

GENERAL FEATURES

- Double-side articulated body
- Potentiometric measurement
- Potentiometric, 4-20 mA 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

The LFM series position transducers 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

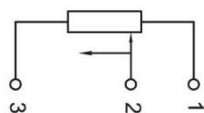
Model	LFM 010	LFM 025	LFM 050	LFM 075	LFM 100	LFM 125	LFM 150	LFM 200	LFM 250	LFM 300
Electrical Stroke (mm)	10	25	50	75	100	125	150	200	250	300
Mechanical Stroke (mm)	12	27	52	77	102	127	152	202	252	302
Independent Linearity	±%1	±%0,5	±%0,4	±%0,25	±%0,2	±%0,2	±%0,2	±%0,1	±%0,1	±%0,1
Repeatability	0.01 mm									
Max Operating Speed	5 m/s									
Resistance Element	Conductive Plastic									
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 ² 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 CONNECTION

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

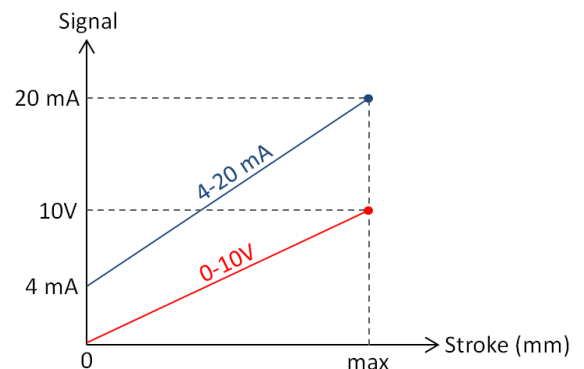
* Output Signal may be potentiometric, 0-10 VDC or 4-20 mA depending on the model (See Product code table).

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

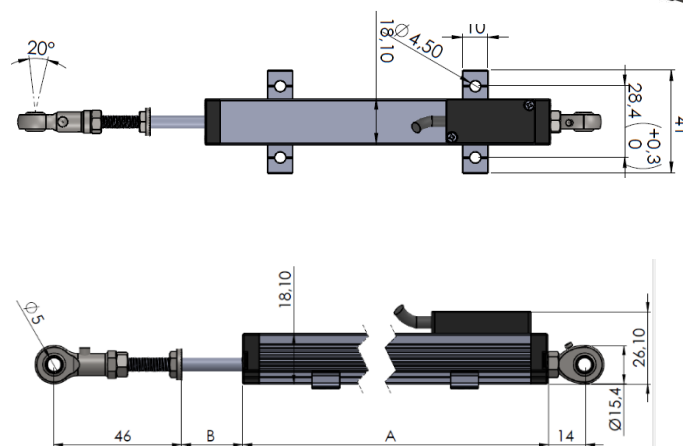
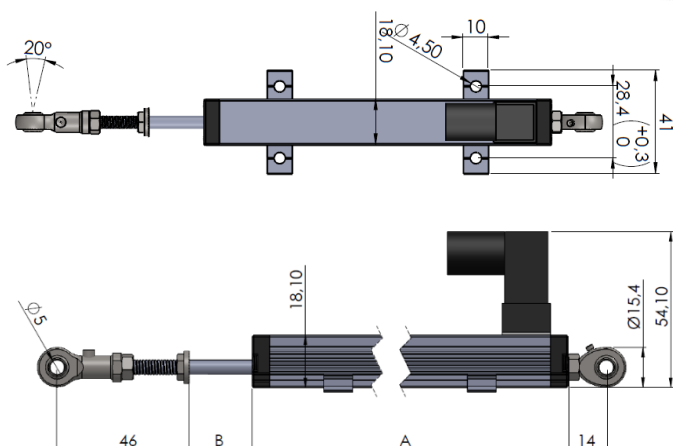


MECHANICAL DIMENSIONS (mm)

MODEL WITH DIN 43650-C SOCKET



MODEL WITH 3 x 0,14 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		Output Signal			Protection			
		A: 4-20 mA (*Optional 0-20 mA) V: 0-10 VDC			No code: IP40 E065: IP65			
LFM	-	XXX	-	X	-	XX	-	XXXX
Measuring Lengths (stroke)				Electrical Connection				
Different measuring lengths between 10 mm and 300 mm				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			
		5K: 5KΩ 10K: 10KΩ			No code: IP40 E065: IP65			
LFM	-	XXX	-	XXX	-	XX	-	XXXX
Measuring Lengths (stroke)				Electrical Connection				
Different measuring lengths between 10 mm and 300 mm				No Code: DIN43650-C connector S80: M16 5 pin male connector 2M: 2 meters PVC cable (standard) *Optional different cable lengths				