



### Basic features

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

### Display/Operation

<b>Function indicator</b>	yes
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### Electrical connection

<b>Cable</b>	PUR, 0.30 m
<b>Cable diameter D</b>	2.50 mm
<b>Connection</b>	M12x1-Male, 4-pin, A-coded
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes
<b>Short-circuit protection</b>	yes

### Electrical data

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

### Environmental conditions

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

### Material

<b>Housing material</b>	PA 12
<b>Material jacket</b>	PUR

Magnetic Sensors  
**BMF 214K-PS-C-2A-SA2-S4-00,3**  
Order Code: BMF00FC

**BALLUFF**

**Mechanical data**

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

**Output/Interface**

Switching output	PNP normally open (NO)
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**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.

**Connector Drawings**



**Wiring Diagrams**

