

# Product Catalogue

About Us

FCON CO., LTD.



#### **≪CREATION OF NEW VALUE≫**

We aim to become a company that is continuously welcomed by society by providing products and services that based on unique technology and new value creation.

Our main business includes design and development, manufacture and sale of mass flow controllers and their applied products.

We also keep challenging new business area.

FCON CO., LTD.

President and CEO

Kuniaki YAMANAKA

#### (What is a Mass Flow Controller)

A mass flow controller is a device used to control the flow rate by measuring the mass flow rate of fluid and gases. It is possible to control the flow rate stably with high accuracy because it is not required to be corrected due to the change of temperature or used pressure.

Flow control by volume flow such as flow meters and needle valves, are required to be corrected due to the change of temperature or pressure when they require a certain degree of the accurate flow rate.

Mass flow controllers and mass flow meters have been used for the field of semiconductor and flat panel display that require the high accuracy of measurement and control. In addition, they have been used in the wide variety of processes such as in the field of analysis, fuel cell, liquid crystal, organic EL, biotechnology, food, environmental measurement, combustion gas control, factory equipment, laboratory equipment and etc.

We aim to design and manufacture products that can be used in a wide range of fields. Therefore, FCON's mass flow controllers / mass flow meters are designed improving performance and reliability through original technology pursuing basic performance.

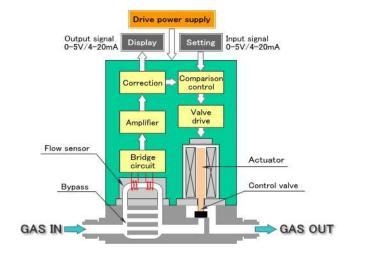
#### (Principle and Structure of Mass Flow Controller)

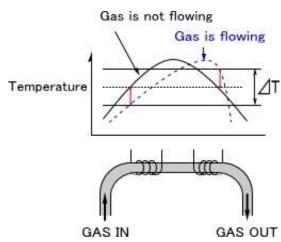
The mass flow controllers are constructed from flow sensor, bypass, valve and the control circuit as shown in the figure below.

In general, the flow sensor used is called thermal flow sensor. Two resistors generate heat when electric current flows through these that are wounded on the upstream side and the downstream side, around the stainless capillary tube.

When no gas is flowing in the capillary tube, the heat of the upstream and downstream sides of the resistor is kept equilibrium and the flow rate output signal shows zero.

Gas entering from the entrance is divided into the sensor and a bypass. When the gas begins to flow into the sensor, a temperature difference occurs between the upstream and the downstream resistors, thermal balance is lost and the temperature distribution of the sensor changes. This change is captured by the bridge circuit as flow rate output signal. Compare the external flow rate setting signal (0 to 5V) and the flow rate output signal of the sensor, the flow control valve performs PID operation (proportional, integral, derivative) to match the signal level. Since the valve opening is fine-tunes and adjust automatically, it is possible to control the flow rate under the setting condition.







#### Digital Mass Flow Controller

With Built-in Display

## 2000 series





#### ≪Features≫

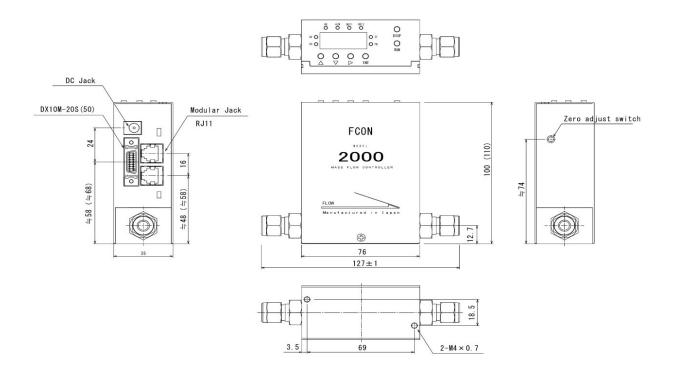
- Built-in display setting unit, setting control is possible only with the main unit.
- Driving power is DC24V single power supply (500mA or more AC adapter can be used).
- Compact size to realize small size and space saving.
- Simple installation to various equipment.
- Digital communication: RS485 communication.
- Analog signal: 0-5V and 4-20mA can be switched.
- Equipped with an abnormal flow rate alarm function.
- Equipped with accumulation function.
- Digital Control Application Software.
- •Calibration certificates, calibration reports and traceability schemes can be produced upon request for an additional fee.



#### [Specification]

Mass Flow Controller	C2005	C2020		
Mass Flow Meter	M2005	M2020		
Flow range (N2 equivalent)	10 SCCM~5SLM	10 SLM 20 SLM		
Gases	Air, nitrogen, carbon dioxide, argon, hydrogen, helium, oxygen			
Valve type	Normally Closed (Exclud	ling Mass Flow Meter)		
Flow rate control range	2-100% F.S. (Excludin	g Mass Flow Meter)		
Accuracy	±1% F.S. (Accuracy guard	anteed between 15-35°C)		
Setting signal	Setting section of main unit, Digital: RS485, Ar	nalog: 0-5V and 4.3-20mA ca	an be switched	
	(Excluding Mass	s Flow Meter)		
Output signal	Main unit display: 7-segment LED, Digital: RS48	5, Analog: 0-5V and 4-20m	A can be switched	
Repeatability	±0.2% F.S.			
Response speed	≦2s	ec		
Operating differential pressure	50-300 kPa	100-300 kPa	200-300kPa	
Pressure resistance	1 MPa(G)			
Operating temperature	5~50°C (Accuracy guaranteed between 15~35°C)、≦85%RH (No condensation permitted)			
Leak integrity	1×10-7Pa⋅m3/sec He			
Mounting attitude	Not Specified (Free)			
Drive power source	+24VDC: ≥500mA			
Communication	RS485, Analog: 0-5V and 4-20mA can be switched			
Wetted surface material	SUS316, PTFE, Fluoro-Rubber			
Seal material	Fluoro-Rubber			
Actuator system	Solenoid (Excluding Mass Flow Meter)			
Surface finishing	Machined finish			
Standard fitting	1/4inch.SWL (equivalent) ※ For other fitting, please contact us.			

#### «Dimensions»



All dimensions are in inches with [mm] in brackets

#### **≪Ordering**≫

$$C = 2005 - 4S2 - 1L - N2$$
 (e.g.)

- 1 Type C: Controller M: Meter
- $\odot$  Flow range 2005 (10 SCCM  $\sim$  5 SLM) 2020 (10 SLM, 20SLM)
- ③ Fittings (\*1) 4S2: 1/4in.SWL(equivalent) KQ2: One-touch fittings
- ⑤ Type of gas (\*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 °Cor 25 °C.
- \*3. Gas type is an example; please contact us for other gases.

#### ≪Signal cable≫ (sold separately)

- ullet AC adapter for C2000 : +24 VDC (DC22.8  $\sim$  25.2 V, 500 mA and above) (recommend)
- ●C2000 RS485 Communication Conversion Unit with Digital Control Application Software
- ●C2000 RJ11 RJ11Communication Cable
- Analog Communication Cable

Please feel free to contact us for more details.



#### **Analog Mass Flow Controller**

## 1000 Series



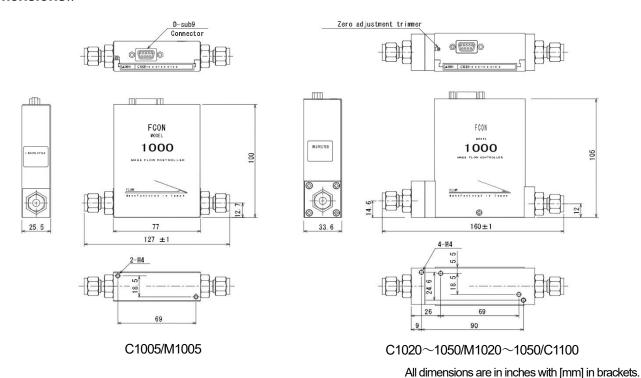
#### ≪Features>>

- 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.

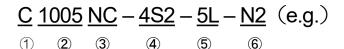
Option: Possible to manufacture a flow rate accuracy of ± 1% F.S.

[Specification]
(X) 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			Air • N2	
Valve type	NO:	Normally Open NC	C: Normally Closed (Exc	cluding Mass Flow Met	er)
Flow rate control range		5-100% F	S (Excluding Mass Flo	w Meter)	
Accuracy		±2% F.S (Acc	uracy guaranteed betw	een 15-35°C)	
Setting signal	0.25-5VDC (Excluding Mass Flow Meter)				
Output signal	0-5VDC				
Repeatability	±0.2% F.S. ±0.5% F.S.			6 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	$5\sim\!50^{\circ}\text{C}$ (Accuracy guaranteed between 15 $\sim\!35^{\circ}\text{C}$ )、 $\leq\!85\%\text{RH}$ (No condensation permitted)				
Leak Integrity	1×10 <sup>7</sup> Pa⋅m³/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.				
		9			



≪Ordering>>



- 1 Type C:Controller M:Meter
- ② Flow range 1005(10 SCCM  $\sim$  5 SLM ) 1020(10  $\sim$  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 °Cor 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.

The contents of this catalog are subject to change without notice.



#### **Control Unit**

## PA01PS PA01S





#### ≪Features≫

- ●Cost effective and easy to use.
- Floor-standing "PA01S" and Panel Mount "PA01PS".
- Compact size.
- Flow rate display and setting functions.
- Mass flow power supply: ±15 VDC
- lacktriangle Input/output : Analog Signal (0  $\sim$  5 VDC)
- lacktriangle Output voltage (0  $\sim$  5 VDC) output terminal is at the back of the unit as standard set up.

#### [Specification]

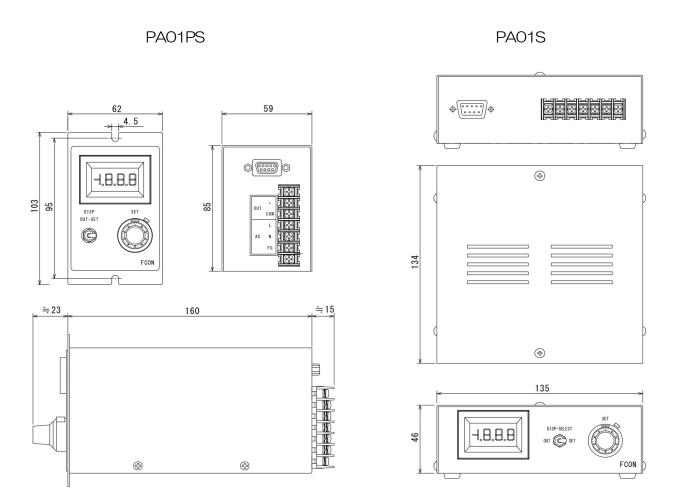
Coboomoation			
Model	PA01PS (Panel mount type) / PA01S (Floor standing type)		
Input Power	AC100 - 240 V		
Mass flow power	0~5 VDC : Setting Signal +15 VDC : 300 mA -15 VDC : 200 mA		
Mass flow control	10-turn potentiometer		
Mass flow output	0~5 VDC		
Flow rate setting / output display	0~100% (*1)		
Display switching (setting/output)	Toggle switch		
Connector	D-sub9Pin female		
Operating environment	5~50°C (Accuracy guaranteed between 15~35°C)、≦85%RH (No condensation permitted)		
Mass flow input/output	0~5 VDC (Linked to the display switching toggle switch)		

<sup>\*1.</sup> Flow rate display setting changes is possible.

#### ≪1000 series connection≫

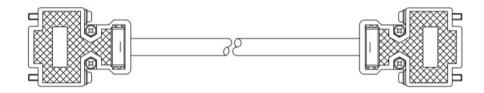






All dimensions are in inches with [mm] in brackets.

### ≪Analog Cables SC0x (Optional) ≫



■ Signal Cable: MFC side D-sub9 female connector ⇔ Power supply side D-sub9 male connector You can order the standard 1 meter, 2 meters, and 3 meters length cable.

Custom-length cable is available.



#### Mass Flow Control / Measurement Unit

## **CUBE MFC**



#### ≪Features≫

- Compact and lightweight integral unit.
- Easy flow measuring and controlling
- Flow rate display: Display (SET / OUT selector switch)
- Output voltage (0 5 VDC) output terminal is at the back of the unit as standard set up.
- Upon request, Calibration certificate, Calibration report, and Traceability scheme can be prepared with additional charges.

Option: Possible to manufacture a flow rate accuracy of ± 1% F.S.

#### [Specification]

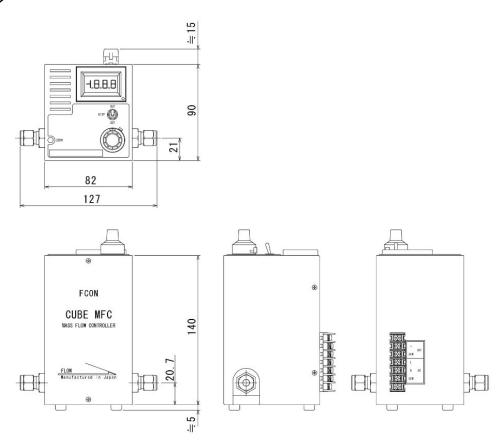
Model : Controller (N.O)	CUBE MFC 1005/1020/1030/1050/1100		
Model : Controller (N.C)	CUBE MFC 1005NC ( winder development: 1020NC / 1030NC / 1050NC)		
Model : Meter (M)	CUBE MFM 1005 / 1020 / 1030 / 1050		
Mass Flow Controller (*1)	1000 series		
Flow range	10 SCCM~100 SLM		
Operating temperature	5~50°C (Accuracy guaranteed between 15~35°C)、≦85%RH (No condensation permitted)		
Standard fitting	1/4in.SWL (equivalent), One-touch fittings,    For other fitting, please contact us.		
Setting signal/Mass flow control	0.25~5 VDC 10-turn potentiometer		
Output signal	0~5 VDC		
Flow rate setting / output display	0~100% (*2)		
Display switching (setting / output)	Toggle Switch		
Output terminal	Setting signal/Output signal : 0∼5 VDC		
Input power	AC100-240 V		

<sup>\*1.</sup> Mass flow controller is conform to 1000 series specification.

<sup>\*2.</sup> Flow rate display setting changes is possible.



Can be used both horizontally and vertically



All dimensions are in inches with [mm] in brackets

#### **≪Ordering**≫

## CUBE MF <u>C</u> 1005 <u>NC</u> - 4S2 - 1L - <u>N2</u> (e.g.)

- Type C:Controller M:Meter
   Flow range 1005(10 SCCM~5 SLM) 1020(10~20 SLM) 1030(30 SLM) 1050(50 SLM) 1100(100 SLM)
   Valve type w/o: Normally open NC: Normally closed (1100 not covered)
   Fitting4S2 1/4inch.SWL(equivalent) KQ2 One-touch fittings
   Full scale (\*1) e.g.:50→50 SCCM 5L→5 SLM
   Gas types (\*2) N2, Air,Ar,O2,H2,He,CO2 etc.
- \*1. 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.
- \*2. Gas type is an example; please contact us for other gases.



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#### Gas flow Meter

## **GFM Series**

#### ≪Features≫

- Equipped with a mass flow sensor
- Supports up to 200 LM in compact size
- Low pressure loss
- Flow output signal: Analog 0 5VDC
- A dedicated power supply and signal cable are required

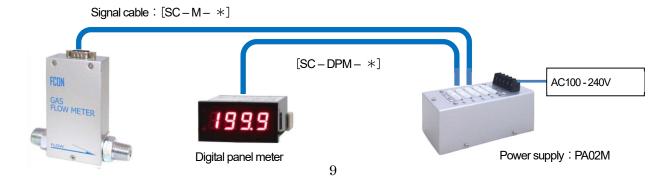


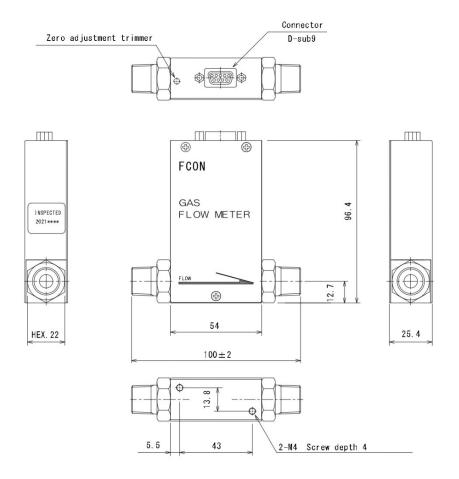
#### [Specification]

Lopecinication				
Model	GFM050	GFM100	GFM200	
Flow range	50 LM	100 LM	200 LM	
Gases	Air, N2			
Flow rate range		0 - 100% F.S.		
Flow rate accuracy	0 - 19% ± 3% F.S. , 20 - 100% ± 2% F.S. (25°C)			
Repeatability		± 0.5% F.S.		
Response speed	≦10 sec			
Pressure resistance	1 MPa(G)			
Flow output signal	Analog: 0 - 5 VDC			
Operating temperature	5 - 50°C (Accuracy guaranteed between 15 - 35°C)、≦85% RH (No condensation permitted)			
Mounting attitude	Not Specified (Free)			
Drive power source	± 15VDC ± 5% (DC 40mA)			
Communication	Analog 0 - 5 VDC			
Seal material	Fluoro-Rubber			
Wetted surface material	Aluminum(A6061),SUS316,SS(Trivalent chromate plating),Fluoro-Rubber			
Standard fittings	3/8R (Male) SS(Trivalent chromate plating)			
Weight	approx. 300g			

#### ≪Example of wiring≫

Optional: A dedicated power supply and signal cable are required





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

#### **≪Ordering**≫

$$\frac{\mathsf{GFM050}}{1} - \frac{3/8\mathsf{R}}{2} - \frac{50 \, \mathsf{LM}}{3} - \frac{\mathsf{N2}}{4} - \frac{4}{5}$$

- ① Model /Flow range GFM050(50LM) GFM100(100LM) GFM200(200LM)
- 2 Fitting 3/8R (male)
- ③ Full scale 50 LM 100 LM 200 LM
- 4 Gas types Air Nitrogen (N2)
- (5) Connection pipe diameter(\*1) 4:1/4 inch. 6:3/8 inch. 8:1/2 inch. 4M:4mm 6M:6mm 10M:10mm
  - \*1 Please specify the pipe diameter of the gas line to be installed.
  - ※ AT FCON, flow rates(LM,CCM) are converted to values at25°C, 101.3kPa abs (1atm) for calibration.

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## **PA02M** Power supply

## (GFM dedicated power supply)

#### ≪Features≫

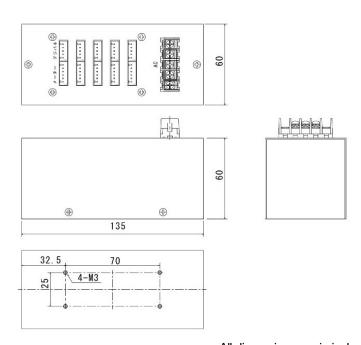
- Compact size (W135 ×H60 (Excluding protrusions) ×D60mm)
- 5 line connection\*\*Please use within the power output range.
- Meter (GFM) power supply: ± 15 VDC
- Display power supply : + 5 VDC



#### [Specification]

Model		PA02M	
Output power	GFM power supply	+15 VDC : 0.3A -15 VDC : 0.2A	
	Display power supply	+5 VDC : 2A	
Number of connection		Maximum: 5	
Flow output signal		Analog 0 - 5 VDC	
		※Output to the display when the cable is connected.	
Connector		B5B-XH-A(LF)(SN) : Display (5 core) B6B-XH-A(LF)(SN) : GFM (6 core)	
Operating environment		5 - 50°C 、≦85%RH(No condensation permitted)	
Input Power AC100 - 240 V		AC100 - 240 V	

#### **≪Dimensions**≫

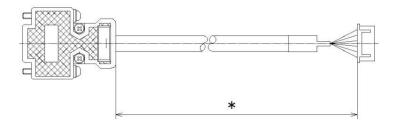


All dimensions are in inches with [mm] in brackets. \*\*Fixing screw (M3): The screwing depth into the housing should be up to 2 mm.

#### **≪Optional**≫

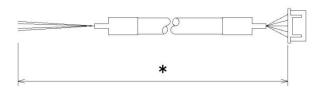
#### ■ Signal cable between GFM and PA02M

Model:SC-M- \*



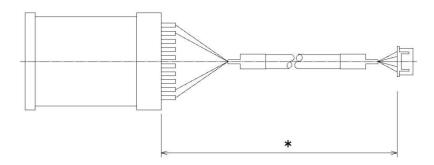
#### ■ Signal cable between PA02M and Digital panel meter

Model: SC - PM - \*



#### ■ Digital panel meter with signal cable

Model: SC - DPM - \*



- ※ Standard length of signal cable 1,2,3 m (More than 4m is order made.)
- $% \times \mathbb{R}$  \*The choice of cable length.

e.g.: SC - M - 1M

Model*	Cable length
1M	1m
2M	2m
3M	3m



#### **Economical Gas Mixer**

## **CUBE GM series**



#### ≪Features≫

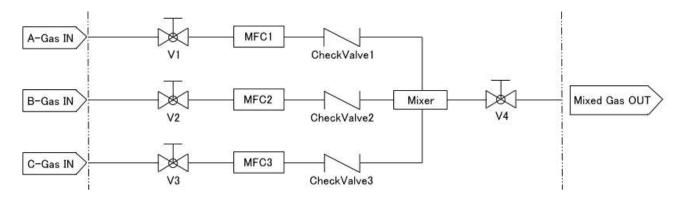
- All-in-one unit with mass flow controller, control power supply, valve, check valve and gas mixer
- This gas mixer unit type consists of mass flow controller C1000 series and power supply control PA01PS.
- Equipped with a mass flow controller to supply a stable gas mixture that is not easily affected by pressure and temperature.

#### [Specification]

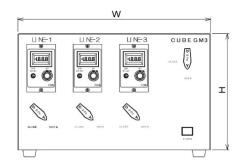
[Specification]			
Model	CUBE GM2 (two gases) / CUBE GM3 (Three gases) / CUBE GM4 (Four gases)		
Built-in MFC	C1000 series (manufactured by FCON) or FCST1000 series (manufactured by Fujikin)		
Flow range (*1)	≦50SLM (Total flow rate)		
Flow rate control range	Conform to built-in mass flow controller specification		
Operating differential pressure	Conform to built-in mass flow controller specification		
Pressure Resistance	Conform to built-in mass flow controller specification		
Operating environment	5~50°C (Accuracy guaranteed between 15~35°C), 85%RH (No condensation permitted)		
Wetted surface material	SUS316, PTFE, Fluoro-Rubber and built-in mass flow controller material		
Standard Fitting	1/4inch.SWL (equivalent) ※For other fitting, please contact us.		
Mass flow control	Conform to PA01PS power supply control		
Flow rate setting/output display	0~100% (*2)		
Input power	AC100-240 V		

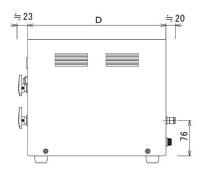
<sup>\*1.</sup> At FCON, flow rates (SCCM, SLM) are converted to values at 0°C, 101.3kPa abs (1atm) for calibration.

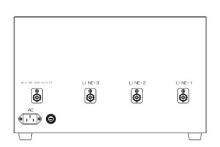
#### [Flow Diagram (e.g.: 3 gases)]



<sup>\*2.</sup> Flow rate display setting changes is possible.







#### **≪Ordering**≫

## CUBE GM3



1 Mixing gases (\*1)

GM2 Two gases

GM3 Three gases

GM4 Four gases

\*1. More than four gases, please contact us.

We can design and manufacture upon request in addition to standard products,



#### Touch panel Gas Mixer

## **CUBE GM-X series**



#### ≪Features≫

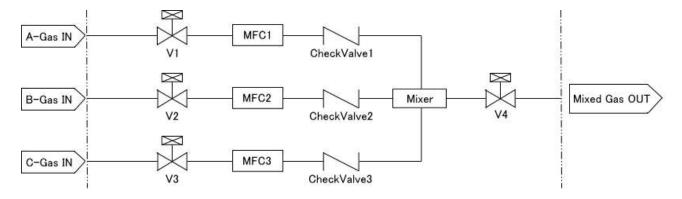
- All-in-one unit with mass flow controller, control power supply, valve, check valve and gas mixer
- Program operation: Flow rate and time is possible to set for each line with program.
- Alarm function: Based on each line upper and lower limit setting, alarm sound if flow rate abnormality occurs
- Unit type gas mixer
- Equipped with a mass flow controller to supply a stable gas mixture that is not easily affected by pressure and temperature.

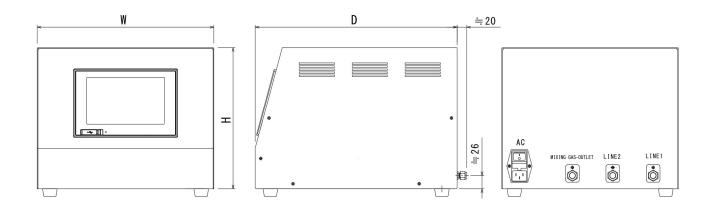
#### (Specification)

• · · · · · · · ·		
Model	CUBE GM-X2 (Two gases) / CUBE GM-X3 (Three gases) / CUBE GM-X4 (Four gases)	
Built-in MFC	C1000series / C2000series (manufactured by FCON) or FCST1000series (manufactured by Fujikin)	
Flow range (*1)	≦50 SLM (Total flow rate)	
Flow rate control range	Conform to built-in mass flow controller specification	
Operating differential pressure	Conform to built-in mass flow controller specification	
Pressure Resistance	Conform to built-in mass flow controller specification	
Operating environment	5~50°C (Accuracy guaranteed between 15~35°C), 85%RH (No condensation permitted)	
Wetted surface material	SUS316, PTFE, Fluoro-Rubber and built-in mass flow controller material	
Standard Fitting	1/4inch.SWL (equivalent) ※For other fitting, please contact us.	
Mass flow control	Touch panel operation	
Input power	AC100-240 V	

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

#### [Flow Diagram (e.g.: 3 gases)]





#### **≪Ordering**≫

## CUBE GM-X3

1

① Mixing gases (\*1) GM-X2 Two gases

GM-X3 Three gases

GM-X4 Four gases

\*1. More than four gases, please contact us.

We can design and manufacture upon request in addition to standard products,



Touch panel Gas Mixer

(Buffer tank specification)

## **CUBE GM-X** a series







#### ≪Features≫

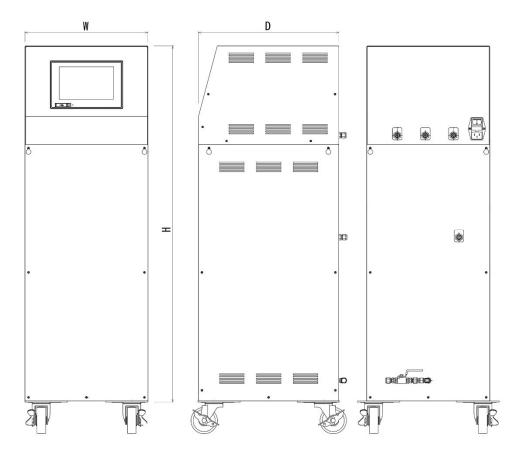
- All-in-one unit with mass flow controller, control power supply, valve, check valve and gas mixer
- Program operation: Flow rate and time is possible to set for each line with program.
- Alarm function: Based on each line upper and lower limit setting, alarm sound if flow rate abnormality occurs
- The buffer tank pressure is constantly monitored, when the pressure falls below a certain level, gas is automatically supplied to the buffer tank at the flow rate set (automatic stop and automatic restart pressure are fixed values). Easy to move with equipped caster with brake.
- Equipped with a mass flow controller to supply a stable gas mixture that is not easily affected by pressure and temperature.

#### [Specification]

Model	CUBE GM-Xα2 (Two gases) / CUBE GM-Xα3 (Three gases) / CUBE GM-Xα4 (Four gases)	
Built-in MFC	C1000series / C2000series (manufactured by FCON) or FCST1000series (manufactured by Fujikin)	
Flow range (*1)	≦50 SLM (Total flow rate)	
Flow rate control range	Conform to built-in mass flow controller specification	
Operating differential pressure	Conform to built-in mass flow controller specification	
Pressure Resistance	Conform to built-in mass flow controller specification	
Operating environment	5~50°C (Accuracy guaranteed between 15~35°C), 85%RH (No condensation permitted)	
Wetted surface material	SUS316, PTFE, Fluoro-Rubber	
Standard Fitting	1/4inch.SWL (equivalent) ※For other fitting, please contact us	
Mass flow control	Touch panel operation	
Tank volume (*2)	10 L, 20 L	
Tank operating pressure	0.49 MPa 以下	
Input power	AC100-240 V	

 $<sup>^{\</sup>star} 1.\,At\,FCON,\,flow\,rates\,(SCCM,\,SLM)\,are\,converted\,to\,values\,at\,0^{\circ}C,\,101.3kPa\,abs\,(1atm)\,for\,calibration.$ 

<sup>\*2.</sup> Other tank volume please kindly discuss with us.



#### **≪Ordering**≫

## CUBE GM-Xα3

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Mixing gases (\*1)

GM-Xα2 Two gases

GM-Xα3 Three gases

GM-Xα4 Four gases

\*1. More than four gases, please contact us.

We can design and manufacture upon request in addition to standard products,

## **Company Profile**

We are the manufacturer of flow control devices such as Mass Flow Controllers (MFC).

We have been providing wide range of flow control devices catering to our customers' needs. From designing and manufacturing of standard and customize devices by our own.

Mass flow controllers are the devices to measure the mass flow of gases and liquids in order to regulate the flow, indispensable for the processes requiring high-precision flow measurement. Because of the high prices of these devices, however, their uses have been confined to specific fields.

Our mass flow controllers are the devices that realizing the reasonable cost while retaining their basic functions. They can be used for wide variety of fields ranging from general industry, mounts for various kinds of production devices, and for research and development.

#### ≪Management Philosophy≫

#### ■ New value and market creation

We are creating a new market, which products and services from the user's perspective by ideas and creation which is not particular about the existing concept.

#### ■ Customer satisfaction is our existence value

We raise our existence value by providing valuable products and service for customers.

#### ■ Work environment with hopes and dreams

To create a rewarding workplace where employees are always motivated and fully demonstrate their potentials, have dreams and hopes for the future.

#### **≪Company Profile**≫

Company Name FCON, CO., Ltd.

President and CEO Kuniaki Yamanaka

Establishment July 2013

Capital JPY 10,000,000

Business Content Manufacturing and sale of various flow controllers

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[MEMO]

## FCON

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