

Analog Mass Flow Controller

1000 Series



《Features》

- It is an analog model specializing the basic functions of the mass flow controller.
- Performance and reliability are improved with basic functions that pursue original technology.
- Two types of Power Supply Control, Floor-standing "PA01S" and Panel Mount "PA01PS".
- Compact size.
- Suppression of Flow surge (overshoot) at the start (Requires more than 30 seconds of interval).
- Input & Output Signal : Analog (0~5VDC)
- To control the mass flow controller, a separate control power supply and a signal cable are required.
- Calibration certificates, calibration reports and traceability schemes can be produced upon request for an additional fee.

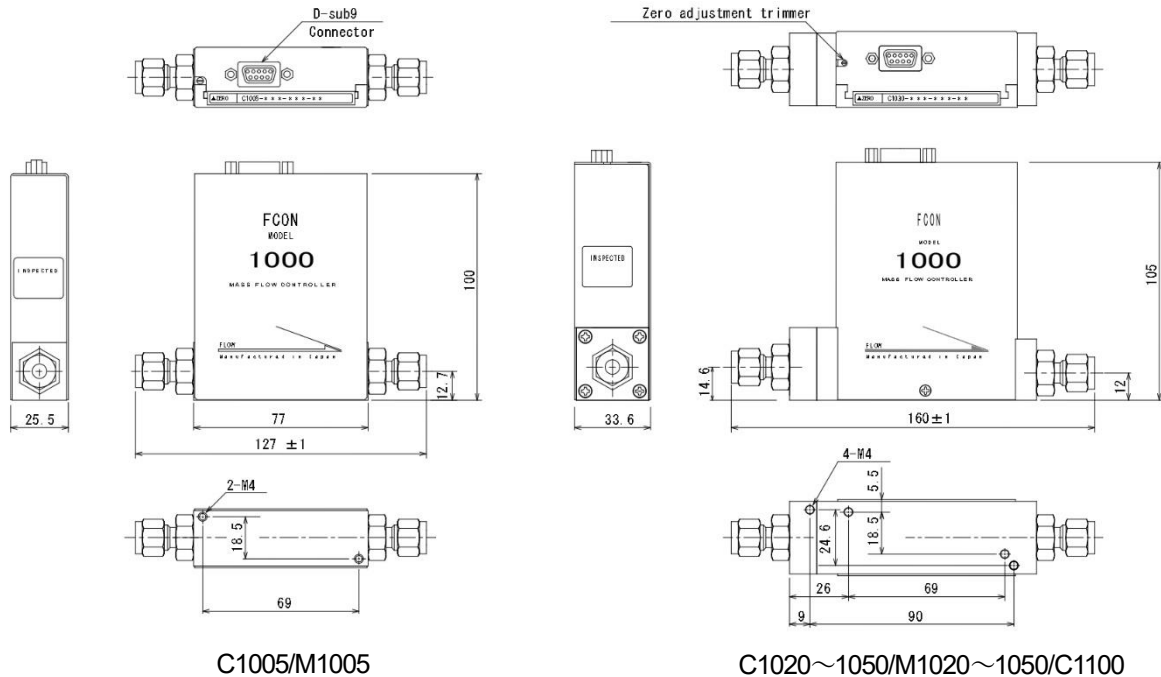
Option: Possible to manufacture a flow rate accuracy of $\pm 1\%$ F.S.

【Specification】

(※) under development

Mass Flow Controller (N.O.)	C1005	C1020	C1030	C1050	C1100
Mass Flow Controller (N.C.)	C1005 NC	C1020 NC (※)	C1030 NC (※)	C1050 NC (※)	-
Mass Flow Meter	M1005	M1020	M1030	M1050	-
Flow range (N2 equivalent)	10,20,30,50,100,200 300,500 SCCM 1,2,3,5 SLM	10,20 SLM	30 SLM	50 SLM	100 SLM
Gases	N2, Air, Ar, O2, H2, He, CO2 etc. (Please consult with us about corrosive gas)				Air • N2
Valve type	NO: Normally Open NC: Normally Closed (Excluding Mass Flow Meter)				
Flow rate control range	5-100% F.S (Excluding Mass Flow Meter)				
Accuracy	$\pm 2\%$ F.S (Accuracy guaranteed between 15-35°C)				
Setting signal	0.25-5VDC (Excluding Mass Flow Meter)				
Output signal	0-5VDC				
Repeatability	$\pm 0.2\%$ F.S.			$\pm 0.5\%$ F.S.	
Response speed	≤ 6 sec			≤ 10 sec	≤ 15 sec
Operating differential pressure	50-300 kPa (C1020NC, 100~300kPa)		200-300 kPa		
Pressure Resistance	1 MPa(G)				
Operating temperature	5~50°C (Accuracy guaranteed between 15~35°C)、 $\leq 85\%$ RH (No condensation permitted)				
Leak Integrity	1×10^{-7} Pa·m ³ /sec He				
Mounting attitude	Not Specified (Free)				
Drive power source	+15VDC : 60mA, -15VDC : 150mA				
Communication	Analog 0-5 VDC				
Wetted surface material	SUS316, PTFE, PEEK, Fluoro-Rubber				
Seal material	Fluoro-Rubber				
Actuator system	Thermal (Excluding Mass Flow Meter)				
Surface Finishing	Machined finish				
Standard fittings	1/4in.SWL (equivalent), One-touch fittings, ※ For other fitting, please contact us.				

《Dimensions》



C1005/M1005

C1020~1050/M1020~1050/C1100

All dimensions are in inches with [mm] in brackets.

《Ordering》

C 1005 NC – 4S2 – 5L – N2 (e.g.)

① ② ③ ④ ⑤ ⑥

① Type C:Controller M:Meter

② Flow range 1005(10 SCCM ~ 5 SLM) 1020(10 ~ 20 SLM) 1030(30 SLM)
1050(50 SLM) 1100(100 SLM)

③ Valve type w/o :Normally open NC :Normally closed (1100 not covered)

④ Fitting (*1) 4S2:1/4in.SWL(equivalent) 6S2:3/8in.SWL(equivalent) KQ2:One-touch fittings

⑤ Full scale (*2) e.g. :50 SCCM→50 5 SLM→5L

⑥ Gas types (*3) N2, Air, Ar, O2, H2, He, CO2 etc.

*1. For other fitting, please contact us.

*2. At FCON, flow rates (SCCM, SLM) are converted to values at 0°C, 101.3kPa abs (1atm) for calibration.

Please specify separately if you wish to calibrate at 20 °C or 25 °C.

*3. Gas type is an example; please contact us for other gases.

《Signal cable》

When purchasing the mass flow controller, it is possible for us to produce signal cables and replacement cables for the power supply control currently in use. In the situation whereby the shape of the signal cable connector from the equipment is different, if the information of the connector shape and pin assignment is available, we can manufacture the signal cables in addition to the standard products. Depending on the type of connector, it may be difficult to manufacture. Please feel free to contact us for more details.

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