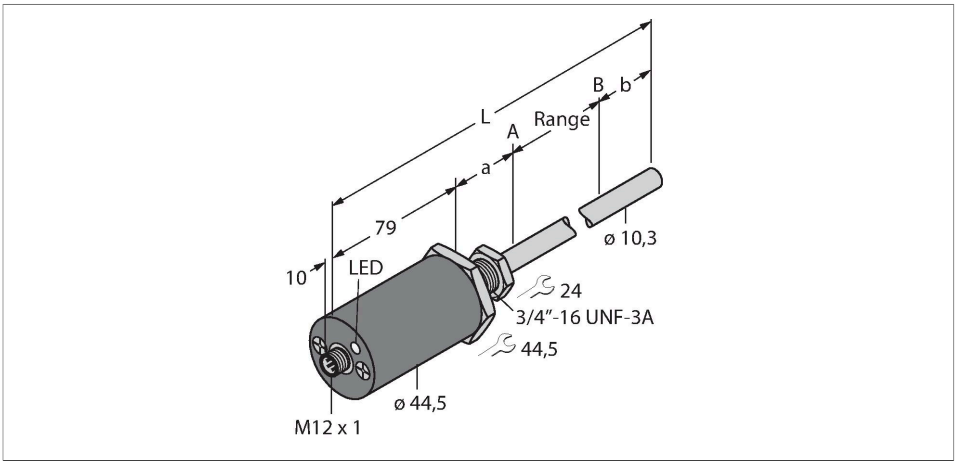
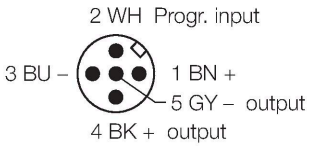
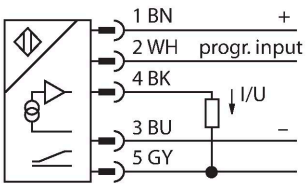
LT80E-R10-LU0-H1151
Magnetically actuated linear position sensor



Features

- Suited for hydraulic cylinders
- 5-wire, 13.5…30 VDC
- High repeatability
- Extremely high linearity
- Male connector, M12 x 1, 13.5…30VDC



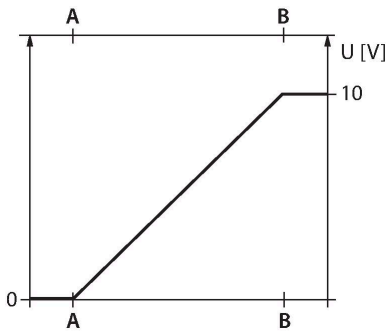


Technical data

Type	LT80E-R10-LU0-H1151
ID	LT0364
Remark to product	Please note housing design on page 2
Measuring principle	Magnetostrictive
General data	
Measuring range	2032 mm
Blind zone a	50.8 mm
Blind zone b	63.5 mm
Repeat accuracy	≤ 0.01 % of full scale
Electrical data	
Operating voltage U_B	13.5…30 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
No-load current	≤ 80 mA
Short-circuit protection	yes/Cyclic
Wire break/reverse polarity protection	yes (voltage supply)
Output function	4-wire, Analog output
Voltage output	0…10 V
Mechanical data	
Design	Rod, R10
Dimensions	2246.884 mm
Housing material	Metal, AL, Black
Active area material	Stainless steel, 1.4404 (AISI 316L)
Electrical connection	Connector, M12 × 1

Functional principle

Magnetostrictive linear position sensors with analog output provide a signal that is proportional to the travel distance. Simple control tasks can thus be accomplished. These sensors feature an excellent repeat accuracy, resolution and linearity.
Due to their extremely robust design, they are especially suited for industrial applications. They also excel in their high electromagnetic compatibility and stability over a wide temperature range. The sensors operate on the non-contact function principle and are thus wear and maintenance free.



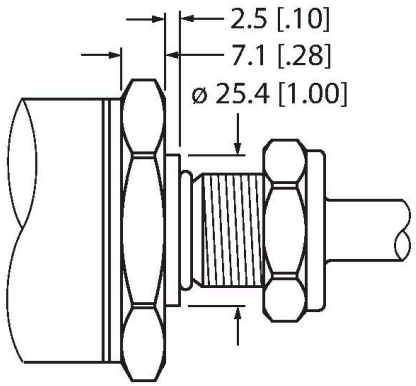
LT80E-R10-LU0-H1151| 10/05/2026 17-35 | technical changes reserved

Technical data

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

Mounting instructions

Mounting instructions/Description



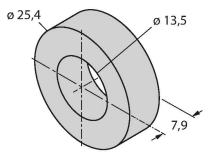
Raised Face Design

This sensor comes in raised face design (see drawing).

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.

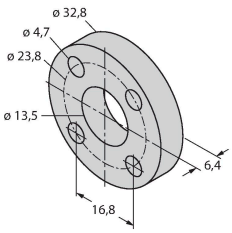
Accessories

CM-R10	6900416



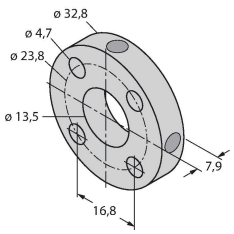
Standard positioning element, suitable for mounting in hydraulic cylinders

STS-R10	6900411



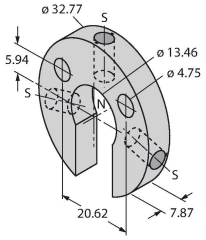
Standard spacer made of non-ferrous material for separating the positioning element from the base of the hydraulic piston rod

STM-AL-R10	6900409



Standard 4-hole positioning element, material: Aluminum

SPM-AL-R10	6900412

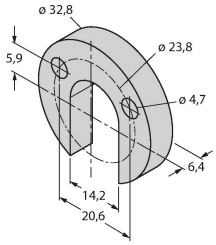


Small ring-type positioning element with slot, material: Aluminum

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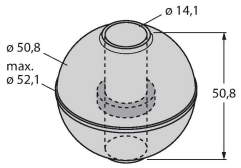
SPS-R10	6900413

Spacer for ring-type positioning element with slot



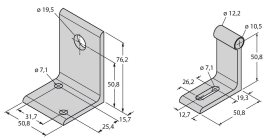
EF-R10	6900417

Float-type positioning element, specific weight 0.62 kg/m³, suitable for external mounting for level monitoring, material: Stainless steel



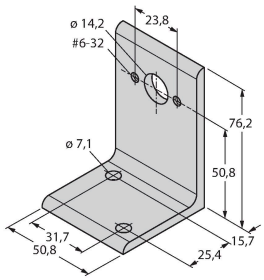
MB-R10	6900419

Mounting bracket for sensor head and rod, for external mounting



MMB-R10	6900004

Mounting bracket for positioning element, for external mounting



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