

# G2 SERIES INTRINSICALLY SAFE

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 water and chemical products
- · Aluminum for fuels and petroleum-based products
- PVDF for aggressive chemicals

- 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

## PRODUCT CONFIGURATION

#### 1 PRODUCT IDENTIFIER:

**G2** = Industrial Grade Flowmeters

#### **2 TURBINE MATERIAL:**

- S = Stainless Steel
- $\mathbf{A} = Aluminum$
- P = PVDF (1/2 in. & 1 in. only)
- **X** = Electronics only (For metal meters)
- **Z** = Electronics only (For plastic meters)

# **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.

# **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)

### 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-Clover® Fitting (Available on S05, S07, S10, S15 & S20 only)

**X** = No Turbine Body

#### 5 ELECTRONIC CHOICE:

Computer Display, Meter Mounted

Q9 = Q9 2-Button Computer

Q1 = Q9 2-Button Computer, Vertical Mount (90° Adapter)

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
- D = 10 Turbines with ANSI Flange Turbine Only or w/Q9, Q1 Electronics
- **E** = 15 & 20 Turbines with ANSI Flange Turbine Only or w/Q9, Q1 Electronics

1 2 3 4 5 6 7

--->>> G2 S 15 N Q9 GM B



#### **SPECIFICATIONS**

OI LUII IUA	IIUIIU				
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, 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 only</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)		
	2 (20)		,		
Accuracy (% o	, ,	Turbine Only	Turbine w/Computer		
Accuracy (% o	, ,	Turbine Only ± 2.0%	,		
Accuracy (% o	f Reading):	-	Turbine w/Computer		
Accuracy (% o	f Reading): 1/2" (05)	± 2.0%	Turbine w/Computer ± 1.5%		
Accuracy (% o	f Reading): 1/2" (05) 3/4" (07)	± 2.0% ± 1.5%	Turbine w/Computer ± 1.5% ± 1.0%		
Accuracy (% o	f Reading): 1/2" (05) 3/4" (07) 1" (10)	± 2.0% ± 1.5% ± 1.5%	Turbine w/Computer ± 1.5% ± 1.0% ± 1.0%		
Accuracy (% o	f Reading): 1/2" (05) 3/4" (07) 1" (10) 1-1/2" (15)	± 2.0% ± 1.5% ± 1.5% ± 1.0%	Turbine w/Computer ± 1.5% ± 1.0% ± 1.0% ± 0.75% ± 0.75%		
	f Reading): 1/2" (05) 3/4" (07) 1" (10) 1-1/2" (15) 2" (20)	± 2.0% ± 1.5% ± 1.5% ± 1.0% ± 1.0%	Turbine w/Computer ± 1.5% ± 1.0% ± 1.0% ± 0.75% ± 0.75%		
Repeatability:	f Reading): 1/2" (05) 3/4" (07) 1" (10) 1-1/2" (15) 2" (20)	± 2.0% ± 1.5% ± 1.5% ± 1.0% ± 1.0%	Turbine w/Computer ± 1.5% ± 1.0% ± 1.0% ± 0.75% ± 0.75%		
Repeatability: Pressure Ratio	f Reading): 1/2" (05) 3/4" (07) 1" (10) 1-1/2" (15) 2" (20)	± 2.0% ± 1.5% ± 1.5% ± 1.0% ± 1.0% ± 0.1% (PVDF is ± 0.3	Turbine w/Computer ± 1.5% ± 1.0% ± 1.0% ± 0.75% ± 0.75%		
Repeatability: Pressure Ration	f Reading): 1/2" (05) 3/4" (07) 1" (10) 1-1/2" (15) 2" (20) ng:	± 2.0% ± 1.5% ± 1.5% ± 1.0% ± 1.0% ± 0.1% (PVDF is ± 0.3	Turbine w/Computer ± 1.5% ± 1.0% ± 1.0% ± 0.75% ± 0.75%		
Repeatability: Pressure Ratii Stainless Stee Aluminum	f Reading): 1/2" (05) 3/4" (07) 1" (10) 1-1/2" (15) 2" (20) ng: 1316 SS	± 2.0% ± 1.5% ± 1.5% ± 1.0% ± 1.0% ± 0.1% (PVDF is ± 0.3 1,500 psi (102 bar) 300 psi (21 bar)	Turbine w/Computer ± 1.5% ± 1.0% ± 1.0% ± 0.75% ± 0.75%		

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

# Stainless Steel Models

	S05, ½ in.	S07, ¾ in.	S10, 1 in.	S15, 1½ in.	S20, 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)	(109.2 mm)	(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)	(109.2 mm)	(114.3 mm)	(134.6 mm)	(160.0 mm)

Operating Ten	anoratura	40° E to 250° E ( 40° C to 121° C)		
Operating Temperature Range:		-40° F to 250° F (-40° C to 121° C)		
_ ŭ		(PVDF) -20° F to 180° F (-28° C to 82° C)		
with Intrinsically Safe Display:		0° F to +129° F (-18° C to +54° 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:	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	Comes standard with G2 Series meters.			
Report:	N.I.S.T. – Certification available.			

# **ACCESSORIES**

Part No.	Description
120077-01	FM Approved Sensor
120077-02	ATEX Approved Sensor
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)













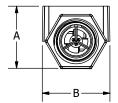


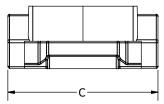




#### **PVDF Models**

	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.

