

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 <sub>o</sub> max. at U <sub>e</sub>	30 mA
Operating voltage U <sub>b</sub>	16...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating voltage U <sub>e</sub> DC	24 V
Ripple max. (% of U <sub>e</sub> )	10 %
Slope I	0.23 mA/mm
Slope U	0.14 V/mm

### Environmental conditions

Ambient temperature	-25...85 °C
Contamination scale	3
EN 60068-2-27, Shock	Half-sinus, 30 g <sub>n</sub> , 11 ms
EN 60068-2-6, Vibration	55 Hz, amplitude 1 mm, 3x30 min
IP rating	IP67

## 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** 92.5 x 21 x 22 mm

**Tightening torque max.** 3 Nm

## Range/Distance

**Linearity range SI** 0...70 mm

**Measuring range** 0...70 mm

**Non-linearity max.** ±300 µm

**Repeat accuracy per BWN** ±80 µm

**Temperature drift max. from end value** ±1.5 %

## Remarks

Specification applies to recommended target BAM TG-XE-001 D=2 mm

The working range is teachable with the aid of the scanner.

Please refer to manual.

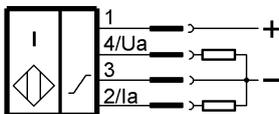
For more information about MTTF and B10d see MTTF / B10d Certificate

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.

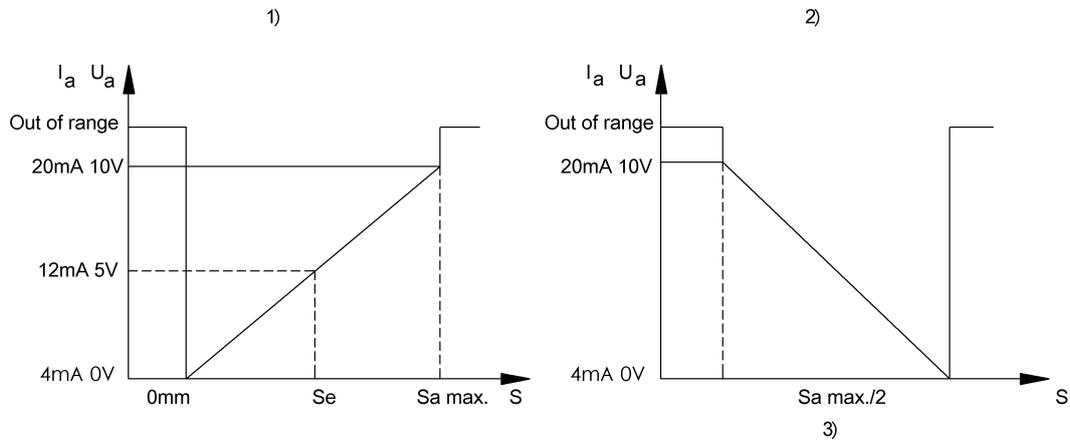
## Connector Drawings



## Wiring Diagrams (Schematic)



Technical Drawings



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