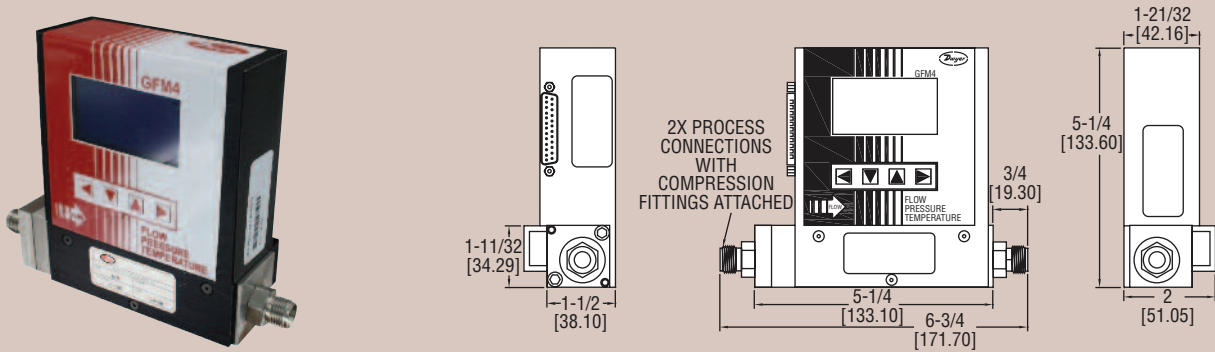




Series
GFM4

Gas Mass Flow Meter

Pressure, Temperature and Flow Monitoring



The **Series GFM4 Gas Mass Flow Meter** is an ideal choice for the measurement of flow rates of a wide variety of gases. This multi parameter flow meter supports various functions such as flow totalizer, flow, temperature, and pressure alarms, and is available in a choice of 0 to 5VDC, 0 to 10VDC, or 4 to 20 mA output signals. Standard LCD and four button keypad allows easy access to the many features of the GFM4. 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, pressure, and temperature to alert user of high or low thresholds being exceeded. With a high $\pm 1\%$ FS accuracy and $\pm 0.25\%$ FS repeatability, the GFM4 is the optimal choice in gas flow metering and monitoring. The GFM4 comes with a NIST traceable certificate.

SPECIFICATIONS

Service: Clean gases compatible with wetted parts.
Wetted Materials: 316 SS, 416 SS; Fluoroelastomer, Buna-N, EPR or PTFE O-rings.
Accuracy: $\pm 1\%$ FS.
Repeatability: $\pm 0.25\%$ FS.
Response Time: 0.6 to 1.0 s to within $\pm 2\%$ of setpoint over 20 to 100% FS.
Output Signal: Linear 0 to 5 VDC (3000 Ω min. load impedance); 0 to 10 VDC (6000 Ω min. load impedance); 4 to 20 mA (500 Ω max loop resistance).
Relay Rating: 1 amp @ 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: 200 psia (13.79 barA).
Leak Integrity: 1×10^{-9} sml/sec of helium.
Display: 128 x 64 graphic LCD with backlight.
Weight: 1 lb (.45 kg).

FEATURES

- Multi-drop capability of up to 256 units (for RS-485 option).
- Programmable 12 digit totalizer indicates total gas volume.
- Flow alarm limits for high and low gas flow with relay output.
- Pressure alarm limits for high and low gas pressure with relay output.
- Four button keypad and large 128x64 graphical LCD with backlight.
- Internal conversion factors for up to 32 gases.
- Automatic zero adjustment.
- Self diagnostic tests.
- Free communication software available at www.dwyer-inst.com.

Example Series	GFM4	AIR	010	5	V	A	N	A	C	2	GFM4-AIR-010-5-V-A-N-A-C-2
Specialty Gas & K-Factor	GFM4	AIR AR C ₂ H ₂ C ₃ H ₈ C ₄ H ₁₀ CH ₄ CO CO ₂ HF HE H ₂ N ₂ NH ₃ O ₂ SO ₂									Gas Mass Flow Meter Air 1.0000 Argon 1.4573 Acetylene 0.5829 Propane 0.3500 Butane 0.2631 Methane 0.7175 Carbon Monoxide 1.0000 Carbon Dioxide 0.7382 Hydrogen Fluoride 0.9998 Helium 1.4540 Hydrogen 1.0106 Nitrogen 1.0000 Ammonia 0.7310 Oxygen 0.9926 Sulfur Dioxide 0.6900
Max Flow (L/Min N2)			010 050 100								10 L/Min 50 L/Min 100 L/Min
Power Supply				5 2 4							± 15 VDC 12 VDC 24 VDC
Seal Material					V B E T						Fluoroelastomer Buna-N EPR PTFE
Fittings						A B D					1/8" Compression (10 L/min) 1/4" Compression (50 L/min) 3/8" Compression (100 L/min)
Display							N L				No Display LED Display
Flow Output Signal								A B G			0 to 5 VDC 4 to 20 mA 0 to 10 VDC
Temperature & Pressure Output Signal									A B C D E F G H I J		N.A/N.A 0 to 5 VDC/0 to 5 VDC 0 to 5 VDC/4 to 20 mA 0 to 5 VDC/0 to 10 VDC 4 to 20 mA/0 to 5 VDC 4 to 20 mA/4 to 20 mA 4 to 20 mA/0 to 10 VDC 0 to 10 VDC/0 to 5 VDC 0 to 10 VDC/4 to 20 mA 0 to 10 VDC/0 to 10 VDC
Digital Interface										2 5 9	RS232 RS485 PROFIBUS

ACCESSORIES

A-110N12, 110 VAC Power Supply, 12 VDC Standard Interface
A-110N24, 110 VAC Power Supply, 24 VDC Standard Interface
A-110NA15, 110 VAC Power Supply, 15 VDC Standard Interface