

## G2 Series (Industrial Turbine Flow Meters)



### FEATURES / BENEFITS

- Meter is designed for thin fluids < 100 cp
- Modular design allows for use with Output Modules, Sensors and Remote Transmitters
- 2 Totals (Batch = Resettable, Cumulative = 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  
**A** = Aluminum  
**P** = PVDF (1/2 in. & 1 in. only)  
**H** = High Pressure Stainless Steel

#### 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:

**I** = ISO (Female) BSPT (ISO 7 Designation is RC)  
**N** = NPT (Female)  
**F** = 150# ANSI Flange (Available on S10, S15 & S20 only)  
**T** = Tri-Clover® fitting (Available on S05-S20 only)  
**X** = Electronics only (For metal meters)  
**Z** = Electronics only (For plastic meters)

### 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)

#### 5 ELECTRONIC CHOICE:

*Local Computer w/Display, Meter Mounted*

**Q9** = Q9 2-Button Computer

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

*Local Computer w/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 (Scales Pulse, RS485 [Modbus or BACnet], BTU Calculator, Bluetooth®)

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

**83** = QSI Version 3 (Scales 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)

**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  
 05 Thru 20 Turbines w/P9, 42, PO, 81, 82, 83 Electronics

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

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

\*All Electronics Approvals Void

# SPECIFICATIONS

<b>Fitting Type:</b>	NPT or ISO (Female) BSPT* (*ISO 7 designation is RC)		
	150# ANSI (Stainless Steel only)		
	Tri-Clover® (Stainless Steel only) - Clamp size is one size bigger than meter size		
<b>Housing Material:</b>	316 Stainless Steel, Aluminum, PVDF		
<b>Meter Sizes Available:</b>	1/2" 3/4" 1" 1-1/2" 2"		
<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>316 Stainless Steel (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>(CE Approval ONLY)</b>		
<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>	14° F to 140° F (-10° C to 60° C)	
<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:	96% 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) / 48-480 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) / 45-450 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

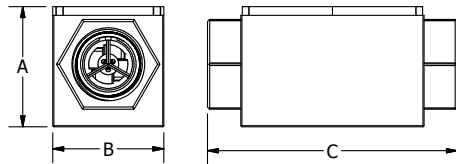
	S05 & H05 ½ in.	S07 & H07 ¾ in.	S10 & H10 1 in.	S15 & H15 1½ in.	S20 & H20 2 in.
<b>A = Height</b>	1.4 in. (35.6 mm)	1.6 in. (40.6 mm)	1.9 in. (48.3 mm)	2.6 in. (66.0 mm)	3.1 in. (78.7 mm)
<b>B = Width</b>	2.0 in. (50.8 mm)	2.0 in. (50.8 mm)	2.0 in. (50.8 mm)	2.7 in. (68.6 mm)	3.4 in. (86.4 mm)
<b>C = 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)



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).

# ACCESSORIES

Part No.	Description	Part No.	Description
113435-10	Conditioned Signal Module	120077-02	ATEX Approved Sensor
125060-10	Pulse Out, Extended Power, Scaled Pulse Module	125260-02	90° Display Adaptor Kit
125100-10	4-20 mA Module	113275-10	FM Approved Remote Kit
120077-01	FM Approved Sensor	125260-2	½ in. Teflon O-Rings (2)
		125260-1	1 in. Teflon O-Rings (2)

**APPROVALS**

CE ATEX NEMA 4

FM APPROVED FM US APPROVED IP65 IEC IECEx