



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

Interface

Analog output Analog, current 4...20 mA

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 369 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 275 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