



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



Basic features

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

Display/Operation

Function indicator	yes
Power indicator	yes

Electrical connection

Cable diameter D	3.80 mm
Cable length L	3 m
Conductor cross-section	0.25 mm ²
Connection type	Cable, 3.00 m, TPU
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

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

Environmental conditions

Ambient temperature	-25...70 °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
IP rating	IP67
Magnetic field immune	magnetic field immune (AC/DC)

Inductive Sensors
BES R01ZC-PSC50B-BZ03-V02
Order Code: **BES0481**

BALLUFF

Functional safety

MTTF (40 °C) 880 a

Interface

Switching output PNP normally open (NO)

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.

Wiring Diagrams

