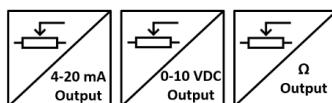


# LINEAR POSITION TRANSDUCERS

"One-side Actuating Rod, Small Body"

LF



## GENERAL FEATURES

- One-side actuating rod
- Potentiometric measurement
- Potentiometric, 4-20mA or 0-10V analog output options
- Standard IP40, optional IP65 protection
- 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

On the LF series position transducers, the movable shaft does not protrude from the rear of the transducer. In this way, it can be easily installed in confined spaces.

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

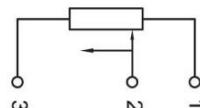
Model	LF 010	LF 025	LF 050	LF 075	LF 100	LF 125	LF 150	LF 200	LF 250	LF 300
Electrical Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Mechanical Stroke (mm)	12	27	52	77	102	127	152	202	252	302
Independent Linearity	±%1	±%0,5	±%0,4	±%0,25	±%0,2	±%0,2	±%0,2	±%0,1	±%0,1	±%0,1
Repeatability	0.01 mm									
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)	-								
Resistance Tolerance (±%)	20	-								
Resolution	Infinite									
Electrical Connection	DIN 43650-C connector, M16 connector or 3 x 0,14 mm <sup>2</sup> shielded PVC cable									
Operating Temperature	-30°C...+100°C									
IP Protection Class	IP40 (optional IP65)									
Life	100 million movements									
Rod Material	Stainless Steel									
Body Material	Aluminum									

## ELECTRICAL CONNECTIONS

SIGNAL	CABLE	DIN 43650-C CONN.	M16/5 PIN MALE CONN.
+VDC	Red	Pin 1	Pin 1
Out Signal*	Yellow	Pin 2	Pin 2
-VDC	Black	Pin 3	Pin 3

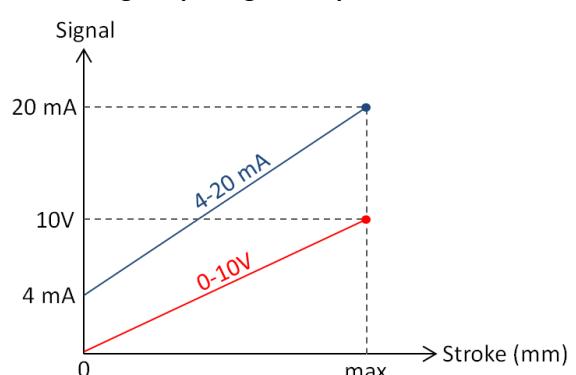
\* Output Signal may be potentiometric, 0-10 VDC or 4-20 mA depending on the model (See Product code table).

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



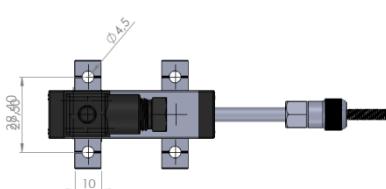
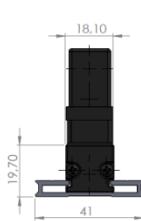
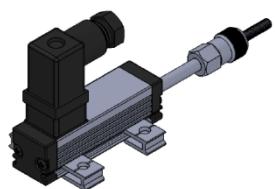
Potentiometer Connection (Voltage Divider)

## Analog Output Signal Graphic

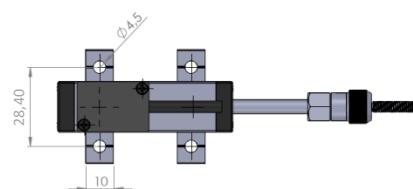
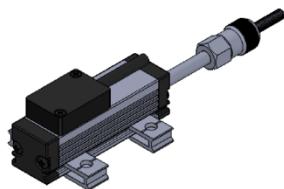


## MECHANICAL DIMENSIONS (mm)

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	For IP40	48	63	88	113	138	163	188	238	288	338
	B	For IP40	12	27	52	77	102	127	152	202	252	302
0-10 V or 4-20 mA Output (with cable)	A	For IP40	48	63	88	113	138	163	188	238	288	338
	B	For IP40	12	27	52	77	102	127	152	202	252	302
0-10 V or 4-20 mA Output (with socket)	A	For IP40	82	97	122	147	172	197	222	272	322	372
	B	For IP40	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

Model No	Output Signal	Protection
LF - XXX - X - XX - XXXX	A: 4-20 mA (*Optional 0-20 mA ) V: 0-10 VDC	No code: IP40 E065: IP65
<b>Measuring Lengths (stroke)</b> Different measuring lengths between 10 mm and 300 mm	<b>Electrical Connection</b> No Code: DIN43650-C connector S80: M16 5 pin male connector 2M: 2 meters PVC cable (standard) *Optional different cable lengths	

### Order Code For Potentiometric Output

Model No	Resistance Value	Protection
LF - XXX - XXX - XX - XXXX	5K: 5KΩ 10K: 10KΩ	No code: IP40 E065: IP65
<b>Measuring Lengths (stroke)</b> Different measuring lengths between 10 mm and 300 mm	<b>Electrical Connection</b> No Code: DIN43650-C connector S80: M16 5 pin male connector 2M: 2 meters PVC cable (standard) *Optional different cable lengths	