## **G2** Industrial Meters **PVDF**



Looking for a turbine meter that can handle aggressive chemicals? Look at the PVDF Meter for a housing material that resists abrasion and has great chemical compatibility.

Use PVDF Meters with harsh chemicals: Bleach, Ferric Chloride, Phenol, Sulfuric Acid or Phosphoric Acid.

For complete part number, see "Meter Number Reference" for this section.

### Select Your Meter Size:

1/2 inch

1 inch



### Features and Benefits:

- ✓ Meter is designed for thin fluids < 100 cp.</p>
- Lithium battery life: 5 years.
- ✓ Available with Local Display or Remote Transmitter.
- 2 Totals (Batch = Resettable, Cumulative = Non-Resettable); Rate of Flow. Factory calibrated in gallons and litres. Field calibratable. Allows user calibration. Includes non-volatile totals.
- Accessories easily upgrade meter.
- One field replaceable internal part making maintenance easy.

PVDF – SPECIFICATIONS						
Fitting Type:		NPT or ISO (Female) BSPT*				
Housing Material:		PVDF				
Meter Sizes Availa	able:	1/2" and 1"				
Flow Range:	1/2" (P05)	1.2 - 12 GPM (4.54 - 45.42 LPM)				
	1" (P10)	5 - 50 GPM (18.9 - 190 LPM)				
Accuracy (% of Re	ading):	Turbine Only Turbine w/Display				
	1/2" (P05)	± 2.0% ± 1.5%				
	1" (P10)	± 1.5% ± 1.0%				
Repeatability:		± 0.3%				
Pressure Rating:		100 PSI / 6.9 BAR				
Operating Tempera	ature Range:	-20° F to +180° F (-28° C to +82° C)				
with	Display:	0° F to +140° F (-18° C to +60° C)				
Maximum Storage Temperature:		-40° F to +250° F (-40° C to +121° C)				
Typical K-Factor:	1/2" (P05)	2,400 PPG / 634 PPL				
	1" (P10)	540 PPG / 143 PPL				
Wetted Materials:	Housing:	PVDF (15% Carbon Fiber Filled)				
	Bearings:	Ceramic - 98% Alumina				
	Shaft:	Ceramic - 98% Alumina				
	Rotor:	PVDF				
	Rings:	Fluorocarbon				
Optional O-Ring:		PTFE				
Frequency Range:		48 - 480 Hz @ 1.2 - 12 GPM				
	1" (P10)	45 - 450 Hz @ 5 - 50 GPM				
Recommended Str						
	1/2" (P05)	60 mesh (250 micron) 30 mesh (595 micron)				
	1" (P10)	,				
Maximum Flow:	1/2" (P05) 1" (P10)	15 GPM (56.8 LPM) 75 GPM (284 LPM)				
01	, -,	,				
Shipping Weight:	1/2" (P05) 1" (P10)	1.3 lbs./0.6 kg - Turbine Only: 1.1 lbs./.54 kg				
0.111 0	, -,	1.9 lbs./0.8 kg - Turbine Only: 1.7 lbs./.77 kg				
Calibration Report		Comes standard with G2 Series meters.				
		N.I.S.T. – Certification available.				

### **ELECTRONIC CHOICES**

Local Display, Remote Display & Remote Transmitter Options:

See Electronics Section.

### **APPROVALS**









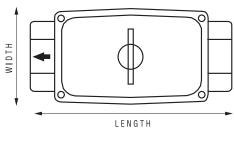


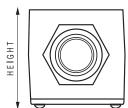
IP65 IECEx

\* ISO 7 designation is RC

# Meter **DIMENSIONS**

### **G2 Series Industrial Grade Meters**





NOTE: 09 Display adds 0.68 in. (17.3 mm) to height.

Model	Length inches (mm)	Height inches (mm)	Width inches (mm)	Model	Length inches (mm)	Height inches (mm)	Width inches (mm)
A05	4.2 (107)	1.8 (46)	2.0 (51)	H20	6.3 (160)	3.2 (81)	3.3 (84)
A07	4.3 (109)	2.0 (51)	2.0 (51)	P05	7.3 (185)	3.2 (81)	2.1 (53)
A10	4.5 (114)	2.2 (56)	2.0 (51)	P10	8.1 (206)	3.3 (84)	2.8 (71)
A15	5.3 (135)	2.8 (71)	2.7 (68)	S05	4.2 (107)	1.8 (46)	2.0 (51)
A20	6.3 (160)	3.2 (81)	3.3 (84)	S07	4.3 (109)	2.0 (51)	2.0 (51)
B05	4.2 (107)	1.8 (46)	2.0 (51)	S10	4.5 (114)	2.2 (56)	2.0 (51)
B07	4.3 (109)	2.0 (51)	2.0 (51)	S15	5.3 (135)	2.8 (71)	2.7 (68)
B10	4.5 (114)	2.2 (56)	2.0 (51)	S20	6.3 (160)	3.2 (81)	3.3 (84)
B15	5.3 (135)	2.8 (71)	2.7 (68)	S10F	6.75 (171)	4.25 (108)	4.25 (108)
B20	6.3 (160)	3.2 (81)	3.3 (84)	S15F	8.0 (203)	5.0 (127)	5.0 (127)
C05	7.3 (185)	3.2 (81)	2.1 (53)	S20F	9.50 (241)	6.0 (152)	6.0 (152)
C10	8.1 (206)	3.3 (84)	2.8 (71)	S05T	5.0 (127)	2.0 (51)	1.8 (46)
H05	4.2 (107)	1.8 (46)	2.0 (51)	S07T	5.0 (127)	2.0 (51)	2.0 (51)
H07	4.3 (109)	2.0 (51)	2.0 (51)	S10T	5.5 (140)	2.0 (51)	2.2 (56)
H10	4.5 (114)	2.2 (56)	2.0 (51)	S15T	6.5 (165)	2.7 (68)	2.8 (71)
H15	5.3 (135)	2.8 (71)	2.7 (68)	S20T	7.0 (178)	3.3 (84)	3.2 (81)

**NOTE**: Dimensions are for reference only and may vary by model.

## **METER NUMBER REFERENCE**

#### **Product Identifier**

G2 = Industrial Grade Meter **Turbine Material & Size Metal Meters:** H15 = Stainless Steel High Pressure – 1-1/2 in. B10 = Brass - 1 in.\$05 = Stainless Steel - 1/2 in.**B15** = Brass -1-1/2 in. H20 = Stainless Steel High Pressure – 2 in. S07 = Stainless Steel -3/4 in. A05 = Aluminum - 1/2 in.B20 = Brass - 2 in.A07 = Aluminum - 3/4 in.\$10 = Stainless Steel - 1 in. **Plastic Meters:** \$15 = Stainless Steel -1-1/2 in. A10 = Aluminum - 1 in.P05 = PVDF - 1/2 in.S20 = Stainless Steel – 2 in. A15 = Aluminum – 1-1/2 in. P10 = PVDF - 1 in.H05 = Stainless Steel High Pressure - 1/2 in. A20 = Aluminum - 2 in.H07 = Stainless Steel High Pressure – 3/4 in. B05 = Brass - 1/2 in.H10 = Stainless Steel High Pressure – 1 in. B07 = Brass - 3/4 in.See Reference section **Fitting Type** for meter dimensions. 150# ANSI Flange - available on S10, S15 and S20 only ISO (Female) BSPT\* NPT (Female) Tri-Clover® Fitting - available on S05 - S20 only Electronics Only - for metal meters Electronics Only - for plastic meters **Electronic Choice Turbine with Local Display** 09 = 2 Button Computer, Field Configurable (2 Totals and Rate of Flow) 19 = Vertical Mount 2-Button Computer, Field Configurable (2 Totals and Rate of Flow) Pulse Output (Remote) 41 = Remote Pulse Out Transmitter & Sine Wave Pickup (Standard Remote Sensor Option) 43 = Remote Pulse Out Transmitter & Turbine Mounted Computer (Pulse Out Sensor Option) GG500 - Display with Pulse Output (Remote) 51 = Sine Wave Pickup (Standard Remote Sensor Option) 52 = Open Collector Pickup (Conditioned Signal Sensor Option) = Turbine Mounted Computer (Pulse Access Sensor Option) GX500 - Display with 4-20 mA Output (Remote) 61 = Sine Wave Pickup (Standard Remote Sensor Option) Open Collector Pickup (Conditioned Signal Sensor Option) = Turbine Mounted Computer (Pulse Access Sensor Option) GA500 - 4-20 mA Output (Remote) = Sine Wave Pickup (Standard Remote Sensor Option) = Open Collector Pickup (Conditioned Signal Sensor Option) 73 = Turbine Mounted Computer (Pulse Access Sensor Option) No Electronics - Turbine Only XX = No Electronics - Turbine Only Calibration Gallons / Minute LM Litres / Minute = XX No Computer **Packaging** A = Use for Turbine Only or Turbine w/Display (Sizes 05-10) B = Use for Turbine Only or Turbine w/Display (Sizes 15-20) C = Use for Turbine with Remote Transmitter With or Without Turbine Mounted Display (Sizes 05-20) D = Use for 150# ANSI Flange Turbine Only (Size 10) E = Use for 150# ANSI Flange Turbine Only (Sizes 15-20) Use for 150# ANSI Flange Turbine with Remote Transmitter (Sizes 10, 15 or 20) **S07** (Sample Model Number)

<sup>\*</sup> ISO 7 designation is RC

## **APPROVALS** Guide

At Great Plains Industries, we've been building rugged, reliable, liquid flowmeters for over 35 years. The GPI Industrial Meter family includes a full line of Precision and Industrial Turbine meters plus Oval Gear meters in various materials, sizes and fitting options.

We design products to meet the needs of our customers. This includes maintaining appropriate, industry standard approvals.

Approvals vary by product line and may be dependent on meter application.

The Approval symbol is listed under product specifications on individual product pages. If no approval mark is found, check the chart to the right. For details about specific "Approvals" refer to the chart.

3-A	<b>3-A Sanitary Standards, Inc.</b> "Flowmeters for Milk and Milk Products, Number 28-03" for GSCPS Models and L Option Meters.
ATEX	Ex II 1 G Per 94/9/EC.
CE	Product reviewed for EMC Directive 2004/108/EC. Includes: Euro Norms 61000-6-2 (2005) and 61000-6-3 (2007) on A1 and G2 Series Meters. Note: For <b>Oval Gear Meters</b> , the CE Approval is applied when meter is part of a system.
FM	Factory Mutual Approved Intrinsically Safe for Class I, II, III, Division 1, All Groups. Nonincendive for Class I, II, III, Division 2 Groups A, B, C, D, F, G.
E FM US APPROVED	Factory Mutual Approved Class 1, Div. 1, Group D (01A31GM Only)
E FM APPROVED	Factory Mutual Approved Intrinsically safe for Class I & II, Div. 1, Groups A, B, C, D, E, F & G, T6 Ta=-40° C to 60° C hazardous locations, and for use in Class I, Zone 0 as Ex is IIC T6 Ta=-40° C to 60° C.
F©	Federal Communication Commission Industry Canada Approval Class B; digital service, part 15 of FCC Rules.
IEC IECEX	Ex ia IIC T6 Ta=60° C
IP44/IP54/IP66	Ingress Protection Code IP44 (Greater than 1 mm and splashed water); IP54 (Dust protected and splashed water); IP66 (Dust-tight and heavy seas).
IP/NEMA	Pulse versions of <b>Oval Gear Meters</b> have enclosure ratings that vary from IP54 / NEMA 13 to IP66 / NEMA 16 depending on the application.
NEMA 4	NEMA Requirements: Enclosure constructed for indoor or outdoor use to provide a degree of protection to personnel against incidental contact with the enclosed equipment. Protection against falling dirt, rain, sleet, snow, windblown dust, splashing or hose directed water that will be undamaged by the external formation of ice on the enclosure. GPI products are tested to NEMA requirements.
RoHS	Restriction of Hazardous Substances Directive 2002/95/EC and 2011/65/EU
C US	Indicates that the product was tested and has met the certification requirements for electrical, plumbing and/or mechanical products.