



Basic features

Application	Optimized response path especially suited for short-stroke cylinders.
Approval/Conformity	cULus CE UKCA WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Magnetic field sensor
Trademark	Global

Display/Operation

Function indicator	yes
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Electrical connection

Cable	PUR, 0.3 m
Cable diameter D	2.50 mm
Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Assured switching field strength Ha	2 kA/m
Load capacitance max. at Ue	1 µF
No-load current Io max., undamped	5 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	Open drain
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	100 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Rated switch field strength Hn	1.2 kA/m
Residual current Ir max.	80 µA
Ripple max. (% of Ue)	15 %
Switching frequency	7000 Hz
Turn-off delay toff max.	0.07 ms
Turn-on delay ton max.	0.07 ms
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-25...85 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
ESD	3A(8KV)
Emission	Group 1, Class B
IP rating	IP67

Interface

Switching output	PNP normally open (NO)
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Magnetic Sensors
BMF 214K-PS-C-2A-SA2-S4-00,3
Order Code: **BMF00FC**

BALLUFF

Material

Housing material	PA 12
Material jacket	PUR

Mechanical data

Dimension	16.8 x 2.9 x 4.5 mm
Mounting part	C-slot SMC Bimba Schunk
Tightening torque	0.03 Nm

Range/Distance

Temp. drift max. (% of Hn)	0.3 %
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Remarks

Max. pull force on cable 10 N.

EMC: Surge resistance

External protection circuit is required. Document 825345, Section 2.

The sensor is functional again after the overload has been eliminated.

UL-MARKINGS: - For use in NFPA 79 Applications only - Adapters providing field wiring means are available from the manufacturer. Refer to manufacturers information.

Connector Drawings



Wiring Diagrams

