

# **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

## PRODUCT CONFIGURATION

#### **1** PRODUCT IDENTIFIER:

**G2** = Industrial Grade Flowmeters

#### **2 TURBINE MATERIAL:**

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

#### **3 TURBINE SIZE:**

<b>05</b> = ½ in.	<b>15</b> = 1-½ in.
<b>07</b> = ¾ in.	<b>20</b> = 2 in.
<b>10</b> = 1 in.	

## **APPLICATIONS**

- Batching
- Blending
- Water

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- 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)

- Meter is designed for thin fluids < 100 cP</li>
- 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

#### 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

1 2 3 4 5

--->>> G2 S 15 N Q9

E = 15 & 20 Turbines with ANSI Flange Turbine Only or w/Q9, Q1 Electronics



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6 7

GM B

### **SPECIFICATIONS**

Fitting Type: NPT or ISO (Female) BSPT (ISO 7 designation is RC)				RC)			
	150# ANSI (S10, S15 y S20 only)						
	Tri-Clamp (Stainless Steel only) - Fitting size is one size bigger than meter size					ne 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 Materi	316 Stainless Steel, Aluminum, PVDF						
Flow Range:	1/2" (05)	1 - 10 GPM			(3.8 - 38 L/min)		
	1/2" (05) <i>PVDF Only</i>	1.2 - 12 GPM		(4.5 - 45 L/min)			
	3/4" (07)	2 - 20 GPM			(7.6 - 76 L/min)		
	1" (10)	5 - 50 GPM		(19 - 190 L/min)			
	1-1/2" (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		
	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%			
	2" (20)	± 1.0%			± 0.75%		
Repeatability:		± 0.1% (PVDF is ± 0.3%)					

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

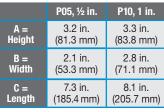
**Stainless Steel Models** 

	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**

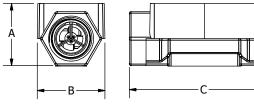
	A05, ½ in.	A07, ¾ in.	A10, 1 in.	A15, 1½ in.	A20, 2 in.
A =	1.8 in.	2.0 in.	2.2 in.	2.8 in.	3.2 in.
Height	(45.7 mm)	(50.8 mm)	(55.9 mm)	(71.1 mm)	(81.3 mm)
B =	2.0 in.	2.0 in.	2.0 in.	2.7 in.	3.3 in.
Width	(50.8 mm)	(50.8 mm)	(50.8 mm)	(68.6 mm)	(83.8 mm)
C =	4.2 in.	4.3 in.	4.5 in.	5.3 in.	6.3 in.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

#### **PVDF Models**



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) -40° F to 250° F (-40° C to 121° C) **Operating Temperature** Range: (PVDF) -20° F to 180° F (-28° C to 82° C) with Intrinsically Safe 0° F to +129° F (-18° C to +54° C) **Display:** 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 316 Stainless Steel or Aluminum Housing: Materials: Bearings: 96% Alumina Oxide Ceramic Shaft: **Tungsten Carbide PVDF** Rotor: Rings: 316 Stainless Steel Wetted PVDF (15% Carbon Fiber Filled) Housing: Materials Bearings **PVDF:** 98% Alumina Ceramic & Shaft: Rotor: P\/DF Rings: Fluorocarbon (Optional PTFE) 42-420 Hz @ 1-10 GPM (3.8-38 L/min) / 45-450 Hz @ 1.2-12 GPM (4.5-45 L/min) (PVDF) Frequency Range: 1/2" (05) 37-370 Hz @ 2-20 GPM (7.6-76 L/min) 3/4" (07) 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)

### **ACCESSORIES**

Calibration

**Report:** 

Part No.	Description	Part No.	Description	
120077-01	FM Approved Sensor	113275-10	FM Approved Remote Kit	
120077-02	ATEX Approved Sensor	125206-2	1/2 in. Teflon O-Ring for PVDF Meter (2)	
125260-02	90° Display Adaptor Kit	125206-1	1 in. Teflon O-Ring for PVDF Meter (2)	

Comes standard with G2 Series meters.

N.I.S.T. - Certification available.



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

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