

1) O-Ring with thrust ring



Basic features

| | |
|---------------------|--------------------------------|
| Approval/Conformity | CE UKCA cULus WEEE |
| Basic standard | IEC 60947-5-2 IEC 60947-5-7 |

Display/Operation

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

Electrical connection

| | |
|-----------------------------------|----------------------------|
| Connection | M12x1-Male, 3-pin, A-coded |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|-------------------------------|-------------|
| Limit frequency -3 dB | 1000 Hz |
| Load resistance RL min. | 2000 Ohm |
| No-load current Io max. at Ue | 10 mA |
| Operating voltage Ub | 15...30 VDC |
| Rated insulation voltage Ui | 75 V DC |
| Rated operating voltage Ue DC | 24 V |
| Ripple max. (% of Ue) | 15 % |
| Slope U | 6.70 V/mm |

Environmental conditions

| | |
|-------------------------|---------------------------------|
| Ambient temperature | -25...85 °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 | IP68 |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 150 a |
|--------------|-------|

Interface

| | |
|---------------------------|--------------------------|
| Analog output | Analog, voltage 0...10 V |
| Output characteristic | falling on approach |
| Output voltage at SI max. | 10 V |
| Output voltage at SI min. | 0 V |
| Output voltage at Se | 5 V |

Material

| | |
|--------------------------|-----------------|
| Housing material | Stainless steel |
| Material sensing surface | Ceramic |

Mechanical data

| | |
|-----------------------|--------------------|
| Dimension | Ø 12 x 78 mm |
| Installation | for flush mounting |
| Mounting length | 43.5 mm |
| Pressure rating max. | 500 bar |
| Pressure rating, note | oil pressure rated |
| Size | M12x1 |
| Tightening torque | 15 Nm ±10 % |

Range/Distance

| | |
|---------------------------------------|------------|
| Linearity range SI | 0.5...2 mm |
| Measuring range | 0.5...2 mm |
| Non-linearity max. | ±45 µm |
| Repeat accuracy per BWN | ±8 µm |
| Temperature drift max. from end value | ±10.0 % |

Remarks

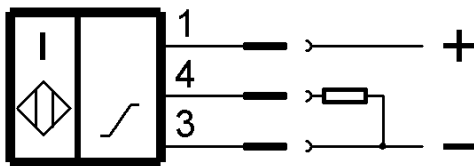
Values referenced to axial approach of St 37 target. For other materials correction factors are applied.
Replacement part number for support ring 150229
Installation Instructions 614804
With connector, e.g. BCC M425-.. total length is = switch length +19 mm.
Seal ring size 6.75 x 1.78
Seal ring material FPM 80
Seal ring replacement part number 149621
Support ring material PTFE
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



Technical Drawings

