



Basic features

Magnets, number (factory setting)	1
Magnets, number max.	1

Electrical connection

Cable diameter D	6.4...7 mm
Connection	Cable with connector
Polarity reversal protected	Ub up to 36 V
Short-circuit protection	to GND and to 36 V DC

Electrical data

Current consumption max. at 24 V DC	100 mA
Galvanic isolation	no
Inrush current	≤ 500 mA/10 ms
Operating voltage Ub	10...30 VDC
Output current max.	5 mA
Output signal adjustable	using programming inputs
Overvoltage protection	Ub up to 36 V
Voltage-proof up to (GND to housing)	500 V AC

Magnetostrictive Sensors
BTL7-A510-M0152-W-K00,2-S32
Order Code: BTL253A

BALLUFF

Environmental conditions

Ambient temperature	-40...85 °C
Cable temperature, flexible routing	-5...90 °C
EN 55016-2-3, Radiation	For industrial and residential use
EN 60068-2-27, Continuous shock	150 g, 2 ms
EN 60068-2-27, Shock	150 g, 6 ms
EN 60068-2-6, Vibration	20 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.	≤ 30 ppm/K at 50% of nominal stroke 500mm

Functional safety

MTTF (40 °C)	72 a
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Interface

Analog output	2x Analog, voltage
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Material

Housing material	1.4305 stainless steel
Material flange	1.4404 stainless steel
	1.4429 stainless steel
	1.4435 stainless steel
	1.4571 stainless steel
O-ring material	FKM
Protection tube material	1.4571 stainless steel

Mechanical data

Housing diameter	65 mm
Tightening torque max.	100 Nm

Range/Distance

Non-linearity max.	±50 µm
Repeat accuracy	± 10 µm