

CLAMPING AND BRAKING ELEMENTS | PNEUMATIC SERIES RBPS

▶ PRODUCT ADVANTAGES



- ▶ **sensing with process reliability**
Sensing of opened/closed state (optional)
- ▶ **Energize to open (NC)**
through spring-loaded energy storage
- ▶ **high durability**
Up to 5 million static clamping cycles
- ▶ **Safety element**
Safe braking in case of energy failure
- ▶ **Simple status sensing**
Querying the piston position with magnetic field sensor

▶ THE BEST PRODUCT FOR YOUR APPLICATION

APPLICATION SCENARIOS

- ▶ **Positioning of axes**
- ▶ **Fixing of vertical axes**
- ▶ **Positioning of lifting units**

FURTHER INFORMATION

- ▶ **Special variants on request, e.g.**
With low opening pressure (3.0 bar)

▶ Technical data

Series	RBPS
Shaft diameter	5-60 mm
Holding force	3500-52000 N
Pressure min. / max.	4 / 6.5 [bar]
Spring storage	existing
PLUS connection	No
B10d value	up to 5 million
Dynamic braking cycles	Up to 2000; only static use for rotating applications
Operation	pneumatic
Operating temperature	-10 ... +70 [°C]
Shaft tolerance	f8/g8/h7
Hardness	min. 54 HRC

▶ RECOMMENDED ACCESSORIES



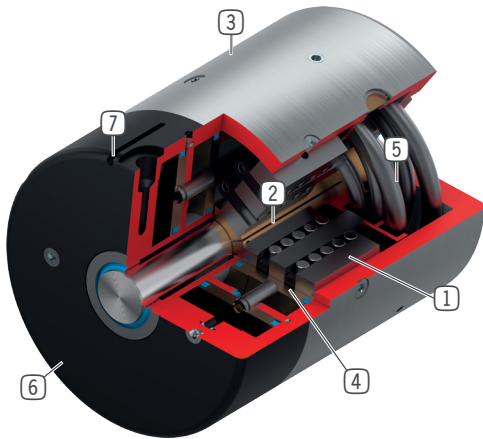
- 103151
* Sensor strip



- MFS02-K-KHC-P1-PNP
 - MFS02-K-KHC-P2-PNP
 - MFS02-S-KHC-P1-PNP
 - MFS02-S-KHC-P2-PNP
 - MFS01-K-KHC-P1-PNP
 - MFS01-S-KHC-P2-PNP
 - MFS01-S-KHC-P1-PNP
- Magnetic field sensor

* Only required for RBPS1000-A and smaller

► BENEFITS IN DETAIL



- ① **Wedge-type gear**
- Power transmission between piston and collet chuck
- ② **Collet chuck for clamping and braking**
- Pressed at the circular guide
- ③ **Housing**
- ④ **Pneumatic piston**
- The ring piston moves the wedge-type gear longitudinally
- ⑤ **Spring-loaded energy storage**
- For non-pressurized closing of the clamping unit
- ⑥ **Cover**
- ⑦ **Integrated slot (for size RBPS12 and larger)**
- Mounting and positioning of a magnetic field sensor (optional)

► TECHNICAL DATA

► SERIES RBPS CLAMPING AND BRAKING NC (NORMALLY CLOSED) CLOSED WITHOUT PRESSURE



Order no.	Shaft Ø* [mm]	Holding force [N]	Holding torque** [Nm]	ØD [mm]	L [mm]
RBPS0500-A	5	3500	5	49	68
RBPS0600-A	6	3500	6	49	68
RBPS0800-A	8	3500	8	49	68
RBPS1000-A ***	10	3500	11	49	68
RBPS1200-A	12	10000	36	99	150
RBPS1400-A	14	10000	42	99	150
RBPS1500-A	15	10000	42	99	150
RBPS1600-A	16	10000	48	99	150
RBPS1800-A	18	10000	54	99	150
RBPS2000-A ***	20	10000	60	99	150
RBPS2200-A	22	18000	120	135	165
RBPS2400-A	24	18000	130	135	165
RBPS2500-A	25	18000	140	135	165
RBPS2600-A	26	18000	140	135	165
RBPS2800-A ***	28	18000	150	135	165
RBPS3000-A	30	35000	320	170	220
RBPS3200-A	32	35000	340	170	220
RBPS3500-A	35	35000	370	170	220
RBPS3600-A	36	35000	380	170	220
RBPS3800-A	38	35000	400	170	220
RBPS4000-A	40	35000	420	170	220
RBPS4200-A	42	35000	440	170	220
RBPS4500-A ***	45	35000	470	170	220
RBPS5000-A	50	52000	780	205	232
RBPS5500-A	55	52000	780	205	232
RBPS6000-A ***	60	52000	780	205	232

*Min. hardness of 54 HRC

**Only for clamping for static use

*** Preferred size