



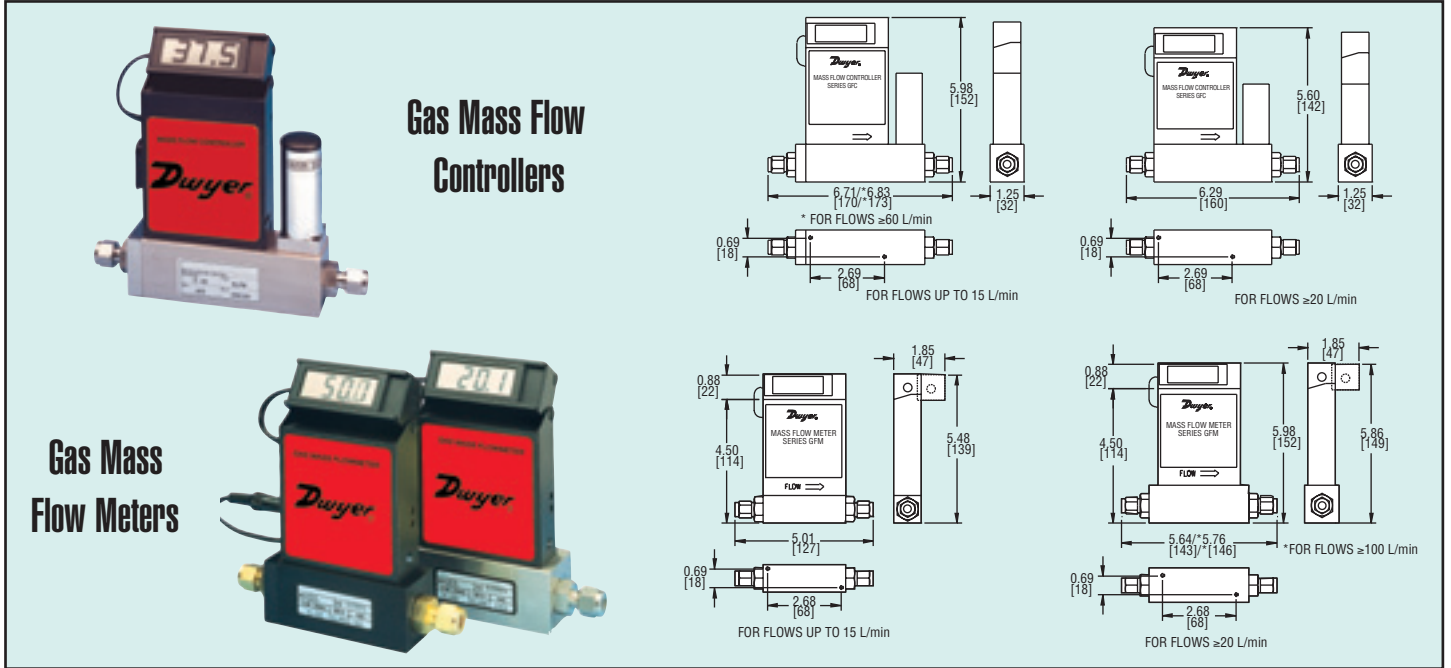
Series
GFC/GFM

Gas Mass Flow Controllers/Meters

Flow Range up to 1000 L/min, Pressures up to 500 psi, NIST Traceable



Flow



Series GFC/GFM Gas Mass Flow Controllers/Meters combine a straight tube sensor with a restrictor flow element to provide high accuracy and repeatability. Flow rates are virtually unaffected by temperature and pressure variations. Actual gas flow is displayed in engineering units on a 3-digit, 90° tiltable LCD readout. Units can be used with Series GFT Flow Totalizer for applications requiring totalization. Series GFC/GFM includes a NIST traceable certificate.

Gas mass flow controllers utilize an electromagnetic valve and PID electronics to maintain continuous control by comparing measured sensor signal set to flow rates. Setpoints can be adjusted with local potentiometers or remotely via 0 to 5 VDC or 4 to 20 mA analog signal.

SPECIFICATIONS

- Service:** Clean gases compatible with wetted parts.
- Wetted Materials:** GFC/GFM-1XXX: Anodized Aluminum, Brass, 316 SS and Viton® O-rings; GFC/GFM-2XXX: 316 SS and Viton® O-rings.
- Accuracy:** ±1.5% FS including linearity over 59 to 77°F (5 to 25°C) and 5 to 60 psia (0.35 to 4 bar).
- Repeatability:** ±0.5% of full scale.
- Response Time:** 2 seconds to within ±2% of actual flow.
- Output:** Linear 0-5 VDC and 4-20 mA.
- Max. Particulate Size:** 5 microns.
- Temperature Limits:** 32 to 122°F (0 to 50°C).
- Power Supply:** ±12 VDC.
- Process Connections:** 1/4" compression fitting for flow rates ≤50 L/m; 3/8" for 100 and 200 L/m; 1/2" for 500 L/min; 3/4" for 1000 L/min.
- Pressure Limits:** 500 psig (34.5 bar).
- Leak Integrity:** 1 x 10⁻⁷ sccs of Helium.
- Display:** 90° tiltable, 3-1/2 digit.
- Agency Approvals:** CE

POPULAR MODELS

Flow Range	Controllers		Meters	
	Aluminum	SS	Aluminum	SS
0-10 sccm	GFC-1101*	GFC-2101*	GFM-1101*	GFM-2101*
0-20 sccm	GFC-1102*	GFC-2102*	GFM-1102*	GFM-2102*
0-50 sccm	GFC-1103*	GFC-2103*	GFM-1103*	GFM-2103*
0-100 sccm	GFC-1104*	GFC-2104*	GFM-1104*	GFM-2104*
0-200 sccm	GFC-1105*	GFC-2105*	GFM-1105*	GFM-2105*
0-500 sccm	GFC-1106*	GFC-2106*	GFM-1106*	GFM-2106*
0-1 L/min	GFC-1107*	GFC-2107*	GFM-1107*	GFM-2107*
0-2 L/min	GFC-1108*	GFC-2108*	GFM-1108*	GFM-2108*
0-5 L/min	GFC-1109*	GFC-2109*	GFM-1109*	GFM-2109*
0-15 L/min	GFC-1111*	GFC-2111*	GFM-1111*	GFM-2111*
0-30 L/min	GFC-1131*	GFC-2131*	GFM-1131*	GFM-2131*
0-50 L/min	GFC-1133*	GFC-2133*	GFM-1133*	GFM-2133*
0-100 L/min	GFC-1142*	GFC-2142*	GFM-1142*	GFM-2142*
0-200 L/min	GFC-1143*	GFC-2143*	GFM-1143*	GFM-2143*
0-500 L/min	GFC-1144*	GFC-2144*	GFM-1144*	GFM-2144*
0-1000 L/min	GFC-1145*	GFC-2145*	GFM-1145*	GFM-2145*

*Specified flow ranges are for an equivalent flow of nitrogen at 70°F (21°C) @ 760 mm Hg.

ACCESSORIES

- For Series GFC Gas Mass Flow Controllers**
 - Model GFC-110P 110V Power Supply
 - Model GFC-220PE 220V Power Supply
 - Model GFC-CBL1 8 ft cable with 15-pin connector
 - Model GFC-CBL3 3 ft extension cable for LCD readout
 - Model IO-1 0-5 VDC to RS232 Input to Output Signal Conditioner
- For Series GFM Gas Mass Flowmeters**
 - Model GFM-110P 110V Power Supply
 - Model GFM-220PE 220V Power Supply
 - Model GFM-CBL4 3 ft cable for 4-20mA output
 - Model GFM-CBL5 3 ft cable for 0-5 VDC output
 - Model IO-1 0-5 VDC to RS232 Input to Output Signal Conditioner