

### Basic features

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

### Display/Operation

Function indicator	Adjustment indicator
Power indicator	no

### Electrical connection

Cable diameter D	3.00 mm
Cable length L	0.22 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection	M18x1-Male, 3-pin
Connection type	Cable with connector, 0.22 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

### Electrical data

Limit frequency -3 dB	500 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	2.50 V/mm

### Environmental conditions

Ambient temperature	-10...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)	640 a
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### 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	Brass, nickel-plated
Material jacket	PUR
Material sensing surface	PBT

## Range/Distance

Linearity range SI	1...5 mm
Measuring range	1...5 mm
Non-linearity max.	±120 µm
Repeat accuracy per BWN	±8 µm
Temperature drift max. from end value	±5.0 %

## Mechanical data

Dimension	Ø 18 x 36 mm
Installation	for flush mounting
Mounting length	30.0 mm
Size	M18x1
Tightening torque	25 Nm

## Remarks

When used in Balluff clamping holders, Ua may be reduced by max. 10%

Values referenced to axial approach of St 37 target. For other materials correction factors are applied.

Scattering (e.g. due to manufacturing tolerances) is described by the tolerance T at Se. This can be approximated using the formula:  $T = (sl_{max} + sl_{min}) / 20 = \pm xx \text{ mm}$ .

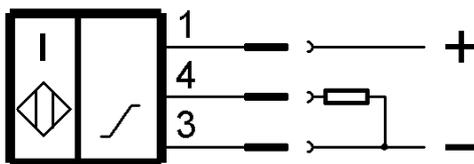
For more information about MTTF and B10d see MTTF / B10d Certificate

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 (Schematic)



Technical Drawings

