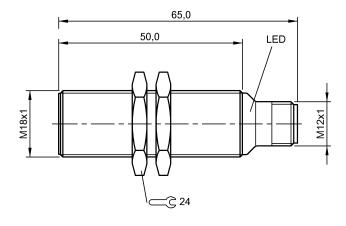
## Inductive Sensors BES M18MI-NSC50B-S04K Order Code: BES007F

# BALLUFF



EHC	CE	CUS IND. CONT. EQ. 81U2 LISTED Class 2 Type 1		X
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#### **Basic features**

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

#### Function indicator Power indicator

# Electrical connection

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

no

#### 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	6 mA
Operating voltage Ub	1230 VDC
Output resistance Ra	3.3 kOhm + D + LED
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.	30 ms
Residual current Ir max.	20 μΑ
Ripple max. (% of Ue)	15 %
Switching frequency	700 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	IP68

#### **Functional safety**

MTTF (40 °C)

710 a

## **Inductive Sensors** BES M18MI-NSC50B-S04K **Order Code: BES007F**



#### Material

Material		Output/Interface	
Housing material	Brass	Switching output	NPN normally open (NO)
Material sensing surface	PA 12		
Surface protection	nickel plated	Range/Distance	
Mechanical data		Assured operating distance Sa	4 mm
		Hysteresis H max. (% of Sr)	15.0 %
Dimension	Ø 18 x 65 mm	Rated operating distance Sn	5 mm
Installation	for flush mounting	Real switching distance sr	5 mm
Size	M18x1	Repeat accuracy max. (% of Sr)	5.0 %
Tightening torque	35 Nm	Temperature drift max. (% of Sr)	10 %
		Tolerance Sr	±10 %

#### Remarks

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.

# **Connector Drawings**



## Wiring Diagrams

