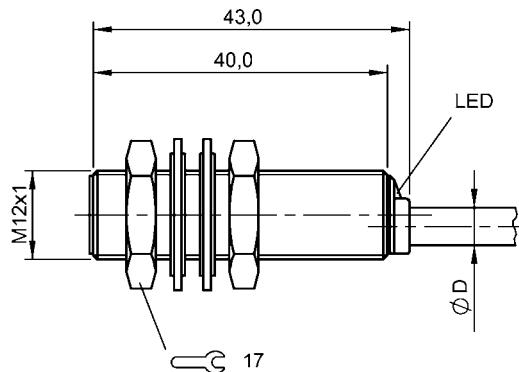


Inductive Sensors

BES M12MG-USC30B-BV05

Order Code: BES004W

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	5 m
Conductor cross-section	0.34 mm ²
Connection type	Cable, 5.00 m, PVC
Number of conductors	2
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	1 μ F
Min. operating current I _m	5 mA
Operating voltage U _b	10...36 VDC
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
Ready delay t _v max.	50 ms
Residual current I _r max.	600 μ A
Ripple max. (% of U _e)	15 %
Switching frequency	1300 Hz
Utilization category	DC-13
Voltage drop static max.	5.3 V

Environmental conditions

Ambient temperature	-25...70 °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
IP rating	IP67

Functional safety

MTTF (40 °C)	315 a
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Interface

Switching output	Non-polarized normally open (NO)
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Material

Housing material	Brass, Nickel-free coated
Material jacket	PVC
Material sensing surface	PA 12

Mechanical data

Dimension	Ø 12 x 43 mm
Installation	for flush mounting
Mounting length	40.00 mm
Size	M12x1
Tightening torque	15 Nm

Remarks

Specify maximum attainable switching frequency (not per IEC 60947-5-2)

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

