Dwyer

SERIES GFM3 & GFM4

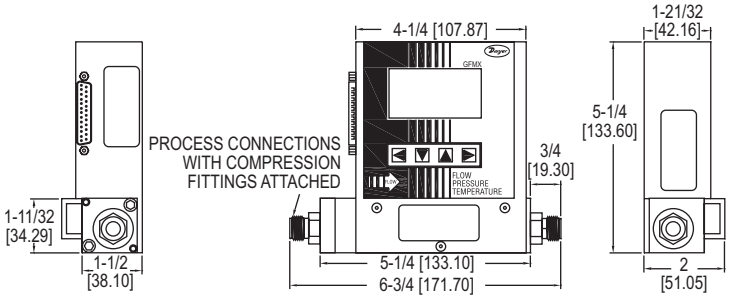
GAS MASS FLOW METERS

Flow Monitoring, Push-Button Configuration

CALIBRATION SERVICES AVAILABLE

GFM3

GFM4



The **Series GFM3 & GFM4 Gas Mass Flow Meters** are an ideal choice for the measurement of flow rates of a wide variety of gases. Unit can be calibrated for a variety of gases via push-button with 0-5 VDC, 0-10 VDC or 4-20 mA and relay outputs.

FEATURES/BENEFITS

- Multi parameter flow meter supports various functions such as flow totalizer, flow, temperature, and pressure alarms, and is available in a choice of 0-5 VDC, 0-10 VDC, or 4-20 mA output signals
- Set alarms remotely via digital interface for flow, pressure, and temperature to alert user of high or low thresholds being exceeded
- Programmable 12-digit totalizer for total gas volume indication, and is available in the choice of 0-5 VDC, 0-10 VDC, or 4-20 mA output signals
- Standard four button keypad and large 128 x 64 graphical LCD with backlight allows easy access to the many features
- Digital interface operates through available RS-485 or RS-232, providing access to internal data parameters and multi-drop capability of up to 255 units (RS-485 only)
- Set alarms remotely via digital interface for flow to alert user of high or low thresholds being exceeded
- Internal conversion factors for up to 32 gases
- NIST traceable certificate included
- Automatic zero adjustment
- Self-diagnostic tests

SPECIFICATIONS

Service: Clean gases compatible with wetted parts.
Wetted Materials: 316 SS, 416 SS; Fluoroelastomer, Buna-N, EPR or PTFE O-rings.
Accuracy: ±1% FS.
Repeatability: ±0.25% FS.
Response Time: 0.6 to 1.0 s to within ±2% of set point over 20 to 100% FS.
Output Signal: Linear 0-5 VDC (3000 Ω min. load impedance); 0-10 VDC (6000 Ω min. load impedance); 4-20 mA (500 Ω max. loop resistance).
Relay Rating: 1 A @ 24 VDC.
Max. Particulate Size: 5 microns.
Temperature Limits: Ambient: 32 to 122°F (0 to 50°C); Dry Gases: 14 to 122°F (-10 to 50°C).
Power Supply: 12 VDC; 15 VDC; ±24 VDC.
Process Connections: 1/8″ compression fitting for flow rates ≤ 10 L/min; 1/4″ for ≤ 50 L/min; 3/8″ for ≤ 100 L/min.
Pressure Limits: 500 psia (35 bar).
Leak Integrity: 1 x 10^{-9} smL/sec of helium.
Display: 128 x 64 graphic LCD with backlight.
Weight: 1 lb (.45 kg).

MODEL CHART

Example	GFM3	-AIR	-010	-5	-E	-B	-L	-B	-C	-2	GFM3-AIR-010-5-E-B-L-B-C-2	Price
Series	GFM3										Gas mass flow meter	-
	GFM4										Gas mass flow meter with temperature	**+$365.00**Ⓑ
Specialty Gas and K-Factor		AIR									Air 1.0000	-
		AR									Argon 1.4573	-
		C2H2									Acetylene 0.5829	-
		C3H8									Propane 0.3500	-
		C4H10									Butane 0.2631	-
		CH4									Methane 0.7175	-
		CO									Carbon monoxide 1.0000	-
		CO2									Carbon dioxide 0.7382	-
		HF									Hydrogen fluoride 0.9998	-
		HE									Helium 1.4540	-
		H2									Hydrogen 1.0106	-
		N2									Nitrogen 1.0000	-
		NH3									Ammonia 0.7310	-
		O2									Oxygen 0.9926	-
		SO2									Sulfur dioxide 0.6900	-
Body Size❷			010								Low flow	**1624.00**Ⓑ
			050								Medium flow	**1760.00**Ⓑ
			100								High flow	**1895.00**Ⓑ
Power Supply				5							±15 VDC	-
				2							12 VDC	**+70.50**Ⓑ
				4							24 VDC	**+139.00**Ⓑ
Seal Material					V						Fluoroelastomer	-
					B						Buna-N	-
					E						EPR	-
					T						PTFE	**+496.00**Ⓑ
Fittings						A					1/4″ compression (low)	-
						B					1/8″ compression (medium)	-
						D					3/8″ compression (high)	-
Display							L				LED display	**+113.00**Ⓑ
Flow Output Signal								A			0-5 VDC	-
								B			4-20 mA	-
								G			0-10 VDC	-
Temperature and Pressure Output Signal									A		N.A/N.A	-
									B		0-5 VDC/0-5 VDC	-
									C		0-5 VDC/4-20 mA	-
									D		0-5 VDC/0-10 VDC	-
									E		4-20 mA/0-5 VDC	-
									F		4-20 mA/4-20 mA	-
									G		4-20 mA/0-10 VDC	-
									H		0-10 VDC/0-5 VDC	-
									I		0-10 VDC/4-20 mA	-
									J		0-10 VDC/0-10 VDC	-
Digital Interface										2	RS232	-
										5	RS485	-
										9	PROFIBUS	**+784.00**Ⓑ

Note: Specify flow range at time of order❶ Ⓑ Items are subject to Schedule B discounts.

APPLICATIONS

- Gas flow measurement
- Gas flow control
- Operating pumps and valves
- Process equipment
- Vacuum processes
- Glass and metal coating
- Film deposition

ACCESSORIES

Model	Description	Price
A-110N12	110 VAC power supply, 12 VDC standard interface	**$93.00**Ⓑ
A-110N24	110 VAC power supply, 24 VDC standard interface	**93.00**Ⓑ
A-110NA15	110 VAC power supply, 15 VDC standard interface	**330.00**Ⓑ

Ⓑ Items are subject to Schedule B discounts.