

GENERAL FEATURES

- Double-side articulated body
- 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 LFM series position rulers can be used to measure linear or angular movements thanks to its double-sided articulated body.

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

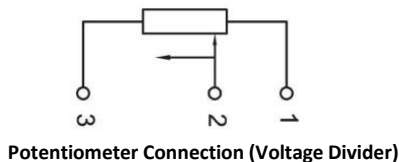
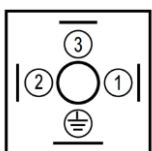
Model	LFM 010	LFM 025	LFM 050	LFM 075	LFM 100	LFM 125	LFM 150	LFM 200	LFM 250	LFM 300
Electrical Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Mechanical Stroke (mm)	12	27	52	77	102	127	152	202	252	302
Independent Linearity	±%1	±%0,5	±%0,4	±%0,25	±%0,2	±%0,2	±%0,2	±%0,1	±%0,1	±%0,1
Repeatability	0.01 mm									
Max Operating Speed	5 m/s									
Resistance Element	Conductive Plastic									
Resistance	5K, 10K (optional other)									
Output Signal	4-20 mA (optional 0...20 mA), 0-10V or Potentiometric									
Supply Voltage	For current and voltage output models: 12...30 VDC For potentiometric output model: 42V max.									
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

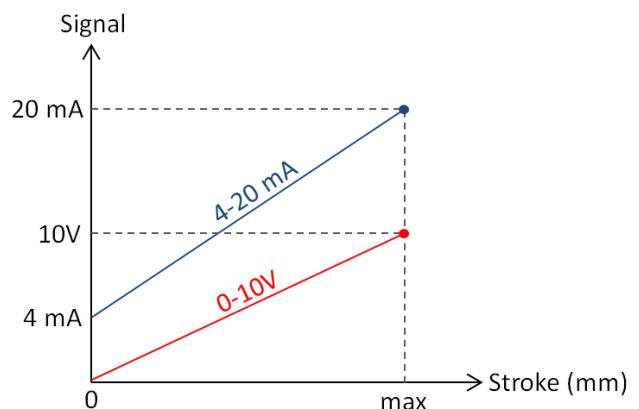
* **Output Signal** may be potentiometric, 0-10 VDC or 4-20 mA depending on the model (See Product code table).

DIN 43650-C SOCKET



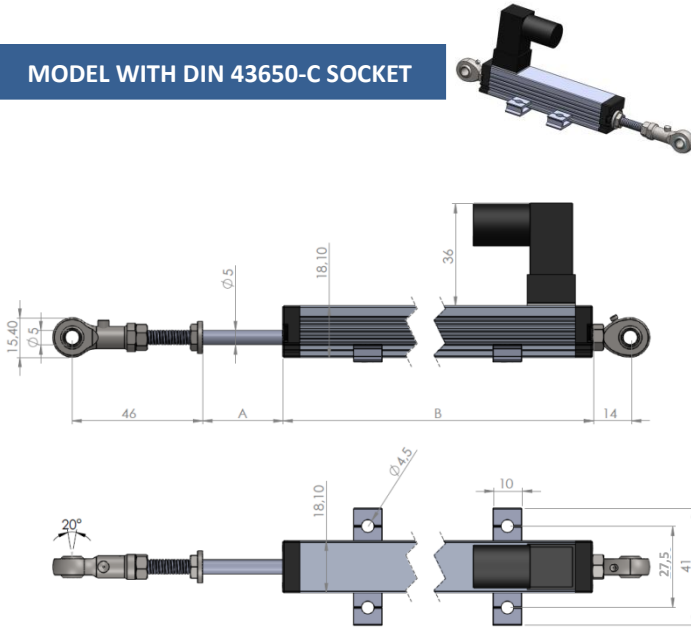
Note: The GND line of the feed and signal output is common. Therefore it can be connected with 3-wire cable

Analog Output Signal Graphic

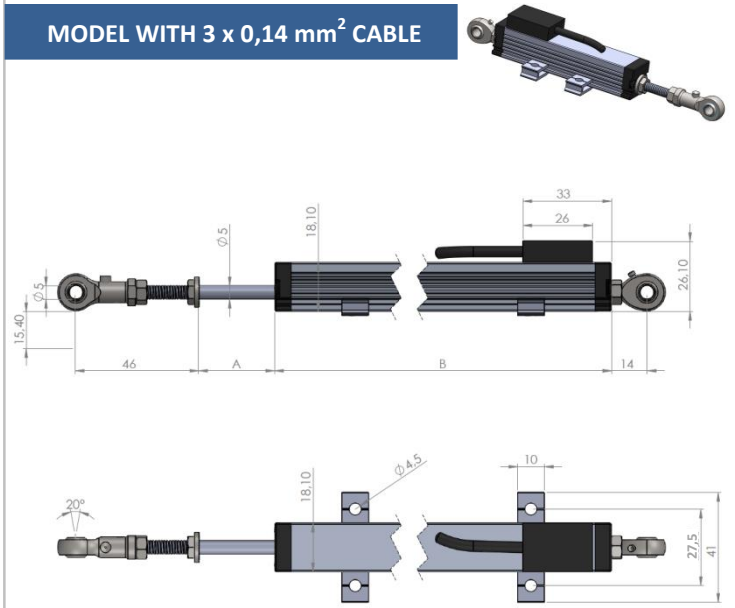


MECHANICAL DIMENSIONS (mm)

MODEL WITH DIN 43650-C SOCKET



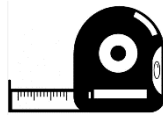
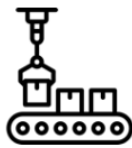
MODEL WITH 3 x 0,14 mm² CABLE



	Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Potentiometric Output (with cable or socket)	A	12	27	52	77	102	127	152	202	252	302
	B	48	63	88	113	138	163	188	238	288	338
0-10 V or 4-20 mA Output (with cable)	A	12	27	52	77	102	127	152	202	252	302
	B	48	63	88	113	138	163	188	238	288	338
0-10 V or 4-20 mA Output (with socket)	A	12	27	52	77	102	127	152	202	252	302
	B	82	97	122	147	172	197	222	272	322	372

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

Model No

L F M - X - X - X - X

Measuring Lengths (stroke)

Different measuring lengths between 10 mm and 300 mm

Resistance Value

5K: 5KΩ
10K: 10KΩ

Output Signal

A: 4-20 mA (*Optional 0-20 mA)
V: 0-10 VDC
No Code: Potentiometric

Electrical Connection

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



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