

LINEAR POSITION TRANSDUCERS

"Double-side articulated, Small body"

LFM



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	Potentiom	etric	4-20 m/	4-20 mA (opt. 020 mA) or 0-10V									
Supply Voltage	42V max.		1230	1230 VDC									
Resistance	5K, 10K (or	otional other	-) -										
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 (optional IP65)												
Life	100 million movements												
Rod Material	Stainless Steel												
Body Material	Aluminum												

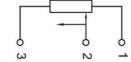
ELECTRICAL CONNECTION

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





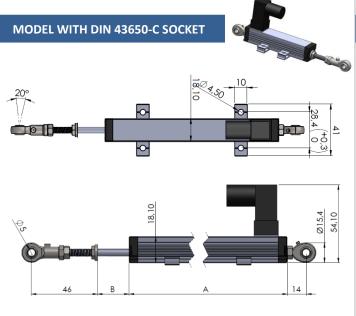
Potentiometer Connection (Voltage Divider)

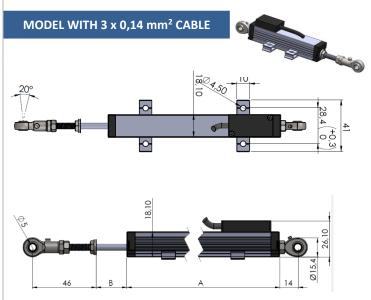
Note: The GND line of the feed and signal output is common. Therefore it can be connected with 3-wire cable

Analog Output Signal Graphic Signal 10V 4 mA 0.20V Stroke (mm)

DS-LFM.002 Rev No:3

MECHANICAL DIMENSIONS (mm)





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

^{*}Dimensions above belong to IP40 body. Ask for IP65 body dimensions.

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

Output Signal Protection A: 4-20 mA (*Optional 0-20 mA) No code: IP40 **Model No** V: 0-10 VDC IP65: IP65 XXX XX **XXXX** Measuring Lengths (stroke) **Electrical Connection**

Different measuring lengths between 10 mm and 300 mm

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

Order Code for Potentiometric Output

Resistance Value Protection 5K: 5KΩ No code: IP40 **Model No 10Κ**: 10ΚΩ **IP65:** IP65 LFM XX **XXXX** -

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)

Atek Elektronik Sensör Teknolojileri Sanayi ve Ticaret A.Ş.



Gebze OSB, 800. Sokak, No:814 Gebze/KOCAELi/TURKEY



