

LFM110 – LFM112

Differential Pressure Transmitter

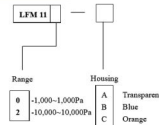


Products Features

- This transmitter is apply to low differential pressure display and signal collection in HVAC, industrial equipment, intelligent building, test bench and other fields.
- M110 Range: -1,000Pa~1,000Pa (Minimum range from 0~100Pa)
M112 Range: -10,000Pa~10,000Pa (Minimum range from 0~1,000Pa)
Adjustable differential pressure range
- Input voltage: 16~30Vac/Vdc
- Output signal: 0~10V and 4~20mA (Both signals can be used at the same time)
- Unit Of measurement: Pa,mmH2O,inWG,mmHG,daPa,KPa,hPa,mbar Various pressure units
- LCD backlit digital display
- Auto zero calibration when power on
- The American SMD core
- ABS industrial plastic housing, IP 65
- Housing with simplified mounting systems

Specification

Range	LFM110	-1,000 ~ +1,000 Pa (Minimum range from 0 ~ +100 Pa)
	LFM112	-10,000 ~ +10,000Pa (Minimum range from 0 ~ +1,000Pa)
Precision	LFM110 / LFM112	±0.5%FS
Pressure Unit	LFM110 / LFM112	Pa, mmH2O, mbar, inWG, mmHG, daPa, KPa, hPa
Tolerated	LFM110 / LFM112	15,000Pa
Overpressure	LFM110 / LFM112	150,000Pa
Output signal		4 ~ 20 mA and 0 ~ 10 Vdc (2 signals available)
Power Supply		16 ~ 30 Vdc/Vac (2 wires)
Power Consumption		24Vdc adaptor power supply 220Vac 1.5W



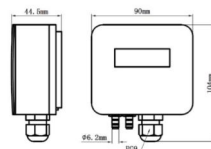
Model Selection

Functions

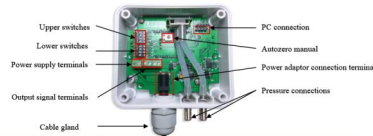
Precision	1%FS
Response Time	20ms
Resolution	1Pa/0.1mmH2O/0.01mbar/0.004inWG/0.007mmHG/0.1daPa/0.001KPa/0.01hPa
Zero Calibration	Manual with push button or automatic at starting for zero calibration
Media	Air and neutral gases
Tolerated	15KPa (LFM110) 150KPa (LFM112)
Overpressure	
Operating Temperature	0~60℃
Storage Temperature	-10~+70℃

Housing Function

Material: Industrial plastic - fire resistance level per UL94V-0
Display: backlit digital display 50 x 22.5 mm
Digital Height: Value 10 mm, Unit 5 mm
Pressure Connection: Ribbed Ø 6.2 mm
Cable Gland: For cables Ø 8 mm maximum
Weight: 140g



Details



Product Instructions

- Display function**
Display pressure range -1000Pa~1000Pa, other display pressure unit available as Pa, mmH2O, inWG, mmHG, daPa, KPa, hPa, mbar.
- Function settings**
Precision calibration is through the circuit board by pushing the button. When the button activated, the sensor will enter into the precision calibration status. Input the pressure supply to -1000Pa and push the button to save the -1000Pa pressure value. Afterwards, by pressing quickly on the button, you can increment a value and scroll down the different points or values while by pressing on the button more than 3 seconds, you can validate the setting and go to the next setting. Usually, we set the pressure range with professional machines and workers before shipment, customers are not encouraged to set the pressure.
- Dial-up switch setting**

4	110	112	110	112	110	112	110	112	110	112
3										
2										
1										

Model	LFM 110	LFM 112	LFM 110	LFM 112	LFM 110	LFM 112	LFM 110	LFM 112	LFM 110	LFM 112
Pa	100	1,000	250	2,500	500	5,000	750	7,500	1,000	10,000
mmH ₂ O	10.0	100.0	25.0	250.0	50.0	500.0	75.0	750.0	100.0	1,000.0
mbar	1	10.00	2.5	25.00	5.0	50.00	7.5	75.00	10.0	100.00
inWG	0.40	4.00	1.00	10.00	2.00	20.00	3.00	30.00	4.00	40.00
mmHG	0.75	7.50	1.87	18.75	3.75	37.50	5.62	56.20	7.50	75.00
daPa	10.0	100	25.0	250.0	50.0	500.0	75.0	750.0	100.0	1,000.0
KPa	0.100	1.00	0.250	2.50	0.500	5.00	0.750	7.50	1.000	10.00
hPa	1.00	10.00	2.50	25.00	5.00	50.00	7.50	75.00	10.00	100.00

To set a unit of measurement, put the 4,3,2 and 1 on-off switches as indicated in the table above (For example, when the pressure range is 100Pa, the display will be 0-100Pa and with output signal as 4-20mA or 0-10V) The above table shows the dial-up switch position in order to reach the desired pressure range.
Other pressure range are available according to customer's requirements

Full range: Central zero (take 0-1,000Pa as an example)

To set the type of measuring range, put the on-off switch as indicated below



Full range: 0-1,000Pa



Central zero: -500Pa-500Pa

Please follow carefully the combinations above the Dial-up switch. If the combination is wrongly done, the following message will appear on the display as "Err" in that case, you have to supply the transmitter, place the Dial-up switches correctly and then power the transmitter up

Product Instructions

To set a measurement unit, put the on-off switch 3,2 and 1 of the unit as shown in the table below

Configuration	Pa	mmH ₂ O	mbar	inWG	mmHG	daPa	KPa	hPa
4								
3								
2								
1								

Push the button 1 to start or stop the autozero powering up



Stop the autozero in starting up



Start the autozero in powering up

Autozero Manual

Press the autozero manual button will zero the data and save the zero point

Electrical connection

- Vac/Vdc Positive;
- Vac/Vdc Negative;
- GND_i
- V_{out}
- GND_i
- I_{out}

