

# 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)				

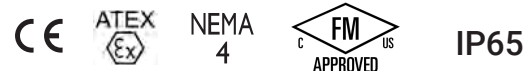
A full line of FLOMEC® G2 Series Turbine Meters are available in a variety of housing materials. Rugged and dependable, the G2 Series offers:

- 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<sup>†</sup>



<sup>†</sup>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

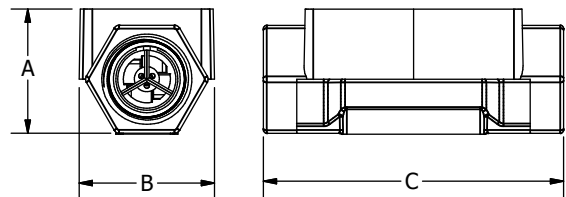
	A05, ½ in.	A07, ¾ in.	A10, 1 in.	A15, 1½ in.	A20, 2 in.
A = Height	1.8 in. (45.7 mm)	2.0 in. (50.8 mm)	2.2 in. (55.9 mm)	2.8 in. (71.1 mm)	3.2 in. (81.3 mm)
B = Width	2.0 in. (50.8 mm)	2.0 in. (50.8 mm)	2.0 in. (50.8 mm)	2.7 in. (68.6 mm)	3.3 in. (83.8 mm)
C = Length	4.2 in. (106.7 mm)	4.3 in. (109.2 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](http://GreatPlainsIndustries.com).*



## ACCESSORIES

### 125100-10\*

4-20 mA Module/  
Pulse Output Module

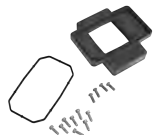


*\*This module is not FM Approved.*

*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 Q9 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**

