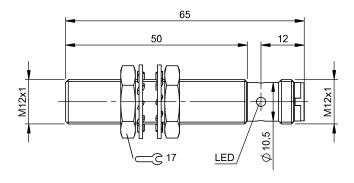
# Inductive Sensors BES M12EI-PSC40A-S04G-S Order Code: BES04Z5





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#### **Basic features**

Additional features	Factor 1
	Weld immune
Approval/Conformity	CE
	cULus
	EAC
	WEEE
Basic standard	IEC 60947-5-2
Trademark	Factor 1
Disulardonaration	

yes no

## **Display/Operation**

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

#### Electrical data

Load capacitance max. at Ue	1μF
Magnetic field strength, interference field	100 kA/m
Min. operating current Im	0 mA
No-load current lo max., damped	33 mA
No-load current lo max., undamped	25 mA
Operating voltage Ub	1030 VDC
Output resistance Ra	33.0 kOhm + D
Rated insulation voltage Ui	75 V DC
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
Ripple max. (% of Ue)	15 %
Switching frequency	80 Hz
Utilization category	DC -13
Voltage drop static max.	2 V

## **Environmental conditions**

Ambient temperature	-2570 °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	IP67
Magnetic field immune	magnetic field immune (AC/DC)

#### **Functional safety**

MTTF (40 °C)

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# Inductive Sensors BES M12EI-PSC40A-S04G-S Order Code: BES04Z5



#### Interface

Switching output	PNP normally open (NO)	
Material		
Housing material	Stainless steel	
Material sensing surface	Stainless steel	
Mechanical data		
Dimension	Ø 12 x 65 mm	
Installation	for flush mounting	
Size	M12x1	
Tightening torgue	00.11	
	20 Nm	

## **Range/Distance**

Assured operating distance Sa	3 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	4 mm
Real switching distance sr	4 mm
Repeat accuracy max. (% of Sr)	5.0 %
Switching distance marking	
Temperature drift max. (% of Sr)	15 %
Tolerance Sr	±10 %

#### Remarks

Installation notice: flush in Al or non-ferrous metal  $Sr = 0.7 \times Sn$ The sensor is functional again after the overload has been eliminated. Installation permitted only in clamp without positive stop.

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

