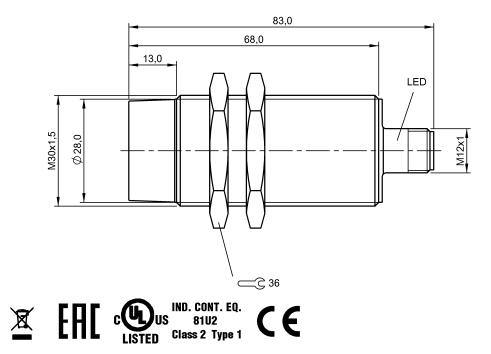
Inductive Sensors BES M30MM-NSC30F-S04K Order Code: BES00AP

BALLUFF



Basic features

Approval/Conformity	CE cULus EAC WEEE
Basic standard Trademark	IEC 60947-5-2 Global
Display/Operation	
Function indicator	yes
Power indicator	no

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at Ue	0.5 μF
Min. operating current Im	0 mA
No-load current lo max., damped	14 mA
No-load current lo max., undamped	3 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	33.0 kOhm + D
Rated insulation voltage Ui	250 V AC
Rated operating current le	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	20 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	300 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

Environmental conditions

Ambient temperature	-2570 °C	
Contamination scale	3	
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms	
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min	
Protection degree	IP67	

Functional safety

MTTF (40 °C)

620 a

Inductive Sensors BES M30MM-NSC30F-S04K **Order Code: BES00AP**



Material

Material		Output/Interface		
Housing material	Brass	Switching output	NPN normally open (NO)	
Material sensing surface	PBT			
Surface protection	Nickel-free coated	Range/Distance		
		Assured operating distance Sa	24 mm	
Mechanical data		Hysteresis H max. (% of Sr)	20.0 %	
Dimension	Ø 30 x 83 mm	Rated operating distance Sn	30 mm	
Installation	non-flush	Real switching distance sr	30 mm	
Size	M30x1.5	Repeat accuracy max. (% of Sr)	5.0 %	
Tightening torque	70 Nm	Switching distance marking	••	
		Temperature drift max. (% of Sr)	10 %	
		Tolerance Sr	±10 %	

Remarks

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

Not for flush mounting: See installation instructions for inductive sensors with extended range 939229. 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

