

1) LED function indicator, 2) 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

| | |
|------------------------|-----|
| Power indicator | yes |
|------------------------|-----|

Electrical connection

| | |
|--|------------------|
| Connection | M8x1-Male, 4-pin |
| 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 I_o max. at U_e | 30 mA |
| Operating voltage U_b | 16...30 VDC |
| Rated insulation voltage U_i | 75 V DC |
| Rated operating voltage U_e DC | 24 V |
| Ripple max. (% of U_e) | 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 |

Inductive Sensors
BIP ED2-B103-03-S75
Order Code: BIP000E



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 SI max. 20 mA
Output current at SI min. 4 mA
Output current at Se 12 mA
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 121 x 21 x 22 mm
Tightening torque max. 3 Nm

Range/Distance

Linearity range SI 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

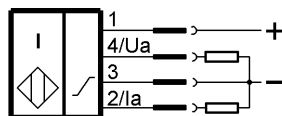
Please refer to manual.
 The working range is teachable with the aid of the scanner.
 Specification applies to recommended target BAM TG-XE-001 D=2 mm
 For more information about MTTF and B10d see MTTF / B10d Certificate

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.

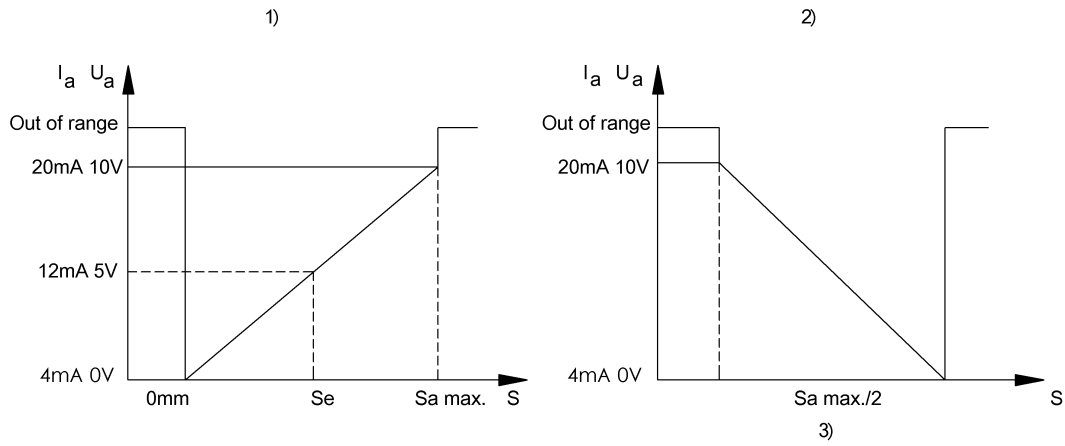
Connector Drawings



Wiring Diagrams



Technical Drawings



- 1) Standard characteristic curve
- 2) Reduced measuring range
- 3) Minimum width $S_{a \max.}/2$