



1) not included in scope of delivery, 2) Non-usable area, 3) Nominal length = Measuring length, 4) Mounting surface, 5) Internal threads M4x4/6 deep, 10) Null point, 11) Installation length, 12) Cable length



### Basic features

Approval/Conformity	CE UKCA WEEE
Base type	BTL6-E500-M....-E2-LA....
Base type deviation	Cover screws glued extra housing cover Test protocol Support ring, not protected with BURN-IN test separate quick guide
Magnets, number (factory setting)	1
Magnets, number max.	1

### Electrical connection

Cable length L	0.19 m
Connection	Leads, 0.19 m, ETFE
Connection version	axial
Polarity reversal protected	Ub up to 40 V
Short-circuit protection	to GND and to 36 V DC

### Electrical data

Current consumption max. at 24 V DC	60 mA
Current consumption typ.	1.5 W
Error signal Ia rising	3.6 mA
Galvanic isolation	no
Inrush current	≤ 2.5 A/2 ms
Operating voltage Ub	10...30 VDC
Output signal adjustable	no
Switch-on delay max.	600 ms
Voltage-proof up to (GND to housing)	500 V DC

### Environmental conditions

Ambient temperature	-40...85 °C
Cable temperature, fixed routing	-40...135 °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	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
Relative humidity	≤ 90 %, non-condensing
Storage temperature	-40...100 °C
Temperature coefficient typ.	25.0 μm/K at 50% of nominal stroke 500mm

**Functional safety**

MTTF (40 °C)	101 a
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**Interface**

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

Cable jacket, material	ETFE
Cover material	1.4305 stainless steel
Housing material	1.4404 stainless steel
Material flange	1.4404 stainless steel
O-ring material	NBR
Plug material	1.4571 stainless steel
Protection tube material	1.4571 stainless steel
Support ring material	PTFE

**Mechanical data**

Housing diameter	48.00 mm
Installation length from contact surface	404 mm
Mounting part	Mounting flange Ø 48 f7
Null point	30.0 mm
Pressure rating max.	350 bar
Protection tube diameter	10.2 mm
Special installation specification	in grounded metal housing
Support ring	yes

**Range/Distance**

Measuring length	310 mm
Non-linearity max.	±200 µm
Repeat accuracy	± 5 µm
Resolution	Controller dependent (limited only by repeat accuracy)
Sampling frequency max.	1000 Hz

**Wiring Diagrams**

colour	
GN	4...20 mA
BU	GND
BN	10...30V DC