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 = ½ in.   **15** = 1-½ in.
07 = ¾ 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-Clamp 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 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:

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

Fitting Type:	NPT or ISO (Female) BSPT (ISO 7 designation is RC)				
	150# ANSI (S10, S15 & 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 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 (% 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%)

Pressure Rating:	
Stainless Steel 316 SS	1,500 psi (102 bar)
Aluminum	300 psi (21 bar)
High Pressure 316 SS	3000 psi (207 bar)
ANSI Flange 316 SS	Flange Rule
Sanitary Flange 316 SS	Limited by fitting, clamp size, & temperature
PVDF	100 psi (6.9 bar)

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:	0° F to 140° F (-18° C to 60° C)
with Hi-Temp. Riser (H9):	0° F to 185° F (-18° C to 85° C) See Temp. Chart in Q9 Non-Agency Manual

Typical K-Factor:	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)

Wetted Materials:	Housing:	316 Stainless Steel or Aluminum
	Bearings:	96% Alumina Oxide Ceramic
	Shaft:	Tungsten Carbide
	Rotor:	PVDF
	Rings:	316 Stainless Steel

Wetted Materials PVDF:	Housing:	PVDF (15% Carbon Fiber Filled)
	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 Report:	Comes standard with G2 Series meters.
	N.I.S.T. – Certification available.

DIMENSIONS

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

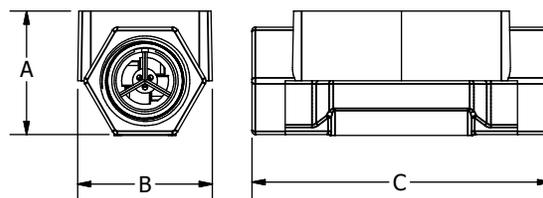**Stainless Steel (SS) and SS High Pressure Models**

	S05 & H05 ½ in.	S07 & H07 ¾ in.	S10 & H10 1 in.	S15 & H15 1½ in.	S20 & H20 2 in.
A = Height	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 = Width	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)
C = Length	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.
A = Height	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 = Width	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)
C = Length	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.
A = Height	3.2 in. (81.3 mm)	3.3 in. (83.8 mm)
B = Width	2.1 in. (53.3 mm)	2.8 in. (71.1 mm)
C = Length	7.3 in. (185.4 mm)	8.1 in. (205.7 mm)

ACCESSORIES

Part No.	Description
113435-10	Conditioned Signal Module
125060-10	Pulse Out, External Power, Scaled Pulse Module
125100-10	4-20 mA Module
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)
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.

IND-1043-G2 Non-Approved Rev A 09/2021