



Basic features

Approval/Conformity	CE cULus EAC WEEE
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Electrical connection

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

Electrical data

Current consumption max. at 24 V DC	150 mA
Error signal Ia rising	$\geq 20.4 \text{ mA}$
Error signal Ua falling	$\leq 0 \text{ V}$
Error signal Ua rising	$\geq 10.2 \text{ V}$
Galvanic isolation	yes
Inrush current	$\leq 3 \text{ A}/0.5 \text{ ms}$
Operating voltage Ub	20...28 VDC
Overvoltage protection	Ub up to 28 V
Voltage-proof up to (GND to housing)	500 V DC

Magnetostrictive Sensors
BTL5-E10-M3000-P-S32
Order Code: BTL02AL

BALLUFF

Environmental conditions

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

Functional safety

MTTF (40 °C)	77 a
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Interface

Analog output	Analog, current 4...20 mA
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Material

Housing material	Aluminum, Anodized
Housing material, surface protection	Anodized

Mechanical data

Mounting part	Mounting clamps
Null point	73.0 mm

Range/Distance

Non-linearity max.	±0.02 %FS
Repeat accuracy	≤ ± 0.2 µA
Repeatability	≤4 µm
Resolution	≤ 0.2 µA
Sampling rate, length-dependent	1 kHz, standard