



MF5000 Series Gas Flow Meters

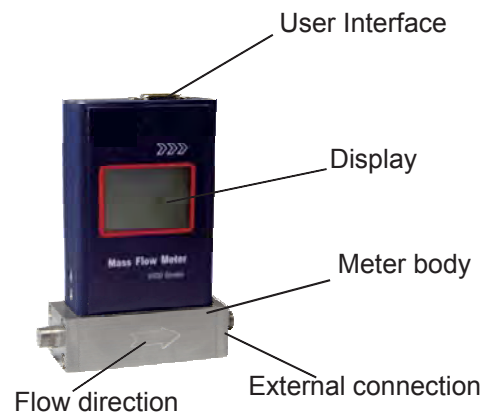
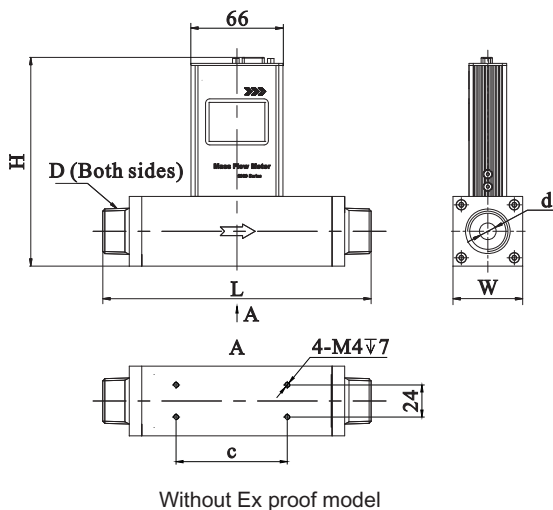
The Products

MF5000 series mass flow meters are specially designed for small pipe flow monitoring and control. The series can measure gas flow in a pipe diameter as small as 3 mm, but not over 19 mm. With the self-flow conditioning feature of the MEMS sensor package, the meters feature an extremely low pressure loss compared to the traditional by-pass thermal mass flow meters in this application scope. The accuracy of the meters are generally $\pm(1.5+0.2FS)\%$ or better depending on the requests. The meters can work at an environment of -20 to 60 C and pressure up to 1.5 MPa. Applications include semiconductor gas process monitoring and control, hospital oxygen gas monitoring, etc.

Features

- ✎ Highly sensitive, measuring as low as 8 mm/sec, and as high as 65 m/sec with a single assembly
- ✎ Directly sense mass flow using thermal mass flow principle
- ✎ Proprietary MEMS sensor package design for better reliability
- ✎ Standard 12 ~ 24 Vdc power supply
- ✎ Low pressure loss for reducing energy cost
- ✎ Industrial standard Modbus protocol for easy networking and remote control

Mechanical Dimensions



Mass Flow Products - Gas Flow Meters MF5000 Series

Model	DN (mm)	Connection (inch)	L	H	W	d	c
MF5003	3	1/8"	96	125	35	Φ3	36
MF5006	6	1/4"	104	127	35	Φ6	36
MF5008	8	3/8"	106	134	35	Φ8	50
MF5012	12	1/2"	142	137	40	Φ12	50
MF5019	19	3/4"	182.5	150	40	Φ19	70

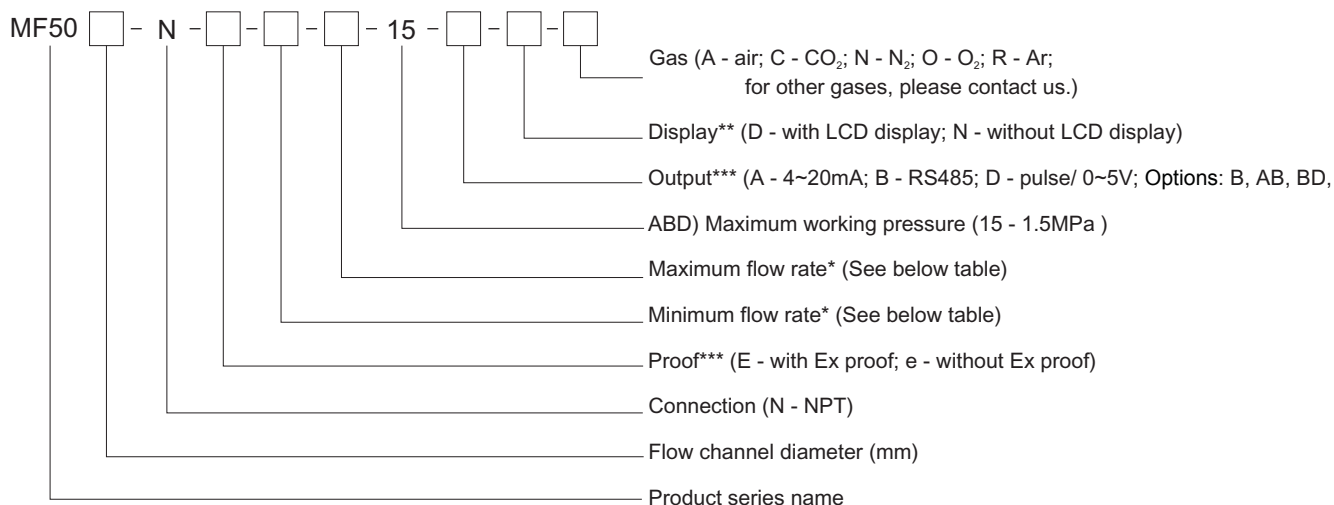
Specifications

Accuracy	±(1.5+0.5FS)%
Environment	Temperature: -20 ~ +60 °C Humidity: < 95 %RH (No icing or condensation)
Flow channel	3 ~ 19 mm
Display	Flowrate and accumulated flow
Interface	4 ~ 20 mA; RS485; Pulse
Calibration	Air @ 20 °C, 101.325 kPa
Protection	IP40 (Without Ex proof model); IP66 (With Ex proof model)
Ex Proof	Ex d IIC T4

Note: the above parameters are applicable at 20°C and 101.325kPa.

Product Selection

In addition to the models listed, we can also provide customized products that are tailored to customers' very needs. For further information, please contact manufacturer. The meters are made by referencing to: ISO-14511; CE Directives: EN61000-6-1 EN61000-6-2



* There is flow rate number only for unit SLPM. If other unit is selected, there must be flow rate number with unit together.

** Only N can be selected for with Ex proof model, that means, there is no display for with Ex proof model.

*** "Output" and "Proof(E)" function can only choose one.

Typical flow range:

Model	DN (mm)	Connection	Flow range*			
			sccm	SLPM	SCFM	NCMH
MF5003	3	1/8"	150-15000	0.15-15		
MF5006	6	1/4"		0.5-50	0.02-2	0.03-3
MF5008	8	3/8"		1.2-120	0.042-4.2	0.072-7.2
MF5012	12	1/2"		3-300	0.1-10	0.18-18
MF5019	19	3/4"		8-800	0.28-28	0.48-48

* For CO₂, flow range are 0.15~10, 0.5~40, 1.2~80, 3~200 and 8~600 SLPM.