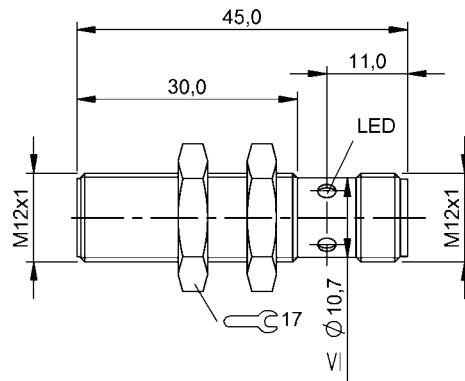


Inductive Sensors  
BES M12EE-PSC40B-S04G  
Order Code: BES014W

**BALLUFF**



## Basic features

Approval/Conformity	CE UKCA cULus WEEE
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 $\mu$ F
Min. operating current Im	0 mA
No-load current Io max., damped	10 mA
No-load current Io max., undamped	3 mA
Operating voltage Ub	10...30 VDC
Output resistance Ra	33.0 kOhm
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating current Ie	200 mA
Rated operating voltage Ue DC	24 V
Rated short circuit current	100 A
Ready delay tv max.	15 ms
Residual current Ir max.	50 $\mu$ A
Ripple max. (% of Ue)	15 %
Switching frequency	2000 Hz
Utilization category	DC-13
Voltage drop static max.	2 V

## Environmental conditions

Ambient temperature	-25...85 °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)	830 a
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## Interface

Switching output	PNP normally open (NO)
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#### Material

Housing material	Stainless steel
Material sensing surface	LCP

#### Mechanical data

Dimension	Ø 12 x 45 mm
Installation	for flush mounting
Mounting length	30.00 mm
Size	M12x1
Tightening torque	12 Nm

#### 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

