



Features



User manual



Features

■ High precision in measurement and control

Manufactured using proprietary calorimetry and diffusivity sensing technologies.

■ Communication protocol

RS485 Modbus RTU

■ Applicable Industries

Semiconductor, Laser welding, IoT

Specification

Model		MFCA-050	MFCA-100	MFCA-200
Flow rate range	(Ln/min)	0~50	0~100	0~200
Fluid		Air, N ₂ , O ₂ , Ar		
Accuracy		±1.5% R.D. (20 ~ 100% of full scale)	±0.3% F.S. (< 20% of full scale)	
Repeatability		±0.5% R.D. (20 ~ 100% of full scale)	±0.1% F.S. (< 20% of full scale)	
Turn-down ratio		100:1		
Max. control range		120% F.S.		
Rated pressure range		0.1~0.8 MPa		
Max. operating differential pressure		0.4 MPa		
Proof pressure		1.5 MPa		
Settling time		100 ms		
Max pressure loss		80 kPa (100L/min models)		
Power supply		24V DC,1A		
Control valve		Nomal closed (N.C.)		
Electrical connector		DB9		
Port size		3/8, 1/2		
Analog	input	Voltage 0~5V or Current 4~20mA		
	output			
Max null shift (analog)		±30 mVdc		
Digital (*)	input	RS485 Modbus		
	output			
Environment	Protection	IP40		
	Working temperature	0~55°C (No freezing)		
	Humidity	<95%RH (No condensation)		
	Storage temperature	-20~70°C (No freezing)		
	Reference conditions	Air (0°C, 101.325 kPa)		
	Certification	CE(EN61000-2;-3;-4), RoHS, REACH		

* For the other digital interface, please contact the manufacturer.

Order example

MFCA – 100 – 10A – A2 0 A – □

MODEL

FLOW RATE RANGE

050: 0 ~ 50 Ln/min
100: 0 ~ 100 Ln/min
200: 0 ~ 200 Ln/min

PORT SIZE

10A: 3/8
15A: 1/2

DEFAULT SETTING

0: Analog signal
1: Digital signal

I/O SIGNAL

A2: 0~5V + RS485
B2: 4~20mA + RS485
(Switchable between analog and digital signals)

PORT THREAD

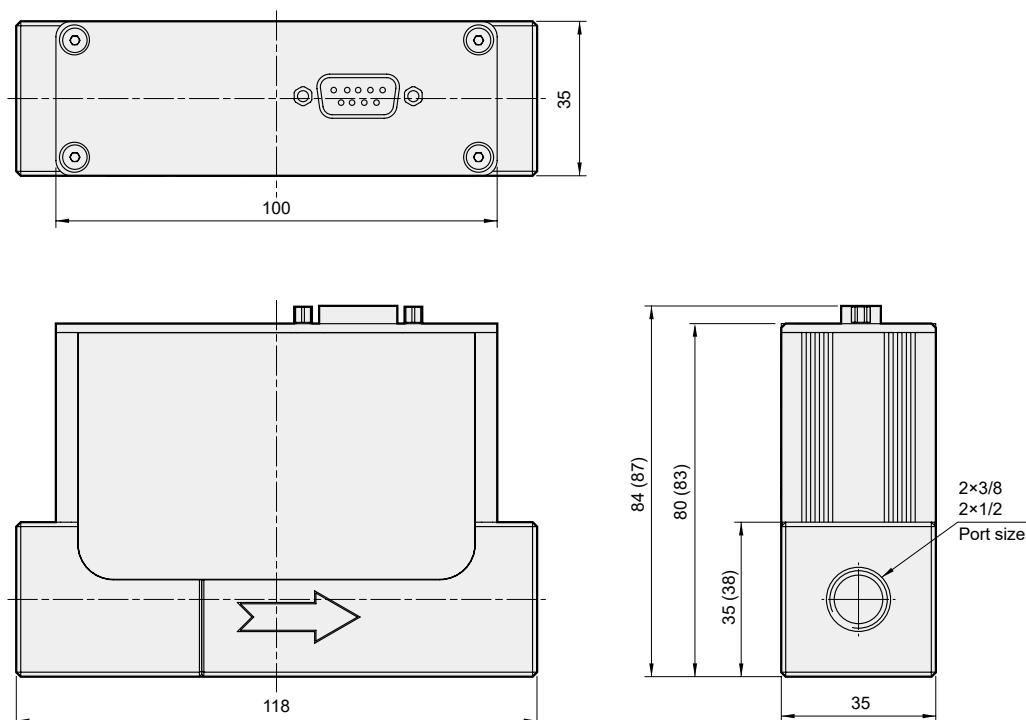
Blank: Rc thread
NPT: NPT thread

(For G thread, please contact our sales)

FLUID

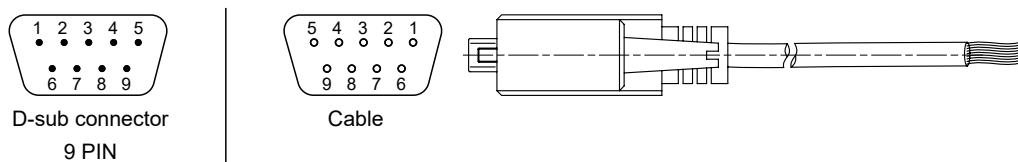
A: Air, N₂, O₂, Ar
(For other gases, please contact our sales)

Dimensions



* () value for MFCA-200.

Cable connector



Pin No.	Color	Function
1	Purple	N/A
2	Red	N/A
3	White	RS485(-)
4	Yellow	Setpoint, analog 0~5V or 4~20mA
5	Black	RS485(+)
6	Gray	Flow rate output 0~5V or 4~20mA
7	Brown	Power supply, 24VDC, 1A
8	Blue	Common (also used for power, communication and analog signals)
9	Green	Common (also used for power, communication and analog signals)

* The standard cable has a D-sub 9pin connector with a length of 1.0 meters. The other end for customer connection is open wires.