

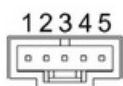
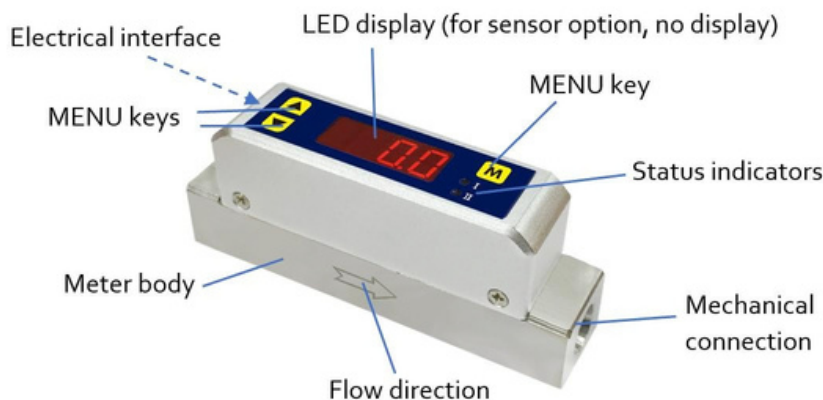


Mass Flow Meter for Gases

Model MF4700



This product is designed for general-purpose gas mass-flow measurement with a metal package for high-pressure compatibility. The product can be used in a variety of applications, with customizable features that include mechanical connections and electrical interfaces.



MF/FS4701/03/08/10 pinout

Wire	Color	Definition
1	Blue	RS485B (-)
2	Green	Analog output 4 ~ 20 mA /Analog output 0.5 ~ 4.5 Vdc
3	Red	Power supply, 8 ~ 24 Vdc
4	Black	Ground
5	Yellow	RS485A (+)

The standard cable (part number: SN5-50) has an AMPMODU MTE (5 positions) compatible connector with a length of 0.5 meters.



MF/FS4712/19 socket definition

Wire	Color	Definition
1	Brown	Power supply, 8 ~ 24 Vdc
2	White	RS485B (-)
3	Blue	Ground
4	Black	RS485A (+)
5	Gray	Analog output 4 ~ 20 mA /Analog output 0.5 ~ 4.5 Vdc

The standard cable (part number: M8-5F-150) has an M8 (5 positions) connector with a length of 1.5 meters.

- Mass flow meter
- Metal package
- Gas process
- Gas mixing
- Instrumentation
- Fuel efficiency
- Fermentation
- Welding gas
- Medical gases



Specifications

	Value	Unit
Full-scale flow range	See Table 6.1	SLPM
Accuracy	$\pm(2.0+0.5FS)$	%
Repeatability	$(0.5+0.15FS)$	%
Turn-down ratio	50:1	
Working temperature	-10 ~ +55	°C
Maximum pressure	1.0	MPa
Humidity	<95, no condensation	%RH
Power supply	8 ~ 24 (50 mA)	Vdc
Temperature coefficient	0.12	%/°C
Digital output	RS485 Modbus half-duplex	
Analog output	0.5 ~ 4.5 Vdc / 4 ~ 20 mA	
Electrical connector	AMPMODU MTE (5 positions) or M8 (5 positions)	
MENU access	3 key – front face keyboard/digital	
Display	Instant flow rate, totalizer, or accumulated flow rate with LED & 2 indicators	
Mechanical	NPT, BSPT, or customized	
Protection	IP40	
Storage temperature	-20 ~ +70	°C
Reference conditions	20°C, 101.325 kPa, air	
Fluid compatibility	Non-corrosive	
CE	EN61326-1; -2; -3	

	4701	4703	4708	4710	4712	4719	
Max. overflow	6	30	200	400	600	2000	SLPM
Max. flow change	1	4	30	60	100	300	SLPM/sec

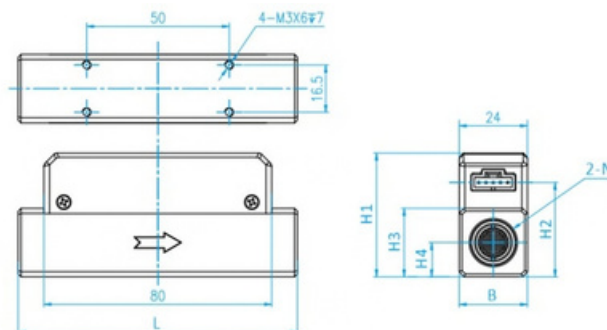
Note: For other features or specifications not listed, please contact the manufacturer.

*All specifications listed in the following table, unless otherwise noted, apply for calibration conditions at 0 °C and 101.325 kPa absolute pressure with air. The product is horizontally mounted during calibration.

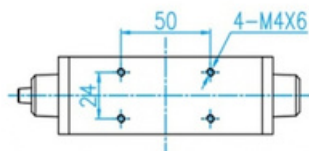
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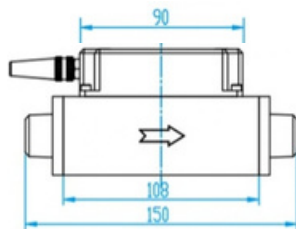
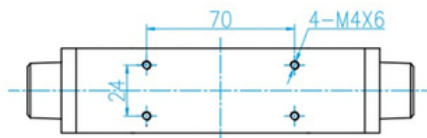
Mechanical dimensions



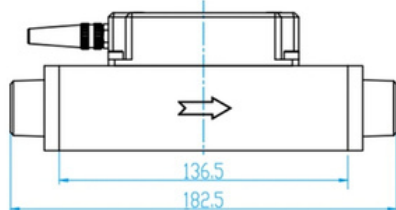
Model	L	B	H1	H2	H3	H4	N
MF4700/03	98	24	43	29	20	10	NPT 1/8", BSPT 1/8"
	98	24	47	33	24	12	NPT 3/8", BSPT 3/8"
	118	30	53	39	30	15	G 1/2" (BSPP 1/2")



MF4712

2-NPT 1/2"-male/female
or 2-BSPT 1/2"-male/female

MF4719

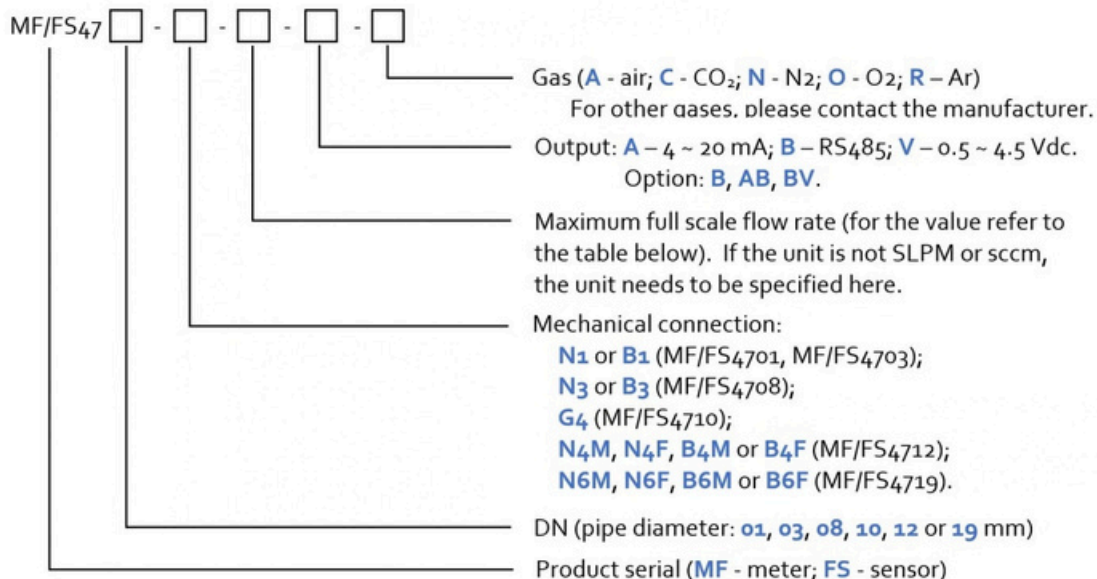
2-NPT 3/4"-male/female
or 2-BSPT 3/4"-male/female

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Product selection and order

The product part number consists of the product model number and suffixes indicating the full-scale flow rate, as well as other parameters. Refer to the following for details.



Mechanical connection and full-scale flow range of all models.

Model	DN (mm)	Mechanical Connection	Flow range		
			sccm	SLPM	SCFH
MF/FS4701	1.0	N1 - NPT 1/8"-female, B1 - BSPT 1/8"-female	0 ~ 100, 200, 500		0 ~ 1
MF/FS4703	3.0	N1 - NPT 1/8"-female, B1 - BSPT 1/8"-female	0 ~ 1000	0 ~ 1, 2, 5	0 ~ 2, 5, 10
MF/FS4708	8.0	N3 - NPT 3/8"-female, B3 - BSPT 3/8"-female		0 ~ 10, 20, 50	0 ~ 20, 50, 100
MF/FS4710	10.0	G4 - G1/2"-female (BSPP 1/2"-female)		0 ~ 100	0 ~ 200
MF/FS4712	12.0	N4M - NPT 1/2"-male, N4F - NPT 1/2"-female, B4M - BSPT 1/2"-male, B4F - BSPT 1/2"-female		0 ~ 200, 300	0 ~ 400, 600
MF/FS4719	19.0	N6M - NPT 3/4"-male, N6F - NPT 3/4"-female, B6M - BSPT 3/4"-male, B6F - BSPT 3/4"-female		0 ~ 500, 800, 1000	0 ~ 1000, 1500, 2000

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