

G2 SERIES INTRINSICALLY SAFE

A full line of **FLOMEC® G2 Series Turbine Meters** are available in a variety of housing materials. Rugged and dependable, the G2 Series offers:

- Stainless Steel for most water and chemical products
- · Aluminum for fuels and petroleum-based products
- PVDF for aggressive chemicals

- Meter is designed for thin fluids < 100 cP
- Modular design allows for use with Output Modules, Sensors and Remote Display Kits
- 2 Totals (Batch Total = Resettable, Total = Non-Resettable);
 Rate of Flow, Factory calibrated in gallons or litres. Field calibratable. Includes non-volatile totals.
- · High accuracy meter
- · Internal parts are simple to replace for easy maintenance
- AAA Alkaline battery life: 2 years

PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER:

G2 = Industrial Grade Flowmeters

2 TURBINE MATERIAL:

- S = Stainless Steel
- $\mathbf{A} = Aluminum$
- $\mathbf{P} = \text{PVDF} (1/2 \text{ in. y 1 in. only})$
- **X** = Electronics only (For metal meters)
- **Z** = Electronics only (For plastic meters)

3 TURBINE SIZE:

05 = $\frac{1}{2}$ in. **15** = 1- $\frac{1}{2}$ in. **07** = $\frac{3}{4}$ in. **20** = 2 in.

10 = 1 in.

APPLICATIONS

- Batching
- Blending
- Water
- Industrial fluids
- Plating solutions
- Ammonium
- Food and beverage processing

- Fuel Products
- Monitoring clean fluids
- Plant process water
- Chemical feed lines
- Harsh chemicals (sulfuric acid and bleach)
- DEF (Diesel Exhaust Fluid)

4 FITTING TYPE:

N = NPT (Female)

I = ISO (Female) BSPT (ISO 7 Designation is RC)

F = 150# ANSI Flange (Available on S10, S15 & S20 only)

T = Tri-Clamp Fitting (Available on S05, S07, S10, S15 & S20 only)

X = No Turbine Body

5 ELECTRONIC CHOICE:

Computer Display, Meter Mounted

Q9 = Q9 2-Button Computer

Q1 = Q9 2-Button Computer, Vertical Mount (90° Adapter)

Retrofit Computer Kit (Display Only

R9 = Q9 2-Button Computer Retrofit Kit (Replaces 09 Display)

No Electronics - Turbine Only

XX = No Electronics - Turbine Only

6 CALIBRATION OF COMPUTER / DISPLAY:

GM = Gallons Per Minute (Gallons Default)

LM = Liters Per Minute (Litres Default)

GD = Gallons Per Minute (Gallons Default) with NIST Certificate

LD = Liters Per Minute (Litres Default) with NIST Certificate

XX = No Calibration

7 PACKAGING:

- A = 05 Thru 10 Turbines, Turbine Only or w/Q9 Electronics 05 Thru 20 Electronics Only (Q9 Replacement Kit or R9 Retrofit Kit)
- **B** = 15 & 20 Turbines, Turbine Only or w/Q9 Electronics 05 Thru 10 Turbines w/Q1 Electronics
- C = 15 Thru 20 Turbine w/Q1 Electronics
- D = 10 Turbines with ANSI Flange Turbine Only or w/Q9, Q1 Electronics
- **E** = 15 & 20 Turbines with ANSI Flange Turbine Only or w/Q9, Q1 Electronics

1 2 3 4 5 6 7 --->>> G2 S 15 N Q9 GM B



SPECIFICATIONS

| or Luii IuAi | IUIIO | | | | | |
|-------------------------------------|--|-------------------------------------|------|--------------------|------------------|----------|
| Fitting Type: | NPT or ISO (Female) BSPT (ISO 7 designation is RC) | | | | | |
| | 150# ANSI (S10, S15 y S20 only) | | | | | |
| | Tri-Clamp (Stainless Steel only) - Fitting size is one size bigger than meter size | | | | | |
| Meter Sizes Available: | | 1/2" | 3/4" | 1" | 1-1/2" | 2" |
| Corresponding Tri-Clamp Fitting: | | 3/4" | 1" | 1-1/2" | 2" | 2-1/2" |
| Housing Material: | | 316 Stainless Steel, Aluminum, PVDF | | | | |
| Flow Range: | 1/2" (05) | 1 - 10 GPM | | | (3.8 - 38 L/min) | |
| | 1/2" (05) PVDF Only | 1.2 - 12 GPM | | | (4.5 - 45 L/min) | |
| | 3/4" (07) | 2 - 20 G | iPM | | (7.6 - 76 | 6 L/min) |
| | 1" (10) | 5 - 50 G | iPM | | (19 - 19 | 0 L/min) |
| | 1-1/2" (15) | 10 - 100 | GPM | | (38 - 38 | 0 L/min) |
| | 2" (20) | 20 - 200 | GPM | | (76 - 76 | 0 L/min) |
| Accuracy (% of Reading): | | Turbine Only | | Turbine w/Computer | | |
| | 1/2" (05) | ± 2.0% | | | ± 1.5% | |
| | 3/4" (07) | ± 1.5% | | | ± 1.0% | |
| | 1" (10) | ± 1.5% | | | ± 1.0% | |
| | 1-1/2" (15) | ± 1.0% | | | ± 0.75% | ó |
| | 2" (20) | ± 1.0% | | | ± 0.75% | ó |
| Repeatability: | | ± 0.1% (PVDF is ± 0.3%) | | | | |
| | | | | | | |

DIMENSIONS NOTE: Q9 Display adds 0.72 in. (18 mm) to height

Stainless Steel Models

| | S05, ½ in. | S07, ¾ in. | S10, 1 in. | S15, 1½ in. | S20, 2 in. |
|--------|------------|------------|------------|-------------|------------|
| A = | 1.4 in. | 1.6 in. | 1.9 in. | 2.6 in. | 3.1 in. |
| Height | (35.6 mm) | (40.6 mm) | (48.3 mm) | (66.0 mm) | (78.7 mm) |
| B = | 2.0 in. | 2.0 in. | 2.0 in. | 2.7 in. | 3.4 in. |
| Width | (50.8 mm) | (50.8 mm) | (50.8 mm) | (68.6 mm) | (86.4 mm) |
| C = | 4.2 in. | 4.3 in. | 4.5 in. | 5.3 in. | 6.3 in. |
| Length | (106.7 mm) | (109.2 mm) | (114.3 mm) | (134.6 mm) | (160.0 mm) |

Aluminum Models

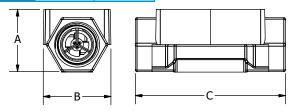
| | A05, ½ in. | A07, ¾ in. | A10, 1 in. | A15, 1½ in. | A20, 2 in. |
|--------|------------|------------|------------|-------------|------------|
| A = | 1.8 in. | 2.0 in. | 2.2 in. | 2.8 in. | 3.2 in. |
| Height | (45.7 mm) | (50.8 mm) | (55.9 mm) | (71.1 mm) | (81.3 mm) |
| B = | 2.0 in. | 2.0 in. | 2.0 in. | 2.7 in. | 3.3 in. |
| Width | (50.8 mm) | (50.8 mm) | (50.8 mm) | (68.6 mm) | (83.8 mm) |
| C = | 4.2 in. | 4.3 in. | 4.5 in. | 5.3 in. | 6.3 in. |
| Length | (106.7 mm) | (109.2 mm) | (114.3 mm) | (134.6 mm) | (160.0 mm) |

PVDF Models

| | P05, ½ in. | P10, 1 in. |
|--------|------------|------------|
| A = | 3.2 in. | 3.3 in. |
| Height | (81.3 mm) | (83.8 mm) |
| B = | 2.1 in. | 2.8 in. |
| Width | (53.3 mm) | (71.1 mm) |
| C = | 7.3 in. | 8.1 in. |
| Length | (185.4 mm) | (205.7 mm) |

NOTE: For representation purpose only. Actual product models vary in shape, design, etc

ANSI Flange and Sanitary Flange dimensions not shown.



GREAT PLAINS INDUSTRIES

| Pressure Rating: | | | | |
|-------------------------------|---------------------------------------|---|--|--|
| Stainless Steel 316 SS | | 1,500 psi (102 bar) | | |
| Aluminum | | 300 psi (21 bar) | | |
| ANSI Flange 316 SS | | Flange Rule | | |
| Sanitary Flange | 316 SS | Limited by fitting, clamp size, & temperature | | |
| PVDF | | 100 psi (6.9 bar) | | |
| Operating Temp | perature | -40° F to 250° F (-40° C to 121° C) | | |
| Range: | | (PVDF) -20° F to 180° F (-28° C to 82° C) | | |
| with Intrinsicall Display: | y Safe | 0° F to +129° F (-18° C to +54° C) | | |
| Typical | 1/2" (05) | 2,500 PPG (660 Pulses/L) | | |
| K-Factor: | 3/4" (07) | 1,100 PPG (291 Pulses/L) | | |
| | 1" (10) | 565 PPG (149 Pulses/L) | | |
| | 1-1/2" (15) | 215 PPG (57 Pulses/L) | | |
| | 2" (20) | 100 PPG (26 Pulses/L) | | |
| Wetted | Housing: | 316 Stainless Steel or Aluminum | | |
| Materials: | Bearings: | 96% Alumina Oxide Ceramic | | |
| | Shaft: | Tungsten Carbide | | |
| | Rotor: | PVDF | | |
| | Rings: | 316 Stainless Steel | | |
| Wetted | Housing: | PVDF (15% Carbon Fiber Filled) | | |
| Materials PVDF: | Bearings & Shaft: | 98% Alumina Ceramic | | |
| | Rotor: | PVDF | | |
| | Rings: | Fluorocarbon (Optional PTFE) | | |
| Frequency Range: | 1/2" (05) | 42-420 Hz @ 1-10 GPM (3.8-38 L/min) / 45-450 Hz @ 1.2-12 GPM (4.5-45 L/min) (PVDF) | | |
| | 3/4" (07) | 37-370 Hz @ 2-20 GPM (7.6-76 L/min) | | |
| | 1" (10) | 47-470 Hz @ 5-50 GPM (19-190 L/min) / 45-475 Hz @ 5-50 GPM (19-190 L/min) (PVDF) | | |
| | 1-1/2" (15) | 36-360 Hz @ 10-100 GPM (38-380 L/min) | | |
| | 2" (20) | 33-330 Hz @ 20-200 GPM (76-760 L/min) | | |
| Calibration | Comes standard with G2 Series meters. | | | |
| Report: | N.I.S.T Certification available. | | | |

ACCESSORIES

| Part No. | Description |
|-----------|----------------------------|
| 120077-01 | FM Approved Sensor |
| 120077-02 | ATEX Approved Sensor |
| 125260-02 | 90° Display Adaptor Kit |

| Part No. | Description |
|-----------|---|
| 113275-10 | FM Approved Remote Kit |
| 125206-2 | 1/2 in. Teflon O-Ring for PVDF Meter (2) |
| 125206-1 | 1 in. Teflon O-Ring for PVDF Meter (2) |

APPROVALS

















ISO 22241-2 Annex C, D, E, F, G, H, I, Diesel Exhaust Fluid (DEF)/Adblue standards

Service & Warranty: For technical assistance, warranty replacement or repair contact your FLOMEC® or GPI® distributor:



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