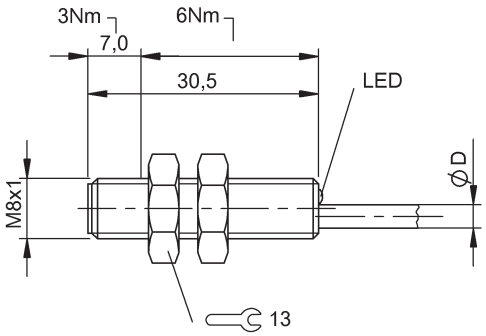
Magnetic field sensor

BMF 08M-PS-C-2-KPU-05
BMF000T

BALLUFF
sensors worldwide



- **Magnetic field sensor**
- **Normally open (NO)**

CE cULus LISTED IND. CONT. EQ. 81U2 for use in the secondary of a class 2 source of supply

General attributes

Approvals / Conformity	CE cULus
Basic standard	IEC 60947-5-2
Enclosure Type per IEC 60529	IP67
Function indicator	yes
Polarity reversal protected	yes
Short circuit protected	yes

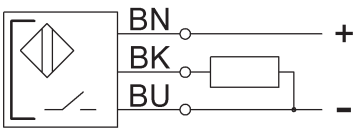
Electrical attributes

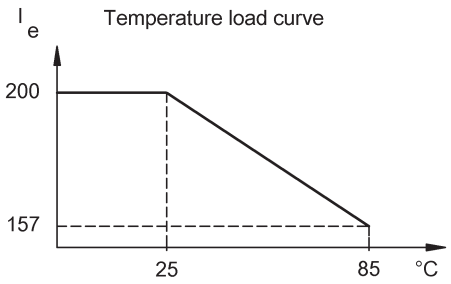
Assured switching field streng	2.0 kA/m
Connection type	Cable
Eff. operating current Ie	200 mA
Eff. operating voltage Ue DC	24.0 V
Electrical version	DC, direct current
Load capacitance max. (at Ue)	1.00 µF
Max. no-load cur. Io undamped	10.0 mA
No-load current Io damped max.	15.0 mA
Operating voltage UB max. DC [V]	30.0 V
Operating voltage UB min. DC [V]	10.0 V
Rated insulation voltage Ui	75 DC
Rated short circuit current	100 A
Rated switching field strength	1.2 kA/m
Ripple max. (% of Ue)	15 %
Switching freq. f max. (at Ue)	10000 Hz
Switching function	Normally open (NO)
Switching output	PNP
Turn on time ton max.	0.05 ms
Voltage drop static max.	3.1 V

Mechanical attributes

Ambient temperature Ta max.	85 °C
Ambient temperature Ta min.	-25 °C
Cable diameter D max.	3.1 mm
Cable jacket material	PUR
Cable length	5.00 m
Conductor cross-section	0.14 mm²
Depth	30.50 mm
Diameter d1	M08x1.0
Housing material	CuZn
Mounting length	30.5 mm
Number of conductors	3
Sensing face material	PBTB
Surface protection	Nickel-plated
Tightening torque	3 Nm / 6 Nm

Additional text
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 immunity; external protection circuit required. Document 825345, Section 2.




I e
Temperature load curve
200
157
25
85
°C