



1) Sensing surface



Basic features

Application	Object detection
Approval/Conformity	CE UKCA WEEE cULus
Basic standard	IEC 60947-5-2
Principle of operation	Magnetic field sensor
Scope of delivery	Cable clip for C-slot
Trademark	Global

Display/Operation

Function indicator	Active, LED yellow
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Electrical connection

Cable	PUR, 0.3 m
Cable diameter D	2.4 mm
Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Assured switching field strength Ha	2.9 kA/m
Load capacitance max. at Ue	1 µF
No-load current I ₀ max., undamped	2 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	100 mA
Rated operating voltage U _e DC	24 V
Rated short circuit current	100 A
Rated switch field strength H _n	2.5 kA/m
Residual current I _r max.	10 µA
Ripple max. (% of U _e)	15 %
Switching frequency	500 Hz
Utilization category	DC -13
Voltage drop static max.	1 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)
Emission	Group 1, Class B
IP rating	IP67

Functional safety

MTTF (40 °C)	1879 a
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Smart Automation and Monitoring System
Magnetic Sensors
BMF 423K-AAPS-C-2-P0-S49-00,3
Order Code: BMF00P0

BALLUFF

Interface

Switching output PNP normally open (NO)

Material

Clamping screw material Stainless steel
Housing material PA 12
Material jacket PUR
Material sensing surface PA 12

Mechanical data

Dimension 24 x 2.9 x 24 mm
Mounting part Screw M2
Size C-slot
Tightening torque 0.07 Nm

Remarks

Damping magnet axially magnetized

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

