

### Basic features

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

### Display/Operation

Power indicator	no
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### 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	20 Hz
Load resistance RL min.	10000 Ohm
No-load current I <sub>o</sub> max. at U <sub>e</sub>	12 mA
Operating voltage U <sub>b</sub>	20...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating voltage U <sub>e</sub> DC	24 V
Ripple max. (% of U <sub>e</sub> )	15 %
Slope U	0.50 V/mm

### Environmental conditions

Ambient temperature	-10...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

### 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 sensing surface	PBT

### Mechanical data

Dimension	Ø 47 x 70 mm
Installation	for flush mounting
Size	PG36
Tightening torque	40 Nm

**Range/Distance**

Linearity range SI	0...20 mm
Measuring range	0...20 mm

Non-linearity max.	±600 µm
Repeat accuracy per BWN	±5 µm
Temperature drift max. from end value	±5.0 %

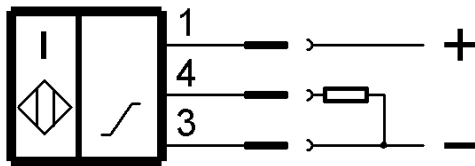
**Remarks**

With connector, e.g. BKS-S 20-... total length = switch length +18 mm.  
 Values referenced to axial approach of St 37 target. For other materials correction factors are applied.

**Connector Drawings**



**Wiring Diagrams**



**Technical Drawings**

