

LFM53 Differential Pressure Transmitter

FEATURES

- Adopt imported thermal micro-pressure core, sensitive pressure reactions
- Overload pressure up to 2 bar
- Accuracy up to 0.5%F.S, strong stability and good repeatability
- Easy to install, not sensitive to the installation location
- Strong anti -interference ability, optional isolation output
- Min Measurement range ±25Pa



DESCRIPTION

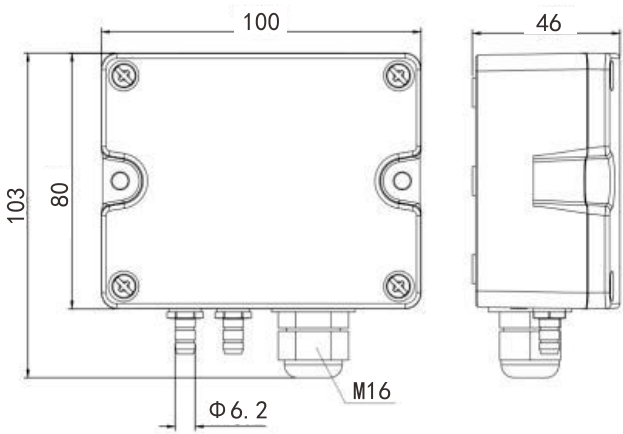
The LFM 53 series differential pressure transmitter adopts the thermal micro -pressure core, use the micro-flow path integrated by the sensor chip, detecting air pressure by detecting the changes in thermal flow. LFM53 has the characteristics of strong overload capacity, strong anti -interference ability, wide measurement range, and multi -signal output. It is widely used in the detection of air or neutral gas, such as HVAC, process control, environmental control, clean room, clean room or other systems that require micro -differential pressure detection.

SPECIFICATION

Measured Medium ①	Air or Neutral gas	
Pressure Range	±25Pa, ±50Pa, ±100Pa	
Overvoltage	2Bar	
Accuracy	±25Pa ±1Pa	
	±50Pa ±1%F.S	
	±100Pa ±0.5%F.S	
Working Temp	-20℃~70℃	
Storage Temp	-40℃~80℃	
Temp.Drift Value	0.03%F.S/℃	
Protection Level	IP65	
Electrical connections	4-wired	6-wired
Output signal	RS-485	4~20mA/0~10VDC
Power Supply ②	9-30VDC/24VAC±20%	12-30VDC/24VAC±20%
Pressure Connection	Metal barbed interface ,Φ6.2mm	
Communication	RS-485 standard interface, Modbus RTU Protocol	
Certification	ROHS, CE	
Electromagnetic compatibility	EN 61326-1	

① Medium includes air, O2, N2, Ar, CO2, other gases, pls consult supplier.  
② Pls use 24VAC isolated power supply for output RS485(non-isolated) when use AC power supply.

DIMENSION (mm)



ORDER REF NO.

Code and Description				Remark
LFM53				Model
	1	-25~25Pa		Measurement Range
	2	-50~50Pa		
	3	-100~100Pa		
		N	Without display	Display mode
		O	With display	
		A	Output both 4-20mA and 0-10VDC	Output type
		E	RS-485Communication	
		E1	RS-485(Isolated)	
LFM53	1	0	E	Selection Example

THE EFFECT OF ALTITUDE/HEIGHT ON PRODUCTS

The measurement of the pressure core is calibrated using the absolute pressure of 1BAR (100000Pa). Due to the use of thermal measurement principle of the use of thermal measurement, the altitude/height will affect the output of the sensor. Need compensation according to the following formula:

$$\Delta P_{eff} = \Delta P_{sensor} \times (100000(Pa)) / P_{abs}$$

- $\Delta P_{eff}$ is Differential pressure after compensation ;      ●  $\Delta P_{sensor}$  The current output differential pressure value of the sensor
- $P_{abs}$  The absolute pressure value of the sensor installation area. It is generally local atmospheric pressure, and the unit is Pa.