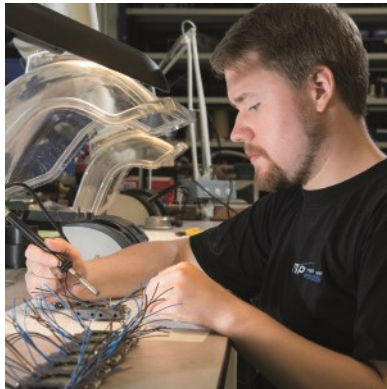
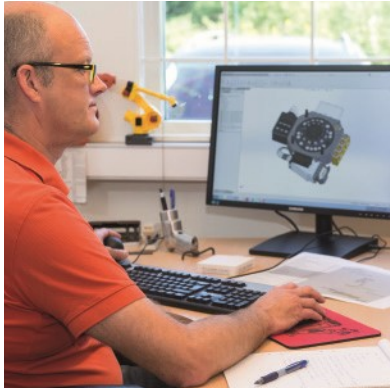


Robot System Products

Product catalog



ROBOT SYSTEM PRODUCTS HAS A WIDE RANGE OF ROBOT PERIPHERAL PRODUCTS:
Tool changers | Swivels | Swivels with tool changer | Grippers | Hose packages | Valve units | Tool systems



The company

Robot System Products is a front-rank provider of peripheral products for high performance robot applications. We provide complete tool system solutions for your robot installations, aiming to improve your productivity with the most reliable and cost-effective tooling on the market. Continuously we explore emerging technologies, working with leading edge design.

Local presence worldwide

As a global company, Robot System Products has subsidiaries and distribution partners in more than 20 countries. Our headquarters is located in Västerås, Sweden.

Products

Our products are available for all major robot brands and come with complete documentation.

We offer:

- Tool changers
- Swivels
- Swivels with tool changer
- Grippers
- Hose packages
- Valve units
- Tool systems
- Tool stands

Tool changers

Robot System Products tool changers are designed to maximize the flexibility and reliability of your robot fleet. Robustness and high safety are combined with low weight and compactness. Depending on model and options, electrical signals, weld and servo power, data, water and compressed air are transferred from the robot side to the tool.

The patented locking device TrueConnect™ has a minimum of play and gives a practically, through the lifespan, absolute positioning repeatability. The principle behind the locking mechanism is the uniform distribution of load, obtained by pressing locking balls into spherical grooves. In consequence, substantially larger positional tolerances are accepted during docking.

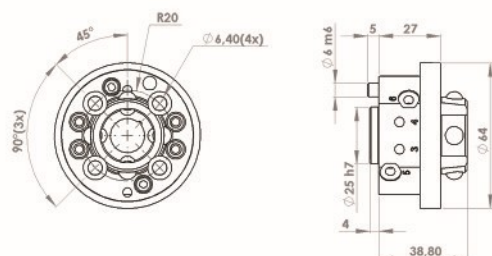
RSP Tool changers are designed to make it possible for you to perform tool changing operations continuously day out and day in.

- Robust design for high torque applications
- Fast docking with high tolerance
- Absolute positioning repeatability
- 3D-models for Robot CAD-systems
- Low maintenance and high uptime

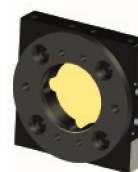


Tool changers and tool attachments

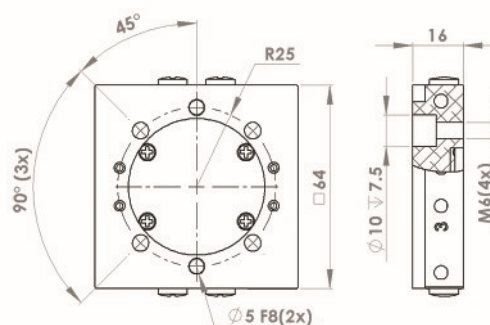
P0101
Tool changer TC20-4



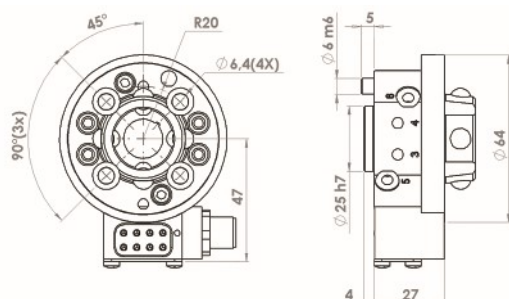
P0102
Tool attachment TA20-4



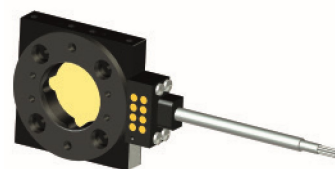
P0123
Tool attachment TA20-4, steel



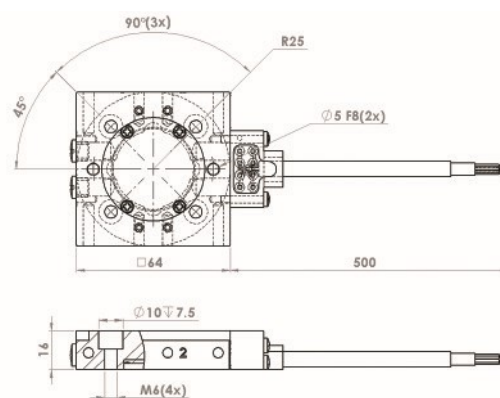
P0103
Tool changer TC20-4E



P0104
Tool attachment TA20-4E



P0124
Tool attachment TA20-4E, steel



TC/TA20

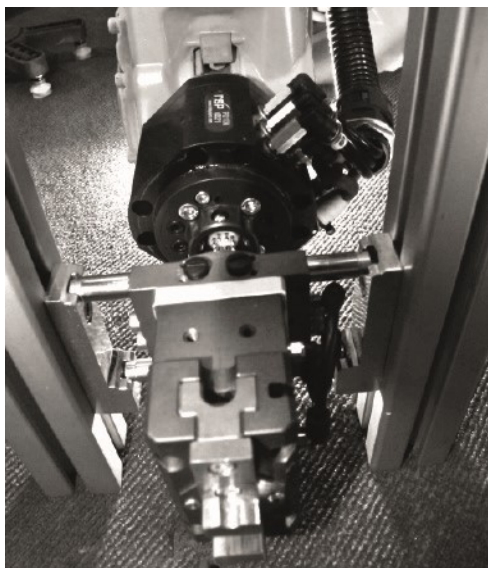
Type	TC20-4	TA20-4	TA20-4 steel	TC20-4E	TA20-4E	TA20-4E steel
Article number	P0101	P0102	P0123	P0103	P0104	P0124
Weight (kg)	0.4	0.1	0.3	0.4	0.2	0.3
Mechanical interface	ISO 9409-1 40-4-M6	ISO 9409-1 50-4-M6	ISO 9409-1 50-4-M6	ISO 9409-1 40-4-M6	ISO 9409-1 50-4-M6	ISO 9409-1 50-4-M6
Working temperature	+10°C – +60°C					
IP classification	IP 54					
	Maximum tool load					
Fz (static)	± 200 N					
Mz (dynamic)	± 100 Nm					
Mx/My (dynamic)	± 200 Nm	± 100 Nm	± 200 Nm	± 200 Nm	± 100 Nm	± 200 Nm
	Air ducts					
Number of air ducts	4					
Dedicated air ducts	1 TC Open (6–10 bar)	–		1 TC Open (6–10 bar)	–	
	1 TC Close (6–10 bar)	–		1 TC Close (6–10 bar)	–	
Max air pressure	10 bar					
Air flow / channel	150 l/min					
Air connection	M5					
Pneumatic valve	–					
Air quality	Oil-clean and waterless filtered air, with max 25µm particle content					
	Electrical signals					
Number of signals	–			8		
Dedicated signals	–			–		
	–			–		
	–			–		
	–			–		
Max current	–			1A		
Max voltage	–			60V		
Connections	–			M12 8P	8x 0.25mm ² cable	

Options	Article number	Description
Options to TC20 (TC20-4 can hold two external options)	P1113	8 signals (1 included in TC20-4E)
	P1115	4 additional air
Options to TA20 (TA20-4 can hold two external options)	P1114	8 signals (1 included in TA20-4E)
	P1116	4 additional air
	P0142	Tool stand kit 20
Cables for TC20 (robot side)	P0025	2 m signal cable M12 8P – M12 8S
	P0025-30	3 m signal cable M12 8P – M12 8S
Adaptation kit for TC20	For information about installation on other mechanical interfaces see chapter: “Adaptation kits for tool changers”	

Swivels with tool changer

Robot System Products swivels with tool changers unite the best out of two technologies. With the TrueConnect™ tool changing mechanism integrated with our swivel technology, absolute positioning repeatability and large tolerances at docking is combined with full motional freedom of your robots – axis 6 is allowed to rotate freely without being limited by hoses, cables or other obstacles. Low weight, high corrosion resistance and a minimum of service requirements will maximize uptime and consequently enhance your productivity in all applications involving substantial robot motions.

- Fast docking with high tolerance
- Absolute positioning repeatability
- Free rotation axis 6
- No limits to axis 4 and 5 when used with RSP hose packages
- Low weight and high corrosion resistance
- Low maintenance and high uptime



Note!

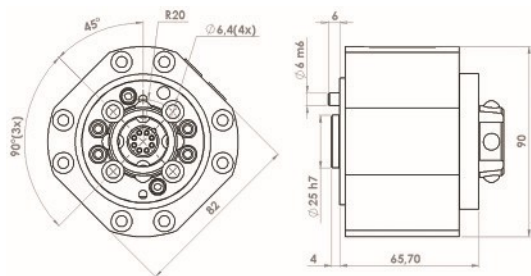
RSP's design of swivel units is based on the ISO standard for robot flanges. For the swivel unit to be able to function properly an adaptation kit has to be included. RSP provides a wide range of adaptation kits for different robot brands. If you do not find your robot model please contact RSP support.



Swivels with tool changer and tool attachment

P0106A

Swivel with tool changer STC20-4

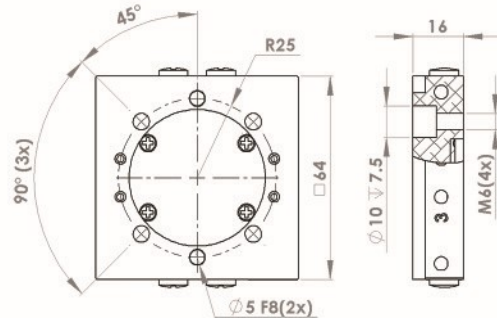
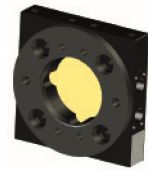


P0102

Tool attachment TA20-4

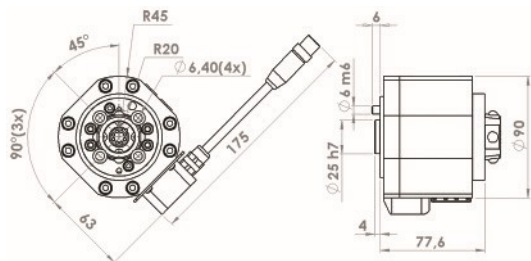
P0123

Tool attachment TA20-4, steel



P0108A

Swivel with tool changer STC20-4E

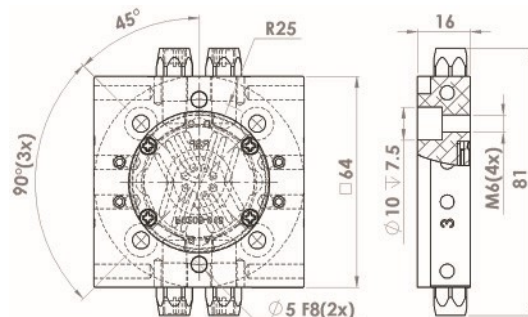
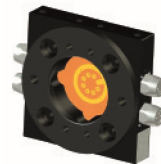


P0109

Tool attachment STA20-4E

P0125

Tool attachment STA20-4E, steel



STC/TA20

Type	STC20-4	TA20-4	TA20-4 Steel	STC20-4E	STA20-4E	STA20-4E Steel
Article number	P0106A	P0102	P0123	P0108A	P0109	P0125
Weight (kg)	0.8	0.1	0.3	1.1	0.1	0.3
Mechanical interface	ISO 9409-1 40-4-M6	ISO 9409-1 50-4-M6		ISO 9409-1 40-4-M6	ISO 9409-1 50-M6	
Working temperature	+10°C – +60°C					
IP classification	IP 54					
	Maximum tool load					
Fz (static)	± 200 N					
Mz (dynamic)	± 100 Nm					
Mx/My (dynamic)	± 200 Nm	± 100 Nm	± 200 Nm	± 200 Nm	± 100 Nm	± 200 Nm
	Air ducts					
Number of air ducts	6	4		6	4	
Dedicated air ducts	1 TC Open (6–10 bar)	–		1 TC Open (6–10 bar)	–	
	1 TC Close (6–10 bar)	–		1 TC Close (6–10 bar)	–	
Max air pressure	10 bar					
Air flow / channel	150 l/min					
Air connection	6 mm plastic hose or M5	M5		6 mm plastic hose or M5	M5	
Pneumatic valve	–					
Air quality	Oil-clean and waterless filtered air, with max 25µm particle content					
	Electrical signals					
Number of signals	–			8		
Dedicated signals	–			1 x 24V DC	4 x 24V DC	
	–			1 x 0V DC	4 x 0V DC	
	–			1 TC Coupled		
Max current	–			1A		
Max voltage	–			60V		
Connections	–			M12 8P	4 x M8 3S	

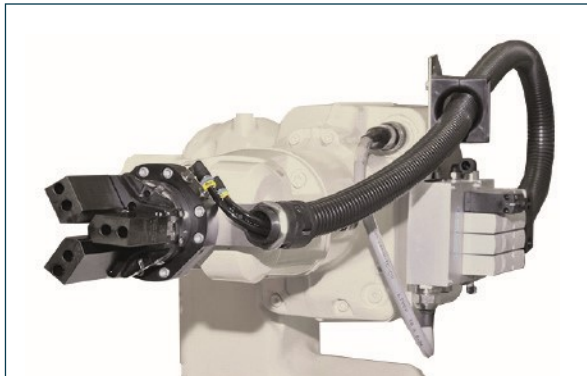
Options	Article number	Description
Options for TA20 (tool side)	P0142	Tool stand kit 20
Cables and connectors for STC20 (robot side)	P0025	2 m signal cable M12 8P – M12 8S
	P0025-30	3 m signal cable M12 8P – M12 8S
Adaptation kit for STC20	For information about necessary adaptation kits see chapter: “Adaptation kits for swivels and swivels with tool changer”	

Swivels

With Robot System Products swivels you can provide compressed air, water, electrical and data signals, as well as weld and servo power to your tools with robot motion capabilities maintained. Axis 6 is allowed to rotate freely without limitations by hoses, cables or other obstacles and together with our hose packages there are no limits to axis 4 and 5 as well.

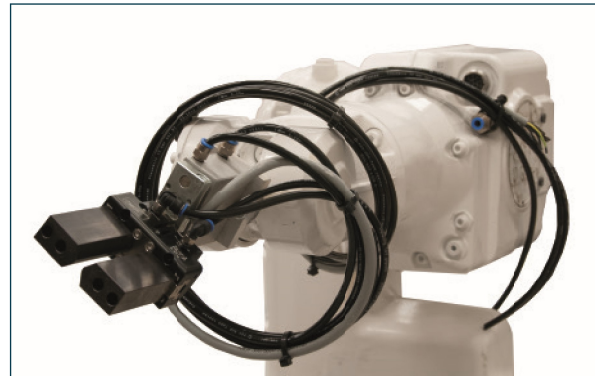
With RSP swivels, the low weight, high corrosion resistance and a minimum of service requirements will enhance your productivity and maximize uptime in all applications involving substantial robot motions.

- Free rotation axis 6
- No limits to axis 4 and 5 when used with RSP hose packages
- Air, water, electrical and fieldbus signals
- Weld and servo power
- Low weight and high corrosion resistance
- Low maintenance and high uptime



With swivel

The rotation of axis 6 does not affect the Dress Pack on the upper arm.



Without swivel

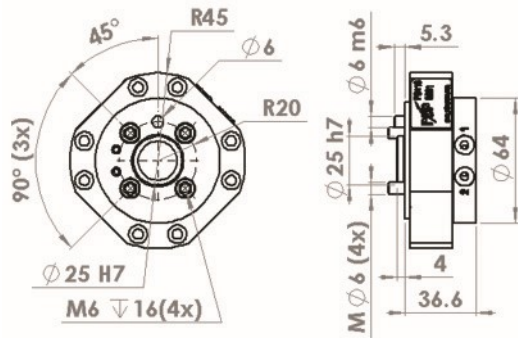
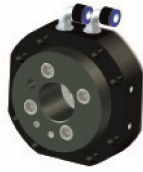
Hose and cable package will be twisted around the upper arm of the robot when axis 6 rotates.

Note!

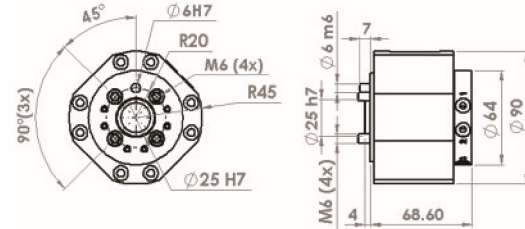
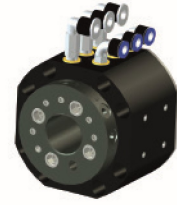
RSP's design of swivel units is based on the ISO standard for robot flanges. For the swivel unit to be able to function properly an adaptation kit has to be included. RSP provides a wide range of adaptation kits for different robot brands. If you do not find your robot model please contact RSP support.

Swivels

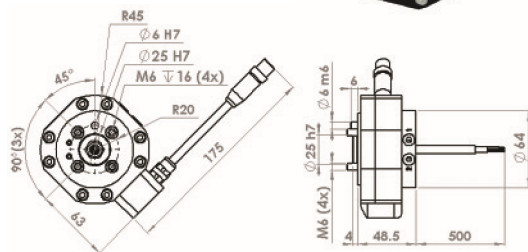
P0110A
Swivel S20-2



P0112A
Swivel S20-6



P0111A
Swivel S20-2E



P0113A
Swivel S20-6E

