



### Basic features

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

### Display/Operation

Function indicator	yes
Power indicator	no

### Electrical connection

Cable diameter D	2.80 mm
Cable length L	2 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection type	Cable, 2.00 m, PUR
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	0.2 µF
Min. operating current I <sub>m</sub>	1 mA
No-load current I <sub>o</sub> max., damped	10 mA
No-load current I <sub>o</sub> max., undamped	3 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Output resistance R <sub>a</sub>	Open collector
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Rated short circuit current	100 A
Ready delay t <sub>v</sub> max.	15 ms
Residual current I <sub>r</sub> max.	50 µA
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	2000 Hz
Utilization category	DC -13
Voltage drop static max.	3 V

### Environmental conditions

Ambient temperature	-25...70 °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

### Functional safety

MTTF (40 °C)	830 a
--------------	-------

### Interface

Switching output	PNP normally open (NO)
------------------	------------------------

Inductive Sensors  
**BES Q05AC-PSC15B-EP02**  
Order Code: **BES01RN**



**Material**

Housing material	1.4305 stainless steel
Material jacket	PUR
Material sensing surface	PBT

**Mechanical data**

Dimension	25 x 5 x 5 mm
Installation	for flush mounting
Size	5x5

**Range/Distance**

Assured operating distance $S_a$	1.2 mm
Hysteresis H max. (% of $S_r$ )	15.0 %
Rated operating distance $S_n$	1.5 mm
Real switching distance $s_r$	1.5 mm
Repeat accuracy max. (% of $S_r$ )	10.0 %
Switching distance marking	■ ■
Temperature drift max. (% of $S_r$ )	20 %
Tolerance $S_r$	±10 %

**Remarks**

The sensor is functional again after the overload has been eliminated.  
ESD requirements met if housing is grounded.  
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**

