

CLAMPING AND BRAKING ELEMENT | PNEUMATIC

CBPS2040-A

► PRODUCT ADVANTAGES



- **sensing with process reliability**
 - Sensing of opened/closed state (optional)
 - C-groove & T-groove for detection using a magnetic field sensor
- **Energize to open (NC)**
 - through spring-loaded energy storage
- **high durability**
 - 5 million static clamping cycles
- **Safety element**
 - Safe braking in case of energy failure
- **Standard interface**
 - Suitable for compact cylinders to DIN EN ISO 21287

► TECHNICAL DETAILS



- ① **Installation Options**
 - Standardized mounting interface for easy integration
- ② **Energy Supply**
 - Air connections on the sides and front for maximum flexibility
- ③ **Status Query**
 - Open/closed detection via magnetic field sensors
 - Integrated C-slots & T-slots
- ④ **Ventilation**
 - for fast and safe operation
- ⑤ **Accessibility**
 - Manual emergency release for unlocking during a power failure
- ⑥ **Protection**
 - Scrapers prevent foreign objects or dirt from entering

► INFORMATION ON THE PRODUCTS

APPLICATION SCENARIOS

- **Securing pneumatic cylinders**
- **Protecting the pneumatic cylinder from external forces**
- **Positioning of axes**
- **Fall protection**

FURTHER INFORMATION

- **The CBPS series is an extremely compact clamping and braking unit for all types of pneumatic cylinders. It is characterised by high holding force, a long service life and a genuine braking function – ideal for safe, space-saving solutions.**

► RECOMMENDED ACCESSORIES



ZCBPS0040-SC
Special Mounting Screw



ZCBPS2040-VA
External Thread Extension



ZCBPS2040-VI
Internal Thread Extension



ZCBPS2040-ZE
Centering Ring



MFS02-K-KHC-P1-PNP
Magnetic field sensor straight, cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector

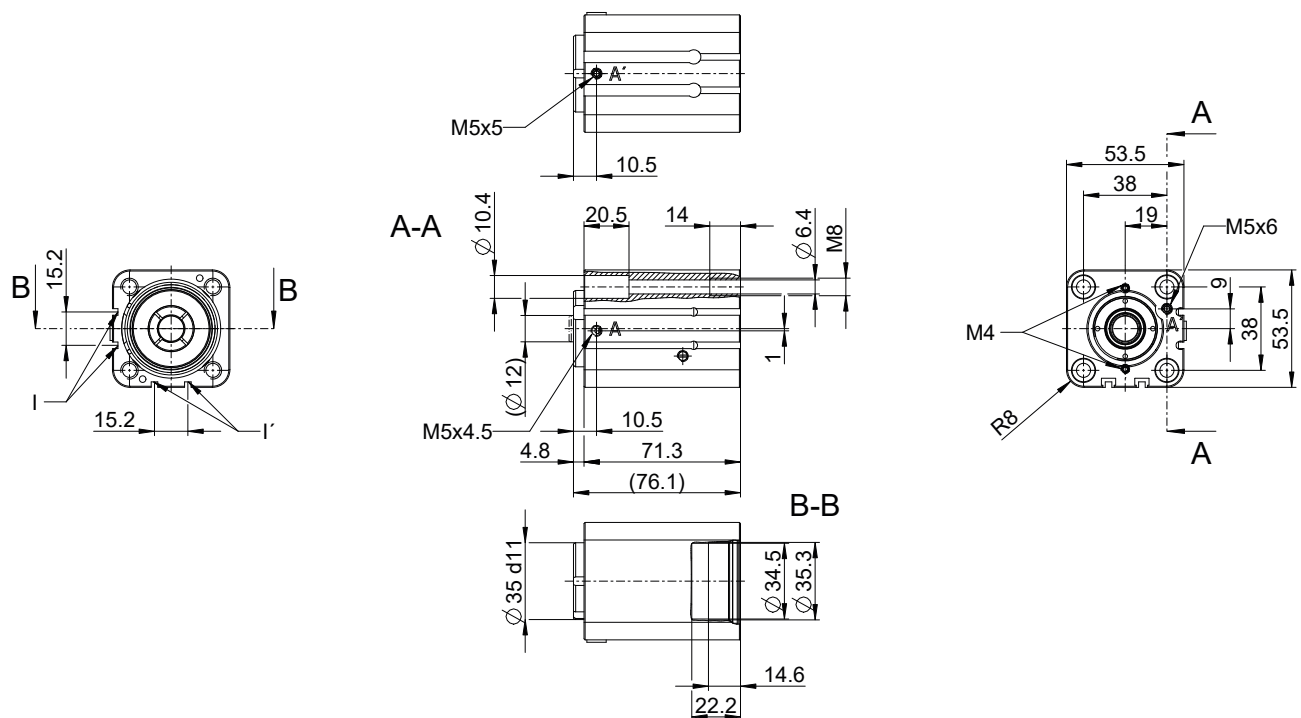


MFS01-K-KHC-P1-PNP
Magnetic field sensor angled, cable 5 m

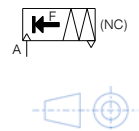


MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector

► TECHNICAL DRAWINGS



- Ⓐ Connection opening
- Ⓐ• Connection alternative opening
- Ⓜ Grooved Magnetic Field Sensor (C-Nut)
- Ⓜ Slot-Type Magnetic Field Sensor (T-Slot)



► TECHNICAL DATA

Order no.	CBPS2040-A
Operation	pneumatic
Holding force [N]	1360
Theoretical holding force ($\mu=0,1$) [N]	1,700
PLUS connection possible	No
Operating pressure [bar]	4 ... 6.5
B10d value	5,000,000
Positioning accuracy +/- [mm]	0,100
Opening time [s]	0.035
Closing time [s]	0.035
Operating temperature [°C]	-10 ... +70
Weight [kg]	0.59
Shaft Ø [mm]	12
Function	clamping and braking
Condition	NC (Normally Closed) closed without pressure
Installation direction	from the front
Wiper	yes
Air volume per cycle [cm³]	11
Sensor linkage	Sensing slot
Certifications	CE / UKCA / LABS / REACH / RoHS

Schematic drawing. General tolerances in accordance with DIN ISO 2768 T1-T2-H. Edges in accordance with ISO 13715. The element may only be used in the axial direction of movement. For rotational use, clarification with the technical department is required. Element has no guiding properties. Guidance must be provided externally. The holding force is the maximum force that can be applied in the axial direction. Each clamping and braking element is tested in a 100% inspection before delivery for the specified holding forces on a hardened round rail with a lightly oiled lubricating layer (ISO-VG 68). The use of other lubricants or rail coatings can influence the coefficient of friction. The operating instructions must be observed before commissioning. We reserve the right to make technical changes in the course of further development. The latest and further data can be found online and in the operating instructions at www.zimmer-group.com.