

Holds securely and monitors reliably

MAGNETIC FIELD SENSORS FOR C-SLOT

BMF magnetic field sensors for the C-slot from Balluff are mainly used to monitor the piston position on cylinders and grippers. The sensor detects the field of the magnet integrated in the piston through the cylinder wall. Thanks to this non-contact position detection, the sensors function wear-free and reliably, even at high travel speeds.

The correct sensor for every cylinder

Thanks to a special sensor element, the magnetic field sensors can be used on any cylinder regardless of the manufacturer. Less really is more now: the newest models replace several of our magnetic field sensors for the C-slot at once, which means that almost all cylinder sizes and makes can be covered with fewer designs.

Flexible integration options

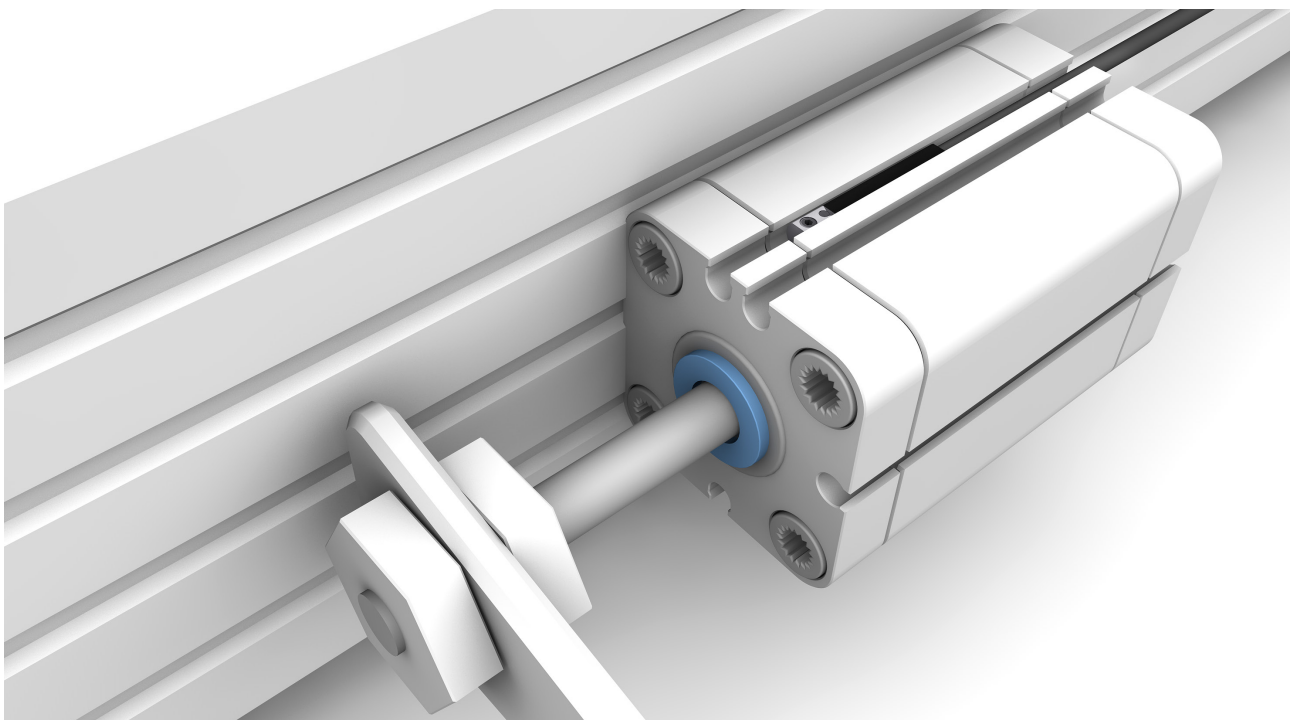
With just a few mounting and retaining materials, the magnetic field sensors can be securely attached to any pneumatic cylinder with a C-slot. Flush-mountable, they are also suitable for space-critical applications. Since they can be inserted from above, the magnetic field sensors also fit where groove ends are closed and lateral insertion is not possible. In addition, Balluff offers extremely short designs for short-stroke cylinders.

Reliably detect end position

In welding systems in the automotive industry, hold-down devices hold the sheets in the desired position during the welding process. A BMF magnetic field sensor integrated into the groove detects the piston end position on the hold-down pneumatic cylinder, thus ensuring smooth processes.

Features

- Quick assembly, firm hold
- No contact burning, bouncing or sticking
- Only one switching point (with LED display)
- Applicable for cylinders and grippers with strong or weak magnets
- IP67: insensitive to dirt
- Suitable for ambient temperatures $-25...+85\text{ }^{\circ}\text{C}$



Wear-free monitoring of piston position

BMF MAGNETIC FIELD SENSORS
STANDARD



PNP NORMALLY OPEN (NO)	BMF00P0	BMF00P3	BMF00NU	BMF00NW
PNP NORMALLY CLOSED (NC)	BMF00P1	BMF00P4	BMF00NY	
NPN NORMALLY OPEN (NO)	BMF00P2	BMF00P5	BMF00NZ	
Operating voltage	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
Switching frequency	500 Hz	500 Hz	500 Hz	500 Hz
Dimension	3.6 × 2.9 × 24 mm	3.6 × 2.9 × 24 mm	3.6 × 2.9 × 24 mm	3.6 × 2.9 × 24 mm
Mounting part	M2 screw	M2 screw	M2 screw	M2 screw
Housing material	PA 12	PA 12	PA 12	PA 12
Approval/conformity	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC	CE, cULus, EAC
IP rating	IP67	IP67	IP67	IP67
Ambient temperature	-25...+85 °C	-25...+85 °C	-25...+85 °C	-25...+85 °C
Connection	0.3 m PUR cable with M8 male, 3-pin	0.3 m PUR cable with M12 male, 4-pin	2 m PUR cable	5 m PUR cable

Mounting bracket for pneumatic cylinders with tie rods and a tool set for installation see www.balluff.com



BMF MAGNETIC FIELD SENSORS
SINGLE-CONNECTOR VERSIONS

PNP NORMALLY OPEN (NO)	BMF00P6	BMF00P7
NPN NORMALLY OPEN (NO)		BMF00P8
Operating voltage	10...30 V DC	10...30 V DC
Switching frequency	500 Hz	500 Hz
Dimension	3.6 × 2.9 × 24 mm	3.6 × 2.9 × 24 mm
Mounting part	M2 screw	M2 screw
Housing material	PA 12	PA 12
Approval/conformity	CE, cULus, EAC	CE, cULus, EAC
IP rating	IP67	IP67
Ambient temperature	-25...+85 °C	-25...+85 °C
Connection	0.3 m PUR cable with M8 male, 3-pin	0.3 m PUR cable with M12 male, 4-pin

BMF mounting bracket for pneumatic cylinders with tie rods and a tool set for installation see www.balluff.com



CONNECTIVITY

2 M PUR CABLE	BCC030K	BCC02M8
5 M PUR CABLE	BCC030L	BCC02M9
10 M PUR CABLE	BCC030M	BCC02MA
Connection	M12 female, straight, 5-pin, A-coded	M8 female, straight, 3-pin, A-coded
Cable	Black, drag chain compatible	Black, drag chain compatible