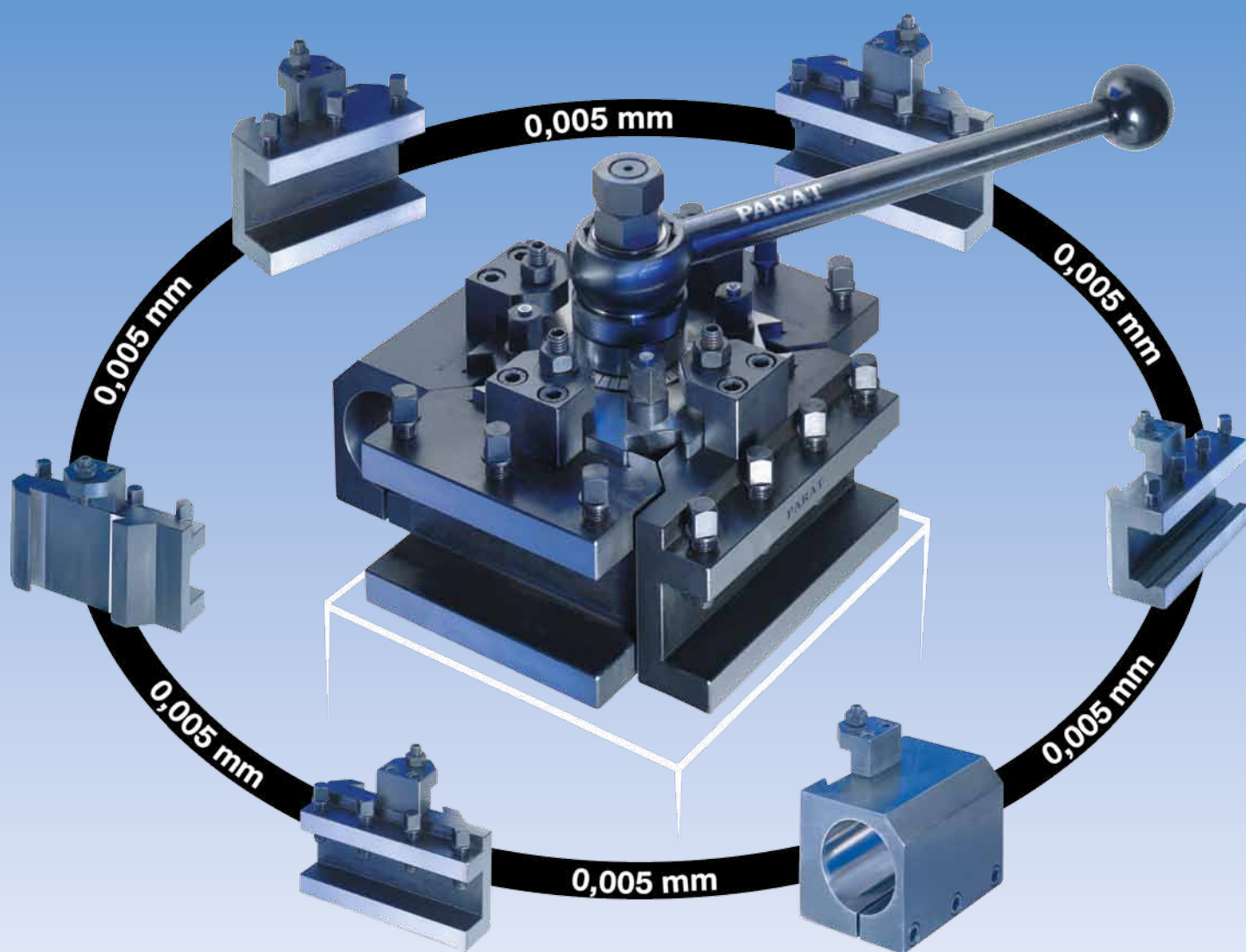


# PARAT 4-WAY-INDEXING-QUICK-CHANGE TURRET-TOOLPOST

## TURNING INSTEAD OF MEASURING

Indexing accuracy 0,005 mm (0,0002")

Internal and external operations in one setting Quick-clamping System with 40 Positions in divisions of 9°. Five sizes available



# The PARAT 4-Way Turret

The production of precision turned components places extremely high demands on the machine and tooling system, without losing ease of operation.

The continuous development of conventional and cycle-controlled lathes has significantly increased the range of features. Nevertheless, the importance of the correct tooling system to make full use of the gained advantages is often overlooked.

When different tools are required for internal and external precision tolerances, the importance of the flexibility and stability of the tool system used becomes quickly clear.

In such cases, the dimensions of the tools themselves as well as the means of handling of heavier tools can quickly cause problems.

With its four tool stations and indexing accuracy of 0.005 mm PARAT turret provides the ideal solution.

For external machining, 4 tool stations are available that enable the exchange of tool holders with a weight of up to 12.3 kg (without tools). This reduces to a minimum a procedure that would otherwise be both tiring and time consuming for the operator.

When outer and inner machining are combined to turn both precision tolerances in one setting, up to three clamping points are available.

Particularly with long drilling rods, the elimination of the need to change the tool holder is particularly advantageous.

The opening and clamping of the PARAT turret occurs through a threadless quick clamping nut in conjunction with a quick clamping lever.

The different tool holders are individually clamped through four eccentric elements.

We would especially like to draw attention to the threaded clamping bolt as well the clamping bolt



PARAT 4-Way Indexing Turret Head



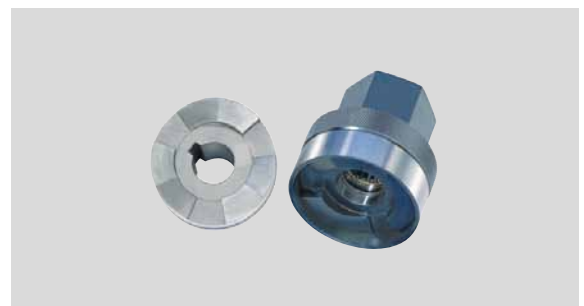
PARAT 4-Way Indexing Head from underneath



PARAT Clamping bolt with collar and feather key



PARAT Clamping bolt with thread and expanding zone



PARAT Quick Clamping Nut



PARAT Operating Tools



PARAT Precision Ground Coupling

with threads and internal coolant facility. The design of these clamping bolts makes a significant contribution to operating safety. A special expansion joint ensures that, in case of a collision, most of the energy is absorbed and, consequently, there is no subsequent damage to other machine components.

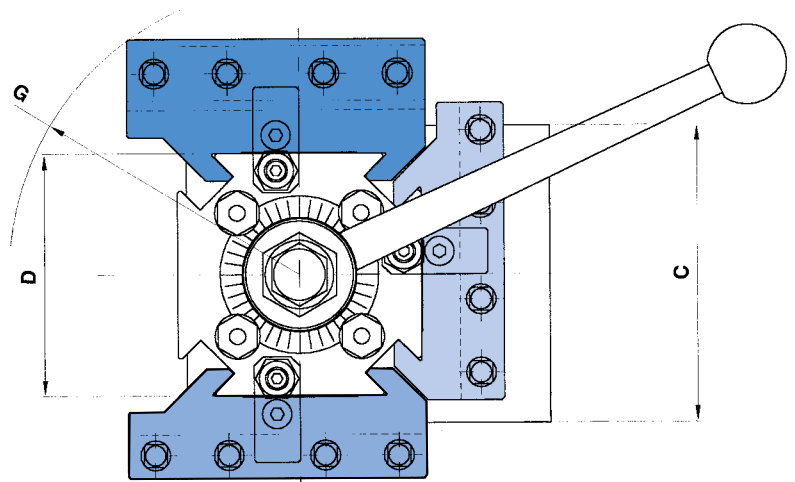
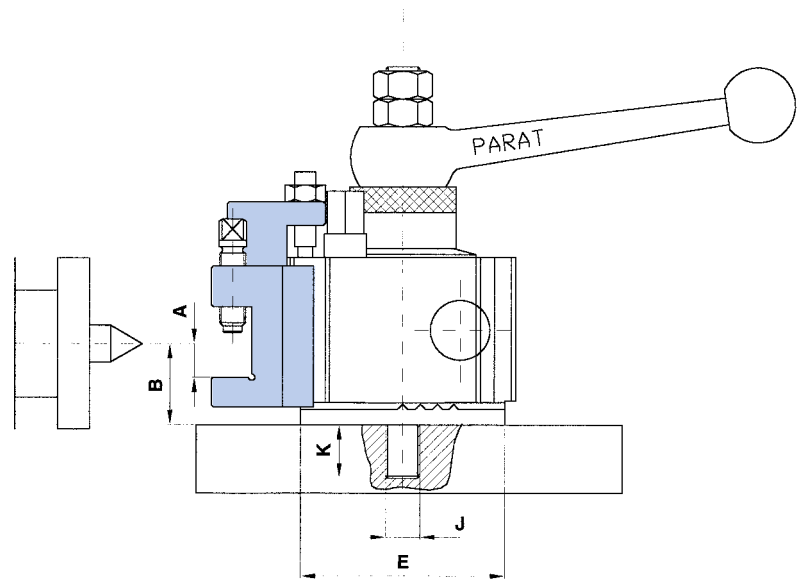
Usually an exchange of the clamping bolt is sufficient to enable machining to be restarted in the required quality.

To ensure optimum acceptance of a large variety of different tools, a wide range of tool holders are available.

Of particular importance here is the partly machined tool holder. This is a tool holder that is supplied with a dovetail guide that is already hardened and ground. The non-machined part of the holder can, however, be finished according to the specific requirements of the special tool to be held.

We can, of course, also supply on request custom tool holders with special sizes or designs suitable for specific technical demands.

As we are sure of the quality of our PARAT turret, we offer our customer a 5 year – manufacturer's warranty for the turret and tool holders (excluding wear and tear parts).



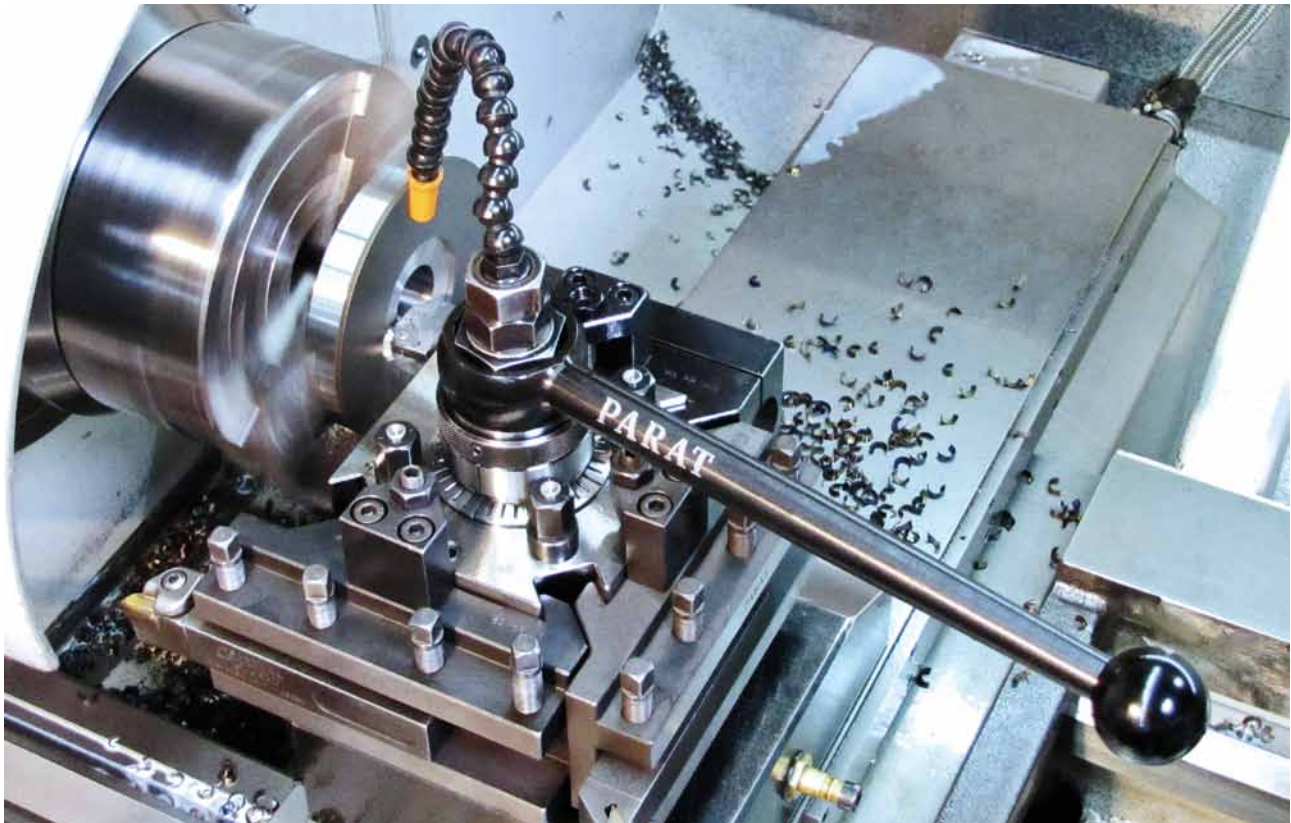
### New – installation service in our factory

#### Technical data to define suitable size

Technical data		mm/inches Size 1	mm/inches Size 2	mm/inches Size 3	mm/inches Size 4	mm/inches Size 5
Approx. drive power of the lathe	kw/hp	6/8	15/20	25/33	45/60	65/87
Approx. torque at the main spindle	Nm/lb/ft	150/110	700/516	1500/1106	7000/5162	12000/8850
Max. cutting tool cross section	A	□12/0.4724 □20/0.7874	□25/0.9842	□40/1.5748	□50/1.9685	□50/1.9865
Height of cutting edge	B	30/1.1811 35/1.3779	40/1.5748	60/2.3622	80/3.1496	90/3.5430
Min. support width	C	90 - 100/ 3.5433	110 - 150/ 4.3307	150 - 180/ 5.9055	200 - 250/ 7.874	200 - 300/ 7.874
Basic square toolpost	D	□84/3.3070	□106/4.1732	□134/5.2755	□154/6.0629	□204/8.0315
Precision coupling	E	Ø 80/3.1496	Ø 100/3.9370	Ø 132/5.1968	Ø 150/5.9055	Ø 195/7.6772
Swing diameter with tool holder	G	Ø 180/7.0866	Ø 240/9.4488	Ø 300/11.811	Ø 350/13.7795	Ø 446/17.5590
Standard clamping bolt with collar and feather key	J (H7)	20/0.7874	25/0.9842	35/1.3779	35/1.3779	45/1.7716
	K	15/0.5905	18/0.7086	25/0.9842	30/1.1811	35/1.3779
Clamping bolt with thread	J	M 14	M 16	M 20	M 24	M 30 x 2
Clamping bolt with thread and internal cooling	J	M 16	M 20	M 24	M 24	M 30 x 2
Thread length mm	K	21/0.8267	25/0.9842	30/1.1811	35/1.3779	35/1.3779
Approx. weight in kg/lbs without tool holder		3/6.6	6,5/14.3	14/30.9	21/46.3	42/92.6

# Advantages of Using the PARAT 4-Way Turret

- High reproducible accuracy of 0.005 mm when turning out and back in
- No additional finishing cuts with fits
- Less opening of the sliding guard
- Fewer exchanges of the tool holder
- Fast and simple exchange through eccentric clamping
- Clamping bolt with high shock absorption and expansion zone on the thread to reduce forces in case of accidents
- Clamping bolt with coolant bore, which enables a shorter coolant hose
- Wide range of quick-change holders for all tools
- 5 year manufacturer's warranty



## Internal coolant

The clamping bolt with internal coolant facility can be utilized for all new but also existing PARAT 4-Way Turret Indexing Systems (option at extra cost). The above mentioned facility consists of the following elements:

- One Clamping Bolt with internal boretwo threaded connectors
- One coolant hose
- One straight connector for coolant supply
- One elbow connector for coolant supply
- One plug screw (as illustrated on left)



PARAT clamping with IC

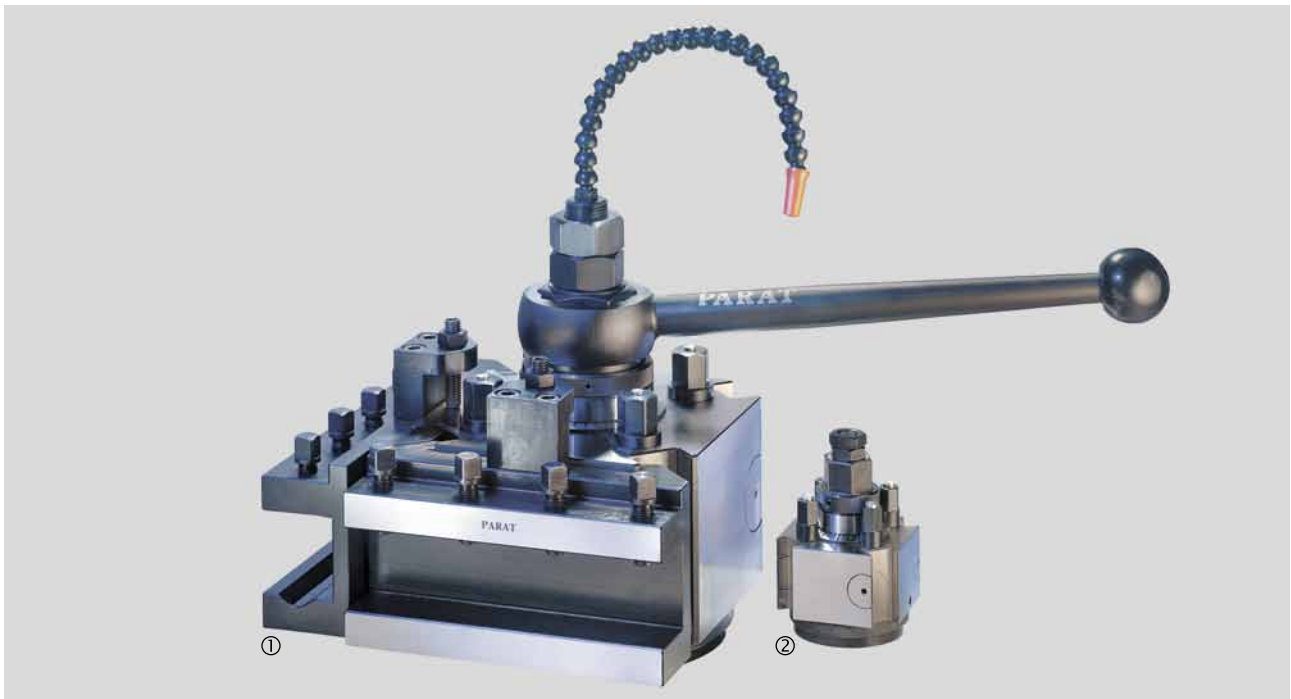
Data:

**Size**    **Thread/  
Measurement "J"**

2	M 20 x 2,5
3	M 24 x 3
4	M 24 x 3
5	M 30 x 2

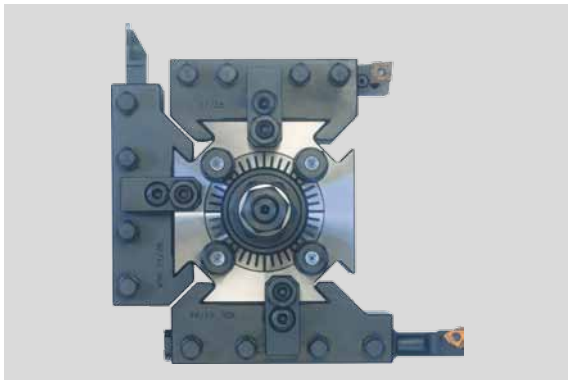


# PARAT 4-Way Indexing Turret System Size 5 for turning machines with higher motor power

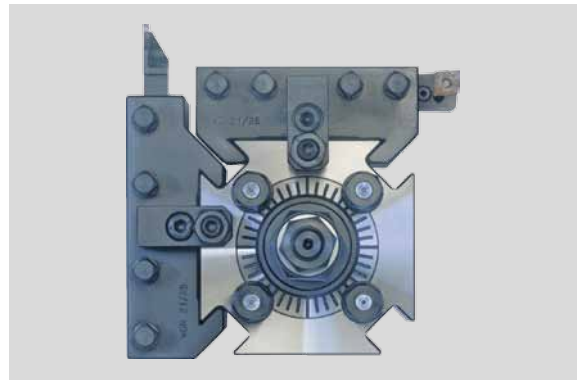


① PARAT Turret RD 5    ② PARAT Turret RD 1

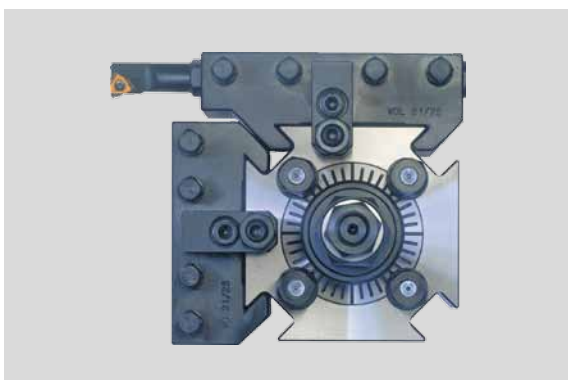
## Lengthened PARAT toolholders utilized correctly 4 examples of how to clamp cutting tools efficiently with short overhang



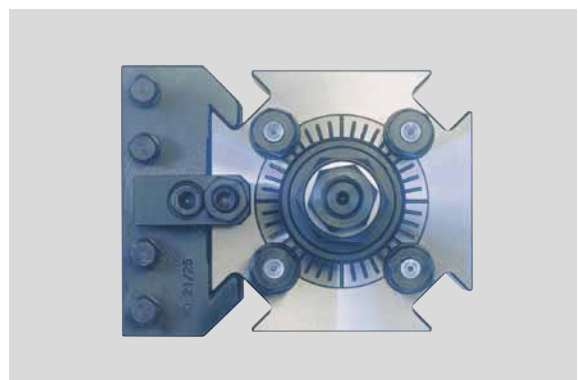
Type RD 2 with toolholder WD 2/25



Type RD 2 with toolholder WD 2/25 and WDR 2/25

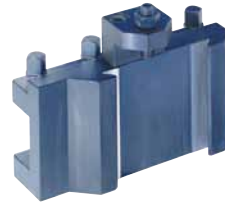
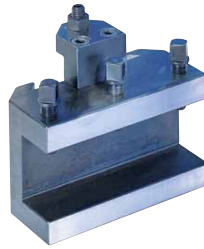


Type RD 2 with toolholder WD 2/25 and WDL 2/25



Type RD 2 with toolholder WD 2/25 and WDR 2/25  
and WDL 2/25

# PARAT toolholders for 4-Way Indexing Turret



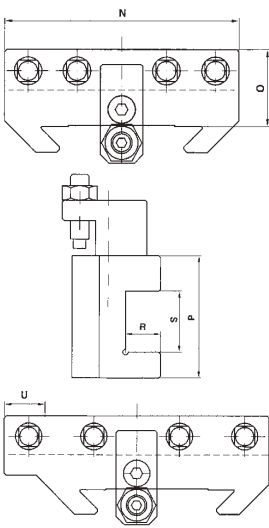
4-Way Indexing Turret  
Type RD



Universal System  
Type UD

Size	Toolholder WD Universal	Toolholder WDL Internal machining	Toolholder WDR External machining	Toolholder WDR Internal
Type RD 1	WD 1/12 WD 1/20	WDL 1/12 WDL 1/20	WDR 1/12 WDR 1/20	WDR 1/20
Type UD 1				
Type RD 2	WD 2/25	WDL 2/25	WDR 2/25	WDR 2/25
Type UD 2				
Type RD 3	WD 3/32 WD 3/40	WDL 3/32 WDL 3/40	WDR 3/32 WDR 3/40	WDR 3/40
Type UD 3				
Type RD 4	WD 4/40 WD 4/50	WDL 4/40 WDL 4/50	WDR 4/40 WDR 4/50	WDR 4/50
Type UD 4				
Type RD 5	WD 5/50	WDL 5/50	WDR 5/50	WDR 5/50
Type UD 5				

## Toolholders



## Technical data

Size	Type	mm/inches	mm/inches	mm/inches	mm/inches	mm/inches	mm/inches	kg/lbs.
		N	O	P	R	S	U	
1	WD 1/12	84/3.3070	24/0.9448	47/1.8503	14/0.5512	22/0.8661	—	0,7/1.54
	WDL 1/12	100/3.9370	24/0.9448	47/1.8503	14/0.5512	22/0.8661	16/0.6299	0,8/1.76
	WDR 1/12	100/3.9370	24/0.9448	47/1.8503	14/0.5512	22/0.8661	16/0.6299	0,8/1.76
	WD 1/20	84/3.3070	33/1.2992	52/2.0472	20/0.7874	22/0.8661	—	0,8/1.76
	WDL 1/20	100/3.9370	33/1.2992	52/2.0472	20/0.7874	22/0.8661	16/0.6299	0,9/1.98
	WDR 1/20	100/3.9370	33/1.2992	52/2.0472	20/0.7874	22/0.8661	16/0.6299	0,9/1.98
	WDPL 1/12	100/3.9370	28/1.1023	47/1.8503	16/0.6299	22/0.8661	16/0.6299	0,9/1.98
	WB 1/30	84/3.3070	39/1.5354	47/1.8503	∅30/1.1811	—	—	0,8/1.76
	WBW 1/30	84/3.3070	39/1.5354	47/1.8503	—	—	—	1,4/3.1
2	WD 2/25	110/4.3307	36/1.4330	66/2.5984	19/0.7480	33/1.2992	—	1,9/4.19
	WDL 2/25	130/5.1181	36/1.4173	66/2.5984	19/0.7480	33/1.2992	20/0.7874	2,1/4.63
	WDR 2/25	130/5.1181	36/1.4173	66/2.5984	19/0.7480	33/1.2992	20/0.7874	2,1/4.63
	WDPL 2/25	130/5.1181	50/1.9685	62/2.4409	31/1.2205	33/1.2992	20/0.7874	2,3/5.07
	WB 2/40	110/4.3307	51/2.0078	63/2.4802	∅40/1.5748	—	—	1,8/3.97
	WBW 2/40	110/4.3307	51/2.0078	63/2.4802	—	—	—	3,2/7
3	WD 3/32	140/5.5118	44/1.7322	76/2.9921	25/0.9842	33/1.2992	—	3,0/6.61
	WDL 3/32	165/6.4961	44/1.7322	76/2.9921	25/0.9842	33/1.2992	25/0.9842	3,4/7.50
	WDR 3/32	165/6.4961	44/1.7322	76/2.9921	25/0.9842	33/1.2992	25/0.9842	3,4/7.50
	WDPL 3/32	165/6.4961	53/2.0866	66/2.5984	∅31/1.2204	33/1.2992	25/0.9842	3,6/7.94
	WD 3/40	140/5.5118	44/1.7322	76/2.9921	25/0.9842	43/1.6929	—	3,1/6.8
	WDL 3/40	165/6.4961	44/1.7322	76/2.9921	25/0.9842	43/1.6929	25/0.9842	3,4/7.50

# Current and Universal Quick Change System



Toolholder WDPL Internal machining	Toolholder WB Internal machining	Toolholder WBW For individually adjustment	Boring Sleeve MK	Sleeve slottet (for dia. Ø)
L 1/12	WB 1/30	WBW 1/30	MK 1/30 MK 2/30	8, 10, 12, 15, 16, 20, 25
L 2/25	WB 2/40	WBW 2/40	MK 3/40 MK 4/40	10, 12, 15, 16, 20, 25, 32
L 3/32	WB 3/40 WB 3/50	WBW 3/40 WBW 3/50	MK 3/40 MK 4/40 MK 3/50 MK 4/50	20, 25, 32, 40
L 4/40	WB 4/60	WBW 4/60	MK 4/60 MK 5/60	25, 32, 40, 50
L 5/50	WB 5/80	WBW 5/80	MK 4/60 MK 5/60 + adapter for Ø 80	25, 32, 40, 50 + adapter for Ø 80

## Technical data

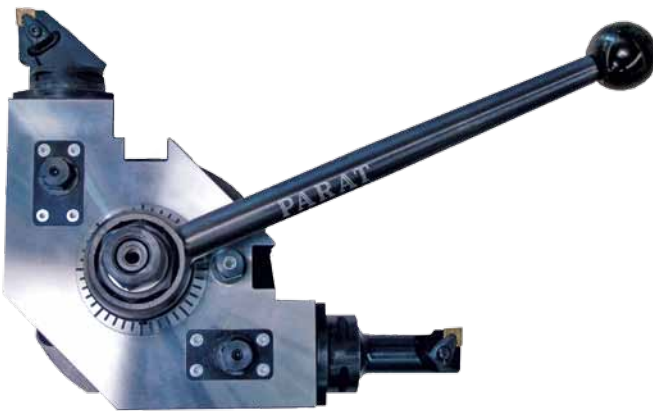
Size	Type	mm/inches N	mm/inches O	mm/inches P	mm/inches R	mm/inches S	mm/inches U	kg/lbs.
3	WDR 3/40	165/6.4961	44/1.7322	76/2.9921	25/0.9842	43/1.6929	25/0.9842	3,4/7.50
	WB 3/40	140/5.5118	53/2.0866	66/2.5984		—	—	2,7/5.96
	WB 3/50	140/5.5118	63/2.4803	76/2.9921		—	—	3,5/7.72
	WBW 3/40	140/5.5118	53/2.0866	66/2.5984	—	—	—	4,3/9.5
	WBW 3/50	140/5.5118	63/2.4803	76/2.9921	—	—	—	5,7/12.6
4	WD 4/40	160/6.2992	53/2.0866	96/3.7795	30/1.1811	44/1.7322	—	5,0/11.03
	WDL 4/40	190/7.4803	53/2.0866	96/3.7795	30/1.1811	44/1.7322	30/1.1811	5,8/12.80
	WDR 4/40	190/7.4803	53/2.0866	96/3.7795	30/1.1811	44/1.7322	30/1.1811	5,8/12.80
	WDPL 4/40	190/7.4803	63/2.4803	96/3.7795	40/1.5748	52/2.0472	30/1.1811	6,5/14.34
	WD 4/50	160/6.2992	63/2.4803	96/3.7795	40/1.5748	54/2.1259	—	5,5/12.14
	WDL 4/50	190/7.4803	63/2.4803	96/3.7795	40/1.5748	54/2.1259	30/1.1811	6,0/13.24
	WDR 4/50	190/7.4803	63/2.4803	96/3.7795	40/1.5748	54/2.1259	30/1.1811	6,0/13.24
	WB 4/60	160/6.2992	77/3.0314	96/3.7795	Ø60/2.3621	—	—	6,0/13.24
	WBW 4/60	160/6.2992	81/3.1889	96/3.7795	—	—	—	10,0/22.0
5	WD 5/50	220/8.6614	67/2.6377	114/4.4881	40/1.5748	54/2.1259	—	9,6/21.18
	WDL 5/50	260/10.2359	67/2.6377	114/4.4881	40/1.5748	54/2.1259	40/1.5748	10,6/23.39
	WDR 5/50		67/2.6377	114/4.4881	40/1.5748	54/2.1259	40/1.5748	10,6/23.39
	WDPL 5/50		74/2.9133	114/4.4881	51/2.0078	54/2.1259	40/1.5748	10,5/23.17
	WB 5/80	220/8.6614		120/4.7244	Ø80	—	—	13,2/29.1
	WBW 5/80	220/8.6614		120/4.7244	—	—	—	23,5/51.8

# PARAT SRD Turret with PSC- or KM holders



SRD with PSC ( Capto )

Internal coolant supply through the main body to the tool cutting edge



## The Parat SRD Turret

Developed for holding two modular clamping points in a L-arrangement on the basis of the proven PARAT 4-way turret, with an accuracy that is particularly suitable for these holders. A choice of PSC or KM holders are available.

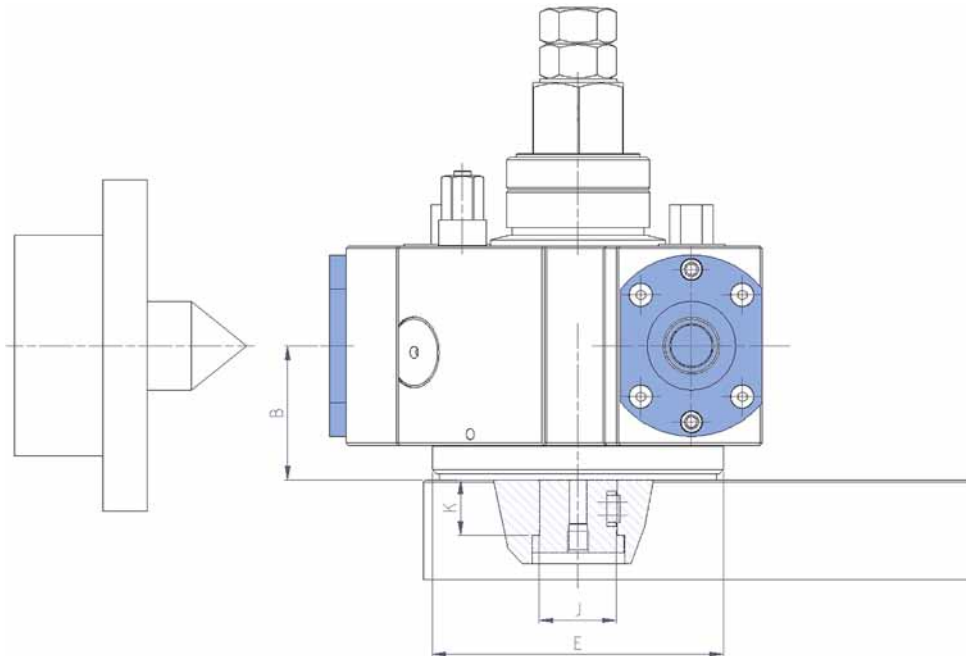
To ensure optimum cooling, the internal coolant facility enables the coolant to be through the clamping bolt to the cutting edge of the tool. The special L-arrangement with the diagonal PARAT clamping point means that when using long drilling bars there is no risk of collision with the sliding cover. Consequently, the complete turning diameter of the machine remains available.

Lengthened quick-change tool holders enable your standard tools to be used in conjunction with the diagonal PARAT clamping point as they ensure that your tools have the optimum clearance.



Patented 90 degree arrangement of the tools for optimum safety. No risk of collisions with longer tools.





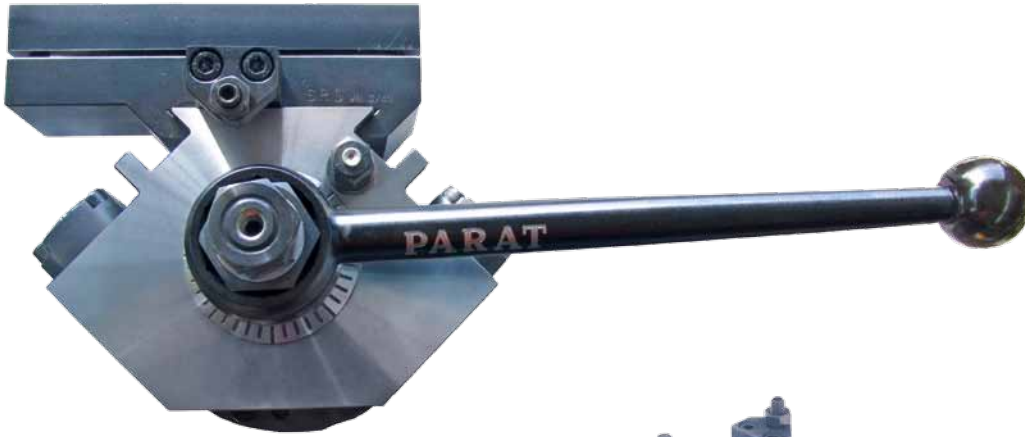
### Technical data to define suitable size

Description		mm/inches Size 2	mm/inches Size 3	mm/inches Size 4	mm/inches Size 5
Approx. drive power of the lathe	kw/hp	15/20	25/33	45/60	65/87
Approx. torque at the main spindle	Nm/lb/ft	700/516	1500/1106	7000/5162	12000/8850
Max. cutting tool cross section		□25/0.9842	□40/1.5748	□50/1.9685	□50/1.9865
Height of cutting edge	B	47,8/1.8819	60,8/2.3937	78,1/3.0748	88,1/3.4685
Min. support width	C	110 - 150/4.3307	150 - 180/5.9055	200 - 250/7.874	200 - 300/7.874
Basic square toolpost	E	Ø 100/3.9370	Ø 132/5.1968	Ø 150/5.9055	Ø 195/7.6772
SRD turning circle	G	Ø 290/11.4173	Ø 360/14.1732	Ø 412/16.2205	Ø 522/20.5512
Clamping bolt	J (H7)	25/0.9842	35/1.3779	35/1.3779	45/1.7716
with collar and feather key	K	18/0.7086	25/0.9842	30/1.1811	35/1.3779
Approx. weight in kg/lbs without tool holder		9,4/20.7	19,5/43	30,5/67,2	55/121,3

### Technical data

Size	Type	Art.-No.
2	SRD 2 with PSC32	P12000-C3
2	SRD 2 with PSC40	P12000-C4
3	SRD 3 with PSC40	P13000-C4
3	SRD 3 with PSC50	P13000-C5
4	SRD 4 with PSC50	P14000-C5
4	SRD 4 with PSC63	P14000-C6
5	SRD 5 with PSC63	P15000-C6
5	SRD 5 with PSC80	P15000-C8
2	SRD 2 with KM40	P12000-KM40
3	SRD 3 with KM40	P13000-KM40
3	SRD 3 with KM50	P13000-KM50
4	SRD 4 with KM50	P14000-KM50
4	SRD 4 with KM63	P14000-KM63
5	SRD 5 with KM63	P15000-KM63

# PARAT toolholders for Turret SRD



## Technical data

Size	site of lengthening	Type
2	right	WDR 2/25 SRD
2	left	WDL 2/25 SRD
2	left	WB 2/40 SRD
3	right	WDR 3/32 SRD
3	left	WDL 3/32 SRD
3	left	WB 3/40 SRD
3	left	WB 3/50 SRD
4	right	WDR 4/40 SRD
4	left	WDL 4/40 SRD
4	left	WB 4/60 SRD
5	right	WDR 5/50 SRD
5	left	WDL 5/50 SRD
5	left	WB 5/80 SRD



WDL-SRD

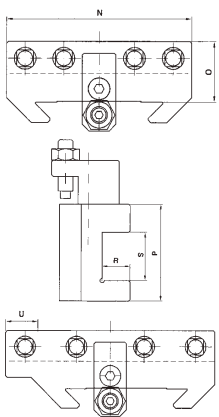


WDR-SRD



WB-SRD

## Toolholders



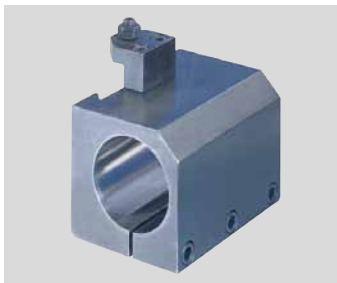
Size	Type	mm/inches N	mm/inches O	mm/inches P	mm/inches R	mm/inches S	mm/inches U	kg/lbs.
2	WDR 2/25 SRD	170/6.6929	36/1.4173	66/2.5984	19/0.7480	33/1.2992	60/2.3622	2,5/5.5
	WDL 2/25 SRD	170/6.6929	36/1.4173	66/2.5984	19/0.7480	33/1.2992	60/2.3622	2,5/5.5
	WB 2/40 SRD	170/6.6929	51/2.0079	63/2.4803	∅ 40/1.5748	-	60/2.3622	2,6/5.7
3	WDR 3/32 SRD	210/8.2677	44/1.7323	76/2.9921	25/0.9843	33/1.2992	70/2.7559	4,1/9
	WDL 3/32 SRD	210/8.2677	44/1.7323	76/2.9921	25/0.9843	33/1.2992	70/2.7559	4,1/9
	WB 3/40 SRD	210/8.2677	53/2.0866	66/2.5984	∅ 40/1.5748	-	70/2.7559	3,6/7.9
	WB 3/50 SRD	210/8.2677	63/2.4803	66/2.5984	∅ 40/1.5748	-	70/2.7559	4,5/9.9
4	WDR 4/40 SRD	240/9.4488	53/2.0866	96/3.7795	30/1.1811	44/1.7323	80/3.1496	6,5/14.3
	WDL 4/40 SRD	240/9.4488	53/2.0866	96/3.7795	30/1.1811	44/1.7323	80/3.1496	6,5/14.3
	WB 4/60 SRD	240/9.4488	77/3.0315	96/3.7795	∅ 60/2.3622	-	80/3.1496	7,7/16.9
5	WDR 5/50 SRD	310/12.2047	67/2.6378	114/4.4882	40/1.5748	54/2.1260	90/3.5433	12/26.5
	WDL 5/50 SRD	310/12.2047	67/2.6378	114/4.4882	40/1.5748	54/2.1260	90/3.5433	12/26.5
	WB 5/80 SRD	310/12.2047	103/4.0551	120/4.7244	∅ 80/3.1496	-	90/3.5433	17,7/39

# PARAT special toolholders for 4-Way Indexing Turret and Universal Quick Change System

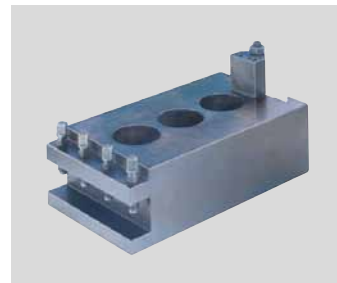


4-Way Turret RD

Size	Toolholder WB with PSC	Toolholder with KM	Toolholder with VDI
	PSC32 - C3 - D 32 mm PSC40 - C4 - D 40 mm PSC50 - C5 - D 50 mm PSC63 - C6 - D 63 mm PSC80 - C8 - D 80 mm	- KM 40 - D40 mm KM 50 - D50 mm KM 63 - D63 mm -	VDI 20 VDI 30 VDI 40 VDI 60 -
RD 1	-	-	-
RD 2	WB 2 with PSC32 R WB 2 with PSC32 L WB 2 with PSC40 R WB 2 with PSC40 L	WB 2 with KM40 R WB 2 with KM40 L WB 2 with KM40 R WB 2 with KM40 L	WB 2 VDI 20 WB 2 VDI 30
RD 3	WB 3 with PSC40 R WB 3 with PSC40 L WB 3 with PSC50 R WB 3 with PSC50 L	WB 3 with KM40 R WB 3 with KM40 L WB 3 with KM50 R WB 3 with KM50 L	WB 3 VDI 30 WB 3 VDI 40
RD 4	WB 4 with PSC50 R WB 4 with PSC50 L WB 4 with PSC63 R WB 4 with PSC63 L	WB 4 with KM50 R WB 4 with KM50 L WB 4 with KM63 R WB 4 with KM63 L	WB 4 VDI 40 WB 4 VDI 60
RD 5	WB 5 with PSC63 R WB 5 with PSC63 L WB 5 with PSC80 R WB 5 with PSC80 L	WB 5 with KM63 R WB 5 with KM63 L	WB 5 VDI 60



Size WB with special bore  
WB 4/80  
WB 4/2 Zoll  
WB 5/60  
WB 5/100



Size SP for large swing- dia. over bed of machine



WB 2/60  
WB 3/60  
WB 3/2 Zoll



Size WB lengthened toward left



by



Your partner of supply and technical advice:

## **Xena by Machineries ISOTOP**

745 rue Pierre-Caisse

Saint-Jean-sur-Richelieu

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F 1.450.348.8661








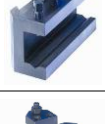
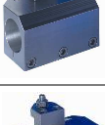

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Price List PARAT Turret








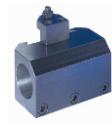

Item No.	Turret	Size		
<b>PARAT 4-way indexing quick change turret</b>		<b>RD 1</b>		
				
P 11000-10	Center clamping bolt for mounting with wall + fitting key			
P 11000-11	Center clamping bolt for mounting with thread M 14			
P 11000-IK	Center clamping bolt for mounting with thread M 16 inner coolant and coolant pipe ( 4 bar )			
P 11000-IKV	Center clamping bolt for mounting with thread M 16 inner coolant and coolant pipe ( 40 bar )			
<b>Toolholders</b>				
P 11100	WD 1/12	1		
P 11140	WD 1/20	1		
P 11120	WDL 1/12	1		
P 11160	WDL 1/20	1		
P 11110	WDR 1/12	1		
P 11150	WDR 1/20	1		
P 11130	WDPL 1/12	1		
P 11170	WB 1/30	1		
P 11171	WBW 1/30 with unmachined cutting side	1		



Item No.          Turret                                  Size



PARAT 4-way indexing quick change turret		RD 2		
				
P 12000-10	Center clamping bolt for mounting with wall + fitting key			
P 12000-11	Center clamping bolt for mounting with thread M 16			
P 12000-IK	Center clamping bolt for mounting with thread M 20 inner coolant and coolant pipe ( 4 bar )			
P 12000-IKV	Center clamping bolt for mounting with thread M 20 inner coolant and coolant pipe ( 40 bar )			<b>QTY 1x INCLUDED KIT RD2</b>

#### Toolholders

P 12100	WD 2/25	2		<b>QTY 1x INCLUDED KIT RD2</b>
P 12120	WDL 2/25	2		
P 12110	WDR 2/25	2		<b>QTY 1x INCLUDED KIT RD2</b>
P 12130	WDPL 2/25	2		<b>QTY 1x INCLUDED KIT RD2</b>
P 12170	WB 2/40	2		
P 12186	WB 2/1,5" inches	2		<b>QTY 2x INCLUDED KIT RD2</b>
P 12171	WBW 2/40 with unmachined cutting side	2		



Item No. Turret Size

Item No.	Turret	Size		
<b>PARAT 4-way indexing quick change turret</b>		<b>RD 3</b>		
				
P 13000-10	Center clamping bolt for mounting with wall + fitting key			
P 13000-11	Center clamping bolt for mounting with thread M20			
P 13000-IK	Center clamping bolt for mounting with thread M24 inner coolant and coolant pipe ( 4 bar )			
P 13000-IKV	Center clamping bolt for mounting with thread M24 inner coolant and coolant pipe ( 40 bar )			<b>QTY 1x INCLUDED KIT RD3</b>






### Toolholders

P 13100	WD 3/32	3		<b>QTY 1x INCLUDED KIT RD3</b>
P 13140	WD 3/40	3		
P 13120	WDL 3/32	3		<b>QTY 1x INCLUDED KIT RD3</b>
P 13160	WDL 3/40	3		
P 13110	WDR 3/32	3		
P 13150	WDR 3/40	3		
P 13130	WDPL 3/32	3		<b>QTY 1x INCLUDED KIT RD3</b>





Item No.      Turret      Size

**Toolholders**

P 13170	WB 3/40	3		
P 13180	WB 3/50	3		
P 13185	WB 3/2" inches	3		<b>QTY 2x INCLUDED KIT RD3</b>
P 13171	WBW 3/40 with unmachined cutting side	3		
P 13181	WBW 3/50 with unmachined cutting side	3		





Item No.	Turret	Size		
	<b>PARAT 4-way indexing quick change turret</b>	<b>RD 4</b>		
				
P 14000-10	Center clamping bolt for mounting with wall + fitting key			
P 14000-11	Center clamping bolt for mounting with thread M24			
P 14000-IK	Center clamping bolt for mounting with thread M24 inner coolant and coolant pipe ( 4 bar )			
P 14000-IKV	Center clamping bolt for mounting with thread M24 inner coolant and coolant pipe ( 40 bar )			

**Toolholders**

P 14100	WD 4/40	4		
P 14140	WD 4/50	4		
P 14120	WDL 4/40	4		
P 14160	WDL 4/50	4		
P 14110	WDR 4/40	4		
P 14150	WDR 4/50	4		
P 14130	WDPL 4/40	4		



Item No.

Turret


Size

**Toolholders**

P 14170	WB 4/60	4		
P 14186	WB 4/2,5" inches	4		
P 14171	WBW 4/60 with unmachined cutting side	4		



No.                      Turret    Size

PARAT 4-way indexing quick change turret		RD 5		
				
P 15000-IK	Center clamping bolt for mounting with thread M30x2,0 Inner coolant and coolant pipe ( 4 bar )			
P 15000-IKV	Center clamping bolt for mounting with thread M30x2,0 Inner coolant and coolant pipe ( 40 bar )			

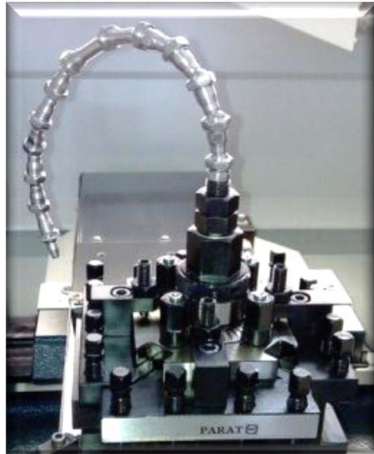
#### Toolholders

P 15100	WD 5/50	5		
P 15120	WDL 5/50	5		
P 15110	WDR 5/50	5		
P 15130	WDPL 5/50	5		
P 15170	WB 5/80	5		
P 15171	WBW 5/80 with unmachined cutting side	5		



## PARAT Inox Steel Coolant Hose

High quality coolant hose made of stainless steel  
for all systems with high colant pressure


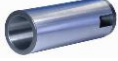


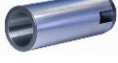


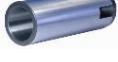




**Item No. Description**

P001-xxxx	Set 1: Coolant hose total length 365 mm Consisting of: ten 25 mm spacers, two 40 mm spacers nozzle and adapter piece (please indicate)		
P002-xxxx	Set 2: Coolant hose total length 225 mm Consisting of: six 25 mm spacers, one 40 mm spacer nozzle and adapter piece (please indicate)		
P003-xxxx	Set 3: Coolant hose total length 150 mm Consisting of: three 25 mm spacers, one 40 mm spacer nozzle and adapter piece (please indicate)		
P004-20 /-35 /-45	Nozzle: diameter 2, 3,5 oder 4,5 mm	per nozzle	
P004-0530	Nozzle: 90 degrees with 5 holes		
P004-0414	Flat nozzle: 14 mm		
P005-25	25 mm spacer		
P005-40	40 mm spacer		
P005-70	70 mm spacer		
P006-18 /-14	Adaper piece for G ¼, G ½ or M10x1 per Adapter		
P007-18	Ball valve G ¼ i / G ¼ a, G ½ a, G ¾ a or G ½ a		

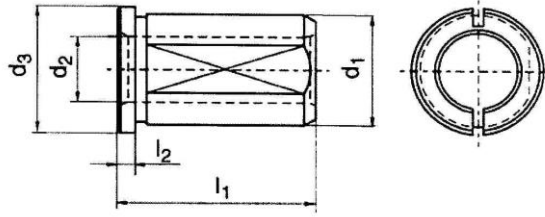


**Sleeves with inner cone**

Item No.	Description	Size		
P 11200	20 MK 1 d 30	1		
P 11210	20 MK 2 d 30	1		
P 12200	21 MK 3 d 40	2 and 3		
P 12210	21 MK 4 d 40	2 and 3		
P 13200	22 MK 3 d 50	3		
P 13210	22 MK 4 d 50	3		
P 14200	23 MK 4 d 60	4		
P 14210	23 MK 5 d 60	4		
806098	Adapter 80 to 60	5		
805098	Adapter 80 to 50	5		



### Slotted Sleeves



Item No.	Dimensions	Size		
300850	d1=30, <b>d2=08</b> , d3=34, l1=50, l2=4	1		
301050	d1=30, <b>d2=10</b> , d3=34, l1=50, l2=4	1		
301250	d1=30, <b>d2=12</b> , d3=34, l1=50, l2=4	1		
301550	d1=30, <b>d2=15</b> , d3=34, l1=50, l2=4	1		
301650	d1=30, <b>d2=16</b> , d3=34, l1=50, l2=4	1		
302050	d1=30, <b>d2=20</b> , d3=34, l1=50, l2=4	1		
302550	d1=30, <b>d2=25</b> , d3=34, l1=50, l2=4	1		
400878	d1=40, <b>d2=08</b> , d3=44, l1=78, l2=4	2 and 3		
401078	d1=40, <b>d2=10</b> , d3=44, l1=78, l2=4	2 and 3		
401278	d1=40, <b>d2=12</b> , d3=44, l1=78, l2=4	2 and 3		
401578	d1=40, <b>d2=15</b> , d3=44, l1=78, l2=4	2 and 3		
401678	d1=40, <b>d2=16</b> , d3=44, l1=78, l2=4	2 and 3		
402078	d1=40, <b>d2=20</b> , d3=44, l1=78, l2=4	2 and 3		
402578	d1=40, <b>d2=25</b> , d3=44, l1=78, l2=4	2 and 3		
403078	d1=40, <b>d2=30</b> , d3=44, l1=78, l2=4	2 and 3		
403278	d1=40, <b>d2=32</b> , d3=44, l1=78, l2=4	2 and 3		
500888	d1=50, <b>d2=08</b> , d3=54, l1=88, l2=4	3		
501688	d1=50, <b>d2=16</b> , d3=54, l1=88, l2=4	3		
502088	d1=50, <b>d2=20</b> , d3=54, l1=88, l2=4	3		
502588	d1=50, <b>d2=25</b> , d3=54, l1=88, l2=4	3		
503088	d1=50, <b>d2=30</b> , d3=54, l1=88, l2=4	3		
503288	d1=50, <b>d2=32</b> , d3=54, l1=88, l2=4	3		
504088	d1=50, <b>d2=40</b> , d3=54, l1=88, l2=4	3		
602088	d1=60, <b>d2=20</b> , d3=64, l1=88, l2=4	4		
602588	d1=60, <b>d2=25</b> , d3=64, l1=88, l2=4	4		
603288	d1=60, <b>d2=32</b> , d3=64, l1=88, l2=4	4		
604088	d1=60, <b>d2=40</b> , d3=64, l1=88, l2=4	4		
605088	d1=60, <b>d2=50</b> , d3=64, l1=88, l2=4	4		

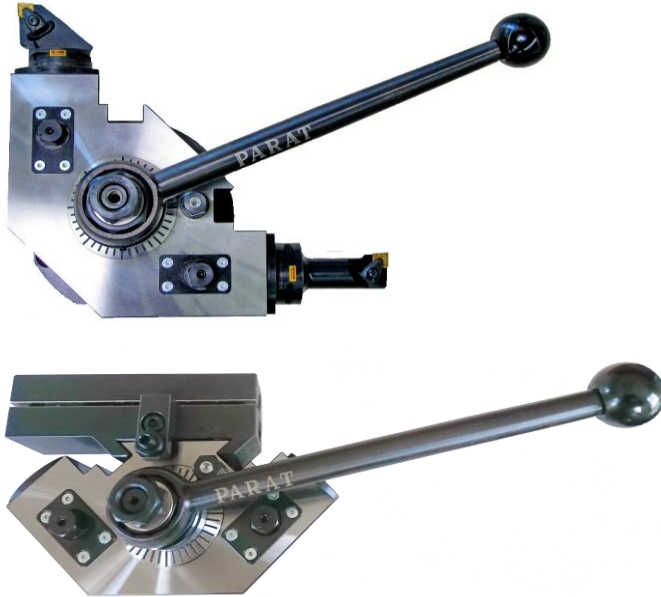
Further slotted sleeves on request



**PARAT turret SRD with modular tooling system PSC**

**(ISO 26623-1) is equivalent to Capto®**

ISO 26623-1	e.g. Capto	D mm	D mm
PSC32	C3	32	32
PSC40	C4	40	40
PSC50	C5	50	50
PSC63	C6	63	63
PSC80	C8	80	80



**Item No.                  PARAT Turret SRD    Size**

**(ISO 26623-1) is equivalent to Capto®**

P12000-C4	SRD 2 with PSC40	2		
P13000-C4	SRD 3 with PSC40	3		
P13000-C5	SRD 3 with PSC50	3		
P14000-C5	SRD 4 with PSC50	4		
P14000-C6	SRD 4 with PSC63	4		
P15000-C6	SRD 5 with PSC63	5		
P15000-C8	SRD 5 with PSC80	5		



**Toolholders for PARAT Turret SRD**



WB 2/40 SRD



WDR 3/32 SRD

Item No.	Toolholders	Size	Design	
P 12110 SRD	WDR 2/25 SRD	2	right	
P 12120 SRD	WDL 2/25 SRD	2	left	
P 12170 SRD	WB 2/40 SRD	2	left	
P 13110 SRD	WDR 3/32 SRD	3	right	
P 13120 SRD	WDL 3/32 SRD	3	left	
P 13170 SRD	WB 3/40 SRD	3	left	
P 13180 SRD	WB 3/50 SRD	3	left	
P 14110 SRD	WDR 4/40 SRD	4	right	
P 14120 SRD	WDL 4/40 SRD	4	left	
P 14170 SRD	WB 4/60 SRD	4	left	
P 15110 SRD	WDR 5/50 SRD	5	right	
P 15120 SRD	WDL 5/50 SRD	5	left	
P 15170 SRD	WB 5/80 SRD	5	left	





**Price List Toolholders WB with PSC-adapters**



(ISO 26623-1) is equivalent to Capto®

ISO 26623-1	e.g. Capto	D mm
PSC32	C3	32
PSC40	C4	40
PSC50	C5	50
PSC63	C6	63
PSC80	C8	80

Item No.	Toolholders	Size	Design	
P 121 C4 / R	WB 2 with PSC40	2	right	
P 121 C4 / L	WB 2 with PSC40	2	left	
P 131 C4 / R	WB 3 with PSC40	3	right	
P 131 C4 / L	WB 3 with PSC40	3	left	
P 131 C5 / R	WB 3 with PSC50	3	right	
P 131 C5 / L	WB 3 with PSC50	3	left	
P 141 C5 / R	WB 4 with PSC50	4	right	
P 141 C5 / L	WB 4 with PSC50	4	left	
P 141 C6 / R	WB 4 with PSC63	4	right	
P 141 C6 / L	WB 4 with PSC63	4	left	
P 151 C6 / R	WB 5 with PSC63	5	right	
P 151 C6 / L	WB 5 with PSC63	5	left	
P 151 C8 / R	WB 5 with PSC80	5	right	
P 151 C8 / L	WB 5 with PSC80	5	left	



**Price List Toolholders WB with KM-adapters**



**(ISO 26622) is equivalent to KM**

Item No.	Toolholders	Size	Design
P 121 KM40 / R	WB 2 with KM40	2	right
P 121 KM40 / L	WB 2 with KM40	2	left
P 131 KM40 / R	WB 3 with KM40	3	right
P 131 KM40 / L	WB 3 with KM40	3	left
P 131 KM50 / R	WB 3 with KM50	3	right
P 131 KM50 / L	WB 3 with KM50	3	left
P 141 KM50 / R	WB 4 with KM50	4	right
P 141 KM50 / L	WB 4 with KM50	4	left
P 141 KM63 / R	WB 4 with KM63	4	right
P 141 KM63 / L	WB 4 with KM63	4	left
P 151 KM63 / R	WB 5 with KM63	5	right
P 151 KM63 / L	WB 5 with KM63	5	left