

PRODUCT INFORMATION

Flow Master

Accurate, Stable, Handy Flow Generator

Customized to the specified pressure and flow.
Use as a standard for testing and comparing flowmeters.

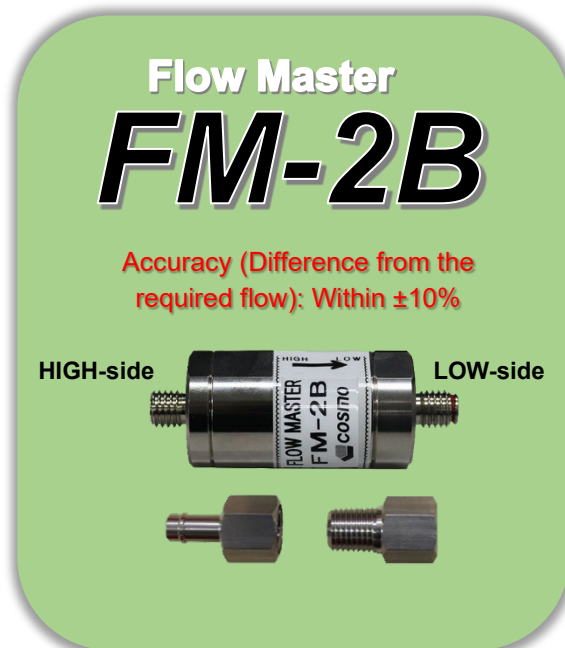
- Check the sensitivity of flow testers easily and reliably.
- Maintains the same flow for a long period of time.
- Use as a flow master for measuring deviation flow.
(Test for ventilation and bore diameter of holes)
- The value of the tester can be checked by connecting to the CAL port of the tester.
- Can be used in Flow Check (C-CHK), (F-CHK) of AF series.
- Joints for connecting to the piping available. Easy connection and disconnection with a plug.
- Traceability certificate available upon request.
- ISO/IEC17025 calibration available.

Customized to the desired flow. Use it as a reference instrument.

Model Classification

FM-2B(a)(b,c)
Example) FM-2B(R2)(50mL/min, 100kPa)
a Adapter diameter

HIGH-side	LOW-side	Specification (a)
R1/4	R1/4	R2
	Ø8	R21
	R1/2	R22
R1/2	R1/4	R3
	Ø8	R31
	R1/2	R32
Ø8	R1/4	R4
	Ø8	R41
	R1/2	R42



b,c Required flow / Pressure

	Flow (b) *1	Test Pressure (c) *2
Pressure	50 mL/min to 3 L/min	1 to 10 kPa
	100 mL/min to 10 L/min	10.1 to 21 kPa
	200 mL/min to 15 L/min	21.1 to 51 kPa
	0.3 L/min to 25 L/min	51.1 to 100 kPa
	0.5 L/min to 35 L/min	100.1 to 151 kPa
	0.5 L/min to 45 L/min	151 to 200 kPa
	0.5 L/min to 55 L/min	201 to 250 kPa
	0.5 L/min to 65 L/min	251 to 300 kPa
	0.5 L/min to 70 L/min	301 to 350 kPa
	0.5 L/min to 80 L/min	351 to 400 kPa
Vacuum	50 mL/min to 3 L/min	-1 to -10 kPa
	100 mL/min to 10 L/min	-10.1 to -21 kPa
	100 mL/min to 15 L/min	-21 to -50 kPa
	200 mL/min to 5 L/min	-50 to -89 kPa

*1 Up to 200 mL/min (in units of 1 mL/min)
Up to 2 L/min (in units of 0.01 L/min)
Beyond that, specify in units of up to 0.1 L/min.

*2 201 to 209 mL/min is outside the standard production range.

*3 2.01 to 2.09 L/min is outside the standard production range.

*4 For less than 200 kPa: In units of 0.1 kPa.
For others: In units of 1 kPa.

About Flow

For FM-2B, the flow is indicated by the "Conversion Flow".

Conversion Flow

The flow of Flow Master measured and converted when produced. (The flow varies depending on the condition of the environment (temperature, atmospheric pressure).)

How to Use

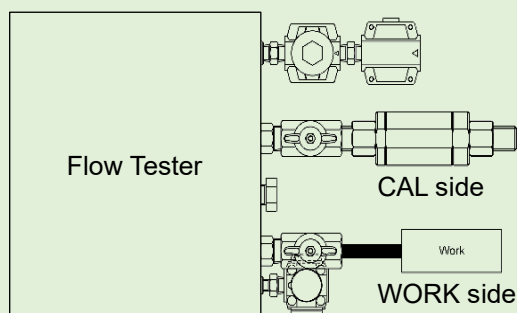
FM-2B is a standard flowmeter with a fixed pressure and flow.

Unlike float-type flowmeters, there is no need to determine the flow using a regulator valve, and no trouble such as damage to the float due to inrush pressure.

Since standard flow rate can be set, it is ideal for accuracy check.

Example of Flow Master Installation

1) Connect to Flow Tester



1) When connecting the Flow Master to Flow Tester

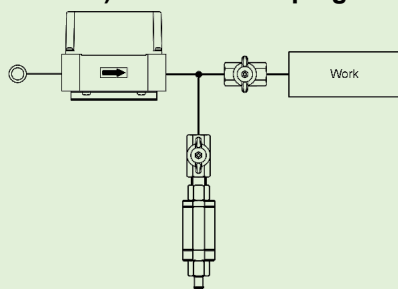
Connect the Flow Master to the CAL port.

(*1, *2)

*1 For mass flow sensor: Port size R1/2

*2 For laminar flow sensor:
10 to 200 mL/min: Port size R1/4
500 mL min or more: Port size R1/2

2) Connect to Piping

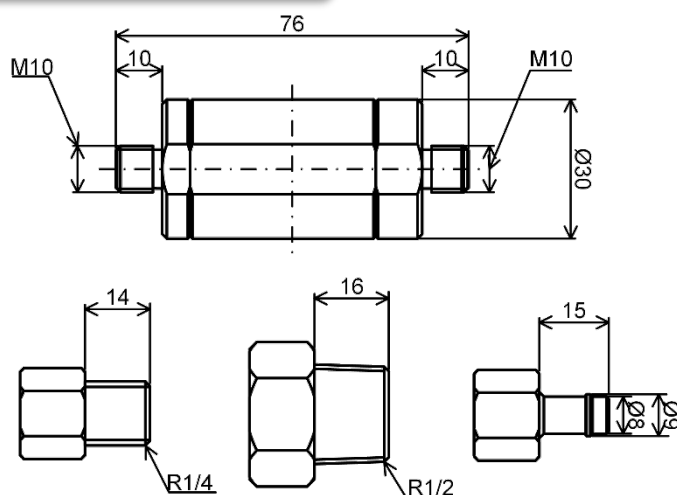


2) When connecting the Flow Master to Piping

Connect as shown.

Attach a shutoff valve in front of the Flow Master. It will always be possible to test with the Flow Master kept connected.
(Open when in use, Close when not in use)

External Appearance



Specifications	Entire length (mm)
R2	112
R21	113
R22	114
R3	114
R31	115
R32	116
R4	113
R41	114
R42	115

The contents of this Product Information are as of April 2023. The specifications are subject to change without prior notice.

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