Industrial Grade

G2 SERIES PRECISION TURBINE FLOW METERS

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

- **Stainless Steel** - for most chemicals and fuel products.
- **Aluminium** - for petroleum based products.
- **Brass** - for most water applications.
- **PVDF** - for aggressive chemicals.

FLOMEC

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 and litres. Field calibratable. Includes non-volatile totals.
- High accuracy meter.
- Internal parts are simple to replace for easy maintenance.
- Lithium battery life: 5 years.

PRODUCT CONFIGURATION:

PRODUCT IDENTIFIER   1
G2 = Industrial Grade Flowmeter

TURBINE MATERIAL   2
S = Stainless Steel
A = Aluminum
P = PVDF (1/2" & 1" only)
H = High Pressure Stainless Steel
B = Brass

TURBINE SIZE   3
05 = ½ inch
07 = ¾ inch
10 = 1 inch
15 = 1-½ inch
20 = 2 inch

FITTING TYPE   4
I = ISO (Female) BSPT (ISO 7 Designation is RC)
N = NPT (Female)
F = 150# ANSI Flange - available on S10, S15 and S20 only
T = Tri-Clover® fitting - available on S05-S20 only
X = Electronics only - for metal meters
Z = Electronics only - for plastic meters

ELECTRONIC CHOICE   5
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.

CALIBRATION OF COMPUTER / DISPLAY   6
GM = Gallons Per Minute (Gallons Default)
LM = Liters Per Minute (Litres Default)
XX = No Calibration.

PACKAGING   7
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
How to Order:	G2	S	15	N	Q9	GM	B

SPECIFICATIONS:

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 Material:	316 Stainless Steel, Aluminum, Brass, 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 ownly*	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:	
316 Stainless Steel	1,500 psi (102 bar)
Aluminum	300 psi (21 bar)
Brass	300 psi (21 bar)
High Pressure 316 Stainless Steel	3000 psi (207 bar) (CE Approval ONLY)
ANSI Flange 316 Stainless Steel	Flange Rule
Sanitary Flange 316 Stainless Steel	Limited by fitting size, 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:		14° F to 140° F (-10° C to 60° C)
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, Aluminum or Brass
	Bearings:	96% Alumina 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) / 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 Report:		Comes standard with G2 Series meters.
		N.I.S.T. – Certification available.

DIMENSIONS: NOTE: Q9 Display adds 0.72 in. (18mm) 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. (35.6mm)	1.6 in. (40.6mm)	1.9 in. (48.3mm)	2.6 in. (66.0mm)	3.1 in. (78.7mm)
B = Width	2.0 in. (50.8mm)	2.0 in. (50.8mm)	2.0 in. (50.8mm)	2.7 in. (68.6mm)	3.4 in. (86.4mm)
C = Length	4.2 in. (106.7mm)	4.3 in. (109.2mm)	4.5 in. (114.3mm)	5.3 in. (134.6mm)	6.3 in. (160.0mm)

Aluminum Models

	A05, ½ in.	A07, ¾ in.	A10, 1 in.	A15, 1½ in.	A20, 2 in.
A = Height	1.8 in. (45.7mm)	2.0 in. (50.8mm)	2.2 in. (55.9mm)	2.8 in. (71.1mm)	3.2 in. (81.3mm)
B = Width	2.0 in. (50.8mm)	2.0 in. (50.8mm)	2.0 in. (50.8mm)	2.7 in. (68.6mm)	3.3 in. (83.8mm)
C = Length	4.2 in. (106.7mm)	4.3 in. (109.2mm)	4.5 in. (114.3mm)	5.3 in. (134.6mm)	6.3 in. (160.0mm)

PVDF Models

	A05, ½ in.	A07, ¾ in.
A = Height	3.2 in. (81.3mm)	3.3 in. (83.8mm)
B = Width	2.1 in. (53.3mm)	2.8 in. (71.1mm)
C = Length	7.3 in. (185.4mm)	8.1 in. (205.7mm)
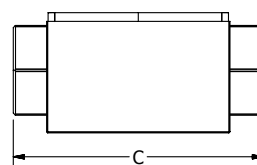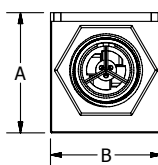
NOTE: For representation purpose only. Actual product models vary in shape, design, etc.

ANSI Flange and Sanitary Flange dimensions not shown.

APPLICATIONS:

- Batching
- Blending
- Water
- Industrial Fluids
- Plating Solutions
- Ammonium

- Food & Beverage Processing
- Fuel Products
- Monitoring Clean Fluids
- Plant Process Water
- Chemical Feed Lines
- Harsh Chemicals (Sulfuric Acid & Bleach)

APPROVALS:

FM APPROVED   c FM us APPROVED   IEC.   IECEx   ATEX Ⓔx

IP65   CE   NEMA 4

ACCESSORIES / ELECTRONICS:

Part No.	Description
113435-10	Conditioned Signal Module
125060-10	Pulse Out, Extended Power, Scaled Pulse Module
125070-1	External Power Module
125100-10	4-20 mA Module
120077-01	FM Approved Sensor
120077-02	ATEX Approved Sensor
125260-02	90 Degree Display Adaptor Kit
125260-2	½ in. Teflon O-Rings (2)
125260-1	1 in. Teflon O-Rings (2)
113275-10	FM Approved Remote Kit
145505-01	Kit, Adapter, G2-QSI1-Q09 Display
145505-02	Kit, Adapter, G2-QSI2-Q09 Display
145505-03	Kit, Adapter, G2-QSI3-Q09 Display
145505-04	Kit, Adapter, G2-QSI1-No Display
145505-05	Kit, Adapter, G2-QSI2-No Display
145505-06	Kit, Adapter, G2-QSI3-No Display
145505-07	Kit, Adapter, G2-QSI1-Display Ready
145505-08	Kit, Adapter, G2-QSI2-Display Ready
145505-09	Kit, Adapter, G2-QSI3-Display Ready