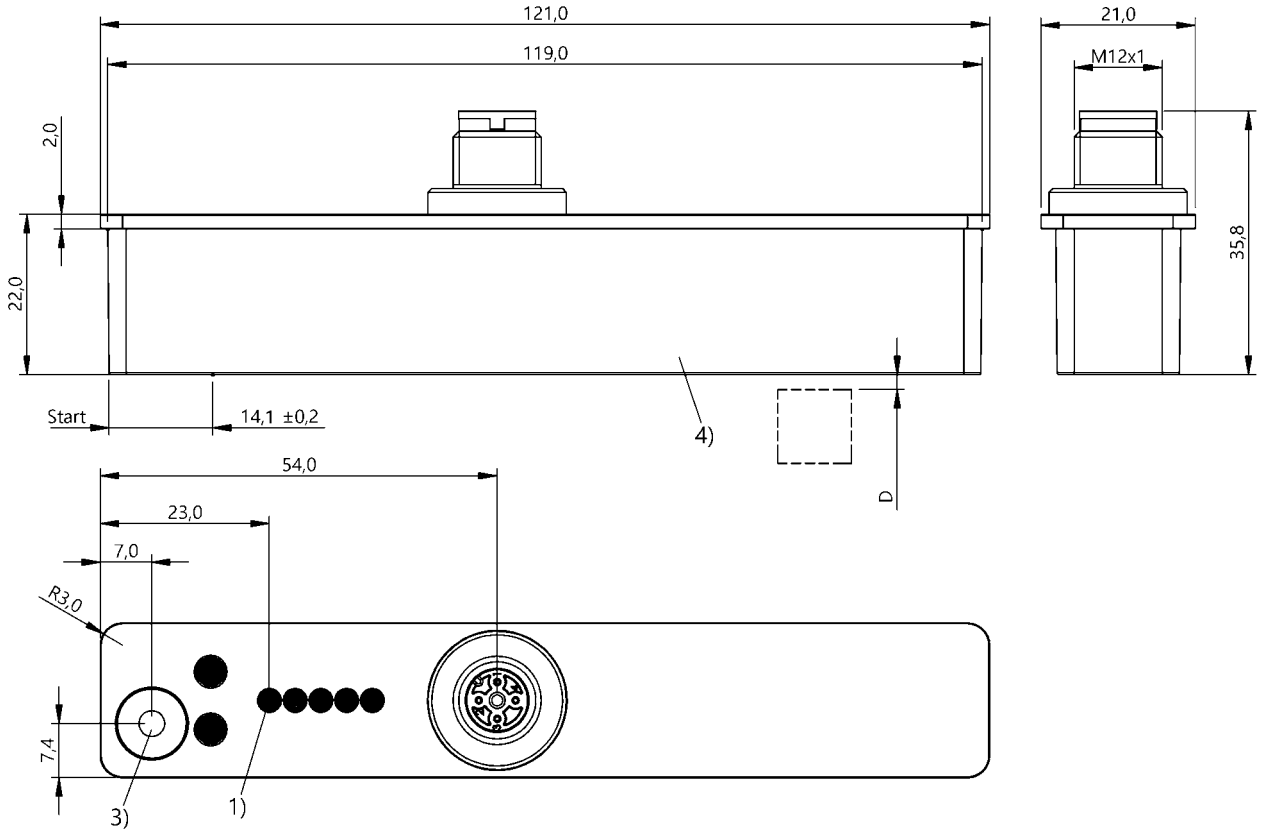
Inductive Sensors

BIP ED2-B103-03-S4
Order Code: BIP000U



1) LED function indicator, 3) Teach-In button, 4) Encoder

Basic features

Application	Positioning
Approval/Conformity	CE UKCA cURus WEEE
Basic standard	IEC 60947-5-2 IEC 60947-5-7

Display/Operation

Function indicator	yes
Power indicator	yes

Electrical connection

Connection	M12x1-Male, 4-pin, A-coded
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load resistance RL	2000...500 Ohm
Load resistance RL max.	500 Ohm
Load resistance RL min.	2000 Ohm
No-load current Io max. at Ue	30 mA
Operating voltage Ub	16...30 VDC
Rated insulation voltage Ui	75 V DC
Rated operating voltage Ue DC	24 V
Ripple max. (% of Ue)	10 %
Slope I	0.16 mA/mm
Slope U	0.10 V/mm

Environmental conditions

Ambient temperature	-25...85 °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

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Functional safety

MTTF (40 °C)	200 a

Interface

Analog output	Analog, voltage 0...10 V Analog, current 4...20 mA
Output characteristic	Adjustable
Output current at Sl max.	20 mA
Output current at Sl min.	4 mA
Output current at Se	12 mA
Output voltage at Sl max.	10 V
Output voltage at Sl min.	0 V
Output voltage at Se	5 V

Material

Housing material	PBT
Material sensing surface	PBT

Mechanical data

Dimension	121 x 21 x 22 mm
Tightening torque max.	3 Nm

Range/Distance

Linearity range Sl	0...103 mm
Measuring range	0...103 mm
Non-linearity max.	±300 µm
Repeat accuracy per BWN	±80 µm
Temperature drift max. from end value	±1.5 %

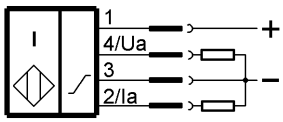
Remarks

Please refer to manual.
The working range is teachable with the aid of the scanner.
Specification applies to recommended target BAM TG-XE-001 D=2 mm
For more information about MTTF and B10d see MTTF / B10d Certificate

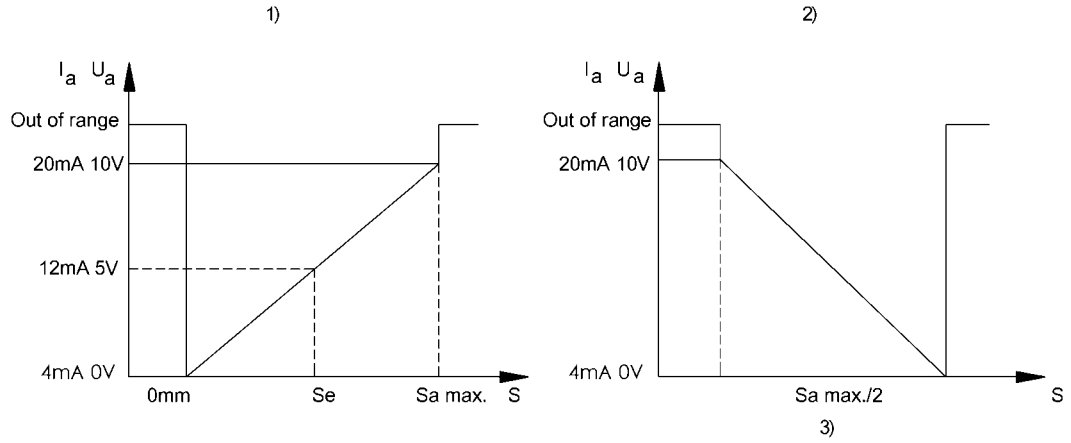
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings

Wiring Diagrams



Technical Drawings



1) Standard characteristic curve
2) Reduced measuring range
3) Minimum width Sa max./2