



1) Sensing surface, 2) LED green, 3) LED yellow



**Basic features**

<b>Approval/Conformity</b>	CE UKCA cULus WEEE
<b>Basic standard</b>	IEC 60947-5-2

**Display/Operation**

<b>Function indicator</b>	yes
<b>Power indicator</b>	yes

**Electrical connection**

<b>Cable diameter D</b>	3.80 mm
<b>Cable length L</b>	0.5 m
<b>Connection</b>	M12x1-Male, 4-pin, A-coded
<b>Connection type</b>	Cable with connector, 0.50 m, TPU
<b>Polarity reversal protected</b>	yes
<b>Protection against device mix-ups</b>	yes
<b>Short-circuit protection</b>	yes

**Electrical data**

<b>Load capacitance max. at Ue</b>	1 µF
<b>Magnetic field strength, interference field</b>	100 kA/m
<b>Min. operating current Im</b>	0 mA
<b>No-load current Io max., damped</b>	15 mA
<b>No-load current Io max., undamped</b>	15 mA
<b>Operating voltage Ub</b>	10...30 VDC
<b>Output resistance Ra</b>	33.0 kOhm + D
<b>Rated insulation voltage Ui</b>	75 V DC
<b>Rated operating current Ie</b>	200 mA
<b>Rated operating voltage Ue DC</b>	24 V
<b>Rated short circuit current</b>	100 A
<b>Ready delay tv max.</b>	20 ms
<b>Residual current Ir max.</b>	80 µA
<b>Ripple max. (% of Ue)</b>	10 %
<b>Switching frequency</b>	100 Hz
<b>Utilization category</b>	DC -13
<b>Voltage drop static max.</b>	2.5 V

**Environmental conditions**

<b>Ambient temperature</b>	-25...70 °C
<b>Contamination scale</b>	3
<b>EN 60068-2-27, Shock</b>	Half-sinus, 30 gn, 11 ms
<b>EN 60068-2-6, Vibration</b>	55 Hz, amplitude 1 mm, 3x30 min
<b>IP rating</b>	IP67
<b>Magnetic field immune</b>	magnetic field immune (AC/DC)

Inductive Sensors  
**BES R01ZC-PSC50B-BZ00,5-GS04-V02**  
**Order Code: BES048W**



**Functional safety**

MTTF (40 °C)	880 a
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**Interface**

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

Housing material	Zinc, Die casting
Material jacket	TPU
Material sensing surface	PA 12

**Mechanical data**

Dimension	32 x 20 x 8 mm
Installation	for flush mounting
Size	32x20x8

**Range/Distance**

Assured operating distance Sa	4 mm
Hysteresis H max. (% of Sr)	15.0 %
Rated operating distance Sn	5 mm
Real switching distance sr	5 mm
Repeat accuracy max. (% of Sr)	5.0 %
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**

