



G2 SERIES (PRECISION TURBINE METERS)

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

- · Stainless Steel for most water, chemical, and fuel products
- · Aluminum for 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 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 = $\frac{1}{2}$ in. **15** = 1- $\frac{1}{2}$ in. **07** = $\frac{3}{4}$ 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 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)

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

SPECIFICATIONS

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Fitting Type:	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			
Housing Mate	rial:	316 Stainless Steel, Aluminum, PVDF		
Meter Sizes Available:		1/2" 3/4" 1" 1-1/2" 2"		
Flow Range:	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)	
Accuracy (% o	f 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%)		
Pressure Ratio	ng:			
316 Stainless Steel (SS)		1,500 psi (102 bar)		
Aluminum		300 psi (21 bar)		
High Pressure 316 SS		3000 psi (207 bar) (CE Approval ONLY)		
ANSI Flange 316 SS		Flange Rule		
Sanitary Flange 316 SS		Limited by fitting & clamp size & temperature		
PVDF		100 psi (6.9 bar)		

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

	S05 & H05	S07 & H07	S10 & H10	S15 & H15	S20 & H20
	½ in.	¾ in.	1 in.	1½ in.	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)	(109.2mm)	(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)	(109.2mm)	(114.3 mm)	(134.6 mm)	(160.0 mm)

Operating Temperature Range:		-40° F to 250° F (-40° C to 121° C)	
		(PVDF) -20° F to 180° F (-28° C to 82° C)	
with Display:		14° F to 140° F (-10° C to 60° 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:	96% Alumina Ceramic	
	Rotor:	PVDF	
	Rings:	Fluorocarbon (Optional PTFE)	
Frequency Range:	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)	
Calibration	Comes stan	dard with G2 Series meters.	
Report:	N.I.S.T. – Certification available.		

ACCESSORIES

Part No.	Description
113435-10	Conditioned Signal Module
125060-10	Pulse Out, Extended Power, Scaled Pulse Module
125100-10	4-20 mA Module
120077-01	FM Approved Sensor

Part No.	Description
120077-02	ATEX Approved Sensor
125260-02	90° Display Adaptor Kit
113275-10	FM Approved Remote Kit
125260-2	½ in. Teflon O-Rings (2)
125260-1	1 in.Teflon O-Rings (2)

APPROVALS













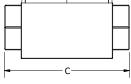




PVDF Models

	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.
Length	(185.4 mm)	(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.



