

# LINEAR POSITION TRANSDUCERS

"Small Structure For Short Range Measurements"

LT



#### **GENERAL FEATURES**

- Short distance measuring scale
- Potentiometric measurement
- Potentiometric, 4-20 mA or 0-10V analog output options
- Optionally cable or DIN 43650-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
- Compact design







The most important feature of LT Series position sensors is that they are used in confined spaces due to their small size.

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	LT 010	LT 025	LT 05	0	LT 075	LT 100	LT 125	LT 150	LT 200	LT 250	LT 300		
Electrical Stroke (mm)	10	25	50		75	100	125	150	200	250	300		
Mechanical Stroke (mm)	11	26	51		76	101	126	151	201	251	301		
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)			-									
Resistance Tolerance (±%)	20			-									
<b>Electrical Connection</b>	DIN 43650-C socket or 3 x 0,14 mm <sup>2</sup> shielded cable												
Operating Temperature	-30°C+100°C												
IP Protection Class	IP40												
Life	100 million movements												
Rod Material	Stainless Steel												
Body Material	Aluminum												

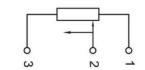
# **ELECTRICAL CONNECTION**

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

<sup>\*</sup> 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)** 

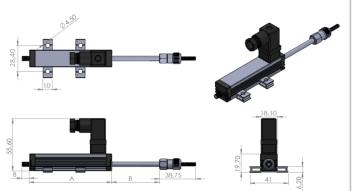
**Note:** The GND line of the feed and signal output is common. Therefore it can be connected with 3-wire cable

# Signal 20 mA 10V 4 mA 0-10V 0 max Stroke (mm)

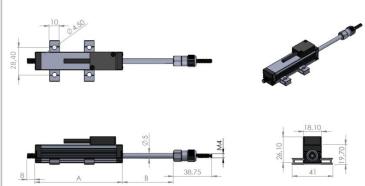
DS-LT.002 Rev No:3

# **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)	Α	48	63	88	113	138	163	188	238	288	338
	В	12	27	52	77	102	127	152	202	252	302
0-10 V or 4-20 mA Output (with cable)	Α	48	63	88	113	138	163	188	238	288	338
0-10 V or 4-20 mA Output (with cable)	В	12	27	52	77	102	127	152	202	252	302
0-10 V or 4-20 mA Output (with socket)	Α	82	97	122	147	172	197	222	272	322	372
0-10 v or 4-20 ma Output (with socker)	В	12	27	52	77	102	127	152	202	252	302

#### 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)

Different measuring lengths between 10

mm and 300 mm

**Electrical Connection** 

No Code: DIN43650-C socket

2M: 2 meters cable

(\*Optionally different cable lengths)

# **Order Code for Potentiometric Output**

**Resistance Value** 

**5K:** 5ΚΩ **Model No 10K**: 10ΚΩ

> XXX XX

# Measuring Lengths (stroke)

Different measuring lengths between 10 mm and 300 mm

#### **Electrical Connection**

No Code: DIN43650-C socket 2M: 2 meters cable

(\*Optionally different cable lengths)

#### Atek Elektronik Sensör Teknolojileri Sanayi ve Ticaret A.Ş.



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