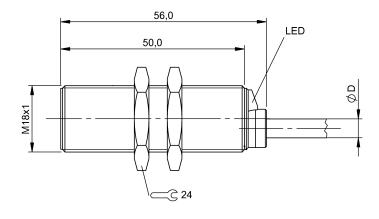
Inductive Sensors BES M18MI-PSC80B-BP05 **Order Code: BES008A**

BALLUFF



IND. CONT. EQ. 81U2 US Class 2 Type 1





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, PUR
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 Im	0 mA
No-load current lo max., damped	15 mA
No-load current lo max., undamped	8 mA
Operating voltage Ub	1230 VDC
Output resistance Ra	33.0 kOhm + D
Protection class	П
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.	30 ms
Residual current Ir max.	20 µA
Ripple max. (% of Ue)	15 %
Switching frequency	150 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
IP rating	IP68

Functional safety

MTTF (40 °C)

330 a

Inductive Sensors BES M18MI-PSC80B-BP05 **Order Code: BES008A**



±10 %

General data		Mechanical data	Mechanical data	
Approval/Conformity Basic standard	CE cULus EAC WEEE IEC 60947-5-2	Dimension Installation Size Tightening torque	Ø 18 x 56 mm for flush mounting M18x1 25 Nm	
Trademark	Global	Output/Interface		
Material		Switching output	PNP normally open (NO)	
Housing material Material jacket	Brass PUR	Range/Distance		
Material sensing surface	PA 12	Assured operating distance Sa	6.4 mm	
Surface protection	nickel plated	Hysteresis H max. (% of Sr)	15.0 %	
		Rated operating distance Sn	8 mm	
		Real switching distance sr	8 mm	
		Repeat accuracy max. (% of Sr)	5.0 %	
		Switching distance marking		
		Temperature drift max. (% of Sr)	10 %	

Remarks

Flush: See installation instructions for inductive sensors with extended range 939221.

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

For further information about the 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.

Tolerance Sr

Wiring Diagrams

