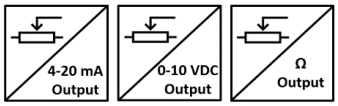
LINEAR POSITION TRANSDUCERS

"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

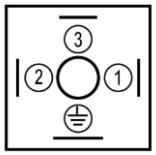
Model	LF 010	LF 025	LF 050	LF 075	LF 100	LF 125	LF 150	LF 200	LF 250	LF 300
Electrical Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Mechanical Stroke (mm)	12	27	52	77	102	127	152	202	252	302
Independent Linearity	±%1	±%0,5	±%0,4	±%0,25	±%0,2	±%0,2	±%0,2	±%0,1	±%0,1	±%0,1
Repeatability	0.01 mm									
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	-								
Electrical Connection	DIN 43650-C socket or 3 x 0,14 mm² shielded cable									
Operating Temperature	-30°C...+100°C									
IP Protection Class	IP40 (optional IP65)									
Life	100 million movements									
Rod Material	Stainless Steel									
Body Material	Aluminum									

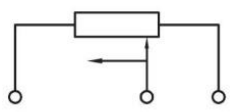
ELECTRICAL CONNECTIONS

SIGNAL	CABLE 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

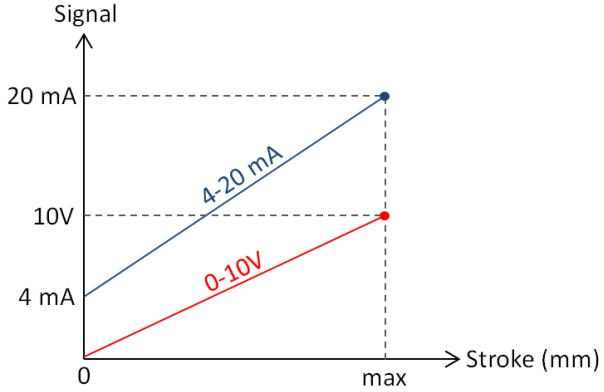




Potentiometer Connection (Voltage Divider)

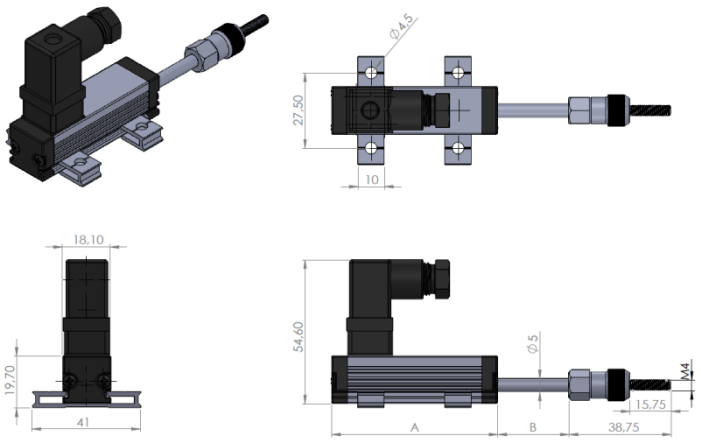
Note: The GND line of the feed and signal output is common. Therefore it can be connected with 3-wire cable

Analog Output Signal Graphic

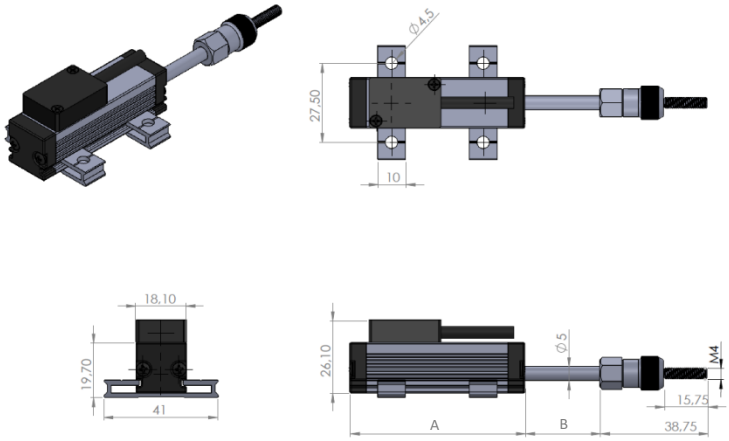


MECHANICAL DIMENSIONS (mm)

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
Potentiometric Output (with cable or socket)	A	For IP40	48	63	88	113	138	163	188	238	288	338
		For IP65	58	73	98	123	148	173	198	248	298	348
	B		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
		For IP65	58	73	98	123	148	173	198	248	298	348
	B		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
		For IP65	92	107	132	157	182	207	232	282	332	382
	B		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

LF	-	XXX	-	X	-	XX	-	XXXX

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

Protection
No code: IP40
E065: IP65

Measuring Lengths (stroke)
Different measuring lengths between 10 mm and 300 mm

Electrical Connection
No Code: DIN43650-C socket
2M: 2 meters PVC cable (standard)
(*Optionally different cable lengths)

Order Code For Potentiometric Output

Model No

LF	-	XXX	-	XXX	-	XX	-	XXXX

Resistance Value
5K: 5KΩ
10K: 10KΩ

Protection
No code: IP40
E065: IP65

Measuring Lengths (stroke)
Different measuring lengths between 10 mm and 300 mm

Electrical Connection
No Code: DIN43650-C socket
2M: 2 meters PVC cable (standard)
(*Optionally different cable lengths)