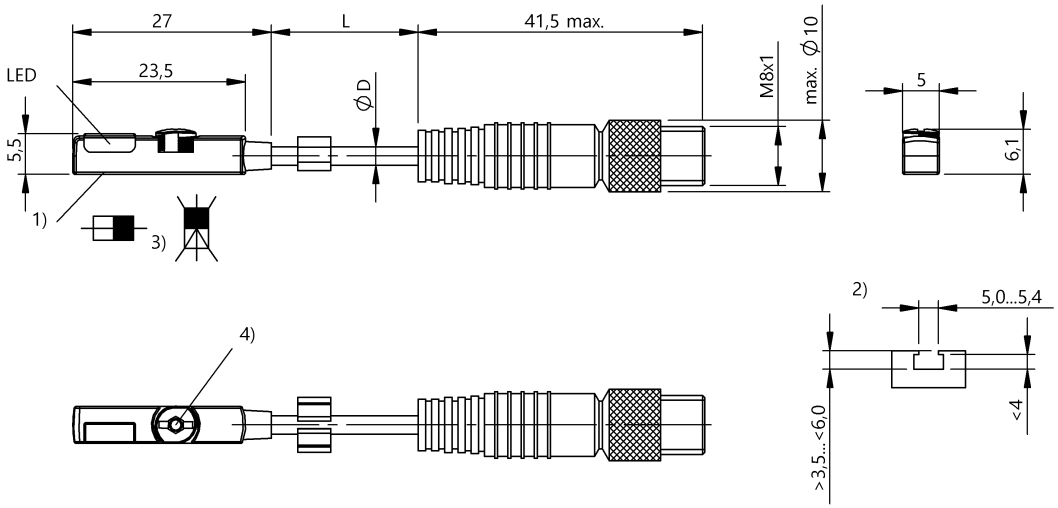
Magnetic Sensors

BMF 235K-PS-C-2A-SA2-S49-00,3
Order Code: BMF00C4



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

Basic features

Application	Pneumatic cylinder with T-slot. For dimensions, see sketch in product view.
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
Trademark	Global

Display/Operation

Function indicator	yes

Electrical connection

Cable diameter D	2.50 mm
Cable jacket, material	PUR
Cable length L	0.30 m
Connection	M8x1-Male, 3-pin
Polarity reversal protected	no
Protection against device mix-ups	no
Short-circuit protection	yes

Electrical data

Assured switching field strength Ha	2 kA/m
Hysteresis H max. (% of Hn)	45 %
Load capacitance max. at Ue	1 µF
No-load current Io max., undamped	3 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	Open drain
Rated insulation voltage Ui	75 V DC
Rated operating current Ie	200 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	3000 Hz
Turn-off delay toff max.	0.1 ms
Turn-on delay ton 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	3A(8KV)
Emission	Group 1, Class B
IP rating	IP67

Magnetic Sensors

BMF 235K-PS-C-2A-SA2-S49-00,3
Order Code: BMF00C4

Functional safety

MTTF (40 °C)	355 a

Interface

Switching output	PNP normally open (NO)

Material

Housing material	PA 12
Material jacket	PUR
Material sensing surface	PU

Mechanical data

Dimension	23.5 x 5 x 5.5 mm
Mounting part	can be installed in T-slot from above
Tightening torque	0.4 Nm

Range/Distance

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

Remarks

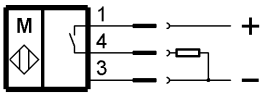
Damping magnet axially magnetized
Effective operating current Ie with thermally coupled installation in metal.
2) Application area: pneumatic cylinder with t-slot. For dimensions, see sketch in product view.
4) Allen wrench 2.0 mm: max. tightening torque 0.4 Nm. Screw driver 4x0.8 mm: max. tightening torque 1 Nm
UL-MARKINGS: - For use in NFPA 79 Applications only - Adapters providing field wiring means are available from the manufacturer. Refer to manufacturers information.
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



Wiring Diagrams (Schematic)



Help Views

