

1) Sensing surface



### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Not incl. in scope of delivery	Mounting bracket, e.g. BMF 305-HW-17
Principle of operation	Magnetic field sensor

### Display/Operation

Function indicator	yes
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### Electrical connection

Cable diameter D	2.90 mm
Cable jacket, material	PUR
Cable length L	2.00 m
Connection	M8x1-Male, 3-pin
Polarity reversal protected	yes
Protection against device mix-ups	yes
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 $\mu$ F
No-load current $I_o$ max., undamped	10 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 $\mu$ A
Ripple max. (% of $U_e$ )	15 %
Switching frequency	10000 Hz
Turn-off delay $t_{off}$ max.	0.05 ms
Turn-on delay $t_{on}$ max.	0.05 ms
Utilization category	DC -13
Voltage drop static max.	3.1 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	4A(15kV)
IP rating	IP67

Functional safety

MTTF (40 °C) 330 a

Interface

Switching output PNP normally open (NO)

Material

Housing material LCP  
 Material jacket PUR  
 Material sensing surface PU

Mechanical data

Dimension 33.5 x 5 x 10.5 mm

Range/Distance

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

Remarks

The sensor is functional again after the overload has been eliminated.

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

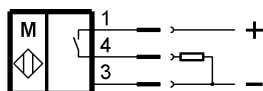
For more information about MTTF and B10d see MTTF / B10d Certificate

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)



## Technical Drawings

