

Magnetic sensor for C-slots with multiple switchpoints

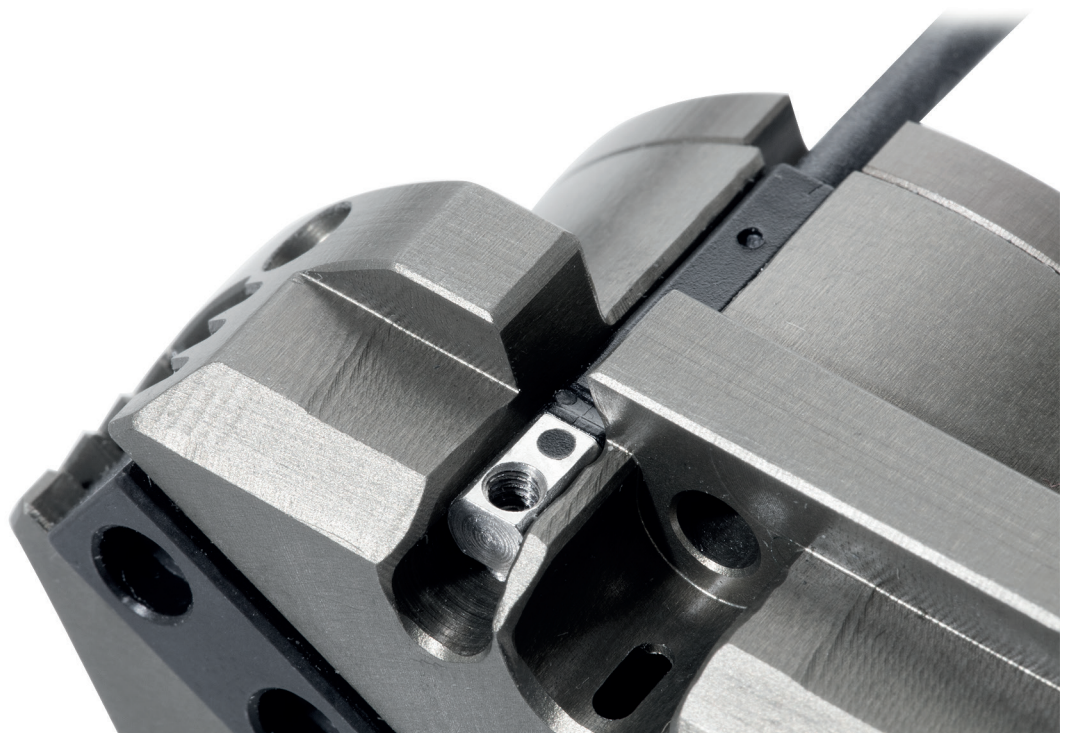
**60 mm detection area with two teachable outputs.
Up to eight switchpoints with IO-Link.**

- 10 mm more traverse distance than other magnetic sensors
- Sensor head length 20mm, with remote electronics
- PNP/NPN NO/NC; IO-Link PNP NO
- Pigtail M12, M8 and 2 m cable
- Temperature range -25 to +80 °C



For cylinders and grippers a teachable magnetic sensor with two switch points replaces two standard sensors. For longer cylinders the additional switch point can be used for example for reducing the air pressure before the end of stroke position of the cylinder. IO-Link offers up to eight switchpoints and along with individual hysteresis settings.

With a detection area of 60 mm, the sensor is ideally located in the middle of the cylinder offering the closest possible switchpoints. The teachable magnetic sensor for C-slots offers 10 mm more detection area vs standard offerings.



Magnetic sensor for C-slots with multiple switchpoints

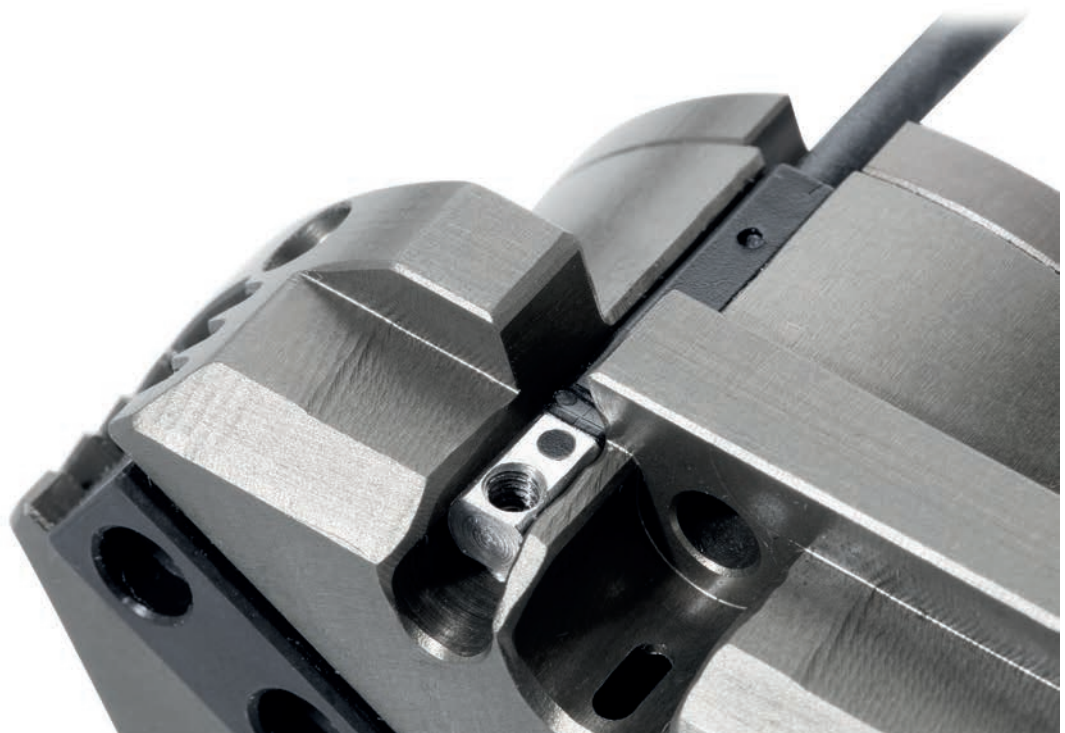
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Product group		Magnetic field sensor	Magnetic field sensor	Magnetic field sensor	
Measurement range		-30...+30 mm	-30...+30 mm	-30...+30 mm	
Area of application		Pneumatic cylinder and gripper with C-slot. For dimensions see drawing in datasheet	Pneumatic cylinder and gripper with C-slot. For dimensions see drawing in datasheet	Pneumatic cylinder and gripper with C-slot. For dimensions see drawing in datasheet	
Normally open (NO), IO-Link	PNP	Order code	BMF00K8	BMF00K9	BMF00JJ
		Part number	BMF 203K-H-PI-C-A8-PU-02	BMF 203K-H-PI-C-A8-S75-00,3	BMF 203K-H-PI-C-A8-S4-00,3
Normally open (NO)	PNP	Order code	BMF00JF	BMF00JH	
		Part number	BMF 203K-H-PS-C-A2-PU-02	BMF 203K-H-PS-C-A2-S75-00,3	
Normally open (NO)	NPN	Order code	BMF00K2	BMF00K3	
		Part number	BMF 203K-H-NS-C-A2-PU-02	BMF 203K-H-NS-C-A2-S75-00,3	
Normally closed (NC)	PNP	Order code	BMF00K4	BMF00K5	
		Part number	BMF 203K-H-PO-C-A2-PU-02	BMF 203K-H-PO-C-A2-S75-00,3	
Normally closed (NC)	NPN	Order code	BMF00K0	BMF00K1	
		Part number	BMF 203K-H-NO-C-A2-PU-02	BMF 203K-H-NO-C-A2-S75-00,3	
Connection type		Cable	Cable with connector	Cable with connector	
Connector type		-	M08x1-S75	M12x1-S04	
Cable length		2.00 m	0.30 m	0.30 m	
Housing material		PA 12	PA 12	PA 12	
Supply voltage		10.0...30.0 V	10.0...30.0 V	10.0...30.0 V	
Enclosure Type per IEC 60529		IP67	IP67	IP67	
Ambient temperature		-25...80 °C	-25...80 °C	-25...80 °C	
Repeatability max.		0.2 mm	0.2 mm	0.2 mm	

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Accessories



Description	Network interface	Network interface		
Order code	BNI006A	BNI0073		
Part number	BNI EIP-508-105-Z015	BNI USB-901-013-A501		



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		Part number	BMF 203K-H-PI-C-A8-PU-02	BMF 203K-H-PI-C-A8-S75-00,3	BMF 203K-H-PI-C-A8-S4-00,3		
Normally open (NO)	NPN	Order code	BMF00JF	BMF00JH			
		Part number	BMF 203K-H-PS-C-A2-PU-02	BMF 203K-H-PS-C-A2-S75-00,3			
Normally closed (NC)	PNP	Order code	BMF00K2	BMF00K3			
		Part number	BMF 203K-H-NS-C-A2-PU-02	BMF 203K-H-NS-C-A2-S75-00,3			
Normally closed (NC)	NPN	Order code	BMF00K4	BMF00K5			
		Part number	BMF 203K-H-PO-C-A2-PU-02	BMF 203K-H-PO-C-A2-S75-00,3			
		Order code	BMF00K0	BMF00K1			
		Part number	BMF 203K-H-NO-C-A2-PU-02	BMF 203K-H-NO-C-A2-S75-00,3			
Connection type		Cable		Cable with connector		Cable with connector	
Connector type		-		M08x1-S75		M12x1-S04	
Cable length		2.00 m		0.30 m		0.30 m	
Housing material		PA 12		PA 12		PA 12	
Supply voltage		10.0...30.0 V		10.0...30.0 V		10.0...30.0 V	
Enclosure Type per IEC 60529		IP67		IP67		IP67	
Ambient temperature		-25...80 °C		-25...80 °C		-25...80 °C	
Repeatability max.		0.2 mm		0.2 mm		0.2 mm	

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Magnetic Sensor for T-slots with Multiple Switchpoints

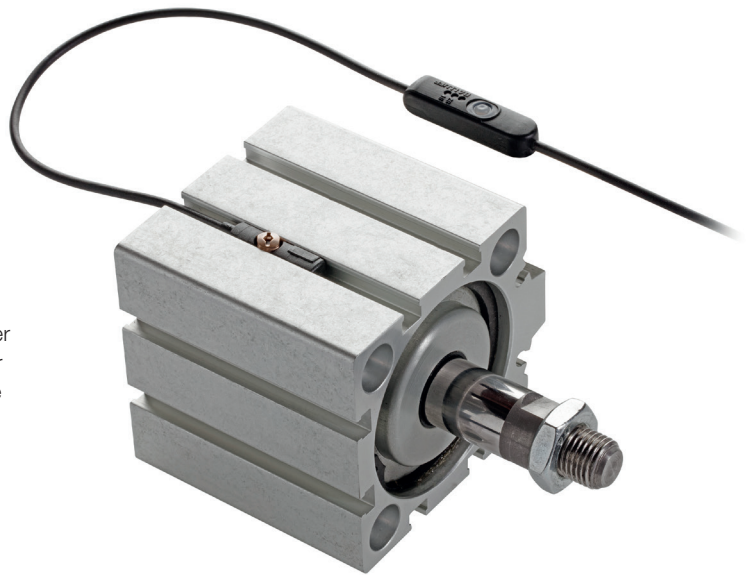
**60 mm detection area with two teachable outputs –
up to eight switchpoints with IO-Link**

- 10 mm more traverse distance than other magnetic sensors
- Sensor head length 27 mm, with remote electronics
- PNP/NPN NO/NC; IO-Link PNP NO
- Pigtail M12, M8 and 2 m cable
- Temperature range -25 to +80 °C



For cylinders, grippers and valves a teachable magnetic sensor with two switch points replaces two standard sensors. For longer cylinders the additional switch point can be used for example for reducing the air pressure before the end of stroke position of the cylinder. IO-Link offers up to eight switchpoints and along with individual hysteresis settings.

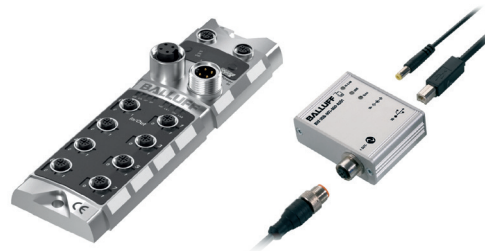
With a detection area of 60 mm, the sensor is ideally located in the middle of the cylinder offering the closest possible switchpoints. The teachable magnetic sensor for C-slots offers 10 mm more detection area vs standard offerings.





Series	BMF 235	BMF 235	BMF 235
Measuring range	-30...+30 mm	-30...+30 mm	-30...+30 mm
Programmable switchpoints	2 (8 with IO-Link)	2 (8 with IO-Link)	2
PNP, NO	BMF00KH	BMF00L6	
NPN, NO	BMF00L3	BMF00L8	
PNP, NC	BMF00L2	BMF00L7	
NPN, NC	BMF00L4	BMF00L9	
PNP, NO, with IO-Link	BMF00L5	BMF00LA	BMF00LC
Supply voltage U_B	10...30 V DC	10...30 V DC	10...30 V DC
Voltage drop U_d	1.5 V	1.5 V	1.5 V
Rated insulation voltage U_i	75 V DC	75 V DC	75 V DC
Rated operating current I_o	100 mA	100 mA	100 mA
No-load supply current I_o max.	≤ 10 mA	≤ 10 mA	≤ 10 mA
Polarity reversal protected/short-circuit protected	Yes/yes	Yes/yes	Yes/yes
Reproducibility max.	0.2 mm	0.2 mm	0.2 mm
Temperature drift of switch-on point of I H _n I typ.	1 mm	1 mm	1 mm
Hysteresis typ.	Standard versions IO-Link versions	Adjustable	Adjustable
On/off delay	≤ 25 ms	≤ 25 ms	≤ 25 ms
Ambient temperature T_a	-25...+80 °C	-25...+80 °C	-25...+80 °C
Degree of protection per IEC 60529	IP67	IP67	IP67
Material	Housing	PA 12	PA 12
Connection	2 m PUR cable, 4 × 0.07 mm ²	0.3 m PUR cable with M8 connector, 4-pin	0.3 m PUR cable with M12 connector, 4-pin
Assembly	Can be installed from above	Can be installed from above	Can be installed from above
Slot	Ʇ5 T-slot	Ʇ5 T-slot	Ʇ5 T-slot

Accessories



Description	Ethernet/IP module with IO-Link functionality	USB IO-Link master tool
IO-Link	BNI006A	BNI0073

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