

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
--------------	------

### Interface

Baud rate	500 kBaud
Interface	CANopen DS301

Magnetostrictive Sensors  
**BTL5-H112-M0350-P-S94**  
**Order Code: BTL03E4**



**Material**

<b>Housing material</b>	Aluminium, Anodized
<b>Housing material, surface protection</b>	Anodized

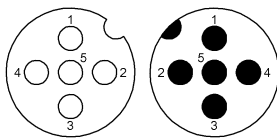
**Mechanical data**

<b>Mounting part</b>	Mounting clamps
<b>Null point</b>	106.0 mm

**Range/Distance**

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

**Connector Drawings**



**Wiring Diagrams**

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