

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
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Electrical connection

Cable	PUR, 2 m
Cable diameter D	2.50 mm
Conductor cross-section	0.10 mm ²
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 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

Magnetic Sensors
BMF 235K-PS-C-2A-PU-02
Order Code: BMF00AR



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

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.

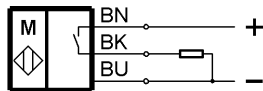
Damping magnet axially magnetized

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

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.

Wiring Diagrams



Help Views

