FL MEC®



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 chemicals and fuel products
- Aluminum for petroleum based products
- Brass for most water applications
- 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 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

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)

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

- $05 = \frac{1}{2}$ inch
- $07 = \frac{3}{4}$ inch
- **10** = 1 inch
- $15 = 1 \frac{1}{2}$ 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

Turbine with Local Display

09 = 2-Button Computer, Field Configurable (Cumulative, Batch & Rate)
 19 = Vertical Mount 2-Button Computer, Field Configurable (Cumulative, Batch & Rate)

Turbine, Local Transmitter, with No Display

- 80 = Unscaled Pulsed Transmitter (Open Collector)
- 81 = QSI Version 1 (Scaled Pulse, RS485 [MODbus or BACnet],
- BTU Calculator, Bluetooth)
- **82** = QSI Version 2 (Scaled Pulse, Data Logger, BTU Calculator, Bluetooth)
- 83 = QSI Version 3 (Scaled Pulse, Data Logger, 4-20mA, Bluetooth)

Turbine, Local Transmitter, with 09 Display

- 90 = Unscaled Pulsed Transmitter (Open Collector)
- 91 = QSI Version 1 (Scaled Pulse, RS485 [MODbus or BACnet], BTU Calculator, Bluetooth)
- 92 = QSI Version 2 (Scaled Pulse, Data Logger, BTU Calculator, Bluetooth)
- 93 = QSI Version 3 (Scaled Pulse, Data Logger, 4-20mA, Bluetooth)

No Electronics - Turbine Only

XX = No Electronics - Turbine Only

CALIBRATION 6

- GM = GPM & L/min (Gallons Default)
- **LM** = GPM & L/min (Litres Default)
- XX = No Calibration (Use with Electronic Choices 41, 71, 72 or Turbine Only)

PACKAGING 7

- A = Use for Turbine Only or 09 Electronics choice (Sizes 05-10)
- B = Use for Turbine Only or 09 Electronics choice (Sizes 15-20)
 Use for 19 Electronics choice (Sizes 05-10)
- C = Use for 19 Electronics choice (Sizes 15-20)
- D = Use for Turbine Only or 09 Electronics choice, with ANSI Flange (Sizes 10) Use for 19 Electronics choice with ANSI Flange (Sizes 10)
- E = Use for Turbine Only or 09 Electronics choice, with ANSI Flange (Sizes 15-20) Use for 19 Electronics choice with ANSI Flange (Sizes 15-20) Use for 80 thru 93 Electronics choice, with ANSI Flange (Sizes 10)
- **F** = Use for 80 thru 93 Electronics choice (Sizes 05-20) **G** = Use for 80 thru 93 Electronics choice, with ANSI Flange (Sizes 15-20)



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 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) <i>PVDF ownly</i>	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 Rati	ng:			
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)		



















ACCESSORIES / ELECTRONICS

Part No.	Description
113435-1	Conditioned Signal Module
125060-1	Pulse Access Module
125070-1	External Power Module
125100-1	4-20 mA Module
120077-01	FM Approved Sensor
120077-02	ATEX Approved Sensor
125260-01	90 Degree Display Adaptor Kit
113275-1	FM Approved Remote Kit

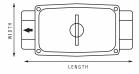
Operating Temperature Range:		-40° F to 250° F (-40° C to 121° C)	
		(PVDF) -20° F to 180° F (-28° C to 82° C)	
with Display:		14° F to 140° F (-10° C to 60° C)	
Typical K-Factor:	1/2" (05)	2,500 PPG (660 Pulses/L)	
	3/4" (07)	1,100 PPG (291 Pulses/L)	
	1" (10)	565 PPG (149 Pulses/L)	
	1-1/2" (15)	215 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	Comes standard with G2 Series meters.		
Report:	N.I.S.T. – Certification available.		

DIMENSIONSNPT/ISO

NOTE: 09 Display adds 0.67 in. (17 mm) to height.

Width " (mm) Meter Size Length " (mm) Height " (mm) 1/2" 4.2 (107) 1.8 (46) 2.0 (51) 4.3 (109) 2.0 (51) 2.0 (51) 1" 4.5 (114) 2.2 (56) 2.0 (51) 1-1/2" 5.3 (135) 2.8 (71) 2.7 (68)

Meter Size	Length " (mm)	Height " (mm)	Width " (mm)
2"	6.3 (160)	3.2 (81)	3.3 (84)
PVDF 1/2"	7.3 (185)	3.2 (81)	2.1 (53)
PVDF 1"	8.1 (206)	3.3 (84)	2.8 (71)





Part No.	Description
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