



## G2 SERIES SAFE AREA ONLY

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 non-volatile products
- Aluminum for non-volatile petroleum-based products
- PVDF for aggressive chemicals

## FEATURES / BENEFITS

- 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
- High temperature local display option for Stainless Steel meters only (185° F/85° C)

## PRODUCT CONFIGURATION

### 1 PRODUCT IDENTIFIER:

**G2** = Industrial Grade Flowmeters

### 2 TURBINE MATERIAL:

**S** = Stainless Steel  
**A** = Aluminum  
**P** = PVDF (1/2 in. & 1 in. only)  
**H** = High Pressure Stainless Steel  
**X** = Electronics only (For metal meters)  
**Z** = Electronics only (For plastic meters)

### 3 TURBINE SIZE:

**05** = 1/2 in.                      **15** = 1-1/2 in.  
**07** = 3/4 in.                      **20** = 2 in.  
**10** = 1 in.

### 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-Clover® Fitting (Available on S05, S07, S10, S15 & S20 only)  
**X** = No Turbine Body

## APPLICATIONS

- Batching
- Blending
- Water
- Industrial fluids
- Plating solutions
- Ammonium
- Food and beverage processing
- Monitoring clean fluids
- Plant process water
- Chemical feed lines
- Harsh chemicals (sulfuric acid and bleach)

### 5 ELECTRONIC CHOICE:

*Computer Display, Meter Mounted*

**Q9** = Q9 2-Button Computer

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

**H9** = Q9 2-Button Computer with High Temp Riser (185° F/85° C)  
 [Available on stainless steel bodies only]

*Computer Display & Module, Meter Mounted*

**P9** = Q9 2-Button Computer w/Pulse Out Module, includes External Power and 10 ft. of Cable

**42** = Q9 2-Button Computer w/4-20mA Module and 10 ft. of Cable  
*Module, Meter Mounted (No Display)*

**PO** = Pulse Out (Unscaled) Conditioned Signal Module w/Cable

*QSI Options, Meter Mounted (No Display)*

**81** = QSI Version 1 (Scaled Pulse, RS485 [Modbus or BACnet], BTU Calculator, Bluetooth®)

**82** = QSI Version 2 (Scaled Pulse, BTU Calculator, Bluetooth®)

**83** = QSI Version 3 (Scaled Pulse, 4-20 mA, Bluetooth®)

*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:

**V** = 05 Thru 10 Turbines, Turbine Only or w/Q9 Electronics  
 05 Thru 20 Electronics Only (Q9 Replacement Kit or R9 Retrofit Kit)

**W** = 15 & 20 Turbines, Turbine Only or w/Q9 Electronics  
 05 Thru 10 Turbines w/Q1 Electronics

**X** = 15 Thru 20 Turbine w/Q1 Electronics  
 05 Thru 20 Turbines w/H9, P9, 42, PO Electronics  
 05 Thru 20 Electronics Only (H9, P9 or 42 Electronics)

**Y** = 10 Turbines with ANSI Flange Turbine Only or w/Q9, Q1, H9, P9, 42, PO Electronics

**Z** = 15 & 20 Turbines with ANSI Flange Turbine Only or w/Q9, Q1, H9, P9, 42, PO Electronics

10 Turbines with ANSI Flange w/81, 82, & 83 Electronics

**F** = 05 Thru 20 Turbines w/81, 82, & 83 Electronics

**G** = 15 & 20 Turbines with ANSI Flange w/81, 82, & 83 Electronics



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

## SPECIFICATIONS

<b>Fitting Type:</b>	NPT or ISO (Female) BSPT (ISO 7 designation is RC)				
	150# ANSI (S10, S15 & S20 only)				
	Tri-Clover® (Stainless Steel only) - Fitting size is one size bigger than meter size				
<b>Meter Sizes Available:</b>	1/2"	3/4"	1"	1-1/2"	2"
<b>Corresponding Tri-Clover® Fitting:</b>	3/4"	1"	1-1/2"	2"	2-1/2"
<b>Housing Material:</b>	316 Stainless Steel, Aluminum, PVDF				
<b>Flow Range:</b>	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 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)		
<b>Accuracy (% of Reading):</b>	<b>Turbine Only</b>		<b>Turbine w/Computer</b>		
	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%		
<b>Repeatability:</b>	± 0.1% (PVDF is ± 0.3%)				
<b>Pressure Rating:</b>					
<b>Stainless Steel 316 SS</b>	1,500 psi (102 bar)				
<b>Aluminum</b>	300 psi (21 bar)				
<b>High Pressure 316 SS</b>	3000 psi (207 bar)				
<b>ANSI Flange 316 SS</b>	Flange Rule				
<b>Sanitary Flange 316 SS</b>	Limited by fitting, clamp size, & temperature				
<b>PVDF</b>	100 psi (6.9 bar)				

<b>Operating Temperature Range:</b>	-40° F to 250° F (-40° C to 121° C)	
	(PVDF) -20° F to 180° F (-28° C to 82° C)	
<b>with Display:</b>	0° F to 140° F (-18° C to 60° C)	
<b>with Hi-Temp. Riser (H9):</b>	0° F to 185° F (-18° C to 85° C) See Temp. Chart in Q9 Non-Agency Manual	
<b>Typical K-Factor:</b>	1/2" (05)	2,500 PPG (660 Pulses/L)
	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)
<b>Wetted Materials:</b>	Housing:	316 Stainless Steel or Aluminum
	Bearings:	96% Alumina Oxide Ceramic
	Shaft:	Tungsten Carbide
	Rotor:	PVDF
	Rings:	316 Stainless Steel
<b>Wetted Materials PVDF:</b>	Housing:	PVDF (15% Carbon Fiber Filled)
	Bearings & Shaft:	98% Alumina Ceramic
	Rotor:	PVDF
	Rings:	Fluorocarbon (Optional PTFE)
<b>Frequency Range:</b>	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)
<b>Calibration Report:</b>	Comes standard with G2 Series meters. N.I.S.T. - Certification available.	

## DIMENSIONS

NOTE: Q9 Display adds 0.72 in. (18 mm) to height  
Stainless Steel (SS) and SS High Pressure Models

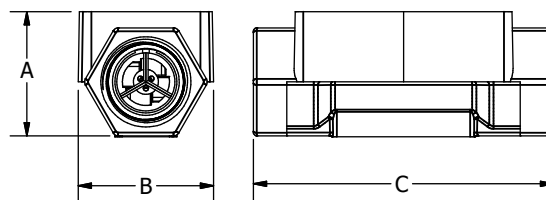
	S05 & H05 ½ in.	S07 & H07 ¾ in.	S10 & H10 1 in.	S15 & H15 1½ in.	S20 & H20 2 in.
<b>A = Height</b>	1.4 in. (35.6 mm)	1.6 in. (40.6 mm)	1.9 in. (48.3 mm)	2.6 in. (66.0 mm)	3.1 in. (78.7 mm)
<b>B = Width</b>	2.0 in. (50.8 mm)	2.0 in. (50.8 mm)	2.0 in. (50.8 mm)	2.7 in. (68.6 mm)	3.4 in. (86.4 mm)
<b>C = Length</b>	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.
<b>A = Height</b>	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>B = Width</b>	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)
<b>C = Length</b>	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.
<b>A = Height</b>	3.2 in. (81.3 mm)	3.3 in. (83.8 mm)
<b>B = Width</b>	2.1 in. (53.3 mm)	2.8 in. (71.1 mm)
<b>C = Length</b>	7.3 in. (185.4 mm)	8.1 in. (205.7 mm)



## ACCESSORIES

Part No.	Description	Part No.	Description
113435-10	Conditioned Signal Module	113275-10	FM Approved* Remote Kit
125060-10	Pulse Out, External Power, Scaled Pulse Module	125206-2	1/2 in. Teflon O-Ring for PVDF Meter (2)
125100-10	4-20 mA Module	125206-1	1 in. Teflon O-Ring for PVDF Meter (2)
125260-02	90° Display Adaptor Kit	125527-01	Q9 Hi-Temp Riser Kit

\*Does not make Non-FM Approved meters FM Approved

## APPROVALS

CE NEMA 4 IP65

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 [FLOMECmeters.com](http://FLOMECmeters.com).

Wichita · Sydney

GREAT PLAINS INDUSTRIES



**Service & Warranty:** For technical assistance, warranty replacement or repair contact your **FLOMEC®** or **GPI®** distributor. In North or South America: **888-996-3837 / FLOMECmeters.com**  
Outside North or South America: **+61 2 9540 4433 / FLOMECmeters.com**