

IND. CONT. EQ.
81U2
Class 2 Type 1



Basic features

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

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
Protection degree	IP67

Display/Operation

Power indicator	no
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Functional safety

MTTF (40 °C)	640 a
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Electrical connection

Cable diameter D	3.00 mm
Cable length L	0.5 m
Connection	M12x1-Male, 3-pin, A-coded
Connection type	Cable with connector, 0.50 m, PUR
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Material

Housing material	Stainless steel
Material jacket	PUR
Material sensing surface	PBT

Mechanical data

Dimension	Ø 8 x 51.5 mm
Installation	for flush mounting
Size	M8x1
Tightening torque	5 Nm

Electrical data

Limit frequency -3 dB	1000 Hz
Load resistance RL min.	2000 Ohm
No-load current Io max. at Ue	8 mA
Operating voltage Ub	15...30 VDC
Protection class	II
Rated insulation voltage Ui	250 V AC
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	15 %
Slope U	10.00 V/mm

Output/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

Range/Distance

Linearity range SI	0.5...1.5 mm
Measuring range	0.5...1.5 mm

Non-linearity max.	±30 µm
Repeat accuracy per BWN	±8 µm
Temperature drift max. from end value	±5.0 %

Remarks

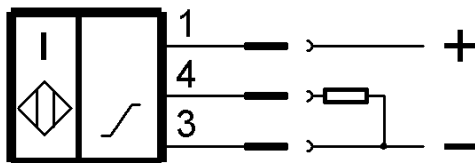
Values referenced to axial approach of St 37 target. For other materials correction factors are applied.
For more information about MTTF and B10d see MTTF / B10d Certificate

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

