

1) not included in scope of delivery, 2) Non-usable area, 3) Nominal length = Measuring length



### Basic features

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

### Electrical connection

Connection	Connector, M12x1, 8-pin
Connection version	axial
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	150 mA
Error signal Ia rising	3.6 mA
Galvanic isolation	no
Inrush current	≤ 3 A/0.5 ms
Operating voltage Ub	10...30 VDC
Output signal adjustable	using programming inputs
Overvoltage protection	Ub up to 36 V
Switch-on delay max.	500 ms
Voltage-proof up to (GND to housing)	500 V DC

### Environmental conditions

Ambient temperature	-25...70 °C
EN 55016-2-3, Radiation	For industrial and residential use
EN 60068-2-27, Continuous shock	50 g, 2 ms
EN 60068-2-27, Shock	50 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
Protection degree	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)	54 a
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### Material

Cover material	Zinc, Die casting
Housing material	Aluminum, Anodized
Housing material, surface protection	Anodized

Magnetostrictive Sensors  
**BTL6-E500-M0150-PF-S115**  
 Order Code: BTL0R93



**Mechanical data**

Installation length	296 mm
Mounting	Mounting clamps
Null point	73.0 mm

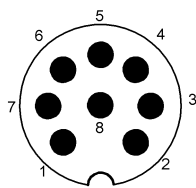
**Output/Interface**

Analog output	Analog, current 4...20 mA
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**Range/Distance**

Measuring length	150 mm
Non-linearity max.	±200 µm
Repeat accuracy	± 5 µm
Resolution	≤ 700 nA
Sampling frequency max.	2000 Hz

**Connector Drawings**



**Wiring Diagrams**

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