**Gas Mass Flow Meter**

±1% FS, Programmable Relays

The Series GFM2 Gas Mass Flow Meter is an ideal choice for the measurement of flow rates of a wide variety of gases. GFM2 utilizes a straight tube sensor with a restrictor flow element to provide a high ±1% FS accuracy and ±0.25% FS repeatability.

Gas flow can be displayed in 23 different engineering units on an optional 2x16 character LCD display. Digital RS-232 or RS-485 interfaces allow for easy communication and for multi-drop capability of up to 256 units (RS-485 only). Additionally, this user-friendly interface allows for the programming of high and low gas flow alarms, along with two electromechanical SPDT relays with latch options. Stores calibration information for up to 10 different gases, internal or user-specific K-factors. Comes standard with support software for programming the various parameters of the GFM2. With self diagnostics run at start up and a pressure limit of up to 500 psi (34.5 bar), the GFM2 is the optimal choice for many flow measurement application. The GFM2 includes a NIST traceable certificate.

### SPECIFICATIONS

**Service:** Clean gases compatible with wetted parts.

**Wetted Materials:**
- GFM2-X-X-A: Anodized aluminum, brass, 316 SS fluoroelastomer O-rings;
- GFM2-X-X-S: 316 SS, and fluoroelastomer O-rings; Buna-N, EPR and PTFE O-rings optional.

**Accuracy:** ±1% FS.

**Repeatability:** ±0.25% FS.

**Response Time:** 2 seconds to within ±2% of actual flow.

**Output Signal:** Linear 0 to 5 VDC (3000 Ω min. load impedance) and 4 to 20 mA (500 Ω max. loop resistance).

**Relay Rating:** 1 amp @ 24 VDC.

**Max. Particulate Size:** 5 microns.

**Temperature Limits:** 32 to 122°F (0 to 50°C).

**Power Supply:** 11 to 26 VDC.

**Process Connections:** 1/8” compression (10 L/min) 1/4” compression (50 L/min) 3/8” compression (100 L/min).

**Display:** 2 x 16 character LCD (optional).

**Pressure Limits:** 500 psig (34.5 bar).

**Leak Integrity:** 1 x 10-9 smL/sec of helium.

**Weight:** 1.05 lb (0.48 kg).

### FEATURES

- Programmable totalizer indicates total gas quantity.
- High and low gas flow alarm limits with preset delay interval.
- Two sets of user-programmable electromechanical SPDT relays with latch option.
- User-selectable analog 0 to 5 VDC or 4 to 20 mA outputs.
- Internal conversion factors for up to 32 gases.
- Automatic sensor zero offset adjustment (via digital interface or local push button).
- Self-diagnostic tests.

### Table: Series GFM2 vs. GFM2-AIR-010-A-V-A-N-A-2

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### Example

- **Max Flow (L/Min N2):** 010 050 100
- **Body Material:** A Stainless Steel S Aluminum
- **Seal Material:** V Fluoroelastomer B EPR T 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 No Display L LED Display
- **Output Signal:** A B 0 to 5 VDC 4 to 20 mA
- **Digital Interface:** 2 RS232 5 RS485 9 PROFIBUS

### ACCESSORY

- **A-110NA12, 110 VAC Power Supply, 12 VDC with Communication Interface Branch**