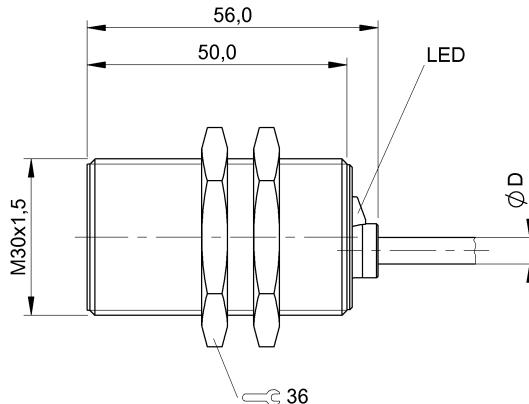


Inductive Sensors  
BES M30MI-NOC10B-BP03  
Order Code: BES0095

**BALLUFF**



#### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Trademark	Global

#### Display/Operation

Function indicator	yes
Power indicator	no

#### Electrical connection

Cable diameter D	4.60 mm
Cable length L	3 m
Conductor cross-section	0.34 mm <sup>2</sup>
Connection type	Cable, 3.00 m, TPU
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

#### Electrical data

Load capacitance max. at Ue	1 µF
Min. operating current I <sub>m</sub>	0 mA
No-load current I <sub>0</sub> max., damped	5 mA
No-load current I <sub>0</sub> max., undamped	10 mA
Operating voltage U <sub>b</sub>	12...30 VDC
Output resistance R <sub>a</sub>	33.0 kOhm + D
Protection class	II
Rated insulation voltage U <sub>i</sub>	250 V AC
Rated operating current I <sub>e</sub>	200 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	150 ms
Residual current I <sub>r</sub> max.	20 µA
Ripple max. (% of U <sub>e</sub> )	15 %
Switching frequency	400 Hz
Utilization category	DC-13
Voltage drop static max.	2.5 V

#### Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP68

#### Functional safety

MTTF (40 °C)	880 a
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#### Interface

Switching output	NPN normally closed (NC)
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Material

Housing material	Brass, nickel-plated
Material jacket	TPU
Material sensing surface	PA 12

Mechanical data

Dimension	Ø 30 x 56 mm
Installation	for flush mounting
Mounting length	50.00 mm
Size	M30x1.5
Tightening torque	70 Nm

Remarks

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

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

