



# LINEAR POSITION TRANSDUCERS

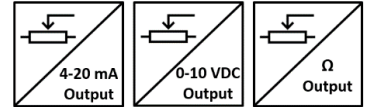
## “Push-Back Spring System For Short Distance Measurement”

# LTR



### GENERAL FEATURES

- Push-back spring system
- Potentiometric measurement
- Potentiometric, 4-20 mA or 0-10V analog output options
- Optionally cable or DIN43650-C socket connection
- Measurement lengths between 10 mm and 300 mm
- Long life up to 100 million movements
- High accuracy
- High operating speed up to 5 m/s



The most important feature of the LTR Series position sensors is the push-back spring.

They work as ABSOLUTE because they are measuring with the potentiometric principle, that is, they do not lose their position in case of power off. Potentiometric, 4-20 mA (optional 0-20 mA) or 0-10V analog output options are available.

Because of their linearized conductive plastic resistance alloy and special contacts, they are not affected by wear and operate for a long time with a life cycle of up to 100 million. They are stable by being linear and they measure evenly.

### TECHNICAL SPECIFICATIONS

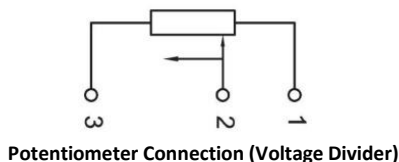
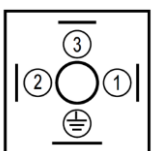
Model	LTR 010	LTR 025	LTR 050	LTR 075	LTR 100	LTR 125	LTR 150	LTR 200	LTR 250	LTR 300
Electrical Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Mechanical Stroke (mm)	12	27	52	77	102	127	152	202	252	302
Independent Linearity	±%1	±%0,5	±%0,4	±%0,25	±%0,2	±%0,2	±%0,2	±%0,1	±%0,1	±%0,1
Repeatability	0.01 mm									
Max Operating Speed	5 m/s									
Resistance Element	Conductive Plastic									
Output Signal	Potentiometric		4-20 mA (opt. 0...20 mA) or 0-10V							
Supply Voltage	42V max.		12...30 VDC							
Resistance	5K, 10K (optional other)		-							
Electrical Connection	DIN 43650-C socket or 3 x 0,14 mm <sup>2</sup> shielded PVC cable									
Operating Temperature	-30°C...+100°C									
IP Protection Class	IP40									
Life	100 million movements									
Rod Material	Stainless Steel									
Body Material	Aluminum									

### ELECTRICAL CONNECTION

SIGNAL	CABLE COLOR	DIN 43650-C SOCKET
+VDC	Red	Pin 1
Output Signal*	Yellow	Pin 2
-VDC	Black	Pin 3

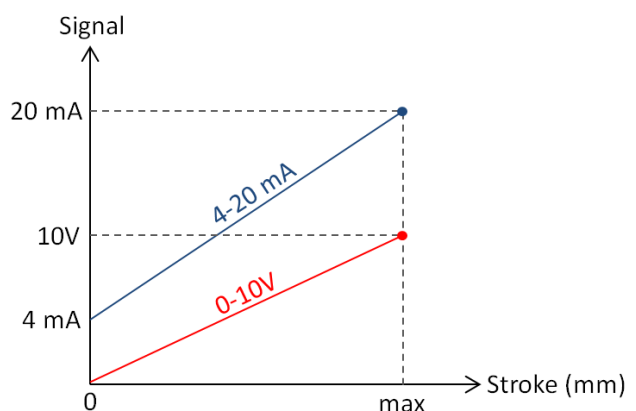
\* Output Signal may be potentiometric, 0-10 VDC or 4-20 mA depending on the model (See Product code table).

#### DIN 43650-C SOCKET



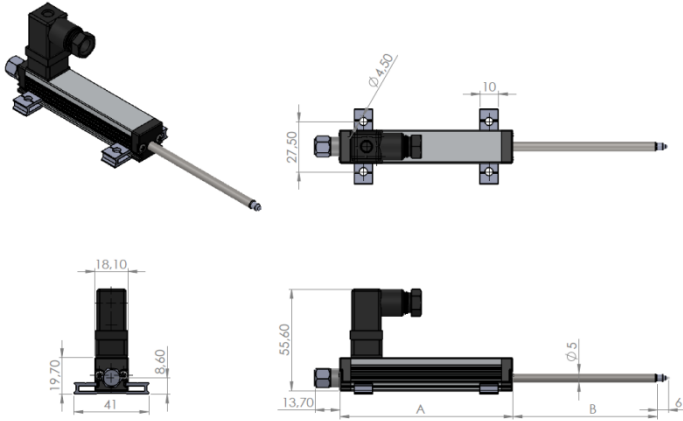
**Note:** The GND line of the feed and signal output is common. Therefore it can be connected with 3-wire cable.

#### Output Signal Graphic

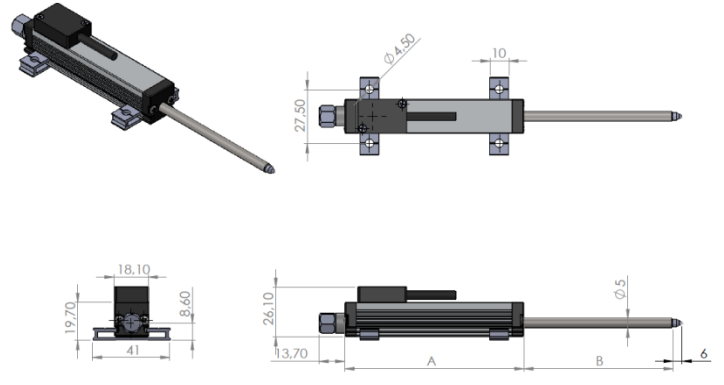


## MECHANICAL DIMENSIONS (mm)

### MODEL WITH DIN 43650-C SOCKET



### MODEL WITH 3 x 0,14 mm<sup>2</sup> CABLE



	Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Potentiometric Output (with cable or socket)	A	48	64	95	128	167	193	226	289	354	417
	B	40	55	80	105	130	155	180	230	280	330
0-10 V or 4-20 mA Output (with cable)	A	48	64	95	128	167	193	226	289	354	417
	B	40	55	80	105	130	155	180	230	280	330
0-10 V or 4-20 mA Output (with socket)	A	82	97	122	147	172	197	222	289	354	417
	B	40	55	80	105	130	155	180	230	280	330

## SAMPLE APPLICATION FIELDS

- Measuring /control technology
- Manufacturing engineering like woodwork machines, riveting machines, packaging machines and welding machines etc.
- Assembly / test devices
- Medical applications
- Building technology

## ORDER CODE

### Order Code For Analog Output

#### Model No

LTR - XXX - X - XX

#### Output Signal

A: 4-20 mA (\*Optional 0-20 mA)  
V: 0-10 VDC

#### Measuring Lengths (stroke)

Different measuring lengths between 10 mm and 300 mm

#### Electrical Connection

No Code: DIN43650-C socket (standard)  
2M: 2 meters PVC cable (optional)

### Order Code For Potentiometric Output

#### Model No

LTR - XXX - XXX - XX

#### Resistance Value

5K: 5KΩ  
10K: 10KΩ

#### Measuring Lengths (stroke)

Different measuring lengths between 10 mm and 300 mm

#### Electrical Connection

No Code: DIN43650-C socket (standard)  
2M: 2 meters PVC cable (optional)

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