



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 = 1/2 inch
07 = 3/4 inch
10 = 1 inch
15 = 1-1/2 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)

1 2 3 4 5 6 7

--->>>> **G2 S 15 N 09 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 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: | | | |
| 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) | | |

APPROVALS



IP65



NEMA 4

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 |

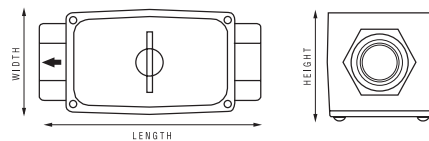
| | | |
|-------------------------------------|---|--|
| Operating Temperature Range: | -40° F to 250° F (-40° C to 121° C) | |
| | (PVDF) -20° F to 180° F (-28° C to 82° C) | |
| with Display: | 14° F to 140° F (-10° C to 60° C) | |
| Typical K-Factor: | 1/2" (05) | 2,500 PPG (660 Pulses/L) |
| | 3/4" (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: |
| 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

NPT/ISO

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

| Meter Size | Length " (mm) | Height " (mm) | Width " (mm) | Meter Size | Length " (mm) | Height " (mm) | Width " (mm) |
|------------|---------------|---------------|--------------|------------|---------------|---------------|--------------|
| 1/2" | 4.2 (107) | 1.8 (46) | 2.0 (51) | 2" | 6.3 (160) | 3.2 (81) | 3.3 (84) |
| 3/4" | 4.3 (109) | 2.0 (51) | 2.0 (51) | PVDF 1/2" | 7.3 (185) | 3.2 (81) | 2.1 (53) |
| 1" | 4.5 (114) | 2.2 (56) | 2.0 (51) | PVDF 1" | 8.1 (206) | 3.3 (84) | 2.8 (71) |
| 1-1/2" | 5.3 (135) | 2.8 (71) | 2.7 (68) | | | | |



| Part No. | Description |
|-----------|-------------------------------------|
| 145505-01 | Kit, Adapter, G2-QS11-Q09 Display |
| 145505-02 | Kit, Adapter, G2-QS12-Q09 Display |
| 145505-03 | Kit, Adapter, G2-QS13-Q09 Display |
| 145505-04 | Kit, Adapter, G2-QS11-No Display |
| 145505-05 | Kit, Adapter, G2-QS12-No Display |
| 145505-06 | Kit, Adapter, G2-QS13-No Display |
| 145505-07 | Kit, Adapter, G2-QS11-Display Ready |
| 145505-08 | Kit, Adapter, G2-QS12-Display Ready |
| 145505-09 | Kit, Adapter, G2-QS13-Display Ready |

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