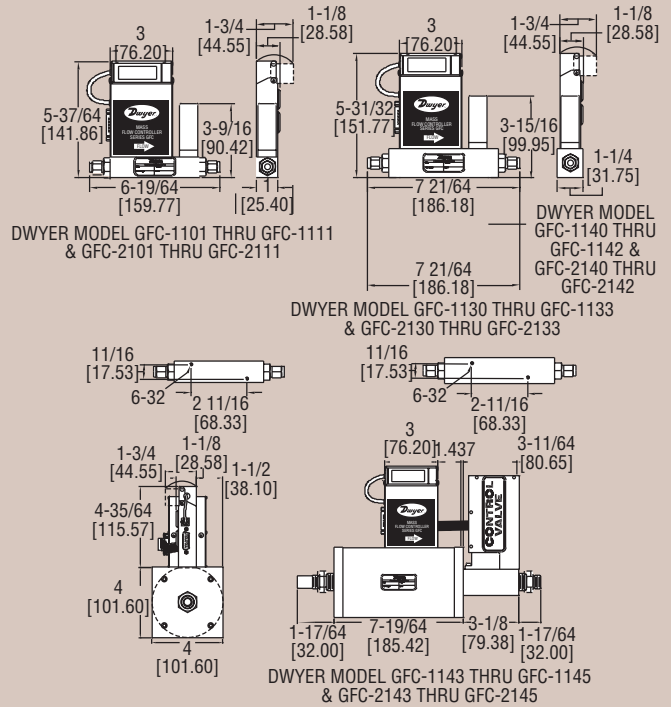




Series
GFC

Gas Mass Flow Controllers

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



FLOW

Mass Flowmeters/
Controllers

Series GFC Gas Mass Flow Controllers combine a straight tube sensor with a restrictor flow element to provide high accuracy and repeatability. 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. 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 includes a NIST traceable certificate.

Flow Range	Model		
	Aluminum	SS	Process Connector Compression Fitting
0-10 mL/m	GFC-1101*	GFC-2101*	1/4"
0-20 mL/m	GFC-1102*	GFC-2102*	1/4"
0-50 mL/m	GFC-1103*	GFC-2103*	1/4"
0-100 mL/m	GFC-1104*	GFC-2104*	1/4"
0-200 mL/m	GFC-1105*	GFC-2105*	1/4"
0-500 mL/m	GFC-1106*	GFC-2106*	1/4"
0-1000 mL/m	GFC-1107*	GFC-2107*	1/4"
0-2 L/min	GFC-1108*	GFC-2108*	1/4"
0-5 L/min	GFC-1109*	GFC-2109*	1/4"
0-15 L/min	GFC-1111*	GFC-2111*	1/4"
0-30 L/min	GFC-1131*	GFC-2131*	1/4"
0-50 L/min	GFC-1133*	GFC-2133*	1/4"
0-100 L/min	GFC-1142*	GFC-2142*	3/8"
0-200 L/min	GFC-1143*	GFC-2143*	3/8"
0-500 L/min	GFC-1144*	GFC-2144*	1/2"
0-1000 L/min	GFC-1145*	GFC-2145*	3/4"

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

SPECIFICATIONS

- Service:** Clean gases compatible with wetted parts.
- Wetted Materials:**
 - GFC-1XXX: Anodized aluminum, brass, 316 SS and fluoroelastomer O-rings;
 - GFC-2XXX: 316 SS and fluoroelastomer 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° tilttable, 3-1/2 digit.
- Agency Approvals:** CE.

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
- GFT-10,** Flow Totalizer with 5-10 VDC input for direct connection to GFM and GFC (replaces GFM/GFC LCD Process display)
- GFT-10C,** Connection Cable for utilizing GFT-10 totalizer in conjunction with GFM/GFC LCD process display