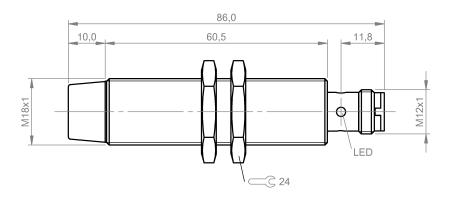
## **Inductive Sensors** BES M18MN-PAH16F-S04G **Order Code: BES04RM**







#### **Basic features**

Approval/Conformity	CE EAC WEEE cULus
Basic standard	IEC 60947-5-2
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	13 mA
No-load current lo max., undamped	7 mA
Operating voltage Ub	1055 VDC
Output resistance Ra	33.0 kOhm + 2D
Protection class	II
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.	35 ms
Residual current Ir max.	10 µA
Ripple max. (% of Ue)	15 %
Switching frequency	430 Hz
Utilization category	DC -13
Voltage drop static max.	2.5 V

### **Environmental conditions**

Ambient temperature	-4085 °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)

271 a

eCl@ss 9.1: 27-27-01-01 ETIM 6.0: EC002714 BES04RM\_0.62\_2022-04-21

# Inductive Sensors BES M18MN-PAH16F-S04G Order Code: BES04RM



#### Interface

		itangoizi
Switching output	PNP normally open/normally closed (NO/NC)	Assured oper Hysteresis H Rated operati
Material		Real switchin
Housing material Material sensing surface Mechanical data	Brass, Nickel-free coated PBT	Repeat accur Switching dis Temperature Tolerance Sr
Dimension Installation Size Tightening torque	Ø 18 x 86 mm non-flush M18x1 25 Nm	

#### **Range/Distance**

Assured operating distance Sa	12.8 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	16.0 mm
Real switching distance sr	16 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	
Temperature drift max. (% of Sr)	15 %
Tolerance Sr	±10 %

#### Remarks

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

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

