

SELECTION



Sliding Head

CERATIZIT is a high-technology engineering group specialised in cutting tools and hard material solutions.

Tooling a Sustainable Future

ceratizit.com



CERATIZIT
GROUP

Welcome!



Placing your order is quick and easy

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Freefax Number

UK: 0800 073 2074

E-Mail

info.uk@ceratizit.com



It couldn't be easier

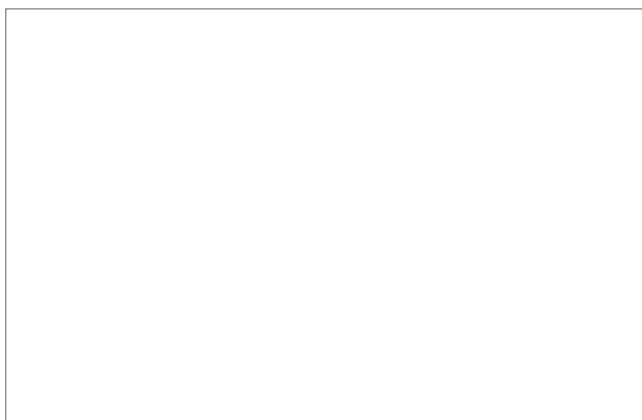
Ordering via the Online Shop

<https://cuttingtools.ceratizit.com>



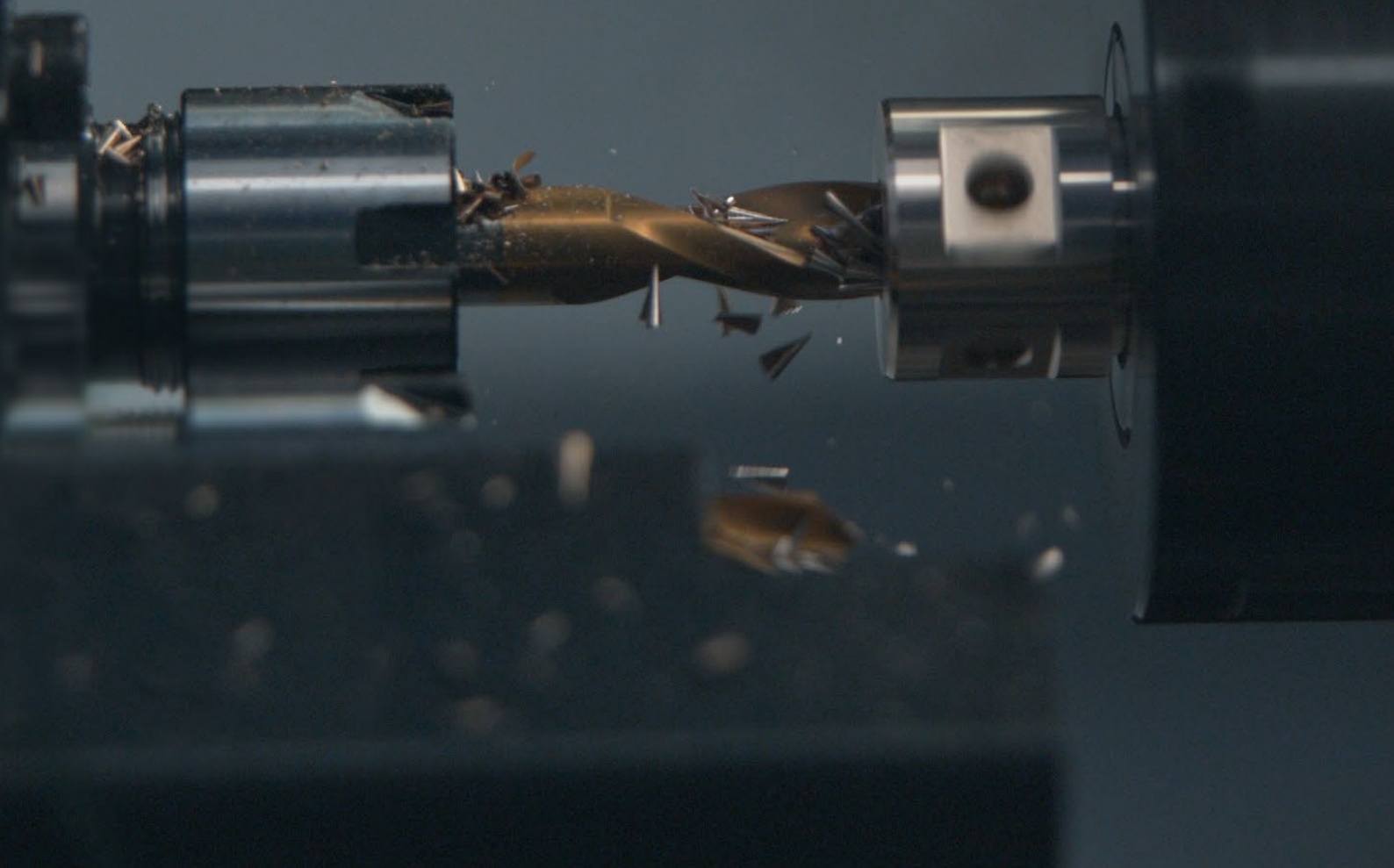
On-site technical support

Your Local Technical Sales Engineer



Your customer number

Solid drilling and bore machining	HSS drilling	1
	Solid carbide drilling	
	Reamers	
Threading	HSS taps	2
	Circular and Thread Milling	
	Thread turning	
Turning	Turning Tools	3
	Multifunction	
	Grooving Tools	
	Miniature turning tools	
Milling	Solid Carbide milling cutters	4
	Milling tools with indexable inserts	
Clamping technology	Collets and reduction sleeves	5





Solid drilling and bore machining

- HSS drilling
- Solid carbide drilling
- Reamers

1

Threading

- HSS taps
- Circular and Thread Milling
- Thread turning

2

Turning

- Turning Tools
- Multifunction
- Grooving Tools
- Miniature turning tools

3

Milling

- Solid Carbide milling cutters
- Milling tools with indexable inserts

4

Clamping technology

- Collets and reduction sleeves

5

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Products and product information can be found in our main catalogue and online shop.

Overview



HSS Drilling

- ▲ Drill for universal application up to 10xD



Solid Carbide Drilling

- ▲ Selection of solid carbide drills and WTX drills
- ▲ High performance for universal application



Reamers

- ▲ HSS and solid carbide reaming from Ø 0.59 - 12 mm

Toolfinder



Mini-drill Micro drills

	HSS	Solid carbide
DIN 1899	✓	
5xD		✓
8xD		✓
12xD		✓



NC Spot Drill

	HSS	Solid carbide
90°	✓	✓
120°	✓	✓

Symbol explanation

Shank



Plain cylindrical shank



Cylindrical shank with lateral driving face „Weldon“



Cylindrical shank with angled clamping flat „Whistle Notch“



Cylindrical shank with lateral driving face (similar to ISO 9766)

Version



Int. coolant supply



self-centering



▲ Pilot hole necessary
▲ min. 2xD

Tool types

HFDS

An explanation of the tool types can be found in the main catalogue, **Chapter 2 Solid carbide drilling**.

- = Main Application
- = Extended application



180° drills

Solid carbide	
3xD	✓
5xD	✓



Reamers

	HSS	Solid carbide
0,95–12,00	✓	
0,59–12,05		✓



Standard drills

	HSS	Solid carbide
3xD	✓	✓
5xD	✓	✓
10xD	✓	





Solid drilling and bore machining

HSS drilling

Solid carbide drilling

Reamers

1

Threading

HSS taps

Circular and Thread Milling

Thread turning

2

Turning

Turning Tools

Multifunction

Grooving Tools

Miniature turning tools

3

Milling

Solid Carbide milling cutters

Milling tools with indexable inserts

4

Clamping technology

Collets and reduction sleeves

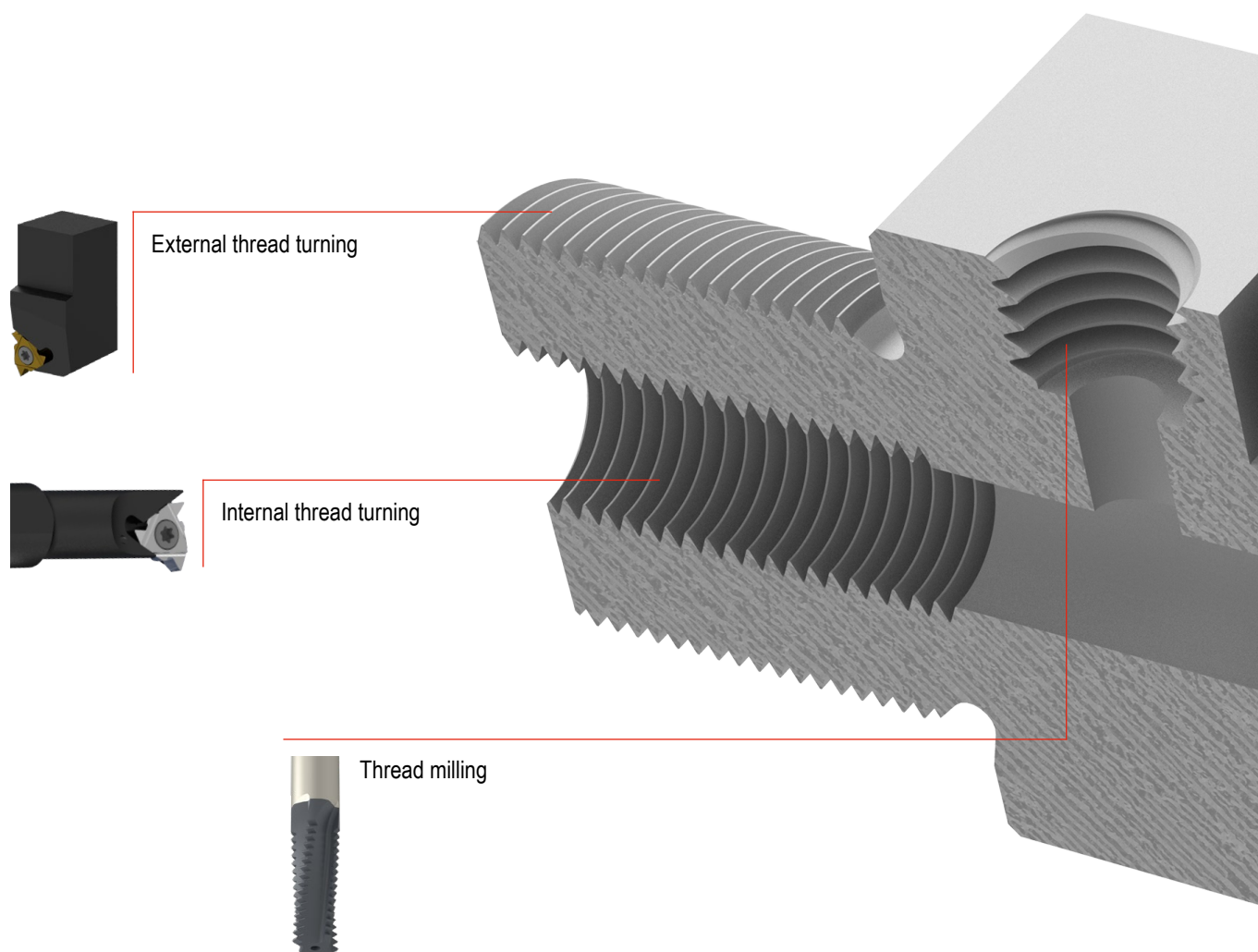
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Products and product information can be found in our main catalogue and online shop.

Toolfinder



Overview



Tapping

- ▲ For through holes and blind holes
- ▲ All common thread types
- ▲ Universal application
- ▲ Static application
- ▲ Rotating application



Thread milling

- ▲ Excellent surface qualities
- ▲ For through holes and blind holes
- ▲ Universal application
- ▲ Various diameters with the same pitch



Circular Milling

- ▲ Circular milling
- ▲ Slot milling
- ▲ Multipurpose milling
- ▲ Universal application



Thread turning

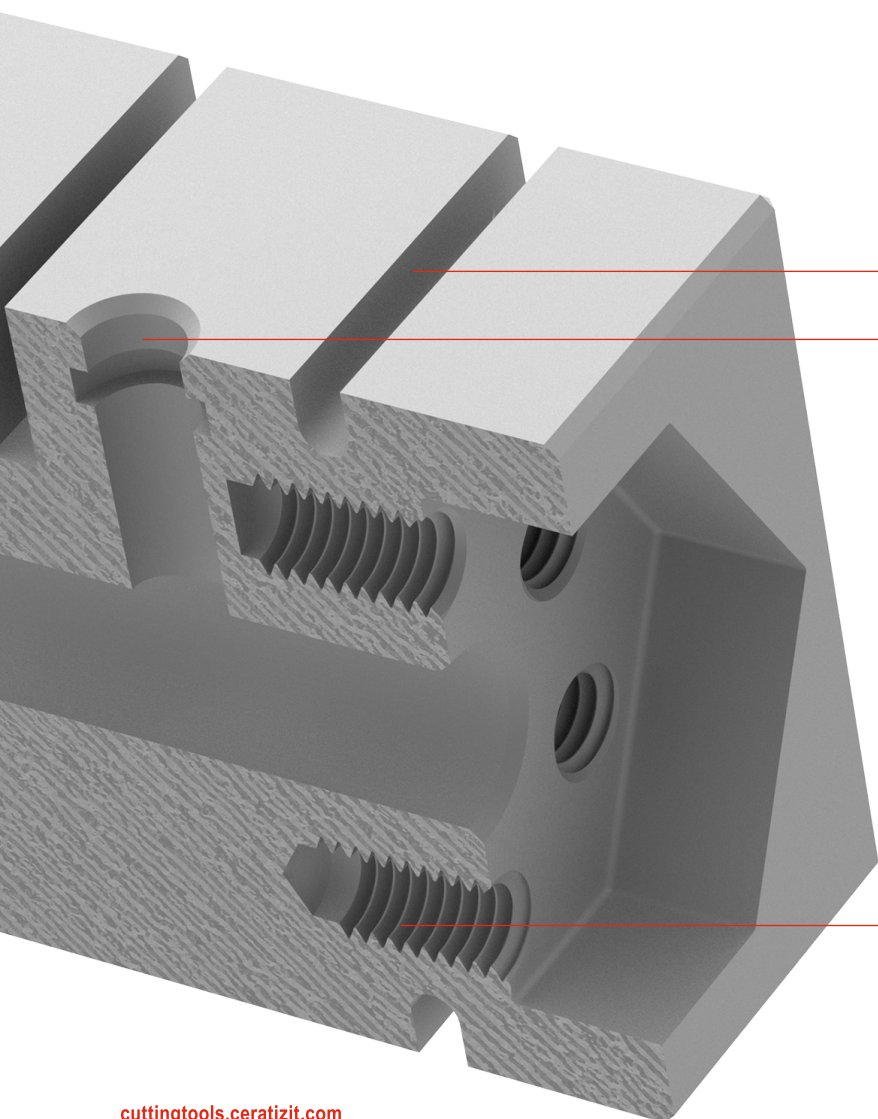
- ▲ Size 06 insert
- ▲ Size 08 insert
- ▲ Size 11 insert
- ▲ Size 16 insert
- ▲ Internal and external thread
- ▲ Shank cross-section = 8 – 25 mm
- ▲ Universal application



Circular and slot milling



Tapping



Thread turning tools overview

Full profile

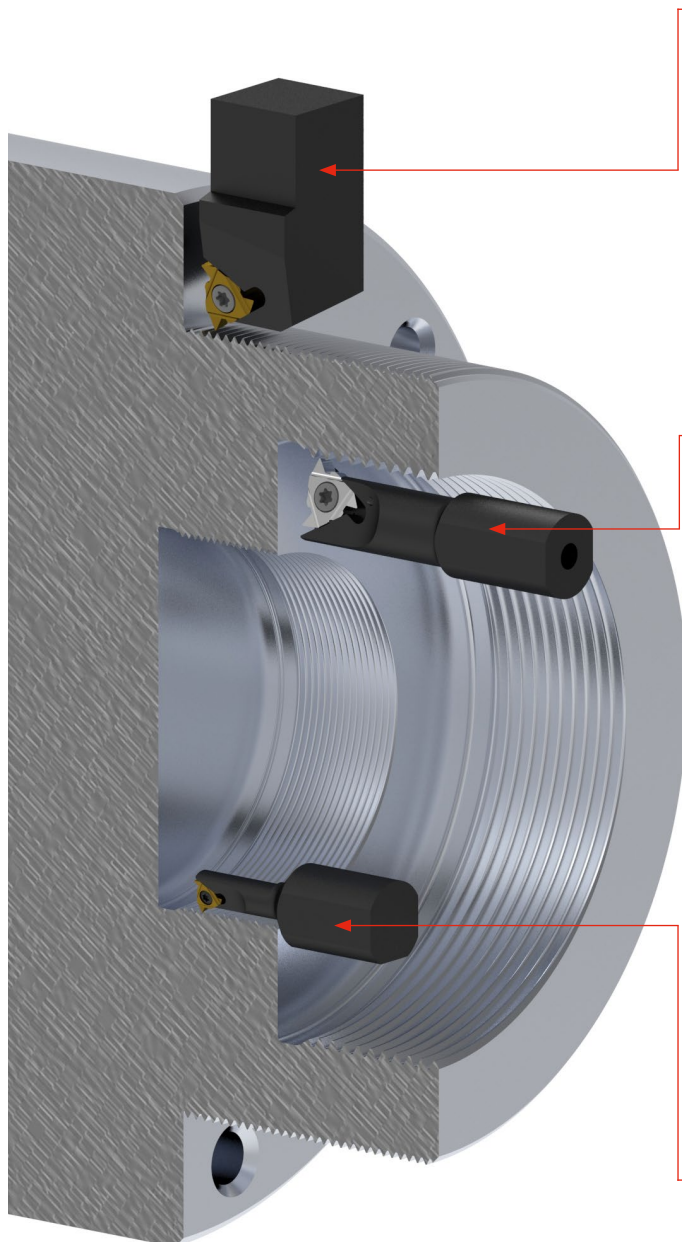


- ▲ Improved quality of thread
- ▲ No burr formation
- ▲ No secondary operations
- ▲ Longer service lives

Partial profile



- ▲ One insert can be used for several pitches
- ▲ Reduced stock requirements

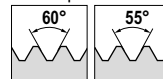


Standard external thread turning

Full profile

M	MJ	BSW	UN	UNC	UNF	UNEF
---	----	-----	----	-----	-----	------

Partial profile



suitable holder

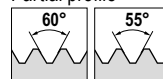


Standard internal thread turning

Full profile

M	MJ	BSW	UN	UNC	UNF	UNEF
---	----	-----	----	-----	-----	------

Partial profile



suitable holder



Full profile / partial profile

Mini size 06 / 08



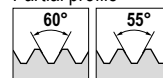
- ▲ Special inserts for low cutting speeds
- ▲ for diameters from 6mm to 8mm

Mini 06

Full profile

M	BSW
---	-----

Partial profile

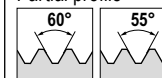


Mini 08

Full profile

M

Partial profile



suitable holder



Other thread turning tools

VertiClamp

→ Chapter Turning – Turning tools

UltraMini



Full profile
Partial profile



Full profile
Partial profile



Partial profile



Partial profile

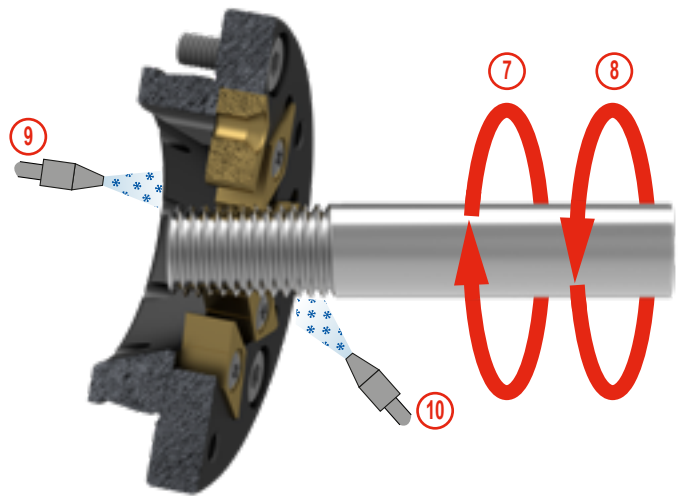
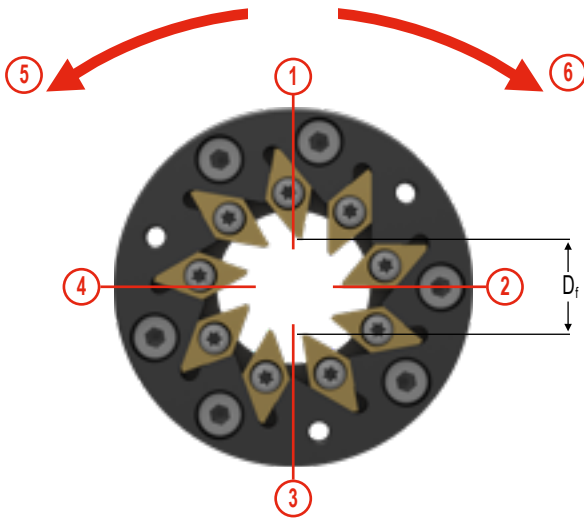
→ Chapter Turning – Miniature turning tools

Form

Request for special tools Thread whirling

Please send the completed form to Techsupport.UK@ceratizit.com!

Company:	Department:
Technical Sales Engineer:	Contact:
Customer no.:	Contact Tel. No.:
Your reference:	Contact E-Mail:



1 Material

Designation	(DIN)	.....
Bar diameter	(Ø)	.....
Bar direction of rotation	(7) (8)	.....
Cutting position	(1) (2) (3) (4)	.....

2 Cutting edge

Full profile	.....
Number of threads	.....
Coating	.....
(only if expressly required)	

3 Tool data

Tool direction of rotation	(5) (6)	.....
Inner cutting circle	(D _i)	.....

4 Machine data

Manufacturer	.....
Machine type	.....
Driven tool manufacturer	.....
Driven tool type	.....
Fitted on/to (e.g. turret, carriage, other)	.....
Y axis (yes/no)	.....
Coolant pressure (bar)	.....
Position of coolant supply	(9) (10)

5 Comments

Please include a detailed drawing of the threaded part with this request form.



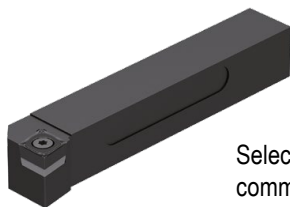
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Reverse-side machining	→ Page 24–62
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	Solid carbide drilling		
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Threading	HSS taps	2	
	Circular and Thread Milling		
	Thread turning		
Turning	Turning Tools	→ Page 5–103	3
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ISO turning



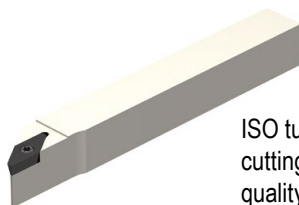
Selection of turning inserts with common ISO geometries in various cutting material grades.

VertiClamp



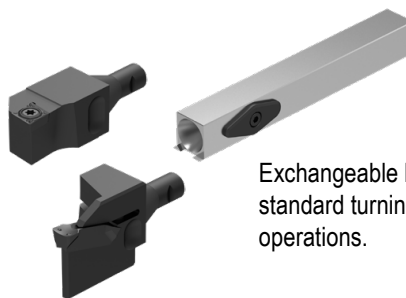
Specialised systems for use on sliding head lathes with vertically positioned indexable inserts.

TriClamp



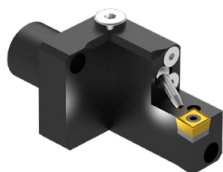
ISO turning inserts with optimised cutting edge for improving the surface quality or increasing the feed rate.

XheadClamp



Exchangeable head system for standard turning and grooving operations.

Reverse-side machining



Flexible tool holder system for machining on the second spindle. There are modular, as well as monoblock tool holders available for turning, grooving, boring and threading on the back of the part.

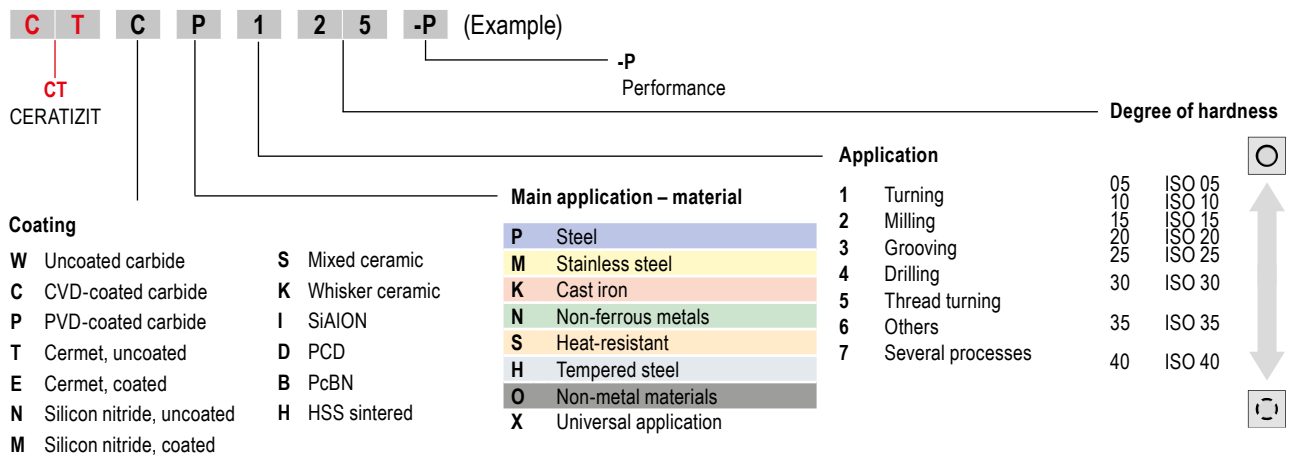
➔ Products and product information can be found in our main catalogue and online shop.

Symbol explanation

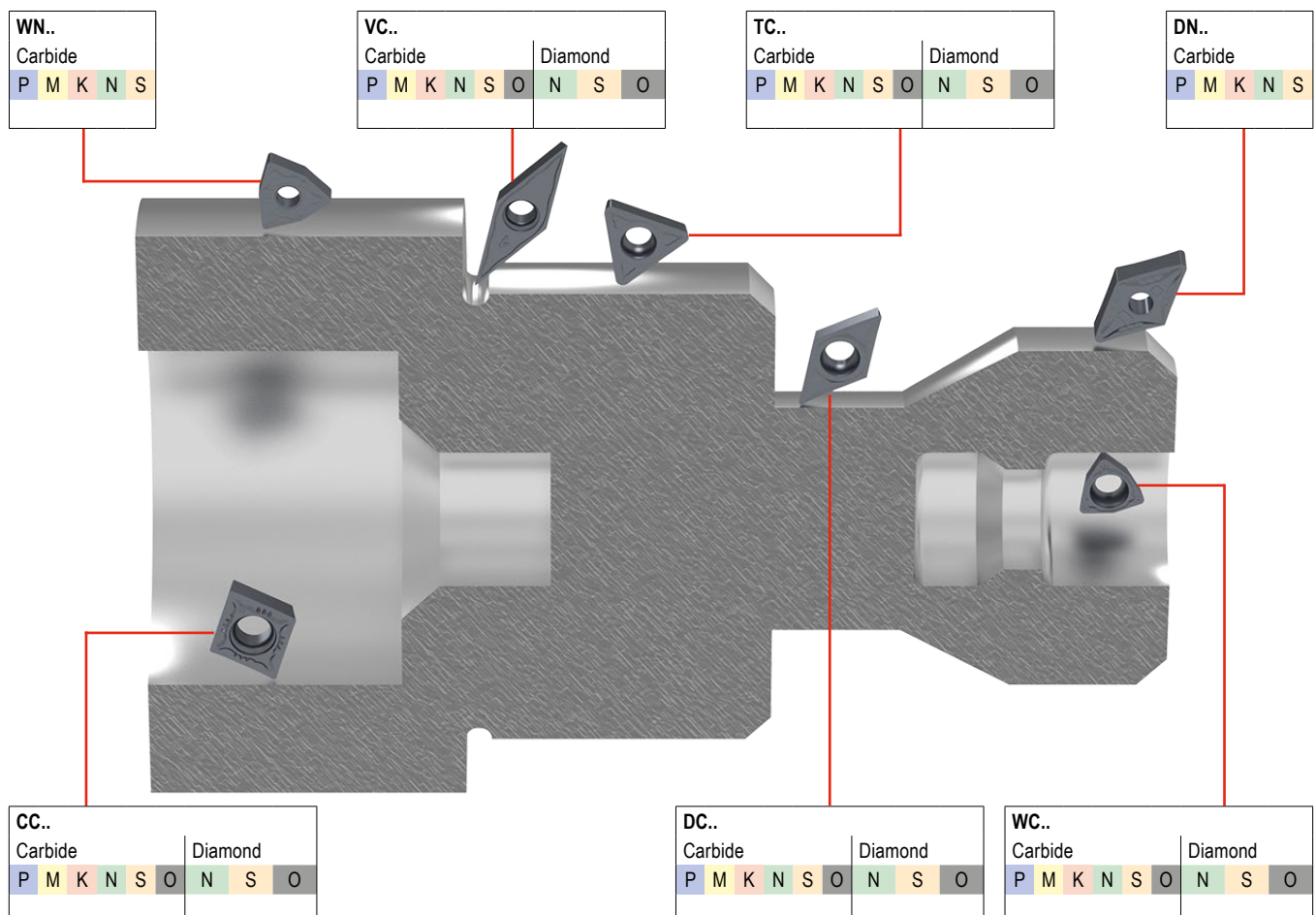
CTCP125-P	Carbide Grade		 Smooth cut  Irregular cutting depth  Interrupted cut	 Int. coolant supply  DirectCooling
F	Fine Machining			
M	Medium Machining			
R	Rough Machining			

1 A detailed overview of grades can be found in the technical appendix on → **page 103**

Grade description

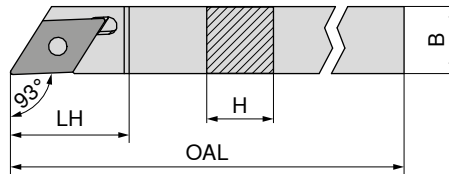


Toolfinder – ISO turning – application

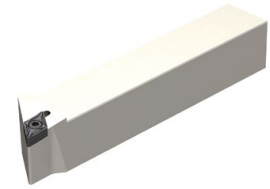


Products and product information can be found in our main catalogue and online shop.

MaxiLock-S – SDJN 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 70 699 ...		Right-hand 70 698 ...	
								£ X0		£ X0	
SDJN R/L 1012 H11	10	12	100	21.3	12	3,2	DNGU 1104	216.00	010	216.00	010
SDJN R/L 1212 H11	12	12	100	21.3	12	3,2	DNGU 1104	216.00	012	216.00	012
SDJN R/L 1616 K11	16	16	125	21.3	16	3,2	DNGU 1104	251.00	016	251.00	016
SDJN R/L 2020 K11	20	20	125	21.3	20	3,2	DNGU 1104	239.00	020	239.00	020
SDJN R/L 2525 M11	25	25	150	21.3	25	3,2	DNGU 1104	281.00	025	281.00	025



Clamping screw

Spare parts for Article no.

70 698 010 / 70 699 010	£ 2A	007
70 698 012 / 70 699 012	5.81	007
70 698 016 / 70 699 016	5.81	007
70 698 020 / 70 699 020	5.81	007
70 698 025 / 70 699 025	5.81	007

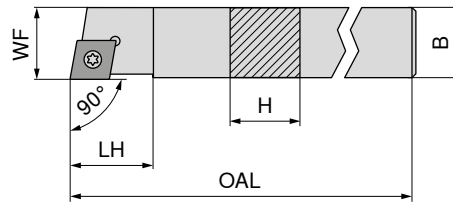
72 950 ...

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

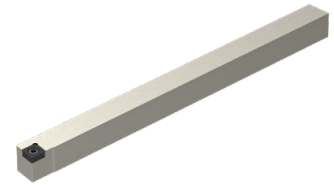
▲ for sliding head lathes

Scope of supply:

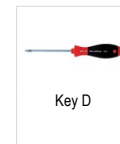
Tool holder with Torx key



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand		Right-hand	
								70 633 ...		70 633 ...	
								£		£	
SCAC R/L 0808 D06	8	8	60	9	8	1,2	CC.. 0602	2A/24		2A/24	
SCAC R/L 1010 E06	10	10	70	9	10	1,2	CC.. 0602	59.00	00800	59.00	00801
SCAC R/L 0808 K06	8	8	125	9	8	1,2	CC.. 0602	63.00	01000	63.00	01001
SCAC R/L 1010 M06	10	10	150	9	10	1,2	CC.. 0602	63.00	10800	63.00	10801
SCAC R/L 1212 F09	12	12	80	13	12	3,2	CC.. 09T3	63.00	11000	63.00	11001
SCAC R/L 1616 H09	16	16	100	13	16	3,2	CC.. 09T3	63.00	01200	63.00	01201
SCAC R/L 1212 M09	12	12	150	13	12	3,2	CC.. 09T3	79.00	11600	79.00	11601
								71.00	11200	71.00	11201



Key D



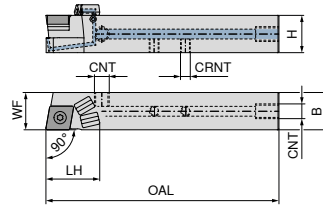
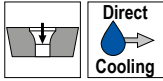
Clamping screw

**Spare parts
for Article no.**

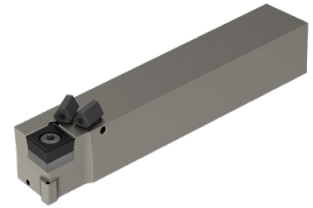
	80 950 ...		70 950 ...	
	£		£	
70 633 00801 / 70 633 00800	Y7		2A/28	
70 633 01001 / 70 633 01000	9.00	039	4.96	857
70 633 10801 / 70 633 10800	9.00	039	4.96	857
70 633 11001 / 70 633 11000	9.00	039	4.96	857
70 633 01201 / 70 633 01200	12.00	120	4.72	87900
70 633 11601 / 70 633 11600	12.00	120	4.72	87900
70 633 11201 / 70 633 11200	12.00	120	4.72	87900

MaxiLock-S – SCAC 90° DC – Tool holder with screw clamping

▲ for sliding head lathes



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	torque moment Nm	Insert	Left-hand		Right-hand	
										70 766 ...		70 766 ...	
										£		£	
										2A/24		2A/24	
SCAC R/L 1212 F09 DC	12	12	80	22	12	M6	M6	3,2	CC.. 09T3	134.00	01201	134.00	01200
SCAC R/L 1212 M09 DC	12	12	150	21	12	M6	M6	3,2	CC.. 09T3	143.00	11201	143.00	11200
SCAC R/L 1616 H09 DC	16	16	100	30	16	G1/8"	M6	3,2	CC.. 09T3	149.00	01601	149.00	01600

Spare parts for Article no.

70 766 01200 / 70 766 01201
70 766 11200 / 70 766 11201
70 766 01600 / 70 766 01601

Clamping screw	Carbide type C	Grubscrew	Grubscrew	Threaded sleeve
70 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...
£	£	£	£	£
2A/28	2A/28	2A/28	2A/28	2A/28
3.79 859			3.51 86700	
3.79 859			3.51 86700	
4.72 87900	11.71 165	2.16 88000	3.51 86700	5.62 171

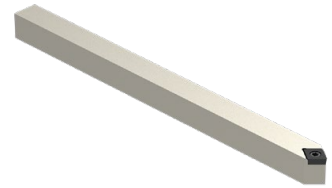
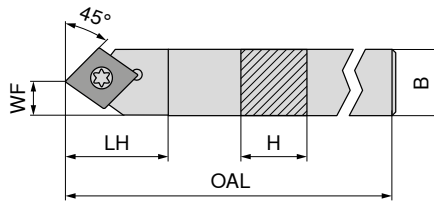
Spare parts for Article no.

70 766 01200 / 70 766 01201
70 766 11200 / 70 766 11201
70 766 01600 / 70 766 01601

Sealing plugs DC	Key D	O-Ring	Coolant nozzle DC	Coolant screw plug
70 950 ...	80 950 ...	70 950 ...	70 950 ...	70 950 ...
£	£	£	£	£
2A/28	Y7	2A/28	2A/28	2A/28
	12.00 120			
	12.00 120			
1.52 87600	12.00 120	1.32 88100	29.58 87700	4.31 294

MaxiLock-S – SCDC 45° – Toolholder with screw clamping**Scope of supply:**

Tool holder with Torx key



Left-hand

70 634 ...

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	
SCDC L 0808 K06	8	8	125	13	4	1,2	CC.. 0602	
SCDC L 1010 M06	10	10	150	13	5	1,2	CC.. 0602	
SCDC L 1212 M09	12	12	150	18	6	3,2	CC.. 09T3	
SCDC L 1414 M09	14	14	150	18	7	3,2	CC.. 09T3	

£

2A/24

59.00 00800

63.00 01000

71.00 01200

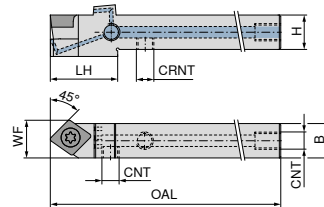
71.00 01400

Key D

Clamping screw

80 950 ...**70 950 ...****Spare parts
for Article no.**

		£		£	
70 634 00800	T08 - IP	9.00	039	M2,5x6 - 08IP	4.96 857
70 634 01000	T08 - IP	9.00	039	M2,5x6 - 08IP	4.96 857
70 634 01200	T15 - IP	12.00	120	M3,5x11	4.72 87900
70 634 01400	T15 - IP	12.00	120	M3,5x11	4.72 87900

MaxiLock-S – SCDC 45° DC – Tool holder with screw clamping

Left-hand

70 767 ...

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	torque moment Nm	Insert	
SCDC L 0808 K06 DC	8	8	125	17	8.5	M5	M5	1,2	CC.. 0602	
SCDC L 1010 M06 DC	10	10	150	17	10.0	M6	M6	1,2	CC.. 0602	
SCDC L 1212 M09 DC	12	12	150	23	13.0	M6	M6	3,2	CC.. 09T3	
SCDC L 1414 M09 DC	14	14	150	25	14.0	G1/8"	M6	3,2	CC.. 09T3	

£

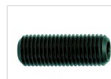
2A/24

134.00 00801

134.00 01001

143.00 01201

143.00 01401



Cylindrical screw

83 950 ...

£

Y7

3.85

157



Key D

80 950 ...

£

Y7

9.00

039

9.00

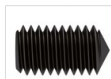
039

12.00

120

12.00

120

Coolant screw
plug**70 950 ...**

£

2A/28

2.86

13800

2.86

13800

3.79

113

3.79

113



Clamping screw

70 950 ...

£

2A/28

2.86

13800

2.86

13800

3.79

113

3.79

113



Grub screw

70 950 ...

£

2A/28

2.86

13800

2.86

13800

3.79

113

3.79

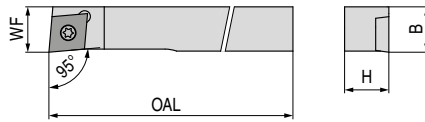
113

**Spare parts
for Article no.**

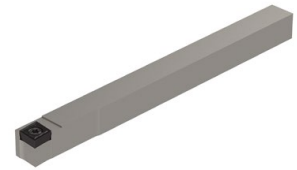
70 767 00801										
70 767 01001										
70 767 01201										
70 767 01401										

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

▲ for sliding head lathes



Illustrations show right-hand versions

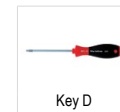


ISO designation	H mm	B mm	OAL mm	WF mm	Insert
SCLC R/L 0808 H06	8	8	100	8	CC.. 0602
SCLC R/L 1010 H06	10	10	100	10	CC.. 0602
SCLC R/L 1212 H09	12	12	100	12	CC.. 09T3

Left-hand		Right-hand	
72 353 ...		72 352 ...	
£		£	
X0		X0	
157.00	008	157.00	008
191.00	010	191.00	010
212.00	012	212.00	012

**Spare parts
for Article no.**

72 352 008 / 72 353 008	T08	10.00	110	M2,5x6 - T08	2.86	13800
72 352 010 / 72 353 010	T08	10.00	110	M2,5x6 - T08	2.86	13800
72 352 012 / 72 353 012	T15	13.00	113	M3,5x11	3.79	113

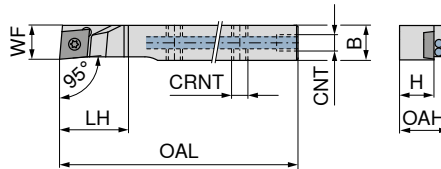
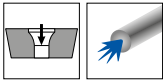


80 950 ...

70 950 ...

MaxiLock-S – SCLC 95° – Tool holder with thro' coolant

▲ for sliding head lathes



Illustrations show right-hand versions

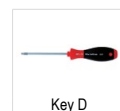


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	Insert
SCLC R/L 0808 H06 IC	8	8	100	16	8	M5	M5	CC.. 0602
SCLC R/L 1010 H06 IC	10	10	100	16	10	M5	M5	CC.. 0602
SCLC R/L 1212 H09 IC	12	12	100	19	12	M5	M5	CC.. 09T3
SCLC R/L 1616 K09 IC	16	16	125	19	16	M5	M5	CC.. 09T3

Left-hand		Right-hand	
72 351 ...		72 350 ...	
£		£	
X0		X0	
471.00	008	471.00	008
393.00	010	393.00	010
442.00	012	442.00	012
428.00	016	428.00	016

**Spare parts
for Article no.**

72 350 008 / 72 351 008	18.03	011	10.00	110	2.86	13800
72 350 010 / 72 351 010	18.03	011	10.00	110	2.86	13800
72 350 012 / 72 351 012	18.03	011	13.00	113	3.79	113
72 350 016 / 72 351 016	18.03	011	13.00	113	3.79	113



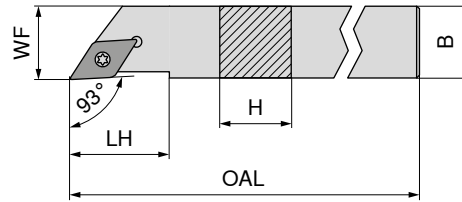
72 950 ...

80 950 ...

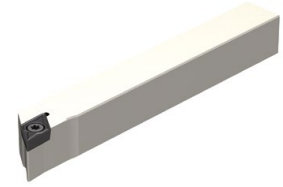
70 950 ...

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

▲ for sliding head lathes



Illustrations show right-hand versions

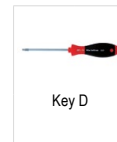


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert
SDJC R/L 0808 H07	8	8	100	13.0	8	1,2	DC.. 0702
SDJC R/L 1010 H07	10	10	100	13.0	10	1,2	DC.. 0702
SDJC R/L 1212 H07	12	12	100	14.5	12	1,2	DC.. 0702
SDJC R/L 1616 K07	16	16	125	33.0	16	1,2	DC.. 0702
SDJC R/L 1212 H11	12	12	100	22.0	12	3,2	DC.. 11T3
SDJC R/L 1616 K11	16	16	125	33.0	16	3,2	DC.. 11T3
SDJC R/L 2020 K11	20	20	125		20	3,2	DC.. 11T3

Left-hand		Right-hand	
70 685 ...		70 684 ...	
£		£	
X0		X0	
188.00	108	188.00	108
188.00	110	188.00	110
211.00	112	211.00	112
233.00	116	233.00	116
211.00	212	211.00	212
233.00	216	233.00	216
258.00	220	258.00	220

Spare parts

Insert			
DC.. 0702	T08	10.00	110
DC.. 11T3	T15	13.00	113



Key D

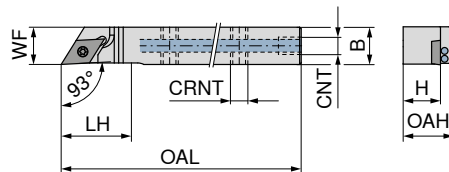


Clamping screw

80 950 ...		72 950 ...	
£		£	
Y7		2A	
10.00	110	5.81	002
13.00	113	5.81	006

MaxiLock-S – SDJC 93° – Tool holder with thro' coolant

▲ for sliding head lathes



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	Insert
SDJC L 0808 H07 IC	8	8	100	17	8	M5	M5	DC.. 0702
SDJC R/L 1010 H07 IC	10	10	100	17	10	M5	M5	DC.. 0702
SDJC R/L 1212 H07 IC	12	12	100	17	12	M5	M5	DC.. 0702
SDJC R/L 1616 K07 IC	16	16	125	17	16	G1/8"	M5	DC.. 0702
SDJC R/L 1010 H11 IC	10	10	100	22	10	M5	M5	DC.. 11T3
SDJC R/L 1212 H11 IC	12	12	100	22	12	M5	M5	DC.. 11T3
SDJC R/L 1616 K11 IC	16	16	125	22	16	G1/8"	M5	DC.. 11T3
SDJC R/L 2020 K11 IC	20	20	125	22	20	G1/8"	M5	DC.. 11T3

Left-hand		Right-hand	
72 357 ...		72 356 ...	
£		£	
X0		X0	
471.00	008	393.00	010
393.00	010	442.00	012
442.00	012	428.00	016
428.00	016	487.00	110
487.00	110	442.00	112
442.00	112	428.00	116
428.00	116	428.00	116
426.00	120	426.00	120

Spare parts

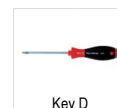
Insert	CNT				
DC.. 0702	M5				
DC.. 0702	G1/8"	57.26	010	18.03	011
DC.. 11T3	M5			18.03	011
DC.. 11T3	G1/8"	57.26	010	13.00	113



Cylindrical screw



Cylindrical screw



Key D



Clamping screw

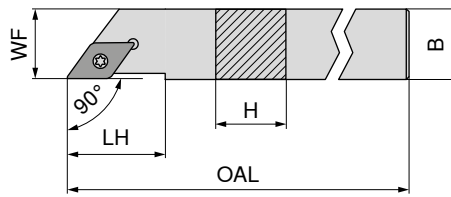
72 950 ...		72 950 ...		80 950 ...		72 950 ...	
£		£		£		£	
X0		X0		Y7		2A	
18.03	011	18.03	011	10.00	110	5.81	002
57.26	010	18.03	011	10.00	110	5.81	002
		18.03	011	13.00	113	5.81	006
				13.00	113	5.81	006

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

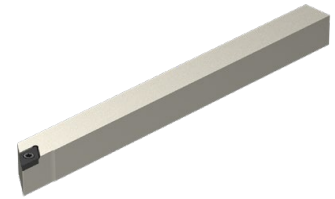
▲ for sliding head lathes

Scope of supply:

Tool holder with Torx key



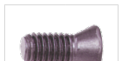
Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand		Right-hand	
								70 639 ...		70 639 ...	
								£ 2A/24		£ 2A/24	
SDAC R/L 0808 K07	8	8	125	14	8	1,2	DC.. 0702	63.00	00800	63.00	00801
SDAC R/L 1010 M07	10	10	150	14	10	1,2	DC.. 0702	63.00	01000	63.00	01001
SDAC R/L 1212 M07	12	12	150	14	12	1,2	DC.. 0702	71.00	01200	71.00	01201
SDAC R/L 1212 M11	12	12	150	21	12	3,2	DC.. 11T3	71.00	11200	71.00	11201
SDAC R/L 1414 M11	14	14	150	21	14	3,2	DC.. 11T3	71.00	01400	71.00	01401



Key D



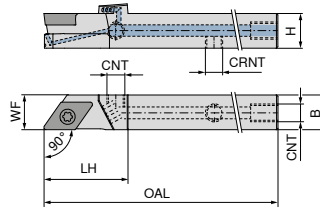
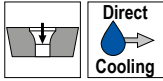
Clamping screw

**Spare parts
for Article no.**

		80 950 ...		70 950 ...	
		£ Y7		£ 2A/28	
70 639 00801 / 70 639 00800	T08 - IP	9.00	039	4.96	857
70 639 01001 / 70 639 01000	T08 - IP	9.00	039	4.96	857
70 639 01201 / 70 639 01200	T08 - IP	9.00	039	4.96	857
70 639 11201 / 70 639 11200	T15 - IP	12.00	120	4.72	87900
70 639 01401 / 70 639 01400	T15 - IP	12.00	120	4.72	87900

MaxiLock-S – SDAC 90° DC – Tool holder with screw clamping

▲ for sliding head lathes



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	torque moment Nm	Insert	Left-hand 70 771 ...		Right-hand 70 771 ...	
										£		£	
SDAC R/L 0808 K07 DC	8	8	125	21	8	M5	M5	1,2	DC.. 0702	134.00	00801	134.00	00800
SDAC R/L 1010 M07 DC	10	10	150	21	10	M6	M6	1,2	DC.. 0702	134.00	01001	134.00	01000
SDAC R/L 1212 M07 DC	12	12	150	21	12	M6	M6	1,2	DC.. 0702	143.00	01201	143.00	01200
SDAC R/L 1212 M11 DC	12	12	150	29	12	M6	M6	3,2	DC.. 11T3	143.00	11201	143.00	11200

**Spare parts
for Article no.**

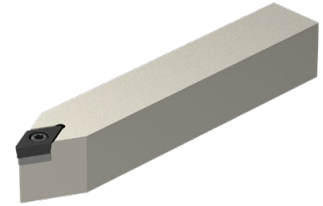
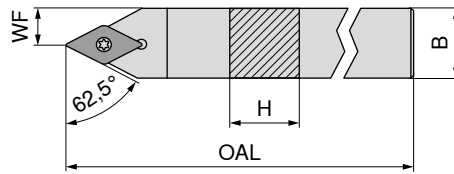
	£		£		£		£
70 771 00800 / 70 771 00801	Y7		Y7		2A/28		2A/28
70 771 01000 / 70 771 01001	3.85	157	9.00	039	2.86	13800	3.51 86700
70 771 01200 / 70 771 01201			9.00	039	2.86	13800	3.51 86700
70 771 11200 / 70 771 11201			12.00	120	3.79	113	3.51 86700

			
Cylindrical screw	Key D	Clamping screw	Grubscrew
83 950 ...	80 950 ...	70 950 ...	70 950 ...
£	£	£	£
Y7	Y7	2A/28	2A/28

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

Scope of supply:

Tool holder with Torx key



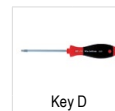
Neutral

70 645 ...

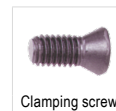
ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	£	
SDNC N 0808 K07	8	8	125	4.0	1,2	DC.. 0702	59.00	00800
SDNC N 1010 M07	10	10	150	5.0	1,2	DC.. 0702	63.00	11000
SDNC N 1010 E07	10	10	70	5.0	1,2	DC.. 0702	63.00	01000
SDNC N 1212 F07	12	12	80	6.0	1,2	DC.. 0702	63.00	01200
SDNC N 1212 M07	12	12	150	6.0	1,2	DC.. 0702	71.00	11200
SDNC N 1212 M11	12	12	150	6.0	3,2	DC.. 11T3	71.00	21200
SDNC N 1616 H11	16	16	100	8.0	3,2	DC.. 11T3	79.00	01600
SDNC N 2020 K11	20	20	125	10.0	3,2	DC.. 11T3	84.00	02000
SDNC N 2525 M11	25	25	150	12.5	3,2	DC.. 11T3	87.00	02500

**Spare parts
for Article no.**

	£		£		£		£	
70 645 00800	9.00	039	4.96	857				
70 645 11000	9.00	039	4.96	857				
70 645 01000	9.00	039	4.96	857				
70 645 01200	9.00	039	4.96	857				
70 645 11200	9.00	039	4.96	857				
70 645 21200	12.00	120	4.72	87900				
70 645 01600	12.00	120	4.72	87900	9.07	106	5.62	171
70 645 02000	12.00	120	4.72	87900	9.07	106	5.62	171
70 645 02500	12.00	120	4.72	87900	9.07	106	5.62	171



Key D



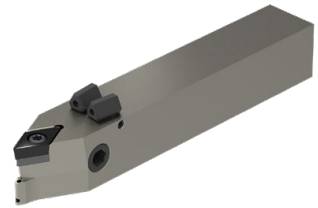
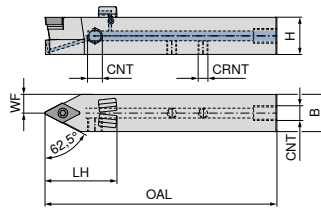
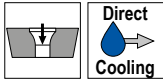
Clamping screw

Solid Carbide
Seat D

Threaded sleeve

80 950 ...**70 950 ...****70 950 ...****70 950 ...**

MaxiLock-S – SDNC 62.5° DC – Tool holder with screw clamping



Neutral

70 774 ...

ISO designation	H mm	B mm	OAL mm	WF mm	CNT	CRNT	torque moment Nm	Insert	£ 2A/24	
SDNC N 1212 F07 DC	12	12	80	6.0	M6	M6	1,2	DC.. 0702	134.00	01200
SDNC N 1212 M07 DC	12	12	150	6.0	M6	M6	1,2	DC.. 0702	143.00	11200
SDNC N 1212 M11 DC	12	12	150	6.0	M6	M6	3,2	DC.. 11T3	143.00	21200
SDNC N 1616 H11 DC	16	16	100	8.0	G1/8"	M6	3,2	DC.. 11T3	149.00	01600
SDNC N 2020 K11 DC	20	20	125	10.0	G1/8"	M6	3,2	DC.. 11T3	158.00	02000
SDNC N 2525 M11 DC	25	25	150	12.5	G1/8"	M6	3,2	DC.. 11T3	164.00	02500

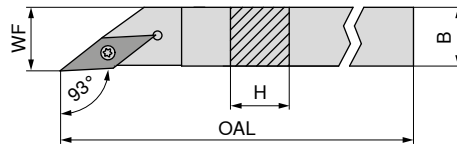
Spare parts for Article no.

	£ 2A/28		£ 2A/28		£ 2A/28		£ 2A/28		£ 2A/28
70 774 01200	4.96	857			3.51	86700			
70 774 11200	4.96	857			3.51	86700			
70 774 21200	3.79	859			3.51	86700			
70 774 01600	4.72	87900	9.07	106	2.16	88000	3.51	86700	5.62 171
70 774 02000	4.72	87900	9.07	106	2.16	88000	3.51	86700	5.62 171
70 774 02500	4.72	87900	9.07	106	2.16	88000	3.51	86700	5.62 171

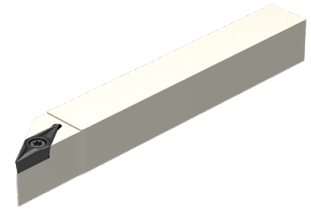
Spare parts for Article no.

	£ 2A/28		£ Y7		£ 2A/28		£ 2A/28		£ 2A/28
70 774 01200			9.00	039					
70 774 11200			9.00	039					
70 774 21200			12.00	120					
70 774 01600	1.52	87600	12.00	120	1.32	88100	29.58	87700	4.31 294
70 774 02000	1.52	87600	12.00	120	1.32	88100	29.58	87700	4.31 294
70 774 02500	1.52	87600	12.00	120	1.32	88100	29.58	87700	4.31 294

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



Illustrations show right-hand versions



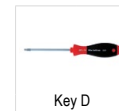
ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert
SVJC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103
SVJC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103
SVJC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103
SVJC R/L 1616 K11	16	16	125	16	1,2	VC.. 1103

Left-hand		Right-hand	
70 697 ...		70 696 ...	
£		£	
X0		X0	
194.00	008	194.00	008
194.00	010	194.00	010
230.00	112	230.00	112
242.00	116	242.00	116

Spare parts

Insert

VC.. 1103



Key D



Clamping screw

80 950 ...

£	
Y7	
10.00	110

70 950 ...

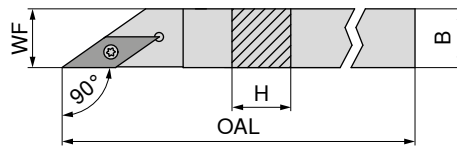
£	
2A/28	
2.86	13800

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

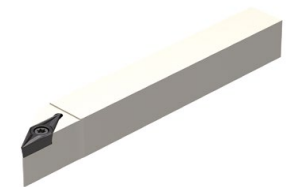
▲ for sliding head lathes

Scope of supply:

Tool holder with Torx key

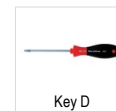


Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert
SVAC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103
SVAC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103
SVAC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103

Left-hand		Right-hand	
70 695 ...		70 694 ...	
£		£	
X0		X0	
194.00	008	194.00	008
194.00	010	194.00	010
230.00	012	230.00	012



Key D



Clamping screw

80 950 ...

£	
Y7	
10.00	110

70 950 ...

£	
2A/28	
2.86	13800

Spare parts

for Article no.

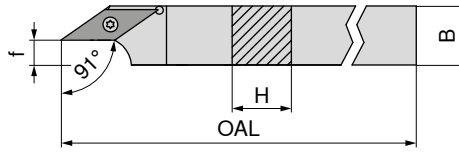
70 694 008 / 70 695 008	T08	10.00	110	M2,5x6 - T08	2.86	13800
70 694 010 / 70 695 010	T08	10.00	110	M2,5x6 - T08	2.86	13800
70 694 012 / 70 695 012	T08	10.00	110	M2,5x6 - T08	2.86	13800

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

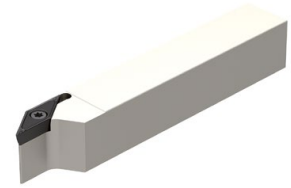
▲ for sliding head lathes

Scope of supply:

Tool holder with Torx key



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	torque moment Nm	Insert	Left-hand 70 691 ...		Right-hand 70 690 ...	
						£ X0		£ X0	
SVXC R/L 1010 H11	10	10	100	1,2	VC.. 1103	194.00	010	194.00	010
SVXC R/L 1212 H11	12	12	100	1,2	VC.. 1103	230.00	012	230.00	012
SVXC R/L 1616 K11	16	16	125	1,2	VC.. 1103	242.00	016	256.00	016

**Spare parts
for Article no.**

		80 950 ...		70 950 ...	
		£ Y7		£ 2A/28	
70 691 010 / 70 690 010	T08	10.00	110	2.86	13800
70 691 012 / 70 690 012	T08	10.00	110	2.86	13800
70 691 016 / 70 690 016	T08	10.00	110	2.86	13800



Key D



Clamping screw

Toolfinder – TriClamp

▲ Indexable inserts with ground wiper geometry
Improves surface quality or increases feed rate

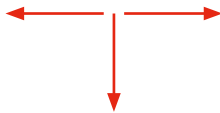
▲ Turning in all three contour directions
Maximum flexibility without changing the tool

▲ Smallest corner radii 0.0–0.2 mm
Generates sharp edges

▲ Perfect chip control
Reduces downtime

▲ High cutting depths can be achieved
Reduces the retraction distance

Application directions



TriClamp system

VPET → Page 19

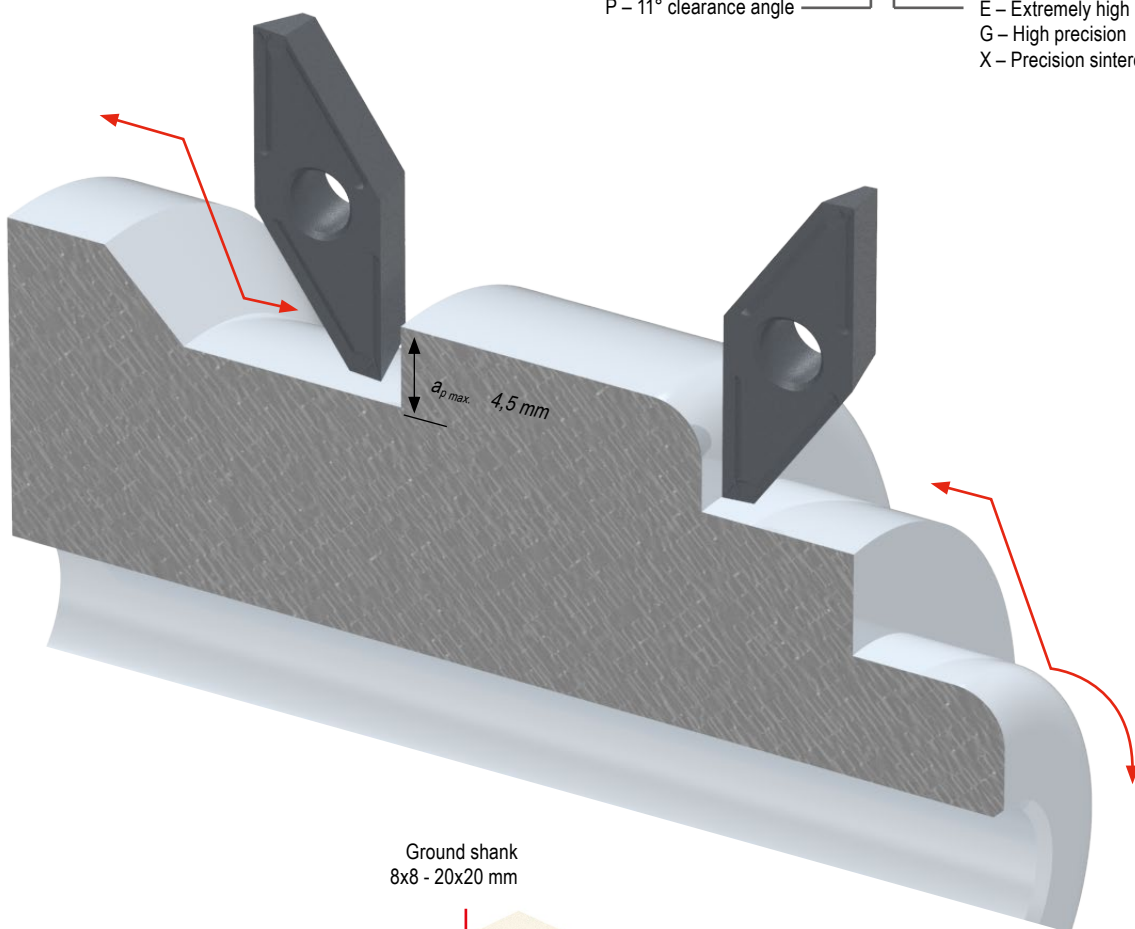
VPGT → Page 19

VPXT → Page 19

Precision ↑

P – 11° clearance angle

E – Extremely high precision
G – High precision
X – Precision sintered



Ground shank
8x8 - 20x20 mm

Holder with and without coolant supply

Special tool steel

All tolerance types can be used in the same holder

Tool holder

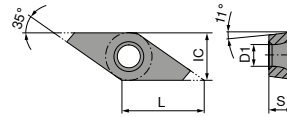
90° → Page 21

91° → Page 22

93° → Page 21–23

VPGT / VPET / VPXT

Designation	L mm	S mm	D1 mm	IC mm
VP.T 1003..	10	3.18	4.4	6.35



VPGT

ISO	RE mm	-FL WPU7610		-FR WPU7610		-FL TiAlN+		-FR TiAlN+		-FL WUU7620		-FR WUU7620	
		F		F		F		F		F		F	
		VPGT		VPGT		VPGT		VPGT		VPGT		VPGT	
		72 405 ...		72 404 ...		72 493 ...		72 492 ...		72 493 ...		72 492 ...	
		£		£		£		£		£		£	
		X1		X1		X1		X1		X1		X1	
1003ZZ	0.00	34.00	760 ²⁾	34.00	760 ¹⁾	32.00	500 ²⁾	32.00	500 ¹⁾	34.00	70000 ²⁾	34.00	70000 ¹⁾
1003008	0.08	34.00	728 ²⁾	34.00	728 ¹⁾	32.00	508 ²⁾	32.00	508 ¹⁾	34.00	70800 ²⁾	34.00	70800 ¹⁾
1003015	0.15	34.00	735 ²⁾	34.00	735 ¹⁾	35.00	515 ²⁾	35.00	515 ¹⁾	34.00	71500 ²⁾	34.00	71500 ¹⁾
P		●		●		●		●		●		●	
M		●		●		●		●		●		●	
K		○		○		○		○		○		○	
N		●		●		○		○		○		○	
S		●		●		●		●		○		○	
H													
O		○		○		○		○		○		○	

1) Note ! Right hand insert for right hand holder

2) Note ! Left hand insert for left hand holder

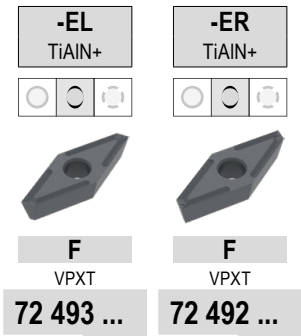
VPET

ISO	RE mm	-FL WUU7610		-FR WUU7610		-FL WPU7610		-FR WPU7610		-FL WPU7620		-FR WPU7620	
		F		F		F		F		F		F	
		VPET		VPET		VPET		VPET		VPET		VPET	
		72 403 ...		72 402 ...		72 403 ...		72 402 ...		72 403 ...		72 402 ...	
		£		£		£		£		£		£	
		X1		X1		X1		X1		X1		X1	
1003ZZ	0.00	33.00	060 ²⁾	33.00	060 ¹⁾	38.00	760 ²⁾	38.00	760 ¹⁾	37.00	560 ²⁾	37.00	560 ¹⁾
1003008	0.08	33.00	028 ²⁾	33.00	028 ¹⁾	38.00	728 ²⁾	38.00	728 ¹⁾	37.00	528 ²⁾	37.00	528 ¹⁾
1003015	0.15	33.00	035 ²⁾	33.00	035 ¹⁾	38.00	735 ²⁾	38.00	735 ¹⁾	37.00	535 ²⁾	37.00	535 ¹⁾
P		○		○		●		●		●		●	
M		○		○		●		●		●		●	
K						○		○		○		○	
N		●		●		●		●		○		○	
S		○		○		●		●		●		●	
H													
O		●		●		○		○		○		○	

1) Note ! Right hand insert for right hand holder

2) Note ! Left hand insert for left hand holder

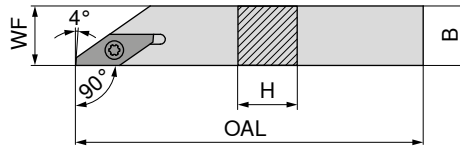
VPXT



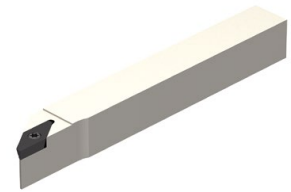
ISO	RE mm		£ X1		£ X1	
1003015	0.15		25.00	615 2)	25.00	615 1)
1003035	0.35		25.00	635 2)	25.00	635 1)
P						
M						
K						
N						
S						
H						
O						

1) Note ! Right hand insert for right hand holder
2) Note ! Left hand insert for left hand holder

TriClamp – SVAP 90° – Toolholder with screw clamping



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	WF mm	Insert
SVAP R/L 0808 H10	8	8	100	8	VP.. 1003
SVAP R/L 1010 H10	10	10	100	10	VP.. 1003
SVAP R/L 1212 H10	12	12	100	12	VP.. 1003

Left-hand		Right-hand	
72 382 ...		72 380 ...	
£		£	
X0		X0	
169.00	008	169.00	008
169.00	010	169.00	010
197.00	012	197.00	012



Key D



Clamping screw

Spare parts

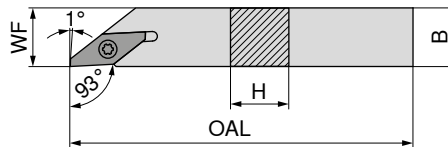
Insert

VP.. 1003

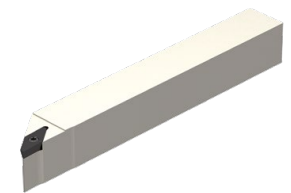
T08

80 950 ...		72 950 ...	
£		£	
Y7		2A	
10.00	110	5.81	002

TriClamp – SVJP 93° – Toolholder with screw clamping



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	WF mm	Insert
SVJP R/L 0808 H10	8	8	100	8	VP.. 1003
SVJP R/L 1010 H10	10	10	100	10	VP.. 1003
SVJP R/L 1212 H10	12	12	100	12	VP.. 1003
SVJP R/L 1616 K10	16	16	125	16	VP.. 1003

Left-hand		Right-hand	
72 386 ...		72 384 ...	
£		£	
X0		X0	
169.00	008	169.00	008
169.00	010	169.00	010
197.00	012	197.00	012
213.00	016	213.00	016



Key D



Clamping screw

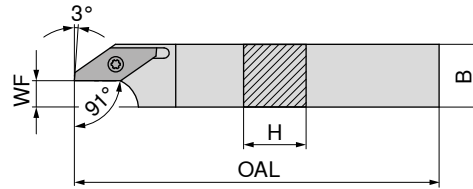
Spare parts

Insert

VP.. 1003

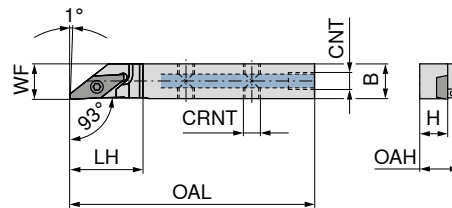
T08

80 950 ...		72 950 ...	
£		£	
Y7		2A	
10.00	110	5.81	002



Spare parts

T08

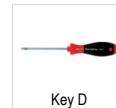


Cylindrical screw

Cylindrical screw



Cylindrical screw



Key D



Clamping screw

72 950 ...

£
X0

72 95
£
X0

£
X0

50 ...

80 950 ...
£
Y7

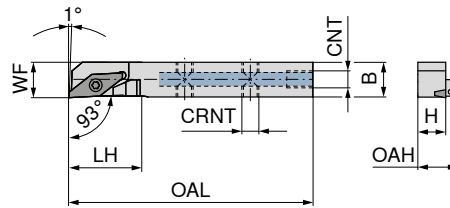
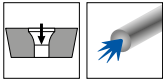
£
Y7

72 950 ...
£
2A

£
2A

72 360 008 / 72 361 008				M5x4	18.03	011	T08	10.00	110	5.81	002
72 360 010 / 72 361 010				M5x4	18.03	011	T08	10.00	110	5.81	002
72 360 012 / 72 361 012				M5x4	18.03	011	T08	10.00	110	5.81	002
72 360 016 / 72 361 016	G1/8"	57.26	010	M5x4	18.03	011	T08	10.00	110	5.81	002
72 360 020 / 72 361 020	G1/8"	57.26	010	M5x4	18.03	011	T08	10.00	110	5.81	002

TriClamp – SVJP 93°-VIC – Reinforced tool holder with screw clamping and thro' coolant



Illustrations show right-hand versions

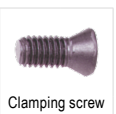
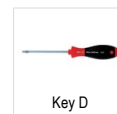


ISO designation	H mm	B mm	LH mm	WF mm	OAL mm	OAH mm	CRNT	CNT	Insert
SVJP R/L 0810 H10 VIC	8	10	21	10	100	11.5	M5	M5	VP.. 1003
SVJP R/L 1010 H10 VIC	10	10	21	10	100	13.5	M5	M5	VP.. 1003
SVJP R/L 1212 H10 VIC	12	12	21	12	100	15.5	M5	M5	VP.. 1003

Left-hand	Right-hand
72 363 ...	72 362 ...
£ X0	£ X0
505.00 008	505.00 008
422.00 010	422.00 010
487.00 012	487.00 012

Spare parts

Insert	VP.. 1003	M5x4	T08
£ X0	18.03 011	£ Y7	10.00 110
		£ 2A	5.81 002

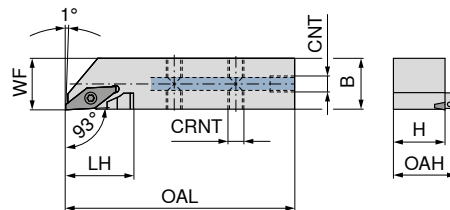


72 950 ...

80 950 ...

72 950 ...

TriClamp – SVJP 93°-VIC – Reinforced tool holder with screw clamping and thro' coolant



Illustrations show right-hand versions

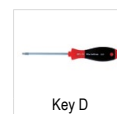


ISO designation	H mm	B mm	LH mm	WF mm	OAL mm	OAH mm	CRNT	CNT	Insert
SVJP R/L 1616 K10 VIC	16	16	21	16	125	19.5	M5	G1/8"	VP.. 1003
SVJP R/L 2020 K10 VIC	20	20	21	20	125	23.5	M5	G1/8"	VP.. 1003

Left-hand	Right-hand
72 365 ...	72 364 ...
£ X0	£ X0
469.00 016	469.00 016
489.00 020	489.00 020

Spare parts

Insert	VP.. 1003	G1/8"	M5x4	T08
£ X0	57.26 010	£ X0	18.03 011	£ Y7
				10.00 110
				£ 2A
				5.81 002



72 950 ...

72 950 ...

80 950 ...

72 950 ...

1 Suitable accessories can be found on → Page 93+94

Reverse-side machining – highlights

▲ Speed

Ultra-fast tool change by tightening / loosening just one bolt

▲ Flexibility

Flexible on all machines

Base holders are installed in the same way on all machines and remain in the machines

▲ Precision

Most accurate height adjustment possible

▲ Set-up time optimisation

Presetting via an adjustment screw directly in the machine or externally in the presetting device

▲ Cooling

Optional coolant overpressure by attaching a coolant attachment

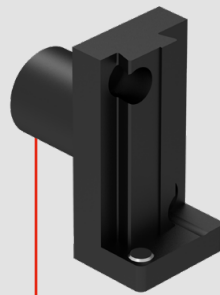
Reverse-side machining – Toolfinder

Modular tools



Distance plates

→ Page 30



CITIZEN

→ Page 26

DOOSAN

→ Page 26

HANWHA

→ Page 27

MAIER

→ Page 27

STAR

→ Page 28

TORNOS

→ Page 28

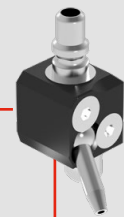
CITIZEN / GILDEMEISTER / HANWHA /
TORNOS / TSUGAMI

→ Page 29

TORNOS / TSUGAMI

→ Page 29

Accessories



Coolant insert

→ Page 62

Turning Holder

CC / DC / VC → Page 31–33

Thread turning holder

→ Page 34

Grooving tool holder

TX → Page 35

Drills and boring bars

→ Page 36

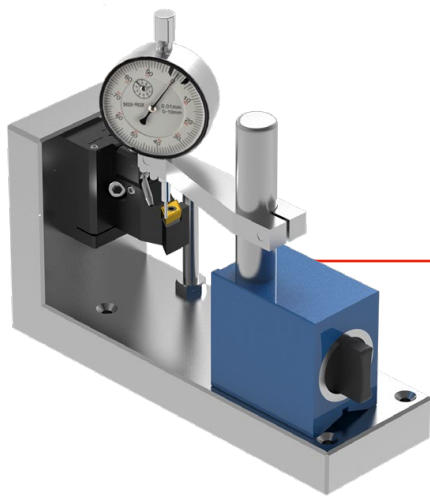
Cutting inserts

→ Page 37+38

Collet Chuck

→ Page 39

Setting Device



Using the adjustment device, you can set our modular holder to the right height outside the machine, which is a plus in terms of flexibility and time.

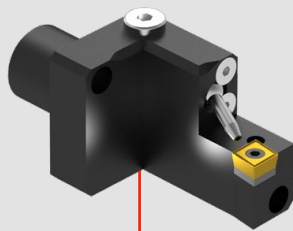
Setting Device

→ Page 65

Detailed information on using the adjustment device

→ Page 98+99

Monoblock tools



STAR

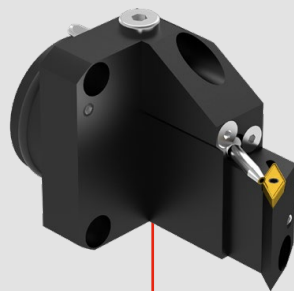
Turning Holder
CC / DC / VC → Page 40–44

Thread turning holder
→ Page 45

Grooving tool holder
TX → Page 46

Drills and boring bars
→ Page 58

Cutting inserts
→ Page 60



TSUGAMI

Turning Holder
CC / DC / VC → Page 47–55

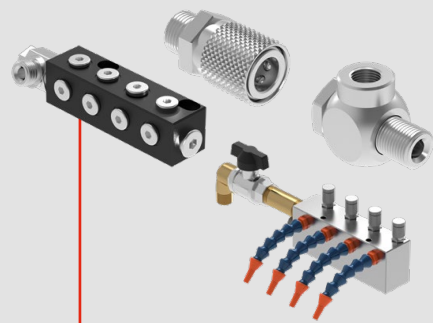
Thread turning holder
→ Page 56

Grooving tool holder
TX → Page 57

Drills and boring bars
→ Page 59

Cutting inserts
→ Page 61

Accessories



Coolant manifold
→ Page 62+63

Coolant nozzles
→ Page 63

Screw plug
→ Page 63

Coolant connection
→ Page 63+64

Threaded adapter
→ Page 64

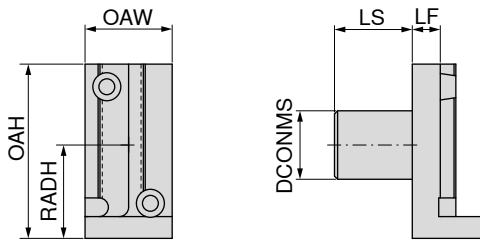
Coolant hoses
→ Page 64

Coupler connector
→ Page 64

Quick-coupler
→ Page 64

Protection plug
→ Page 64

Machine base holder for CITIZEN



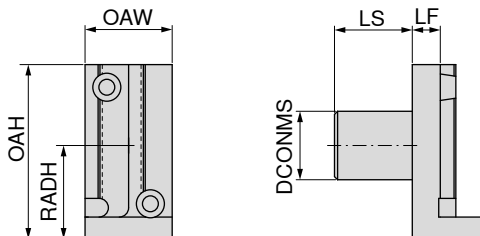
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 951 ...	
							£	
CI.GH 3/4"-40	19.05	28	56	9	40	30	X0	
CI.GH 25-30	25.00	28	56	9	30	30	135.00	07004
CI.GH 1"-60	25.40	28	56	9	60	30	135.00	07002
CI.GH 31-15	31.00	34	58	9	15	32	135.00	07003
							135.00	07001

suitable for the following machines:

Article no.	Machine manufacturer	Machine type
72 951 07001	Citizen	A32-VII with drive
72 951 07002	Citizen	L12 / A20 / CL20 with drive
72 951 07003	Citizen	A20 / A32 / C32 / L32 / M32 without drive
72 951 07004	Citizen	C16 / L12 / L20 / M16

Machine base holder for DOOSAN

▲ for DOOSAN Puma ST20G

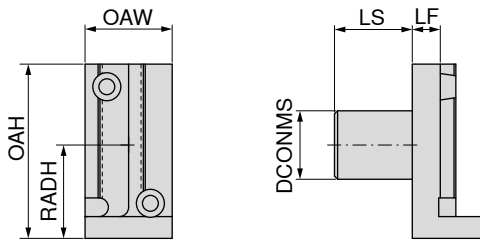


Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 952 ...	
							£	
DO.GH 32-25	32	34	56	9	25	30	X0	
							135.00	07001

suitable for the following machines:

Article no.	Machine manufacturer	Machine type
72 952 07001	Doosan	Puma ST20G

Machine base holder for HANWHA



72 953 ...

Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm
HA.GH 25-40	25	28	56	9	40	30
HA.GH 32-27	32	38	56	34	27	30
HA.GH 33-40	33	28	56	9	40	30

£

X0

135.00 07003

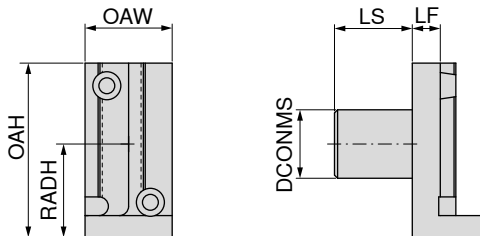
135.00 07002

135.00 07001

suitable for the following machines:

Article no.	Machine manufacturer	Machine type
72 953 07001	Hanwha	XD20 / 26 / 32 / 38
72 953 07002	Hanwha	XD38H
72 953 07003	Hanwha	XE26

Machine base holder for MAIER



72 954 ...

Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm
MA.GH 34-20	34	38	56	9	20	30

£

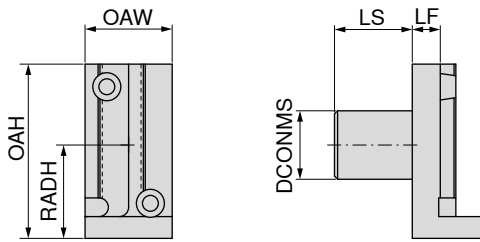
X0

135.00 07001

suitable for the following machines:

Article no.	Machine manufacturer	Machine type
72 954 07001	Maier	ML26 / ML32 / ML12C / ML16C / ML16D / ML20

Machine base holder for STAR

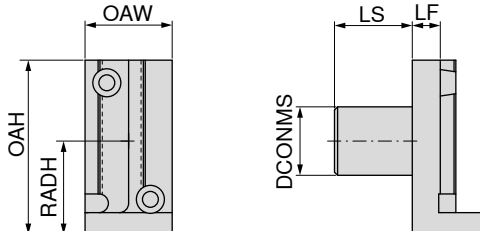


Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 955 ...	
							£	
ST.GH 22-20	22	38	56	9	20	30	X0	
ST.GH 22-25	22	28	56	9	25	30	135.00	07001
							135.00	07002

suitable for the following machines:

Article no.	Machine manufacturer	Machine type
72 955 07001	Star	SR32 / SR32J / SR32JN (from mach. no 161)
72 955 07002	Star	ECAS12 / ECAS20 / SR20RIII / SR20N / SR20JN / SR32J / SR10J / SR16R / SR20R / SR20RII

Machine base holder for TORNOS

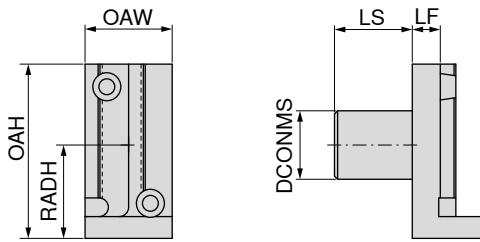


Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 956 ...	
							£	
TO.GH 20-100	20	28	56	9	100	30	X0	
TO.GH 25-100	25	28	56	9	100	30	135.00	07002
							135.00	07001

Machine type assignment

Article no.	Machine manufacturer	Machine type
72 956 07001	Tornos	Deco 7 / 10 / 13 / 20 (Ø25)
72 956 07002	Tornos	Deco 7 / 10 / 13 / 20 (20er Schaft)

Machine base holder for CITIZEN / GILDEMEISTER / HANWHA / TORNOS / TSUGAMI



72 958 ...

£
X0

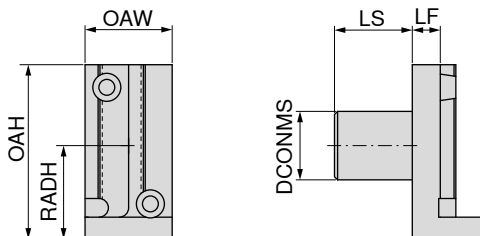
135.00 07001

Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm
CI/GI/HA/TO/TS.GH 20-40	20	28	56	9	40	30

suitable for the following machines:

Article no.	Machine manufacturer	Machine type
72 958 07001	Citizen	K16
	Gildemeister	Sprint 20
	Hanwha	SL 12H
	Tornos	Delta 20 / Gamma 20
	Tsugami	BO 125 / 205

Machine base holder for TORNOS / TSUGAMI



72 958 ...

£
X0

135.00 07002

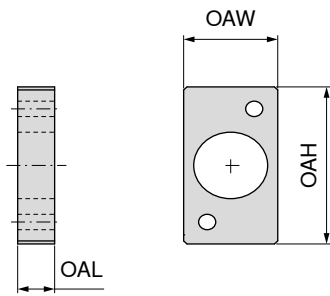
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm
TO/TS.GH 32-50	32	28	56	9	50	30

suitable for the following machines:

Article no.	Machine manufacturer	Machine type
72 958 07001	Tornos	Delta 385 without drive
	Tsugami	BO 385 / BH 38

Distance plate

▲ flexible adjustment of the projection length



Designation	OAW mm	OAH mm	OAL mm	Base holder
CI.DP-GH1"-60-11	28	52	11	CI.GH1"-60
CI.DP-GH25-30-11	28	52	11	CI.GH25-30
CI.DP-GH3/4"-40-11	28	52	11	CI.GH3/4"-40

72 951 ...

£
X0

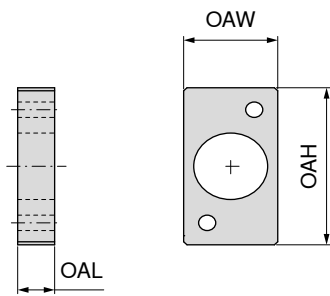
39.00 04006

39.00 04005

39.00 04007

Distance plate

▲ flexible adjustment of the projection length



Designation	OAW mm	OAH mm	OAL mm	Base holder
HA.DP-GH33-40-11	35	52	11	HA.GH33-40

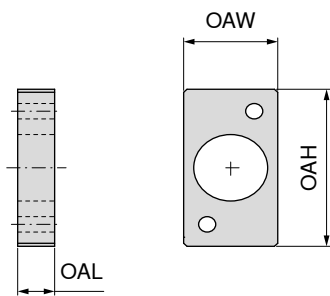
72 953 ...

£
X0

39.00 04004

Distance plate

▲ flexible adjustment of the projection length



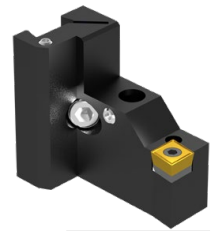
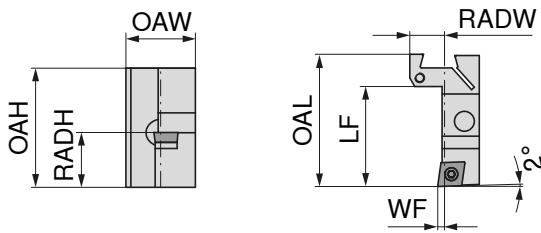
Designation	OAW mm	OAH mm	OAL mm	Base holder
ST.DP-GH22-25-11	28	52	11	ST.GH22-25

72 955 ...

£
X0

39.00 04003

Tool holder block with screw clamping for CC.. Indexable inserts



72 981 ...

£

X0

157.00 08001

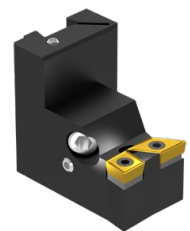
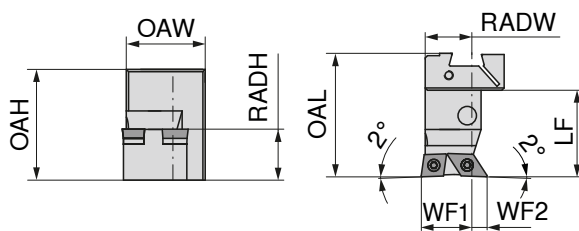
Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert
MU.AH-CC09-R	28	48	41	14	22	2.5	54	CC.. 09T3

			
Key D	Clamping screw	Carbide type C	Threaded sleeve
80 950 ...	70 950 ...	70 950 ...	70 950 ...
£	£	£	£
Y7	2A/28	2A/28	2A/28
13.00	3.79	11.71	5.62
113	113	165	171

Spare parts
for Article no.
72 981 08001

 Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Tool holder block (double) with screw clamping for CC.. / DC.. Indexable inserts



double

72 981 ...

£

X0

266.00 08011

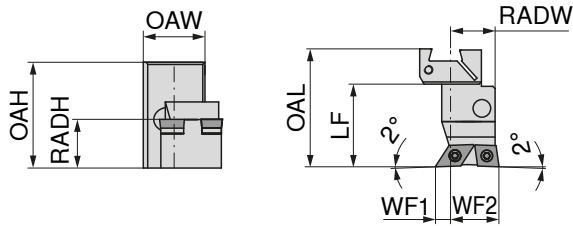
Designation	OAH mm	LF mm	RADW mm	RADH mm	OAL mm	WF_1 mm	WF_2 mm	Insert
MU.AH-CC09-L-DC11-R	48	38	20	22	54	22	7	CC.. 09T3 / DC.. 11T3

Spare parts
for Article no.
72 981 08011

					
Key D	Combination Key	Clamping screw	Solid Carbide Seat D	Carbide type C	Threaded sleeve
80 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...
£	£	£	£	£	£
Y7	2A/28	2A/28	2A/28	2A/28	2A/28
13.00	10.04	3.79	9.07	11.71	5.62
113	398	113	106	165	171

 Suitable CC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.
Suitable DC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Tool holder block (double) with screw clamping for CC.. / DC.. Indexable inserts



double

72 981 ...

£

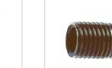
X0

266.00 08010

Designation	OAH mm	LF mm	RADW mm	RADH mm	OAL mm	WF_1 mm	WF_2 mm	Insert
MU.AH-CC09-R-DC11-L	48	38	20	22	54	22	7	CC.. 09T3 / DC.. 11T3

Spare parts
for Article no.

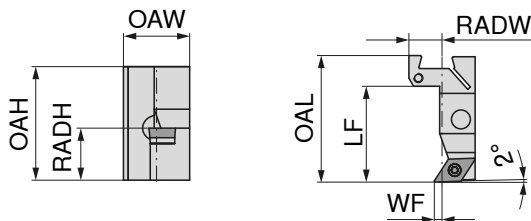
72 981 08010

					
Key D	Combination Key	Clamping screw	Solid Carbide Seat D	Carbide type C	Threaded sleeve
80 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...
£	£	£	£	£	£
Y7	2A/28	2A/28	2A/28	2A/28	2A/28
13.00	10.04	3.79	9.07	11.71	5.62
113	398	113	106	165	171



Suitable CC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.
 Suitable DC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Tool holder block with screw clamping for DC.. Indexable inserts



72 981 ...

£

X0

157.00 08002

157.00 08003

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert
MU.AH-DC07-R	28	48	41	14	22	3.0	54	DC.. 0702
MU.AH-DC11-R	28	48	41	14	22	3.5	54	DC.. 11T3

Spare parts
for Article no.

72 981 08002

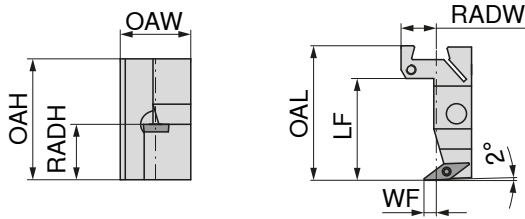
72 981 08003

				
Key D	Combination Key	Clamping screw	Solid Carbide Seat D	Threaded sleeve
80 950 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...
£	£	£	£	£
Y7	2A/28	2A/28	2A/28	2A/28
10.00	10.04	3.79	9.07	5.62
110	398	113	106	171



Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Tool holder block with screw clamping for VC.. Indexable inserts



72 981 ...

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert	£	
MU.AH-VC11-R	28	48	41	14	22	5.0	54	VC.. 1103	157.00	08004
MU.AH-VC16-R	28	48	41	14	22	14.5	54	VC.. 1604	157.00	08005

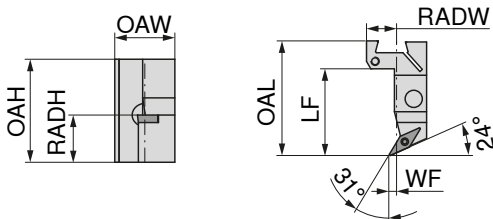
Spare parts
for Article no.

72 981 08004	£	Y7	10.00	110	£	2A/28	10.04	398	£	2A/28	2.86	13800	£	2A/28	12.19	107	£	2A/28	5.62	171
72 981 08005																				



(VC.. 1103) Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.
(VC.. 1604) Suitable indexable inserts can be found in our OnlineShop.

Tool holder block with screw clamping for VC.. Indexable inserts



72 981 ...

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert	£	
MU.AH-VC11-24-R	28	48	41	14	22	3	54	VC.. 1103	157.00	08006

Spare parts
for Article no.

72 981 08006	£	Y7	10.00	110	£	2A/28	2.86	13800
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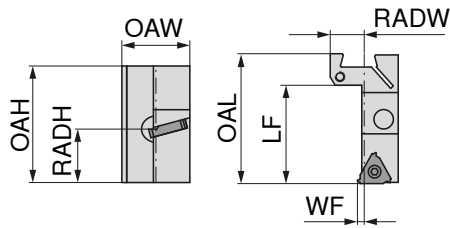


Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Tool holders for right external thread-turning inserts

▲ Tool holder with approach angle 1.5°

▲ Thread-turning inserts with pitch max. 1.5 mm



Right-hand

72 981 ...

£

X0

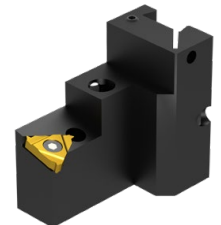
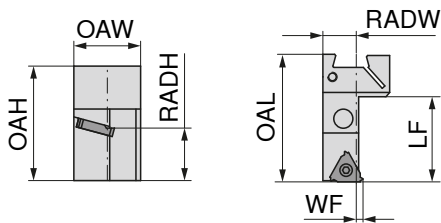
157.00 08007

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert
MU.AH-ER16-R	28	48	41	14	22	3	54	16 ER..

Tool holders for left external thread-turning inserts

▲ Tool holder with approach angle 1.5°

▲ Thread-turning inserts with pitch max. 1.5 mm



Left-hand

72 981 ...

£

X0

157.00 08008

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert
MU.AH-ER16-L	28	48	34	14	22	3	54	16 EL..

Spare parts
for Article no.

72 981 08007



Clamping screw

71 950 ...

£

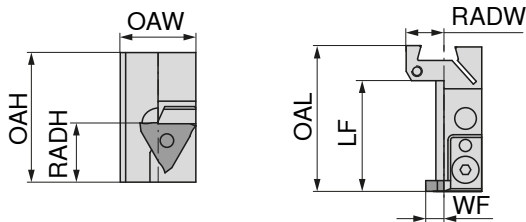
Y2

1.93 231

 Suitable indexable inserts can be found in the main catalogue, **Chapter 8 Thread turning**.

Tool holder block for TX grooving inserts

▲ Insert width 0.5-4.0 mm



Right-hand

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert
MU.AH-TX-R	28	48	41	14	22	7	54	TX R/N/L ...2/3/4

72 986 ...

£

X0

157.00

16001

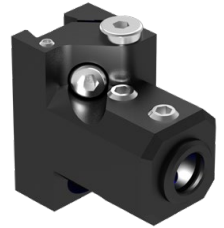
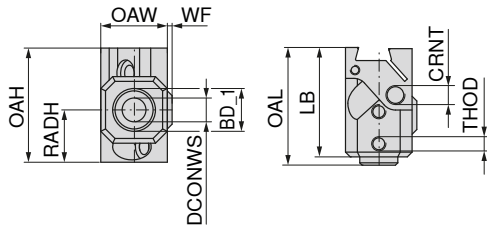
Spare parts
for Article no.
72 986 16001

			
Clamp	Lock washer	Countersunk screw	Guide pin with flange
72 950 ...	72 950 ...	72 950 ...	72 950 ...
£	£	£	£
Y6	Y6	Y6	Y6
63.21	3.34	3.34	12.20
19001	19002	19003	19004

 Suitable indexable inserts can be found in the main catalogue, **Chapter 11 Grooving tools.**

Tool holder blocks for drills and boring bars

▲ with inner high-pressure coolant supply through the tool



72 982 ...

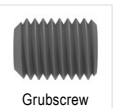
Designation	DCONWS mm	BD_1 mm	OAW mm	OAH mm	LB mm	WF mm	OAL mm	RADH mm	THOD	
MU.AH-BH06IK	6	12	28	48	46.0		48.5	22	M6	£ X0 179.00 03001
MU.AH-BH08IK	8	14	28	48	46.0		48.5	22	M8	£ 179.00 03002
MU.AH-BH10IK	10	16	28	48	46.0		49.5	22	M8	£ 179.00 03003
MU.AH-BH12IK	12	18	28	48	50.0		52.5	22	M10	£ 179.00 03004
MU.AH-BH14IK	14	19	28	48	50.5		54.0	22	M10	£ 179.00 03005
MU.AH-BH16IK	16	21	28	48	50.5	2	54.0	22	M10	£ 179.00 03006



72 950 ...

£ Y8 3.52

19011



83 950 ...

£ Y8 4.49

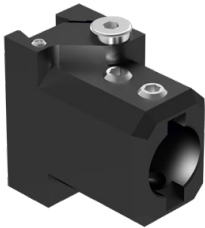
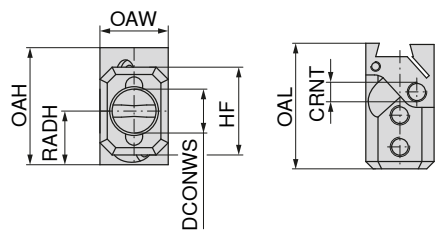
464

Spare parts
for Article no.

72 982 03001	£ Y8 3.52	19011	
72 982 03002			£ 4.49 464
72 982 03003			£ 4.49 464
72 982 03004	£ 3.52	19013	
72 982 03005	£ 3.52	19013	
72 982 03006	£ 3.52	19013	

Tool holders for clamping inserts

- ▲ Thro' coolant directly through base holder
- ▲ Also suitable for collet chucks



72 983 ...

£

X0

179.00 20001

Designation	DCONWS H6	HF	OAW	OAH	RADH	OAL	CRNT
MU.AH-S20IK	20 mm	36 mm	28 mm	48 mm	22 mm	51.5 mm	M8x1



Grubscrew

83 950 ...

£

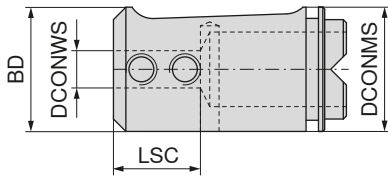
Y8

4.49 464

Spare parts
for Article no.
72 983 20001

Clamping insert for UltraMini cutting inserts

▲ with inner high-pressure coolant supply through the tool



72 995 ...

Designation	DCONMS _{g6} mm	DCONWS mm	BD _{g6} mm	LSC mm
MU.ULTRAMINI.KH-DM4	20	4	20	13
MU.ULTRAMINI.KH-DM5	20	5	20	14
MU.ULTRAMINI.KH-DM6	20	6	20	14
MU.ULTRAMINI.KH-DM7	20	7	20	14
MU.ULTRAMINI.KH-DM8	20	8	20	19

£

X0

52.00 08001

52.00 08002

52.00 08003

52.00 08004

52.00 08005



Grubscrew

72 950 ...

£

Y8

3.52 19009

3.52 19010

3.52 19012

Spare parts

DCONWS

4

5 - 7

8

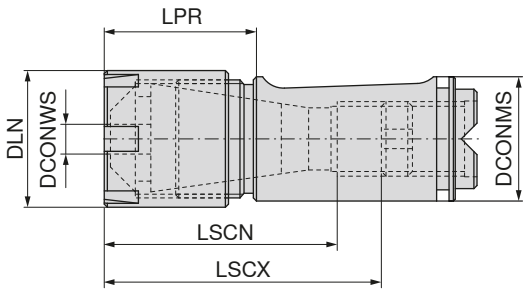


Suitable UltraMini cutting inserts can be found in the main catalogue, **Chapter 12 Miniature turning tools.**

ER collet chuck (mini lock nut)

▲ with inner high-pressure coolant supply through the tool

Scope of supply:
Base body without lock nut



72 984 ...

Designation	LPR mm	DCONMS _{g6} mm	DLN mm	LSCX mm	LSCN mm	for collet
MU.S20-SPZH-ER16-IK	25.0	20	22	55	38	426E (ER16)
MU.S20-SPZH-ER20-IK	27.5	20	28	56	40	428E (ER20)

£

X0

72.00 06001

72.00 06002



Mini IK

83 950 ...

£

Y8

89.00 058

91.00 059

Spare parts
for Article no.
72 984 06001
72 984 06002

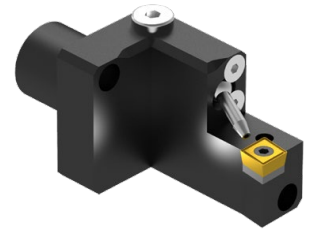
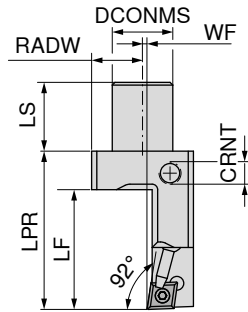
1 Sealing discs can be found in our clamping technology catalogue, Chapter 16 Adaptors and Accessories.

Rear holder with screw clamping for CC.. Indexable inserts

▲ for **STAR** SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



									72 955 ...	
Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	£	
ST.SR20R4-RE-K-CC09-L-IK	22	25	43.5	1.5	77.5	18.5	M8x1	CC.. 09T3	237.00	08005
ST.SR20R4-RE-K-CC09-R-IK	22	25	43.5	1.5	57.5	18.5	M8x1	CC.. 09T3	194.00	08004

							
Screw plug	Countersunk screw	Coolant nozzle	Combination Key	Clamping screw	Carbide type C	Threaded sleeve	Alu ring
72 950 ...	72 950 ...	72 989 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	72 950 ...
£ Y8	£ Y8	£ X0	£ 2A/28	£ 2A/28	£ 2A/28	£ 2A/28	£ Y8
72 955 08005	14.10 19006	3.52 19007	8.00 10002	10.04 398	3.79 113	11.71 165	5.62 171
72 955 08004	14.10 19006	3.52 19007	8.00 10002	10.04 398	3.79 113	11.71 165	5.62 171

Spare parts
for Article no.

72 955 08005	14.10	19006	3.52	19007	8.00	10002	10.04	398	3.79	113	11.71	165	5.62	171	8.21	19008
72 955 08004	14.10	19006	3.52	19007	8.00	10002	10.04	398	3.79	113	11.71	165	5.62	171	8.21	19008



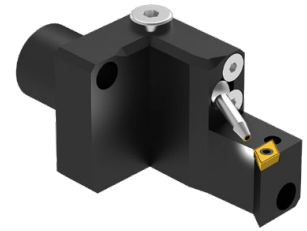
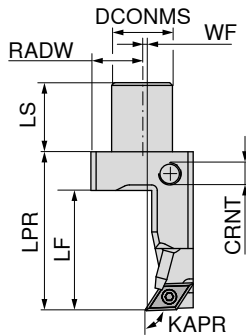
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder with screw clamping for DC.. Indexable inserts

▲ for STAR SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	KAPR °	Insert	72 955 ...	
										£	
ST.SR20R4-RE-K-DC07-R-IK	22	25	43.5	1.5	57.5	18.5	M8x1	92	DC.. 0702	194.00	08006
ST.SR20R4-RE-K-DC11-R-IK	22	25	43.5	1.0	57.5	18.5	M8x1	92	DC.. 11T3	194.00	08008
ST.SR20R4-RE-L-DC07-R-IK	22	25	43.5	1.5	77.5	18.5	M8x1	92	DC.. 0702	237.00	08007
ST.SR20R4-RE-L-DC11-R-IK	22	25	43.5	1.0	77.5	18.5	M8x1	92	DC.. 11T3	237.00	08009

Spare parts
for Article no.

	70 950 ...		70 950 ...		70 950 ...		72 950 ...		72 950 ...	
	£		£		£		£		£	
72 955 08006	2A/28		2.86	13800	2A/28		2A		8.21	19008
72 955 08008	10.04	398	3.79	113	9.07	106	19.55	19005	8.21	19008
72 955 08007			2.86	13800					8.21	19008
72 955 08009	10.04	398	3.79	113	9.07	106	19.55	19005	8.21	19008

Spare parts
for Article no.

	72 950 ...		72 950 ...		80 950 ...		72 989 ...	
	£		£		£		£	
72 955 08006	Y8		Y8		Y7		X0	
72 955 08008	14.10	19006	3.52	19007	10.00	110	8.00	10002
72 955 08007	14.10	19006	3.52	19007			8.00	10002
72 955 08009	14.10	19006	3.52	19007			8.00	10002



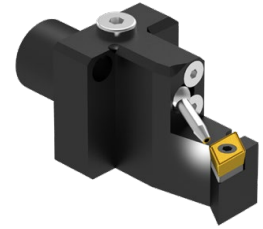
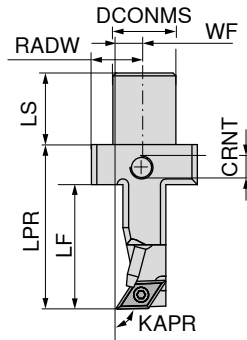
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, Chapter 9 Turning Tools.

Rear holder with screw clamping for DC.. Indexable inserts

▲ for STAR SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



72 955 ...

Designation	DCONMS mm _{g6}	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	KAPR °	Insert	£	
ST.SR20R4-RX-K-DC11-R-IK	22	25	43.5	10	57.5	18.5	M8x1	92	DC.. 11T3	194.00	08010
ST.SR20R4-RX-L-DC11-R-IK	22	25	43.5	10	77.5	18.5	M8x1	92	DC.. 11T3	237.00	08011

								
	Screw plug	Countersunk screw	Coolant nozzle	Combination Key	Clamping screw	Solid Carbide Seat D	Threaded sleeve	Alu ring
	72 950 ...	72 950 ...	72 989 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	72 950 ...
Spare parts for Article no.	£ Y8	£ Y8	£ X0	£ 2A/28	£ 2A/28	£ 2A/28	£ 2A/28	£ Y8
	72 955 08010	72 955 08010	72 955 08010	72 955 08010	72 955 08010	72 955 08010	72 955 08010	72 955 08010
	14.10 19006	3.52 19007	8.00 10002	10.04 398	3.79 113	9.07 106	5.62 171	8.21 19008
	72 955 08011	72 955 08011	72 955 08011	72 955 08011	72 955 08011	72 955 08011	72 955 08011	72 955 08011
	14.10 19006	3.52 19007	8.00 10002	10.04 398	3.79 113	9.07 106	5.62 171	8.21 19008

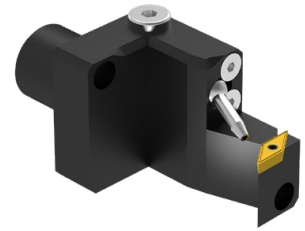
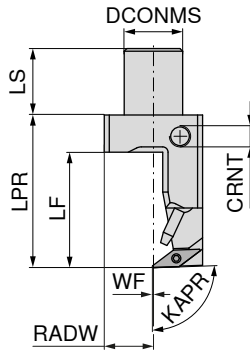
 Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder with screw clamping for VC.. Indexable inserts

▲ for **STAR** SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R

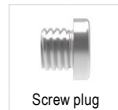
Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



72 955 ...

Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	KAPR °	Insert	£	
ST.SR20R4-RE-K-VC11-R-IK	22	25	43.5	0.5	57.5	18.5	M8x1	92	VC.. 1103	194.00	08012
ST.SR20R4-RE-L-VC11-R-IK	22	25	43.5	0.5	77.5	18.5	M8x1	92	VC.. 1103	237.00	08013



Screw plug

72 950 ...

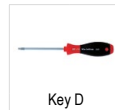
£
Y8



Countersunk screw

72 950 ...

£
Y8



Key D

80 950 ...

£
Y7



Coolant nozzle

72 989 ...

£
X0



Clamping screw

70 950 ...

£
2A/28



Alu ring

72 950 ...

£
Y8

Spare parts
for Article no.

72 955 08012	14.10	19006	3.52	19007	10.00	110	8.00	10002	2.86	13800	8.21	19008
72 955 08013	14.10	19006	3.52	19007	10.00	110	8.00	10002	2.86	13800	8.21	19008



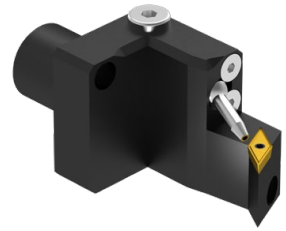
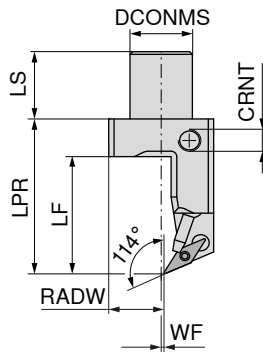
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder with screw clamping for VC.. Indexable inserts

▲ for **STAR** SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	72 955 ...	
ST.SR20R4-RE-K-VC11-24-R-IK	22	25	43.5	1.1	57.5	18.5	M8x1	VC.. 1103	£ X0	
ST.SR20R4-RE-L-VC11-24-R-IK	22	25	43.5	1.1	77.5	18.5	M8x1	VC.. 1103	194.00	08014
									237.00	08015

Spare parts for Article no.

	Screw plug		Countersunk screw		Key D		Coolant nozzle		Clamping screw		Alu ring	
72 955 08014	£ Y8	14.10	£ Y8	3.52	£ Y7	10.00	£ X0	8.00	£ 2A/28	2.86	£ Y8	8.21
72 955 08015		19006		19007		110		10002		13800		19008



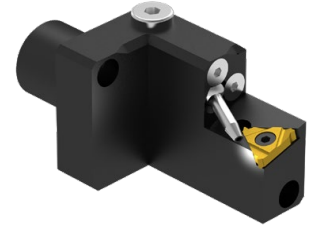
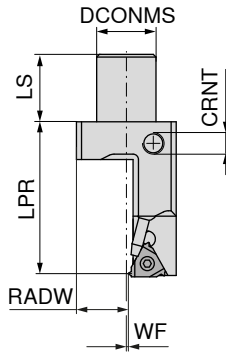
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder for right outer thread-turning inserts (ER 16..)

- ▲ for **STAR** SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R
- ▲ Tool holder with approach angle 1.5°
- ▲ Thread-turning inserts with pitch max. 1.5 mm

Scope of supply:

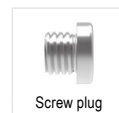
Holder with coolant nozzle and screw plug, without coolant connection



Right-hand

72 955 ...

Designation	DCONMS _{g6} mm	LS mm	WF mm	LPR mm	RADW mm	CRNT	Insert	£	
ST.SR20R4-RE-K-ER16-R-IK	22	25	0.7	57.5	18.5	M8x1	16 ER..	194.00	08016
ST.SR20R4-RE-L-ER16-R-IK	22	25	0.7	77.5	18.5	M8x1	16 ER..	237.00	08017



Screw plug

72 950 ...

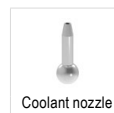
£
Y8



Countersunk screw

72 950 ...

£
Y8



Coolant nozzle

72 989 ...

£
X0



Clamping screw

71 950 ...

£
Y2



Alu ring

72 950 ...

£
Y8

Spare parts for Article no.

72 955 08016	14.10	19006	3.52	19007	8.00	10002	1.93	231	8.21	19008
72 955 08017	14.10	19006	3.52	19007	8.00	10002	1.93	231	8.21	19008



Suitable indexable inserts can be found in the main catalogue, **Chapter 8 Thread turning.**

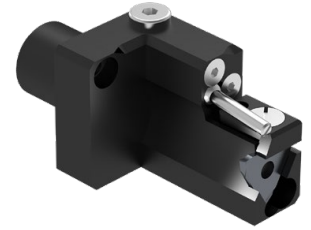
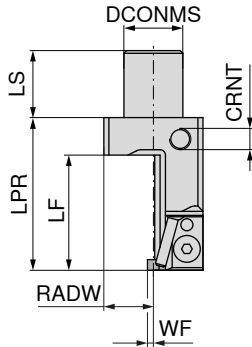
Rear holder for TX grooving inserts

▲ for **STAR** SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R

▲ Insert width 0.5-4.0 mm

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	72 955 ...	
									£ X0	
ST.SR20R4-RE-K-TX-R-1K	22	25	43	2	57	18.5	M8x1	TX R/N/L ...2/3/4	194.00	16018
ST.SR20R4-RE-L-TX-R-1K	22	25	43	2	77	18.5	M8x1	TX R/N/L ...2/3/4	237.00	16019

							
	Screw plug	Clamp	Lock washer	Countersunk screw	Coolant nozzle	Guide pin with flange	Alu ring
	72 950 ...	72 950 ...	72 950 ...	72 950 ...	72 989 ...	72 950 ...	72 950 ...
Spare parts for Article no.	£ Y8	£ Y6	£ Y6	£ Y6	£ X0	£ Y6	£ Y8
72 955 16018	14.10 19006	63.21 19001	3.34 19002	3.34 19003	12.00 10001	12.20 19004	8.21 19008
72 955 16019	14.10 19006	63.21 19001	3.34 19002	3.34 19003	12.00 10001	12.20 19004	8.21 19008

Spare parts for Article no.

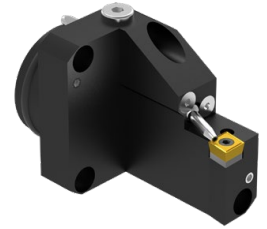
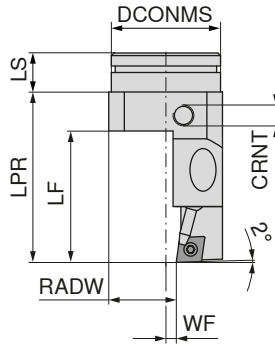
 Suitable indexable inserts can be found in the main catalogue, **Chapter 11 Grooving tools**.

Rear holder with screw clamping for CC.. Indexable inserts

▲ for TSUGAMI BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



72 957 ...

Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	£ X0 266.00	08001
TS.RE42.65-CC09-R-1K	42	15	50.5	4	65.5	26	M8x1	CC.. 09T3		

							
Screw plug	Countersunk screw	Key D	Coolant nozzle	Clamping screw	Carbide type C	Threaded sleeve	Alu ring
72 950 ...	72 950 ...	80 950 ...	72 989 ...	70 950 ...	70 950 ...	70 950 ...	72 950 ...
£ Y8	£ Y8	£ Y7	£ X0	£ 2A/28	£ 2A/28	£ 2A/28	£ Y8
14.10 19006	3.52 19007	13.00 113	8.00 10002	3.79 113	11.71 165	5.62 171	8.21 19008

Spare parts
for Article no.

72 957 08001

Spare parts
for Article no.

72 957 08001

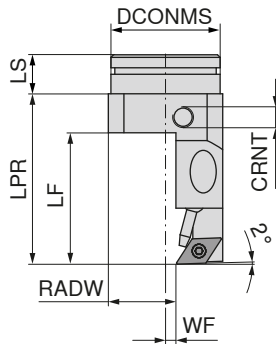
1 Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder with screw clamping for DC.. Indexable inserts

▲ for TSUGAMI BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



72 957 ...

Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	£
TS.RE42.65-DC11-R-IK	42	15	50.5	4	65.5	26	M8x1	DC.. 11T3	X0 266.00 08002

	Screw plug	Countersunk screw	Coolant nozzle	Combination Key	Clamping screw	Solid Carbide Seat D	Threaded sleeve	Alu ring
	72 950 ...	72 950 ...	72 989 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	72 950 ...
Spare parts for Article no.	£ Y8	£ Y8	£ X0	£ 2A/28	£ 2A/28	£ 2A/28	£ 2A/28	£ Y8
72 957 08002	14.10 19006	3.52 19007	8.00 10002	10.04 398	3.79 113	9.07 106	5.62 171	8.21 19008



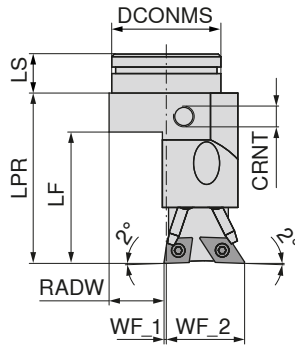
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder (double) with screw clamping for CC.. / DC.. Indexable inserts

▲ for TSUGAMI BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



double

72 957 ...

£

X0

320.00 08009

Designation	DCONMS _{g6} mm	LS mm	LF mm	LPR mm	WF_1 mm	WF_2 mm	RADW mm	CRNT	Insert
TS.RD42.65-CC09-R-DC11-L-IK	42	15	50.5	65.5	1	30	21	M8x1	CC.. 09T3 / DC.. 11T3

Spare parts
for Article no.
72 957 08009

 Clamping screw 70 950 ... £ 2A/28 3.79 113	 Solid Carbide Seat D 70 950 ... £ 2A/28 9.07 106	 Carbide type C 70 950 ... £ 2A/28 11.71 165	 Threaded sleeve 70 950 ... £ 2A/28 5.62 171	 Alu ring 72 950 ... £ Y8 8.21 19008
 Screw plug 72 950 ... £ Y8 14.10 19006	 Countersunk screw 72 950 ... £ Y8 3.52 19007	 Key D 80 950 ... £ Y7 13.00 113	 Coolant nozzle 72 989 ... £ X0 8.00 10002	 Combination Key 70 950 ... £ 2A/28 10.04 398

Spare parts
for Article no.
72 957 08009



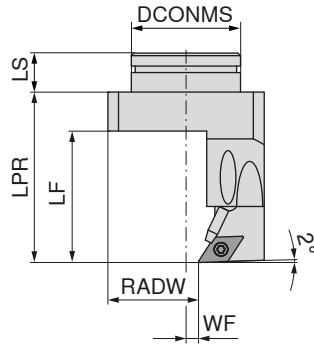
Suitable CC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.
Suitable DC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Overhead rear holder with screw clamping for DC.. Indexable inserts

▲ for TSUGAMI BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



72 957 ...

Designation	DCONMS _{g6} mm	LS mm	LF mm	LPR mm	WF mm	RADW mm	Insert	£
TS.RY42.65-DC11-R-1K	42	15	50.5	65.5	4.5	34.5	DC.. 11T3	X0 266.00 08007

	Screw plug	Countersunk screw	Coolant nozzle	Combination Key	Clamping screw	Solid Carbide Seat D	Threaded sleeve	Alu ring
	72 950 ...	72 950 ...	72 989 ...	70 950 ...	70 950 ...	70 950 ...	70 950 ...	72 950 ...
Spare parts for Article no.	£ Y8	£ Y8	£ X0	£ 2A/28	£ 2A/28	£ 2A/28	£ 2A/28	£ Y8
72 957 08007	14.10 19006	3.52 19007	8.00 10002	10.04 398	3.79 113	9.07 106	5.62 171	8.21 19008

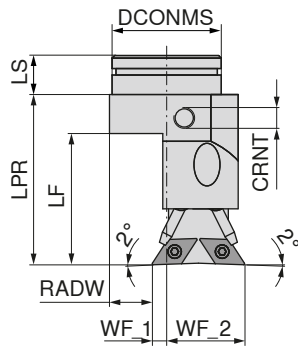
1 Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder (double) with screw clamping for DC.. Indexable inserts

▲ for TSUGAMI BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



double

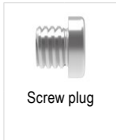
72 957 ...

£

X0

320.00 08011

Designation	DCONMS _{g6} mm	LS mm	LF mm	LPR mm	WF_1 mm	WF_2 mm	RADW mm	CRNT	Insert
TS.RD42.65-DC11-R-DC11-L-IK	42	15	50.5	65.5	5.5	30	16.5	M8x1	DC.. 11T3



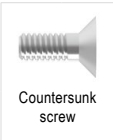
Screw plug

72 950 ...

£

Y8

14.10 19006



Countersunk screw

72 950 ...

£

Y8

3.52 19007



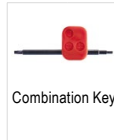
Coolant nozzle

72 989 ...

£

X0

8.00 10002



Combination Key

70 950 ...

£

2A/28

10.04 398



Clamping screw

70 950 ...

£

2A/28

3.79 113



Solid Carbide Seat D

70 950 ...

£

2A/28

9.07 106



Threaded sleeve

70 950 ...

£

2A/28

5.62 171



Alu ring

72 950 ...

£

Y8

8.21 19008

Spare parts
for Article no.
72 957 08011

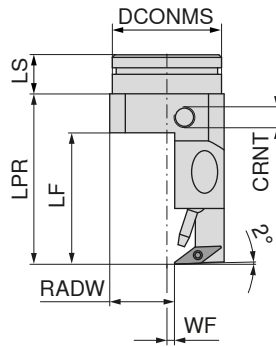
1 Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

Rear holder with screw clamping for VC.. Indexable inserts

▲ for **TSUGAMI** BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



Designation	DCONMS _{g6} mm	LS mm	LF mm	LPR mm	WF mm	RADW mm	CRNT	Insert	72 957 ...	
TS.RE42.65-VC11-R-IK	42	15	50.5	65.5	3	25	M8x1	VC.. 1103	£ X0 266.00	08003

Spare parts for Article no.

72 957 08003

					
Screw plug	Countersunk screw	Key D	Coolant nozzle	Clamping screw	Alu ring
72 950 ...	72 950 ...	80 950 ...	72 989 ...	70 950 ...	72 950 ...
£ Y8 14.10	£ Y8 3.52	£ Y7 10.00	£ X0 8.00	£ 2A/28 2.86	£ Y8 8.21
19006	19007	110	10002	13800	19008



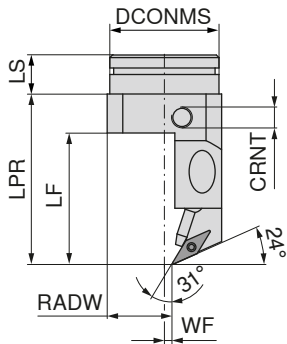
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder with screw clamping for VC.. Indexable inserts

▲ for TSUGAMI BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



Designation	DCONMS _{g6} mm	LS mm	LF mm	LPR mm	WF mm	RADW mm	CRNT	Insert	72 957 ...	
TS.RE42.65-VC11-24-R-IK	42	15	50.5	65.5	3	25	M8x1	VC.. 1103	£ X0	266.00 08004

Spare parts
for Article no.

72 957 08004

 Screw plug	 Countersunk screw	 Key D	 Coolant nozzle	 Clamping screw	 Alu ring
72 950 ...	72 950 ...	80 950 ...	72 989 ...	70 950 ...	72 950 ...
£ Y8	£ Y8	£ Y7	£ X0	£ 2A/28	£ Y8
14.10 19006	3.52 19007	10.00 110	8.00 10002	2.86 13800	8.21 19008

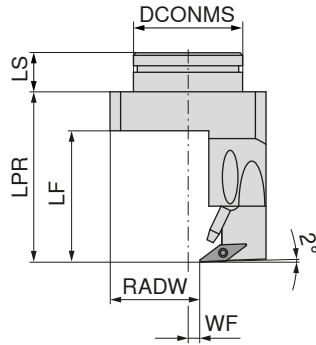
1 Suitable indexable inserts can be found in the ISO turning section in the main catalogue, Chapter 9 Turning Tools.

Overhead rear holder with screw clamping for VC.. Indexable inserts

▲ for **TSUGAMI** BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



Designation	DCONMS _{g6} mm	LS mm	WF mm	LF mm	LPR mm	RADW mm	CRNT	Insert	72 957 ...	
TS.RY42.65-VC11-R-1K	42	15	3	50.5	65.5	25	M8x1	VC.. 1103	£ X0 266.00	08008

Spare parts
for Article no.

72 957 08008

					
Screw plug	Countersunk screw	Key D	Coolant nozzle	Clamping screw	Alu ring
72 950 ...	72 950 ...	80 950 ...	72 989 ...	70 950 ...	72 950 ...
£ Y8 14.10	£ Y8 3.52	£ Y7 10.00	£ X0 8.00	£ 2A/28 2.86	£ Y8 8.21
19006	19007	110	10002	13800	19008

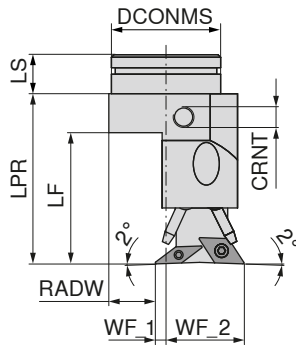
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools**.

Rear holder (double) with screw clamping for VC.. / DC.. Indexable inserts

▲ for TSUGAMI BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



double

72 957 ...

£

X0

320.00 08010

Designation	DCONMS mm ⁹⁶	LS mm	LF mm	LPR mm	WF_1 mm	WF_2 mm	RADW mm	CRNT	Insert
TS.RD42.65-VC11-R-DC11-L-IK	42	15	50.5	65.5	4	30	18	M8x1	VC.. 1103 / DC.. 11T3

Spare parts
for Article no.
72 957 08010

Combination Key

70 950 ...

£

2A/28

10.04

398



Clamping screw

70 950 ...

£

2A/28

3.79

113

Solid Carbide
Seat D

70 950 ...

£

2A/28

9.07

106



Threaded sleeve

70 950 ...

£

2A/28

5.62

171



Alu ring

72 950 ...

£

Y8

8.21

19008

Spare parts
for Article no.
72 957 08010

Screw plug

72 950 ...

£

Y8

14.10

19006

Countersunk
screw

72 950 ...

£

Y8

3.52

19007



Key D

80 950 ...

£

Y7

10.00

110



Coolant nozzle

72 989 ...

£

X0

8.00

10002



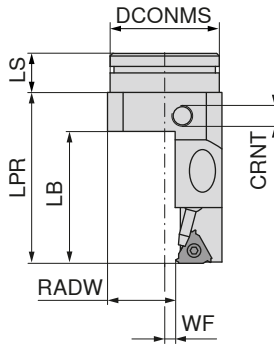
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, Chapter 9 Turning Tools.

Rear holder for right outer thread-turning inserts (ER 16..)

- ▲ for **TSUGAMI** BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329
- ▲ Tool holder with approach angle 1.5°
- ▲ Thread-turning inserts with pitch max. 1.5 mm

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



Right-hand

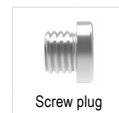
72 957 ...

£

X0

266.00 08005

Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert
TS.RE42.65-ER16-R-IK	42	15	50.5	4	65.5	26	M8x1	16 ER..



72 950 ...

£

Y8

14.10 19006

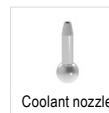


72 950 ...

£

Y8

3.52 19007

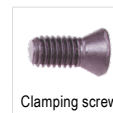


72 989 ...

£

X0

8.00 10002



71 950 ...

£

Y2

1.93 231



72 950 ...

£

Y8

8.21 19008

Spare parts for Article no.

72 957 08005



Suitable indexable inserts can be found in the main catalogue, **Chapter 8 Thread turning**.

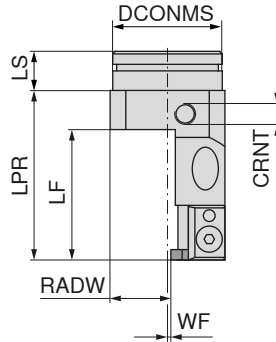
Rear holder for TX grooving inserts

▲ for **TSUGAMI** BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

▲ Insert width 0.5-4.0 mm

Scope of supply:

Holder with coolant nozzle and screw plug, without coolant connection



72 957 ...

Designation	DCONMS _{g6} mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	£ X0 266.00	16006
TS.RE42.65-TX-R-IK	42	15	50	1	65.5	23	M8x1	TX R/N/L ...2/3/4		

Spare parts
for Article no.
72 957 16006

						
Screw plug	Clamp	Lock washer	Countersunk screw	Coolant nozzle	Guide pin with flange	Alu ring
72 950 ...	72 950 ...	72 950 ...	72 950 ...	72 989 ...	72 950 ...	72 950 ...
£ Y8	£ Y6	£ Y6	£ Y6	£ X0	£ Y6	£ Y8
14.10 19006	63.21 19001	3.34 19002	3.34 19003	12.00 10001	12.20 19004	8.21 19008

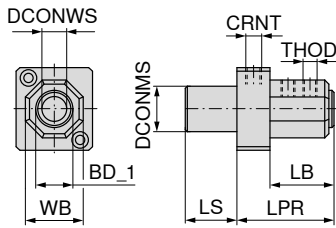


Suitable indexable inserts can be found in the main catalogue, **Chapter 11 Grooving tools.**

Rear holder for drills and boring bars

▲ for **STAR** SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R

▲ with inner high-pressure coolant supply through the tool

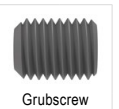


72 955 ...

Designation	DCONMS _{g6} mm	DCONWS mm	BD_1 mm	LPR mm	LS mm	WB mm	LB mm	THOD	
ST.SR20R4-BH-06-1K	22	6	12	47	25	28	31	M6	£ 237.00 03020
ST.SR20R4-BH-08-1K	22	8	14	47	25	28	31	M8	£ 237.00 03021
ST.SR20R4-BH-10-1K	22	10	16	47	25	28	31	M8	£ 237.00 03022
ST.SR20R4-BH-12-1K	22	12	18	47	25	28	31	M10	£ 237.00 03023
ST.SR20R4-BH-14-1K	22	14	19	47	25	28	31	M10	£ 237.00 03024
ST.SR20R4-BH-66-1K	22	16	21	47	25	32	31	M10	£ 237.00 03025



Grubscrew



Grubscrew

72 950 ...

83 950 ...

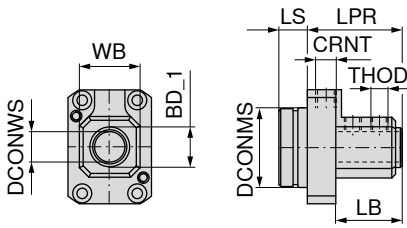
Spare parts for Article no.

72 955 03020	£ 3.52	19011	£ 4.49	464
72 955 03021			£ 4.49	464
72 955 03022				
72 955 03023	£ 3.52	19013		
72 955 03024	£ 3.52	19013		
72 955 03025	£ 3.52	19013		

Rear holder for drills and boring bars

▲ for **TSUGAMI** BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329

▲ with inner high-pressure coolant supply through the tool



72 957 ...

Designation	DCONMS _{g6} mm	DCONWS mm	BD_1 mm	LPR mm	LS mm	WB mm	LB mm	THOD	
TS.RE42.65-BH-06-IK	42	6	12	50	15	28	35	M6	
TS.RE42.65-BH-08-IK	42	8	14	50	15	28	35	M8	
TS.RE42.65-BH-10-IK	42	10	16	50	15	28	35	M8	
TS.RE42.65-BH-12-IK	42	12	18	50	15	28	35	M10	
TS.RE42.65-BH-14-IK	42	14	18	50	15	28	35	M10	
TS.RE42.65-BH-16-IK	42	16	21	50	15	32	35	M10	

£

X0

304.00 03012

304.00 03013

304.00 03014

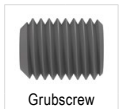
304.00 03015

304.00 03016

304.00 03017



Grubscrew



Grubscrew

72 950 ...

£

Y8

3.52 19011

83 950 ...

£

Y8

4.49 464

4.49 464

Spare parts for Article no.

72 957 03012

72 957 03013

72 957 03014

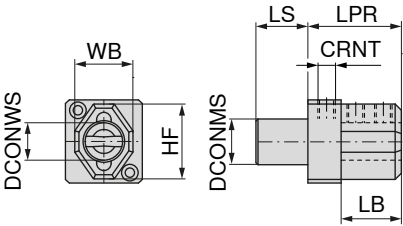
72 957 03015

72 957 03016

72 957 03017

Rear holder for clamping inserts

- ▲ for **STAR** SR 20 R-IV / 20 JII / 32 JII / 38 / SW 12 / 20 / SV 20 R
- ▲ Thro' coolant directly through base holder
- ▲ Also suitable for collet holders



Designation	DCONMS _{g6} mm	DCONWS _{H6} mm	HF mm	LS mm	LB mm	WB mm	LPR mm	CRNT
ST.SR20R4-S20-IK	22	20	36	25	29	28	45	M8x1

Spare parts
for Article no.
72 955 20027

 Suitable cutting inserts and collet holders can be found on → **Page 38+39**



72 955 ...

£

X0

226.00

20027



Grubscrew

83 950 ...

£

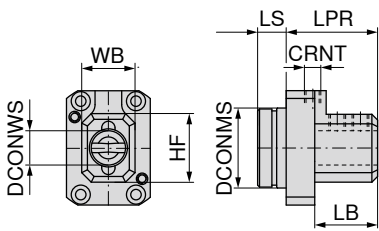
Y8

4.49

464

Rear holder for clamping inserts

- ▲ for **TSUGAMI** BO 266 / 326 / 386 / 38T / HS 267 / 237 / 38M / BW 269 / 329
- ▲ Thro' coolant directly through base holder
- ▲ Also suitable for collet holders



72 957 ...

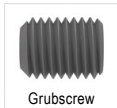
£

X0

304.00

20018

Designation	DCONMS _{g6} mm	DCONWS _{H6} mm	HF mm	LS mm	LB mm	WB mm	LPR mm	CRNT
TS.RE42.65-S-20-IK	42	20	36	15	33	28	48	M8x1



Grubscrew

83 950 ...

£

Y8

4.49

464

Spare parts
for Article no.
72 957 20018

 Suitable cutting inserts and collet holders can be found on → **Page 38+39**

Coolant attachment for height-adjustable insert holder, left



Left-hand

72 985 ...

£

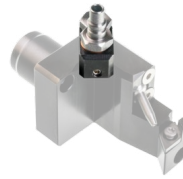
X0

41.00

09003

Designation	for
MU.KS-KA-AH-L	MU.AH-...-L

Coolant attachment for STAR



72 955 ...

£

X0

37.00

09026

Designation
ST.KS-KA-STAR

Coolant attachment for height-adjustable insert holder, right



Right-hand

72 985 ...

£

X0

41.00

09001

Designation	for
MU.KS-KA-AH-R	MU.AH-...-R

Coolant distributor for high-pressure connections - 6 outlets

Scope of supply:
without quick-couplers



72 991 ...

£

X0

81.00

12003

Designation
MU.KSV-45-30-35x6

Coolant attachment for height-adjustable insert holder, double



double

72 985 ...

£

X0

48.00

09002

Designation	for
MU.KS-KA-AH-D	MU.AH-...-R/L

Coolant distributor for high-pressure connections - 7 outlets

Scope of supply:
without quick-couplers



72 991 ...

£

X0

86.00

12002

Designation
MU.KSV-80-30-30x7

Coolant distributor for high-pressure connections - 8 outlets

Scope of supply:
without quick-couplers

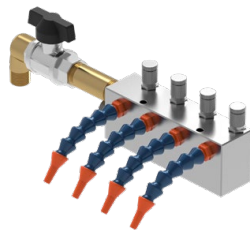


Designation	£	X0	72 991 ...
MU.KSV-110-30-30x8	92.00		12001

Coolant distributor for STAR SR 32

▲ 4x high-pressure and 4x low-pressure connections (G1/8")

Scope of supply:
without quick-couplers



Designation	£	X0	72 991 ...
MU.KSV-45-30-35x6	189.00		12004

Coolant nozzle for high-pressure applications



Designation	£	X0	72 989 ...
MU.KS-KD-HD	8.00		10002

Coolant nozzle for TX grooving tool holder



Designation	£	X0	72 989 ...
MU.KS-KD-HO	12.00		10001

Coolant nozzle for low-pressure applications



Designation	£	X0	72 989 ...
MU.KS-KD-ND	8.00		10003

G1/8" screw plug

▲ Max. 200 bar/2900 psi
▲ No sealing ring required



Designation	THSZMS	£	X0	72 950 ...
VS.G1/8	G1/8"	57.26		010

Angled coolant connection - short



Designation	THOD	£	X0	72 987 ...
MU.KS-KA-VU-K	M8x1	36.00		18001

Angled coolant connection - long



Designation	THOD	£	X0	72 987 ...
MU.KS-KA-VU-L	M8x1	41.00		18002

Angled coolant connection for distributor

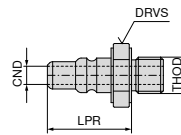


72 987 ...

Designation	THOD	THID	£	
MU.KS-KA-KSV	G1/8"	G1/8"	X0	
			36.00	18003

Coupler connector

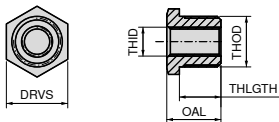
▲ pressure-resistant up to at least 400 bar



72 992 ...

Designation	LPR	CND	DRVS	OAL	£	
MU.KSKS-M8x1	mm	mm	mm	mm	X0	
	18.5	4	12	19	12.00	13001

Threaded adapter



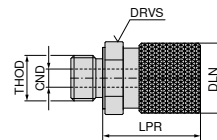
72 988 ...

THID	THOD	THLGTH	DRVS	OAL	£	
		mm	mm	mm	X0	
G1/8"	G1/4"	11.5	17	15.0	10.00	01005
G1/8"	M8x1	11.5	14	15.0	10.00	01006
G1/8"	M12x1	11.5	14	15.0	10.00	01007
G1/8"	M14x1	11.5	17	15.0	10.00	01008
M8x1	G1/4"	11.5	17	15.0	12.00	01003
M8x1	M12x1	11.5	14	15.0	12.00	01001
M8x1	M14x1	11.5	17	15.0	12.00	01002
M8x1	G1/8"	11.5	14	23.5	12.00	01004

Quick-coupler

▲ pressure-resistant up to at least 400 bar

▲ rapid change of coolant distribution without screws thanks to click system



72 993 ...

THOD	BD	DLN	LPR	CND	£	
	mm	mm	mm	mm	X0	
G1/8"	16	15.5	21.5	4	28.00	15001

Flexible coolant hoses

▲ incl. prefitted quick-coupler and coupler connector

▲ extremely flexible

▲ pressure-resistant up to 300 bar

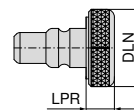


72 990 ...

Designation	BD	CND	OAL	£	
	mm	mm	mm	X0	
MU.KSS-DN3-150	6.0	3	150	77.00	11005
MU.KSS-DN3-250	6.0	3	250	81.00	11006
MU.KSS-DN5-200	9.5	5	200	87.00	11001
MU.KSS-DN5-300	9.5	5	300	92.00	11002
MU.KSS-DN5-400	9.5	5	400	94.00	11003
MU.KSS-DN5-500	9.5	5	500	96.00	11004

Sealing plugs

▲ for closing off the quick-coupler to protect against contamination



72 994 ...

Designation	LPR	DLN	£	
	mm	mm	X0	
MU.KSVS	5.5	15.5	3.00	17001

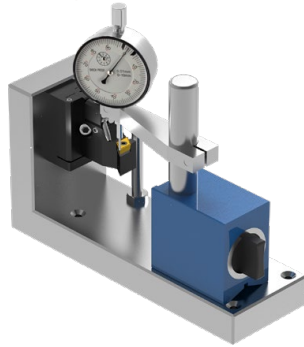
Adjustment device for setting height of tool block holder

- ▲ Reduced setup times thanks to convenient presetting away from the machine
- ▲ prevention of machine downtimes
- ▲ best positional accuracy following tool change by presetting away from the machine

Scope of supply:

72 996 05001: Adjustment device with dial gauge and dial gauge stand

72 996 05002: Adjustment device without dial gauge and dial gauge stand



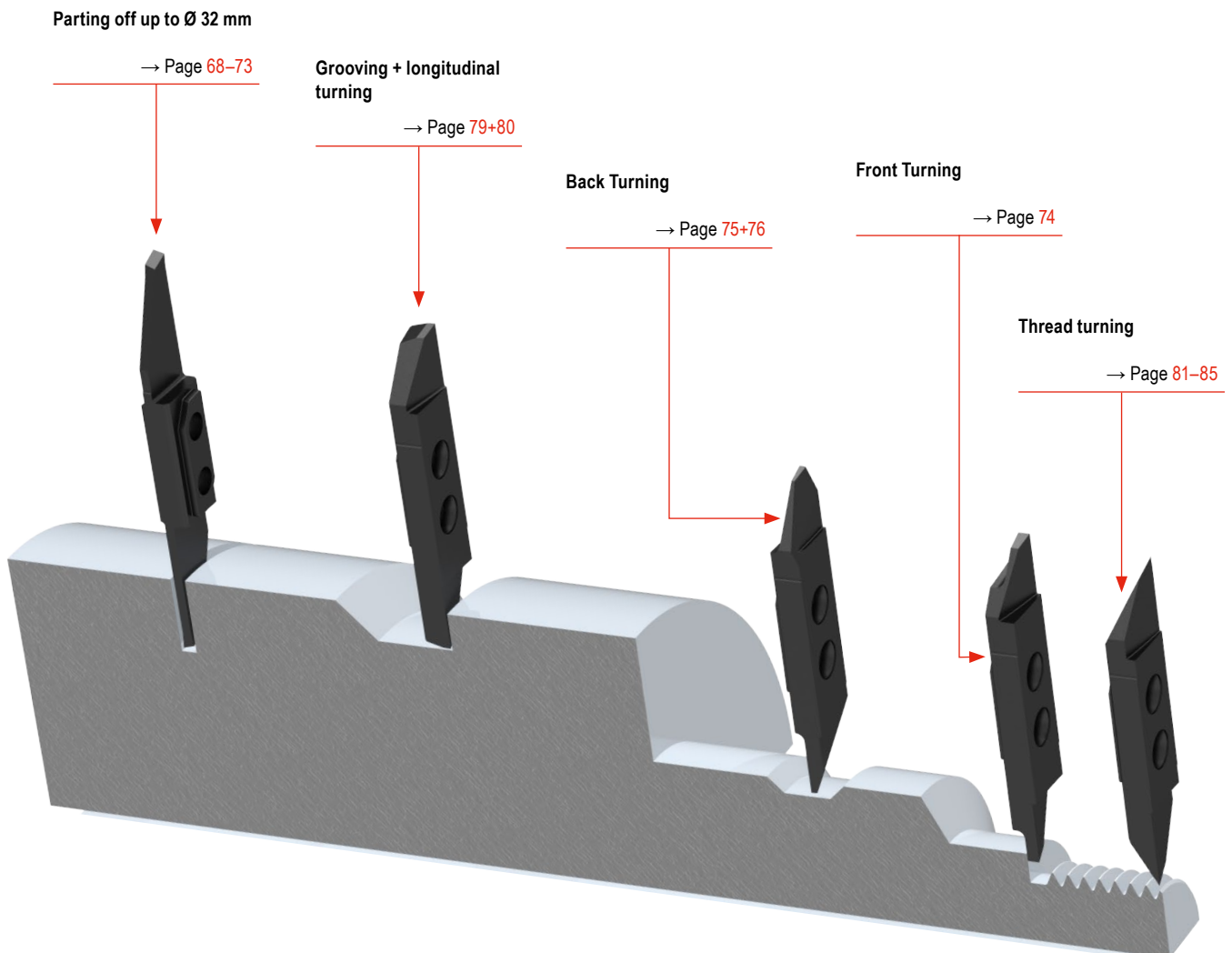
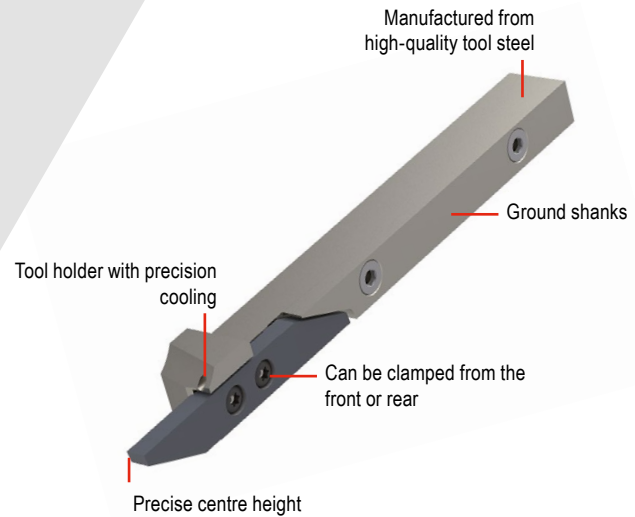
Designation	72 996 ...	
	£	X0
MU.EV MAX	597.00	05001
MU.EV MAX-OMU	434.00	05002



Information on correct usage, and any conversions required can be found on → **Page 98+99**

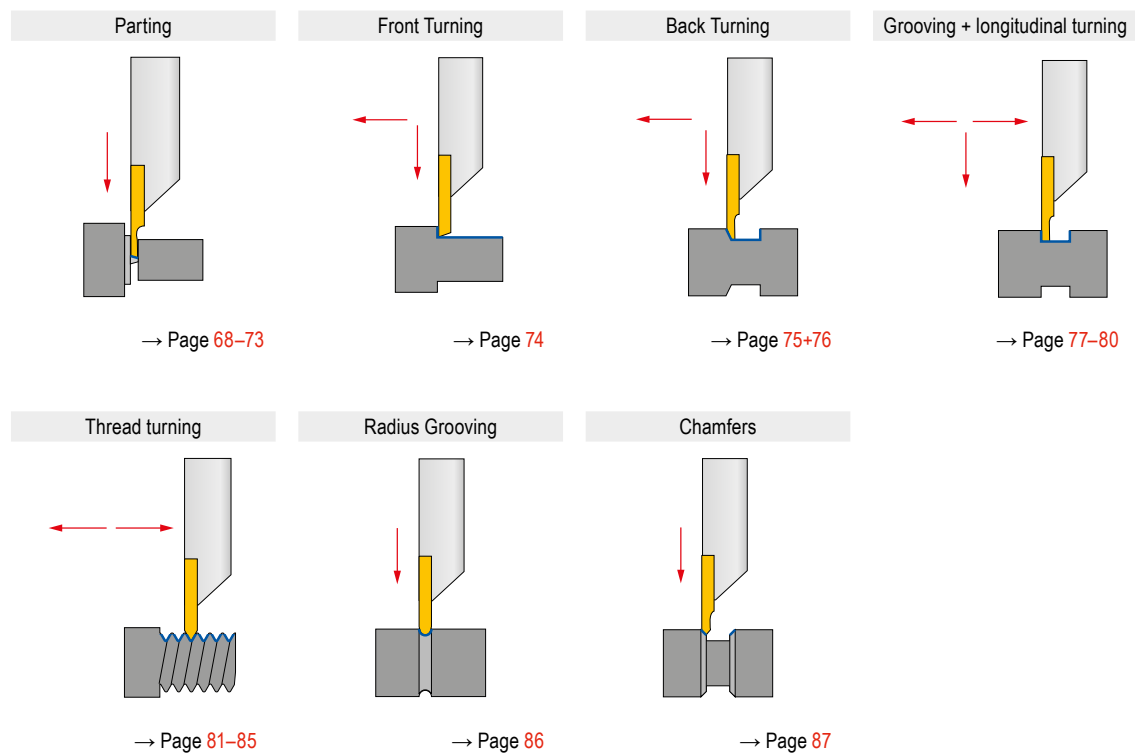
Toolfinder – VertiClamp

- ▲ Vertical arrangement of cutting edges
Less space required
- ▲ Second cutting edge can still be used in the event of breakage
Minimises costs
- ▲ Insert seat protected against swarf
Increases the service life of the holder
- ▲ High changeover precision
Reduces unproductive times
- ▲ Large selection of indexable inserts and geometries
Increases flexibility
- ▲ Optional coolant supply to cutting edge
Increases service life and improves surface quality

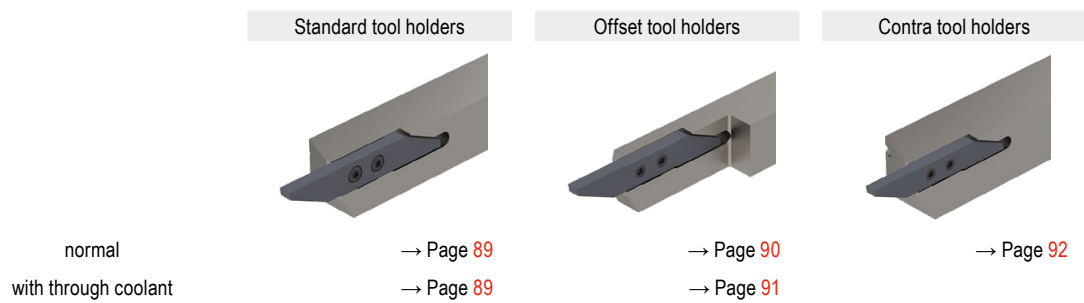


Overview – VertiClamp

Inserts

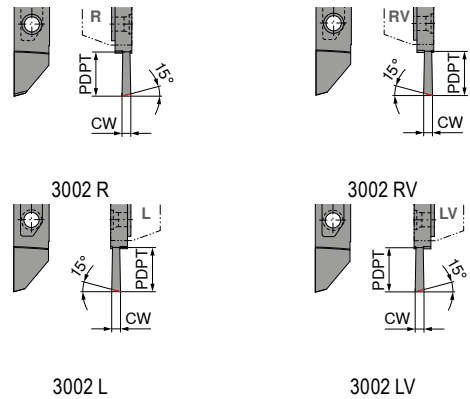


Tool holder



3002 L / 3002 LV / 3002 R / 3002 RV

Designation	CW mm	PDPT mm
3002-0,8-6	0.8	6
3002-0,8-10	0.8	10
3002-1,0-6	1.0	6
3002-1,0-13	1.0	13
3002-1,2-6	1.2	6
3002-1,5-8	1.5	8
3002-1,5-16	1.5	16
3002-1,8-8	1.8	8
3002-2,0-10	2.0	10
3002-2,0-16	2.0	16
3002-2,5-13	2.5	13
3002-2,5-16	2.5	16
3002-3,0-16	3.0	16



3002_L / 3002_LV / 3002_R / 3002_RV

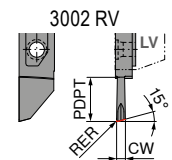
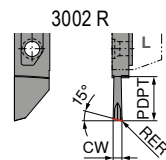
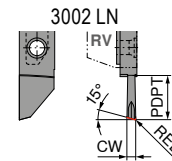
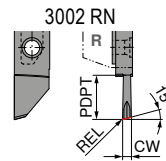
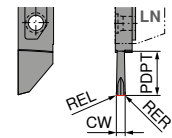
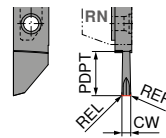
▲ for parting off

	WPU7620	WPU7620	WPU7620	WPU7620
	F	F	F	F
	3002 L	3002 LV	3002 R	3002 RV
	72 420 ...	72 422 ...	72 416 ...	72 418 ...
ISO designation	£ X1	£ X1	£ X1	£ X1
3002-0,8-6	42.00 510	42.00 510	42.00 510	42.00 510
3002-0,8-10	42.00 530	42.00 530	42.00 530	42.00 530
3002-1,0-6	42.00 512	42.00 512	42.00 512	42.00 512
3002-1,0-13	49.00 532	49.00 532	49.00 532	49.00 532
3002-1,2-6	42.00 514	42.00 514	42.00 514	42.00 514
3002-1,5-8	42.00 516	42.00 516	42.00 516	42.00 516
3002-1,5-16	53.00 536	53.00 536	53.00 536	53.00 536
3002-1,8-8	42.00 518	42.00 518	42.00 518	42.00 518
3002-2,0-10	42.00 520	42.00 520	42.00 520	42.00 520
3002-2,0-16	53.00 540	53.00 540	53.00 540	53.00 540
3002-2,5-13	49.00 522 ¹⁾	49.00 522 ¹⁾	49.00 522 ¹⁾	49.00 522 ¹⁾
3002-2,5-16	53.00 542 ¹⁾	53.00 542 ¹⁾	53.00 542 ¹⁾	53.00 542 ¹⁾
3002-3,0-16	51.00 524 ¹⁾	51.00 524 ¹⁾	51.00 524 ¹⁾	51.00 524 ¹⁾
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	○	○	○	○
S	●	●	●	●
H	●	●	●	●
O	○	○	○	○

1) used with tool holders with 12 mm and larger shank size

3002 L / 3002 LN / 3002 LV / 3002 R / 3002 RN / 3002 RV

Designation	CW mm	PDPT mm
3002-1,5-8	1.5	8
3002-1,5-10	1.5	10
3002-1,5-16	1.5	16
3002-2,0-10	2.0	10
3002-2,0-16	2.0	16
3002-2,5-13	2.5	13
3002-2,5-16	2.5	16
3002-3,0-16	3.0	16



3002 L

3002 LV

3002_L / 3002_LN / 3002_LV / 3002_R / 3002_RN / 3002_RV

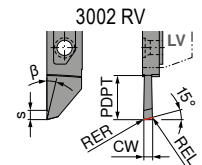
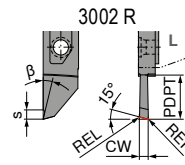
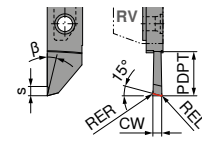
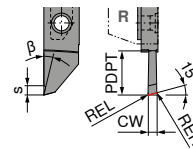
▲ for parting off

			-SC WPU7620		-SC WPU7620		-SC WPU7620		-SC WPU7620		-SC WPU7620		-SC WPU7620		-SC WPU7620	
			F 3002 L		F 3002 LN		F 3002 LV		F 3002 R		F 3002 RN		F 3002 RV			
			72 432 ...		72 426 ...		72 434 ...		72 428 ...		72 424 ...		72 430 ...			
ISO designation	REL mm	RER mm	£ X1		£ X1		£ X1		£ X1		£ X1		£ X1			
3002-1,5-8	0.00	0.08	45.00	508			45.00	508	45.00	508			45.00	508		
3002-1,5-10	0.08	0.08			56.00	510					47.00	510				
3002-1,5-16	0.08	0.08			59.00	530					59.00	530				
3002-1,5-16	0.08	0.00							57.00	528			57.00	528		
3002-2,0-10	0.08	0.08			56.00	512					47.00	512				
3002-2,0-10	0.08	0.00	45.00	510			45.00	510	45.00	510			45.00	510		
3002-2,0-16	0.08	0.08			59.00	532					59.00	532				
3002-2,0-16	0.08	0.00							57.00	530			57.00	530		
3002-2,0-16	0.00	0.08	57.00	530			57.00	530								
3002-2,5-13	0.08	0.08			64.00	514 ¹⁾			53.00	512 ¹⁾			53.00	512 ¹⁾		
3002-2,5-13	0.08	0.00	53.00	512 ¹⁾			53.00	512 ¹⁾	57.00	532 ¹⁾			57.00	532 ¹⁾		
3002-2,5-16	0.08	0.08			57.00	534 ¹⁾					56.00	534 ¹⁾				
3002-2,5-16	0.08	0.00							57.00	532 ¹⁾			57.00	532 ¹⁾		
3002-3,0-16	0.08	0.08			57.00	516 ¹⁾					56.00	516 ¹⁾				
3002-3,0-16	0.00	0.08	57.00	514 ¹⁾			57.00	514 ¹⁾	57.00	514 ¹⁾			57.00	514 ¹⁾		
P			●		●		●		●		●		●			
M			●		●		●		●		●		●			
K																
N			○		○		○		○		○		○			
S			●		●		●		●		●		●			
H																
O			○		○		○		○		○		○			

1) used with tool holders with 12 mm and larger shank size

3002 L / 3002 LV / 3002 R / 3002 RV

Designation	CW mm	PDPT mm	s mm
3002-0,8-10	0.8	10	2
3002-0,8-10	1.0	10	2
3002-1,0-13	1.0	13	2
3002-1,5-8-06	1.5	8	2
3002-1,5-8-12	1.5	8	2
3002-1,5-16	1.5	16	2
3002-2,0-10-06	2.0	10	2
3002-2,0-10-12	2.0	10	2
3002-2,0-16-12	2.0	16	2
3002-2,0-16-06	2.0	16	2
3002-2,5-13-12	2.5	13	2
3002-2,5-13-06	2.5	13	2
3002-2,5-16-12	2.5	16	2
3002-2,5-16-06	2.5	16	2
3002-3,0-16-12	3.0	16	2
3002-3,0-16-06	3.0	16	2

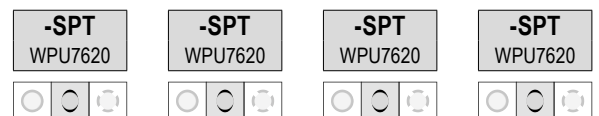


3002 L

3002 LV

3002_L / 3002_LV / 3002_R / 3002_RV

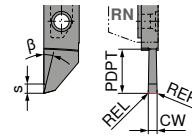
▲ for parting off



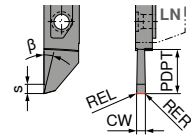
ISO designation	REL mm	RER mm	72 440 ... £ X1	72 442 ... £ X1	72 436 ... £ X1	72 438 ... £ X1
3002-0,8-10	0.00	0.00	45.00 50600	45.00 50600	45.00 50600	45.00 50600
3002-1,0-13	0.00	0.00	52.00 52800	52.00 52800	52.00 52800	52.00 52800
3002-1,5-16	0.00	0.00	58.00 53000	58.00 53000	58.00 53000	58.00 53000
3002-1,5-8-06	0.00	0.05	48.00 540	48.00 540	48.00 540	48.00 540
3002-1,5-8-06	0.05	0.00	45.00 570	45.00 570	45.00 570	45.00 570
3002-1,5-8-12	0.00	0.05	48.00 572	48.00 572	48.00 572	48.00 572
3002-1,5-8-12	0.05	0.00	45.00 582	45.00 582	45.00 582	45.00 582
3002-2,0-10-06	0.00	0.05	61.00 552	61.00 552	61.00 552	61.00 552
3002-2,0-10-06	0.05	0.00	58.00 592	58.00 592	58.00 592	58.00 592
3002-2,0-10-12	0.00	0.05	57.00 554	61.00 554	57.00 554	61.00 554
3002-2,0-10-12	0.05	0.00	52.00 584	52.00 584	52.00 584	52.00 584
3002-2,0-16-06	0.00	0.05	61.00 574	61.00 574	61.00 574	61.00 574
3002-2,0-16-06	0.05	0.00	58.00 594	58.00 594	58.00 594	58.00 594
3002-2,0-16-12	0.00	0.05	61.00 556	61.00 556	61.00 556	61.00 556
3002-2,0-16-12	0.05	0.00	58.00 586	58.00 586	58.00 586	58.00 586
3002-2,5-13-06	0.00	0.05				
3002-2,5-13-06	0.05	0.00				
3002-2,5-13-12	0.00	0.05				
3002-2,5-13-12	0.05	0.00				
3002-2,5-16-06	0.00	0.05				
3002-2,5-16-06	0.05	0.00				
3002-2,5-16-12	0.00	0.05				
3002-2,5-16-12	0.05	0.00				
3002-3,0-16-06	0.00	0.05				
3002-3,0-16-06	0.05	0.00				
3002-3,0-16-12	0.00	0.05				
3002-3,0-16-12	0.05	0.00				
P			●	●	●	●
M			●	●	●	●
K						
N			○	○	○	○
S			●	●	●	●
H						
O			○	○	○	○

3002 LN / 3002 RN

Designation	CW mm	PDPT mm	s mm	β°
3002-1,0-10	1.0	10	2	20
3002-1,5-10-06	1.5	10	2	6
3002-1,5-10-12	1.5	10	2	12
3002-1,5-16	1.5	16	2	20
3002-2,0-10-06	2.0	10	2	6
3002-2,0-10-12	2.0	10	2	12
3002-2,0-16-12	2.0	16	2	12
3002-2,0-16-06	2.0	16	2	6
3002-2,5-13-12	2.5	13	2	12
3002-2,5-13-06	2.5	13	2	6
3002-2,5-16-06	2.5	16	2	6
3002-2,5-16-12	2.5	16	2	12
3002-3,0-16-12	3.0	16	2	12
3002-3,0-16-06	3.0	16	2	6



3002 RN

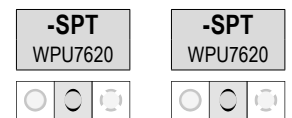


3002 LN

3002_LN / 3002_RN

▲ for parting off

ISO designation	REL mm	RER mm
3002-1,0-10	0.05	0.05
3002-1,5-10-06	0.05	0.05
3002-1,5-10-12	0.05	0.05
3002-1,5-16	0.05	0.05
3002-2,0-10-06	0.05	0.05
3002-2,0-10-12	0.05	0.05
3002-2,0-16-06	0.05	0.05
3002-2,0-16-12	0.05	0.05
3002-2,5-13-06	0.05	0.05
3002-2,5-13-12	0.05	0.05
3002-2,5-16-06	0.05	0.05
3002-2,5-16-12	0.05	0.05
3002-3,0-16-06	0.05	0.05
3002-3,0-16-12	0.05	0.05

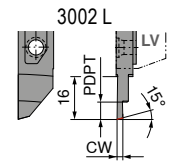
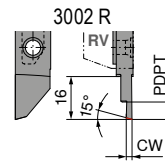
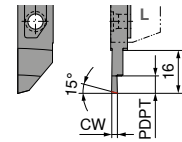
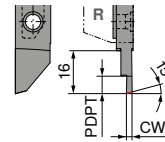


F 3002 LN		F 3002 RN	
72 515 ...		72 514 ...	
£		£	
X1		X1	
54.00	50800	54.00	50800
48.00	550	48.00	550
48.00	580	48.00	580
61.00	53000	61.00	53000
48.00	572	48.00	572
48.00	582	48.00	582
61.00	552	61.00	552
61.00	592	61.00	592
57.00	554	57.00	554
57.00	584	57.00	584
61.00	574	61.00	574
61.00	594	61.00	594
61.00	556	61.00	556
61.00	586	61.00	586

P	●	●
M	●	●
K		
N	○	○
S	●	●
H		
O	○	○

3002 L-16 / 3002 LV-16 / 3002 R-16 / 3002 RV-16

Designation	CW mm	PDPT mm
3002-0,8-..	0.8	6
3002-1,0-..	1.0	6
3002-1,2-..	1.2	6

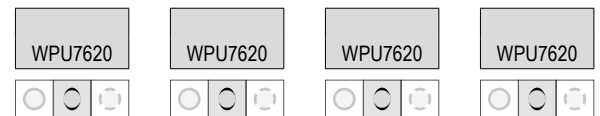


3002 RV

3002 LV

3002_L_16 / 3002_LV_16 / 3002_R_16 / 3002_RV_16

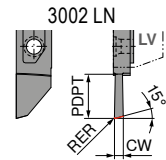
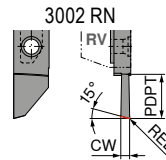
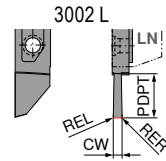
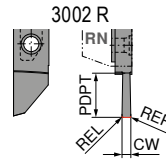
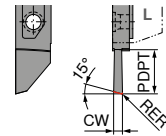
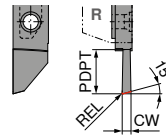
▲ For parting off with pick-up spindle



ISO designation	72 497 ...		72 499 ...		72 496 ...		72 498 ...	
	£	X1	£	X1	£	X1	£	X1
3002-0,8-6-16	52.00	510	52.00	510	52.00	510	52.00	510
3002-1,0-6-16	52.00	51200	52.00	51200	52.00	51200	52.00	51200
3002-1,2-6-16	52.00	514	52.00	514	52.00	514	52.00	514
P	●	●	●	●	●	●	●	●
M	●	●	●	●	●	●	●	●
K	●	●	●	●	●	●	●	●
N	○	○	○	○	○	○	○	○
S	●	●	●	●	●	●	●	●
H	○	○	○	○	○	○	○	○
O	○	○	○	○	○	○	○	○

3002 L / 3002 LN / 3002 LV / 3002 R / 3002 RN / 3002 RV

Designation	CW mm	PDPT mm
3002-2,0-10..	2	10

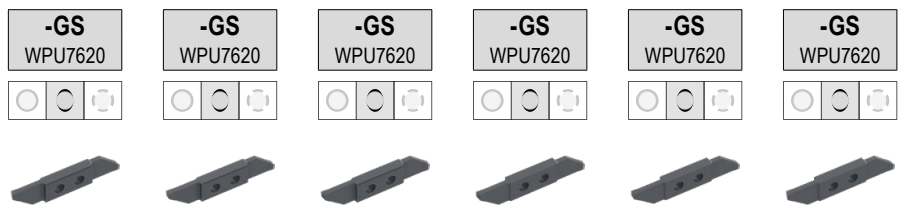


3002 RV

3002 LV

3002_L / 3002_LN / 3002_LV / 3002_R / 3002_RN / 3002_RV

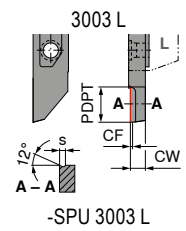
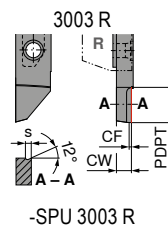
- ▲ For parting off
- ▲ E: Blade with rounded cutting edge
- ▲ F: Blade with sharp cutting edge



	-GS WPU7620	-GS WPU7620	-GS WPU7620	-GS WPU7620	-GS WPU7620	-GS WPU7620
	F	F	F	F	F	F
	3002 L	3002 LN	3002 LV	3002 R	3002 RN	3002 RV
	72 501 ...	72 505 ...	72 507 ...	72 500 ...	72 504 ...	72 506 ...
ISO designation	REL mm	RER mm	REL mm	RER mm	REL mm	RER mm
3002-2,0-10 E	0.2	0.2	0.2	0.2	0.2	0.2
3002-2,0-10 E	0.2	0.0	0.2	0.2	0.2	0.2
3002-2,0-10 E	0.0	0.2	0.2	0.2	0.2	0.2
3002-2,0-10 F	0.2	0.2	0.2	0.2	0.2	0.2
3002-2,0-10 F	0.2	0.0	0.2	0.2	0.2	0.2
3002-2,0-10 F	0.0	0.2	0.2	0.2	0.2	0.2
	£ X1	£ X1	£ X1	£ X1	£ X1	£ X1
	36.00	512	36.00	512	36.00	512
	43.00	552	43.00	552	43.00	552
P	●	●	●	●	●	●
M	●	●	●	●	●	●
K	●	●	●	●	●	●
N	○	○	○	○	○	○
S	●	●	●	●	●	●
H	○	○	○	○	○	○
O	○	○	○	○	○	○

3003 L / 3003 R

Designation	CBMD	CW mm	CF mm	s mm	PDPT mm
3003-3,4-..	-SPU	3.4	0.2	1.2	8
3003-3,4-..		3.4	1.0	-	8



3003_L / 3003_R

▲ for front turning

WPU7620	WPU7620	-SPU WPU7620	-SPU WPU7620
F 3003 L	F 3003 R	F 3003 L	F 3003 R
72 446 ...	72 444 ...	72 521 ...	72 520 ...
£ X1	£ X1	£ X1	£ X1
43.00 510	43.00 510	48.00 510	48.00 510

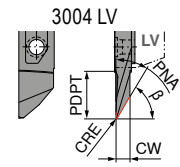
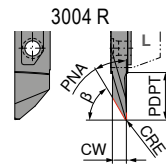
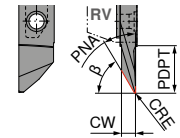
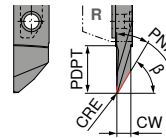
ISO designation

3003-3,4-8

P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	○	○	○	○
S	●	●	●	●
H				
O	○	○	○	○

3004 L / 3004 LV / 3004 R / 3004 RV

Designation	CRE mm	CW mm	PDPT mm	PNA °	β°
3004-3,2-5 35015	0.15	3.2	11	35	55
3004-3,2-5 35035	0.35	3.2	11	35	55
3004-3,2-6 29008	0.08	3.2	11	29	61
3004-3,2-6 29015	0.15	3.2	11	29	61
3004-3,2-6 29035	0.35	3.2	11	29	61
3004-3,2-6 29075	0.75	3.2	11	29	61

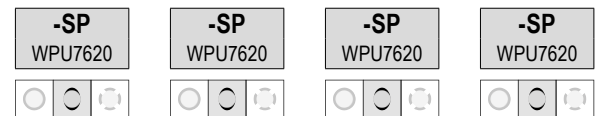


3004 L

3004 LV

3004_L / 3004_LV / 3004_R / 3004_RV

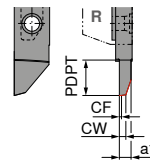
▲ for back turning



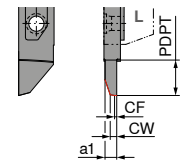
ISO designation	72 562 ...	72 563 ...	72 560 ...	72 561 ...
	£ X1	£ X1	£ X1	£ X1
3004-3,2-5 35015	50.00 514		50.00 514	
3004-3,2-5 35035	50.00 516		50.00 516	
3004-3,2-6 29008	50.00 508	50.00 508	50.00 508	50.00 508
3004-3,2-6 29015	50.00 510	50.00 510	50.00 510	50.00 510
3004-3,2-6 29035	50.00 512	50.00 512	50.00 512	50.00 512
3004-3,2-6 29075	50.00 515	50.00 515	50.00 515	50.00 515
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	○	○	○	○
S	●	●	●	●
H				
O	○	○	○	○

3004 L / 3004 R

Designation	CW mm	CF mm	PDPT mm	a ₁ mm
3004-0,8-..	0.8	0.5	6	2.0
3004-1,0-..	1.0	0.5	6	2.2
3004-1,2-..	1.2	0.5	8	2.4
3004-1,5-..	1.5	0.5	8	2.7
3004-1,8-..	1.8	0.5	8	3.0



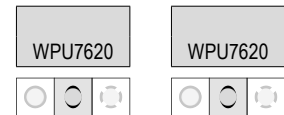
3004 R



3004 L

3004_L / 3004_R

▲ for back turning

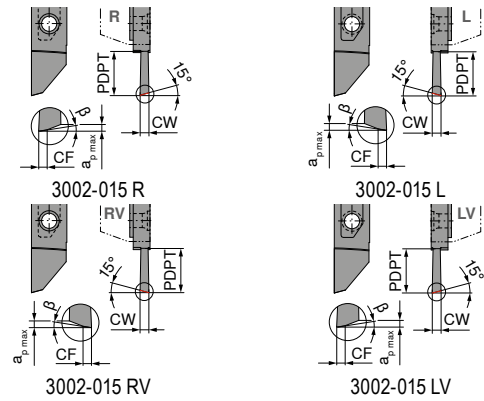


ISO designation									
3004-0,8-6									
3004-1,0-6									
3004-1,2-8									
3004-1,5-8									
3004-1,8-8									
P									
M									
K									
N									
S									
H									
O									

F	F
3004 L	3004 R
72 457 ...	72 456 ...
£	£
X1	X1
43.00	43.00
504	504
43.00	43.00
506	506
43.00	43.00
508	508
43.00	43.00
510	510
43.00	43.00
512	512

3002-015 L / 3002-015 LV / 3002-015 R / 3002-015 RV

Designation	CW mm	CF mm	PDPT mm	β°	$a_{p \max}$ mm
3002-015-..	2	0.3	10	1,5	0.45



3002_015_L / 3002_015_LV / 3002_015_R / 3002_015_RV

▲ For turning and parting off

WPU7620	WPU7620	WPU7620	WPU7620
F 3002-015 L	F 3002-015 LV	F 3002-015 R	F 3002-015 RV
72 517 ...	72 519 ...	72 516 ...	72 518 ...
£ X1	£ X1	£ X1	£ X1
45.00 510	45.00 510	45.00 510	45.00 510

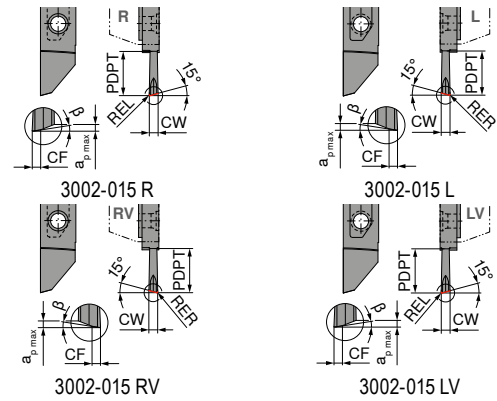
ISO designation

3002-015-2,0-10

P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	○	○	○	○
S	●	●	●	●
H				
O	○	○	○	○

3002-015 L / 3002-015 LV / 3002-015 R / 3002-015 RV

Designation	CW mm	CF mm	PDPT mm	β°	$a_{p \max}$ mm
3002-015-..	2	0.3	10	15	0.45



3002_015_L / 3002_015_LV / 3002_015_R / 3002_015_RV

▲ For turning and parting off

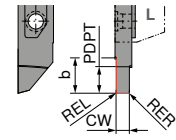
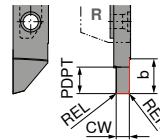
-SC WPU7620	-SC WPU7620	-SC WPU7620	-SC WPU7620
F 3002-015 L	F 3002-015 LV	F 3002-015 R	F 3002-015 RV
72 511 ...	72 513 ...	72 510 ...	72 512 ...
£ X1	£ X1	£ X1	£ X1
48.00	48.00	48.00	48.00
510	510	510	510

ISO designation	REL mm	RER mm
3002-015-2,0-10	0.15	0.00
3002-015-2,0-10	0.00	0.15

P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	○	○	○	○
S	●	●	●	●
H	●	●	●	●
O	○	○	○	○

3005 L / 3005 R

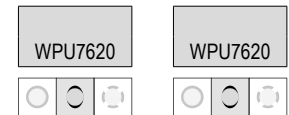
Designation	CW mm	PDPT mm	b mm
3005-1,0-..	1.0	2.5	8
3005-1,5-..	1.5	3.0	8
3005-2,0-..	2.0	4.0	8
3005-2,5-..	2.5	5.0	8
3005-3,0-..	3.0	6.0	8



3005 R

3005_L / 3005_R

▲ for grooving and turning



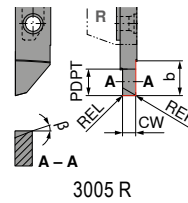
ISO designation	REL mm	RER mm
3005-1,0-2,5	0.05	0.05
3005-1,5-3	0.05	0.05
3005-2,0-4	0.05	0.05
3005-2,5-5	0.05	0.05
3005-3,0-6	0.05	0.05

F	3005 L	F	3005 R
72 466 ...		72 464 ...	
£		£	
X1		X1	
45.00	518	45.00	518
45.00	510	45.00	510
45.00	512	45.00	512
45.00	514	45.00	514
45.00	516	45.00	516

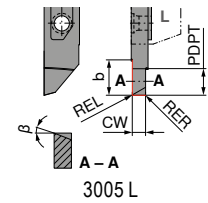
P	●	●
M	●	●
K	○	○
N	○	○
S	●	●
H	○	○
O	○	○

3005 L / 3005 R

Designation	CW mm	PDPT mm	b mm	β°
3005-0,8-2,5	0.8	2.5	8	10
3005-1,0-3,5	1.0	3.5	8	10
3005-1,5-4	1.5	4.0	8	10
3005-1,5-4 R08	1.5	4.0	8	10
3005-2,0-5	2.0	5.0	8	10
3005-2,0-5 R08	2.0	5.0	8	10
3005-2,0-5 R15	2.0	5.0	8	10
3005-2,5-6	2.5	6.0	8	10
3005-2,5-6 R08	2.5	6.0	8	10
3005-2,5-6 R15	2.5	6.0	8	10
3005-3,0-6	3.0	6.0	8	10
3005-3,0-6 R08	3.0	6.0	8	10
3005-3,0-6 R15	3.0	6.0	8	10



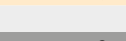
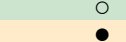
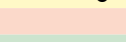
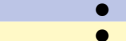
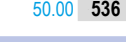
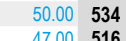
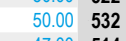
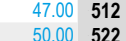
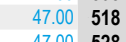
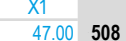
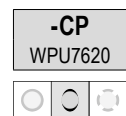
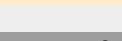
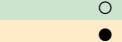
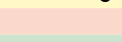
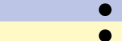
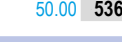
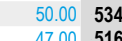
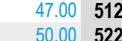
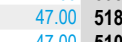
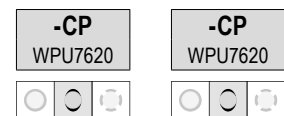
3005 R



3005 L

3005_L / 3005_R

▲ for grooving and turning

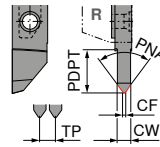


ISO designation	REL mm	RER mm
3005-0,8-2,5	0.00	0.00
3005-1,0-3,5	0.00	0.00
3005-1,5-4	0.00	0.00
3005-1,5-4 R08	0.08	0.08
3005-2,0-5	0.00	0.00
3005-2,0-5 R08	0.08	0.08
3005-2,0-5 R15	0.15	0.15
3005-2,5-6	0.00	0.00
3005-2,5-6 R08	0.08	0.08
3005-2,5-6 R15	0.15	0.15
3005-3,0-6	0.00	0.00
3005-3,0-6 R08	0.08	0.08
3005-3,0-6 R15	0.15	0.15

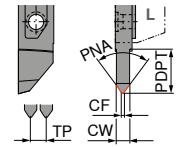
P	●	●
M	●	●
K		
N	○	○
S	●	●
H		
O	○	○

3006 L / 3006 R

Designation	TP mm	CW mm	PDPT mm	PNA °	CF mm
3006-2-6-..	0,25 - 2,0	2	6	60	0.035
3006-3-10..	0,25 - 2,0	3	10	60	0.035



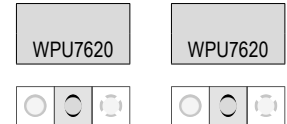
3006 R



3006 L

3006_L / 3006_R

▲ For thread turning (partial profile)



F
3006 L **F**
3006 R

72 478 ...	72 476 ...
£ X1	£ X1
43.00 510	43.00 510
43.00 512	43.00 512

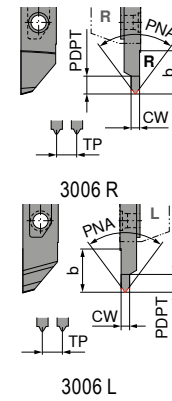
ISO designation

3006-2-6-60
3006-3-10-60

P	●	●
M	●	●
K		
N	○	○
S	●	●
H		
O	○	○

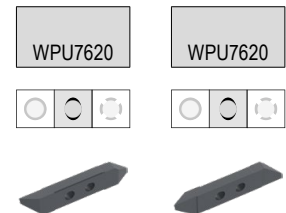
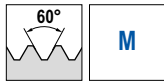
3006 VP L / 3006 VP R

Designation	TP mm	TD mm	CW mm	PDPT mm	b mm	PNA °
3006-0,15..	0.15	M0,6	0.16	0.275	8	60
3006-0,25..	0.25	M1 - M1,2	0.28	0.275	8	60
3006-0,35..	0.35	M1,6 - M1,8	0.36	0.275	8	60
3006-0,35..	0.35	M1,6 - M1,8	0.38	0.275	8	60
3006-0,4-..	0.40	M2	0.44	0.275	8	60
3006-0,45..	0.45	M2,2 - M2,5	0.50	0.275	8	60
3006-0,5-..	0.50	M3	0.70	1.400	8	60
3006-0,6-..	0.60	M3,5	0.80	1.400	8	60
3006-0,7-..	0.70	M4	0.90	1.800	8	60
3006-0,75..	0.75	M4,5	0.95	1.900	8	60
3006-0,8-..	0.80	M5	1.00	2.000	8	60
3006-1,0-..	1.00	M6 - M7	1.20	2.400	8	60
3006-1,25..	1.25	M8 - M9	1.45	2.900	8	60
3006-1,5-..	1.50	M10 - M11	1.74	3.400	8	60
3006-1,75..	1.75	M12	1.95	3.900	8	60
3006-2,0-..	2.00	M14 - M16	2.20	4.000	8	60



3006_VP_L / 3006_VP_R

▲ For thread turning (full profile)



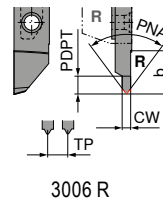
F 3006 VP L F 3006 VP R

72 474 ... 72 472 ...

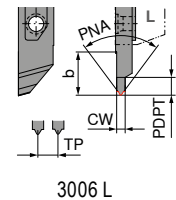
ISO designation	£ X1	50800	£ X1	50800
3006-0,15-10-60 VP	97.00	510	97.00	510
3006-0,25-10-60 VP	97.00	512	97.00	512
3006-0,35-10-60 VP	97.00	514	97.00	514
3006-0,4-10-60 VP	97.00	516	97.00	516
3006-0,45-10-60 VP	68.00	518	68.00	518
3006-0,5-10-60 VP	68.00	520	68.00	520
3006-0,6-10-60 VP	68.00	522	68.00	522
3006-0,7-10-60 VP	68.00	524	68.00	524
3006-0,75-10-60 VP	68.00	526	68.00	526
3006-0,8-10-60 VP	68.00	528	68.00	528
3006-1,0-10-60 VP	68.00	530	68.00	530
3006-1,25-10-60 VP	68.00	532	68.00	532
3006-1,75-10-60 VP	68.00	534	68.00	534
3006-2,0-10-60 VP			68.00	53600
P		●		●
M		●		●
K				
N		○		○
S		●		●
H				
O		○		○

3006 VP L / 3006 VP R

Designation	TP mm	CW mm	PDPT mm	b mm	PNA °
3006-13 U..	1.954	2.4	4.2	8	60
3006-14 U..	1.814	2.2	3.9	8	60
3006-16 U..	1.588	1.8	3.6	8	60
3006-18 U..	1.411	1.6	3.4	8	60
3006-20 U..	1.270	1.4	2.9	8	60
3006-24 U..	1.058	1.2	2.4	8	60
3006-28 U..	0.907	1.2	2.2	8	60
3006-32 U..	0.794	1.0	2.0	8	60
3006-36 U..	0.705	0.8	1.8	8	60
3006-40 U..	0.635	0.8	1.8	8	60
3006-44 U..	0.577	0.8	1.4	8	60
3006-48 U..	0.529	0.6	1.4	8	60



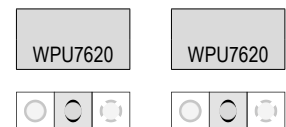
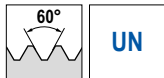
3006 R



3006 L

3006_VP_L / 3006_VP_R

▲ for thread turning (full profile UN)



F	F
3006 VP L	3006 VP R

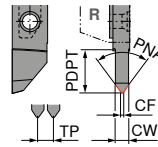
72 531 ...	72 530 ...
------------	------------

£		£	
X1		X1	
68.00	52400	68.00	52400
68.00	52200	68.00	52200
68.00	52000	68.00	52000
68.00	51800	68.00	51800
68.00	51600	68.00	51600
68.00	51400	68.00	51400
68.00	51200	68.00	51200
68.00	51000	68.00	51000
68.00	50800	68.00	50800
68.00	50600	68.00	50600
68.00	50400	68.00	50400
68.00	50200	68.00	50200

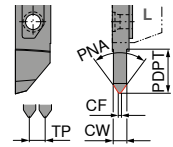
ISO designation		
3006-13 UN 10-60 VP		
3006-14 UN 10-60 VP		
3006-16 UN 10-60 VP		
3006-18 UN 10-60 VP		
3006-20 UN 10-60 VP		
3006-24 UN 10-60 VP		
3006-28 UN 10-60 VP		
3006-32 UN 10-60 VP		
3006-36 UN 10-60 VP		
3006-40 UN 10-60 VP		
3006-44 UN 10-60 VP		
3006-48 UN 10-60 VP		
P	●	●
M	●	●
K		
N	○	○
S	●	●
H		
O	○	○

3006 L / 3006 R

Designation	TP mm	CW mm	PDPT mm	PNA °	CF mm
3006-2-6-..	0,25 - 2,0	2	6	55	0.035
3006-3-10..	0,25 - 2,0	3	10	55	0.035



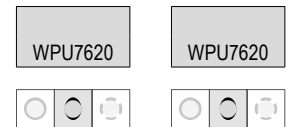
3006 R



3006 L

3006_L / 3006_R

▲ For thread turning (partial profile)



ISO designation

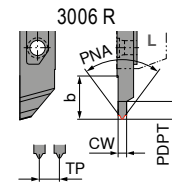
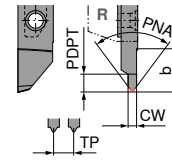
3006-2-6-55

3006-3-10-55

	P	M	K	N	S	H	O
3006-2-6-55	●	●	●	○	●	●	○
3006-3-10-55	●	●	●	○	●	●	○

3006 VP L / 3006 VP R

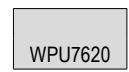
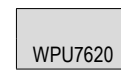
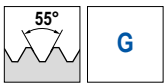
Designation	TP mm	TD mm	CW mm	PDPT mm	b mm	PNA °
3006-G11-..	2.309	1-11 - 6-11	2.54	5.0	8	55
3006-G14-..	1.814	1/2-14 - 7/8-14	2.00	4.5	8	55
3006-G19-..	1.337	1/4-19 - 3/8-19	1.48	3.3	8	55
3006-G28-..	0.907	1/8-28 - 1/16-28	1.00	2.3	8	55



3006 L

3006_VP_L / 3006_VP_R

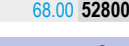
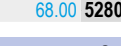
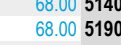
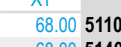
▲ For thread turning (full profile)



ISO designation

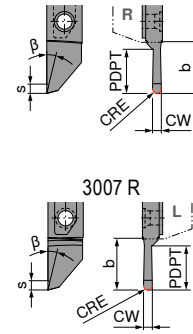
3006-G11-10-55 VP
3006-G14-10-55 VP
3006-G19-10-55 VP
3006-G28-10-55 VP

P	•	•
M	•	•
K	•	•
N	○	○
S	•	•
H	•	•
O	○	○



3007 L / 3007 R

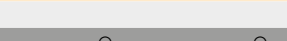
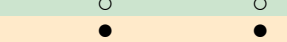
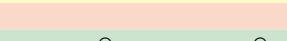
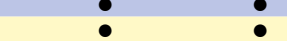
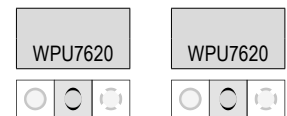
Designation	CW mm	b mm	PDPT mm	CRE mm	s mm	β°
3007-R0,25-2-..	0.5	12	2.0	0.25	2	6
3007-R0,5-2,5-..	1.0	12	2.5	0.50	2	6
3007-R0,6-2,5-..	1.2	12	2.5	0.60	2	6
3007-R0,75-3-..	1.5	12	3.0	0.75	2	6
3007-R0,8-3-1-..	1.6	12	3.0	0.80	2	6
3007-R1,0-10	2.0	12	10.0	1.00	2	6
3007-R1,5-10	3.0	12	10.0	1.50	2	6
3007-R1,5-16	3.0	17	16.0	1.50	2	6



3007 R

3007_L / 3007_R

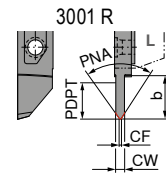
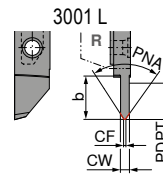
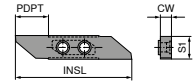
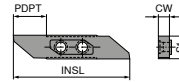
▲ for radius turning



ISO designation	£	X1	£	X1
3007-R0,25-2-10	43.00	510	43.00	510
3007-R0,5-2,5-10	43.00	512	43.00	512
3007-R0,6-2,5-10	43.00	514	43.00	514
3007-R0,75-3-10	43.00	516	43.00	516
3007-R0,8-3-10	43.00	518	43.00	518
3007-R1,0-10	43.00	520	43.00	520
3007-R1,5-10	43.00	522	43.00	522
3007-R1,5-16	52.00	524	52.00	524
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	○	○	○	○
S	●	●	●	●
H	○	○	○	○
O	○	○	○	○

3012 L / 3012 R / 3001 L / 3001 R

Designation	CW mm	PDPT mm	b mm	PNA °	CF mm
3012-2-6-..	2.0	2	10	60	0.035
3012-2-10-..	2.0	10	12	90	0.02
3001-3,5-..	3.5	11	-	-	-

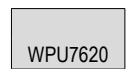
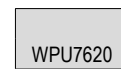


3012 R

3012 L

3012_L / 3012_R

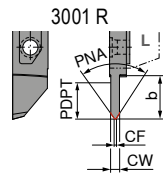
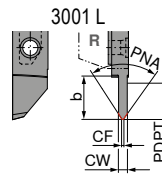
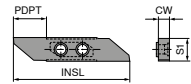
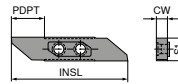
▲ for chamfering



ISO designation	£ X1		£ X1	
3012-2-6-60	46.00	51000	46.00	51000
3012-2-10-45	46.00	51200	46.00	51200
P		●		●
M		●		●
K				
N		○		○
S		●		●
H				
Q		○		○

3012 L / 3012 R / 3001 L / 3001 R

Designation	CW mm	PDPT mm	S1 mm	INSL mm
3001-3,5-..	3.5	11	8	40.5
3001-3,6-..	3.6	17	8	51.5
3012-2-10-..	2.0	10	8	40.0
3012-2-6-..	2.0	2	8	40.0

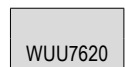
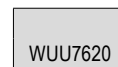


3012 R

3012 L

3001_L / 3001_R

▲ Blank



3001 L

3001 R

72 414 ...

72 412 ...

£

X1

40.00

11000

43.00

13000

£

X1

40.00

11000

43.00

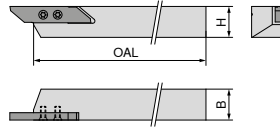
13000

ISO designation

3001-3,5-10

3001-3,6-17

VertiClamp – Standard tool holder



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	Insert	Left-hand 72 302 ...		Right-hand 72 300 ...	
					£ X0		£ X0	
3000-08x100 .	8	8	100	30..	152.00	008	152.00	008
3000-10x100 .	10	10	100	30..	136.00	010	136.00	010
3000-12x100 .	12	12	100	30..	135.00	012	135.00	012
3000-16x125 .	16	16	125	30..	162.00	016	162.00	016
3000-20x125 .	20	20	125	30..	183.00	020	183.00	020
3000-25x150 .	25	25	150	30..	252.00	025		

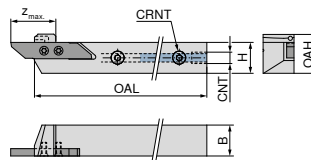
Spare parts for Article no.

72 300 008 / 72 302 008	T08	£ Y7	10.00	110	£ 2A	4.58	004
72 300 010 / 72 302 010	T08	£ Y7	10.00	110	£ 2A	4.58	005
72 300 012 / 72 302 012	T08	£ Y7	10.00	110	£ 2A	4.58	005
72 300 016 / 72 302 016	T08	£ Y7	10.00	110	£ 2A	4.58	005
72 300 020 / 72 302 020	T08	£ Y7	10.00	110	£ 2A	4.58	005
72 302 025	T08	£ Y7	10.00	110	£ 2A	4.58	005

VertiClamp – Standard holder with thro' coolant

Scope of supply:

Holder without coolant connection



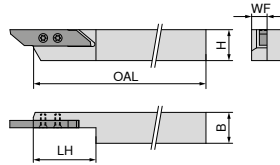
Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	OAH mm	Z _{max} mm	CRNT	CNT	Insert	Left-hand 72 311 ...		Right-hand 72 310 ...	
									£ X0		£ X0	
3000-08x100 .IC	8	12	100	12.2	26	M5	M5	30..	407.00	008	407.00	008
3000-10x100 .IC	10	12	100	14.0	26	M5	M5	30..	337.00	010	337.00	010
3000-12x100 .IC	12	12	100	16.0	26	M5	M5	30..	337.00	012	337.00	012
3000-16x100 .IC	16	16	125	20.0	26	M5	G1/8"	30..	358.00	016	358.00	016
3000-20x100 .IC	20	20	125	24.0	26	M5	G1/8"	30..	367.00	020	367.00	020
3000-25x100 .IC	25	25	125	29.0	26	M5	G1/8"	30..	413.00	025	413.00	025

Spare parts for Article no.	£ X0		£ X0		£ Y7		£ 2A	
72 310 008 / 72 311 008			18.03	011	10.00	110	4.58	004
72 310 010 / 72 311 010			18.03	011	10.00	110	4.58	005
72 310 012 / 72 311 012			18.03	011	10.00	110	4.58	005
72 310 016 / 72 311 016		G1/8"	18.03	011	10.00	110	4.58	005
72 310 020 / 72 311 020		G1/8"	18.03	011	10.00	110	4.58	005
72 310 025 / 72 311 025		G1/8"	18.03	011	10.00	110	4.58	005

VertiClamp – Offset tool holder



Illustrations show right-hand versions

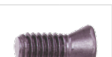


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	Insert
3000-10x100 .A	10	10	100	37	8	30..
3000-12x100 .A	12	12	100	37	8	30..
3000-16x125 .A	16	16	125	37	8	30..

Left-hand	Right-hand
72 309 ...	72 308 ...
£ X0	£ X0
148.00 006	148.00 006
149.00 008	149.00 008
180.00 010	180.00 010



Key D



Clamping screw

Spare parts
for Article no.

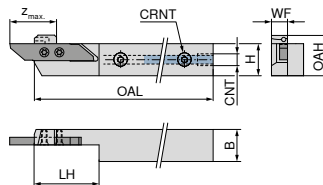
72 308 006 / 72 309 006

72 308 008 / 72 309 008

72 308 010 / 72 309 010

Left-hand	Right-hand
80 950 ...	72 950 ...
£ Y7	£ 2A
10.00 110	4.58 004
10.00 110	4.58 004
10.00 110	4.58 004

VertiClamp – Offset holder with thro' coolant



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	WF mm	LH mm	OAH mm	Z _{max} mm	CNT	CRNT	Insert
3000-16x125 .A IC	16	16	125	8	37	20	27	G1/8"	M5	30..

Left-hand	Right-hand
72 315 ...	72 314 ...
£ X0	£ X0
358.00 016	358.00 016



Cylindrical screw



Cylindrical screw



Key D



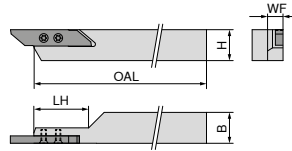
Clamping screw

Spare parts
for Article no.

72 314 016 / 72 315 016

Left-hand	Right-hand
72 950 ...	72 950 ...
£ X0	£ X0
57.26 010	18.03 011
G1/8"	M5x4
10.00 110	4.58 004

VertiClamp – Offset holder with offset insert seat



Illustrations show right-hand versions

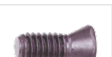


ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	Insert
3000-10x100 .AV	10	10	100	28	8	30..
3000-12x100 .AV	12	12	100	28	8	30..
3000-16x125 .AV	16	16	125	28	8	30..

Left-hand	Right-hand
72 317 ...	72 316 ...
£ X0	£ X0
148.00 010	148.00 010
148.00 012	148.00 012
179.00 016	179.00 016



Key D



Clamping screw

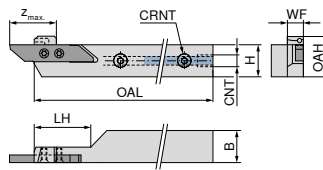
Spare parts for Article no.

72 316 010 / 72 317 010	T08	£ Y7	110	£ 2A	004
72 317 012	T08	10.00	110	4.58	004
72 316 016 / 72 317 016	T08	10.00	110	4.58	004

80 950 ...

72 950 ...

VertiClamp – Offset holder with offset insert seat and thro' coolant



Illustrations show right-hand versions



ISO designation	H mm	B mm	OAL mm	OAH mm	Z _{max} mm	CRNT	CNT	Insert
3000-16x125 .AV IC	16	16	125	20	27	M5	G1/8"	30..

Left-hand	Right-hand
72 313 ...	72 312 ...
£ X0	£ X0
358.00 016	358.00 016



Cylindrical screw



Cylindrical screw



Key D



Clamping screw

Spare parts for Article no.

72 312 016 / 72 313 016	G1/8"	£ X0	57.26 010	M5x4	£ X0	18.03 011	T08	£ Y7	110	£ 2A	004
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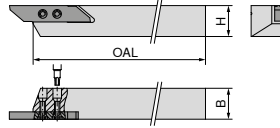
72 950 ...

72 950 ...

80 950 ...

72 950 ...

VertiClamp – Combi tool holder



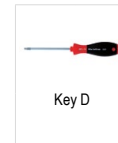
Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	Insert
3000-08x100 .C	8	8	100	30..
3000-10x100 .C	10	10	100	30..
3000-12x100 .C	12	12	100	30..
3000-16x125 .C	16	16	125	30..
3000-20x125 .C	20	20	125	30..

Left-hand		Right-hand	
72 306 ...		72 304 ...	
£		£	
X0		X0	
175.00	008	175.00	008
156.00	010	156.00	010
156.00	012	156.00	012
189.00	016	189.00	016
212.00	020	212.00	020

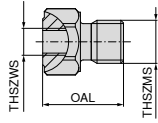
Spare parts for Article no.

		80 950 ...		72 950 ...		72 950 ...	
		£		£		£	
72 304 008 / 72 306 008	T08	10.00	110	4.58	003	4.73	008
72 304 010 / 72 306 010	T08	10.00	110	4.58	003	4.73	008
72 304 012 / 72 306 012	T08	10.00	110	4.58	003	4.73	008
72 304 016 / 72 306 016	T08	10.00	110	4.58	003	4.73	008
72 304 020 / 72 306 020	T08	10.00	110	4.58	003	4.73	008



Reducer fitting

- ▲ Max. 200 bar/2900 psi
- ▲ No sealing ring required



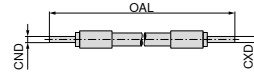
72 301 ...			
Designation	THSZWS	THSZMS	OAL mm
RV.100.M6-M5	M5	M6	18
RV.100.M8x1-M5	M5	M8x1	15
RV.100.M10x1-M5	M5	M10x1	15
RV.100.G1/8-M5	M5	G1/8"	15

£
X0

002
008
007
006

Hose (connecting piece/connecting piece)

- ▲ Max. 200 bar/2900 psi



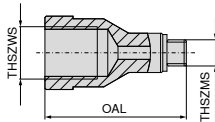
72 305 ...			
Designation	CND mm	CXD mm	OAL mm
HDKS.150.4-4	4	4	150
HDKS.200.4-4	4	4	200
HDKS.300.4-4	4	4	300
HDKS.500.4-4	4	4	500

£
X0

003
014
025
037

Reducer fitting

- ▲ Max. 200 bar/2900 psi
- ▲ Includes sealing ring



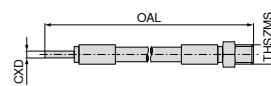
72 301 ...			
Designation	THSZWS	THSZMS	OAL mm
RV.100.M5-M6	M6	M5	15
RV.100.M5-M8x1	M8x1	M5	23
RV.100.M5-M10x1	M10x1	M5	27
RV.100.M5-G1/8	G1/8"	M5	27

£
X0

001
003
005
004

Hose (connecting piece/thread)

- ▲ Max. 200 bar/2900 psi
- ▲ No sealing ring required



72 305 ...			
Designation	THSZMS	CXD mm	OAL mm
HDKS.150.M5-4	M5	4	150
HDKS.200.M5-4	M5	4	200
HDKS.300.M5-4	M5	4	300
HDKS.500.M5-4	M5	4	500

£
X0

010
021
033
045



Sealing ring

Spare parts
for Article no.

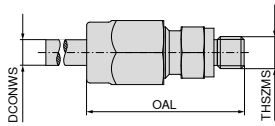
72 950 ...	
£	
X0	
4.42	009
4.42	009
4.42	009
4.42	009



Coolant connections are supplied-to-order items

Straight fitting

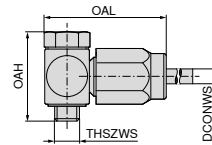
▲ Max. 200 bar/2900 psi



72 307 ...				
Designation	DCONWS mm	THSZMS	OAL mm	£ X0
KA.M5-4	4	M5	27	85.00
KA.G1/8-4	4	G1/8"	32	75.00
				009
				003

Swivel fitting

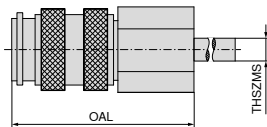
▲ Max. 200 bar/2900 psi



72 307 ...				
Designation	DCONWS mm	OAH mm	THSZMS	OAL mm
KA.SV.M5-4	4	21	M5	28
KA.SV.G1/8-4	4	30	G1/8"	37
				£ X0
				217.00
				273.00
				017
				012

Quick connection (coupling)

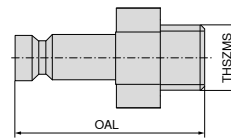
▲ Max. 200 bar/2900 psi



72 319 ...			
Designation	THSZMS	OAL mm	£ X0
KIG.M5	M5	26	247.00
			001

Quick connection (connector)

▲ Max. 200 bar/2900 psi
▲ No sealing ring required



72 320 ...			
Designation	THSZMS	OAL mm	£ X0
SAG.M5	M5	20	86.00
			001

Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment	Tensile strength N/mm ² / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0,15 % C	Annealed	420 N/mm ² / 125 HB	1.0401	C15	1.1141 Ck15
		P.1.2	< 0,45 % C	Annealed	640 N/mm ² / 190 HB	1.1191	C45E	1.0718 9SMnPb28
		P.1.3	< 0,45 % C	Tempered	840 N/mm ² / 250 HB	1.1191	C45E	1.0535 C55
		P.1.4	< 0,75 % C	Annealed	910 N/mm ² / 270 HB	1.1223	C60R	1.0535 C55
		P.1.5	< 0,75 % C	Tempered	1010 N/mm ² / 300 HB	1.1223	C60R	1.0727 45S20
	Low-alloy steel	P.2.1		Annealed	610 N/mm ² / 180 HB	1.7131	16MnCr5	1.6587 17CrNiMo6
		P.2.2		Tempered	930 N/mm ² / 275 HB	1.7131	16MnCr5	1.6587 17CrNiMo6
		P.2.3		Tempered	1010 N/mm ² / 300 HB	1.7225	42CrMo4	1.3505 100Cr6
		P.2.4		Tempered	1200 N/mm ² / 375 HB	1.7225	42CrMo4	1.3505 100Cr6
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	680 N/mm ² / 200 HB	1.4021	X20Cr13	1.4034 X46Cr13
		P.3.2		Hardened and tempered	1100 N/mm ² / 300 HB	1.2343	X38CrMoV5-1	1.4034 X46Cr13
		P.3.3		Hardened and tempered	1300 N/mm ² / 400 HB	1.2343	X38CrMoV5-1	1.4034 X46Cr13
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	680 N/mm ² / 200 HB	1.4016	X6Cr17	1.2316 X36CrMo16
		P.4.2	Martensitic	Tempered	1010 N/mm ² / 300 HB	1.4112	X90CrMoV18	1.2316 X36CrMo16
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	610 N/mm ² / 180 HB	1.4301	X5CrNi18-10	1.4571 X6CrNiMoTi17-12-2
		M.2.1	Austenitic	Tempered	300 HB	1.4841	X15CrNiSi25-21	1.4539 X1NiCrMoCu25-20-5
		M.3.1	Austenitic / ferritic (Duplex)		780 N/mm ² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501 X2CrNiMoCuWN25-7-4
K	Grey cast iron	K.1.1	Pearlitic / ferritic		350 N/mm ² / 180 HB	0.6010	GG-10	0.6025 GG-25
		K.1.2	Pearlitic (martensitic)		500 N/mm ² / 260 HB	0.6030	GG-30	0.6045 GG-45
	Spherulitic graphite cast iron	K.2.1	Ferritic		540 N/mm ² / 160 HB	0.7040	GGG-40	0.7060 GGG-60
		K.2.2	Pearlitic		845 N/mm ² / 250 HB	0.7070	GGG-70	0.7080 GGG-80
	Malleable iron	K.3.1	Ferritic		440 N/mm ² / 130 HB	0.8035	GTW-35-04	0.8045 GTW-45
		K.3.2	Pearlitic		780 N/mm ² / 230 HB	0.8165	GTS-65-02	0.8170 GTS-70-02
N	Aluminium wrought alloy	N.1.1	Non-hardenable		60 HB	3.0255	Al99,5	3.3315 AlMg1
		N.1.2	Hardenable	Age-hardened	340 N/mm ² / 100 HB	3.1355	AlCuMg2	3.2315 AlMgSi1
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		250 N/mm ² / 75 HB	3.2581	G-AlSi12	3.2163 G-AlSi9Cu3
		N.2.2	≤ 12 % Si, hardenable	Age-hardened	300 N/mm ² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373 G-AlSi9Mg
		N.2.3	> 12 % Si, non-hardenable		440 N/mm ² / 130 HB		G-AlSi17Cu4Mg	G-AlSi18CuNiMg
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		375 N/mm ² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410 CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm ² / 90 HB	2.0331	CuZn15	2.4070 CuZn28Sn1As
		N.3.3	CuSn, lead-free copper and electrolytic copper		340 N/mm ² / 100 HB	2.0060	E-Cu57	2.0590 CuZn40Fe
	Magnesium alloys	N.4.1	Magnesium and magnesium alloys		70 HB	3.5612	MgAl6Zn	3.5312 MgAl3Zn
S	Heat-resistant alloys	S.1.1	Fe - basis	Annealed	680 N/mm ² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865 G-X40NiCrSi38-18
		S.1.2		Age-hardened	950 N/mm ² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876 X10NiCrAlTi32-20
		S.2.1	Ni or Co basis	Annealed	840 N/mm ² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856 NiCr22Mo9Nb
		S.2.2		Age-hardened	1180 N/mm ² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955 NiFe25Cr20NbTi
		S.2.3		Cast	1080 N/mm ² / 320 HB	2.4765	CoCr20W15Ni	1.3401 G-X120Mn12
	Titanium alloys	S.3.1	Pure titanium		400 N/mm ²	3.7025	Ti99,8	3.7034 Ti99,7
		S.3.2	Alpha + beta alloys	Age-hardened	1050 N/mm ² / 320 HB	3.7165	TiAl6V4	Ti-6246 Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	Beta alloys		1400 N/mm ² / 410 HB	Ti555.3	Ti-5Al-5V-5Mo-3Cr	R56410 Ti-10V-2Fe-3Al
H	Hardened steel	H.1.1		Hardened and tempered	46–55 HRC			
		H.1.2		Hardened and tempered	56–60 HRC			
		H.1.3		Hardened and tempered	61–65 HRC			
		H.1.4		Hardened and tempered	66–70 HRC			
	Chilled iron	H.2.1		Cast	400 HB			
	Hardened cast iron	H.3.1		Hardened and tempered	55 HRC			
O	Non-metal materials	O.1.1	Plastics, duroplastic		≤ 150 N/mm ²			
		O.1.2	Plastics, thermoplastic		≤ 100 N/mm ²			
		O.2.1	Aramid fibre-reinforced		≤ 1000 N/mm ²			
		O.2.2	Glass/carbon-fibre reinforced		≤ 1000 N/mm ²			
		O.3.1	Graphite					

* Tensile strength

Cutting data standard values – VertiClamp system

Index	Parting				Turning				
	WPU7620	Fine	Medium	Rough	WPU7620		Fine	Medium	Rough
	v_c in m/min	f	f	f	v_c in m/min	a_p in mm	f	f	f
P.1.1	80	0,005-0,080	0,02-0,15	0,10-0,25	80	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.1.2	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.1.3	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.1.4	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.1.5	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.2.1	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.2.2	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.2.3	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.2.4	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.3.1	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.3.2	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.3.3	75	0,005-0,080	0,02-0,15	0,10-0,25	75	< 3	0,005-0,080	0,02-0,15	0,10-0,25
P.4.1	75	0,005-0,080	0,01-0,12	0,10-0,20	75	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
P.4.2	75	0,005-0,080	0,01-0,12	0,10-0,20	75	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
M.1.1	55	0,005-0,080	0,01-0,12	0,10-0,20	55	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
M.2.1	55	0,005-0,080	0,01-0,12	0,10-0,20	55	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
M.3.1	55	0,005-0,080	0,01-0,12	0,10-0,20	55	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
K.1.1	70	0,005-0,080	0,01-0,12	0,10-0,20	70	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
K.1.2	70	0,005-0,080	0,01-0,12	0,10-0,20	70	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
K.2.1	70	0,005-0,080	0,01-0,12	0,10-0,20	70	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
K.2.2	70	0,005-0,080	0,01-0,12	0,10-0,20	70	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
K.3.1	70	0,005-0,080	0,01-0,12	0,10-0,20	70	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
K.3.2	70	0,005-0,080	0,01-0,12	0,10-0,20	70	< 2,5	0,005-0,080	0,01-0,12	0,10-0,20
N.1.1	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.1.2	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.2.1	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.2.2	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.2.3	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.3.1	180	0,050-0,200	0,02-0,25	0,10-0,40	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.3.2	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.3.3	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
N.4.1	180	0,050-0,200	0,02-0,25	0,10-0,30	180	< 3	0,050-0,200	0,02-0,25	0,10-0,30
S.1.1	45	0,005-0,060	0,02-0,08	0,10-0,25	45	< 2,5	0,005-0,060	0,02-0,08	0,10-0,25
S.1.2	45	0,005-0,060	0,02-0,08	0,10-0,25	45	< 2,5	0,005-0,060	0,02-0,08	0,10-0,25
S.2.1	40	0,005-0,060	0,02-0,08	0,10-0,25	40	< 2,5	0,005-0,060	0,02-0,08	0,10-0,25
S.2.2	40	0,005-0,060	0,02-0,08	0,10-0,25	40	< 2,5	0,005-0,060	0,02-0,08	0,10-0,25
S.2.3									
S.3.1									
S.3.2	45	0,005-0,060	0,02-0,08	0,10-0,25	45	< 2,5	0,005-0,060	0,02-0,08	0,10-0,25
S.3.3	45	0,005-0,060	0,02-0,08	0,10-0,25	45	< 2,5	0,005-0,060	0,02-0,08	0,10-0,25
H.1.1									
H.1.2									
H.1.3									
H.1.4									
H.2.1									
H.3.1									
O.1.1	220	0,050-0,200	0,02-0,25	0,10-0,30	220	< 3	0,050-0,200	0,02-0,25	0,10-0,30
O.1.2	220	0,050-0,200	0,02-0,25	0,10-0,30	220	< 3	0,050-0,200	0,02-0,25	0,10-0,30
O.2.1									
O.2.2									
O.3.1									



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 standard values – VertiClamp and TriClamp system

Index	VertiClamp system				TriClamp system					
	Grooving				Turning					
	WPU7620	Fine	Medium	Rough	WUU7610	WPU7610	WPU7620	WUU7620		
	v_c in m/min	f	f	f	v_c in m/min				f	$a_{p\max}$ in mm
P.1.1	80	0,005-0,080	0,02-0,15	0,10-0,25	85	110	115	80	0,005-0,080	1,5
P.1.2	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.1.3	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.1.4	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.1.5	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.2.1	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.2.2	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.2.3	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.2.4	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.3.1	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.3.2	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.3.3	75	0,005-0,080	0,02-0,15	0,10-0,25	50	65	70	40	0,005-0,080	1,5
P.4.1	75	0,005-0,080	0,01-0,12	0,10-0,20	50	65	70	40	0,005-0,080	1,5
P.4.2	75	0,005-0,080	0,01-0,12	0,10-0,20	50	65	70	40	0,005-0,080	1,5
M.1.1	55	0,005-0,080	0,01-0,12	0,10-0,20		55	65		0,005-0,080	1,5
M.2.1	55	0,005-0,080	0,01-0,12	0,10-0,20		40	45		0,005-0,080	1,5
M.3.1	55	0,005-0,080	0,01-0,12	0,10-0,20		55	65		0,005-0,080	1,5
K.1.1	70	0,005-0,080	0,01-0,12	0,10-0,20		110	115		0,005-0,080	1,5
K.1.2	70	0,005-0,080	0,01-0,12	0,10-0,20		110	115		0,005-0,080	1,5
K.2.1	70	0,005-0,080	0,01-0,12	0,10-0,20		110	115		0,005-0,080	1,5
K.2.2	70	0,005-0,080	0,01-0,12	0,10-0,20		110	115		0,005-0,080	1,5
K.3.1	70	0,005-0,080	0,01-0,12	0,10-0,20		110	115		0,005-0,080	1,5
K.3.2	70	0,005-0,080	0,01-0,12	0,10-0,20		110	115		0,005-0,080	1,5
N.1.1	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.1.2	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.2.1	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.2.2	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.2.3	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.3.1	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.3.2	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.3.3	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
N.4.1	180	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	1,5
S.1.1	45	0,005-0,060	0,02-0,08	0,10-0,25	40	45	45	40	0,005-0,060	1,0
S.1.2	45	0,005-0,060	0,02-0,08	0,10-0,25	40	45	45	40	0,005-0,060	1,0
S.2.1	40	0,005-0,060	0,02-0,08	0,10-0,25	35	40	40	35	0,005-0,060	1,0
S.2.2	40	0,005-0,060	0,02-0,08	0,10-0,25	35	40	40	35	0,005-0,060	1,0
S.2.3										
S.3.1										
S.3.2	45	0,005-0,060	0,02-0,08	0,10-0,25	35	45	45	40	0,005-0,060	1,0
S.3.3	45	0,005-0,060	0,02-0,08	0,10-0,25	35	45	45	40	0,005-0,060	1,0
H.1.1										
H.1.2										
H.1.3										
H.1.4										
H.2.1										
H.3.1										
O.1.1	220	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	2,0
O.1.2	220	0,050-0,200	0,02-0,25	0,10-0,30	180	200	220	180	0,050-0,200	2,0
O.2.1										
O.2.2										
O.3.1										



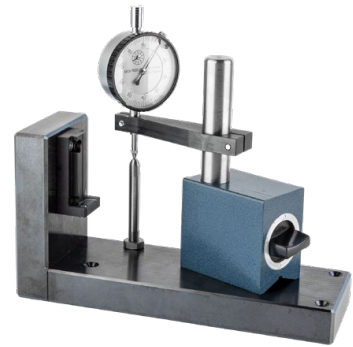
The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type. The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

Setting Device

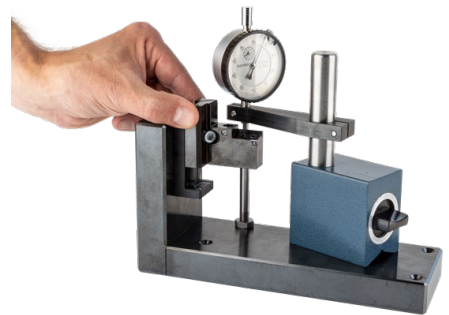
The adjustment device is profitable if the tool system is expanded with several tool holder blocks on several machines. The tool system can be preset so that holders on every machine have a suitable centre height in relation to the turning centre of the machine.

Setting Device

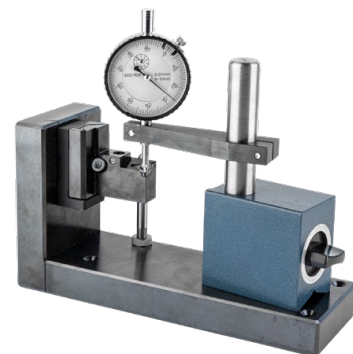
1. Zero the dial gauge on the surface of the measuring stick.



2. Place tool holder block on the device and gently tighten the clamping screw until the holder sits on the device free of play. Ideally, set the centre height slightly below the centre, so that the tool holder block is pushed upward when the height is set.



3. Carefully place the dial gauge on the tip of the tool's cutting edge.

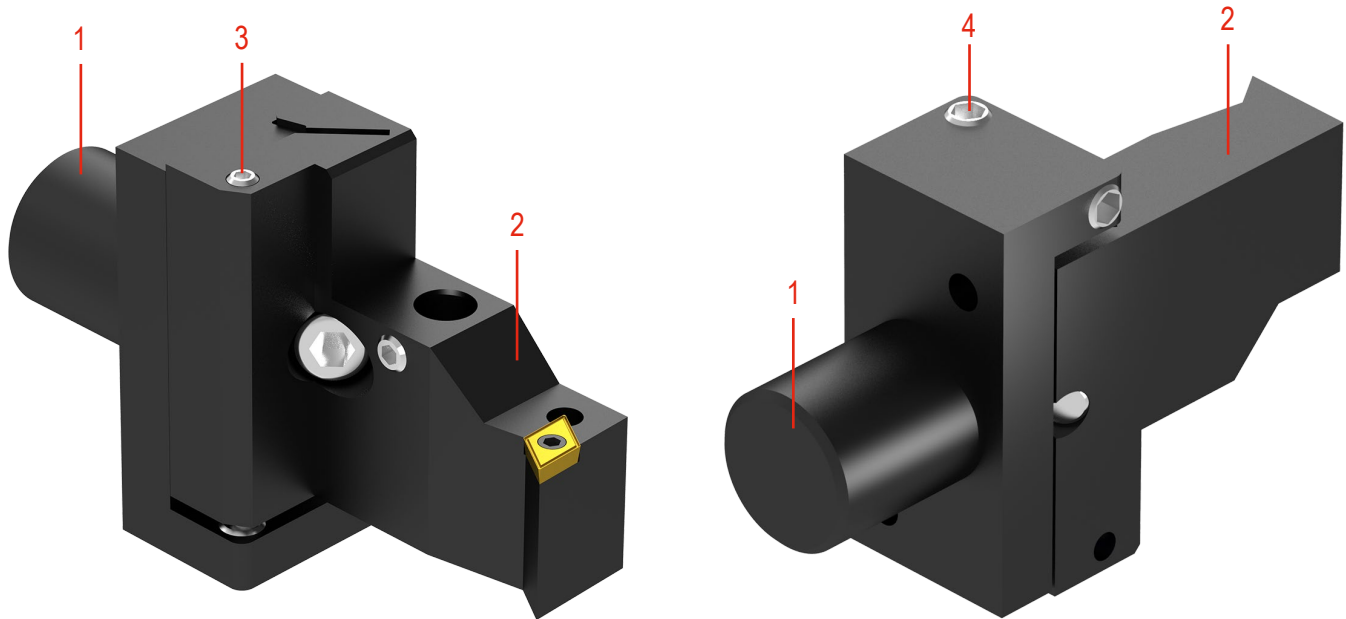


4. Adjust the height adjustment screw until the dial gauge is set to zero.



Procedure when retrofitting on the CT tool system

1. Screw all base holders (1) into the machine.
2. Clamp the height-adjustable screw (4) of the individual base holders (1) and set to the same height using the dial gauge.
3. Clamp a tool holder block (2) onto any base holder (1) and set precisely on the turning centre using the height-adjustable screw (3) of the tool holder block (2).
4. Remove the tool holder block (2) from the machine and clamp it on the height presetting device.
5. Set the dial gauge on the tool to zero and adjust the measuring pin on the presetting device.
6. Each additional tool holder block (2) is set to zero once on the presetting device using the measuring pin and dial gauge.



If several tool holders are arranged side-by-side, you can quickly and reliably fix them at the same height using height adjustment screws (3) and (4).

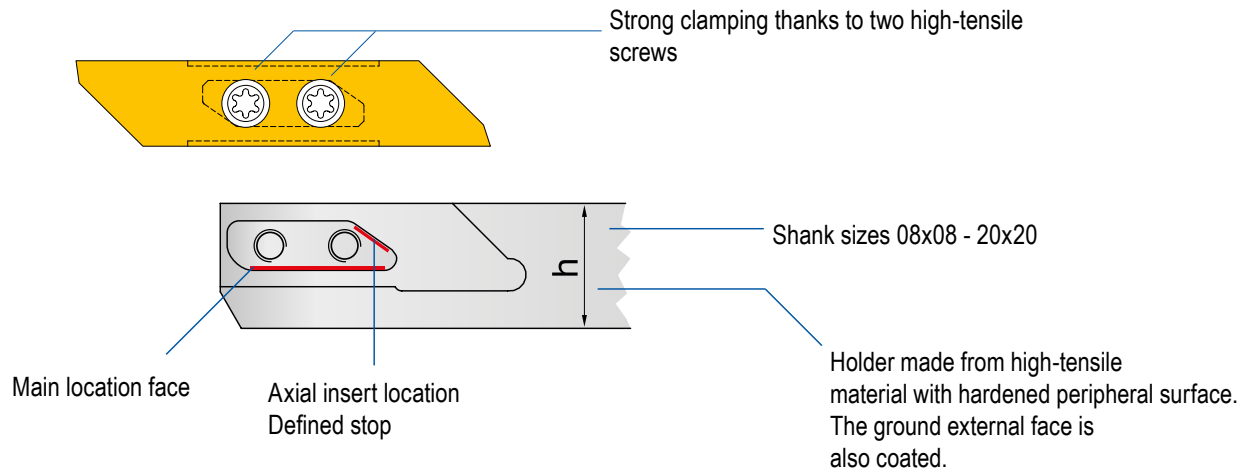
The same tool holders (2) can be used for multiple machines without presetting them again individually. However, the base holders (1) of the other machines must be adjusted to one another.

This is done as follows:

1. Screw all base holders into machine 2.
2. Clamp a preset tool block holder from machine 1 on any base holder in machine 2 and adjust the turning centre precisely using the height-adjustment screw of the base holder.
3. Set all other height-adjustable screws on the rest of the base holders in machine 2 to the same height using the dial gauge.
The preset tool block holders can thus be used on each tool station of several machines without readjustment.

VertiClamp

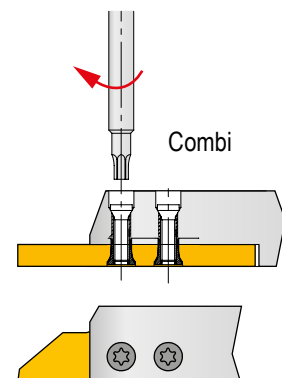
Features



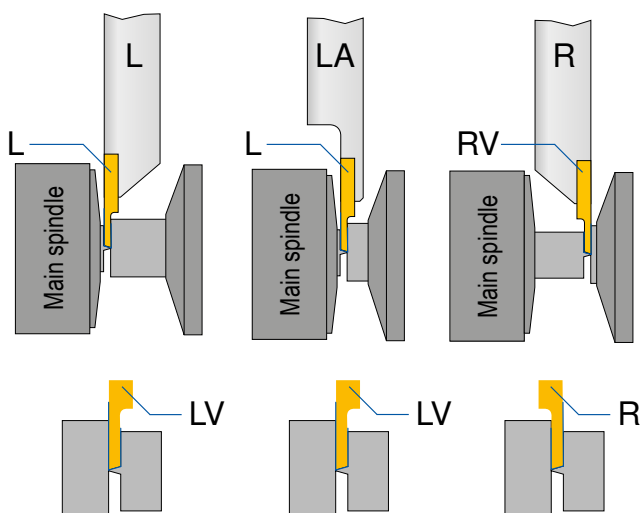
Advantages

- ▲ The connection between the indexable insert and holder guarantees optimum fixation
- ▲ The second cutting edge can always be used, even if the first cutting edge is broken off
- ▲ Shearing forces do not act on the screws
- ▲ For all cutting edge forms, the overhang of the cutting edge from the tool holder is identical
- ▲ Vertical insert orientation maintained thanks to large seating surface
- ▲ The indexable insert seat is completely protected against swarf
- ▲ Inserts are clamped through two high-tensile screws and a tapered axial stop of 30° in all cutting directions

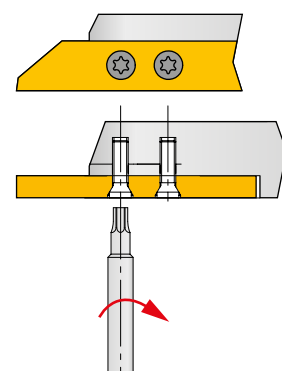
Clamping of cutting edge
With combi holders



Turning away from the spindle



Clamping of cutting edge
With standard holders

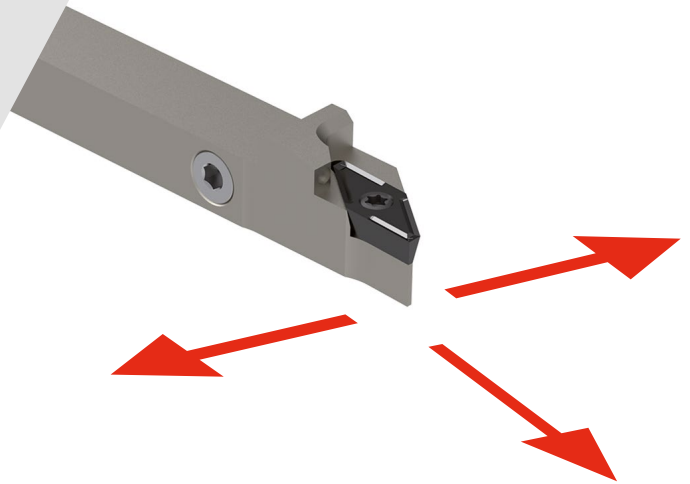


TriClamp

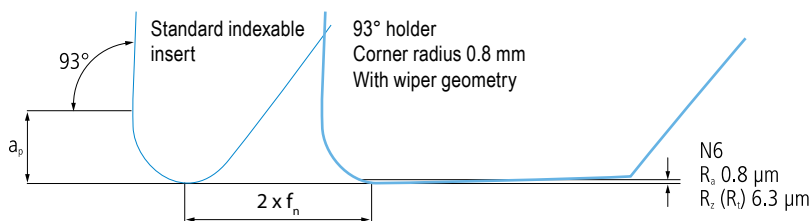
The feed rate can be doubled through the use of the TriClamp system with wiper geometry and 93° holder. This in turn allows machining times to be reduced considerably with no impact on quality, or the surface quality can be improved whilst retaining the same machining time. The ability to machine in a radial direction and in both axial directions makes this system particularly flexible.

Advantages

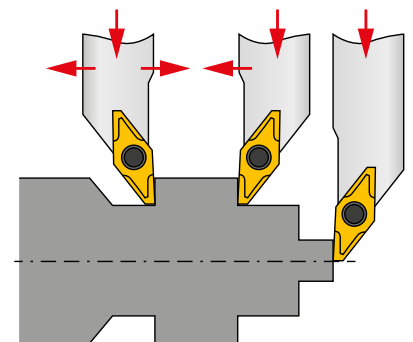
- ▲ Expansion of the ISO range
- ▲ Turning in three directions
- ▲ All cutting edges can easily be replaced
- ▲ Sharp positive cutting edges with 11° clearance angle
- ▲ Small corner radii 0.08 mm and 0.2 mm
- ▲ Perfect chip control
- ▲ Special holders for sliding head lathes (Cross-sections 8x8 mm to 16x16 mm)



Smoothing geometry in detail:

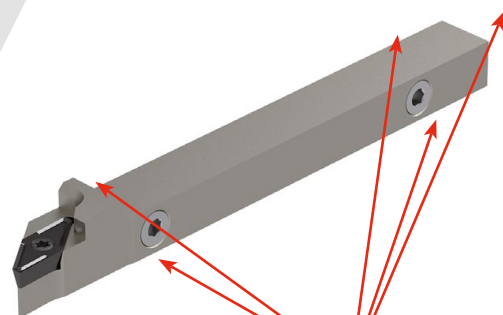


Applications:



Tool holders with a thro' coolant supply increase the performance of indexable inserts and improve the quality of components, particularly in the case of difficult-to-machine materials such as stainless steels and super alloys.

- ▲ All IC holders have five coolant supply options
- ▲ Made from highly tempered steel
- ▲ Precise coolant jet on the cutting edge
- ▲ Can be used at any coolant pressure



Coolant connection options

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.

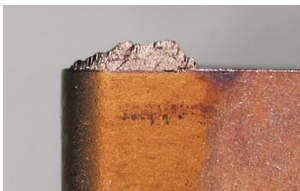
Cause

- ▲ 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.

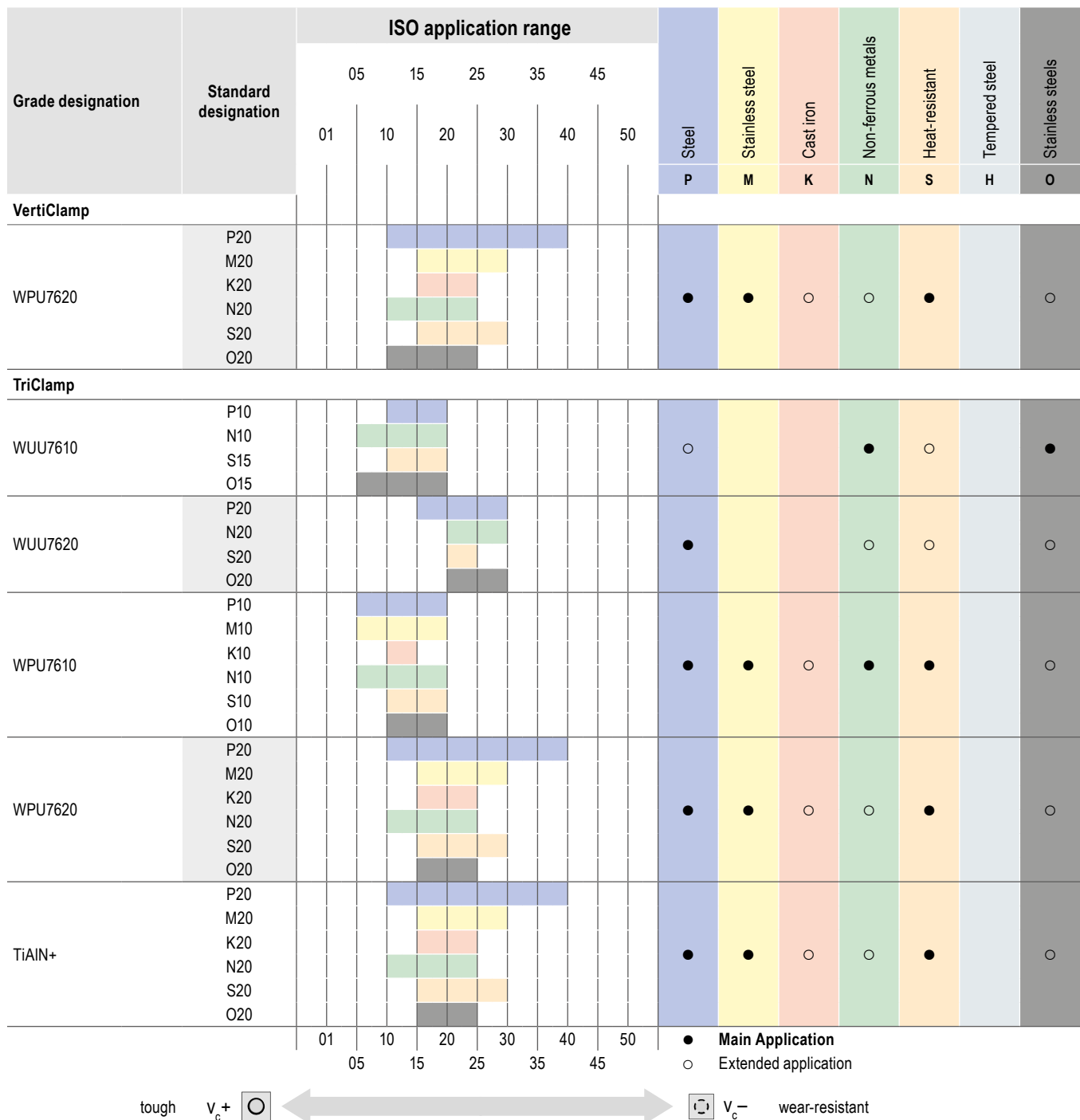
Cause

- ▲ 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

Grades Overview



Grade description

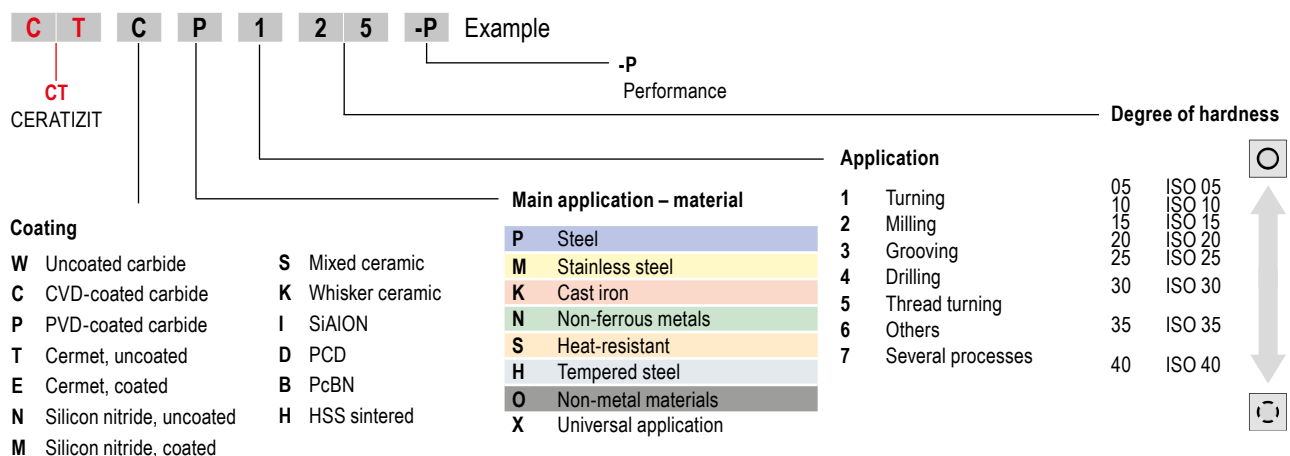


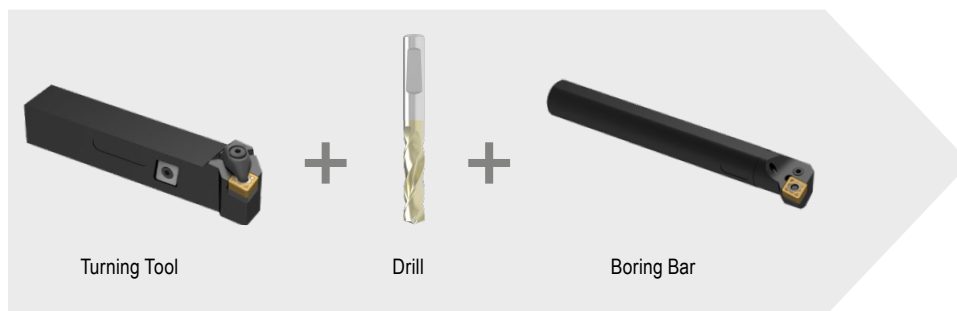
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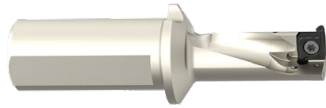
Products and product information can be found in our main catalogue and online shop.

Advantages of EcoCut

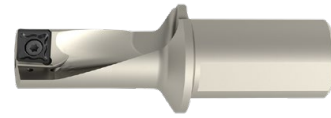
- ▲ reduced machining time
- ▲ reduced need for tool positions
- ▲ generates flat bottom of hole
- ▲ less programming
- ▲ lower set-up costs / reduced setting time
- ▲ time savings due to fewer tool changes



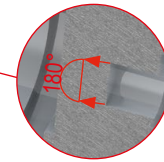
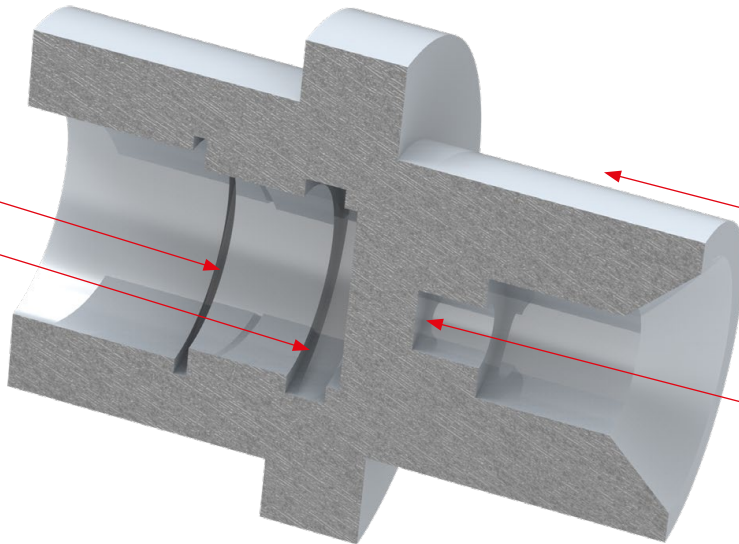
Application examples



EcoCut ProfileMaster



EcoCut Classic



EcoCut Mini



Symbol explanation



Turning outside profiles



Face turning



Drilling into full material



Turning internal profiles



External / internal radial grooving



Axial grooving



Int. coolant supply

-28P — Polished chip breaker
H216T — Carbide Grade

F Fine Machining
M Medium Machining
R Rough Machining



Smooth cut
Irregular cutting depth
Interrupted cut

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Symbol explanation	107
System overview	107

Products and product information can be found in our main catalogue and online shop.

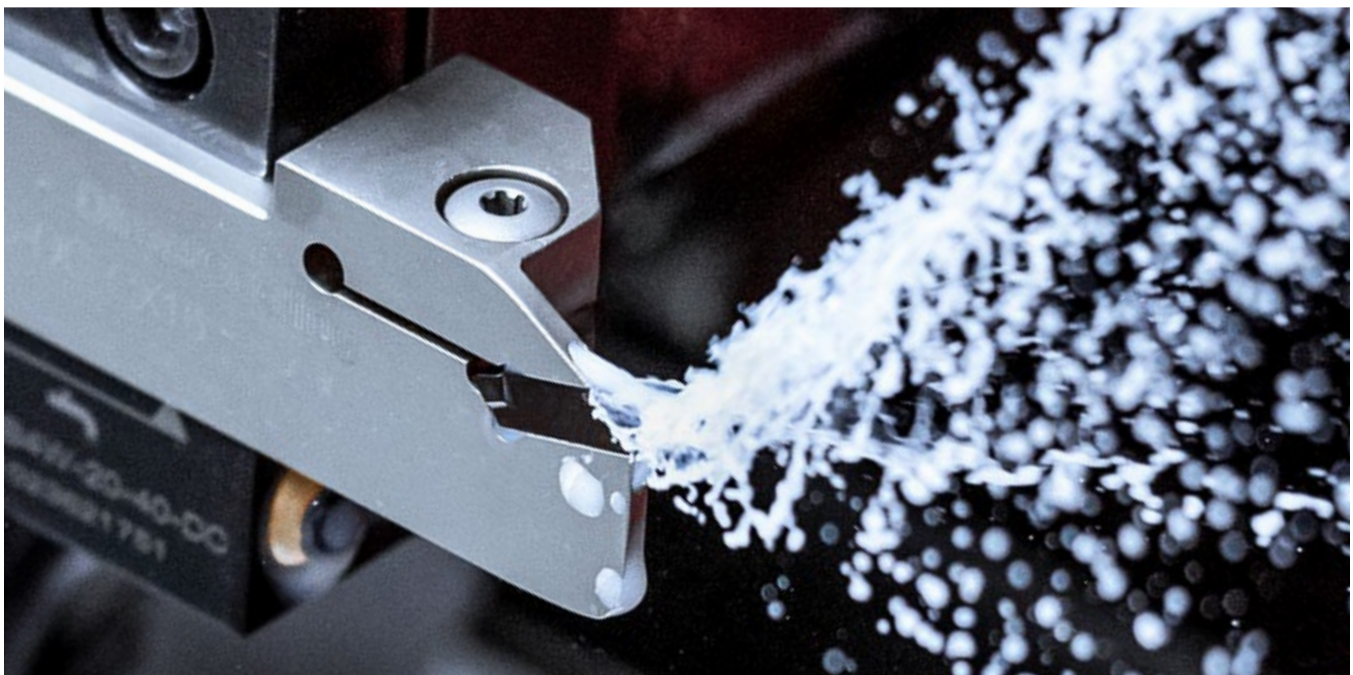
Advantages due to DirectCooling



- ▲ Improved chip control
- ▲ Longer service life of the indexable insert
- ▲ Greater process security
- ▲ Application of higher cutting data
- ▲ Reduced wear
- ▲ Universal application



cutting.tools/gb/en/direct-cooling



Symbol explanation

	Grooving		Internal machining		DirectCooling
	Parting		Internal thread		Int. coolant supply
	Grooving and Turning		External thread		Repeatability
	Copy Turning	F	Fine Machining	-F2	Chip groove
	Axial Grooving and Turning	M	Medium Machining	CTPP345	Carbide Grade
	Circlip Grooves	R	Rough Machining		Smooth cut
			Main Application		Irregular cutting depth
			Extended application		Interrupted cut

System overview

No. of cutting edges	System	Grooving	Parting	Grooving and Turning	Copy Turning	Axial Grooving and Turning	Circlip Grooves	Internal machining	External machining		Internal machining		Axial machining	
									CW (mm)	CDX max. (mm)	DMIN (mm)	CDX max. (mm)	DAXN (mm)	CDX max. (mm)
1	SX								2-6	60				
	LX								8-10	80	200	34	500	39
2	GX 09								2-3,5	7	16	6		
	GX 16								2-6	12	20,5	11		
	GX 24								2-6	21	42	19	45	25
3	TX								0,5-5,15	8	46	2	20	3

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System overview	109
Toolfinder	108+109

Products and product information can be found in our main catalogue and online shop.



Should you wish to send us a request for specially adjusted solutions, you will find a detailed form in the download area on our homepage. Please fill it out carefully and send it via email or print it out and send via fax. → cuttingtools.ceratizit.com/gb/en/download.html

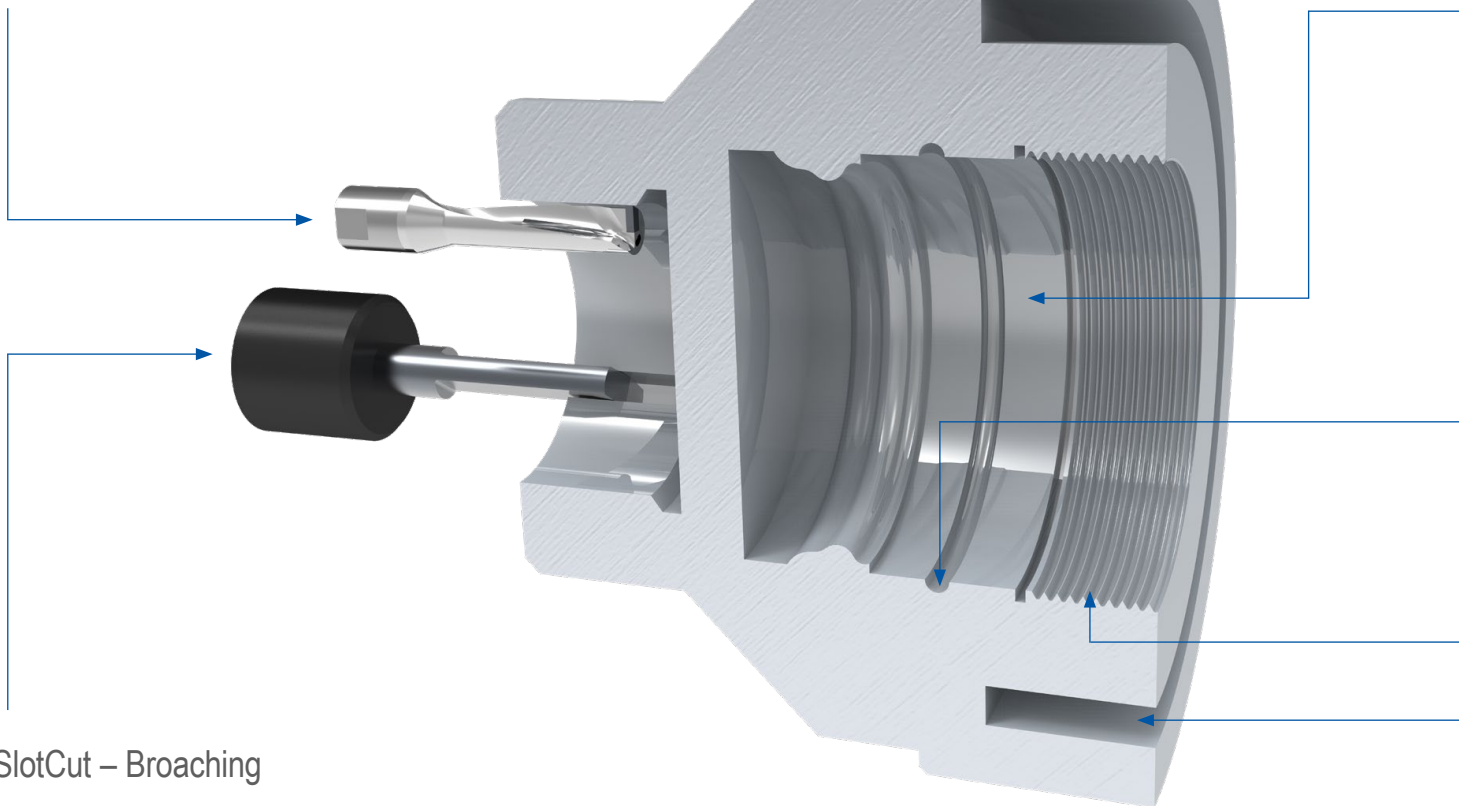
Please email the completed form to tsc@ceratizit.com.

Toolfinder

EcoCut Mini

From Ø 2 mm

Inserts and tool holders can be found in → **Chapter 10**
Multifunctional Tools – EcoCut and FreeTurn



SlotCut – Broaching

Inserts + Holder DIN138

Symbol explanation



Internal machining



Internal grooving



Internal thread turning



Axial machining

System overview

UltraMini



- ▲ from Ø 0.5 mm
- ▲ flexible system
- ▲ ground inserts
- ▲ high repeatability
- ▲ coolant supply to the cutting edge

MiniCut



- ▲ from Ø 7.8 mm
- ▲ stable three-rib interface
- ▲ easy handling
- ▲ coolant supply to the cutting edge
- ▲ precise cutting edge position

SlotCut



- ▲ broaching directly on the machine
- ▲ usable from Ø 6 mm
- ▲ low machine load
- ▲ variety of tolerance classes

		UltraMini										MiniCut				
Hole diameter (mm)		≥ 0,5	≥ 2	≥ 2,4	≥ 2,8	≥ 3	≥ 4	≥ 5	≥ 6	≥ 8	≥ 16	≥ 8	≥ 9	≥ 11	≥ 14	≥ 16
Internal turning and profiling	Internal turning and profiling	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓	✓	✓
	Internal turning and profiling – hard turning		✓		✓		✓	✓	✓			✓		✓	✓	✓
	High-feed turning		✓			✓	✓	✓	✓							
	Internal turning				✓		✓	✓				✓	✓	✓	✓	✓
	Back boring					✓	✓	✓	✓			✓	✓	✓	✓	
	Turning and chamfering							✓	✓			✓	✓	✓	✓	
Pre-parting and chamfering	Pre-parting and chamfering						✓	✓	✓			✓	✓	✓	✓	✓
	Internal Undercuts		✓		✓		✓	✓	✓			✓	✓	✓	✓	✓
	Groove turning		✓			✓	✓	✓	✓			✓	✓	✓	✓	✓
	Groove and profile turning						✓	✓	✓			✓	✓	✓	✓	✓
Internal thread turning	Internal thread turning			✓			✓	✓	✓			✓	✓	✓	✓	✓
	Axial grooving							✓	✓	✓	✓	✓	✓	✓	✓	✓
suitable holder		✓										✓				
Sets		✓										✓				





Solid drilling and bore machining

HSS drilling

Solid carbide drilling

Reamers

1

Threading

HSS taps

Circular and Thread Milling

Thread turning

2

Turning

Turning Tools

Multifunction

Grooving Tools

Miniature turning tools

3

Milling

Solid Carbide milling cutters

Milling tools with indexable inserts

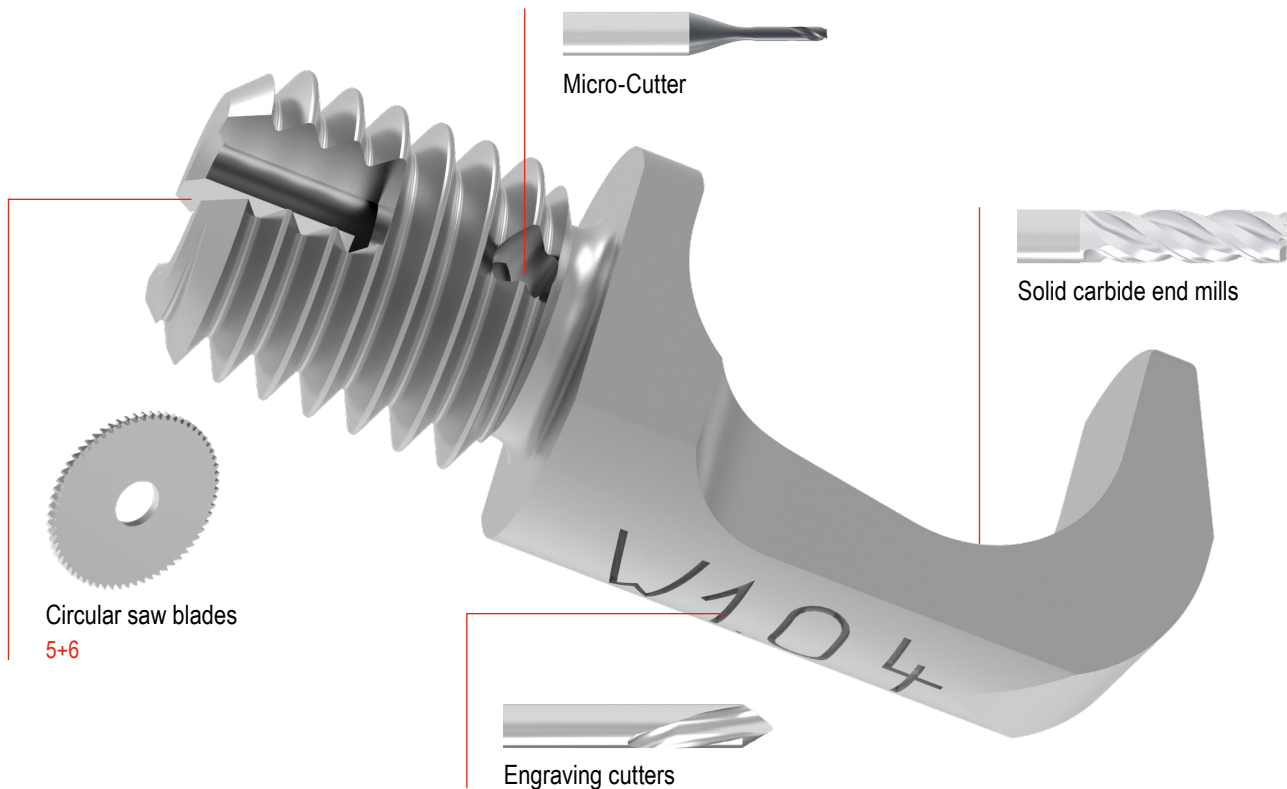
4

Clamping technology

Collets and reduction sleeves

5

Toolfinder



Symbol explanation

Shank



Shank type



Length: extra short / short / medium / long / extra long



Axial thro' coolant



Radial thro' coolant

Cutting edge preparation



Sharp



Corner chamfer (CHW = chamfer width in mm)



Corner radius



Full Radius

Application

HPC

High volume machining

HFC

High-feed milling

**54–70
HRC**

Hard materials



Machining example



The red arrows describe the possible feed directions

$\lambda_s = 48^\circ$
 $\gamma_s = 10^\circ$

Cutting geometry
 λ_s = Helix Angle
 γ_s = Rake Angle

λ_s
var.

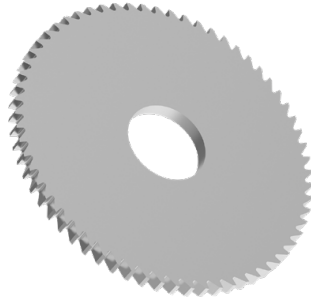
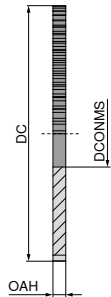
Variable helix angle

ZEFP = Number of flutes
● = **Main Application**
○ = Extended application



Solid carbide circular saw blades, fine-toothed, DIN 1837A

▲ fine-straight-cut



DIN 1837 A

54 700 ...

DC _{js15}	OAH _{±0.01}	DCONMS _{H6}	ZEFP	£	
mm	mm	mm		V6	
15	0.20	5	64	18.00	102
15	0.25	5	64	18.00	103
15	0.30	5	64	18.00	104
15	0.35	5	64	18.00	105
15	0.40	5	64	18.00	106
15	0.50	5	48	18.00	107
15	0.60	5	48	18.00	108
15	0.70	5	48	21.00	109
15	0.80	5	40	21.00	110
15	0.90	5	40	23.00	111
15	1.00	5	40	23.00	112
15	1.10	5	40	24.00	113
15	1.20	5	40	24.00	114
15	1.30	5	40	24.00	115
15	1.40	5	40	24.00	116
15	1.50	5	40	26.00	117
15	1.60	5	40	28.00	118
15	1.70	5	40	31.00	119
15	1.80	5	40	31.00	120
15	1.90	5	40	32.00	121
15	2.00	5	40	32.00	122
15	2.50	5	40	44.00	123
15	3.00	5	40	50.00	124
15	3.50	5	40	56.00	125
15	4.00	5	40	70.00	126
15	4.50	5	40	81.00	127
15	5.00	5	40	85.00	128
15	5.50	5	40	101.00	129
15	6.00	5	40	104.00	130
20	0.20	5	80	20.00	152
20	0.25	5	64	20.00	153
20	0.30	5	64	20.00	154
20	0.35	5	64	20.00	155
20	0.40	5	64	20.00	156
20	0.50	5	48	20.00	157
20	0.60	5	48	20.00	158
20	0.70	5	48	23.00	159
20	0.80	5	48	23.00	160
20	0.90	5	40	24.00	161
20	1.00	5	40	26.00	162
20	1.10	5	40	28.00	163
20	1.20	5	40	28.00	164
20	1.30	5	40	29.00	165
20	1.40	5	40	32.00	166
20	1.50	5	40	32.00	167
20	1.60	5	40	34.00	168
20	1.70	5	40	35.00	169
20	1.80	5	32	35.00	170
20	1.90	5	32	38.00	171
20	2.00	5	32	38.00	172
20	2.50	5	32	47.00	173
20	3.00	5	32	54.00	174
20	3.50	5	24	59.00	175
20	4.00	5	24	71.00	176
20	4.50	5	24	85.00	177
20	5.00	5	24	88.00	178
20	5.50	5	24	103.00	179
20	6.00	5	24	107.00	180
25	0.20	8	80	19.00	202

54 700 ...

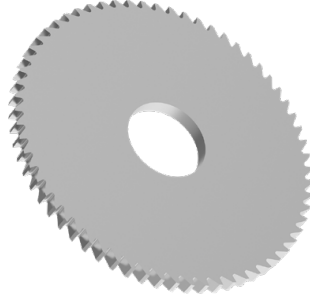
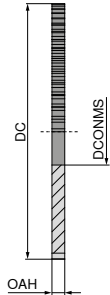
DC _{js15}	OAH _{±0.01}	DCONMS _{H6}	ZEFP	£	
mm	mm	mm		V6	
25	0.25	8	80	19.00	203
25	0.30	8	80	19.00	204
25	0.35	8	64	19.00	205
25	0.40	8	64	19.00	206
25	0.50	8	64	23.00	207
25	0.60	8	64	23.00	208
25	0.70	8	48	25.00	209
25	0.80	8	48	28.00	210
25	0.90	8	48	31.00	211
25	1.00	8	48	31.00	212
25	1.10	8	48	35.00	213
25	1.20	8	48	35.00	214
25	1.30	8	40	36.00	215
25	1.40	8	40	38.00	216
25	1.50	8	40	38.00	217
25	1.60	8	40	42.00	218
25	1.70	8	40	42.00	219
25	1.80	8	40	43.00	220
25	1.90	8	40	47.00	221
25	2.00	8	40	48.00	222
25	2.50	8	40	58.00	223
25	3.00	8	32	76.00	224
25	3.50	8	32	84.00	225
25	4.00	8	32	94.00	226
25	4.50	8	32	108.00	227
25	5.00	8	32	114.00	228
25	5.50	8	24	130.00	229
25	6.00	8	24	135.00	230
30	0.20	8	100	25.00	252
30	0.25	8	100	25.00	253
30	0.30	8	80	25.00	254
30	0.35	8	80	25.00	255
30	0.40	8	80	25.00	256
30	0.50	8	80	26.00	257
30	0.60	8	64	26.00	258
30	0.70	8	64	32.00	259
30	0.80	8	64	35.00	260
30	0.90	8	64	38.00	261
30	1.00	8	64	38.00	262
30	1.10	8	64	42.00	263
30	1.20	8	48	42.00	264
30	1.30	8	48	43.00	265
30	1.40	8	48	47.00	266
30	1.50	8	48	47.00	267
30	1.60	8	48	50.00	268
30	1.70	8	48	50.00	269
30	1.80	8	48	51.00	270
30	1.90	8	48	54.00	271
30	2.00	8	48	56.00	272
30	2.50	8	40	66.00	273
30	3.00	8	40	79.00	274
30	3.50	8	40	89.00	275
30	4.00	8	40	101.00	276
30	4.50	8	32	116.00	277
30	5.00	8	32	122.00	278
30	5.50	8	32	138.00	279
30	6.00	8	32	144.00	280

P	●
M	●
K	●
N	●
S	●
H	
O	●

→ v_e/f_z Page 10

Solid carbide circular saw blades, fine-toothed, DIN 1837A

▲ fine-straight-cut



DIN 1837 A

54 700 ...

DC _{js15}	OAH _{±0.01}	DCONMS _{H6}	ZEFP	£	
mm	mm	mm		V6	
40	0.20	10	128	31.00	302
40	0.25	10	100	31.00	303
40	0.30	10	100	31.00	304
40	0.35	10	100	31.00	305
40	0.40	10	100	33.00	306
40	0.50	10	80	35.00	307
40	0.60	10	80	35.00	308
40	0.70	10	80	41.00	309
40	0.80	10	80	42.00	310
40	0.90	10	64	42.00	311
40	1.00	10	64	43.00	312
40	1.10	10	64	44.00	313
40	1.20	10	64	47.00	314
40	1.30	10	64	48.00	315
40	1.40	10	64	50.00	316
40	1.50	10	64	53.00	317
40	1.60	10	64	54.00	318
40	1.70	10	48	56.00	319
40	1.80	10	48	58.00	320
40	1.90	10	48	59.00	321
40	2.00	10	48	59.00	322
40	2.50	10	48	77.00	323
40	3.00	10	48	88.00	324
40	3.50	10	48	99.00	325
40	4.00	10	40	110.00	326
40	4.50	10	40	124.00	327
40	5.00	10	40	132.00	328
40	5.50	10	40	148.00	329
40	6.00	10	40	156.00	330
50	0.20	13	128	50.00	352
50	0.25	13	128	49.00	353
50	0.30	13	128	41.00	354
50	0.35	13	100	41.00	355
50	0.40	13	100	41.00	356
50	0.50	13	100	43.00	357
50	0.60	13	100	43.00	358
50	0.70	13	80	44.00	359
50	0.80	13	80	49.00	360
50	0.90	13	80	50.00	361
50	1.00	13	80	53.00	362
50	1.10	13	80	54.00	363
50	1.20	13	80	55.00	364
50	1.30	13	64	62.00	365
50	1.40	13	64	63.00	366
50	1.50	13	64	66.00	367
50	1.60	13	64	67.00	368
50	1.70	13	64	69.00	369
50	1.80	13	64	73.00	370
50	1.90	13	64	73.00	371
50	2.00	13	64	76.00	372
50	2.50	13	64	92.00	373
50	3.00	13	48	107.00	374
50	3.50	13	48	122.00	375
50	4.00	13	48	129.00	376
50	4.50	13	48	149.00	377
50	5.00	13	48	157.00	378
50	5.50	13	40	176.00	379
50	6.00	13	40	183.00	380
63	0.20	16	160	74.00	402

54 700 ...

£

V6

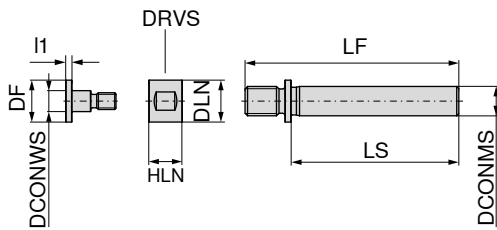
DC _{js15}	OAH _{±0.01}	DCONMS _{H6}	ZEFP	£	
mm	mm	mm		V6	
63	0.25	16	160	71.00	403
63	0.30	16	128	66.00	404
63	0.35	16	128	63.00	405
63	0.40	16	128	57.00	406
63	0.50	16	128	56.00	407
63	0.60	16	100	57.00	408
63	0.70	16	100	64.00	409
63	0.80	16	100	71.00	410
63	0.90	16	100	71.00	411
63	1.00	16	100	73.00	412
63	1.10	16	80	76.00	413
63	1.20	16	80	78.00	414
63	1.30	16	80	80.00	415
63	1.40	16	80	81.00	416
63	1.50	16	80	82.00	417
63	1.60	16	80	87.00	418
63	1.70	16	80	92.00	419
63	1.80	16	80	93.00	420
63	1.90	16	80	97.00	421
63	2.00	16	80	100.00	422
63	2.50	16	64	120.00	423
63	3.00	16	64	137.00	424
63	3.50	16	64	156.00	425
63	4.00	16	64	171.00	426
63	4.50	16	64	197.00	427
63	5.00	16	48	205.00	428
63	5.50	16	48	230.00	429
63	6.00	16	48	238.00	430

P	●
M	●
K	●
N	●
S	●
H	●
O	●

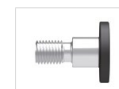
→ v_c/f_z Page 10

Cylindrical shank adapter for circular saw blades

▲ DCONWS = circular saw blade bore diameter



									72 900 ...	
DCONWS _{H7}	DCONMS _{H7}	DLN	DF	LF	LS	HLN	I ₁	DRVS	£	
mm	mm	mm	mm	mm	mm	mm	mm	mm	X1	
5	7	10	10	51	40	8	3	9	193.00	005
5	10	10	10	61	50	8	3	9	193.00	105
8	7	15	15	51	40	8	3	14	193.00	008
8	10	15	15	61	50	8	3	14	209.00	108
10	7	17	17	53	40	10	3	16	193.00	010
10	10	17	17	63	50	10	3	16	209.00	110
10	16	17	17	74	55	10	3	16	223.00	210
13	10	20	20	66	50	10	3	18	209.00	113
13	16	20	20	77	55	10	3	18	223.00	213
16	10	24	24	66	50	14	3	22	209.00	116
16	16	24	24	79	55	14	3	22	223.00	216



Screw - SR



Lock nut - KM

Spare parts for Article no.

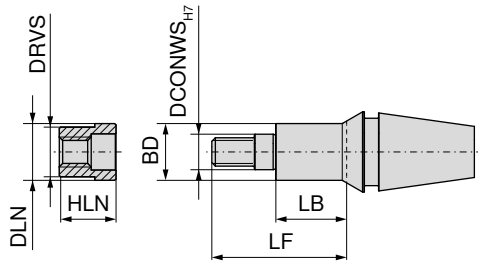
			72 945 ...		72 945 ...	
			£		£	
			X1		X1	
72 900 005			36.00	000	57.00	005
72 900 105			36.00	000	57.00	005
72 900 008			36.00	001	57.00	006
72 900 108			36.00	001	57.00	006
72 900 010			39.00	002	59.00	007
72 900 110			39.00	002	59.00	007
72 900 210			39.00	010	59.00	012
72 900 113			40.00	003	61.00	008
72 900 213			40.00	003	61.00	008
72 900 116			42.00	004	63.00	009
72 900 216			42.00	011	63.00	013

ER mono clamping – Circular saw blades

▲ DCONWS = circular saw blade bore diameter

Scope of supply:

Adapter incl. Lock nut



								72 930 ...	
DCONWS _{H7}	Adapter	DLN	LB	HLN	BD	LF	DRVS	£	
mm		mm	mm	mm	mm	mm	mm	X1	
5	ER 11	8	10	8	8	21	7	288.00	51100
5	ER 16	10	18	8	10	29	9	299.00	51600
5	ER 20	10	18	8	10	29	9	310.00	52000
8	ER 20	15	18	8	15	29	13	310.00	82000
10	ER 20	16	30	8	15	41	14	310.00	12000



Lock nut - ER

Spare parts for Article no.

		72 946 ...	
		£	
		X1	
72 930 51100		73.00	51100
72 930 51600		74.00	51600
72 930 52000		76.00	52000
72 930 82000		76.00	82000
72 930 12000		76.00	12000

Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment	Tensile strength N/mm ² / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0,15 % C	Annealed	420 N/mm ² / 125 HB	1.0401	C15	1.1141 Ck15
		P.1.2	< 0,45 % C	Annealed	640 N/mm ² / 190 HB	1.1191	C45E	1.0718 9SMnPb28
		P.1.3	< 0,45 % C	Tempered	840 N/mm ² / 250 HB	1.1191	C45E	1.0535 C55
		P.1.4	< 0,75 % C	Annealed	910 N/mm ² / 270 HB	1.1223	C60R	1.0535 C55
		P.1.5	< 0,75 % C	Tempered	1010 N/mm ² / 300 HB	1.1223	C60R	1.0727 45S20
	Low-alloy steel	P.2.1		Annealed	610 N/mm ² / 180 HB	1.7131	16MnCr5	1.6587 17CrNiMo6
		P.2.2		Tempered	930 N/mm ² / 275 HB	1.7131	16MnCr5	1.6587 17CrNiMo6
		P.2.3		Tempered	1010 N/mm ² / 300 HB	1.7225	42CrMo4	1.3505 100Cr6
		P.2.4		Tempered	1200 N/mm ² / 375 HB	1.7225	42CrMo4	1.3505 100Cr6
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	680 N/mm ² / 200 HB	1.4021	X20Cr13	1.4034 X46Cr13
		P.3.2		Hardened and tempered	1100 N/mm ² / 300 HB	1.2343	X38CrMoV5-1	1.4034 X46Cr13
		P.3.3		Hardened and tempered	1300 N/mm ² / 400 HB	1.2343	X38CrMoV5-1	1.4034 X46Cr13
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	680 N/mm ² / 200 HB	1.4016	X6Cr17	1.2316 X36CrMo16
		P.4.2	Martensitic	Tempered	1010 N/mm ² / 300 HB	1.4112	X90CrMoV18	1.2316 X36CrMo16
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	610 N/mm ² / 180 HB	1.4301	X5CrNi18-10	1.4571 X6CrNiMoTi17-12-2
		M.2.1	Austenitic	Tempered	300 HB	1.4841	X15CrNiSi25-21	1.4539 X1NiCrMoCu25-20-5
		M.3.1	Austenitic / ferritic (Duplex)		780 N/mm ² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501 X2CrNiMoCuWN25-7-4
K	Grey cast iron	K.1.1	Pearlitic / ferritic		350 N/mm ² / 180 HB	0.6010	GG-10	0.6025 GG-25
		K.1.2	Pearlitic (martensitic)		500 N/mm ² / 260 HB	0.6030	GG-30	0.6045 GG-45
	Spherulitic graphite cast iron	K.2.1	Ferritic		540 N/mm ² / 160 HB	0.7040	GGG-40	0.7060 GGG-60
		K.2.2	Pearlitic		845 N/mm ² / 250 HB	0.7070	GGG-70	0.7080 GGG-80
	Malleable iron	K.3.1	Ferritic		440 N/mm ² / 130 HB	0.8035	GTW-35-04	0.8045 GTW-45
		K.3.2	Pearlitic		780 N/mm ² / 230 HB	0.8165	GTS-65-02	0.8170 GTS-70-02
N	Aluminium wrought alloy	N.1.1	Non-hardenable		60 HB	3.0255	Al99,5	3.3315 AlMg1
		N.1.2	Hardenable	Age-hardened	340 N/mm ² / 100 HB	3.1355	AlCuMg2	3.2315 AlMgSi1
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		250 N/mm ² / 75 HB	3.2581	G-AlSi12	3.2163 G-AlSi9Cu3
		N.2.2	≤ 12 % Si, hardenable	Age-hardened	300 N/mm ² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373 G-AlSi9Mg
		N.2.3	> 12 % Si, non-hardenable		440 N/mm ² / 130 HB		G-AlSi17Cu4Mg	G-AlSi18CuNiMg
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		375 N/mm ² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410 CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm ² / 90 HB	2.0331	CuZn15	2.4070 CuZn28Sn1As
		N.3.3	CuSn, lead-free copper and electrolytic copper		340 N/mm ² / 100 HB	2.0060	E-Cu57	2.0590 CuZn40Fe
	Magnesium alloys	N.4.1	Magnesium and magnesium alloys		70 HB	3.5612	MgAl6Zn	3.5312 MgAl3Zn
S	Heat-resistant alloys	S.1.1	Fe - basis	Annealed	680 N/mm ² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865 G-X40NiCrSi38-18
		S.1.2		Age-hardened	950 N/mm ² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876 X10NiCrAlTi32-20
		S.2.1	Ni or Co basis	Annealed	840 N/mm ² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856 NiCr22Mo9Nb
		S.2.2		Age-hardened	1180 N/mm ² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955 NiFe25Cr20NbTi
		S.2.3		Cast	1080 N/mm ² / 320 HB	2.4765	CoCr20W15Ni	1.3401 G-X120Mn12
	Titanium alloys	S.3.1	Pure titanium		400 N/mm ²	3.7025	Ti99,8	3.7034 Ti99,7
		S.3.2	Alpha + beta alloys	Age-hardened	1050 N/mm ² / 320 HB	3.7165	TiAl6V4	Ti-6246 Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	Beta alloys		1400 N/mm ² / 410 HB	Ti555.3	Ti-5Al-5V-5Mo-3Cr	R56410 Ti-10V-2Fe-3Al
H	Hardened steel	H.1.1		Hardened and tempered	46–55 HRC			
		H.1.2		Hardened and tempered	56–60 HRC			
		H.1.3		Hardened and tempered	61–65 HRC			
		H.1.4		Hardened and tempered	66–70 HRC			
	Chilled iron	H.2.1		Cast	400 HB			
	Hardened cast iron	H.3.1		Hardened and tempered	55 HRC			
O	Non-metal materials	O.1.1	Plastics, duroplastic		≤ 150 N/mm ²			
		O.1.2	Plastics, thermoplastic		≤ 100 N/mm ²			
		O.2.1	Aramid fibre-reinforced		≤ 1000 N/mm ²			
		O.2.2	Glass/carbon-fibre reinforced		≤ 1000 N/mm ²			
		O.3.1	Graphite					

* Tensile strength

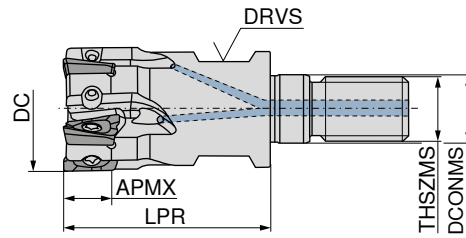
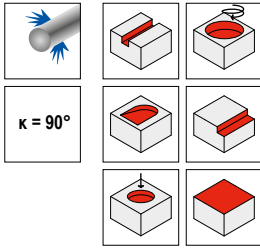
Cutting data standard values – Circular saw blades

54 700 ...		
Circular saws		
Solid carbide Fine		
Index	v_c (m/min)	f_z mm
P.1.1	80 – 140	0,002 – 0,012
P.1.2	50 – 80	0,001 – 0,012
P.1.3	50 – 80	0,001 – 0,012
P.1.4	50 – 80	0,001 – 0,012
P.1.5	50 – 80	0,001 – 0,012
P.2.1	50 – 80	0,001 – 0,012
P.2.2	50 – 80	0,001 – 0,012
P.2.3	50 – 80	0,001 – 0,012
P.2.4	50 – 80	0,001 – 0,012
P.3.1	50 – 80	0,001 – 0,012
P.3.2	50 – 80	0,001 – 0,012
P.3.3	50 – 80	0,001 – 0,012
P.4.1	80 – 120	0,001 – 0,012
P.4.2	50 – 80	0,001 – 0,012
M.1.1	50 – 80	0,001 – 0,012
M.2.1	50 – 80	0,001 – 0,012
M.3.1	50 – 80	0,001 – 0,012
K.1.1	80 – 140	0,002 – 0,012
K.1.2	50 – 80	0,001 – 0,01
K.2.1	50 – 80	0,001 – 0,01
K.2.2	50 – 80	0,001 – 0,01
K.3.1	50 – 80	0,001 – 0,01
K.3.2	50 – 80	0,001 – 0,01
N.1.1	200 – 500	0,003 – 0,012
N.1.2	200 – 500	0,003 – 0,012
N.2.1	200 – 450	0,003 – 0,012
N.2.2	200 – 450	0,003 – 0,012
N.2.3	200 – 450	0,003 – 0,012
N.3.1	200 – 450	0,003 – 0,012
N.3.2	200 – 450	0,003 – 0,012
N.3.3	200 – 450	0,003 – 0,012
N.4.1		
S.1.1	20 – 30	0,001 – 0,012
S.1.2	20 – 30	0,001 – 0,012
S.2.1	20 – 30	0,001 – 0,012
S.2.2	20 – 30	0,001 – 0,012
S.2.3	20 – 30	0,001 – 0,012
S.3.1	30 – 70	0,001 – 0,012
S.3.2	30 – 70	0,001 – 0,012
S.3.3	30 – 70	0,001 – 0,012
H.1.1		
H.1.2		
H.1.3		
H.1.4		
H.2.1		
H.3.1		
O.1.1	130 – 200	0,003 – 0,015
O.1.2	130 – 200	0,003 – 0,015
O.2.1		
O.2.2		
O.3.1		



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.

MaxiMill – 211-07 Screw in cutter



											50 751 ...	
Designation	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	torque moment Nm	Insert	£	
G211.16.R.04-07	16	4	6	27	8.5	M8	10	50400	1	XD.T 0703	259.00	016
G211.20.R.05-07	20	5	6	33	10.5	M10	15	44280	1	XD.T 0703	289.00	020

Spare parts for Article no.

	80 950 ...		80 950 ...		70 950 ...		70 950 ...		80 950 ...	
	£		£		£		£		£	
50 751 016	8.91	051	13.95	117	5.31	303	3.85	137	217.91	191
50 751 020	8.91	051	13.95	117	5.31	303	3.85	137	217.91	191



TORX® blade

80 950 ...

£
Y7



Key D

80 950 ...

£
Y7



Molykote

70 950 ...

£
2A/28



Clamping screw

70 950 ...

£
2A/28



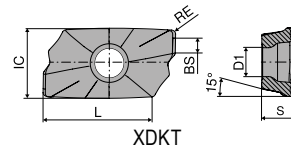
Torque screw-driver

80 950 ...

£
Y7

XDKT

Designation	IC mm	D1 mm	L mm	BS mm	S mm
XDKT 0703..	4.9	2.5	7.8	1.2	3.18



XDKT

ISO	RE mm	-F50 CTCP230 DRAGONSKIN				-M50 CTCP230 DRAGONSKIN				-F50 CTPP235 DRAGONSKIN				-M50 CTPP235 DRAGONSKIN			
		F XDKT				M XDKT				F XDKT				M XDKT			
		51 033 ...				51 036 ...				51 033 ...				51 036 ...			
		£ 1B/61				£ 1B/61				£ 1B/61				£ 1B/61			
070304SR	0.4	14.00 004				14.00 004				14.00 104				14.00 104			
070308SR	0.8	14.00 008				14.00 008				14.00 108				14.00 108			
P		●				●				●				●			
M										○				○			
K		○				○				○				○			
N																	
S																	
H																	
O																	

XDKT

ISO	RE mm	-F50 CTPM240 DRAGONSKIN		-M50 CTPM240 DRAGONSKIN		-F40 CTPM245 DRAGONSKIN		-F40 CTCM245 DRAGONSKIN		-F20 CTWN215		-F40 CTC5240 DRAGONSKIN		-F40 CTCS245 DRAGONSKIN	
		F XDKT		M XDKT		F XDKT		F XDKT		F XDKT		F XDKT		F XDKT	
		51 033 ...		51 036 ...		51 112 ...		51 112 ...		50 507 ...		50 498 ...		51 112 ...	
		£ 1B/61		£ 1B/61		£ 1H/17		£ 1H/17		£ 1A/90		£ 1H/17		£ 1H/17	
070304ER	0.4					16.72 454		16.72 90401		16.12 504		16.72 544			
070304FR	0.4														
070304SR	0.4	14.00 404		14.00 404											
070308ER	0.8					16.72 458		16.72 90801		16.12 508		16.72 548		16.72 558	
070308FR	0.8														
070308SR	0.8	14.00 408		14.00 408											
P		○		○		●		●							
M		●		●		●		●							
K										○					
N										●					
S								○				●		●	
H															
O										○					

Milling guide

Cutting data standard values

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Machining strategy

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Starting Parameter

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Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment	Tensile strength N/mm ² / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0,15 % C	Annealed	420 N/mm ² / 125 HB	1.0401	C15	1.1141 Ck15
		P.1.2	< 0,45 % C	Annealed	640 N/mm ² / 190 HB	1.1191	C45E	1.0718 9SMnPb28
		P.1.3	< 0,45 % C	Tempered	840 N/mm ² / 250 HB	1.1191	C45E	1.0535 C55
		P.1.4	< 0,75 % C	Annealed	910 N/mm ² / 270 HB	1.1223	C60R	1.0535 C55
		P.1.5	< 0,75 % C	Tempered	1010 N/mm ² / 300 HB	1.1223	C60R	1.0727 45S20
	Low-alloy steel	P.2.1		Annealed	610 N/mm ² / 180 HB	1.7131	16MnCr5	1.6587 17CrNiMo6
		P.2.2		Tempered	930 N/mm ² / 275 HB	1.7131	16MnCr5	1.6587 17CrNiMo6
		P.2.3		Tempered	1010 N/mm ² / 300 HB	1.7225	42CrMo4	1.3505 100Cr6
		P.2.4		Tempered	1200 N/mm ² / 375 HB	1.7225	42CrMo4	1.3505 100Cr6
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	680 N/mm ² / 200 HB	1.4021	X20Cr13	1.4034 X46Cr13
		P.3.2		Hardened and tempered	1100 N/mm ² / 300 HB	1.2343	X38CrMoV5-1	1.4034 X46Cr13
		P.3.3		Hardened and tempered	1300 N/mm ² / 400 HB	1.2343	X38CrMoV5-1	1.4034 X46Cr13
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	680 N/mm ² / 200 HB	1.4016	X6Cr17	1.2316 X36CrMo16
		P.4.2	Martensitic	Tempered	1010 N/mm ² / 300 HB	1.4112	X90CrMoV18	1.2316 X36CrMo16
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	610 N/mm ² / 180 HB	1.4301	X5CrNi18-10	1.4571 X6CrNiMoTi17-12-2
		M.2.1	Austenitic	Tempered	300 HB	1.4841	X15CrNiSi25-21	1.4539 X1NiCrMoCu25-20-5
		M.3.1	Austenitic / ferritic (Duplex)		780 N/mm ² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501 X2CrNiMoCuWN25-7-4
K	Grey cast iron	K.1.1	Pearlitic / ferritic		350 N/mm ² / 180 HB	0.6010	GG-10	0.6025 GG-25
		K.1.2	Pearlitic (martensitic)		500 N/mm ² / 260 HB	0.6030	GG-30	0.6045 GG-45
	Spherulitic graphite cast iron	K.2.1	Ferritic		540 N/mm ² / 160 HB	0.7040	GGG-40	0.7060 GGG-60
		K.2.2	Pearlitic		845 N/mm ² / 250 HB	0.7070	GGG-70	0.7080 GGG-80
	Malleable iron	K.3.1	Ferritic		440 N/mm ² / 130 HB	0.8035	GTW-35-04	0.8045 GTW-45
		K.3.2	Pearlitic		780 N/mm ² / 230 HB	0.8165	GTS-65-02	0.8170 GTS-70-02
N	Aluminium wrought alloy	N.1.1	Non-hardenable		60 HB	3.0255	Al99,5	3.3315 AlMg1
		N.1.2	Hardenable	Age-hardened	340 N/mm ² / 100 HB	3.1355	AlCuMg2	3.2315 AlMgSi1
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		250 N/mm ² / 75 HB	3.2581	G-AlSi12	3.2163 G-AlSi9Cu3
		N.2.2	≤ 12 % Si, hardenable	Age-hardened	300 N/mm ² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373 G-AlSi9Mg
		N.2.3	> 12 % Si, non-hardenable		440 N/mm ² / 130 HB		G-AlSi17Cu4Mg	G-AlSi18CuNiMg
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		375 N/mm ² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410 CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm ² / 90 HB	2.0331	CuZn15	2.4070 CuZn28Sn1As
		N.3.3	CuSn, lead-free copper and electrolytic copper		340 N/mm ² / 100 HB	2.0060	E-Cu57	2.0590 CuZn40Fe
	Magnesium alloys	N.4.1	Magnesium and magnesium alloys		70 HB	3.5612	MgAl6Zn	3.5312 MgAl3Zn
S	Heat-resistant alloys	S.1.1	Fe - basis	Annealed	680 N/mm ² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865 G-X40NiCrSi38-18
		S.1.2		Age-hardened	950 N/mm ² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876 X10NiCrAlTi32-20
		S.2.1		Annealed	840 N/mm ² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856 NiCr22Mo9Nb
		S.2.2	Ni or Co basis	Age-hardened	1180 N/mm ² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955 NiFe25Cr20NbTi
		S.2.3		Cast	1080 N/mm ² / 320 HB	2.4765	CoCr20W15Ni	1.3401 G-X120Mn12
	Titanium alloys	S.3.1	Pure titanium		400 N/mm ²	3.7025	Ti99,8	3.7034 Ti99,7
		S.3.2	Alpha + beta alloys	Age-hardened	1050 N/mm ² / 320 HB	3.7165	TiAl6V4	Ti-6246 Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	Beta alloys		1400 N/mm ² / 410 HB	Ti555.3	Ti-5Al-5V-5Mo-3Cr	R56410 Ti-10V-2Fe-3Al
H	Hardened steel	H.1.1		Hardened and tempered	46–55 HRC			
		H.1.2		Hardened and tempered	56–60 HRC			
		H.1.3		Hardened and tempered	61–65 HRC			
		H.1.4		Hardened and tempered	66–70 HRC			
	Chilled iron	H.2.1		Cast	400 HB			
	Hardened cast iron	H.3.1		Hardened and tempered	55 HRC			
O	Non-metal materials	O.1.1	Plastics, duroplastic		≤ 150 N/mm ²			
		O.1.2	Plastics, thermoplastic		≤ 100 N/mm ²			
		O.2.1	Aramid fibre-reinforced		≤ 1000 N/mm ²			
		O.2.2	Glass/carbon-fibre reinforced		≤ 1000 N/mm ²			
		O.3.1	Graphite					

* Tensile strength

Cutting data standard values

Index	CTCP230		CTPP235		CTPM240		CTPM245		CTCM245		CTWN215		CTC5240		CTCS245		
	DRAGONSKIN												DRAGONSKIN				
																	
	Cutting Material hard (v _c ↑) → tough (v _c ↓)																
	v _c (m/min)																
P.1.1	286	150	246	137	226	141	244	139	279	134							
P.1.2	242	133	208	121	188	126	207	124	242	119							
P.1.3	202	118	172	106	152	112	173	109	208	104							
P.1.4	189	112	160	101	140	107	161	104	196	99							
P.1.5	169	105	143	94	123	100	144	97	179	92							
P.2.1	249	136	214	123	194	128	212	126	247	121							
P.2.2	185	111	157	100	137	106	158	103	193	98							
P.2.3	169	105	143	94	123	100	144	97	179	92							
P.2.4	118	85	98	76	78	83	101	78	136	73							
P.3.1	140	87	121	97	126	105	155	107	175	122							
P.3.2	90	55	108	83	112	95	143	93	163	108							
P.3.3	40	22	96	69	98	85	131	79	151	94							
P.4.1	140	87	121	97	126	105	155	107	175	122							
P.4.2	115	71	114	90	119	100	149	100	169	115							
M.1.1			121	97	126	105	155	107	175	122							
M.2.1			108	83	112	95	143	93	163	108							
M.3.1			117	93	121	102	152	103	172	118							
K.1.1	310	190	160	110							130	130					
K.1.2	160	100	150	110							110	110					
K.2.1	200	120	150	110							130	130					
K.2.2	130	80	150	110							120	120					
K.3.1	190	115									130	130					
K.3.2	160	100									110	110					
N.1.1												1500					
N.1.2												1000					
N.2.1												1100					
N.2.2												1000					
N.2.3												280					
N.3.1												350					
N.3.2												350					
N.3.3												320					
N.4.1												320					
S.1.1									80				80		64		
S.1.2									70				70		56		
S.2.1									35				35		28		
S.2.2									25				25		20		
S.2.3									30				30		24		
S.3.1									80				80		64		
S.3.2									50				50		40		
S.3.3									40				40		32		
H.1.1																	
H.1.2																	
H.1.3																	
H.1.4																	
H.2.1																	
H.3.1																	
O.1.1											160	160					
O.1.2																	
O.2.1											240	240					
O.2.2																	
O.3.1																	

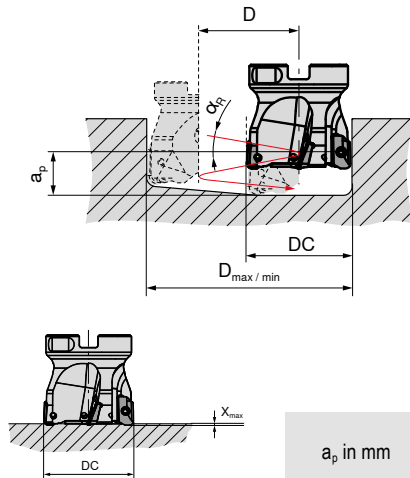


The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. $\pm 20\%$ according to the usage conditions.

System MaxiMill 211-07

Machining strategy

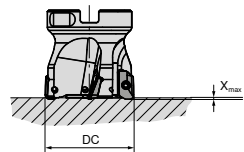
Helical plunging



DC mm	D _{max} / RE 0,4 mm	D _{min} mm	α _{R max} °
10	19	13	5,5
12	23	17	6,0
16	31	25	3,0
20	39	33	2,0
25	49	43	1,5
32	63	57	1,2
40	79	73	0,8
50	99	93	0,7

DC mm	D mm	α _{R max 360°} °
10	13	5,5
12	17	6,0
16	25	3,0
20	33	2,0
25	43	1,5
32	57	1,2
40	73	0,8
50	93	0,7

Axial ramping

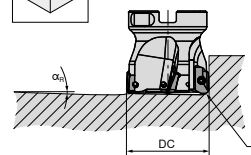


DC mm	X _{max} mm
10	0,8
12	0,8
16	0,8
20	0,8
25	0,8
32	0,8
40	0,8
50	0,8

D_{max} in mm = largest diameter for flat bottom hole

D_{min} in mm = smallest hole diameter for flat bottom surface

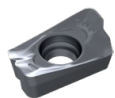
Angled ramping



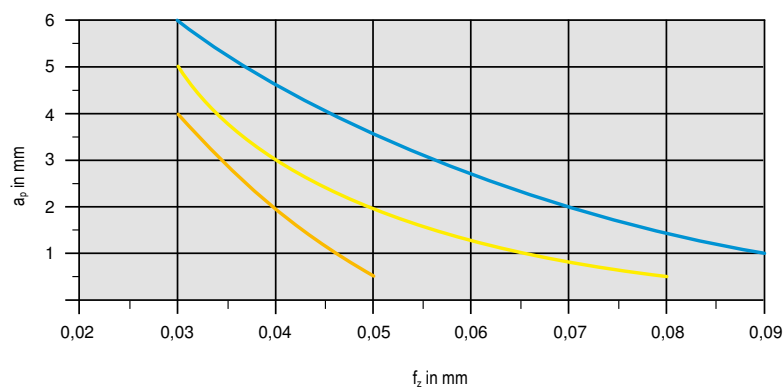
DC mm	α °
10	11,0
12	7,9
16	4,3
20	3,0
25	2,5
32	1,6
40	1,2
50	1,0

$$D = D_{\max} - DC / D_{\min} - DC$$

Starting Parameter



XDKT 07



Material	Inserts	v _c in m/min	Cooling
Steel	P.2.2 40CrMnMoS 8-6 XDKT070308SR-M50 CTCP230	200	Dry
Stainless steel	M.1.1 X6CrNiMoTi 1712 2 XDKT070308SR-F50 CTPM240	180	Dry
Heat-resistant	S.2.2 Inconel 718 XDKT070308ER-F50 CTC5240	35	Emulsion



Detailed information on cutting speed for each grade can be found on → page 14
From v_c > 400 m/min, the tool must be balanced!





Solid drilling and bore machining	HSS drilling	1
	Solid carbide drilling	
	Reamers	
Threading	HSS taps	2
	Circular and Thread Milling	
	Thread turning	
Turning	Turning Tools	3
	Multifunction	
	Grooving Tools	
	Miniature turning tools	
Milling	Solid Carbide milling cutters	4
	Milling tools with indexable inserts	
Clamping technology	Collets and reduction sleeves	5

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Collets	5–15
Stem collets	16–21
Guide bushes	22–32
Clamping sleeves	33–41
Reduction sleeves	42
Technical Information	43

Overview

Collets

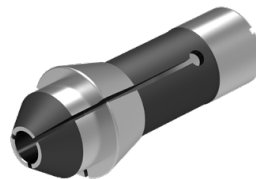
Collets for clamping the bar in the main spindle and for the sub-spindle



5–15

Stem collets

With an adapted stem for improved pick-up of the workpieces and for better secondary operation machinability



16–21

Guide bushes

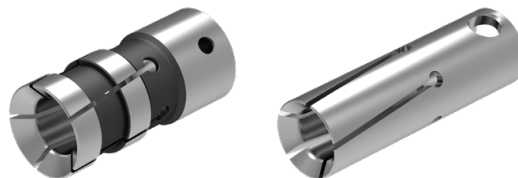
Ensures bar guidance in the main spindle



22–32

Clamping sleeves

Mounting for bar feeder magazines



33–41

Reduction sleeves

With a reduction sleeve, small tools can be used directly on tool clamping points with larger mounting diameters.



42



Other profile shapes and sizes and extended options available on request.

Collets overview

Norm	Clamping diameter range in mm	Profile	Version	Page No.
116 E / F 13	Ø 6,0 – 10,0		Grooved	6
	Ø 1,0 – 10,0		Smooth	6
120 E / F 15	Ø 6,0 – 12,0		Grooved	7
	Ø 1,0 – 12,0		Smooth	7
	SW 2,0 – 11,0		Grooved*	7
F 16 / 1212 E	Ø 1,0 – 13,0		Grooved	8
	Ø 6,0 – 13,0		Smooth	8
136 E / F 20-201	Ø 6,0 – 16,0		Grooved	9
	Ø 1,0 – 16,0		Smooth	9
138 E / F 20-87	Ø 6,0 – 16,0		Grooved	10
	Ø 1,0 – 16,0		Smooth	10
	SW 2,0 – 14,0		Grooved*	10
145 E / F 25	Ø 6,0 – 20,0		Grooved	11+12
	Ø 1,5 – 20,0		Smooth	11+12
	SW 2,0 – 19,0		Grooved*	11+12
	SW 2,0 – 15,0		Grooved*	11+12
F 37 / 1536 E	Ø 6,0 – 32,0		Grooved	13–15
	Ø 1,0 – 32,0		Smooth	13–15
	SW 3,0 – 27,0		Grooved*	13–15
	SW 3,0 – 23,0		Grooved*	13–15

* Grooved from SW 8

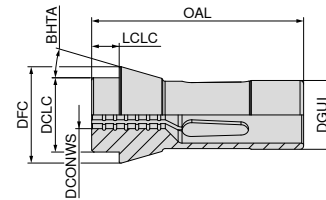


Other profile shapes and sizes and extended options available on request.

Should you wish to send us a request for specially adjusted solutions, you will find a detailed form in the download area on our homepage. Please fill it out carefully and send it via email or print it out and send via fax. → cuttingtools.ceratizit.com/gb/en/download.htmlPlease email the completed form to tsc@ceratizit.com.

Collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °
116 E / F 13	13	19	13	6	64	16



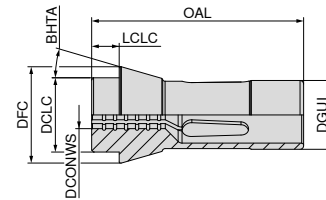
Pressure collet 116 E / F 13



DCONWS mm	Grooved 116 E / F 13		Smooth 116 E / F 13	
	£ Y8/YS	81 000 ...	£ Y8/YS	81 002 ...
1.0			258.00	01000
1.5			258.00	01500
2.0			258.00	02000
2.5			258.00	02500
3.0			88.00	03000
3.5			88.00	03500
4.0			88.00	04000
4.5			88.00	04500
5.0			88.00	05000
5.5			88.00	05500
6.0	88.00	06000	126.00	06000
6.5	88.00	06500	126.00	06500
7.0	88.00	07000	126.00	07000
7.5	88.00	07500	126.00	07500
8.0	88.00	08000	126.00	08000
8.5	88.00	08500	126.00	08500
9.0	88.00	09000	126.00	09000
9.5	88.00	09500	126.00	09500
10.0	88.00	10000	126.00	10000

Collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °
120 E / F 15	15	21	15	6	64	16



Pressure collet 120 E / F 15

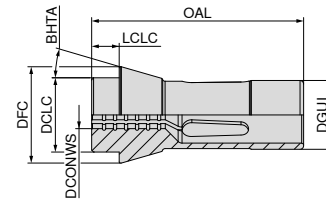


DCONWS mm	DCONWS inch	Grooved 120 E / F 15		Smooth 120 E / F 15		Grooved 120 E / F 15	
		81 003 ... £ Y8/YS		81 005 ... £ Y8/YS		81 031 ... £ Y8/YS	
1.000				179.00	01000		
1.500				179.00	01500		
2.000				96.00	02000	343.00	02000 ¹⁾
2.500				96.00	02500		
3.000				59.00	03000	343.00	03000 ¹⁾
3.175	1/8					343.00	03175 ¹⁾
3.500				59.00	03500		
4.000				59.00	04000	182.00	04000 ¹⁾
4.500				59.00	04500		
5.000				59.00	05000	182.00	05000 ¹⁾
5.500				59.00	05500		
6.000		59.00	06000	96.00	06000	182.00	06000 ¹⁾
6.350	1/4					262.00	06350 ¹⁾
6.500		59.00	06500	96.00	06500		
7.000		59.00	07000	96.00	07000	182.00	07000 ¹⁾
7.500		59.00	07500	96.00	07500		
8.000		59.00	08000	96.00	08000	182.00	08000
8.500		59.00	08500	96.00	08500		
9.000		59.00	09000	96.00	09000	182.00	09000
9.500				96.00	09500		
10.000		59.00	10000	96.00	10000	218.00	10000
10.500		59.00	10500	96.00	10500		
11.000		59.00	11000	96.00	11000	382.00	11000
11.500		59.00	11500	96.00	11500		
12.000		59.00	12000	96.00	12000		

1) Without transverse grooves

Collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °
F 16 / 1212 E	16	21	16	6	64	16



Pressure collet F 16 / 1212 E



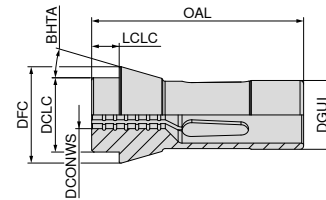
Grooved
F 16 / 1212 E

Smooth
F 16 / 1212 E

DCONWS mm	81 019 ...		81 021 ...	
	£		£	
	Y8/YS		Y8/YS	
1.0			135.00	01000
1.5			135.00	01500
2.0			135.00	02000
2.5			135.00	02500
3.0			88.00	03000
3.5			88.00	03500
4.0			88.00	04000
4.5			88.00	04500
5.0			88.00	05000
5.5			88.00	05500
6.0	88.00	06000	126.00	06000
6.5	88.00	06500	126.00	06500
7.0	88.00	07000	126.00	07000
7.5	88.00	07500	126.00	07500
8.0	88.00	08000	126.00	08000
8.5	88.00	08500	126.00	08500
9.0	88.00	09000	126.00	09000
9.5	88.00	09500	126.00	09500
10.0	88.00	10000	126.00	10000
10.5	88.00	10500	126.00	10500
11.0	88.00	11000	126.00	11000
11.5	88.00	11500	126.00	11500
12.0	88.00	12000	126.00	12000
12.5	88.00	12500	126.00	12500
13.0	88.00	13000	126.00	13000

Collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °
136 E / F 20-201	20	26	19	5	54	15



Pressure collet 136 E / F 20-201



 Grooved
136 E / F 20-201
  Smooth
136 E / F 20-201

81 007 ...

£
Y8/YS

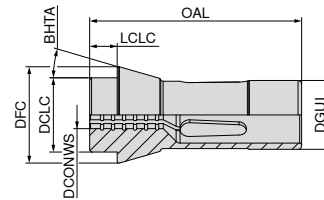
81 009 ...

£
Y8/YS

DCONWS mm		
1.0		
1.5		
2.0		
2.5		
3.0		
3.5		
4.0		
4.5		
5.0		
5.5		
6.0	88.00	06000
6.5	88.00	06500
7.0	88.00	07000
7.5	88.00	07500
8.0	88.00	08000
8.5	88.00	08500
9.0	88.00	09000
9.5	88.00	09500
10.0	88.00	10000
10.5	88.00	10500
11.0	88.00	11000
11.5	88.00	11500
12.0	88.00	12000
12.5	88.00	12500
13.0	88.00	13000
13.5	88.00	13500
14.0	88.00	14000
14.5	88.00	14500
15.0	88.00	15000
15.5	88.00	15500
16.0	88.00	16000

Collets

Designation	DGWI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °
138 E / F20-87	20	28	21	7	67	16



Pressure collet 138 E / F 20-87

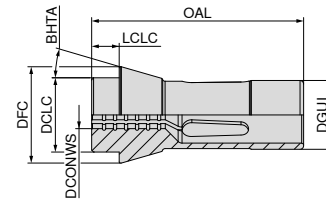


DCONWS mm	DCONWS inch	Grooved 138 E / F20-87		Smooth 138 E / F20-87		Grooved 138 E / F20-87	
		81 011 ...		81 013 ...		81 026 ...	
		£		£		£	
		Y8/YS		Y8/YS		Y8/YS	
1.00				225.00	01000		
1.50				225.00	01500		
2.00				123.00	02000	454.00	02000 ¹⁾
2.50				123.00	02500		
3.00				88.00	03000	215.00	03000 ¹⁾
3.50				88.00	03500		
4.00				88.00	04000	215.00	04000 ¹⁾
4.50				88.00	04500		
5.00				88.00	05000	215.00	05000 ¹⁾
5.50				88.00	05500		
6.00		88.00	06000	126.00	06000	215.00	06000 ¹⁾
6.35	1/4					296.00	06350 ¹⁾
6.50		88.00	06500	126.00	06500		
7.00		88.00	07000	126.00	07000	170.00	07000 ¹⁾
7.50		88.00	07500	126.00	07500		
8.00		88.00	08000	126.00	08000	170.00	08000
8.50		88.00	08500	126.00	08500		
9.00		88.00	09000	126.00	09000	170.00	09000
9.50		88.00	09500	126.00	09500		
10.00		88.00	10000	126.00	10000	170.00	10000
10.50		88.00	10500	126.00	10500		
11.00		88.00	11000	126.00	11000	170.00	11000
11.50		88.00	11500	126.00	11500		
12.00		88.00	12000	126.00	12000	170.00	12000
12.50		88.00	12500	126.00	12500		
13.00		88.00	13000	126.00	13000	170.00	13000
13.50		88.00	13500	126.00	13500		
14.00		88.00	14000	126.00	14000	170.00	14000
14.50		88.00	14500	126.00	14500		
15.00		88.00	15000	126.00	15000		
15.50		88.00	15500	126.00	15500		
16.00		88.00	16000	126.00	16000		

1) Without transverse grooves

Collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °
145 E / F 25	25	35	27	10	77	16



Pressure collet 145 E / F 25



DCONWS mm	DCONWS inch	Grooved 145 E / F 25		Smooth 145 E / F 25		Grooved 145 E / F 25		Grooved 145 E / F 25	
		81 015 ...	£ Y8/YS	81 017 ...	£ Y8/YS	81 027 ...	£ Y8/YS	81 029 ...	£ Y8/YS
1,500				148.00	01500				
1,501 - 1,999				174.00	xxxxx ²⁾				
2,000				148.00	02000	497.00	02000 ¹⁾	629.00	02000 ¹⁾
2,001 - 2,499				174.00	xxxxx ²⁾				
2,500				148.00	02500				
2,501 - 2,999				174.00	xxxxx ²⁾				
3,000				106.00	03000	382.00	03000 ¹⁾	313.00	03000 ¹⁾
3,001 - 3,499				174.00	xxxxx ²⁾				
3,500				106.00	03500				
3,501 - 3,999				174.00	xxxxx ²⁾				
4,000				106.00	04000	296.00	04000 ¹⁾	225.00	04000 ¹⁾
4,001 - 4,499				174.00	xxxxx ²⁾				
4,500				106.00	04500				
4,501 - 4,999				174.00	xxxxx ²⁾				
5,000				106.00	05000	225.00	05000 ¹⁾	225.00	05000 ¹⁾
5,001 - 5,499				174.00	xxxxx ²⁾				
5,500				106.00	05500				
5,501 - 5,999				174.00	xxxxx ²⁾				
6,000		106.00	06000	144.00	06000	225.00	06000 ¹⁾	225.00	06000 ¹⁾
6,001 - 6,349		174.00	xxxxx ²⁾						
6,350	1/4	174.00	06350	144.00	06350	305.00	06350 ¹⁾		
6,351 - 6,499		174.00	xxxxx ²⁾						
6,500		106.00	06500	144.00	06500				
6,501 - 6,999		174.00	xxxxx ²⁾						
7,000		106.00	07000	144.00	07000	175.00	07000 ¹⁾	175.00	07000 ¹⁾
7,001 - 7,499		174.00	xxxxx ²⁾						
7,500		106.00	07500	144.00	07500				
7,501 - 7,937		174.00	xxxxx ²⁾						
7,938	5/16	174.00	07938	144.00	07938				
7,939 - 7,999		174.00	xxxxx ²⁾						
8,000		106.00	08000	144.00	08000	175.00	08000	175.00	08000
8,001 - 8,499		174.00	xxxxx ²⁾						
8,500		106.00	08500	144.00	08500				
8,501 - 8,999		174.00	xxxxx ²⁾						
9,000		106.00	09000	144.00	09000	175.00	09000	175.00	09000
9,001 - 9,499		174.00	xxxxx ²⁾						
9,500		106.00	09500	144.00	09500				
9,501 - 9,999		174.00	xxxxx ²⁾						
10,000		106.00	10000	144.00	10000	175.00	10000	175.00	10000
10,001 - 10,499		174.00	xxxxx ²⁾						
10,500		106.00	10500	144.00	10500				
10,501 - 10,999		174.00	xxxxx ²⁾						
11,000		106.00	11000	144.00	11000	175.00	11000	175.00	11000
11,001 - 11,112		174.00	xxxxx ²⁾						

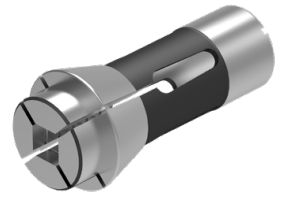
1) Without transverse grooves

2) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 015 06789).

Pressure collet 145 E / F 25



DCONWS mm	DCONWS inch	Grooved 145 E / F 25		Smooth 145 E / F 25		Grooved 145 E / F 25		Grooved 145 E / F 25	
		81 015 ...		81 017 ...		81 027 ...		81 029 ...	
		£ Y8/YS		£ Y8/YS		£ Y8/YS		£ Y8/YS	
11,113	7/16	174.00	11113	144.00	11113				
11,114 - 11,499		174.00	xxxxx ²⁾						
11,500		106.00	11500	144.00	11500				
11,501 - 11,999		174.00	xxxxx ²⁾						
12,000		106.00	12000	144.00	12000	175.00	12000	175.00	12000
12,001 - 12,499		174.00	xxxxx ²⁾						
12,500		106.00	12500	144.00	12500				
12,501 - 12,699		174.00	xxxxx ²⁾						
12,700	1/2	174.00	12700	144.00	12700	175.00	12700		
12,701 - 12,999		174.00	xxxxx ²⁾						
13,000		106.00	13000	144.00	13000	175.00	13000	175.00	13000
13,001 - 13,499		174.00	xxxxx ²⁾						
13,500		106.00	13500	144.00	13500				
13,501 - 13,999		174.00	xxxxx ²⁾						
14,000		106.00	14000	144.00	14000	175.00	14000	175.00	14000
14,001 - 14,499		174.00	xxxxx ²⁾						
14,500		106.00	14500	144.00	14500				
14,501 - 14,999		174.00	xxxxx ²⁾						
15,000		106.00	15000	144.00	15000	175.00	15000	313.00	15000
15,001 - 15,499		174.00	xxxxx ²⁾						
15,500		106.00	15500	144.00	15500				
15,501 - 15,999		174.00	xxxxx ²⁾						
16,000		106.00	16000	144.00	16000	175.00	16000		
16,001 - 16,499		174.00	xxxxx ²⁾						
16,500		106.00	16500	144.00	16500				
16,501 - 16,999		174.00	xxxxx ²⁾						
17,000		106.00	17000	144.00	17000	175.00	17000		
17,001 - 17,499		174.00	xxxxx ²⁾						
17,500		106.00	17500	144.00	17500				
17,501 - 17,999		174.00	xxxxx ²⁾						
18,000		106.00	18000	144.00	18000	382.00	18000		
18,001 - 18,499		174.00	xxxxx ²⁾						
18,500		106.00	18500	144.00	18500				
18,501 - 18,999		174.00	xxxxx ²⁾						
19,000		106.00	19000	144.00	19000	382.00	19000		
19,001 - 19,049		174.00	xxxxx ²⁾						
19,050	3/4	174.00	19050						
19,051 - 19,499		174.00	xxxxx ²⁾						
19,500		106.00	19500	144.00	19500				
19,501 - 19,999		174.00	xxxxx ²⁾						
20,000		106.00	20000	144.00	20000				

1) Without transverse grooves

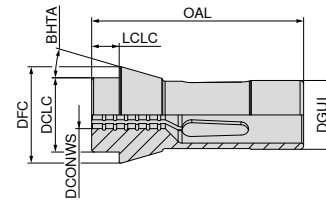
2) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



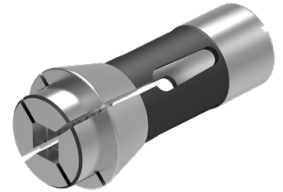
For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 015 06789).

Collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °
F 37 / 1536 E	37	47	40	10	92	16



Pressure collet F 37 / 1536 E



DCONWS mm	DCONWS inch	Grooved F 37 / 1536 E 81 023 ...	Smooth F 37 / 1536 E 81 025 ...	Grooved F 37 / 1536 E 81 028 ...	Grooved F 37 / 1536 E 81 030 ...
		£ Y8/Y5	£ Y8/Y5	£ Y8/Y5	£ Y8/Y5
1,000			206.00 01000		
1,001 - 1,499			217.00 xxxxx ²⁾		
1,500			206.00 01500		
1,501 - 1,999			217.00 xxxxx ²⁾		
2,000			206.00 02000		
2,001 - 2,499			217.00 xxxxx ²⁾		
2,500			206.00 02500		
2,501 - 2,999			217.00 xxxxx ²⁾		
3,000			148.00 03000	478.00 03000 ¹⁾	382.00 03000 ¹⁾
3,001 - 3,499			217.00 xxxxx ²⁾		
3,500			148.00 03500		
3,501 - 3,999			217.00 xxxxx ²⁾		
4,000			148.00 04000	245.00 04000 ¹⁾	382.00 04000 ¹⁾
4,001 - 4,499			217.00 xxxxx ²⁾		
4,500			148.00 04500		
4,501 - 4,999			217.00 xxxxx ²⁾		
5,000			148.00 05000	245.00 05000 ¹⁾	382.00 05000 ¹⁾
5,001 - 5,499			217.00 xxxxx ²⁾		
5,500			148.00 05500		
5,501 - 5,999			217.00 xxxxx ²⁾		
6,000		148.00 06000	186.00 06000	245.00 06000 ¹⁾	382.00 06000 ¹⁾
6,001 - 6,349		217.00 xxxxx ²⁾			
6,350	1/4	217.00 06350	186.00 06350	323.00 06350 ¹⁾	382.00 06350 ¹⁾
6,351 - 6,499		217.00 xxxxx ²⁾			
6,500		148.00 06500	186.00 06500		
6,501 - 6,999		217.00 xxxxx ²⁾			
7,000		148.00 07000	186.00 07000	245.00 07000 ¹⁾	382.00 07000 ¹⁾
7,001 - 7,499		217.00 xxxxx ²⁾			
7,500		148.00 07500	186.00 07500		
7,501 - 7,999		217.00 xxxxx ²⁾			
8,000		148.00 08000	186.00 08000	245.00 08000	382.00 08000
8,001 - 8,499		217.00 xxxxx ²⁾			
8,500		148.00 08500	186.00 08500		
8,501 - 8,999		217.00 xxxxx ²⁾			
9,000		148.00 09000	186.00 09000	245.00 09000	382.00 09000
9,001 - 9,499		217.00 xxxxx ²⁾			
9,500		148.00 09500	186.00 09500		
9,501 - 9,524		217.00 xxxxx ²⁾			
9,525	3/8	217.00 09525			
9,526 - 9,999		217.00 xxxxx ²⁾			
10,000		148.00 10000	186.00 10000	245.00 10000	382.00 10000
10,001 - 10,499		217.00 xxxxx ²⁾			
10,500		148.00 10500	186.00 10500		
10,501 - 10,999		217.00 xxxxx ²⁾			

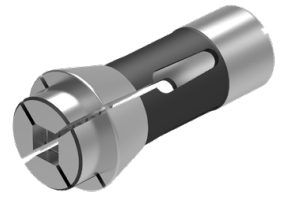
1) Without transverse grooves

2) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 023 06789).

Pressure collet F 37 / 1536 E



DCONWS mm	DCONWS inch	Grooved F 37 / 1536 E		Smooth F 37 / 1536 E		Grooved F 37 / 1536 E		Grooved F 37 / 1536 E	
		81 023 ...	£ Y8/YS	81 025 ...	£ Y8/YS	81 028 ...	£ Y8/YS	81 030 ...	£ Y8/YS
11,000		11000	148.00	11000	186.00	11000	245.00	11000	382.00
11,001 - 11,499		xxxxx ²⁾	217.00	11500	186.00				
11,500		11500	148.00	11500	186.00				
11,501 - 11,999		xxxxx ²⁾	217.00	12000	186.00	12000	245.00	12000	382.00
12,000		12000	148.00	12000	186.00	12000	245.00	12000	382.00
12,001 - 12,499		xxxxx ²⁾	217.00	12500	186.00				
12,500		12500	148.00	12500	186.00				
12,501 - 12,699		xxxxx ²⁾	217.00	12700	186.00	12700	323.00	12700	382.00
12,700	1/2	12700	148.00	12700	186.00	12700	323.00	12700	382.00
12,701 - 12,999		xxxxx ²⁾	217.00	13000	186.00	13000	245.00	13000	382.00
13,000		13000	148.00	13000	186.00	13000	245.00	13000	382.00
13,001 - 13,499		xxxxx ²⁾	217.00	13500	186.00				
13,500		13500	148.00	13500	186.00				
13,501 - 13,999		xxxxx ²⁾	217.00	14000	186.00	14000	245.00	14000	382.00
14,000		14000	148.00	14000	186.00	14000	245.00	14000	382.00
14,001 - 14,499		xxxxx ²⁾	217.00	14500	186.00				
14,500		14500	148.00	14500	186.00				
14,501 - 14,999		xxxxx ²⁾	217.00	15000	186.00	15000	245.00	15000	382.00
15,000		15000	148.00	15000	186.00	15000	245.00	15000	382.00
15,001 - 15,499		xxxxx ²⁾	217.00	15500	186.00				
15,500		15500	148.00	15500	186.00				
15,501 - 15,999		xxxxx ²⁾	217.00	16000	186.00	16000	245.00	16000	382.00
16,000		16000	148.00	16000	186.00	16000	245.00	16000	382.00
16,001 - 16,499		xxxxx ²⁾	217.00	16500	186.00				
16,500		16500	148.00	16500	186.00				
16,501 - 16,999		xxxxx ²⁾	217.00	17000	186.00	17000	245.00	17000	382.00
17,000		17000	148.00	17000	186.00	17000	245.00	17000	382.00
17,001 - 17,499		xxxxx ²⁾	217.00	17500	186.00				
17,500		17500	148.00	17500	186.00				
17,501 - 17,999		xxxxx ²⁾	217.00	18000	186.00	18000	245.00	18000	382.00
18,000		18000	148.00	18000	186.00	18000	245.00	18000	382.00
18,001 - 18,499		xxxxx ²⁾	217.00	18500	186.00				
18,500		18500	148.00	18500	186.00				
18,501 - 18,999		xxxxx ²⁾	217.00	19000	186.00	19000	245.00	19000	382.00
19,000		19000	148.00	19000	186.00	19000	245.00	19000	382.00
19,001 - 19,049		xxxxx ²⁾	217.00	19050	186.00				
19,050	3/4	19050	148.00	19050	186.00				
19,051 - 19,499		xxxxx ²⁾	217.00	19500	186.00				
19,500		19500	148.00	19500	186.00				
19,501 - 19,999		xxxxx ²⁾	217.00	20000	186.00	20000	245.00	20000	382.00
20,000		20000	148.00	20000	186.00	20000	245.00	20000	382.00
20,001 - 20,499		xxxxx ²⁾	217.00	20500	186.00				
20,500		20500	148.00	20500	186.00				
20,501 - 20,999		xxxxx ²⁾	217.00	21000	186.00	21000	245.00	21000	382.00
21,000		21000	148.00	21000	186.00	21000	245.00	21000	382.00
21,001 - 21,499		xxxxx ²⁾	217.00	21500	186.00				
21,500		21500	148.00	21500	186.00				
21,501 - 21,999		xxxxx ²⁾	217.00	22000	186.00	22000	245.00	22000	382.00
22,000		22000	148.00	22000	186.00	22000	245.00	22000	382.00
22,001 - 22,224		xxxxx ²⁾	217.00	22250					
22,225	7/8	22250	148.00	22250					
22,226 - 22,499		xxxxx ²⁾	217.00	22500	148.00				
22,500		22500	186.00	22500	148.00				
22,501 - 22,999		xxxxx ²⁾	217.00	23000	148.00	23000	245.00	23000	382.00
23,000		23000	186.00	23000	148.00	23000	245.00	23000	382.00

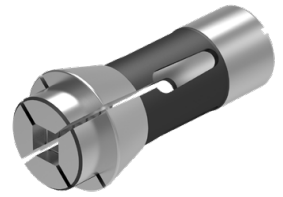
1) Without transverse grooves

2) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 023 06789).

Pressure collet F 37 / 1536 E



DCONWS mm	DCONWS inch	Grooved F 37 / 1536 E		Smooth F 37 / 1536 E		Grooved F 37 / 1536 E		Grooved F 37 / 1536 E	
		81 023 ...		81 025 ...		81 028 ...		81 030 ...	
		£ Y8/YS		£ Y8/YS		£ Y8/YS		£ Y8/YS	
23,001 - 23,499		217.00	xxxxx ²⁾						
23,500		186.00	23500	148.00	23500				
23,501 - 23,999		217.00	xxxxx ²⁾						
24,000		186.00	24000	148.00	24000	245.00	24000		
24,001 - 24,499		217.00	xxxxx ²⁾						
24,500		186.00	24500	148.00	24500				
24,501 - 24,999		217.00	xxxxx ²⁾						
25,000		148.00	25000	186.00	25000	245.00	25000		
25,001 - 25,499		217.00	xxxxx ²⁾						
25,400	1/1					323.00	25400		
25,500		148.00	25500	186.00	25500				
25,501 - 25,999		217.00	xxxxx ²⁾						
26,000		148.00	26000	186.00	26000	245.00	26000		
26,001 - 26,499		217.00	xxxxx ²⁾						
26,500		148.00	26500	186.00	26500				
26,501 - 26,999		217.00	xxxxx ²⁾						
27,000		148.00	27000	186.00	27000	245.00	27000		
27,001 - 27,499		217.00	xxxxx ²⁾						
27,500		148.00	27500	186.00	27500				
27,501 - 27,999		217.00	xxxxx ²⁾						
28,000		148.00	28000	186.00	28000				
28,001 - 28,499		217.00	xxxxx ²⁾						
28,500		148.00	28500	186.00	28500				
28,501 - 28,999		217.00	xxxxx ²⁾						
29,000		148.00	29000	186.00	29000				
29,001 - 29,499		217.00	xxxxx ²⁾						
29,500		148.00	29500	186.00	29500				
29,501 - 29,999		217.00	xxxxx ²⁾						
30,000		148.00	30000	186.00	30000				
30,001 - 30,499		217.00	xxxxx ²⁾						
30,500		148.00	30500	186.00	30500				
30,501 - 30,999		217.00	xxxxx ²⁾						
31,000		148.00	31000	186.00	31000				
31,001 - 31,499		217.00	xxxxx ²⁾						
31,500		148.00	31500	186.00	31500				
31,501 - 31,999		217.00	xxxxx ²⁾						
32,000		148.00	32000	186.00	32000				

1) Without transverse grooves

2) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 023 06789).

Stem collets overview

Norm	Clamping diameter range in mm	Profile	Version	Page No.
116 E / F 13	Ø 1,0 – 8,0		Smooth	17
120 E / F 15	Ø 1,0 – 8,0		Smooth	17
F 16 / 1212 E	Ø 1,0 – 9,0		Smooth	18
138 E / F 20-87	Ø 1,0 – 12,0		Smooth	18
136 E / F 20-201	Ø 1,0 – 14,0		Smooth	19
145 E / F 25	Ø 1,0 – 20,0		Smooth	20
F 37 / 1536 E	Ø 1,0 – 28,0		Smooth	21



Other profile shapes and sizes and extended options available on request.

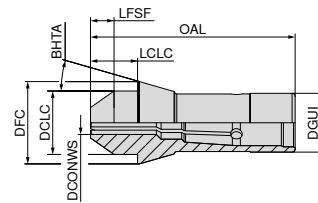


Should you wish to send us a request for specially adjusted solutions, you will find a detailed form in the download area on our homepage. Please fill it out carefully and send it via email or print it out and send via fax. → cuttingtools.ceratizit.com/gb/en/download.html

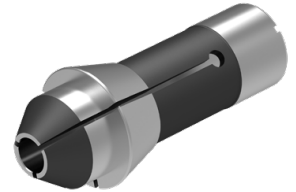
Please email the completed form to tsc@ceratizit.com.

Stem collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °	LFSF mm
116 E / F 13	13	19	13	12	70	16	6
120 E / F 15	15	21	15	13	71	16	7
120 E / F 15	15	21	15	15	73	16	9



Stem collet 116 E / F 13



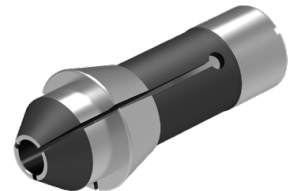
Smooth
116 E / F 13

81 001 ...

£ Y8/YS	
450.00	01000
450.00	02000
409.00	03000
409.00	04000
409.00	05000
409.00	06000
409.00	07000

DCONWS mm	
1	
2	
3	
4	
5	
6	
7	

Stem collet 120 E / F 15



Smooth
120 E / F 15
LFSF = 7 mm

Smooth
120 E / F 15
LFSF = 9 mm

81 004 ...

£ Y8/YS	
452.00	01000
452.00	02000
414.00	03000
414.00	04000
414.00	05000
414.00	06000
414.00	07000
414.00	08000

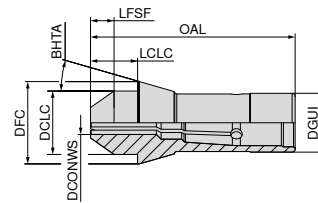
81 006 ...

£ Y8/YS	
452.00	01000
452.00	02000
414.00	03000
414.00	04000
414.00	05000
414.00	06000
414.00	07000
414.00	08000

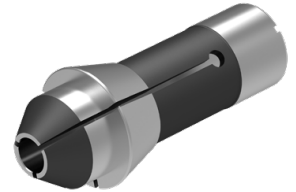
DCONWS mm	
1	
2	
3	
4	
5	
6	
7	
8	

Stem collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °	LFSF mm
F 16 / 1212 E	16	21	16	13	71	16	7
F 16 / 1212 E	16	21	16	15	73	16	9
138 E / F20-87	20	28	21	15	78	16	8
138 E / F20-87	20	28	21	20	80	16	13



Stem collet F 16 / 1212 E

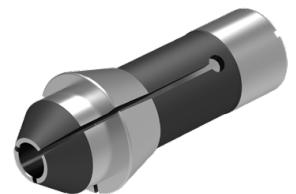


DCONWS
mm

1
2
3
4
5
6
7
8
9

Smooth	Smooth
F 16 / 1212 E	F 16 / 1212 E
LFSF = 7 mm	LFSF = 9 mm
81 020 ...	81 022 ...
£	£
Y8/YS	Y8/YS
452.00 01000	452.00 01000
452.00 02000	452.00 02000
414.00 03000	414.00 03000
414.00 04000	414.00 04000
414.00 05000	540.00 05000
414.00 06000	540.00 06000
414.00 07000	540.00 07000
414.00 08000	414.00 08000
414.00 09000	540.00 09000

Stem collet 138 E / F 20-87



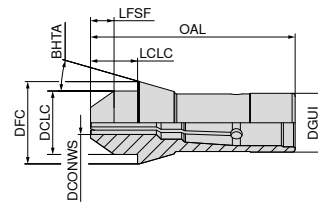
DCONWS
mm

1
2
3
4
5
6
7
8
9
10
11
12

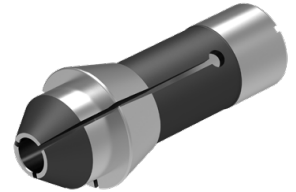
Smooth	Smooth
138 E / F20-87	138 E / F20-87
LFSF = 8 mm	LFSF = 13 mm
81 012 ...	81 014 ...
£	£
Y8/YS	Y8/YS
542.00 01000	542.00 01000
542.00 02000	542.00 02000
505.00 03000	505.00 03000
505.00 04000	505.00 04000
505.00 05000	505.00 05000
505.00 06000	505.00 06000
505.00 07000	505.00 07000
505.00 08000	505.00 08000
505.00 09000	505.00 09000
505.00 10000	505.00 10000
505.00 11000	505.00 11000
505.00 12000	505.00 12000

Stem collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °	LFSF mm
136 E / F 20-201	20	26	19	13	62	15	8
136 E / F 20-201	20	26	19	15	64	15	10



Stem collet 136 E / F 20-201

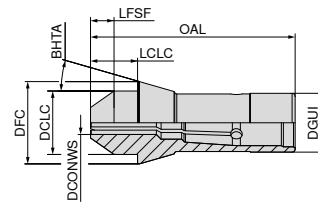


Smooth	Smooth
136 E / F 20-201	136 E / F 20-201
LFSF = 8 mm	LFSF = 10 mm

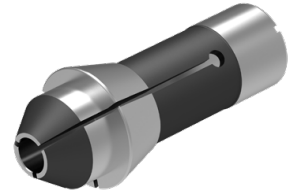
DCONWS mm	£ Y8/YS	81 008 ...	£ Y8/YS	81 010 ...
1	542.00	01000	542.00	01000
2	542.00	02000	542.00	02000
3	505.00	03000	505.00	03000
4	505.00	04000	505.00	04000
5	505.00	05000	505.00	05000
6	542.00	06000	505.00	06000
7	542.00	07000	505.00	07000
8	505.00	08000	505.00	08000
9	505.00	09000	505.00	09000
10	505.00	10000	505.00	10000
11	505.00	11000	505.00	11000
12	505.00	12000	505.00	12000
13			505.00	13000
14			505.00	14000

Stem collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °	LFSF mm
145 E / F 25	25	35	27	20	87	16	10
145 E / F 25	25	35	27	25	92	16	15



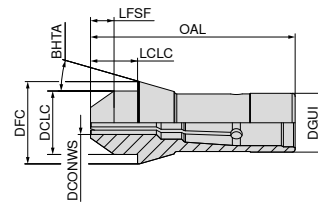
Stem collet 145 E / F 25



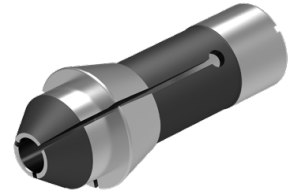
DCONWS mm	Smooth 145 E / F 25 LFSF = 10 mm		Smooth 145 E / F 25 LFSF = 15 mm	
	£ Y8/YS		£ Y8/YS	
1	542.00	01000	542.00	01000
2	542.00	02000	542.00	02000
3	505.00	03000	505.00	03000
4	505.00	04000	505.00	04000
5	505.00	05000	505.00	05000
6	505.00	06000	505.00	06000
7	505.00	07000	505.00	07000
8	505.00	08000	505.00	08000
9	505.00	09000	505.00	09000
10	505.00	10000	505.00	10000
11	505.00	11000	505.00	11000
12	505.00	12000	505.00	12000
13	505.00	13000	505.00	13000
14	505.00	14000	505.00	14000
15	505.00	15000	505.00	15000
16	505.00	16000	505.00	16000
17	505.00	17000	505.00	17000
18	505.00	18000	505.00	18000
19	505.00	19000	505.00	19000
20	505.00	20000	505.00	20000

Stem collets

Designation	DGUI mm	DFC mm	DCLC mm	LCLC mm	OAL mm	BHTA °	LFSF mm
F 37 / 1536 E	37	47	40	25	107	16	15



Stem collet F 37 / 1536 E



Smooth

F 37 / 1536 E

81 024 ...

DCONWS mm	£ Y8/YS	
1	607.00	01000
2	607.00	02000
3	519.00	03000
4	519.00	04000
5	519.00	05000
6	519.00	06000
7	519.00	07000
8	519.00	08000
9	519.00	09000
10	519.00	10000
11	519.00	11000
12	519.00	12000
13	581.00	13000
14	519.00	14000
15	519.00	15000
16	519.00	16000
17	519.00	17000
18	519.00	18000
19	519.00	19000
20	519.00	20000
21	519.00	21000
22	519.00	22000
23	519.00	23000
24	519.00	24000
25	519.00	25000
26	519.00	26000
27	519.00	27000
28	519.00	28000

Adjustable guide bushes overview

Norm	Guide diameter range in mm	Profile	Version	Page No.
I353	Ø 1,0 – 10,5		Carbide insert	23
F853	Ø 1,0 – 13,0		Carbide insert	24
F391	Ø 1,0 – 18,0		Carbide insert	25
F605	Ø 1,0 – 17,0		Carbide insert	26
T223	Ø 1,0 – 22,0		Carbide insert	27
	SW 2,0 – 11,0		Carbide insert	27
	SW 2,0 – 15,0		Carbide insert	27
I357	Ø 2,0 – 22,0		Carbide insert	28
T227	Ø 1,0 – 25,0		Carbide insert	29
T229	Ø 2,0 – 32,0		Carbide insert	30
	SW 2,0 – 14,0		Carbide insert	30

Flexible GBE guide bushes overview

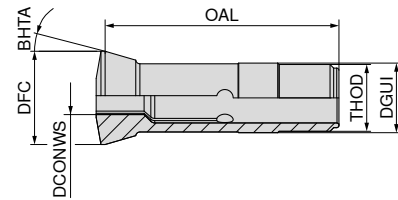
GBE 28	Ø 2,0 – 15,0		31
GBE 42	Ø 2,0 – 15,0		32



Other profile shapes and sizes and extended options available on request.

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
I 353 SR	16	19.5	56.79	16	M14 x 1



Adjustable guide bush I 353 SR

▲ For Star* CNC sliding head lathes

▲ With carbide insert



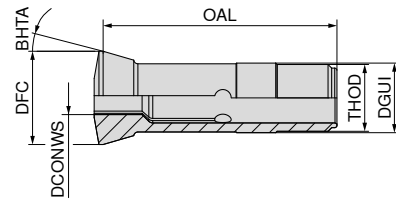
I 353 SR

DCONWS mm	£ Y8/YF	
1.0	266.00	01000
1.5	245.00	01500
2.0	245.00	02000
2.5	245.00	02500
3.0	245.00	03000
3.5	245.00	03500
4.0	245.00	04000
4.5	195.00	04500
5.0	195.00	05000
5.5	217.00	05500
6.0	217.00	06000
6.5	231.00	06500
7.0	231.00	07000
7.5	245.00	07500
8.0	245.00	08000
8.5	252.00	08500
9.0	252.00	09000
9.5	262.00	09500
10.0	262.00	10000
10.5	271.00	10500

81 035 ...

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
F 853	18	22	60	30	M16 x 1



Adjustable guide bush F 853

▲ With carbide insert

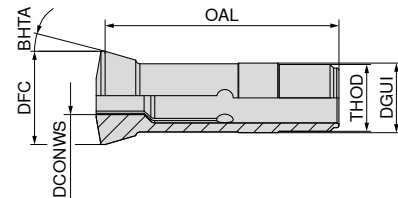


F 853

DCONWS		81 034 ...	
mm		£	
		Y8/YF	
1.0		266.00	01000
1.5		245.00	01500
2.0		245.00	02000
2.5		245.00	02500
3.0		245.00	03000
3.5		245.00	03500
4.0		245.00	04000
4.5		195.00	04500
5.0		195.00	05000
5.5		217.00	05500
6.0		217.00	06000
6.5		231.00	06500
7.0		231.00	07000
7.5		245.00	07500
8.0		245.00	08000
8.5		252.00	08500
9.0		252.00	09000
9.5		262.00	09500
10.0		262.00	10000
10.5		271.00	10500
11.0		271.00	11000
11.5		284.00	11500
12.0		284.00	12000
12.5		297.00	12500
13.0		297.00	13000

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
F 391	22	29	68	16	M22 x 1



Adjustable guide bush F 391

▲ With carbide insert



F 391

81 032 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
1,000		297.00	01000
1,001 - 1,499		306.00	xxxxx ¹⁾
1,500		251.00	01500
1,501 - 1,999		306.00	xxxxx ¹⁾
2,000		251.00	02000
2,001 - 2,499		306.00	xxxxx ¹⁾
2,500		201.00	02500
2,501 - 2,999		306.00	xxxxx ¹⁾
3,000		201.00	03000
3,001 - 3,499		306.00	xxxxx ¹⁾
3,500		191.00	03500
3,501 - 3,999		306.00	xxxxx ¹⁾
4,000		191.00	04000
4,001 - 4,499		306.00	xxxxx ¹⁾
4,500		203.00	04500
4,501 - 4,999		306.00	xxxxx ¹⁾
5,000		203.00	05000
5,001 - 5,499		306.00	xxxxx ¹⁾
5,500		225.00	05500
5,501 - 5,999		306.00	xxxxx ¹⁾
6,000		225.00	06000
6,001 - 6,349		306.00	xxxxx ¹⁾
6,350	1/4	306.00	06350
6,351 - 6,499		306.00	xxxxx ¹⁾
6,500		232.00	06500
6,501 - 6,999		306.00	xxxxx ¹⁾
7,000		232.00	07000
7,001 - 7,499		306.00	xxxxx ¹⁾
7,500		251.00	07500
7,501 - 7,999		306.00	xxxxx ¹⁾
8,000		251.00	08000
8,001 - 8,499		306.00	xxxxx ¹⁾
8,500		262.00	08500
8,501 - 8,999		306.00	xxxxx ¹⁾
9,000		262.00	09000
9,001 - 9,499		306.00	xxxxx ¹⁾
9,500		271.00	09500
9,501 - 9,999		306.00	xxxxx ¹⁾
10,000		271.00	10000
10,001 - 10,499		306.00	xxxxx ¹⁾
10,500		282.00	10500
10,501 - 10,999		306.00	xxxxx ¹⁾
11,000		282.00	11000
11,001 - 11,499		306.00	xxxxx ¹⁾
11,500		291.00	11500
11,501 - 11,999		306.00	xxxxx ¹⁾
12,000		291.00	12000
12,001 - 12,499		306.00	xxxxx ¹⁾
12,500		316.00	12500
12,501 - 12,699		306.00	xxxxx ¹⁾

81 032 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
12,700	1/2	394.00	12700
12,701 - 12,999		394.00	xxxxx ¹⁾
13,000		316.00	13000
13,001 - 13,499		394.00	xxxxx ¹⁾
13,500		324.00	13500
13,501 - 13,999		394.00	xxxxx ¹⁾
14,000		324.00	14000
14,001 - 14,499		394.00	xxxxx ¹⁾
14,500		343.00	14500
14,501 - 14,999		394.00	xxxxx ¹⁾
15,000		343.00	15000
15,001 - 15,499		394.00	xxxxx ¹⁾
15,500		369.00	15500
15,501 - 15,999		394.00	xxxxx ¹⁾
16,000		369.00	16000
16,001 - 16,499		394.00	xxxxx ¹⁾
16,500		386.00	16500
16,501 - 16,999		394.00	xxxxx ¹⁾
17,000		386.00	17000
17,001 - 17,499		394.00	xxxxx ¹⁾
17,500		405.00	17500
17,501 - 17,999		394.00	xxxxx ¹⁾
18,000		405.00	18000

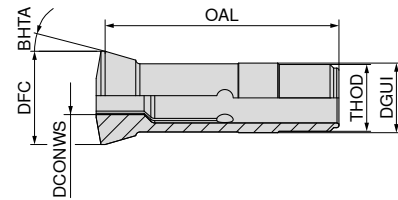
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 032 06789).

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
F 605	24	29.5	61	30	M24 x 1



Adjustable guide bush F 605

▲ With carbide insert



F 605

81 033 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
1,000		669.00	01000
1,001 - 1,499		283.00	xxxxx ¹⁾
1,500		251.00	01500
1,501 - 1,999		283.00	xxxxx ¹⁾
2,000		251.00	02000
2,001 - 2,499		283.00	xxxxx ¹⁾
2,500		201.00	02500
2,501 - 2,999		283.00	xxxxx ¹⁾
3,000		201.00	03000
3,001 - 3,174		283.00	xxxxx ¹⁾
3,175	1/8	283.00	03175
3,176 - 3,499		283.00	xxxxx ¹⁾
3,500		191.00	03500
3,501 - 3,999		283.00	xxxxx ¹⁾
4,000		191.00	04000
4,001 - 4,499		283.00	xxxxx ¹⁾
4,500		203.00	04500
4,501 - 4,762		283.00	xxxxx ¹⁾
4,763	3/16	285.00	04763
4,764 - 4,999		285.00	xxxxx ¹⁾
5,000		203.00	05000
5,001 - 5,499		285.00	xxxxx ¹⁾
5,500		225.00	05500
5,501 - 5,999		285.00	xxxxx ¹⁾
6,000		225.00	06000
6,001 - 6,349		285.00	xxxxx ¹⁾
6,350	1/4	306.00	06350
6,351 - 6,499		306.00	xxxxx ¹⁾
6,500		232.00	06500
6,501 - 6,999		306.00	xxxxx ¹⁾
7,000		232.00	07000
7,001 - 7,499		306.00	xxxxx ¹⁾
7,500		251.00	07500
7,501 - 7,999		306.00	xxxxx ¹⁾
8,000		251.00	08000
8,001 - 8,499		306.00	xxxxx ¹⁾
8,500		262.00	08500
8,501 - 8,999		306.00	xxxxx ¹⁾
9,000		262.00	09000
9,001 - 9,499		306.00	xxxxx ¹⁾
9,500		271.00	09500
9,501 - 9,999		306.00	xxxxx ¹⁾
10,000		271.00	10000
10,001 - 10,499		306.00	xxxxx ¹⁾
10,500		282.00	10500
10,501 - 10,999		306.00	xxxxx ¹⁾
11,000		282.00	11000
11,001 - 11,499		306.00	xxxxx ¹⁾
11,500		291.00	11500
11,501 - 11,999		306.00	xxxxx ¹⁾

81 033 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
12,000		291.00	12000
12,001 - 12,499		306.00	xxxxx ¹⁾
12,500		316.00	12500
12,501 - 12,699		306.00	xxxxx ¹⁾
12,700	1/2	394.00	12700
12,701 - 12,999		394.00	xxxxx ¹⁾
13,000		316.00	13000
13,001 - 13,499		394.00	xxxxx ¹⁾
13,500		324.00	13500
13,501 - 13,999		394.00	xxxxx ¹⁾
14,000		324.00	14000
14,001 - 14,499		394.00	xxxxx ¹⁾
14,500		343.00	14500
14,501 - 14,999		394.00	xxxxx ¹⁾
15,000		343.00	15000
15,001 - 15,499		394.00	xxxxx ¹⁾
15,500		369.00	15500
15,501 - 15,999		394.00	xxxxx ¹⁾
16,000		369.00	16000
16,001 - 16,499		394.00	xxxxx ¹⁾
16,500		386.00	16500
16,501 - 16,999		394.00	xxxxx ¹⁾
17,000		386.00	17000

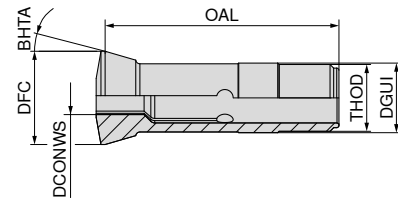
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 033 06789).

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
T 223	28	34	82	16	M25 x 1



Adjustable guide bush T 223

▲ With carbide insert



		T 223		T 223		T 223	
		81 037 ...		81 038 ...		81 039 ...	
DCONWS mm	DCONWS inch	£ Y8/YF		£ Y8/YF		£ Y8/YF	
1,000		669.00	01000				
1,001 - 1,499		306.00	xxxxx ¹⁾				
1,500		338.00	01500				
1,501 - 1,999		306.00	xxxxx ¹⁾				
2,000		251.00	02000				
2,001 - 2,499		306.00	xxxxx ¹⁾				
2,500		201.00	02500				
2,501 - 2,999		306.00	xxxxx ¹⁾				
3,000		201.00	03000	436.00	03000	652.00	03000
3,001 - 3,499		306.00	xxxxx ¹⁾				
3,500		191.00	03500				
3,501 - 3,999		306.00	xxxxx ¹⁾				
4,000		191.00	04000	427.00	04000	642.00	04000
4,001 - 4,499		306.00	xxxxx ¹⁾				
4,500		203.00	04500				
4,501 - 4,999		306.00	xxxxx ¹⁾				
5,000		203.00	05000	391.00	05000	604.00	05000
5,001 - 5,499		306.00	xxxxx ¹⁾				
5,500		225.00	05500				
5,501 - 5,999		306.00	xxxxx ¹⁾				
6,000		225.00	06000	433.00	06000	648.00	06000
6,001 - 6,349		306.00	xxxxx ¹⁾				
6,350	1/4	306.00	06350	512.00	06350	728.00	06350
6,351 - 6,499		306.00	xxxxx ¹⁾				
6,500		232.00	06500				
6,501 - 6,999		306.00	xxxxx ¹⁾				
7,000		232.00	07000	454.00	07000	669.00	07000
7,001 - 7,499		306.00	xxxxx ¹⁾				
7,500		251.00	07500				
7,501 - 7,999		306.00	xxxxx ¹⁾				
7,938	5/16			554.00	07938		
8,000		251.00	08000	487.00	08000	701.00	08000
8,001 - 8,499		306.00	xxxxx ¹⁾				
8,500		262.00	08500				
8,501 - 8,999		306.00	xxxxx ¹⁾				
9,000		262.00	09000	505.00	09000	721.00	09000
9,001 - 9,499		306.00	xxxxx ¹⁾				
9,500		271.00	09500				
9,501 - 9,999		306.00	xxxxx ¹⁾				
9,525	3/8			589.00	09525		
10,000		271.00	10000	523.00	10000	738.00	10000
10,001 - 10,499		306.00	xxxxx ¹⁾				
10,500		282.00	10500				
10,501 - 10,999		306.00	xxxxx ¹⁾				
11,000		282.00	11000	542.00	11000	758.00	11000
11,001 - 11,499		306.00	xxxxx ¹⁾				
11,500		291.00	11500				
11,501 - 11,999		306.00	xxxxx ¹⁾				
12,000		291.00	12000	565.00	12000	780.00	12000
12,001 - 12,499		306.00	xxxxx ¹⁾				

		81 037 ...		81 038 ...		81 039 ...	
DCONWS mm	DCONWS inch	£ Y8/YF		£ Y8/YF		£ Y8/YF	
12,500		316.00	12500				
12,501 - 12,699		306.00	xxxxx ¹⁾				
12,700	1/2	394.00	12700	669.00	12700		
12,701 - 12,999		394.00	xxxxx ¹⁾				
13,000		316.00	13000	603.00	13000	819.00	13000
13,001 - 13,499		394.00	xxxxx ¹⁾				
13,500		324.00	13500				
13,501 - 13,999		394.00	xxxxx ¹⁾				
14,000		324.00	14000	618.00	14000	833.00	14000
14,001 - 14,499		394.00	xxxxx ¹⁾				
14,500		343.00	14500				
14,501 - 14,999		394.00	xxxxx ¹⁾				
15,000		343.00	15000	644.00	15000		
15,001 - 15,499		394.00	xxxxx ¹⁾				
15,500		369.00	15500				
15,501 - 15,999		394.00	xxxxx ¹⁾				
16,000		369.00	16000	677.00	16000		
16,001 - 16,499		394.00	xxxxx ¹⁾				
16,500		386.00	16500				
16,501 - 16,999		394.00	xxxxx ¹⁾				
17,000		386.00	17000	702.00	17000		
17,001 - 17,499		394.00	xxxxx ¹⁾				
17,500		405.00	17500				
17,501 - 17,999		394.00	xxxxx ¹⁾				
18,000		405.00	18000				
18,001 - 18,499		394.00	xxxxx ¹⁾				
18,500		422.00	18500				
18,501 - 18,999		394.00	xxxxx ¹⁾				
19,000		422.00	19000				
19,001 - 19,499		394.00	xxxxx ¹⁾				
19,500		430.00	19500				
19,501 - 19,999		394.00	xxxxx ¹⁾				
20,000		430.00	20000				
20,001 - 20,499		394.00	xxxxx ¹⁾				
20,500		456.00	20500				
20,501 - 20,999		394.00	xxxxx ¹⁾				
21,000		456.00	21000				
21,001 - 21,499		394.00	xxxxx ¹⁾				
21,500		473.00	21500				
21,501 - 21,999		394.00	xxxxx ¹⁾				
22,000		652.00	22000				

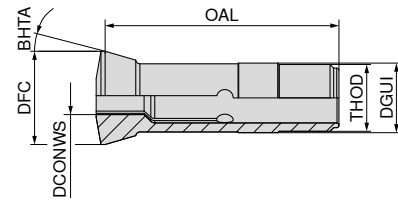
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 037 06789).

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
I 357	28	38	81	30	M25 x 1



Adjustable guide bush I 357

▲ With carbide insert



I 357

81 036 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
2,000		251.00	02000
2,001 - 2,499		283.00	xxxxx ¹⁾
2,500		251.00	02500
2,501 - 2,999		283.00	xxxxx ¹⁾
3,000		201.00	03000
3,001 - 3,174		283.00	xxxxx ¹⁾
3,175	1/8	283.00	03175
3,176 - 3,499		283.00	xxxxx ¹⁾
3,500		191.00	03500
3,501 - 3,999		283.00	xxxxx ¹⁾
4,000		191.00	04000
4,001 - 4,499		283.00	xxxxx ¹⁾
4,500		203.00	04500
4,501 - 4,999		283.00	xxxxx ¹⁾
5,000		203.00	05000
5,001 - 5,499		283.00	xxxxx ¹⁾
5,500		225.00	05500
5,501 - 5,999		283.00	xxxxx ¹⁾
6,000		225.00	06000
6,001 - 6,499		283.00	xxxxx ¹⁾
6,500		232.00	06500
6,501 - 6,999		283.00	xxxxx ¹⁾
7,000		232.00	07000
7,001 - 7,143		283.00	xxxxx ¹⁾
7,144	9/32	313.00	07144
7,145 - 7,499		313.00	xxxxx ¹⁾
7,500		251.00	07500
7,501 - 7,999		313.00	xxxxx ¹⁾
8,000		251.00	08000
8,001 - 8,499		313.00	xxxxx ¹⁾
8,500		262.00	08500
8,501 - 8,999		313.00	xxxxx ¹⁾
9,000		262.00	09000
9,001 - 9,499		313.00	xxxxx ¹⁾
9,500		271.00	09500
9,501 - 9,999		313.00	xxxxx ¹⁾
10,000		271.00	10000
10,001 - 10,499		313.00	xxxxx ¹⁾
10,500		282.00	10500
10,501 - 10,999		313.00	xxxxx ¹⁾
11,000		282.00	11000
11,001 - 11,499		313.00	xxxxx ¹⁾
11,500		291.00	11500
11,501 - 11,999		313.00	xxxxx ¹⁾
12,000		291.00	12000
12,001 - 12,499		313.00	xxxxx ¹⁾
12,500		316.00	12500
12,501 - 12,699		394.00	xxxxx ¹⁾
12,700	1/2	394.00	12700
12,701 - 12,999		394.00	xxxxx ¹⁾

81 036 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
13,000		316.00	13000
13,001 - 13,499		394.00	xxxxx ¹⁾
13,500		324.00	13500
13,501 - 13,999		394.00	xxxxx ¹⁾
14,000		324.00	14000
14,001 - 14,499		394.00	xxxxx ¹⁾
14,500		343.00	14500
14,501 - 14,999		394.00	xxxxx ¹⁾
15,000		343.00	15000
15,001 - 15,499		394.00	xxxxx ¹⁾
15,500		369.00	15500
15,501 - 15,999		394.00	xxxxx ¹⁾
16,000		369.00	16000
16,001 - 16,499		394.00	xxxxx ¹⁾
16,500		386.00	16500
16,501 - 16,999		394.00	xxxxx ¹⁾
17,000		386.00	17000
17,001 - 17,499		394.00	xxxxx ¹⁾
17,500		405.00	17500
17,501 - 17,999		394.00	xxxxx ¹⁾
18,000		405.00	18000
18,001 - 18,499		394.00	xxxxx ¹⁾
18,500		422.00	18500
18,501 - 18,999		394.00	xxxxx ¹⁾
19,000		422.00	19000
19,001 - 19,499		394.00	xxxxx ¹⁾
19,500		430.00	19500
19,501 - 19,999		394.00	xxxxx ¹⁾
20,000		430.00	20000
20,001 - 20,499		394.00	xxxxx ¹⁾
20,500		456.00	20500
20,501 - 20,999		394.00	xxxxx ¹⁾
21,000		456.00	21000
21,001 - 21,499		394.00	xxxxx ¹⁾
21,500		473.00	21500
21,501 - 21,999		394.00	xxxxx ¹⁾
22,000		473.00	22000

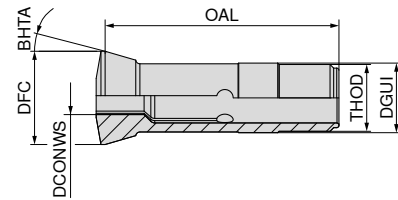
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 036 06789).

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
T 227	34	41	87.5	10	M34 x 1



Adjustable guide bush T 227

▲ With carbide insert



T 227

81 040 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
1,000		526.00	01000
1,001 - 1,499		306.00	xxxxx ¹⁾
1,500		526.00	01500
1,501 - 1,999		306.00	xxxxx ¹⁾
2,000		251.00	02000
2,001 - 2,499		306.00	xxxxx ¹⁾
2,500		201.00	02500
2,501 - 2,999		306.00	xxxxx ¹⁾
3,000		201.00	03000
3,001 - 3,499		306.00	xxxxx ¹⁾
3,500		191.00	03500
3,501 - 3,999		306.00	xxxxx ¹⁾
4,000		191.00	04000
4,001 - 4,499		306.00	xxxxx ¹⁾
4,500		203.00	04500
4,501 - 4,999		306.00	xxxxx ¹⁾
5,000		203.00	05000
5,001 - 5,499		306.00	xxxxx ¹⁾
5,500		225.00	05500
5,501 - 5,999		306.00	xxxxx ¹⁾
6,000		225.00	06000
6,001 - 6,349		306.00	xxxxx ¹⁾
6,350	1/4	306.00	06350
6,351 - 6,499		306.00	xxxxx ¹⁾
6,500		232.00	06500
6,501 - 6,999		306.00	xxxxx ¹⁾
7,000		232.00	07000
7,001 - 7,499		306.00	xxxxx ¹⁾
7,500		251.00	07500
7,501 - 7,999		306.00	xxxxx ¹⁾
8,000		251.00	08000
8,001 - 8,499		306.00	xxxxx ¹⁾
8,500		262.00	08500
8,501 - 8,999		306.00	xxxxx ¹⁾
9,000		262.00	09000
9,001 - 9,499		306.00	xxxxx ¹⁾
9,500		271.00	09500
9,501 - 9,999		306.00	xxxxx ¹⁾
10,000		271.00	10000
10,001 - 10,499		306.00	xxxxx ¹⁾
10,500		282.00	10500
10,501 - 10,999		306.00	xxxxx ¹⁾
11,000		282.00	11000
11,001 - 11,499		306.00	xxxxx ¹⁾
11,500		291.00	11500
11,501 - 11,999		306.00	xxxxx ¹⁾
12,000		291.00	12000
12,001 - 12,499		306.00	xxxxx ¹⁾
12,500		316.00	12500
12,501 - 12,699		306.00	xxxxx ¹⁾
12,700	1/2	394.00	12700
12,701 - 12,999		394.00	xxxxx ¹⁾

81 040 ...

DCONWS mm	DCONWS inch	£ Y8/YF	
13,000		316.00	13000
13,001 - 13,499		394.00	xxxxx ¹⁾
13,500		324.00	13500
13,501 - 13,999		394.00	xxxxx ¹⁾
14,000		324.00	14000
14,001 - 14,499		394.00	xxxxx ¹⁾
14,500		343.00	14500
14,501 - 14,999		394.00	xxxxx ¹⁾
15,000		343.00	15000
15,001 - 15,499		394.00	xxxxx ¹⁾
15,500		369.00	15500
15,501 - 15,999		394.00	xxxxx ¹⁾
16,000		369.00	16000
16,001 - 16,499		394.00	xxxxx ¹⁾
16,500		386.00	16500
16,501 - 16,999		394.00	xxxxx ¹⁾
17,000		386.00	17000
17,001 - 17,499		394.00	xxxxx ¹⁾
17,500		405.00	17500
17,501 - 17,999		394.00	xxxxx ¹⁾
18,000		405.00	18000
18,001 - 18,499		394.00	xxxxx ¹⁾
18,500		422.00	18500
18,501 - 18,999		394.00	xxxxx ¹⁾
19,000		422.00	19000
19,001 - 19,499		394.00	xxxxx ¹⁾
19,500		430.00	19500
19,501 - 19,999		394.00	xxxxx ¹⁾
20,000		430.00	20000
20,001 - 20,499		394.00	xxxxx ¹⁾
20,500		456.00	20500
20,501 - 20,999		394.00	xxxxx ¹⁾
21,000		456.00	21000
21,001 - 21,499		394.00	xxxxx ¹⁾
21,500		473.00	21500
21,501 - 21,999		394.00	xxxxx ¹⁾
22,000		473.00	22000
22,001 - 22,499		394.00	xxxxx ¹⁾
22,500		487.00	22500
22,501 - 22,999		394.00	xxxxx ¹⁾
23,000		487.00	23000
23,001 - 23,499		394.00	xxxxx ¹⁾
23,500		503.00	23500
23,501 - 23,999		394.00	xxxxx ¹⁾
24,000		503.00	24000
24,001 - 24,499		394.00	xxxxx ¹⁾
24,500		509.00	24500
24,501 - 24,999		394.00	xxxxx ¹⁾
25,000		509.00	25000

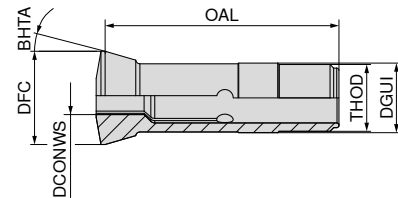
1) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 040 06789).

Adjustable guide bushes

Designation	DGUI mm	DFC mm	OAL mm	BHTA °	THOD
T 229	42	49	82	16	M40 x 1



Adjustable guide bush T 229

▲ With carbide insert



T 229

T 229

		81 041 ...		81 042 ...	
DCONWS mm	DCONWS inch	£ Y8/YF		£ Y8/YF	
2,000		904.00	02000		
2,001 - 2,499		381.00	xxxxx ¹⁾		
2,500		904.00	02500		
2,501 - 2,999		381.00	xxxxx ¹⁾		
3,000		369.00	03000		
3,001 - 3,499		381.00	xxxxx ¹⁾		
3,500		369.00	03500		
3,501 - 3,999		381.00	xxxxx ¹⁾		
4,000		324.00	04000	562.00	04000
4,001 - 4,499		381.00	xxxxx ¹⁾		
4,500		324.00	04500		
4,501 - 4,999		381.00	xxxxx ¹⁾		
5,000		297.00	05000	486.00	05000
5,001 - 5,499		381.00	xxxxx ¹⁾		
5,500		297.00	05500		
5,501 - 5,999		381.00	xxxxx ¹⁾		
6,000		304.00	06000	512.00	06000
6,001 - 6,349		381.00	xxxxx ¹⁾		
6,350	1/4	381.00	06350	593.00	06350
6,351 - 6,499		381.00	xxxxx ¹⁾		
6,500		304.00	06500		
6,501 - 6,999		381.00	xxxxx ¹⁾		
7,000		304.00	07000	525.00	07000
7,001 - 7,499		381.00	xxxxx ¹⁾		
7,500		304.00	07500		
7,501 - 7,999		381.00	xxxxx ¹⁾		
8,000		304.00	08000	540.00	08000
8,001 - 8,499		381.00	xxxxx ¹⁾		
8,500		304.00	08500		
8,501 - 8,999		381.00	xxxxx ¹⁾		
9,000		304.00	09000	548.00	09000
9,001 - 9,499		381.00	xxxxx ¹⁾		
9,500		304.00	09500		
9,501 - 9,524		381.00	xxxxx ¹⁾		
9,525	3/8	381.00	09525		
9,526 - 9,999		381.00	xxxxx ¹⁾		
10,000		304.00	10000	554.00	10000
10,001 - 10,499		381.00	xxxxx ¹⁾		
10,500		304.00	10500		
10,501 - 10,999		381.00	xxxxx ¹⁾		
11,000		313.00	11000	573.00	11000
11,001 - 11,499		381.00	xxxxx ¹⁾		
11,500		313.00	11500		
11,501 - 11,999		381.00	xxxxx ¹⁾		
12,000		313.00	12000	585.00	12000
12,001 - 12,499		381.00	xxxxx ¹⁾		
12,500		313.00	12500		
12,501 - 12,699		381.00	xxxxx ¹⁾		
12,700	1/2	388.00	12700		
12,701 - 12,999		388.00	xxxxx ¹⁾		
13,000		321.00	13000	607.00	13000
13,001 - 13,499		388.00	xxxxx ¹⁾		
13,500		321.00	13500		
13,501 - 13,999		388.00	xxxxx ¹⁾		
14,000		330.00	14000	623.00	14000
14,001 - 14,499		388.00	xxxxx ¹⁾		
14,500		330.00	14500		
14,501 - 14,999		388.00	xxxxx ¹⁾		
15,000		346.00	15000	646.00	15000
15,001 - 15,499		388.00	xxxxx ¹⁾		
15,500		346.00	15500		
15,501 - 15,999		388.00	xxxxx ¹⁾		
16,000		372.00	16000	682.00	16000
16,001 - 16,499		388.00	xxxxx ¹⁾		

		81 041 ...		81 042 ...	
DCONWS mm	DCONWS inch	£ Y8/YF		£ Y8/YF	
16,500		372.00	16500		
16,501 - 16,999		388.00	xxxxx ¹⁾		
17,000		388.00	17000	707.00	17000
17,001 - 17,499		388.00	xxxxx ¹⁾		
17,500		388.00	17500		
17,501 - 17,999		388.00	xxxxx ¹⁾		
18,000		409.00	18000	742.00	18000
18,001 - 18,499		388.00	xxxxx ¹⁾		
18,500		409.00	18500		
18,501 - 18,999		388.00	xxxxx ¹⁾		
19,000		419.00	19000	780.00	19000
19,001 - 19,049		388.00	xxxxx ¹⁾		
19,050	3/4	492.00	19050		
19,051 - 19,499		492.00	xxxxx ¹⁾		
19,500		419.00	19500		
19,501 - 19,999		492.00	xxxxx ¹⁾		
20,000		428.00	20000	803.00	20000
20,001 - 20,499		492.00	xxxxx ¹⁾		
20,500		428.00	20500		
20,501 - 20,999		492.00	xxxxx ¹⁾		
21,000		447.00	21000	840.00	21000
21,001 - 21,499		492.00	xxxxx ¹⁾		
21,500		447.00	21500		
21,501 - 21,999		492.00	xxxxx ¹⁾		
22,000		466.00	22000	872.00	22000
22,001 - 22,224		492.00	xxxxx ¹⁾		
22,225	7/8	537.00	22225		
22,226 - 22,499		537.00	xxxxx ¹⁾		
22,500		466.00	22500		
22,501 - 22,999		537.00	xxxxx ¹⁾		
23,000		487.00	23000	903.00	23000
23,001 - 23,499		537.00	xxxxx ¹⁾		
23,500		487.00	23500		
23,501 - 23,999		537.00	xxxxx ¹⁾		
24,000		497.00	24000	928.00	24000
24,001 - 24,499		537.00	xxxxx ¹⁾		
24,500		497.00	24500		
24,501 - 24,999		537.00	xxxxx ¹⁾		
25,000		505.00	25000	956.00	25000
25,001 - 25,499		537.00	xxxxx ¹⁾		
25,500		505.00	25500		
25,501 - 25,999		537.00	xxxxx ¹⁾		
26,000		517.00	26000	989.00	26000
26,001 - 26,499		537.00	xxxxx ¹⁾		
26,500		517.00	26500		
26,501 - 26,999		537.00	xxxxx ¹⁾		
27,000		545.00	27000	1,024.00	27000
27,001 - 27,499		537.00	xxxxx ¹⁾		
27,500		545.00	27500		
27,501 - 27,999		537.00	xxxxx ¹⁾		
28,000		576.00	28000		
28,001 - 28,499		537.00	xxxxx ¹⁾		
28,500		576.00	28500		
28,501 - 28,999		537.00	xxxxx ¹⁾		
29,000		603.00	29000		
29,001 - 29,499		537.00	xxxxx ¹⁾		
29,500		603.00	29500		
29,501 - 29,999		537.00	xxxxx ¹⁾		
30,000		618.00	30000		
30,001 - 30,499		537.00	xxxxx ¹⁾		
30,500		618.00	30500		
30,501 - 30,999		537.00	xxxxx ¹⁾		
31,000		640.00	31000		
31,001 - 31,499		537.00	xxxxx ¹⁾		
31,500		640.00	31500		
31,501 - 31,999		537.00	xxxxx ¹⁾		
32,000		660.00	32000		

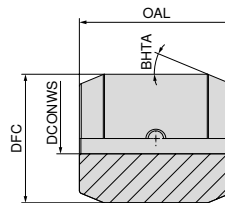
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



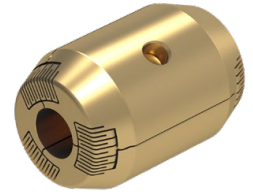
For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 041 06789).

Flexible guide bushes

Designation	DFC mm	OAL mm	BHTA °
GBE 28	28	40	22.5



Guide bush GBE 28



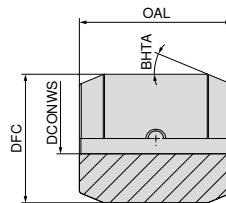
●
GBE 28

DCONWS mm	DCONWS inch		£ Y8/YF	
3.000			777.00	03000
4.000			777.00	04000
5.000			777.00	05000
6.000			777.00	06000
6.350	1/4		777.00	06350
7.000			777.00	07000
8.000			777.00	08000
9.000			777.00	09000
9.525	3/8		777.00	09525
10.000			654.00	10000
11.000			654.00	11000
12.000			654.00	12000
12.700	1/2		654.00	12700
13.000			654.00	13000
14.000			654.00	14000
15.000			654.00	15000
16.000			654.00	16000
17.000			654.00	17000
18.000			654.00	18000
19.000			654.00	19000
19.050	3/4		654.00	19050
20.000			654.00	20000

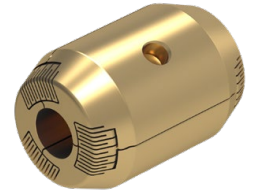
81 059 ...

Flexible guide bushes

Designation	DFC mm	OAL mm	BHTA °
GBE 42	42	50	22.5



Guide bush GBE 42



●
GBE 42

DCONWS mm	DCONWS inch	£ Y8/YF	
3.000		1,087.00	03000
4.000		1,087.00	04000
5.000		1,087.00	05000
6.000		1,087.00	06000
6.350	1/4	1,087.00	06350
7.000		1,087.00	07000
8.000		1,087.00	08000
9.000		1,087.00	09000
10.000		1,087.00	10000
11.000		963.00	11000
12.000		963.00	12000
12.700	1/2	963.00	12700
13.000		963.00	13000
14.000		963.00	14000
15.000		963.00	15000
15.875	5/8	963.00	15880
16.000		963.00	16000
17.000		963.00	17000
18.000		963.00	18000
19.000		963.00	19000
19.050	3/4	963.00	19050
20.000		963.00	20000
21.000		963.00	21000
22.000		963.00	22000
22.225	7/8	963.00	22225
23.000		963.00	23000
24.000		963.00	24000
25.000		963.00	25000
25.400	1/1	963.00	25400
26.000		963.00	26000
27.000		963.00	27000
28.000		963.00	28000
29.000		963.00	29000
30.000		963.00	30000
31.000		963.00	31000
32.000		963.00	32000

81 060 ...

Clamping sleeves overview

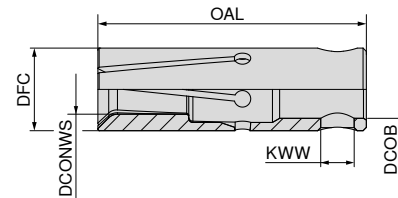
Norm	External diameter range in mm	Clamping diameter range	Profile	Version	Page No.
S 10 / 210 E	10	Ø 3,0 - 10,0			34
		SW 3,0 - 8,0			34
S 12 / 212 E	12	Ø 3,0 - 11,0			35
		SW 3,0 - 9,0			35
S 15 / 203 E	15	Ø 3,0 - 14,0			36
		SW 3,0 - 12,0			36
S 16	16	Ø 3,0 - 15,0			37
		SW 3,0 - 13,0			37
S 18 / 218 E	18	Ø 3,0 - 16,0			38
		SW 5,0 - 14,0			38
S 20 / 225 E	20	Ø 4,0 - 19,0			39
		SW 5,0 - 16,0			39
S 25 / 222 E	25	Ø 4,0 - 24,0			40
		SW 5,0 - 20,0			40
ST32 „Turbo“	32	Ø 5,0 - 32,0		Turbo	41
		SW 5,0 - 26,0			41



Other profile shapes and sizes and extended options available on request.

Clamping sleeves

Designation	Pusher Ø	DFC mm	KWW mm	DCOB _{H7} mm	OAL mm
S 10 / 210 E	D 10	10	4	7	40



Clamping sleeve S 10 / 210 E

▲ Also suitable for all INDEX multi-spindle machines



DCONWS mm	DCONWS inch	S 10 / 210 E 81 043 ...		S 10 / 210 E 81 044 ...	
		£ Y8/Y5		£ Y8/Y5	
3,000		82.00	03000	178.00	03000
3,001 - 3,499		88.00	xxxxx ¹⁾		
3,500		82.00	03500		
3,501 - 3,999		88.00	xxxxx ¹⁾		
4,000		56.00	04000	145.00	04000
4,001 - 4,499		88.00	xxxxx ¹⁾		
4,500		56.00	04500		
4,501 - 4,999		88.00	xxxxx ¹⁾		
5,000		56.00	05000	145.00	05000
5,001 - 5,499		88.00	xxxxx ¹⁾		
5,500		56.00	05500		
5,501 - 5,999		88.00	xxxxx ¹⁾		
6,000		56.00	06000	145.00	06000
6,001 - 6,349		88.00	xxxxx ¹⁾		
6,350	1/4	88.00	06350		
6,351 - 6,499		88.00	xxxxx ¹⁾		
6,500		56.00	06500		
6,501 - 6,999		88.00	xxxxx ¹⁾		
7,000		56.00	07000	145.00	07000
7,001 - 7,143		88.00	xxxxx ¹⁾		
7,144	9/32	88.00	07144		
7,145 - 7,499		88.00	xxxxx ¹⁾		
7,500		56.00	07500		
7,501 - 7,937		88.00	xxxxx ¹⁾		
7,938	5/16	88.00	07938		
7,939 - 7,999		88.00	xxxxx ¹⁾		
8,000		56.00	08000	145.00	08000
8,001 - 8,499		88.00	xxxxx ¹⁾		
8,500		56.00	08500		
8,501 - 8,999		88.00	xxxxx ¹⁾		
9,000		82.00	09000		
9,001 - 9,499		88.00	xxxxx ¹⁾		
9,500		82.00	09500		
9,501 - 9,999		88.00	xxxxx ¹⁾		
10,000		82.00	10000		

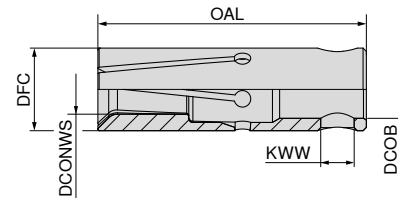
1) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 043 06789).

Clamping sleeves

Designation	Pusher Ø	DFC mm	KWW mm	DCOB _{H7} mm	OAL mm
S 12 / 212 E	D 12	12	4	8	40



Clamping sleeve S 12 / 212 E

▲ Also suitable for all INDEX multi-spindle machines



DCONWS mm	DCONWS inch	S 12 / 212 E 81 045 ...		S 12 / 212 E 81 046 ...	
		£ Y8/YS		£ Y8/YS	
3,000		86.00	03000	185.00	03000
3,001 - 3,499		90.00	xxxxx ¹⁾		
3,500		86.00	03500		
3,501 - 3,999		90.00	xxxxx ¹⁾		
4,000		59.00	04000	148.00	04000
4,001 - 4,499		90.00	xxxxx ¹⁾		
4,500		59.00	04500		
4,501 - 4,762		90.00	xxxxx ¹⁾		
4,763	3/16	90.00	04763		
4,764 - 4,999		90.00	xxxxx ¹⁾		
5,000		59.00	05000	148.00	05000
5,001 - 5,499		90.00	xxxxx ¹⁾		
5,500		59.00	05500		
5,501 - 5,999		90.00	xxxxx ¹⁾		
6,000		59.00	06000	148.00	06000
6,001 - 6,349		90.00	xxxxx ¹⁾		
6,350	1/4	90.00	06350	194.00	06350
6,351 - 6,499		90.00	xxxxx ¹⁾		
6,500		59.00	06500		
6,501 - 6,999		90.00	xxxxx ¹⁾		
7,000		59.00	07000	148.00	07000
7,001 - 7,499		90.00	xxxxx ¹⁾		
7,500		59.00	07500		
7,501 - 7,937		90.00	xxxxx ¹⁾		
7,938	5/16	90.00	07938		
7,939 - 7,999		90.00	xxxxx ¹⁾		
8,000		59.00	08000	148.00	08000
8,001 - 8,499		90.00	xxxxx ¹⁾		
8,500		59.00	08500		
8,501 - 8,999		90.00	xxxxx ¹⁾		
9,000		59.00	09000	148.00	09000
9,001 - 9,499		90.00	xxxxx ¹⁾		
9,500		59.00	09500		
9,501 - 9,524		90.00	xxxxx ¹⁾		
9,525	3/8	90.00	09525		
9,526 - 9,999		90.00	xxxxx ¹⁾		
10,000		86.00	10000		
10,001 - 10,499		90.00	xxxxx ¹⁾		
10,500		86.00	10500		
10,501 - 10,999		90.00	xxxxx ¹⁾		
11,000		86.00	11000		

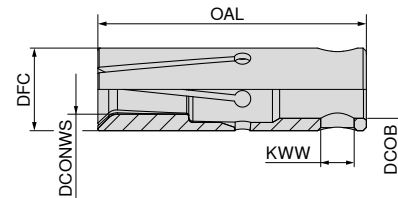
1) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 045 06789).

Clamping sleeves

Designation	Pusher Ø	DFC mm	KWW mm	DCOB _{H7} mm	OAL mm
S 15 / 203 E	D 15	15	6	11	40



Clamping sleeve S 15 / 203 E

▲ Also suitable for all INDEX multi-spindle machines



S 15 / 203 E

S 15 / 203 E

DCONWS mm	DCONWS inch	£ Y8/YS		£ Y8/YS	
3,000		92.00	03000	271.00	03000
3,001 - 3,174		122.00	xxxxx ¹⁾		
3,175	1/8	122.00	03175		
3,176 - 3,499		122.00	xxxxx ¹⁾		
3,500		92.00	03500		
3,501 - 3,999		122.00	xxxxx ¹⁾		
4,000		64.00	04000	154.00	04000
4,001 - 4,499		122.00	xxxxx ¹⁾		
4,500		64.00	04500		
4,501 - 4,999		122.00	xxxxx ¹⁾		
5,000		64.00	05000	154.00	05000
5,001 - 5,499		122.00	xxxxx ¹⁾		
5,500		64.00	05500		
5,501 - 5,999		122.00	xxxxx ¹⁾		
6,000		64.00	06000	154.00	06000
6,001 - 6,349		122.00	xxxxx ¹⁾		
6,350	1/4	95.00	06350	201.00	06350
6,351 - 6,499		95.00	xxxxx ¹⁾		
6,500		64.00	06500		
6,501 - 6,999		95.00	xxxxx ¹⁾		
7,000		64.00	07000	154.00	07000
7,001 - 7,499		95.00	xxxxx ¹⁾		
7,500		64.00	07500		
7,501 - 7,937		95.00	xxxxx ¹⁾		
7,938	5/16	95.00	07938	201.00	07938
7,939 - 7,999		95.00	xxxxx ¹⁾		
8,000		64.00	08000	154.00	08000
8,001 - 8,499		95.00	xxxxx ¹⁾		
8,500		64.00	08500		
8,501 - 8,999		95.00	xxxxx ¹⁾		
9,000		64.00	09000	154.00	09000
9,001 - 9,499		95.00	xxxxx ¹⁾		
9,500		64.00	09500		
9,501 - 9,524		95.00	xxxxx ¹⁾		
9,525	3/8	95.00	09525		
9,526 - 9,999		95.00	xxxxx ¹⁾		
10,000		64.00	10000	154.00	10000
10,001 - 10,499		95.00	xxxxx ¹⁾		
10,500		64.00	10500		
10,501 - 10,999		95.00	xxxxx ¹⁾		
11,000		64.00	11000	223.00	11000
11,001 - 11,112		95.00	xxxxx ¹⁾		
11,113	7/16	95.00	11113		
11,114 - 11,499		95.00	xxxxx ¹⁾		
11,500		64.00	11500		
11,501 - 11,999		95.00	xxxxx ¹⁾		
12,000		64.00	12000	223.00	12000
12,001 - 12,499		95.00	xxxxx ¹⁾		
12,500		64.00	12500		
12,501 - 12,699		95.00	xxxxx ¹⁾		

81 047 ...

81 048 ...

DCONWS mm	DCONWS inch	£ Y8/YS		£ Y8/YS	
12,700	1/2	95.00	12700		
12,701 - 12,999		95.00	xxxxx ¹⁾		
13,000		64.00	13000		
13,001 - 13,499		95.00	xxxxx ¹⁾		
13,500		93.00	13500		
13,501 - 13,999		95.00	xxxxx ¹⁾		
14,000		93.00	14000		

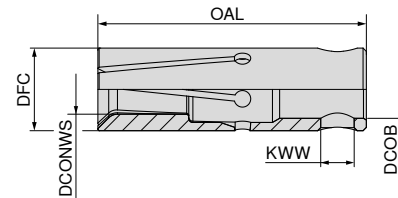
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 047 06789).

Clamping sleeves

Designation	Pusher Ø	DFC mm	KWW mm	DCOB _{H7} mm	OAL mm
S 16	D 16	16	6	11	40



Clamping sleeve S 16

▲ Also suitable for all INDEX multi-spindle machines



S 16

S 16

		81 049 ...		81 050 ...	
DCONWS mm	DCONWS inch	£ Y8/YS		£ Y8/YS	
3,000		92.00	03000	271.00	03000
3,001 - 3,499		95.00	xxxxx ¹⁾		
3,500		92.00	03500		
3,501 - 3,999		95.00	xxxxx ¹⁾		
4,000		64.00	04000	154.00	04000
4,001 - 4,499		95.00	xxxxx ¹⁾		
4,500		64.00	04500		
4,501 - 4,999		95.00	xxxxx ¹⁾		
5,000		64.00	05000	154.00	05000
5,001 - 5,499		95.00	xxxxx ¹⁾		
5,500		64.00	05500		
5,501 - 5,999		95.00	xxxxx ¹⁾		
6,000		64.00	06000	154.00	06000
6,001 - 6,349		95.00	xxxxx ¹⁾		
6,350	1/4	95.00	06350		
6,351 - 6,499		95.00	xxxxx ¹⁾		
6,500		92.00	06500		
6,501 - 6,999		95.00	xxxxx ¹⁾		
7,000		64.00	07000	154.00	07000
7,001 - 7,499		95.00	xxxxx ¹⁾		
7,500		64.00	07500		
7,501 - 7,999		95.00	xxxxx ¹⁾		
8,000		64.00	08000	154.00	08000
8,001 - 8,499		95.00	xxxxx ¹⁾		
8,500		64.00	08500		
8,501 - 8,999		95.00	xxxxx ¹⁾		
9,000		64.00	09000	154.00	09000
9,001 - 9,499		95.00	xxxxx ¹⁾		
9,500		64.00	09500		
9,501 - 9,524		95.00	xxxxx ¹⁾		
9,525	3/8	95.00	09525		
9,526 - 9,999		95.00	xxxxx ¹⁾		
10,000		64.00	10000	154.00	10000
10,001 - 10,499		95.00	xxxxx ¹⁾		
10,500		64.00	10500		
10,501 - 10,999		95.00	xxxxx ¹⁾		
11,000		64.00	11000	154.00	11000
11,001 - 11,112		95.00	xxxxx ¹⁾		
11,113	7/16	95.00	11113		
11,114 - 11,499		95.00	xxxxx ¹⁾		
11,500		64.00	11500		
11,501 - 11,999		95.00	xxxxx ¹⁾		
12,000		64.00	12000	223.00	12000
12,001 - 12,499		95.00	xxxxx ¹⁾		
12,500		64.00	12500		
12,501 - 12,699		95.00	xxxxx ¹⁾		
12,700	1/2	95.00	12700		
12,701 - 12,999		95.00	xxxxx ¹⁾		
13,000		64.00	13000	223.00	13000
13,001 - 13,499		95.00	xxxxx ¹⁾		

81 049 ...

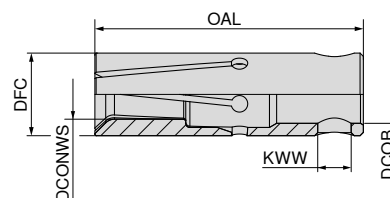
81 050 ...

DCONWS mm	DCONWS inch	£ Y8/YS	
13,500		93.00	13500
13,501 - 13,999		95.00	xxxxx ¹⁾
14,000		93.00	14000
14,001 - 14,287		95.00	xxxxx ¹⁾
14,288	9/16	123.00	14288
14,289 - 14,499		123.00	xxxxx ¹⁾
14,500		93.00	14500
14,501 - 14,999		123.00	xxxxx ¹⁾
15,000		93.00	15000

1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working daysFor xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 049 06789).

Clamping sleeves

Designation	Pusher Ø	DFC mm	KWW mm	DCOB _{H7} mm	OAL mm
S 18 / 218 E	D 18	18	6	11	40



Clamping sleeve S 18 / 218 E

▲ Also suitable for all INDEX multi-spindle machines



S 18 / 218 E

S 18 / 218 E

		81 051 ...		81 052 ...	
DCONWS mm	DCONWS inch	£ Y8/YS		£ Y8/YS	
3,000		100.00	03000		
3,001 - 3,174		129.00	xxxxx ¹⁾		
3,175	1/8	129.00	03175		
3,176 - 3,499		129.00	xxxxx ¹⁾		
3,500		100.00	03500		
3,501 - 3,999		129.00	xxxxx ¹⁾		
4,000		100.00	04000		
4,001 - 4,499		129.00	xxxxx ¹⁾		
4,500		100.00	04500		
4,501 - 4,762		129.00	xxxxx ¹⁾		
4,763	3/16	129.00	04763		
4,764 - 4,999		129.00	xxxxx ¹⁾		
5,000		70.00	05000	162.00	05000
5,001 - 5,499		129.00	xxxxx ¹⁾		
5,500		70.00	05500		
5,501 - 5,999		129.00	xxxxx ¹⁾		
6,000		70.00	06000	162.00	06000
6,001 - 6,499		129.00	xxxxx ¹⁾		
6,500		70.00	06500		
6,501 - 6,999		129.00	xxxxx ¹⁾		
7,000		70.00	07000	162.00	07000
7,001 - 7,499		129.00	xxxxx ¹⁾		
7,500		70.00	07500		
7,501 - 7,937		129.00	xxxxx ¹⁾		
7,938	5/16	101.00	07938		
7,939 - 7,999		101.00	xxxxx ¹⁾		
8,000		70.00	08000	162.00	08000
8,001 - 8,499		101.00	xxxxx ¹⁾		
8,500		70.00	08500		
8,501 - 8,999		101.00	xxxxx ¹⁾		
9,000		70.00	09000	162.00	09000
9,001 - 9,499		101.00	xxxxx ¹⁾		
9,500		70.00	09500		
9,501 - 9,524		101.00	xxxxx ¹⁾		
9,525	3/8	101.00	09525		
9,526 - 9,999		101.00	xxxxx ¹⁾		
10,000		70.00	10000	162.00	10000
10,001 - 10,499		101.00	xxxxx ¹⁾		
10,500		70.00	10500		
10,501 - 10,999		101.00	xxxxx ¹⁾		
11,000		70.00	11000	231.00	11000
11,001 - 11,112		101.00	xxxxx ¹⁾		
11,113	7/16	101.00	11113		
11,114 - 11,499		101.00	xxxxx ¹⁾		
11,500		70.00	11500		
11,501 - 11,999		101.00	xxxxx ¹⁾		
12,000		70.00	12000	231.00	12000
12,001 - 12,499		101.00	xxxxx ¹⁾		
12,500		70.00	12500		
12,501 - 12,699		101.00	xxxxx ¹⁾		
12,700	1/2	101.00	12700	271.00	12700
12,701 - 12,999		101.00	xxxxx ¹⁾		
13,000		70.00	13000	231.00	13000
13,001 - 13,499		101.00	xxxxx ¹⁾		
13,500		70.00	13500		

		81 051 ...		81 052 ...	
DCONWS mm	DCONWS inch	£ Y8/YS		£ Y8/YS	
13,501 - 13,999		101.00	xxxxx ¹⁾		
14,000		70.00	14000	231.00	14000
14,001 - 14,287		101.00	xxxxx ¹⁾		
14,288	9/16	101.00	14288		
14,289 - 14,499		101.00	xxxxx ¹⁾		
14,500		70.00	14500		
14,501 - 14,999		101.00	xxxxx ¹⁾		
15,000		70.00	15000		
15,001 - 15,499		101.00	xxxxx ¹⁾		
15,500		70.00	15500		
15,501 - 15,874		101.00	xxxxx ¹⁾		
15,875	5/8	101.00	15875		
15,876 - 15,999		101.00	xxxxx ¹⁾		
16,000		70.00	16000		

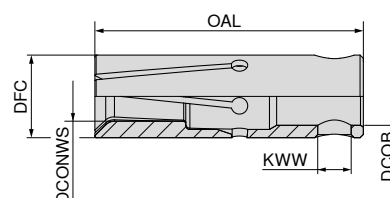
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 051 06789).

Clamping sleeves

Designation	Pusher Ø	DFC mm	KWW mm	DCOB _{H7} mm	OAL mm
S 20 / 225 E	D 20	20	8	14	65



Clamping sleeve S 20 / 225 E

▲ Also suitable for all INDEX multi-spindle machines



S 20 / 225 E

S 20 / 225 E

DCONWS mm	DCONWS inch	81 053 ... £ Y8/YS	81 054 ... £ Y8/YS
4,000		100.00 04000	
4,001 - 4,499		129.00 xxxxx ¹⁾	
4,500		100.00 04500	
4,501 - 4,762		129.00 xxxxx ¹⁾	
4,763	3/16	129.00 04763	
4,764 - 4,999		129.00 xxxxx ¹⁾	
5,000		100.00 05000	167.00 05000
5,001 - 5,499		129.00 xxxxx ¹⁾	
5,500		100.00 05500	
5,501 - 5,999		129.00 xxxxx ¹⁾	
6,000		74.00 06000	167.00 06000
6,001 - 6,349		129.00 xxxxx ¹⁾	
6,350	1/4	105.00 06350	245.00 06350
6,351 - 6,499		105.00 xxxxx ¹⁾	
6,500		74.00 06500	
6,501 - 6,999		105.00 xxxxx ¹⁾	
7,000		74.00 07000	167.00 07000
7,001 - 7,499		105.00 xxxxx ¹⁾	
7,500		74.00 07500	
7,501 - 7,937		105.00 xxxxx ¹⁾	
7,938	5/16	105.00 07938	
7,939 - 7,999		105.00 xxxxx ¹⁾	
8,000		74.00 08000	167.00 08000
8,001 - 8,499		105.00 xxxxx ¹⁾	
8,500		74.00 08500	
8,501 - 8,999		105.00 xxxxx ¹⁾	
9,000		74.00 09000	167.00 09000
9,001 - 9,499		105.00 xxxxx ¹⁾	
9,500		74.00 09500	
9,501 - 9,524		105.00 xxxxx ¹⁾	
9,525	3/8	105.00 09525	
9,526 - 9,999		105.00 xxxxx ¹⁾	
10,000		74.00 10000	167.00 10000
10,001 - 10,499		105.00 xxxxx ¹⁾	
10,500		74.00 10500	
10,501 - 10,999		105.00 xxxxx ¹⁾	
11,000		74.00 11000	235.00 11000
11,001 - 11,112		105.00 xxxxx ¹⁾	
11,113	7/16	105.00 11113	
11,114 - 11,499		105.00 xxxxx ¹⁾	
11,500		74.00 11500	
11,501 - 11,999		105.00 xxxxx ¹⁾	
12,000		74.00 12000	235.00 12000
12,001 - 12,499		105.00 xxxxx ¹⁾	
12,500		74.00 12500	
12,501 - 12,699		105.00 xxxxx ¹⁾	
12,700	1/2	105.00 12700	277.00 12700
12,701 - 12,999		105.00 xxxxx ¹⁾	
13,000		74.00 13000	235.00 13000
13,001 - 13,499		105.00 xxxxx ¹⁾	
13,500		74.00 13500	
13,501 - 13,999		105.00 xxxxx ¹⁾	
14,000		74.00 14000	235.00 14000
14,001 - 14,499		105.00 xxxxx ¹⁾	
14,500		74.00 14500	

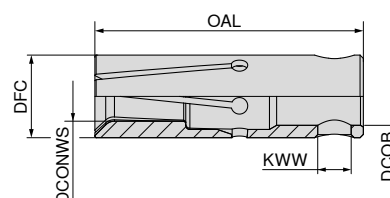
81 053 ... 81 054 ...

DCONWS mm	DCONWS inch	£ Y8/YS	£ Y8/YS
14,501 - 14,999		105.00 xxxxx ¹⁾	
15,000		74.00 15000	235.00 15000
15,001 - 15,499		105.00 xxxxx ¹⁾	
15,500		74.00 15500	
15,501 - 15,999		105.00 xxxxx ¹⁾	
16,000		74.00 16000	235.00 16000
16,001 - 16,499		105.00 xxxxx ¹⁾	
16,500		74.00 16500	
16,501 - 16,999		105.00 xxxxx ¹⁾	
17,000		74.00 17000	
17,001 - 17,499		105.00 xxxxx ¹⁾	
17,500		74.00 17500	
17,501 - 17,999		105.00 xxxxx ¹⁾	
18,000		74.00 18000	
18,001 - 18,499		105.00 xxxxx ¹⁾	
18,500		100.00 18500	
18,501 - 18,999		105.00 xxxxx ¹⁾	
19,000		100.00 19000	

1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working daysFor xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 053 06789).

Clamping sleeves

Designation	Pusher Ø	DFC mm	KWW mm	DCOB _{H7} mm	OAL mm
S 25 / 222 E	D 25	25	8	20	65



Clamping sleeve S 25 / 222 E

▲ Also suitable for all INDEX multi-spindle machines



S 25 / 222 E

S 25 / 222 E

DCONWS mm	DCONWS inch	£ Y8/YS	81 056 ...	£ Y8/YS	81 055 ...
4,000				102.00	04000
4,001 - 4,499				107.00	xxxxx ¹⁾
4,500				102.00	04500
4,501 - 4,999				107.00	xxxxx ¹⁾
5,000		201.00	05000	102.00	05000
5,001 - 5,499				107.00	xxxxx ¹⁾
5,500				102.00	05500
5,501 - 5,999				107.00	xxxxx ¹⁾
6,000		170.00	06000	77.00	06000
6,001 - 6,349				107.00	xxxxx ¹⁾
6,350	1/4	209.00	06350	107.00	06350
6,351 - 6,499				107.00	xxxxx ¹⁾
6,500				77.00	06500
6,501 - 6,999				107.00	xxxxx ¹⁾
7,000		170.00	07000	77.00	07000
7,001 - 7,499				107.00	xxxxx ¹⁾
7,500				77.00	07500
7,501 - 7,999				107.00	xxxxx ¹⁾
8,000		170.00	08000	77.00	08000
8,001 - 8,499				107.00	xxxxx ¹⁾
8,500				77.00	08500
8,501 - 8,999				107.00	xxxxx ¹⁾
9,000		170.00	09000	77.00	09000
9,001 - 9,499				107.00	xxxxx ¹⁾
9,500				77.00	09500
9,501 - 9,999				107.00	xxxxx ¹⁾
10,000		170.00	10000	77.00	10000
10,001 - 10,499				107.00	xxxxx ¹⁾
10,500				77.00	10500
10,501 - 10,999				107.00	xxxxx ¹⁾
11,000		237.00	11000	77.00	11000
11,001 - 11,499				107.00	xxxxx ¹⁾
11,500				77.00	11500
11,501 - 11,999				107.00	xxxxx ¹⁾
12,000		237.00	12000	77.00	12000
12,001 - 12,499				107.00	xxxxx ¹⁾
12,500				77.00	12500
12,501 - 12,699				107.00	xxxxx ¹⁾
12,700	1/2			107.00	12700
12,701 - 12,999				107.00	xxxxx ¹⁾
13,000		237.00	13000	77.00	13000
13,001 - 13,499				107.00	xxxxx ¹⁾
13,500				77.00	13500
13,501 - 13,999				107.00	xxxxx ¹⁾
14,000		237.00	14000	77.00	14000
14,001 - 14,499				107.00	xxxxx ¹⁾
14,500				77.00	14500
14,501 - 14,999				107.00	xxxxx ¹⁾
15,000		237.00	15000	77.00	15000
15,001 - 15,499				107.00	xxxxx ¹⁾
15,500				77.00	15500
15,501 - 15,999				107.00	xxxxx ¹⁾
16,000		237.00	16000	77.00	16000
16,001 - 16,499				107.00	xxxxx ¹⁾
16,500				77.00	16500

DCONWS mm	DCONWS inch	£ Y8/YS	81 056 ...	£ Y8/YS	81 055 ...
16,501 - 16,999				107.00	xxxxx ¹⁾
17,000		237.00	17000	77.00	17000
17,001 - 17,499				107.00	xxxxx ¹⁾
17,500				77.00	17500
17,501 - 17,999				107.00	xxxxx ¹⁾
18,000		237.00	18000	77.00	18000
18,001 - 18,499				107.00	xxxxx ¹⁾
18,500				77.00	18500
18,501 - 18,999				107.00	xxxxx ¹⁾
19,000		237.00	19000	77.00	19000
19,001 - 19,049				107.00	xxxxx ¹⁾
19,050	3/4			107.00	19050
19,051 - 19,499				107.00	xxxxx ¹⁾
19,500				77.00	19500
19,501 - 19,999				107.00	xxxxx ¹⁾
20,000		237.00	20000	77.00	20000
20,001 - 20,499				107.00	xxxxx ¹⁾
20,500				77.00	20500
20,501 - 20,999				107.00	xxxxx ¹⁾
21,000				77.00	21000
21,001 - 21,499				107.00	xxxxx ¹⁾
21,500				77.00	21500
21,501 - 21,999				107.00	xxxxx ¹⁾
22,000				77.00	22000
22,001 - 22,499				107.00	xxxxx ¹⁾
22,500				77.00	22500
22,501 - 22,999				107.00	xxxxx ¹⁾
23,000				77.00	23000
23,001 - 23,499				107.00	xxxxx ¹⁾
23,500				102.00	23500
23,501 - 23,999				107.00	xxxxx ¹⁾
24,000				102.00	24000

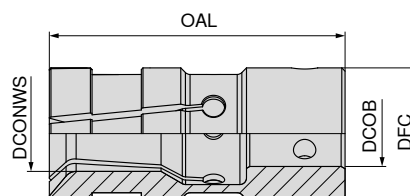
1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days



For xxxxx please specify the required diameter when ordering (e.g. Ø
6.789 – article number 81 056 06789).

Clamping sleeves

Designation	Pusher Ø	DFC mm	DCOB _{H7} mm	OAL mm
ST 32	D 32	32	20	90



Clamping sleeve ST 32 (turbo version)

▲ Also suitable for all INDEX multi-spindle machines



ST 32

ST 32

		81 057 ...		81 058 ...	
DCONWS mm	DCONWS inch	£ Y8/YS		£ Y8/YS	
5,000		177.00	05000		
5,001 - 5,499		233.00	xxxxx ¹⁾	323.00	05000
5,500		177.00	05500		
5,501 - 5,999		233.00	xxxxx ¹⁾		
6,000		177.00	06000	323.00	06000
6,001 - 6,349		233.00	xxxxx ¹⁾		
6,350	1/4	233.00	06350		
6,351 - 6,499		233.00	xxxxx ¹⁾		
6,500		177.00	06500		
6,501 - 6,999		233.00	xxxxx ¹⁾	323.00	07000
7,000		177.00	07000		
7,001 - 7,499		233.00	xxxxx ¹⁾		
7,500		177.00	07500		
7,501 - 7,999		233.00	xxxxx ¹⁾		
8,000		177.00	08000	323.00	08000
8,001 - 8,499		233.00	xxxxx ¹⁾		
8,500		177.00	08500		
8,501 - 8,999		233.00	xxxxx ¹⁾	231.00	09000
9,000		102.00	09000		
9,001 - 9,499		233.00	xxxxx ¹⁾		
9,500		102.00	09500		
9,501 - 9,524		233.00	xxxxx ¹⁾		
9,525	3/8	161.00	09525		
9,526 - 9,999		161.00	xxxxx ¹⁾	231.00	10000
10,000		102.00	10000		
10,001 - 10,499		161.00	xxxxx ¹⁾		
10,500		102.00	10500		
10,501 - 10,999		161.00	xxxxx ¹⁾	243.00	11000
11,000		102.00	11000		
11,001 - 11,499		161.00	xxxxx ¹⁾		
11,500		102.00	11500		
11,501 - 11,999		161.00	xxxxx ¹⁾		
12,000		102.00	12000	243.00	12000
12,001 - 12,499		161.00	xxxxx ¹⁾		
12,500		102.00	12500		
12,501 - 12,699		161.00	xxxxx ¹⁾		
12,700	1/2	161.00	12700		
12,701 - 12,999		161.00	xxxxx ¹⁾	243.00	13000
13,000		102.00	13000		
13,001 - 13,499		161.00	xxxxx ¹⁾		
13,500		102.00	13500		
13,501 - 13,999		161.00	xxxxx ¹⁾	243.00	14000
14,000		102.00	14000		
14,001 - 14,499		161.00	xxxxx ¹⁾		
14,500		102.00	14500		
14,501 - 14,999		161.00	xxxxx ¹⁾	243.00	15000
15,000		102.00	15000		
15,001 - 15,499		161.00	xxxxx ¹⁾		
15,500		102.00	15500		
15,501 - 15,874		161.00	xxxxx ¹⁾		
15,875	5/8	161.00	15875		
15,876 - 15,999		161.00	xxxxx ¹⁾	243.00	16000
16,000		102.00	16000		
16,001 - 16,499		161.00	xxxxx ¹⁾		
16,500		102.00	16500		
16,501 - 16,999		161.00	xxxxx ¹⁾	243.00	17000
17,000		102.00	17000		
17,001 - 17,462		161.00	xxxxx ¹⁾		
17,463	1 1/16	161.00	17463		
17,464 - 17,499		161.00	xxxxx ¹⁾		
17,500		102.00	17500		
17,501 - 17,999		161.00	xxxxx ¹⁾	243.00	18000
18,000		102.00	18000		
18,001 - 18,499		161.00	xxxxx ¹⁾		

		81 057 ...		81 058 ...	
DCONWS mm	DCONWS inch	£ Y8/YS		£ Y8/YS	
18,500		102.00	18500		
18,501 - 18,999		161.00	xxxxx ¹⁾		
19,000		102.00	19000	243.00	19000
19,001 - 19,049		161.00	xxxxx ¹⁾		
19,050	3/4	161.00	19050		
19,051 - 19,499		161.00	xxxxx ¹⁾		
19,500		102.00	19500		
19,501 - 19,999		161.00	xxxxx ¹⁾	243.00	20000
20,000		102.00	20000		
20,001 - 20,499		161.00	xxxxx ¹⁾		
20,500		102.00	20500		
20,501 - 20,999		161.00	xxxxx ¹⁾		
21,000		102.00	21000	280.00	21000
21,001 - 21,499		161.00	xxxxx ¹⁾		
21,500		102.00	21500		
21,501 - 21,999		161.00	xxxxx ¹⁾		
22,000		102.00	22000	280.00	22000
22,001 - 22,224		161.00	xxxxx ¹⁾		
22,225	7/8	161.00	22225		
22,226 - 22,499		161.00	xxxxx ¹⁾		
22,500		102.00	22500		
22,501 - 22,999		161.00	xxxxx ¹⁾	280.00	23000
23,000		102.00	23000		
23,001 - 23,499		161.00	xxxxx ¹⁾		
23,500		102.00	23500		
23,501 - 23,999		161.00	xxxxx ¹⁾	280.00	24000
24,000		102.00	24000		
24,001 - 24,499		161.00	xxxxx ¹⁾		
24,500		102.00	24500		
24,501 - 24,999		161.00	xxxxx ¹⁾	280.00	25000
25,000		102.00	25000		
25,001 - 25,399		161.00	xxxxx ¹⁾		
25,400	1/1	161.00	25400		
25,401 - 25,499		161.00	xxxxx ¹⁾		
25,500		102.00	25500		
25,501 - 25,999		161.00	xxxxx ¹⁾	280.00	26000
26,000		102.00	26000		
26,001 - 26,499		161.00	xxxxx ¹⁾		
26,500		102.00	26500		
26,501 - 26,999		161.00	xxxxx ¹⁾		
27,000		102.00	27000		
27,001 - 27,499		161.00	xxxxx ¹⁾		
27,500		102.00	27500		
27,501 - 27,999		161.00	xxxxx ¹⁾		
28,000		102.00	28000		
28,001 - 28,499		161.00	xxxxx ¹⁾		
28,500		177.00	28500		
28,501 - 28,574		161.00	xxxxx ¹⁾		
28,575	1 1/8	233.00	28575		
28,576 - 28,999		233.00	xxxxx ¹⁾		
29,000		177.00	29000		
29,001 - 29,499		233.00	xxxxx ¹⁾		
29,500		177.00	29500		
29,501 - 29,999		233.00	xxxxx ¹⁾		
30,000		177.00	30000		

1) Not available ex stock, articles are non-returnable and cannot be exchanged /
Delivery time 7 working days

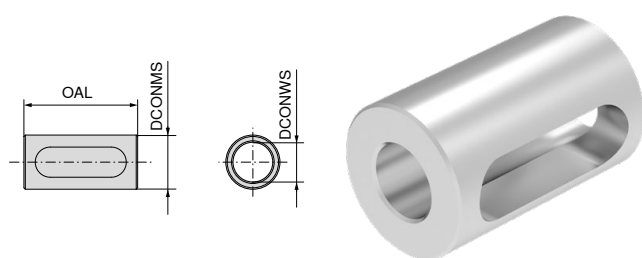


For xxxxx please specify the required diameter when ordering (e.g. Ø 6.789 – article number 81 057 06789).

Reduction sleeve

▲ for tools with cylindrical shank

▲ Radial run-out accuracy < 0.01 mm

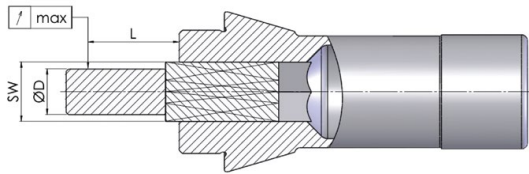


81 427 ...

DCONMS _{g6} mm	DCONMS _{g6} inch	DCONWS _{H7} mm	OAL mm	£ Y8	
15.875	5/8	12	30	229.00	15912
16.000		12	30	229.00	16012
19.050	3/4	8	40	229.00	19108
19.050	3/4	10	40	229.00	19110
19.050	3/4	12	40	229.00	19112
19.050	3/4	14	40	229.00	19114
19.050	3/4	16	40	229.00	19116
20.000		10	40	229.00	20010
20.000		12	40	229.00	20012
20.000		16	40	229.00	20016
22.000		12	40	229.00	22012
22.000		16	40	229.00	22016
25.000		12	40	229.00	25012
25.000		16	40	229.00	25016
25.000		20	40	229.00	25020
25.400	1	12	40	229.00	25412
25.400	1	16	40	222.00	25416
25.400	1	20	40	229.00	25420
33.000		20	40	244.00	33020
33.000		22	40	244.00	33022
33.000		25	40	244.00	33025

Technical Information

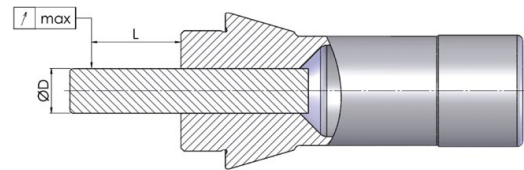
Runout accuracy



Run-out tolerances of collets with profiles					
Profile size		L mm	Standard norm	Norm	
from	up to			Standard	HP*
0,5	0,9	3	0,12	< 0,02	< 0,01
1	1,5	6	0,12	< 0,02	< 0,01
1,6	3	10	0,12	< 0,02	< 0,01
3,1	6	16	0,12	< 0,02	< 0,01
6,1	10	25	0,15	< 0,02	< 0,01
10,1	18	40	0,2	< 0,02	< 0,01
18,1	24	50	0,2	< 0,02	< 0,01
24,1	30	60	0,2	< 0,02	< 0,01
30,0		80	0,2	< 0,02	< 0,01

* Lower run-out tolerances with the HP (High Precision) option on request.

Our profile collets and guide bushes are micro-eroded with up to 7 slots. This ensures maximum quality with minimal run-out tolerances.



Run-out tolerances of round collets				
hole		L mm	Norm	
from	up to		Standard	HP*
0,5	0,9	3	< 0,01	< 0,008
1	1,5	6	< 0,01	< 0,008
1,6	3	10	< 0,015	< 0,008
3,1	6	16	< 0,015	< 0,008
6,1	10	25	< 0,015	< 0,008
10,1	18	40	< 0,02	< 0,01
18,1	24	50	< 0,02	< 0,01
24,1	30	60	< 0,02	< 0,01
30,0		80	< 0,03	< 0,015

* Lower run-out tolerances with the HP (High Precision) option on request.

Your wish is our command. That is why our tolerances are far tighter than standard tolerances. The service lives of both the machine components and the tools are extended.

Special shapes

Due to the variety of different applications, it may be necessary to individually adapt some products to the processes. To do this, we offer you maximum quality according to your specifications.

Get in touch using one of the options below and let us create your clamping device:

Technical Advice

Interested in our clamping devices?

Our Technical Sales Engineers would be happy to advise you. You can of course also talk to our in-house Technical Sales Engineers by calling our freefone number.

Enquiry Form

Should you wish to send us a request for specially adjusted solutions, you will find a detailed form in the download area on our homepage. Please fill it out carefully and send it via email or print it out and send via fax.

→ cuttingtools.ceratzit.com/gb/en/download.html

Please email the completed form to tsc@ceratzit.com.



Other profile shapes and sizes and extended options available on request.



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