

PRODUCT INFORMATION

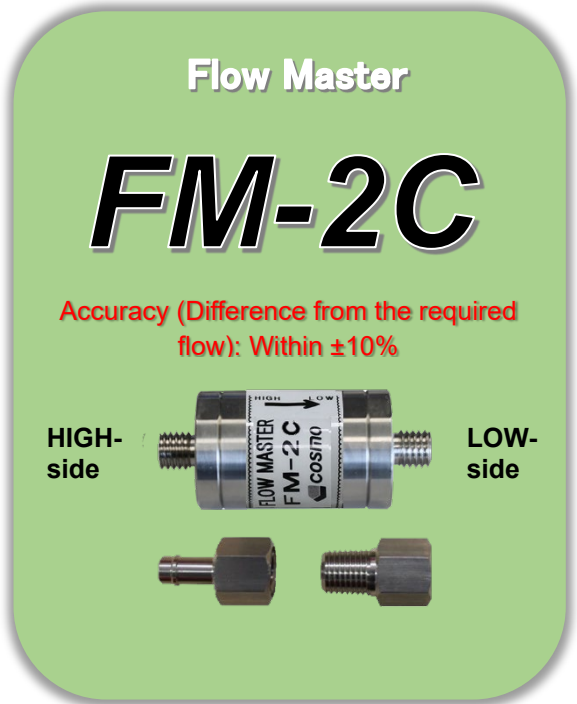
Flow Master

Accurate, Stable, Handy Flow Generator

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

- Improved long-term flow stability.
- Enhanced prevention of distortion during installation.
- Check the sensitivity of flow testers easily and reliably.
- Extremely low flow variation ensures long-time stable use.
- Can be used as a flow master for measuring deviation flow. (Test for ventilation and bore diameter of holes)
- 15% more compact than conventional products.
- The numerical value of the tester can be checked by connecting to the CAL port of the tester.
- Can be used for Flow Check (C-CHK), (F-CHK) of AF series.
- Joints for connecting to the piping available.
- Easy connection and disconnection with a plug.
- ISO/IEC17025 calibration available.

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



Model Classification

FM-2C(a)(b,c)

Example) FM-2C(R2)(50mL/min,100kPa)

a Joint connection 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 150 kPa
	0.5 L/min to 45 L/min	150.1 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
Vacuum	0.5 L/min to 80 L/min	351 to 400 kPa
	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	-21.1 to -50 kPa
	200 mL/min to 5 L/min	-50.1 to -89 kPa

*1 For up to 200 mL/min, specify in units of 1 mL/min.
For up to 2 L/min, specify in units of 0.01 L/min.
Beyond that, specify in units of 0.1 L/min or more.

*2 For less than 200 kPa, specify in units of 0.1 kPa.
For others, specify in units of 1 kPa.

Note: Flows between "201 and 209 mL/min" and between "2.01 and 2.09 L/min" are outside our standard ranges.
Request for quotation is required for these ranges.

Flow Indication

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

Conversion Flow

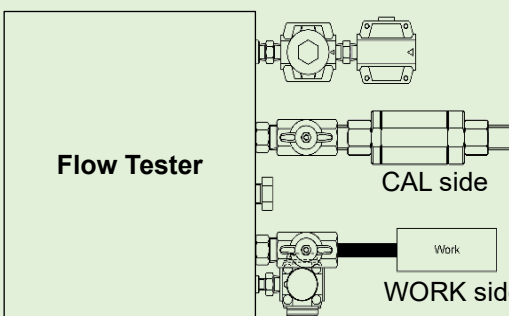
The flow value measured and then converted when the Flow Master is produced. The value varies depending on the environmental conditions (temperature, atmospheric pressure).

How to Use

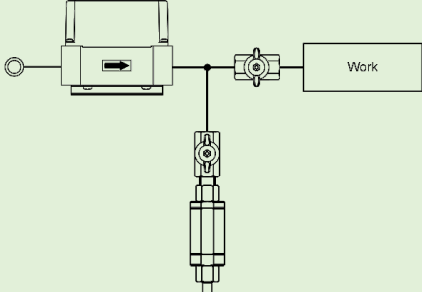
FM-2C is a standard flowmeter with a fixed pressure and flow. Unlike float-type flowmeters, it is unnecessary to determine the flow using a regulator valve, and there is no trouble such as damage to the float due to inrush pressure. Since standard flow rate can be set, it is ideal for accuracy check.

Example of Flow Master Installation

1) Connect to Flow Tester



2) Connect to Piping



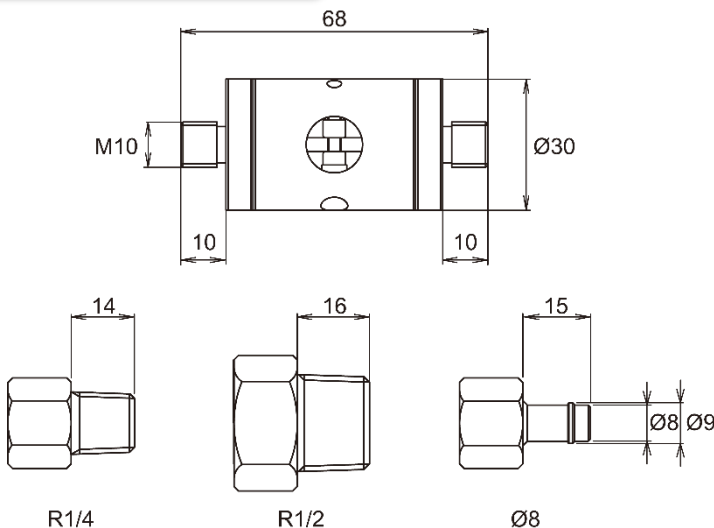
1) When connecting the Flow Master to Flow Tester:
Connect the Flow Master to the CAL port.
(*1, *2)

*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) When connecting the Flow Master to Piping:
Connect as shown.

Attaching a shutoff valve in front of the Flow Master makes it possible to perform testing with the Flow Master left connected. (Open the valve when using the Flow Master. Close when not using.)

External Appearance



Specifications	Entire length (mm)
R2	104
R21	105
R22	106
R3	106
R31	107
R32	108
R4	105
R41	106
R42	107

The contents of this Product Information are as of September 2024. The specifications are subject to change without prior notice.

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