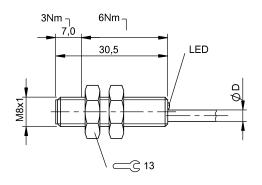
BALLUFF







yes

Basic features

Application	Flexible mounting Switching distances > 20 mm possible
Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Magnetic field sensor

Display/Operation

Function indicator

Electrical connection

Cable diameter D	3.10 mm
Cable jacket, material	PUR
Cable length L	5.00 m
Conductor cross-section	0.14 mm ²
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Assured switching field strength Ha	2 kA/m
Load capacitance max. at Ue	1 µF
No-load current lo max., undamped	10 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	Open drain
Rated insulation voltage Ui	75 V DC
Rated operating current le	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 μΑ
Ripple max. (% of Ue)	15 %
Switching frequency	10000 Hz
Turn-off delay toff max.	0.05 ms
Turn-on delay ton max.	0.05 ms
Utilization category	DC -13
Voltage drop static max.	3.1 V

Environmental conditions

Ambient temperature	-2585 °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(8KV)
IP rating	IP67

Functional safety

MTTF (40 °C)

330 a

eCl@ss 9.1: 27-27-01-04 ETIM 6.0: EC002544 BMF000T_1_2025-01-08

Magnetic Sensors BMF 08M-PS-C-2-KPU-05 Order Code: BMF000T



Ø 8 x 30.5 mm Clamps M8x1

3 Nm/6 Nm

Interface

Mechanical data

Switching output	PNP normally open (NO)	Dimension
		Mounting part
Material		Size
Housing material	Brass, nickel-plated	Tightening torque
Material jacket	PUR	
Material sensing surface	PBTB	
Surface protection	nickel-plated	

Remarks

The switching distance depends on the magnet used. Switching distances of >20 mm can be achieved.

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

EMC: Surge resistance

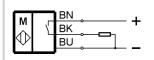
External protection circuit is required. Document 825345, Section 2.

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

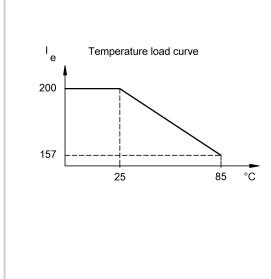
For more information about MTTF and B10d see MTTF / B10d Certificate

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 (Schematic)



Technical Drawings



Internet