

Basic features

Approval/Conformity	CE WEEE
Base type deviation	Special calibration
Basic standard	IEC 60947-5-2 IEC 60947-5-7

Display/Operation

Function indicator	Adjustment indicator
Power indicator	no

Electrical connection

Connection	M12x1-Male, 3-pin, A-coded
Polarity reversal protected	no
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Limit frequency -3 dB	15 Hz
Load resistance R_L min.	10000 Ohm
No-load current I_o max. at U_e	12 mA
Operating voltage U_b	20...30 VDC
Rated insulation voltage U_i	75 V DC
Rated operating voltage U_e DC	24 V
Ready delay t_v max.	1 s
Ripple max. (% of U_e)	15 %

Environmental conditions

Ambient temperature	-10...70 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g_n , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

Functional safety

MTTF (40 °C)	970 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	PBT
Material sensing surface	PBT

Mechanical data

Dimension	80 x 40 x 80 mm
Installation	non-flush
Tightening torque	1.5 Nm

Range/Distance

Linearity range SI	0...50 mm
Measuring range	0...50 mm
Non-linearity max.	±750 µm [15...35 mm] ±1500 µm [5...15 mm, 35...45 mm] ±2000 µm [0...5 mm, 45...50 mm]
Repeat accuracy per BWN	±12 µm
Temperature drift max. from end value	±7.0 %

Remarks

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

With connector, e.g. BKS-S 20-... total length = switch length +18 mm.

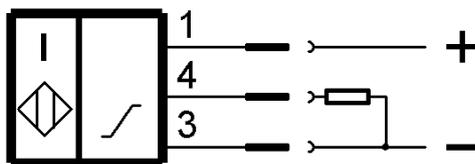
For more information about MTTF and B10d see MTTF / B10d Certificate

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

