

LINEAR POSITION TRANSDUCERS

“Rodless, Sliding System for Long Distance Measurements”

LTK



GENERAL FEATURES

The most important feature of LTK series position sensors is that they have a rodless and sliding system. They take measurement by movement of the sled along the profile. This provides the body to be shorter and allows up to 1500 mm stroke length.

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.

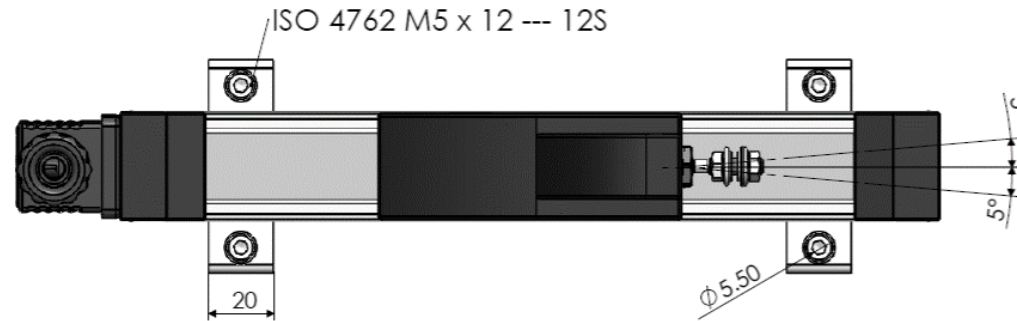
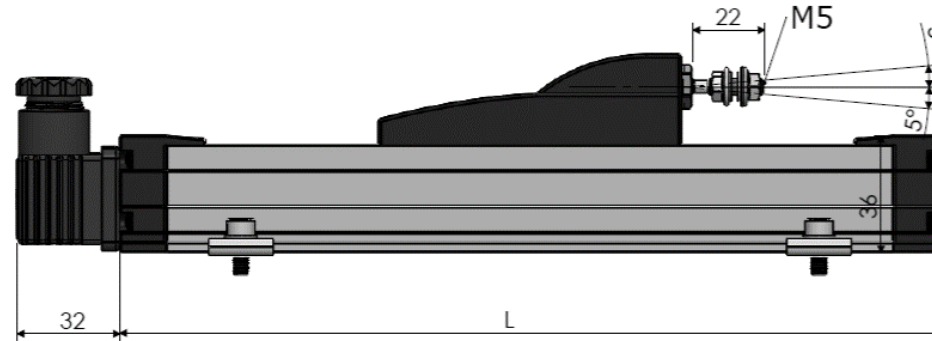
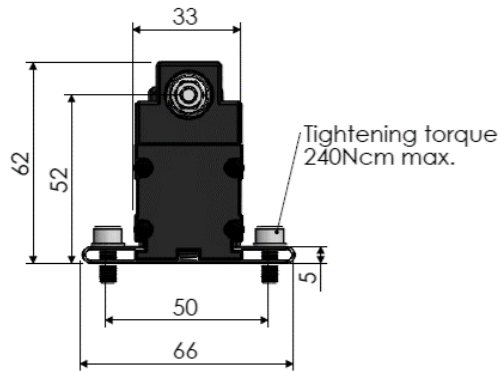
Because of their linearized conductive plastic resistance alloy and special contacts, they are not affected by wear and operate for a long time with a life cycle of up to 100 million. They are stable by being linear and they measure evenly.

- Rodless, sliding system
- Measuring lengths between 50 mm and 1500 mm
- Potentiometric measurement
- Potentiometric, 4-20 mA or 0-10V analog output options
- Long life up to 100 million movements
- High accuracy
- Compact design
- DIN43650-A socket connection
- IP 40 protection class
(if slider is mounted upside down, it becomes IP54)

TECHNICAL SPECIFICATIONS

Model	LTK 50	LTK 75	LTK 100	LTK 125	LTK 150	LTK 175	LTK 200	LTK 225	LTK 250	LTK 275	LTK 300	LTK 325	LTK 350	LTK 375	LTK 400	LTK 450	LTK 500	LTK 550	LTK 600	LTK 650	LTK 700	LTK 750	LTK 800	LTK 900	LTK 1000	LTK 1100	LTK 1250	LTK 1500	
Electrical Stroke (mm)	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600	650	700	750	800	900	1000	1100	1250	1500	
Independent Linearity (±%)	0,1																												
Repeatability	0.01 mm																												
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.									15...30 VDC																			
Resistance (KΩ)	Models from 50 to 1100mm: 5K, 10K (optional others)									-																			
	Models with 1250 or 1500mm: 20K (standard)																												
Resistance Tolerance (±%)	20									-																			
Resolution	Infinite																												
Electrical Connection	DIN 43650-A 4 pin socket																												
Mechanical Fixing	Adjustable (sliding) mounting feet																												
Operating Temperature	-30°C...+100°C																												
IP Protection Class	IP40 (if slider is mounted upside down, it becomes IP54)																												
Life	100 x 10 ⁶ movements																												
Material	Sliding parts: Plastic																												
	Body: Aluminum																												

MECHANICAL DIMENSIONS (mm)

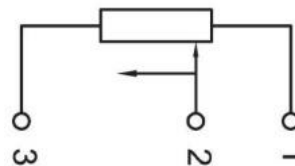
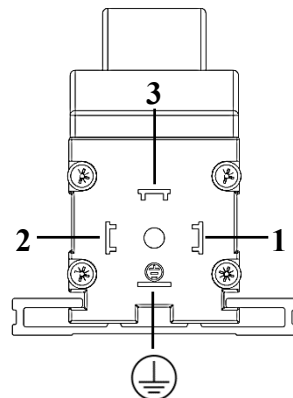


Stroke	Body Length (L)
50	204
75	229
100	254
125	279
150	304
175	329
200	354
225	379
250	404
275	429
300	454
325	479
350	504
375	529
400	554
450	604
500	654
550	704
600	754
650	804
700	854
750	904
800	954
900	1054
1000	1154
1100	1254
1250	1404
1500	1654

ELECTRICAL CONNECTION

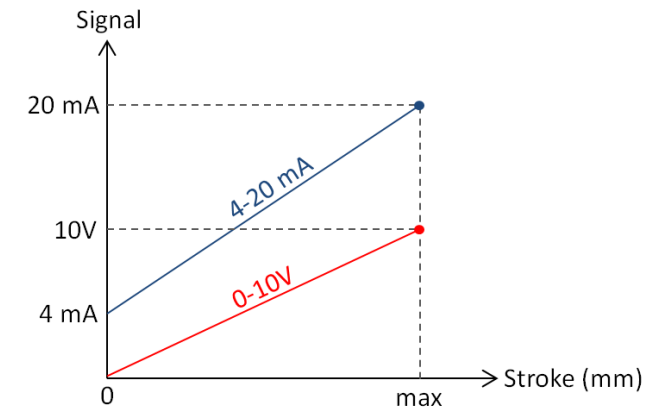
SIGNAL	DIN 43650-A SOCKET
+ V	Pin 1
Output Signal*	Pin 2
- V	Pin 3

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



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.



SAMPLE APPLICATION FIELDS

- Measuring /control technology
- Manufacturing engineering like woodwork machines, riveting machines, packaging machines etc.
- Hydraulic machines
- Press brakes
- Metal working machines
- Bending machines
- Assembly and test equipment
- Medical applications
- Building technology
- Textile machinery
- Plastic and metal injection machines

ORDER CODE

Order Code For Analog Output

Model No

LTK	-	XXX	-	X	-	XX
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Output Signal

A: 4-20 mA (*Optional 0-20 mA)

V: 0-10 VDC

Measuring length (Stroke)

Different measuring lengths between 50 mm and 1500 mm

Electrical Connection

No code: DIN43650-A Socket (standard)

Order Code For Potentiometric Output

Model No

LTK	-	XXX	-	XXX	-	XX
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Resistance Value⁽¹⁾

5K: 5KΩ

10K: 10KΩ

20K: 20KΩ

*Optional others

Measuring length (Stroke)

Different measuring lengths between 50 mm and 1500 mm

Electrical Connection

No code: DIN43650-A Socket (standard)

(1) Resistance value can be selected;
5K or 10K (optional others) in models from 50 to 1100mm
20K in models 1250 and 1500mm

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