



1) Sensing surface



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 | 3.50 mm |
| Cable length L | 0.2 m |
| Connection | M12x1-Male, 4-pin, A-coded |
| Connection type | Cable with connector, 0.20 m, PUR |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|----------------|
| Load capacitance max. at Ue | 0.2 µF |
| No-load current I ₀ max., damped | 10 mA |
| No-load current I ₀ max., undamped | 3 mA |
| Operating voltage U _b | 10...30 VDC |
| Output resistance R _a | Open collector |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e | 100 mA |
| Rated operating voltage U _e DC | 24 V |
| Rated short circuit current | 100 A |
| Ready delay t _v max. | 20 ms |
| Residual current I _r max. | 50 µA |
| Ripple max. (% of U _e) | 15 % |
| Switching frequency | 5000 Hz |
| Utilization category | DC -12 |
| 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 g _n , 11 ms |
| EN 60068-2-6, Vibration | 55 Hz, amplitude 1 mm, 3x30 min |
| IP rating | IP67 |

Interface

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

Inductive Sensors
BES R04MC-PSC20B-EP00,2-GS04-107
Order Code: BES04YL



Material

| | |
|--------------------------|---------------------------|
| Housing material | Brass, Nickel-free coated |
| Material jacket | PUR, with silicone tube |
| Material sensing surface | Ceramic |

Range/Distance

| | |
|----------------------------------|--------|
| Assured operating distance Sa | 1.6 mm |
| Hysteresis H max. (% of Sr) | 15.0 % |
| Rated operating distance Sn | 2 mm |
| Real switching distance sr | 2 mm |
| Repeat accuracy max. (% of Sr) | 1.0 % |
| Switching distance marking | ■ ■ |
| Temperature drift max. (% of Sr) | 10 % |
| Tolerance Sr | ±10 % |

Mechanical data

| | |
|--------------|--------------------|
| Dimension | 16 x 8 x 4.7 mm |
| Installation | for flush mounting |
| Size | 16x8x4.7 |

Remarks

The sensor is functional again after the overload has been eliminated.

Connector Drawings



Wiring Diagrams

