

G2 SERIES HAZARDOUS AREA INTRINSICALLY SAFE



SPECIFICATIONS

| | | | | | |
|----------------------------------|--|--------------|-----|---------------------|-----|
| Fitting Type: | NPT or ISO (Female) BSPT (ISO 7 designation is RC) | | | | |
| | 150# ANSI (S10, S15, S20 only) | | | | |
| | Tri-Clamp (Stainless Steel only) - Fitting size is one size bigger than meter size | | | | |
| Meter Sizes Available: | ½" | ¾" | 1" | 1½" | 2" |
| Corresponding Tri-Clamp Fitting: | ¾" | 1" | 1½" | 2" | 2½" |
| Housing Material: | 316 Stainless Steel, Aluminum, PVDF | | | | |
| Flow Range: | ½" (05) | 1 - 10 GPM | | (3.8 - 38 L/min) | |
| | ½" (05) PVDF Only | 1.2 - 12 GPM | | (4.5 - 45 L/min) | |
| | ¾" (07) | 2 - 20 GPM | | (7.6 - 76 L/min) | |
| | 1" (10) | 5 - 50 GPM | | (19 - 190 L/min) | |
| | 1½" (15) | 10 - 100 GPM | | (38 - 380 L/min) | |
| | 2" (20) | 20 - 200 GPM | | (76 - 760 L/min) | |
| Accuracy (% of Reading): | Turbine Only | | | Turbine w/ Computer | |
| | ½" (05) | ± 2.0% | | ± 1.5% | |
| | ¾" (07) | ± 1.5% | | ± 1.0% | |
| | 1" (10) | ± 1.5% | | ± 1.0% | |
| | 1½" (15) | ± 1.0% | | ± 0.75% | |
| | 2" (20) | ± 1.0% | | ± 0.75% | |
| Repeatability: | ± 0.1% (PVDF is ± 0.3%) | | | | |
| 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 Temperature Range: | -40°F to 250°F (-40°C to 121°C) | | | | |
| Turbine without display | (PVDF) -20°F to 180°F (-28°C to 82°C) | | | | |
| with Intrinsically Safe Display: | 0°F to +129°F (-18°C to +54°C) | | | | |

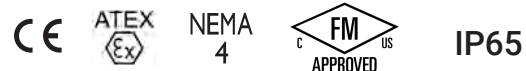
A full line of FLOMEC® G2 Series Turbine Meters are available in a variety of housing materials. Rugged and dependable, the G2 Series offers:

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

FEATURES / BENEFITS

- Features highly visible Q9, battery-powered, LCD display; 2-year battery life
- 11 pre-programmed engineering units plus 1 custom option: gallon, litre, imperial gallon, quart, ounce, acre-foot, millilitre, cubic foot, cubic centimetre, cubic metre, barrel
- High accuracy meter – view SPECIFICATIONS of each SKU once meter options are selected
- Modular design allows for use with output modules, sensors, and remote display kits; plug and play *output modules and sensors will remove approvals.
- Internal parts are simple to replace for easy maintenance
- NPT, ISO 7, #150 ANSI Flange, and Tri-clamp fitting options
- Tri-clamp (not food grade) options available:
 - ¾ inch fitting for ½ inch meter
 - 1 inch fitting for ¾ inch meter
 - 1½ inch fitting for 1 inch meter
 - 2 inch fitting for 1½ inch meter
 - 2½ inch fitting for 2 inch meter

APPROVALS[†]



[†]If the meter includes any modules (4-20 mA and Pulse Out) that introduces external power or adds the high temp riser, then all intrinsic safety approvals are voided.

G2 SERIES

HAZARDOUS AREA INTRINSICALLY SAFE

SPECIFICATIONS CONTINUED

| | | |
|------------------------------|---------------------------------------|---|
| Typical K-Factor: | ½" (05) | 2,500 PPG (660 Pulses/L) |
| | ½" (05) | 2,400 PPG (633 Pulses/L) (PVDF) |
| | ¾" (07) | 1,100 PPG (291 Pulses/L) |
| | 1" (10) | 565 PPG (149 Pulses/L) |
| | 1" (10) | 540 PPG (142 Pulses/L) (PVDF) |
| | 1½" (15) | 215 PPG (57 Pulses/L) |
| | 2" (20) | 100 PPG (26 Pulses/L) |
| Wetted Materials: | Housing: | 316 Stainless Steel or Aluminum |
| | Bearings: | 96% Alumina Oxide Ceramic |
| | Shaft: | Tungsten Carbide |
| | Rotor: | PVDF |
| | Rings: | 316 Stainless Steel |
| Wetted Materials PVDF: | Housing: | PVDF (15% Carbon Fiber Filled) |
| | Bearings & Shaft: | 98% Alumina Ceramic |
| | Rotor: | PVDF |
| | Rings: | Fluorocarbon (Optional PTFE) |
| Frequency Range: | ½" (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) |
| | ¾" (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) |
| | 1½" (15) | 36-360 Hz @ 10-100 GPM (38-380 L/min) |
| | 2" (20) | 33-330 Hz @ 20-200 GPM (76-760 L/min) |
| Calibration Report: | Comes standard with G2 Series meters. | |
| | N.I.S.T. – Certification available. | |

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)

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 = Height | 1.4 in. (35.6 mm) | 1.6 in. (40.6 mm) | 1.9 in. (48.3 mm) | 2.6 in. (66.0 mm) | 3.1 in. (78.7 mm) |
| B = Width | 2.0 in. (50.8 mm) | 2.0 in. (50.8 mm) | 2.0 in. (50.8 mm) | 2.7 in. (68.6 mm) | 3.4 in. (86.4 mm) |
| C = Length | 4.2 in. (106.7 mm) | 4.3 in. (109.2 mm) | 4.5 in. (114.3 mm) | 5.3 in. (134.6 mm) | 6.3 in. (160.0 mm) |

Aluminum Models

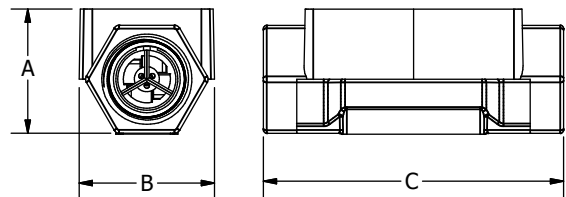
| | A05, ½ in. | A07, ¾ in. | A10, 1 in. | A15, 1½ in. | A20, 2 in. |
|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| A = Height | 1.8 in. (45.7 mm) | 2.0 in. (50.8 mm) | 2.2 in. (55.9 mm) | 2.8 in. (71.1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

PVDF Models

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

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

ANSI Flange and Sanitary Flange dimensions not shown. For those dimensions, please refer to product manuals or our website GreatPlainsIndustries.com.



ACCESSORIES

125100-10*

4-20 mA Module/
Pulse Output Module

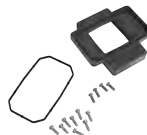


**This module is not FM Approved.*

Therefore, using this module with an approved metering system voids FM Approval.

125260-02

90° Display Adapter Kit



113275-10

FM Approved Remote Kit





PRODUCT CONFIGURATION

1 PRODUCT IDENTIFIER:

G2 = Industrial Grade Flowmeters

2 TURBINE MATERIAL:

S = Stainless Steel

A = Aluminum

P = PVDF (1/2 in. y 1 in. only)

X = Electronics only (For metal meters)

Z = Electronics only (For plastic meters)

3 TURBINE SIZE:

05 = 1/2 in.

07 = 3/4 in.

10 = 1 in.

15 = 1-1/2 in.

20 = 2 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

