

1) not included in scope of delivery, 2) Non-usable area, 3) Nominal length = Measuring length, 10) Null point, 11) Installation length



Basic features

Approval/Conformity	CE UKCA cULus WEEE
Magnets, number (factory setting)	1
Magnets, number max.	4

Electrical connection

Connection	Connector, M12x1, 5-pin
Connection 1	M12x1, 5-pin
Connection 2	M12x1
Connection version	axial
Polarity reversal protected	Ub up to 28 V

Electrical data

Current consumption max. at 24 V DC	100 mA
Galvanic isolation	no
Inrush current	≤ 3 A/0.5 ms
Operating voltage Ub	20...28 VDC
Output signal adjustable	with software tool
Overvoltage protection	Ub up to 28 V
Voltage-proof up to (GND to housing)	500 V DC

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)	86 a
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Interface

Baud rate	500 kBaud
Interface	CANopen DS301

Magnetostrictive Sensors
BTL5-H112-M0150-P-S94
Order Code: BTL03CU



Material

Housing material	Aluminium, Anodized
Housing material, surface protection	Anodized

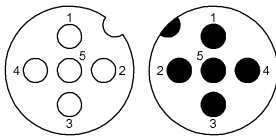
Mechanical data

Mounting part	Mounting clamps
Null point	106.0 mm

Range/Distance

Non-linearity max.	±30 µm
Repeat accuracy	± 1 LSB
Reproducibility	±1 LSB
Resolution	≤ 5 µm
Resolution min., traverse speed	0.1 mm/s
Sampling rate, length-dependent	1 kHz, standard

Connector Drawings



Wiring Diagrams

Pin	
1	CAN_GND
2	+24 V DC
3	GND
4	CAN_HIGH
5	CAN_LOW