



1) Pressure resistant area



Basic features

| | |
|----------------------------|-----------------------------------|
| Additional features | Housing resistant to weld spatter |
| Approval/Conformity | CE UKCA cULus WEEE |
| Basic standard | IEC 60947-5-2 |

Display/Operation

| | |
|---------------------------|-----|
| Function indicator | yes |
| Power indicator | no |

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 | 1.0 µF |
| Min. operating current Im | 0 mA |
| No-load current Io max., damped | 6 mA |
| No-load current Io max., undamped | 2 mA |
| Operating voltage Ub | 10...30 VDC |
| Output resistance Ra | 100.0 kOhm |
| 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. | 23 ms |
| Residual current Ir max. | 10 µA |
| Ripple max. (% of Ue) | 10 % |
| Switching frequency | 350 Hz |
| Utilization category | DC -13 |
| Voltage drop static max. | 2.0 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 |

Functional safety

| | |
|---------------------|-------|
| MTTF (40 °C) | 770 a |
|---------------------|-------|

Inductive Sensors
BES M18EI-PSC72B-S04G-S01
Order Code: BES02NK



Interface

Switching output PNP normally open (NO)

Material

Housing material Stainless steel, PTFE coated
 Material sensing surface Stainless steel

Mechanical data

Dimension Ø 18 x 65 mm
 Installation for flush mounting
 Pressure rating max. 40 bar
 Pressure rating, note Pressure-resistant
 Size M18x1
 Tightening torque 25 Nm ±10 %

Range/Distance

Assured operating distance Sa 5.2 mm
 Hysteresis H max. (% of Sr) 20.0 %
 Rated operating distance Sn 7.2 mm
 Real switching distance sr 7.2 mm
 Repeat accuracy max. (% of Sr) 5.0 %
 Switching distance marking ■■
 Temperature drift max. (% of Sr) 20 %
 Tolerance Sr ±10 %

Remarks

With connector, e.g. BKS-S 20-... total length = switch length +18 mm.
 When installing in non-ferromagnetic metals, the distance x must be considered. This dimension x is described in the document "BES 2SN STEELFACE".
 Since the nuts supplied are made of non-ferromagnetic metal, the specified dimension x also applies here. Mounting, where the nuts are close to the active surface, is not intended.
 The sensor is functional again after the overload has been eliminated.
 Optical irregularities on the coating have no effect on function.
 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

