

1) not included in scope of delivery, 2) Non-usable area, 3) Nominal length = Measuring length, 10) Null point, 11) Installation length



**Electrical connection**

<b>Connection</b>	Connector, M16x0.75, 8-pin
<b>Connection version</b>	axial
<b>Polarity reversal protected</b>	Ub up to 28 V

**Electrical data**

<b>Current consumption max. at 24 V DC</b>	150 mA
<b>Error signal Ia falling</b>	0 mA
<b>Error signal Ua falling</b>	≤ 0 V
<b>Error signal Ua rising</b>	≥ 10.2 V
<b>Galvanic isolation</b>	yes
<b>Inrush current</b>	≤ 3 A/0.5 ms
<b>Operating voltage Ub</b>	20...28 VDC
<b>Output signal adjustable</b>	no
<b>Overvoltage protection</b>	Ub up to 28 V
<b>Voltage-proof up to (GND to housing)</b>	500 V DC

**Environmental conditions**

<b>Ambient temperature</b>	-40...85 °C
<b>EN 55016-2-3, Radiation</b>	Industrial areas
<b>EN 60068-2-27, Continuous shock</b>	100 g, 2 ms
<b>EN 60068-2-27, Shock</b>	100 g, 6 ms
<b>EN 60068-2-6, Vibration</b>	12 g, 10...2000 Hz
<b>EN 61000-4-2, ESD</b>	Severity Level 3
<b>EN 61000-4-3, RFI</b>	Severity Level 3
<b>EN 61000-4-4, Burst</b>	Severity Level 3
<b>EN 61000-4-5, Surge</b>	Severity Level 2
<b>EN 61000-4-6, High-frequency fields</b>	Severity Level 3
<b>EN 61000-4-8 Magnetic fields</b>	Severity Level 4
<b>IP rating</b>	IP67 with connector
<b>Relative humidity</b>	≤ 90 %, non-condensing
<b>Storage temperature</b>	-40...100 °C
<b>Temperature coefficient typ.</b>	≤ 35 ppm/K at 50% of nominal stroke 500mm

**Functional safety**

<b>MTTF (40 °C)</b>	77 a
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**General data**

<b>Approval/Conformity</b>	CE cULus EAC WEEE
<b>Magnets, number (factory setting)</b>	1
<b>Magnets, number max.</b>	1

Magnetostrictive Sensors  
**BTL5-C17-M0450-P-S32**  
 Order Code: BTL014F

**BALLUFF**

**Material**

Cover material	Aluminum, Die-cast, nickel plated
Housing material	Aluminum
Housing material, surface protection	Anodized

**Mechanical data**

Installation length	596 mm
Mounting	Mounting clamps
Null point	73.0 mm

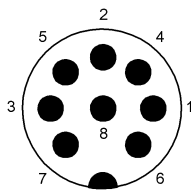
**Output/Interface**

Analog output	Analog, current 20...0 mA
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**Range/Distance**

Measuring length	450 mm
Non-linearity max.	±100 µm
Repeat accuracy	≤ ± 0.2 µA
Reproducibility	≤4 µm
Resolution	≤ 0.2 µA
Sampling rate, length-dependent	1 kHz, standard

**Connector Drawings**



**Wiring Diagrams**

Pin	
1	20...0 mA
2	GND output
3	NC
4	NC
5	NC
6	GND
7	+24 V DC
8	NC