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

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It couldn’t be easier

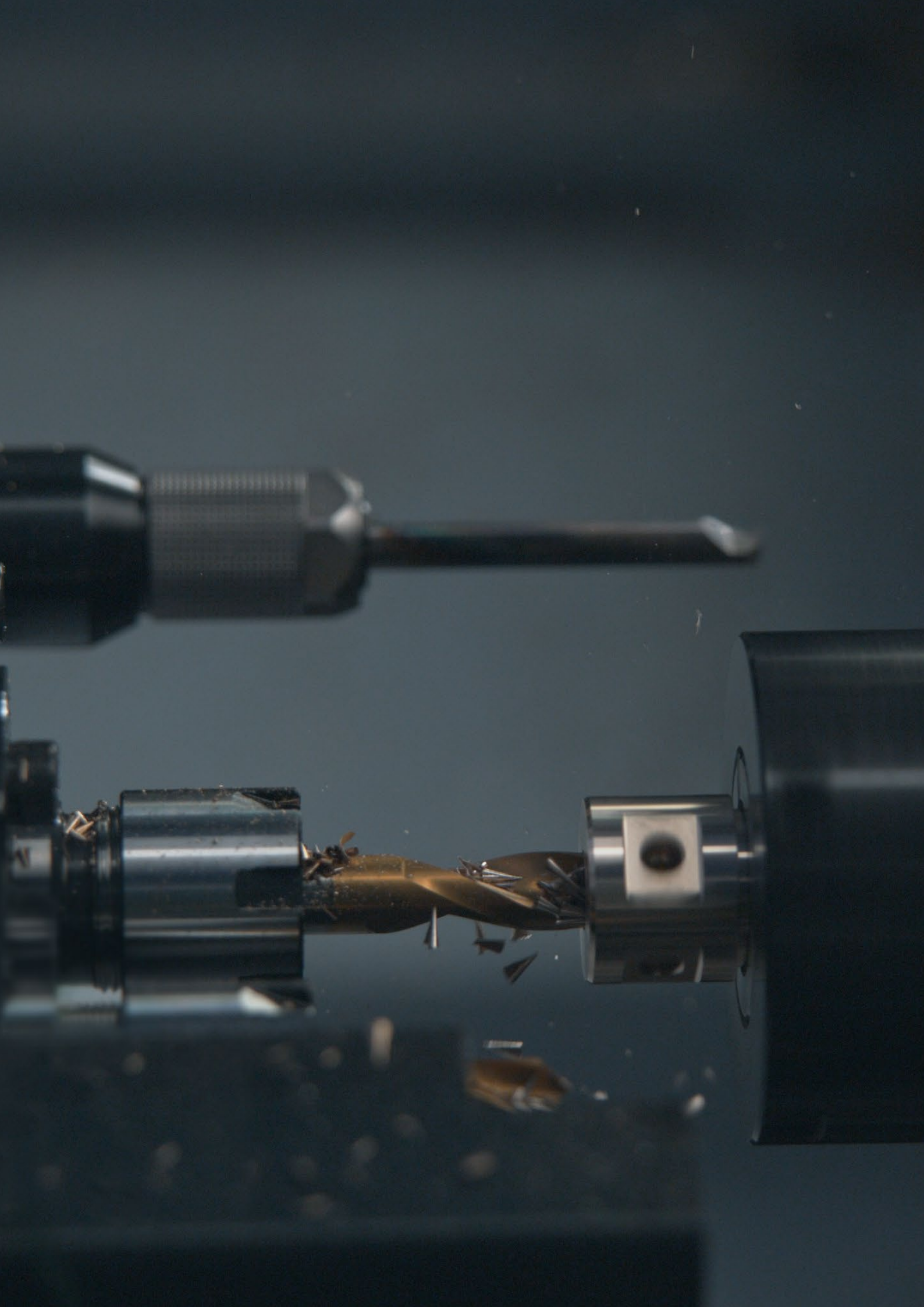
Ordering via the Online Shop

https://cuttingtools.ceratizit.com

On-site technical support

Your Local Technical Sales Engineer

Your customer number



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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

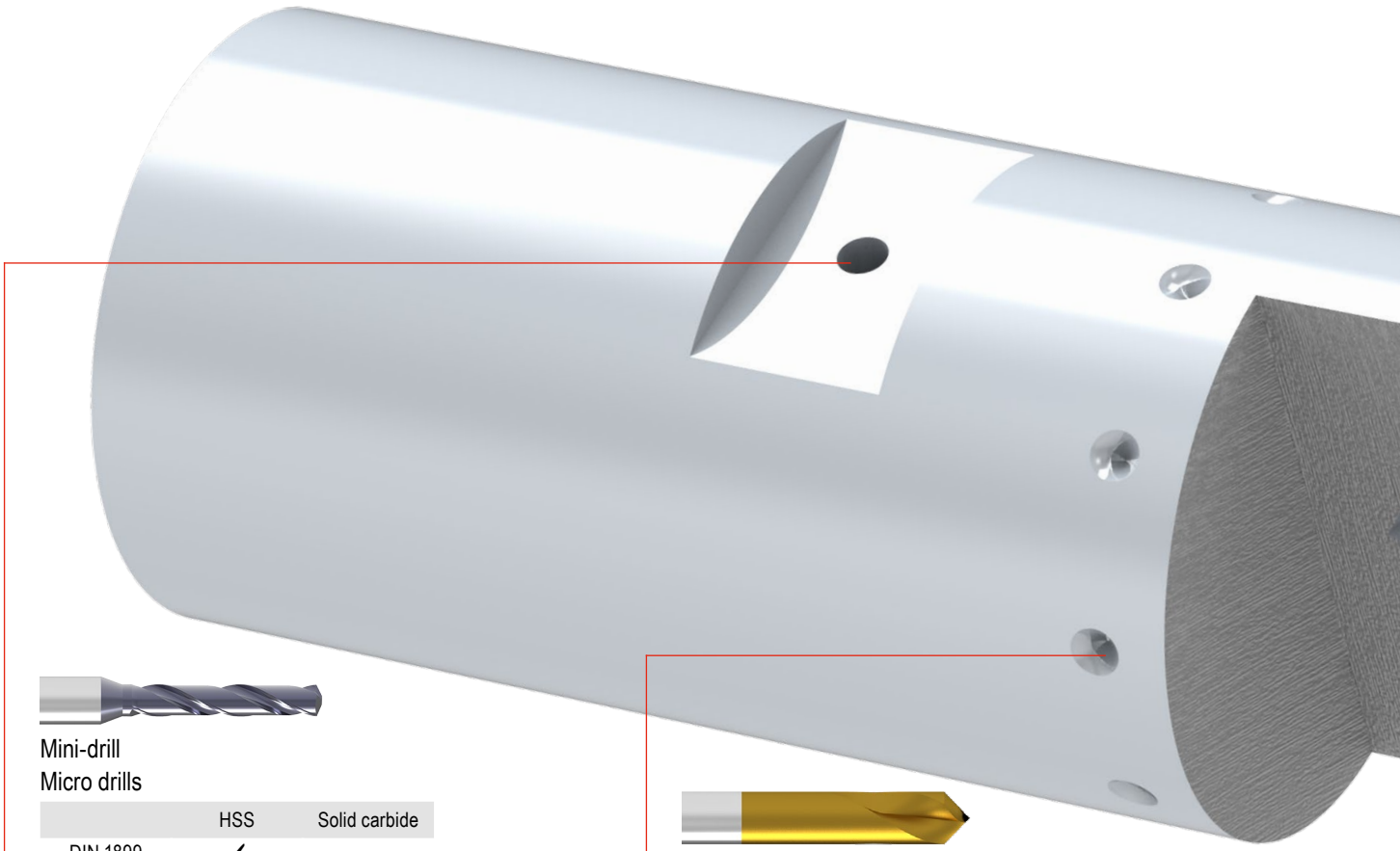
Solid Carbide Drilling

- 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)

Tool types

HFDS

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

Version


Int. coolant supply


self-centering


▲ Pilot hole necessary
▲ min. 2xD

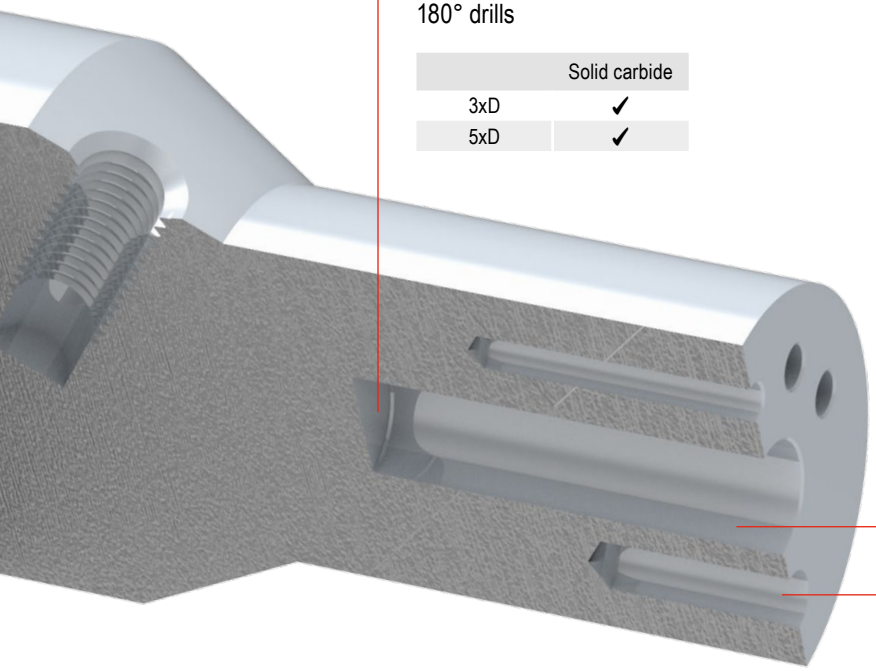
● = **Main Application**
○ = Extended application

Reamers

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

180° drills

	Solid carbide
3xD	✓
5xD	✓



Standard drills

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

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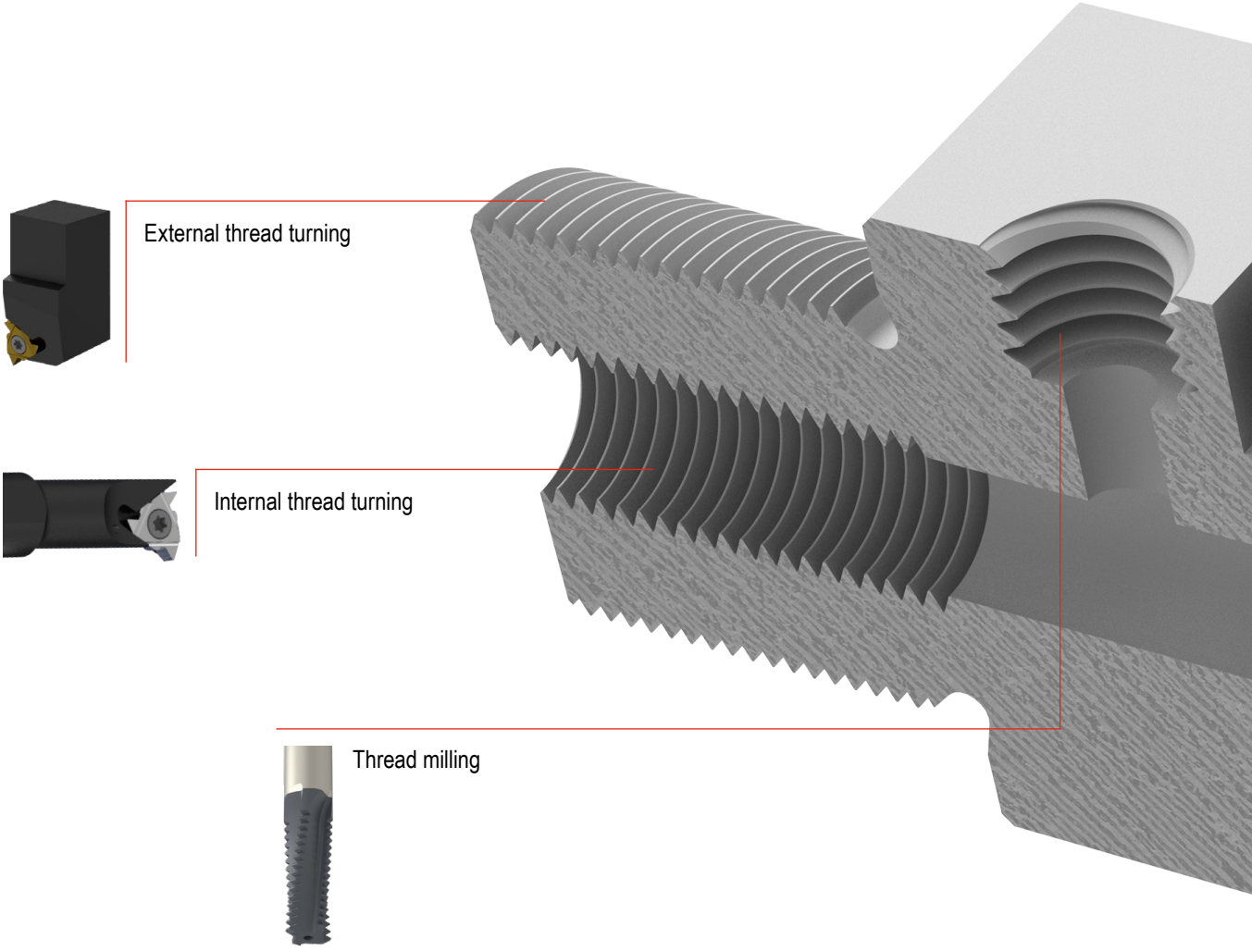
Toolfinder



Overview

Tapping

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

Thread milling

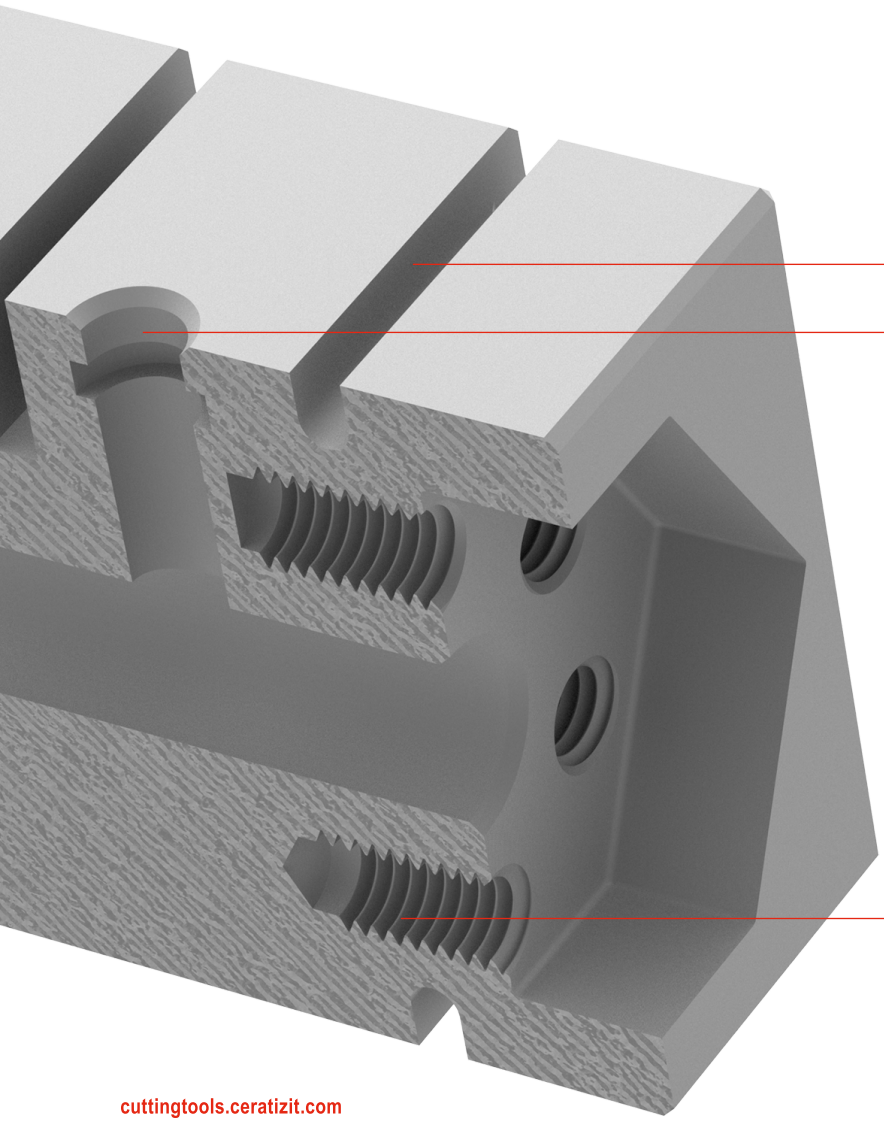
- Excellent surface qualities
- For through holes and blind holes
- Universal application
- Various diameters with the same pitch

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

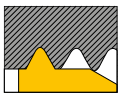


Circular and slot milling

Tapping

Thread turning tools overview

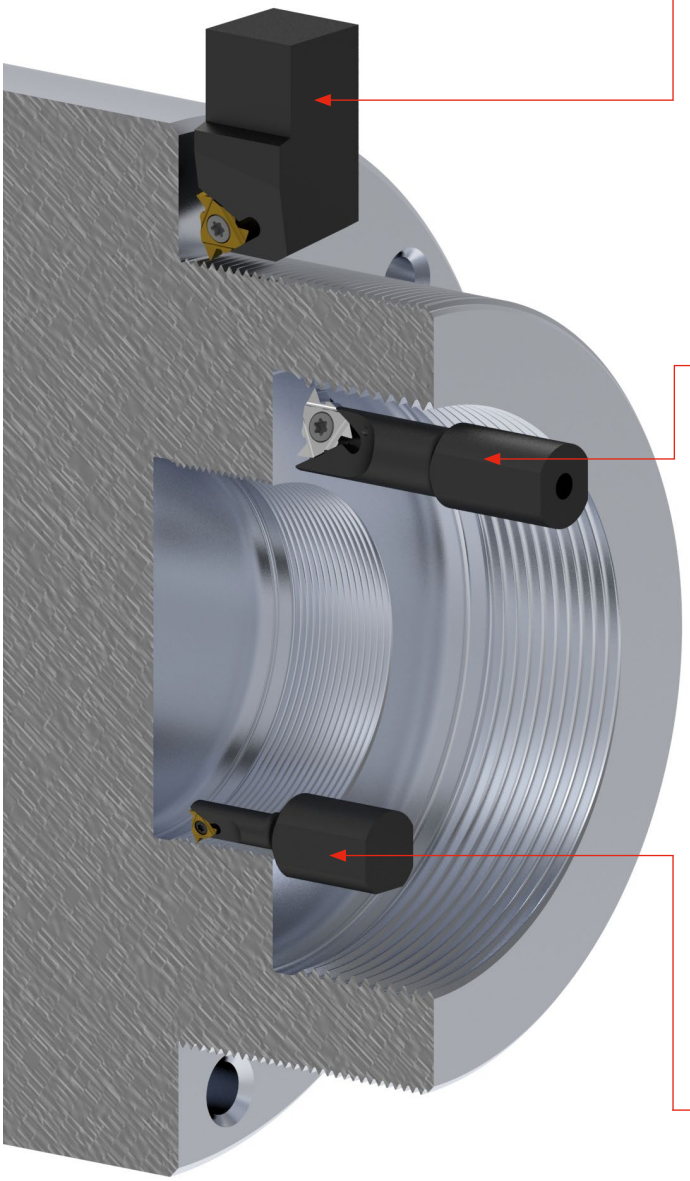
Full profile



- ▲ 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

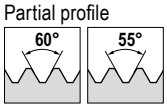


Standard external thread turning

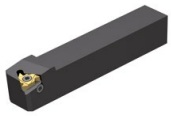
Full profile

M	MJ	BSW	UN	UNC	UNF	UNEF

Partial profile



suitable holder

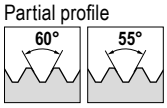


Standard internal thread turning

Full profile

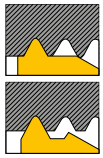
M	MJ	BSW	UN	UNC	UNF	UNEF

Partial profile



suitable holder

Full profile / partial profile
Mini size 06 / 08



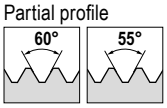
- ▲ Special inserts for low cutting speeds
- ▲ for diameters from 6mm to 8mm

Mini 06

Full profile

M	BSW

Partial profile

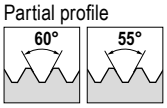


Mini 08

Full profile

M

Partial profile



suitable holder

Other thread turning tools

VertiClamp

→ **Chapter Turning – Turning tools**

UltraMini

M	MF	G	Tr
Full profile Partial profile	Full profile Partial profile	Partial profile	Partial profile

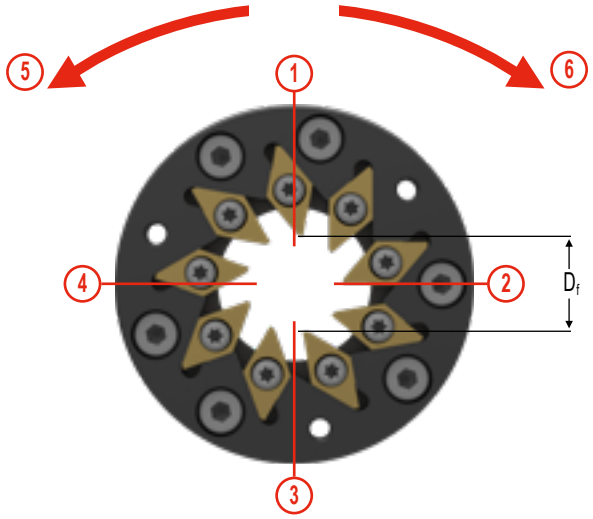
→ **Chapter Turning – Miniature turning tools**

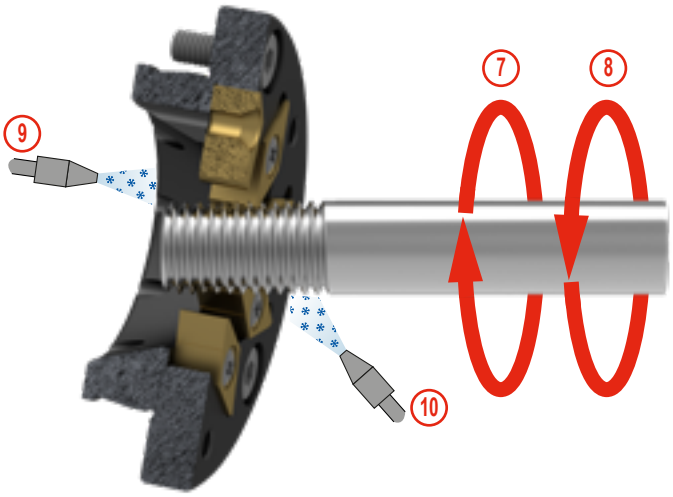
Form

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

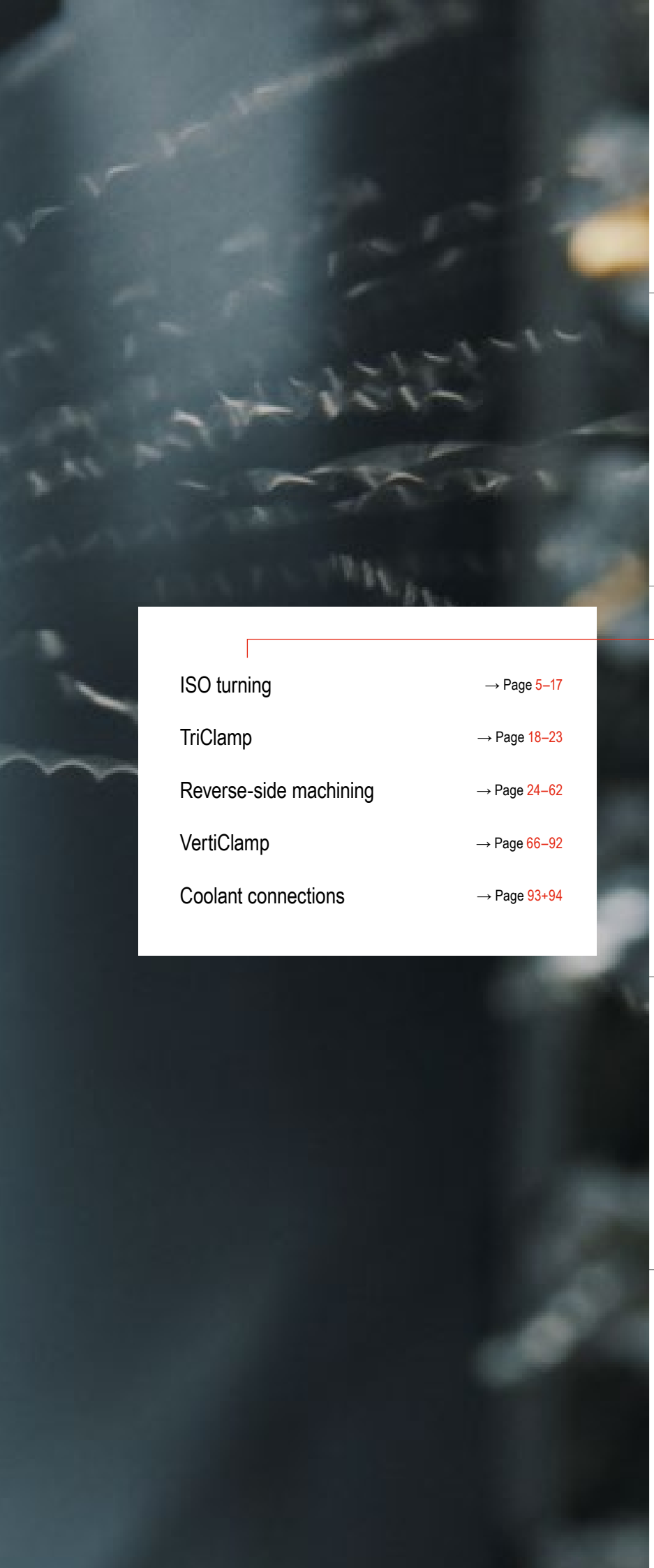
Tool direction of rotation		5 ◯ 6 ◯
Inner cutting circle	(D_f)	

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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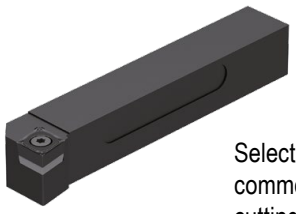
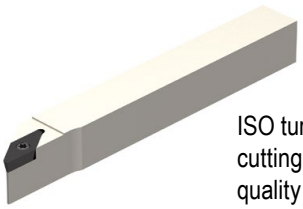
ISO turning



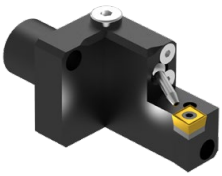
Selection of turning inserts with common ISO geometries in various cutting material grades.

TriClamp



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

Reverse-side machining

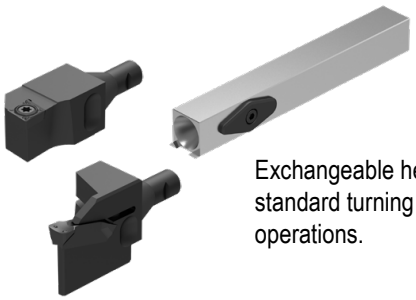


Flexible tool holder system for machining on the second spindle. There are modular, as well as monoblock tool holders available for turning, grooving, boring and threading on the back of the part.

VertiClamp

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

XheadClamp



Exchangeable head system for standard turning and grooving operations.

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

Symbol explanation

CTCP125-P *Carbide Grade*

F	Fine Machining
M	Medium Machining
R	Rough Machining

Smooth cut
Irregular cutting depth
Interrupted cut

Int. coolant supply

Direct Cooling — DirectCooling

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

Grade description

C T C P 1 2 5 -P (Example)

CT
CERATIZIT

-P
Performance

Degree of hardness

05	ISO 05
10	ISO 10
15	ISO 15
20	ISO 20
25	ISO 25
30	ISO 30
35	ISO 35
40	ISO 40

Application

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

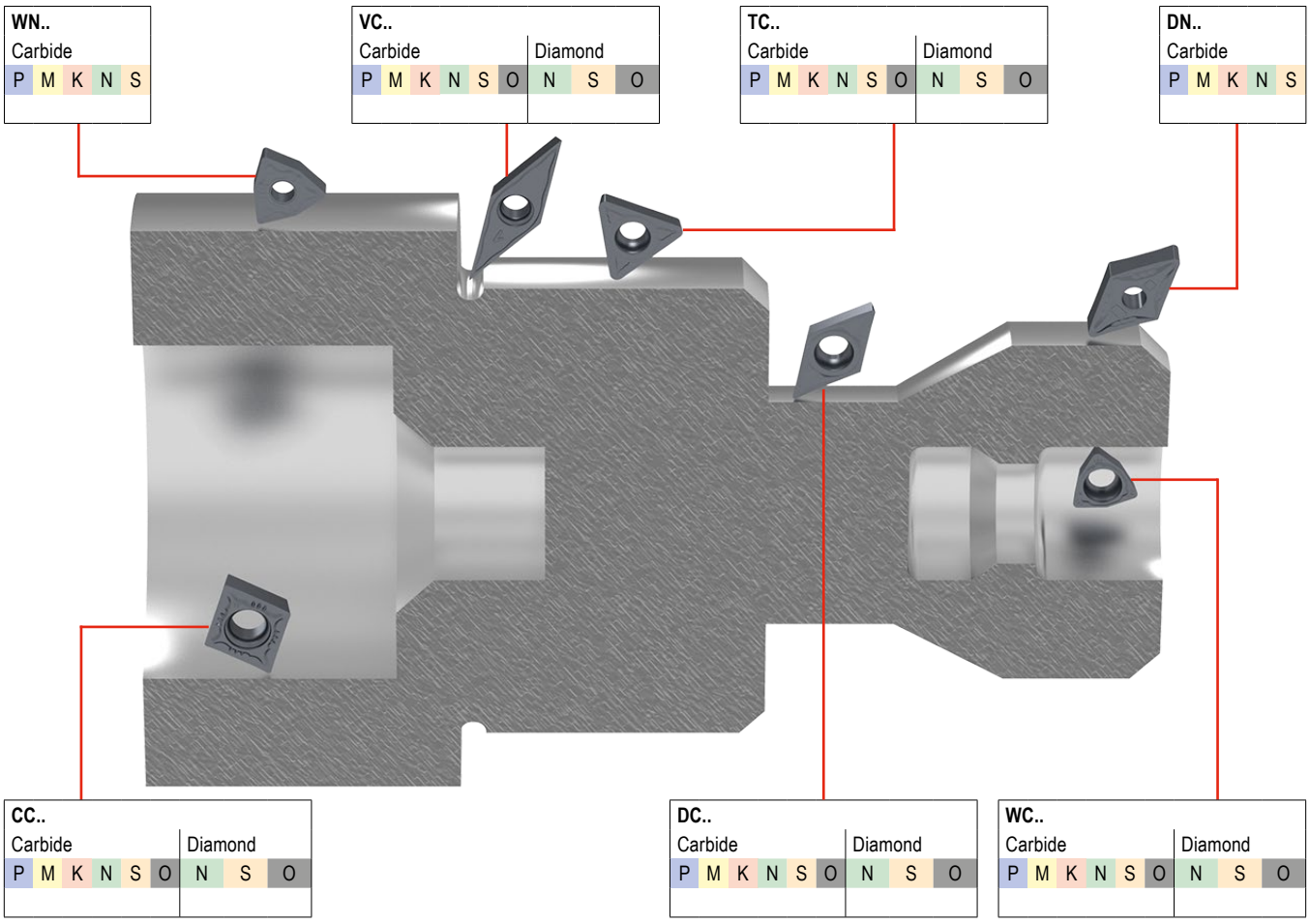
Main application – material

P	Steel
M	Stainless steel
K	Cast iron
N	Non-ferrous metals
S	Heat-resistant
H	Tempered steel
O	Non-metal materials
X	Universal application

Coating

W	Uncoated carbide	**S**	Mixed ceramic
C	CVD-coated carbide	**K**	Whisker ceramic
P	PVD-coated carbide	**I**	SiAlON
T	Cermet, uncoated	**D**	PCD
E	Cermet, coated	**B**	PcBN
N	Silicon nitride, uncoated	**H**	HSS sintered
M	Silicon nitride, coated		

Toolfinder – ISO turning – application



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

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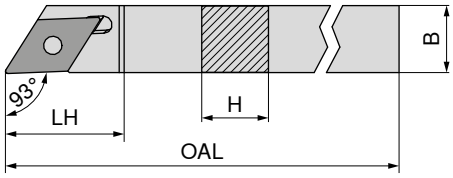
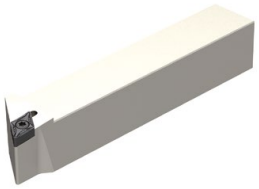
MaxiLock-S – SDJN 93° – Toolholder with screw clamping





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 ... EUR X0		Right-hand 70 698 ... EUR X0	
SDJN R/L 1012 H11	10	12	100	21,3	12	3,2	DNGU 1104	123,20	**010**	123,20	**010**
SDJN R/L 1212 H11	12	12	100	21,3	12	3,2	DNGU 1104	123,20	**012**	123,20	**012**
SDJN R/L 1616 K11	16	16	125	21,3	16	3,2	DNGU 1104	134,00	**016**	134,00	**016**
SDJN R/L 2020 K11	20	20	125	21,3	20	3,2	DNGU 1104	134,00	**020**	134,00	**020**
SDJN R/L 2525 M11	25	25	150	21,3	25	3,2	DNGU 1104	155,20	**025**	155,20	**025**

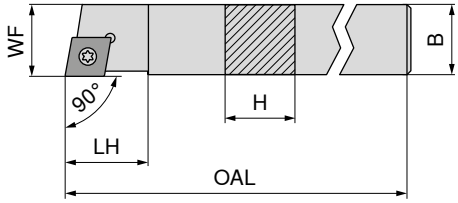
Clamping screw

Spare parts for Article no.	72 950 ... EUR 2A	
70 698 010 / 70 699 010	6,07	**007**
70 698 012 / 70 699 012	6,07	**007**
70 698 016 / 70 699 016	6,07	**007**
70 698 020 / 70 699 020	6,07	**007**
70 698 025 / 70 699 025	6,07	**007**

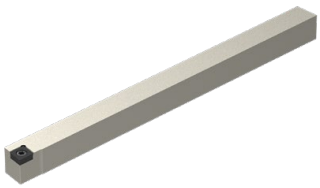
MaxiLock-S – SCAC 90° – Toolholder with screw clamping

▲ for sliding head lathes

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions



ISO designation	H	B	OAL	LH	WF	torque moment	Insert	Left-hand 70 633 ... EUR 2A/24		Right-hand 70 633 ... EUR 2A/24	
	mm	mm	mm	mm	mm	Nm					
SCAC R/L 0808 D06	8	8	60	9	8	1,2	CC.. 0602	75,87	**00800**	75,87	**00801**
SCAC R/L 1010 E06	10	10	70	9	10	1,2	CC.. 0602	80,94	**01000**	80,94	**01001**
SCAC R/L 0808 K06	8	8	125	9	8	1,2	CC.. 0602	80,94	**10800**	80,94	**10801**
SCAC R/L 1010 M06	10	10	150	9	10	1,2	CC.. 0602	80,94	**11000**	80,94	**11001**
SCAC R/L 1212 F09	12	12	80	13	12	3,2	CC.. 09T3	80,94	**01200**	80,94	**01201**
SCAC R/L 1616 H09	16	16	100	13	16	3,2	CC.. 09T3	101,20	**11600**	101,20	**11601**
SCAC R/L 1212 M09	12	12	150	13	12	3,2	CC.. 09T3	91,06	**11200**	91,06	**11201**

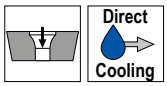
Key D

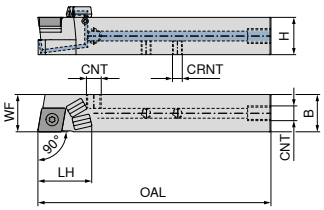
Clamping screw

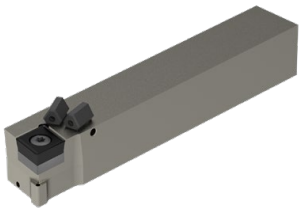
Spare parts for Article no.	80 950 ... EUR Y7		70 950 ... EUR 2A/28	
70 633 00801 / 70 633 00800	8,11	**039**	5,38	**857**
70 633 01001 / 70 633 01000	8,11	**039**	5,38	**857**
70 633 10801 / 70 633 10800	8,11	**039**	5,38	**857**
70 633 11001 / 70 633 11000	8,11	**039**	5,38	**857**
70 633 01201 / 70 633 01200	11,79	**120**	4,82	**87900**
70 633 11601 / 70 633 11600	11,79	**120**	4,82	**87900**
70 633 11201 / 70 633 11200	11,79	**120**	4,82	**87900**

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

▲ for sliding head lathes







Illustrations show right-hand versions

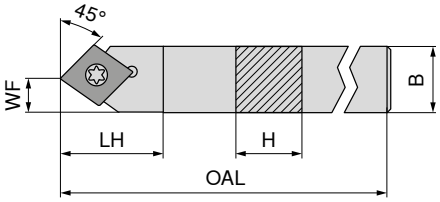
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	torque moment Nm	Insert	Left-hand 70 766 ... EUR 2A/24		Right-hand 70 766 ... EUR 2A/24	
SCAC R/L 1212 F09 DC	12	12	80	22	12	M6	M6	3,2	CC.. 09T3	171,30	**01201**	171,30	**01200**
SCAC R/L 1212 M09 DC	12	12	150	21	12	M6	M6	3,2	CC.. 09T3	183,00	**11201**	183,00	**11200**
SCAC R/L 1616 H09 DC	16	16	100	30	16	G1/8"	M6	3,2	CC.. 09T3	190,30	**01601**	190,30	**01600**

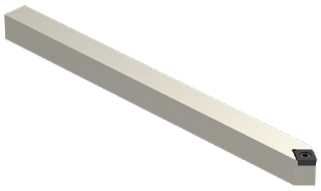
Spare parts for Article no.	Clamping screw 70 950 ... EUR 2A/28		Carbide type C 70 950 ... EUR 2A/28		Grubscrew 70 950 ... EUR 2A/28		Grubscrew 70 950 ... EUR 2A/28		Threaded sleeve 70 950 ... EUR 2A/28	
70 766 01200 / 70 766 01201	4,14	**859**					3,84	**86700**		
70 766 11200 / 70 766 11201	4,14	**859**					3,84	**86700**		
70 766 01600 / 70 766 01601	4,82	**87900**	12,46	**165**	2,19	**88000**	3,84	**86700**	5,98	**171**

Spare parts for Article no.	Sealing plugs DC 70 950 ... EUR 2A/28		Key D 80 950 ... EUR Y7		O-Ring 70 950 ... EUR 2A/28		Coolant nozzle DC 70 950 ... EUR 2A/28		Coolant screw plug 70 950 ... EUR 2A/28	
70 766 01200 / 70 766 01201			11,79	**120**						
70 766 11200 / 70 766 11201			11,79	**120**						
70 766 01600 / 70 766 01601	1,53	**87600**	11,79	**120**	1,36	**88100**	30,13	**87700**	4,59	**294**

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

Scope of supply:
Tool holder with Torx key





Left-hand

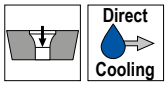
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	70 634 ... EUR 2A/24	
SCDC L 0808 K06	8	8	125	13	4	1,2	CC.. 0602	75,87	**00800**
SCDC L 1010 M06	10	10	150	13	5	1,2	CC.. 0602	80,94	**01000**
SCDC L 1212 M09	12	12	150	18	6	3,2	CC.. 09T3	91,06	**01200**
SCDC L 1414 M09	14	14	150	18	7	3,2	CC.. 09T3	91,06	**01400**

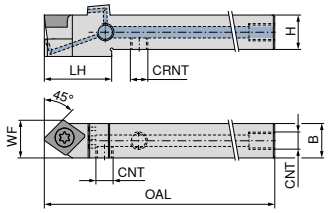
Key D

Clamping screw

Spare parts for Article no.	80 950 ... EUR Y7		70 950 ... EUR 2A/28	
70 634 00800	T08 - IP	8,11 **039**	M2,5x6 - 08IP	5,38 **857**
70 634 01000	T08 - IP	8,11 **039**	M2,5x6 - 08IP	5,38 **857**
70 634 01200	T15 - IP	11,79 **120**	M3,5x11	4,82 **87900**
70 634 01400	T15 - IP	11,79 **120**	M3,5x11	4,82 **87900**

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





Left-hand

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	torque moment Nm	Insert	70 767 ... EUR 2A/24	
SCDC L 0808 K06 DC	8	8	125	17	8,5	M5	M5	1,2	CC.. 0602	171,30	**00801**
SCDC L 1010 M06 DC	10	10	150	17	10,0	M6	M6	1,2	CC.. 0602	171,30	**01001**
SCDC L 1212 M09 DC	12	12	150	23	13,0	M6	M6	3,2	CC.. 09T3	183,00	**01201**
SCDC L 1414 M09 DC	14	14	150	25	14,0	G1/8"	M6	3,2	CC.. 09T3	183,00	**01401**

Cylindrical screw

Key D

Coolant screw plug

Clamping screw

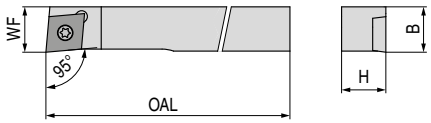
Grubscrew

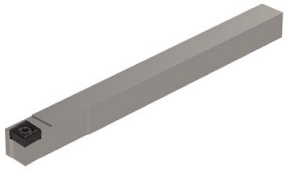
Spare parts for Article no.	83 950 ... EUR Y7		80 950 ... EUR Y7		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28	
70 767 00801	2,39	**157**	8,11	**039**			2,99	**13800**		
70 767 01001			8,11	**039**			2,99	**13800**	3,84	**86700**
70 767 01201			11,79	**120**			4,14	**113**	3,84	**86700**
70 767 01401			11,79	**120**	4,59	**294**	4,14	**113**	3,84	**86700**

3

IsoClamp – 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	Left-hand 72 353 ... EUR X0		Right-hand 72 352 ... EUR X0	
SCLC R/L 0808 H06	8	8	100	8	CC.. 0602	104,80	**008**	104,80	**008**
SCLC R/L 1010 H06	10	10	100	10	CC.. 0602	104,80	**010**	104,80	**010**
SCLC R/L 1212 H09	12	12	100	12	CC.. 09T3	116,50	**012**	116,50	**012**

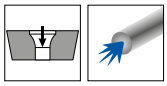
Key D

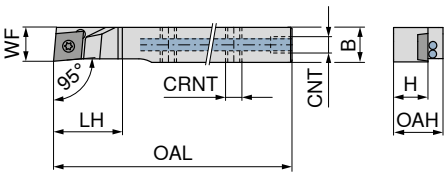
Clamping screw

Spare parts for Article no.		80 950 ... EUR Y7		70 950 ... EUR 2A/28	
72 352 008 / 72 353 008	T08	10,05	**110**	M2,5x6 - T08	2,99 **13800**
72 352 010 / 72 353 010	T08	10,05	**110**	M2,5x6 - T08	2,99 **13800**
72 352 012 / 72 353 012	T15	11,96	**113**	M3,5x11	4,14 **113**

IsoClamp – 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	Left-hand 72 351 ... EUR X0		Right-hand 72 350 ... EUR X0	
SCLC R/L 0808 H06 IC	8	8	100	16	8	M5	M5	CC.. 0602	313,70	**008**	313,70	**008**
SCLC R/L 1010 H06 IC	10	10	100	16	10	M5	M5	CC.. 0602	262,20	**010**	262,20	**010**
SCLC R/L 1212 H09 IC	12	12	100	19	12	M5	M5	CC.. 09T3	294,70	**012**	294,70	**012**
SCLC R/L 1616 K09 IC	16	16	125	19	16	M5	M5	CC.. 09T3	285,10	**016**	285,10	**016**

Cylindrical screw

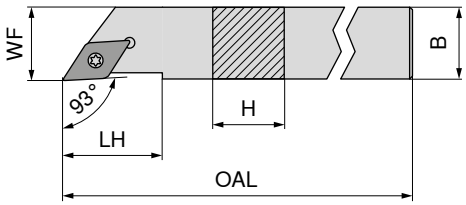
Key D

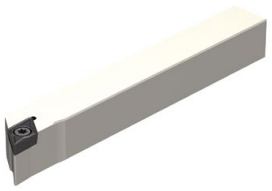
Clamping screw

Spare parts for Article no.		72 950 ... EUR X0		80 950 ... EUR Y7		70 950 ... EUR 2A/28	
72 350 008 / 72 351 008		6,85	**011**	10,05	**110**	2,99	**13800**
72 350 010 / 72 351 010		6,85	**011**	10,05	**110**	2,99	**13800**
72 350 012 / 72 351 012		6,85	**011**	11,96	**113**	4,14	**113**
72 350 016 / 72 351 016		6,85	**011**	11,96	**113**	4,14	**113**

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

▲ for sliding head lathes





Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	torque moment Nm	Insert	Left-hand 70 685 ... EUR X0		Right-hand 70 684 ... EUR X0	
SDJC R/L 0808 H07	8	8	100	13,0	8	1,2	DC.. 0702	99,20	**108**	99,20	**108**
SDJC R/L 1010 H07	10	10	100	13,0	10	1,2	DC.. 0702	99,20	**110**	99,20	**110**
SDJC R/L 1212 H07	12	12	100	14,5	12	1,2	DC.. 0702	111,40	**112**	111,40	**112**
SDJC R/L 1616 K07	16	16	125	33,0	16	1,2	DC.. 0702	123,20	**116**	123,20	**116**
SDJC R/L 1212 H11	12	12	100	22,0	12	3,2	DC.. 11T3	111,40	**212**	111,40	**212**
SDJC R/L 1616 K11	16	16	125	33,0	16	3,2	DC.. 11T3	123,20	**216**	123,20	**216**
SDJC R/L 2020 K11	20	20	125		20		DC.. 11T3	142,00	**220**	142,00	**220**

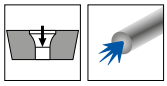
Key D

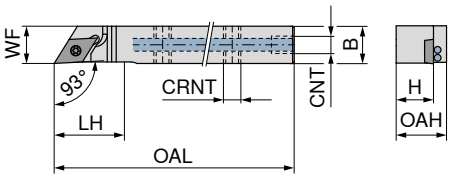
Clamping screw

Spare parts Insert			EUR 80 950 ... Y7		EUR 72 950 ... 2A	
DC.. 0702		T08	10,05	**110**	6,07	**002**
DC.. 11T3		T15	11,96	**113**	6,07	**006**

IsoClamp – 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	Left-hand 72 357 ... EUR X0		Right-hand 72 356 ... EUR X0	
SDJC L 0808 H07 IC	8	8	100	17	8	M5	M5	DC.. 0702	313,70	**008**		
SDJC R/L 1010 H07 IC	10	10	100	17	10	M5	M5	DC.. 0702	262,20	**010**	262,20	**010**
SDJC R/L 1212 H07 IC	12	12	100	17	12	M5	M5	DC.. 0702	294,70	**012**	294,70	**012**
SDJC R/L 1616 K07 IC	16	16	125	17	16	G1/8"	M5	DC.. 0702	285,10	**016**	285,10	**016**
SDJC R/L 1010 H11 IC	10	10	100	22	10	M5	M5	DC.. 11T3	324,60	**110**	324,60	**110**
SDJC R/L 1212 H11 IC	12	12	100	22	12	M5	M5	DC.. 11T3	294,70	**112**	294,70	**112**
SDJC R/L 1616 K11 IC	16	16	125	22	16	G1/8"	M5	DC.. 11T3	285,10	**116**	285,10	**116**
SDJC R/L 2020 K11 IC	20	20	125	22	20	G1/8"	M5	DC.. 11T3	283,90	**120**	283,90	**120**

Cylindrical screw

Cylindrical screw

Key D

Clamping screw

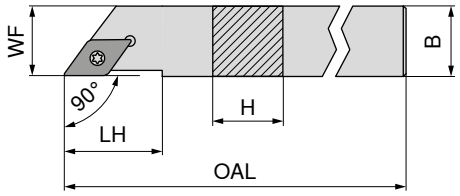
Spare parts Insert	CNT	EUR 72 950 ... X0		EUR 72 950 ... X0		EUR 80 950 ... Y7		EUR 72 950 ... 2A	
DC.. 0702	M5			6,85	**011**	10,05	**110**	6,07	**002**
DC.. 0702	G1/8"	21,72	**010**	6,85	**011**	10,05	**110**	6,07	**002**
DC.. 11T3	M5			6,85	**011**	11,96	**113**	6,07	**006**
DC.. 11T3	G1/8"	21,72	**010**	6,85	**011**	11,96	**113**	6,07	**006**

3

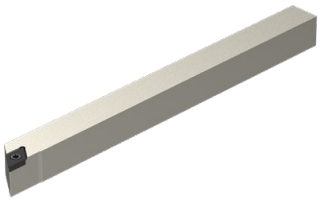
MaxiLock-S – SDAC 90° – Toolholder with screw clamping

▲ for sliding head lathes

Scope of supply:
Tool holder with Torx key



Illustrations show right-hand versions



								Left-hand		Right-hand	
								70 639 ...		**70 639 ...**	
ISO designation	H	B	OAL	LH	WF	torque moment	Insert	**EUR**		**EUR**	
	mm	mm	mm	mm	mm	Nm		2A/24		2A/24	
SDAC R/L 0808 K07	8	8	125	14	8	1,2	DC.. 0702	80,94	**00800**	80,94	**00801**
SDAC R/L 1010 M07	10	10	150	14	10	1,2	DC.. 0702	80,94	**01000**	80,94	**01001**
SDAC R/L 1212 M07	12	12	150	14	12	1,2	DC.. 0702	91,06	**01200**	91,06	**01201**
SDAC R/L 1212 M11	12	12	150	21	12	3,2	DC.. 11T3	91,06	**11200**	91,06	**11201**
SDAC R/L 1414 M11	14	14	150	21	14	3,2	DC.. 11T3	91,06	**01400**	91,06	**01401**

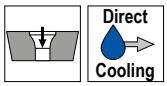
Key D

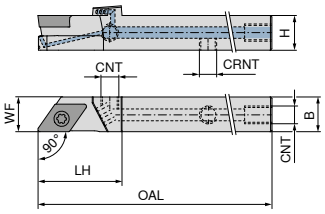
Clamping screw

			80 950 ...			**70 950 ...**	
Spare parts for Article no.		**EUR**			**EUR**		
		Y7			2A/28		
70 639 00801 / 70 639 00800	T08 - IP	8,11	**039**	M2,5x6 - 08IP	5,38	**857**
70 639 01001 / 70 639 01000	T08 - IP	8,11	**039**	M2,5x6 - 08IP	5,38	**857**
70 639 01201 / 70 639 01200	T08 - IP	8,11	**039**	M2,5x6 - 08IP	5,38	**857**
70 639 11201 / 70 639 11200	T15 - IP	11,79	**120**	M3,5x11	4,82	**87900**
70 639 01401 / 70 639 01400	T15 - IP	11,79	**120**	M3,5x11	4,82	**87900**

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

▲ for sliding head lathes





Illustrations show right-hand versions

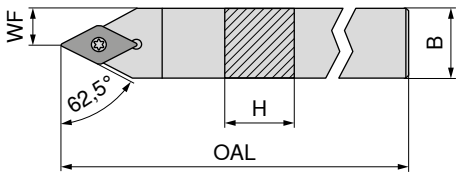
										Left-hand		Right-hand	
										70 771 ...		**70 771 ...**	
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	CNT	CRNT	torque moment Nm	Insert	**EUR** 2A/24		**EUR** 2A/24	
SDAC R/L 0808 K07 DC	8	8	125	21	8	M5	M5	1,2	DC.. 0702	171,30	**00801**	171,30	**00800**
SDAC R/L 1010 M07 DC	10	10	150	21	10	M6	M6	1,2	DC.. 0702	171,30	**01001**	171,30	**01000**
SDAC R/L 1212 M07 DC	12	12	150	21	12	M6	M6	1,2	DC.. 0702	183,00	**01201**	183,00	**01200**
SDAC R/L 1212 M11 DC	12	12	150	29	12	M6	M6	3,2	DC.. 11T3	183,00	**11201**	183,00	**11200**

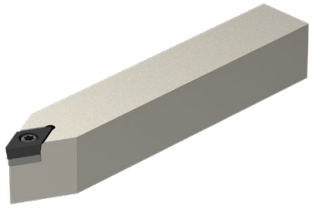
									 Cylindrical screw		Key D		 Clamping screw		 Grubscrew	
									83 950 ...		**80 950 ...**		**70 950 ...**		**70 950 ...**	
Spare parts for Article no.									**EUR** Y7		**EUR** Y7		**EUR** 2A/28		**EUR** 2A/28	
70 771 00800 / 70 771 00801									2,39	**157**	8,11	**039**	2,99	**13800**		
70 771 01000 / 70 771 01001											8,11	**039**	2,99	**13800**	3,84	**86700**
70 771 01200 / 70 771 01201											8,11	**039**	2,99	**13800**	3,84	**86700**
70 771 11200 / 70 771 11201											11,79	**120**	4,14	**113**	3,84	**86700**

3

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

Scope of supply:
Tool holder with Torx key

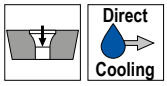


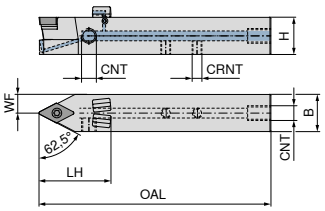


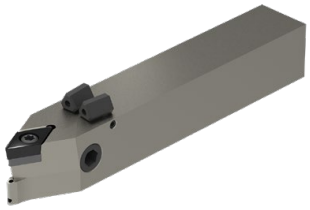
ISO designation	H mm	B mm	OAL mm	WF mm	torque moment Nm	Insert	Neutral 70 645 ... EUR 2A/24	
SDNC N 0808 K07	8	8	125	4,0	1,2	DC.. 0702	75,87	**00800**
SDNC N 1010 M07	10	10	150	5,0	1,2	DC.. 0702	80,94	**11000**
SDNC N 1010 E07	10	10	70	5,0	1,2	DC.. 0702	80,94	**01000**
SDNC N 1212 F07	12	12	80	6,0	1,2	DC.. 0702	80,94	**01200**
SDNC N 1212 M07	12	12	150	6,0	1,2	DC.. 0702	91,06	**11200**
SDNC N 1212 M11	12	12	150	6,0	3,2	DC.. 11T3	91,06	**21200**
SDNC N 1616 H11	16	16	100	8,0	3,2	DC.. 11T3	101,20	**01600**
SDNC N 2020 K11	20	20	125	10,0	3,2	DC.. 11T3	107,20	**02000**
SDNC N 2525 M11	25	25	150	12,5	3,2	DC.. 11T3	111,30	**02500**

Spare parts for Article no.	Key D 80 950 ... EUR Y7		Clamping screw 70 950 ... EUR 2A/28		Solid Carbide Seat D 70 950 ... EUR 2A/28		Threaded sleeve 70 950 ... EUR 2A/28	
70 645 00800	8,11	**039**	5,38	**857**				
70 645 11000	8,11	**039**	5,38	**857**				
70 645 01000	8,11	**039**	5,38	**857**				
70 645 01200	8,11	**039**	5,38	**857**				
70 645 11200	8,11	**039**	5,38	**857**				
70 645 21200	11,79	**120**	4,82	**87900**				
70 645 01600	11,79	**120**	4,82	**87900**	9,66	**106**	5,98	**171**
70 645 02000	11,79	**120**	4,82	**87900**	9,66	**106**	5,98	**171**
70 645 02500	11,79	**120**	4,82	**87900**	9,66	**106**	5,98	**171**

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







Neutral

ISO designation	H mm	B mm	OAL mm	WF mm	CNT	CRNT	torque moment Nm	Insert	70 774 ... EUR 2A/24	
SDNC N 1212 F07 DC	12	12	80	6,0	M6	M6	1,2	DC.. 0702	171,30	**01200**
SDNC N 1212 M07 DC	12	12	150	6,0	M6	M6	1,2	DC.. 0702	183,00	**11200**
SDNC N 1212 M11 DC	12	12	150	6,0	M6	M6	3,2	DC.. 11T3	183,00	**21200**
SDNC N 1616 H11 DC	16	16	100	8,0	G1/8"	M6	3,2	DC.. 11T3	190,30	**01600**
SDNC N 2020 K11 DC	20	20	125	10,0	G1/8"	M6	3,2	DC.. 11T3	201,70	**02000**
SDNC N 2525 M11 DC	25	25	150	12,5	G1/8"	M6	3,2	DC.. 11T3	209,40	**02500**

Clamping screw

Solid Carbide Seat D

Grubscrew

Grubscrew

Threaded sleeve

Spare parts for Article no.	70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28	
70 774 01200	5,38	**857**					3,84	**86700**		
70 774 11200	5,38	**857**					3,84	**86700**		
70 774 21200	4,14	**859**					3,84	**86700**		
70 774 01600	4,82	**87900**	9,66	**106**	2,19	**88000**	3,84	**86700**	5,98	**171**
70 774 02000	4,82	**87900**	9,66	**106**	2,19	**88000**	3,84	**86700**	5,98	**171**
70 774 02500	4,82	**87900**	9,66	**106**	2,19	**88000**	3,84	**86700**	5,98	**171**

Sealing plugs DC

Key D

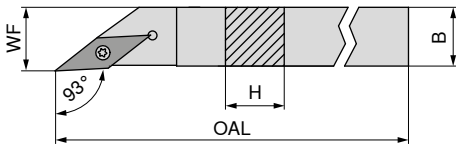
O-Ring

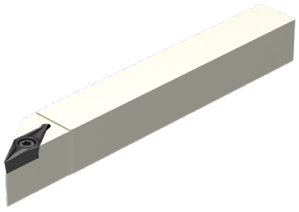
Coolant nozzle DC

Coolant screw plug

Spare parts for Article no.	70 950 ... EUR 2A/28		80 950 ... EUR Y7		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28	
70 774 01200			8,11	**039**						
70 774 11200			8,11	**039**						
70 774 21200			11,79	**120**						
70 774 01600	1,53	**87600**	11,79	**120**	1,36	**88100**	30,13	**87700**	4,59	**294**
70 774 02000	1,53	**87600**	11,79	**120**	1,36	**88100**	30,13	**87700**	4,59	**294**
70 774 02500	1,53	**87600**	11,79	**120**	1,36	**88100**	30,13	**87700**	4,59	**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	Left-hand 70 697 ... EUR X0		Right-hand 70 696 ... EUR X0	
SVJC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103	106,90	**008**	106,90	**008**
SVJC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103	106,90	**010**	106,90	**010**
SVJC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103	123,00	**112**	123,00	**112**
SVJC R/L 1616 K11	16	16	125	16	1,2	VC.. 1103	134,00	**116**	134,00	**116**


Key D

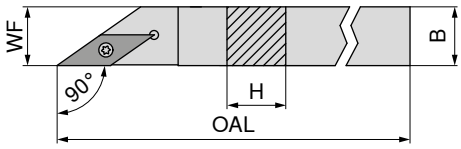

Clamping screw

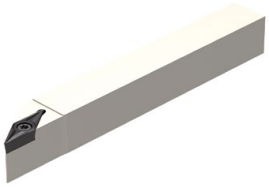
Spare parts Insert	Key D 80 950 ... EUR Y7		Clamping screw 70 950 ... EUR 2A/28	
VC.. 1103	10,05	**110**	2,99	**13800**

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	Left-hand 70 695 ... EUR X0		Right-hand 70 694 ... EUR X0	
SVAC R/L 0808 H11	8	8	100	8	1,2	VC.. 1103	106,90	**008**	106,90	**008**
SVAC R/L 1010 H11	10	10	100	10	1,2	VC.. 1103	106,90	**010**	106,90	**010**
SVAC R/L 1212 H11	12	12	100	12	1,2	VC.. 1103	123,00	**012**	123,00	**012**


Key D

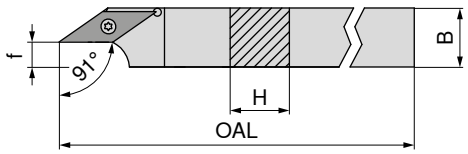

Clamping screw

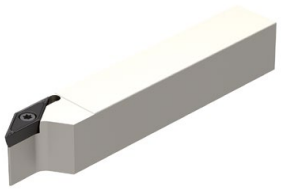
Spare parts for Article no.		Key D 80 950 ... EUR Y7			Clamping screw 70 950 ... EUR 2A/28	
70 694 008 / 70 695 008	T08	10,05	**110**	M2,5x6 - T08	2,99	**13800**
70 694 010 / 70 695 010	T08	10,05	**110**	M2,5x6 - T08	2,99	**13800**
70 694 012 / 70 695 012	T08	10,05	**110**	M2,5x6 - T08	2,99	**13800**

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 ... EUR X0		Right-hand 70 690 ... EUR X0	
SVXC R/L 1010 H11	10	10	100	1,2	VC.. 1103	106,90	**010**	106,90	**010**
SVXC R/L 1212 H11	12	12	100	1,2	VC.. 1103	123,00	**012**	123,00	**012**
SVXC R/L 1616 K11	16	16	125	1,2	VC.. 1103	134,00	**016**	134,00	**016**


Key D


Clamping screw

Spare parts for Article no.		80 950 ... EUR Y7		70 950 ... EUR 2A/28	
70 691 010 / 70 690 010	T08	10,05	**110**	M2,5x6 - T08	2,99 **13800**
70 691 012 / 70 690 012	T08	10,05	**110**	M2,5x6 - T08	2,99 **13800**
70 691 016 / 70 690 016	T08	10,05	**110**	M2,5x6 - T08	2,99 **13800**

Toolfinder – TriClamp

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

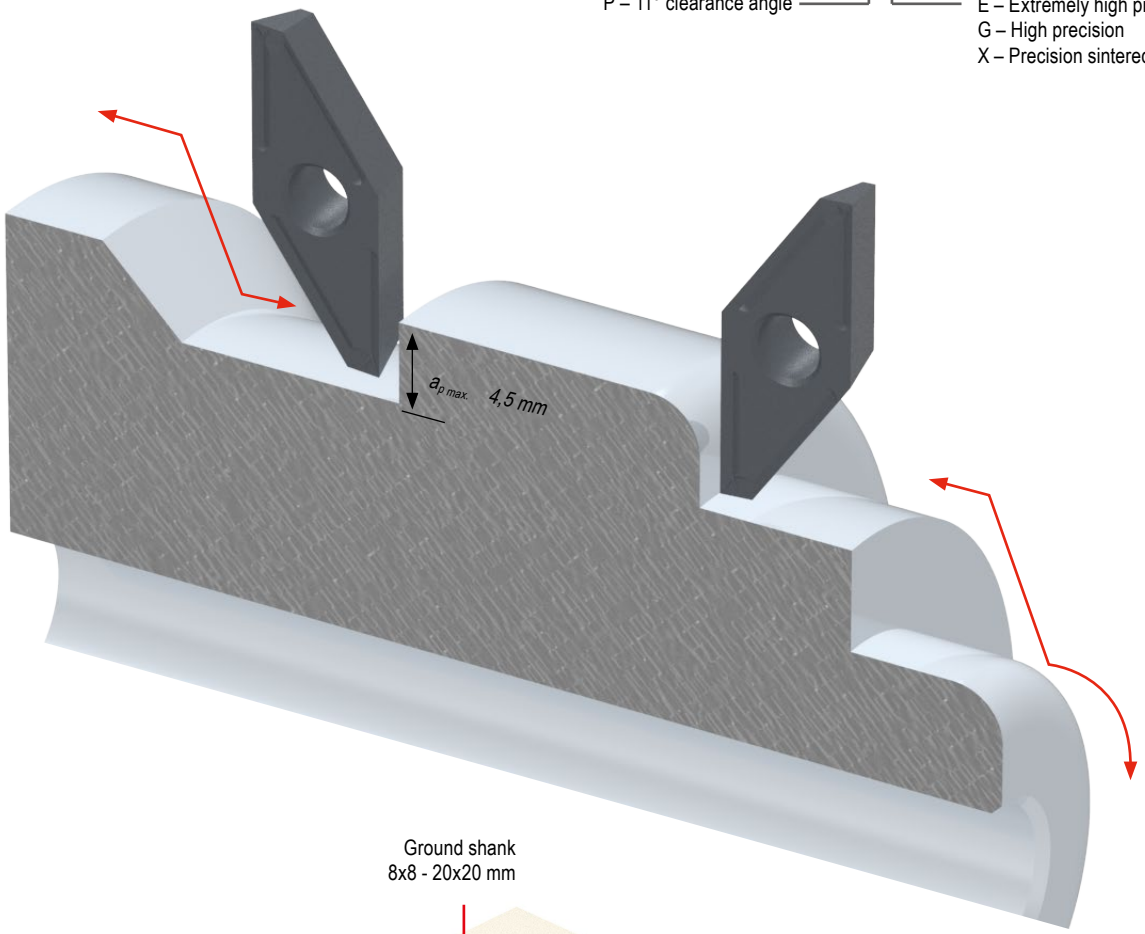
▲ Turning in all three contour directions
Maximum flexibility without changing the tool

▲ 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

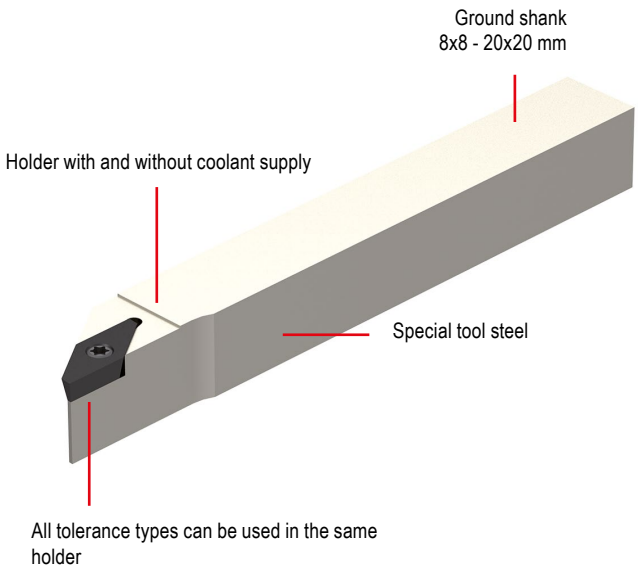


TriClamp system	
V P E T	→ Page 19
V P G T	→ Page 19
V P X T	→ Page 19

Precision

P – 11° clearance angle

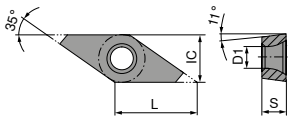
E – Extremely high precision
G – High precision
X – Precision sintered



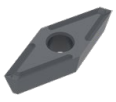
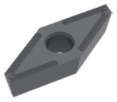
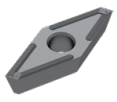
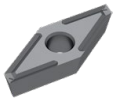
Tool holder	
90°	→ Page 21
91°	→ Page 22
93°	→ Page 21–23

VPGT / VPET / VPXT

Designation	L	S	D1	IC
	mm	mm	mm	mm
VP.T 1003..	10	3,18	4,4	6,35

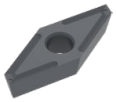
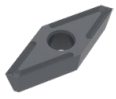
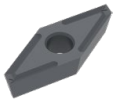


VPGT

	-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 ...
ISO / RE mm	EUR X1	EUR X1	EUR X1	EUR X1	EUR X1	EUR X1
1003ZZ 0,00	25,58 **760** 2)	25,58 **760** 1)	25,28 **500** 2)	25,28 **500** 1)	21,43 **70000**2)	21,43 **70000**1)
1003008 0,08	25,58 **728** 2)	25,58 **728** 1)	25,28 **508** 2)	25,28 **508** 1)	21,43 **70800**2)	21,43 **70800**1)
1003015 0,15	25,58 **735** 2)	25,58 **735** 1)	25,86 **515** 2)	25,86 **515** 1)	21,43 **71500**2)	21,43 **71500**1)
P	●	●	●	●	●	●
M	●	●	●	●		
K	○	○	○	○		
N	●	●	○	○	○	○
S	●	●	●	●	○	○
H						
O	○	○	○	○	○	○

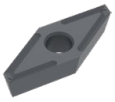
1) Note ! Right hand insert for right hand holder
2) Note ! Left hand insert for left hand holder

VPET

	-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 ...
ISO / RE mm	EUR X1	EUR X1	EUR X1	EUR X1	EUR X1	EUR X1
1003ZZ 0,00	24,71 **060** 2)	24,71 **060** 1)	28,69 **760** 2)	28,69 **760** 1)	28,69 **560** 2)	28,69 **560** 1)
1003008 0,08	24,71 **028** 2)	24,71 **028** 1)	28,69 **728** 2)	28,69 **728** 1)	28,69 **528** 2)	28,69 **528** 1)
1003015 0,15	24,71 **035** 2)	24,71 **035** 1)	28,69 **735** 2)	28,69 **735** 1)	28,69 **535** 2)	28,69 **535** 1)
P	○	○	●	●	●	●
M			●	●	●	●
K			○	○	○	○
N	●	●	●	●	○	○
S	○	○	●	●	●	●
H						
O	●	●	○	○	○	○

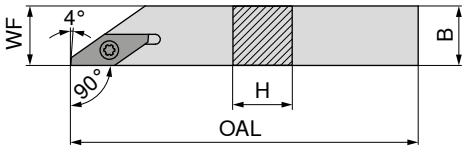
1) Note ! Right hand insert for right hand holder
2) Note ! Left hand insert for left hand holder

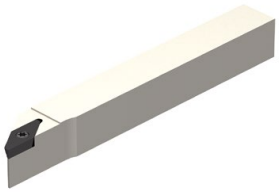
VPXT

		-EL TiAIN+		-ER TiAIN+	
					
		F		F	
		VPXT		VPXT	
		72 493 ...		72 492 ...	
ISO	RE mm	EUR X1		EUR X1	
1003015	0,15	18,48	615 [2]	18,48	615 [1]
1003035	0,35	18,48	635 [2]	18,48	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

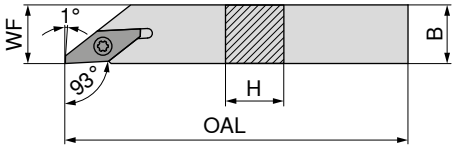
ISO designation	H mm	B mm	OAL mm	WF mm	Insert	Left-hand 72 382 ... EUR X0		Right-hand 72 380 ... EUR X0	
SVAP R/L 0808 H10	8	8	100	8	VP.. 1003	109,00	**008**	109,00	**008**
SVAP R/L 1010 H10	10	10	100	10	VP.. 1003	109,00	**010**	109,00	**010**
SVAP R/L 1212 H10	12	12	100	12	VP.. 1003	125,40	**012**	125,40	**012**

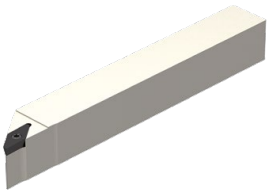
Key D

Clamping screw

Spare parts			80 950 ... EUR Y7		72 950 ... EUR 2A	
Insert						
VP.. 1003	T08		10,05	**110**	6,07	**002**

TriClamp – SVJP 93° – Toolholder with screw clamping





Illustrations show right-hand versions

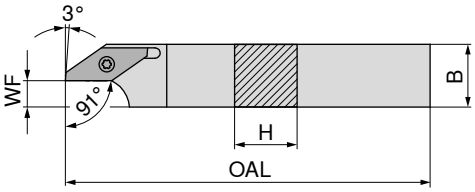
ISO designation	H mm	B mm	OAL mm	WF mm	Insert	Left-hand 72 386 ... EUR X0		Right-hand 72 384 ... EUR X0	
SVJP R/L 0808 H10	8	8	100	8	VP.. 1003	109,00	**008**	109,00	**008**
SVJP R/L 1010 H10	10	10	100	10	VP.. 1003	109,00	**010**	109,00	**010**
SVJP R/L 1212 H10	12	12	100	12	VP.. 1003	125,40	**012**	125,40	**012**
SVJP R/L 1616 K10	16	16	125	16	VP.. 1003	136,60	**016**	136,60	**016**

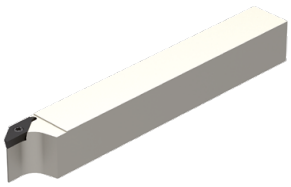
Key D

Clamping screw

Spare parts			80 950 ... EUR Y7		72 950 ... EUR 2A	
Insert						
VP.. 1003	T08		10,05	**110**	6,07	**002**

TriClamp – SVXP 91° – Toolholder with screw clamping





Illustrations show right-hand versions

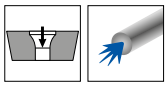
ISO designation	B mm	H mm	OAL mm	Insert	Left-hand 72 390 ... EUR X0		Right-hand 72 388 ... EUR X0	
SVXP R/L 0808 H10	8	8	100	VP.. 1003	109,00	**008**	109,00	**008**
SVXP R/L 1010 H10	10	10	100	VP.. 1003	109,00	**010**	109,00	**010**
SVXP R/L 1212 H10	12	12	100	VP.. 1003	125,40	**012**	125,40	**012**
SVXP R/L 1616 K10	16	16	125	VP.. 1003	136,60	**016**	136,60	**016**

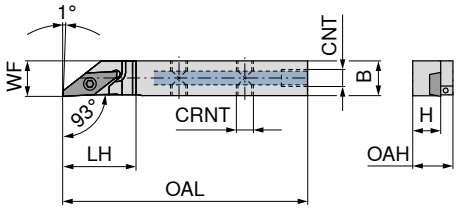

Key D


Clamping screw

Spare parts Insert		Key D 80 950 ... EUR Y7		Clamping screw 72 950 ... EUR 2A	
VP.. 1003	T08	10,05	**110**	6,07	**002**

TriClamp – SVJP 93°-IC – 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	Left-hand 72 361 ... EUR X0		Right-hand 72 360 ... EUR X0	
SVJP R/L 0810 H10 IC	8	10	21	10	100	11,5	M5	M5	VP.. 1003	336,60	**008**	336,60	**008**
SVJP R/L 1010 H10 IC	10	10	21	10	100	13,5	M5	M5	VP.. 1003	281,40	**010**	281,40	**010**
SVJP R/L 1212 H10 IC	12	12	21	12	100	15,5	M5	M5	VP.. 1003	324,60	**012**	324,60	**012**
SVJP R/L 1616 K10 IC	16	16	21	16	125	19,5	M5	G1/8"	VP.. 1003	312,30	**016**	312,30	**016**
SVJP R/L 2020 K10 IC	20	20	21	20	125	23,5	M5	G1/8"	VP.. 1003	325,80	**020**	325,80	**020**


Cylindrical screw


Cylindrical screw

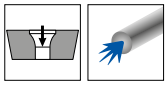

Key D

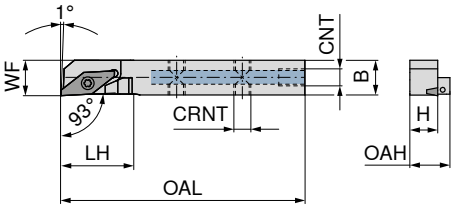

Clamping screw

Spare parts for Article no.		Cylindrical screw 72 950 ... EUR X0			Cylindrical screw 72 950 ... EUR X0			Key D 80 950 ... EUR Y7		Clamping screw 72 950 ... EUR 2A	
72 360 008 / 72 361 008				M5x4	6,85	**011**	T08	10,05	**110**	6,07	**002**
72 360 010 / 72 361 010				M5x4	6,85	**011**	T08	10,05	**110**	6,07	**002**
72 360 012 / 72 361 012				M5x4	6,85	**011**	T08	10,05	**110**	6,07	**002**
72 360 016 / 72 361 016	G1/8"	21,72	**010**	M5x4	6,85	**011**	T08	10,05	**110**	6,07	**002**
72 360 020 / 72 361 020	G1/8"	21,72	**010**	M5x4	6,85	**011**	T08	10,05	**110**	6,07	**002**

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

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	Left-hand 72 363 ... EUR X0		Right-hand 72 362 ... EUR X0	
SVJP R/L 0810 H10 VIC	8	10	21	10	100	11,5	M5	M5	VP.. 1003	336,60	**008**	336,60	**008**
SVJP R/L 1010 H10 VIC	10	10	21	10	100	13,5	M5	M5	VP.. 1003	281,40	**010**	281,40	**010**
SVJP R/L 1212 H10 VIC	12	12	21	12	100	15,5	M5	M5	VP.. 1003	324,60	**012**	324,60	**012**

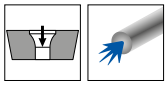

Cylindrical screw

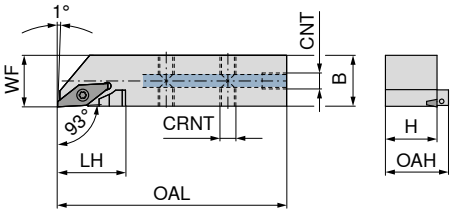

Key D


Clamping screw

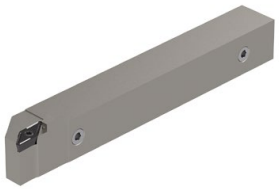
Spare parts								
	72 950 ...		80 950 ...		72 950 ...			
Insert	EUR X0		EUR Y7		EUR 2A			
VP.. 1003	M5x4	6,85	**011**	T08	10,05	**110**	6,07	**002**

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	Left-hand 72 365 ... EUR X0		Right-hand 72 364 ... EUR X0	
SVJP R/L 1616 K10 VIC	16	16	21	16	125	19,5	M5	G1/8"	VP.. 1003	312,30	**016**	312,30	**016**
SVJP R/L 2020 K10 VIC	20	20	21	20	125	23,5	M5	G1/8"	VP.. 1003	325,80	**020**	325,80	**020**


Cylindrical screw


Cylindrical screw


Key D


Clamping screw

Spare parts									
	72 950 ...		72 950 ...		80 950 ...		72 950 ...		
Insert	EUR X0		EUR X0		EUR Y7		EUR 2A		
VP.. 1003	G1/8"	21,72	**010**	M5x4	6,85	**011**	T08	10,05	**110**	6,07	**002**

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

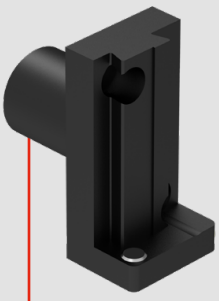
▲ **Set-up time optimisation**
Presetting via an adjustment screw directly in the machine or externally in the presetting device

▲ **Cooling**
Optional coolant overpressure by attaching a coolant attachment

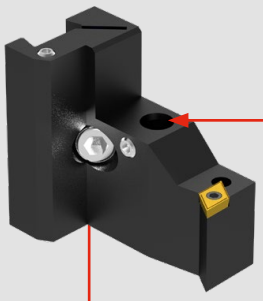
Reverse-side machining – Toolfinder

Modular tools

Distance plates
→ Page 30

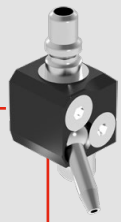


- CITIZEN → Page 26
- DOOSAN → Page 26
- HANWHA → Page 27
- MAIER → Page 27
- STAR → Page 28
- TORNOS → Page 28
- CITIZEN / GILDEMEISTER / HANWHA / TORNOS / TSUGAMI → Page 29
- TORNOS / TSUGAMI → Page 29



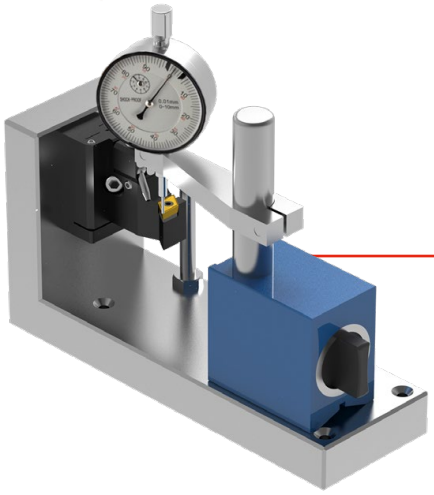
- Turning Holder CC / DC / VC → Page 31–33
- Thread turning holder → Page 34
- Grooving tool holder TX → Page 35
- Drills and boring bars → Page 36
- Cutting inserts → Page 37+38
- Collet Chuck → Page 39

Accessories



Coolant insert
→ Page 62

Setting Device

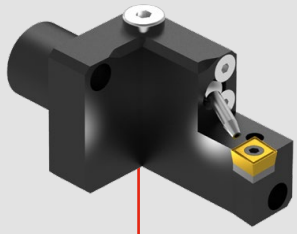


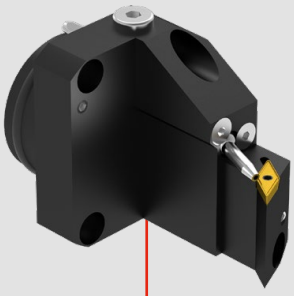
Using the adjustment device, you can set our modular holder to the right height outside the machine, which is a plus in terms of flexibility and time.

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

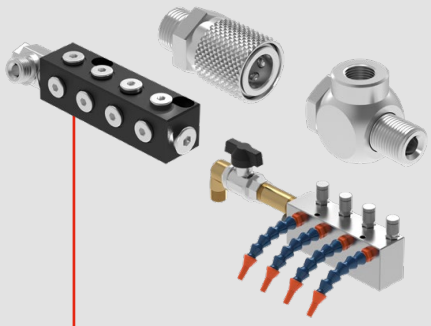
Thread turning holder → Page 56

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

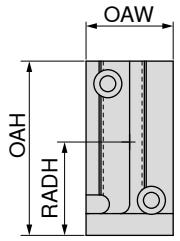
Coolant hoses → Page 64

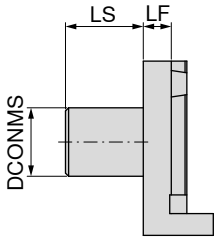
Coupler connector → Page 64

Quick-coupler → Page 64

Protection plug → Page 64

Machine base holder for CITIZEN





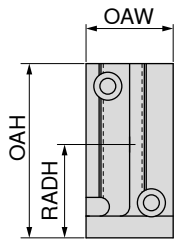
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 951 ... EUR X0	
CI.GH 3/4"-40	19,05	28	56	9	40	30	159,50	**07004**
CI.GH 25-30	25,00	28	56	9	30	30	159,50	**07002**
CI.GH 1"-60	25,40	28	56	9	60	30	159,50	**07003**
CI.GH 31-15	31,00	34	58	9	15	32	159,50	**07001**

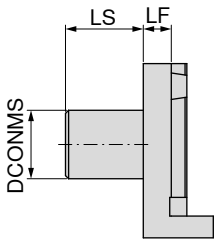
suitable for the following machines:

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



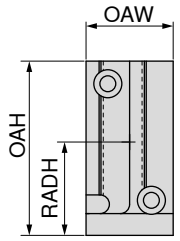


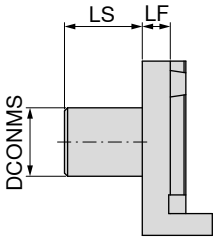
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 952 ... EUR X0	
DO.GH 32-25	32	34	56	9	25	30	159,50	**07001**

suitable for the following machines:

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

Machine base holder for HANWHA



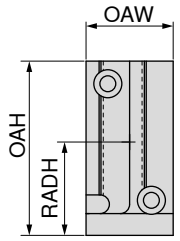


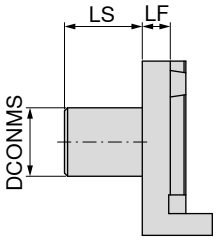
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 953 ... EUR X0	
HA.GH 25-40	25	28	56	9	40	30	159,50	**07003**
HA.GH 32-27	32	38	56	34	27	30	159,50	**07002**
HA.GH 33-40	33	28	56	9	40	30	159,50	**07001**

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



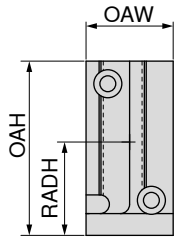


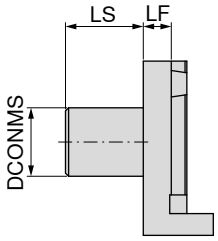
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 954 ... EUR X0	
MA.GH 34-20	34	38	56	9	20	30	159,50	**07001**

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



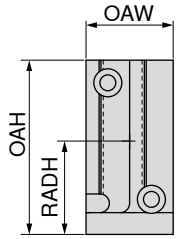


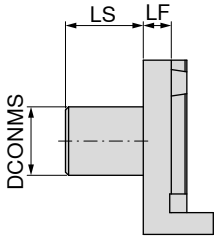
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 955 ... EUR X0	
ST.GH 22-20	22	38	56	9	20	30	159,50	**07001**
ST.GH 22-25	22	28	56	9	25	30	159,50	**07002**

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



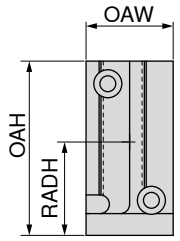


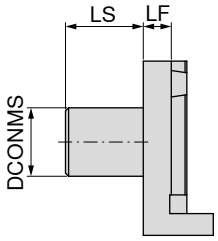
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 956 ... EUR X0	
TO.GH 20-100	20	28	56	9	100	30	159,50	**07002**
TO.GH 25-100	25	28	56	9	100	30	159,50	**07001**

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 (Ø20)

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



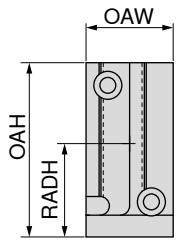


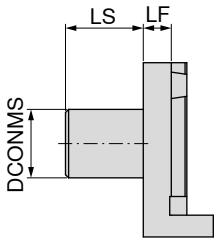
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 958 ... EUR X0	
CI/GI/HA/TO/TS.GH 20-40	20	28	56	9	40	30	159,50	**07001**

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





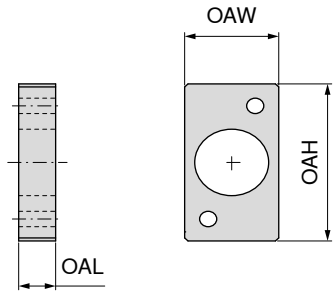
Designation	DCONMS mm	OAW mm	OAH mm	LF mm	LS mm	RADH mm	72 958 ... EUR X0	
TO/TS.GH 32-50	32	28	56	9	50	30	159,50	**07002**

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

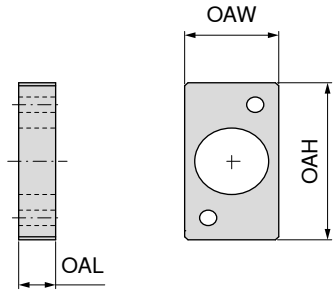


72 951 ...

Designation	OAW mm	OAH mm	OAL mm	Base holder	EUR X0	
CI.DP-GH1"-60-11	28	52	11	CI.GH1"-60	46,95	**04006**
CI.DP-GH25-30-11	28	52	11	CI.GH25-30	46,95	**04005**
CI.DP-GH3/4"-40-11	28	52	11	CI.GH3/4"-40	46,95	**04007**

Distance plate

▲ flexible adjustment of the projection length

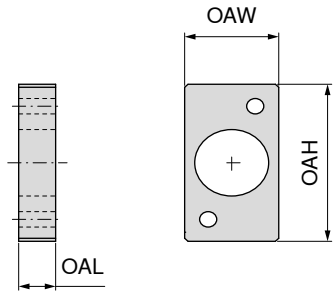


72 953 ...

Designation	OAW mm	OAH mm	OAL mm	Base holder	EUR X0	
HA.DP-GH33-40-11	35	52	11	HA.GH33-40	46,95	**04004**

Distance plate

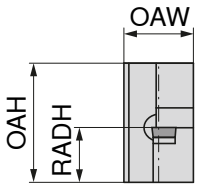
▲ flexible adjustment of the projection length

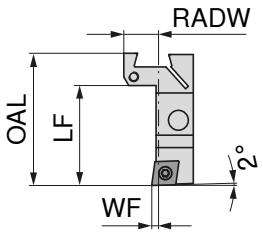


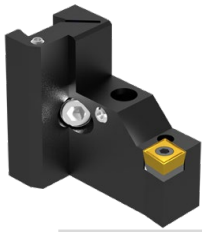
72 955 ...

Designation	OAW mm	OAH mm	OAL mm	Base holder	EUR X0	
ST.DP-GH22-25-11	28	52	11	ST.GH22-25	46,95	**04003**

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







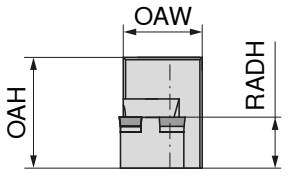
72 981 ...

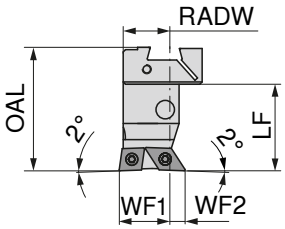
Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert	EUR X0	
MU.AH-CC09-R	28	48	41	14	22	2,5	54	CC.. 09T3	185,00	**08001**

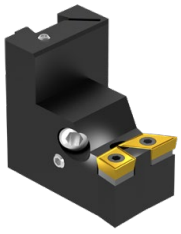
Spare parts for Article no.	Key D **80 950 ...** EUR Y7		Clamping screw **70 950 ...** EUR 2A/28		Carbide type C **70 950 ...** EUR 2A/28		Threaded sleeve **70 950 ...** EUR 2A/28	
72 981 08001	11,96	**113**	4,14	**113**	12,46	**165**	5,98	**171**

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

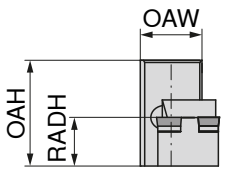
72 981 ...

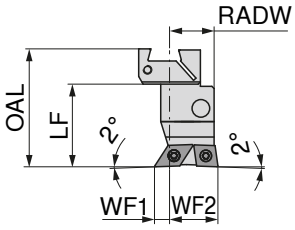
Designation	OAH mm	LF mm	RADW mm	RADH mm	OAL mm	WF_1 mm	WF_2 mm	Insert	EUR X0	
MU.AH-CC09-L-DC11-R	48	38	20	22	54	22	7	CC.. 09T3 / DC.. 11T3	312,60	**08011**

Spare parts for Article no.	Key D **80 950 ...** EUR Y7		Combination Key **70 950 ...** EUR 2A/28		Clamping screw **70 950 ...** EUR 2A/28		Solid Carbide Seat D **70 950 ...** EUR 2A/28		Carbide type C **70 950 ...** EUR 2A/28		Threaded sleeve **70 950 ...** EUR 2A/28	
72 981 08011	11,96	**113**	10,66	**398**	4,14	**113**	9,66	**106**	12,46	**165**	5,98	**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





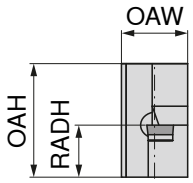
double

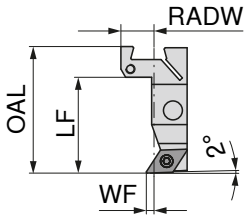
Designation	OAH mm	LF mm	RADW mm	RADH mm	OAL mm	WF_1 mm	WF_2 mm	Insert	72 981 ... EUR X0	
MU.AH-CC09-R-DC11-L	48	38	20	22	54	22	7	CC.. 09T3 / DC.. 11T3	312,60	**08010**

Spare parts for Article no.	Key D 80 950 ... EUR Y7		Combination Key 70 950 ... EUR 2A/28		Clamping screw 70 950 ... EUR 2A/28		Solid Carbide Seat D 70 950 ... EUR 2A/28		Carbide type C 70 950 ... EUR 2A/28		Threaded sleeve 70 950 ... EUR 2A/28	
72 981 08010	11,96	**113**	10,66	**398**	4,14	**113**	9,66	**106**	12,46	**165**	5,98	**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



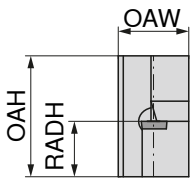


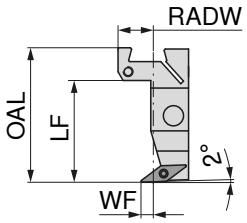
Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert	72 981 ... EUR X0	
MU.AH-DC07-R	28	48	41	14	22	3,0	54	DC.. 0702	185,00	**08002**
MU.AH-DC11-R	28	48	41	14	22	3,5	54	DC.. 11T3	185,00	**08003**

Spare parts for Article no.	Key D 80 950 ... EUR Y7		Combination Key 70 950 ... EUR 2A/28		Clamping screw 70 950 ... EUR 2A/28		Solid Carbide Seat D 70 950 ... EUR 2A/28		Threaded sleeve 70 950 ... EUR 2A/28	
72 981 08002	10,05	**110**			2,99	**13800**				
72 981 08003			10,66	**398**	4,14	**113**	9,66	**106**	5,98	**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	EUR X0	
MU.AH-VC11-R	28	48	41	14	22	5,0	54	VC.. 1103	185,00	**08004**
MU.AH-VC16-R	28	48	41	14	22	14,5	54	VC.. 1604	185,00	**08005**


Key D


Combination Key


Clamping screw

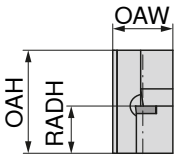

Solid Carbide Seat V

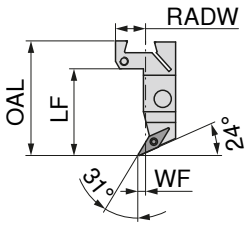

Threaded sleeve

Spare parts for Article no.	80 950 ... EUR Y7		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28	
72 981 08004	10,05	**110**			2,99	**13800**				
72 981 08005			10,66	**398**	4,14	**113**	12,97	**107**	5,98	**171**

(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	EUR X0	
MU.AH-VC11-24-R	28	48	41	14	22	3	54	VC.. 1103	185,00	**08006**


Key D

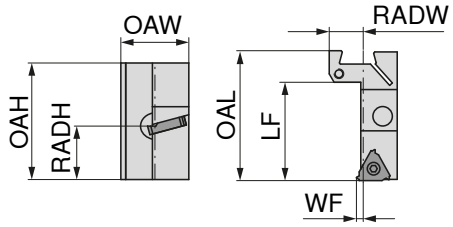

Clamping screw

Spare parts for Article no.	80 950 ... EUR Y7		70 950 ... EUR 2A/28	
72 981 08006	10,05	**110**	2,99	**13800**

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



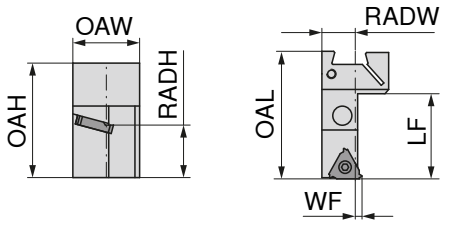
Right-hand

72 981 ...

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert	EUR X0	
MU.AH-ER16-R	28	48	41	14	22	3	54	16 ER..	185,00	**08007**

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 ...

Designation	OAW mm	OAH mm	LF mm	RADW mm	RADH mm	WF mm	OAL mm	Insert	EUR X0	
MU.AH-ER16-L	28	48	34	14	22	3	54	16 EL..	185,00	**08008**

Clamping screw

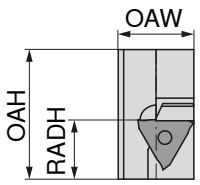
71 950 ...

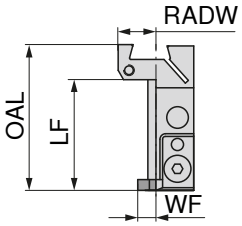
Spare parts for Article no.	EUR Y2	
72 981 08007	1,41	**231**

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	72 986 ... EUR X0
MU.AH-TX-R	28	48	41	14	22	7	54	TX R/N/L ...2/3/4	185,00 **16001**

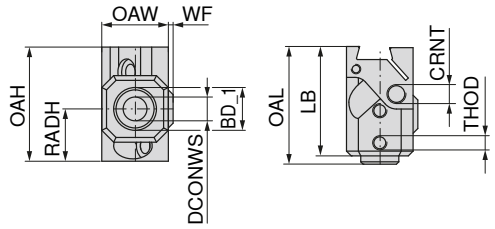
Spare parts for Article no.	 Clamp 72 950 ... EUR Y6	 Lock washer 72 950 ... EUR Y6	 Countersunk screw 72 950 ... EUR Y6	 Guide pin with flange 72 950 ... EUR Y6
72 986 16001	59,41 **19001**	3,14 **19002**	3,14 **19003**	11,46 **19004**

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

3

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	EUR X0	
MU.AH-BH06IK	6	12	28	48	46,0		48,5	22	M6	210,60	**03001**
MU.AH-BH08IK	8	14	28	48	46,0		48,5	22	M8	210,60	**03002**
MU.AH-BH10IK	10	16	28	48	46,0		49,5	22	M8	210,60	**03003**
MU.AH-BH12IK	12	18	28	48	50,0		52,5	22	M10	210,60	**03004**
MU.AH-BH14IK	14	19	28	48	50,5		54,0	22	M10	210,60	**03005**
MU.AH-BH16IK	16	21	28	48	50,5	2	54,0	22	M10	210,60	**03006**


Grubscrew

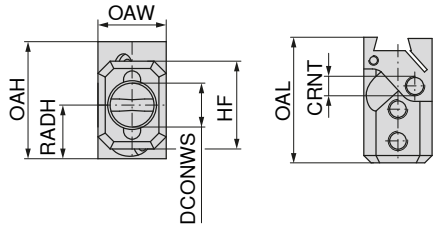

Grubscrew

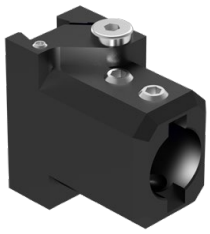
72 950 ... **83 950 ...**

Spare parts for Article no.	EUR Y8		EUR Y8	
72 982 03001	3,31	**19011**		
72 982 03002			2,66	**464**
72 982 03003			2,66	**464**
72 982 03004	3,31	**19013**		
72 982 03005	3,31	**19013**		
72 982 03006	3,31	**19013**		

Tool holders for clamping inserts

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





72 983 ...

Designation	DCONWS $_{H6}$ mm	HF mm	OAW mm	OAH mm	RADH mm	OAL mm	CRNT	EUR X0	
MU.AH-S20IK	20	36	28	48	22	51,5	M8x1	210,60	**20001**

Grubscrew

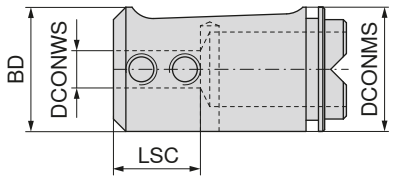
83 950 ...

Spare parts for Article no.	EUR Y8	
72 983 20001	2,66	**464**

3

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	EUR X0	
MU.ULTRAMINI.KH-DM4	20	4	20	13	61,89	**08001**
MU.ULTRAMINI.KH-DM5	20	5	20	14	61,89	**08002**
MU.ULTRAMINI.KH-DM6	20	6	20	14	61,89	**08003**
MU.ULTRAMINI.KH-DM7	20	7	20	14	61,89	**08004**
MU.ULTRAMINI.KH-DM8	20	8	20	19	61,89	**08005**

Grubscrew

72 950 ...

Spare parts DCONWS	EUR Y8	
4	3,31	**19009**
5 - 7	3,31	**19010**
8	3,31	**19012**

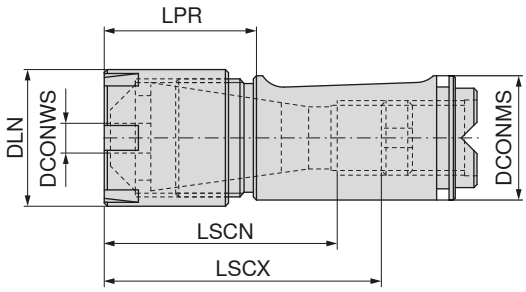
Suitable UltraMini cutting inserts can be found in the main catalogue, **Chapter 12 Miniature turning tools.**

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	EUR X0	
MU.S20-SPZH-ER16-IK	25,0	20	22	55	38	426E (ER16)	85,46	**06001**
MU.S20-SPZH-ER20-IK	27,5	20	28	56	40	428E (ER20)	85,46	**06002**

Mini IK

83 950 ...

Spare parts for Article no.	EUR Y8	
72 984 06001	46,98	**058**
72 984 06002	57,30	**059**

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

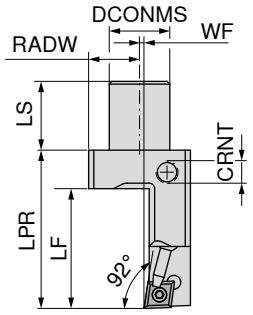
3

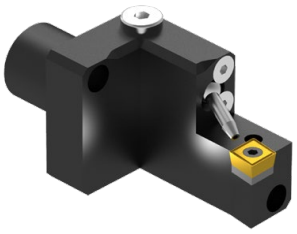
Rear holder with screw clamping for CC.. Indexable inserts

▲ 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





Designation	DCONMS $_{g6}$ mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	72 955 ... EUR X0	
ST.SR20R4-RE-K-CC09-L-IK	22	25	43,5	1,5	77,5	18,5	M8x1	CC.. 09T3	279,50	**08005**
ST.SR20R4-RE-K-CC09-R-IK	22	25	43,5	1,5	57,5	18,5	M8x1	CC.. 09T3	228,50	**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 ...**	
Spare parts for Article no.	EUR Y8		EUR Y8		EUR X0		EUR 2A/28		EUR 2A/28		EUR 2A/28		EUR 2A/28		EUR Y8	
72 955 08005	13,25	**19006**	3,31	**19007**	10,08	**10002**	10,66	**398**	4,14	**113**	12,46	**165**	5,98	**171**	7,73	**19008**
72 955 08004	13,25	**19006**	3,31	**19007**	10,08	**10002**	10,66	**398**	4,14	**113**	12,46	**165**	5,98	**171**	7,73	**19008**

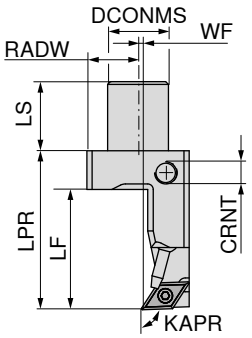
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

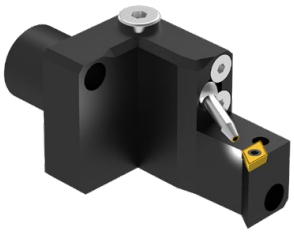
Rear holder with screw clamping for DC.. Indexable inserts

▲ 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 ... EUR X0	
ST.SR20R4-RE-K-DC07-R-IK	22	25	43,5	1,5	57,5	18,5	M8x1	92	DC.. 0702	228,50	**08006**
ST.SR20R4-RE-K-DC11-R-IK	22	25	43,5	1,0	57,5	18,5	M8x1	92	DC.. 11T3	228,50	**08008**
ST.SR20R4-RE-L-DC07-R-IK	22	25	43,5	1,5	77,5	18,5	M8x1	92	DC.. 0702	279,50	**08007**
ST.SR20R4-RE-L-DC11-R-IK	22	25	43,5	1,0	77,5	18,5	M8x1	92	DC.. 11T3	279,50	**08009**

Combination Key

Clamping screw

Solid Carbide Seat D

Threaded bush

Alu ring

Spare parts for Article no.	70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		72 950 ... EUR 2A		72 950 ... EUR Y8	
72 955 08006			2,99	**13800**					7,73	**19008**
72 955 08008	10,66	**398**	4,14	**113**	9,66	**106**	18,38	**19005**	7,73	**19008**
72 955 08007			2,99	**13800**					7,73	**19008**
72 955 08009	10,66	**398**	4,14	**113**	9,66	**106**	18,38	**19005**	7,73	**19008**

Screw plug

Countersunk screw

Key D

Coolant nozzle

Spare parts for Article no.	72 950 ... EUR Y8		72 950 ... EUR Y8		80 950 ... EUR Y7		72 989 ... EUR X0	
72 955 08006	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**
72 955 08008	13,25	**19006**	3,31	**19007**			10,08	**10002**
72 955 08007	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**
72 955 08009	13,25	**19006**	3,31	**19007**			10,08	**10002**

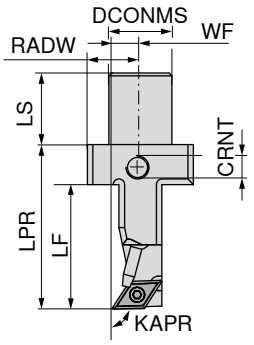
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

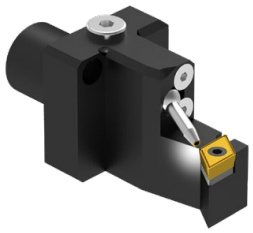
Rear holder with screw clamping for DC.. Indexable inserts

▲ 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





Designation	DCONMS $_{g6}$ mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	KAPR °	Insert	72 955 ... EUR X0	
ST.SR20R4-RX-K-DC11-R-IK	22	25	43,5	10	57,5	18,5	M8x1	92	DC.. 11T3	228,50	**08010**
ST.SR20R4-RX-L-DC11-R-IK	22	25	43,5	10	77,5	18,5	M8x1	92	DC.. 11T3	279,50	**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.	EUR Y8	EUR Y8	EUR X0	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR Y8
72 955 08010	13,25 **19006**	3,31 **19007**	10,08 **10002**	10,66 **398**	4,14 **113**	9,66 **106**	5,98 **171**	7,73 **19008**
72 955 08011	13,25 **19006**	3,31 **19007**	10,08 **10002**	10,66 **398**	4,14 **113**	9,66 **106**	5,98 **171**	7,73 **19008**

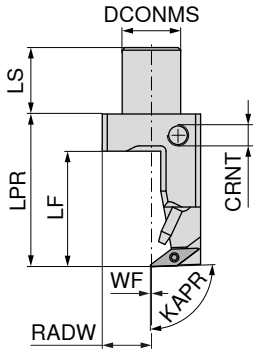
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

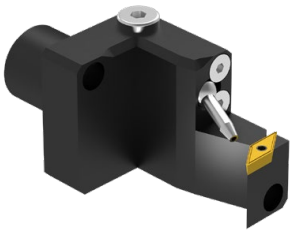
Rear holder with screw clamping for VC.. Indexable inserts

▲ 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	KAPR °	Insert	72 955 ... EUR X0	
ST.SR20R4-RE-K-VC11-R-IK	22	25	43,5	0,5	57,5	18,5	M8x1	92	VC.. 1103	228,50	**08012**
ST.SR20R4-RE-L-VC11-R-IK	22	25	43,5	0,5	77,5	18,5	M8x1	92	VC.. 1103	279,50	**08013**

Spare parts for Article no.	 Screw plug 72 950 ... EUR Y8		 Countersunk screw 72 950 ... EUR Y8		 Key D 80 950 ... EUR Y7		 Coolant nozzle 72 989 ... EUR X0		 Clamping screw 70 950 ... EUR 2A/28		 Alu ring 72 950 ... EUR Y8	
72 955 08012	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**	2,99	**13800**	7,73	**19008**
72 955 08013	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**	2,99	**13800**	7,73	**19008**

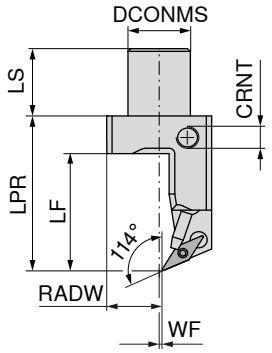
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

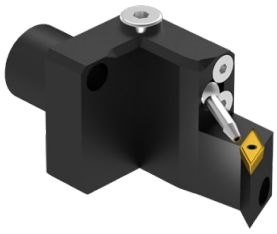
Rear holder with screw clamping for VC.. Indexable inserts

▲ 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 ... EUR X0	
ST.SR20R4-RE-K-VC11-24-R-IK	22	25	43,5	1,1	57,5	18,5	M8x1	VC.. 1103	228,50	**08014**
ST.SR20R4-RE-L-VC11-24-R-IK	22	25	43,5	1,1	77,5	18,5	M8x1	VC.. 1103	279,50	**08015**

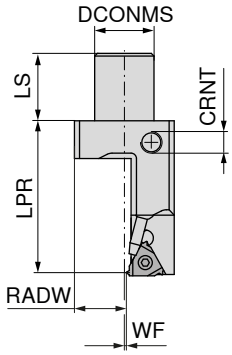
Spare parts for Article no.	Screw plug 72 950 ... EUR Y8		Countersunk screw 72 950 ... EUR Y8		Key D 80 950 ... EUR Y7		Coolant nozzle 72 989 ... EUR X0		Clamping screw 70 950 ... EUR 2A/28		Alu ring 72 950 ... EUR Y8	
72 955 08014	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**	2,99	**13800**	7,73	**19008**
72 955 08015	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**	2,99	**13800**	7,73	**19008**

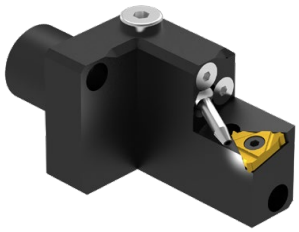
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

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





Designation	DCONMS $_{g6}$ mm	LS mm	WF mm	LPR mm	RADW mm	CRNT	Insert	Right-hand 72 955 ... EUR X0	
ST.SR20R4-RE-K-ER16-R-IK	22	25	0,7	57,5	18,5	M8x1	16 ER..	228,50	**08016**
ST.SR20R4-RE-L-ER16-R-IK	22	25	0,7	77,5	18,5	M8x1	16 ER..	279,50	**08017**

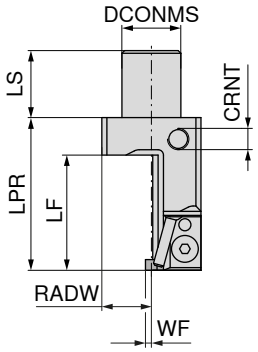
Spare parts for Article no.	Screw plug 72 950 ... EUR Y8		Countersunk screw 72 950 ... EUR Y8		Coolant nozzle 72 989 ... EUR X0		Clamping screw 71 950 ... EUR Y2		Alu ring 72 950 ... EUR Y8	
72 955 08016	13,25	**19006**	3,31	**19007**	10,08	**10002**	1,41	**231**	7,73	**19008**
72 955 08017	13,25	**19006**	3,31	**19007**	10,08	**10002**	1,41	**231**	7,73	**19008**

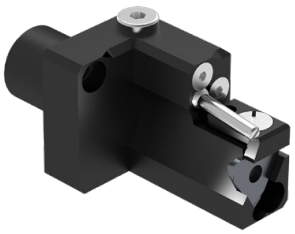
Suitable indexable inserts can be found in the main catalogue, **Chapter 8 Thread turning.**

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 ... EUR X0	
ST.SR20R4-RE-K-TX-R-IK	22	25	43	2	57	18,5	M8x1	TX R/N/L ...2/3/4	228,50	**16018**
ST.SR20R4-RE-L-TX-R-IK	22	25	43	2	77	18,5	M8x1	TX R/N/L ...2/3/4	279,50	**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.	EUR Y8	EUR Y6	EUR Y6	EUR Y6	EUR X0	EUR Y6	EUR Y8
72 955 16018	13,25 **19006**	59,41 **19001**	3,14 **19002**	3,14 **19003**	15,19 **10001**	11,46 **19004**	7,73 **19008**
72 955 16019	13,25 **19006**	59,41 **19001**	3,14 **19002**	3,14 **19003**	15,19 **10001**	11,46 **19004**	7,73 **19008**

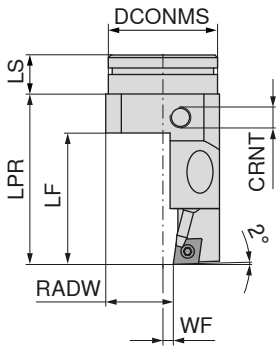
Suitable indexable inserts can be found in the main catalogue, **Chapter 11 Grooving tools.**

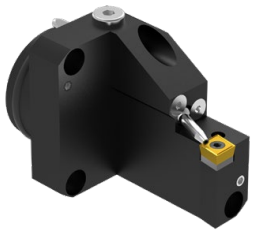
Rear holder with screw clamping for CC.. Indexable inserts

▲ 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





Designation	DCONMS $_{g6}$ mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	72 957 ... EUR X0	
TS.RE42.65-CC09-R-IK	42	15	50,5	4	65,5	26	M8x1	CC.. 09T3	312,60	**08001**

	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 ...**
Spare parts for Article no.	EUR Y8	EUR Y8	EUR Y7	EUR X0	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR Y8
72 957 08001	13,25 **19006**	3,31 **19007**	11,96 **113**	10,08 **10002**	4,14 **113**	12,46 **165**	5,98 **171**	7,73 **19008**

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

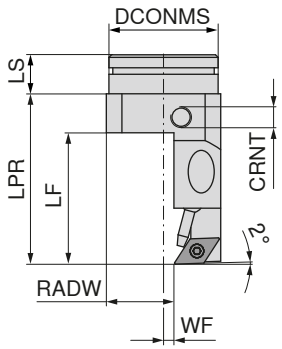
3

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



Designation	DCONMS $_{g6}$ mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	72 957 ... EUR X0	
TS.RE42.65-DC11-R-IK	42	15	50,5	4	65,5	26	M8x1	DC.. 11T3	312,60	**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.	EUR Y8	EUR Y8	EUR X0	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR Y8
72 957 08002	13,25 **19006**	3,31 **19007**	10,08 **10002**	10,66 **398**	4,14 **113**	9,66 **106**	5,98 **171**	7,73 **19008**

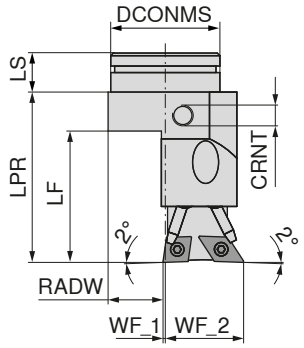
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

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



Designation	DCONMS $_{g6}$	LS	LF	LPR	WF_1	WF_2	RADW	CRNT	Insert	double 72 957 ... EUR X0
	mm	mm	mm	mm	mm	mm	mm			
TS.RD42.65-CC09-R-DC11-L-IK	42	15	50,5	65,5	1	30	21	M8x1	CC.. 09T3 / DC.. 11T3	376,50 **08009**

	 Clamping screw	 Solid Carbide Seat D	 Carbide type C	 Threaded sleeve	 Alu ring
	70 950 ...	**70 950 ...**	**70 950 ...**	**70 950 ...**	**72 950 ...**
Spare parts for Article no.	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR Y8
72 957 08009	4,14 **113**	9,66 **106**	12,46 **165**	5,98 **171**	7,73 **19008**

	 Screw plug	 Countersunk screw	 Key D	 Coolant nozzle	 Combination Key
	72 950 ...	**72 950 ...**	**80 950 ...**	**72 989 ...**	**70 950 ...**
Spare parts for Article no.	EUR Y8	EUR Y8	EUR Y7	EUR X0	EUR 2A/28
72 957 08009	13,25 **19006**	3,31 **19007**	11,96 **113**	10,08 **10002**	10,66 **398**

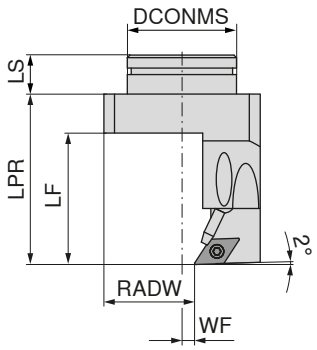
Suitable CC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**
Suitable DC.. Indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

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



Designation	DCONMS g6 mm	LS mm	LF mm	LPR mm	WF mm	RADW mm	Insert	72 957 ... EUR X0	
TS.RY42.65-DC11-R-IK	42	15	50,5	65,5	4,5	34,5	DC.. 11T3	312,60	**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.	EUR Y8	EUR Y8	EUR X0	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR Y8
72 957 08007	13,25 **19006**	3,31 **19007**	10,08 **10002**	10,66 **398**	4,14 **113**	9,66 **106**	5,98 **171**	7,73 **19008**

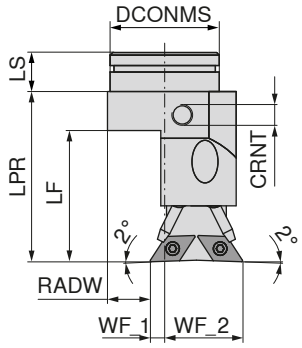
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

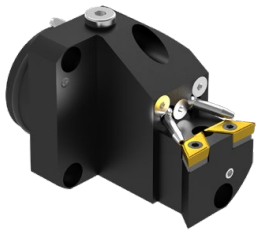
Rear holder (double) with screw clamping for DC.. Indexable inserts

▲ 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





Designation	DCONMS g6 mm	LS mm	LF mm	LPR mm	WF_1 mm	WF_2 mm	RADW mm	CRNT	Insert	double 72 957 ... EUR X0	
TS.RD42.65-DC11-R-DC11-L-IK	42	15	50,5	65,5	5,5	30	16,5	M8x1	DC.. 11T3	376,50	**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.	EUR Y8	EUR Y8	EUR X0	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR 2A/28	EUR Y8
72 957 08011	13,25 **19006**	3,31 **19007**	10,08 **10002**	10,66 **398**	4,14 **113**	9,66 **106**	5,98 **171**	7,73 **19008**

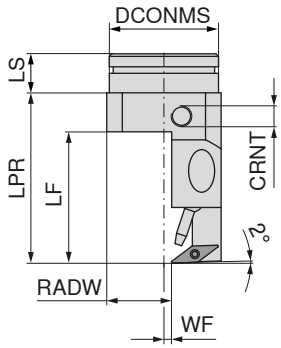
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

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 ... EUR X0	
TS.RE42.65-VC11-R-IK	42	15	50,5	65,5	3	25	M8x1	VC.. 1103	312,60	**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 ...**
Spare parts for Article no.	EUR Y8	EUR Y8	EUR Y7	EUR X0	EUR 2A/28	EUR Y8
72 957 08003	13,25 **19006**	3,31 **19007**	10,05 **110**	10,08 **10002**	2,99 **13800**	7,73 **19008**

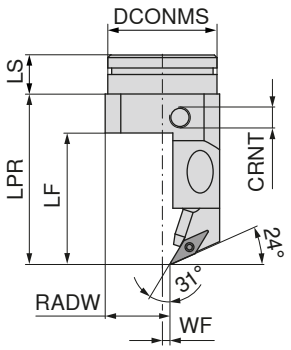
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

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 ... EUR X0	
TS.RE42.65-VC11-24-R-IK	42	15	50,5	65,5	3	25	M8x1	VC.. 1103	312,60	**08004**

Spare parts for Article no.	 Screw plug 72 950 ... EUR Y8		 Countersunk screw 72 950 ... EUR Y8		Key D 80 950 ... EUR Y7		 Coolant nozzle 72 989 ... EUR X0		 Clamping screw 70 950 ... EUR 2A/28		 Alu ring 72 950 ... EUR Y8	
72 957 08004	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**	2,99	**13800**	7,73	**19008**

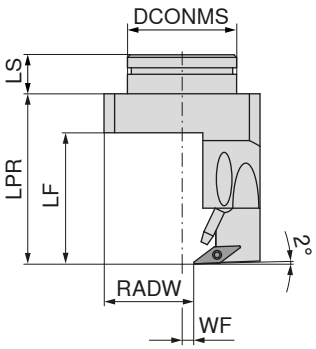
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

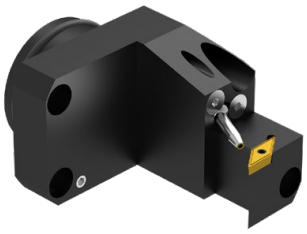
Overhead rear holder with screw clamping for VC.. Indexable inserts

▲ 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 ... EUR X0	
TS.RY42.65-VC11-R-IK	42	15	3	50,5	65,5	25	M8x1	VC.. 1103	312,60	**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 ...**
Spare parts for Article no.	**EUR** Y8	**EUR** Y8	**EUR** Y7	**EUR** X0	**EUR** 2A/28	**EUR** Y8
72 957 08008	13,25 **19006**	3,31 **19007**	10,05 **110**	10,08 **10002**	2,99 **13800**	7,73 **19008**

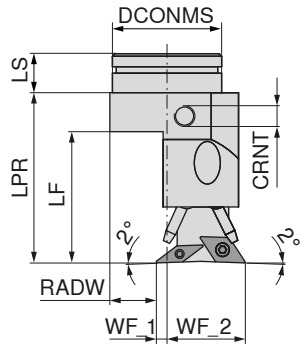
Suitable indexable inserts can be found in the ISO turning section in the main catalogue, **Chapter 9 Turning Tools.**

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



Designation	DCONMS $_{g6}$ mm	LS mm	LF mm	LPR mm	WF_1 mm	WF_2 mm	RADW mm	CRNT	Insert		double 72 957 ... EUR X0	
TS.RD42.65-VC11-R-DC11-L-IK	42	15	50,5	65,5	4	30	18	M8x1	VC.. 1103 / DC.. 11T3		376,50	**08010**

	Combination Key		Clamping screw		Solid Carbide Seat D		Threaded sleeve		Alu ring	
	70 950 ...		70 950 ...		70 950 ...		70 950 ...		72 950 ...	
Spare parts for Article no.	EUR 2A/28		EUR 2A/28		EUR 2A/28		EUR 2A/28		EUR Y8	
72 957 08010	10,66	**398**	4,14	**113**	9,66	**106**	5,98	**171**	7,73	**19008**

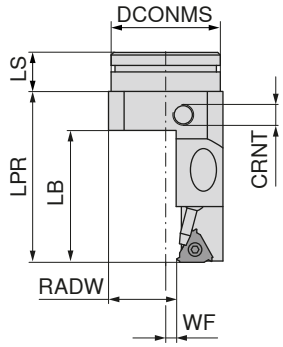
	Screw plug		Countersunk screw		Key D		Coolant nozzle	
	72 950 ...		72 950 ...		80 950 ...		72 989 ...	
Spare parts for Article no.	EUR Y8		EUR Y8		EUR Y7		EUR X0	
72 957 08010	13,25	**19006**	3,31	**19007**	10,05	**110**	10,08	**10002**

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

Designation	DCONMS $_{g6}$ mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	72 957 ... EUR X0	
TS.RE42.65-ER16-R-IK	42	15	50,5	4	65,5	26	M8x1	16 ER..	312,60	**08005**

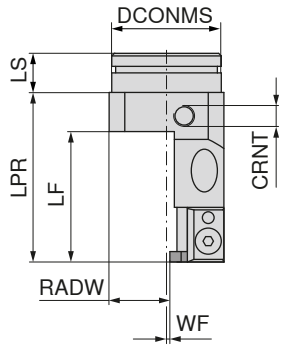
	 Screw plug	 Countersunk screw	 Coolant nozzle	 Clamping screw	 Alu ring
	72 950 ...	**72 950 ...**	**72 989 ...**	**71 950 ...**	**72 950 ...**
Spare parts for Article no.	**EUR Y8**	**EUR Y8**	**EUR X0**	**EUR Y2**	**EUR Y8**
72 957 08005	13,25 **19006**	3,31 **19007**	10,08 **10002**	1,41 **231**	7,73 **19008**

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



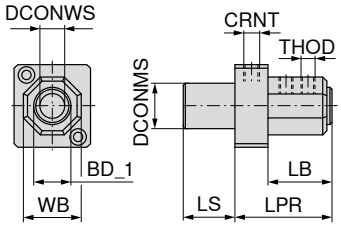
Designation	DCONMS $_{g6}$ mm	LS mm	LF mm	WF mm	LPR mm	RADW mm	CRNT	Insert	72 957 ... EUR X0	
TS.RE42.65-TX-R-IK	42	15	50	1	65,5	23	M8x1	TX R/N/L ...2/3/4	312,60	**16006**

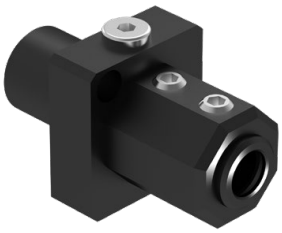
	Screw plug	Clamp	Lock washer	Countersunk screw	Coolant nozzle	Guide pin with flange	Alu ring
	72 950 ...	72 950 ...	72 950 ...	72 950 ...	72 989 ...	72 950 ...	72 950 ...
Spare parts for Article no.	EUR Y8	EUR Y6	EUR Y6	EUR Y6	EUR X0	EUR Y6	EUR Y8
72 957 16006	13,25 **19006**	59,41 **19001**	3,14 **19002**	3,14 **19003**	15,19 **10001**	11,46 **19004**	7,73 **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	EUR X0	
ST.SR20R4-BH-06-IK	22	6	12	47	25	28	31	M6	279,50	**03020**
ST.SR20R4-BH-08-IK	22	8	14	47	25	28	31	M8	279,50	**03021**
ST.SR20R4-BH-10-IK	22	10	16	47	25	28	31	M8	279,50	**03022**
ST.SR20R4-BH-12-IK	22	12	18	47	25	28	31	M10	279,50	**03023**
ST.SR20R4-BH-14-IK	22	14	19	47	25	28	31	M10	279,50	**03024**
ST.SR20R4-BH-66-IK	22	16	21	47	25	32	31	M10	279,50	**03025**

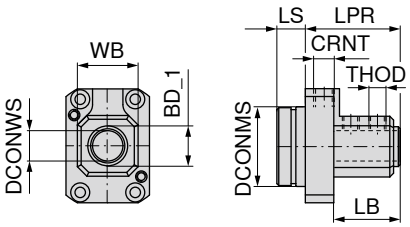

Grubscrew


Grubscrew

Spare parts for Article no.	72 950 ... EUR Y8		83 950 ... EUR Y8	
72 955 03020	3,31	**19011**		
72 955 03021			2,66	**464**
72 955 03022			2,66	**464**
72 955 03023	3,31	**19013**		
72 955 03024	3,31	**19013**		
72 955 03025	3,31	**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	EUR X0	
TS.RE42.65-BH-06-IK	42	6	12	50	15	28	35	M6	357,50	**03012**
TS.RE42.65-BH-08-IK	42	8	14	50	15	28	35	M8	357,50	**03013**
TS.RE42.65-BH-10-IK	42	10	16	50	15	28	35	M8	357,50	**03014**
TS.RE42.65-BH-12-IK	42	12	18	50	15	28	35	M10	357,50	**03015**
TS.RE42.65-BH-14-IK	42	14	18	50	15	28	35	M10	357,50	**03016**
TS.RE42.65-BH-16-IK	42	16	21	50	15	32	35	M10	357,50	**03017**


Grubscrew

72 950 ...

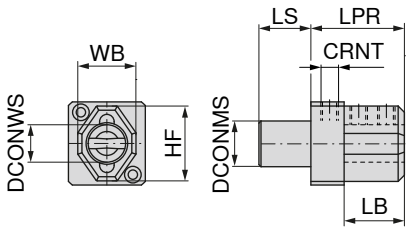

Grubscrew

83 950 ...

Spare parts for Article no.	EUR Y8		EUR Y8	
72 957 03012	3,31	**19011**		
72 957 03013			2,66	**464**
72 957 03014			2,66	**464**
72 957 03015	3,31	**19013**		
72 957 03016	3,31	**19013**		
72 957 03017	3,31	**19013**		

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



72 955 ...

Designation	DCONMS $_{g6}$ mm	DCONWS $_{H6}$ mm	HF mm	LS mm	LB mm	WB mm	LPR mm	CRNT	EUR X0	
ST.SR20R4-S20-IK	22	20	36	25	29	28	45	M8x1	266,20	**20027**

Grubscrew

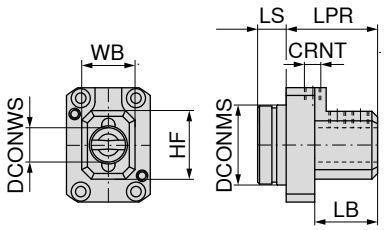
83 950 ...

Spare parts for Article no.	EUR Y8	
72 955 20027	2,66	**464**

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

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 ...

Designation	DCONMS $_{g6}$ mm	DCONWS $_{H6}$ mm	HF mm	LS mm	LB mm	WB mm	LPR mm	CRNT	EUR X0	
TS.RE42.65-S-20-IK	42	20	36	15	33	28	48	M8x1	357,20	**20018**

Grubscrew

83 950 ...

Spare parts for Article no.	EUR Y8	
72 957 20018	2,66	**464**

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

Coolant attachment for height-adjustable insert holder, left

Left-hand

Designation	for	72 985 ... EUR X0	
MU.KS-KA-AH-L	MU.AH-...-L	49,13	09003

Coolant attachment for STAR

Designation	72 955 ... EUR X0	
ST.KS-KA-STAR	44,01	09026

Coolant attachment for height-adjustable insert holder, right

Right-hand

Designation	for	72 985 ... EUR X0	
MU.KS-KA-AH-R	MU.AH-...-R	49,13	09001

Coolant distributor for high-pressure connections - 6 outlets

Scope of supply:
without quick-couplers

Designation	72 991 ... EUR X0	
MU.KSV-45-30-35x6	95,70	12003

Coolant attachment for height-adjustable insert holder, double

double

Designation	for	72 985 ... EUR X0	
MU.KS-KA-AH-D	MU.AH-...-R/L	56,79	09002

Coolant distributor for high-pressure connections - 7 outlets

Scope of supply:
without quick-couplers

Designation	72 991 ... EUR X0	
MU.KSV-80-30-30x7	102,10	12002

Coolant distributor for high-pressure connections - 8 outlets

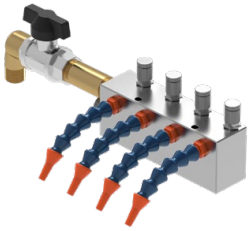
Scope of supply:
without quick-couplers

Designation		72 991 ... EUR X0	
MU.KSV-110-30-30x8		108,40	12001

Coolant distributor for STAR SR 32

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

Scope of supply:
without quick-couplers



Designation		72 991 ... EUR X0	
MU.KSV-45-30-35x6		222,20	12004

Coolant nozzle for high-pressure applications

Designation		72 989 ... EUR X0	
MU.KS-KD-HD		10,08	10002

Coolant nozzle for TX grooving tool holder

Designation		72 989 ... EUR X0	
MU.KS-KD-HO		15,19	10001

Coolant nozzle for low-pressure applications

Designation		72 989 ... EUR X0	
MU.KS-KD-ND		10,08	10003

G1/8” screw plug

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

Designation	THSZMS	72 950 ... EUR X0	
VS.G1/8	G1/8"	21,72	010

Angled coolant connection - short

Designation	THOD	short 72 987 ... EUR X0	
MU.KS-KA-VU-K	M8x1	42,78	18001

Angled coolant connection - long

Designation	THOD	long 72 987 ... EUR X0	
MU.KS-KA-VU-L	M8x1	49,13	18002

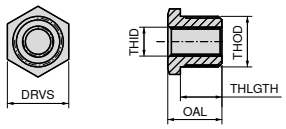
3

Angled coolant connection for distributor

72 987 ...

Designation	THOD	THID	EUR X0	
MU.KS-KA-KSV	G1/8"	G1/8"	42,78	18003

Threaded adapter

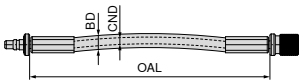


72 988 ...

THID	THOD	THLGTH mm	DRVS mm	OAL mm	EUR X0	
G1/8"	G1/4"	11,5	17	15,0	15,19	01005
G1/8"	M8x1	11,5	14	15,0	15,19	01006
G1/8"	M12x1	11,5	14	15,0	15,19	01007
G1/8"	M14x1	11,5	17	15,0	15,19	01008
M8x1	G1/4"	11,5	17	15,0	15,19	01003
M8x1	M12x1	11,5	14	15,0	15,19	01001
M8x1	M14x1	11,5	17	15,0	15,19	01002
M8x1	G1/8"	11,5	14	23,5	15,19	01004

Flexible coolant hoses

- ▲ incl. prefitted quick-coupler and coupler connector
- ▲ extremely flexible
- ▲ pressure-resistant up to 300 bar

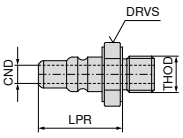


72 990 ...

Designation	BD mm	CND mm	OAL mm	EUR X0	
MU.KSS-DN3-150	6,0	3	150	90,58	11005
MU.KSS-DN3-250	6,0	3	250	95,70	11006
MU.KSS-DN5-200	9,5	5	200	103,30	11001
MU.KSS-DN5-300	9,5	5	300	108,40	11002
MU.KSS-DN5-400	9,5	5	400	111,00	11003
MU.KSS-DN5-500	9,5	5	500	113,60	11004

Coupler connector

- ▲ pressure-resistant up to at least 400 bar

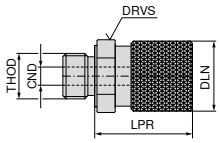


72 992 ...

Designation	LPR mm	CND mm	DRVS mm	OAL mm	EUR X0	
MU.KSKS-M8x1	18,5	4	12	19	14,66	13001

Quick-coupler

- ▲ pressure-resistant up to at least 400 bar
- ▲ rapid change of coolant distribution without screws thanks to click system

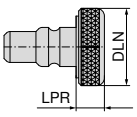


72 993 ...

THOD	BD mm	DLN mm	LPR mm	CND mm	EUR X0	
G1/8"	16	15,5	21,5	4	33,81	15001

Sealing plugs

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



72 994 ...

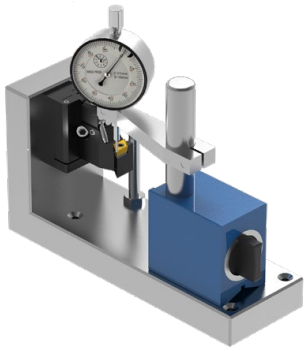
Designation	LPR mm	DLN mm	EUR X0	
MU.KSVS	5,5	15,5	4,45	17001

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	EUR X0	72 996 ...
MU.EV MAX	701,70	05001
MU.EV MAX-OMU	510,50	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

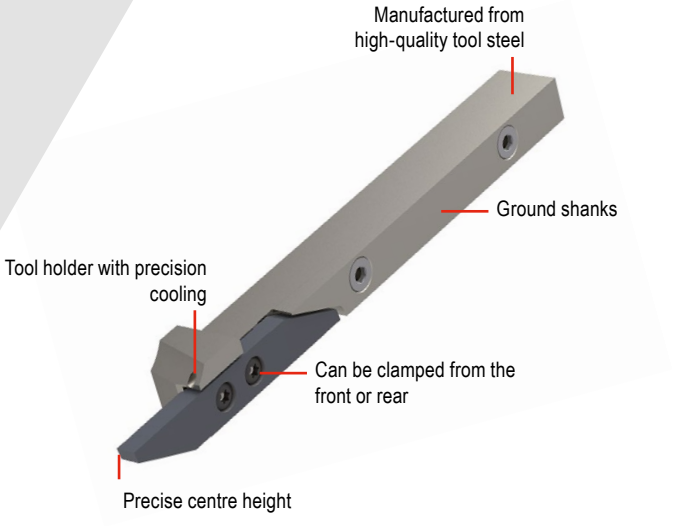
▲ Second cutting edge can still be used in the event of breakage
Minimises costs

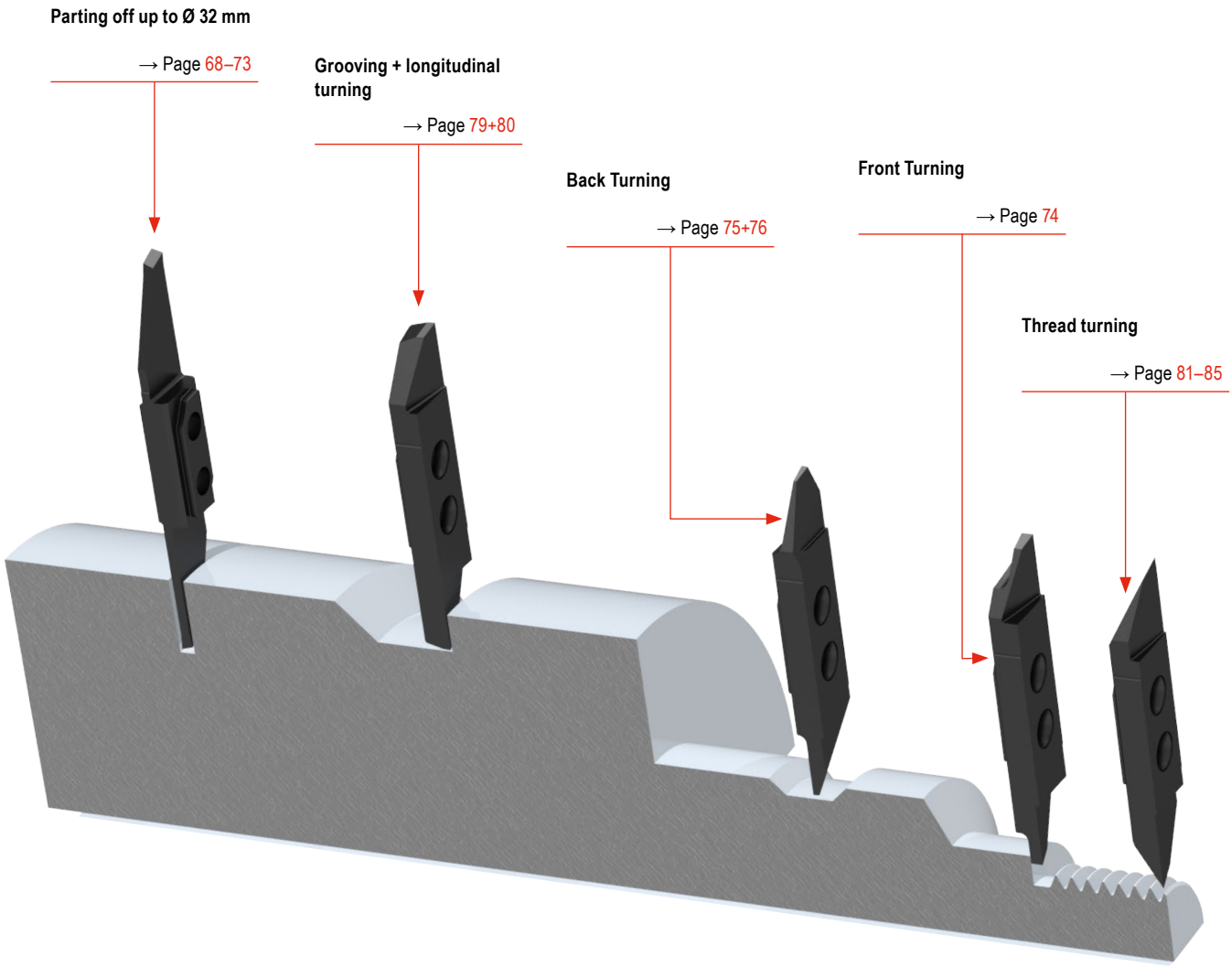
▲ Insert seat protected against swarf
Increases the service life of the holder

▲ High changeover precision
Reduces unproductive times

▲ Large selection of indexable inserts and geometries
Increases flexibility

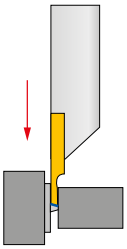
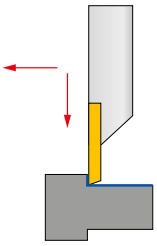
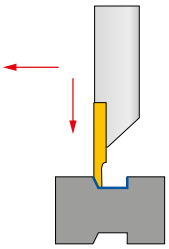
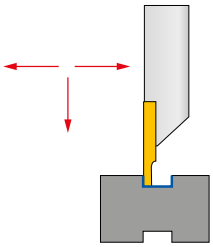
▲ Optional coolant supply to cutting edge
Increases service life and improves surface quality

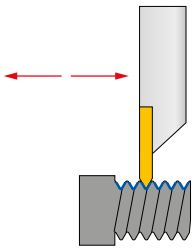
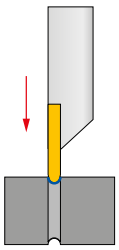
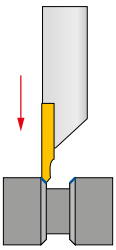




Overview – VertiClamp

Inserts

Parting	Front Turning	Back Turning	Grooving + longitudinal turning
			
→ Page 68–73	→ Page 74	→ Page 75+76	→ Page 77–80

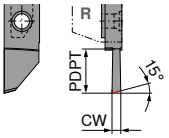
Thread turning	Radius Grooving	Chamfers
		
→ Page 81–85	→ Page 86	→ Page 87

Tool holder

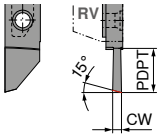
	Standard tool holders	Offset tool holders	Contra tool holders
			
normal	→ Page 89	→ Page 90	→ Page 92
with through coolant	→ Page 89	→ Page 91	

3002 L / 3002 LV / 3002 R / 3002 RV

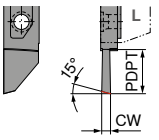
Designation	CW mm	PDPT mm
3002-0,8-6	0,8	6
3002-0,8-10	0,8	10
3002-1,0-6	1,0	6
3002-1,0-13	1,0	13
3002-1,2-6	1,2	6
3002-1,5-8	1,5	8
3002-1,5-16	1,5	16
3002-1,8-8	1,8	8
3002-2,0-10	2,0	10
3002-2,0-16	2,0	16
3002-2,5-13	2,5	13
3002-2,5-16	2,5	16
3002-3,0-16	3,0	16



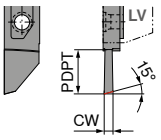
3002 L



3002 LV



3002 R



3002 RV

3002_L / 3002_LV / 3002_R / 3002_RV

▲ for parting off

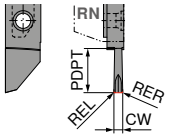
	F	F	F	F
	3002 L	3002 LV	3002 R	3002 RV
	72 420 ...	72 422 ...	72 416 ...	72 418 ...
ISO designation	EUR X1	EUR X1	EUR X1	EUR X1
3002-0,8-6	31,84 510	31,84 510	31,84 510	31,84 510
3002-0,8-10	31,84 530	31,84 530	31,84 530	31,84 530
3002-1,0-6	31,84 512	31,84 512	31,84 512	31,84 512
3002-1,0-13	37,09 532	37,36 532	37,09 532	37,36 532
3002-1,2-6	31,84 514	31,84 514	31,84 514	31,84 514
3002-1,5-8	31,84 516	31,84 516	31,84 516	31,84 516
3002-1,5-16	40,48 536	40,48 536	40,48 536	40,48 536
3002-1,8-8	31,84 518	31,84 518	31,84 518	31,84 518
3002-2,0-10	31,84 520	31,84 520	31,84 520	31,84 520
3002-2,0-16	40,48 540	40,48 540	40,48 540	40,48 540
3002-2,5-13	37,09 522 1)	37,09 522 1)	37,09 522 1)	37,09 522 1)
3002-2,5-16	40,48 542 1)	40,48 542 1)	40,48 542 1)	40,48 542 1)
3002-3,0-16	39,92 524 1)	39,92 524 1)	39,92 524 1)	39,92 524 1)
P	●	●	●	●
M	●	●	●	●
K				
N	○	○	○	○
S	●	●	●	●
H				
O	○	○	○	○

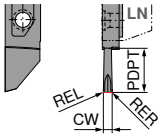
1) used with tool holders with 12 mm and larger shank size

→ v_c Page 96+97

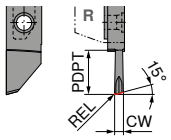
3002 L / 3002 LN / 3002 LV / 3002 R / 3002 RN / 3002 RV

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

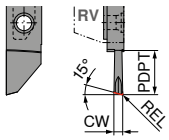




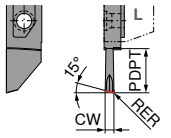
3002 RN



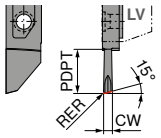
3002 LN



3002 R



3002 RV



3002 L

3002 LV

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

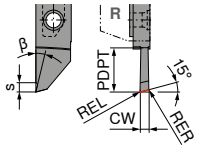
▲ for parting off

ISO designation	REL mm	RER mm	-SC WPU7620	F 3002 L 72 432 ... EUR X1		-SC WPU7620	F 3002 LN 72 426 ... EUR X1		-SC WPU7620	F 3002 LV 72 434 ... EUR X1		-SC WPU7620	F 3002 R 72 428 ... EUR X1		-SC WPU7620	F 3002 RN 72 424 ... EUR X1		-SC WPU7620	F 3002 RV 72 430 ... EUR X1	
3002-1,5-8	0,00	0,08		34,53	508					34,53	508									
3002-1,5-8	0,08	0,00											34,53	508					34,53	508
3002-1,5-10	0,08	0,08					35,09	510								35,09	510			
3002-1,5-16	0,08	0,08					44,04	530								44,04	530			
3002-1,5-16	0,08	0,00											43,33	528					43,33	528
3002-1,5-16	0,00	0,08		43,33	528					43,33	528									
3002-2,0-10	0,08	0,08					35,09	512								35,09	512			
3002-2,0-10	0,08	0,00											34,53	510					34,53	510
3002-2,0-10	0,00	0,08		34,53	510					34,53	510									
3002-2,0-16	0,08	0,08					44,04	532								44,04	532			
3002-2,0-16	0,08	0,00											43,33	530					43,33	530
3002-2,0-16	0,00	0,08		43,33	530					43,33	530									
3002-2,5-13	0,08	0,08					41,49	514 1)								41,49	514 1)			
3002-2,5-13	0,08	0,00											40,48	512 1)					40,36	512 1)
3002-2,5-13	0,00	0,08		40,48	512 1)					40,36	512 1)									
3002-2,5-16	0,08	0,08					43,46	534 1)								41,49	534 1)			
3002-2,5-16	0,08	0,00											43,33	532 1)					43,33	532 1)
3002-2,5-16	0,00	0,08		43,33	532 1)					43,33	532 1)									
3002-3,0-16	0,08	0,08					43,46	516 1)								41,49	516 1)			
3002-3,0-16	0,08	0,00											43,33	514 1)					43,33	514 1)
3002-3,0-16	0,00	0,08		43,33	514 1)					43,33	514 1)									
P				●			●			●			●			●			●	
M				●			●			●			●			●			●	
K																				
N				○			○			○			○			○			○	
S				●			●			●			●			●			●	
H																				
O				○			○			○			○			○			○	

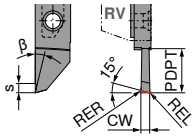
1) used with tool holders with 12 mm and larger shank size

3002 L / 3002 LV / 3002 R / 3002 RV

Designation	CW	PDPT	s
	mm	mm	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

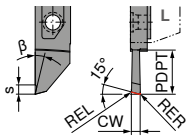


3002 L

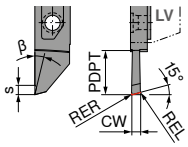


3002 LV

3002 R

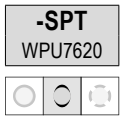


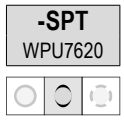
3002 RV



3002_L / 3002_LV / 3002_R / 3002_RV

▲ for parting off



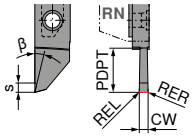


ISO designation	REL	RER	F 3002 L 72 440 ...		F 3002 LV 72 442 ...		F 3002 R 72 436 ...		F 3002 RV 72 438 ...	
	mm	mm	EUR X1		EUR X1		EUR X1		EUR X1	
3002-0,8-10	0,00	0,00	34,53	**50600**	34,53	**50600**	34,53	**50600**	34,53	**50600**
3002-1,0-13	0,00	0,00	40,05	**52800**	40,05	**52800**	40,05	**52800**	40,05	**52800**
3002-1,5-16	0,00	0,00	42,76	**53000**	42,76	**53000**	42,76	**53000**	42,76	**53000**
3002-1,5-8-06	0,00	0,05	36,94	**540**	36,94	**540**				
3002-1,5-8-06	0,05	0,00					36,94	**540**	36,94	**540**
3002-1,5-8-12	0,00	0,05	34,53	**570**	34,53	**570**				
3002-1,5-8-12	0,05	0,00					34,53	**570**	34,53	**570**
3002-2,0-10-06	0,00	0,05	36,94	**572**	36,94	**572**				
3002-2,0-10-06	0,05	0,00					36,94	**572**	36,94	**572**
3002-2,0-10-12	0,00	0,05	34,53	**582**	34,53	**582**				
3002-2,0-10-12	0,05	0,00					34,53	**582**	34,53	**582**
3002-2,0-16-06	0,00	0,05	46,17	**552**	46,17	**552**				
3002-2,0-16-06	0,05	0,00					46,17	**552**	46,17	**552**
3002-2,0-16-12	0,00	0,05	42,76	**592**	42,76	**592**				
3002-2,0-16-12	0,05	0,00					42,76	**592**	42,76	**592**
3002-2,5-13-06	0,00	0,05	43,46	**554**	46,17	**554**				
3002-2,5-13-06	0,05	0,00					43,46	**554**	46,17	**554**
3002-2,5-13-12	0,00	0,05	40,05	**584**	40,05	**584**				
3002-2,5-13-12	0,05	0,00					40,05	**584**	40,05	**584**
3002-2,5-16-06	0,00	0,05	46,17	**574**	46,17	**574**				
3002-2,5-16-06	0,05	0,00					46,17	**574**	46,17	**574**
3002-2,5-16-12	0,00	0,05	42,76	**594**	42,76	**594**				
3002-2,5-16-12	0,05	0,00					42,76	**594**	42,76	**594**
3002-3,0-16-06	0,00	0,05	46,17	**556**	46,17	**556**				
3002-3,0-16-06	0,05	0,00					46,17	**556**	46,17	**556**
3002-3,0-16-12	0,00	0,05	42,76	**586**	42,76	**586**				
3002-3,0-16-12	0,05	0,00					42,76	**586**	42,76	**586**
P			●		●		●		●	
M			●		●		●		●	
K										
N			○		○		○		○	
S			●		●		●		●	
H										
O			○		○		○		○	

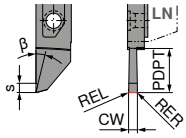
→ v_c Page 96+97

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

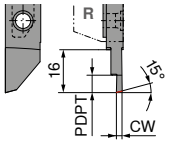
	-SPT WPU7620	-SPT WPU7620
		
	F	F
	3002 LN	3002 RN
	72 515 ...	72 514 ...

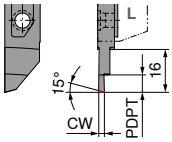
ISO designation	REL mm	RER mm	EUR	X1	EUR	X1
3002-1,0-10	0,05	0,05	41,06	50800	41,06	50800
3002-1,5-10-06	0,05	0,05	36,94	550	36,94	550
3002-1,5-10-12	0,05	0,05	36,94	580	36,94	580
3002-1,5-16	0,05	0,05	46,17	53000	46,17	53000
3002-2,0-10-06	0,05	0,05	36,94	572	36,94	572
3002-2,0-10-12	0,05	0,05	36,94	582	36,94	582
3002-2,0-16-06	0,05	0,05	46,17	552	46,17	552
3002-2,0-16-12	0,05	0,05	46,17	592	46,17	592
3002-2,5-13-06	0,05	0,05	43,46	554	43,46	554
3002-2,5-13-12	0,05	0,05	43,46	584	43,46	584
3002-2,5-16-06	0,05	0,05	46,17	574	46,17	574
3002-2,5-16-12	0,05	0,05	46,17	594	46,17	594
3002-3,0-16-06	0,05	0,05	46,17	556	46,17	556
3002-3,0-16-12	0,05	0,05	46,17	586	46,17	586
P			●		●	
M			●		●	
K						
N			○		○	
S			●		●	
H						
O			○		○	

3

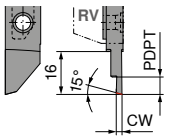
3002 L-16 / 3002 LV-16 / 3002 R-16 / 3002 RV-16

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

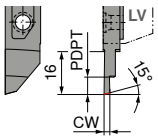




3002 R



3002 L



3002 RV

3002 LV

3002_L_16 / 3002_LV_16 / 3002_R_16 / 3002_RV_16

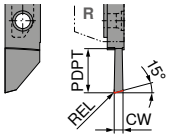
▲ For parting off with pick-up spindle

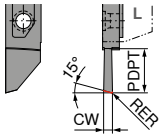
ISO designation	F 3002 L-16 72 497 ... EUR X1		F 3002 LV-16 72 499 ... EUR X1		F 3002 R-16 72 496 ... EUR X1		F 3002 RV-16 72 498 ... EUR X1	
3002-0,8-6-16	39,76	**510**	39,76	**510**	39,76	**510**	39,76	**510**
3002-1,0-6-16	39,76	**51200**	39,76	**51200**	39,76	**51200**	39,76	**51200**
3002-1,2-6-16	39,76	**514**	39,76	**514**	39,76	**514**	39,76	**514**
P	●		●		●		●	
M	●		●		●		●	
K								
N	○		○		○		○	
S	●		●		●		●	
H								
O	○		○		○		○	

→ v_c Page 96+97

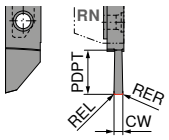
3002 L / 3002 LN / 3002 LV / 3002 R / 3002 RN / 3002 RV

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

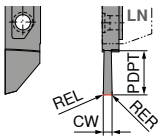




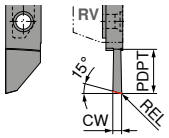
3002 R



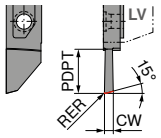
3002 L



3002 RN



3002 LN



3002 RV

3002 LV

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

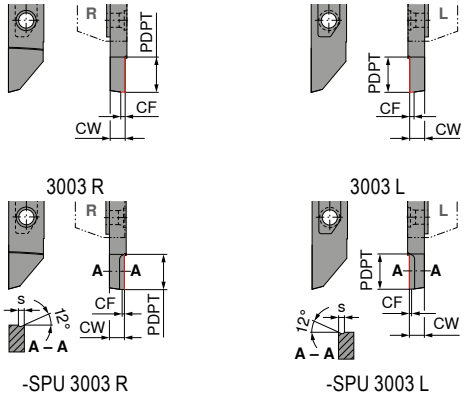
▲ For parting off
▲ **E:** Blade with rounded cutting edge
▲ **F:** Blade with sharp cutting edge

ISO designation	REL mm	RER mm	-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 ...	
			EUR X1		EUR X1		EUR X1		EUR X1		EUR X1		EUR X1	
3002-2,0-10 E	0,2	0,2			27,85	**512**					27,85	**512**		
3002-2,0-10 E	0,2	0,0							27,85	**512**			27,85	**512**
3002-2,0-10 E	0,0	0,2	27,85	**512**			27,85	**512**						
3002-2,0-10 F	0,2	0,2			33,10	**552**					33,10	**552**		
3002-2,0-10 F	0,2	0,0							33,10	**552**			33,10	**552**
3002-2,0-10 F	0,0	0,2	33,10	**552**			33,10	**552**						
P			●		●		●		●		●		●	
M			●		●		●		●		●		●	
K														
N			○		○		○		○		○		○	
S			●		●		●		●		●		●	
H														
O			○		○		○		○		○		○	

3

3003 L / 3003 R

Designation	CBMD	CW	CF	s	PDPT
		mm	mm	mm	mm
3003-3,4-..	-SPU	3,4	0,2	1,2	8
3003-3,4-..		3,4	1,0	-	8



-SPU 3003 R -SPU 3003 L

3003_L / 3003_R

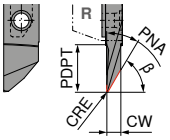
▲ for front turning

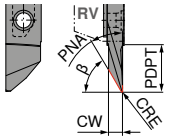
	WPU7620	WPU7620	-SPU WPU7620	-SPU WPU7620
				
	F	**F**	**F**	**F**
	3003 L	3003 R	3003 L	3003 R
	72 446 ...	**72 444 ...**	**72 521 ...**	**72 520 ...**
ISO designation	EUR X1	EUR X1	EUR X1	EUR X1
3003-3,4-8	29,27 **510**	29,27 **510**	31,98 **510**	31,98 **510**
P	●	●	●	●
M	●	●	●	●
K				
N	○	○	○	○
S	●	●	●	●
H				
O	○	○	○	○

→ v_c Page 96+97

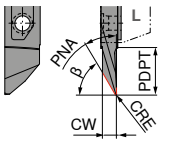
3004 L / 3004 LV / 3004 R / 3004 RV

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

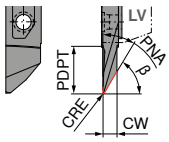




3004 R



3004 LV



3004 L

3004 LV

3004_L / 3004_LV / 3004_R / 3004_RV

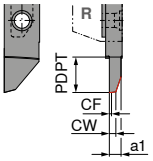
▲ for back turning

ISO designation	-SP WPU7620	-SP WPU7620	-SP WPU7620	-SP WPU7620
				
	F 3004 L	**F** 3004 LV	**F** 3004 R	**F** 3004 RV
	72 562 ...	**72 563 ...**	**72 560 ...**	**72 561 ...**
	EUR X1	EUR X1	EUR X1	EUR X1
3004-3,2-5 35015	33,96 **514**		33,96 **514**	
3004-3,2-5 35035	33,96 **516**		33,96 **516**	
3004-3,2-6 29008	33,96 **508**	33,96 **508**	33,96 **508**	33,96 **508**
3004-3,2-6 29015	33,96 **510**	33,96 **510**	33,96 **510**	33,96 **510**
3004-3,2-6 29035	33,96 **512**	33,96 **512**	33,96 **512**	33,96 **512**
3004-3,2-6 29075	33,96 **515**	33,96 **515**	33,96 **515**	33,96 **515**
P	●	●	●	●
M	●	●	●	●
K				
N	○	○	○	○
S	●	●	●	●
H				
O	○	○	○	○

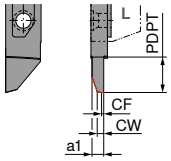
3

3004 L / 3004 R

Designation	CW	CF	PDPT	a_1
	mm	mm	mm	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

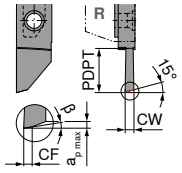
▲ for back turning

ISO designation	F 3004 L 72 457 ... EUR X1		F 3004 R 72 456 ... EUR X1	
3004-0,8-6	29,27	**504**	29,27	**504**
3004-1,0-6	29,27	**506**	29,27	**506**
3004-1,2-8	29,27	**508**	29,27	**508**
3004-1,5-8	29,27	**510**	29,27	**510**
3004-1,8-8	29,27	**512**	29,27	**512**
P	●		●	
M	●		●	
K				
N	○		○	
S	●		●	
H				
O	○		○	

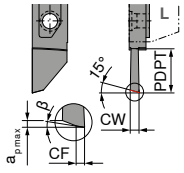
→ v_c Page 96+97

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

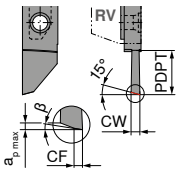
Designation	CW mm	CF mm	PDPT mm	β°	$a_{p\,max}$ mm
3002-015-..	2	0,3	10	1,5	0,45



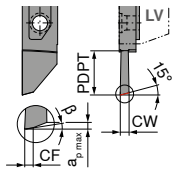
3002-015 R



3002-015 L



3002-015 RV



3002-015 LV

3002_015_L / 3002_015_LV / 3002_015_R / 3002_015_RV

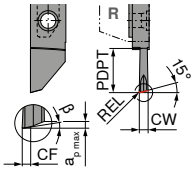
▲ For turning and parting off

	WPU7620	WPU7620	WPU7620	WPU7620
				
	F	F	F	F
	3002-015 L	3002-015 LV	3002-015 R	3002-015 RV
	72 517 ...	72 519 ...	72 516 ...	72 518 ...
ISO designation	EUR X1	EUR X1	EUR X1	EUR X1
3002-015-2,0-10	34,53 510	34,53 510	34,53 510	34,53 510
P	●	●	●	●
M	●	●	●	●
K				
N	○	○	○	○
S	●	●	●	●
H				
O	○	○	○	○

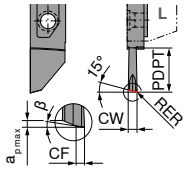
3

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

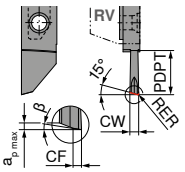
Designation	CW mm	CF mm	PDPT mm	β°	$a_{p\,max}$ mm
3002-015-..	2	0,3	10	15	0,45



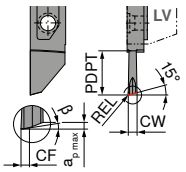
3002-015 R



3002-015 L



3002-015 RV



3002-015 LV

3002_015_L / 3002_015_LV / 3002_015_R / 3002_015_RV

▲ For turning and parting off

ISO designation	REL mm	RER mm	-SC WPU7620	-SC WPU7620	-SC WPU7620	-SC WPU7620
						
			F	F	F	F
			3002-015 L	3002-015 LV	3002-015 R	3002-015 RV
			72 511 ...	72 513 ...	72 510 ...	72 512 ...
			EUR X1	EUR X1	EUR X1	EUR X1
3002-015-2,0-10	0,15	0,00		36,51 510	36,51 510	
3002-015-2,0-10	0,00	0,15	36,51 510			36,51 510
P			●	●	●	●
M			●	●	●	●
K						
N			○	○	○	○
S			●	●	●	●
H						
O			○	○	○	○

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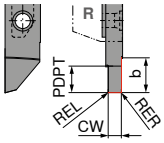
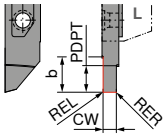
3005 L / 3005 R

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_L / 3005_R

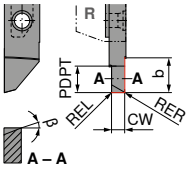
▲ for grooving and turning

ISO designation	REL mm	RER mm	F 3005 L 72 466 ... EUR X1		F 3005 R 72 464 ... EUR X1	
3005-1,0-2,5	0,05	0,05	29,98	**518**	29,98	**518**
3005-1,5-3	0,05	0,05	29,98	**510**	29,98	**510**
3005-2,0-4	0,05	0,05	29,98	**512**	29,98	**512**
3005-2,5-5	0,05	0,05	29,98	**514**	29,98	**514**
3005-3,0-6	0,05	0,05	29,98	**516**	29,98	**516**
P			●		●	
M			●		●	
K						
N			○		○	
S			●		●	
H						
O			○		○	

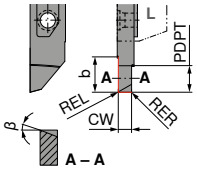
3

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	-CP WPU7620 F 3005 L 72 470 ... EUR	X1		-CP WPU7620 F 3005 R 72 468 ... EUR	X1	
3005-0,8-2,5	0,00	0,00		31,53	**508**		31,53	**508**
3005-1,0-3,5	0,00	0,00		31,53	**518**		31,53	**518**
3005-1,5-4	0,00	0,00		31,53	**510**		31,53	**528**
3005-1,5-4 R08	0,08	0,08		33,54	**519**		33,54	**519**
3005-2,0-5	0,00	0,00		31,53	**512**		31,53	**512**
3005-2,0-5 R08	0,08	0,08		33,54	**522**		33,54	**522**
3005-2,0-5 R15	0,15	0,15		33,54	**532**		33,54	**532**
3005-2,5-6	0,00	0,00		31,53	**514**		31,53	**514**
3005-2,5-6 R08	0,08	0,08		33,54	**524**		33,54	**524**
3005-2,5-6 R15	0,15	0,15		33,54	**534**		33,54	**534**
3005-3,0-6	0,00	0,00		31,53	**516**		31,53	**516**
3005-3,0-6 R08	0,08	0,08		33,54	**526**		33,54	**526**
3005-3,0-6 R15	0,15	0,15		33,54	**536**		33,54	**536**
P					●			●
M					●			●
K								
N					○			○
S					●			●
H								
O					○			○

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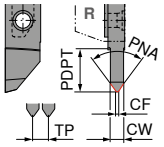
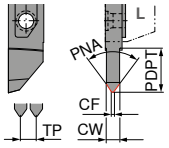
3006 L / 3006 R

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



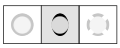
3006 R



3006 L

3006_L / 3006_R

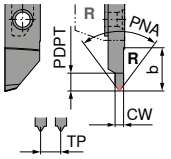
▲ For thread turning (partial profile)

	WPU7620	WPU7620
		
		
	F	**F**
	3006 L	3006 R
	72 478 ...	**72 476 ...**
ISO designation	EUR X1	EUR X1
3006-2-6-60	29,27 **510**	29,27 **510**
3006-3-10-60	29,27 **512**	29,27 **512**
P	●	●
M	●	●
K		
N	○	○
S	●	●
H		
O	○	○

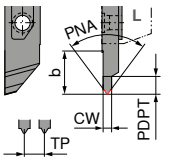
3

3006 VP L / 3006 VP R

Designation	TP	TD	CW	PDPT	b	PNA
	mm	mm	mm	mm	mm	°
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



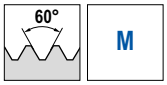
3006 R

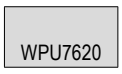


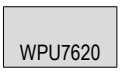
3006 L

3006_VP_L / 3006_VP_R

▲ For thread turning (full profile)





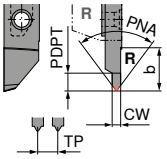


	F	F
	3006 VP L	3006 VP R
	72 474 ...	**72 472 ...**
ISO designation	EUR X1	EUR X1
3006-0,15-10-60 VP	65,07 **50800**	65,07 **50800**
3006-0,25-10-60 VP	65,07 **510**	65,07 **510**
3006-0,35-10-60 VP	65,07 **512**	65,07 **512**
3006-0,4-10-60 VP	65,07 **514**	65,07 **514**
3006-0,45-10-60 VP	65,07 **516**	65,07 **516**
3006-0,5-10-60 VP	45,33 **518**	45,33 **518**
3006-0,6-10-60 VP	45,33 **520**	45,33 **520**
3006-0,7-10-60 VP	45,33 **522**	45,33 **522**
3006-0,75-10-60 VP	45,33 **524**	45,33 **524**
3006-0,8-10-60 VP	45,33 **526**	45,33 **526**
3006-1,0-10-60 VP	45,33 **528**	45,33 **528**
3006-1,25-10-60 VP	45,33 **530**	45,33 **530**
3006-1,5-10-60 VP	45,33 **532**	45,33 **532**
3006-1,75-10-60 VP	45,33 **534**	45,33 **534**
3006-2,0-10-60 VP		45,33 **53600**
P	●	●
M	●	●
K		
N	○	○
S	●	●
H		
O	○	○

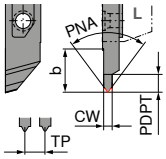
→ v_c Page 96+97

3006 VP L / 3006 VP R

Designation	TP	CW	PDPT	b	PNA
	mm	mm	mm	mm	°
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



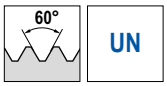
3006 R

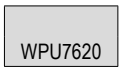


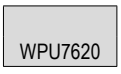
3006 L

3006_VP_L / 3006_VP_R

▲ for thread turning (full profile UN)





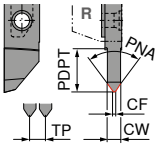


ISO designation	F 3006 VP L **72 531 ...** EUR X1		F 3006 VP R **72 530 ...** EUR X1	
3006-13 UN 10-60 VP	45,33	**52400**	45,33	**52400**
3006-14 UN 10-60 VP	45,33	**52200**	45,33	**52200**
3006-16 UN 10-60 VP	45,33	**52000**	45,33	**52000**
3006-18 UN 10-60 VP	45,33	**51800**	45,33	**51800**
3006-20 UN 10-60 VP	45,33	**51600**	45,33	**51600**
3006-24 UN 10-60 VP	45,33	**51400**	45,33	**51400**
3006-28 UN 10-60 VP	45,33	**51200**	45,33	**51200**
3006-32 UN 10-60 VP	45,33	**51000**	45,33	**51000**
3006-36 UN 10-60 VP	45,33	**50800**	45,33	**50800**
3006-40 UN 10-60 VP	45,33	**50600**	45,33	**50600**
3006-44 UN 10-60 VP	45,33	**50400**	45,33	**50400**
3006-48 UN 10-60 VP	45,33	**50200**	45,33	**50200**
P	●		●	
M	●		●	
K				
N	○		○	
S	●		●	
H				
O	○		○	

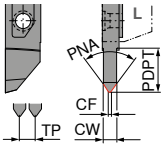
3

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



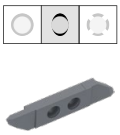
3006 R



3006 L

3006_L / 3006_R

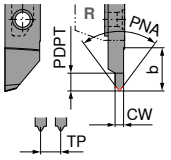
▲ For thread turning (partial profile)

			WPU7620	WPU7620
				
			F 3006 L	**F** 3006 R
			72 527 ...	**72 526 ...**
ISO designation			EUR X1	EUR X1
3006-2-6-55			29,27 **50000**	29,27 **50000**
3006-3-10-55			29,27 **50200**	29,27 **50200**
P			●	●
M			●	●
K				
N			○	○
S			●	●
H				
O			○	○

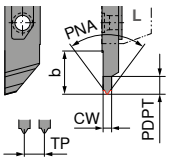
→ v_c Page 96+97

3006 VP L / 3006 VP R

Designation	TP	TD	CW	PDPT	b	PNA
	mm	mm	mm	mm	mm	°
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



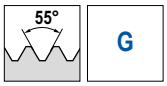
3006 R

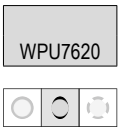


3006 L

3006_VP_L / 3006_VP_R

▲ For thread turning (full profile)



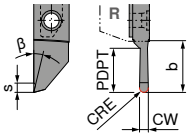


	F	F
	3006 VP L	3006 VP R
	72 529 ...	**72 528 ...**
ISO designation	EUR X1	EUR X1
3006-G11-10-55 VP	45,33 **51100**	45,33 **51100**
3006-G14-10-55 VP	45,33 **51400**	45,33 **51400**
3006-G19-10-55 VP	45,33 **51900**	45,33 **51900**
3006-G28-10-55 VP	45,33 **52800**	45,33 **52800**
P	●	●
M	●	●
K		
N	○	○
S	●	●
H		
O	○	○

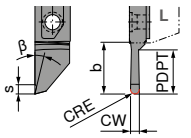
3

3007 L / 3007 R

Designation	CW	b	PDPT	CRE	s	β°
	mm	mm	mm	mm	mm	
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 R

3007_L / 3007_R

▲ for radius turning

ISO designation	F 3007 L 72 482 ... EUR X1		F 3007 R 72 480 ... EUR X1	
3007-R0,25-2-10	29,27	**510**	29,27	**510**
3007-R0,5-2,5-10	29,27	**512**	29,27	**512**
3007-R0,6-2,5-10	29,27	**514**	29,27	**514**
3007-R0,75-3-10	29,27	**516**	29,27	**516**
3007-R0,8-3-10	29,27	**518**	29,27	**518**
3007-R1,0-10	29,27	**520**	29,27	**520**
3007-R1,5-10	29,27	**522**	29,27	**522**
3007-R1,5-16	34,81	**524**	34,81	**524**
P	●		●	
M	●		●	
K				
N	○		○	
S	●		●	
H				
O	○		○	

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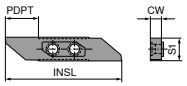
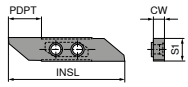
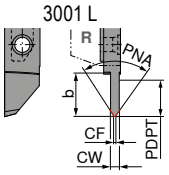
3012 L / 3012 R / 3001 L / 3001 R

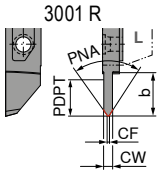
Designation	CW mm	PDPT mm	b mm	PNA °	CF mm
3012-2-6-..	2,0	2	10	60	0,035
3012-2-10..	2,0	10	12	90	0,02
3001-3,5-..	3,5	11	-	-	-







3012 R



3012 L

3012_L / 3012_R

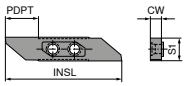
▲ for chamfering

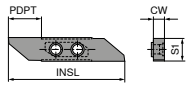
ISO designation		F 3012 L **72 486 ...** EUR X1		F 3012 R **72 484 ...** EUR X1	
3012-2-6-60		34,10	**51000**	34,10	**51000**
3012-2-10-45		34,10	**51200**	34,10	**51200**
P		●		●	
M		●		●	
K					
N		○		○	
S		●		●	
H					
O		○		○	

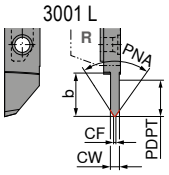
3

3012 L / 3012 R / 3001 L / 3001 R

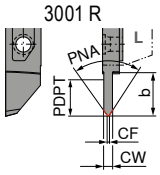
Designation	CW	PDPT	S1	INSL
	mm	mm	mm	mm
3001-3,5-..	3,5	11	8	40,5
3001-3,6-..	3,6	17	8	51,5
3012-2-10..	2,0	10	8	40,0
3012-2-6-..	2,0	2	8	40,0







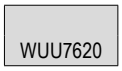
3012 R

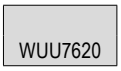


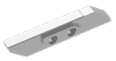
3012 L

3001_L / 3001_R

▲ Blank







ISO designation	3001 L **72 414 ...** EUR X1		3001 R **72 412 ...** EUR X1	
3001-3,5-10	25,22	**11000**	25,22	**11000**
3001-3,6-17	26,69	**13000**	26,69	**13000**

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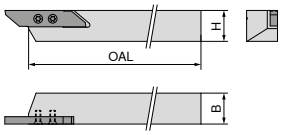
VertiClamp – Standard tool holder



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	Insert	Left-hand 72 302 ... EUR X0		Right-hand 72 300 ... EUR X0	
3000-08x100 .	8	8	100	30..	85,86	**008**	85,86	**008**
3000-10x100 .	10	10	100	30..	86,11	**010**	86,11	**010**
3000-12x100 .	12	12	100	30..	86,25	**012**	86,25	**012**
3000-16x125 .	16	16	125	30..	103,40	**016**	103,40	**016**
3000-20x125 .	20	20	125	30..	117,20	**020**	117,20	**020**
3000-25x150 .	25	25	150	30..	160,90	**025**		

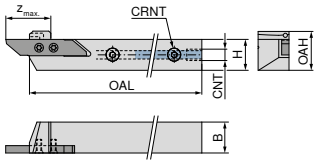

Key D


Clamping screw

Spare parts for Article no.		80 950 ... EUR Y7		72 950 ... EUR 2A	
72 300 008 / 72 302 008	T08	10,05	**110**	4,87	**004**
72 300 010 / 72 302 010	T08	10,05	**110**	4,87	**005**
72 300 012 / 72 302 012	T08	10,05	**110**	4,87	**005**
72 300 016 / 72 302 016	T08	10,05	**110**	4,87	**005**
72 300 020 / 72 302 020	T08	10,05	**110**	4,87	**005**
72 302 025	T08	10,05	**110**	4,87	**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 ... EUR X0		Right-hand 72 310 ... EUR X0	
3000-08x100 .IC	8	12	100	12,2	26	M5	M5	30..	259,60	**008**	259,60	**008**
3000-10x100 .IC	10	12	100	14,0	26	M5	M5	30..	214,90	**010**	214,90	**010**
3000-12x100 .IC	12	12	100	16,0	26	M5	M5	30..	214,90	**012**	214,90	**012**
3000-16x100 .IC	16	16	125	20,0	26	M5	G1/8"	30..	228,50	**016**	228,50	**016**
3000-20x100 .IC	20	20	125	24,0	26	M5	G1/8"	30..	233,80	**020**	233,80	**020**
3000-25x100 .IC	25	25	125	29,0	26	M5	G1/8"	30..	263,60	**025**	263,60	**025**


Cylindrical screw

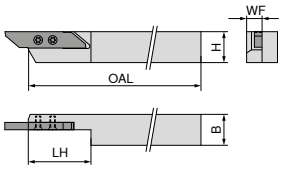

Cylindrical screw


Key D


Clamping screw

Spare parts for Article no.			72 950 ... EUR X0			72 950 ... EUR X0			80 950 ... EUR Y7		72 950 ... EUR 2A	
72 310 008 / 72 311 008					M5x4	6,85	**011**	T08	10,05	**110**	4,87	**004**
72 310 010 / 72 311 010					M5x4	6,85	**011**	T08	10,05	**110**	4,87	**005**
72 310 012 / 72 311 012					M5x4	6,85	**011**	T08	10,05	**110**	4,87	**005**
72 310 016 / 72 311 016	G1/8"	21,72	**010**		M5x4	6,85	**011**	T08	10,05	**110**	4,87	**005**
72 310 020 / 72 311 020	G1/8"	21,72	**010**		M5x4	6,85	**011**	T08	10,05	**110**	4,87	**005**
72 310 025 / 72 311 025	G1/8"	21,72	**010**		M5x4	6,85	**011**	T08	10,05	**110**	4,87	**005**

VertiClamp – Offset tool holder



Illustrations show right-hand versions

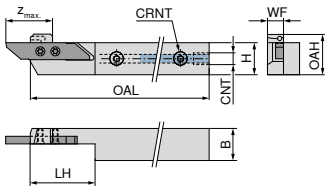
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	Insert	Left-hand 72 309 ... EUR X0		Right-hand 72 308 ... EUR X0	
3000-10x100 .A	10	10	100	37	8	30..	94,36	**006**	94,36	**006**
3000-12x100 .A	12	12	100	37	8	30..	94,36	**008**	94,36	**008**
3000-16x125 .A	16	16	125	37	8	30..	114,40	**010**	114,40	**010**


Key D


Clamping screw

Spare parts for Article no.		80 950 ... EUR Y7		72 950 ... EUR 2A	
72 308 006 / 72 309 006	T08	10,05	**110**	4,87	**004**
72 308 008 / 72 309 008	T08	10,05	**110**	4,87	**004**
72 308 010 / 72 309 010	T08	10,05	**110**	4,87	**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	Left-hand 72 315 ... EUR X0		Right-hand 72 314 ... EUR X0	
3000-16x125 .A IC	16	16	125	8	37	20	27	G1/8"	M5	30..	228,50	**016**	228,50	**016**


Cylindrical screw

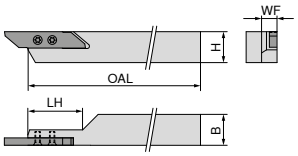

Cylindrical screw


Key D


Clamping screw

Spare parts for Article no.			72 950 ... EUR X0			72 950 ... EUR X0			80 950 ... EUR Y7		72 950 ... EUR 2A	
72 314 016 / 72 315 016		G1/8"	21,72	**010**	M5x4	6,85	**011**	T08	10,05	**110**	4,87	**004**

VertiClamp – Offset holder with offset insert seat



Illustrations show right-hand versions

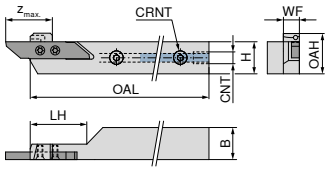
ISO designation	H mm	B mm	OAL mm	LH mm	WF mm	Insert	Left-hand 72 317 ... EUR X0		Right-hand 72 316 ... EUR X0	
3000-10x100 .AV	10	10	100	28	8	30..	94,36	**010**	94,36	**010**
3000-12x100 .AV	12	12	100	28	8	30..	94,36	**012**		
3000-16x125 .AV	16	16	125	28	8	30..	114,40	**016**	114,40	**016**


Key D


Clamping screw

Spare parts for Article no.		Key D 80 950 ... EUR Y7		Clamping screw 72 950 ... EUR 2A	
72 316 010 / 72 317 010	T08	10,05	**110**	4,87	**004**
72 317 012	T08	10,05	**110**	4,87	**004**
72 316 016 / 72 317 016	T08	10,05	**110**	4,87	**004**

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	Left-hand 72 313 ... EUR X0		Right-hand 72 312 ... EUR X0	
3000-16x125 .AV IC	16	16	125	20	27	M5	G1/8"	30..	228,50	**016**	228,50	**016**


Cylindrical screw


Cylindrical screw

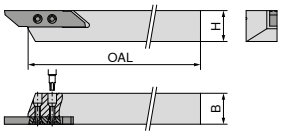

Key D


Clamping screw

Spare parts for Article no.			Cylindrical screw 72 950 ... EUR X0			Cylindrical screw 72 950 ... EUR X0		Key D 80 950 ... EUR Y7		Clamping screw 72 950 ... EUR 2A	
72 312 016 / 72 313 016		G1/8"	21,72	**010**	M5x4	6,85	**011**	T08	10,05	**110**	4,87	**004**

3

VertiClamp – Combi tool holder



Illustrations show right-hand versions

ISO designation	H mm	B mm	OAL mm	Insert	Left-hand 72 306 ... EUR X0		Right-hand 72 304 ... EUR X0	
3000-08x100 .C	8	8	100	30..	98,95	**008**	98,95	**008**
3000-10x100 .C	10	10	100	30..	99,10	**010**	99,10	**010**
3000-12x100 .C	12	12	100	30..	98,95	**012**	98,95	**012**
3000-16x125 .C	16	16	125	30..	119,00	**016**	119,00	**016**
3000-20x125 .C	20	20	125	30..	134,40	**020**	134,40	**020**


Key D

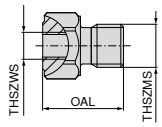

Clamping screw


Threaded sleeve

Spare parts for Article no.		80 950 ... EUR Y7		72 950 ... EUR 2A		72 950 ... EUR 2A	
72 304 008 / 72 306 008	T08	10,05	**110**	4,87	**003**	5,04	**008**
72 304 010 / 72 306 010	T08	10,05	**110**	4,87	**003**	5,04	**008**
72 304 012 / 72 306 012	T08	10,05	**110**	4,87	**003**	5,04	**008**
72 304 016 / 72 306 016	T08	10,05	**110**	4,87	**003**	5,04	**008**
72 304 020 / 72 306 020	T08	10,05	**110**	4,87	**003**	5,04	**008**

Reducer fitting

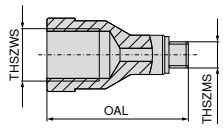
▲ Max. 200 bar/2900 psi
▲ No sealing ring required



Designation	THSZWS	THSZMS	OAL mm	72 301 ... EUR X0	
RV.100.M6-M5	M5	M6	18	40,27	**002**
RV.100.M8x1-M5	M5	M8x1	15	40,27	**008**
RV.100.M10x1-M5	M5	M10x1	15	40,27	**007**
RV.100.G1/8-M5	M5	G1/8"	15	40,27	**006**

Reducer fitting

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



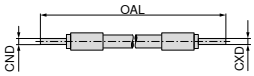
Designation	THSZWS	THSZMS	OAL mm	72 301 ... EUR X0	
RV.100.M5-M6	M6	M5	15	40,27	**001**
RV.100.M5-M8x1	M8x1	M5	23	40,27	**003**
RV.100.M5-M10x1	M10x1	M5	27	40,27	**005**
RV.100.M5-G1/8	G1/8"	M5	27	40,27	**004**

Sealing ring

Spare parts for Article no.	72 950 ... EUR X0	
72 301 001	1,67	**009**
72 301 003	1,67	**009**
72 301 005	1,67	**009**
72 301 004	1,67	**009**

Hose (connecting piece/connecting piece)

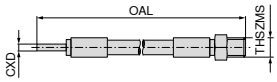
▲ Max. 200 bar/2900 psi



Designation	CND mm	CXD mm	OAL mm	72 305 ... EUR X0	
HDKS.150.4-4	4	4	150	58,65	**003**
HDKS.200.4-4	4	4	200	59,46	**014**
HDKS.300.4-4	4	4	300	59,80	**025**
HDKS.500.4-4	4	4	500	61,66	**037**

Hose (connecting piece/thread)

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



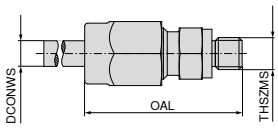
Designation	THSZMS	CXD mm	OAL mm	72 305 ... EUR X0	
HDKS.150.M5-4	M5	4	150	63,83	**010**
HDKS.200.M5-4	M5	4	200	64,48	**021**
HDKS.300.M5-4	M5	4	300	64,56	**033**
HDKS.500.M5-4	M5	4	500	66,82	**045**

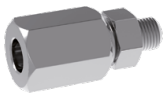
3

Coolant connections are supplied-to-order items

Straight fitting

▲ Max. 200 bar/2900 psi

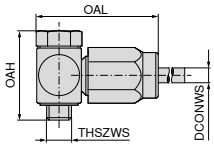




Designation	DCONWS mm	THSZMS	OAL mm	72 307 ... EUR X0	
KA. M5-4	4	M5	27	41,11	**009**
KA. G1/8-4	4	G1/8"	32	35,62	**003**

Swivel fitting

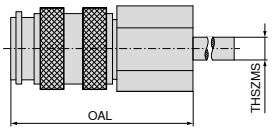
▲ Max. 200 bar/2900 psi



Designation	DCONWS mm	OAH mm	THSZMS	OAL mm	72 307 ... EUR X0	
KA.SV.M5-4	4	21	M5	28	135,10	**017**
KA.SV.G1/8-4	4	30	G1/8"	37	129,40	**012**

Quick connection (coupling)

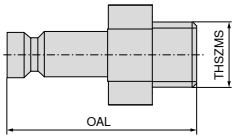
▲ Max. 200 bar/2900 psi



Designation	THSZMS	OAL mm	72 319 ... EUR X0	
KIG.M5	M5	26	175,70	**001**

Quick connection (connector)

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



Designation	THSZMS	OAL mm	72 320 ... EUR X0	
SAG.M5	M5	20	60,44	**001**

Coolant connections are supplied-to-order items

Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment		Tensile strength N/mm²* / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0,15 % C	Annealed	420 N/mm² / 125 HB	1.0401	C15	1.1141	Ck15
		P.1.2	< 0,45 % C	Annealed	640 N/mm² / 190 HB	1.1191	C45E	1.0718	9SMnPb28
		P.1.3		Tempered	840 N/mm² / 250 HB	1.1191	C45E	1.0535	C55
		P.1.4	< 0,75 % C	Annealed	910 N/mm² / 270 HB	1.1223	C60R	1.0535	C55
		P.1.5		Tempered	1010 N/mm² / 300 HB	1.1223	C60R	1.0727	45S20
	Low-alloy steel	P.2.1		Annealed	610 N/mm² / 180 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.2		Tempered	930 N/mm² / 275 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.3		Tempered	1010 N/mm² / 300 HB	1.7225	42CrMo4	1.3505	100Cr6
		P.2.4		Tempered	1200 N/mm² / 375 HB	1.7225	42CrMo4	1.3505	100Cr6
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	680 N/mm² / 200 HB	1.4021	X20Cr13	1.4034	X46Cr13
		P.3.2		Hardened and tempered	1100 N/mm² / 300 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
		P.3.3		Hardened and tempered	1300 N/mm² / 400 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	680 N/mm² / 200 HB	1.4016	X6Cr17	1.2316	X36CrMo16
		P.4.2	Martensitic	Tempered	1010 N/mm² / 300 HB	1.4112	X90CrMoV18	1.2316	X36CrMo16
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	610 N/mm² / 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/mm² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501	X2CrNiMoCuWN25-7-4
K	Grey cast iron	K.1.1	Pearlitic / ferritic		350 N/mm² / 180 HB	0.6010	GG-10	0.6025	GG-25
		K.1.2	Pearlitic (martensitic)		500 N/mm² / 260 HB	0.6030	GG-30	0.6045	GG-45
	Spherulitic graphite cast iron	K.2.1	Ferritic		540 N/mm² / 160 HB	0.7040	GGG-40	0.7060	GGG-60
		K.2.2	Pearlitic		845 N/mm² / 250 HB	0.7070	GGG-70	0.7080	GGG-80
	Malleable iron	K.3.1	Ferritic		440 N/mm² / 130 HB	0.8035	GTW-35-04	0.8045	GTW-45
		K.3.2	Pearlitic		780 N/mm² / 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/mm² / 100 HB	3.1355	AlCuMg2	3.2315	AlMgSi1
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		250 N/mm² / 75 HB	3.2581	G-AlSi12	3.2163	G-AlSi9Cu3
		N.2.2	≤ 12 % Si, hardenable	Age-hardened	300 N/mm² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373	G-AlSi9Mg
		N.2.3	> 12 % Si, non-hardenable		440 N/mm² / 130 HB		G-AlSi17Cu4Mg		G-AlSi18CuNiMg
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		375 N/mm² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410	CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm² / 90 HB	2.0331	CuZn15	2.4070	CuZn28Sn1As
		N.3.3	CuSn, lead-free copper and electrolytic copper		340 N/mm² / 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/mm² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865	G-X40NiCrSi38-18
		S.1.2		Age-hardened	950 N/mm² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876	X10NiCrAlTi32-20
		S.2.1	Ni or Co basis	Annealed	840 N/mm² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856	NiCr22Mo9Nb
		S.2.2		Age-hardened	1180 N/mm² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955	NiFe25Cr20NbTi
		S.2.3		Cast	1080 N/mm² / 320 HB	2.4765	CoCr20W15Ni	1.3401	G-X120Mn12
	Titanium alloys	S.3.1	Pure titanium		400 N/mm²	3.7025	Ti99,8	3.7034	Ti99,7
		S.3.2	Alpha + beta alloys	Age-hardened	1050 N/mm² / 320 HB	3.7165	TiAl6V4	Ti-6246	Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	Beta alloys		1400 N/mm² / 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/mm²				
		O.1.2	Plastics, thermoplastic		≤ 100 N/mm²				
		O.2.1	Aramid fibre-reinforced		≤ 1000 N/mm²				
		O.2.2	Glass/carbon-fibre reinforced		≤ 1000 N/mm²				
		O.3.1	Graphite						

*** Tensile strength**

Cutting data standard values – VertiClamp system

	Parting				Turning				
	WPU7620	Fine	Medium	Rough	WPU7620		Fine	Medium	Rough
Index	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	0,005-0,200	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

	VertiClamp system				TriClamp system					
	Grooving				Turning					
	WPU7620	Fine	Medium	Rough	WUU7610	WPU7610	WPU7620	WUU7620		
Index	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										

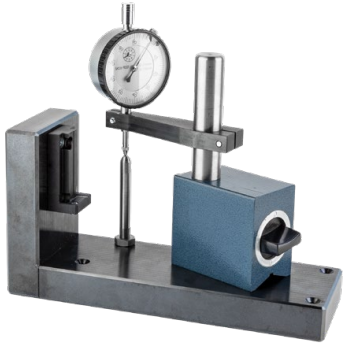
The cutting data depends extremely on the external conditions, e.g. stability of the tool and tool clamping, material and machine type.
The indicated values are possible cutting data which have to be increased or reduced according to the application conditions.

Setting Device

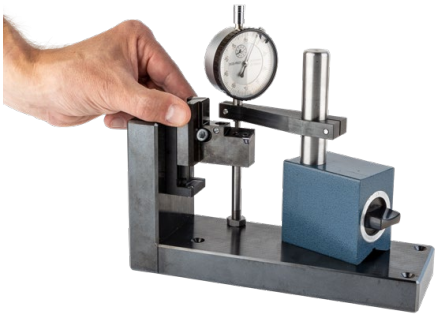
The adjustment device is profitable if the tool system is expanded with several tool holder blocks on several machines. The tool system can be preset so that holders on every machine have a suitable centre height in relation to the turning centre of the machine.

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.

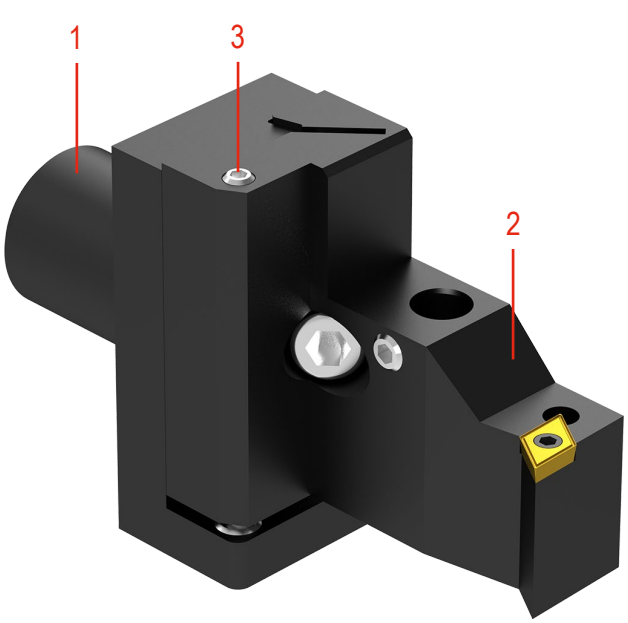


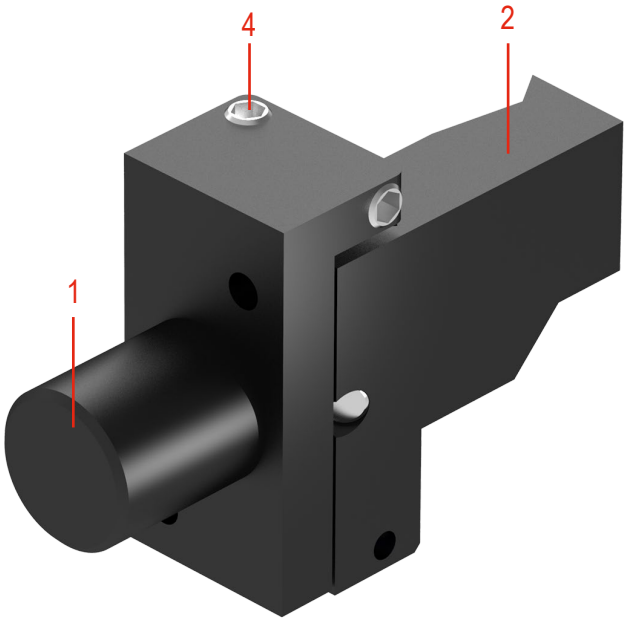
3. Carefully place the dial gauge on the tip of the tool's cutting edge.

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).

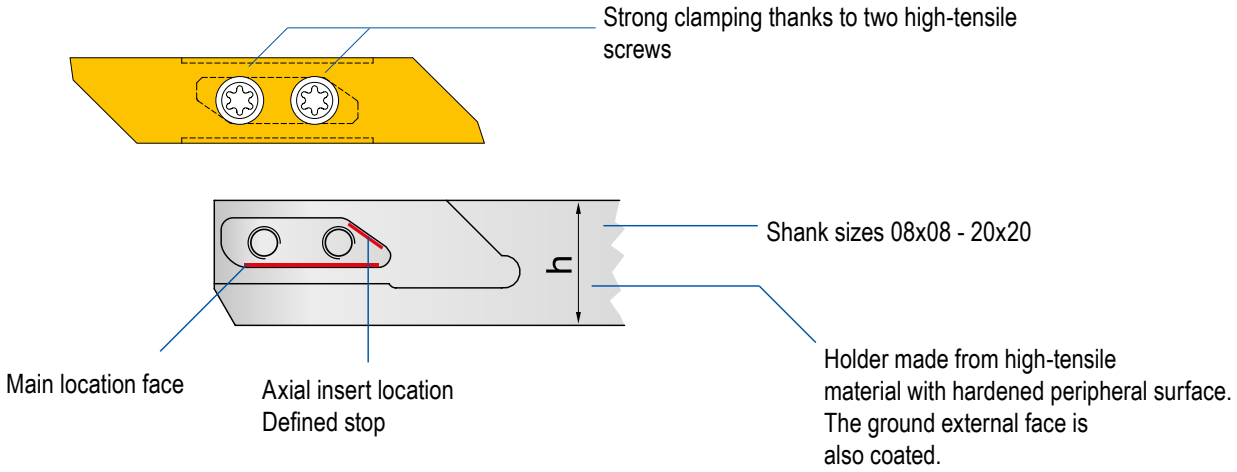
The same tool holders (2) can be used for multiple machines without presetting them again individually. However, the base holders (1) of the other machines must be adjusted to one another.

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

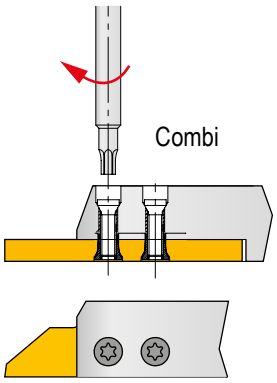
Features



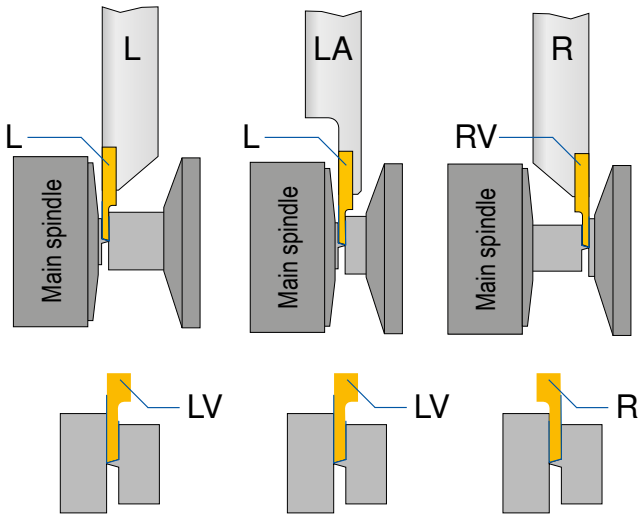
Advantages

- 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

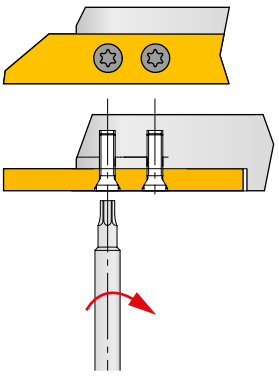
Clamping of cutting edge
With combi holders



Turning away from the spindle



Clamping of cutting edge
With standard holders

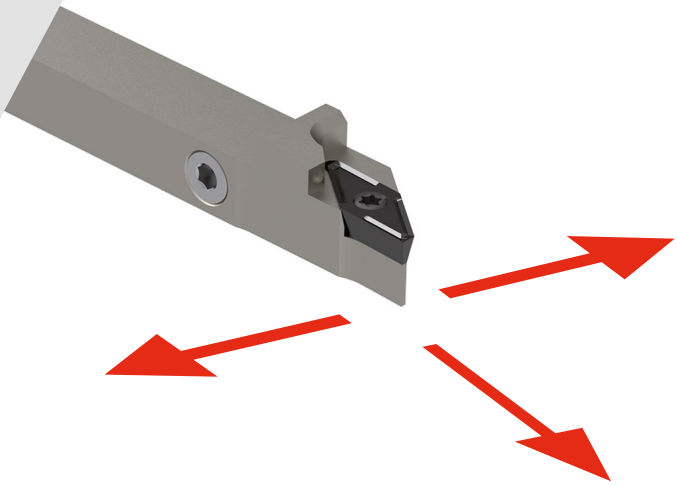


TriClamp

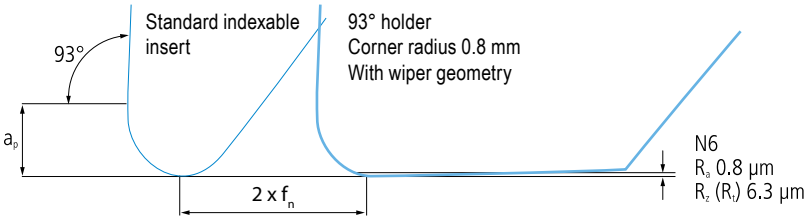
The feed rate can be doubled through the use of the TriClamp system with wiper geometry and 93° holder. This in turn allows machining times to be reduced considerably with no impact on quality, or the surface quality can be improved whilst retaining the same machining time. The ability to machine in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

Advantages

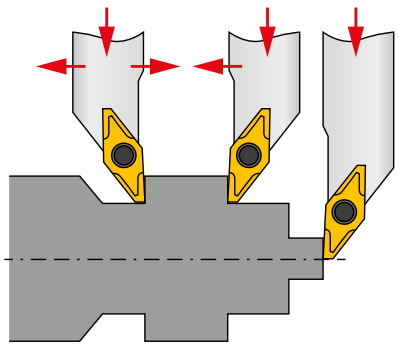
- ▲ Expansion of the ISO range
- ▲ Turning in three directions
- ▲ All cutting edges can easily be replaced
- ▲ Sharp positive cutting edges with 11° clearance angle
- ▲ Small corner radii 0.08 mm and 0.2 mm
- ▲ Perfect chip control
- ▲ Special holders for sliding head lathes (Cross-sections 8x8 mm to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



Smoothing geometry in detail:

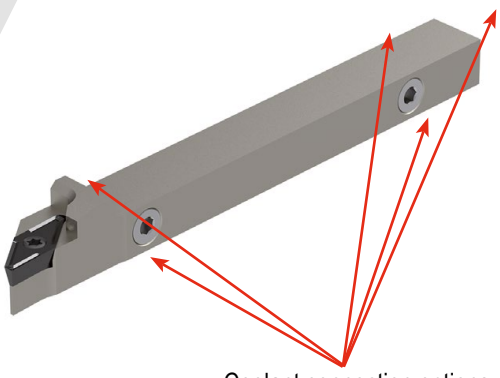


Applications:



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.

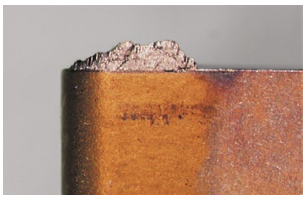
Cause

- 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 designation	Standard designation	ISO application range	Steel P	Stainless steel M	Cast iron K	Non-ferrous metals N	Heat-resistant S	Tempered steel H	Stainless steels O
VertiClamp									
WPU7620	P20	05 15 25 35 45 / 01 10 20 30 40 50	●	●	○	○	●		○
	M20								
	K20								
	N20								
	S20								
	O20								
TriClamp									
WUU7610	P10		○			●	○		●
	N10								
	S15								
	O15								
WUU7620	P20		●			○	○		○
	N20								
	S20								
	O20								
WPU7610	P10		●	●	○	●	●		○
	M10								
	K10								
	N10								
	S10								
	O10								
WPU7620	P20		●	●	○	○	●		○
	M20								
	K20								
	N20								
	S20								
	O20								
TiAlN+	P20		●	●	○	○	●		○
	M20								
	K20								
	N20								
	S20								
	O20								

01 10 20 30 40 50 / 05 15 25 35 45

● Main Application
○ Extended application

tough v_c+ ○ ⟷ ⬡ v_c− wear-resistant

Grade description

C T C P 1 2 5 -P Example

CT
CERATIZIT

-P
Performance

Degree of hardness

05	ISO 05
10	ISO 10
15	ISO 15
20	ISO 20
25	ISO 25
30	ISO 30
35	ISO 35
40	ISO 40

Application

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

Main application – material

P	Steel
M	Stainless steel
K	Cast iron
N	Non-ferrous metals
S	Heat-resistant
H	Tempered steel
O	Non-metal materials
X	Universal application

Coating

W	Uncoated carbide
C	CVD-coated carbide
P	PVD-coated carbide
T	Cermet, uncoated
E	Cermet, coated
N	Silicon nitride, uncoated
M	Silicon nitride, coated
S	Mixed ceramic
K	Whisker ceramic
I	SiAlON
D	PCD
B	PcBN
H	HSS sintered

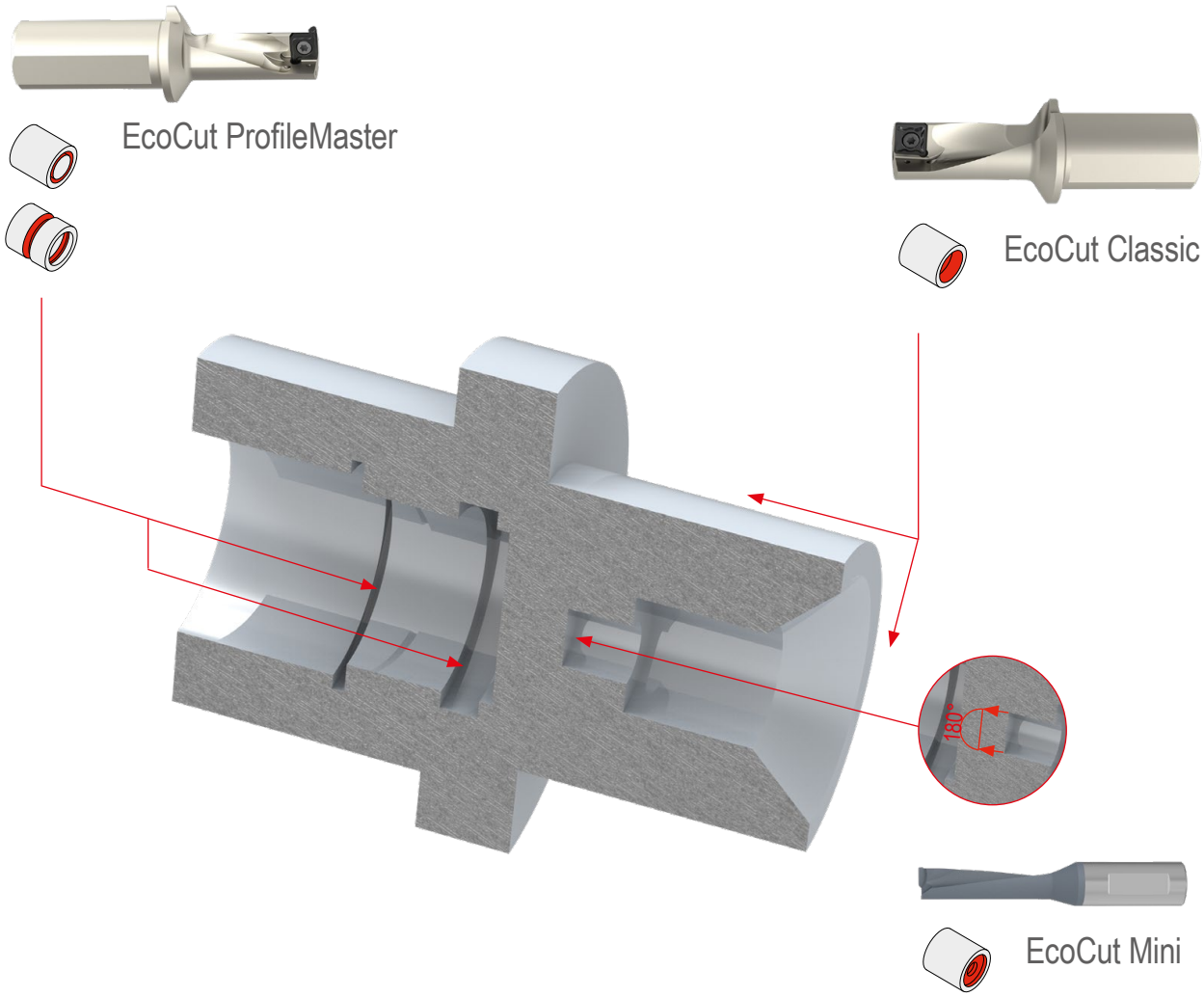
Table of contents

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

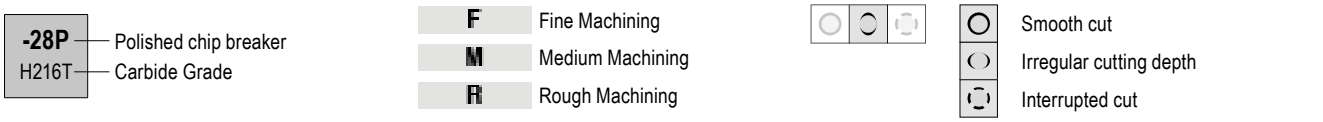
Advantages of EcoCut

- ▲ 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



Symbol explanation



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

Advantages due to DirectCooling

Direct Cooling

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

cuttingtools.ceratizit.com/ie/en/direct-cooling

Symbol explanation


Grooving


Parting


Grooving and Turning


Copy Turning


Axial Grooving and Turning


Circlip Grooves


Internal machining


Internal thread


External thread

F Fine Machining
M Medium Machining
R Rough Machining


Main Application
Extended application

DirectCooling


Int. coolant supply


Repeatability

-F2 Chip groove
CTPP345 Carbide Grade


Smooth cut
Irregular cutting depth
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 CW (mm)	External machining CDX max. (mm)	Internal machining DMIN (mm)	Internal machining CDX max. (mm)	Axial machining DAXN (mm)	Axial machining 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

Table of contents

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

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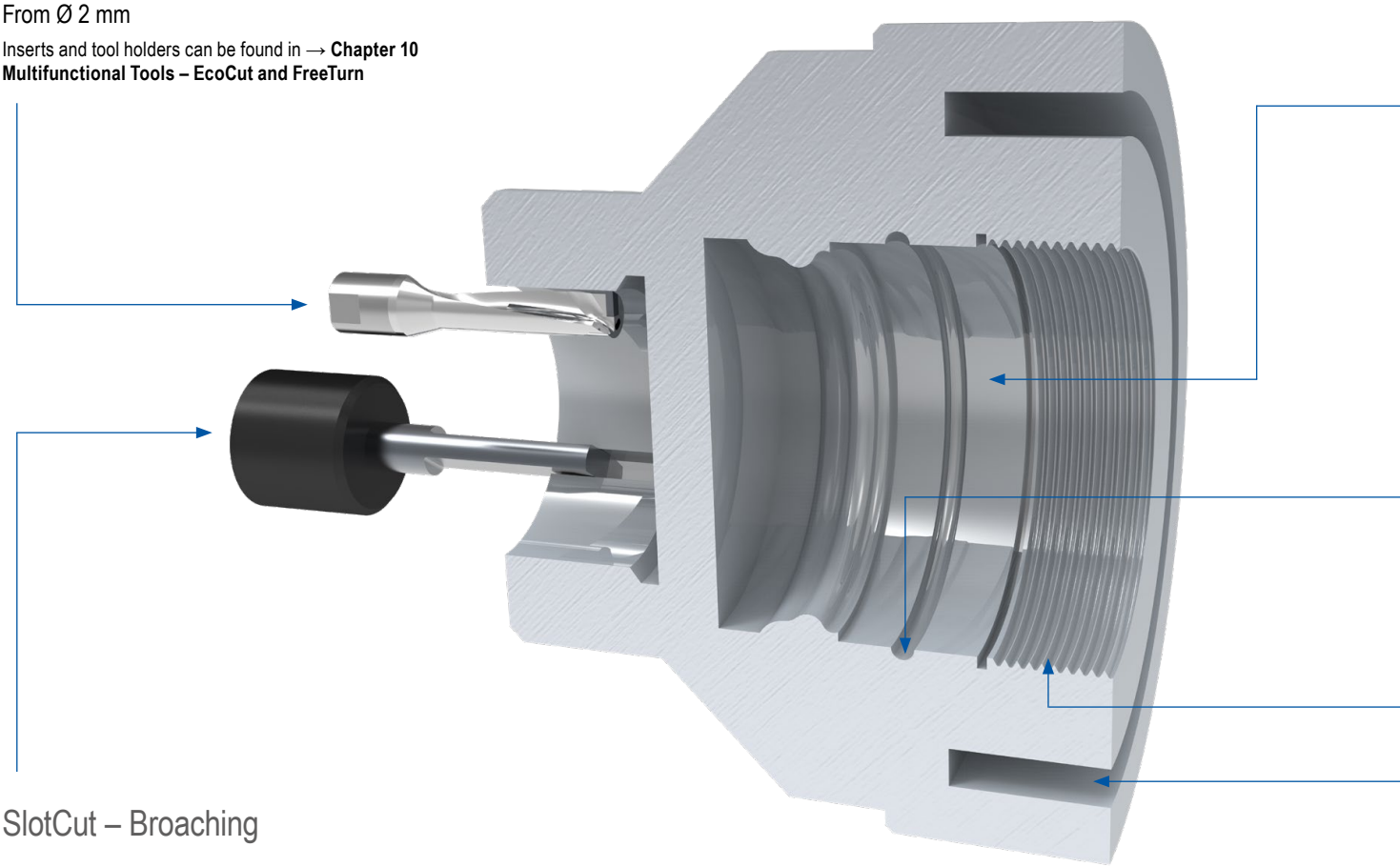
Please email the completed form to tsc@ceratizit.com.

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

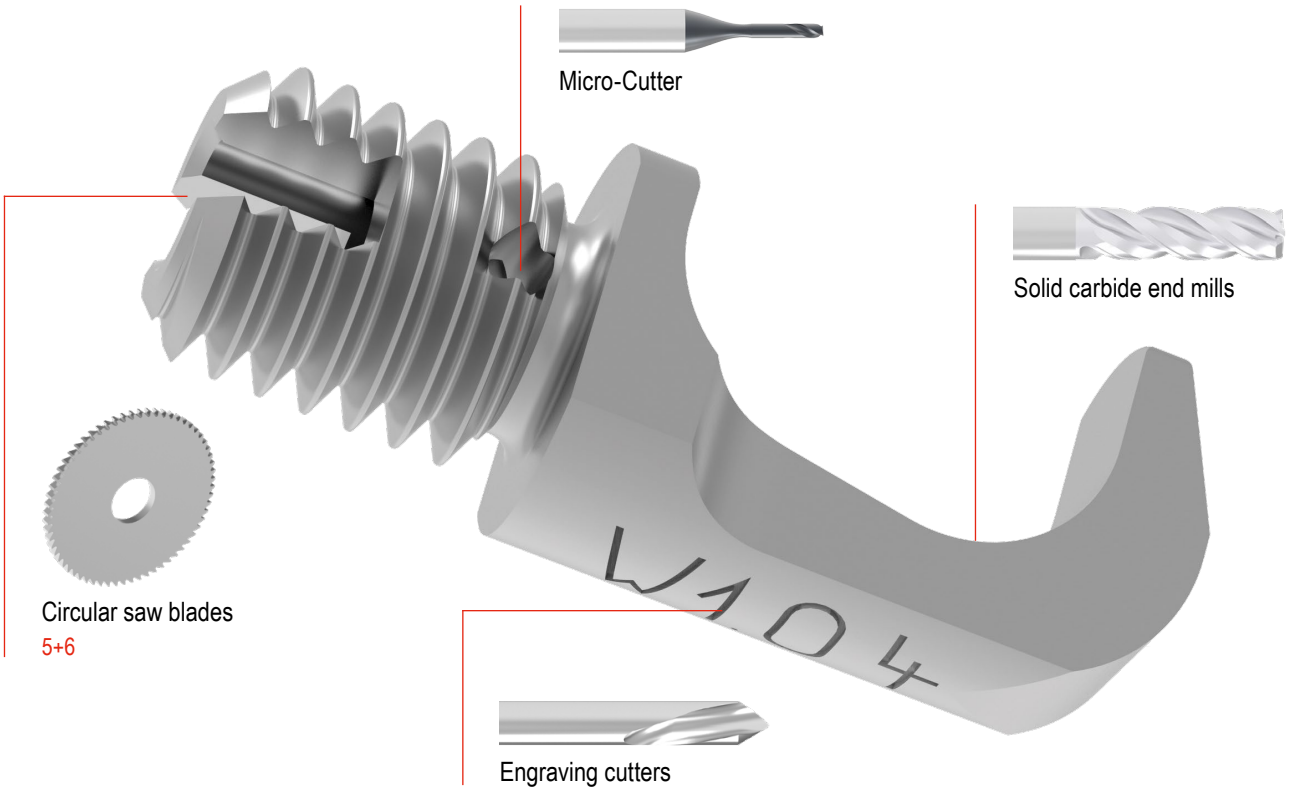
- ▲ from Ø 7.8 mm
- ▲ stable three-rib interface
- ▲ easy handling
- ▲ coolant supply to the cutting edge
- ▲ precise cutting edge position

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 – hard turning			✓		✓		✓	✓	✓			✓		✓	✓	✓
High-feed turning			✓			✓	✓	✓	✓							
Internal turning					✓		✓	✓				✓	✓	✓	✓	✓
Back boring						✓	✓	✓	✓			✓	✓	✓	✓	
Turning and chamfering								✓	✓			✓	✓	✓	✓	
Pre-parting and chamfering							✓	✓	✓			✓	✓	✓	✓	✓
Internal Undercuts			✓		✓		✓	✓	✓			✓	✓	✓	✓	✓
Groove turning			✓			✓	✓	✓	✓			✓	✓	✓	✓	✓
Groove and profile turning							✓	✓	✓			✓	✓	✓	✓	✓
Internal thread turning				✓			✓	✓	✓			✓	✓	✓	✓	✓
Axial grooving								✓	✓	✓	✓	✓	✓	✓	✓	✓
suitable holder						✓								✓		
Sets						✓								✓		

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

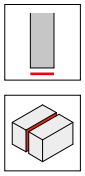
Application

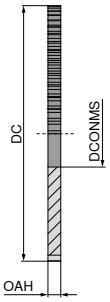
HPC	High volume machining
HFC	High-feed milling
54–70 HRC	Hard materials
	Machining example
	The red arrows describe the possible feed directions
λ_s=48° γ_s=10°	Cutting geometry λ_s = Helix Angle γ_s = Rake Angle
λ_s var.	Variable helix angle

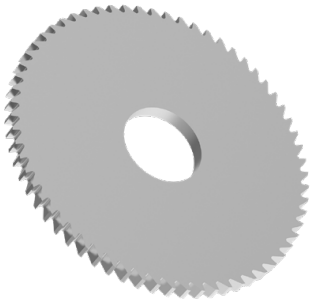
ZEFP = Number of flutes
● = **Main Application**
○ = Extended application

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

▲ fine-straight-cut







DIN 1837 A

54 700 ...

DC js15 mm	OAH ±0,01 mm	DCONMS H6 mm	ZEFP	EUR V6	
15	0,20	5	64	18,97	102
15	0,25	5	64	18,97	103
15	0,30	5	64	18,97	104
15	0,35	5	64	18,97	105
15	0,40	5	64	18,97	106
15	0,50	5	48	18,97	107
15	0,60	5	48	18,97	108
15	0,70	5	48	22,61	109
15	0,80	5	40	22,61	110
15	0,90	5	40	23,17	111
15	1,00	5	40	24,05	112
15	1,10	5	40	25,06	113
15	1,20	5	40	25,06	114
15	1,30	5	40	25,06	115
15	1,40	5	40	25,06	116
15	1,50	5	40	27,25	117
15	1,60	5	40	29,26	118
15	1,70	5	40	31,74	119
15	1,80	5	40	31,74	120
15	1,90	5	40	33,03	121
15	2,00	5	40	33,46	122
15	2,50	5	40	46,21	123
15	3,00	5	40	52,30	124
15	3,50	5	40	59,09	125
15	4,00	5	40	72,86	126
15	4,50	5	40	85,45	127
15	5,00	5	40	88,94	128
15	5,50	5	40	106,20	129
15	6,00	5	40	109,40	130
20	0,20	5	80	20,57	152
20	0,25	5	64	20,57	153
20	0,30	5	64	20,57	154
20	0,35	5	64	20,57	155
20	0,40	5	64	20,57	156
20	0,50	5	48	20,57	157
20	0,60	5	48	20,57	158
20	0,70	5	48	24,05	159
20	0,80	5	48	24,05	160
20	0,90	5	40	25,06	161
20	1,00	5	40	27,25	162
20	1,10	5	40	29,26	163
20	1,20	5	40	29,26	164
20	1,30	5	40	30,84	165
20	1,40	5	40	33,46	166
20	1,50	5	40	33,46	167
20	1,60	5	40	35,06	168
20	1,70	5	40	36,94	169
20	1,80	5	32	36,94	170
20	1,90	5	32	38,68	171
20	2,00	5	32	38,68	172
20	2,50	5	32	48,83	173
20	3,00	5	32	55,64	174
20	3,50	5	24	62,58	175
20	4,00	5	24	74,47	176
20	4,50	5	24	88,94	177
20	5,00	5	24	92,56	178
20	5,50	5	24	107,60	179
20	6,00	5	24	111,10	180
25	0,20	8	80	20,28	202

54 700 ...

DC js15 mm	OAH ±0,01 mm	DCONMS H6 mm	ZEFP	EUR V6	
25	0,25	8	80	20,28	203
25	0,30	8	80	20,28	204
25	0,35	8	64	20,28	205
25	0,40	8	64	20,28	206
25	0,50	8	64	23,61	207
25	0,60	8	64	23,61	208
25	0,70	8	48	26,22	209
25	0,80	8	48	29,26	210
25	0,90	8	48	31,74	211
25	1,00	8	48	31,74	212
25	1,10	8	48	36,51	213
25	1,20	8	48	36,51	214
25	1,30	8	40	38,09	215
25	1,40	8	40	39,69	216
25	1,50	8	40	39,69	217
25	1,60	8	40	43,73	218
25	1,70	8	40	43,73	219
25	1,80	8	40	45,49	220
25	1,90	8	40	48,67	221
25	2,00	8	40	50,13	222
25	2,50	8	40	60,83	223
25	3,00	8	32	79,24	224
25	3,50	8	32	87,36	225
25	4,00	8	32	98,66	226
25	4,50	8	32	113,00	227
25	5,00	8	32	119,40	228
25	5,50	8	24	135,90	229
25	6,00	8	24	142,30	230
30	0,20	8	100	26,22	252
30	0,25	8	100	26,22	253
30	0,30	8	80	26,22	254
30	0,35	8	80	26,22	255
30	0,40	8	80	26,22	256
30	0,50	8	80	27,53	257
30	0,60	8	64	27,53	258
30	0,70	8	64	33,33	259
30	0,80	8	64	36,51	260
30	0,90	8	64	39,69	261
30	1,00	8	64	39,69	262
30	1,10	8	64	44,64	263
30	1,20	8	48	43,90	264
30	1,30	8	48	45,36	265
30	1,40	8	48	49,40	266
30	1,50	8	48	49,40	267
30	1,60	8	48	52,58	268
30	1,70	8	48	52,58	269
30	1,80	8	48	54,03	270
30	1,90	8	48	55,64	271
30	2,00	8	48	59,09	272
30	2,50	8	40	69,38	273
30	3,00	8	40	82,57	274
30	3,50	8	40	93,73	275
30	4,00	8	40	105,20	276
30	4,50	8	32	121,20	277
30	5,00	8	32	127,80	278
30	5,50	8	32	144,00	279
30	6,00	8	32	150,60	280

P	●
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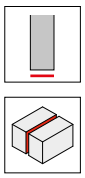
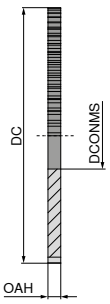
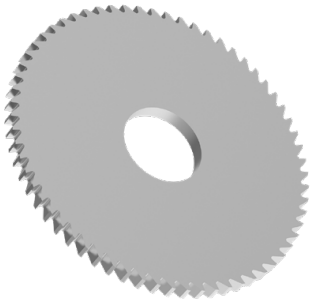
4

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

▲ fine-straight-cut







DIN 1837 A

DC js15 mm	OAH ±0,01 mm	DCONMS H6 mm	ZEFP	54 700 ... EUR V6	
40	0,20	10	128	32,14	302
40	0,25	10	100	32,14	303
40	0,30	10	100	32,14	304
40	0,35	10	100	32,14	305
40	0,40	10	100	34,05	306
40	0,50	10	80	37,09	307
40	0,60	10	80	37,09	308
40	0,70	10	80	42,44	309
40	0,80	10	80	44,18	310
40	0,90	10	64	44,18	311
40	1,00	10	64	45,64	312
40	1,10	10	64	47,08	313
40	1,20	10	64	48,83	314
40	1,30	10	64	49,68	315
40	1,40	10	64	52,87	316
40	1,50	10	64	54,45	317
40	1,60	10	64	55,77	318
40	1,70	10	48	59,09	319
40	1,80	10	48	60,53	320
40	1,90	10	48	62,28	321
40	2,00	10	48	62,28	322
40	2,50	10	48	80,10	323
40	3,00	10	48	92,72	324
40	3,50	10	48	103,60	325
40	4,00	10	40	114,90	326
40	4,50	10	40	130,40	327
40	5,00	10	40	138,40	328
40	5,50	10	40	155,00	329
40	6,00	10	40	163,70	330
50	0,20	13	128	52,87	352
50	0,25	13	128	51,15	353
50	0,30	13	128	43,44	354
50	0,35	13	100	43,44	355
50	0,40	13	100	43,44	356
50	0,50	13	100	44,91	357
50	0,60	13	100	44,91	358
50	0,70	13	80	47,08	359
50	0,80	13	80	51,15	360
50	0,90	13	80	52,87	361
50	1,00	13	80	54,45	362
50	1,10	13	80	55,77	363
50	1,20	13	80	57,51	364
50	1,30	13	64	64,46	365
50	1,40	13	64	65,90	366
50	1,50	13	64	69,26	367
50	1,60	13	64	70,70	368
50	1,70	13	64	71,73	369
50	1,80	13	64	76,32	370
50	1,90	13	64	76,32	371
50	2,00	13	64	78,66	372
50	2,50	13	64	96,03	373
50	3,00	13	48	111,50	374
50	3,50	13	48	127,30	375
50	4,00	13	48	135,10	376
50	4,50	13	48	156,60	377
50	5,00	13	48	165,20	378
50	5,50	13	40	184,00	379
50	6,00	13	40	191,30	380
63	0,20	16	160	77,64	402
63	0,25	16	160	74,74	403
63	0,30	16	128	69,53	404
63	0,35	16	128	65,75	405
63	0,40	16	128	59,54	406
63	0,50	16	128	58,08	407
63	0,60	16	100	59,54	408
63	0,70	16	100	67,07	409
63	0,80	16	100	73,88	410
63	0,90	16	100	74,74	411
63	1,00	16	100	76,20	412
63	1,10	16	80	79,24	413
63	1,20	16	80	81,99	414
63	1,30	16	80	84,01	415
63	1,40	16	80	85,33	416
63	1,50	16	80	86,78	417
63	1,60	16	80	91,13	418
63	1,70	16	80	95,75	419
63	1,80	16	80	97,34	420
63	1,90	16	80	101,50	421
63	2,00	16	80	105,00	422
63	2,50	16	64	126,20	423
63	3,00	16	64	142,80	424
63	3,50	16	64	163,70	425
63	4,00	16	64	179,80	426
63	4,50	16	64	205,70	427
63	5,00	16	48	214,40	428
63	5,50	16	48	240,60	429
63	6,00	16	48	249,20	430

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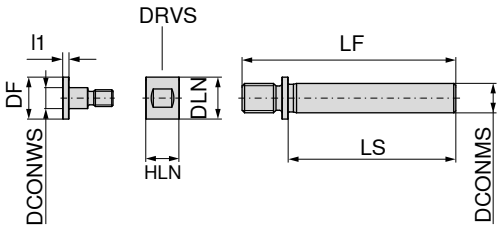
Cylindrical shank adapter for circular saw blades

▲ DCONWS = circular saw blade bore diameter



DCONWS h7 mm	DCONMS h7 mm	DLN mm	DF mm	LF mm	LS mm	HLN mm	l_1 mm	DRVS mm	72 900 ... EUR X1	
5	7	10	10	51	40	8	3	9	129,60	**005**
5	10	10	10	61	50	8	3	9	129,60	**105**
8	7	15	15	51	40	8	3	14	129,60	**008**
8	10	15	15	61	50	8	3	14	140,70	**108**
10	7	17	17	53	40	10	3	16	129,60	**010**
10	10	17	17	63	50	10	3	16	140,70	**110**
10	16	17	17	74	55	10	3	16	150,10	**210**
13	10	20	20	66	50	10	3	18	140,70	**113**
13	16	20	20	77	55	10	3	18	150,10	**213**
16	10	24	24	66	50	14	3	22	140,70	**116**
16	16	24	24	79	55	14	3	22	150,10	**216**

Screw - SR

Lock nut - KM

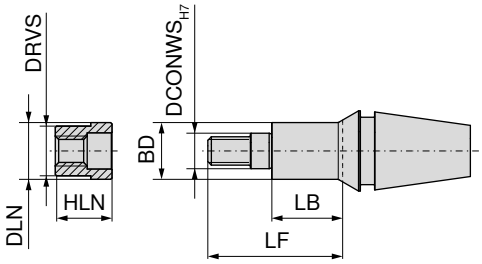
Spare parts for Article no.	72 945 ... EUR X1		72 945 ... EUR X1	
72 900 005	24,61	**000**	38,67	**005**
72 900 105	24,61	**000**	38,67	**005**
72 900 008	24,61	**001**	38,67	**006**
72 900 108	24,61	**001**	38,67	**006**
72 900 010	26,22	**002**	40,14	**007**
72 900 110	26,22	**002**	40,14	**007**
72 900 210	26,22	**010**	40,14	**012**
72 900 113	27,45	**003**	41,51	**008**
72 900 213	27,45	**003**	41,51	**008**
72 900 116	28,80	**004**	42,70	**009**
72 900 216	28,80	**011**	42,70	**013**

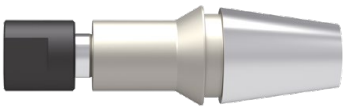
ER mono clamping - Circular saw blades

▲ DCONWS = circular saw blade bore diameter

Scope of supply:

Adapter incl. Lock nut





DCONWS H7 mm	Adapter	DLN mm	LB mm	HLN mm	BD mm	LF mm	DRVS mm	72 930 ... EUR X1	
5	ER 11	8	10	8	8	21	7	177,90	**51100**
5	ER 16	10	18	8	10	29	9	184,80	**51600**
5	ER 20	10	18	8	10	29	9	191,50	**52000**
8	ER 20	15	18	8	15	29	13	191,50	**82000**
10	ER 20	16	30	8	15	41	14	191,50	**12000**

Lock nut - ER

Spare parts for Article no.	72 946 ... EUR X1	
72 930 51100	44,93	**51100**
72 930 51600	45,93	**51600**
72 930 52000	46,95	**52000**
72 930 82000	46,95	**82000**
72 930 12000	46,95	**12000**

Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment		Tensile strength N/mm²* / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0,15 % C	Annealed	420 N/mm² / 125 HB	1.0401	C15	1.1141	Ck15
		P.1.2	< 0,45 % C	Annealed	640 N/mm² / 190 HB	1.1191	C45E	1.0718	9SMnPb28
		P.1.3		Tempered	840 N/mm² / 250 HB	1.1191	C45E	1.0535	C55
		P.1.4	< 0,75 % C	Annealed	910 N/mm² / 270 HB	1.1223	C60R	1.0535	C55
		P.1.5		Tempered	1010 N/mm² / 300 HB	1.1223	C60R	1.0727	45S20
	Low-alloy steel	P.2.1		Annealed	610 N/mm² / 180 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.2		Tempered	930 N/mm² / 275 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.3		Tempered	1010 N/mm² / 300 HB	1.7225	42CrMo4	1.3505	100Cr6
		P.2.4		Tempered	1200 N/mm² / 375 HB	1.7225	42CrMo4	1.3505	100Cr6
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	680 N/mm² / 200 HB	1.4021	X20Cr13	1.4034	X46Cr13
		P.3.2		Hardened and tempered	1100 N/mm² / 300 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
		P.3.3		Hardened and tempered	1300 N/mm² / 400 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	680 N/mm² / 200 HB	1.4016	X6Cr17	1.2316	X36CrMo16
		P.4.2	Martensitic	Tempered	1010 N/mm² / 300 HB	1.4112	X90CrMoV18	1.2316	X36CrMo16
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	610 N/mm² / 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/mm² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501	X2CrNiMoCuWN25-7-4
K	Grey cast iron	K.1.1	Pearlitic / ferritic		350 N/mm² / 180 HB	0.6010	GG-10	0.6025	GG-25
		K.1.2	Pearlitic (martensitic)		500 N/mm² / 260 HB	0.6030	GG-30	0.6045	GG-45
	Spherulitic graphite cast iron	K.2.1	Ferritic		540 N/mm² / 160 HB	0.7040	GGG-40	0.7060	GGG-60
		K.2.2	Pearlitic		845 N/mm² / 250 HB	0.7070	GGG-70	0.7080	GGG-80
	Malleable iron	K.3.1	Ferritic		440 N/mm² / 130 HB	0.8035	GTW-35-04	0.8045	GTW-45
		K.3.2	Pearlitic		780 N/mm² / 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/mm² / 100 HB	3.1355	AlCuMg2	3.2315	AlMgSi1
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		250 N/mm² / 75 HB	3.2581	G-AlSi12	3.2163	G-AlSi9Cu3
		N.2.2	≤ 12 % Si, hardenable	Age-hardened	300 N/mm² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373	G-AlSi9Mg
		N.2.3	> 12 % Si, non-hardenable		440 N/mm² / 130 HB		G-AlSi17Cu4Mg		G-AlSi18CuNiMg
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		375 N/mm² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410	CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm² / 90 HB	2.0331	CuZn15	2.4070	CuZn28Sn1As
		N.3.3	CuSn, lead-free copper and electrolytic copper		340 N/mm² / 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/mm² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865	G-X40NiCrSi38-18
		S.1.2		Age-hardened	950 N/mm² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876	X10NiCrAlTi32-20
		S.2.1	Ni or Co basis	Annealed	840 N/mm² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856	NiCr22Mo9Nb
		S.2.2		Age-hardened	1180 N/mm² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955	NiFe25Cr20NbTi
		S.2.3		Cast	1080 N/mm² / 320 HB	2.4765	CoCr20W15Ni	1.3401	G-X120Mn12
	Titanium alloys	S.3.1	Pure titanium		400 N/mm²	3.7025	Ti99,8	3.7034	Ti99,7
		S.3.2	Alpha + beta alloys	Age-hardened	1050 N/mm² / 320 HB	3.7165	TiAl6V4	Ti-6246	Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	Beta alloys		1400 N/mm² / 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/mm²				
		O.1.2	Plastics, thermoplastic		≤ 100 N/mm²				
		O.2.1	Aramid fibre-reinforced		≤ 1000 N/mm²				
		O.2.2	Glass/carbon-fibre reinforced		≤ 1000 N/mm²				
		O.3.1	Graphite						

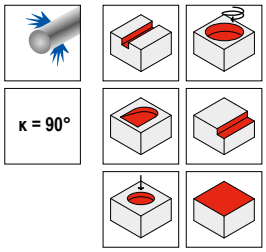
*** Tensile strength**

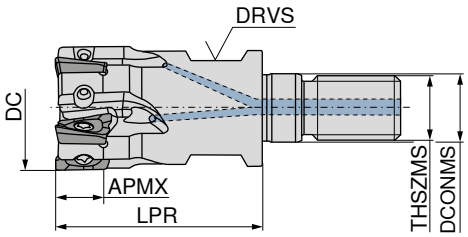
Cutting data standard values – Circular saw blades

	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





Designation	DC mm	ZNF	APMX mm	LPR mm	DCONMS mm	THSZMS	DRVS mm	RPMX 1/min.	torque moment Nm	Insert	50 751 ... EUR 2B/40	
G211.16.R.04-07	16	4	6	27	8,5	M8	10	50400	1	XD.T 0703	338,90	**016**
G211.20.R.05-07	20	5	6	33	10,5	M10	15	44280	1	XD.T 0703	378,20	**020**

TORX® blade


Key D


Molykote


Clamping screw

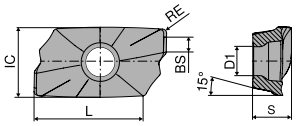

Torque screw-driver

Spare parts for Article no.	80 950 ... EUR Y7		80 950 ... EUR Y7		70 950 ... EUR 2A/28		70 950 ... EUR 2A/28		80 950 ... EUR Y7	
50 751 016	6,78	**051**	10,26	**117**	5,64	**303**	4,19	**137**	153,30	**191**
50 751 020	6,78	**051**	10,26	**117**	5,64	**303**	4,19	**137**	153,30	**191**

4

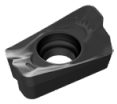
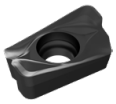
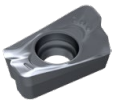
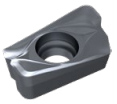
XDKT

Designation	IC	D1	L	BS	S
	mm	mm	mm	mm	mm
XDKT 0703..	4,9	2,5	7,8	1,2	3,18

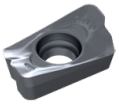
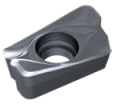
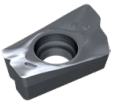
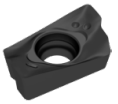


XDKT

XDKT

		-F50 CTCP230	-M50 CTCP230	-F50 CTPP235	-M50 CTPP235
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN
					
		F	M	F	M
		XDKT	XDKT	XDKT	XDKT
		51 033 ...	51 036 ...	51 033 ...	51 036 ...
ISO	RE mm	EUR 1B/61	EUR 1B/61	EUR 1B/61	EUR 1B/61
070304SR	0,4	15,19 004	15,19 004	15,19 104	15,19 104
070308SR	0,8	15,19 008	15,19 008	15,19 108	15,19 108
P		●	●	●	●
M				○	○
K		○	○	○	○
N					
S					
H					
O					

XDKT

		-F50 CTPM240	-M50 CTPM240	-F40 CTPM245	-F40 CTCM245	-F20 CTWN215	-F40 CTC5240	-F40 CTCS245
		DRAGONSKIN	DRAGONSKIN	DRAGONSKIN	DRAGONSKIN		DRAGONSKIN	DRAGONSKIN
								
		F	M	F	F	F	F	F
		XDKT	XDKT	XDKT	XDKT	XDKT	XDKT	XDKT
		51 033 ...	51 036 ...	51 112 ...	51 112 ...	50 507 ...	50 498 ...	51 112 ...
ISO	RE mm	EUR 1B/61	EUR 1B/61	EUR 1H/17	EUR 1H/17	EUR 1A/90	EUR 1H/17	EUR 1H/17
070304ER	0,4			18,15 454	18,15 90401		18,15 544	
070304FR	0,4					18,69 504		
070304SR	0,4	15,19 404	15,19 404					
070308ER	0,8			18,15 458	18,15 90801		18,15 548	18,15 558
070308FR	0,8					18,69 508		
070308SR	0,8	15,19 408	15,19 408					
P		○	○	●	●			
M		●	●	●	●			
K						○		
N						●		
S					○		●	●
H								
O						○		

Milling guide

Cutting data standard values	→ 14	Machining strategy	→ 15
Starting Parameter	→ 15		

Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment		Tensile strength N/mm²* / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0,15 % C	Annealed	420 N/mm² / 125 HB	1.0401	C15	1.1141	Ck15
		P.1.2	< 0,45 % C	Annealed	640 N/mm² / 190 HB	1.1191	C45E	1.0718	9SMnPb28
		P.1.3		Tempered	840 N/mm² / 250 HB	1.1191	C45E	1.0535	C55
		P.1.4	< 0,75 % C	Annealed	910 N/mm² / 270 HB	1.1223	C60R	1.0535	C55
		P.1.5		Tempered	1010 N/mm² / 300 HB	1.1223	C60R	1.0727	45S20
	Low-alloy steel	P.2.1		Annealed	610 N/mm² / 180 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.2		Tempered	930 N/mm² / 275 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.3		Tempered	1010 N/mm² / 300 HB	1.7225	42CrMo4	1.3505	100Cr6
		P.2.4		Tempered	1200 N/mm² / 375 HB	1.7225	42CrMo4	1.3505	100Cr6
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	680 N/mm² / 200 HB	1.4021	X20Cr13	1.4034	X46Cr13
		P.3.2		Hardened and tempered	1100 N/mm² / 300 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
		P.3.3		Hardened and tempered	1300 N/mm² / 400 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	680 N/mm² / 200 HB	1.4016	X6Cr17	1.2316	X36CrMo16
		P.4.2	Martensitic	Tempered	1010 N/mm² / 300 HB	1.4112	X90CrMoV18	1.2316	X36CrMo16
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	610 N/mm² / 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/mm² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501	X2CrNiMoCuWN25-7-4
K	Grey cast iron	K.1.1	Pearlitic / ferritic		350 N/mm² / 180 HB	0.6010	GG-10	0.6025	GG-25
		K.1.2	Pearlitic (martensitic)		500 N/mm² / 260 HB	0.6030	GG-30	0.6045	GG-45
	Spherulitic graphite cast iron	K.2.1	Ferritic		540 N/mm² / 160 HB	0.7040	GGG-40	0.7060	GGG-60
		K.2.2	Pearlitic		845 N/mm² / 250 HB	0.7070	GGG-70	0.7080	GGG-80
	Malleable iron	K.3.1	Ferritic		440 N/mm² / 130 HB	0.8035	GTW-35-04	0.8045	GTW-45
		K.3.2	Pearlitic		780 N/mm² / 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/mm² / 100 HB	3.1355	AlCuMg2	3.2315	AlMgSi1
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		250 N/mm² / 75 HB	3.2581	G-AlSi12	3.2163	G-AlSi9Cu3
		N.2.2	≤ 12 % Si, hardenable	Age-hardened	300 N/mm² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373	G-AlSi9Mg
		N.2.3	> 12 % Si, non-hardenable		440 N/mm² / 130 HB		G-AlSi17Cu4Mg		G-AlSi18CuNiMg
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		375 N/mm² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410	CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm² / 90 HB	2.0331	CuZn15	2.4070	CuZn28Sn1As
		N.3.3	CuSn, lead-free copper and electrolytic copper		340 N/mm² / 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/mm² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865	G-X40NiCrSi38-18
		S.1.2		Age-hardened	950 N/mm² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876	X10NiCrAlTi32-20
		S.2.1	Ni or Co basis	Annealed	840 N/mm² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856	NiCr22Mo9Nb
		S.2.2		Age-hardened	1180 N/mm² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955	NiFe25Cr20NbTi
		S.2.3		Cast	1080 N/mm² / 320 HB	2.4765	CoCr20W15Ni	1.3401	G-X120Mn12
	Titanium alloys	S.3.1	Pure titanium		400 N/mm²	3.7025	Ti99,8	3.7034	Ti99,7
		S.3.2	Alpha + beta alloys	Age-hardened	1050 N/mm² / 320 HB	3.7165	TiAl6V4	Ti-6246	Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	Beta alloys		1400 N/mm² / 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/mm²				
		O.1.2	Plastics, thermoplastic		≤ 100 N/mm²				
		O.2.1	Aramid fibre-reinforced		≤ 1000 N/mm²				
		O.2.2	Glass/carbon-fibre reinforced		≤ 1000 N/mm²				
		O.3.1	Graphite						

*** Tensile strength**

Cutting data standard values

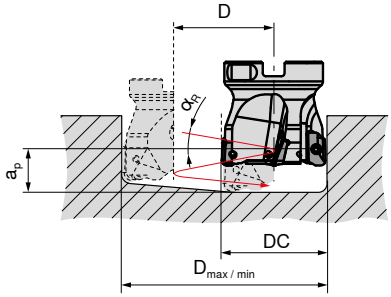
Index	CTCP230		CTPP235		CTPM240		CTPM245		CTCM245		CTWN215		CTC5240		CTCS245	
													DRAGONSKIN		DRAGONSKIN	
	Cutting Material **hard** (v_c↑) → **tough** (v_c↓)															
	v_c (m/min)															
P.1.1	286	150	246	137	226	141	244	139	279	134						
P.1.2	242	133	208	121	188	126	207	124	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																

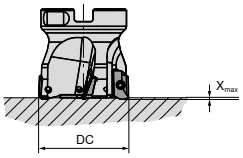
The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. **±20%** according to the usage conditions.

System MaxiMill 211-07

Machining strategy

Helical plunging



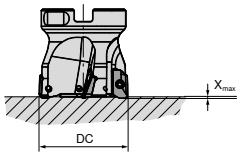


a_p in mm = D * π * tan α_R

DC mm	D_{max} / RE 0,4 mm	D_{min} mm	$\alpha_{R\,max}$ °
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	$\alpha_{R\,max\,360°}$ °
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

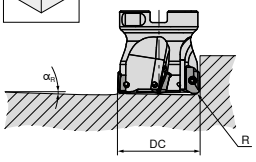
Axial ramping



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

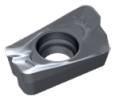
Angled ramping



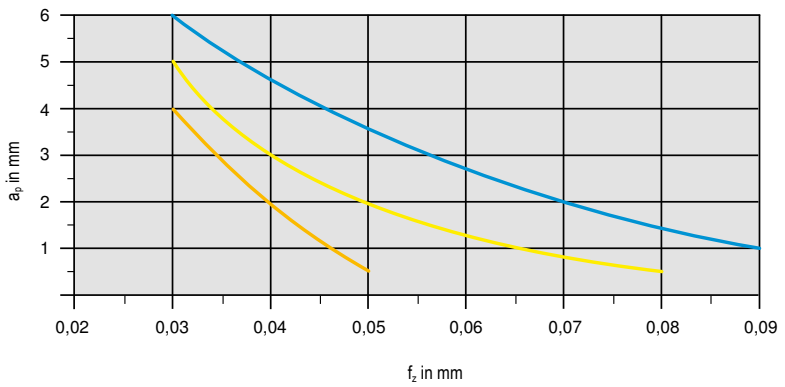
DC mm	α °
10	11,0
12	7,9
16	4,3
20	3,0
25	2,5
32	1,6
40	1,2
50	1,0

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!


Ø10.00
81 000 10000
PC.116E.10.000.R.G
821721/1718091

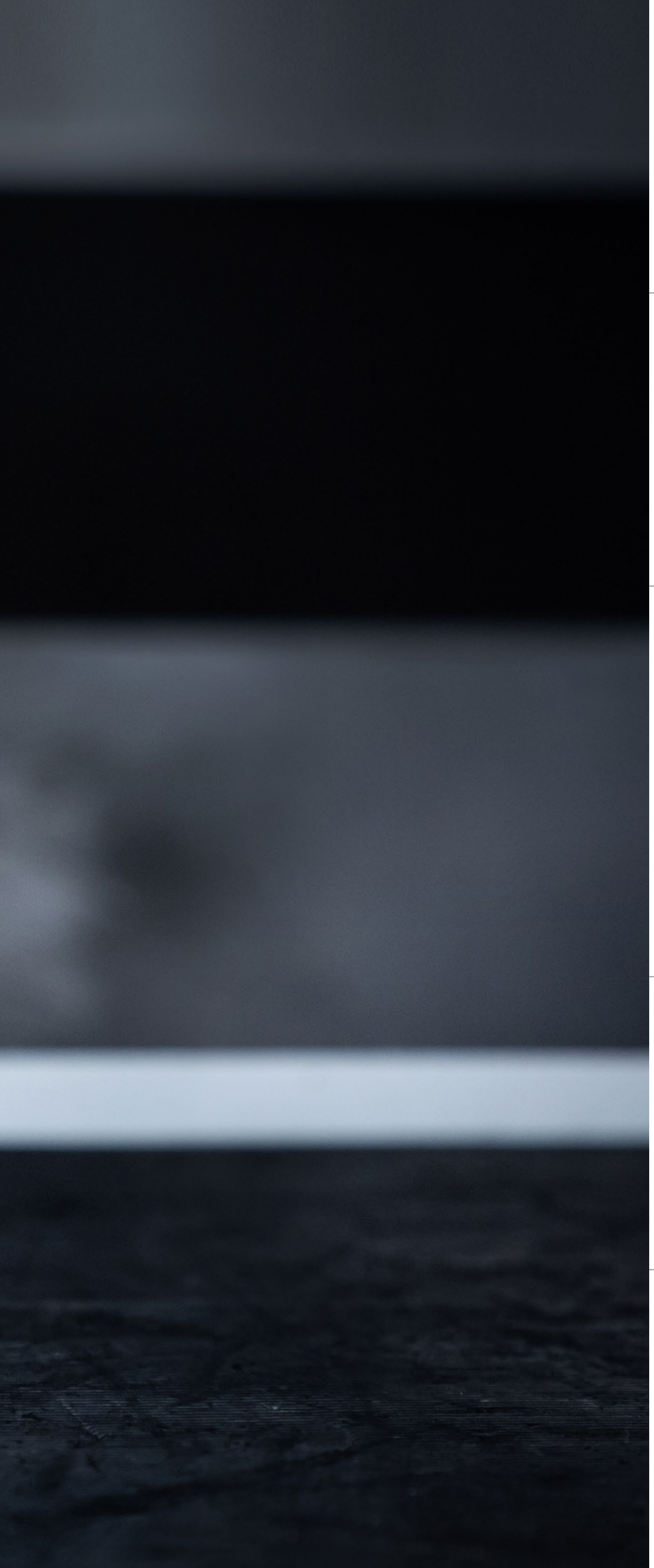


Table of contents

Overview

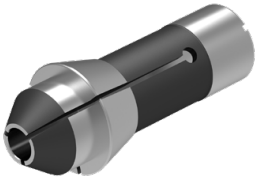
Collets

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.

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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

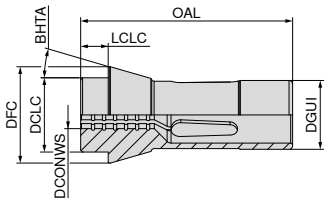
Other profile shapes and sizes and extended options available on request.

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/ie/en/download.html**

Please 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

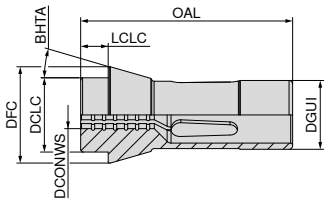
Grooved
116 E / F 13

Smooth
116 E / F 13

DCONWS mm	81 000 ... EUR Y8/YS		81 002 ... EUR Y8/YS	
1,0			178,50	01000
1,5			178,50	01500
2,0			178,50	02000
2,5			178,50	02500
3,0			61,11	03000
3,5			61,11	03500
4,0			61,11	04000
4,5			61,11	04500
5,0			61,11	05000
5,5			61,11	05500
6,0	61,11	06000	87,20	06000
6,5	61,11	06500	87,20	06500
7,0	61,11	07000	87,20	07000
7,5	61,11	07500	87,20	07500
8,0	61,11	08000	87,20	08000
8,5	61,11	08500	87,20	08500
9,0	61,11	09000	87,20	09000
9,5	61,11	09500	87,20	09500
10,0	61,11	10000	87,20	10000

Collets

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



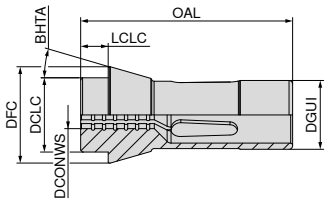
Pressure collet 120 E / F 15

DCONWS mm	DCONWS inch	Grooved 120 E / F 15 81 003 ... EUR Y8/YS		Smooth 120 E / F 15 81 005 ... EUR Y8/YS		Grooved 120 E / F 15 81 031 ... EUR Y8/YS	
1,000				123,80	**01000**		
1,500				123,80	**01500**		
2,000				67,18	**02000**	236,60	**02000**[1)]
2,500				67,18	**02500**		
3,000				40,97	**03000**	236,60	**03000**[1)]
3,175	1/8					236,60	**03175**[1)]
3,500				40,97	**03500**		
4,000				40,97	**04000**	126,00	**04000**[1)]
4,500				40,97	**04500**		
5,000				40,97	**05000**	126,00	**05000**[1)]
5,500				40,97	**05500**		
6,000		40,97	**06000**	67,18	**06000**	126,00	**06000**[1)]
6,350	1/4					181,40	**06350**[1)]
6,500		40,97	**06500**	67,18	**06500**		
7,000		40,97	**07000**	67,18	**07000**	126,00	**07000**[1)]
7,500		40,97	**07500**	67,18	**07500**		
8,000		40,97	**08000**	67,18	**08000**	126,00	**08000**
8,500		40,97	**08500**	67,18	**08500**		
9,000		40,97	**09000**	67,18	**09000**	126,00	**09000**
9,500				67,18	**09500**		
10,000		40,97	**10000**	67,18	**10000**	151,30	**10000**
10,500		40,97	**10500**	67,18	**10500**		
11,000		40,97	**11000**	67,18	**11000**	263,60	**11000**
11,500		40,97	**11500**	67,18	**11500**		
12,000		40,97	**12000**	67,18	**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

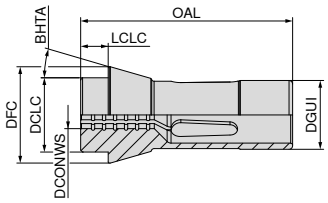
Grooved
F 16 / 1212 E

Smooth
F 16 / 1212 E

DCONWS mm	81 019 ... EUR Y8/YS		81 021 ... EUR Y8/YS	
1,0			94,22	01000
1,5			94,22	01500
2,0			94,22	02000
2,5			94,22	02500
3,0			61,11	03000
3,5			61,11	03500
4,0			61,11	04000
4,5			61,11	04500
5,0			61,11	05000
5,5			61,11	05500
6,0	61,11	06000	87,20	06000
6,5	61,11	06500	87,20	06500
7,0	61,11	07000	87,20	07000
7,5	61,11	07500	87,20	07500
8,0	61,11	08000	87,20	08000
8,5	61,11	08500	87,20	08500
9,0	61,11	09000	87,20	09000
9,5	61,11	09500	87,20	09500
10,0	61,11	10000	87,20	10000
10,5	61,11	10500	87,20	10500
11,0	61,11	11000	87,20	11000
11,5	61,11	11500	87,20	11500
12,0	61,11	12000	87,20	12000
12,5	61,11	12500	87,20	12500
13,0	61,11	13000	87,20	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

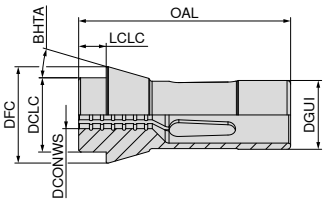


Pressure collet 136 E / F 20-201

	Grooved 136 E / F 20-201		Smooth 136 E / F 20-201	
	81 007 ...		**81 009 ...**	
DCONWS mm	**EUR Y8/YS**		**EUR Y8/YS**	
1,0			152,80	**01000**
1,5			152,80	**01500**
2,0			99,51	**02000**
2,5			99,51	**02500**
3,0			61,11	**03000**
3,5			61,11	**03500**
4,0			61,11	**04000**
4,5			61,11	**04500**
5,0			61,11	**05000**
5,5			61,11	**05500**
6,0	61,11	**06000**	87,20	**06000**
6,5	61,11	**06500**	87,20	**06500**
7,0	61,11	**07000**	87,20	**07000**
7,5	61,11	**07500**	87,20	**07500**
8,0	61,11	**08000**	87,20	**08000**
8,5	61,11	**08500**	87,20	**08500**
9,0	61,11	**09000**	87,20	**09000**
9,5	61,11	**09500**	87,20	**09500**
10,0	61,11	**10000**	87,20	**10000**
10,5	61,11	**10500**	87,20	**10500**
11,0	61,11	**11000**	87,20	**11000**
11,5	61,11	**11500**	87,20	**11500**
12,0	61,11	**12000**	87,20	**12000**
12,5	61,11	**12500**	87,20	**12500**
13,0	61,11	**13000**	87,20	**13000**
13,5	61,11	**13500**	87,20	**13500**
14,0	61,11	**14000**	87,20	**14000**
14,5	61,11	**14500**	87,20	**14500**
15,0	61,11	**15000**	87,20	**15000**
15,5	61,11	**15500**	87,20	**15500**
16,0	61,11	**16000**	87,20	**16000**

Collets

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



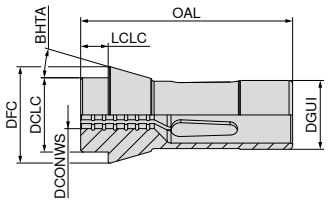
Pressure collet 138 E / F 20-87

		Grooved 138 E / F20-87		Smooth 138 E / F20-87		Grooved 138 E / F20-87	
		81 011 ...		81 013 ...		81 026 ...	
DCONWS mm	DCONWS inch	EUR Y8/YS		EUR Y8/YS		EUR Y8/YS	
1,00				155,50	01000		
1,50				155,50	01500		
2,00				85,44	02000	313,70	02000[1)]
2,50				85,44	02500		
3,00				61,11	03000	148,80	03000[1)]
3,50				61,11	03500		
4,00				61,11	04000	148,80	04000[1)]
4,50				61,11	04500		
5,00				61,11	05000	148,80	05000[1)]
5,50				61,11	05500		
6,00		61,11	06000	87,20	06000	148,80	06000[1)]
6,35	1/4					204,80	06350[1)]
6,50		61,11	06500	87,20	06500		
7,00		61,11	07000	87,20	07000	117,60	07000[1)]
7,50		61,11	07500	87,20	07500		
8,00		61,11	08000	87,20	08000	117,60	08000
8,50		61,11	08500	87,20	08500		
9,00		61,11	09000	87,20	09000	117,60	09000
9,50		61,11	09500	87,20	09500		
10,00		61,11	10000	87,20	10000	117,60	10000
10,50		61,11	10500	87,20	10500		
11,00		61,11	11000	87,20	11000	117,60	11000
11,50		61,11	11500	87,20	11500		
12,00		61,11	12000	87,20	12000	117,60	12000
12,50		61,11	12500	87,20	12500		
13,00		61,11	13000	87,20	13000	117,60	13000
13,50		61,11	13500	87,20	13500		
14,00		61,11	14000	87,20	14000	117,60	14000
14,50		61,11	14500	87,20	14500		
15,00		61,11	15000	87,20	15000		
15,50		61,11	15500	87,20	15500		
16,00		61,11	16000	87,20	16000		

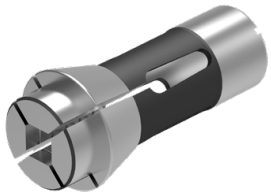
1) Without transverse grooves

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



		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 ...	
DCONWS mm	DCONWS inch	EUR Y8/YS		EUR Y8/YS		EUR Y8/YS		EUR Y8/YS	
1,500				102,80	01500				
1,501 - 1,999				165,60	xxxxx[2]				
2,000				102,80	02000	343,40	02000[1]	434,00	02000[1]
2,001 - 2,499				165,60	xxxxx[2]				
2,500				102,80	02500				
2,501 - 2,999				165,60	xxxxx[2]				
3,000				73,21	03000	263,60	03000[1]	216,20	03000[1]
3,001 - 3,499				120,30	xxxxx[2]				
3,500				73,21	03500				
3,501 - 3,999				120,30	xxxxx[2]				
4,000				73,21	04000	204,30	04000[1]	155,50	04000[1]
4,001 - 4,499				120,30	xxxxx[2]				
4,500				73,21	04500				
4,501 - 4,999				120,30	xxxxx[2]				
5,000				73,21	05000	155,50	05000[1]	155,50	05000[1]
5,001 - 5,499				120,30	xxxxx[2]				
5,500				73,21	05500				
5,501 - 5,999				120,30	xxxxx[2]				
6,000		73,27	06000	99,36	06000	155,50	06000[1]	155,50	06000[1]
6,001 - 6,349		120,30	xxxxx[2]						
6,350	1/4	120,30	06350	146,50	06350	211,00	06350[1]		
6,351 - 6,499		120,30	xxxxx[2]						
6,500		73,27	06500	99,36	06500				
6,501 - 6,999		120,30	xxxxx[2]						
7,000		73,27	07000	99,36	07000	120,70	07000[1]	120,70	07000[1]
7,001 - 7,499		120,30	xxxxx[2]						
7,500		73,27	07500	99,36	07500				
7,501 - 7,937		120,30	xxxxx[2]						
7,938	5/16	120,30	07938	146,50	07938				
7,939 - 7,999		120,30	xxxxx[2]						
8,000		73,27	08000	99,36	08000	120,70	08000	120,70	08000
8,001 - 8,499		120,30	xxxxx[2]						
8,500		73,27	08500	99,36	08500				
8,501 - 8,999		120,30	xxxxx[2]						
9,000		73,27	09000	99,36	09000	120,70	09000	120,70	09000
9,001 - 9,499		120,30	xxxxx[2]						
9,500		73,27	09500	99,36	09500				
9,501 - 9,999		120,30	xxxxx[2]						
10,000		73,27	10000	99,36	10000	120,70	10000	120,70	10000
10,001 - 10,499		120,30	xxxxx[2]						
10,500		73,27	10500	99,36	10500				
10,501 - 10,999		120,30	xxxxx[2]						
11,000		73,27	11000	99,36	11000	120,70	11000	120,70	11000
11,001 - 11,112		120,30	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**).

Continued on next page

Pressure collet 145 E / F 25

		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 ...**	
DCONWS mm	DCONWS inch	EUR Y8/YS		EUR Y8/YS		EUR Y8/YS		EUR Y8/YS	
11,113	7/16	120,30	**11113**	146,50	**11113**				
11,114 - 11,499		120,30	**xxxxx**[2]						
11,500		73,27	**11500**	99,36	**11500**				
11,501 - 11,999		120,30	**xxxxx**[2]						
12,000		73,27	**12000**	99,36	**12000**	120,70	**12000**	120,70	**12000**
12,001 - 12,499		120,30	**xxxxx**[2]						
12,500		73,27	**12500**	99,36	**12500**				
12,501 - 12,699		120,30	**xxxxx**[2]						
12,700	1/2	120,30	**12700**	146,50	**12700**	120,70	**12700**		
12,701 - 12,999		120,30	**xxxxx**[2]						
13,000		73,27	**13000**	99,36	**13000**	120,70	**13000**	120,70	**13000**
13,001 - 13,499		120,30	**xxxxx**[2]						
13,500		73,27	**13500**	99,36	**13500**				
13,501 - 13,999		120,30	**xxxxx**[2]						
14,000		73,27	**14000**	99,36	**14000**	120,70	**14000**	120,70	**14000**
14,001 - 14,499		120,30	**xxxxx**[2]						
14,500		73,27	**14500**	99,36	**14500**				
14,501 - 14,999		120,30	**xxxxx**[2]						
15,000		73,27	**15000**	99,36	**15000**	120,70	**15000**	216,20	**15000**
15,001 - 15,499		120,30	**xxxxx**[2]						
15,500		73,27	**15500**	99,36	**15500**				
15,501 - 15,999		120,30	**xxxxx**[2]						
16,000		73,27	**16000**	99,36	**16000**	120,70	**16000**		
16,001 - 16,499		120,30	**xxxxx**[2]						
16,500		73,27	**16500**	99,36	**16500**				
16,501 - 16,999		120,30	**xxxxx**[2]						
17,000		73,27	**17000**	99,36	**17000**	120,70	**17000**		
17,001 - 17,499		120,30	**xxxxx**[2]						
17,500		73,27	**17500**	99,36	**17500**				
17,501 - 17,999		120,30	**xxxxx**[2]						
18,000		73,27	**18000**	99,36	**18000**	263,60	**18000**		
18,001 - 18,499		120,30	**xxxxx**[2]						
18,500		73,27	**18500**	99,36	**18500**				
18,501 - 18,999		120,30	**xxxxx**[2]						
19,000		73,27	**19000**	99,36	**19000**	263,60	**19000**		
19,001 - 19,049		120,30	**xxxxx**[2]						
19,050	3/4	120,30	**19050**						
19,051 - 19,499		120,30	**xxxxx**[2]						
19,500		73,27	**19500**	99,36	**19500**				
19,501 - 19,999		120,30	**xxxxx**[2]						
20,000		73,27	**20000**	99,36	**20000**				

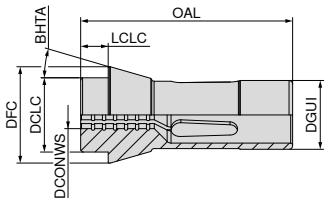
1) Without transverse grooves

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

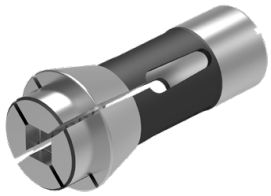
For xxxxx please specify the required diameter when ordering (e.g. **Ø 6.789** – article number 81 015 **06789**).

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 ... EUR Y8/YS		Smooth F 37 / 1536 E 81 025 ... EUR Y8/YS		Grooved F 37 / 1536 E 81 028 ... EUR Y8/YS		Grooved F 37 / 1536 E 81 030 ... EUR Y8/YS	
1,000				142,10	01000				
1,001 - 1,499				204,90	xxxxx[2]				
1,500				142,10	01500				
1,501 - 1,999				204,90	xxxxx[2]				
2,000				142,10	02000				
2,001 - 2,499				204,90	xxxxx[2]				
2,500				142,10	02500				
2,501 - 2,999				204,90	xxxxx[2]				
3,000				102,80	03000	329,80	03000[1]	263,60	03000[1]
3,001 - 3,499				150,00	xxxxx[2]				
3,500				102,80	03500				
3,501 - 3,999				150,00	xxxxx[2]				
4,000				102,80	04000	169,00	04000[1]	263,60	04000[1]
4,001 - 4,499				150,00	xxxxx[2]				
4,500				102,80	04500				
4,501 - 4,999				150,00	xxxxx[2]				
5,000				102,80	05000	169,00	05000[1]	263,60	05000[1]
5,001 - 5,499				150,00	xxxxx[2]				
5,500				102,80	05500				
5,501 - 5,999				150,00	xxxxx[2]				
6,000		102,90	06000	128,90	06000	169,00	06000[1]	263,60	06000[1]
6,001 - 6,349		150,10	xxxxx[2]						
6,350	1/4	150,10	06350	176,00	06350	223,10	06350[1]	263,60	06350[1]
6,351 - 6,499		150,10	xxxxx[2]						
6,500		102,90	06500	128,90	06500				
6,501 - 6,999		150,10	xxxxx[2]						
7,000		102,90	07000	128,90	07000	169,00	07000[1]	263,60	07000[1]
7,001 - 7,499		150,10	xxxxx[2]						
7,500		102,90	07500	128,90	07500				
7,501 - 7,999		150,10	xxxxx[2]						
8,000		102,90	08000	128,90	08000	169,00	08000	263,60	08000
8,001 - 8,499		150,10	xxxxx[2]						
8,500		102,90	08500	128,90	08500				
8,501 - 8,999		150,10	xxxxx[2]						
9,000		102,90	09000	128,90	09000	169,00	09000	263,60	09000
9,001 - 9,499		150,10	xxxxx[2]						
9,500		102,90	09500	128,90	09500				
9,501 - 9,524		150,10	xxxxx[2]						
9,525	3/8	150,10	09525						
9,526 - 9,999		150,10	xxxxx[2]						
10,000		102,90	10000	128,90	10000	169,00	10000	263,60	10000
10,001 - 10,499		150,10	xxxxx[2]						
10,500		102,90	10500	128,90	10500				
10,501 - 10,999		150,10	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**).

Continued on next page

Pressure collet F 37 / 1536 E

		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 ...**	
DCONWS mm	DCONWS inch	**EUR Y8/YS**		**EUR Y8/YS**		**EUR Y8/YS**		**EUR Y8/YS**	
11,000		102,90	**11000**	128,90	**11000**	169,00	**11000**	263,60	**11000**
11,001 - 11,499		150,10	**xxxxx**[2)]						
11,500		102,90	**11500**	128,90	**11500**				
11,501 - 11,999		150,10	**xxxxx**[2)]						
12,000		102,90	**12000**	128,90	**12000**	169,00	**12000**	263,60	**12000**
12,001 - 12,499		150,10	**xxxxx**[2)]						
12,500		102,90	**12500**	128,90	**12500**				
12,501 - 12,699		150,10	**xxxxx**[2)]						
12,700	1/2	150,10	**12700**	176,00	**12700**	223,10	**12700**	263,60	**12700**
12,701 - 12,999		150,10	**xxxxx**[2)]						
13,000		102,90	**13000**	128,90	**13000**	169,00	**13000**	263,60	**13000**
13,001 - 13,499		150,10	**xxxxx**[2)]						
13,500		102,90	**13500**	128,90	**13500**				
13,501 - 13,999		150,10	**xxxxx**[2)]						
14,000		102,90	**14000**	128,90	**14000**	169,00	**14000**	263,60	**14000**
14,001 - 14,499		150,10	**xxxxx**[2)]						
14,500		102,90	**14500**	128,90	**14500**				
14,501 - 14,999		150,10	**xxxxx**[2)]						
15,000		102,90	**15000**	128,90	**15000**	169,00	**15000**	263,60	**15000**
15,001 - 15,499		150,10	**xxxxx**[2)]						
15,500		102,90	**15500**	128,90	**15500**				
15,501 - 15,999		150,10	**xxxxx**[2)]						
16,000		102,90	**16000**	128,90	**16000**	169,00	**16000**	263,60	**16000**
16,001 - 16,499		150,10	**xxxxx**[2)]						
16,500		102,90	**16500**	128,90	**16500**				
16,501 - 16,999		150,10	**xxxxx**[2)]						
17,000		102,90	**17000**	128,90	**17000**	169,00	**17000**	263,60	**17000**
17,001 - 17,499		150,10	**xxxxx**[2)]						
17,500		102,90	**17500**	128,90	**17500**				
17,501 - 17,999		150,10	**xxxxx**[2)]						
18,000		102,90	**18000**	128,90	**18000**	169,00	**18000**	263,60	**18000**
18,001 - 18,499		150,10	**xxxxx**[2)]						
18,500		102,90	**18500**	128,90	**18500**				
18,501 - 18,999		150,10	**xxxxx**[2)]						
19,000		102,90	**19000**	128,90	**19000**	169,00	**19000**	263,60	**19000**
19,001 - 19,049		150,10	**xxxxx**[2)]						
19,050	3/4	150,10	**19050**	176,00	**19050**				
19,051 - 19,499		150,10	**xxxxx**[2)]						
19,500		102,90	**19500**	128,90	**19500**				
19,501 - 19,999		150,10	**xxxxx**[2)]						
20,000		102,90	**20000**	128,90	**20000**	169,00	**20000**	263,60	**20000**
20,001 - 20,499		150,10	**xxxxx**[2)]						
20,500		102,90	**20500**	128,90	**20500**				
20,501 - 20,999		150,10	**xxxxx**[2)]						
21,000		102,90	**21000**	128,90	**21000**	169,00	**21000**	263,60	**21000**
21,001 - 21,499		150,10	**xxxxx**[2)]						
21,500		102,90	**21500**	128,90	**21500**				
21,501 - 21,999		150,10	**xxxxx**[2)]						
22,000		102,90	**22000**	128,90	**22000**	169,00	**22000**	263,60	**22000**
22,001 - 22,224		150,10	**xxxxx**[2)]						
22,225	7/8	150,10	**22225**						
22,226 - 22,499		150,10	**xxxxx**[2)]						
22,500		129,10	**22500**	128,90	**22500**				
22,501 - 22,999		150,10	**xxxxx**[2)]						
23,000		129,10	**23000**	128,90	**23000**	169,00	**23000**	263,60	**23000**

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**).

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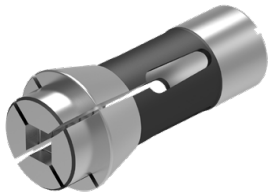
Pressure collet F 37 / 1536 E



		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 ...**	
DCONWS mm	DCONWS inch	**EUR Y8/YS**		**EUR Y8/YS**		**EUR Y8/YS**		**EUR Y8/YS**	
23,001 - 23,499		150,10	**xxxxx**[2]						
23,500		129,10	**23500**	128,90	**23500**				
23,501 - 23,999		150,10	**xxxxx**[2]						
24,000		129,10	**24000**	128,90	**24000**	169,00	**24000**		
24,001 - 24,499		150,10	**xxxxx**[2]						
24,500		129,10	**24500**	128,90	**24500**				
24,501 - 24,999		150,10	**xxxxx**[2]						
25,000		102,90	**25000**	128,90	**25000**	169,00	**25000**		
25,001 - 25,499		150,10	**xxxxx**[2]						
25,400	1/1					223,10	**25400**		
25,500		102,90	**25500**	128,90	**25500**				
25,501 - 25,999		150,10	**xxxxx**[2]						
26,000		102,90	**26000**	128,90	**26000**	169,00	**26000**		
26,001 - 26,499		150,10	**xxxxx**[2]						
26,500		102,90	**26500**	128,90	**26500**				
26,501 - 26,999		150,10	**xxxxx**[2]						
27,000		102,90	**27000**	128,90	**27000**	169,00	**27000**		
27,001 - 27,499		150,10	**xxxxx**[2]						
27,500		102,90	**27500**	128,90	**27500**				
27,501 - 27,999		150,10	**xxxxx**[2]						
28,000		102,90	**28000**	128,90	**28000**				
28,001 - 28,499		150,10	**xxxxx**[2]						
28,500		102,90	**28500**	128,90	**28500**				
28,501 - 28,999		150,10	**xxxxx**[2]						
29,000		102,90	**29000**	128,90	**29000**				
29,001 - 29,499		150,10	**xxxxx**[2]						
29,500		102,90	**29500**	128,90	**29500**				
29,501 - 29,999		150,10	**xxxxx**[2]						
30,000		102,90	**30000**	128,90	**30000**				
30,001 - 30,499		150,10	**xxxxx**[2]						
30,500		102,90	**30500**	128,90	**30500**				
30,501 - 30,999		150,10	**xxxxx**[2]						
31,000		102,90	**31000**	128,90	**31000**				
31,001 - 31,499		150,10	**xxxxx**[2]						
31,500		102,90	**31500**	128,90	**31500**				
31,501 - 31,999		150,10	**xxxxx**[2]						
32,000		102,90	**32000**	128,90	**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

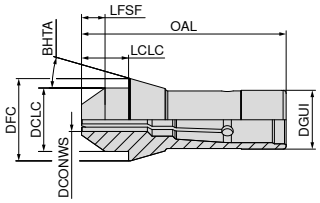
Other profile shapes and sizes and extended options available on request.

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/ie/en/download.html**

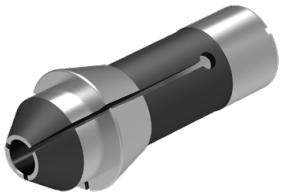
Please email the completed form to tsc@ceratizit.com.

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



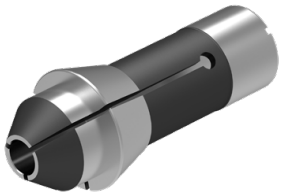
Stem collet 116 E / F 13



Smooth
116 E / F 13

DCONWS mm	81 001 ... EUR Y8/YS	
1	310,90	**01000**
2	310,90	**02000**
3	282,60	**03000**
4	282,60	**04000**
5	282,60	**05000**
6	282,60	**06000**
7	282,60	**07000**

Stem collet 120 E / F 15



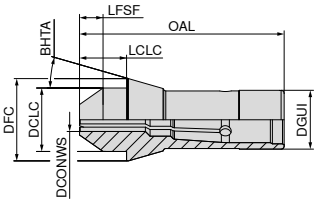
Smooth
120 E / F 15
LFSF = 7 mm

Smooth
120 E / F 15
LFSF = 9 mm

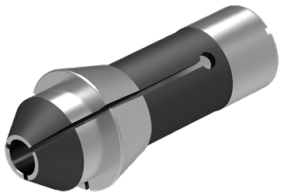
DCONWS mm	81 004 ... EUR Y8/YS		81 006 ... EUR Y8/YS	
1	312,30	**01000**	312,30	**01000**
2	312,30	**02000**	312,30	**02000**
3	286,70	**03000**	286,70	**03000**
4	286,70	**04000**	286,70	**04000**
5	286,70	**05000**	286,70	**05000**
6	286,70	**06000**	286,70	**06000**
7	286,70	**07000**	286,70	**07000**
8	286,70	**08000**	286,70	**08000**

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

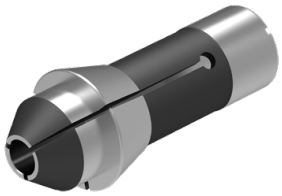


Stem collet F 16 / 1212 E



DCONWS mm	Smooth F 16 / 1212 E LFSF = 7 mm 81 020 ... EUR Y8/YS		Smooth F 16 / 1212 E LFSF = 9 mm 81 022 ... EUR Y8/YS	
1	312,30	01000	312,30	01000
2	312,30	02000	312,30	02000
3	286,70	03000	286,70	03000
4	286,70	04000	286,70	04000
5	286,70	05000	373,10	05000
6	286,70	06000	373,10	06000
7	286,70	07000	373,10	07000
8	286,70	08000	286,70	08000
9	286,70	09000	373,10	09000

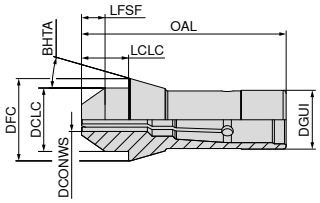
Stem collet 138 E / F 20-87



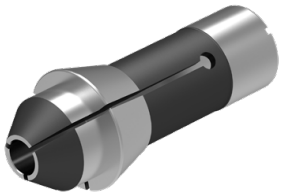
DCONWS mm	Smooth 138 E / F20-87 LFSF = 8 mm 81 012 ... EUR Y8/YS		Smooth 138 E / F20-87 LFSF = 13 mm 81 014 ... EUR Y8/YS	
1	374,50	01000	374,50	01000
2	374,50	02000	374,50	02000
3	348,70	03000	348,70	03000
4	348,70	04000	348,70	04000
5	348,70	05000	348,70	05000
6	348,70	06000	348,70	06000
7	348,70	07000	348,70	07000
8	348,70	08000	348,70	08000
9	348,70	09000	348,70	09000
10	348,70	10000	348,70	10000
11	348,70	11000	348,70	11000
12	348,70	12000	348,70	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



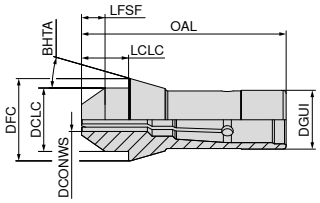
Stem collet 136 E / F 20-201



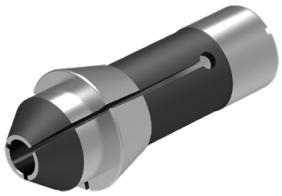
DCONWS mm	Smooth 136 E / F 20-201 LFSF = 8 mm 81 008 ... EUR Y8/YS		Smooth 136 E / F 20-201 LFSF = 10 mm 81 010 ... EUR Y8/YS	
1	374,50	**01000**	374,50	**01000**
2	374,50	**02000**	374,50	**02000**
3	348,70	**03000**	348,70	**03000**
4	348,70	**04000**	348,70	**04000**
5	348,70	**05000**	348,70	**05000**
6	374,50	**06000**	348,70	**06000**
7	374,50	**07000**	348,70	**07000**
8	348,70	**08000**	348,70	**08000**
9	348,70	**09000**	348,70	**09000**
10	348,70	**10000**	348,70	**10000**
11	348,70	**11000**	348,70	**11000**
12	348,70	**12000**	348,70	**12000**
13			348,70	**13000**
14			348,70	**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



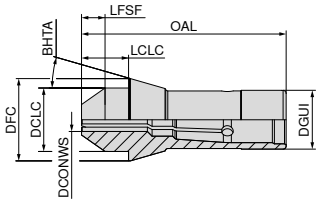
Stem collet 145 E / F 25



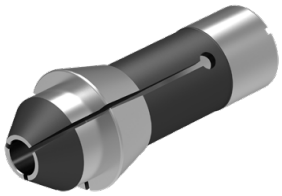
DCONWS mm	Smooth 145 E / F 25 LFSF = 10 mm 81 016 ... EUR Y8/YS		Smooth 145 E / F 25 LFSF = 15 mm 81 018 ... EUR Y8/YS	
1	374,50	**01000**	374,50	**01000**
2	374,50	**02000**	374,50	**02000**
3	348,70	**03000**	348,70	**03000**
4	348,70	**04000**	348,70	**04000**
5	348,70	**05000**	348,70	**05000**
6	348,70	**06000**	348,70	**06000**
7	348,70	**07000**	348,70	**07000**
8	348,70	**08000**	348,70	**08000**
9	348,70	**09000**	348,70	**09000**
10	348,70	**10000**	348,70	**10000**
11	348,70	**11000**	348,70	**11000**
12	348,70	**12000**	348,70	**12000**
13	348,70	**13000**	348,70	**13000**
14	348,70	**14000**	348,70	**14000**
15	348,70	**15000**	348,70	**15000**
16	348,70	**16000**	348,70	**16000**
17	348,70	**17000**	348,70	**17000**
18	348,70	**18000**	348,70	**18000**
19	348,70	**19000**	348,70	**19000**
20	348,70	**20000**	348,70	**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

DCONWS mm	81 024 ... EUR Y8/YS	
1	419,20	01000
2	419,20	02000
3	358,10	03000
4	358,10	04000
5	358,10	05000
6	358,10	06000
7	358,10	07000
8	358,10	08000
9	358,10	09000
10	358,10	10000
11	358,10	11000
12	358,10	12000
13	401,40	13000
14	358,10	14000
15	358,10	15000
16	358,10	16000
17	358,10	17000
18	358,10	18000
19	358,10	19000
20	358,10	20000
21	358,10	21000
22	358,10	22000
23	358,10	23000
24	358,10	24000
25	358,10	25000
26	358,10	26000
27	358,10	27000
28	358,10	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

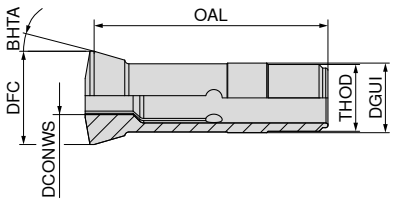
Flexible GBE guide bushes overview

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

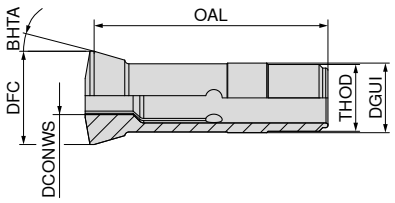
▲ For Star* CNC sliding head lathes
▲ With carbide insert

I 353 SR

DCONWS mm		81 035 ... EUR Y8/YF	
1,0		183,90	**01000**
1,5		169,00	**01500**
2,0		169,00	**02000**
2,5		169,00	**02500**
3,0		169,00	**03000**
3,5		169,00	**03500**
4,0		169,00	**04000**
4,5		135,30	**04500**
5,0		135,30	**05000**
5,5		150,10	**05500**
6,0		150,10	**06000**
6,5		159,50	**06500**
7,0		159,50	**07000**
7,5		169,00	**07500**
8,0		169,00	**08000**
8,5		174,50	**08500**
9,0		174,50	**09000**
9,5		181,30	**09500**
10,0		181,30	**10000**
10,5		187,90	**10500**

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

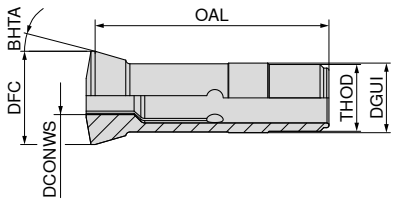
▲ With carbide insert

F 853

DCONWS mm		81 034 ... EUR Y8/YF	
1,0		183,90	01000
1,5		169,00	01500
2,0		169,00	02000
2,5		169,00	02500
3,0		169,00	03000
3,5		169,00	03500
4,0		169,00	04000
4,5		135,30	04500
5,0		135,30	05000
5,5		150,10	05500
6,0		150,10	06000
6,5		159,50	06500
7,0		159,50	07000
7,5		169,00	07500
8,0		169,00	08000
8,5		174,50	08500
9,0		174,50	09000
9,5		181,30	09500
10,0		181,30	10000
10,5		187,90	10500
11,0		187,90	11000
11,5		196,10	11500
12,0		196,10	12000
12,5		205,50	12500
13,0		205,50	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

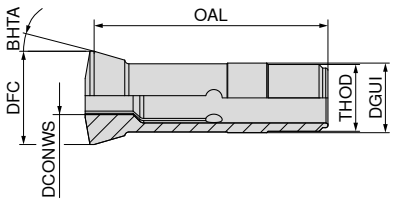
DCONWS mm	DCONWS inch	81 032 ... EUR Y8/YF	
1,000		206,70	01000
1,001 - 1,499		284,90	xxxxx[1]
1,500		174,20	01500
1,501 - 1,999		252,40	xxxxx[1]
2,000		174,20	02000
2,001 - 2,499		252,40	xxxxx[1]
2,500		139,70	02500
2,501 - 2,999		217,90	xxxxx[1]
3,000		139,70	03000
3,001 - 3,499		204,90	xxxxx[1]
3,500		133,20	03500
3,501 - 3,999		198,30	xxxxx[1]
4,000		133,20	04000
4,001 - 4,499		198,30	xxxxx[1]
4,500		141,60	04500
4,501 - 4,999		206,70	xxxxx[1]
5,000		141,60	05000
5,001 - 5,499		206,70	xxxxx[1]
5,500		156,30	05500
5,501 - 5,999		221,70	xxxxx[1]
6,000		156,30	06000
6,001 - 6,349		221,70	xxxxx[1]
6,350	1/4	221,70	06350
6,351 - 6,499		221,70	xxxxx[1]
6,500		162,10	06500
6,501 - 6,999		227,20	xxxxx[1]
7,000		162,10	07000
7,001 - 7,499		227,20	xxxxx[1]
7,500		174,20	07500
7,501 - 7,999		239,30	xxxxx[1]
8,000		174,20	08000
8,001 - 8,499		239,30	xxxxx[1]
8,500		181,50	08500
8,501 - 8,999		246,70	xxxxx[1]
9,000		181,50	09000
9,001 - 9,499		246,70	xxxxx[1]
9,500		189,00	09500
9,501 - 9,999		254,20	xxxxx[1]
10,000		189,00	10000
10,001 - 10,499		254,20	xxxxx[1]
10,500		195,70	10500
10,501 - 10,999		260,70	xxxxx[1]
11,000		195,70	11000
11,001 - 11,499		260,70	xxxxx[1]
11,500		202,90	11500
11,501 - 11,999		268,10	xxxxx[1]
12,000		202,90	12000
12,001 - 12,499		268,10	xxxxx[1]
12,500		219,70	12500
12,501 - 12,699		284,90	xxxxx[1]
12,700	1/2	284,90	12700
12,701 - 12,999		284,90	xxxxx[1]
13,000		219,70	13000
13,001 - 13,499		284,90	xxxxx[1]
13,500		226,30	13500
13,501 - 13,999		291,50	xxxxx[1]
14,000		226,30	14000
14,001 - 14,499		291,50	xxxxx[1]
14,500		238,50	14500
14,501 - 14,999		303,50	xxxxx[1]
15,000		238,50	15000
15,001 - 15,499		303,50	xxxxx[1]
15,500		257,00	15500
15,501 - 15,999		322,20	xxxxx[1]
16,000		257,00	16000
16,001 - 16,499		322,20	xxxxx[1]
16,500		267,30	16500
16,501 - 16,999		332,30	xxxxx[1]
17,000		267,30	17000
17,001 - 17,499		332,30	xxxxx[1]
17,500		282,10	17500
17,501 - 17,999		347,40	xxxxx[1]
18,000		282,10	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

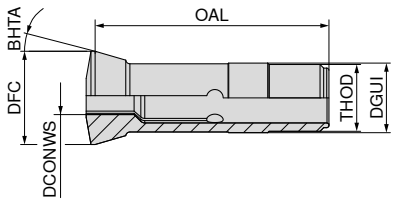
DCONWS mm	DCONWS inch	81 033 ... EUR Y8/YF	
1,000		202,90	01000
1,001 - 1,499		281,10	xxxxx[1]
1,500		174,20	01500
1,501 - 1,999		252,40	xxxxx[1]
2,000		174,20	02000
2,001 - 2,499		252,40	xxxxx[1]
2,500		139,70	02500
2,501 - 2,999		217,90	xxxxx[1]
3,000		139,70	03000
3,001 - 3,174		204,90	xxxxx[1]
3,175	1/8	204,90	03175
3,176 - 3,499		204,90	xxxxx[1]
3,500		133,20	03500
3,501 - 3,999		198,30	xxxxx[1]
4,000		133,20	04000
4,001 - 4,499		198,30	xxxxx[1]
4,500		141,60	04500
4,501 - 4,762		206,70	xxxxx[1]
4,763	3/16	206,70	04763
4,764 - 4,999		206,70	xxxxx[1]
5,000		141,60	05000
5,001 - 5,499		206,70	xxxxx[1]
5,500		156,30	05500
5,501 - 5,999		221,70	xxxxx[1]
6,000		156,30	06000
6,001 - 6,349		221,70	xxxxx[1]
6,350	1/4	221,70	06350
6,351 - 6,499		221,70	xxxxx[1]
6,500		162,10	06500
6,501 - 6,999		227,20	xxxxx[1]
7,000		162,10	07000
7,001 - 7,499		227,20	xxxxx[1]
7,500		174,20	07500
7,501 - 7,999		239,30	xxxxx[1]
8,000		174,20	08000
8,001 - 8,499		239,30	xxxxx[1]
8,500		181,50	08500
8,501 - 8,999		246,70	xxxxx[1]
9,000		181,50	09000
9,001 - 9,499		246,70	xxxxx[1]
9,500		189,00	09500
9,501 - 9,999		254,20	xxxxx[1]
10,000		189,00	10000
10,001 - 10,499		254,20	xxxxx[1]
10,500		195,70	10500
10,501 - 10,999		260,70	xxxxx[1]
11,000		195,70	11000
11,001 - 11,499		260,70	xxxxx[1]
11,500		202,90	11500
11,501 - 11,999		268,10	xxxxx[1]
12,000		202,90	12000
12,001 - 12,499		268,10	xxxxx[1]
12,500		219,70	12500
12,501 - 12,699		284,90	xxxxx[1]
12,700	1/2	284,90	12700
12,701 - 12,999		284,90	xxxxx[1]
13,000		219,70	13000
13,001 - 13,499		284,90	xxxxx[1]
13,500		226,30	13500
13,501 - 13,999		291,50	xxxxx[1]
14,000		226,30	14000
14,001 - 14,499		291,50	xxxxx[1]
14,500		238,50	14500
14,501 - 14,999		303,50	xxxxx[1]
15,000		238,50	15000
15,001 - 15,499		303,50	xxxxx[1]
15,500		257,00	15500
15,501 - 15,999		322,20	xxxxx[1]
16,000		257,00	16000
16,001 - 16,499		322,20	xxxxx[1]
16,500		267,30	16500
16,501 - 16,999		332,30	xxxxx[1]
17,000		267,30	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

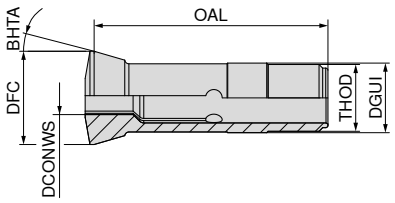
DCONWS mm	DCONWS inch	81 037 ... EUR Y8/YF		81 038 ... EUR Y8/YF		81 039 ... EUR Y8/YF	
1,000		202,90	**01000**				
1,001 - 1,499		281,10	**xxxxx**[1]				
1,500		235,60	**01500**				
1,501 - 1,999		313,80	**xxxxx**[1]				
2,000		174,20	**02000**				
2,001 - 2,499		252,40	**xxxxx**[1]				
2,500		139,70	**02500**				
2,501 - 2,999		217,90	**xxxxx**[1]				
3,000		139,70	**03000**	301,30	**03000**	450,10	**03000**
3,001 - 3,499		204,90	**xxxxx**[1]				
3,500		133,20	**03500**				
3,501 - 3,999		198,30	**xxxxx**[1]				
4,000		133,20	**04000**	294,90	**04000**	443,40	**04000**
4,001 - 4,499		198,30	**xxxxx**[1]				
4,500		141,60	**04500**				
4,501 - 4,999		206,70	**xxxxx**[1]				
5,000		141,60	**05000**	269,90	**05000**	417,70	**05000**
5,001 - 5,499		206,70	**xxxxx**[1]				
5,500		156,30	**05500**				
5,501 - 5,999		221,70	**xxxxx**[1]				
6,000		156,30	**06000**	298,70	**06000**	447,50	**06000**
6,001 - 6,349		221,70	**xxxxx**[1]				
6,350	1/4	221,70	**06350**	354,00	**06350**	505,70	**06350**
6,351 - 6,499		221,70	**xxxxx**[1]				
6,500		162,10	**06500**				
6,501 - 6,999		227,20	**xxxxx**[1]				
7,000		162,10	**07000**	313,30	**07000**	462,40	**07000**
7,001 - 7,499		227,20	**xxxxx**[1]				
7,500		174,20	**07500**				
7,501 - 7,999		239,30	**xxxxx**[1]				
7,938	5/16			381,80	**07938**		
8,000		174,20	**08000**	335,60	**08000**	484,00	**08000**
8,001 - 8,499		239,30	**xxxxx**[1]				
8,500		181,50	**08500**				
8,501 - 8,999		246,70	**xxxxx**[1]				
9,000		181,50	**09000**	348,50	**09000**	497,60	**09000**
9,001 - 9,499		246,70	**xxxxx**[1]				
9,500		189,00	**09500**				
9,501 - 9,999		254,20	**xxxxx**[1]				
9,525	3/8			406,80	**09525**		
10,000		189,00	**10000**	360,50	**10000**	509,70	**10000**
10,001 - 10,499		254,20	**xxxxx**[1]				
10,500		195,70	**10500**				
10,501 - 10,999		260,70	**xxxxx**[1]				
11,000		195,70	**11000**	374,40	**11000**	523,20	**11000**
11,001 - 11,499		260,70	**xxxxx**[1]				
11,500		202,90	**11500**				
11,501 - 11,999		268,10	**xxxxx**[1]				
12,000		202,90	**12000**	390,20	**12000**	538,10	**12000**
12,001 - 12,499		268,10	**xxxxx**[1]				
12,500		219,70	**12500**				
12,501 - 12,699		284,90	**xxxxx**[1]				
12,700	1/2	284,90	**12700**	462,30	**12700**		
12,701 - 12,999		284,90	**xxxxx**[1]				
13,000		219,70	**13000**	416,00	**13000**	565,20	**13000**
13,001 - 13,499		284,90	**xxxxx**[1]				
13,500		226,30	**13500**				
13,501 - 13,999		291,50	**xxxxx**[1]				
14,000		226,30	**14000**	426,10	**14000**	574,70	**14000**
14,001 - 14,499		291,50	**xxxxx**[1]				
14,500		238,50	**14500**				
14,501 - 14,999		303,50	**xxxxx**[1]				
15,000		238,50	**15000**	443,60	**15000**		
15,001 - 15,499		303,50	**xxxxx**[1]				
15,500		257,00	**15500**				
15,501 - 15,999		322,20	**xxxxx**[1]				
16,000		257,00	**16000**	467,80	**16000**		
16,001 - 16,499		322,20	**xxxxx**[1]				
16,500		267,30	**16500**				
16,501 - 16,999		332,30	**xxxxx**[1]				
17,000		267,30	**17000**	485,30	**17000**		
17,001 - 17,499		332,30	**xxxxx**[1]				
17,500		282,10	**17500**				
17,501 - 17,999		347,40	**xxxxx**[1]				
18,000		282,10	**18000**				
18,001 - 18,499		347,40	**xxxxx**[1]				
18,500		293,30	**18500**				
18,501 - 18,999		358,40	**xxxxx**[1]				
19,000		293,30	**19000**				
19,001 - 19,499		358,40	**xxxxx**[1]				
19,500		299,80	**19500**				
19,501 - 19,999		365,00	**xxxxx**[1]				
20,000		299,80	**20000**				
20,001 - 20,499		365,00	**xxxxx**[1]				
20,500		316,60	**20500**				
20,501 - 20,999		381,80	**xxxxx**[1]				
21,000		316,60	**21000**				
21,001 - 21,499		381,80	**xxxxx**[1]				
21,500		328,70	**21500**				
21,501 - 21,999		393,90	**xxxxx**[1]				
22,000		452,50	**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

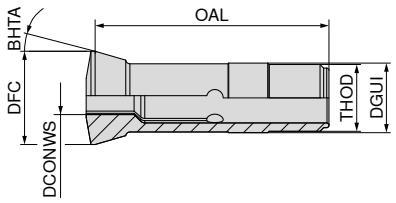
DCONWS mm	DCONWS inch	81 036 ... EUR Y8/YF	
2,000		174,20	02000
2,001 - 2,499		252,40	xxxxx[1]
2,500		174,20	02500
2,501 - 2,999		252,40	xxxxx[1]
3,000		139,70	03000
3,001 - 3,174		204,90	xxxxx[1]
3,175	1/8	204,90	03175
3,176 - 3,499		204,90	xxxxx[1]
3,500		133,20	03500
3,501 - 3,999		198,30	xxxxx[1]
4,000		133,20	04000
4,001 - 4,499		198,30	xxxxx[1]
4,500		141,60	04500
4,501 - 4,999		206,70	xxxxx[1]
5,000		141,60	05000
5,001 - 5,499		206,70	xxxxx[1]
5,500		156,30	05500
5,501 - 5,999		221,70	xxxxx[1]
6,000		156,30	06000
6,001 - 6,499		221,70	xxxxx[1]
6,500		162,10	06500
6,501 - 6,999		227,20	xxxxx[1]
7,000		162,10	07000
7,001 - 7,143		227,20	xxxxx[1]
7,144	9/32	227,20	07144
7,145 - 7,499		227,20	xxxxx[1]
7,500		174,20	07500
7,501 - 7,999		239,30	xxxxx[1]
8,000		174,20	08000
8,001 - 8,499		239,30	xxxxx[1]
8,500		181,50	08500
8,501 - 8,999		246,70	xxxxx[1]
9,000		181,50	09000
9,001 - 9,499		246,70	xxxxx[1]
9,500		189,00	09500
9,501 - 9,999		254,20	xxxxx[1]
10,000		189,00	10000
10,001 - 10,499		254,20	xxxxx[1]
10,500		195,70	10500
10,501 - 10,999		260,70	xxxxx[1]
11,000		195,70	11000
11,001 - 11,499		260,70	xxxxx[1]
11,500		202,90	11500
11,501 - 11,999		268,10	xxxxx[1]
12,000		202,90	12000
12,001 - 12,499		268,10	xxxxx[1]
12,500		219,70	12500
12,501 - 12,699		284,90	xxxxx[1]
12,700	1/2	284,90	12700
12,701 - 12,999		284,90	xxxxx[1]
13,000		219,70	13000
13,001 - 13,499		284,90	xxxxx[1]
13,500		226,30	13500
13,501 - 13,999		291,50	xxxxx[1]
14,000		226,30	14000
14,001 - 14,499		291,50	xxxxx[1]
14,500		238,50	14500
14,501 - 14,999		303,50	xxxxx[1]
15,000		238,50	15000
15,001 - 15,499		303,50	xxxxx[1]
15,500		257,00	15500
15,501 - 15,999		322,20	xxxxx[1]
16,000		257,00	16000
16,001 - 16,499		322,20	xxxxx[1]
16,500		267,30	16500
16,501 - 16,999		332,30	xxxxx[1]
17,000		267,30	17000
17,001 - 17,499		332,30	xxxxx[1]
17,500		282,10	17500
17,501 - 17,999		347,40	xxxxx[1]
18,000		282,10	18000
18,001 - 18,499		347,40	xxxxx[1]
18,500		293,30	18500
18,501 - 18,999		358,40	xxxxx[1]
19,000		293,30	19000
19,001 - 19,499		358,40	xxxxx[1]
19,500		299,80	19500
19,501 - 19,999		365,00	xxxxx[1]
20,000		299,80	20000
20,001 - 20,499		365,00	xxxxx[1]
20,500		316,60	20500
20,501 - 20,999		381,80	xxxxx[1]
21,000		316,60	21000
21,001 - 21,499		381,80	xxxxx[1]
21,500		328,70	21500
21,501 - 21,999		393,90	xxxxx[1]
22,000		329,60	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

DCONWS mm	DCONWS inch	81 040 ... EUR Y8/YF	
1,000		202,90	01000
1,001 - 1,499		281,10	xxxxx[1]
1,500		202,90	01500
1,501 - 1,999		281,10	xxxxx[1]
2,000		174,20	02000
2,001 - 2,499		252,40	xxxxx[1]
2,500		139,70	02500
2,501 - 2,999		217,90	xxxxx[1]
3,000		139,70	03000
3,001 - 3,499		204,90	xxxxx[1]
3,500		133,20	03500
3,501 - 3,999		198,30	xxxxx[1]
4,000		133,20	04000
4,001 - 4,499		198,30	xxxxx[1]
4,500		141,60	04500
4,501 - 4,999		206,70	xxxxx[1]
5,000		141,60	05000
5,001 - 5,499		206,70	xxxxx[1]
5,500		156,30	05500
5,501 - 5,999		221,70	xxxxx[1]
6,000		156,30	06000
6,001 - 6,349		221,70	xxxxx[1]
6,350	1/4	221,70	06350
6,351 - 6,499		221,70	xxxxx[1]
6,500		162,10	06500
6,501 - 6,999		227,20	xxxxx[1]
7,000		162,10	07000
7,001 - 7,499		227,20	xxxxx[1]
7,500		174,20	07500
7,501 - 7,999		239,30	xxxxx[1]
8,000		174,20	08000
8,001 - 8,499		239,30	xxxxx[1]
8,500		181,50	08500
8,501 - 8,999		246,70	xxxxx[1]
9,000		181,50	09000
9,001 - 9,499		246,70	xxxxx[1]
9,500		189,00	09500
9,501 - 9,999		254,20	xxxxx[1]
10,000		189,00	10000
10,001 - 10,499		254,20	xxxxx[1]
10,500		195,70	10500
10,501 - 10,999		260,70	xxxxx[1]
11,000		195,70	11000
11,001 - 11,499		260,70	xxxxx[1]
11,500		202,90	11500
11,501 - 11,999		268,10	xxxxx[1]
12,000		202,90	12000
12,001 - 12,499		268,10	xxxxx[1]
12,500		219,70	12500
12,501 - 12,699		284,90	xxxxx[1]
12,700	1/2	284,90	12700
12,701 - 12,999		284,90	xxxxx[1]

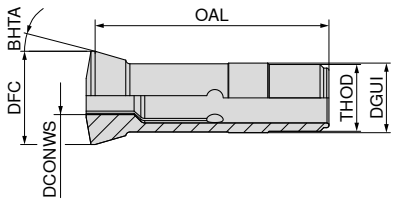
DCONWS mm	DCONWS inch	81 040 ... EUR Y8/YF	
13,000		219,70	13000
13,001 - 13,499		284,90	xxxxx[1]
13,500		226,30	13500
13,501 - 13,999		291,50	xxxxx[1]
14,000		226,30	14000
14,001 - 14,499		291,50	xxxxx[1]
14,500		238,50	14500
14,501 - 14,999		303,50	xxxxx[1]
15,000		238,50	15000
15,001 - 15,499		303,50	xxxxx[1]
15,500		257,00	15500
15,501 - 15,999		322,20	xxxxx[1]
16,000		257,00	16000
16,001 - 16,499		322,20	xxxxx[1]
16,500		267,30	16500
16,501 - 16,999		332,30	xxxxx[1]
17,000		267,30	17000
17,001 - 17,499		332,30	xxxxx[1]
17,500		282,10	17500
17,501 - 17,999		347,40	xxxxx[1]
18,000		282,10	18000
18,001 - 18,499		347,40	xxxxx[1]
18,500		293,30	18500
18,501 - 18,999		358,40	xxxxx[1]
19,000		293,30	19000
19,001 - 19,499		358,40	xxxxx[1]
19,500		299,80	19500
19,501 - 19,999		365,00	xxxxx[1]
20,000		299,80	20000
20,001 - 20,499		365,00	xxxxx[1]
20,500		316,60	20500
20,501 - 20,999		381,80	xxxxx[1]
21,000		316,60	21000
21,001 - 21,499		381,80	xxxxx[1]
21,500		328,70	21500
21,501 - 21,999		393,90	xxxxx[1]
22,000		328,70	22000
22,001 - 22,499		393,90	xxxxx[1]
22,500		338,10	22500
22,501 - 22,999		403,20	xxxxx[1]
23,000		338,10	23000
23,001 - 23,499		403,20	xxxxx[1]
23,500		349,10	23500
23,501 - 23,999		414,30	xxxxx[1]
24,000		349,10	24000
24,001 - 24,499		414,30	xxxxx[1]
24,500		352,90	24500
24,501 - 24,999		418,10	xxxxx[1]
25,000		352,90	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

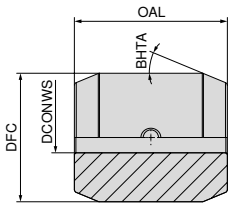
DCONWS mm	DCONWS inch	81 041 ... EUR Y8/YF		81 042 ... EUR Y8/YF	
2,000		260,70	02000		
2,001 - 2,499		339,00	xxxxx[1]		
2,500		260,70	02500		
2,501 - 2,999		339,00	xxxxx[1]		
3,000		257,00	03000		
3,001 - 3,499		322,20	xxxxx[1]		
3,500		257,00	03500		
3,501 - 3,999		322,20	xxxxx[1]		
4,000		226,30	04000	388,00	04000
4,001 - 4,499		291,50	xxxxx[1]		
4,500		226,30	04500		
4,501 - 4,999		291,50	xxxxx[1]		
5,000		206,70	05000	335,20	05000
5,001 - 5,499		271,90	xxxxx[1]		
5,500		206,70	05500		
5,501 - 5,999		271,90	xxxxx[1]		
6,000		211,30	06000	354,10	06000
6,001 - 6,349		276,50	xxxxx[1]		
6,350	1/4	276,50	06350	411,60	06350
6,351 - 6,499		276,50	xxxxx[1]		
6,500		211,30	06500		
6,501 - 6,999		276,50	xxxxx[1]		
7,000		211,30	07000	362,30	07000
7,001 - 7,499		276,50	xxxxx[1]		
7,500		211,30	07500		
7,501 - 7,999		276,50	xxxxx[1]		
8,000		211,30	08000	373,10	08000
8,001 - 8,499		276,50	xxxxx[1]		
8,500		211,30	08500		
8,501 - 8,999		276,50	xxxxx[1]		
9,000		211,30	09000	378,50	09000
9,001 - 9,499		276,50	xxxxx[1]		
9,500		211,30	09500		
9,501 - 9,524		276,50	xxxxx[1]		
9,525	3/8	276,50	09525		
9,526 - 9,999		276,50	xxxxx[1]		
10,000		211,30	10000	382,70	10000
10,001 - 10,499		276,50	xxxxx[1]		
10,500		211,30	10500		
10,501 - 10,999		276,50	xxxxx[1]		
11,000		217,10	11000	396,20	11000
11,001 - 11,499		282,10	xxxxx[1]		
11,500		217,10	11500		
11,501 - 11,999		282,10	xxxxx[1]		
12,000		217,10	12000	404,20	12000
12,001 - 12,499		282,10	xxxxx[1]		
12,500		217,10	12500		
12,501 - 12,699		282,10	xxxxx[1]		
12,700	1/2	282,10	12700		
12,701 - 12,999		282,10	xxxxx[1]		
13,000		222,60	13000	419,20	13000
13,001 - 13,499		287,80	xxxxx[1]		
13,500		222,60	13500		
13,501 - 13,999		287,80	xxxxx[1]		
14,000		230,10	14000	429,90	14000
14,001 - 14,499		295,20	xxxxx[1]		
14,500		230,10	14500		
14,501 - 14,999		295,20	xxxxx[1]		
15,000		240,20	15000	446,20	15000
15,001 - 15,499		305,40	xxxxx[1]		
15,500		240,20	15500		
15,501 - 15,999		305,40	xxxxx[1]		
16,000		258,90	16000	470,50	16000
16,001 - 16,499		324,00	xxxxx[1]		
16,500		258,90	16500		
16,501 - 16,999		324,00	xxxxx[1]		
17,000		269,10	17000	488,20	17000
17,001 - 17,499		334,30	xxxxx[1]		
17,500		269,10	17500		
17,501 - 17,999		334,30	xxxxx[1]		
18,000		284,00	18000	512,30	18000
18,001 - 18,499		349,10	xxxxx[1]		
18,500		284,00	18500		
18,501 - 18,999		349,10	xxxxx[1]		
19,000		291,50	19000	538,10	19000
19,001 - 19,049		356,60	xxxxx[1]		
19,050	3/4	356,60	19050		
19,051 - 19,499		356,60	xxxxx[1]		
19,500		291,50	19500		
19,501 - 19,999		356,60	xxxxx[1]		
20,000		297,90	20000	554,30	20000
20,001 - 20,499		363,10	xxxxx[1]		
20,500		297,90	20500		
20,501 - 20,999		363,10	xxxxx[1]		
21,000		310,10	21000	580,10	21000
21,001 - 21,499		375,10	xxxxx[1]		
21,500		310,10	21500		
21,501 - 21,999		375,10	xxxxx[1]		
22,000		324,00	22000	601,70	22000
22,001 - 22,224		389,30	xxxxx[1]		
22,225	7/8	389,30	22225		
22,226 - 22,499		389,30	xxxxx[1]		
22,500		324,00	22500		
22,501 - 22,999		389,30	xxxxx[1]		
23,000		339,00	23000	623,20	23000
23,001 - 23,499		404,10	xxxxx[1]		
23,500		339,00	23500		
23,501 - 23,999		404,10	xxxxx[1]		
24,000		345,40	24000	640,80	24000
24,001 - 24,499		410,70	xxxxx[1]		
24,500		345,40	24500		
24,501 - 24,999		410,70	xxxxx[1]		
25,000		351,00	25000	659,80	25000
25,001 - 25,499		416,20	xxxxx[1]		
25,500		351,00	25500		
25,501 - 25,999		416,20	xxxxx[1]		
26,000		359,50	26000	682,70	26000
26,001 - 26,499		424,60	xxxxx[1]		
26,500		359,50	26500		
26,501 - 26,999		424,60	xxxxx[1]		
27,000		378,00	27000	707,10	27000
27,001 - 27,499		443,10	xxxxx[1]		
27,500		378,00	27500		
27,501 - 27,999		443,10	xxxxx[1]		
28,000		400,30	28000		
28,001 - 28,499		465,50	xxxxx[1]		
28,500		400,30	28500		
28,501 - 28,999		465,50	xxxxx[1]		
29,000		419,10	29000		
29,001 - 29,499		484,20	xxxxx[1]		
29,500		419,10	29500		
29,501 - 29,999		484,20	xxxxx[1]		
30,000		429,20	30000		
30,001 - 30,499		494,40	xxxxx[1]		
30,500		429,20	30500		
30,501 - 30,999		494,40	xxxxx[1]		
31,000		444,10	31000		
31,001 - 31,499		509,30	xxxxx[1]		
31,500		444,10	31500		
31,501 - 31,999		509,30	xxxxx[1]		
32,000		458,10	32000		

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

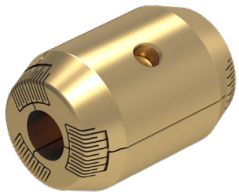
For xxxxx please specify the required diameter when ordering (e.g. **Ø 6.789** – article number 81 041 **06789**).

Flexible guide bushes

Designation	DFC mm	OAL mm	BHTA °
GBE 28	28	40	22,5



Guide bush GBE 28

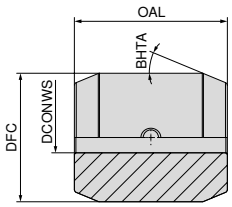


GBE 28

DCONWS mm	DCONWS inch	81 059 ... EUR Y8/YF	
3,000		536,60	03000
4,000		536,60	04000
5,000		536,60	05000
6,000		536,60	06000
6,350	1/4	536,60	06350
7,000		536,60	07000
8,000		536,60	08000
9,000		536,60	09000
9,525	3/8	536,60	09525
10,000		451,60	10000
11,000		451,60	11000
12,000		451,60	12000
12,700	1/2	451,60	12700
13,000		451,60	13000
14,000		451,60	14000
15,000		451,60	15000
16,000		451,60	16000
17,000		451,60	17000
18,000		451,60	18000
19,000		451,60	19000
19,050	3/4	451,60	19050
20,000		451,60	20000

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	81 060 ... EUR Y8/YF	
3,000		750,40	03000
4,000		750,40	04000
5,000		750,40	05000
6,000		750,40	06000
6,350	1/4	750,40	06350
7,000		750,40	07000
8,000		750,40	08000
9,000		750,40	09000
10,000		750,40	10000
11,000		665,20	11000
12,000		665,20	12000
12,700	1/2	665,20	12700
13,000		665,20	13000
14,000		665,20	14000
15,000		665,20	15000
15,875	5/8	665,20	15880
16,000		665,20	16000
17,000		665,20	17000
18,000		665,20	18000
19,000		665,20	19000
19,050	3/4	665,20	19050
20,000		665,20	20000
21,000		665,20	21000
22,000		665,20	22000
22,225	7/8	665,20	22225
23,000		665,20	23000
24,000		665,20	24000
25,000		665,20	25000
25,400	1/1	665,20	25400
26,000		665,20	26000
27,000		665,20	27000
28,000		665,20	28000
29,000		665,20	29000
30,000		665,20	30000
31,000		665,20	31000
32,000		665,20	32000

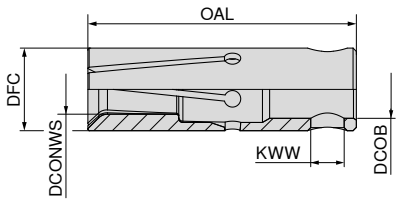
Clamping sleeves overview

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

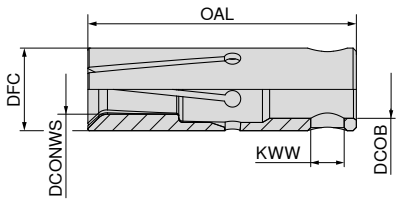
DCONWS mm	DCONWS inch	S 10 / 210 E 81 043 ... EUR Y8/YS		S 10 / 210 E 81 044 ... EUR Y8/YS	
3,000		57,56	**03000**	122,90	**03000**
3,001 - 3,499		81,97	**xxxxx**[1)]		
3,500		57,56	**03500**		
3,501 - 3,999		81,97	**xxxxx**[1)]		
4,000		39,26	**04000**	100,60	**04000**
4,001 - 4,499		63,66	**xxxxx**[1)]		
4,500		39,26	**04500**		
4,501 - 4,999		63,66	**xxxxx**[1)]		
5,000		39,26	**05000**	100,60	**05000**
5,001 - 5,499		63,66	**xxxxx**[1)]		
5,500		39,26	**05500**		
5,501 - 5,999		63,66	**xxxxx**[1)]		
6,000		39,26	**06000**	100,60	**06000**
6,001 - 6,349		63,66	**xxxxx**[1)]		
6,350	1/4	63,66	**06350**		
6,351 - 6,499		63,66	**xxxxx**[1)]		
6,500		39,26	**06500**		
6,501 - 6,999		63,66	**xxxxx**[1)]		
7,000		39,26	**07000**	100,60	**07000**
7,001 - 7,143		63,66	**xxxxx**[1)]		
7,144	9/32	63,66	**07144**		
7,145 - 7,499		63,66	**xxxxx**[1)]		
7,500		39,26	**07500**		
7,501 - 7,937		63,66	**xxxxx**[1)]		
7,938	5/16	63,66	**07938**		
7,939 - 7,999		63,66	**xxxxx**[1)]		
8,000		39,26	**08000**	100,60	**08000**
8,001 - 8,499		63,66	**xxxxx**[1)]		
8,500		39,26	**08500**		
8,501 - 8,999		63,66	**xxxxx**[1)]		
9,000		57,56	**09000**		
9,001 - 9,499		81,97	**xxxxx**[1)]		
9,500		57,56	**09500**		
9,501 - 9,999		81,97	**xxxxx**[1)]		
10,000		57,56	**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

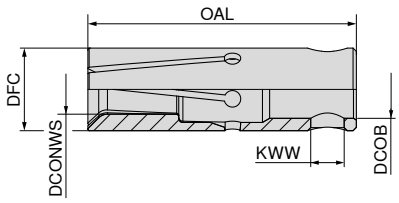
		S 12 / 212 E		S 12 / 212 E	
		81 045 ...		**81 046 ...**	
DCONWS mm	DCONWS inch	**EUR Y8/YS**		**EUR Y8/YS**	
3,000		59,30	**03000**	128,20	**03000**
3,001 - 3,499		83,74	**xxxxx**[1)]		
3,500		59,30	**03500**		
3,501 - 3,999		83,74	**xxxxx**[1)]		
4,000		40,99	**04000**	102,70	**04000**
4,001 - 4,499		65,43	**xxxxx**[1)]		
4,500		40,99	**04500**		
4,501 - 4,762		65,43	**xxxxx**[1)]		
4,763	3/16	65,43	**04763**		
4,764 - 4,999		65,43	**xxxxx**[1)]		
5,000		40,99	**05000**	102,70	**05000**
5,001 - 5,499		65,43	**xxxxx**[1)]		
5,500		40,99	**05500**		
5,501 - 5,999		65,43	**xxxxx**[1)]		
6,000		40,99	**06000**	102,70	**06000**
6,001 - 6,349		65,43	**xxxxx**[1)]		
6,350	1/4	65,43	**06350**	135,60	**06350**
6,351 - 6,499		65,43	**xxxxx**[1)]		
6,500		40,99	**06500**		
6,501 - 6,999		65,43	**xxxxx**[1)]		
7,000		40,99	**07000**	102,70	**07000**
7,001 - 7,499		65,43	**xxxxx**[1)]		
7,500		40,99	**07500**		
7,501 - 7,937		65,43	**xxxxx**[1)]		
7,938	5/16	65,43	**07938**		
7,939 - 7,999		65,43	**xxxxx**[1)]		
8,000		40,99	**08000**	102,70	**08000**
8,001 - 8,499		65,43	**xxxxx**[1)]		
8,500		40,99	**08500**		
8,501 - 8,999		65,43	**xxxxx**[1)]		
9,000		40,99	**09000**	102,70	**09000**
9,001 - 9,499		65,43	**xxxxx**[1)]		
9,500		40,99	**09500**		
9,501 - 9,524		65,43	**xxxxx**[1)]		
9,525	3/8	65,43	**09525**		
9,526 - 9,999		65,43	**xxxxx**[1)]		
10,000		59,30	**10000**		
10,001 - 10,499		83,74	**xxxxx**[1)]		
10,500		59,30	**10500**		
10,501 - 10,999		83,74	**xxxxx**[1)]		
11,000		59,30	**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

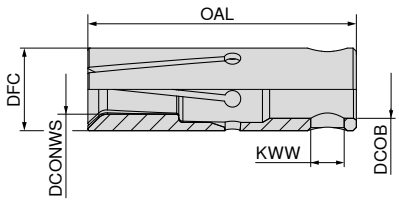
DCONWS mm	DCONWS inch	81 047 ... EUR Y8/YS		81 048 ... EUR Y8/YS	
3,000		63,62	03000	187,90	03000
3,001 - 3,174		88,01	xxxxx[1]		
3,175	1/8	88,01	03175		
3,176 - 3,499		88,01	xxxxx[1]		
3,500		63,62	03500		
3,501 - 3,999		88,01	xxxxx[1]		
4,000		44,43	04000	106,90	04000
4,001 - 4,499		68,87	xxxxx[1]		
4,500		44,43	04500		
4,501 - 4,999		68,87	xxxxx[1]		
5,000		44,43	05000	106,90	05000
5,001 - 5,499		68,87	xxxxx[1]		
5,500		44,43	05500		
5,501 - 5,999		68,87	xxxxx[1]		
6,000		44,43	06000	106,90	06000
6,001 - 6,349		68,87	xxxxx[1]		
6,350	1/4	68,87	06350	139,80	06350
6,351 - 6,499		68,87	xxxxx[1]		
6,500		44,43	06500		
6,501 - 6,999		68,87	xxxxx[1]		
7,000		44,43	07000	106,90	07000
7,001 - 7,499		68,87	xxxxx[1]		
7,500		44,43	07500		
7,501 - 7,937		68,87	xxxxx[1]		
7,938	5/16	68,87	07938	139,80	07938
7,939 - 7,999		68,87	xxxxx[1]		
8,000		44,43	08000	106,90	08000
8,001 - 8,499		68,87	xxxxx[1]		
8,500		44,43	08500		
8,501 - 8,999		68,87	xxxxx[1]		
9,000		44,43	09000	106,90	09000
9,001 - 9,499		68,87	xxxxx[1]		
9,500		44,43	09500		
9,501 - 9,524		68,87	xxxxx[1]		
9,525	3/8	68,87	09525		
9,526 - 9,999		68,87	xxxxx[1]		
10,000		44,43	10000	106,90	10000
10,001 - 10,499		68,87	xxxxx[1]		
10,500		44,43	10500		
10,501 - 10,999		68,87	xxxxx[1]		
11,000		44,43	11000	154,20	11000
11,001 - 11,112		68,87	xxxxx[1]		
11,113	7/16	68,87	11113		
11,114 - 11,499		68,87	xxxxx[1]		
11,500		44,43	11500		
11,501 - 11,999		68,87	xxxxx[1]		
12,000		44,43	12000	154,20	12000
12,001 - 12,499		68,87	xxxxx[1]		
12,500		44,43	12500		
12,501 - 12,699		68,87	xxxxx[1]		
12,700	1/2	68,87	12700		
12,701 - 12,999		68,87	xxxxx[1]		
13,000		44,43	13000		
13,001 - 13,499		68,87	xxxxx[1]		
13,500		64,48	13500		
13,501 - 13,999		88,90	xxxxx[1]		
14,000		64,48	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

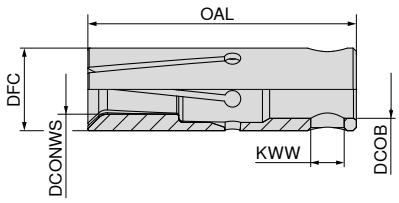
DCONWS mm	DCONWS inch	81 049 ... EUR Y8/YS		81 050 ... EUR Y8/YS	
3,000		63,71	03000	187,90	03000
3,001 - 3,499		88,14	xxxxx[1)]		
3,500		63,71	03500		
3,501 - 3,999		88,14	xxxxx[1)]		
4,000		44,49	04000	106,90	04000
4,001 - 4,499		68,97	xxxxx[1)]		
4,500		44,49	04500		
4,501 - 4,999		68,97	xxxxx[1)]		
5,000		44,49	05000	106,90	05000
5,001 - 5,499		68,97	xxxxx[1)]		
5,500		44,49	05500		
5,501 - 5,999		68,97	xxxxx[1)]		
6,000		44,49	06000	106,90	06000
6,001 - 6,349		68,97	xxxxx[1)]		
6,350	1/4	68,97	06350		
6,351 - 6,499		68,97	xxxxx[1)]		
6,500		44,49	06500		
6,501 - 6,999		68,97	xxxxx[1)]		
7,000		44,49	07000	106,90	07000
7,001 - 7,499		68,97	xxxxx[1)]		
7,500		44,49	07500		
7,501 - 7,999		68,97	xxxxx[1)]		
8,000		44,49	08000	106,90	08000
8,001 - 8,499		68,97	xxxxx[1)]		
8,500		44,49	08500		
8,501 - 8,999		68,97	xxxxx[1)]		
9,000		44,49	09000	106,90	09000
9,001 - 9,499		68,97	xxxxx[1)]		
9,500		44,49	09500		
9,501 - 9,524		68,97	xxxxx[1)]		
9,525	3/8	68,97	09525		
9,526 - 9,999		68,97	xxxxx[1)]		
10,000		44,49	10000	106,90	10000
10,001 - 10,499		68,97	xxxxx[1)]		
10,500		44,49	10500		
10,501 - 10,999		68,97	xxxxx[1)]		
11,000		44,49	11000	106,90	11000
11,001 - 11,112		68,97	xxxxx[1)]		
11,113	7/16	68,97	11113		
11,114 - 11,499		68,97	xxxxx[1)]		
11,500		44,49	11500		
11,501 - 11,999		68,97	xxxxx[1)]		
12,000		44,49	12000	154,20	12000
12,001 - 12,499		68,97	xxxxx[1)]		
12,500		44,49	12500		
12,501 - 12,699		68,97	xxxxx[1)]		
12,700	1/2	68,97	12700		
12,701 - 12,999		68,97	xxxxx[1)]		
13,000		44,49	13000	154,20	13000
13,001 - 13,499		68,97	xxxxx[1)]		
13,500		64,59	13500		
13,501 - 13,999		89,05	xxxxx[1)]		
14,000		64,59	14000		
14,001 - 14,287		89,05	xxxxx[1)]		
14,288	9/16	89,05	14288		
14,289 - 14,499		89,05	xxxxx[1)]		
14,500		64,59	14500		
14,501 - 14,999		89,05	xxxxx[1)]		
15,000		64,59	15000		

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 81 049 **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

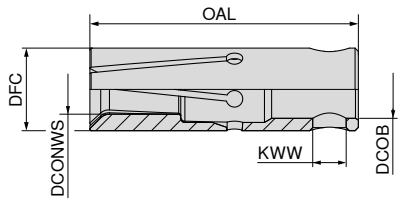
DCONWS mm	DCONWS inch	81 051 ... EUR Y8/YS		81 052 ... EUR Y8/YS	
3,000		68,94	03000		
3,001 - 3,174		93,28	xxxxx[1]		
3,175	1/8	93,28	03175		
3,176 - 3,499		93,28	xxxxx[1]		
3,500		68,94	03500		
3,501 - 3,999		93,28	xxxxx[1]		
4,000		68,94	04000		
4,001 - 4,499		93,28	xxxxx[1]		
4,500		68,94	04500		
4,501 - 4,762		93,28	xxxxx[1]		
4,763	3/16	93,28	04763		
4,764 - 4,999		93,28	xxxxx[1]		
5,000		48,83	05000	112,20	05000
5,001 - 5,499		93,28	xxxxx[1]		
5,500		48,83	05500		
5,501 - 5,999		93,28	xxxxx[1]		
6,000		48,83	06000	112,20	06000
6,001 - 6,499		93,28	xxxxx[1]		
6,500		48,83	06500		
6,501 - 6,999		93,28	xxxxx[1]		
7,000		48,83	07000	112,20	07000
7,001 - 7,499		93,28	xxxxx[1]		
7,500		48,83	07500		
7,501 - 7,937		93,28	xxxxx[1]		
7,938	5/16	73,27	07938		
7,939 - 7,999		73,27	xxxxx[1]		
8,000		48,83	08000	112,20	08000
8,001 - 8,499		73,27	xxxxx[1]		
8,500		48,83	08500		
8,501 - 8,999		73,27	xxxxx[1]		
9,000		48,83	09000	112,20	09000
9,001 - 9,499		73,27	xxxxx[1]		
9,500		48,83	09500		
9,501 - 9,524		73,27	xxxxx[1]		
9,525	3/8	73,27	09525		
9,526 - 9,999		73,27	xxxxx[1]		
10,000		48,83	10000	112,20	10000
10,001 - 10,499		73,27	xxxxx[1]		
10,500		48,83	10500		
10,501 - 10,999		73,27	xxxxx[1]		
11,000		48,83	11000	159,50	11000
11,001 - 11,112		73,27	xxxxx[1]		
11,113	7/16	73,27	11113		
11,114 - 11,499		73,27	xxxxx[1]		
11,500		48,83	11500		
11,501 - 11,999		73,27	xxxxx[1]		
12,000		48,83	12000	159,50	12000
12,001 - 12,499		73,27	xxxxx[1]		
12,500		48,83	12500		
12,501 - 12,699		73,27	xxxxx[1]		
12,700	1/2	73,27	12700	187,90	12700
12,701 - 12,999		73,27	xxxxx[1]		
13,000		48,83	13000	159,50	13000
13,001 - 13,499		73,27	xxxxx[1]		
13,500		48,83	13500		
13,501 - 13,999		73,27	xxxxx[1]		
14,000		48,83	14000	159,50	14000
14,001 - 14,287		73,27	xxxxx[1]		
14,288	9/16	73,27	14288		
14,289 - 14,499		73,27	xxxxx[1]		
14,500		48,83	14500		
14,501 - 14,999		73,27	xxxxx[1]		
15,000		48,83	15000		
15,001 - 15,499		73,27	xxxxx[1]		
15,500		48,83	15500		
15,501 - 15,874		73,27	xxxxx[1]		
15,875	5/8	73,27	15875		
15,876 - 15,999		73,27	xxxxx[1]		
16,000		48,83	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

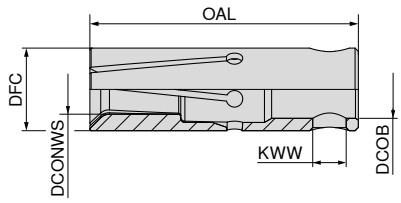
DCONWS mm	DCONWS inch	81 053 ... EUR Y8/YS		81 054 ... EUR Y8/YS	
4,000		68,87	04000		
4,001 - 4,499		93,27	xxxxx[1)]		
4,500		68,87	04500		
4,501 - 4,762		93,27	xxxxx[1)]		
4,763	3/16	93,27	04763		
4,764 - 4,999		93,27	xxxxx[1)]		
5,000		68,87	05000	115,50	05000
5,001 - 5,499		93,27	xxxxx[1)]		
5,500		68,87	05500		
5,501 - 5,999		93,27	xxxxx[1)]		
6,000		51,42	06000	115,50	06000
6,001 - 6,349		75,81	xxxxx[1)]		
6,350	1/4	75,81	06350	169,60	06350
6,351 - 6,499		75,81	xxxxx[1)]		
6,500		51,42	06500		
6,501 - 6,999		75,81	xxxxx[1)]		
7,000		51,42	07000	115,50	07000
7,001 - 7,499		75,81	xxxxx[1)]		
7,500		51,42	07500		
7,501 - 7,937		75,81	xxxxx[1)]		
7,938	5/16	75,81	07938		
7,939 - 7,999		75,81	xxxxx[1)]		
8,000		51,42	08000	115,50	08000
8,001 - 8,499		75,81	xxxxx[1)]		
8,500		51,42	08500		
8,501 - 8,999		75,81	xxxxx[1)]		
9,000		51,42	09000	115,50	09000
9,001 - 9,499		75,81	xxxxx[1)]		
9,500		51,42	09500		
9,501 - 9,524		75,81	xxxxx[1)]		
9,525	3/8	75,81	09525		
9,526 - 9,999		75,81	xxxxx[1)]		
10,000		51,42	10000	115,50	10000
10,001 - 10,499		75,81	xxxxx[1)]		
10,500		51,42	10500		
10,501 - 10,999		75,81	xxxxx[1)]		
11,000		51,42	11000	162,40	11000
11,001 - 11,112		75,81	xxxxx[1)]		
11,113	7/16	75,81	11113		
11,114 - 11,499		75,81	xxxxx[1)]		
11,500		51,42	11500		
11,501 - 11,999		75,81	xxxxx[1)]		
12,000		51,42	12000	162,40	12000
12,001 - 12,499		75,81	xxxxx[1)]		
12,500		51,42	12500		
12,501 - 12,699		75,81	xxxxx[1)]		
12,700	1/2	75,81	12700	192,00	12700
12,701 - 12,999		75,81	xxxxx[1)]		
13,000		51,42	13000	162,40	13000
13,001 - 13,499		75,81	xxxxx[1)]		
13,500		51,42	13500		
13,501 - 13,999		75,81	xxxxx[1)]		
14,000		51,42	14000	162,40	14000
14,001 - 14,499		75,81	xxxxx[1)]		
14,500		51,42	14500		
14,501 - 14,999		75,81	xxxxx[1)]		
15,000		51,42	15000	162,40	15000
15,001 - 15,499		75,81	xxxxx[1)]		
15,500		51,42	15500		
15,501 - 15,999		75,81	xxxxx[1)]		
16,000		51,42	16000	162,40	16000
16,001 - 16,499		75,81	xxxxx[1)]		
16,500		51,42	16500		
16,501 - 16,999		75,81	xxxxx[1)]		
17,000		51,42	17000		
17,001 - 17,499		75,81	xxxxx[1)]		
17,500		51,42	17500		
17,501 - 17,999		75,81	xxxxx[1)]		
18,000		51,42	18000		
18,001 - 18,499		75,81	xxxxx[1)]		
18,500		68,87	18500		
18,501 - 18,999		93,27	xxxxx[1)]		
19,000		68,87	19000		

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 81 053 **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 ●

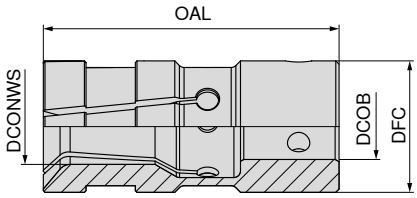
DCONWS mm	DCONWS inch	81 056 ... EUR Y8/YS		81 055 ... EUR Y8/YS	
4,000				70,72	04000
4,001 - 4,499				95,14	xxxxx[1]
4,500				70,72	04500
4,501 - 4,999				95,14	xxxxx[1]
5,000		139,30	05000	70,72	05000
5,001 - 5,499				95,14	xxxxx[1]
5,500				70,72	05500
5,501 - 5,999				95,14	xxxxx[1]
6,000		117,60	06000	53,26	06000
6,001 - 6,349				77,71	xxxxx[1]
6,350	1/4	146,10	06350	77,71	06350
6,351 - 6,499				77,71	xxxxx[1]
6,500				53,26	06500
6,501 - 6,999				77,71	xxxxx[1]
7,000		117,60	07000	53,26	07000
7,001 - 7,499				77,71	xxxxx[1]
7,500				53,26	07500
7,501 - 7,999				77,71	xxxxx[1]
8,000		117,60	08000	53,26	08000
8,001 - 8,499				77,71	xxxxx[1]
8,500				53,26	08500
8,501 - 8,999				77,71	xxxxx[1]
9,000		117,60	09000	53,26	09000
9,001 - 9,499				77,71	xxxxx[1]
9,500				53,26	09500
9,501 - 9,999				77,71	xxxxx[1]
10,000		117,60	10000	53,26	10000
10,001 - 10,499				77,71	xxxxx[1]
10,500				53,26	10500
10,501 - 10,999				77,71	xxxxx[1]
11,000		163,60	11000	53,26	11000
11,001 - 11,499				77,71	xxxxx[1]
11,500				53,26	11500
11,501 - 11,999				77,71	xxxxx[1]
12,000		163,60	12000	53,26	12000
12,001 - 12,499				77,71	xxxxx[1]
12,500				53,26	12500
12,501 - 12,699				77,71	xxxxx[1]
12,700	1/2			77,71	12700
12,701 - 12,999				77,71	xxxxx[1]
13,000		163,60	13000	53,26	13000
13,001 - 13,499				77,71	xxxxx[1]
13,500				53,26	13500
13,501 - 13,999				77,71	xxxxx[1]
14,000		163,60	14000	53,26	14000
14,001 - 14,499				77,71	xxxxx[1]
14,500				53,26	14500
14,501 - 14,999				77,71	xxxxx[1]
15,000		163,60	15000	53,26	15000
15,001 - 15,499				77,71	xxxxx[1]
15,500				53,26	15500
15,501 - 15,999				77,71	xxxxx[1]
16,000		163,60	16000	53,26	16000
16,001 - 16,499				77,71	xxxxx[1]
16,500				53,26	16500
16,501 - 16,999				77,71	xxxxx[1]
17,000		163,60	17000	53,26	17000
17,001 - 17,499				77,71	xxxxx[1]
17,500				53,26	17500
17,501 - 17,999				77,71	xxxxx[1]
18,000		163,60	18000	53,26	18000
18,001 - 18,499				77,71	xxxxx[1]
18,500				53,26	18500
18,501 - 18,999				77,71	xxxxx[1]
19,000		163,60	19000	53,26	19000
19,001 - 19,049				77,71	xxxxx[1]
19,050	3/4			77,71	19050
19,051 - 19,499				77,71	xxxxx[1]
19,500				53,26	19500
19,501 - 19,999				77,71	xxxxx[1]
20,000		163,60	20000	53,26	20000
20,001 - 20,499				77,71	xxxxx[1]
20,500				53,26	20500
20,501 - 20,999				77,71	xxxxx[1]
21,000				53,26	21000
21,001 - 21,499				77,71	xxxxx[1]
21,500				53,26	21500
21,501 - 21,999				77,71	xxxxx[1]
22,000				53,26	22000
22,001 - 22,499				77,71	xxxxx[1]
22,500				53,26	22500
22,501 - 22,999				77,71	xxxxx[1]
23,000				53,26	23000
23,001 - 23,499				77,71	xxxxx[1]
23,500				70,72	23500
23,501 - 23,999				95,14	xxxxx[1]
24,000				70,72	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

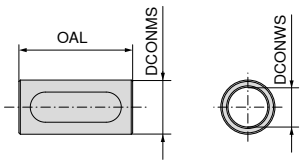
DCONWS mm	DCONWS inch	81 057 ... EUR Y8/YS		81 058 ... EUR Y8/YS	
5,000		122,20	05000	223,10	05000
5,001 - 5,499		167,60	xxxxx[1]		
5,500		122,20	05500		
5,501 - 5,999		167,60	xxxxx[1]		
6,000		122,20	06000	223,10	06000
6,001 - 6,349		167,60	xxxxx[1]		
6,350	1/4	167,60	06350		
6,351 - 6,499		167,60	xxxxx[1]		
6,500		122,20	06500		
6,501 - 6,999		167,60	xxxxx[1]		
7,000		122,20	07000	223,10	07000
7,001 - 7,499		167,60	xxxxx[1]		
7,500		122,20	07500		
7,501 - 7,999		167,60	xxxxx[1]		
8,000		122,20	08000	223,10	08000
8,001 - 8,499		167,60	xxxxx[1]		
8,500		122,20	08500		
8,501 - 8,999		167,60	xxxxx[1]		
9,000		70,72	09000	159,50	09000
9,001 - 9,499		116,10	xxxxx[1]		
9,500		70,72	09500		
9,501 - 9,524		116,10	xxxxx[1]		
9,525	3/8	116,10	09525		
9,526 - 9,999		116,10	xxxxx[1]		
10,000		70,72	10000	159,50	10000
10,001 - 10,499		116,10	xxxxx[1]		
10,500		70,72	10500		
10,501 - 10,999		116,10	xxxxx[1]		
11,000		70,72	11000	167,70	11000
11,001 - 11,499		116,10	xxxxx[1]		
11,500		70,72	11500		
11,501 - 11,999		116,10	xxxxx[1]		
12,000		70,72	12000	167,70	12000
12,001 - 12,499		116,10	xxxxx[1]		
12,500		70,72	12500		
12,501 - 12,699		116,10	xxxxx[1]		
12,700	1/2	116,10	12700		
12,701 - 12,999		116,10	xxxxx[1]		
13,000		70,72	13000	167,70	13000
13,001 - 13,499		116,10	xxxxx[1]		
13,500		70,72	13500		
13,501 - 13,999		116,10	xxxxx[1]		
14,000		70,72	14000	167,70	14000
14,001 - 14,499		116,10	xxxxx[1]		
14,500		70,72	14500		
14,501 - 14,999		116,10	xxxxx[1]		
15,000		70,72	15000	167,70	15000
15,001 - 15,499		116,10	xxxxx[1]		
15,500		70,72	15500		
15,501 - 15,874		116,10	xxxxx[1]		
15,875	5/8	116,10	15875		
15,876 - 15,999		116,10	xxxxx[1]		
16,000		70,72	16000	167,70	16000
16,001 - 16,499		116,10	xxxxx[1]		
16,500		70,72	16500		
16,501 - 16,999		116,10	xxxxx[1]		
17,000		70,72	17000	167,70	17000
17,001 - 17,462		116,10	xxxxx[1]		
17,463	11/16	116,10	17463		
17,464 - 17,499		116,10	xxxxx[1]		
17,500		70,72	17500		
17,501 - 17,999		116,10	xxxxx[1]		
18,000		70,72	18000	167,70	18000
18,001 - 18,499		116,10	xxxxx[1]		
18,500		70,72	18500		
18,501 - 18,999		116,10	xxxxx[1]		
19,000		70,72	19000	167,70	19000
19,001 - 19,049		116,10	xxxxx[1]		
19,050	3/4	116,10	19050		
19,051 - 19,499		116,10	xxxxx[1]		
19,500		70,72	19500		
19,501 - 19,999		116,10	xxxxx[1]		
20,000		70,72	20000	167,70	20000
20,001 - 20,499		116,10	xxxxx[1]		
20,500		70,72	20500		
20,501 - 20,999		116,10	xxxxx[1]		
21,000		70,72	21000	193,30	21000
21,001 - 21,499		116,10	xxxxx[1]		
21,500		70,72	21500		
21,501 - 21,999		116,10	xxxxx[1]		
22,000		70,72	22000	193,30	22000
22,001 - 22,224		116,10	xxxxx[1]		
22,225	7/8	116,10	22225		
22,226 - 22,499		116,10	xxxxx[1]		
22,500		70,72	22500		
22,501 - 22,999		116,10	xxxxx[1]		
23,000		70,72	23000	193,30	23000
23,001 - 23,499		116,10	xxxxx[1]		
23,500		70,72	23500		
23,501 - 23,999		116,10	xxxxx[1]		
24,000		70,72	24000	193,30	24000
24,001 - 24,499		116,10	xxxxx[1]		
24,500		70,72	24500		
24,501 - 24,999		116,10	xxxxx[1]		
25,000		70,72	25000	193,30	25000
25,001 - 25,399		116,10	xxxxx[1]		
25,400	1/1	116,10	25400		
25,401 - 25,499		116,10	xxxxx[1]		
25,500		70,72	25500		
25,501 - 25,999		116,10	xxxxx[1]		
26,000		70,72	26000	193,30	26000
26,001 - 26,499		116,10	xxxxx[1]		
26,500		70,72	26500		
26,501 - 26,999		116,10	xxxxx[1]		
27,000		70,72	27000		
27,001 - 27,499		116,10	xxxxx[1]		
27,500		70,72	27500		
27,501 - 27,999		116,10	xxxxx[1]		
28,000		70,72	28000		
28,001 - 28,499		116,10	xxxxx[1]		
28,500		122,20	28500		
28,501 - 28,574		167,60	xxxxx[1]		
28,575	1 1/8	167,60	28575		
28,576 - 28,999		167,60	xxxxx[1]		
29,000		122,20	29000		
29,001 - 29,499		167,60	xxxxx[1]		
29,500		122,20	29500		
29,501 - 29,999		167,60	xxxxx[1]		
30,000		122,20	30000		

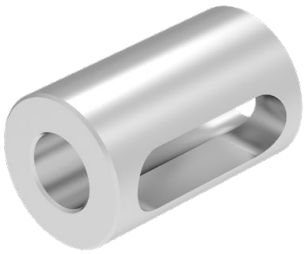
1) Not available ex stock, articles are non-returnable and cannot be exchanged / Delivery time 7 working days

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

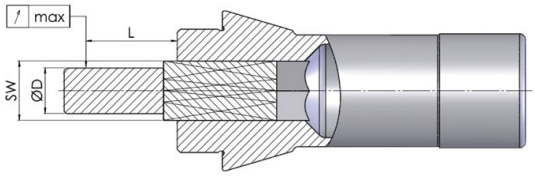




				81 427 ...	
DCONMS $_{g6}$ mm	DCONMS $_{g6}$ inch	DCONWS $_{H7}$ mm	OAL mm	EUR Y8	
15,875	5/8	12	30	141,50	**15912**
16,000		12	30	141,50	**16012**
19,050	3/4	8	40	141,50	**19108**
19,050	3/4	10	40	141,50	**19110**
19,050	3/4	12	40	141,50	**19112**
19,050	3/4	14	40	141,50	**19114**
19,050	3/4	16	40	141,50	**19116**
20,000		10	40	141,50	**20010**
20,000		12	40	141,50	**20012**
20,000		16	40	141,50	**20016**
22,000		12	40	141,50	**22012**
22,000		16	40	141,50	**22016**
25,000		12	40	141,50	**25012**
25,000		16	40	141,50	**25016**
25,000		20	40	141,50	**25020**
25,400	1	12	40	141,50	**25412**
25,400	1	16	40	137,10	**25416**
25,400	1	20	40	141,50	**25420**
33,000		20	40	150,70	**33020**
33,000		22	40	150,70	**33022**
33,000		25	40	150,70	**33025**

Technical Information

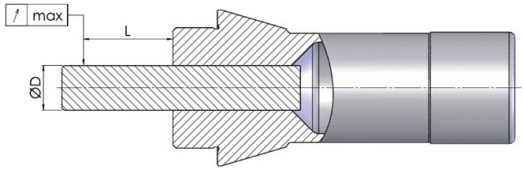
Runout accuracy



Run-out tolerances of collets with profiles					
Profile size		L	Standard	Norm	
from	up to	mm	norm	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	Norm	
from	up to	mm	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:

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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.

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→ **cuttingtools.ceratizit.com/ie/en/download.html**

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

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

Our current valid terms and conditions apply which can be found on our website. Images and prices are valid, subject to corrections due to technical improvements or further developments as well as general mistakes and typographical errors.

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