

# **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</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

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

1 2 3 4 5 --->>> G2 S 15 N Q9



### **SPECIFICATIONS**

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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 G	iPM		(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 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 - 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%	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**

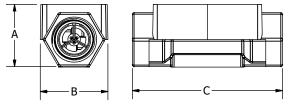
	A05, ½ in.	A07, ¾ in.	A10, 1 in.	A15, 1½ in.	A20, 2 in.
A =	1.8 in.	2.0 in.	2.2 in.	2.8 in.	3.2 in.
Height	(45.7 mm)	(50.8 mm)	(55.9 mm)	(71.1 mm)	(81.3 mm)
B =	2.0 in.	2.0 in.	2.0 in.	2.7 in.	3.3 in.
Width	(50.8 mm)	(50.8 mm)	(50.8 mm)	(68.6 mm)	(83.8 mm)
C =	4.2 in.	4.3 in.	4.5 in.	5.3 in.	6.3 in.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

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

ANSI Flange and Sanitary Flange dimensions not shown.



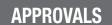
GREAT PLAINS INDUSTRIES / /

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)



















IND-1043-G2 Approved Rev A 02/2023

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:

