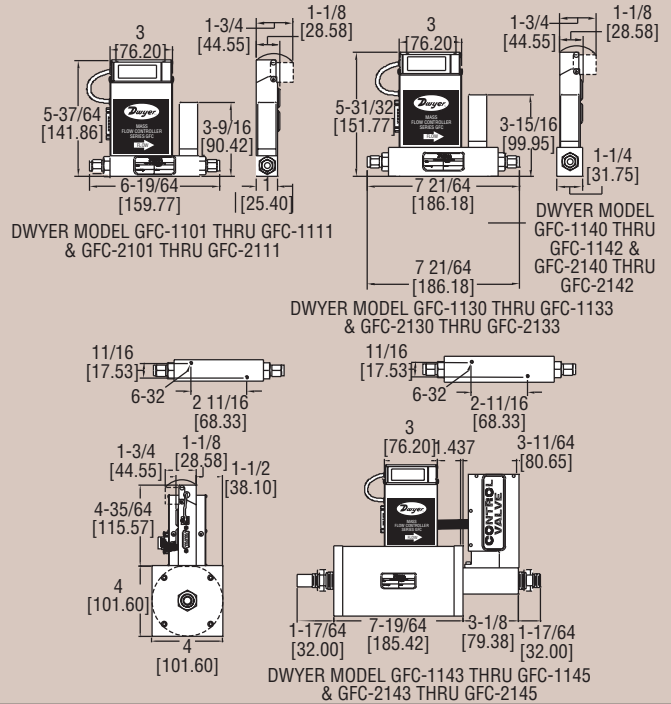
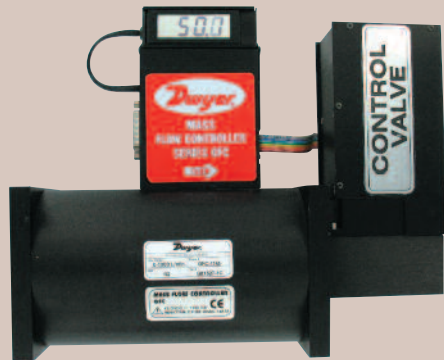




Series  
GFC

# Gas Mass Flow Controllers

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



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.

## 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 s to within ±2% of actual flow.

**Output:** Linear 0 to 5 VDC and 4 to 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<sup>-7</sup> sccs of helium.

**Display:** 90° tiltable, 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' cable with 15-pin connector

**Model GFC-CBL3,** 3' extension cable for LCD readout

FLOW

Mass Flowmeters/  
Controllers

Flow Range	Model		Process Connector Compression Fitting
	Aluminum	SS	
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.