



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, 6) Null point, 7) Installation length, 8) 1/2" - 14 NPT (cable entry), 9) 15/16" or 24 mm wrench, 10) External Housing GND, 11) Cover fastening screw, 12) O-ring, 12) Cable fitting/ATEX approved, 13) Part label, metal, 14) PUR cable, flame-resistant

### Basic features

Magnets, number max. 4

### Electrical connection

Bending radius min., fixed cable 6 x D  
 Bending radius min., flexible cable 5 x D  
 Cable diameter D 9.6...10 mm  
 Cable length L 20 m, drag chain compatible  
 Connection Cable, 20.00 m, PUR  
 Connection version radial  
 Polarity reversal protected Ub up to 28 V

### Electrical data

Current consumption max. at 24 V DC 120 mA  
 Galvanic isolation no  
 Inrush current ≤ 3 A/0.5 ms  
 Operating voltage Ub 20...28 VDC  
 Overvoltage protection Ub up to 28 V  
 Voltage-proof up to (GND to housing) 500 V DC

### Environmental conditions

Ambient temperature -40...80 °C  
 Cable temperature, fixed routing -40...80 °C  
 EN 55016-2-3, Radiation For industrial and residential use  
 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 IP68  
 Relative humidity ≤ 90 %, non-condensing  
 Storage temperature -50...100 °C  
 Temperature coefficient typ. ≤ 35 ppm/K at 50% of nominal stroke 500mm

### Interface

Interface Profibus DP

Magnetostrictive Sensors  
**BTL5-T110-M0100-J-DEXC-K20**  
Order Code: BTL1WM2



**Material**

Cable jacket, material	PUR
Housing material	1.4404 stainless steel
Material flange	1.4404 stainless steel
O-ring material	FKM
Protection tube material	1.4571 stainless steel

**Mechanical data**

Housing diameter	88 mm
Installation length from contact surface	228 mm
Mounting part	Flange Ø18h6 plus holes
Null point	50.8 mm
Pressure rating max.	600 bar
Protection tube diameter	10.2 mm
Tightening torque	3.5 Nm

**Range/Distance**

Non-linearity max.	±30 µm
Repeat accuracy	± 2 LSB
Reproducibility	±2 LSB
Sampling rate, length-dependent	1 kHz, standard

**Wiring Diagrams**

Color	
RD	RxD/TxD-N
GN	RxD/TxD-P
BU	GND
BK	+24V DC
GN/YE	Hsg GND

Help Views

