1,2			12,53	320	12,53	520	12,53	720			14,42	320	14,42	520
Steel		●		●		●		●		●		●		●	
Stainless steel		○		○		○		○		○		○		○	
Cast iron		○		○		○				○		○		○	
Non ferrous metals															
Heat resistant alloys								○							

WNMG

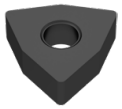
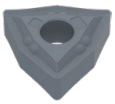
ISO	RE mm	-XU CTCP115		-XU CTCP125		-M50 CTCK110		-M50 CTCK120		-M50 CTCP115		-M50 CTCP125		-M50 CTCP135	
		-XU HCX1115		-XU HCX1125		-NM15 DCX3110		-NM15 HCF3120		-NM15 HCX1115		-NM15 HCX1125		-NM15 HCR1135	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
															
		M		M		M		M		M		M		M	
		WNMG		WNMG		WNMG		WNMG		WNMG		WNMG		WNMG	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
		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 ...	
		EUR		EUR		EUR		EUR		EUR		EUR		EUR	
060404EN	0,4									9,95	304	9,95	504	9,95	704
060408EN	0,8									9,95	306	9,95	506	9,95	706
060412EN	1,2									9,95	308	9,95	508	9,95	708
080404EN	0,4	12,54	316	12,54	516					12,53	316	12,53	516	12,53	716
080408EN	0,8	12,54	318	12,54	518	12,53	018	12,53	518	12,53	318	12,53	518	12,53	718
080412EN	1,2	12,54	320	12,54	520	12,53	020	12,53	520	12,53	320	12,53	520	12,53	720
080416EN	1,6									12,53	322	12,53	522	12,53	722
Steel		●		●		●		●		●		●		●	
Stainless steel		○		○		○				○		○		○	
Cast iron		○		○		●		●		○		○			
Non ferrous metals															
Heat resistant alloys														○	

9

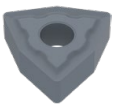
WNMG

ISO	RE mm	-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		M		M		M		M		M		M	
		WNMG		WNMG		WNMG		WNMG		WNMG		WNMG		WNMG	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
		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 ...	
		EUR		EUR		EUR		EUR		EUR		EUR		EUR	
060408EN	0,8									9,95	306	9,95	506	9,95	706
060412EN	1,2									9,95	308	9,95	508	9,95	708
080408EN	0,8	14,42	31800	14,42	518	12,53	018	12,53	518	12,53	318	12,53	518	12,53	718
080412EN	1,2	14,42	320	14,42	520	12,53	020	12,53	520	12,53	320	12,53	520	12,53	720
080416EN	1,6					12,53	022	12,53	522	12,53	322	12,53	522	12,53	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	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
060404EN	0,4					9,95	204			9,68	400				
060408EN	0,8					9,95	206	9,95	206	9,68	402	9,95	206		
060412EN	1,2							9,95	208			9,95	208		
080404EN	0,4					12,53	216			12,53	404				
080408EN	0,8	12,53	018	12,53	518	12,53	218	12,53	218	12,53	406	12,53	218	12,53	418
080412EN	1,2	12,53	020	12,53	520			12,53	220	12,53	408	12,53	220		
080416EN	1,6	12,53	022	12,53	522										
Steel							○		○		○		○		○
Stainless steel							●		●		●		●		●
Cast iron			●		●										
Non ferrous metals															
Heat resistant alloys									○		●		○		●

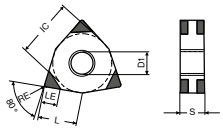
WNMG

		-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	
		1A/08		1A/08		1A/08		1A/08	
ISO	RE	Article no. 75 008 ...		Article no. 75 008 ...		Article no. 70 178 ...		Article no. 70 179 ...	
	mm	EUR		EUR		EUR		EUR	
060404EN	0,4							9,68	604
060408EN	0,8							9,68	608
080404EN	0,4							12,53	612
080408EN	0,8	13,09	418	13,09	518	12,53	608	12,53	614
080412EN	1,2	13,09	420	13,09	520				
Steel									
Stainless steel			○		○		○		○
Cast iron							○		○
Non ferrous metals							○		○
Heat resistant alloys			●		●		●		●

→ v_c Page 144–159

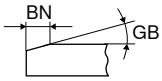
WNGA

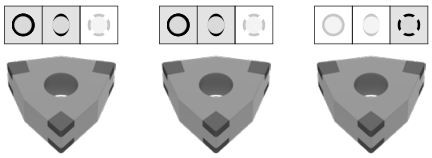
Designation	L	S	D1	IC
	mm	mm	mm	mm
WNGA 0804..	8,5	4,76	5,13	12,7



-M (-6SC)

WNGA

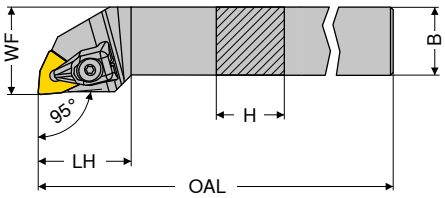


					-M CTBS20C		-M CTBH20C		-M CTBH40C	
					-6SC PBC15-S		-6SC PBC25-S		-6SC PBC40-S	
										
					F		F		F	
					CBN WNGA		CBN WNGA		CBN WNGA	
					Y0		Y0		Y0	
ISO	RE	GB	BN	LE	Article no. 71 405 ...		Article no. 71 405 ...		Article no. 71 405 ...	
	mm	°	mm	mm	EUR		EUR		EUR	
080404SN	0,4	10	0,09	2,8	81,39	**122**				
080404SN	0,4	15	0,09	2,8	81,39	**132**				
080404SN	0,4	20	0,09	2,8	81,39	**152**			81,39	**332**
080404SN	0,4	20	0,11	2,8			81,39	**242**		
080404SN	0,4	25	0,11	2,8					81,39	**352**
080404SN	0,4	25	0,13	2,8			81,39	**262**		
080404SN	0,4	30	0,14	2,8					81,39	**372**
080408SN	0,8	10	0,09	2,5	81,39	**124**				
080408SN	0,8	15	0,09	2,5	81,39	**134**				
080408SN	0,8	20	0,09	2,5	81,39	**154**			81,39	**334**
080408SN	0,8	20	0,11	2,5			81,39	**244**		
080408SN	0,8	25	0,11	2,5					81,39	**354**
080408SN	0,8	25	0,13	2,5			81,39	**264**	81,39	**364**
080408SN	0,8	25	0,16	2,5	81,39	**174**				
080408SN	0,8	30	0,14	2,5			81,39	**274**	81,39	**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



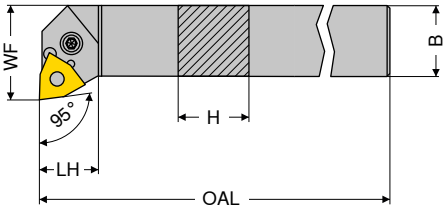
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 543 ... EUR		Right-hand 2A/24 Article no. 70 542 ... EUR	
DWLN R/L 1616 H06	16	16	100	25	20	2	WN.. 0604	76,33	716	76,33	716
DWLN R/L 2020 K06	20	20	125	27	25	2	WN.. 0604	85,04	720	85,04	720
DWLN R/L 2525 M06	25	25	150	27	32	2	WN.. 0604	87,97	725	87,97	725
DWLN R/L 2020 K08	20	20	125	34	25	4	WN.. 0804	85,04	620	85,04	620
DWLN R/L 2525 M08	25	25	150	34	32	4	WN.. 0804	87,97	625	87,97	625

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

Spare parts	2A/28 XPress type Article no. 70 950 ...		Y7 Key D Article no. 80 950 ...		2A/28 Clamping screw Article no. 70 950 ...		2A/28 Solid Carbide Seat W Article no. 70 950 ...	
for Article no.	EUR		EUR		EUR		EUR	
70 543 716 / 70 542 716	24,10	823	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,40	807
70 543 720 / 70 542 720	24,10	823	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,40	807
70 543 725 / 70 542 725	24,10	823	T09 - IP 11,24	126	M3x7 - IP 3,14	819	3,40	807
70 543 620 / 70 542 620	23,77	824	T15 - IP 11,89	128	M4,5x12 - IP 2,98	820	9,93	812
70 543 625 / 70 542 625	23,77	824	T15 - IP 11,89	128	M4,5x12 - IP 2,98	820	9,93	812

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

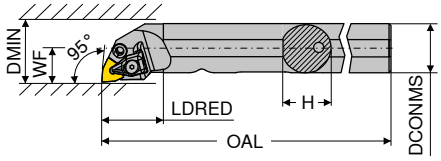


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 543 ... EUR		Right-hand 2A/24 Article no. 70 542 ... EUR	
PWLN R/L 1616 H06	16	16	100	20	22,5	3	WNMG 0604	76,33	116	76,33	116
PWLN R/L 2020 K06	20	20	125	26	25,0	3	WNMG 0604	85,04	120	85,04	120
PWLN R/L 2525 M06	25	25	150	19	32,0	3	WNMG 0604	87,97	125	87,97	125
PWLN R/L 2020 K08	20	20	125	22	25,0	4	WNMG 0804	85,04	020	85,04	020
PWLN R/L 2525 M08	25	25	150	22	32,0	4	WNMG 0804	87,97	025	87,97	025
PWLN R/L 3225 P08	32	25	170	22	32,0	4	WNMG 0804	94,37	032	94,37	032

Spare parts		2A/28 Key I Article no. 70 950 ...		2A/28 Shim Article no. 70 950 ...		2A/28 Assembly pin Article no. 70 950 ...		2A/28 Lever Article no. 70 950 ...		2A/28 Clamping screw Article no. 70 950 ...		2A/28 Solid Carbide Seat W Article no. 70 950 ...	
for Article no.		EUR		EUR		EUR		EUR		EUR		EUR	
70 542 116 / 70 543 116	SW2,5	2,45	175	2,06	122	1,22	191	12,48	185	3,19	208	7,21	127
70 542 120 / 70 543 120	SW2,5	2,45	175	2,06	122	1,22	191	12,48	185	3,19	208	7,21	127
70 542 125 / 70 543 125	SW2,5	2,45	175	2,06	122	1,22	191	12,48	185	3,19	208	7,21	127
70 542 020 / 70 543 020	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	8,72	235
70 542 025 / 70 543 025	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	8,72	235
70 542 032 / 70 543 032	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	8,72	235

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



Illustrations show right-hand versions

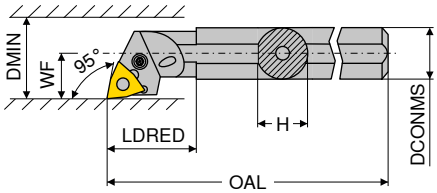
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 573 ... EUR		Right-hand 2A/24 Article no. 70 572 ... EUR	
A25R DWLN R/L 06	25	24	200	32	17	32	2	WN.. 0604	222,20	725	222,20	725
A32S DWLN R/L 08	32	31	250	40	22	40	4	WN.. 0804	229,80	732	229,80	732
A40T DWLN R 08	40	39	300	45	27	50	4	WN.. 0804			256,00	640

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

Spare parts	2A/28 XPress type Article no. 70 950 ... EUR		Y7 Key D Article no. 80 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Hydrant Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat W Article no. 70 950 ... EUR	
for Article no.										
70 572 725 / 70 573 725	24,10	823	T09 - IP	11,24	126	M3x7 - IP	3,14	819	20,84	834	3,40	807
70 572 732 / 70 573 732	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	20,84	834	9,93	812
70 572 640	23,77	824	T15 - IP	11,89	128	M4,5x12 - IP	2,98	820	20,84	834	9,93	812

9

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



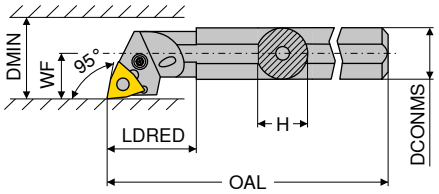
Illustrations show right-hand versions

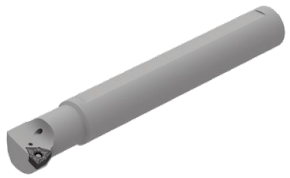
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 573 ... EUR		Right-hand 2A/24 Article no. 70 572 ... EUR	
A16M PWLN R/L 06	16	15	150	20	11	20	3	WNMG 0604	180,50	116	180,50	116
A20Q PWLN R/L 06-1	20	19	180	30	13	25	3	WNMG 0604	199,40	121	199,40	121
A25R PWLN R/L 06	25	23	200	25	17	32	3	WNMG 0604	222,20	125	222,20	125
A32S PWLN R/L 06	32	30	250	50	22	40	3	WNMG 0604	229,80	132	229,80	132
A25R PWLN R/L 08	25	23	200	40	17	31	4	WNMG 0804	222,30	225	222,30	225
A32S PWLN R/L 08	32	30	250	50	22	40	4	WNMG 0804	229,80	032	229,80	032
A40T PWLN R/L 08	40	39	300	60	27	50	4	WNMG 0804	256,00	040	256,00	040

Spare parts		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat W Article no. 70 950 ... EUR	
for Article no.													
70 572 116 / 70 573 116	SW2	2,45	177					14,97	129	4,23	217		
70 572 121 / 70 573 121	SW2	2,45	177					14,97	129	4,23	217		
70 572 125 / 70 573 125	SW2,5	2,45	175	2,06	122	1,22	191	12,48	185	3,19	208	7,21	127
70 572 132 / 70 573 132	SW2,5	2,45	175	2,06	122	1,22	191	12,48	185	3,19	208	7,21	127
70 572 225 / 70 573 225	SW3	2,45	176					12,59	187	4,28	205		
70 572 032 / 70 573 032	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	8,72	235
70 572 040 / 70 573 040	SW3	2,45	176	1,76	198	1,22	192	12,59	187	3,50	209	8,72	235

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

▲ with carbide core





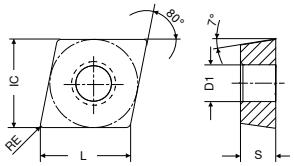
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 567 ... EUR		Right-hand 2A Article no. 70 566 ... EUR	
E-A16M PWLN R/L 06	16	15	150	24	11	20	3	WNMG 0604	640,40	**016**	640,40	**016**
E-A20Q PWLN R/L 06	20	18	180	29	13	27	3	WNMG 0604	684,60	**020**	684,60	**020**
E-A25R PWLN R/L 06	25	23	200	40	17	31	3	WNMG 0604	709,60	**025**	709,60	**025**
E-A25R PWLN R/L 08	25	23	200	40	17	31	4	WNMG 0804	709,60	**125**	709,60	**125**
E-A32S PWLN R/L 08	32	30	250	50	22	39	4	WNMG 0804	936,70	**032**	936,70	**032**
E-A40T PWLN R/L 08	40	38	300	60	27	48	4	WNMG 0804	1.118,00	**040**	1.118,00	**040**

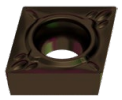
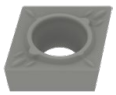
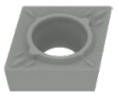
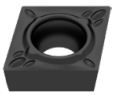
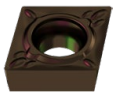
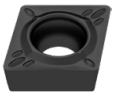
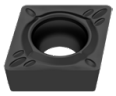
Spare parts		2A/28 Key I Article no. 70 950 ... EUR		2A/28 Shim Article no. 70 950 ... EUR		2A/28 Assembly pin Article no. 70 950 ... EUR		2A/28 Lever Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat W Article no. 70 950 ... EUR	
for Article no.													
70 566 016 / 70 567 016	SW2	2,45	**177**					14,97	**129**	4,23	**217**		
70 566 020 / 70 567 020	SW2	2,45	**177**					14,97	**129**	4,23	**217**		
70 566 025 / 70 567 025	SW2,5	2,45	**175**	2,06	**122**	1,22	**191**	12,48	**185**	3,19	**208**	7,21	**127**
70 566 125 / 70 567 125	SW3	2,45	**176**					12,59	**187**	3,50	**209**		
70 566 032 / 70 567 032	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	8,72	**235**
70 566 040 / 70 567 040	SW3	2,45	**176**	1,76	**198**	1,22	**192**	12,59	**187**	3,50	**209**	8,72	**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	
															
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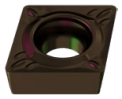
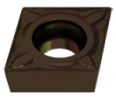
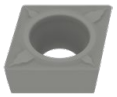
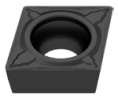
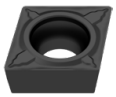
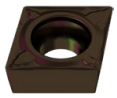
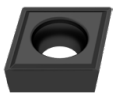
ISO	RE mm	Article no. 76 247 ... EUR		Article no. 70 251 ... EUR		Article no. 70 251 ... EUR		Article no. 76 251 ... EUR		Article no. 76 251 ... EUR		Article no. 76 253 ... EUR		Article no. 76 253 ... EUR	
060202EN	0,2	13,86	002	13,43	900	13,43	850	13,86	502	13,86	702				
060204EN	0,4	13,86	004	13,43	902	13,43	852					7,78	304	7,78	504
09T302EN	0,2	14,77	014	13,86	904	13,86	854								
09T304EN	0,4	14,77	016	13,86	906							9,70	316	9,70	516
09T308EN	0,8	14,77	018	13,86	908							9,70	318	9,70	518
120404EN	0,4			17,34	910									13,66	528
120408EN	0,8													13,66	530
Steel		●		●		●		●		●		●		●	
Stainless steel		○						○		○		○		○	
Cast iron		○		○		○		○				○		○	
Non ferrous metals															
Heat resistant alloys										○					

9

CCMT / CCGT

ISO	RE mm	-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	
															
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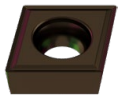
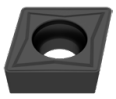
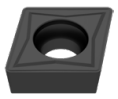
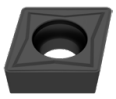
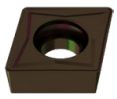
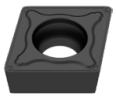
		Article no. 76 253 ...		Article no. 76 248 ...		Article no. 70 249 ...		Article no. 76 249 ...		Article no. 76 249 ...		Article no. 76 249 ...		Article no. 76 250 ...	
		EUR		EUR		EUR		EUR		EUR		EUR		EUR	
060202EN	0,2													13,86	502
060204EN	0,4	7,78	704	7,54	004	7,28	900			7,78	504	7,78	704		
060208EN	0,8									7,78	506				
09T304EN	0,4	9,70	716	9,68	016	9,03	904	9,70	316	9,70	516	9,70	716		
09T308EN	0,8			9,68	018	9,03	906	9,70	318	9,70	518				
120404EN	0,4			13,66	028					13,66	528				
120408EN	0,8							13,66	330			13,66	730		
Steel		●		●		●		●		●		●		●	
Stainless steel		○		○				○		○		○		○	
Cast iron				○		○		○		○				○	
Non ferrous metals															
Heat resistant alloys		○										○			

CCGT / CCMT

ISO	RE mm	-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	
															
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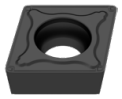
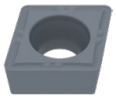
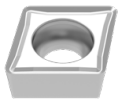
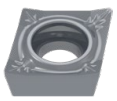
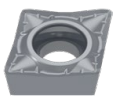
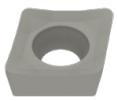
		CCGT 1A/08		CCMT 1A/08		CCMT 1A/08		CCMT 1A/08		CCMT 1A/08		CCMT 1A/08		CCMT 1A/08	
		Article no. 76 250 ...		Article no. 70 252 ...		Article no. 70 252 ...		Article no. 76 252 ...		Article no. 76 252 ...		Article no. 76 252 ...		Article no. 76 194 ...	
		EUR		EUR		EUR		EUR		EUR		EUR		EUR	
060202EN	0,2	13,86	702												
060204EN	0,4			7,78	004	7,78	554	7,78	304	7,78	504	7,78	704		
060208EN	0,8			7,78	006	7,78	506	7,78	306			7,78	706		
09T304EN	0,4			9,70	016	9,70	516	9,70	316	9,70	516	9,70	716	10,91	31600
09T308EN	0,8			9,70	018	9,70	518	9,70	318	9,70	518	9,70	718	10,91	31800
09T312EN	1,2			9,70	020	9,70	520								
120404EN	0,4			13,66	028	13,66	528	13,66	328	13,66	528	13,66	728	15,33	32800
120408EN	0,8			13,66	030	13,66	530	13,66	330	13,66	530	13,66	730	15,33	330
120412EN	1,2									13,66	532				
Steel		●		●		●		●		●		●		●	
Stainless steel		○		○				○		○		○		○	
Cast iron				●		●		○		○				○	
Non ferrous metals															
Heat resistant alloys		○										○			

→ v_c Page 144–159

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		F		F		M		F		M		F	
		CCMT		CCMT		CCMT		CCXT		CCMT		CCMT		CCMT	
		1A/08		1A/08		1A/08		1A		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
060202FN	0,2							9,64	100						
060204EN	0,4			7,54	460					7,78	204	7,54	670	7,78	204
060204FN	0,4							9,64	102						
09T302FN	0,2							9,43	104						
09T304EN	0,4	10,91	516	9,68	464	9,68	460			9,70	216	9,68	674	9,70	216
09T304FN	0,4							9,43	106						
09T308EN	0,8	10,91	518			9,68	462			9,70	218	9,68	676	9,70	218
09T308FN	0,8							9,43	108						
120404EN	0,4	15,33	528									13,66	678	13,66	228
120408EN	0,8	15,33	530									13,66	680	13,66	230
Steel		●		○		○				○		○		○	
Stainless steel		○		●		●		●		●		●		●	
Cast iron		○													
Non ferrous metals								○							
Heat resistant alloys				●		●						●			

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		F		F		M		M		M		M	
		CCGT		CCGT		CCGT		CCGT		CCGT		CCGT		CCGT	
		1A/90		1A/90		1A/90		1A/90		1A		1A/90		1A	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
060202FN	0,2	10,91	652	10,91	636	12,98	556					10,22	600	12,97	300
060204FN	0,4	10,91	654	10,91	638	12,98	558	11,86	678	15,68	618	10,22	602	12,97	302
09T302FN	0,2			11,42	639	13,31	539					10,91	604	13,41	304
09T304FN	0,4	11,42	656	11,42	640	13,31	560	12,53	680	16,43	620	10,91	606	13,41	306
09T308FN	0,8	11,42	658	11,42	641	13,31	541	12,53	681	16,43	621	10,91	608	13,41	308
120402FN	0,2			13,31	643							12,75	610	15,56	310
120404FN	0,4			13,31	642	17,00	562	14,77	682	18,48	622	12,75	612	15,56	312
120408FN	0,8			13,31	644	17,00	564	14,77	686	18,48	626	12,75	614	15,56	314
Steel						○				○					
Stainless steel						○				○				○	
Cast iron		○		○		○		○		○		○			
Non ferrous metals		●		●		●		●		●		●		●	
Heat resistant alloys		○		○				○				○			

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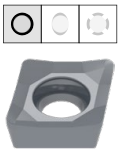
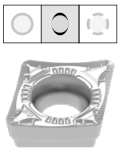
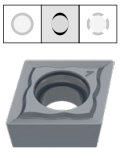
CCGT / CCMT

ISO	RE mm	-27 AMZ / -AL AMZ		-29 H216T		-29 AMZ		-F23 CTP2120 / -F23 CCN2120	
									
		M		M		M		F	
		CCGT 1A/90		CCMT NEW 1A/90		CCMT NEW 1A/90		CCGT 1A/08	
		Article no. 70 254 ...		Article no. 70 245 ...		Article no. 70 245 ...		Article no. 70 191 ...	
	mm	EUR		EUR		EUR		EUR	
060200FN	0,0							13,86	600
060201FN	0,1							13,86	602
060202FN	0,2	12,42	450						
060204EN	0,4			7,86	60400	9,40	40400		
060204FN	0,4	12,42	452						
09T300FN	0,0							16,00	604
09T301FN	0,1							16,00	606
09T302FN	0,2	12,75	454						
09T304EN	0,4			8,37	61600	9,71	41600		
09T304FN	0,4	12,75	456						
09T308EN	0,8			8,37	61800	9,71	41800		
09T308FN	0,8	12,75	458						
120402FN	0,2	15,89	460						
120404FN	0,4	15,89	462						
120408FN	0,8	15,89	464						

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

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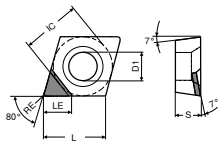
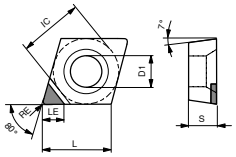
CCGW / CCGT

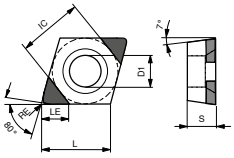
Designation	L	S	D1	IC
	mm	mm	mm	mm
CCG. 0602..	6,40	2,38	2,8	6,35
CCGW 09T3..	9,70	3,97	4,4	9,52
CCGW 1204..	12,90	4,76	5,5	12,70



CCGT -A

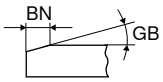


CCGW -A



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

CCGW / CCGT



ISO	RE	GB	BN	LE	-A CTBS10U PBC10		-A CTBS10U PBC10		-B CTBS20C -2MC PBC15-S		-Q-B CTBS20C -2Q PBC15-S	
					F		F		F		F	
					CBN CCGW		CBN CCGT		CBN CCGW		CBN CCGW	
					Y0		Y0		Y0		Y0	
	mm	°	mm	mm	Article no. 71 120 ...		Article no. 71 124 ...		Article no. 71 161 ...		Article no. 71 162 ...	
					EUR		EUR		EUR		EUR	
060202SN	0,2	10	0,09	3,4							55,21	120
060202SN	0,2	15	0,11	3,4							55,21	130
060202TN	0,2	20	0,14	3,4	34,55	300						
060202TN	0,2	20	0,15	3,4							55,21	140
060202SN	0,2	20	0,16	3,4					55,21	150	55,21	150
060202TN	0,2	25	0,17	3,4					55,21	160	55,21	160
060202FN	0,2			3,4	34,55	200	41,23	200				
060202EN	0,2			3,4					55,21	110	55,21	110
060204SN	0,4	10	0,09	3,1					55,21	121	55,21	121
060204SN	0,4	15	0,11	3,1					55,21	131	55,21	131
060204TN	0,4	20	0,14	3,1	34,55	302						
060204TN	0,4	20	0,15	3,1					55,21	141	55,21	141
060204SN	0,4	20	0,16	3,1					55,21	151	55,21	151
060204TN	0,4	25	0,17	3,1					55,21	161	55,21	161
060204SN	0,4	25	0,18	3,1							55,21	171
060204FN	0,4			3,1	34,55	202	41,23	202				
060208SN	0,8	10	0,09	2,8					55,21	122		
060208SN	0,8	15	0,11	2,8					55,21	132		
060208TN	0,8	20	0,15	2,8					55,21	142		
060208TN	0,8	25	0,17	2,8					55,21	162		
060208SN	0,8	25	0,18	2,8					55,21	172		
060208SN	0,8	30	0,18	2,8					55,21	182		
060208EN	0,8			2,8					55,21	112		
09T302SN	0,2	10	0,09	3,4					55,21	123		
09T302SN	0,2	15	0,11	3,4					55,21	133		
09T302SN	0,2	20	0,16	3,4					55,21	153		
09T302TN	0,2	25	0,17	3,4					55,21	163		
09T302SN	0,2	25	0,18	3,4					55,21	173		
09T302EN	0,2			3,4					55,21	113		

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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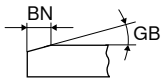
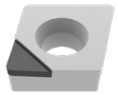
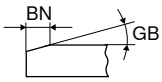
→ v_c Page 160–167
Continued on next page

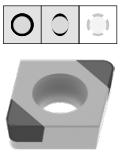
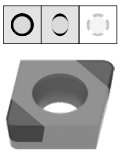
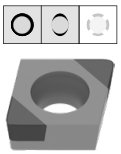
CCGW / CCGT



					-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	
					Y0		Y0		Y0		Y0	
ISO	RE	GB	BN	LE	Article no. 71 120 ...		Article no. 71 124 ...		Article no. 71 161 ...		Article no. 71 162 ...	
	mm	°	mm	mm	EUR		EUR		EUR		EUR	
09T304EN	0,4			3,1					55,21	114		
09T304SN	0,4	10	0,09	3,1					55,21	124	55,21	124
09T304SN	0,4	15	0,11	3,1					55,21	134	55,21	134
09T304TN	0,4	20	0,14	2,8	34,55	304						
09T304TN	0,4	20	0,15	3,1					55,21	144	55,21	144
09T304SN	0,4	20	0,16	3,1					55,21	154	55,21	154
09T304TN	0,4	25	0,17	3,1					55,21	164	55,21	164
09T304SN	0,4	25	0,18	3,1					55,21	174	55,21	174
09T304SN	0,4	30	0,18	3,1					55,21	184		
09T304FN	0,4			2,8	34,55	204						
09T308SN	0,8	10	0,09	2,8					55,21	125	55,21	125
09T308SN	0,8	15	0,11	2,8							55,21	135
09T308TN	0,8	20	0,14	2,5	34,55	306						
09T308TN	0,8	20	0,15	2,8					55,21	145	55,21	145
09T308SN	0,8	20	0,16	2,8					55,21	155	55,21	155
09T308TN	0,8	25	0,17	2,8					55,21	165	55,21	165
09T308SN	0,8	25	0,18	2,8					55,21	175		
09T308SN	0,8	30	0,18	2,8					55,21	185		
09T308FN	0,8			2,5	34,55	206						
09T308EN	0,8			2,8							55,21	115
120404FN	0,4			3,1	34,55	208						
120404TN	0,4	20	0,14	3,1	34,55	308						
120408FN	0,8			2,8	34,55	210						
120408TN	0,8	20	0,14	2,8	34,55	310						
Cast iron						●		●		●		●
Sintered steels						●		●		●		●
Heat resistant alloys						●		●		●		●
hardened < 45 HRC												
hardened 46–55 HRC												
hardened 56–60 HRC												
hardened 61–65 HRC												

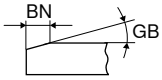
CCGW



ISO	RE	GB	BN	LE	-B CTBH15U		-B CTBH15C		-Q-B CTBH15C	
										
					F		F		F	
					CBN CCGW		CBN CCGW		CBN CCGW	
					NEW Y0		NEW Y0		NEW Y0	
					Article no. 71 001 ...		Article no. 71 000 ...		Article no. 71 002 ...	
	mm	°	mm	mm	EUR		EUR		EUR	
060202SN	0,2	15	0,11	3,4	69,18	30214	66,91	30214		
060202EN	0,2			3,4	69,18	00200	66,91	00200		
060204SN	0,4	15	0,11	3,1	69,18	30414	66,91	30414		
060204SN	0,4	25	0,13	3,1	69,18	30429	66,91	30429		
060204EN	0,4			3,1	69,18	00400	66,91	00400		
060208EN	0,8			2,8	69,18	00600	66,91	00600		
060208SN	0,8	15	0,11	2,8	69,18	30614	66,91	30614		
060208SN	0,8	25	0,13	2,8	69,18	30629	66,91	30629		
09T302SN	0,2	15	0,11	3,4			66,91	31414		
09T302SN	0,2	25	0,13	3,4			66,91	31429		
09T304SN	0,4	15	0,11	3,1			66,91	31614	77,62	31614
09T304SN	0,4	25	0,13	3,1			66,91	31629	66,91	31629
09T308SN	0,8	15	0,11	2,8			66,91	31814	66,91	31814
09T308SN	0,8	25	0,13	2,8			66,91	31829	66,91	31829
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



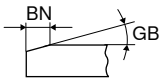
					-A CTBH21U		-A CTBH21U		-B CTBH21U		-Q-B CTBH21U		-B CTBH20C		-Q-B CTBH20C	
					PBC25		PBC25		-2S PBC25		-2Q PBC25		-2MC PBC25-S		-2Q PBC25-S	
					F		F		F		F		F		F	
					CBN CCGW		CBN CCGT		CBN CCGW		CBN CCGW		CBN CCGW		CBN CCGW	
					Y0		Y0		Y0		Y0		Y0		Y0	
ISO	RE	GB	BN	LE	Article no. 71 120 ...		Article no. 71 124 ...		Article no. 71 121 ...		Article no. 71 123 ...		Article no. 71 161 ...		Article no. 71 162 ...	
	mm	°	mm	mm	EUR		EUR		EUR		EUR		EUR		EUR	
060202SN	0,2	10	0,09	3,4									55,21	230	55,21	230
060202SN	0,2	15	0,11	3,4											55,21	240
060202SN	0,2	20	0,09	3,4									55,21	250		
060202TN	0,2	20	0,14	3,4	34,55	500										
060202TN	0,2	25	0,14	3,4									55,21	260		
060202EN	0,2			3,4											55,21	220
060202SN	0,2	25	0,15	3,4									55,21	270		
060202FN	0,2			3,4	34,55	400 1)	41,23	400							55,21	210
060204EN	0,4			3,1									55,21	221		
060204SN	0,4	10	0,09	3,1									55,21	231	55,21	231
060204SN	0,4	15	0,11	3,1									55,21	241	55,21	241
060204SN	0,4	20	0,09	3,1									55,21	251	55,21	251
060204TN	0,4	20	0,14	3,1	34,55	502										
060204TN	0,4	25	0,14	3,1									55,21	261	55,21	261
060204FN	0,4			3,1	34,55	402 1)	41,23	402								
060204SN	0,4	25	0,15	3,1									55,21	271		
060208SN	0,8	10	0,09	2,8									55,21	232		
060208SN	0,8	20	0,09	2,8									55,21	252		
060208TN	0,8	25	0,14	2,8									55,21	262		
060208SN	0,8	30	0,18	2,8									55,21	282		
060208FN	0,8			2,8									55,21	212		
09T302SN	0,2	10	0,09	3,4									55,21	233		
09T302SN	0,2	15	0,11	3,4									55,21	243		
09T302SN	0,2	20	0,09	3,4									55,21	253		
09T302SN	0,2	25	0,15	3,4									55,21	273		
09T304SN	0,4	10	0,09	3,1									55,21	234		
09T304SN	0,4	15	0,11	3,1									55,21	244		
09T304SN	0,4	20	0,09	3,1									55,21	254		
09T304TN	0,4	20	0,14	2,8	34,55	504										
09T304TN	0,4	20	0,14	3,1					54,36	502	54,58	502				
09T304TN	0,4	25	0,14	3,1									55,21	264		
09T304SN	0,4	25	0,15	3,1									55,21	274		
09T304SN	0,4	30	0,18	3,1									55,21	284		
09T304EN	0,4			3,1									55,21	224		
09T304FN	0,4			3,1					54,36	402 1)						
09T304FN	0,4			2,8	34,55	404 1)										
09T308SN	0,8	10	0,09	2,8									55,21	235	55,21	235
09T308SN	0,8	15	0,11	2,8									55,21	245	55,21	245
09T308SN	0,8	20	0,09	2,8											55,21	255
09T308TN	0,8	20	0,14	2,8					54,36	504	54,58	504				
09T308TN	0,8	20	0,14	2,5	34,55	506										
09T308TN	0,8	25	0,14	2,8									55,21	265	55,21	265
09T308SN	0,8	25	0,15	2,8									55,21	275		
09T308FN	0,8			2,5	34,55	406 1)										
09T308EN	0,8			2,8											55,21	225
09T308FN	0,8			2,8					54,36	404 1)	54,58	404 1)			55,21	215
120404TN	0,4	20	0,14	3,1	34,55	508										
120408TN	0,8	20	0,14	2,8	34,55	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

→ v_c Page 160–167

CCGW / CCGT



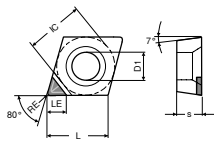
ISO	RE	GB	BN	LE	-A CTBH40U PBC40		-A CTBH40U PBC40		-B CTBH40U -2S PBC40		-Q-B CTBH40U -2Q PBC40		-B CTBH40C -2MC PBC40-S		-Q-B CTBH40C -2Q PBC40-S	
					F CBN CCGW Y0		F CBN CCGT Y0		F CBN CCGW Y0		F CBN CCGW Y0		F CBN CCGW Y0		F CBN CCGW Y0	
	mm	°	mm	mm	Article no. 71 120 ... EUR		Article no. 71 124 ... EUR		Article no. 71 121 ... EUR		Article no. 71 123 ... EUR		Article no. 71 161 ... EUR		Article no. 71 162 ... EUR	
060202TN	0,2	20	0,09	3,4									55,21	320		
060202SN	0,2	20	0,09	3,4											55,21	330
060202SN	0,2	25	0,09	3,4									55,21	350	55,21	350
060202TN	0,2	25	0,11	3,4									55,21	340	55,21	340
060202TN	0,2	25	0,12	3,4	34,55	900										
060202TN	0,2	30	0,14	3,4									55,21	360	55,21	360
060202FN	0,2			3,4	34,55	800	41,23	800								
060204SN	0,4	20	0,09	3,1									55,21	331		
060204SN	0,4	25	0,09	3,1									55,21	351	55,21	351
060204TN	0,4	25	0,11	3,1									55,21	341	55,21	341
060204TN	0,4	25	0,12	3,1	34,55	902										
060204TN	0,4	30	0,14	3,1									55,21	361	55,21	361
060204SN	0,4	30	0,16	3,1									55,21	371	55,21	371
060204SN	0,4	35	0,17	3,1									55,21	381	55,21	381
060204FN	0,4			3,1	34,55	802	41,23	802								
060208TN	0,8	20	0,09	2,8									55,21	322		
060208SN	0,8	25	0,09	2,8									55,21	352		
060208TN	0,8	25	0,11	2,8									55,21	342		
060208TN	0,8	30	0,14	2,8									55,21	362		
060208SN	0,8	30	0,16	2,8									55,21	372		
060208SN	0,8	35	0,17	2,8									55,21	382		
09T302TN	0,2	20	0,09	3,4									55,21	323		
09T302SN	0,2	25	0,09	3,4									55,21	353		
09T302TN	0,2	25	0,11	3,4									55,21	343		
09T302SN	0,2	30	0,16	3,4									55,21	373		
09T302SN	0,2	35	0,17	3,4									55,21	383		
09T304SN	0,4	20	0,09	3,1									55,21	334	55,21	334
09T304TN	0,4	20	0,09	3,1									55,21	324	55,21	324
09T304SN	0,4	25	0,09	3,1									55,21	354	55,21	354
09T304TN	0,4	25	0,11	3,1									55,21	344	55,21	344
09T304TN	0,4	25	0,12	3,1					54,36	902	54,58	902				
09T304TN	0,4	25	0,12	2,8	34,55	904										
09T304TN	0,4	30	0,14	3,1									55,21	364	55,21	364
09T304SN	0,4	30	0,16	3,1									55,21	374		
09T304EN	0,4			3,1									55,21	314		
09T304SN	0,4	35	0,17	3,1									55,21	384		
09T304FN	0,4			3,1					54,36	802	54,58	802				
09T304FN	0,4			2,8	34,55	804										
09T308SN	0,8	20	0,09	2,8									55,21	335	55,21	335
09T308TN	0,8	20	0,09	2,8									55,21	325	55,21	325
09T308SN	0,8	25	0,09	2,8									55,21	355	55,21	355
09T308TN	0,8	25	0,11	2,8									55,21	345	55,21	345
09T308TN	0,8	25	0,12	2,8					54,36	904	54,58	904				
09T308TN	0,8	25	0,12	2,5	34,55	906										
09T308TN	0,8	30	0,14	2,8									55,21	365	55,21	365
09T308SN	0,8	30	0,16	2,8											55,21	375
09T308SN	0,8	35	0,17	2,8									55,21	385		
09T308FN	0,8			2,8					54,36	804	54,58	804				
09T308FN	0,8			2,5	34,55	806										
09T308EN	0,8			2,8											55,21	315
120404FN	0,4			3,1	34,55	808										
120404TN	0,4	25	0,12	3,1	34,55	908										
120408TN	0,8	25	0,12	2,8	34,55	910										

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

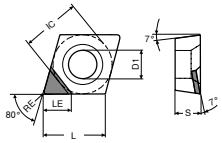
9

CCGW / CCGT

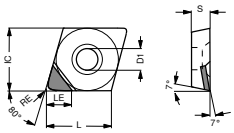
Designation	L	S	D1	IC
	mm	mm	mm	mm
CCG. 0602..	6,45	2,38	2,8	6,35
CCG. 09T3..	9,70	3,97	4,4	9,52
CCG. 1204..	12,90	4,76	5,5	12,70



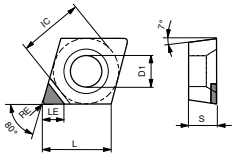
CCGW -Q-A



CCGT -A

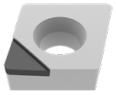
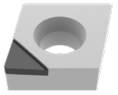


CCGT -Q-A



CCGW -A

CCGW / CCGT

ISO	RE	LE	-A CTDMD05		-A CTDPD20		-A CTDPD20		-Q-A CTDPD20		-Q-A CTDPD20	
			MDC		PDC		PDC		-2Q PDC		-2Q PDC	
												
			F		F		F		F		F	
			DIAMOND CCGW		DIAMOND CCGW		DIAMOND CCGT		DIAMOND CCGW		DIAMOND CCGT	
			Y0		Y0		Y0		Y0		Y0	
			Article no. 71 120 ...		Article no. 71 120 ...		Article no. 71 124 ...		Article no. 71 125 ...		Article no. 71 126 ...	
	mm	mm	EUR		EUR		EUR		EUR		EUR	
060201FN	0,1	3,4									61,68	101
060202FN	0,2	2,5	261,80	050								
060202FN	0,2	3,3							61,68	102	61,68	102
060202FN	0,2	3,4			48,64	100	48,64	100				
060204FN	0,4	2,5	261,80	052								
060204FN	0,4	3,1									61,68	104
060204FN	0,4	3,2			48,64	102	48,64	102	61,68	104		
09T301FN	0,1	4,5							62,85	111	62,85	111
09T302FN	0,2	4,4							62,85	112	62,85	112
09T304FN	0,4	2,5	265,00	054								
09T304FN	0,4	4,2							62,85	114	62,85	114
09T304FN	0,4	4,3			49,70	104	49,70	104				
09T308FN	0,8	2,5	265,00	056								
09T308FN	0,8	4,1			49,70	106	49,70	106				
120402FN	0,2	4,4							63,91	122	63,91	122
120404FN	0,4	4,2							63,91	124	63,91	124
120404FN	0,4	4,3			49,70	108	49,70	108				
120408FN	0,8	4,1			49,70	110	49,70	110				

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

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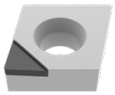
CCGT / CCGW

ISO	RE mm	LE mm	-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		F		F		F		M		M	
			DIAMOND CCGT Y0		DIAMOND CCGT Y0		DIAMOND CCGW Y0		DIAMOND CCGT Y0		DIAMOND CCGT Y0		DIAMOND CCGT Y0	
			Article no. 71 300 ...		Article no. 71 305 ...		Article no. 71 125 ...		Article no. 71 126 ...		Article no. 71 301 ...		Article no. 71 306 ...	
			EUR		EUR		EUR		EUR		EUR		EUR	
060202FN	0,2	3,3					61,68	152	61,68	152				
060202EN	0,2	3,3											66,24	202
060202EN	0,2	3,4									57,76	202		
060202FN	0,2	3,4	57,76	102										
060204FN	0,4	3,1			66,24	104								
060204EN	0,4	3,1											66,24	204
060204EN	0,4	3,2									57,76	204		
060204FN	0,4	3,2	57,76	104										
060208EN	0,8	3,0									62,63	208		
09T302FN	0,2	4,4					62,85	162	62,85	162				
09T302EN	0,2	4,4											66,98	212
09T302EN	0,2	4,5									57,65	212		
09T302FN	0,2	4,5	59,03	112										
09T304FN	0,4	4,2			66,98	114								
09T304EN	0,4	4,2											66,98	214
09T304EN	0,4	4,3									57,65	214		
09T304FN	0,4	4,3	59,03	114										
09T308EN	0,8	4,1									62,42	218		
09T308FN	0,8	4,1	63,91	118										
120402FN	0,2	4,4							63,91	172				
120402EN	0,2	4,4											68,78	222
120404EN	0,4	4,2											68,78	224
120404FN	0,4	4,2			68,78	124			63,91	174				
120404EN	0,4	4,3									60,09	224		
120404FN	0,4	4,3	60,09	124										
120408EN	0,8	4,1									65,07	228		
120408FN	0,8	4,1	65,07	128										

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

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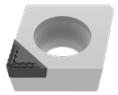
CCGT

			-A-CB3 CTDPU20		-A-CB1 CTDCD10		-A-CB2 CTDCD10		-A-Q-CB2 CTDCD10	
			-CB3 PDC-S		-CB1 CVD		-CB2 CVD		-Q-CB2 CVD	
										
			R		F		M		M	
			DIAMOND CCGT		DIAMOND CCGT		DIAMOND CCGT		DIAMOND CCGT	
			Y0		Y0		Y0		Y0	
ISO	RE	LE	Article no. 71 302 ...		Article no. 71 300 ...		Article no. 71 301 ...		Article no. 71 306 ...	
	mm	mm	EUR		EUR		EUR		EUR	
060202FN	0,2	2,4			76,20	302				
060204EN	0,4	2,1							81,07	304
060204FN	0,4	2,2			76,20	304				
060204EN	0,4	2,2					76,20	304		
060204EN	0,4	3,2	57,76	204						
09T304EN	0,4	2,1							81,70	314
09T304FN	0,4	2,2			78,63	314				
09T304EN	0,4	2,2					78,63	314		
09T304EN	0,4	4,3	57,65	214						
09T308EN	0,8	4,1	62,42	218						
120404EN	0,4	2,1							83,62	324
120408EN	0,8	2,1					88,38	328		

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

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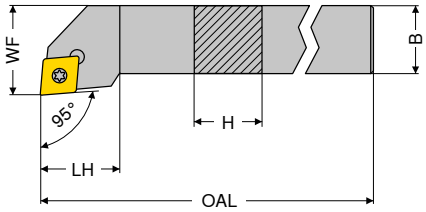
MaxiLock-S – SCLC 95° – Toolholder with screw clamping



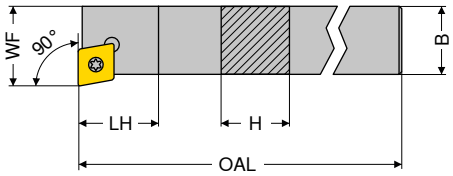
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 653 ... EUR		Right-hand 2A/24 Article no. 70 652 ... EUR	
SCLC R/L 0808 D06	8	8	60	9	10	1,2	CC.. 0602	60,92	**008**	60,92	**008**
SCLC R/L 1010 E06	10	10	70	9	12	1,2	CC.. 0602	64,59	**010**	64,59	**010**
SCLC R/L 1212 F09	12	12	80	15	16	3,2	CC.. 09T3	64,59	**012**	64,59	**012**
SCLC R/L 1616 H09	16	16	100	17	20	3,2	CC.. 09T3	80,00	**016**	80,00	**016**
SCLC R/L 2020 K09	20	20	125	17	25	3,2	CC.. 09T3	85,04	**020**	85,04	**020**
SCLC R/L 1616 H12	16	16	100	20	20	5	CC.. 1204	80,00	**116**	80,00	**116**
SCLC R/L 2020 K12	20	20	125	20	25	5	CC.. 1204	85,04	**120**	85,04	**120**
SCLC R/L 2525 M12	25	25	150	20	32	5	CC.. 1204	87,97	**125**	87,97	**125**
SCLC R/L 3225 P12	32	25	170	20	32	5	CC.. 1204	91,44	**132**	91,44	**132**

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

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 653 008 / 70 652 008	7,80	**110**			2,36	**112**				
70 653 010 / 70 652 010	7,80	**110**			2,36	**112**				
70 653 012 / 70 652 012	9,28	**113**			3,14	**113**				
70 653 016 / 70 652 016			8,28	**398**	3,14	**113**	9,67	**165**	4,64	**171**
70 653 020 / 70 652 020			8,28	**398**	3,14	**113**	9,67	**165**	4,64	**171**
70 653 116 / 70 652 116			8,28	**398**	2,57	**114**	12,37	**166**	4,64	**170**
70 653 120 / 70 652 120			8,28	**398**	2,57	**114**	12,37	**166**	4,64	**170**
70 653 125 / 70 652 125			8,28	**398**	2,57	**114**	12,37	**166**	4,64	**170**
70 653 132 / 70 652 132			8,28	**398**	2,57	**114**	12,37	**166**	4,64	**170**

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

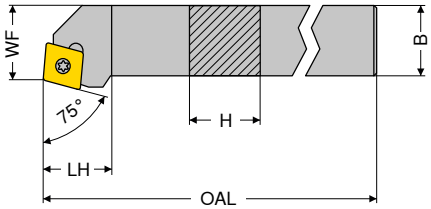


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 761 ... EUR		Right-hand 2A/24 Article no. 70 760 ... EUR	
SCFC R/L 0808 D06	8	8	60	10	10	1,2	CC.. 0602	60,92	008	60,92	008
SCFC R/L 1010 E06	10	10	70	10	12	1,2	CC.. 0602	64,59	010	64,59	010
SCFC R/L 1212 F09	12	12	80	13	16	3,2	CC.. 09T3	64,59	012	64,59	012
SCFC R/L 1616 H09	16	16	100	13	20	3,2	CC.. 09T3	80,00	016	80,00	016
SCFC R/L 2020 K12	20	20	125	17	25	5	CC.. 1204	85,04	020	85,04	020

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 761 008 / 70 760 008	7,80	110			2,36	112				
70 761 010 / 70 760 010	7,80	110			2,36	112				
70 761 012 / 70 760 012	9,28	113			3,14	113				
70 761 016 / 70 760 016			8,28	398	3,14	113	9,67	165	4,64	171
70 761 020 / 70 760 020			8,28	398	2,57	114	12,37	166	4,64	170

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

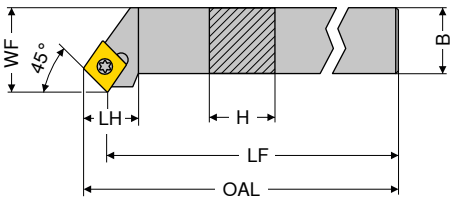


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 649 ... EUR		Right-hand 2A/24 Article no. 70 648 ... EUR	
SCRC R 1010 E06	10	10	70	10	11	1,2	CC.. 0602			64,59	010
SCRC R/L 1212 F09	12	12	80	16	13	3,2	CC.. 09T3	64,59	012	64,59	012
SCRC R/L 1616 H09	16	16	100	17	17	3,2	CC.. 09T3	80,00	016	80,00	016
SCRC R/L 2020 K09	20	20	125	17	22	3,2	CC.. 09T3	85,04	020	85,04	020
SCRC R/L 2020 K12	20	20	125	20	22	5	CC.. 1204	85,04	120	85,04	120
SCRC R/L 2525 M12	25	25	150	20	27	5	CC.. 1204	87,97	125	87,97	125

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 648 010	7,80	110			2,36	112				
70 649 012 / 70 648 012	9,28	113			3,14	113				
70 649 016 / 70 648 016			8,28	398	3,14	113	9,67	165	4,64	171
70 649 020 / 70 648 020			8,28	398	3,14	113	9,67	165	4,64	171
70 649 120 / 70 648 120			8,28	398	2,57	114	12,37	166	4,64	170
70 649 125 / 70 648 125			8,28	398	2,57	114	12,37	166	4,64	170

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



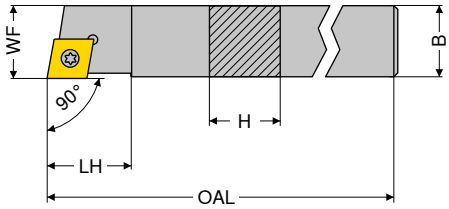
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LF mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 641 ... EUR		Right-hand 2A/24 Article no. 70 640 ... EUR	
SCSC R 1616 H12	16	16	109,1	100	20	20	5	CC.. 1204			80,00	016
SCSC R/L 2020 K12	20	20	134,1	125	20	25	5	CC.. 1204	85,04	020	85,04	020
SCSC R/L 2525 M12	25	25	159,1	150	20	32	5	CC.. 1204	87,97	025	87,97	025

Spare parts for Article no.		2A/28 Combination Key Article no. 70 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR			2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 640 016	T15/SW	8,28	398	M4,5x12	2,57	114	12,37	166	M4,5	4,64	170
70 641 020 / 70 640 020	T15/SW	8,28	398	M4,5x12	2,57	114	12,37	166	M4,5	4,64	170
70 641 025 / 70 640 025	T15/SW	8,28	398	M4,5x12	2,57	114	12,37	166	M4,5	4,64	170

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

▲ for sliding head lathes

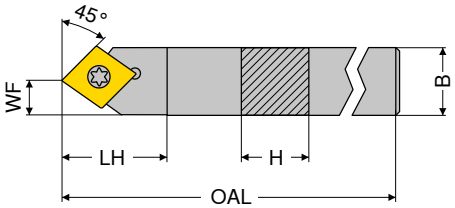


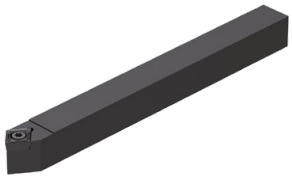
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 757 ... EUR		Right-hand 2A/24 Article no. 70 756 ... EUR	
SCAC R/L 0808 K06	8	8	125	9	8	1,2	CC.. 0602	64,59	108	64,59	108
SCAC R/L 0808 D06	8	8	60	9	8	1,2	CC.. 0602	60,92	008	60,92	008
SCAC R/L 1010 M06	10	10	150	9	10	1,2	CC.. 0602	64,59	110	64,59	110
SCAC R/L 1010 E06	10	10	70	9	10	1,2	CC.. 0602	64,59	010	64,59	010
SCAC R/L 1212 M09	12	12	150	13	12	3,2	CC.. 09T3	72,25	112	72,25	112
SCAC R/L 1212 F09	12	12	80	13	12	3,2	CC.. 09T3	64,59	012	64,59	012
SCAC R/L 1414 M09	14	14	150	13	14	3,2	CC.. 09T3	72,25	114	72,25	114
SCAC R/L 1616 H09	16	16	100	13	16	3,2	CC.. 09T3	80,00	116	80,00	116
SCAC R/L 2020 K12	20	20	125	17	20	5	CC.. 1204	85,04	120	85,04	120

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 756 108 / 70 757 108	7,80	110			2,36	112				
70 756 008 / 70 757 008	7,80	110			2,36	112				
70 756 110 / 70 757 110	7,80	110			2,36	112				
70 756 010 / 70 757 010	7,80	110			2,36	112				
70 756 112 / 70 757 112	9,28	113			3,14	113				
70 756 012 / 70 757 012	9,28	113			3,14	113				
70 756 114 / 70 757 114	9,28	113			3,14	113				
70 756 116 / 70 757 116			8,28	398	3,14	113	9,67	165	4,64	171
70 756 120 / 70 757 120			8,28	398	2,57	114	12,37	166	4,64	170

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



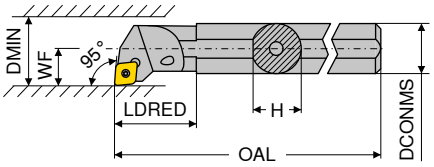


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 752 ... EUR	
SCDC L 0808 K06	8	8	125	13	4	1,2	CC.. 0602	64,59	**008**
SCDC L 1010 M06	10	10	150	13	5	1,2	CC.. 0602	64,59	**010**
SCDC L 1212 M09	12	12	150	18	6	3,2	CC.. 09T3	72,25	**012**
SCDC L 1414 M09	14	14	150	18	7	3,2	CC.. 09T3	72,25	**014**

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A Clamping screw Article no. 70 950 ... EUR	
70 752 008	T08	7,80	**110**	M2,5x6	2,36	**112**
70 752 010	T08	7,80	**110**	M2,5x6	2,36	**112**
70 752 012	T15	9,28	**113**	M3,5x11	3,14	**113**
70 752 014	T15	9,28	**113**	M3,5x11	3,14	**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 2A/24 Article no. 70 717 ... EUR		Right-hand 2A/24 Article no. 70 716 ... EUR	
S08H SCLC R/L 06	8	7,2	100		5	11	1,2	CC.. 0602	96,57	**008**	96,57	**008**
A08F SCLC R/L 06	8	7,6	80	17	5	11	1,2	CC.. 0602	96,57	**208**	96,57	**208**
A10H SCLC R/L 06	10	9,5	100	19	7	13	1,2	CC.. 0602	96,57	**210**	96,57	**210**
S10K SCLC R/L 06	10	9,0	125		7	13	1,2	CC.. 0602	96,57	**010**	96,57	**010**
A12K SCLC R/L 06	12	11,5	125	22	9	16	1,2	CC.. 0602	96,57	**212**	96,57	**212**
S12Q SCLC R/L 06	12	11,0	180		9	16	1,2	CC.. 0602	96,57	**012**	96,57	**012**
A16M SCLC R/L 06	16	14,0	150	50	9	18	1,2	CC.. 0602	98,67	**116**	98,67	**116**
S16R SCLC R/L 09	16	14,5	200		11	20	3,2	CC.. 09T3	98,67	**016**	98,67	**016**
A16M SCLC R/L 09	16	15,0	150	29	11	20	3,2	CC.. 09T3	98,67	**216**	98,67	**216**
A20Q SCLC R/L 09	20	18,5	180	32	13	25	3,2	CC.. 09T3	123,00	**220**	123,00	**220**
S20S SCLC R/L 09	20	18,0	250		13	25	3,2	CC.. 09T3	123,00	**020**	123,00	**020**
S25T SCLC R/L 09	25	23,0	300		17	32	3,2	CC.. 09T3	141,40	**025**	141,40	**025**
A25R SCLC R/L 09	25	23,0	200	36	17	32	3,2	CC.. 09T3	141,40	**225**	141,40	**225**
A32S SCLC R/L 12	32	30,0	250	50	22	40	5	CC.. 1204	194,40	**232**	194,40	**232**
A40T SCLC R/L 12	40	38,0	300	60	27	50	5	CC.. 1204	233,40	**240**	233,40	**240**

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

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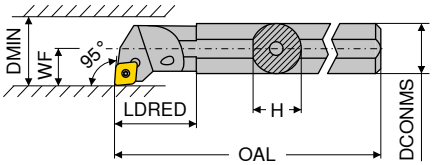
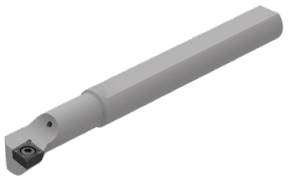
Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Carbide type C Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 716 008 / 70 717 008	7,80	**110**			2,57	**116**				
70 716 208 / 70 717 208	7,80	**110**			2,57	**116**				
70 716 210 / 70 717 210	7,80	**110**			2,57	**116**				
70 716 010 / 70 717 010	7,80	**110**			2,57	**116**				
70 716 212 / 70 717 212	7,80	**110**			2,57	**116**				
70 716 012 / 70 717 012	7,80	**110**			2,57	**116**				
70 716 116 / 70 717 116	7,80	**110**			2,57	**116**				
70 716 016 / 70 717 016	9,28	**113**			3,14	**110**				
70 716 216 / 70 717 216	9,28	**113**			3,14	**110**				
70 716 220 / 70 717 220	9,28	**113**			3,14	**304**				
70 716 020 / 70 717 020	9,28	**113**			3,14	**110**				
70 716 025 / 70 717 025	9,28	**113**			3,14	**113**				
70 716 225 / 70 717 225	9,28	**113**			3,14	**304**				
70 716 232 / 70 717 232			8,28	**398**	2,57	**114**	12,37	**166**	4,64	**170**
70 716 240 / 70 717 240			8,28	**398**	2,57	**114**	12,37	**166**	4,64	**170**

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

▲ with carbide core





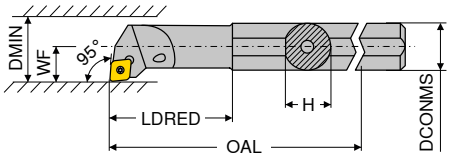
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 719 ... EUR		Right-hand 2A Article no. 70 718 ... EUR	
E-A08F SCLC R/L 06	8	7,5	80	18	6	12	1,2	CC.. 0602	177,20	**208**	177,20	**208**
E-A10H SCLC R/L 06	10	9,0	100	20	7	14	1,2	CC.. 0602	177,20	**210**	177,20	**210**
E-A12K SCLC R/L 06	12	11,0	125	20	9	18	1,2	CC.. 0602	190,90	**212**	190,90	**212**
E-A16M SCLC R/L 09	16	15,0	150	28	11	22	3,2	CC.. 09T3	324,00	**216**	324,00	**216**
E-A20Q SCLC R/L 09	20	18,0	180	38	13	26	3,2	CC.. 09T3	400,60	**220**	400,60	**220**
E-A25R SCLC R/L 09	25	23,0	200	38	17	34	3,2	CC.. 09T3	508,50	**225**	508,50	**225**
E-A32S SCLC R/L 12	32	30,0	250	43	22	39	5	CC.. 1204	800,10	**232**	800,10	**232**

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR	
70 718 208 / 70 719 208	T08	7,80 **110**	M2,5x5	2,57 **116**
70 718 210 / 70 719 210	T08	7,80 **110**	M2,5x5	2,57 **116**
70 718 212 / 70 719 212	T08	7,80 **110**	M2,5x5	2,57 **116**
70 718 216 / 70 719 216	T15	9,28 **113**	M4x9,5	3,14 **449**
70 718 220 / 70 719 220	T15	9,28 **113**	M4x9,5	3,14 **449**
70 718 225 / 70 719 225	T15	9,28 **113**	M4x9,5	3,14 **449**
70 718 232 / 70 719 232	T15	9,28 **113**	M4x11	3,40 **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 2A Article no. 70 719 ... EUR		Right-hand 2A Article no. 70 718 ... EUR	
E-A0608F SCLC R/L 06	8	7,5	100	25	4	8	1,2	CC.. 0602	190,90	308	190,90	308
E-A0810H SCLC R/L 06	10	9,0	110	32	6	12	1,2	CC.. 0602	190,90	310	190,90	310
E-A1012K SCLC R/L 06	12	11,0	125	38	7	14	1,2	CC.. 0602	190,90	312	190,90	312
E-A1216M SCLC R/L 06	16	15,0	150	50	9	18	1,2	CC.. 0602	190,90	316	190,90	316

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR	
70 718 308 / 70 719 308	7,80	110	2,57	116
70 718 310 / 70 719 310	7,80	110	2,57	116
70 718 312 / 70 719 312	7,80	110	2,57	116
70 718 316 / 70 719 316	7,80	110	2,57	116

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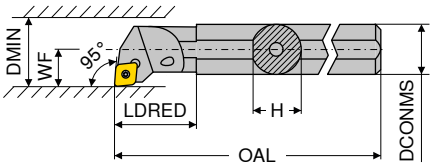
MaxiLock-S – SCLC 95° – Boring bar with screw clamping

▲ Type: Solid carbide

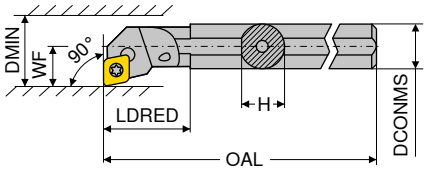


Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 719 ... EUR		Right-hand 2A/24 Article no. 70 718 ... EUR	
E08H SCLC R/L 06	8	7,6	100		5	11	1,2	CC.. 0602	219,60	008	219,60	008
E10K SCLC R/L 06	10	9,0	125	22	7	13	1,2	CC.. 0602	253,70	010	253,70	010
E12Q SCLC R/L 06	12	11,5	180	26	9	16	1,2	CC.. 0602	333,20	012	333,20	012
E16R SCLC R/L 09	16	15,0	200	34	11	20	3,2	CC.. 09T3	435,40	016	435,40	016
E20S SCLC R/L 09	20	18,5	250	38	13	25	3,2	CC.. 09T3	543,90	020	543,90	020
E25T SCLC R/L 09	25	23,0	300	43	17	32	3,2	CC.. 09T3	959,10	025	959,10	025

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR	
70 719 008 / 70 718 008	T08	7,80	110	M2,5x5	2,57	116
70 719 010 / 70 718 010	T08	7,80	110	M2,5x5	2,57	116
70 719 012 / 70 718 012	T08	7,80	110	M2,5x5	2,57	116
70 719 016 / 70 718 016	T15	9,28	113	M3,5x7,2	3,14	110
70 719 020 / 70 718 020	T15	9,28	113	M3,5x8,6	3,14	304
70 719 025 / 70 718 025	T15	9,28	113	M3,5x11	3,14	113

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

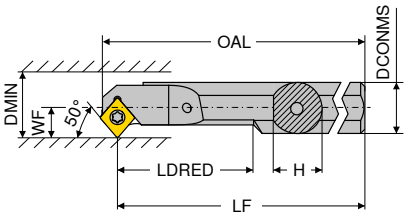


Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 793 ... EUR		Right-hand 2A/24 Article no. 70 792 ... EUR	
A08F SCFC R/L 06	8	7,6	80	17	5	11	1,2	CC.. 0602	96,57	208	96,57	208
A10H SCFC R/L 06	10	9,5	100	19	7	13	1,2	CC.. 0602	96,57	210	96,57	210
A12K SCFC R/L 06	12	11,5	125	22	9	16	1,2	CC.. 0602	96,57	212	96,57	212

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR	
70 792 208 / 70 793 208	T08	7,80	110	M2,5x5	2,57	116
70 792 210 / 70 793 210	T08	7,80	110	M2,5x5	2,57	116
70 792 212 / 70 793 212	T08	7,80	110	M2,5x5	2,57	116

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



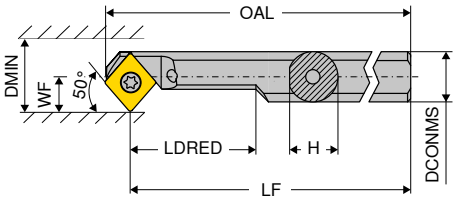
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LF mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 723 ... EUR		Right-hand 2A Article no. 70 722 ... EUR	
A08H SCMC R/L 06	8	7	104,15	100	20	5,5	10,5	1,2	CC.. 0602	96,57	208	96,57	208
A10H SCMC R/L 06	10	9	114,15	110	26	6,0	11,0	1,2	CC.. 0602	96,57	210	96,57	210
A12K SCMC R/L 06	12	11	129,15	125	32	7,0	13,0	1,2	CC.. 0602	96,57	212	96,57	212
A16M SCMC R/L 06	16	14	154,15	150	40	9,0	16,0	1,2	CC.. 0602	98,67	216	98,67	216

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR	
70 723 208 / 70 722 208	T08	7,80	110	M2,5x5	2,57	116
70 723 210 / 70 722 210	T08	7,80	110	M2,5x5	2,57	116
70 723 212 / 70 722 212	T08	7,80	110	M2,5x5	2,57	116
70 723 216 / 70 722 216	T08	7,80	110	M2,5x5	2,57	116

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

▲ with carbide core



Illustrations show right-hand versions

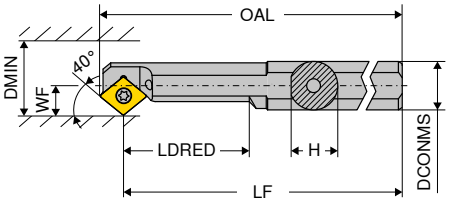
ISO designation	DCONMS mm	H mm	OAL mm	LF mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 707 ... EUR		Right-hand 2A Article no. 70 706 ... EUR	
E-A0608H SCMC R/L 06	8	7,5	104,15	100	20	5,5	10,5	1,2	CC.. 0602	190,90	008	190,90	008
E-A0810H SCMC R/L 06	10	9,0	114,15	110	26	6,0	11,0	1,2	CC.. 0602	190,90	010	190,90	010
E-A1012K SCMC R/L 06	12	11,0	129,15	125	32	7,0	13,0	1,2	CC.. 0602	190,90	012	190,90	012
E-A1216M SCMC R/L 06	16	15,0	154,15	150	40	9,0	16,0	1,2	CC.. 0602	190,90	016	190,90	016

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR	
70 706 008 / 70 707 008	7,80	110	2,57	116
70 706 010 / 70 707 010	7,80	110	2,57	116
70 706 012 / 70 707 012	7,80	110	2,57	116
70 706 016 / 70 707 016	7,80	110	2,57	116

9

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

▲ with carbide core



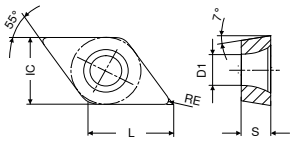
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LF mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 715 ... EUR		Right-hand 2A Article no. 70 714 ... EUR	
E-A0608H SCXC R/L 06	8	7,5	105	100	20	5	9,5	1,2	CC.. 0602	190,90	008	190,90	008
E-A0810H SCXC R/L 06	10	9,0	115	110	26	6	11,0	1,2	CC.. 0602	190,90	010	190,90	010
E-A1012K SCXC R/L 06	12	11,0	130	125	32	7	13,0	1,2	CC.. 0602	190,90	012	190,90	012
E-A1216M SCXC R/L 06	16	15,0	155	150	40	9	16,0	1,2	CC.. 0602	190,90	016	190,90	016

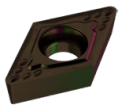
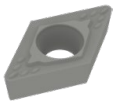
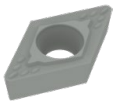
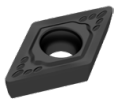
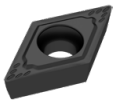
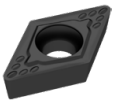
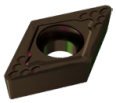
Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR	
70 714 008 / 70 715 008	7,80	110	2,57	116
70 714 010 / 70 715 010	7,80	110	2,57	116
70 714 012 / 70 715 012	7,80	110	2,57	116
70 714 016 / 70 715 016	7,80	110	2,57	116

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
							
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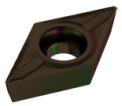
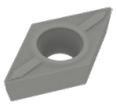
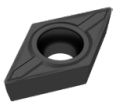
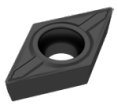
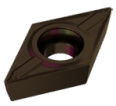
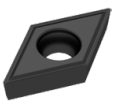
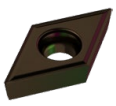
	CERMET DCGT 1A/78	CERMET DCGT 1A/78	CERMET DCGT 1A/78	DCGT 1A/08	DCMT 1A/08	DCMT 1A/08	DCMT 1A/08
ISO / RE	Article no. 76 245 ...	Article no. 70 257 ...	Article no. 70 257 ...	Article no. 76 257 ...	Article no. 76 259 ...	Article no. 76 259 ...	Article no. 76 259 ...
mm	EUR	EUR	EUR	EUR	EUR	EUR	EUR
070201EN 0,1		13,43 898					
070202EN 0,2	13,86 002	13,43 900		13,86 502			
070204EN 0,4	13,86 004	13,43 902	13,43 852		7,78 304	7,78 504	7,78 704
11T302EN 0,2	18,35 014	17,12 904	17,12 854				
11T304EN 0,4	18,35 016	17,12 906	17,12 856		10,93 316	10,93 516	10,93 716
11T308EN 0,8	18,35 018	17,12 908	17,12 858		10,93 318	10,93 518	10,93 718
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 1A/78	CERMET DCMT 1A/78	DCMT 1A/08	DCMT 1A/08	DCMT 1A/08	DCGT 1A/08	DCGT 1A/08
ISO / RE	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 ...
mm	EUR	EUR	EUR	EUR	EUR	EUR	EUR
070202EN 0,2	7,87 002	7,28 898				13,86 502	13,86 702
070204EN 0,4	7,87 004	7,28 900		7,78 504	7,78 704		
070208EN 0,8					7,78 706		
11T304EN 0,4	10,91 016	10,22 904	10,93 316	10,93 516	10,93 716		
11T308EN 0,8	10,91 018	10,22 906	10,93 318	10,93 518	10,93 718		
Steel	●	●	●	●	●	●	●
Stainless steel	○		○	○	○	○	○
Cast iron	○	○	○	○		○	
Non ferrous metals							
Heat resistant alloys					○		○

→ v_c Page 144–159

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	
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		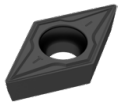		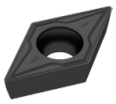		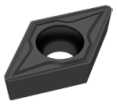		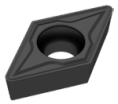		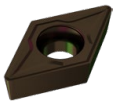		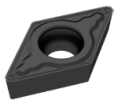		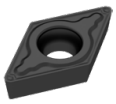	
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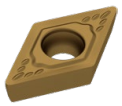
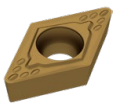
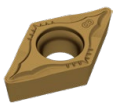
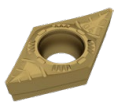
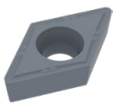
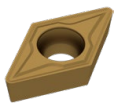
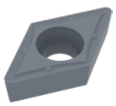
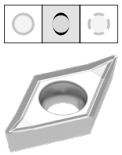
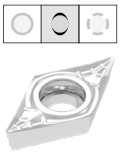
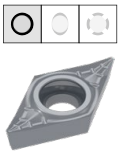
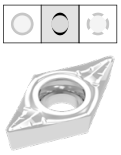
		DCMT		DCMT		DCMT		DCMT		DCMT		DCMT		DCMT	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	Article no. 70 258 ...		Article no. 70 258 ...		Article no. 76 258 ...		Article no. 76 258 ...		Article no. 76 258 ...		Article no. 76 195 ...		Article no. 76 195 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
070204EN	0,4	7,78	004	7,78	554	7,78	304	7,78	504	7,78	704	8,87	304	8,87	504
070208EN	0,8	7,78	006	7,78	506	7,78	306	7,78	506	7,78	706				
11T304EL	0,4													12,19	516
11T304EN	0,4	10,93	016	10,93	516	10,93	316	10,93	516	10,93	716			12,19	515
11T304ER	0,4													12,19	517
11T308EN	0,8	10,93	018	10,93	518	10,93	318	10,93	518	10,93	718			12,19	518
11T312EN	1,2							10,93	520						
Steel		●		●		●		●		●		●		●	
Stainless steel		○				○		○		○		○		○	
Cast iron		●		●		○		○				○		○	
Non ferrous metals															
Heat resistant alloys										○					

9

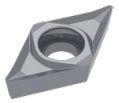
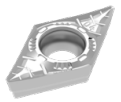
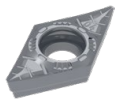
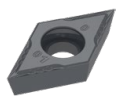
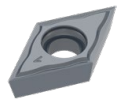
DCGT / DCMT / DCXT

		-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		F		F		M		F		M		F	
		DCGT		DCMT		DCMT		DCXT		DCMT		DCMT		DCMT	
		1A/08		1A/08		1A/08		1A		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
070202EN	0,2	13,86	440			7,54	400			7,78	202				
070202FN	0,2							9,85	100						
070204EN	0,4			7,54	440	7,54	402			7,78	204	7,54	440	7,78	204
070204FN	0,4							9,85	102						
070208EN	0,8											7,54	442	7,78	206
11T302EN	0,2					10,91	404			10,91	214				
11T302FN	0,2							10,23	104						
11T304EN	0,4			10,91	444	10,91	406			10,93	216	10,91	444	10,93	216
11T304FN	0,4							10,23	106						
11T308EN	0,8			10,91	446	10,91	408			10,93	218	10,91	448	10,93	218
11T308FN	0,8							10,23	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	F	F	M	M	M	M
		DCGT 1A/90	DCGT 1A/90	DCGT 1A/90	DCGT 1A/90	DCGT 1A	DCGT 1A/90	DCGT 1A
ISO	RE mm	Article no. 70 261 ... EUR	Article no. 70 263 ... EUR	Article no. 70 263 ... EUR	Article no. 70 263 ... EUR	Article no. 70 263 ... EUR	Article no. 70 260 ... EUR	Article no. 70 260 ... EUR
070202FN	0,2		9,83 632	11,75 552			9,29 600	11,89 300
070204FN	0,4	9,83 654	9,83 634	11,75 554			9,29 602	11,89 302
11T302FN	0,2		12,19 635	14,21 535			11,63 604	14,06 304
11T304FL	0,4				13,31 670	16,97 620		
11T304FN	0,4	12,19 664	12,19 636	14,21 556	13,31 660	16,97 610	11,63 606	14,06 306
11T304FR	0,4				13,31 680	16,97 630		
11T308FL	0,8				13,31 672	16,97 622		
11T308FN	0,8	12,19 666	12,19 638	14,21 558	13,31 662	16,97 612	11,63 608	14,06 308
11T308FR	0,8				13,31 682	16,97 642		
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			DRAGONSKIN	-F23 CCN2120
						
		M	M	M	F	F
		DCGT 1A/90	DCMT NEW 1A/90	DCMT NEW 1A/90	DCET NEW 1H/17	DCGT 1A/08
ISO	RE mm	Article no. 70 260 ... EUR	Article no. 70 246 ... EUR	Article no. 70 246 ... EUR	Article no. 76 254 ... EUR	Article no. 70 192 ... EUR
0702005FN	0,05				16,76 10200	
070200FN	0,00					13,86 600
0702015FN	0,15				16,76 10600	
070201FN	0,10				16,76 10400	13,86 602
070202FN	0,20	11,29 450			16,76 10800	
070204EN	0,40		7,12 60400	8,76 40400		
070204FN	0,40	11,29 452				
11T3005FN	0,05				22,22 11400	
11T300FN	0,00					18,68 604
11T3015FN	0,15				22,22 11800	
11T301FN	0,10				22,22 11600	18,68 606
11T302FN	0,20	13,66 454			22,22 12000	
11T304EN	0,40		9,60 61600	10,95 41600		
11T304FN	0,40	13,66 456				
11T304N	0,40				22,22 12200	
11T308EN	0,80		9,60 61800	10,95 41800		
11T308FN	0,80	13,66 458				
Steel		○		○	●	
Stainless steel		○		○	●	●
Cast iron		○	○	○	○	○
Non ferrous metals		●	●	●	○	○
Heat resistant alloys			○		●	●

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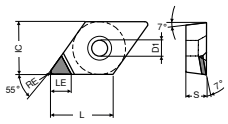
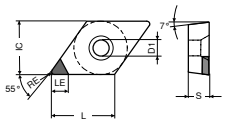
DCGW / DCGT

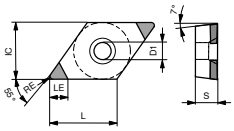
Designation	L	S	D1	IC
	mm	mm	mm	mm
DCG. 0702..	7,75	2,38	2,8	6,35
DCG. 11T3..	11,60	3,97	4,4	9,52



DCGT -A

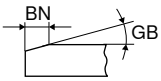


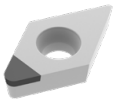
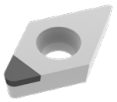
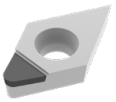
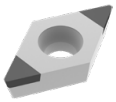
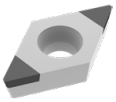
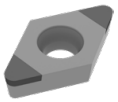
DCGW -A



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
	Y0	Y0	Y0	Y0	Y0	Y0
	Article no. 71 130 ...	Article no. 71 130 ...	Article no. 71 134 ...	Article no. 71 131 ...	Article no. 71 131 ...	Article no. 71 163 ...
	EUR	EUR	EUR	EUR	EUR	EUR

ISO	RE	GB	BN	LE	-A CTBS10U		-A CTBS10U		-A CTBS10U		-B CTBS10U		-B CTBS10U		-B CTBS20C	
	mm	°	mm	mm	EUR		EUR		EUR		EUR		EUR		EUR	
070202SN	0,2	10	0,09	3,9											55,21	120
070202SN	0,2	15	0,11	3,9											55,21	130
070202TN	0,2	20	0,14	3,9			34,55	300								
070202TN	0,2	20	0,15	3,9											55,21	140
070202SN	0,2	20	0,16	3,9											55,21	150
070202TN	0,2	25	0,17	3,9											55,21	160
070202FN	0,2			3,9	34,55	200			38,15	200						
070204SN	0,4	10	0,09	3,5											55,21	121
070204SN	0,4	15	0,11	3,5											55,21	131
070204TN	0,4	20	0,14	3,5			34,55	302								
070204TN	0,4	20	0,15	3,5											55,21	141
070204SN	0,4	20	0,16	3,5											55,21	151
070204TN	0,4	25	0,17	3,5											55,21	161
070204SN	0,4	30	0,18	3,5											55,21	181
070204FN	0,4			3,5	34,55	202			38,15	202						
070208SN	0,8	15	0,11	3,0											55,21	132
070208TN	0,8	20	0,14	3,0			34,55	304								
070208TN	0,8	20	0,15	3,0											55,21	142
070208SN	0,8	20	0,16	3,0											55,21	152
070208TN	0,8	25	0,17	3,0											55,21	162
070208SN	0,8	25	0,18	3,0											55,21	172
070208EN	0,8			3,0											55,21	112
070208FN	0,8			3,0	34,55	204			38,15	204						
11T302SN	0,2	15	0,11	3,9											55,21	133
11T302TN	0,2	20	0,14	3,9			34,55	306					54,36	300		
11T302TN	0,2	20	0,15	3,9											55,21	143
11T302SN	0,2	20	0,16	3,9											55,21	153

	-A CTBS10U	-A CTBS10U	-A CTBS10U	-B CTBS10U	-B CTBS10U	-B CTBS20C
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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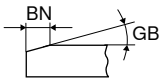
→ v_c Page 160–167
Continued on next page

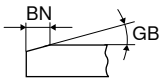
DCGW / DCGT

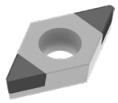
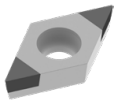
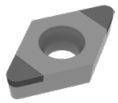
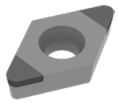
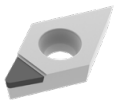
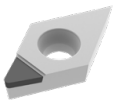


ISO	RE mm	GB °	BN mm	LE mm	-A CTBS10U PBC10 F CBN DCGW Y0 Article no. 71 130 ... EUR		-A CTBS10U PBC10 F CBN DCGW Y0 Article no. 71 130 ... EUR		-A CTBS10U PBC10 F CBN DCGT Y0 Article no. 71 134 ... EUR		-B CTBS10U -2S PBC10 F CBN DCGW Y0 Article no. 71 131 ... EUR		-B CTBS10U -2S PBC10 F CBN DCGW Y0 Article no. 71 131 ... EUR		-B CTBS20C -2MC PBC15-S F CBN DCGW Y0 Article no. 71 163 ... EUR	
11T302TN	0,2	25	0,17	3,9											55,21	163
11T302FN	0,2			3,9	34,55	206			39,43	206	54,36	200				
11T302EN	0,2			3,9											55,21	113
11T304SN	0,4	10	0,09	3,5											55,21	124
11T304TN	0,4	20	0,14	3,5			34,55	308					54,36	302		
11T304TN	0,4	20	0,15	3,5											55,21	144
11T304SN	0,4	20	0,16	3,5											55,21	154
11T304TN	0,4	25	0,17	3,5											55,21	164
11T304SN	0,4	25	0,18	3,5											55,21	174
11T304SN	0,4	30	0,18	3,5											55,21	184
11T304FN	0,4			3,5	34,55	208			39,43	208	54,36	202				
11T308SN	0,8	15	0,11	3,0											55,21	135
11T308TN	0,8	20	0,14	3,0			34,55	310					54,36	304		
11T308TN	0,8	20	0,15	3,0											55,21	145
11T308SN	0,8	20	0,16	3,0											55,21	155
11T308TN	0,8	25	0,17	3,0											55,21	165
11T308SN	0,8	30	0,18	3,0											55,21	185
11T308FN	0,8			3,0	34,55	210			39,43	210	54,36	204				
11T308EN	0,8			3,0											55,21	115
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

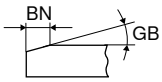
DCGW / DCGT



ISO	RE mm	GB °	BN mm	LE mm	-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 Y0		NEW Y0		NEW Y0		NEW Y0		Y0		Y0	
					Article no. 71 008 ...		Article no. 71 012 ...		Article no. 71 007 ...		Article no. 71 009 ...		Article no. 71 134 ...		Article no. 71 134 ...	
					EUR		EUR		EUR		EUR		EUR		EUR	
070202EN	0,2			3,9	73,61	00200			66,91	00200						
070202SN	0,2	15	0,11	3,9	69,18	30214			66,91	30214						
070202FN	0,2			3,9									38,15	400	38,15	800
070204EN	0,4			3,5	69,18	00400			66,91	00400						
070204SN	0,4	15	0,11	3,5	69,18	30414			66,91	30414						
070204SN	0,4	25	0,13	3,5	69,18	30429			66,91	30429						
070204FN	0,4			3,5									38,15	402	38,15	802
070208SN	0,8	15	0,11	3,0			69,18	30614			66,91	30614				
070208SN	0,8	25	0,13	3,0			69,18	30629			66,91	30629				
070208EN	0,8			3,0			69,18	00600			66,91	00600				
11T302SN	0,2	15	0,11	3,9					66,91	31414						
11T302RN	0,2			3,9					66,91	21400						
11T302SN	0,2	25	0,13	3,9					66,91	31429						
11T302FN	0,2			3,9									39,43	406	39,43	806
11T304SN	0,4	15	0,11	3,5					66,91	31614						
11T304SN	0,4	25	0,13	3,5					66,91	31629						
11T304RN	0,4			3,5					66,91	21600						
11T304FN	0,4			3,5									39,43	408	39,43	808
11T308RN	0,8			3,0							66,91	21800				
11T308SN	0,8	15	0,11	3,0							66,91	31814				
11T308SN	0,8	25	0,13	3,0							66,91	31829				
11T308FN	0,8			3,0									39,43	410	39,43	810
Cast iron																
Sintered steels																
Heat resistant alloys																
hardened < 45 HRC						●		●		●		●				
hardened 46–55 HRC						●		●		●		●		●		●
hardened 56–60 HRC						●		●		●		●		●		●
hardened 61–65 HRC																●

9

DCGW



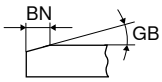
ISO	RE	GB	BN	LE	-A CTBH21U		-B CTBH21U		-B CTBH20C		-A CTBH40U		-B CTBH40U		-B CTBH40C	
					PBC25		-2S PBC25		-2MC PBC25-S		PBC40		-2S PBC40		-2MC PBC40-S	
					F		F		F		F		F		F	
					CBN DCGW		CBN DCGW		CBN DCGW		CBN DCGW		CBN DCGW		CBN DCGW	
					Y0		Y0		Y0		Y0		Y0		Y0	
					Article no. 71 130 ...		Article no. 71 131 ...		Article no. 71 163 ...		Article no. 71 130 ...		Article no. 71 131 ...		Article no. 71 163 ...	
	mm	°	mm	mm	EUR		EUR		EUR		EUR		EUR		EUR	
070202FN	0,2			3,9	34,55	400 [1]					34,55	800				
070202SN	0,2	10	0,09	3,9					55,21	230						
070202SN	0,2	15	0,11	3,9					55,21	240						
070202SN	0,2	20	0,09	3,9					55,21	250						
070202TN	0,2	20	0,09	3,9											55,21	320
070202TN	0,2	20	0,14	3,9	34,55	500										
070202SN	0,2	25	0,09	3,9											55,21	350
070202TN	0,2	25	0,11	3,9											55,21	340
070202TN	0,2	25	0,12	3,9							34,55	900				
070202TN	0,2	25	0,14	3,9					55,21	260						
070202TN	0,2	30	0,14	3,9											55,21	360
070202SN	0,2	30	0,16	3,9											55,21	370
070202SN	0,2	35	0,17	3,9											55,21	380
070202EN	0,2			3,9											55,21	310
070204SN	0,4	10	0,09	3,5					55,21	231						
070204SN	0,4	15	0,11	3,5					55,21	241						
070204SN	0,4	20	0,09	3,5					55,21	251					55,21	331
070204TN	0,4	20	0,14	3,5	34,55	502										
070204SN	0,4	25	0,09	3,5											55,21	351
070204TN	0,4	25	0,11	3,5											55,21	341
070204TN	0,4	25	0,12	3,5							34,55	902				
070204TN	0,4	25	0,14	3,5					55,21	261						
070204SN	0,4	25	0,15	3,5					55,21	271						
070204TN	0,4	30	0,14	3,5											55,21	361
070204SN	0,4	30	0,16	3,5											55,21	371
070204SN	0,4	35	0,17	3,5											55,21	381
070204FN	0,4			3,5	34,55	402 [1]			55,21	211	34,55	802				
070208SN	0,8	10	0,09	3,0					55,21	232						
070208SN	0,8	20	0,09	3,0					55,21	252					55,21	332
070208TN	0,8	20	0,14	3,0	34,55	504										
070208SN	0,8	25	0,09	3,0											55,21	352
070208TN	0,8	25	0,11	3,0											55,21	342
070208TN	0,8	25	0,12	3,0							34,55	904				
070208TN	0,8	25	0,14	3,0					55,21	262						
070208TN	0,8	30	0,14	3,0											55,21	362
070208SN	0,8	30	0,16	3,0											55,21	372
070208SN	0,8	35	0,17	3,0											55,21	382
070208FN	0,8			3,0	34,55	404 [1]			55,21	212	34,55	804				
070208EN	0,8			3,0					55,21	222					55,21	312
11T302FN	0,2			3,9	34,55	406 [1]	54,36	400 [1]			34,55	806	54,36	800 [1]		
11T302SN	0,2	15	0,09	3,9					55,21	233						
11T302SN	0,2	15	0,11	3,9					55,21	243						
11T302SN	0,2	20	0,09	3,9					55,21	253						
11T302TN	0,2	20	0,09	3,9											55,21	323

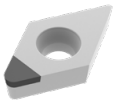
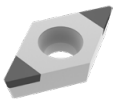
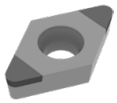
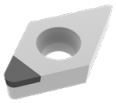
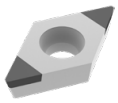
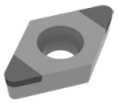
Cast iron						
Sintered steels						
Heat resistant alloys						
hardened < 45 HRC						
hardened 46–55 HRC	●	●	●	●	●	●
hardened 56–60 HRC	●	●	●	●	●	●
hardened 61–65 HRC				●	●	●

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		F		F		F		F		F	
					CBN DCGW		CBN DCGW		CBN DCGW		CBN DCGW		CBN DCGW		CBN DCGW	
					Y0		Y0		Y0		Y0		Y0		Y0	
					Article no. 71 130 ...		Article no. 71 131 ...		Article no. 71 163 ...		Article no. 71 130 ...		Article no. 71 131 ...		Article no. 71 163 ...	
	mm	°	mm	mm	EUR		EUR		EUR		EUR		EUR		EUR	
11T302TN	0,2	20	0,14	3,9	34,55	506	54,36	500								
11T302SN	0,2	25	0,09	3,9											55,21	353
11T302TN	0,2	25	0,11	3,9											55,21	343
11T302TN	0,2	25	0,12	3,9							34,55	906	54,36	900		
11T302TN	0,2	25	0,14	3,9					55,21	263						
11T302SN	0,2	25	0,15	3,9					55,21	273						
11T302TN	0,2	30	0,14	3,9											55,21	363
11T302SN	0,2	35	0,17	3,9											55,21	383
11T302EN	0,2			3,9											55,21	313
11T304FN	0,4			3,5	34,55	408 [1]	54,36	402 [1]	55,21	214	34,55	808	54,36	802 [1]		
11T304SN	0,4	10	0,09	3,5					55,21	234						
11T304SN	0,4	15	0,11	3,5					55,21	244						
11T304SN	0,4	20	0,09	3,5					55,21	254					55,21	334
11T304TN	0,4	20	0,09	3,5											55,21	324
11T304TN	0,4	20	0,14	3,5	34,55	508	54,36	502								
11T304SN	0,4	25	0,09	3,5											55,21	354
11T304TN	0,4	25	0,11	3,5											55,21	344
11T304TN	0,4	25	0,12	3,5							34,55	908	54,36	902		
11T304TN	0,4	25	0,14	3,5					55,21	264						
11T304SN	0,4	25	0,15	3,5					55,21	274						
11T304TN	0,4	30	0,14	3,5											55,21	364
11T304SN	0,4	30	0,16	3,5											55,21	374
11T304SN	0,4	30	0,18	3,5					55,21	284						
11T304SN	0,4	35	0,17	3,5											55,21	384
11T304EN	0,4			3,5					55,21	224					55,21	314
11T308SN	0,8	15	0,11	3,0					55,21	245						
11T308SN	0,8	20	0,09	3,0					55,21	255					55,21	335
11T308TN	0,8	20	0,09	3,0											55,21	325
11T308TN	0,8	20	0,14	3,0	34,55	510	54,36	504								
11T308SN	0,8	25	0,09	3,0											55,21	355
11T308TN	0,8	25	0,11	3,0											55,21	345
11T308TN	0,8	25	0,12	3,0							34,55	910	54,36	904		
11T308TN	0,8	25	0,14	3,0					55,21	265						
11T308TN	0,8	30	0,14	3,0											55,21	365
11T308SN	0,8	30	0,16	3,0											55,21	375
11T308SN	0,8	30	0,18	3,0					55,21	285						
11T308SN	0,8	35	0,17	3,0											55,21	385
11T308EN	0,8			3,0					55,21	225						
11T308FN	0,8			3,0	34,55	410 [1]	54,36	404 [1]	55,21	215			54,36	804 [1]		

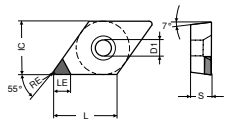
Cast iron						
Sintered steels						
Heat resistant alloys						
hardened < 45 HRC						
hardened 46–55 HRC	●	●	●	●	●	●
hardened 56–60 HRC	●	●	●	●	●	●
hardened 61–65 HRC				●	●	●

1) Machining to 60 HRC

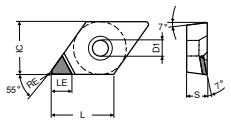
9

DCGW / DCGT

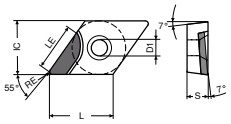
Designation	L	S	D1	IC
	mm	mm	mm	mm
DCG. 0702..	7,75	2,38	2,8	6,35
DCG. 11T3..	11,60	3,97	4,4	9,52



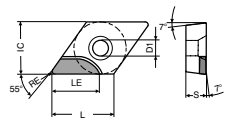
DCGW -A



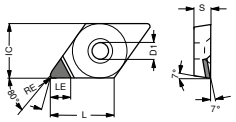
DCGT -A



DCGT-L

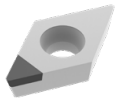
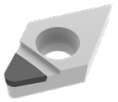
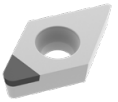
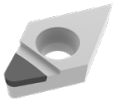
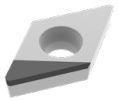
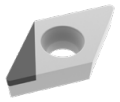


DCGT-R



DCGT -Q-A (-2Q)

DCGW / DCGT

ISO	RE	LE	-A CTDMD05		-A CTDMD05		-A CTDPD20		-A CTDPD20		-A CTDPD20		-A CTDPD20	
			MDC		MDC		PDC		PDC		PDC		PDC	
														
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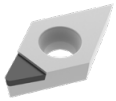
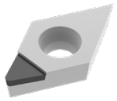
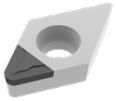
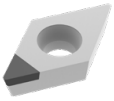
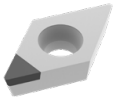
			DIAMOND DCGW		DIAMOND DCGT		DIAMOND DCGW		DIAMOND DCGT		DIAMOND DCGT		DIAMOND DCGT	
			Y0		Y0		Y0		Y0		Y0		Y0	
			Article no. 71 130 ...		Article no. 71 134 ...		Article no. 71 130 ...		Article no. 71 134 ...		Article no. 71 135 ...		Article no. 71 136 ...	
	mm	mm	EUR		EUR		EUR		EUR		EUR		EUR	
070202FN	0,2	2,5			283,00	050								
070202FN	0,2	3,7					48,64	100	48,64	100				
070204FN	0,4	2,5			283,00	052								
070204FN	0,4	3,4					48,64	102	48,64	102				
070204FRR	0,4	5,5									67,61	102		
070204FLL	0,4	5,5											67,61	102
070208FN	0,8	2,5			283,00	054								
070208FN	0,8	3,0					48,64	104	48,64	104				
070208FRR	0,8	5,0									67,61	104		
070208FLL	0,8	5,0											67,61	104
11T302FN	0,2	2,5			283,00	056								
11T302FN	0,2	3,0	260,70	056										
11T302FN	0,2	4,7					52,14	106	52,14	106				
11T304FN	0,4	2,5			283,00	058								
11T304FN	0,4	3,0	260,70	058										
11T304FN	0,4	4,3					52,14	108	52,14	108				
11T304FRR	0,4	7,5									73,02	108		
11T304FLL	0,4	7,5											73,02	108
11T308FN	0,8	2,5			283,00	060								
11T308FN	0,8	4,0					52,14	110	52,14	110				
11T308FRR	0,8	7,0									73,02	110		
11T308FLL	0,8	7,0											73,02	110
Steel														
Stainless steel														
Cast iron														
Non ferrous metals				●		●		●		●		●		●
Heat resistant alloys				○		○								

→ v_c Page 160–167

DCGT / DCGW

ISO	RE mm	LE mm	-Q-A CTDPD20 -2Q PDC		-Q-A CTDPD20 -2Q PDC		-A-CB1 CTDPD20 -CB1 PDC		-Q-A CTDPS30 -2Q PDC-S		-Q-A CTDPS30 -2Q PDC-S	
												
			F DIAMOND DCGT Y0		F DIAMOND DCGT Y0		F DIAMOND DCGT Y0		F DIAMOND DCGW Y0		F DIAMOND DCGW Y0	
			Article no. 71 144 ...		Article no. 71 145 ...		Article no. 71 310 ...		Article no. 71 138 ...		Article no. 71 139 ...	
			EUR		EUR		EUR		EUR		EUR	
070202FN	0,2	3,7					60,09	102				
070204FL	0,4	3,0			60,51	104						
070204FR	0,4	3,0	60,51	104								
070204FN	0,4	3,4					60,09	104				
070208FN	0,8	3,0					66,24	108				
11T302FR	0,2	4,0							63,91	162		
11T302FN	0,2	4,7					63,91	112				
11T304FR	0,4	4,0	63,91	114					63,91	164		
11T304FL	0,4	4,0			63,91	114					63,91	164
11T304FN	0,4	4,3					63,91	114				
11T308FN	0,8	4,0					71,10	118				

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

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DCGT

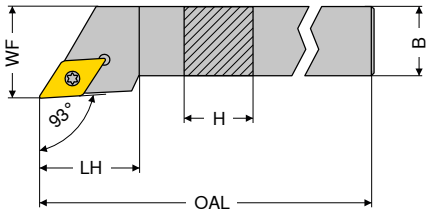
ISO	RE mm	LE mm	-Q-A CTDPS30 -2Q PDC-S		-Q-A CTDPS30 -2Q PDC-S		-A-CB1 CTDPS30 -CB1 PDC-S		-A-CB2 CTDPS30 -CB2 PDC-S		-A-CB3 CTDPU20 -CB3 PDC-S	
			F DIAMOND DCGT Y0		F DIAMOND DCGT Y0		F DIAMOND DCGT Y0		M DIAMOND DCGT Y0		R DIAMOND DCGT Y0	
			Article no. 71 144 ...		Article no. 71 145 ...		Article no. 71 310 ...		Article no. 71 311 ...		Article no. 71 312 ...	
			EUR		EUR		EUR		EUR		EUR	
070201FL	0,1	3,0			60,51	151						
070202FL	0,2	3,0			60,51	152						
070202FR	0,2	3,0	60,51	152								
070202FN	0,2	3,7					60,09	202				
070202EN	0,2	3,7							60,09	202		
070204FN	0,4	3,4					60,09	204				
070204EN	0,4	3,4							60,09	204	60,09	204
070208EN	0,8	3,0							66,24	208		
11T301FL	0,1	4,0			63,91	161						
11T301FR	0,1	4,0	63,91	161								
11T302FR	0,2	4,0	63,91	162								
11T302FL	0,2	4,0			63,91	162						
11T302FN	0,2	4,7					63,91	212				
11T302EN	0,2	4,7							63,91	212		
11T304FN	0,4	4,3					63,91	214				
11T304EN	0,4	4,3							63,91	214	63,91	214
11T308EN	0,8	4,0							71,10	218	71,10	218
11T308FN	0,8	4,0					71,10	218				
Steel												
Stainless steel												
Cast iron												
Non ferrous metals				●		●		●		●		●
Heat resistant alloys				○		○		○		○		○

DCGT

ISO	RE mm	LE mm	-A-CB1 CTDCD10 -CB1 CVD		-A-CB2 CTDCD10 -CB2 CVD	
			F DIAMOND DCGT Y0		M DIAMOND DCGT Y0	
			Article no. 71 310 ...		Article no. 71 311 ...	
			EUR		EUR	
070202FN	0,2	2,6	77,37	302		
070204FN	0,4	2,3	77,37	304		
070204EN	0,4	2,3			77,37	304
070208EN	0,8	2,0			83,62	308
11T304EN	0,4	2,3			78,63	314
11T304FN	0,4	2,3	78,63	314		
11T308EN	0,8	2,0			84,78	318
11T308FN	0,8	2,0	84,78	318		
Steel						
Stainless steel						
Cast iron						
Non ferrous metals				●		●
Heat resistant alloys						

→ v_c Page 160–167

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 2A/24 Article no. 70 685 ... EUR		Right-hand 2A/24 Article no. 70 684 ... EUR	
SDJC R/L 0808 D07	8	8	60	13,0	10	1,2	DC.. 0702	60,92	008	60,92	008
SDJC R/L 1010 E07	10	10	70	13,0	12	1,2	DC.. 0702	64,59	010	64,59	010
SDJC R/L 1212 F07	12	12	80	14,5	16	1,2	DC.. 0702	64,59	012	64,59	012
SDJC R/L 1616 H11	16	16	100	20,0	20	3,2	DC.. 11T3	80,00	016	80,00	016
SDJC R/L 2020 K11	20	20	125	20,5	25	3,2	DC.. 11T3	85,04	020	85,04	020
SDJC R/L 2525 M11	25	25	150	21,5	32	3,2	DC.. 11T3	87,97	025	87,97	025
SDJC R/L 3225 P11	32	25	170	21,5	32	3,2	DC.. 11T3	91,44	032	91,44	032

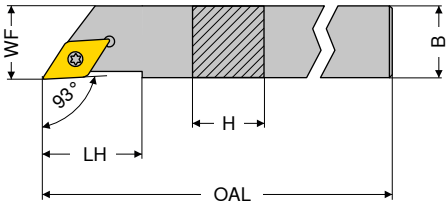
Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**

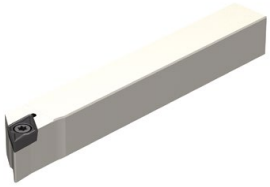
Spare parts	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat D Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
Insert										
DC.. 0702	7,80	110			2,36	112				
DC.. 11T3			8,28	398	3,14	113	7,49	106	4,64	171

9

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

▲ for sliding head lathes



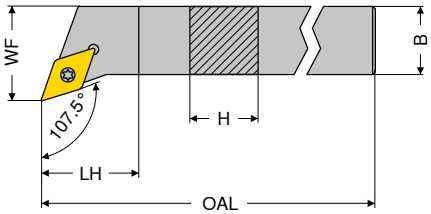


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand X0 Article no. 70 685 ... EUR		Right-hand X0 Article no. 70 684 ... EUR	
SDJC R/L 0808 H07	8	8	100	13,0	8	1,2	DC.. 0702	78,43	108	78,43	108
SDJC R/L 1010 H07	10	10	100	13,0	10	1,2	DC.. 0702	78,43	110	78,43	110
SDJC R/L 1212 H07	12	12	100	14,5	12	1,2	DC.. 0702	88,08	112	88,08	112
SDJC R/L 1616 K07	16	16	125	33,0	16	1,2	DC.. 0702	97,42	116	97,42	116
SDJC R/L 1212 H11	12	12	100	22,0	12	3,2	DC.. 11T3	88,08	212	88,08	212
SDJC R/L 1616 K11	16	16	125	33,0	16	3,2	DC.. 11T3	97,42	216	97,42	216

Spare parts		Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 72 950 ... EUR	
Insert					
DC.. 0702	T08	7,80	110	4,80	002
DC.. 11T3	T15	9,28	113	4,80	006

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



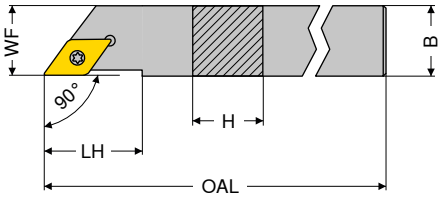
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 689 ... EUR		Right-hand 2A/24 Article no. 70 688 ... EUR	
SDHC R/L 1010 E07	10	10	70	5,5	12	1,2	DC.. 0702	64,59	010	64,59	010
SDHC R/L 1212 F07	12	12	80	12,0	16	1,2	DC.. 0702	64,59	012	64,59	012
SDHC R/L 1616 H11	16	16	100	10,4	20	3,2	DC.. 11T3	80,00	016	80,00	016
SDHC R/L 2020 K11	20	20	125	14,0	32	3,2	DC.. 11T3	85,04	020	85,04	020
SDHC R/L 2525 M11	25	25	150	20,0	32	3,2	DC.. 11T3	87,97	025	87,97	025

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat D Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 689 010 / 70 688 010	7,80	110			2,36	112				
70 689 012 / 70 688 012	7,80	110			2,36	112				
70 689 016 / 70 688 016			8,28	398	3,14	113	7,49	106	4,64	171
70 689 020 / 70 688 020			8,28	398	3,14	113	7,49	106	4,64	171
70 689 025 / 70 688 025			8,28	398	3,14	113	7,49	106	4,64	171

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

▲ for sliding head lathes

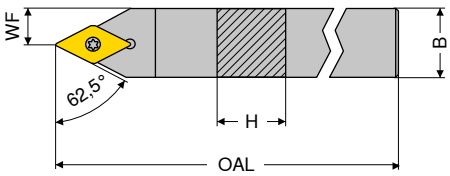


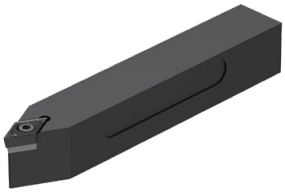
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 789 ... EUR		Right-hand 2A/24 Article no. 70 788 ... EUR	
SDAC R/L 0808 K07	8	8	125	14	8	1,2	DC.. 0702	64,59	008	64,59	008
SDAC R/L 1010 M07	10	10	150	14	10	1,2	DC.. 0702	64,59	010	64,59	010
SDAC R/L 1212 M07	12	12	150	14	12	1,2	DC.. 0702	72,25	012	72,25	012
SDAC R/L 1414 M11	14	14	150	21	14	3,2	DC.. 11T3	72,25	014	72,25	014

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A Clamping screw Article no. 70 950 ... EUR	
70 788 008 / 70 789 008	T08	7,80	110	M2,5x6	2,36	112
70 788 010 / 70 789 010	T08	7,80	110	M2,5x6	2,36	112
70 788 012 / 70 789 012	T08	7,80	110	M2,5x6	2,36	112
70 788 014 / 70 789 014	T15	9,28	113	M3,5x11	3,14	113

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



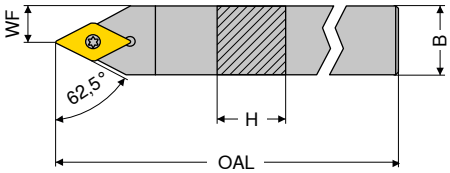


ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 680 ... EUR	
SDNC N 0808 D07	8	8	60	4,0	1,2	DC.. 0702	60,92	008
SDNC N 1010 E07	10	10	70	5,0	1,2	DC.. 0702	64,59	010
SDNC N 1212 F07	12	12	80	6,0	1,2	DC.. 0702	64,59	012
SDNC N 1616 H11	16	16	100	8,0	3,2	DC.. 11T3	80,00	016
SDNC N 2020 K11	20	20	125	10,0	3,2	DC.. 11T3	85,04	020
SDNC N 2525 M11	25	25	150	12,5	3,2	DC.. 11T3	87,97	025

Spare parts	Y7 Key D		2A/28 Combination Key		2A Clamping screw		2A/28 Solid Carbide Seat D		2A/28 Threaded sleeve	
for Article no.	Article no. 80 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR	
70 680 008	7,80	110			2,36	112				
70 680 010	7,80	110			2,36	112				
70 680 012	7,80	110			2,36	112				
70 680 016			8,28	398	3,14	113	7,49	106	4,64	171
70 680 020			8,28	398	3,14	113	7,49	106	4,64	171
70 680 025			8,28	398	3,14	113	7,49	106	4,64	171

9

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

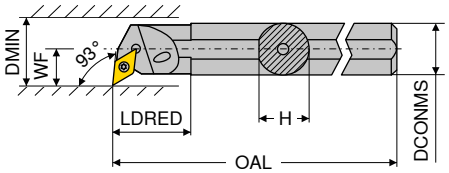


ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 784 ... EUR	
SDNC N 0808 K07	8	8	125	4	1,2	DC.. 0702	60,92	008
SDNC N 1010 M07	10	10	150	5	1,2	DC.. 0702	64,59	010
SDNC N 1212 M07	12	12	150	6	1,2	DC.. 0702	72,25	012
SDNC N 1414 M11	14	14	150	7	3,2	DC.. 11T3	72,25	014

Spare parts		Y7 Key D Article no. 80 950 ...			2A Clamping screw Article no. 70 950 ...	
for Article no.		EUR			EUR	
70 784 008	T08	7,80	110	M2,5x6	2,36	112
70 784 010	T08	7,80	110	M2,5x6	2,36	112
70 784 012	T08	7,80	110	M2,5x6	2,36	112
70 784 014	T15	9,28	113	M3,5x11	3,14	113

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

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



Illustrations show right-hand versions

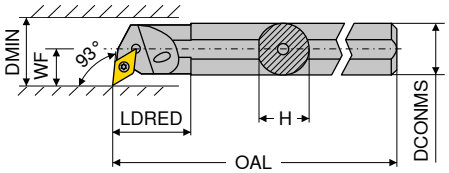
ISO designation	DCONMS	H	OAL	LDRED	WF	DMIN	torque moment	Insert	Left-hand 2A/24 Article no. 70 737 ...		Right-hand 2A/24 Article no. 70 736 ...	
	mm	mm	mm	mm	mm	mm	Nm		EUR		EUR	
S12Q SDUC R/L 07	12	11,0	180		9	17	1,2	DC.. 0702	96,57	**012**	96,57	**012**
A12K SDUC R/L 07	12	11,5	125	22	9	16	1,2	DC.. 0702	96,57	**212**	96,57	**212**
A16M SDUC R/L 07	16	15,0	150	29	11	20	1,2	DC.. 0702	98,67	**216**	98,67	**216**
S16R SDUC R/L 07	16	15,0	200		11	21	1,2	DC.. 0702	98,67	**016**	98,67	**016**
A20Q SDUC R/L 07	20	18,5	180	32	13	25	1,2	DC.. 0702	123,00	**220**	123,00	**220**
S20S SDUC R 07	20	18,0	250		13	25	1,2	DC.. 0702			123,00	**020**
S20S SDUC R 11	20	18,0	250		13	25	3,2	DC.. 11T3			123,00	**120**
A20Q SDUC R/L 11	20	18,5	180	32	13	25	3,2	DC.. 11T3	123,00	**320**	123,00	**320**
A25R SDUC R/L 11	25	23,0	200	36	17	32	3,2	DC.. 11T3	141,40	**325**	141,40	**325**
S25T SDUC R/L 11	25	23,0	300		17	32	3,2	DC.. 11T3	141,40	**125**	141,40	**125**
A32S SDUC R/L 11	32	30,0	250	50	22	40	3,2	DC.. 11T3	194,40	**332**	194,40	**332**
S32U SDUC R 11	32	30,0	350		22	40	3,2	DC.. 11T3			194,40	**132**
A40T SDUC R/L 11	40	38,0	300	60	27	50	3,2	DC.. 11T3	233,40	**340**	233,40	**340**

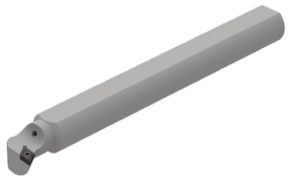
Tool holders with HSK-T or PSC interface can be found in → **Chapter 16.**

Spare parts	Y7 Key D		2A/28 Combination Key		2A Clamping screw		2A/28 Solid Carbide Seat D		2A/28 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.	EUR		EUR		EUR		EUR		EUR	
70 736 012 / 70 737 012	7,80	**110**			2,36	**112**				
70 736 212 / 70 737 212	7,80	**110**			2,36	**112**				
70 736 216 / 70 737 216	7,80	**110**			2,36	**112**				
70 736 016 / 70 737 016	7,80	**110**			2,36	**112**				
70 736 220 / 70 737 220	7,80	**110**			2,36	**112**				
70 736 020	7,80	**110**			2,36	**112**				
70 736 120	9,28	**113**			3,14	**110**				
70 736 320 / 70 737 320	9,28	**113**			3,14	**110**				
70 736 325 / 70 737 325	9,28	**113**			3,14	**113**				
70 736 125 / 70 737 125			8,28	**398**	3,14	**113**	7,49	**106**	4,64	**171**
70 736 332 / 70 737 332			8,28	**398**	3,14	**113**	7,49	**106**	4,64	**171**
70 736 132			8,28	**398**	3,14	**113**	7,49	**106**	4,64	**171**
70 736 340 / 70 737 340			8,28	**398**	3,14	**113**	7,49	**106**	4,64	**171**

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

▲ with carbide core





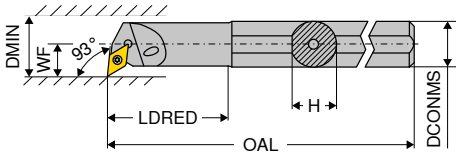
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 739 ... EUR		Right-hand 2A Article no. 70 738 ... EUR	
E-A10H SDUC R/L 07	10	9	100	28	8	13	1,2	DC.. 0702	179,40	210	179,40	210
E-A12K SDUC R/L 07	12	11	125	18	9	18	1,2	DC.. 0702	179,40	212	179,40	212
E-A16M SDUC R/L 07	16	15	150	30	11	22	1,2	DC.. 0702	285,20	216	285,20	216
E-A20Q SDUC R/L 07	20	18	180	38	13	26	1,2	DC.. 0702	357,60	220	357,60	220
E-A20Q SDUC R/L 11	20	18	180	38	13	26	3,2	DC.. 11T3	378,60	320	378,60	320
E-A25R SDUC R/L 11	25	23	200	38	17	34	3,2	DC.. 11T3	545,30	225	545,30	225
E-A32S SDUC R/L 11	32	30	250	43	22	39	3,2	DC.. 11T3	800,10	232	800,10	232

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 738 210 / 70 739 210	7,80	110	2,36	112
70 738 212 / 70 739 212	7,80	110	2,36	112
70 738 216 / 70 739 216	7,80	110	2,36	112
70 738 220 / 70 739 220	7,80	110	2,36	112
70 738 320 / 70 739 320	9,28	113	3,14	449
70 738 225 / 70 739 225	9,28	113	3,14	449
70 738 232 / 70 739 232	9,28	113	3,14	449

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

▲ with carbide core



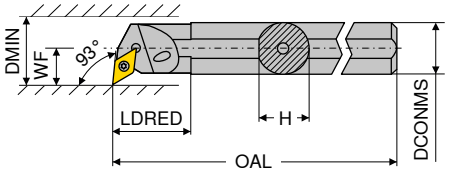
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 739 ... EUR		Right-hand 2A Article no. 70 738 ... EUR	
E-A0810H SDUC R/L 07	10	9	100	22	7	12,5	1,2	DC.. 0702	223,40	410	223,40	410
E-A1012K SDUC R/L 07	12	11	125	28	9	15,5	1,2	DC.. 0702	223,40	412	223,40	412
E-A1216M SDUC R/L 07	16	15	150	36	11	19,5	1,2	DC.. 0702	223,40	416	223,40	416

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 738 410 / 70 739 410	7,80	110	2,36	112
70 738 412 / 70 739 412	7,80	110	2,36	112
70 738 416 / 70 739 416	7,80	110	2,36	112

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

▲ Type: Solid carbide

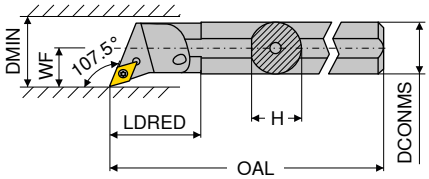


Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 739 ... EUR		Right-hand 2A/24 Article no. 70 738 ... EUR	
E12Q SDUC R/L 07	12	11,5	180	26	9	16	1,2	DC.. 0702	333,20	012	333,20	012
E16R SDUC R/L 07	16	15,0	200	34	11	20	1,2	DC.. 0702	435,40	016	435,40	016
E20S SDUC R/L 11	20	18,5	250	38	13	25	3,2	DC.. 11T3	543,90	120	543,90	120
E25T SDUC R/L 11	25	23,0	300	43	17	32	3,2	DC.. 11T3	959,10	125	959,10	125

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 739 012 / 70 738 012	7,80	110	2,36	112
70 739 016 / 70 738 016	7,80	110	2,36	112
70 739 120 / 70 738 120	9,28	113	3,14	304
70 739 125 / 70 738 125	9,28	113	3,14	113

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



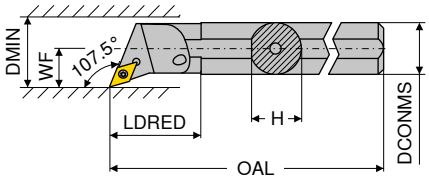
Illustrations show right-hand versions

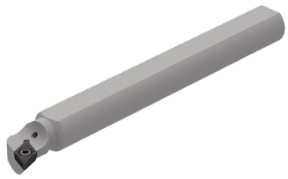
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 741 ... EUR		Right-hand 2A Article no. 70 740 ... EUR	
A10H SDQC R/L 07	10	9,0	100	22	7	12,5	1,2	DC.. 0702	96,57	210	96,57	210
A12K SDQC R/L 07	12	11,5	125	22	9	16,0	1,2	DC.. 0702	96,57	212	96,57	212
A16M SDQC R/L 07	16	15,0	150	29	11	20,0	1,2	DC.. 0702	98,67	216	98,67	216
A20Q SDQC R/L 07	20	18,5	180	32	13	25,0	1,2	DC.. 0702	123,00	220	123,00	220
A25R SDQC R/L 11	25	23,0	200	36	17	32,0	3,2	DC.. 11T3	141,40	225	141,40	225
A32S SDQC R/L 11	32	30,0	250	50	22	40,0	3,2	DC.. 11T3	194,40	232	194,40	232
A40T SDQC R/L 11	40	38,0	300	60	27	50,0	3,2	DC.. 11T3	233,40	240	233,40	240

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat D Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 740 210 / 70 741 210	7,80	110			2,36	112				
70 740 212 / 70 741 212	7,80	110			2,36	112				
70 740 216 / 70 741 216	7,80	110			2,36	112				
70 740 220 / 70 741 220	7,80	110			2,36	112				
70 740 225 / 70 741 225			8,28	398	3,14	113	7,49	106	4,64	171
70 740 232 / 70 741 232			8,28	398	3,14	113	7,49	106	4,64	171
70 740 240 / 70 741 240			8,28	398	3,14	113	7,49	106	4,64	171

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

▲ with carbide core





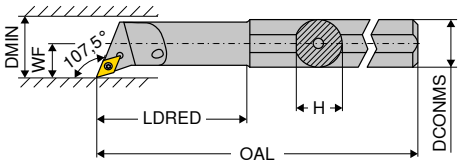
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 751 ... EUR		Right-hand 2A Article no. 70 750 ... EUR	
E-A12K SDQC R/L 07	12	11	125	24	9	18	1,2	DC.. 0702	179,40	012	179,40	012
E-A16M SDQC R/L 07	16	15	150	30	11	22	1,2	DC.. 0702	306,20	016	306,20	016
E-A20Q SDQC R/L 07	20	18	180	38	13	26	1,2	DC.. 0702	357,60	020	357,60	020
E-A20Q SDQC R/L 11	20	18	180	38	13	26	3,2	DC.. 11T3	378,60	120	378,60	120
E-A25R SDQC R/L 11	25	23	200	38	17	34	3,2	DC.. 11T3	605,10	025	605,10	025
E-A32S SDQC R/L 11	32	30	250	43	22	39	3,2	DC.. 11T3	800,10	032	800,10	032

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 750 012 / 70 751 012	7,80	110	2,36	112
70 750 016 / 70 751 016	7,80	110	2,36	112
70 750 020 / 70 751 020	7,80	110	2,36	112
70 750 120 / 70 751 120	9,28	113	3,14	449
70 750 025 / 70 751 025	9,28	113	3,14	449
70 750 032 / 70 751 032	9,28	113	3,14	449

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

▲ with carbide core

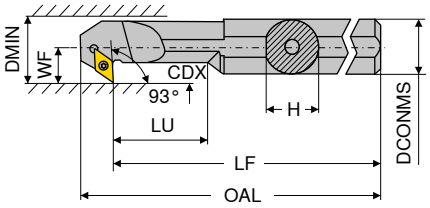


Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 751 ... EUR		Right-hand 2A Article no. 70 750 ... EUR	
E-A0810H SDQC R/L 07	10	9	100	22	7	12,5	1,2	DC.. 0702	223,40	210	223,40	210
E-A1012K SDQC R/L 07	12	11	125	28	9	15,5	1,2	DC.. 0702	223,40	212	223,40	212
E-A1216M SDQC R/L 07	16	15	150	36	11	19,5	1,2	DC.. 0702	223,40	216	223,40	216

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 750 210 / 70 751 210	7,80	110	2,36	112
70 750 212 / 70 751 212	7,80	110	2,36	112
70 750 216 / 70 751 216	7,80	110	2,36	112

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



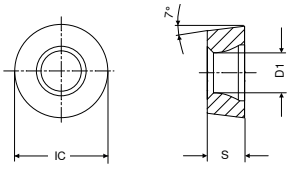
Illustrations show right-hand versions

ISO designation	DCONMS	H	LF	OAL	LU	WF	DMIN	CDX	torque moment	Insert	Left-hand 2A/24 Article no. 70 733 ... EUR		Right-hand 2A/24 Article no. 70 732 ... EUR	
	mm	mm	mm	mm	mm	mm	mm	mm	Nm					
A12K SDXC R/L 07	12	11,5	125	137,0	24	9	16	4,5	1,2	DC.. 0702	96,57	**212**	96,57	**212**
A16M SDXC R/L 07	16	15,0	150	162,0	36	11	20	4,5	1,2	DC.. 0702	98,67	**216**	98,67	**216**
A20Q SDXC R/L 11	20	18,5	180	196,5	40	13	25	6,5	3,2	DC.. 11T3	123,00	**220**	123,00	**220**
A25R SDXC R/L 11	25	23,0	200	216,8	50	17	32	9,5	3,2	DC.. 11T3	141,40	**225**	141,40	**225**

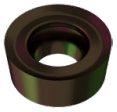
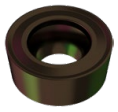
Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 733 212 / 70 732 212	7,80	**110**	2,36	**112**
70 733 216 / 70 732 216	7,80	**110**	2,36	**112**
70 733 220 / 70 732 220	9,28	**113**	3,14	**304**
70 733 225 / 70 732 225	9,28	**113**	3,14	**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
		1A/08	1A/08	1A/08	1A/08	1A/08	1A/08	1A/90
ISO	RE	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 ...
	mm	EUR	EUR	EUR	EUR	EUR	EUR	EUR
0602MOEN	3,0		8,07 502	8,07 702				
0602MOFN	3,0							6,03 600
0803MOEN	4,0		8,99 512	8,99 712				
0803MOFN	4,0							6,73 602
1003MOFN	5,0							6,73 604
1003MOSN	5,0					7,78 514	7,78 714	
1204MOSN	6,0				9,22 328	9,22 526	9,22 726	
1606MOEN	8,0	18,13 038						
1606MOSN	8,0				18,13 340	18,13 538	18,13 738	
2006MOSN	10,0					24,95 550	24,95 750	
2507MOSN	12,5				40,18 36200	40,18 562	40,18 762	
Steel		●	●	●	●	●	●	
Stainless steel		○	○	○	○	○	○	
Cast iron		●	○		○	○		○
Non ferrous metals								●
Heat resistant alloys				○			○	○

9

RCGT

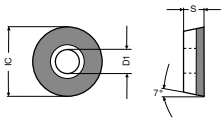
		-27 CWN15		-27 AMZ	
		-AL CWN15		-AL AMZ	
		M		M	
		RCGT		RCGT	
		1A		1A/90	
ISO	RE mm	Article no. 70 266 ...		Article no. 70 266 ...	
		EUR		EUR	
0602MOFN	3	8,03	300		
0803MOFN	4	8,03	302	7,87	502

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

→ v_c Page 144–159

RCGT

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



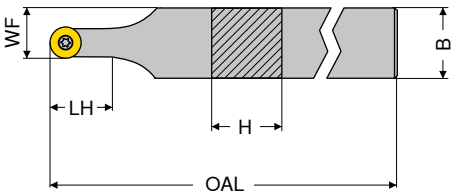
RCGT-F

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	
			Y0		Y0		NEW Y0	
ISO	RE	LE	Article no. 71 315 ...		Article no. 71 315 ...		Article no. 71 316 ...	
	mm	mm	EUR		EUR		EUR	
0602M0EN	3	6					146,20	202
0602M0FN	3	6	146,20	102	146,20	202		
10T3M0EN	5	10					191,80	204
10T3M0FN	5	10	191,80	104	191,80	204		
Steel								
Stainless steel								
Cast iron								
Non ferrous metals				●		●		●
Heat resistant alloys						○		○

9

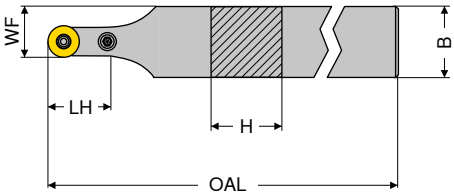
MaxiLock-S – SRDC 0° – Toolholder with screw clamping



ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 708 ... EUR	
SRDC N 1212 F06	12	12	80	12,4	9,0	1,2	RC.. 0602 MO	73,60	012
SRDC N 1616 H06	16	16	100	12,4	11,0	1,2	RC.. 0602 MO	76,33	016
SRDC N 2020 K06	20	20	125	12,4	13,0	1,2	RC.. 0602 MO	85,04	020
SRDC N 2525 M06	25	25	150	12,4	15,5	1,2	RC.. 0602 MO	87,97	025
SRDC N 1616 H08	16	16	100	16,4	12,0	1,8	RC.. 0803 MO	76,33	116
SRDC N 2020 K08	20	20	125	16,4	14,0	1,8	RC.. 0803 MO	85,04	120
SRDC N 2525 M08	25	25	150	16,4	16,5	1,8	RC.. 0803 MO	87,97	125
SRDC N 1616 H10	16	16	100	20,3	13,0	3,2	RC.. 1003 MO	76,33	216
SRDC N 2020 K10	20	20	125	20,3	15,0	3,2	RC.. 1003 MO	85,04	220
SRDC N 2525 M10	25	25	150	20,3	17,5	3,2	RC.. 1003 MO	87,97	225

Spare parts	Y7 Key D		2A/28 Combination Key		2A Clamping screw		2A/28 Solid carbide support R		2A/28 Threaded sleeve	
for Article no.	Article no. 80 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR	
70 708 012	7,80	110			2,36	112				
70 708 016	7,80	110			2,36	112				
70 708 020	7,80	110			2,36	112				
70 708 025	7,80	110			2,36	112				
70 708 116	7,80	110			2,57	115				
70 708 120	7,80	110			2,57	115				
70 708 125	7,80	110			2,57	115				
70 708 216			8,28	398	3,14	113	12,37	117	4,64	171
70 708 220			8,28	398	3,14	113	12,37	117	4,64	171
70 708 225			8,28	398	3,14	113	12,37	117	4,64	171

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

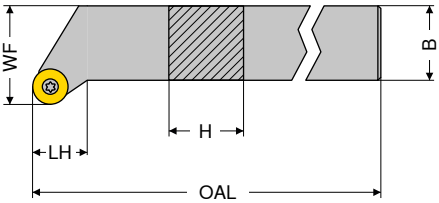


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 544 ... EUR	
PRDC N 2525 M12	25	25	150	24	18,5	3	RCMT 1204	87,97	**025**
PRDC N 3225 P12	32	25	170	24	18,5	3	RCMT 1204	94,37	**032**
PRDC N 3225 P16	32	25	170	28	20,5	4	RCMT 1606	94,37	**132**
PRDC N 3225 P20	32	32	170	32	26,0	5	RCMT 2006	116,50	**23200**
PRDC N 4040 S25	40	40	250	42	32,5	6	RCMT 2507	144,90	**04000**

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

Spare parts		2A/28 Key I		2A/28 Shim		2A/28 Assembly pin		2A/28 Lever		2A/28 Clamping screw		2A/28 Solid carbide support R	
for Article no.		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR		Article no. 70 950 ... EUR	
70 544 025	SW2,5	2,45	**175**	1,76	**197**	1,22	**191**	15,52	**178**	3,19	**208**	7,09	**215**
70 544 032	SW2,5	2,45	**175**	1,76	**197**	1,22	**191**	15,52	**178**	3,19	**208**	7,09	**215**
70 544 132	SW3	2,45	**176**	1,37	**196**	1,22	**192**	16,06	**387**	3,50	**390**	12,59	**384**
70 544 23200	SW2	2,45	**177**	1,12	**391**	1,22	**394**	15,23	**28100**	3,44	**28500**	17,04	**27400**
70 544 04000	SW4	2,57	**396**	1,76	**392**	1,22	**395**	18,75	**28400**	7,48	**28600**	31,95	**27500**

MaxiLock-S – SRGC – Toolholder with screw clamping



Illustrations show right-hand versions

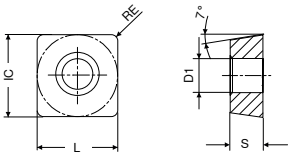
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 713 ... EUR		Right-hand 2A/24 Article no. 70 712 ... EUR	
SRGC R/L 1212 F06	12	12	80	10,0	16	1,2	RC.. 0602 MO	73,60	**012**	73,60	**012**
SRGC R 1616 H06	16	16	100	10,0	20	1,2	RC.. 0602 MO			76,33	**016**
SRGC R/L 2020 K06	20	20	125	11,5	25	1,2	RC.. 0602 MO	85,04	**020**	85,04	**020**
SRGC R/L 2525 M06	25	25	150	15,0	32	1,2	RC.. 0602 MO	87,97	**025**	87,97	**025**
SRGC R/L 1616 H08	16	16	100	11,0	20	1,8	RC.. 0803 MO	76,33	**116**	76,33	**116**
SRGC R 2020 K08	20	20	125	13,0	25	1,8	RC.. 0803 MO			85,04	**120**
SRGC R/L 2525 M08	25	25	150	16,0	32	1,8	RC.. 0803 MO	87,97	**125**	87,97	**125**
SRGC R/L 1616 H10	16	16	100	12,0	20	3,2	RC.. 1003 MO	76,33	**216**	76,33	**216**
SRGC R/L 2020 K10	20	20	125	13,5	25	3,2	RC.. 1003 MO	85,04	**220**	85,04	**220**
SRGC R/L 2525 M10	25	25	150	17,0	32	3,2	RC.. 1003 MO	87,97	**225**	87,97	**225**

Spare parts for Article no.		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid carbide support R Article no. 70 950 ... EUR			2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 712 012 / 70 713 012	M2,5x6	2,36	**112**					
70 712 016	M2,5x6	2,36	**112**					
70 712 020 / 70 713 020	M2,5x6	2,36	**112**					
70 712 025 / 70 713 025	M2,5x6	2,36	**112**					
70 712 116 / 70 713 116	M3x7,3	2,57	**115**					
70 712 120	M3x7,3	2,57	**115**					
70 712 125 / 70 713 125	M3x7,3	2,57	**115**					
70 712 216 / 70 713 216	M3,5x11	3,14	**113**	12,37	**117**	M3,5	4,64	**171**
70 712 220 / 70 713 220	M3,5x11	3,14	**113**	12,37	**117**	M3,5	4,64	**171**
70 712 225 / 70 713 225	M3,5x11	3,14	**113**	12,37	**117**	M3,5	4,64	**171**

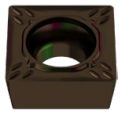
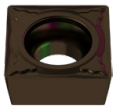
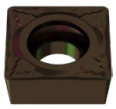
Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A/28 Combination Key Article no. 70 950 ... EUR	
70 712 012 / 70 713 012	T08	7,80	**110**			
70 712 016	T08	7,80	**110**			
70 712 020 / 70 713 020	T08	7,80	**110**			
70 712 025 / 70 713 025	T08	7,80	**110**			
70 712 116 / 70 713 116	T08	7,80	**110**			
70 712 120	T08	7,80	**110**			
70 712 125 / 70 713 125	T08	7,80	**110**			
70 712 216 / 70 713 216				T15/SW	8,28	**398**
70 712 220 / 70 713 220				T15/SW	8,28	**398**
70 712 225 / 70 713 225				T15/SW	8,28	**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		F		F		F		F		F		F	
		CERMET SCGT		CERMET SCGT		CERMET SCGT		SCMT		CERMET SCMT		SCMT		SCMT	
		1A/78		1A/78		1A/78		1A/08		1A/78		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
09T304EN	0,4	15,10	004	13,86	902			9,70	504	9,68	004	9,70	304		
09T308EN	0,8	15,10	006	13,86	904	13,86	852	9,70	506	9,68	006	9,70	306		
120408EN	0,8							13,66	518					13,66	718
Steel		●		●		●		●		●		●		●	
Stainless steel		○						○		○		○		○	
Cast iron		○		○		○		○		○		○			
Non ferrous metals															
Heat resistant alloys														○	

9

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		M		M		M		M		M		M	
		SCMT		SCMT		SCMT		SCMT		SCMT		SCMX		SCMT	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
09T304EN	0,4	9,70	004	9,70	504	9,70	304	9,70	504	9,70	704				
09T308EN	0,8	9,70	006	9,70	506	9,70	306	9,70	506	9,70	706			9,68	442
120408EN	0,8	13,66	018	13,66	518	13,66	318	13,66	518	13,66	718	12,42	718	13,66	444
120412EN	1,2	13,66	020	13,66	520			13,66	520						
Steel		●		●		●		●		●		●		○	
Stainless steel		○				○		○		○		○		●	
Cast iron		●		●		○		○							
Non ferrous metals															
Heat resistant alloys										○		○		●	

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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	
		1A/08		1A/90		1A/90		1A/90		1A	
ISO	RE	Article no. 75 216 ...		Article no. 70 283 ...		Article no. 70 283 ...		Article no. 70 270 ...		Article no. 70 270 ...	
	mm	EUR		EUR		EUR		EUR		EUR	
09T304FN	0,4							10,91	600	13,41	300
09T308EN	0,8	9,70	206								
09T308FN	0,8							10,91	602	13,41	302
120408EN	0,8	13,66	218								
120408FN	0,8			13,31	634	15,78	554	12,75	604	15,89	304

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

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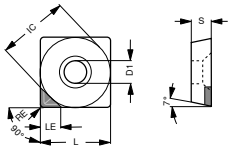
SCGT

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



SCGT-A

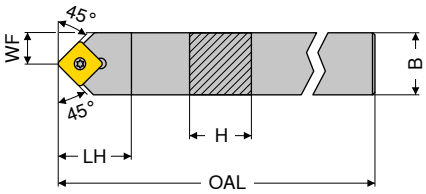
SCGT

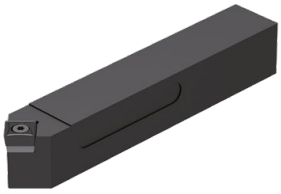
ISO	RE	LE	-A-CB1 CTDPD20		-A-CB2 CTDPS30		-A-CB3 CTDPU20	
			-CB1 PDC		-CB2 PDC-S		-CB3 PDC-S	
			F		M		R	
			DIAMOND SCGT		DIAMOND SCGT		DIAMOND SCGT	
			Y0		NEW Y0		Y0	
	mm	mm	Article no. 71 320 ...		Article no. 71 321 ...		Article no. 71 322 ...	
			EUR		EUR		EUR	
09T304EN	0,4	4,4			66,24	214	66,24	214
09T304FN	0,4	4,4	66,24	114				
09T308EN	0,8	4,3			71,10	218	71,10	218
09T308FN	0,8	4,3	71,10	118				

	-A-CB1 CTDPD20	-A-CB2 CTDPS30	-A-CB3 CTDPU20
Steel			
Stainless steel			
Cast iron			
Non ferrous metals	●	●	●
Heat resistant alloys		○	○

9

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

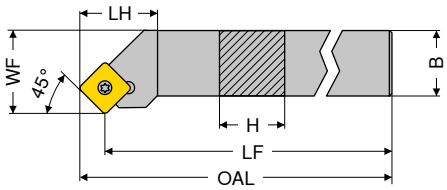




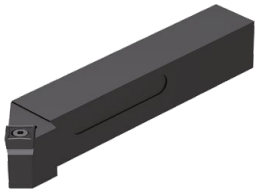
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 656 ... EUR	
SSDC N 1212 F09	12	12	80	16	6,0	3,2	SC.. 09T3..	64,59	012
SSDC N 1616 H09	16	16	100	20	8,0	3,2	SC.. 09T3..	80,00	016
SSDC N 2020 K09	20	20	125	20	10,0	3,2	SC.. 09T3..	85,04	020
SSDC N 1616 H12	16	16	100	25	8,0	5	SC.. 1204..	80,00	116
SSDC N 2020 K12	20	20	125	25	10,0	5	SC.. 1204..	85,04	120
SSDC N 2525 M12	25	25	150	25	12,5	5	SC.. 1204..	87,97	125

Spare parts	Y7 Key D		2A/28 Combination Key		2A/28 Clamping screw		2A/28 Solid Carbide support S		2A/28 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.	EUR		EUR		EUR		EUR		EUR	
70 656 012	9,28	113			3,14	113				
70 656 016			8,28	398	3,14	113	9,67	167	4,64	171
70 656 020			8,28	398	3,14	113	9,67	167	4,64	171
70 656 116			8,28	398	2,57	114	12,37	168	4,64	170
70 656 120			8,28	398	2,57	114	12,37	168	4,64	170
70 656 125			8,28	398	2,57	114	12,37	168	4,64	170

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



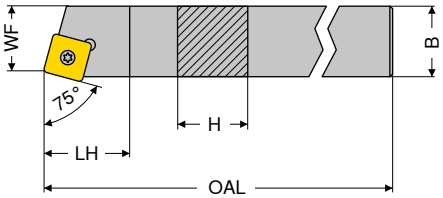
Illustrations show right-hand versions



ISO designation	H mm	B mm	LF mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 661 ... EUR		Right-hand 2A/24 Article no. 70 660 ... EUR	
SSSC R/L 1212 F09	12	12	80	86,40	18	16	3,2	SC.. 09T3..	64,59	012	64,59	012
SSSC R/L 1616 H09	16	16	100	106,40	20	20	3,2	SC.. 09T3..	80,00	016	80,00	016
SSSC R/L 2020 K09	20	20	125	131,40	20	25	3,2	SC.. 09T3..	85,04	020	85,04	020
SSSC R/L 1616 H12	16	16	100	108,63	25	20	5	SC.. 1204..	80,00	116	80,00	116
SSSC R/L 2020 K12	20	20	125	133,63	25	25	5	SC.. 1204..	85,04	120	85,04	120
SSSC R/L 2525 M12	25	25	150	158,63	25	32	5	SC.. 1204..	87,97	125	87,97	125
SSSC R 3225 P12	32	25	170	178,63	25	32	5	SC.. 1204..			91,44	132

Spare parts	Y7 Key D		2A/28 Combination Key		2A/28 Clamping screw		2A/28 Solid Carbide support S		2A/28 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.	EUR		EUR		EUR		EUR		EUR	
70 661 012 / 70 660 012	9,28	113			3,14	113				
70 661 016 / 70 660 016			8,28	398	3,14	113	9,67	167	4,64	171
70 661 020 / 70 660 020			8,28	398	3,14	113	9,67	167	4,64	171
70 661 116 / 70 660 116			8,28	398	2,57	114	12,37	168	4,64	170
70 661 120 / 70 660 120			8,28	398	2,57	114	12,37	168	4,64	170
70 661 125 / 70 660 125			8,28	398	2,57	114	12,37	168	4,64	170
70 660 132			8,28	398	2,57	114	12,37	168	4,64	170

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

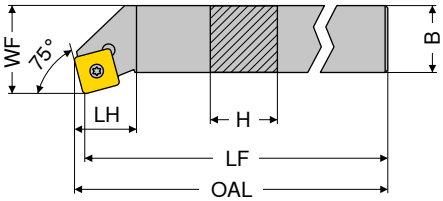


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 665 ... EUR		Right-hand 2A/24 Article no. 70 664 ... EUR	
SSBC R/L 1616 H09	16	16	100	20	13	3,2	SC.. 09T3..	80,00	**016**	80,00	**016**
SSBC R 2020 K09	20	20	125	20	17	3,2	SC.. 09T3..			85,04	**020**
SSBC R/L 2020 K12	20	20	125	20	17	5	SC.. 1204..	85,04	**120**	85,04	**120**
SSBC R/L 2525 M12	25	25	150	20	22	5	SC.. 1204..	87,97	**125**	87,97	**125**

Spare parts	Y7 Key D		2A/28 Combination Key		2A/28 Clamping screw		2A/28 Solid Carbide support S		2A/28 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.	EUR		EUR		EUR		EUR		EUR	
70 665 016 / 70 664 016	9,28	**113**	8,28	**398**	3,14	**113**	9,67	**167**	4,64	**171**
70 664 020	9,28	**113**	8,28	**398**	3,14	**113**	9,67	**167**	4,64	**171**
70 665 120 / 70 664 120	9,28	**113**	8,28	**398**	2,57	**114**	12,37	**168**	4,64	**170**
70 665 125 / 70 664 125	9,28	**113**	8,28	**398**	2,57	**114**	12,37	**168**	4,64	**170**

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

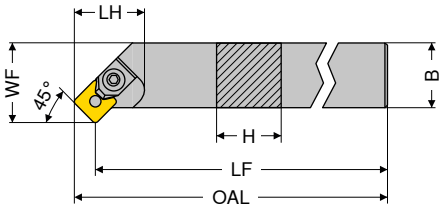


Illustrations show right-hand versions

ISO designation	H mm	B mm	LF mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 669 ... EUR		Right-hand 2A/24 Article no. 70 668 ... EUR	
SSKC R/L 1616 H09	16	16	100	102,3	22	20	3,2	SC.. 09T3..	80,00	**016**	80,00	**016**
SSKC R/L 2020 K09	20	20	125	127,3	22	25	3,2	SC.. 09T3..	85,04	**020**	85,04	**020**
SSKC R 2020 K12	20	20	125	127,3	23	25	5	SC.. 1204..			85,04	**120**
SSKC R 2525 M12	25	25	150	153,3	23	32	5	SC.. 1204..			87,97	**125**

Spare parts	Y7 Key D		2A/28 Combination Key		2A/28 Clamping screw		2A/28 Solid Carbide support S		2A/28 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.	EUR		EUR		EUR		EUR		EUR	
70 668 016 / 70 669 016	9,28	**113**	8,28	**398**	3,14	**113**	9,67	**167**	4,64	**171**
70 668 020 / 70 669 020	9,28	**113**	8,28	**398**	3,14	**113**	9,67	**167**	4,64	**171**
70 668 120	9,28	**113**	8,28	**398**	2,57	**114**	12,37	**168**	4,64	**170**
70 668 125	9,28	**113**	8,28	**398**	2,57	**114**	12,37	**168**	4,64	**170**

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

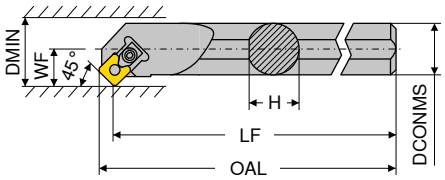


Illustrations show right-hand versions

ISO designation	H	B	LF	OAL	LH	WF	torque moment	Insert	Left-hand 2A/24 Article no. 70 589 ...		Right-hand 2A/24 Article no. 70 588 ...	
	mm	mm	mm	mm	mm	mm	Nm		EUR		EUR	
MSSC R/L 2020 K12	20	20	125	133,65	32	25	5	SCMX 1204	92,37	**020**	92,37	**020**
MSSC R/L 2525 M12	25	25	150	158,65	28	32	5	SCMX 1204	95,73	**025**	95,73	**025**
MSSC R/L 3225 P12	32	25	170	178,65	28	32	5	SCMX 1204	98,67	**032**	98,67	**032**

Spare parts		Y7 Key D		2A/28 Dowel pin		2A/28 Clamping Element		2A/28 Wedge		2A/28 Solid Carbide support S	
		Article no. 80 950 ...		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...		Article no. 70 950 ...	
for Article no.		EUR		EUR		EUR		EUR		EUR	
70 588 020 / 70 589 020	T20	9,95	**114**	4,09	**153**	11,95	**159**	7,49	**150**	12,15	**140**
70 588 025 / 70 589 025	T20	9,95	**114**	4,09	**153**	11,95	**159**	7,49	**150**	12,15	**140**
70 588 032 / 70 589 032	T20	9,95	**114**	4,09	**153**	11,95	**159**	7,49	**150**	12,15	**140**

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



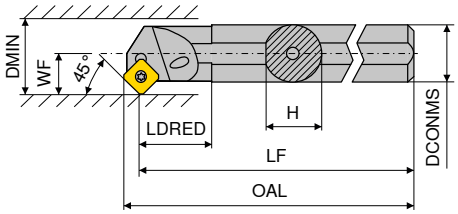
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 625 ... EUR		Right-hand 2A/24 Article no. 70 624 ... EUR	
S32S MSSC R/L 12	32	30	250	258	22	40	5	SCMX 1204	226,00	032	226,00	032

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR		2A/28 Dowel pin Article no. 70 950 ... EUR		2A/28 Clamping Element Article no. 70 950 ... EUR		2A/28 Wedge Article no. 70 950 ... EUR		2A/28 Solid Carbide support S Article no. 70 950 ... EUR	
70 625 032 / 70 624 032	T20	9,95	114	5,03	155	11,95	163	7,49	150	12,15	147

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

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

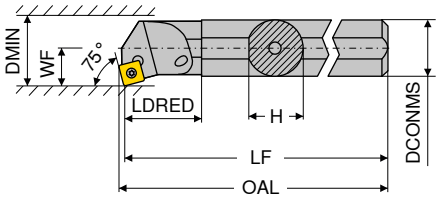


Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 721 ... EUR		Right-hand 2A/24 Article no. 70 720 ... EUR	
S16R SSSC R 09	16	15,00	200	206,0	13,97	11	20	3,2	SC.. 09T3..			98,67	016
A16M SSSC R/L 09	16	15,25	150	156,0	29,00	11	20	3,2	SC.. 09T3..	98,67	216	98,67	216
A20Q SSSC R/L 09	20	19,00	180	186,0	32,00	13	25	3,2	SC.. 09T3..	123,00	220	123,00	220
A25R SSSC R/L 09	25	24,50	200	206,0	36,00	17	32	3,2	SC.. 09T3..	141,40	225	141,40	225
A32S SSSC R/L 12	32	31,00	250	258,3	50,00	22	40	5	SC.. 1204..	194,40	232	194,40	232
A40T SSSC R/L 12	40	39,00	300	308,1	60,00	27	50	5	SC.. 1204..	233,40	240	233,40	240

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide support S Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 720 016	9,28	113			3,14	110				
70 720 216 / 70 721 216	9,28	113			3,14	110				
70 720 220 / 70 721 220	9,28	113			3,14	304				
70 720 225 / 70 721 225	9,28	113			3,14	304				
70 720 232 / 70 721 232			8,28	398	2,57	114	12,37	168	4,64	170
70 720 240 / 70 721 240			8,28	398	2,57	114	12,37	168	4,64	170

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



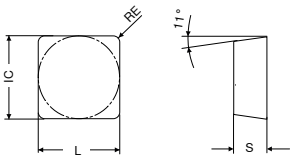
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	LF mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 725 ... EUR		Right-hand 2A/24 Article no. 70 724 ... EUR	
A16M SSKC R/L 09	16	15,0	150	152,4	29	11	20	3,2	SC.. 09T3..	98,67	**216**	98,67	**216**
A20Q SSKC R/L 09	20	18,5	180	182,4	32	13	25	3,2	SC.. 09T3..	123,00	**220**	123,00	**220**
A25R SSKC R/L 09	25	23,0	200	202,4	36	17	32	3,2	SC.. 09T3..	141,40	**225**	141,40	**225**

Spare parts		Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR	
for Article no.						
70 724 216 / 70 725 216	T15	9,28	**113**	M3,5x7,2	3,14	**110**
70 724 220 / 70 725 220	T15	9,28	**113**	M3,5x8,6	3,14	**304**
70 724 225 / 70 725 225	T15	9,28	**113**	M3,5x8,6	3,14	**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

		CTCP135	CTCP135
		HCR1135	HCR1135
		DRAGONSKIN	DRAGONSKIN
		M	M
		SPMR	SPUN
		1A/11	1A/08
ISO	RE	Article no. 76 208 ...	Article no. 76 206 ...
	mm	EUR	EUR
090304EN	0,4	7,42 704	
120304EN	0,4	10,77 716	
120308EN	0,8	10,77 718	8,99 718
120308ER	0,8	11,19 720	
Steel		●	●
Stainless steel		○	○
Cast iron			
Non ferrous metals			
Heat resistant alloys		○	○

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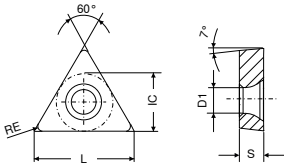
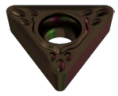
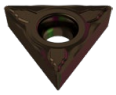
TCGT / TCMT

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	
		1A/78		1A/78		1A/08		1A/78		1A/78		1A/08	
ISO	RE	Article no. 76 272 ...		Article no. 70 273 ...		Article no. 76 275 ...		Article no. 76 266 ...		Article no. 70 284 ...		Article no. 76 284 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR	
110202EN	0,2	13,54	014	12,53	900								
110204EN	0,4	13,54	016	12,53	902	7,64	516	7,72	016	7,28	902		
110208EN	0,8	13,54	018			7,64	518					7,64	318
16T304EN	0,4	17,16	028	15,89	906	11,04	528					11,04	328
16T308EN	0,8					11,04	530	10,70	030			11,04	330
Steel			●		●		●		●		●		●
Stainless steel			○				○		○				○
Cast iron			○		○		○		○		○		○
Non ferrous metals													
Heat resistant alloys													

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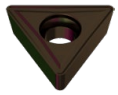
TCMT / TCGT

ISO	RE mm	-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		M		M		M		M		M		M	
		TCMT		TCGT		TCMT		TCMT		TCMT		TCMT		TCMT	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
		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 ...	
		EUR		EUR		EUR		EUR		EUR		EUR		EUR	
090204EN	0,4											7,64	504	7,64	704
110202EN	0,2			13,54	714										
110204EN	0,4					7,64	016	7,64	516	7,64	316	7,64	516	7,64	716
110208EN	0,8	7,64	718			7,64	018	7,64	518	7,64	318			7,64	718
16T304EN	0,4					11,04	028	11,04	528	11,04	328	11,04	528	11,04	728
16T308EN	0,8					11,04	030	11,04	530	11,04	330	11,04	530	11,04	730
16T312EN	1,2					11,04	032	11,04	532						
220408EN	0,8											15,89	542	15,89	742
Steel		●		●		●		●		●		●		●	
Stainless steel		○		○		○				○		○		○	
Cast iron						●		●		○		○			
Non ferrous metals															
Heat resistant alloys		○		○										○	

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TCMT / TCGT

ISO	RE mm	-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		F		M		F		M		M	
		TCMT		TCMT		TCMT		TCMT		TCGT		TCGT	
		1A/08		1A/08		1A/08		1A/08		1A/90		1A	
		Article no. 70 187 ...		Article no. 75 217 ...		Article no. 70 274 ...		Article no. 75 218 ...		Article no. 70 276 ...		Article no. 70 276 ...	
		EUR		EUR		EUR		EUR		EUR		EUR	
090204EN	0,4					7,54	398	7,64	204				
110202FN	0,2									10,91	600	13,41	300
110204EN	0,4	7,54	400	7,64	216	7,54	402	7,64	216				
110204FN	0,4									10,91	602	13,41	302
16T302FN	0,2									12,86	604	15,89	304
16T304EN	0,4	10,50	402	11,04	228								
16T304FN	0,4									12,86	606	15,89	306
16T308EN	0,8	10,50	404	11,04	230	10,50	396	11,04	230				
16T308FN	0,8									12,86	608	15,89	308
Steel		○		○		○		○					
Stainless steel		●		●		●		●				○	
Cast iron											○		
Non ferrous metals											●		●
Heat resistant alloys		●				●					○		

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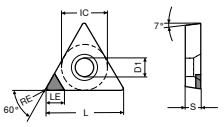
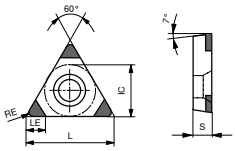
TCGW

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

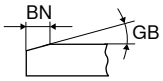


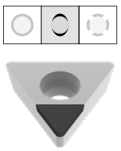
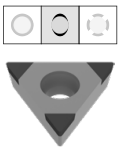
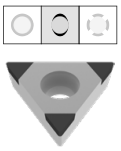
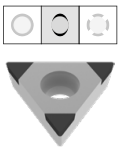
TCGW-A



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
	Y0	Y0	NEW Y0	NEW Y0
	Article no. 71 140 ...	Article no. 71 164 ...	Article no. 71 028 ...	Article no. 71 029 ...
	EUR	EUR	EUR	EUR

ISO	RE	GB	BN	LE	-A CTBS10U EUR	-A CTBS10U	-C CTBS20C EUR	-C CTBS20C	-C CTBH15U EUR	-C CTBH15U	-C CTBH15U EUR	-C CTBH15U
	mm	°	mm	mm								
090202SN	0,2	10	0,09	2,6			64,85	120				
090202SN	0,2	15	0,11	2,6			64,85	130			79,51	30214
090202TN	0,2	20	0,14	3,8	34,55	300						
090202TN	0,2	20	0,15	2,6			64,85	140				
090202SN	0,2	20	0,16	2,6			64,85	150				
090202EN	0,2			2,6							79,51	00200
090204SN	0,4	10	0,09	2,2			64,85	121				
090204SN	0,4	15	0,11	2,2			64,85	131	79,51	30414		
090204TN	0,4	20	0,14	3,5	34,55	302						
090204SN	0,4	20	0,16	2,2			64,85	151				
090204TN	0,4	25	0,17	2,2			64,85	161				
090204FN	0,4			3,5	34,55	202						
090204EN	0,4			2,2			64,85	111	79,51	00400		
090208SN	0,8	10	0,09	1,8			64,85	122				
090208SN	0,8	15	0,11	1,8			64,85	132	79,51	30614		
090208TN	0,8	20	0,15	1,8			64,85	142				
090208TN	0,8	25	0,17	1,8			64,85	162				
090208EN	0,8			1,8					79,51	00600		
110202SN	0,2	10	0,09	2,9			64,85	123				
110202SN	0,2	15	0,11	2,9			64,85	133				
110202TN	0,2	20	0,14	3,8	34,55	306						
110202TN	0,2	20	0,15	2,9			64,85	143				
110202SN	0,2	20	0,16	2,9			64,85	153				
110202FN	0,2			3,8	34,55	206						
110204SN	0,4	10	0,09	2,5			64,85	124				
110204SN	0,4	15	0,11	2,5			64,85	134				
110204TN	0,4	20	0,14	3,5	34,55	308						
110204TN	0,4	20	0,15	2,5			64,85	144				
110204SN	0,4	20	0,16	2,5			64,85	154				
110204TN	0,4	25	0,17	2,5			64,85	164				
110204FN	0,4			3,5	34,55	208						
110204EN	0,4			2,5			64,85	114				
110208SN	0,8	10	0,09	2,1			64,85	125				
110208SN	0,8	15	0,11	2,1			64,85	135				
110208TN	0,8	20	0,14	3,0	34,55	310						
110208TN	0,8	20	0,15	2,1			64,85	145				
110208TN	0,8	25	0,17	2,1			64,85	165				
110208FN	0,8			3,0	34,55	210						
16T304SN	0,4	10	0,09	3,2			64,85	126				
16T304SN	0,4	15	0,11	3,2			64,85	136				
16T308SN	0,8	10	0,09	2,7			64,85	127				
16T308SN	0,8	15	0,11	2,7			64,85	137				
16T308SN	0,8	20	0,16	2,7			64,85	157				
16T308TN	0,8	25	0,17	2,7			64,85	167				
16T308EN	0,8			2,7			64,85	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				

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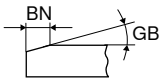
TCGW



ISO	RE mm	GB °	BN mm	LE mm	-C CTBH15C F CBN TCGW NEW Y0 Article no. 71 027 ... EUR		-C CTBH15C F CBN TCGW NEW Y0 Article no. 71 034 ... EUR		-A CTBH21U PBC25 F CBN TCGW Y0 Article no. 71 140 ... EUR		-C CTBH20C -3MC PBC25-S F CBN TCGW Y0 Article no. 71 164 ... EUR		-A CTBH40U PBC40 F CBN TCGW Y0 Article no. 71 140 ... EUR		-C CTBH40C -3MC PBC40-S F CBN TCGW Y0 Article no. 71 164 ... EUR	
090202FN	0,2			2,6							64,85	210				
090202SN	0,2	15	0,11	2,6			77,62	30214								
090202SN	0,2	20	0,09	2,6							64,85	250			64,85	330
090202TN	0,2	20	0,09	2,6											64,85	320
090202TN	0,2	20	0,14	3,8					34,55	500						
090202TN	0,2	25	0,11	2,6											64,85	340
090202TN	0,2	25	0,12	3,8									34,55	900		
090202EN	0,2			2,6			77,62	00200			64,85	220				
090202FN	0,2			3,8					34,55	400						
090204SN	0,4	15	0,11	2,2	77,62	30414					64,85	241				
090204TN	0,4	20	0,09	2,2											64,85	321
090204TN	0,4	20	0,14	3,5					34,55	502						
090204SN	0,4	25	0,09	2,2											64,85	351
090204TN	0,4	25	0,11	2,2											64,85	341
090204TN	0,4	25	0,12	3,5									34,55	902		
090204EN	0,4			2,2	77,62	00400					64,85	221				
090204FN	0,4			3,5					34,55	402			34,55	802		
090204TN	0,4	25	0,14	2,2							64,85	261				
090204SN	0,4	25	0,15	2,2							64,85	271				
090204TN	0,4	30	0,14	2,2											64,85	361
090204SN	0,4	30	0,16	2,2											64,85	371
090208SN	0,8	10	0,09	1,8							64,85	232				
090208SN	0,8	15	0,11	1,8	77,62	30614					64,85	242				
090208SN	0,8	20	0,09	1,8							64,85	252				
090208TN	0,8	20	0,14	1,8											64,85	362
090208TN	0,8	20	0,14	3,0					34,55	504						
090208SN	0,8	25	0,09	1,8											64,85	352
090208TN	0,8	25	0,11	1,8											64,85	342
090208TN	0,8	25	0,12	3,0									34,55	904		
090208EN	0,8			1,8	77,62	00600									64,85	312
110202SN	0,2	15	0,11	2,9			77,62	31414								
110202SN	0,2	20	0,09	2,9							64,85	253			64,85	333
110202TN	0,2	20	0,09	2,9											64,85	323
110202TN	0,2	20	0,14	3,8					34,55	506						
110202TN	0,2	25	0,11	2,9											64,85	343
110202TN	0,2	25	0,12	3,8									34,55	906		
110202EN	0,2			2,9							64,85	223				
110202FN	0,2			2,9							64,85	213				
110202FN	0,2			3,8					34,55	406			34,55	806		
110202SN	0,2	25	0,13	2,9			77,62	31429								
110202TN	0,2	30	0,14	2,9											64,85	363
110204FN	0,4			2,5							64,85	214				
110204SN	0,4	10	0,09	2,5							64,85	234				
110204EN	0,4			2,5							64,85	224				

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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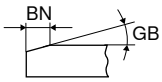
→ v_c Page 160–167
Continued on next page

TCGW



ISO	RE mm	GB °	BN mm	LE mm	-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 Y0		NEW Y0		Y0		Y0		Y0		Y0	
					Article no. 71 027 ...		Article no. 71 034 ...		Article no. 71 140 ...		Article no. 71 164 ...		Article no. 71 140 ...		Article no. 71 164 ...	
					EUR		EUR		EUR		EUR		EUR		EUR	
110204SN	0,4	15	0,11	2,5			77,62	31614			64,85	244				
110204TN	0,4	20	0,09	2,5											64,85	324
110204TN	0,4	20	0,14	3,5					34,55	508						
110204SN	0,4	25	0,09	2,5											64,85	354
110204TN	0,4	25	0,11	2,5											64,85	344
110204TN	0,4	25	0,12	3,5									34,55	908		
110204SN	0,4	25	0,13	2,5			77,62	31629								
110204TN	0,4	25	0,14	2,5							64,85	264				
110204FN	0,4			3,5									34,55	808		
110204SN	0,4	25	0,15	2,5							64,85	274				
110204TN	0,4	30	0,14	2,5											64,85	364
110204SN	0,4	30	0,16	2,5											64,85	374
110208SN	0,8	10	0,09	2,1							64,85	235				
110208SN	0,8	15	0,11	2,1	77,62	31814					64,85	245				
110208SN	0,8	20	0,09	2,1							64,85	255				
110208TN	0,8	20	0,09	2,1											64,85	325
110208TN	0,8	20	0,14	3,0					34,55	510						
110208SN	0,8	25	0,09	2,1											64,85	355
110208TN	0,8	25	0,12	3,0									34,55	910		
110208EN	0,8			2,1											64,85	315
110208SN	0,8	25	0,13	2,1	77,62	31829										
110208TN	0,8	25	0,14	2,1							64,85	265				
110208TN	0,8	30	0,14	2,1											64,85	365
110208SN	0,8	30	0,16	2,1											64,85	375
110208FN	0,8			3,0					34,55	410						
16T304SN	0,4	20	0,09	3,2							64,85	256			64,85	336
16T304SN	0,4	25	0,09	3,2											64,85	356
16T304TN	0,4	25	0,11	3,2											64,85	346
16T304SN	0,4	25	0,15	3,2							64,85	276				
16T304TN	0,4	30	0,14	3,2											64,85	366
16T304SN	0,4	35	0,17	3,2											64,85	386
16T304FN	0,4			3,2							64,85	216				
16T304EN	0,4			3,2							64,85	226				
16T308SN	0,8	15	0,11	2,7							64,85	247				
16T308SN	0,8	20	0,09	2,7											64,85	337
16T308SN	0,8	25	0,09	2,7											64,85	357
16T308TN	0,8	25	0,11	2,7											64,85	347
16T308TN	0,8	25	0,14	2,7							64,85	267				
16T308SN	0,8	25	0,15	2,7							64,85	277				
16T308TN	0,8	30	0,14	2,7											64,85	367
16T308SN	0,8	30	0,16	2,7											64,85	377
16T308SN	0,8	30	0,18	2,7							64,85	287				
16T308EN	0,8			2,7							64,85	227			64,85	317

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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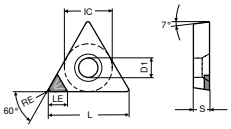
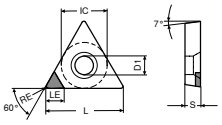
TCGW / TCGT

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

			-A CTDPD20		-A-CB1 CTDPD20		-A-CB2 CTDPS30		-A-CB3 CTDPU20	
			PDC		-CB1 PDC		-CB2 PDC-S		-CB3 PDC-S	
			F		F		M		R	
			DIAMOND TCGW		DIAMOND TCGT		DIAMOND TCGT		DIAMOND TCGT	
			Y0		Y0		Y0		Y0	
ISO	RE	LE	Article no. 71 140 ...		Article no. 71 325 ...		Article no. 71 326 ...		Article no. 71 327 ...	
	mm	mm	EUR		EUR		EUR		EUR	
090202FN	0,2	3,7	52,14	100	57,76	112				
090202EN	0,2	3,7					57,76	212		
090204FN	0,4	3,4	52,14	102	57,76	114				
090204EN	0,4	3,4					57,76	214		
090208FN	0,8	3,0	52,14	104						
110202FN	0,2	3,7	47,58	106	60,09	122				
110202EN	0,2	3,7					60,09	222		
110204FN	0,4	3,4	47,58	108	60,09	124				
110204EN	0,4	3,4					60,09	224	60,09	224
110208FN	0,8	3,0	47,58	110						
16T304FN	0,4	4,6	52,14	112	62,63	134				
16T304EN	0,4	4,6					62,63	234		
16T308FN	0,8	4,2	52,14	114						
16T308EN	0,8	4,2							63,79	238

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

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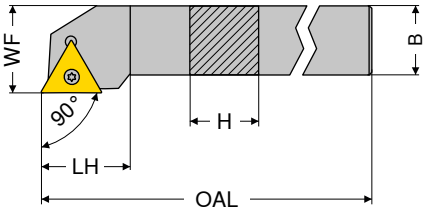
MaxiLock-S – STGC 90° – Toolholder with screw clamping



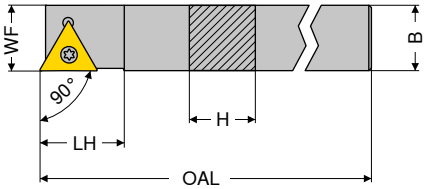
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 677 ... EUR		Right-hand 2A/24 Article no. 70 676 ... EUR	
STGC R/L 1010 E09	10	10	70	12	12	1	TC.. 0902	64,59	010	64,59	010
STGC R/L 1212 F11	12	12	80	15	16	1,2	TC.. 1102	64,59	012	64,59	012
STGC R/L 1616 H16	16	16	100	22	20	3,2	TC.. 16T3	80,00	016	80,00	016
STGC R/L 2020 K16	20	20	125	22	25	3,2	TC.. 16T3	85,04	020	85,04	020
STGC R/L 2525 M16	25	25	150	22	32	3,2	TC.. 16T3	87,97	025	87,97	025

Spare parts	Y7 Key D		2A/28 Combination Key		2A/28 Clamping screw		2A/28 Solid Carbide Seat T		2A/28 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.	EUR		EUR		EUR		EUR		EUR	
70 676 010 / 70 677 010	7,80	109			2,57	111				
70 676 012 / 70 677 012	7,80	110			2,36	112				
70 676 016 / 70 677 016			8,28	398	3,14	113	7,76	169	4,64	171
70 676 020 / 70 677 020			8,28	398	3,14	113	7,76	169	4,64	171
70 676 025 / 70 677 025			8,28	398	3,14	113	7,76	169	4,64	171

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

▲ for sliding head lathes

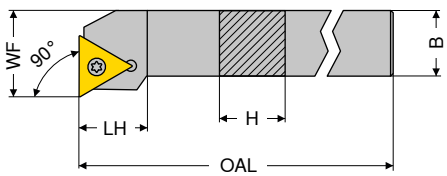


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 769 ... EUR		Right-hand 2A/24 Article no. 70 768 ... EUR	
STAC R/L 1010 K09	10	10	125	12	10	1	TC.. 0902	64,59	010	64,59	010
STAC R/L 1212 K11	12	12	125	15	12	1,2	TC.. 1102	72,25	012	72,25	012
STAC R 1414 K11	14	14	125	15	14	1,2	TC.. 1102			72,25	014

Spare parts		Y7 Key D			2A/28 Clamping screw	
		Article no. 80 950 ...			Article no. 70 950 ...	
for Article no.		EUR			EUR	
70 769 010 / 70 768 010	T07	7,80	109	M2,2x5	2,57	111
70 769 012 / 70 768 012	T08	7,80	110	M2,5x6	2,36	112
70 768 014	T08	7,80	110	M2,5x6	2,36	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 2A/24 Article no. 70 673 ... EUR		Right-hand 2A/24 Article no. 70 672 ... EUR	
STFC R/L 1212 F11	12	12	80	15	16	1,2	TC.. 1102	64,59	012	64,59	012
STFC R/L 1616 H16	16	16	100	20	20	3,2	TC.. 16T3	80,00	016	80,00	016
STFC R/L 2020 K16	20	20	125	20	25	3,2	TC.. 16T3	85,04	020	85,04	020
STFC R/L 2525 M16	25	25	150	20	32	3,2	TC.. 16T3	87,97	025	87,97	025

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 673 012 / 70 672 012	7,80	110			2,36	112				
70 673 016 / 70 672 016			8,28	398	3,14	113	7,76	169	4,64	171
70 673 020 / 70 672 020			8,28	398	3,14	113	7,76	169	4,64	171
70 673 025 / 70 672 025			8,28	398	3,14	113	7,76	169	4,64	171

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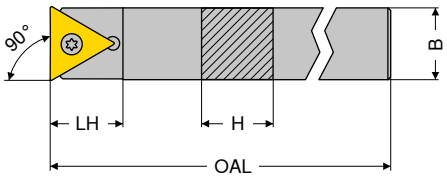
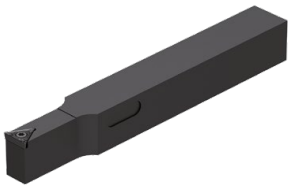
MaxiLock-S – STCC 90° – Toolholder with screw clamping



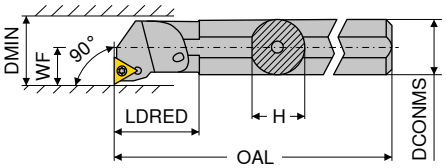


ISO designation	H mm	B mm	OAL mm	LH mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 782 ... EUR	
STCC N 0808 K09	8	8	125	11	1	TC.. 0902	60,92	008
STCC N 1010 K11	10	10	125	15	1,2	TC.. 1102	64,59	010
STCC N 1212 K11	12	12	125	15	1,2	TC.. 1102	72,25	012
STCC N 1414 K11	14	14	125	21	1,2	TC.. 1102	72,25	014
STCC N 1616 K11	16	16	125	24	1,2	TC.. 1102	80,00	016

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR	
70 782 008	T07	7,80	109	M2,2x5	2,57	111
70 782 010	T08	7,80	110	M2,5x6	2,36	112
70 782 012	T08	7,80	110	M2,5x6	2,36	112
70 782 014	T08	7,80	110	M2,5x6	2,36	112
70 782 016	T08	7,80	110	M2,5x6	2,36	112

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

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



Illustrations show right-hand versions

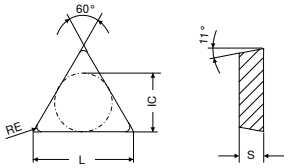
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 729 ... EUR		Right-hand 2A/24 Article no. 70 728 ... EUR	
A10H STFC R/L 09	10	9,5	100	19	7	13	1	TC.. 0902	96,57	**210**	96,57	**210**
A12K STFC R/L 11	12	11,5	125	22	9	16	1,2	TC.. 1102	96,57	**212**	96,57	**212**
A16M STFC R/L 11	16	15,0	150	29	11	20	1,2	TC.. 1102	98,67	**216**	98,67	**216**
S16R STFC R 11	16	15,0	200		11	21	1,2	TC.. 1102			98,67	**016**
A20Q STFC R/L 11	20	18,5	180	32	13	25	1,2	TC.. 1102	123,00	**220**	123,00	**220**
S20S STFC R 11	20	18,0	250		13	25	1,2	TC.. 1102			123,00	**020**
A25R STFC R/L 16	25	24,0	200	36	17	32	3,2	TC.. 16T3	141,40	**225**	141,40	**225**
A32S STFC R/L 16	32	31,0	250	50	22	40	3,2	TC.. 16T3	194,40	**232**	194,40	**232**
A40T STFC R/L 16	40	39,0	300	60	27	50	3,2	TC.. 16T3	233,40	**240**	233,40	**240**

Spare parts for Article no.		2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR			2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 729 210 / 70 728 210	M2,2x5	2,57	**111**					
70 729 212 / 70 728 212	M2,5x6	2,36	**112**					
70 729 216 / 70 728 216	M2,5x6	2,36	**112**					
70 728 016	M2,5x6	2,36	**112**					
70 729 220 / 70 728 220	M2,5x6	2,36	**112**					
70 728 020	M2,5x6	2,36	**112**					
70 729 225 / 70 728 225	M3,5x11	3,14	**113**	7,76	**169**	M3,5	4,64	**171**
70 729 232 / 70 728 232	M3,5x11	3,14	**113**	7,76	**169**	M3,5	4,64	**171**
70 729 240 / 70 728 240	M3,5x11	3,14	**113**	7,76	**169**	M3,5	4,64	**171**

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A/28 Combination Key Article no. 70 950 ... EUR	
70 729 210 / 70 728 210	T07	7,80	**109**			
70 729 212 / 70 728 212	T08	7,80	**110**			
70 729 216 / 70 728 216	T08	7,80	**110**			
70 728 016	T08	7,80	**110**			
70 729 220 / 70 728 220	T08	7,80	**110**			
70 728 020	T08	7,80	**110**			
70 729 225 / 70 728 225				T15/SW	8,28	**398**
70 729 232 / 70 728 232				T15/SW	8,28	**398**
70 729 240 / 70 728 240				T15/SW	8,28	**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

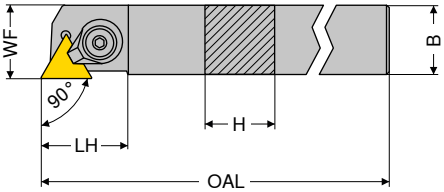


TPMR / TPUN

		CTCK110		CTCP135		CTCP135		CTCP135	
		DCX3110		HCR1135		HCR1135		HCR1135	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN	
		M		M		M		M	
		TPMR		TPMR		TPMR		TPUN	
		1A/11		1A/11		1A/08		1A/13	
ISO	RE	Article no. 70 189 ...		Article no. 76 228 ...		Article no. 76 232 ...		Article no. 76 212 ...	
	mm	EUR		EUR		EUR		EUR	
110304EL	0,4					10,38	706		
110304EN	0,4			7,12	702			5,67	702
110304ER	0,4					10,38	704		
110308EN	0,8			7,12	704				
160304EL	0,4					13,20	714		
160304EN	0,4			9,29	706			7,42	720
160304ER	0,4					13,20	712		
160308EL	0,8					13,20	718		
160308EN	0,8	9,29	008	9,29	708			7,42	722
160308ER	0,8					13,20	716		
160312EN	1,2							7,42	724
220408EN	0,8							13,30	742
220412EN	1,2							13,30	744
Steel			●		●		●		●
Stainless steel			○		○		○		○
Cast iron			●						
Non ferrous metals									
Heat resistant alloys					○		○		○

9

Simplex – CTAP 90° – Toolholder with top clamping

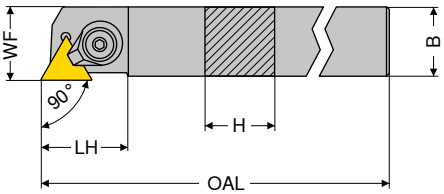


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/23 Article no. 70 797 ... EUR		Right-hand 2A/23 Article no. 70 796 ... EUR	
CTAP R/L 2020 K16	20	20	125	30	20,5	10	TP.. 1603	90,28	020	90,28	020
CTAP R/L 2525 M16	25	25	150	30	20,5	10	TP.. 1603	92,80	025	92,80	025

Spare parts	2A/28 Clamp			2A/28 Key I			2A/28 Clamping screw		2A/28 Countersunk head grooved pin		2A/28 Solid Carbide Seat T		2A/28 Spring washer	
	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.	EUR			EUR			EUR		EUR		EUR		EUR	
70 796 020 / 70 797 020	8,87	601	SW4	2,57	396	M8x20	5,17	604	1,10	603	9,93	602	1,10	605
70 796 025 / 70 797 025	8,87	601	SW4	2,57	396	M8x20	5,17	604	1,10	603	9,93	602	1,10	605

Simplex – CTGP 90° – Toolholder with top clamping

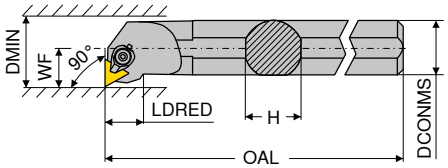


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/23 Article no. 70 797 ... EUR		Right-hand 2A/23 Article no. 70 796 ... EUR	
CTGP R 1010 E11	10	10	70	16,5	12	5	TP.. 1103			79,90	010
CTGP R/L 1212 F11	12	12	80	16,5	16	5	TP.. 1103	79,90	012	79,90	012

Spare parts	2A/28 Clamp			Y7 Key D			2A/28 Clamping screw	
	Article no. 70 950 ...			Article no. 80 950 ...			Article no. 70 950 ...	
for Article no.	EUR			EUR			EUR	
70 796 010	5,17	600	T15	9,28	113	M4x10	1,89	477
70 797 012 / 70 796 012	5,17	600	T15	9,28	113	M4x10	1,89	477

Simplex – CTFP 90° – Boring bar with top clamping



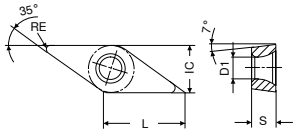
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/23 Article no. 70 795 ... EUR		Right-hand 2A/23 Article no. 70 794 ... EUR	
S12Q CTFP R/L 11	12	11,0	180	15	9	16	5	TP.. 1103	107,00	**012**	107,00	**012**
S16R CTFP R/L 11	16	14,5	200	15	11	20	5	TP.. 1103	107,00	**016**	107,00	**016**
S20S CTFP R/L 11	20	18,0	250	15	13	25	5	TP.. 1103	130,60	**020**	130,60	**020**
S25T CTFP R/L 16	25	23,0	300	20	17	32	10	TP.. 1603	154,10	**025**	154,10	**025**
S32U CTFP R/L 16	32	30,0	350	20	22	40	10	TP.. 1603	209,00	**032**	209,00	**032**

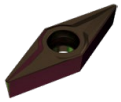
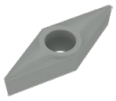
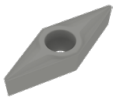
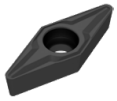
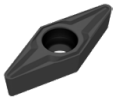
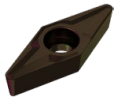
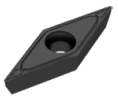
Spare parts for Article no.	2A/28 Clamp Article no. 70 950 ... EUR			Y7 Key D Article no. 80 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Countersunk head grooved pin Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat T Article no. 70 950 ... EUR	
70 794 012 / 70 795 012	5,17	**600**	T15	9,28	**113**	M4x10	1,89	**477**				
70 794 016 / 70 795 016	5,17	**600**	T15	9,28	**113**	M4x10	1,89	**477**				
70 794 020 / 70 795 020	5,17	**600**	T15	9,28	**113**	M4x10	1,89	**477**				
70 794 025 / 70 795 025	8,72	**606**	T20	9,95	**114**	M6x16,2	5,17	**596**	1,10	**603**	9,93	**602**
70 794 032 / 70 795 032	8,72	**606**	T20	9,95	**114**	M6x16,2	5,17	**596**	1,10	**603**	9,93	**602**

VCGT / VCMT / VCXT / VCET

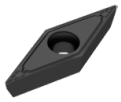
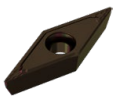
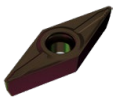
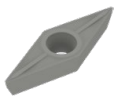
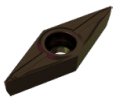
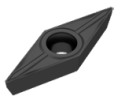
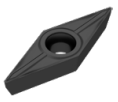
Designation	L	S	D1	IC
	mm	mm	mm	mm
VCET 1103..	11,1	3,18	2,8	6,35
VC.T 1103..	11,1	3,18	2,9	6,35
VC.T 1604..	16,6	4,76	4,4	9,52
VCGT 2205..	22,1	5,56	5,5	12,70



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
	1A/78	1A/78	1A/78	1A/08	1A/08	1A/08	1A/08
ISO / RE	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 ...
mm	EUR	EUR	EUR	EUR	EUR	EUR	EUR
110301EN 0,1			15,33 892				
110302EN 0,2	16,80 014	15,33 844	15,33 894	16,00 314	16,00 514	16,00 714	
110304EN 0,4	16,80 016	15,33 846	15,33 896	16,00 316	16,00 516	16,00 716	
110308EN 0,8				16,00 318	16,00 518	16,00 718	
160404EN 0,4	20,03 028	19,36 850	19,36 900				16,00 328
160408EN 0,8	20,03 030		19,36 902				16,00 330
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
	1A/08	1A/08	1A/78	1A/78	1A/08	1A/08	1A/08
ISO / RE	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 ...
mm	EUR	EUR	EUR	EUR	EUR	EUR	EUR
110302EN 0,2					16,00 714		
110304EN 0,4			13,04 016	12,31 896		13,76 316	13,76 516
160404EN 0,4	16,00 528	16,00 728	16,00 028	15,23 900		16,00 328	16,00 528
160408EN 0,8	16,00 530		16,00 030	15,23 902		16,00 330	16,00 530
Steel	●	●	●	●	●	●	●
Stainless steel	○	○	○		○	○	○
Cast iron	○		○	○		○	○
Non ferrous metals							
Heat resistant alloys		○			○		

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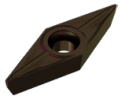
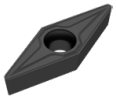
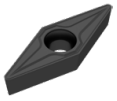
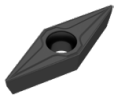
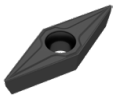
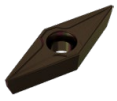
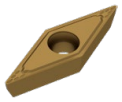
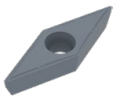
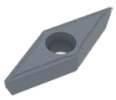
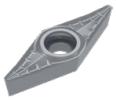
VCMT / VCGT

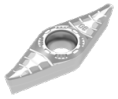
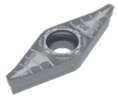
		-SMF CTCP135		-SM CTCK110		-SM CTCK120		-SM CTCP115		-SM CTCP125		-SM CTCP135		-SF CTC2135	
		-SMF HCR1135		-ZM DCX3110		-ZM HCF3120		-ZM HCX1115		-ZM HCX1125		-ZM HCR1135		-ZF CWN2135	
		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN		DRAGONSKIN			
															
		F		M		M		M		M		M		F	
		VCMT		VCMT		VCMT		VCMT		VCMT		VCMT		VCGT	
		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08		1A/08	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
110302EN	0,2													16,00	444
110304EN	0,4	13,76	716											16,00	446
160404EN	0,4	16,00	728	16,00	028	16,00	528	16,00	328	16,00	528	16,00	728		
160406EN	0,6							16,00	329						
160408EN	0,8	16,00	730	16,00	030	16,00	530	16,00	330	16,00	530	16,00	730		
160412EN	1,2			16,00	032	16,00	532	16,00	33200	16,00	53200	16,00	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	
		1A/08		1A		1A/08		1A/08		1A/08		1A/90		1A/90	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
110302FN	0,2											15,10	638	17,34	538
110304FN	0,4											15,10	640	17,34	540
160404EN	0,4	16,00	440			16,00	228	16,00	440	16,00	228				
160404FN	0,4			15,25	112							18,46	642	21,49	562
160408EN	0,8							16,00	442	16,00	230				
160408FN	0,8			15,25	114							18,46	644	21,49	564
160412FN	1,2											18,46	646	21,49	566
220530FN	3,0											24,95	648	28,64	568
Steel			○				○		○		○				○
Stainless steel			●		●		●		●		●				○
Cast iron													○		○
Non ferrous metals					○								●		●
Heat resistant alloys			●						●				○		

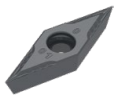
9

VCGT / VCMT

		-25Q H210T		-25Q AMZ		-27 H10T		-27 CWN15		-27 AMZ		-29 H216T		-29 AMZ	
		-25Q CWK20		-25Q AMZ		-AL CWK15		-AL CWN15		-AL AMZ					
															
		M		M		M		M		M		M		M	
		VCGT		VCGT		VCGT		VCGT		VCGT		VCMT		VCMT	
		1A/90		1A		1A/90		1A		1A/90		NEW 1A/90		NEW 1A/90	
ISO	RE	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 ...	
	mm	EUR		EUR		EUR		EUR		EUR		EUR		EUR	
110302FN	0,2					14,42	606	16,97	306	16,90	456				
110304FL	0,4	16,80	670	20,44	620										
110304FN	0,4					14,42	608	16,97	308	16,90	458				
110304FR	0,4	16,80	680	20,44	630										
110308FN	0,8					14,42	610	16,97	310						
160404EN	0,4											13,54	62800	16,23	42800
160404FN	0,4					17,57	612	20,00	312	20,48	462				
160408EN	0,8											13,54	63000	16,23	43000
160408FN	0,8					17,57	614	20,00	314	20,48	464				
160412EN	1,2											13,54	63200	16,23	43200
160412FN	1,2					17,57	616	20,00	316						
220530FN	3,0					23,84	618								

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

VCET / VCGT

		-F05 CTPX710		-F23 CTP2120	
				-F23 CCN2120	
		DRAGONSKIN			
					
		F		F	
		VCET		VCGT	
		NEW 1H/17		1A/08	
ISO	RE	Article no. 76 255 ...		Article no. 70 193 ...	
	mm	EUR		EUR	
110300FN	0,00			16,00	600
1103015FN	0,15	23,29	11800		
110301FN	0,10	23,29	11600	16,00	602
113005FN	0,05	23,29	11400		
11302FN	0,20	23,29	12000		
11304FN	0,40	23,29	12200		
160401FN	0,10			20,48	606

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

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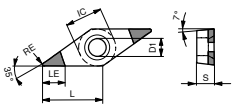
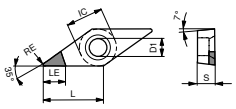
VCGW

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

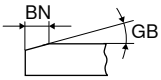


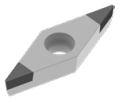
-B (-2MC)



-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
	Y0	Y0	NEW Y0	NEW Y0
	Article no. 71 160 ...	Article no. 71 165 ...	Article no. 71 036 ...	Article no. 71 035 ...

ISO	RE	GB	BN	LE	-A CTBS10U EUR		-B CTBS20C EUR		-B CTBH15U EUR		-B CTBH15C EUR	
	mm	°	mm	mm								
110302SN	0,2	15	0,11	3,4					69,18	32014	66,91	32014
110302TN	0,2	20	0,14	4,7	40,80	300						
110302SN	0,2	25	0,13	3,4					69,18	32029	66,91	32029
110302FN	0,2			4,7	40,80	200						
110302EN	0,2			3,4					69,18	02000	66,91	02000
110304SN	0,4	10	0,09	3,1			55,21	121				
110304SN	0,4	15	0,11	3,1			55,21	131	69,18	32214	66,91	32214
110304TN	0,4	20	0,14	4,5	40,80	302						
110304TN	0,4	20	0,15	3,1			55,21	141				
110304SN	0,4	20	0,16	3,1			55,21	151				
110304SN	0,4	25	0,13	3,1							66,91	32229
110304SN	0,4	25	0,18	3,1			55,21	171				
110304FN	0,4			4,5	40,80	202						
110304EN	0,4			3,1					69,18	02200	66,91	02200
110308SN	0,8	10	0,09	2,5			55,21	122				
110308SN	0,8	15	0,11	2,5			55,21	132	69,18	32414	66,91	32414
110308TN	0,8	20	0,14	4,2	40,80	304						
110308SN	0,8	20	0,16	2,5			55,21	152				
110308SN	0,8	25	0,13	3,1					69,18	32229		
110308SN	0,8	25	0,13	2,5					69,18	32429	66,91	32429
110308TN	0,8	25	0,17	2,5			55,21	162				
110308SN	0,8	25	0,18	2,5			55,21	172				
110308FN	0,8			4,2	40,80	204						
110308EN	0,8			2,5			55,21	112	69,18	02400	66,91	02400
160402SN	0,2	15	0,11	3,4					69,18	33614	66,91	33614
160402TN	0,2	20	0,14	5,3	45,78	305						
160404SN	0,2	25	0,13	3,4					69,18	33629		
160402RN	0,2			3,4							66,91	23600
160402FN	0,2			5,3	45,78	205						
160402SN	0,2	25	0,13	3,4							66,91	33629
160404SN	0,4	10	0,09	3,1			55,21	125				
160404SN	0,4	15	0,11	3,1			55,21	135	69,18	33814	66,91	33814
160404TN	0,4	20	0,14	5,0	45,78	306						
160404TN	0,4	20	0,15	3,1			55,21	145				
160404SN	0,4	20	0,16	3,1			55,21	155				
160404RN	0,4			3,4					69,18	23600		
160404SN	0,4	25	0,13	3,1					69,18	33829	66,91	33829
160404SN	0,4	25	0,18	3,1			55,21	175				
160404FN	0,4			5,0	45,78	206						
160404RN	0,4			3,1					69,18	23800	66,91	23800

	-A CTBS10U	-B CTBS20C	-B CTBH15U	-B CTBH15C
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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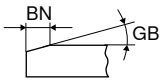
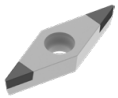
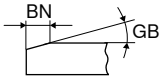
Continued on next page

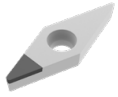
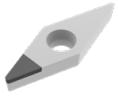
VCGW



ISO	RE mm	GB °	BN mm	LE mm	-A CTBS10U PBC10		-B CTBS20C -2MC PBC15-S		-B CTBH15U		-B CTBH15C	
												
					F		F		F		F	
					CBN VCGW		CBN VCGW		CBN VCGW		CBN VCGW	
					Y0		Y0		NEW Y0		NEW Y0	
					Article no. 71 160 ...		Article no. 71 165 ...		Article no. 71 036 ...		Article no. 71 035 ...	
					EUR		EUR		EUR		EUR	
160408SN	0,8	10	0,09	2,5			55,21	126				
160408SN	0,8	15	0,11	2,5			55,21	136	69,18	34014	66,91	34014
160408TN	0,8	20	0,14	4,4	45,78	308						
160408SN	0,8	20	0,16	2,5			55,21	156				
160408SN	0,8	25	0,13	2,5					69,18	34029	66,91	34029
160408TN	0,8	25	0,17	2,5			55,21	166				
160408SN	0,8	25	0,18	2,5			55,21	176				
160408EN	0,8			2,5			55,21	116				
160408FN	0,8			4,4	45,78	208						
160408RN	0,8			2,5					69,18	24000	66,91	24000
Cast iron					●		●					
Sintered steels					●		●					
Heat resistant alloys					●		●					
hardened < 45 HRC										●		●
hardened 46–55 HRC										●		●
hardened 56–60 HRC										●		●
hardened 61–65 HRC												

VCGW

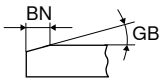


ISO	RE mm	GB °	BN mm	LE mm	-A CTBH21U PBC25		-B CTBH20C -2MC PBC25-S		-A CTBH40U PBC40		-B CTBH40C -2MC PBC40-S	
												
					F		F		F		F	
					CBN VCGW		CBN VCGW		CBN VCGW		CBN VCGW	
					Y0		Y0		Y0		Y0	
					Article no. 71 160 ...		Article no. 71 165 ...		Article no. 71 160 ...		Article no. 71 165 ...	
					EUR		EUR		EUR		EUR	
110302TN	0,2	20	0,14	4,7	40,80	500						
110302TN	0,2	25	0,12	4,7					40,80	900		
110302FN	0,2			4,7	40,80	400 1)			40,80	800		
110304FN	0,4			4,5	40,80	402 1)			40,80	802		
110304SN	0,4	20	0,09	3,1			55,21	251			55,21	331
110304TN	0,4	20	0,14	4,5	40,80	502						
110304SN	0,4	25	0,09	3,1							55,21	351
110304TN	0,4	25	0,11	3,1							55,21	341
110304TN	0,4	25	0,12	4,5					40,80	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 mm	GB °	BN mm	LE mm	-A CTBH21U PBC25		-B CTBH20C -2MC PBC25-S		-A CTBH40U PBC40		-B CTBH40C -2MC PBC40-S	
					F		F		F		F	
					CBN VCGW		CBN VCGW		CBN VCGW		CBN VCGW	
					Y0		Y0		Y0		Y0	
					Article no. 71 160 ...		Article no. 71 165 ...		Article no. 71 160 ...		Article no. 71 165 ...	
					EUR		EUR		EUR		EUR	
110304EN	0,4			3,1			55,21	221				
110304FN	0,4			3,1			55,21	211				
110304TN	0,4	25	0,14	3,1			55,21	261				
110304SN	0,4	25	0,15	3,1			55,21	271				
110304TN	0,4	30	0,14	3,1							55,21	361
110304SN	0,4	35	0,17	3,1							55,21	381
110308FN	0,8			4,2	40,80	404 [1]			40,80	804		
110308SN	0,8	15	0,11	2,5			55,21	242				
110308SN	0,8	20	0,09	2,5			55,21	252			55,21	332
110308TN	0,8	20	0,14	4,2	40,80	504						
110308SN	0,8	25	0,09	2,5							55,21	352
110308TN	0,8	25	0,11	2,5							55,21	342
110308TN	0,8	25	0,14	2,5			55,21	262				
110308SN	0,8	25	0,15	2,5			55,21	272				
110308TN	0,8	30	0,14	2,5							55,21	362
110308SN	0,8	30	0,16	2,5							55,21	372
110308SN	0,8	30	0,18	2,5			55,21	282				
110308SN	0,8	35	0,17	2,5							55,21	382
110308EN	0,8			2,5			55,21	222			55,21	312
160402FN	0,2			5,3	45,78	405 [1]			45,78	805		
160402TN	0,2	20	0,14	5,3	45,78	505						
160402TN	0,2	25	0,12	5,3					45,78	905		
160404FN	0,4			5,0	45,78	406 [1]			45,78	806		
160404SN	0,4	20	0,09	3,1			55,21	255			55,21	335
160404TN	0,4	20	0,14	5,0	45,78	506						
160404SN	0,4	25	0,09	3,1							55,21	355
160404TN	0,4	25	0,11	3,1							55,21	345
160404TN	0,4	25	0,12	5,0					45,78	906		
160404FN	0,4			3,1			55,21	215				
160404EN	0,4			3,1			55,21	225				
160404TN	0,4	25	0,14	3,1			55,21	265				
160404TN	0,4	30	0,14	3,1							55,21	365
160404SN	0,4	35	0,17	3,1							55,21	385
160408FN	0,8			4,4	45,78	408 [1]			45,78	808		
160408SN	0,8	15	0,11	2,5			55,21	246				
160408SN	0,8	20	0,09	2,5			55,21	256			55,21	336
160408TN	0,8	20	0,14	4,4	45,78	508						
160408SN	0,8	25	0,09	2,5							55,21	356
160408TN	0,8	25	0,11	2,5							55,21	346
160408TN	0,8	25	0,12	4,4					45,78	908		
160408TN	0,8	25	0,14	2,5			55,21	266				
160408SN	0,8	25	0,15	2,5			55,21	276				
160408TN	0,8	30	0,14	2,5							55,21	366
160408SN	0,8	30	0,16	2,5							55,21	376
160408SN	0,8	30	0,18	2,5			55,21	286				
160408SN	0,8	35	0,17	2,5							55,21	386
160408EN	0,8			2,5			55,21	226			55,21	316
160412TN	1,2	20	0,14	3,9	45,78	510						

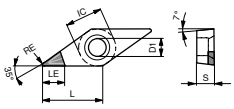
Cast iron				
Sintered steels				
Heat resistant alloys				
hardened < 45 HRC				
hardened 46–55 HRC	●	●	●	●
hardened 56–60 HRC	●	●	●	●
hardened 61–65 HRC			●	●

1) Machining to 60 HRC

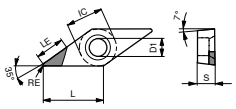
9

VCGW / VCGT

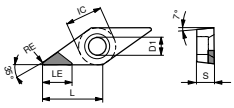
Designation	L	S	D1	IC
	mm	mm	mm	mm
VCG. 1103..	11,1	3,18	2,9	6,35
VCG. 1604..	16,6	4,76	4,4	9,52



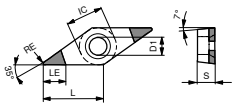
VCGT -A



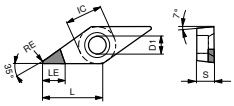
VCGT-L



VCGT-R

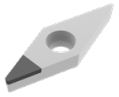
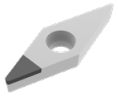
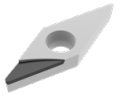
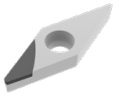


-B (-2MC)



VCGW -A

VCGW / VCGT

ISO	RE	LE	-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	
			Y0		Y0		Y0		Y0		Y0	
			Article no. 71 160 ...		Article no. 71 160 ...		Article no. 71 062 ...		Article no. 71 063 ...		Article no. 71 064 ...	
	mm	mm	EUR		EUR		EUR		EUR		EUR	
110302FN	0,2	3,0	329,60	050								
110302FN	0,2	4,6			55,01	100	57,01	100				
110304FN	0,4	3,0	329,60	052								
110304FN	0,4	3,9			55,01	102	57,01	102				
110304FRR	0,4	6,5							73,02	102		
110304FLL	0,4	6,5									73,02	102
110308FN	0,8	3,3			57,01	104	57,01	104				
110308FRR	0,8	6,0							73,02	104		
110308FLL	0,8	6,0									73,02	104
160402FN	0,2	5,9			59,24	105	62,42	105				
160404FN	0,4	5,5			60,30	106	62,42	106				
160404FRR	0,4	7,5							78,31	106		
160404FLL	0,4	7,5									78,31	106
160408FN	0,8	5,0			62,42	108	62,42	108				
160408FRR	0,8	7,0							78,31	108		
160408FLL	0,8	7,0									78,31	108
160412FN	1,2	4,5			67,61	110	71,75	110				
160412FRR	1,2	7,0							83,41	110		
160412FLL	1,2	7,0									83,41	110

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

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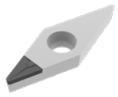
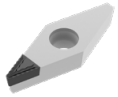
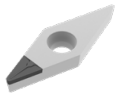
VCGT

ISO	RE mm	LE mm	-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		F		M		R		F		M	
			DIAMOND VCGT		DIAMOND VCGT		DIAMOND VCGT		DIAMOND VCGT		DIAMOND VCGT		DIAMOND VCGT	
			Y0		Y0		Y0		Y0		Y0		Y0	
			Article no. 71 330 ...		Article no. 71 330 ...		Article no. 71 331 ...		Article no. 71 332 ...		Article no. 71 330 ...		Article no. 71 331 ...	
			EUR		EUR		EUR		EUR		EUR		EUR	
110302FN	0,2	3,0									93,26	312		
110302EN	0,2	3,0											93,26	312
110302EN	0,2	4,6					78,63	212						
110302FN	0,2	4,6	81,07	112										
110304FN	0,4	3,0									93,26	314		
110304EN	0,4	3,0											93,26	314
110304EN	0,4	3,9					81,07	214	81,07	214				
110304FN	0,4	3,9	81,07	114	81,07	214								
160404EN	0,4	3,0											96,97	334
160404EN	0,4	5,5					84,78	234	84,78	234				
160404FN	0,4	5,5	84,78	134	84,78	234								
160408EN	0,8	3,0											108,10	338
160408EN	0,8	5,0					93,26	238						
160408FN	0,8	5,0	93,26	138	93,26	238								
160412EN	1,2	4,5					103,10	242						

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

9

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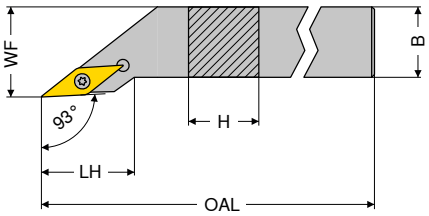
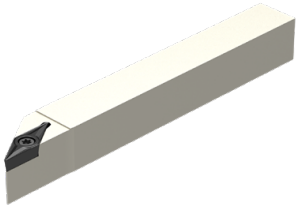
MaxiLock-S – SVJC 93° – Toolholder with screw clamping





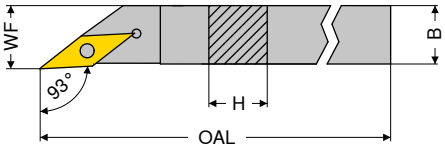
Illustrations show right-hand versions

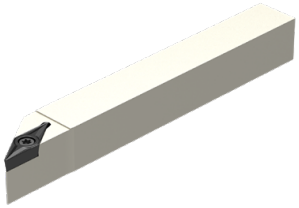
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 697 ... EUR		Right-hand 2A/24 Article no. 70 696 ... EUR	
SVJC R/L 1212 F11	12	12	80	21,5	16	1,2	VC.. 1103	79,27	012	79,27	012
SVJC R/L 1616 H11	16	16	100	21,5	20	1,2	VC.. 1103	87,97	016	87,97	016
SVJC R/L 2020 K11	20	20	125	23,0	25	1,2	VC.. 1103	100,90	020	100,90	020
SVJC R/L 2525 M11	25	25	150	25,5	32	1,2	VC.. 1103	108,20	025	108,20	025
SVJC R/L 2020 K16	20	20	125	29,5	25	3,2	VC.. 1604	100,90	120	100,90	120
SVJC R/L 2525 M16	25	25	150	32,5	32	3,2	VC.. 1604	108,20	125	108,20	125
SVJC R/L 3225 P16	32	25	170	32,5	32	3,2	VC.. 1604	116,70	132	116,70	132

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

Spare parts	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
Insert										
VC.. 1103	7,80	110			2,36	112				
VC.. 1604			8,28	398	3,14	113	10,06	107	4,64	171

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



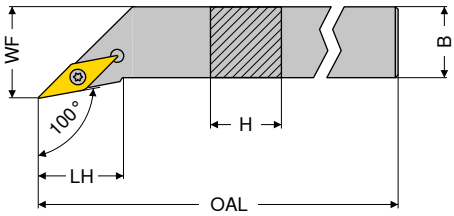


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Left-hand X0 Article no. 70 697 ... EUR		Right-hand X0 Article no. 70 696 ... EUR	
SVJC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103	84,51	008	84,51	008
SVJC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103	84,51	010	84,51	010
SVJC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103	97,30	112	97,30	112
SVJC R/L 1616 K11	16	16	125	16	1,2	VC.. 1103	105,90	116	105,90	116

Spare parts	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
Insert				
VC.. 1103	7,80	110	2,36	112

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

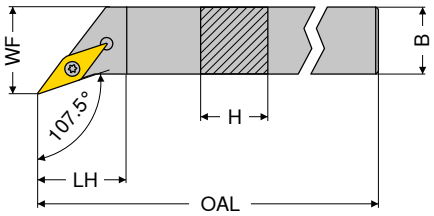


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 701 ... EUR		Right-hand 2A/24 Article no. 70 700 ... EUR	
SVZC R/L 2525 M16	25	25	150	28,5	32	3,2	VC.. 1604	108,20	**025**	108,20	**025**

Spare parts for Article no.		2A/28 Combination Key Article no. 70 950 ... EUR			2A/28 Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR			2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 701 025 / 70 700 025	T15/SW	8,28	**398**	M3,5x11	3,14	**113**	10,06	**107**	M3,5	4,64	**171**

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



Illustrations show right-hand versions

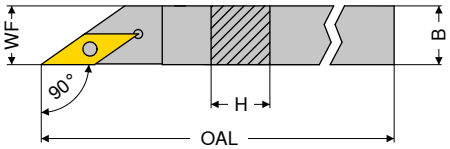
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 705 ... EUR		Right-hand 2A/24 Article no. 70 704 ... EUR	
SVHC R/L 1212 F11	12	12	80	11,4	16	1,2	VC.. 1103	79,27	**012**	79,27	**012**
SVHC R/L 1616 H11	16	16	100	11,4	20	1,2	VC.. 1103	87,97	**016**	87,97	**016**
SVHC R/L 2020 K11	20	20	125	14,6	25	1,2	VC.. 1103	100,90	**020**	100,90	**020**
SVHC R/L 2525 M11	25	25	150	20,9	32	1,2	VC.. 1103	108,20	**025**	108,20	**025**
SVHC R/L 2020 K16	20	20	125	13,2	25	3,2	VC.. 1604	100,90	**120**	100,90	**120**
SVHC R/L 2525 M16	25	25	150	19,6	32	3,2	VC.. 1604	108,20	**125**	108,20	**125**
SVHC R/L 3225 P16	32	25	170	19,6	32	3,2	VC.. 1604	116,70	**132**	116,70	**132**
SVHC R/L 2525 M22	25	25	150	19,6	32	5	VC.. 2205	108,20	**225**	108,20	**225**
SVHC R/L 3225 P22	32	25	170	19,6	32	5	VC.. 2205	116,70	**232**	116,70	**232**

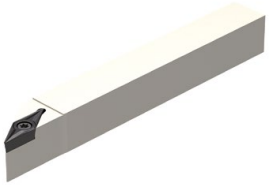
Tool holders with HSK-T interface can be found in → **Chapter 16.**

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 704 012 / 70 705 012	7,80	**110**			2,36	**112**				
70 704 016 / 70 705 016	7,80	**110**			2,36	**112**				
70 704 020 / 70 705 020	7,80	**110**			2,36	**112**				
70 704 025 / 70 705 025	7,80	**110**			2,36	**112**				
70 704 120 / 70 705 120			8,28	**398**	3,14	**113**	10,06	**107**	4,64	**171**
70 704 125 / 70 705 125			8,28	**398**	3,14	**113**	10,06	**107**	4,64	**171**
70 704 132 / 70 705 132			8,28	**398**	3,14	**113**	10,06	**107**	4,64	**171**
70 704 225 / 70 705 225			8,28	**398**	2,57	**114**	13,35	**109**	4,64	**170**
70 704 232 / 70 705 232			8,28	**398**	2,57	**114**	13,35	**109**	4,64	**170**

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

▲ for sliding head lathes



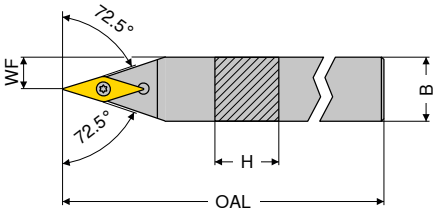


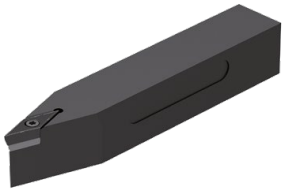
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Left-hand X0 Article no. 70 695 ... EUR		Right-hand X0 Article no. 70 694 ... EUR	
SVAC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103	84,51	008	84,51	008
SVAC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103	84,51	010	84,51	010
SVAC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103	97,30	012	97,30	012

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A Clamping screw Article no. 70 950 ... EUR	
70 694 008 / 70 695 008	T08	7,80	110	M2,5x6	2,36	112
70 694 010 / 70 695 010	T08	7,80	110	M2,5x6	2,36	112
70 694 012 / 70 695 012	T08	7,80	110	M2,5x6	2,36	112

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



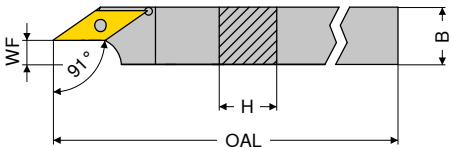


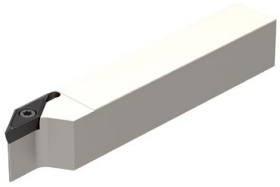
ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Neutral 2A/24 Article no. 70 692 ... EUR	
SVVC N 1212 F11	12	12	80	6,0	1,2	VC.. 1103	79,27	012
SVVC N 1616 H11	16	16	100	8,0	1,2	VC.. 1103	87,97	016
SVVC N 2020 K11	20	20	125	10,0	1,2	VC.. 1103	100,90	020
SVVC N 2525 M11	25	25	150	12,5	1,2	VC.. 1103	108,20	025
SVVC N 2020 K16	20	20	125	10,0	3,2	VC.. 1604	100,90	120
SVVC N 2525 M16	25	25	150	12,5	3,2	VC.. 1604	108,20	125
SVVC N 3225 P16	32	25	170	12,5	3,2	VC.. 1604	116,70	132

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 692 012	7,80	110			2,36	112				
70 692 016	7,80	110			2,36	112				
70 692 020	7,80	110			2,36	112				
70 692 025	7,80	110			2,36	112				
70 692 120			8,28	398	3,14	113	10,06	107	4,64	171
70 692 125			8,28	398	3,14	113	10,06	107	4,64	171
70 692 132			8,28	398	3,14	113	10,06	107	4,64	171

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

▲ for sliding head lathes



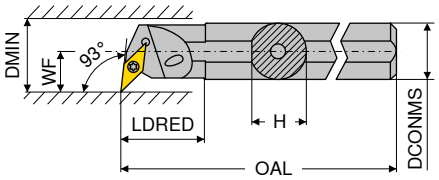


Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Left-hand X0 Article no. 70 691 ... EUR		Right-hand X0 Article no. 70 690 ... EUR	
SVXC R/L 1010 H11	10	10	100	3,4	1,2	VC.. 1103	84,51	**010**	84,51	**010**
SVXC R/L 1212 H11	12	12	100	5,4	1,2	VC.. 1103	97,30	**012**	97,30	**012**
SVXC R/L 1616 K11	16	16	125	8,9	1,2	VC.. 1103	105,90	**016**	105,90	**016**
SVXC R/L 2020 K16	20	20	125	10,4	3,2	VC.. 1604	121,60	**020**	121,60	**020**

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A Clamping screw Article no. 70 950 ... EUR	
70 691 010 / 70 690 010	T08	7,80	**110**	M2,5x6	2,36	**112**
70 691 012 / 70 690 012	T08	7,80	**110**	M2,5x6	2,36	**112**
70 691 016 / 70 690 016	T08	7,80	**110**	M2,5x6	2,36	**112**
70 691 020 / 70 690 020	T15	9,28	**113**	M3,5x11	3,14	**113**

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



Illustrations show right-hand versions

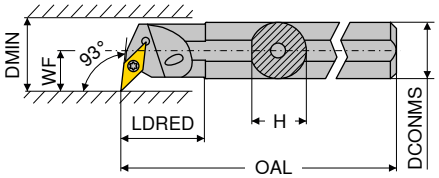
ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 745 ... EUR		Right-hand 2A/24 Article no. 70 744 ... EUR	
A16M SVUC R/L 11	16	15,0	150	29	11	20	1,2	VC.. 1103	125,90	216	125,90	216
A20Q SVUC R/L 11	20	18,5	180	32	13	25	1,2	VC.. 1103	145,10	220	145,10	220
A25R SVUC R/L 11	25	23,0	200	36	17	32	1,2	VC.. 1103	177,80	225	177,80	225
A32S SVUC R/L 16	32	30,0	250	50	22	40	3,2	VC.. 1604	213,30	232	213,30	232
A40T SVUC R/L 16	40	38,0	300	60	27	50	3,2	VC.. 1604	247,50	240	247,50	240

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

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 744 216 / 70 745 216	7,80	110			2,36	112				
70 744 220 / 70 745 220	7,80	110			2,36	112				
70 744 225 / 70 745 225	7,80	110			2,36	112				
70 744 232 / 70 745 232			8,28	398	3,14	113	10,06	107	4,64	171
70 744 240 / 70 745 240			8,28	398	3,14	113	10,06	107	4,64	171

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

▲ with carbide core



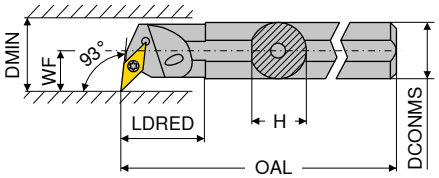
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 747 ... EUR		Right-hand 2A Article no. 70 746 ... EUR	
E-A16M SVUC R/L 11	16	15	150	16,5	11	21	1,2	VC.. 1103	326,10	216	326,10	216
E-A20Q SVUC R/L 11	20	18	180	20,5	13	25	1,2	VC.. 1103	464,50	220	464,50	220
E-A25R SVUC R/L 11	25	23	200	25,5	17	31	1,2	VC.. 1103	788,50	225	788,50	225
E-A25R SVUC R/L 16	25	23	200	25,5	17	31	3,2	VC.. 1604	788,50	325	788,50	325
E-A32S SVUC R/L 16	32	30	250	32,5	22	39	3,2	VC.. 1604	850,40	232	850,40	232

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 746 216 / 70 747 216	7,80	110	2,36	112
70 746 220 / 70 747 220	7,80	110	2,36	112
70 746 225 / 70 747 225	7,80	110	2,36	112
70 746 325 / 70 747 325	9,28	113	3,14	449
70 746 232 / 70 747 232	9,28	113	3,14	449

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

▲ Type: Solid carbide

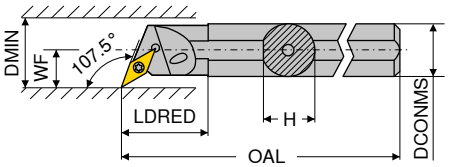


Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 747 ... EUR		Right-hand 2A/24 Article no. 70 746 ... EUR	
E16R SVUC R/L 11	16	15,0	200	34	11	20	1,2	VC.. 1103	482,10	016	482,10	016
E20S SVUC R/L 11	20	18,5	250	38	13	25	1,2	VC.. 1103	571,80	020	571,80	020
E25T SVUC R/L 11	25	23,0	300	43	17	32	1,2	VC.. 1103	1.001,00	025	1.001,00	025

Spare parts for Article no.		Y7 Key D Article no. 80 950 ... EUR			2A Clamping screw Article no. 70 950 ... EUR	
70 746 016 / 70 747 016	T08	7,80	110	M2,5x6	2,36	112
70 746 020 / 70 747 020	T08	7,80	110	M2,5x6	2,36	112
70 746 025 / 70 747 025	T08	7,80	110	M2,5x6	2,36	112

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



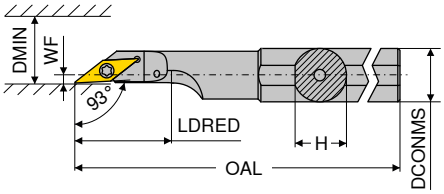
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A/24 Article no. 70 749 ... EUR		Right-hand 2A/24 Article no. 70 748 ... EUR	
A16M SVQC R/L 11	16	15,0	150	29	11	20	1,2	VC.. 1103	125,90	216	125,90	216
A20Q SVQC R/L 11	20	18,5	180	32	13	25	1,2	VC.. 1103	145,10	220	145,10	220
A25R SVQC R/L 11	25	23,0	200	36	17	32	1,2	VC.. 1103	177,80	225	177,80	225
A32S SVQC R/L 16	32	30,0	250	50	22	40	3,2	VC.. 1604	213,30	232	213,30	232
A40T SVQC R/L 16	40	38,0	300	60	27	50	3,2	VC.. 1604	247,50	240	247,50	240

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

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A/28 Combination Key Article no. 70 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR		2A/28 Solid Carbide Seat V Article no. 70 950 ... EUR		2A/28 Threaded sleeve Article no. 70 950 ... EUR	
70 748 216 / 70 749 216	7,80	110			2,36	112				
70 748 220 / 70 749 220	7,80	110			2,36	112				
70 748 225 / 70 749 225	7,80	110			2,36	112				
70 748 232 / 70 749 232			8,28	398	3,14	113	10,06	107	4,64	171
70 748 240 / 70 749 240			8,28	398	3,14	113	10,06	107	4,64	171

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



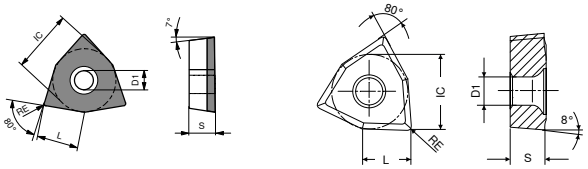
Illustrations show right-hand versions

ISO designation	DCONMS mm	H mm	OAL mm	LDRED mm	WF mm	DMIN mm	torque moment Nm	Insert	Left-hand 2A Article no. 70 727 ... EUR		Right-hand 2A Article no. 70 726 ... EUR	
A16M SVJC R/L 11	16	15	150	30	2	22	1,2	VC.. 1103	114,30	**216**	114,30	**216**
A20M SVJC R/L 11	20	19	150	38	2	25	1,2	VC.. 1103	114,30	**220**	114,30	**220**
A25M SVJC R/L 16	25	24	150	44	2	28	3,2	VC.. 1604	114,30	**225**	114,30	**225**

Spare parts for Article no.	Y7 Key D Article no. 80 950 ... EUR		2A Clamping screw Article no. 70 950 ... EUR	
70 727 216 / 70 726 216	7,80	**110**	2,36	**112**
70 727 220 / 70 726 220	7,80	**110**	2,36	**112**
70 727 225 / 70 726 225	9,28	**113**	3,40	**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

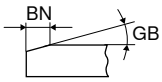
WCGT

		-SF TCM10		-SF CTPP430		-SF H216T	
		-ZF CWC10		-ZF HCN2430		-ZF CWK26	
				DRAGONSKIN			
		F		F		F	
		CERMET WCGT 1A/78		WCGT 1A/08		WCGT 1A/08	
ISO	RE	Article no. 70 287 ...		Article no. 70 287 ...		Article no. 70 287 ...	
	mm	EUR		EUR		EUR	
020102EN	0,2	16,23	**900**	17,47	**450**	13,34	**600**
020104EN	0,4	16,23	**902**	17,47	**452**	13,34	**602**

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

9

WCGW



ISO	RE mm	GB °	BN mm	LE mm	-F CTBS10U PBC10 F CBN WCGW Y0 Article no. 71 154 ... EUR		-F CTBH15U F CBN WCGW NEW Y0 Article no. 71 037 ... EUR		-F CTBH21U PBC25 F CBN WCGW Y0 Article no. 71 154 ... EUR		-F CTBH40U PBC40 F CBN WCGW Y0 Article no. 71 154 ... EUR	
020102EN	0,2			2,7			134,00	00200				
020102SN	0,2	15	0,11	2,7			134,00	30214				
020102TN	0,2	20	0,14	2,7					127,20	500		
020102TN	0,2	25	0,12	2,7							127,20	900
020102FN	0,2			2,7	127,20	200			127,20	400 [1]	127,20	800
020104SN	0,4	15	0,11	2,7			134,00	30414				
020104TN	0,4	20	0,14	2,7					127,20	502		
020104FN	0,4			2,7					127,20	402 [1]		
020104EN	0,4			2,7			134,00	00400				
020104TN	0,4	25	0,12	2,7							127,20	902

	-F CTBS10U	-F CTBH15U	-F CTBH21U	-F CTBH40U
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

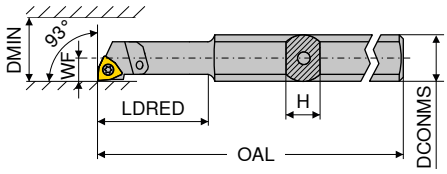
WCGW

ISO	RE mm	LE mm	-F CTDPD20 PDC F DIAMOND WCGW Y0 Article no. 71 154 ... EUR	
020102FN	0,2	2,7	126,20	100
020104FN	0,4	2,7	126,20	102

	-F CTDPD20
Steel	
Stainless steel	
Cast iron	
Non ferrous metals	●
Heat resistant alloys	

→ v_c Page 144–167

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 2A Article no. 70 731 ...		Right-hand 2A Article no. 70 730 ...	
	mm	mm	mm	mm	mm	mm	Nm		EUR		EUR	
A0508H SWUC R/L 02	7	100	24	2,9	8	5,8	0,4	WC.. 0201..	138,40	**005**	138,40	**005**
A0608H SWUC R/L 02	7	100	24	3,9	8	7,8	0,4	WC.. 0201..	138,40	**006**	138,40	**006**
SET							0,4	WC.. 0201..	250,60	**999**	250,60	**999**

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

Spare parts		Y7 Key D Article no. 80 950 ...			2A/28 Clamping screw Article no. 70 950 ...	
for Article no.		EUR			EUR	
70 731 005 / 70 730 005	T06	8,44	**108**	M1,8x3,4	3,68	**334**
70 731 006 / 70 730 006	T06	8,44	**108**	M1,8x3,4	3,68	**334**

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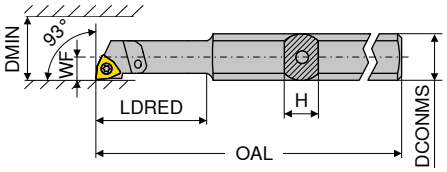
MaxiLock-S – SWUC 93° – Boring bar with screw clamping

▲ with carbide core



Illustrations show right-hand versions

ISO designation	H	OAL	LDRED	WF	DCONMS	DMIN	torque moment	Insert	Left-hand 2A Article no. 70 743 ...		Right-hand 2A Article no. 70 742 ...	
	mm	mm	mm	mm	mm	mm	Nm		EUR		EUR	
E-A0508H SWUC R/L 02	7	100	24	2,9	8	5,8	0,4	WC.. 0201..	154,10	**005**	154,10	**005**
E-A0608H SWUC R/L 02	7	100	24	3,9	8	7,8	0,4	WC.. 0201..	154,10	**006**	154,10	**006**
SET							0,4	WC.. 0201..	306,20	**999**	306,20	**999**

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

Spare parts		Y7 Key D Article no. 80 950 ...			2A/28 Clamping screw Article no. 70 950 ...	
for Article no.		EUR			EUR	
70 743 005 / 70 742 005	T06	8,44	**108**	M1,8x3,4	3,68	**334**
70 743 006 / 70 742 006	T06	8,44	**108**	M1,8x3,4	3,68	**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	Tempered steel	< 45 HRC						
	6.2		46–55 HRC						
	6.3		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	CTCK120	CTCP115	CTCP125	CTCP135	CTPM125	CTP2120	CTC2135	CWN2120			CTP5110	CTP5115	
	(DCX3110)	(HCF3120)	(HCX1115)	(HCX1125)	(HCR1135)	(HCN2125)	(CCN2120)	(CWN2135)	(CWN2120)			(HCN5110)	(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.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	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.	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												
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.	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	0,05	**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

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.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	max.	min.	Recom-mended	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

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.	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	0,2	**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**

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	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10
		v_c in m/min	**400–2500**	**400–2500**	**400–2000**	**400–2000**	**400–1600**	**400–1600**
	◐	Grade		PD20 / CD10		PD20 / CD10		PD20 / CD10
		v_c in m/min		**400–2500**		**400–2000**		**400–1600**
	◌	Grade	PD20 / PU20	PD20 / PU20	PD20 / PU20	PD20 / PU20	PD20 / PU20	PD20 / PU20
		v_c in m/min	**400–2500**	**400–2500**	**400–2000**	**400–2000**	**400–1600**	**400–1600**
Aluminium cast alloys Si=2–12 % f=0.05–0.5 mm/rev.	●	Grade	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10
		v_c in m/min	**600–2000**	**600–2200**	**600–1800**	**600–2000**	**600–1500**	**600–1800**
	◐	Grade	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10
		v_c in m/min	**400–2000**	**400–2200**	**400–1800**	**600–2000**	**400–1500**	**400–1800**
	◌	Grade	PS30	PS30	PS30	PS30	PS30	
		v_c in m/min	**600–2000**	**600–2200**	**600–1800**	**600–2000**	**600–1500**	
Aluminium cast alloys Si=12–20 % f=0.05–0.5 mm/rev.	●	Grade	PU20 / CD10	PU20 / CD10	PU20 / CD10	PU20 / CD10	PU20 / CD10	PU20 / CD10
		v_c in m/min	**800-1200**	**400–1800**	**700–1000**	**400–1500**	**600–900**	**400–1200**
	◐	Grade		PU20 / CD10		PU20 / CD10		PU20 / CD10
		v_c in m/min		**600–1800**		**600–1500**		**600–1200**
	◌	Grade		PU20		PU20		
		v_c in m/min		**600–1800**		**600–1500**		
Copper and copper wrought alloys f=0.05–0.5 mm/rev.	●	Grade	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PS30 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10
		v_c in m/min	**400–1800**	**300–1600**	**400–1600**	**300–1600**	**400–1400**	**400–1500**
	◐	Grade	PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10	PS30 / PU20 / CD10	PD20 / PU20 / CD10	PD20 / PU20 / CD10
		v_c in m/min	**300–1500**	**300–1500**	**400–1600**	**300–1500**	**400–1500**	**300–1400**
	◌	Grade		PD20 / PU20		PS30 / PU20	PD20 / PU20	PS30 / PU20
		v_c in m/min		**300–1800**		**300–1700**	**300–1600**	**200–1300**
Plastic materials without reinforcement (acrylic glass) f=0.05–0.7 mm/rev.	●	Grade		PD20 / CD10		PD20 / CD10		PD20 / CD10
		v_c in m/min		**400–1200**		**300–1000**		**200–1000**
	◐	Grade		PD20 / CD10		PD20 / CD10		PS30 / CD10
		v_c in m/min		**300–1200**		**200–1000**		**200–900**
	◌	Grade		PD20 / CD10		PD20 / CD10		PD20 / CD10
		v_c in m/min		**400–1200**		**300–1000**		**200–1000**
Plastic materials with reinforcement (glass-fibre, carbon-fibre reinforced) f=0.05–0.7 mm/rev.	●	Grade	PS30 / PU20 / CD10		PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10
		v_c in m/min	**500–1000**		**400–900**	**300–900**	**300–800**	**200–1200**
	◐	Grade	PS30 / PU20 / CD10		PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10	PS30 / PU20 / CD10
		v_c in m/min	**400–900**		**300–800**	**200–900**	**200–800**	**200–1400**
	◌	Grade	PU20		PU20	PU20	PU20	
		v_c in m/min	**500–1000**		**400–800**	**300–1000**	**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	

9

CBN – The Next Generation

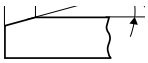
The ‚Sandwich‘ Technology

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°)	29,36
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°)	29,36
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°)	29,36

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

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,[illegible]
	0,03-0,15	

9

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	x		160–240	0,03–0,15	0,06–0,3	160–240	0,03–0,15	0,06–0,3
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, ...

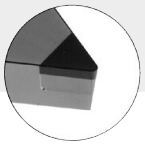
The cutting materials

	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

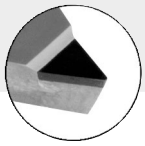
Neutral rake angle:

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



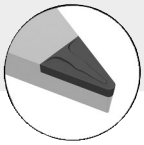
Positive rake angle:

- 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

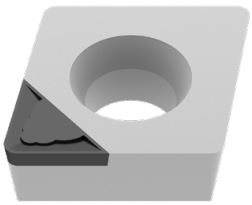


Notes on diamond usage

- 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

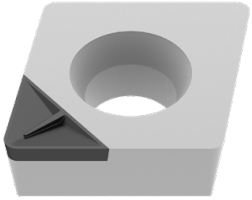
-CB1



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

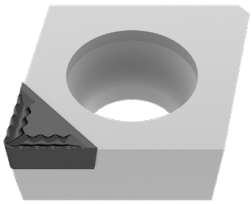
-CB2



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

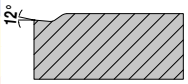
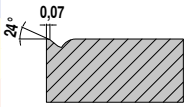
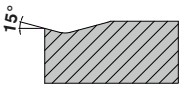
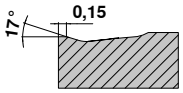
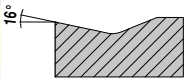
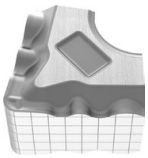
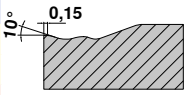


3D-Chip Breaker -CB3				
Corner Radius	a_p in mm		f_z in mm/rev.	
	min.	max.	min.	max.
0,4 mm	1,00	3,00	0,10	0,20
0,8 mm	1,00	3,00	0,15	0,35

- 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

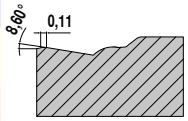
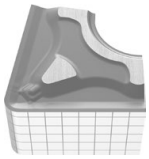
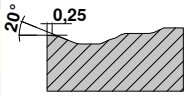
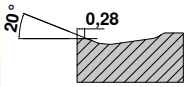
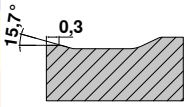
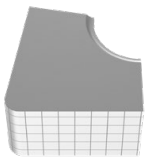
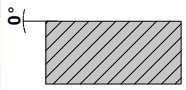
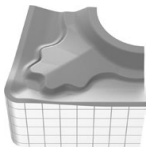
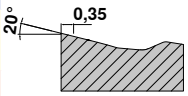
Standard chip breakers / application notes

Main application steel and cast iron, secondary application stainless steels

Negative	Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration	a_p mm	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	 F	**CTEP110 / TCM10 (DCC1110 / CWC10)** CTEP110 / TCM10 (DCC1110 / CWC10) CTEP110 / TCM10 (DCC1110 / CWC10)				0,30–1,50	0,07–0,25	CN.. DN.. TN.. WN..
-F40 (-F40) ▲ Fine turning chip breaker for machining steels ▲ Good chip control ▲ Ideal for copy turning work	 F	**CTCP125 (HCX1125)** CTCP125 (HCX1125) CTCP125 (HCX1125)	**CTCP125 (HCX1125)** CTCP125 (HCX1125) CTCP125 (HCX1125)			0,50–2,00	0,10–0,30	VN..
-F50 (-NF15) ▲ Fine turning chip breaker for fine machining ▲ Steel and stainless steels ▲ Excellent chip control ▲ High surface quality	 F	**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..
-TFQ (-TFQ) ▲ Wiper geometry ▲ Finishing to medium machining ▲ Very high feedrate ▲ High surface quality	 F	**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..
-42 (-42) ▲ Extremely soft-cutting chip breaker ▲ For small and medium widths of cut ▲ Suitable for thin-walled parts	 F M	**CTC2135 (CWN2135)** CTC2135 (CWN2135) **CTC2135 (CWN2135)**	**CTC2135 (CWN2135)** CTC2135 (CWN2135) **CTC2135 (CWN2135)**			0,50–4,50	0,05–0,35	CN..
-XU (-XU) ▲ Finishing to light roughing ▲ Universal chip breaker ▲ Copy turning ▲ Excellent chip formation ▲ Low cutting forces	 M	**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..

Standard chip breakers / application notes

Main application steel and cast iron, secondary application stainless steels

Negative	Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration	a_p mm	f mm	Geometry
-M40 (-M40) ▲ Stable geometry ▲ Medium feed rates ▲ Can be used for any application ▲ Good chip control	 M	**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	 M	**CTCP115 / CTCP125 / CTCK110 / CTCK120 (HCX1115 / HCX1125 / DCX3110 / HCF3120)** CTCP125 (HCX1125) **CTCP115 / CTCP125 / CTCK110 / CTCK120 (HCX1115 / HCX1125 / DCX3110 / HCF3120)**	CTCP115 / **CTCP125** (HCX1115 / **HCX1125**) CTCP125 (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	 M	**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	 M R	**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	 R	**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	 R	**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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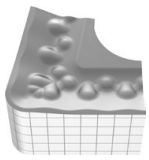
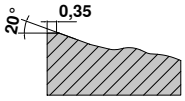
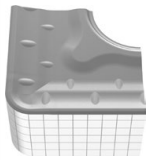
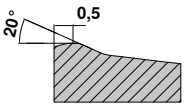
Standard chip breakers / application notes

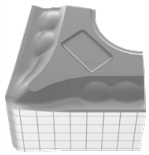
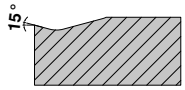
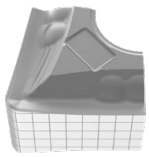
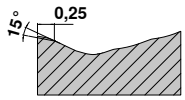
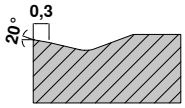
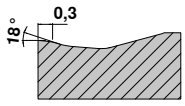
Negative

Main application steel and cast iron, secondary application stainless steels

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

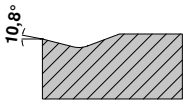
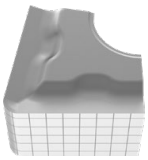
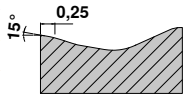
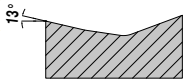
Negative

Main application stainless steels, secondary application steel and super alloys

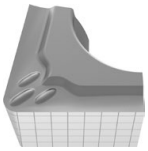
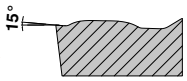
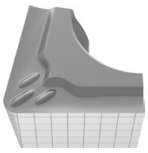
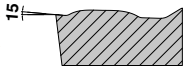
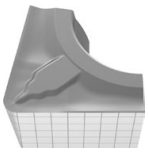
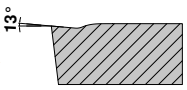
Negative	Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration		Geometry
-F30 (-NF23) ▲ Finishing of stainless steels ▲ Continous cut ▲ High surface quality ▲ Good swarf control	 F	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**			0,08–2,5	0,10–0,35	CN.. DN.. SN.. TN.. VN.. WN..
-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)	CTPM125 (HCN2125) **CTPM125** **(HCN2125)** CTPM125 (HCN2125)	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**		1,00-4,50	0,15-0,40	CN.. DN.. SN.. TN.. VN.. WN..
-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)**	**CTP2120 / CTC2135** **(CCN2120 / CWN2135)** **CTP2120 / CTC2135** **(CCN2120 / CWN2135)**	**CTC2135** **(CWN2135)**		1,00–4,00	0,20–0,40	CN.. DN.. SN.. TN.. WN..
-M60 (-NM26) ▲ Light to medium roughing ▲ Stable cutting edge ▲ Interrupted cut ▲ Forged skin and cast crust	 M R	CTPM125 (HCN2125) **CTPM125** **(HCN2125)**	CTPM125 (HCN2125) **CTPM125** **(HCN2125)** CTPM125 (HCN2125)	CTPM125 (HCN2125) **CTPM125** **(HCN2125)** CTPM125 (HCN2125)		1,50–6,00	0,25–0,50	CN.. DN.. SN.. TN.. WN..

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) **CTP2120 (CCN2120)**	**CTP2120 (CCN2120)** CTP2120 (CCN2120)		 0,05–4,0	0,05–0,25	CN.. DN.. VN..
	-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)**	**CTP5110 / CTP5115 (HCN5110 / HCN5115)** **CTP5110 / CTP5115 (HCN5110 / HCN5115)**		 0,80–3,0	0,10–0,30	CN.. DN.. SN.. VN.. WN..
	-M52 (-M52) ▲ Universal geometry for machining superalloys and stainless steels	 M	**CTP2120 (CCN2120)** **CTP2120 (CCN2120)**	**CTP2120 (CCN2120)** CTP2120 (CCN2120)		 1,50–4,00	0,20–0,38	CN.. DN.. SN.. TN.. WN..

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)** CTEP110 (DCC1110) CTEP110 (DCC1110)	TCM10 / TCM407 (CWC10 / CWC407) TCM10 / TCM407 (CWC10 / CWC407)		 0,20–1,30	0,06–0,25	CC.. DC.. SC.. TC.. VC..
	-SF (-ZF) ▲ Finishing / contour turning ▲ Good swarf control ▲ High surface quality ▲ Low cutting forces	 F	CTC2135 **/ CTCP115** (CWN2135 **/ HCX1115**) CTC2135 **/ CTCP125** (CWN2135 **/ HCX1125**) CTC2135 / CTCP125 (CWN2135 / HCX1125)	**CTCP125 (HCX1125)** CTCP125 **/ CTC2135** (HCX1125 **/ CWN2135**) **CTCP125 (HCX1125)** CTC2135 (CWN2135)	**CTCP125 / CTCP135 (HCX1125 / HCR1135)** **CTC2135 (CWN2135)** **CTCP125 (HCX1125)**	 0,05–2,50	0,05–0,25	CC.. DC.. SC.. TC.. VC.. WC..
	-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)** CTEP110 (DCC1110) CTEP110 (DCC1110)	**TCM10 /** CTEP110 **(CWC10 /** DCC1110) CTEP110 (DCC1110) CTEP110 (DCC1110)		 0,20–1,30	0,06–0,25	CC.. DC.. SC.. TC.. VC..

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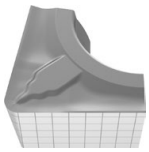
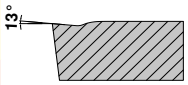
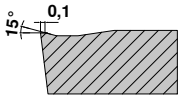
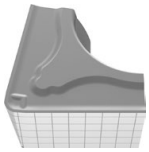
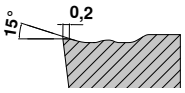
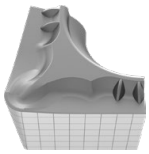
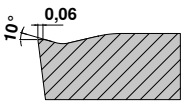
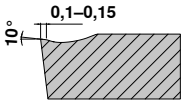
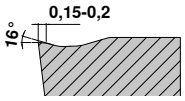
Standard chip breakers / application notes

Positive

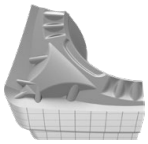
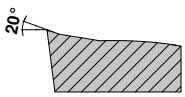
	Positive	Model	Smooth cut	Irregular cutting depth	Interrupted cut	sectional illustration a_p mm	sectional illustration f mm	Geometry
Main application steel and cast iron, secondary application stainless steels and super alloys	-SMF (-SMF) ▲ Finishing to medium machining ▲ Low cutting forces ▲ Good swarf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

Positive

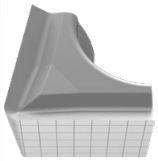
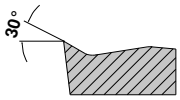
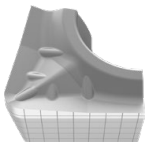
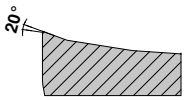
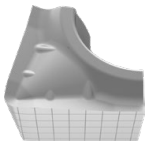
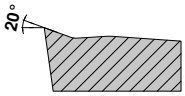
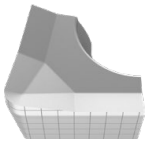
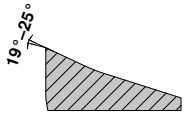
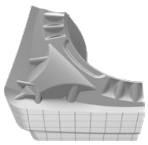
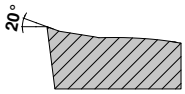
	Positive	Model	Smooth cut	Irregular cutting depth	Interrupted cut	sectional illustration a_p mm	sectional illustration f mm	Geometry
Main application stainless steels	-F43 (-F43) ▲ For the light to medium machining of all stainless steels, general steels and superalloys	 F	CTC2135 (CWN2135) **CTC2135**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

Standard chip breakers / application notes

Positive

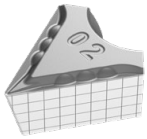
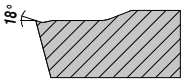
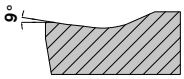
Main application stainless steels	Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
-M81 (-M81) ▲ Directly pressed insert ▲ Positive rake angle ▲ Good swarf control ▲ For medium to rough machining	 **M**	**CWN2120 (CWN2120)** CWN2120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

Positive

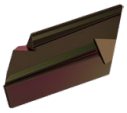
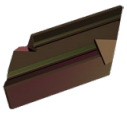
Main application non-ferrous metals, secondary application stainless steels, steels, super alloys, cast iron	Model	Smooth cut	Irregular cutting depth	Interrupted cut	Sectional illustration a_p mm	Sectional illustration f mm	Geometry
-23P (-23P) ▲ Low adhesion ▲ Good chip control with soft aluminium alloys	 **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**					DC.. VC..
		CTPX710					
		CTPX710					
		CTPX710			0,10–2,50	0,02–0,25	
		CTPX710					
-F23 (-F23) ▲ Fine finishing (ground edge) ▲ Very high surface quality ▲ High repeatability ▲ Low depths of cut	 F						CC.. DC.. VC..
		CTP2120 (CCN2120)	**CTP2120 (CCN2120)**				
		CTP2120 (CCN2120)					
		CTP2120 (CCN2120)			0,10–2,00	0,06–0,13	
		CTP2120 (CCN2120)	**CTP2120 (CCN2120)**				

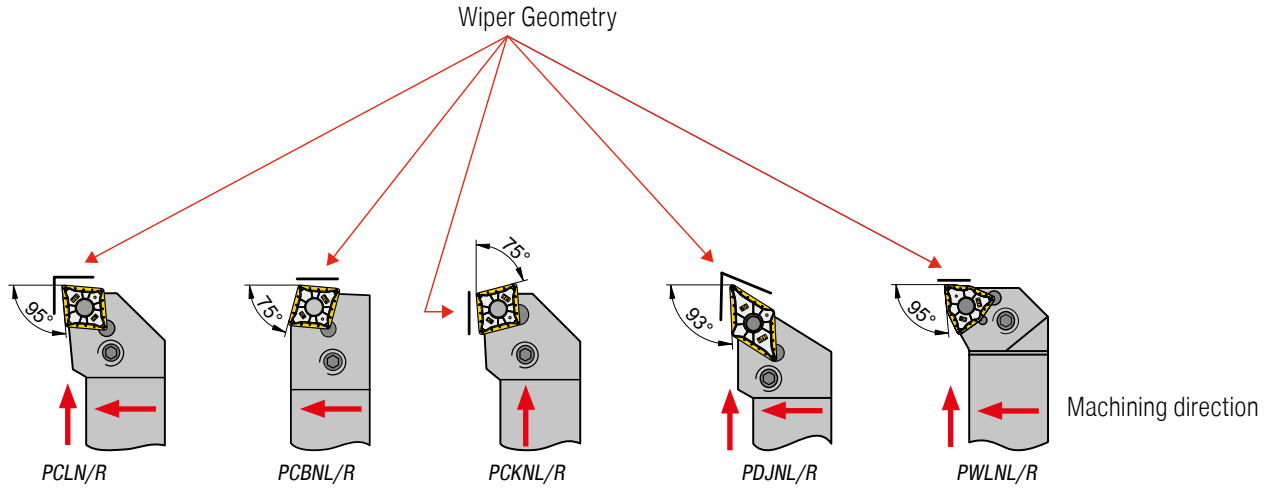
Supplementary chip breakers / application notes

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)**

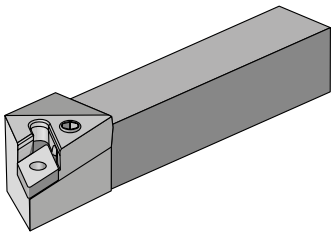
9

Masterfinish – wiper geometry – notes

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

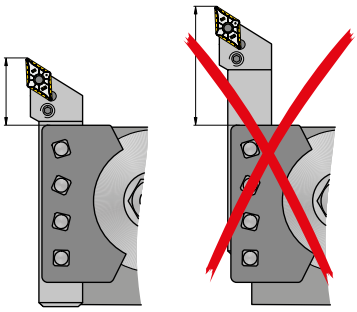


All turning inserts with wiper cutting edge are clamped in standard ISO tool holders

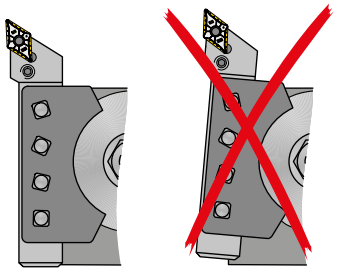


Check toolholder:

- Insert seat
- Shim
- Clamping Lever



Short tool overhang



Ensure correct tool alignment

Feed rate guide values for surface finish quality

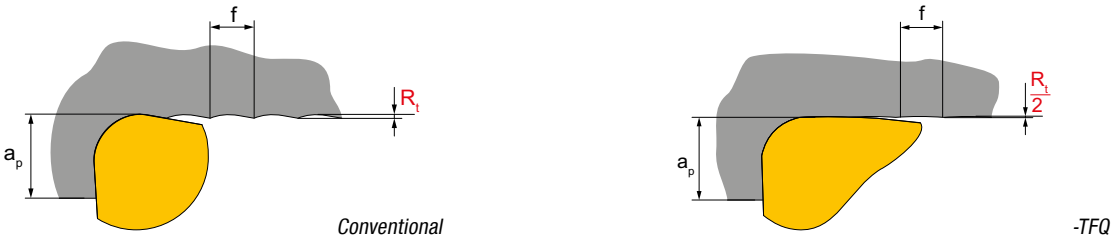
Roughness range R_Z in µm	$R_{t\,max.}$	Corresponds to R_a	Roughness index	ISO 1302	Corner radius r_ε in mm and feed rate f in mm/rev.			
					r_ε = 0,4	r_ε = 0,8	r_ε = 1,2	r_ε = 1,6
63–100	R_t100	12,5–25	N11	25		0,51	0,69	0,88
40–63	R_t63	6,3–25	N10	12,5	0,27	0,43	0,56	0,68
31,5–40	R_t40	4,9–6,3	N9	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!))**

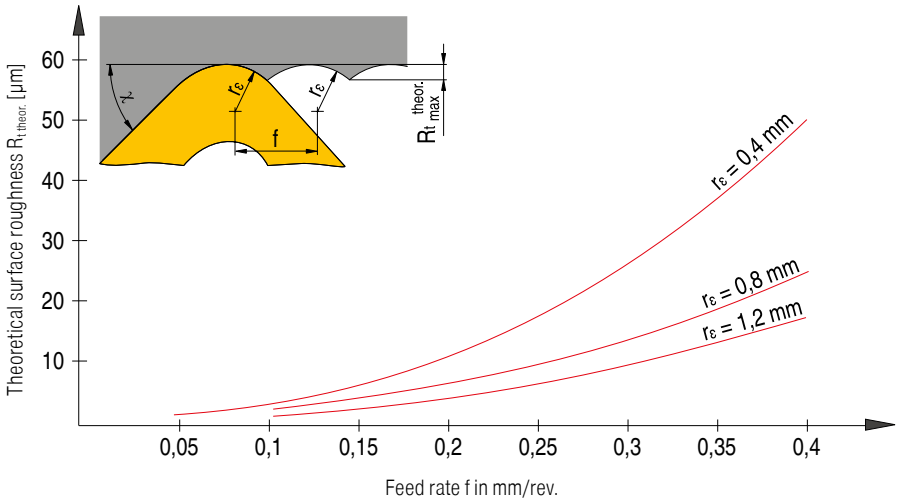
Theoretical Surface Quality

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:

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



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

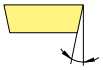
Indexable inserts, CBN, ceramic – inch

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



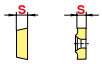
	α		α
A	3°	F	25°
B	5°	G	30°
C	7°	N	0°
D	15°	P	11°
E	20°		
O	Clearance angles not included within the standard for which particular information is necessary.		

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

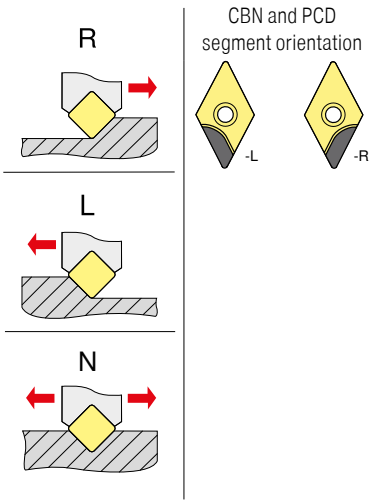
7 Corner radius

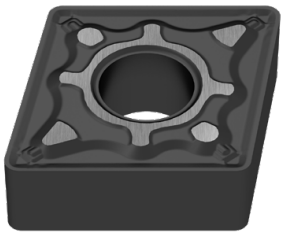
		Code		RN **00** RC **MO**
mm	inch	mm	inch	
≤ 0,05	.0015	00	X0	
0,1	.004	01	0	
0,2	.008	02	.5	
0,4	1/64	04	1	
0,8	1/32	08	2	
1,2	3/64	12	3	
1,6	1/16	16	4	
2,0	5/64	20	5	
2,4	3/32	24	6	
2,8	7/64	28	7	
3,2	1/8	32	8	

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





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

A	
B	
C	
D	
G	
H	

Complete insert thickness

T	
U	
V	
W	
X	
Y	

Double sided

K	
L	
M	
N	
P	
Q	

Entire clamping flat

S	
F	
E	

12 Segment length

LE

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

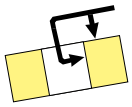
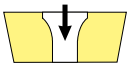
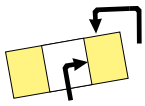
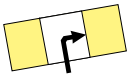
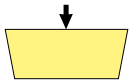
	1	2	3	4	5	6	7	8	9		10
	P	C	L	N	R	20	20	K	12	-	T
0	1	2	3	4	5	6	7	8	9		10
UT50 -	P	C	L	N	R				-12		
0	1	2	3	4	5	6	7	8	9		10
HSK-T63 -	D	C	L	N	R				-12		

0 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

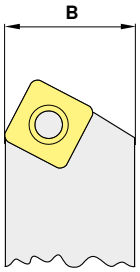
D  Retained from above and via bore	**S**  Retained via centre screw
M  Retained from above and via bore	**P**  Retained via the bore
C  Retained from above	**X** Special version

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°		

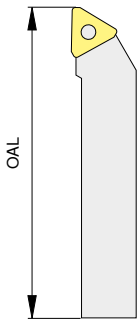
6 Shank height

7 Shank width



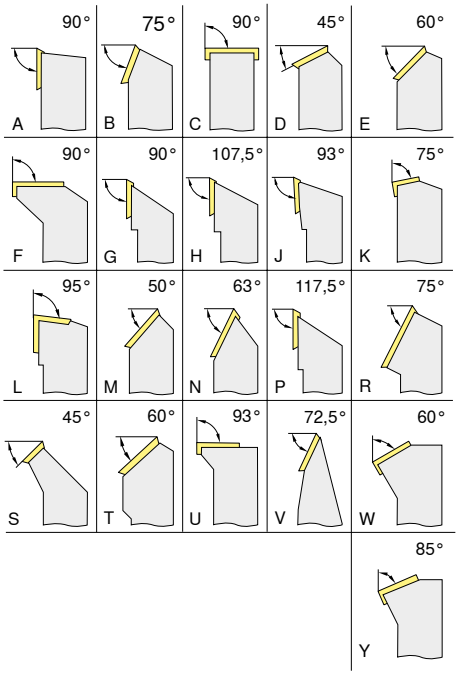
8 Tool length

OAL			OAL		
mm	**inch**		**mm**	**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**			



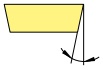
3

Style



4

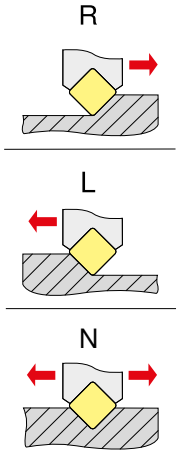
Clearance angle



	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.		

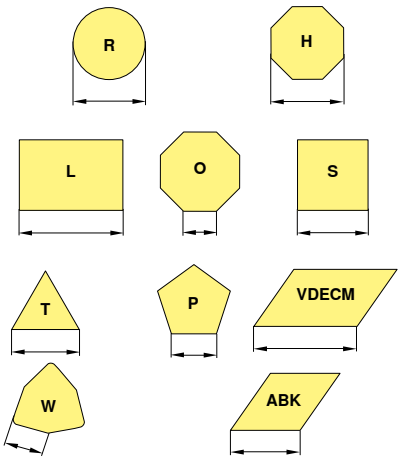
5

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

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

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

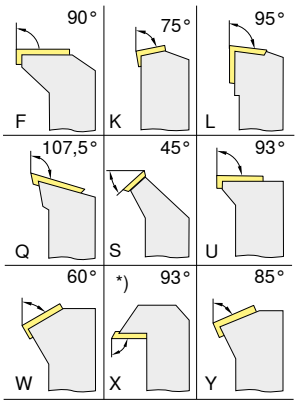
1 Shank type

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

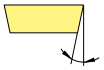
V	35°	Included angle
D	55°	
E	75°	
C	80°	
M	86°	
K	55°	Included angle
B	82°	
A	85°	
L	90°	Other shapes
P	108°	
H	120°	
O	135°	
R	-	
S	90°	
T	60°	
W	80°	

6 Style



*) CERATIZIT factory standard

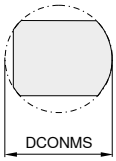
7 Clearance angle



	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.		

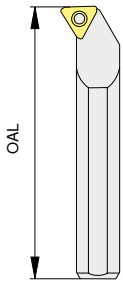
2 Shank diameter

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	



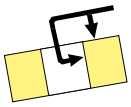
3 Tool length

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



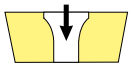
4 Clamping method

D



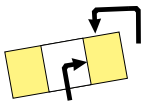
Retained from above and via bore

S



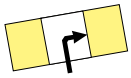
Retained via centre screw

M



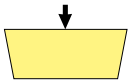
Retained from above and via bore

P



Retained via the bore

C



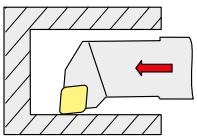
Retained from above

X

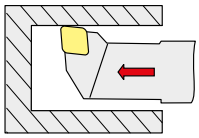
Special version

8 Direction of cut

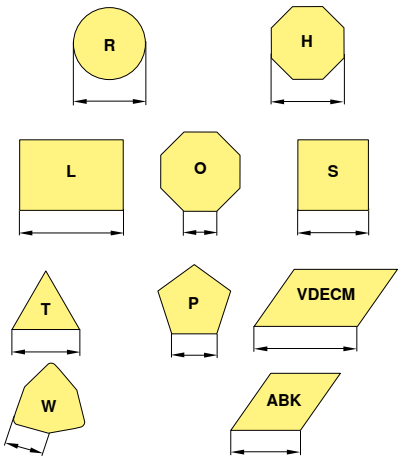
R



L



9 Cutting length



10 Manufacturer specification

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

9

Types of wear

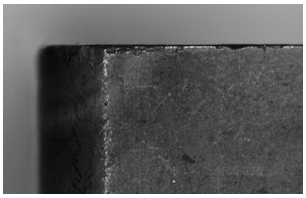
Wear on clearance face

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

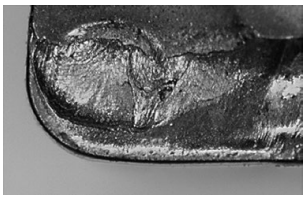


Through excessive mechanical stress at the cutting edge fracture and chipping can occur.

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

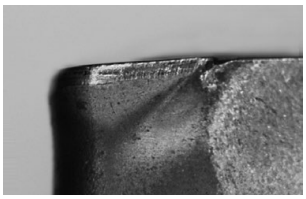


The hot chip which is being evacuated causes cratering at the rake face of the cutting edge.

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

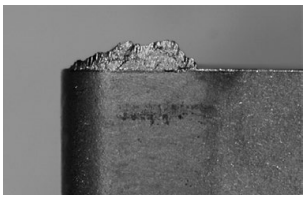


High machining temperature and simultaneous mechanical stress can lead to plastic deformation.

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

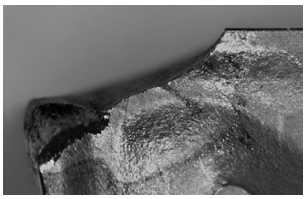


Built-up material / edges occur when the chip is not evacuated properly due to insufficient cutting temperature.

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

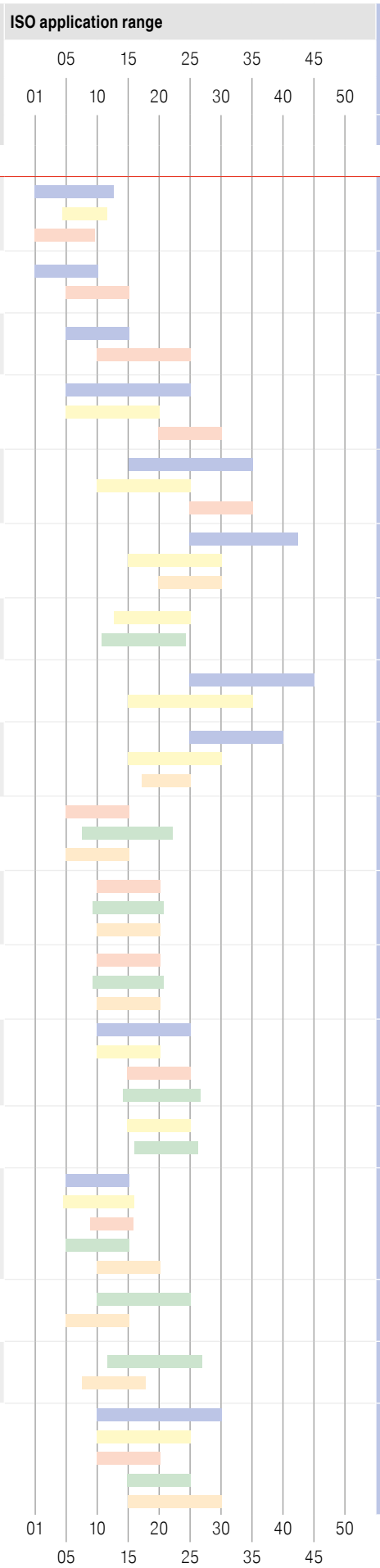
Type of problem															
Type of wear						Work piece problems				Swarf control					
Wear on clearance face	Cratering	Edge chipping	Plastic deformation	Insert breakage	Built-up edge	Vibration	Formation of pips and burrs	Chattered surface	Surface quality	Chip too long (snarl chip)	Chip too short (fragmented chip)				
↓↓	↓↓		↓↓		↓↓	↓			↑	↓		Cutting speed		Cutting data	Remedy measures
~		↓↓	↓	↓↓		↑		↓↓	↓↓	↑↑	↓↓	Feed rate			
↓	↓↓	↓↓	↓				↓↓	↓	↓			Feed rate at centre			
		↑↑	~		↓↓	~	↓↓	↓↓	↓	↓↓	↑↑	Chip groove	↑ ↓	Insert selection	
↑↑		↑↑	↑↑	↑		↓	↓↓	↓	↑			Corner radius	↑ larger / smaller ↓		
↑↑	↑↑	↓↓	↑↑	↓↓								Tap Material	↑ wear resistance / toughness ↓		
		~		~		~		~	~			Tool clamping		General criteria	
		~		~		~		~	~			Work piece clamping			
		~		~		~			↓			Overhang			
~		~				~	~		~			Tip height			
●	~		●		●		●		●	●		Cooling lubricant			

↑↑ raise, increase large influence
↑ raise, increase small influence
↓↓ avoid, reduce large influence
↓ avoid, reduce small influence
~ check, optimise
● use

9

Grades Overview

	Grade designation	Standard designation	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		●	○	○	●



● **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
	...