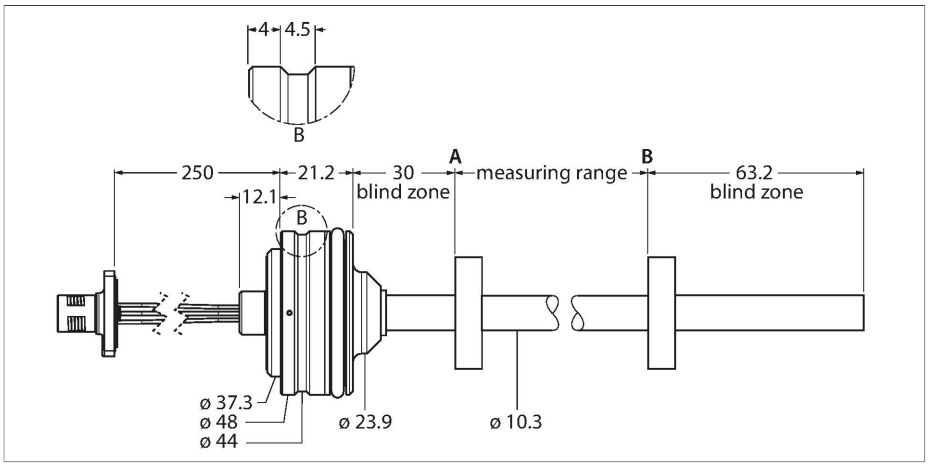
LTE500M-HT10-LU10-P-0.25-H1151
Pressure-Resistant Linear Position Sensor – Analog



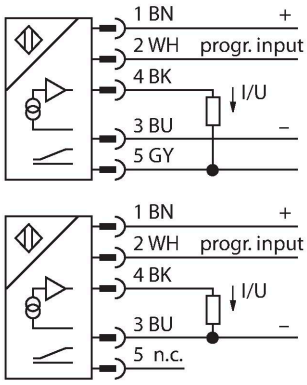
Technical data

Type	LTE500M-HT10-LU10-P-0.25-H1151
ID	100002123
Measuring principle	Magnetostrictive
General data	
Measuring range	500 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 U_B	8…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
Isolation test voltage	0.5 kV
Wire break/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	626.5 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.

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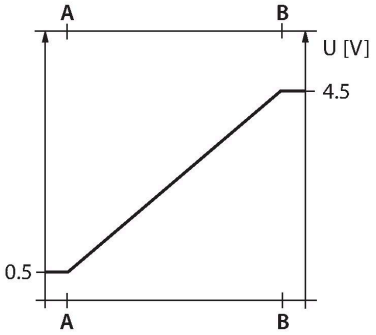
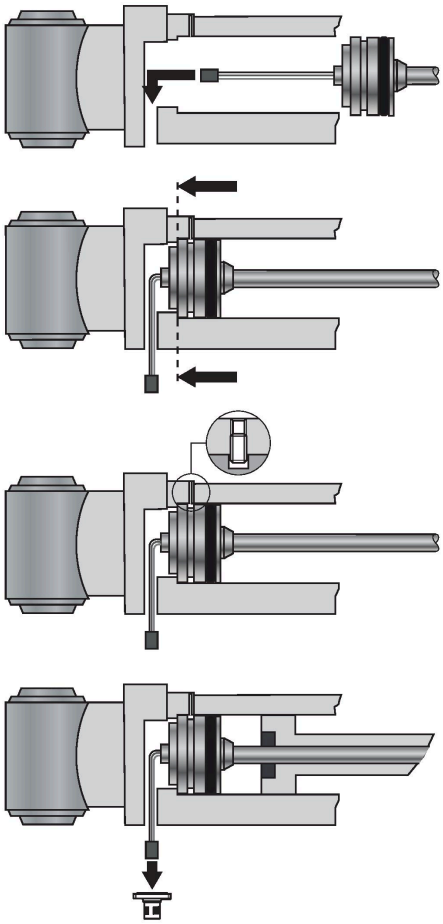
Technical data

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.

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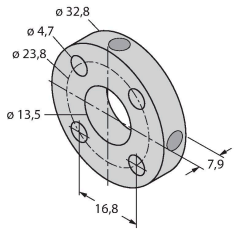
Accessories

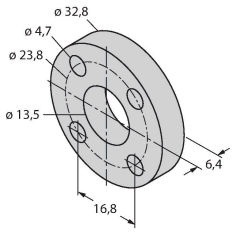
STM-AL-R10	6900409

Standard 4-hole positioning element, material: Aluminum



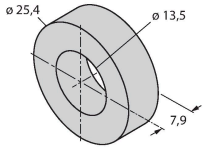
STS-R10	6900411

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



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