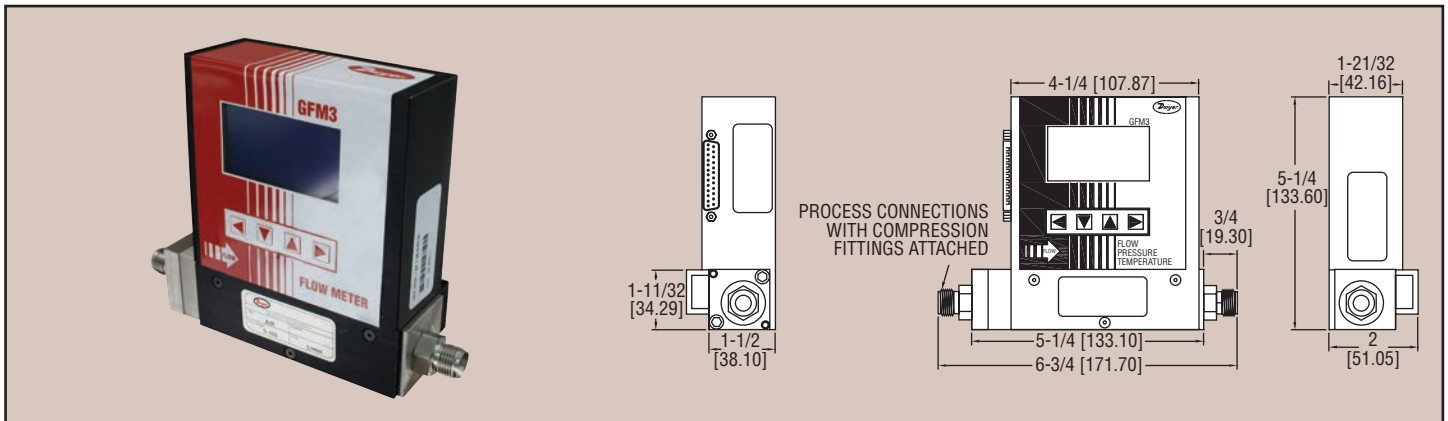




Series  
GFM3

# Gas Mass Flow Meter

## Flow Monitoring, Push-Button Configuration



The Series GFM3 Gas Mass Flow Meter is an ideal choice for the measurement of flow rates of a wide variety of gases. This digital flow meter features a 12-digit totalizer for total gas volume indication, and is available in the choice of 0 to 5 VDC, 0 to 10 VDC, or 4 to 20 mA output signals. Standard LCD and four button keypad allows easy access to the many features of the GFM3. 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. With a high  $\pm 1\%$  FS accuracy and  $\pm 0.25\%$  FS repeatability, the GFM3 is the optimal choice in gas flow metering and monitoring. The GFM3 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  $\Omega$  min. load impedance); 0 to 10 VDC (6000  $\Omega$  min. load impedance); 4 to 20 mA (500  $\Omega$  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;  $\pm 24$  VDC.
- Process Connections:** 1/8" compression fitting for flow rates  $\leq 10$  L/min; 1/4" for  $\leq 50$  L/min; 3/8" for  $\leq 100$  L/min.
- Pressure Limits:** 500 psia (35 bar).
- Leak Integrity:**  $1 \times 10^{-9}$  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.
- 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 for download at [www.dwyer-inst.com](http://www.dwyer-inst.com)

### ACCESSORIES

- A-110N12**, 110 VAC Power Supply, 12 VDC Standard Interface . **\$82.50**ⓑ
- A-110N24**, 110 VAC Power Supply, 24 VDC Standard Interface . . **\$82.50**ⓑ
- A-110NA15**, 110 VAC Power Supply, 15 VDC Standard Interface **295.00**ⓑ

Example	GFM3	AIR	010	5	E	B	L	B	2	GFM3-AIR-010-5-E-B-L-B-2	Price
<b>Series</b>	GFM3									Gas Mass Flow Meter	-
<b>Specialty Gas &amp; K-Factor</b>		AIR								Air 1.0000	-
		AR								Argon 1.4573	-
		C <sub>2</sub> H <sub>2</sub>								Acetylene 0.5829	-
		C <sub>3</sub> H <sub>8</sub>								Propane 0.3500	-
		C <sub>4</sub> H <sub>10</sub>								Butane 0.2631	-
		CH <sub>4</sub>								Methane 0.7175	-
		CO								Carbon Monoxide 1.0000	-
		CO <sub>2</sub>								Carbon Dioxide 0.7382	-
		HF								Hydrogen Fluoride 0.9998	-
		HE								Helium 1.4540	-
		H <sub>2</sub>								Hydrogen 1.0106	-
		N <sub>2</sub>								Nitrogen 1.0000	-
		NH <sub>3</sub>								Ammonia 0.7310	-
		O <sub>2</sub>								Oxygen 0.9926	-
		SO <sub>2</sub>								Sulfur Dioxide 0.6900	-
<b>Body Size</b> ⓐ			010							Low Flow	\$1461.00ⓑ
			050							Medium Flow	1583.00ⓑ
			100							High Flow	1705.00ⓑ
<b>Power Supply</b>				5						$\pm 15$ VDC	-
				2						12 VDC	+61.00ⓑ
				4						24 VDC	+122.00ⓑ
<b>Seal Material</b>					V					Fluoroelastomer	-
					B					Buna-N	-
					E					EPR	-
					T					PTFE	+445.00ⓑ
<b>Fittings</b>						A				1/8" Compression (Low)	-
						B				1/4" Compression (Medium)	-
						D				3/8" Compression (High)	-
<b>Display</b>							N			No Display	-
							L			LED Display	+98.00ⓑ
<b>Flow Output Signal</b>								A		0 to 5 VDC	-
								B		4 to 20 mA	-
								G		0 to 10 VDC	-
<b>Digital Interface</b>									2	RS232	-
									5	RS485	-
									9	PROFIBUS	+704.00ⓑ

Note: Specify flow range at time of order ⓐ

ⓑ Items are subject to Schedule B discounts.

FLOW  
Mass Flowmeters/  
Controllers