

SWIVEL UNIT RSP-FLEX

Especially for the automated loading and unloading to machine tools, as well as for the fast and precise insertion of components in assembly systems, the RSP Flex swivel units offer an alternative to complicated special designs. Thanks to the modular structure and the extensive expansion options, they are flexible and reliably Integrated. The innovative shock absorber concept with flexible and infinitely variable adjustability in all end positions allows for smoothly and precise swiveling.

ADVANTAGES AT A GLANCE

- \circledast Smoothly and precise swiveling thanks to innovative shock absorber concept
- Maintenance-free up to 10 million swivel cycles
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RSP-Flex 32



APPLICATION

Swivel unit with high torque and compact design. Flexibly adjustable hardness of the shock absorbers.

TYPE

Realise two damping ranges, "hard" and "soft" with one swivel unit!

CUSTOMER BENEFITS

- Outform damping in the end positions
 Fine adjustment of the dampers at the end position settings
 Optimal bearing support of the rotary plate for several million cycles
 Energy supply possible by means of screw connection or via hoseless direct connection
 Can be used in all positions e.g. vertical, suspended, horizontal

TECHNICAL FEATURES

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3,0 2,5 tia [kam²] 2,0 1,5 1,0 0,5

Body made of high-strength, hard-coated aluminum Pinion shaft and rack made of hardened steel End position can be infinitely variably adjusted $\pm 3^{\circ}$ or $\pm 90^{\circ}$ Optional inductive and magnetic position sensors Up to 8-fold fluid feeder

RSP-FLEX 32

0.5

1,0 1,5 2,0 2,5

Swiveling time [sec]

- Up to 9-fold cable feed-through



C40

0.10				
RSP-Flex 32, air operated				
	RSP32-Flex-90-J3	RSP32-Flex-180-J3	RSP32-Flex-180-J90	RSP32-Flex-180-J3-MV
RSP-Flex Basic unit	174000	174001	174002	174003
RSP-Flex + fluid feed-through*	174006	174007	174008	174009
RSP-Flex + fluid feed-through* + cable feedthrough**	174012	174013	174014	174015
RSP-FLEX + fluid feed-through* + cable feedthrough** + proximity switch adapter***	174018	174019	174020	174021
Pivot angle °	90	180	180	180 + 2x90
End position adjustability °	± 3	±3	90 ± 3	± 3
Mid-position adjustability °	-	-	-	± 3
Torque at 6 bar Nm	10	10	10	10
Nominal operating pressure (min./ max.) bar	6	6	6	6
Operating temperature min./max. °C	5-80	5-80	5-80	5-80
Repeat accurancy °	± 0,01	± 0,01	± 0,01	± 0,01
Weight kg	2,5	2,5	2,5	3,6
Axial bearing load $F_z N$	800	800	800	800
Radial bearing load M _y Nm	19	19	19	19

* number of fluid feed-throughs RSP32=4; RSP42/RSP52=8 (max. 8 bar) ** number of signals=RSP32=8; RSP42/52=10 (24V, max. 1A), plug machine side M16, plug tool side M8

*** number of holders for proximity switches: 3

RSP-Flex 42



APPLICATION

Swivel unit with high torque and compact design. Flexibly adjustable hardness of the shock absorbers.

TYPE

Realise two damping ranges, "hard" and "soft" with one swivel unit!

CUSTOMER BENEFITS

- Uniform damping in the end positions
 Fine adjustment of the dampers at the end position settings
 Optimal bearing support of the rotary plate for several million cycles
 Energy supply possible by means of screw connection or via hoseless direct connection
 Can be used in all positions e.g. vertical, suspended, horizontal

TECHNICAL FEATURES

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- Body made of high-strength, hard-coated aluminum Pinion shaft and rack made of hardened steel End position can be infinitely variably adjusted ± 3° or ± 90° Optional inductive and magnetic position sensors Up to 8-fold fluid feeder Up to 9-fold cable feed-through



RS	P-FLEX 42	
7,0		
6,0		
5,0		
4,0		
3,0		
2,0		
1,0		
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	0,5 1,0 1,5 2,0 2,5 Swiveling time [sec]	3,0

C40 RSP-Flex 42, air operated

	RSP42-Flex-90-J3	RSP42-Flex-180-J3	RSP42-Flex-180-J90	RSP42-Flex-180-J3-MV
RSP-Flex Basic unit	174024	174025	174026	174027
RSP-Flex + fluid feed-through*	174030	174031	174032	174033
RSP-Flex + fluid feed-through* + cable feedthrough**	174036	174037	174038	174039
RSP-Flex + fluid feed-through* + cable feedthrough** + proximity switch adapter***	174042	174043	174044	174045
Pivot angle °	90	180	180	180 + 2x90
End position adjustability °	± 3	± 3	90 ± 3	± 3
Mid-position adjustability °	-	-	-	± 3
Torque at 6 bar Nm	23	23	23	23
Nominal operating pressure (min./ max.) bar	6	6	6	6
Operating temperature min./max. °C	5-80	5-80	5-80	5-80
Repeat accurancy °	± 0,01	± 0,01	± 0,01	± 0,01
Weight kg	5	5	5	5
Axial bearing load $F_z N$	2900	2900	2900	2900
Radial bearing load M _y Nm	68	68	68	68

* number of fluid feed-throughs RSP32=4; RSP42/RSP52=8 (max. 8 bar)
 ** number of signals=RSP32=8; RSP42/52=10 (24V, max. 1A), plug machine side M16, plug tool side M8
 *** number of holders for proximity switches: 3

RSP-Flex 52



APPLICATION

Swivel unit with high torque and compact design. Flexibly adjustable hardness of the shock absorbers.

TYPE

Realise two damping ranges, "hard" and "soft" with one swivel unit!

CUSTOMER BENEFITS

- Outform damping in the end positions
 Fine adjustment of the dampers at the end position settings
 Optimal bearing support of the rotary plate for several million cycles
 Energy supply possible by means of screw connection or via hoseless direct connection
 Can be used in all positions e.g. vertical, suspended, horizontal

TECHNICAL FEATURES

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8 6 2

Body made of high-strength, hard-coated aluminum Pinion shaft and rack made of hardened steel End position can be infinitely variably adjusted $\pm 3^{\circ}$ or $\pm 90^{\circ}$ Optional inductive and magnetic position sensors Up to 8-fold fluid feeder

RSP-FLEX 52

0,5 1,0 1,5 2,0 2,5 3,0 3,5

Swiveling time [sec]

- Up to 9-fold cable feed-through



C40

PSP Flox 52 air operated				
	RSP52-Flex-90-J3	RSP52-Flex-180-J3	RSP52-Flex-180-J90	RSP52-Flex-180-J3-MV
RSP-Flex Basic unit	174048	174049	174050	174051
RSP-Flex + fluid feed-through*	174054	174055	174056	174057
RSP-Flex + fluid feed-through* + cable feedthrough**	174060	174061	174062	174063
RSP-Flex + fluid feed-through* + cable feedthrough** + proximity switch adapter***	174066	174067	174068	174069
Pivot angle °	90	180	180	180 + 2x90
End position adjustability °	± 3	± 3	90 ± 3	± 3
Mid-position adjustability °	-	-	-	± 3
Torque at 6 bar Nm	58	58	58	58
Nominal operating pressure (min./ max.) bar	6	6	6	6
Operating temperature min./max. °C	5-80	5-80	5-80	5-80
Repeat accurancy °	± 0,01	± 0,01	± 0,01	± 0,01
Weight kg	10,2	10,2	10,2	13,9
Axial bearing load $F_z N$	9000	9000	9000	9000
Radial bearing load M_y Nm	340	340	340	340

* number of fluid feed-throughs RSP32=4; RSP42/RSP52=8 (max. 8 bar)
** number of signals=RSP32=8; RSP42/52=10 (24V, max. 1A), plug machine side M16, plug tool side M8
*** number of holders for proximity switches: 3

Röhm Swivel Units

Accessories RSP-Flex

Magnetic field sensors

Item no. Design



1276722	3m cable, 3 litz wire	all sizes, all types
1276723	0,2m cable, M8x1 con- nector	all sizes, all types

For

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Proximity switch		
Item no.	Design	For
389661	3 m cable, open leads	all sizes, all types
1078808	3m cable, 3 open leads	all sizes, all types
680969	without cable, M8x1 connector	all sizes, all types