

1) Sensing surface



### Basic features

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

### Display/Operation

Function indicator	no
Power indicator	no

### Electrical connection

Bending radius min., fixed cable	3 x D
Bending radius min., flexible cable	Fixed installation only.
Cable diameter D	3.5 mm
Cable length L	2 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection type	Cable, 2 m, PUR
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

### Electrical data

Load resistance RL max.	500 Ohm
No-load current I <sub>o</sub> max. at U <sub>e</sub>	15 mA
Operating voltage U <sub>b</sub>	15...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	300 ms
Ripple max. (% of U <sub>e</sub> )	10 %

Inductive Sensors  
**BIP CD2-T017-04-BP02**  
Order Code: BIP001L

**BALLUFF**

**Environmental conditions**

Ambient temperature	-25...70 °C, Temperature drift is between -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
IP rating	IP67
Storage temperature	-40...85 °C

**Functional safety**

MTTF (40 °C)	440 a
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**Interface**

Analog output	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

**Remarks**

Please refer to manual.  
Specification applies to recommended target (BAM TG--XE-020)  
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.

**Material**

Cable shield	yes
Housing material	PA
Material jacket	PUR
Material sensing surface	PA

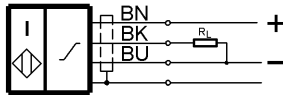
**Mechanical data**

Dimension	30 x 18 x 40.5 mm
Tightening torque max.	0.5 Nm

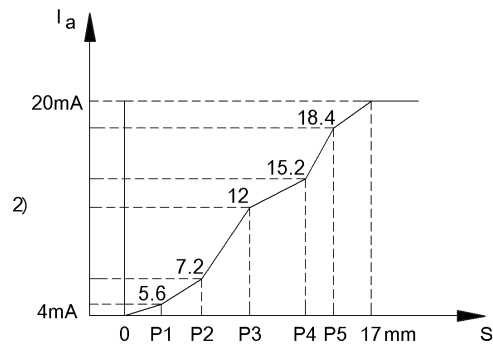
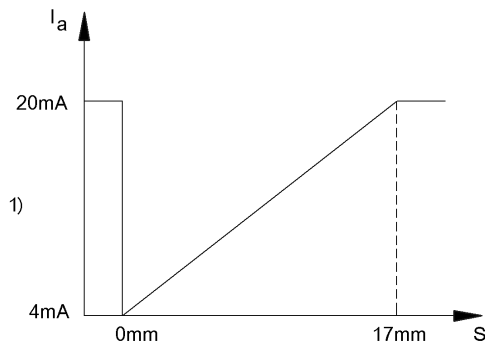
**Range/Distance**

Linearity range SI	0...17 mm
Measuring range	0...17 mm
Non-linearity max.	±250 µm
Repeat accuracy per BWN	±50 µm
Temperature drift max. from end value	±3.0 %

**Wiring Diagrams**



## Technical Drawings



- 1) Standard characteristic curve
- 2) Prog. characteristic curve (Ex.)