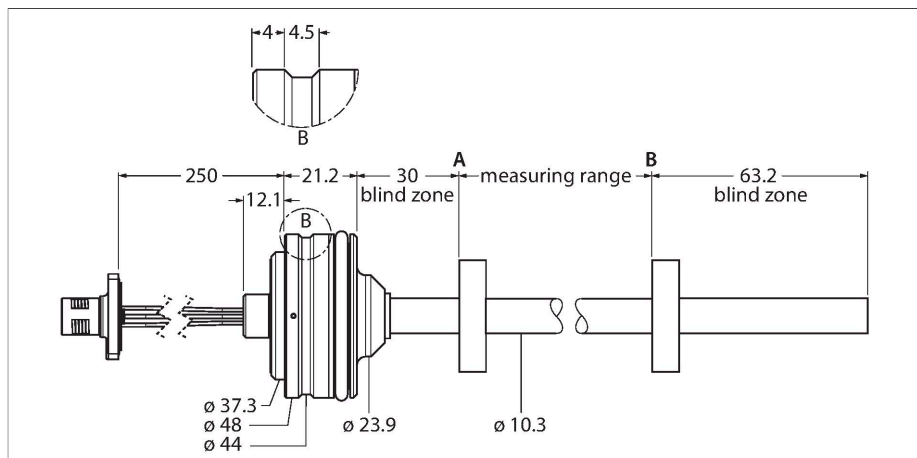


LTE250M-HT10-LU10-P-0.25-H1151

Pressure-Resistant Linear Position Sensor – Analog



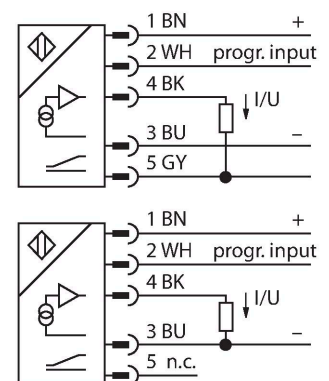
Technical data

| | |
|---|-------------------------------------|
| Type | LTE250M-HT10-LU10-P-0.25-H1151 |
| ID | 100002118 |
| Measuring principle | Magnetostrictive |
| General data | |
| Measuring range | 250 mm |
| Resolution | 16 bit |
| Blind zone a | 30 mm |
| Blind zone b | 63.2 mm |
| Repeat accuracy | ≤ 0.01 % of full scale |
| Linearity deviation | ≤ 0.04 % f.s. |
| Hysteresis | ≤ 0.026 mm |
| Electrical data | |
| Operating voltage | 8...30 VDC |
| Residual ripple | ≤ 10 % U _{ss} |
| Isolation test voltage | ≤ 0.5 kV |
| Wire breakage/Reverse polarity protection | yes (voltage supply) |
| Output function | 5-pin, Analog output |
| Voltage output | 0.5...4.5 V |
| Load resistance voltage output | ≥ 2 kΩ |
| Current consumption | < 60 mA at 24 VDC |
| Mechanical data | |
| Design | Rod |
| Dimensions | 376.5 mm |
| Housing material | Stainless steel, 1.4305 (AISI 303) |
| Active area material | Stainless steel, 1.4404 (AISI 316L) |
| Electrical connection | Cable with connector, M12 × 1 |

Features

- Suited for hydraulic cylinders
- Embedded housing design
- The sensor is pressure resistant up to 340 bar (permanent), 680 bar (short-term)
- Adjustable measuring range
- Analog output 0.5...4.5 V
- 0.25 m cable with M12 male connector

Wiring diagram

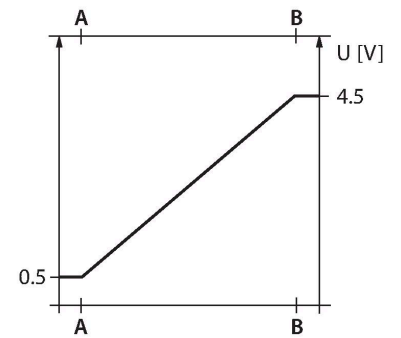


Functional principle

The LTE is a magnetostrictive sensor, optimized for precise position control in hydraulic cylinders. The absolute value sensor is very robust and precise, and also saves the position information in the event of a voltage failure, rendering additional zeroing unnecessary. The sensors operate on the non-contact function principle and are thus wear and maintenance free.

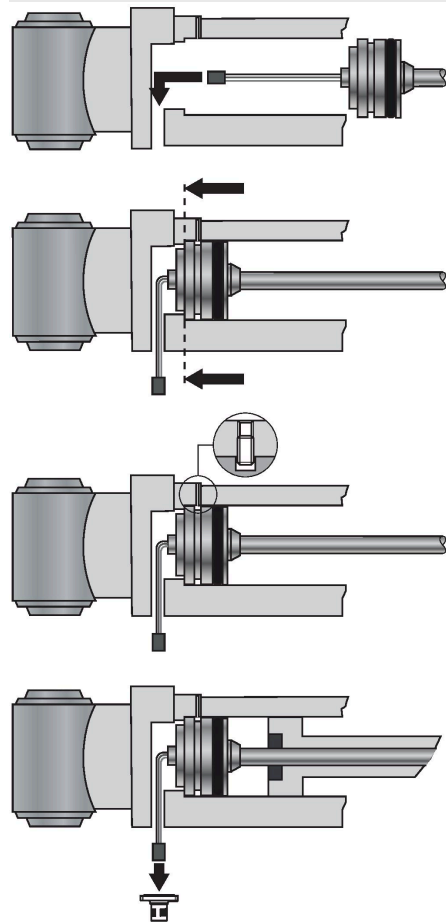
Technical data

| Environmental conditions | |
|--------------------------|---------------|
| Ambient temperature | -40...+85 °C |
| Vibration resistance | 30 Hz (1 mm) |
| Shock resistance | 100 g (11 ms) |
| Protection class | IP68 |



Mounting instructions

Mounting instructions/Description



Mounting

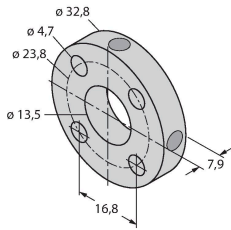
To fasten the sensor, the end cap of the hydraulic cylinder must have an M18 × 1.5 threaded bore according to ISO 6149-1. For more information, refer to the operating instructions.

Accessories

STM-AL-R10

6900409

Standard 4-hole positioning element,
material: Aluminum



STS-R10

6900411

Standard spacer made of non-ferrous material for separating the positioning element from the base of the hydraulic piston rod



CM-R10

6900416

Standard positioning element,
suitable for mounting in hydraulic
cylinders

