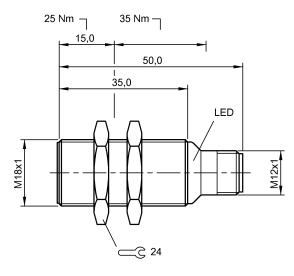
Inductive Sensors BES M18MF-USC70B-S04K Order Code: BES006A

BALLUFF





Basic features

Function indicator	yes	
Display/Operation		
Trademark	Global	
Basic standard	IEC 60947-5-2	
	WEEE	
	EAC	
	cULus	
Approval/Conformity	CE	

no

Electrical connection

Power indicator

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	1 µF
Min. operating current Im	5 mA
Operating voltage Ub	1036 VDC
Rated insulation voltage Ui	75 V DC
Rated operating current le	100 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	50 ms
Residual current Ir max.	600 µA
Ripple max. (% of Ue)	15 %
Switching frequency	600 Hz
Utilization category	DC -13
Voltage drop static max.	5.3 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)	315 a
Material	
Housing material	Brass
Material sensing surface	PA 12
Surface protection	Nickel-free coated

Inductive Sensors BES M18MF-USC70B-S04K Order Code: BES006A

BALLUFF

Mechanical data

Range/Distance

Dimension	Ø 18 x 50 mm	Assured operating distance Sa	5.6 mm	
Installation	for flush mounting	Hysteresis H max. (% of Sr)	20.0 %	
Size	M18x1	Rated operating distance Sn	7 mm	
Tightening torque	25 Nm	Real switching distance sr	7 mm	
		Repeat accuracy max. (% of Sr)	5.0 %	
Output/Interface		Switching distance marking		
Switching output	non-polarized normally open (NO)	Temperature drift max. (% of Sr)	10 %	
		Tolerance Sr	±10 %	

Remarks

The sensor is functional again after the overload has been eliminated. Specify maximum attainable switching frequency (not per IEC 60947-5-2) Flush: See installation instructions for inductive sensors with extended range 825357. 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

