

LINEAR POSITION TRANSDUCERS

umentation "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. 020 mA) or 0-10V									
Supply Voltage	42V max.			1230 VDC									
Resistance	5K, 10K (optional other)			-									
Electrical Connection	DIN 43650-C socket or 3 x 0,14 mm ² shielded PVC cable												
Operating Temperature	-30°C+100°C												
IP Protection Class	IP40												
Life	100 million movements												
Rod Material	Stainless Steel												
Body Material	Aluminum												

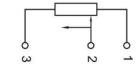
ELECTRICAL CONNECTION

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





Potentiometer Connection (Voltage Divider)

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

Output Signal Graphic Signal 10V 4 mA → Stroke (mm) max

DS-LTR.002 Rev No:2 1

MODEL WITH DIN 43650-C SOCKET

MODEL WITH 3 x 0,14 mm² CABLE

	Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Retentiometric Output (with cable or cocket)	Α	48	64	95	128	167	193	226	289	354	417
Potentiometric Output (with cable or socket)	В	40	55	80	105	130	155	180	230	280	330
0 10 V or 4 20 m A Outmut (with cable)	Α	48	64	95	128	167	193	226	289	354	417
0-10 V or 4-20 mA Output (with cable)	В	40	55	80	105	130	155	180	230	280	330
0.10 V or 4.20 mA Output (with cooket)	Α	82	97	122	147	172	197	222	289	354	417
0-10 V or 4-20 mA Output (with socket)	В	40	55	80	105	130	155	180	230	280	330

MECHANICAL DIMENSIONS (mm)

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 Output Signal A: 4-20 mA (*Optional 0-20 mA) **Model No** V: 0-10 VDC XXX -XX Measuring Lengths (stroke) **Electrical Connection** Different measuring lengths between 10 No Code: DIN43650-C socket (standard) mm and 300 mm 2M: 2 meters PVC cable (optional) **Order Code For Potentiometric Output Resistance Value 5K**: 5KΩ **Model No 10K**: 10KΩ **LTR** XXX XXXXX-Measuring Lengths (stroke) **Electrical Connection** Different measuring lengths between 10 No Code: DIN43650-C socket (standard) mm and 300 mm 2M: 2 meters PVC cable (optional)