

1) Sensing surface, 2) see remarks, 3) see remarks, 4) see remarks



Basic features

Approval/Conformity	cULus CE UKCA WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Magnetic field sensor
Scope of delivery	Cable clip for T-slot

Display/Operation

Function indicator	yes
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Electrical connection

Cable	TPE welding spark resistant, 0.5 m
Cable diameter D	2.50 mm
Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	no
Short-circuit protection	yes

Electrical data

Assured switching field strength H_a	2 kA/m
Hysteresis H max. (% of H_n)	45 %
Load capacitance max. at U_e	1 μ F
No-load current I_o max., undamped	3 mA
Operating voltage U_b	10...30 VDC
Output resistance R_a	Open drain
Rated insulation voltage U_i	75 V DC
Rated operating current I_e	200 mA
Rated operating voltage U_e DC	24 V
Rated short circuit current	100 A
Rated switch field strength H_n	1.2 kA/m
Residual current I_r max.	80 μ A
Ripple max. (% of U_e)	15 %
Switching frequency	3000 Hz
Turn-off delay t_{off} max.	0.1 ms
Turn-on delay t_{on} max.	0.1 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 g_n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
ESD	2A (4 kV)/3A (8 kV)
Emission	Group 1, Class B
IP rating	IP67

Magnetic Sensors
BMF 235K-PS-C-2A-SA5-S49-00,5
Order Code: **BMF00KF**



Interface

Switching output PNP normally open (NO)

Material

Housing material PA 12
Material jacket TPE, welding spark resistant
Material sensing surface PU

Mechanical data

Dimension 23.5 x 5 x 5.5 mm
Tightening torque 0.4 Nm

Range/Distance

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

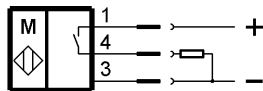
Remarks

2) Application area: pneumatic cylinder with t-slot. For dimensions, see sketch in product view.
4) Allen wrench 2.0 mm: max. tightening torque 0.4 Nm. Screw driver 4x0.8 mm: max. tightening torque 1 Nm
Effective operating current I_e with thermally coupled installation in metal.
Damping magnet axially magnetized
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



Help Views

