

## Display/Operation

Function indicator	Adjustment indicator
Power indicator	no

## Electrical connection

Connection	M12x1-Male, 4-pole, A-coded
Protection against device mix-ups	yes
Short-circuit protection	yes

## Electrical data

Contamination scale	3
No-load current $I_0$ max. at $U_e$	10 mA
Operating voltage $U_b$	15...30 VDC
Polarity reversal protected	yes
Protection class	II
Rated insulation voltage $U_i$	250 V AC
Rated operating voltage $U_e$ DC	24 V
Residual ripple max. (% of $U_e$ )	15 %
Slope U	6.70 V/mm

## Environmental conditions

Ambient temperature	-10...70 °C
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 per IEC 60529	IP67

## Functional safety

MTTF (40 °C)	640 a
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## General data

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

## Material

Housing material	Brass
Material sensing surface	PBT
Surface protection	nickel plated

## Mechanical data

Dimension	Ø 12 x 65 mm
Installation	for flush mounting
Size	M12x1
Tightening torque	15 Nm

## Output/Interface

Analog output	Analog, voltage, Voltage falling on approach
Output voltage at $S_e$	5 V
Output voltage at SI max.	10 V
Output voltage at SI min.	0 V

## Range/Distance

Linearity range SI	0.5...2 mm
Measuring range	0.5...2 mm
Non-linearity max.	±45 µm
Repeat accuracy	±8.0 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.

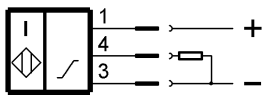
For further information on MTTF/B10d, please refer to the MTTF / B10d Certificate.

Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Connector view



Wiring Diagram



Diagram

