MASS FLOW METER USER MANUAL

Description

EMF5700 series mass flow meters are designed for general purpose

flow metering and control applications enabled by IoT or wireless

data while having the mobile power option. With Siargo's

proprietary MEMS mass flow sensing technology and smart electronic

circuitry, the products offer unprecedented cost-effectiveness

with performance. The sensors directly measure mass flow with

a very low pressure loss, opt with various wireless transmissions,

and control ON/OFF valve. The current models can be readily

applied to many process applications.

EMF5700 can measure a flow up to 250 SLPM. The mechanical

connectors can be fully customized.

Features

1. ncrease model EMF5708 0~100L/min

2. dd optional LoRa wireless control module

3. dd valve control module to the whole series

4. he national standard G thread is added to the full range of interfaces

5. pgrade the motherboard, RS485 communication is more smooth and convenient

6.Parameters can be configured via buttons

7.With over-range alarm indication function

8.Portable design, battery power supply and external power supply can be switched at will

G thread or NPT thread connection, easy to install and use, other interfaces can also be customized

according to customer needs
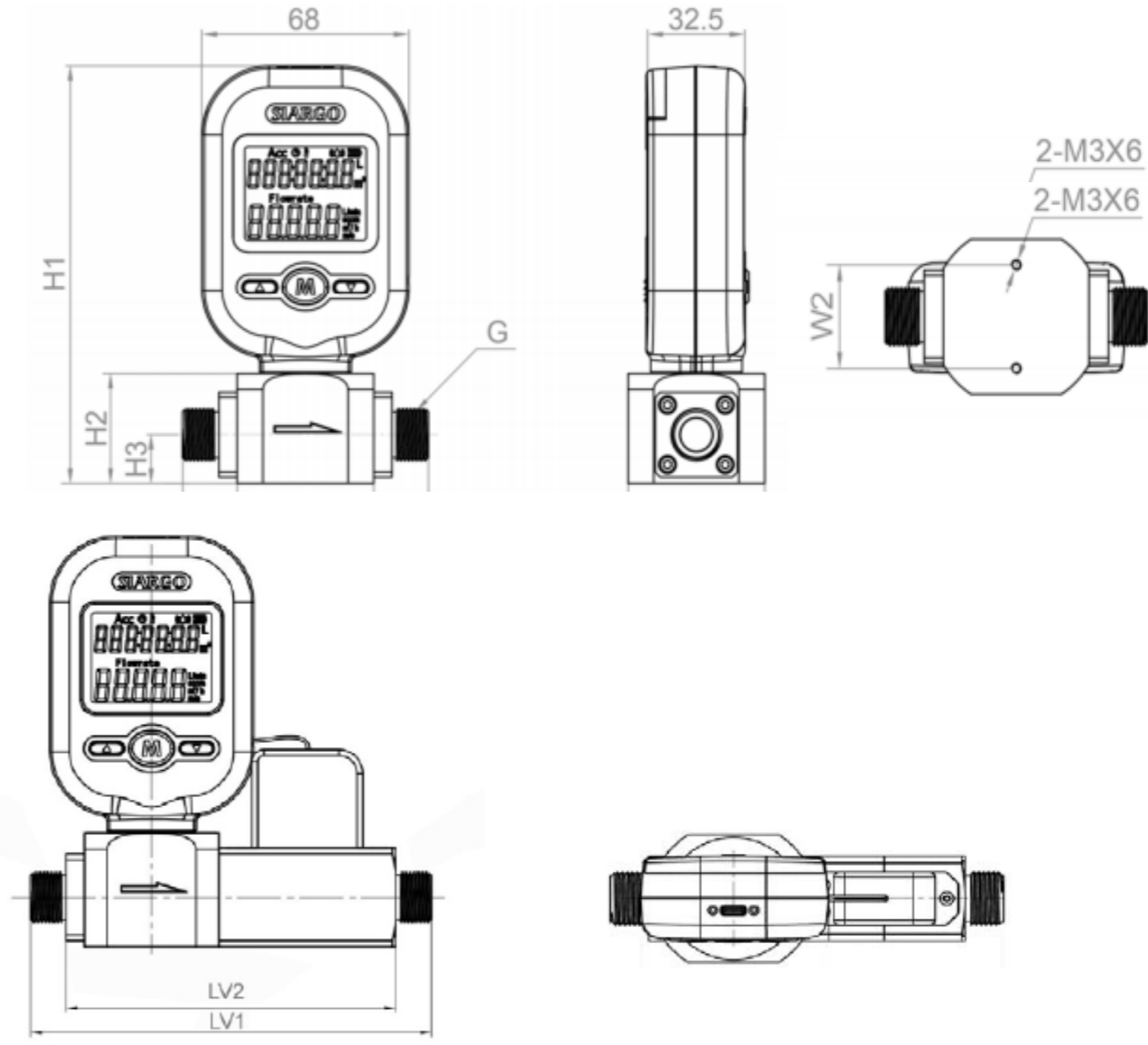
Mechanical Dimensions

Figure 3.6: EMF5700 meter with control valves dimensions

Table 3.3: Mechanical dimensions of the meters/meters with control valves

	Connector, G	L1	L2	LV1	LV2	W1	W2	H1	H2	H3
EMF5706	BSPP ¼"	61	34	95.5	123	34	25	127	28	12.5
EMF5708	BSPP 3/8"	81	45	110	134	45	30	134	35	15.5
EMF5712	BSPP ½"	90	50	115	143	45	30	141	42	19.5

Specifications

	EMF5706	EMF5708	EMF5712	Unit
Full-scale flow range	0~20	0~100	0~250	SLPM
Accuracy	±(2.0+0.5FS)			%
Repeatability	0.5			%
Turn-down ratio	80:1			
Response time	<2.0			sec
Working temperature	-10~55			°C
Maximum pressure	0.8			MPa
Humidity	<95, no condensation			%RH
Maximum overflow	100	200	400	SLPM
Maximum flow change	15	30	60	SLPM/sec
Pressure loss	0.6	1.0	2.0	kPa
Power supply	4-AA batteries (LR6) / 5~24 Vdc			
Power consumption	>60 (on batteries)			day
Power / data interface	USB Type-C			
Digital output	RS485 Modbus half-duplex			
Wireless options	LoRa / WIFI / NB-IoT / BT LE			
Display	LCD			
Resolution	0.01 L/min (instant) / 1 L (accumulated)			
Mechanical connection	BSPP 1/4 or NPT 1/4"	BSPP 3/8" or NPT3/8"	BSPP 1/2" or NPT/ 1/2"	
Storage temperature	-20 ~ 70			°C
Reference conditions	20°C, 101.325 kPa, air			
Protection	IP50			
Fluid compatibility	Non-corrosive			
CE	EN61326-1; -2; -3			

Product model

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Gas (A - air; C - CO$_2$; N - N2; O - O2; R- Ar, for other gases, please contact the manufacturer.

Output (B - RS485 Modbus).

Maximum full scale flow rate (for other units refer to the table below). If the unit is not SLPM, the unit needs to be specified here.

Mechanical connection (G - BSPP; N - NPT)

DN (pipe inner diameter: 06, 08 or 12 mm)
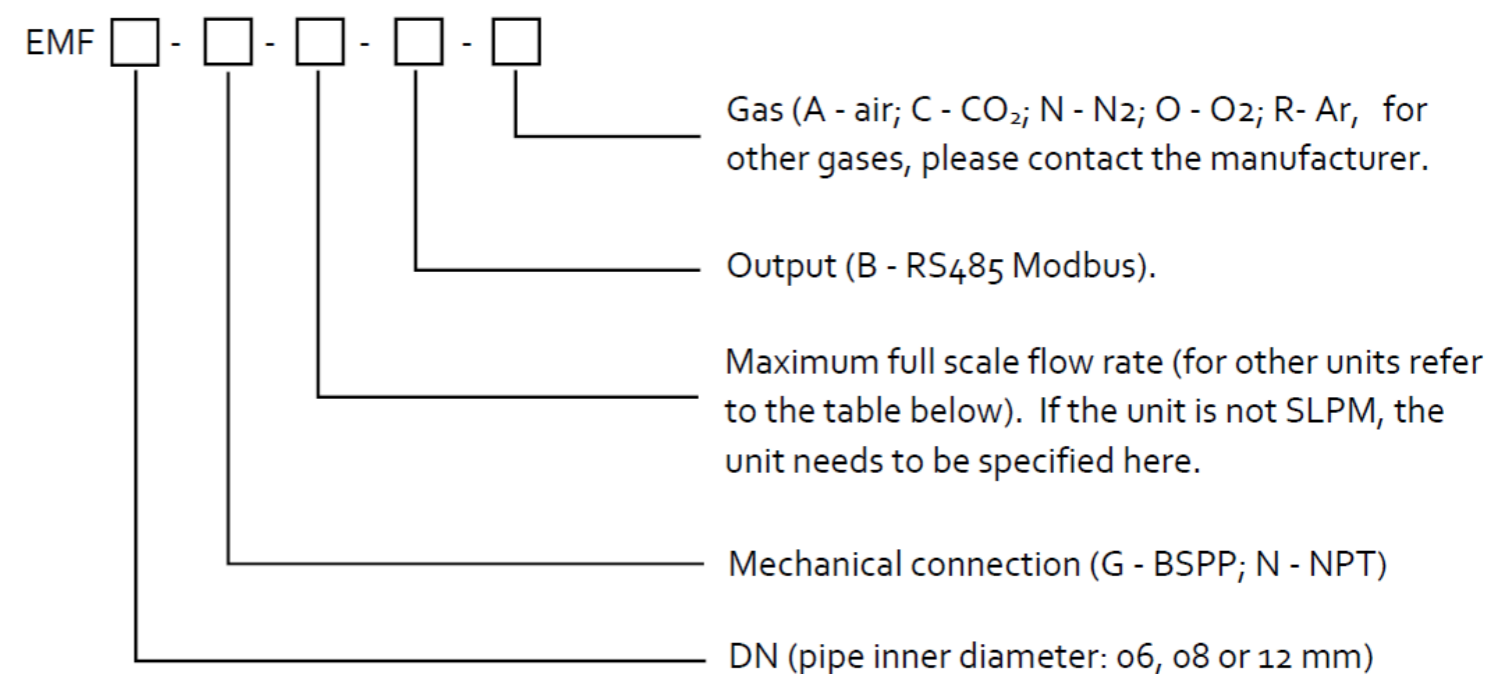
Model	DN (mm)	Connection	Maximum full-scale flow rate		
			SLPM	SCFH	NCMH
EMF5706	6.0	BSPP 1/4" or NPT 1/4"	20	40	1.2
EMF5708	8.0	BSPP 3/8" or NPT 3/8"	100	200	6
EMF5712	12.0	BSPP 1/2" or NPT 1/2"	250	500	15