INDUSTRIAL METER CATALOG

version seven

www.gpimeters.net

TABLE OF **CONTENTS**

G SERIES PRECISION METERS

The High Precision Meter line is the most accurate of the GPI Turbine Meters and includes a traditional design. These meters come in a variety of sizes and fitting options including BSP, ISO, NPT and ANSI Flange fittings. The GSCPS in this section carries the 3A Sanitary Rating.

BUILD-YOUR-OWN G SERIES METER

1) Select Your Turbine

Threaded Models

Sanitary Clamp Models

Flange Models

2) Select Your Sensor

Local Pickup Wire Lead

3) Select Your Electronic Choice

For further details and selections see the Electronics Section.

Remote Models		Local Models	
GA500	R700-R	GA510	R700-L
GG500	R800-R	GG510	R800-L
GX500	SC500	GX510	SC510

4) Do You Want It Assembled?

GPI will assemble the components you choose into a single unit, configured to your request.

Contact the factory for details on Custom System Assembly.

G SERIES METER NUMBER REFERENCE

USE THIS AS A GUIDE – SIZES VARY BY FITTING TYPE.

Product Identifier

G = G Series Precision Turbine Meter

Fitting Type

N = NPT (Male)
I = ISO Taper (Male)
B = BSP (Male)
F = Flanged
SC = Sanitary Clamp

Meter Dimensions listed on page 75.

Shaft / Sleeve Bearing / Thrust Bearing

T- = Tungsten Carbide / Tungsten Carbide
P- = Stainless Steel / PTFE / Stainless Steel

Turbine Size & Flowrate

-050S = 1/2 in. (0.6 - 6 GPM) Low Flow - Turbine Body Only◆
-051S = 1/2 in. (0.8 - 6 GPM) Standard - Uses Low Drag Standard Sensor 1
-051H = 1/2 in. (0.8 - 6 GPM) High Temp - Turbine Body Only◆
-075S = 3/4 in. (1.6 - 16 GPM) Standard - Uses Standard Sensor 2
-075H = 3/4 in. (1.6 - 16 GPM) High Temp - Turbine Body Only◆
-075E = 3/4 in. (2.32 - 23 GPM) Ext-Range - Uses Standard Sensor 2
-75EH = 3/4 in. (2.32 - 23 GPM) Ext-Range High Temp - Turbine Body Only◆
-100S = 1 in. (6.7 - 67 GPM) Standard - Uses Standard Sensor 2
-100H = 1 in. (6.7 - 67 GPM) High Temp - Turbine Body Only◆
-150S = 1-1/2 in. (17.7 - 177 GPM) Standard - Uses Standard Sensor 2
-150H = 1-1/2 in. (17.7 - 177 GPM) High Temp - Turbine Body Only◆
-200S = 2 in. (33 - 330 GPM) Standard - Uses Standard Sensor 2
-200H = 2 in. (33 - 330 GPM) High Temp - Turbine Body Only◆
-300S = 3 in. (60-600 GPM) Standard - Uses Standard Sensor 2

◆ Call GPI for Sensor & Electronics

Sensor Choice

1 = Low Drag Standard Sensor with 12 inch Lead Wires
2 = Standard Sensor with 12 inch Lead Wires
X = No Sensor - Turbine Body Only

Electronic Choice (Local)*

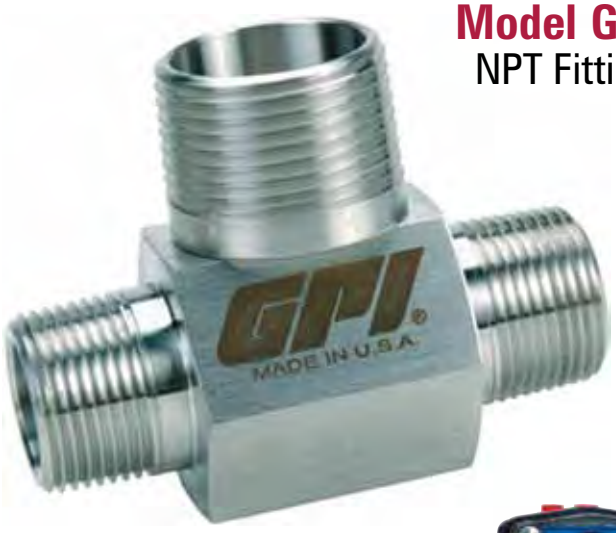
Turbine Mounted
-5 = GG510 - Standard Display
-6 = GX510 - 4-20 mA Transmitter with Display
-7 = GA510 - 4-20 mA Transmitter
-8 = SC510 - Scaled Pulse Output
-X = No Electronics - Turbine Body Only

G + I + T- + -075S + 2 + -6 ← (Sample Model Number)

* Electronic Choice not available on all models.

GBT, GIT & GNT PRECISION METERS

Model GNT
NPT Fitting



GNT shown here with Local Display

For complete part number, see "Number Reference" chart on page 5.

SPECIFICATIONS

Design Type:		Turbine					
Housing Material:		316 Stainless Steel					
Meter Sizes Available:							
For GNT: NPT Taper (Male)		1/2"	3/4"	1"	1-1/2"	2"	3"
For GBT: BSPP * (Male)		1/2"	3/4"	1"	1-1/2"	2"	3"
For GIT: ISO Taper (Male)		1/2"	3/4"	1"	1-1/2"	2"	3"
For High Temperature*:		1/2"	3/4"	1"	1-1/2"	2"	—
Flow Range:	**1/2" (051)**	0.8 - 6.0 GPM	(3.0 - 22 LPM)				
	3/4" (075)	1.6 - 16 GPM	(6.0 - 60 LPM)				
	3/4" (075E)	2.3 - 23 GPM	(8.7 - 87 LPM)				
	1" (100)	6.7 - 67 GPM	(25.2 - 252 LPM)				
	1-1/2" (150)	17.7 - 177 GPM	(67.0 - 670 LPM)				
	2" (200)	33 - 330 GPM	(125.0 - 1250 LPM)				
	3" (300)	60 - 600 GPM	(227.1 - 2271 LPM)				
Accuracy (Linearity):		± 0.5%					
Repeatability:		± 0.1%					
Pressure Rating:		1/2" to 2" = 5,000 PSI / 340 BAR					
		3" = 2,500 PSI / 170 BAR					
Operating Temperature Range:							
For Tungsten Carbide:		-100° F to +225° F (-74° C to +107° C)					
For High Temperature *:		-450° F to +800° F (-268° C to +426° C)					
Typical K-Factor:	**1/2" (051)**	10,000					
	3/4" (075)	3,750					
	3/4" (075E)	2,608					
	1" (100)	896					
	1-1/2" (150)	340					
	2" (200)	181					
	3" (300)	50					
Wetted Materials:							
Housing:		316 Stainless Steel					
Sleeve Bearings:		Tungsten Carbide					
Thrust Bearing:		Tungsten Carbide					
Shaft:		Tungsten Carbide					
Rotor:		CD4MCu Stainless Steel					
Rotor Supports:		316 Stainless Steel					
Recommended Strainer Size:							
	1/2"	40 mesh					
	3/4"	40 mesh					
	1"	40 mesh					
	1-1/2"	18 mesh					
	2"	14 mesh					
	3"	14 mesh					
Frequency Output:	**1/2" (051)**	125 - 1000 Hz					
	3/4" (075)	100 - 1000 Hz					
	3/4" (075E)	100 - 1000 Hz					
	1" (100)	100 - 1000 Hz					
	1-1/2" (150)	100 - 1000 Hz					
	2" (200)	100 - 1000 Hz					
	3" (300)	50 - 500 Hz					

* Requires High Temp Pickup.
* ISO 228-1 designation is G.

ACCURACY: ± 0.5%

Select Your Meter Size:

1/2 inch	1 inch	2 inch
3/4 inch	1-1/2 inch	3 inch

For Your Special Application Needs:

Model GNT HT
For High Temperatures
(This model is not available in 3 inch)

Sensor Options:
- Low Drag Pickup (1/2 in. turbines)
- Standard Pickup (3/4 to 3 in. turbines)

Electronics Options:
- GG510 (Display with Pulse Output)
- GX510 (Display with 4-20 mA Output)
- GA510 (4-20 mA Output)
- SC510 (Scaled Pulse Output)

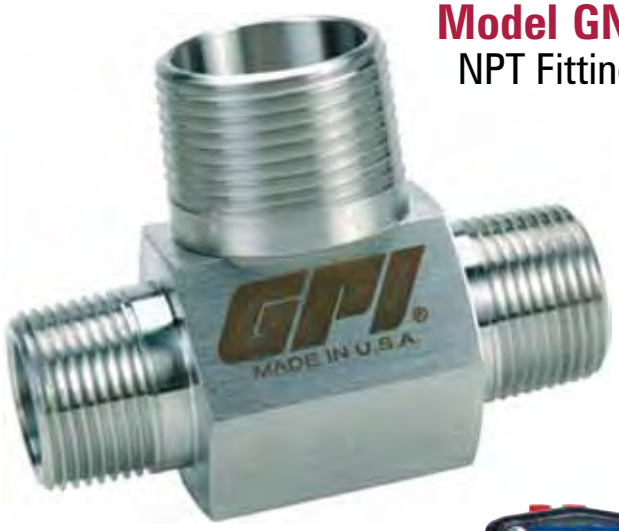
GBP, GIP & GNP PRECISION METERS

SPECIFICATIONS

Design Type:		Turbine				
Housing Material:		316 Stainless Steel				
Meter Sizes Available:						
For GNP: NPT (Male)		1/2”	3/4”	1”	1-1/2”	2”
For GBP: BSPP+ (Male)		1/2”	3/4”	1”	1-1/2”	2”
For GIP: ISO Taper (Male)		1/2”	3/4”	1”	1-1/2”	2”
Flow Range:	**1/2” (050)***	0.6 - 6.0 GPM	(2.2 - 22 LPM)			
	1/2” (051)	0.8 - 6.0 GPM	(3.0 - 22 LPM)			
	3/4” (075)	1.6 - 16 GPM	(6.0 - 60 LPM)			
	3/4” (075E)	2.3 - 23 GPM	(8.7 - 87 LPM)			
	1” (100)	6.7 - 67 GPM	(25.2 - 252 LPM)			
	1-1/2” (150)	17.7 - 177 GPM	(67.0 - 670 LPM)			
	2” (200)	33 - 330 GPM	(125.0 - 1250 LPM)			
Accuracy (Linearity):		± 0.5%				
Repeatability:		± 0.1%				
Pressure Rating:		1/2” to 2” = 5,000 PSI / 340 BAR				
Operating Temperature Range:		-100° F to +185° F (-74° C to +85° C)				
Typical K-Factor:	**1/2” (050)***	10,000				
	1/2” (051)	10,000				
	3/4” (075)	3,750				
	3/4” (075E)	2,608				
	1” (100)	896				
	1-1/2” (150)	340				
	2” (200)	181				
Wetted Materials:						
Housing:		316 Stainless Steel				
Sleeve Bearings:		PTFE				
Thrust Bearing:		440C Stainless Steel				
Shaft:		316 Stainless Steel				
Rotor:		CD4MCu Stainless Steel				
Rotor Supports:		316 Stainless Steel				
Recommended Strainer Size:						
	1/2”	40 mesh				
	3/4”	40 mesh				
	1”	40 mesh				
	1-1/2”	18 mesh				
	2”	14 mesh				
Frequency Output:	**1/2” (051)***	125 - 1000 Hz				
	3/4” (075)	100 - 1000 Hz				
	3/4” (075E)	100 - 1000 Hz				
	1” (100)	100 - 1000 Hz				
	1-1/2” (150)	100 - 1000 Hz				
	2” (200)	100 - 1000 Hz				

* 1/2 in. (050) requires RF Pickup.
+ ISO 228-1 designation is G.

Model GNP
NPT Fitting



GNP shown here with Local Display

For complete part number, see “Number Reference” chart on page 5.

ACCURACY: ± 0.5%

Select Your Meter Size:

1/2 inch
3/4 inch
1 inch
1-1/2 inch
2 inch

Sensor Options:
- Low Drag Pickup (1/2 in. turbines)
- Standard Pickup (3/4 to 3 in. turbines)

Electronics Options:
- GG510 (Display with Pulse Output)
- GX510 (Display with 4-20 mA Output)
- GA510 (4-20 mA Output)
- SC510 (Scaled Pulse Output)

ANSI FLANGE PRECISION METERS

Model GFT
150# RF ANSI Flange Fitting

GFT shown here with GX510

For complete part number, see "Number Reference" chart on page 5.

ACCURACY: ± 0.5%

Select Your Meter Size:

3/4 inch
1 inch
1-1/2 inch
2 inch
3 inch

For Your Special Application Needs:

Model GFP
For Chemicals

Model GFT HT
For High Temperatures

(These models not available in 3 inch)

Sensor:
- Standard Pickup (3/4 to 3 inch turbines)

Electronics Options:
- GG510 (Display with Pulse Output)
- GX510 (Display with 4-20 mA Output)
- GA510 (4-20 mA Output)
- SC510 (Scaled Pulse Output)

SPECIFICATIONS

Design Type:		Turbine				
Housing Material:		316 Stainless Steel				
Meter Sizes Available:						
For GFT:		3/4"	1"	1-1/2"	2"	3"
For GFP:		3/4"	1"	1-1/2"	2"	—
For High Temperature:		3/4"	1"	1-1/2"	2"	—
Flow Range:	**3/4" (075)**	1.6 - 16 GPM	(6.0 - 60 LPM)			
	3/4" (075E)	2.3 - 23 GPM	(8.7 - 87 LPM)			
	1" (100)	6.7 - 67 GPM	(25.2 - 252 LPM)			
	1-1/2" (150)	17.7 - 177 GPM	(67.0 - 670 LPM)			
	2" (200)	33 - 330 GPM	(125.0 - 1250 LPM)			
	3" (300)	60 - 600 GPM	(227.1 - 2271 LPM)			
Accuracy (Linearity):		± 0.5%				
Repeatability:		± 0.1%				
Pressure Rating:		Flange Rule				
Operating Temperature Range:						
For Tungsten Carbide:		-100° F to +225° F (-74° C to +107° C)				
For SS/PTFE:		-100° F to +185° F (-74° C to +85° C)				
For High Temperature*:		-450° F to +800° F (-268° C to +426° C)				
Typical K-Factor:	**3/4" (075)**	3,750				
	3/4" (075E)	2,608				
	1" (100)	896				
	1-1/2" (150)	340				
	2" (200)	181				
	3" (300)	50				
Wetted Materials (GFT):						
Housing:		316 Stainless Steel				
Sleeve Bearings:		Tungsten Carbide				
Thrust Bearing:		Tungsten Carbide				
Shaft:		Tungsten Carbide				
Rotor:		CD4MCu Stainless Steel				
Rotor Supports:		316 Stainless Steel				
Wetted Materials (GFP):						
Housing:		316 Stainless Steel				
Sleeve Bearings:		PTFE				
Thrust Bearing:		440C Stainless Steel				
Shaft:		316 Stainless Steel				
Rotor:		CD4MCu Stainless Steel				
Rotor Supports:		316 Stainless Steel				
Recommended Strainer Size:						
	3/4"	40 mesh				
	1"	40 mesh				
	1-1/2"	18 mesh				
	2"	14 mesh				
	3"	14 mesh				
Frequency Output:	**3/4" (075)**	100 - 1000 Hz				
	3/4" (075E)	100 - 1000 Hz				
	1" (100)	100 - 1000 Hz				
	1-1/2" (150)	100 - 1000 Hz				
	2" (200)	100 - 1000 Hz				
	3" (300)	50 - 500 Hz				

* Requires High Temp Pickup.

SANITARY CLAMP PRECISION METERS

SPECIFICATIONS

Design Type:		Turbine
Housing Material:		316 Stainless Steel
Meter Sizes Available (ID):		1" 1-1/2" 2"
Meter ID:	**1"**	1-1/2" Fitting
	1-1/2"	1-1/2" Fitting
	2"	2" Fitting
Flow Range:	**1" (100)**	6.7 - 67 GPM (25.2 - 252 LPM)
	1-1/2" (150)	17.7 - 177 GPM (67.0 - 670 LPM)
	2" (200)	33 - 330 GPM (125.0 - 1250 LPM)
Accuracy (Linearity):		± 0.5%
Repeatability:		± 0.1%
Pressure Rating:		Limited by fitting size, clamp size & temp.
Operating Temperature Range:		
For GSCPS:		-100° F to +225° F (-74° C to +107° C)
SIP (up to 1 hour):		+285° F (+140° C)
Typical K-Factor:	**1" (100)**	896
	1-1/2" (150)	340
	2" (200)	181
Wetted Materials (SIP):		
Housing:		316 Stainless Steel
Sleeve Bearings:		PEEK
Thrust Bearing:		PEEK
Shaft:		316 Stainless Steel
Rotor:		CD4MCu Stainless Steel
Rotor Supports:		316 Stainless Steel
Recommended Strainer Size:		
	1"	40 mesh
	1-1/2"	18 mesh
	2"	14 mesh
Frequency Output:	**1" (100)**	100 - 1000 Hz
	1-1/2" (150)	100 - 1000 Hz
	2" (200)	100 - 1000 Hz

APPROVALS

GSCPS & "L" Option Meters carry a

Sanitary Rating.
Flowmeters for milk and milk products, Number 28-04.

CIP SIP

This meter meets the strict 3-A Sanitary Standards using the new "Third Party Verification" (TPV) program. Our methods of design, construction and traceability of components have been reviewed and approved.

The internals of this meter are machined or polished to meet 3-A self-draining and cleaning requirements (Ra 32). The GSCPS Meter meets Clean in Place (CIP), Steam in Place (SIP) and Clean Out of Place (COP) requirements.

Model GSCPS
Standard Sanitary Clamp

Model GSCPS
Low Profile Sanitary Clamp

For complete part number, see "Number Reference" chart on page 5.

ACCURACY: ± 0.5%

GSCPS Stainless Steel Precision Turbine Meter

Select Your Meter Size:

1 inch Meter with 1-1/2 inch Fitting
1-1/2 inch Meter with 1-1/2 inch Fitting
2 inch Meter with 2 inch Fitting

PRECISION METERS **SANITARY CLAMP**

Use this meter in pre-process applications where high accuracy is required without 3-A Approval.

Model GSCP
Tri-Clover® Clamp

GSCP shown here with Local Display

For complete part number, see "Number Reference" chart on page 5.

ACCURACY: ± 0.5%

Select Your Meter Size:

1/2 inch Meter with 3/4 or 1 inch Fitting
3/4 inch Meter with 1-1/2 inch Fitting
1 inch Meter with 1-1/2 inch Fitting
1-1/2 inch Meter with 1-1/2 inch Fitting
2 inch Meter with 2 inch Fitting

Sensor Options:
- Low Drag Pickup (1/2 in. turbines)
- Standard Pickup (3/4 to 2 in. turbines)

Electronics Options:
- GG510 (Display with Pulse Output)
- GX510 (Display with 4-20 mA Output)
- GA510 (4-20 mA Output)
- SC510 (Scaled Pulse Output)

SPECIFICATIONS

Design Type:	Turbine	
Housing Material:	316 Stainless Steel	
Meter Sizes Available (ID):	1/2" 3/4" 1" 1-1/2" 2"	
Meter ID: **1/2"**	3/4" Fitting	
1/2"	1" Fitting	
3/4"	1-1/2" Fitting	
1"	1-1/2" Fitting	
1-1/2"	1-1/2" Fitting	
2"	2" Fitting	
Flow Range: 1/2" (050)†	0.6 - 6 GPM	(2.2 - 22 LPM)
1/2" (051)	0.8 - 6 GPM	(3.0 - 22 LPM)
3/4" (075)	1.6 - 16 GPM	(6.0 - 60 LPM)
3/4" (075E)	2.3 - 23 GPM	(8.7 - 87 LPM)
1" (100)	6.7 - 67 GPM	(25.2 - 252 LPM)
1-1/2" (150)	17.7 - 177 GPM	(67.0 - 670 LPM)
2" (200)	33 - 330 GPM	(125.0 - 1250 LPM)
Accuracy (Linearity):	± 0.5%	
Repeatability:	± 0.1%	
Pressure Rating:	Limited by fitting size, clamp size & temp.	
Operating Temperature Range:	-100° F to +185° F (-74° C to +85° C)	
Typical K-Factor: 1/2" (050)†	10,000	
1/2" (051)	10,000	
3/4" (075)	3,750	
3/4" (075E)	2,608	
1" (100)	896	
1-1/2" (150)	340	
2" (200)	181	
Wetted Materials:		
Housing:	316 Stainless Steel	
Sleeve Bearings:	PTFE	
Thrust Bearing:	440C Stainless Steel	
Shaft:	316 Stainless Steel	
Rotor:	CD4MCu Stainless Steel	
Rotor Supports:	316 Stainless Steel	
Recommended Strainer Size:		
1/2"	40 mesh	
3/4"	40 mesh	
1"	40 mesh	
1-1/2"	18 mesh	
2"	14 mesh	
Frequency Output: 1/2" (050)	100 - 1000 Hz	
1/2" (051)	125 - 1000 Hz	
3/4" (075)	100 - 1000 Hz	
3/4" (075E)	100 - 1000 Hz	
1" (100)	100 - 1000 Hz	
1-1/2" (150)	100 - 1000 Hz	
2" (200)	100 - 1000 Hz	

† GSCP-050 requires RF Pickup.

Magnetic Pickups

When choosing a magnetic pickup, the turbine meter and electronics are generally already known. Electronics can be either Local or Remote. Remote electronics include GPI Remote Displays or output to customer supplied equipment. Follow these 3 steps when choosing a magnetic pickup then see the Specification Table for further details.

1

Select your size:
1/2 inch or
3/4 to 3 inch

2

Choose: Local or Remote/Output
Local uses a wire lead pickup.
Remote/Output requires a connector.

3

What's your signal type:
Sine Wave or Square Wave
Sine Wave - has no sensor power, can be used with battery powered displays.
Square Wave - sensor power is required.

1/2 INCH METER SIZES

Magnetic Pickups work with…

Description	Part Number	Sensor Power	Temperature Range	Cable Type	Connector Required	Cable Length	Thread Size	Local	Remote	Battery Pwr Display
Wire Lead Low Drag	81006001	None	-100° F - +250° F (-73° C - +121° C)	None	None	12 in.	5/8" - 18	X		Yes
Low Drag	81006000	None	-100° F - +250° F (-73° C - +121° C)	S	80001200	N/A	5/8" - 18		X	Yes
High Temp., Low Drag (10 ft. cable)	81007001	None	-450° F - +800° F (-268° C - +426° C)	None	None	10 ft.	5/8" - 18		X	Yes
* RF (required for GNP-050, GTP-050 & GSCP-050)	81005002	7-30 VDC	-40° F - +248° F (-29° C - +120° C)	D	80001202	N/A	5/8" - 18		X	No

3/4 TO 3 INCH METER SIZES

Wire Lead Standard	81003000	None	-100° F - +250° F (-73° C - +121° C)	None	None	12 in.	5/8" - 18	X		Yes
Standard	81001000	None	-100° F - +250° F (-73° C - +121° C)	S	80001200	N/A	5/8" - 18		X	Yes
Herm / High Temperature	81002000	None	-450° F - +258° F (-268° C - +125° C)	S	80001200	N/A	5/8" - 18		X	Yes
High Temperature, Standard	81007000	None	-450° F - +800° F (-268° C - +426° C)	None	None	3 ft.	5/8" - 18		X	Yes
* Digital (Di-Mag)	81004000	5-32 VDC	-40° F - +248° F (-29° C - +120°C)	D	80001202	N/A	5/8" - 18		X	No

* Externally powered pickups for pulse output only.

Pickup Enclosures

Pickup Enclosures are optional on G Series Meters. Choose from four pickup enclosures. Models N4A and N4S are weather-proof enclosures. For explosion-proof enclosures, choose N7A for the enclosure without terminal strip or the N7AT with terminal strip.

ENCLOSURES – PART NUMBERS

Description	Part Number
N4AWP - Weatherproof magnetic pickup steel enclosure	80001101
N4SWP - Weatherproof magnetic pickup 316 S.S. enclosure	80001105
N7AXP - Explosion-proof pickup enclosure (NEMA 7D)	80001100
N7ATXP - Explosion-proof pickup enclosure w/terminal strip (NEMA 7D)	80001102
Optional Spacer	42825524

G SERIES PRECISION **ACCESSORIES**

Connectors

Connectors are included with cable assemblies from GPI. If you need replacement connectors, choose from the following:

CONNECTORS – PART NUMBERS

Description	Part Number
Standard mating connector (2 pin) used on Type S and T cable assemblies	80001200
Water resistant connector (2 pin) used on Type H cable assembly	80001201
Di-Mag connector (3 pin) used on Type D cable assembly	80001202

Cable Assemblies

GPI Cable Assemblies include the connector.

CABLE ASSEMBLY – PART NUMBERS

Type "S" Standard Cable (2 Conductor)		Type "H" Water Resistant (2 Conductor)	
Cable Length	**Part No.**	**Cable Length**	**Part No.**
8 inch	83001001	8 inch	83003001
5 feet	83001005	5 feet	83003005
10 feet	83001010	10 feet	83003010
15 feet	83001015	15 feet	83003015
20 feet	83001020	20 feet	83003020
25 feet	83001025	25 feet	83003025
30 feet	83001030	30 feet	83003030
40 feet	83001040	40 feet	83003040
50 feet	83001050	50 feet	83003050
75 feet	83001075	75 feet	83003075
100 feet	83001100		
125 feet	83001125		

Type "D" Di-Mag or RF (3 Conductor)		Type "T" High Temperature (2 Conductor)	
Cable Length	**Part No.**	**Cable Length**	**Part No.**
8 inch	83002001	8 inch	83004001
5 feet	83002005	5 feet	83004005
10 feet	83002010	10 feet	83004010
15 feet	83002015	15 feet	83004015
20 feet	83002020	20 feet	83004020
25 feet	83002025	25 feet	83004025
30 feet	83002030	30 feet	83004030
40 feet	83002040	40 feet	83004040
50 feet	83002050	50 feet	83004050
75 feet	83002075	75 feet	83004075

G2 SERIES INDUSTRIAL GRADE METERS

The unique modular approach of the Industrial Grade Meter line allows you to design a meter to match your specific application. Turbine choice depends on flowrate, line size, pressure rating, fitting type, chemical compatibility and temperature range. When choosing a G2 Series Meter, select from our wide variety of materials and sizes. These meters offer high accuracy at a lower cost, are compact and include a self-contained design. G2 Series Meters are field serviceable.

BUILD-YOUR-OWN G2 SERIES METER

ELECTRONICS SECTION HAS ADDITIONAL ITEMS

1) Select Your Turbine Material and Size

Turbine choice depends on flowrate, line size, pressure rating, fitting type, chemical compatibility and temperature range.

Stainless Steel

"Look for the blue label!"

Aluminum
(Shown with 09 Computer)

"Look for the blue label!"

Brass
(Shown with 09 Computer)

PVDF

2) Need A Computer?

"Look for the blue label!"

09 Computer

XX No Computer

Or Choose an Electronics
(For further details and selections see the Electronics Section.)

3) Add a Module?

For further details and selections see pages 23-26.

Standard Remote Kit

FM Approved Remote Kit

Conditioned Signal Output Module

FM Approved Sensor Kit

4-20 mA Module

Pulse Access Module

External Power Module
(Pulse Access Module Required)

4) Do You Require Any Accessories?

For further details and selections see pages 27-28.

Conduit Adapter Kit

90° Display Adapter Kit

510 Conversion Kit

Pulse Access Dust Cover

GPI Electronics Programmer

G2 SERIES METER NUMBER REFERENCE

Product Identifier

G2 = Industrial Grade Meter

Turbine Material & Size

Metal Meters:

S05 = Stainless Steel – 1/2 in.
S07 = Stainless Steel – 3/4 in.
S10 = Stainless Steel – 1 in.
S15 = Stainless Steel – 1-1/2 in.
S20 = Stainless Steel – 2 in.
H05 = Stainless Steel High Pressure – 1/2 in.
H07 = Stainless Steel High Pressure – 3/4 in.
H10 = Stainless Steel High Pressure – 1 in.
H15 = Stainless Steel High Pressure – 1-1/2 in.
H20 = Stainless Steel High Pressure – 2 in.

A05 = Aluminum – 1/2 in.
A07 = Aluminum – 3/4 in.
A10 = Aluminum – 1 in.
A15 = Aluminum – 1-1/2 in.
A20 = Aluminum – 2 in.
B05 = Brass – 1/2 in.
B07 = Brass – 3/4 in.
B10 = Brass – 1 in.
B15 = Brass – 1-1/2 in.
B20 = Brass – 2 in.

Plastic Meters:

P05 = PVDF – 1/2 in.
P10 = PVDF – 1 in.

Meter Dimensions listed on page 75.

Fitting Type

F = 150# ANSI Flange - available on S10, S15 and S20 only
I = ISO (Female)
N = NPT (Female)
T = Tri-Clover® Fitting - available on S05 - S20 only
X = Electronics Only - for metal meters
Z = 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)
53 = Turbine Mounted Computer (Pulse Access Sensor Option)

GX500 – Display with 4-20 mA Output (Remote)

61 = Sine Wave Pickup (Standard Remote Sensor Option)
62 = Open Collector Pickup (Conditioned Signal Sensor Option)
63 = Turbine Mounted Computer (Pulse Access Sensor Option)

GA500 – 4-20 mA Output (Remote)

71 = Sine Wave Pickup (Standard Remote Sensor Option)
72 = 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

GM = 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)

G2 + S07 + N + 09 + GM + A ← (Sample Model Number)

G2 INDUSTRIAL METERS **STAINLESS STEEL**

"Look for the blue label!"

The GPI Stainless Steel Meter line has a proven track record in the industrial market. GPI Stainless Steel Meters are rugged and dependable. Use stainless steel meters for most chemicals: Ammonium, Plating Solutions and Fuel products.

For complete part number, see "Number Reference" chart on page 15.

Select Your Meter Size:

1/2 inch 3/4 inch 1 inch 1-1/2 inch 2 inch

Features and Benefits:

- ✓ Stainless steel meters have excellent chemical compatibility.
- ✓ 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. Allows user calibration. Includes non-volatile totals.
- ✓ High accuracy meter.
- ✓ Internal parts are simple to replace for easy maintenance.
- ✓ Lithium battery life: 5 years.
- ✓ Accessories easily upgrade meter.

STAINLESS STEEL – SPECIFICATIONS

Fitting Type:		NPT or ISO (Female)
Housing Material:		316 Stainless Steel
Meter Sizes Available:		1/2" 3/4" 1" 1-1/2" 2"
Flow Range:	**1/2" (S05)**	1 - 10 GPM (3.8 - 37.9 LPM)
	3/4" (S07)	2 - 20 GPM (7.6 - 75.7 LPM)
	1" (S10)	5 - 50 GPM (18.9 - 190 LPM)
	1-1/2" (S15)	10 - 100 GPM (38.0 - 380 LPM)
	2" (S20)	20 - 200 GPM (76 - 760 LPM)
Accuracy (% of Reading):		**Turbine Only** / **Turbine w/Computer**
	1/2" (S05)	± 2.0% / ± 1.5%
	3/4" (S07)	± 1.5% / ± 1.0%
	1" (S10)	± 1.5% / ± 1.0%
	1-1/2" (S15)	± 1.0% / ± 0.75%
	2" (S20)	± 1.0% / ± 0.75%
Repeatability:		± 0.1%
Pressure Rating:		1,500 PSI / 102 BAR
Operating Temperature Range:		-40° F to +250° F (-40° C to +121° C)
with Computer:		0° F to +140° F (-18° C to +60° C)
Typical K-Factor:	**1/2" (S05)**	2,500
	3/4" (S07)	1,100
	1" (S10)	565
	1-1/2" (S15)	215
	2" (S20)	100
Wetted Materials:	**Housing:**	316 Stainless Steel
	Bearings:	Ceramic
	Shaft:	Tungsten Carbide
	Rotor:	PVDF
	Rings:	316 Stainless Steel
Frequency Range:	**1/2" (S05)**	42 - 420 Hz @ 1 - 10 GPM
	3/4" (S07)	37 - 370 Hz @ 2 - 20 GPM
	1" (S10)	47 - 470 Hz @ 5 - 50 GPM
	1-1/2" (S15)	36 - 360 Hz @ 10 - 100 GPM
	2" (S20)	33 - 330 Hz @ 20 - 200 GPM
Recommended Strainer Size:		
	1/2" (S05)	55 mesh
	3/4" (S07)	55 mesh
	1" (S10)	55 mesh
	1-1/2" (S15)	28 mesh
	2" (S20)	28 mesh
Maximum Flow:	**1/2" (S05)**	15 GPM (56.8 LPM)
	3/4" (S07)	30 GPM (113.6 LPM)
	1" (S10)	75 GPM (284 LPM)
	1-1/2" (S15)	150 GPM (568 LPM)
	2" (S20)	300 GPM (1,136 LPM)
Wrench Flat Size:	**1/2" (S05)**	1-1/16 inch (27 mm)
	3/4" (S07)	1-5/16 inch (33 mm)
	1" (S10)	1-5/8 inch (41 mm)
	1-1/2" (S15)	2-3/8 inch (60 mm)
	2" (S20)	3 inch (75 mm)
Shipping Weight:	**1/2" (S05)**	2.3 lbs./1.1 kg - Turbine Only: 2.1 lbs./.95 kg
	3/4" (S07)	2.5 lbs./1.1 kg - Turbine Only: 2.3 lbs./1.0 kg
	1" (S10)	3.0 lbs./1.3 kg - Turbine Only: 2.8 lbs./1.2 kg
	1-1/2" (S15)	4.6 lbs./2.0 kg - Turbine Only: 4.4 lbs./2.0 kg
	2" (S20)	6.8 lbs./3.0 kg - Turbine Only: 6.6 lbs./3.0 kg

ELECTRONIC CHOICES

Local Display, Remote Display & Remote Transmitter Options:	See Electronics Section.

APPROVALS

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G2 INDUSTRIAL METERS **HIGH PRESSURE**

HIGH PRESSURE – SPECIFICATIONS

Fitting Type:		NPT or ISO (Female)	
Housing Material:		316 Stainless Steel	
Meter Sizes Available:		1/2" 3/4" 1" 1-1/2" 2"	
Flow Range:	**1/2" (H05)**	1 - 10 GPM	(3.8 - 37.9 LPM)
	3/4" (H07)	2 - 20 GPM	(7.6 - 75.7 LPM)
	1" (H10)	5 - 50 GPM	(18.9 - 190 LPM)
	1-1/2" (H15)	10 - 100 GPM	(38.0 - 380 LPM)
	2" (H20)	20 - 200 GPM	(76 - 760 LPM)
Accuracy (% of Reading):		**Turbine Only**	**Turbine w/Computer**
	1/2" (H05)	± 2.0%	± 1.5%
	3/4" (H07)	± 1.5%	± 1.0%
	1" (H10)	± 1.5%	± 1.0%
	1-1/2" (H15)	± 1.0%	± 0.75%
	2" (H20)	± 1.0%	± 0.75%
Repeatability:		± 0.1%	
Pressure Rating:		3,000 PSI / 207 BAR	
Operating Temperature Range:		-40° F to +250° F (-40° C to +121° C)	
with Computer:		0° F to +140° F (-18° C to +60° C)	
Typical K-Factor:	**1/2" (H05)**	2,500	
	3/4" (H07)	1,100	
	1" (H10)	565	
	1-1/2" (H15)	215	
	2" (H20)	100	
Wetted Materials:	**Housing:**	316 Stainless Steel	
	Bearings:	Ceramic	
	Shaft:	Tungsten Carbide	
	Rotor:	PVDF	
	Rings:	316 Stainless Steel	
Frequency Range:	**1/2" (H05)**	42 - 420 Hz @ 1 - 10 GPM	
	3/4" (H07)	37 - 370 Hz @ 2 - 20 GPM	
	1" (H10)	47 - 470 Hz @ 5 - 50 GPM	
	1-1/2" (H15)	36 - 360 Hz @ 10 - 100 GPM	
	2" (H20)	33 - 330 Hz @ 20 - 200 GPM	
Recommended Strainer Size:			
	1/2" (H05)	55 mesh	
	3/4" (H07)	55 mesh	
	1" (H10)	55 mesh	
	1-1/2" (H15)	28 mesh	
	2" (H20)	28 mesh	
Maximum Flow:	**1/2" (H05)**	15 GPM (56.8 LPM)	
	3/4" (H07)	30 GPM (113.6 LPM)	
	1" (H10)	75 GPM (284 LPM)	
	1-1/2" (H15)	150 GPM (568 LPM)	
	2" (H20)	300 GPM (1,136 LPM)	
Wrench Flat Size:	**1/2" (H05)**	1-1/16 inch (27 mm)	
	3/4" (H07)	1-5/16 inch (33 mm)	
	1" (H10)	1-5/8 inch (41 mm)	
	1-1/2" (H15)	2-3/8 inch (60 mm)	
	2" (H20)	3 inch (75 mm)	
Shipping Weight:	**1/2" (H05)**	2.3 lbs./1.0 kg - Turbine Only: 2.1 lbs./1.0 kg	
	3/4" (H07)	2.4 lbs./1.1 kg - Turbine Only: 2.2 lbs./1.0 kg	
	1" (H10)	3.0 lbs./1.3 kg - Turbine Only: 2.8 lbs./1.2 kg	
	1-1/2" (H15)	4.6 lbs./2.1 kg - Turbine Only: 4.4 lbs./2.0 kg	
	2" (H20)	6.8 lbs./3.0 kg - Turbine Only: 6.6 lbs./3.0 kg	

ELECTRONIC CHOICES

Local Display, Remote Display & Remote Transmitter Options:	See Electronics Section.

APPROVALS

CE

®

"Look for the blue label!"

This is the turbine meter of choice for high pressure applications like spray washers and hydraulic systems. PSIG for the GPI High Pressure Meter is 3,000 compared to 1,500 for the standard stainless steel meter. This proven meter can perform in all kinds of high pressure applications.

For complete part number, see "Number Reference" chart on page 15.

Select Your Meter Size:

1/2 inch 3/4 inch 1 inch 1-1/2 inch 2 inch

Features and Benefits:

- ✓ High pressure and high accuracy.
- ✓ Excellent chemical compatibility.
- ✓ 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. Allows user calibration. Includes non-volatile totals.
- ✓ Internal parts are simple to replace for easy maintenance.
- ✓ Lithium battery life: 5 years.

G2 INDUSTRIAL METERS **ANSI FLANGE**

"Look for the blue label!"

Select stainless steel meters with 150# ANSI Flanges when you need a meter that installs in-line quickly. Flange Meters are easily installed and removed with four bolts. Combine with GPI's Computer Electronics for a complete, accurate, metering system.

For complete part number, see "Number Reference" chart on page 15.

ANSI FLANGE – SPECIFICATIONS

Fitting Type:		150# ANSI Flange	
Housing Material:		316 Stainless Steel	
Meter Sizes Available:		1" 1-1/2" 2"	
Flow Range:	**1" (S10F)**	5 - 50 GPM	(18.9 - 190 LPM)
	1-1/2" (S15F)	10 - 100 GPM	(38.0 - 380 LPM)
	2" (S20F)	20 - 200 GPM	(76 - 760 LPM)
Accuracy (% of Reading):		**Turbine Only**	**Turbine w/Computer**
	1" (S10F)	± 1.5%	± 1.0%
	1-1/2" (S15F)	± 1.0%	± 0.75%
	2" (S20F)	± 1.0%	± 0.75%
Repeatability:		± 0.1%	
Pressure Rating:		Flange Rule	
Operating Temperature Range:		-40° F to +250° F (-40° C to +121° C)	
with Computer:		0° F to +140° F (-18° C to +60° C)	
Typical K-Factor:	**1" (S10F)**	565	
	1-1/2" (S15F)	215	
	2" (S20F)	100	
Wetted Materials:	**Housing:**	316 Stainless Steel	
	Bearings:	Ceramic	
	Shaft:	Tungsten Carbide	
	Rotor:	PVDF	
	Rings:	316 Stainless Steel	
Frequency Range:	**1" (S10F)**	47 - 470 Hz @ 5 - 50 GPM	
	1-1/2" (S15F)	36 - 360 Hz @ 10 - 100 GPM	
	2" (S20F)	33 - 330 Hz @ 20 - 200 GPM	
Recommended Strainer Size:			
	1" (S10F)	55 mesh	
	1-1/2" (S15F)	28 mesh	
	2" (S20F)	28 mesh	
Maximum Flow:	**1" (S10F)**	75 GPM (284 LPM)	
	1-1/2" (S15F)	150 GPM (568 LPM)	
	2" (S20F)	300 GPM (1,136 LPM)	
Shipping Weight:	**1" (S10F)**	7.2 lbs./3.3 kg - Turbine Only: 7.0 lbs./3.2 kg	
	1-1/2" (S15F)	11.3 lbs./5.1 kg - Turbine Only: 11.1 lbs./5.0 kg	
	2" (S20F)	18.6 lbs./8.4 kg - Turbine Only: 18.4 lbs./8.3 kg	

ELECTRONIC CHOICES

Local Display, Remote Display & Remote Transmitter Options:	See Electronics Section.

APPROVALS

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Select Your Meter Size:

1 inch 1-1/2 inch 2 inch

Features and Benefits:

- ✓ Stainless steel meters have excellent chemical compatibility.
- ✓ 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. Allows user calibration. Includes non-volatile totals.
- ✓ Precision accuracy meter.
- ✓ Internal parts are simple to replace for easy maintenance.
- ✓ Lithium battery life: 5 years.
- ✓ Accessories easily upgrade meter.

TRI-CLOVER® – SPECIFICATIONS

Fitting Type:		Tri-Clover®				
Housing Material:		316 Stainless Steel				
Meter Sizes Available:		1/2"	3/4"	1"	1-1/2"	2"
Tri-Clover® Fittings Available:		3/4"	1"	1-1/2"	2"	2-1/2"
Flow Range:	**1/2" (S05T)**	1 - 10 GPM	(3.8 - 37.9 LPM)			
	3/4" (S07T)	2 - 20 GPM	(7.6 - 75.7 LPM)			
	1" (S10T)	5 - 50 GPM	(18.9 - 190 LPM)			
	1-1/2" (S15T)	10 - 100 GPM	(38.0 - 380 LPM)			
	2" (S20T)	20 - 200 GPM	(76 - 760 LPM)			
Accuracy (% of Reading):		**Turbine Only**	**Turbine w/Computer**			
	1/2" (S05T)	± 2.0%	± 1.5%			
	3/4" (S07T)	± 1.5%	± 1.0%			
	1" (S10T)	± 1.5%	± 1.0%			
	1-1/2" (S15T)	± 1.0%	± 0.75%			
	2" (S20T)	± 1.0%	± 0.75%			
Repeatability:		± 0.1%				
Pressure Rating:		Limited by fitting size, clamp size & temp.				
Operating Temperature Range:		-40° F to +250° F (-40° C to +121° C)				
with Computer:		0° F to +140° F (-18° C to +60° C)				
Typical K-Factor:	**1/2" (S05T)**	2,500				
	3/4" (S07T)	1,100				
	1" (S10T)	565				
	1-1/2" (S15T)	215				
	2" (S20T)	100				
Wetted Materials:	**Housing:**	316 Stainless Steel				
	Bearings:	Ceramic				
	Shaft:	Tungsten Carbide				
	Rotor:	PVDF				
	Rings:	316 Stainless Steel				
Frequency Range:	**1/2" (S05T)**	42 - 420 Hz @ 1 - 10 GPM				
	3/4" (S07)	37 - 370 Hz @ 2 - 20 GPM				
	1" (S10T)	47 - 470 Hz @ 5 - 50 GPM				
	1-1/2" (S15T)	36 - 360 Hz @ 10 - 100 GPM				
	2" (S20T)	33 - 330 Hz @ 20 - 200 GPM				
Recommended Strainer Size:						
	1/2" (S05T)	55 mesh				
	3/4" (S07T)	55 mesh				
	1" (S10T)	55 mesh				
	1-1/2" (S15T)	28 mesh				
	2" (S20T)	28 mesh				
Maximum Flow:	**1/2" (S05T)**	15 GPM (56.8 LPM)				
	3/4" (S07T)	30 GPM (113.6 LPM)				
	1" (S10T)	75 GPM (284 LPM)				
	1-1/2" (S15T)	150 GPM (568 LPM)				
	2" (S20T)	300 GPM (1,136 LPM)				
Shipping Weight:	**1/2" (S05T)**	2.5 lbs./1.0 kg - Turbine Only: 2.3 lbs./1.0 kg				
	3/4" (S07T)	2.9 lbs./1.3 kg - Turbine Only: 2.7 lbs./1.2 kg				
	1" (S10T)	3.2 lbs./1.4 kg - Turbine Only: 3.0 lbs./1.3 kg				
	1-1/2" (S15T)	4.7 lbs./2.1 kg - Turbine Only: 4.5 lbs./2.0 kg				
	2" (S20T)	6.5 lbs./2.9 kg - Turbine Only: 6.3 lbs./2.8 kg				

ELECTRONIC CHOICES

Local Display, Remote Display & Remote Transmitter Options:	See Electronics Section.

APPROVALS

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"Look for the blue label!"

The GPI Stainless Steel Meters with Tri-Clover® fittings can be used with food and beverage industries in preprocess applications. Built of stainless steel construction, these meters come in five sizes to fit most every application.

For complete part number, see "Number Reference" chart on page 15.

Select Your Meter Size:

1/2 inch Meter with 3/4 inch Fitting
3/4 inch Meter with 1 inch Fitting
1 inch Meter with 1-1/2 inch Fitting
1-1/2 inch Meter with 2 inch Fitting
2 inch Meter with 2-1/2 inch Fitting

Features and Benefits:

- ✓ Stainless steel meter with Tri-Clover® fittings.
- ✓ 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. Allows user calibration. Includes non-volatile totals.
- ✓ Internal parts are easy to replace.
- ✓ Lithium battery life: 5 years.
- ✓ Accessories easily upgrade meter.

G2 INDUSTRIAL METERS **ALUMINUM**

"Look for the blue label!"

GPI offers a full line of Industrial Meters in a variety of housing materials. Aluminum meters are best suited for petroleum based products. The modular design allows for maximum flexibility in meeting custom applications. Models are available with ISO or NPT fittings.

For complete part number, see "Number Reference" chart on page 15.

Select Your Meter Size:

1/2 inch 3/4 inch 1 inch 1-1/2 inch 2 inch

Features and Benefits:

- ✓ High pressure, durable and compact turbine flowmeters.
- ✓ 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. Allows user calibration. Includes non-volatile totals.
- ✓ Internal parts are simple to replace for easy maintenance.
- ✓ Lightweight, compact design allows for easy installation.
- ✓ Lithium battery life: 5 years.

ALUMINUM – SPECIFICATIONS

Fitting Type:		NPT or ISO (Female)	
Housing Material:		Aluminum	
Meter Sizes Available:		1/2" 3/4" 1" 1-1/2" 2"	
Flow Range:	**1/2" (A05)**	1 - 10 GPM	(3.8 - 37.9 LPM)
	3/4" (A07)	2 - 20 GPM	(7.6 - 75.7 LPM)
	1" (A10)	5 - 50 GPM	(18.9 - 190 LPM)
	1-1/2" (A15)	10 - 100 GPM	(38.0 - 380 LPM)
	2" (A20)	20 - 200 GPM	(76 - 760 LPM)
Accuracy (% of Reading):		**Turbine Only**	**Turbine w/Computer**
	1/2" (A05)	± 2.0%	± 1.5%
	3/4" (A07)	± 1.5%	± 1.0%
	1" (A10)	± 1.5%	± 1.0%
	1-1/2" (A15)	± 1.0%	± 0.75%
	2" (A20)	± 1.0%	± 0.75%
Repeatability:		± 0.1%	
Pressure Rating:		300 PSI / 21 BAR	
Operating Temperature Range:		-40° F to +250° F (-40° C to +121° C)	
with Computer:		0° F to +140° F (-18° C to +60° C)	
Typical K-Factor:	**1/2" (A05)**	2,500	
	3/4" (A07)	1,100	
	1" (A10)	565	
	1-1/2" (A15)	215	
	2" (A20)	100	
Wetted Materials:	**Housing:**	Aluminum	
	Bearings:	Ceramic	
	Shaft:	Tungsten Carbide	
	Rotor:	PVDF	
	Rings:	316 Stainless Steel	
Frequency Range:	**1/2" (A05)**	42 - 420 Hz @ 1 - 10 GPM	
	3/4" (A07)	37 - 370 Hz @ 2 - 20 GPM	
	1" (A10)	47 - 470 Hz @ 5 - 50 GPM	
	1-1/2" (A15)	36 - 360 Hz @ 10 - 100 GPM	
	2" (A20)	33 - 330 Hz @ 20 - 200 GPM	
Recommended Strainer Size:			
	1/2" (A05)	55 mesh	
	3/4" (A07)	55 mesh	
	1" (A10)	55 mesh	
	1-1/2" (A15)	28 mesh	
	2" (A20)	28 mesh	
Maximum Flow:	**1/2" (A05)**	15 GPM (56.8 LPM)	
	3/4" (A07)	30 GPM (113.6 LPM)	
	1" (A10)	75 GPM (284 LPM)	
	1-1/2" (A15)	150 GPM (568 LPM)	
	2" (A20)	300 GPM (1,136 LPM)	
Wrench Flat Size:	**1/2" (A05)**	1-1/16 inch (27 mm)	
	3/4" (A07)	1-5/16 inch (33 mm)	
	1" (A10)	1-5/8 inch (41 mm)	
	1-1/2" (A15)	2-3/8 inch (60 mm)	
	2" (A20)	3 inch (75 mm)	
Shipping Weight:	**1/2" (A05)**	1.3 lbs./.59 kg - Turbine Only: 1.1 lbs./.50 kg	
	3/4" (A07)	1.4 lbs./.63 kg - Turbine Only: 1.2 lbs./.50 kg	
	1" (A10)	1.6 lbs./.73 kg - Turbine Only: 1.4 lbs./.63 kg	
	1-1/2" (A15)	2.8 lbs./1.3 kg - Turbine Only: 2.6 lbs./1.2 kg	
	2" (A20)	3.9 lbs./1.7 kg - Turbine Only: 3.7 lbs./1.7 kg	

ELECTRONIC CHOICES

Local Display, Remote Display & Remote Transmitter Options:	See Electronics Section.

APPROVALS

FM APPROVED c UL us CE Ex NEMA 4 ATEX **IP44**

BRASS – SPECIFICATIONS

Fitting Type:		NPT or ISO (Female)
Housing Material:		Brass
Meter Sizes Available:		1/2" 3/4" 1" 1-1/2" 2"
Flow Range:	**1/2" (B05)**	1 - 10 GPM (3.8 - 37.9 LPM)
	3/4" (B07)	2 - 20 GPM (7.6 - 75.7 LPM)
	1" (B10)	5 - 50 GPM (18.9 - 190 LPM)
	1-1/2" (B15)	10 - 100 GPM (38.0 - 380 LPM)
	2" (B20)	20 - 200 GPM (76 - 760 LPM)
Accuracy (% of Reading):		**Turbine Only** / **Turbine w/Computer**
	1/2" (B05)	± 2.0% / ± 1.5%
	3/4" (B07)	± 1.5% / ± 1.0%
	1" (B10)	± 1.5% / ± 1.0%
	1-1/2" (B15)	± 1.0% / ± 0.75%
	2" (B20)	± 1.0% / ± 0.75%
Repeatability:		± 0.1%
Pressure Rating:		300 PSI / 21 BAR
Operating Temperature Range:		-40° F to +250° F (-40° C to +121° C)
with Computer:		0° F to +140° F (-18° C to +60° C)
Typical K-Factor:	**1/2" (B05)**	2,500
	3/4" (B07)	1,100
	1" (B10)	565
	1-1/2" (B15)	215
	2" (B20)	100
Wetted Materials:	**Housing:**	Brass
	Bearings:	Ceramic
	Shaft:	Tungsten Carbide
	Rotor:	PVDF
	Rings:	316 Stainless Steel
Frequency Range:	**1/2" (B05)**	42 - 420 Hz @ 1 - 10 GPM
	3/4" (B07)	37 - 370 Hz @ 2 - 20 GPM
	1" (B10)	47 - 470 Hz @ 5 - 50 GPM
	1-1/2" (B15)	36 - 360 Hz @ 10 - 100 GPM
	2" (B20)	33 - 330 Hz @ 20 - 200 GPM
Recommended Strainer Size:		
	1/2" (B05)	55 mesh
	3/4" (B07)	55 mesh
	1" (B10)	55 mesh
	1-1/2" (B15)	28 mesh
	2" (B20)	28 mesh
Maximum Flow:	**1/2" (B05)**	15 GPM (56.8 LPM)
	3/4" (B07)	30 GPM (113.6 LPM)
	1" (B10)	75 GPM (284 LPM)
	1-1/2" (B15)	150 GPM (568 LPM)
	2" (B20)	300 GPM (1,136 LPM)
Wrench Flat Size:	**1/2" (B05)**	1-1/16 inch (27 mm)
	3/4" (B07)	1-5/16 inch (33 mm)
	1" (B10)	1-5/8 inch (41 mm)
	1-1/2" (B15)	2-3/8 inch (60 mm)
	2" (B20)	3 inch (75 mm)
Shipping Weight:	**1/2" (B05)**	2.4 lbs./1.0 kg - Turbine Only: 2.2 lbs./1.0 kg
	3/4" (B07)	2.6 lbs./1.1 kg - Turbine Only: 2.4 lbs./1.0 kg
	1" (B10)	3.1 lbs./1.4 kg - Turbine Only: 2.9 lbs./1.3 kg
	1-1/2" (B15)	3.1 lbs./1.4 kg - Turbine Only: 2.9 lbs./1.3 kg
	2" (B20)	10.0 lbs./4.5 kg - Turbine Only: 9.8 lbs./4.4 kg

ELECTRONIC CHOICES

Local Display, Remote Display & Remote Transmitter Options:	See Electronics Section.

APPROVALS

FM APPROVED · c UL us · CE · Ex · NEMA 4 · ATEX · **IP44**

"Look for the blue label!"

The G2 Industrial Brass Meter allows another choice for fluid compatibility. The GPI Brass Meter works well with most water applications. Use with glucose, lacquer thinners and vegetable juices for example.

For complete part number, see "Number Reference" chart on page 15.

Select Your Meter Size:

1/2 inch 3/4 inch 1 inch 1-1/2 inch 2 inch

Features and Benefits:

- ✓ High pressure and durable turbine flowmeters.
- ✓ 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. Allows user calibration. Includes non-volatile totals.
- ✓ Internal parts are simple to replace for easy maintenance.
- ✓ Lithium battery life: 5 years.

G2 INDUSTRIAL METERS **PVDF**

"Look for the blue label!"

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 "Number Reference" chart on page 15.

PVDF – SPECIFICATIONS

Fitting Type:		NPT or ISO (Female)	
Housing Material:		PVDF	
Meter Sizes Available:		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 Reading):		**Turbine Only**	**Turbine w/Computer**
	1/2" (P05)	± 2.0%	± 1.5%
	1" (P10)	± 1.5%	± 1.0%
Repeatability:		± 0.3%	
Pressure Rating:		150 PSI / 10.2 BAR	
Operating Temperature Range:		-20° F to +180° F (-28° C to +82° C)	
with Computer:		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	
	1" (P10)	540	
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:	**1/2" (P05)**	48 - 480 Hz @ 1.2 - 12 GPM	
	1" (P10)	45 - 450 Hz @ 5 - 50 GPM	
Recommended Strainer Size:			
	1/2" (P05)	55 mesh	
	1" (P10)	28 mesh	
Maximum Flow:	**1/2" (P05)**	15 GPM (56.8 LPM)	
	1" (P10)	75 GPM (284 LPM)	
Shipping Weight:	**1/2" (P05)**	1.3 lbs./0.6 kg - Turbine Only: 1.1 lbs./.54 kg	
	1" (P10)	1.9 lbs./0.8 kg - Turbine Only: 1.7 lbs./.77 kg	

ELECTRONIC CHOICES

Local Display, Remote Display & Remote Transmitter Options:	See Electronics Section.

APPROVALS

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Select Your Meter Size:

1/2 inch 1 inch

Features and Benefits:

- ✓ Precision accuracy in a lightweight and durable meter.
- ✓ 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.

FM Approved Remote Kit Assembly
(Part No. 113275-1)

Features and Benefits:

- ✓ Maintains FM Approval.
- ✓ Accommodates fluid temperatures from -40° F to +250° F (-40° C to +121° C) depending on meter.
- ✓ This kit can upgrade an existing GPI meter or can be purchased with a new meter.
- ✓ Battery powered from meter; no additional power required.

FM Approved Remote Kit Assembly Installed

SPECIFICATIONS	
Magnetic Pickup:	1.3 k Ohm, 90 mH
Signal Type:	Sine Wave
Voltage:	Peak to Peak 10 mV to 500 mV
Frequency:	11 to 750 Hz
Cable:	10 ft. (3 m), 2-conductor shielded, Belden #9501

APPROVALS

FM APPROVED CE

The Factory Mutual (FM) Approved Remote Kit Assembly modifies GPI Electronic Digital Meters for applications in specialized situations including remote indication and high or low fluid temperature metering applications. This kit provides the versatility of panel mounting of the LCD readout up to 100 ft. from the turbine.

This kit consists of a sensor module, a dust cover assembly and 10 ft. of cable. Requires a complete meter with display.

Standard Remote Kit Assembly
(Part No. 113265-1)

Features and Benefits:

- ✓ Accommodates fluid temperatures from -40° F to +250° F (-40° C to +121° C) depending on meter.
- ✓ This kit can upgrade an existing GPI meter or can be purchased with a new meter.
- ✓ Battery powered from meter; no additional power required.

Standard Remote Kit Assembly Installed

SPECIFICATIONS	
Magnetic Pickup:	1.5 k Ohm, 700 mH
Signal Type:	Sine Wave
Voltage:	Peak to Peak 33 mV to 825 mV
Frequency:	11 to 750 Hz
Cable:	10 ft. (3 m), 2-conductor shielded, Belden #1266A or #8451

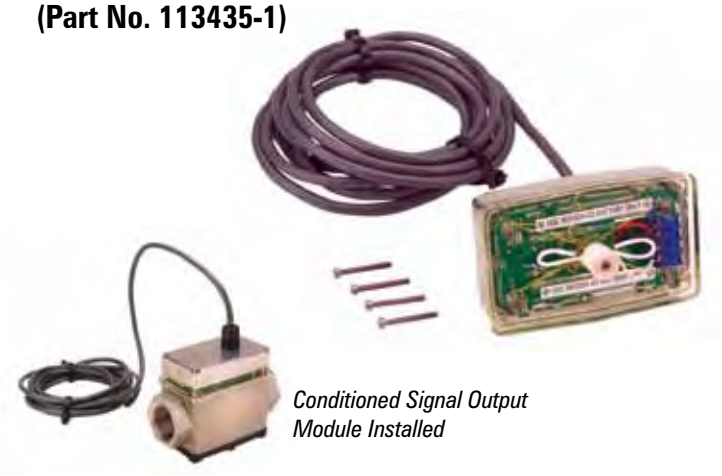
The Standard Remote Kit Assembly modifies GPI Electronic Digital Meters for applications in specialized situations including remote indication and high or low fluid temperature metering applications. This kit also provides the versatility of panel mounting of the LCD readout up to 300 ft. from the turbine housing and sensor.

This kit consists of a sensor module, a dust cover assembly and 10 ft. of cable. Requires a complete meter with display.

G2 INDUSTRIAL **METER MODULES**

Conditioned Signal Output Module

(Part No. 113435-1)



Conditioned Signal Output Module Installed

This module provides an unscaled, amplified, digital signal capable of transmission up to 5,000 ft. There is no need for additional signal conditioning or amplification devices to achieve the desired digital signal. Use on G2 "Turbine Only" model.

The module is factory assembled for Open Collector signal output and operates from an external 9 to 35 volt power source. By changing terminal connections and adding a battery kit, the module provides a self-powered 6-volt Square Wave signal.

Features and Benefits:

- ✓ Provides two digital signals: Open Collector or 6-volt Square Wave and can communicate with most process control devices.
- ✓ Operating temperature range of -40° F to +212° F (-40° C to +100° C).
- ✓ Can be externally powered or battery powered.

SPECIFICATIONS	
Connector:	Hubble PG7
Signal Type:	Open Collector (NPN)
Power:	External 9 to 35 VDC, approximately 1 mA
Connection:	Three wire
Frequency:	0 to 750 Hz
Cable:	10 ft. (3 m) Belden #9363

APPROVALS

CE

FM Approved Sensor Kit

(Part No. 120077-01)

FM Approved Sensor Kit Installed

The Factory Mutual (FM) Approved Sensor is designed for use with any G2 Turbine Meter when rotor pulse data is required and the meter is located within a hazardous location. The output signal is compatible with existing GPI remote electronics. Use on G2 "Turbine Only" model.

This kit includes pickup, screws, coverplate and jam nut. Connection Kit sold separately.

Features and Benefits:

- ✓ Mounts to any G2 meter housing via the coverplate.
- ✓ Ideal for indoor or outdoor applications.
- ✓ Factory Mutual (Intrinsic Safe) Class 1, Div. 1, Groups ABCDEFG.

SPECIFICATIONS	
Signal Type:	Open Collector (NPN)
Power Source:	8 to 30 VDC
Supply Current:	≤ 15 mA
Frequency:	5 to 10k Hz
Cable:	None provided - 3 conductor required for use
Temperature:	Sensor is capable of operating in the range of -40° F to +248° F (-40° C to +120° C). For Class I, II, III, Division 1: Group ABCDEFG and CSA: Class 1, Div. 1 Group ABCD, the following temperature codes apply: T6 +185° F (+85° C) at +149° F (+65°C) Ambient Temperature T5 +212° F (+100° C) at +186° F (+85° C) Ambient Temperature

APPROVALS

FM APPROVED

4-20 mA Module

(Part No. 125100-1)

4-20 mA Module Installed

Combine the 4-20 mA Module with an Industrial Grade Turbine and Computer Electronics to provide an industry standard analog signal for connection to a wide variety of chart recorders, display equipment and process control equipment.

This module outputs an analog signal which is directly proportional to the frequency of the digital output. With some simple adjustments, you can scale the module to represent whatever range is desired. Kit comes with circuit, assembly, enclosure and screws.

Features and Benefits:

- ✓ Communicates with most analog process control devices.
- ✓ Operating temperature range of +14° F to +140° F (-10° C to +60° C).
- ✓ Module installs on all turbine sizes.
- ✓ Provides external power to computer electronics.

SPECIFICATIONS	
Signal Type:	Analog
Power:	Loop Powered
Voltage:	7 to 30 VDC
Strain Relief:	Hubble PG7
Cable:	10 ft. (3 m), Belden #9363

Pulse Access Module

(Part No. 125060-1)

Pulse Access Module Installed

The Pulse Access Module provides an unscaled, digital signal from your GPI meter by accessing circuitry from the on-board computer readout.

This kit comes complete, ready to install, with a circuit assembly, coverplate assembly and 10 ft. of cable.

The Pulse Access Module requires both a GPI Turbine and an 09 Computer Electronics which are sold separately.

Features and Benefits:

- ✓ Provides a digital Open Collector signal.
- ✓ Operating temperature range of +14° F to +140° F (-10° C to +60° C).
- ✓ Can transmit signal up to 5,000 ft.
- ✓ Communicates with most digital process control devices and its easy to install.

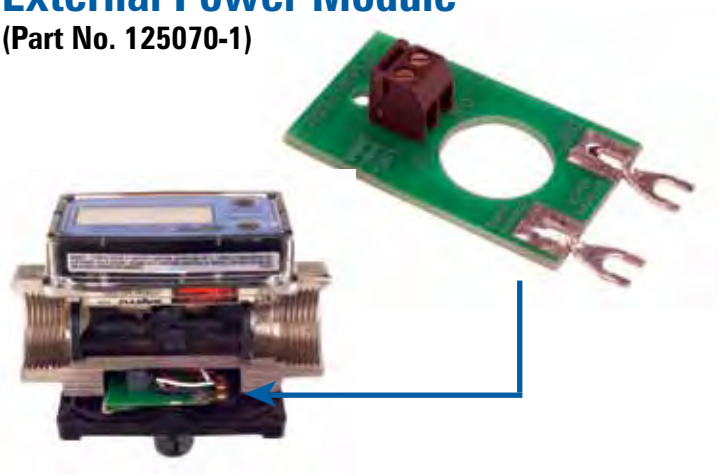
SPECIFICATIONS	
Signal Type:	Open Collector (NPN)
Voltage:	0 to 60 VDC
Frequency:	0 to 750 Hz
Strain Relief:	Hubble PG7
Cable:	10 ft. (3 m) Belden #9363

APPROVALS
CE

G2 INDUSTRIAL **METER MODULES**

External Power Module

(Part No. 125070-1)



Features and Benefits:

- ✓ Internal batteries become a backup or auxiliary power source.
- ✓ Operating temperature range of+14° F to +140° F (-10° C to +60° C).
- ✓ Input power is 7 to 30 volt external power.

SPECIFICATIONS	
Voltage:	7 to 30 VDC @ 1 mA

APPROVALS

CE

Combine the External Power Module and the GPI Pulse Access Module to provide external power capabilities to a GPI Electronic Digital Meter.

The module is designed to provide regulated power to the Computer Electronics. The batteries then become a backup or auxiliary power source.

If desired, a pulse output may be accessed. The unscaled, digital signal is capable of transmission up to 5,000 ft.

Conduit Adapter Kit

(Part No. 113437-01)

The Conduit Adapter allows you to enclose wiring from the magnetic pickup. The kit includes a turbine meter cover with a 1 inch male NPT conduit fitting and screws for plastic or metal installation.

Conduit Adapter Kit Installed

90° Display Adapter Kit

(Part No. 125260-01)

90° Display Adapter Kit allows for horizontal readout of vertical meters. Includes adapter, O-ring, screws and foam spacers required for installation.

Can be ordered with a meter.
Specify -19 option with meter order.

Kit Shown Installed on PVDF Meter

510 Conversion Kit

(Part No. 11344001)

This new kit combines the Conduit Adapter with a magnetic pickup to allow easy installation of the 510 Series Displays or Transmitters to a G2 Meter.

510 Conversion Kit Installed

G2 INDUSTRIAL METER **ACCESSORIES**

Pulse Access Dust Cover
(Part No. 125080-1)

Used with the Remote Kit, this part replaces the dust cover that houses the electronic display. This module provides a digital, open collector (NPN) output signal. Use this combination to communicate to a PLC or other piece of electronic equipment.

Pulse Access Dust Cover Installed

GPI Electronics Programmer
(Part No. 113800-06)

The GPI Electronics Programmer is a system composed of a small USB interface unit, a USB cable, and a software program. This kit is perfect for reconfiguring multiple GPI Electronics for the first time or when changing the configuration over the life of the meter.

Used with your PC, it allows quick, convenient on-screen setting (and reading) of setup options and calibration data from may GPI Electronic Digital Meters (EDMs).

GM SERIES OVAL GEAR METERS

GM Series Oval Gear Meters are designed for low flow and high accuracy. GM Series Meters are great for viscous fluids. Units are available with pulse output from either a Reed Switch or Hall Effect Sensor. Electronics choices for the GM Series Meters are covered in the Electronic Choices Section.

BUILD-YOUR-OWN GM SERIES METER

1) Select Your GM Meter

GM Meters come in a variety of sizes and materials.

Pulse Meter

Mechanical Meter

2) Select Your Sensor

Reed Switch
(Standard)

Hall Effect
Requires Dedicated Power Source

Combo
Reed Switch / Hall Effect
(Available on GM001, GM002 and GM003)

3) Select Your Electronics Choice

For further details and selections see the Electronics Section.

GA
4-20 mA Output Without Display
(Remote)

GG
Display With Pulse Output
(Remote)

GX
Display 4-20 mA Output
(Remote)

Pulse Output

4) Need a Strainer?

Oval Gear Meters work best with clean fluid, free of debris.
GPI carries Y Strainers to fit all models of Oval Gear Meters. These strainers range from 1/4 in. to 2 in. models.
All sizes are 316 Stainless Steel and come complete with blow-off and plug. See page 79 for strainer specifications.

GM SERIES METER NUMBER REFERENCE

Product Identifier

- **GM001** = Pulse Meter - 1/8 inch
- **GM002** = Pulse Meter - 1/4 inch
- **GM003** = Pulse Meter - 1/4 inch
- **GM005** = Pulse Meter - 1/2 inch
- **GM505** = Mechanical Meter - 1/2 inch
- **GM006** = Pulse Meter - 3/4 inch
- **GM007** = Pulse Meter - 1 inch
- **GM010** = Pulse Meter - 1 inch
- **GM510** = Mechanical Meter - 1 inch
- **GM015** = Pulse Meter - 1-1/2 inch
- **GM515** = Mechanical Meter - 1-1/2 inch
- **GM020** = Pulse Meter - 2 inch
- **GM520** = Mechanical Meter - 2 inch

Body Material

- **A** = Aluminum (All models except GM007)
- **C** = PPS w/Hastalloy C Shafts (Model GM007 only)
- **I** = Intermediate Pressure Stainless Steel (Models GM001, GM002 & GM003)
- **R** = PPS (Models GM002, GM003 & GM007)
- **S** = Stainless Steel (All models except GM006 & GM007)

GM Series dimensions listed on page 76.

Fitting Type

- **1** = BSP (Female) Litre
- **2** = NPT (Female) Gallon
- **3** = NPT (Female) Litre (Models GM505, GM510, GM515 & GM520)
- **4** = 150# ANSI Flange Gallon (Models GM010, GM015, GM020, GM510, GM515, GM520 Aluminum & S.S. only)
- **5** = 150# ANSI Flange Litre (Models GM510, GM515, GM520 Aluminum & S.S. only)
- **6** = Tri-Clover® Fitting Gallon (Models GM010, GM015 S.S. only)

Sensor

- **C** = Combination Reed Switch & Hall Effect (Models GM001, GM002 & GM003)
- **H** = Hall Effect (Models GM005, GM006, GM007, GM010, GM015 & GM020)
- **M** = Mechanical Display (Models GM505, GM510, GM515 & GM520 only)
- **R** = Reed Switch (Models GM005, GM006, GM007, GM010, GM015 & GM020)

Rotor Materials

- **2** = PPS (Models GM002*, GM003*, GM005, GM006, GM007*, GM010, GM015, GM020, GM505, GM510, GM515 & GM520)
- **3** = High Viscosity PPS (Models GM005, GM010, GM015, GM020, GM505, GM510, GM515 & GM520)
- **4** = Stainless Steel (Models GM001, GM002, GM003, GM005, GM010, GM015, GM020, GM510, GM515 & GM520)
- **5** = High Viscosity S.S. (Models GM003, GM005, GM010, GM015, GM020, GM510, GM515 & GM520)

O-Ring

- **1** = Fluorocarbon
- **2** = Perfluoroelastomer (GM001, GM002 & GM003); PTFE on (GM005 and larger)

Electronics Choice

- **1** = Pulse Out - Aluminum (Models GM001, GM002, GM003, GM005, GM010, GM015 & GM020)
- **2** = Pulse Out - S.S. (Models GM001, GM002, GM003, GM005, GM010, GM015 & GM020)
- **3** = Pulse Out - Bronze (Models GM010 & GM015)
- **4** = Pulse Out - PPS (Models GM002, GM003 & GM007)
- **5** = GG500 - Standard Display (Models GM001, GM002, GM003, GM005, GM006, GM007, GM010, GM015 & GM020)
- **6** = GX500 - 4-20 mA Transmitter with Display (Models GM001, GM002, GM003, GM005, GM006, GM007, GM010, GM015 & GM020)
- **7** = GA500 - 4-20 mA Transmitter (Models GM001, GM002, GM003, GM005, GM006, GM007, GM010, GM015 & GM020)
- **9** = Mechanical (Models GM505, GM510, GM515 & GM520)

GM001 + A + 2 + R + 4 + 1 + 1 ← (Sample Model Number)

* Requires PPS body material.

GM001 - 1/8" OVAL GEAR PULSE METER

Shown here with Local Display

The GM001 is one of three compact meters in the GM Series Meter line. This meter is small and accurate. Choose from either Aluminum or 316 Stainless Steel body materials, both with stainless steel rotors. The GM001 can handle a wide range of fluid viscosities.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±1.0% OF READING

Select Your Body Material:

Aluminum
Stainless Steel
Intermediate Pressure Stainless Steel

Features and Benefits:

- ✓ Up to 1,000 cps viscosity.
- ✓ Compact, durable and serviceable on-site. Extremely accurate even with viscous fluids.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Handles particle sizes to 0.005"/0.127 mm.
- ✓ Comes with combination board (includes Reed Switch/ Hall Effect Sensor*).
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM001 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch / Hall Effect Sensor* Combo
Rotor Material:	316 Stainless Steel
O-Ring:	Fluorocarbon (Std.), Perfluoroelastomer (Optional)
Output Options:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display Local Display with 4-20 mA Output
Flow Range:	0.13 - 13.2 GPH (0.5 - 50 LPH)
Flow Range @ < 5 cps:	0.53 - 13.2 GPH (2 - 50 LPH)
Accuracy:	± 1.0% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	1,000 cps
Pressure Rating:	
Aluminum:	75 PSI / 5 BAR
Stainless Steel:	150 PSI / 10 BAR
Intermed. Pressure SS:	800 PSI / 55 BAR
Maximum Temperature:	
Aluminum:	176° F / 80° C
Stainless Steel:	248° F / 120° C
Intermed. Pressure SS:	248° F / 120° C
Typical K-Factor:	5855.4 PPG / 1547 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum with PPS Cap
Stainless Steel:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Wetted Mat'l. - Rotor:	316 Stainless Steel
Wetted Mat'l. - Bearings:	Sapphire
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	0.2 - 21.5 Hz @ 0.13 - 13.2 GPH
Recommended Strainer Size:	200 mesh
Shipping Weight (approx.):	
Aluminum:	1.0 lbs. (0.45 kg)
Stainless Steel:	2.0 lbs. (0.91 kg)
Intermed. Pressure SS:	2.0 lbs. (0.91 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

GM002 - 1/4" OVAL GEAR PULSE METER

GM002 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch / Hall Effect Sensor* Combo
Rotor Material:	PPS or 316 Stainless Steel
O-Ring:	Fluorocarbon (Std.), Perfluoroelastomer (Optional)
Output Options:	
Aluminum:	Pulse Out or Local 4-20 mA Transmitter
PPS:	Pulse Out or Local 4-20 mA Transmitter
Stainless Steel:	Pulse Out or Local 4-20 mA Transmitter
High Pressure SS:	Pulse Out
Intermed. Pressure SS:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display
	Local Display with 4-20 mA Output
Flow Range:	0.53 - 26.4 GPH (2 - 100 LPH)
Flow Range @ < 5 cps:	1.32 - 26.4 GPH (5 - 100 LPH)
Accuracy:	± 1.0% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	1,000 cps
Pressure Rating:	
Aluminum:	75 PSI / 5 BAR
PPS:	75 PSI / 5 BAR
Stainless Steel:	150 PSI / 10 BAR
Intermed. Pressure SS:	800 PSI / 55 BAR
Maximum Temperature:	
Aluminum:	176° F / 80° C
PPS:	176° F / 80° C
Stainless Steel:	248° F / 120° C
Intermed. Pressure SS:	248° F / 120° C
Typical K-Factor:	3785.4 PPG / 1000 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum with PPS Cap
PPS:	PPS
Stainless Steel:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
PPS:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Intermed. Pressure SS:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	Bronze
PPS Rotor:	PPS
Stainless Steel:	Ceramic
Intermed. Pressure SS:	Ceramic
Wetted Mat'l. - Shaft:	
Aluminum:	316 Stainless Steel
PPS:	Hastalloy C / Stainless Steel
Stainless Steel:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Frequency Range:	0.6 - 27.8 Hz @ 0.53 - 26.4 GPH
Recommended Strainer Size:	200 mesh
Shipping Weight (approx.):	Aluminum/PPS = 1 lb. (0.45 kg),
	SS/Intermediate Pressure SS = 2 lbs. (0.91 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

The GM002 is one of the small capacity meters in the GM Series line and is differentiated by its flowrate capabilities. It has the ability to handle a wide range of fluid viscosities with exceptional levels of repeatability and durability.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±1.0% OF READING

Select Your Body Material:

Aluminum
PPS
Stainless Steel
High Pressure Stainless Steel
Intermediate Pressure Stainless Steel

Features and Benefits:

- ✓ Up to 1,000 cps viscosity.
- ✓ Compact size and extremely accurate even with viscous fluids.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Handles particle sizes to 0.005"/0.127 mm.
- ✓ Comes with combination board (includes Reed Switch/ Hall Effect Sensor*).
- ✓ Durable and serviceable on-site.
- ✓ Certificate of Accuracy supplied with meter.

GM003 - 1/4" OVAL GEAR PULSE METER

The GM003 is another of the GPI compact Pulse Meters. This 1/4-inch Pulse Meter has an increased flow range and offers the same ability to handle a wide range of fluid viscosities with exceptional levels of repeatability.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±1.0% OF READING

Select Your Body Material:

Aluminum
PPS
Stainless Steel
High Pressure Stainless Steel
Intermediate Pressure Stainless Steel

Features and Benefits:

- ✓ Up to 1,000 cps viscosity with standard rotor; 1,000,000 cps with high viscosity rotor.
- ✓ Compact size and extremely accurate even with viscous fluids.
- ✓ High viscosity stainless steel rotor available.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Handles particle sizes to 0.005"/0.127 mm.
- ✓ Comes with combination board (includes Reed Switch/ Hall Effect Sensor*).
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM003 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch / Hall Effect Sensor* Combo
Rotor Materials:	PPS, 316 Stainless Steel or High Viscosity SS
O-Ring:	Fluorocarbon (Std.), Perfluoroelastomer (Optional)
Output Options:	
Aluminum:	Pulse Out or Local 4-20 mA Transmitter
PPS:	Pulse Out or Local 4-20 mA Transmitter
Stainless Steel:	Pulse Out or Local 4-20 mA Transmitter
High Pressure SS:	Pulse Out
Intermed. Pressure SS:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display or Local Display w/4-20 mA Output
Flow Range:	4 - 132 GPH (15 - 500 LPH)
Flow Range @ < 5 cps:	6.60 - 132 GPH (25 - 500 LPH)
Accuracy:	± 1.0% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	
Aluminum:	75 PSI / 5 BAR
PPS:	75 PSI / 5 BAR
Stainless Steel:	150 PSI / 10 BAR
Intermed. Pressure SS:	800 PSI / 55 BAR
Maximum Temperature:	
Aluminum:	176° F / 80° C
PPS:	176° F / 80° C
Stainless Steel:	248° F / 120° C
Intermed. Pressure SS:	248° F / 120° C
Typical K-Factor:	1514.2 PPG / 400 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum with PPS Cap
PPS:	PPS
Stainless Steel:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
PPS:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Intermed. Pressure SS:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	Bronze
PPS Rotor:	N/A
Stainless Steel:	Ceramic
Intermed. Pressure SS:	Ceramic
Wetted Mat'l. - Shaft:	
Aluminum:	316 Stainless Steel
PPS:	Hastalloy C / Stainless Steel
Stainless Steel:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Frequency Range:	1.7 - 55.5 Hz @ 4 - 132 GPH
Recommended Strainer Size:	200 mesh
Shipping Weight (approx.):	Aluminum/PPS = 1 lb. (0.45 kg),
	SS/Intermediate Pressure SS = 2 lbs. (0.91 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

GM005 - 1/2" OVAL GEAR PULSE METER

GM005 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Materials:	PPS or High Viscosity PPS
	316 Stainless Steel or
	High Viscosity Stainless Steel
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display
	Local Display with 4-20 mA Output
Flow Range:	0.53 - 7.93 GPM (2 - 30 LPM)
Flow Range @ < 5 cps:	0.80 - 6.6 GPM (3 - 25 LPM)
Accuracy:	± 0.5% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	800 PSI / 55 BAR
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
SS Rotors:	248° F / 120° C
Typical K-Factor:	
Single Pickup:	424 PPG / 112 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	PPS
Stainless Steel:	Carbon
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	1.8 - 55.8 Hz @ 0.26 - 7.9 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	3.25 lbs. (1.5 kg)
Stainless Steel:	6.0 lbs. (2.7 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

The GM005 Meter is a low to medium flow range model. The construction of this meter allows for fast and easy servicing while installed.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±0.5% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ High viscosity PPS and Stainless Steel rotors available.
- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with Reed Switch as standard, Hall Effect Sensor* optional.
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM505 - 1/2" OVAL GEAR MECHANICAL METER

The GM505 is the 1/2 inch Mechanical Meter in the GM Series. Use this meter with low to medium flow ranges. The GM505 is available in three fitting/calibration combinations (NPT Gallon, NPT Litre and BSP Litre).

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±1.0% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ Cumulative and Resettable Totals.
- ✓ High viscosity PPS rotors available.
- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with easy-to-read Mechanical Display.
- ✓ Certificate of Accuracy supplied with meter.

GM505 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female)
Sensor Options:	Mechanical Display
Rotor Materials:	PPS or High Viscosity PPS
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	N/A
Display Options:	Mechanical Display
Flow Range:	0.53 - 7.93 GPM (2 - 30 LPM)
Flow Range @ < 5 cps:	0.80 - 6.6 GPM (3 - 25 LPM)
Accuracy:	± 1.0% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	500 PSI / 34.5 BAR
Maximum Temperature:	176° F / 80° C
Typical K-Factor:	N/A
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS
Stainless Steel:	PPS
Wetted Mat'l. - Bearings:	
Aluminum:	PPS
Stainless Steel:	PPS
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	N/A
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	3.75 lbs. (1.7 kg)
Stainless Steel:	6.5 lbs. (2.9 kg)

GM006 - 3/4" OVAL GEAR PULSE METER

GM006 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Materials:	PPS
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display
	Local Display with 4-20 mA Output
Flow Range:	0.79 - 21.1 GPM (3 - 80 LPM)
Flow Range @ < 5 cps:	2.11 - 18.5 GPM (8 - 70 LPM)
Accuracy:	± 0.5% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
Pressure Rating:	800 PSI / 55 BAR
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
Typical K-Factor:	
Single Pickup:	197 PPG / 52 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Wetted Mat'l. - Rotor:	PPS
Wetted Mat'l. - Bearings:	PPS
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	2.6 - 51.9 Hz @ 0.8 - 15.8 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	4.30 lbs. (1.9 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

The GM006 Meter is a low to medium flow range model. This meter is great for lubrication products and fluids compatible with aluminum.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±0.5% OF READING

Select Your Body Material:

Aluminum

Features and Benefits:

- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with Reed Switch as standard, Hall Effect Sensor* optional.
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM007 - 1" OVAL GEAR PULSE METER

Use the GM007 with aggressive chemicals, DEF and water. The PPS body and rotor materials provide excellent chemical compatibility in this 1-inch meter. This meter is a great choice when you need a rugged and reliable meter.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±0.5% OF READING

Select Your Body Material:

PPS

PPS with Hastalloy C Shafts

Features and Benefits:

- ✓ PPS body and rotors are excellent for aggressive chemicals.
- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with Reed Switch as standard, Hall Effect Sensor* optional.
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM007 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Material:	PPS
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display
	Local Display with 4-20 mA Output
Flow Range:	0.79 - 21.1 GPM (3 - 80 LPM)
Flow Range @ < 5 cps:	2.11 - 18.5 GPM (8 - 70 LPM)
Accuracy:	± 0.5% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	1,000 cps
Pressure Rating:	150 PSI / 10 BAR
Maximum Temperature:	176° F / 80° C
Typical K-Factor:	
Single Pickup:	197 PPG / 52 PPL
Wetted Mat'l. - Housing:	PPS
Wetted Mat'l. - Rotor:	
PPS:	PPS
PPS with Hastalloy C:	PPS
Wetted Mat'l. - Bearings:	PPS
Wetted Mat'l. - Shaft:	
PPS:	316 Stainless Steel
PPS with Hastalloy C:	Hastalloy C
Frequency Range:	2.6 - 69.0 Hz @ 0.8 - 21 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	3.0 lbs. (1.3 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

GM010 - 1" OVAL GEAR PULSE METER

GM010 – SPECIFICATIONS

Fitting Type:	
Aluminum:	BSP or NPT (Female), 150# ANSI Flange
Stainless Steel:	BSP or NPT (Female), 150# ANSI Flange
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Materials:	PPS or High Viscosity PPS, 316 Stainless Steel
	or High Viscosity Stainless Steel
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display
	Local Display with 4-20 mA Output
Flow Range:	1.59 - 31.7 GPM (6 - 120 LPM)
Flow Range @ < 5 cps:	2.64 - 26.4 GPM (10 - 100 LPM)
Accuracy:	± 0.5% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	800 PSI / 55 BAR or Flange Rule
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
SS Rotors:	248° F / 120° C
Typical K-Factor:	
Single Pickup:	136.3 PPG / 36 PPL
Double Pickup:	272.6 PPG / 72 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	PPS
Stainless Steel:	Carbon
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	3.6 - 72.7 Hz @ 1.6 - 332 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	4.9 lbs. (2.2 kg) - Pulse
	6.6 lbs. (2.9 kg) - 150# ANSI Flange
Stainless Steel:	12.5 lbs. (5.7 kg) - Pulse
	14.6 lbs. (6.6 kg) - 150# ANSI Flange
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

GM010 shown here with Local Display

The GM010 Meter is a 1-inch meter available in Aluminum or 316 Stainless Steel body materials. Optional 150# ANSI Flange Fittings are available on the GM010.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±0.5% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with Reed Switch as standard, Hall Effect Sensor* optional.
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM510 - 1" OVAL GEAR MECHANICAL METER

The GM510 is a Mechanical Meter available in Aluminum or 316 Stainless Steel body materials. Optional 150# ANSI Flanges are available on the GM510.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±1.0% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ Cumulative and Resettable Totals.
- ✓ BSP or NPT fittings are standard, optional 150# ANSI Flanges are available.
- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with easy-to-read Mechanical Display.
- ✓ Certificate of Accuracy supplied with meter.

GM510 – SPECIFICATIONS

Fitting Type:	
Aluminum:	BSP or NPT (Female), 150# ANSI Flange
Stainless Steel:	BSP or NPT (Female), 150# ANSI Flange
Sensor Options:	Mechanical Display
Rotor Materials:	PPS or High Viscosity PPS, 316 Stainless Steel
	or High Viscosity Stainless Steel
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	N/A
Display Options:	Mechanical Display
Flow Range:	1.59 - 31.7 GPM (6 - 120 LPM)
Flow Range @ < 5 cps:	2.64 - 26.4 GPM (10 - 100 LPM)
Accuracy:	± 1.0% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	500 PSI / 34.5 BAR or Flange Rule
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
SS Rotors:	248° F / 120° C
Typical K-Factor:	N/A
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	PPS
Stainless Steel:	Carbon
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	N/A
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	4.9 lbs. (2.2 kg) - Pulse
	7.0 lbs. (3.1 kg) - 150# ANSI Flange
Stainless Steel:	11.7 lbs. (5.3 kg) - Pulse
	13.6 lbs. (6.2 kg) - 150# ANSI Flange

GM015 - 1-1/2" OVAL GEAR PULSE METER

GM015 – SPECIFICATIONS

Fitting Type:	
Aluminum:	BSP or NPT (Female), 150# ANSI Flange
Stainless Steel:	BSP or NPT (Female), 150# ANSI Flange
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Materials:	PPS or High Viscosity PPS, 316 Stainless Steel
	or High Viscosity Stainless Steel
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display
	Local Display with 4-20 mA Output
Flow Range:	2.64 - 66 GPM (10 - 250 LPM)
Flow Range @ < 5 cps:	3.96 - 62.1 GPM (15 - 235 LPM)
Accuracy:	± 0.5% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	
Aluminum:	800 PSI / 55 BAR or Flange Rule
Stainless Steel:	800 PSI / 55 BAR or Flange Rule
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
SS Rotors:	248° F / 120° C
Typical K-Factor:	
Single Pickup:	54.9 PPG / 14.5 PPL
Double Pickup:	109.8 PPG / 29 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	PPS
Stainless Steel:	Carbon
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	2.4 - 60.4 Hz @ 2.6 - 66 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	10.0 lbs. (4.5 kg) - Pulse
	12.0 lbs. (5.4 kg) - 150# ANSI Flange
Stainless Steel:	18.4 lbs. (8.4 kg) - Pulse
	20.9 lbs. (9.4 kg) - 150# ANSI Flange
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

The GM015 is our medium to large capacity meter with 1-1/2-inch fittings. Optional 150# ANSI Flange Fittings are available on the GM015. The GM015 can be installed without regard to straight pipe runs, making installation easy.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±0.5% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with Reed Switch as standard, Hall Effect Sensor* optional.
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM515 - 1-1/2" OVAL GEAR MECHANICAL METER

The GM515 is a medium to large capacity meter with Mechanical Sensor and Display. Optional 150# ANSI Flanges are available on the GM515 model. This meter can handle high viscosity fluids without sacrificing accuracy.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±1.0% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ Cumulative and Resettable Totals.
- ✓ Models available with BSP, NPT or 150# ANSI Flange Fittings.
- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.015"/0.38 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with easy-to-read Mechanical Display.
- ✓ Certificate of Accuracy supplied with meter.

GM515 – SPECIFICATIONS

Fitting Type:	BSP or NPT (Female), 150# ANSI Flange
Sensor Options:	Mechanical Display
Rotor Materials:	PPS or High Viscosity PPS, 316 Stainless Steel
	or High Viscosity Stainless Steel
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	N/A
Display Options:	Mechanical Display
Flow Range:	2.64 - 66 GPM (10 - 250 LPM)
Flow Range @ < 5 cps:	3.96 - 62.1 GPM (15 - 235 LPM)
Accuracy:	± 1.0% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	
Aluminum:	500 PSI / 34.5 BAR
Stainless Steel:	500 PSI / 34.5 BAR or Flange Rule
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
SS Rotors:	248° F / 120° C
Typical K-Factor:	N/A
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	PPS
Stainless Steel:	Carbon
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	N/A
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	9.9 lbs. (4.5 kg) - Mechanical
	12.0 lbs. (5.4 kg) - 150# ANSI Flange
Stainless Steel:	17.6 lbs. (8.0 kg) - Mechanical
	20.2 lbs. (9.2 kg) - 150# ANSI Flange

GM020 - 2" OVAL GEAR PULSE METER

GM020 – SPECIFICATIONS

Fitting Type:	
Aluminum:	BSP or NPT (Female), 150# ANSI Flange
Stainless Steel:	150# ANSI Flange
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Materials:	PPS or High Viscosity PPS, 316 Stainless Steel
	or High Viscosity Stainless Steel
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display
	Local Display with 4-20 mA Output
Flow Range:	3.96 - 92.5 GPM (15 - 350 LPM)
Flow Range @ < 5 cps:	7.93 - 79.3 GPM (30 - 300 LPM)
Accuracy:	± 0.5% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	
Aluminum:	800 PSI / 55 BAR or Flange Rule
Stainless Steel:	Flange Rule
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
SS Rotors:	248° F / 120° C
Typical K-Factor:	
Single Pickup:	25.3 PPG / 6.7 PPL
Double Pickup:	50.6 PPG / 13.4 PPL
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	
Aluminum:	PPS
Stainless Steel:	Carbon
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	1.7 - 39.0 Hz @ 4.0 - 92.5 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	17.1 lbs. (7.8 kg) - Pulse
	20.1 lbs. (9.1 kg) - 150# ANSI Flange
Stainless Steel:	20.1 lbs. (9.1 kg) - Pulse
	46.3 lbs. (2.1 kg) - 150# ANSI Flange
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

* Hall Effect Sensor requires dedicated power source.

The GM020 is the largest of our GM Series Meters. The fitting size is 2 inches on this large meter. This meter includes NPT or BSP fittings as standard. Choose from four rotor options; PPS is standard.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±0.5% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ Models available with BSP, NPT or 150# ANSI Flange Fittings.
- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.011"/0.28 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with Reed Switch as standard, Hall Effect Sensor* optional.
- ✓ Choose from a variety of Output and Display Options.
- ✓ Certificate of Accuracy supplied with meter.

GM520 - 2" OVAL GEAR MECHANICAL METER

The GM520 is the Mechanical version of our large capacity meter. Choose from either Aluminum or 316 Stainless Steel body materials. This meter can be mounted horizontally or vertically depending on your application.

For complete part number, see "Number Reference" chart on page 31.

ACCURACY: ±1.0% OF READING

Select Your Body Material:

Aluminum
Stainless Steel

Features and Benefits:

- ✓ Cumulative and Resettable Totals.
- ✓ Five Fitting / Calibration offerings are available, 150# ANSI Flanges are one of the options.
- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particle sizes to 0.015"/0.38 mm.
- ✓ Meter design minimizes the number of wearable parts – extending product life.
- ✓ Comes with easy-to-read Mechanical Display.
- ✓ Certificate of Accuracy supplied with meter.

GM520 – SPECIFICATIONS

Fitting Type:	
Aluminum:	BSP or NPT (Female), 150# ANSI Flange
Stainless Steel:	150# ANSI Flange
Sensor Options:	Mechanical Display
Rotor Materials:	PPS or High Viscosity PPS, 316 Stainless Steel
	or High Viscosity Stainless Steel
O-Ring:	Fluorocarbon (Standard), PTFE (Optional)
Output Options:	N/A
Display Options:	Mechanical Display
Flow Range:	3.96 - 92.5 GPM (15 - 350 LPM)
Flow Range @ < 5 cps:	7.93 - 79.3 GPM (30 - 300 LPM)
Accuracy:	± 1.0% of reading
Repeatability:	± 0.03%
Maximum Viscosity:	Standard Rotors: 1,000 cps
	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	
Aluminum:	500 PSI / 34.5 BAR or Flange Rule
Stainless Steel:	Flange Rule
Maximum Temperature:	
PPS Rotors:	176° F / 80° C
SS Rotors:	248° F / 120° C
Typical K-Factor:	N/A
Wetted Mat'l. - Housing:	
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l. - Rotor:	
Aluminum:	PPS or Stainless Steel
Stainless Steel:	PPS or Stainless Steel
Wetted Mat'l. - Bearings:	PPS
	Carbon
Wetted Mat'l. - Shaft:	316 Stainless Steel
Frequency Range:	N/A
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	17.1 lbs. (7.7 kg) - Mechanical
	20.1 lbs. (9.1 kg) - 150# ANSI Flange
Stainless Steel:	46.3 lbs. (2.1 kg) - 150# ANSI Flange

TM SERIES WATER METERS

GPI Water Meters are accurate, economical and designed to last. Choose GPI Water Meters for water processing and irrigation applications. The TM Series Water Meters meet Schedule 80 PVC specifications and come standard with the low-profile display. Meters come in seven sizes with three fitting types, offering flowrates from 1 - 800 GPM.

TM SERIES METER NUMBER REFERENCE

Product Identifier

TM = Water Meter

Turbine Size

050	=	Schedule 80 PVC, 1/2 inch
075	=	Schedule 80 PVC, 3/4 inch
100	=	Schedule 80 PVC, 1 inch
150	=	Schedule 80 PVC, 1-1/2 inch
200	=	Schedule 80 PVC, 2 inch
300	=	Schedule 80 PVC, 3 inch
400	=	Schedule 80 PVC, 4 inch

Meter Dimensions listed on page 77.

Fitting Type

Blank	=	Spigot (Pipe) End
-N	=	NPT (Female)
-F	=	150# ANSI Flange (3 in. and 4 in. meters only)

Electronic Choices

Blank	=	Local Display
-P	=	Pulse Output
-GA	=	4-20 mA Output, No Display (3 in. and 4 in. meters only)
-GG	=	Pulse Output, With Display (3 in. and 4 in. meters only)
-GX	=	4-20 mA Output, With Display (3 in. and 4 in. meters only)
-SC	=	Scaled Pulse Output (3 in. and 4 in. meters only)

TM + 300 + -N + -GA ← (Sample Model Number)

TM SERIES 1/2" - 2" WATER METERS

TM SERIES – SPECIFICATIONS

Design Type:	Turbine	
Fitting Size:	1/2" 3/4" 1" 1-1/2" 2"	
Fitting Type:	Schedule 80 Spigot (Pipe) End or NPT (Female)	
Flow Range:		
1/2" - TM 050:	1 - 10 GPM (3.8 - 38 LPM)	
3/4" - TM075	2 - 20 GPM (7.6 - 76 LPM)	
1" - TM100:	5 - 50 GPM (19 - 190 LPM)	
1-1/2" - TM150	10 - 100 GPM (38 - 380 LPM)	
2" - TM200	20 - 200 GPM (76 - 760 LPM)	
Accuracy:	± 3.0% of reading	
Pressure Rating:	225 PSIG / 15.3 BAR at 73° F (23° C)	
Operating Temperature:	+32° F to +140° F (0° to +60° C)	
Battery Life:	5 Years	
Wetted Materials:		
Housing:	PVC	
Bearings:	Ceramic	
Shaft:	Tungsten Carbide	
Rotor:	PVDF	
Rings:	316 Stainless Steel	
Shipping Weight (approx.):	**Spigot**	**NPT**
1/2" - TM050:	.38 lbs. (.172 kg)	.55 lbs. (.249 kg)
3/4" - TM075:	.43 lbs. (.304 kg)	.67 lbs. (.304 kg)
1" - TM100:	.49 lbs. (.222 kg)	.49 lbs. (.381 kg)
1-1/2" - TM150:	.66 lbs. (.299 kg)	1.38 lbs. (.626 kg)
2" - TM200:	.78 lbs. (.354 kg)	1.78 lbs. (.807 kg)
Display Features:	Rate of Flow, Batch and Cumulative Totals, Field Calibration available	
Pulse Output:	Open Collector (NPN)	

APPROVALS

CE

Model TM150-N

"Look for the blue label!"

TM Series Meters are designed for use in water applications. The five smallest sizes are shown here. (For 3" and 4" meters, see next page.) Choose either Spigot (pipe end) or NPT or fittings.

For complete part number, see "Number Reference" chart on page 46.

Model TM050

"Look for the blue label!"

Model TM200

"Look for the blue label!"

ACCURACY: ±3.0% READING

Features and Benefits:

- ✓ Easy to install.
- ✓ Displays in gallons, litres and cubic feet.
- ✓ Indicates Batch, Cumulative Totals and Rate of Flow.
- ✓ Available in NPT or Spigot fittings.
- ✓ Meets Schedule 80 specifications.
- ✓ Lithium battery life: 5 years.
- ✓ Non-volatile totals means amounts are retained when batteries are replaced or power is lost.

Applications:

- OEM water treatment equipment / skids
- Sub-metering of facility water usage
- Small waste water treatment equipment
- Water based cooling systems

TM SERIES 3" & 4" WATER METERS

Model - TM300-F

TM Series Meters are designed for use in water applications. The 3" and 4" models are shown here. Choose Spigot (pipe end), NPT or 150# ANSI Flange fittings.

For complete part number, see "Number Reference" chart on page 46.

ACCURACY: ±3.0% READING

Features and Benefits:

- ✓ Available in Spigot, NPT and Flange fittings.
- ✓ Displays in gallons, litres and cubic feet.
- ✓ Indicates Batch, Cumulative Totals and Rate of Flow.
- ✓ One-piece field replaceable turbine assembly.
- ✓ Spigot models may be cut to length.
- ✓ Meets Schedule 80 specifications.
- ✓ Lithium battery life: 5 years.
- ✓ Non-volatile totals means amounts are retained when batteries are replaced or power is lost.

Applications:

- OEM water treatment equipment / skids
- Sub-metering of facility water usage
- Waste water treatment equipment
- Chemical feed systems
- Cooling towers
- Irrigation

TM SERIES – SPECIFICATIONS

Design Type:	Turbine		
Fitting Size:	3" 4"		
Fitting Type:	Schedule 80 Spigot (Pipe) End, NPT (Female) or 150# ANSI Flange		
Flow Range:			
3" - TM 300:	40 - 400 GPM (151 - 1514 LPM)		
Extended Range:	30 - 600 GPM (131 - 2271 LPM)		
4" - TM400:	60 - 600 GPM (227 - 2271 LPM)		
Extended Range:	40 - 800 GPM (151 - 3028 LPM)		
Accuracy:	± 3.0% of reading		
Pressure Rating:	225 PSIG / 15.3 BAR at 73° F (23° C)		
For CE Applications:	135 PSIG / 9.1 BAR at 73° F (23° C)		
Operating Temperature:	+32° F to +140° F (0° to +60° C)		
Battery Life:	5 Years		
Wetted Materials:			
Housing:	PVC		
Bearings:	PEEK		
Shaft & Thrust Washers:	Stainless Steel		
Rotor & Nose Cone:	Acetal		
Signal Generator:	Ferrite		
Shipping Weight (approx.):	**Spigot**	**NPT**	**Flange**
3" - TM300:	2.4 lbs. (1.09 kg)	3.9 lbs. (1.77 kg)	5.8 lbs. (2.63 kg)
4" - TM400:	3.7 lbs. (1.68 kg)	6.1 lbs. (2.77 kg)	9.2 lbs. (4.17 kg)
Display Features:	Rate of Flow, Batch and Cumulative Totals, Field Calibration available		
Pulse Output:	Open Collector (NPN)		

ELECTRONIC CHOICES

GG, GX, GA or SC:	See Electronics Section.

APPROVALS

CE

Spigot Model - TM400 Shown

NPT Model - TM300-N Shown

"Look for the silver label!"

"Look for the silver label!"

A1 SERIES COMMERCIAL GRADE METERS

Commercial Grade Meters are designed as self-contained, battery powered units. These indicating meters come in Aluminum or Nylon only. A1 Meters are not field serviceable like the popular G2 Series Meters. For flowmeters with advanced features and additional housing materials, refer to the G Series, G2 Series, GM Series or TM Series sections in this catalog.

BUILD-YOUR-OWN A1 SERIES METER

1) Select Your Turbine

Aluminum

Nylon

2) Select Your Electronic Choice

For further details see the Electronics Section.

"Look for the silver label!"

09 Computer

XX No Computer

3) Select Your Module

For further details see pages 54-55.

Standard Remote Kit

FM Approved Remote Kit

Conditioned Signal Output Module

4) Do You Require Any Accessories?

For further details see page 56.

Display Adapter Kit

GPI Electronics Programmer

A1 SERIES METER NUMBER REFERENCE

Product Identifier

A1 = Commercial Grade Electronic Digital Meter

Electronic Choice

09 = 2 Totals (1 Resettable, 1 Cumulative), Factory Calibration in Gallons and Litres, User Configuration and Rate of Flow
XX = No Computer

Calibration

GM = Gallons / Minute (NPT only)
LM = Litres / Minute (ISO only)
XX = No Computer

Turbine Material & Size

A025 = Aluminum – Low Flow
A100 = Aluminum – 1 inch
A200 = Aluminum – 2 inch
N025 = Nylon – Low Flow
N100 = Nylon – 1 inch
X### = No Turbine *

Fitting Type

N = NPT (Female)
I = ISO (Female)
B = BSPP (Female) - available on A025 and A100 turbines only
X = No Turbine

Packaging

A1 = Standard Low Flow – 1 inch
A2 = Standard – 2 inch
B1 = Low Flow – 1 inch Turbine Only
B2 = 2 inch Turbine Only
B3 = Computer Only
C1 = Generic Low Flow – 1 inch
C2 = Generic – 2 inch
C3 = Generic Computer Only

A1 + 09 + LM + N100 + N + A1 ← (Sample Model Number)

** When ordering Computer Assembly Only, specify Turbine Housing size.*

A1 COMMERCIAL GRADE METERS

GPI Commercial Grade Meters are identified by an A1 prefix. Commercial Grade Meters are packaged as a self-contained unit. Select this meter when you need an accurate, basic meter. GPI Commercial Grade Meters come in Aluminum or Nylon housing material.

Choose one of three sizes of Aluminum meters for petroleum products. Use the Nylon meters for water or non-aggressive chemicals.

Aluminum

"Look for the silver label!"

Nylon

For complete part number, see "Number Reference" chart on page 51.

ACCURACY: ±1.5% READING
(On models A100, A200 and N100)

Select Your Fitting Size:

Aluminum

Low Flow 1 inch 2 inch

Nylon

Low Flow 1 inch

Features and Benefits:

- ✓ Unique package combines Turbine and LCD into a self-contained, compact, economical meter.
- ✓ Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; User Configuration and Rate of Flow.
- ✓ Output capabilities available to communicate with process control equipment.
- ✓ Lightweight, compact design allows for easy installation.
- ✓ Lithium battery life: 5 years.

APPROVALS

FM APPROVED · c UL us · CE · Ex · NEMA 4 · ATEX · **IP44**

A1 METER **SPECIFICATIONS**

	ALUMINUM			NYLON	
	A025 (Low Flow)	**A100 (1 inch)**	**A200 (2 inch)**	**N025 (Low Flow)**	**N100 (1 inch)**
Design Type:	Paddlewheel	Turbine	Turbine	Paddlewheel	Turbine
Housing Material:	Aluminum	Aluminum	Aluminum	Nylon	Nylon
Fitting Size:	1 inch	1 inch	2 inch	1 inch	1 inch
Fitting Type:	NPT, ISO or BSPP(female)	NPT, ISO or BSPP(female)	NPT or ISO (female)	NPT or ISO (female)	NPT or ISO (female)
Flow Range (GPM):	0.3 - 3 GPM	3 - 50 GPM	30 - 300 GPM	0.3 - 3 GPM	3 - 50 GPM
Flow Range (LPM):	1 - 11 LPM	11 - 190 LPM	114 - 1,135 LPM	1 - 11 LPM	11 - 190 LPM
Accuracy:	N/A*	± 1.5% of reading	± 1.5% of reading	N/A*	± 1.5% of reading
Repeatability:	± 1%	± 0.2%	± 0.2%	± 1%	± 0.2%
Pressure Rating:	300 PSI / 21 BAR	300 PSI / 21 BAR	300 PSI / 21 BAR	150 PSI / 10.2 BAR	150 PSI / 10.2 BAR
Operating Temperature Range:	-40° F to +250° F	-40° F to +250° F	-40° F to +250° F	-40° F to +250° F	-40° F to +250° F
	(-40° C to +121° C)	(-40° C to +121° C)	(-40° C to +121° C)	(-40° C to +121° C)	(-40° C to +121° C)
with Computer:	0° F to +140° F	0° F to +140° F	0° F to +140° F	0° F to +140° F	0° F to +140° F
	(-18° C to +60° C)	(-18° C to +60° C)	(-18° C to +60° C)	(-18° C to +60° C)	(-18° C to +60° C)
Wetted Material - Housing:	Aluminum	Aluminum	Aluminum	Nylon	Nylon
Bearings:	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Shaft:	Tungsten Carbide	Tungsten Carbide	Tungsten Carbide	Tungsten Carbide	Tungsten Carbide
Rotor:	Nylon	Nylon	Nylon	Nylon	Nylon
Signal Generators:	Ferrite	Ferrite	Ferrite	Ferrite	Ferrite
Rings:	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
Typical K-Factor:	2200	730	72	2200	730
Frequency Range:	11 - 110 Hz @	36.5 - 608.3 Hz @	36 - 360 Hz @	11 - 110 Hz @	36.5 - 608.3 Hz @
	0.3 - 3 GPM	3 - 50 GPM	30 - 300 GPM	0.3 - 3 GPM	3 - 50 GPM
Recommended Strainer Size:	55 mesh	28 mesh	28 mesh	55 mesh	28 mesh
Shipping Weight:	1.35 lbs. (0.61 kg)	1.35 lbs. (0.61 kg)	3.0 lbs. (1.36 kg)	1.0 lbs. (0.5 kg)	1.0 lbs. (0.5 kg)
Local Display:	09 Computer (See page 63)	09 Computer (See page 63)	09 Computer (See page 63)	09 Computer (See page 63)	09 Computer (See page 63)

* Accuracy can vary up to ± 5% depending on installation and fluid type.
Field Calibration is recommended for best accuracy.

FM Approved Remote Kit Assembly
(Part No. 113275-1)

FM Approved Remote Kit Assembly Installed

The Factory Mutual (FM) Approved Remote Kit Assembly modifies GPI Electronic Digital Meters for applications in specialized situations including remote indication and high or low fluid temperature metering applications. This kit provides the versatility of panel mounting of the LCD readout up to 100 ft. from the turbine.

This kit consists of a sensor module, a dust cover assembly and 10 ft. of cable; it also requires a 09 Computer.

Features and Benefits:

- ✓ Maintains FM Approval.
- ✓ Accommodates fluid temperatures from -40° F to +250° F (-40° C to +121° C).
- ✓ This kit can upgrade an existing GPI meter or can be purchased with a new meter.
- ✓ Use this module with GPI Industrial or Commercial Grade Electronic Digital Meters.

SPECIFICATIONS	
Magnetic Pickup:	1.3 k Ohm, 90 mH
Signal Type:	Sine Wave
Voltage:	Peak to Peak 10 mV to 500 mV
Frequency:	11 to 750 Hz
Cable:	10 ft. (3 m), 2-conductor shielded, Belden #9501

APPROVALS

FM APPROVED

Standard Remote Kit Assembly
(Part No. 113265-1)

Standard Remote Kit Assembly Installed

The Standard Remote Kit Assembly modifies GPI Electronic Digital Meters for applications in specialized situations including remote indication and high or low fluid temperature metering applications. This kit also provides the versatility of panel mounting of the LCD readout up to 300 ft. from the turbine housing and sensor.

This kit consists of a sensor module, a dust cover assembly and 10 ft. of cable; it also requires a 09 Computer.

Do not use on A1 2-inch meter. Order 113275-1.

Features and Benefits:

- ✓ Accommodates fluid temperatures from -40° F to +250° F (-40° C to +121° C).
- ✓ This kit can upgrade an existing GPI meter or can be purchased with a new meter.
- ✓ Battery powered from meter; no additional power required.

SPECIFICATIONS	
Magnetic Pickup:	1.5 k Ohm, 700 mH
Signal Type:	Sine Wave
Voltage:	Peak to Peak 33 mV to 825 mV
Frequency:	11 to 750 Hz
Cable:	10 ft. (3 m), 2-conductor shielded, Belden #1266A or #8451

Features and Benefits:

- ✓ Provides two digital signals: Open Collector or 6-volt Square Wave and can communicate with most process control devices.
- ✓ Operating temperature range of -40° F to +212° F (-40° C to +100° C).
- ✓ Can be externally powered or battery powered.

SPECIFICATIONS	
Connector:	Hubble PG7
Signal Type:	Open Collector (NPN)
Power:	External 9 to 35 VDC, approximately 1 mA
Connection:	Three wire
Frequency:	0 to 750 Hz
Cable:	10 ft. (3 m) Belden #9363

APPROVALS

CE

Conditioned Signal Output Module

(Part No. 113435-1)

Conditioned Signal Output Module Installed

This module provides an unscaled, amplified, digital signal capable of transmission up to 5,000 ft. There is no need for additional signal conditioning or amplification devices to achieve the desired digital signal. Use on G2 "Turbine Only" model.

The module is factory assembled for Open Collector signal output and operates from an external 9 to 35 volt power source. By changing terminal connections and adding a battery kit, the module provides a self-powered 6-volt Square Wave signal.

A1 METER **ACCESSORIES**

90° Display Adapter Kit

(Part No. 125260-01)

90° Display Adapter Kit allows for horizontal readout of vertical meters. Includes adapter, O-ring, screws and foam spacers required for installation.

Kit Shown Installed on PVDF Meter

GPI Electronics Programmer

(Part No. 113800-06)

The GPI Electronics Programmer is a system composed of a small USB interface unit, a USB cable, and a software program. This kit is perfect for reconfiguring multiple GPI Electronics for the first time or when changing the configuration over the life of the meter.

Used with your PC, it allows quick, convenient on-screen setting (and reading) of setup options and calibration data from may GPI Electronic Digital Meters (EDMs).

"Look for the red label!"

ECONOMY ELECTRONIC DIGITAL METERS

GPI offers a variety of economy meters to meet specific applications. These meters are great for monitoring and indication. They provide lower accuracy than our other meters but are an economical choice in many applications. The economy meters are not field serviceable like the popular G2 Series Meters.

LM SERIES MECHANICAL LUBE METERS

Model No.
LM50P

Model No.
LM50D

Model No.
LM50M

Choose from one of the latest positive displacement meters available from GPI. These compact meters are perfect for metering engine oils or transmission fluids (maximum viscosity 1,000 cps). The LM50M Mechanical Meter is suitable for hazardous locations.

Choose the LM50P when Pulse Out without Display meets your application. The LM50D model includes an easy-to-read display. All meters are designed with oval rotors for optimum accuracy.

Features and Benefits:

- ✓ Extremely accurate.
- ✓ Dependable performance.
- ✓ Reliable, trouble-free operation.
- ✓ Total and Flowrate.

LM50P – SPECIFICATIONS	
Construction:	Aluminum
Wetted Components:	Acetal, Aluminum, Nitril and Steel
Connections:	1/2 inch NPT or BSPT (Female)
K-Factor:	424 PPG / 112 PPL
Flow Range:	0.26 - 7.8 GPM (1 - 30 LPM) @ 5 - 1,000 cps
Accuracy:	± 0.5% of reading
Max. Working Pressure:	1,500 PSI / 103.5 BAR
Operating Temperature:	+23° F to +131° F (-5° C to +55° C)
Model Numbers:	LM50PB (Lube Meter 1/2" BSPT)
	LM50PN (Lube Meter 1/2" NPT)

LM50D – SPECIFICATIONS	
Construction:	Aluminum
Wetted Components:	Acetal, Aluminum, Nitril and Steel
Connections:	1/2 inch NPT or BSPT (Female)
Flow Range:	0.26 - 7.8 GPM (1 - 30 LPM) @ 5 - 1,000 cps
Accuracy:	± 0.5% of reading
Max. Working Pressure:	1,500 PSI / 103.5 BAR
Operating Temperature:	+23° F to +131° F (-5° C to +55° C)
Battery:	Two AAA Alkaline batteries
Display:	6 digit; Shows Batch, Reset Total, Non-Reset
	Total and Rate of Flow
Display Units:	User selectable (gallons, litres, pints or quarts)
Model Numbers:	LM50DB (Lube Meter with Display 1/2" BSPT)
	LM50DN (Lube Meter with Display 1/2" NPT)

LM50M – SPECIFICATIONS	
Construction:	Aluminum
Wetted Components:	Acetal, Aluminum, Nitril and Steel
Connections:	1/2 inch NPT or BSPT (Female)
Flow Range:	0.26 - 7.8 GPM (1 - 30 LPM) @ 5 - 1,000 cps
Accuracy:	± 1.0% of reading
Max. Working Pressure:	1,500 PSI / 103.5 BAR
Operating Temperature:	+14° F
Battery:	None required
Model Numbers:	LM50MNG - 1/2" NPT fitting. Calibrated in gallons
	LM50MNL - 1/2" NPT fitting. Calibrated in litres
	LM50MBL - 1/2" BSPT fitting. Calibrated in litres
	LM50MBQ - 1/2" BSPT fitting. Calibrated in quarts
	LM50MBG - 1/2" BSPT fitting. Calibrated in gallons
	LM50MNQ - 1/2" NPT fitting. Calibrated in quarts

01 SERIES ELECTRONIC DIGITAL METERS

01N – SPECIFICATIONS

Design Type:	Turbine
Fitting Size:	1 inch
Fitting Type:	NPT or ISO (Female)
Flow Range:	3 - 30 GPM (10 - 100 LPM)
Accuracy:	± 5.0% of reading
Repeatability:	± .5%
Pressure Rating:	150 PSIG (10.2 BAR)
Operating Temperature:	+14° F to +131° F (-10° C to +55° C)
Wetted Material:	
Housing:	Nylon
Bearings:	Ceramic
Shaft:	Tungsten Carbide
Rotor:	Nylon
Signal Generators:	Ferrite
Rings:	316 Stainless Steel
Shipping Weight (approx.):	1.1 lbs. (0.5 kg) (See page 76 for meter dimensions)
Local Display:	Includes: 2 Totals (1 Cumulative, 1 Batch); Permanent factory calibration for water.

APPROVALS

CE

01N Series Water Meter

ACCURACY: ±5.0% OF READING

Features and Benefits:

- ✓ Simple, small and sturdy Electronic Digital Water Meter with rugged nylon housing.
- ✓ Mount on the end of a hose or a pipe, in-line.
- ✓ Complete meter, including turbine assembly, micro-processor and LCD readout.
- ✓ Choice of gallon and litre measurement.
- ✓ Works well on any pump or gravity feed system with at least 3-30 GPM (10-100 LPM) flow range.

01A – SPECIFICATIONS

Design Type:	Turbine
Fitting Size:	1 inch
Fitting Type:	NPT or ISO or BSPP (Female)
Flow Range:	3 - 30 GPM (10 - 100 LPM)
Accuracy:	± 5.0% of reading
Repeatability:	± .5%
Pressure Rating:	300 PSIG (21 BAR)
Operating Temperature:	+14° F to +130° F (-10° C to +54° C)
Wetted Material:	
Housing:	Aluminum
Bearings:	Ceramic
Shaft:	Tungsten Carbide
Rotor:	Nylon
Signal Generators:	Ferrite
Rings:	316 Stainless Steel
Shipping Weight (approx.):	2 lbs. (0.9 kg) (See page 76 for meter dimensions)
Local Display:	Includes: 2 Totals (1 Cumulative, 1 Batch); Permanent factory calibration for gasoline, diesel fuel or kerosene.

APPROVALS

CE

01A Series Fuel Meter

"Look for the red label!"

ACCURACY: ±5.0% OF READING

Features and Benefits:

- ✓ Lightweight, accurate, and reliable turbine meter with rugged aluminum housing and sealed electronic circuitry.
- ✓ Powered by two AAA batteries that are easy to replace.
- ✓ Factory calibrated for petroleum fuel with a choice of gallon and litre measurement.
- ✓ Works well on any pump or gravity feed system with at least 3-30 GPM (10-100 LPM) flow range.

FM-300 CHEMICAL METERS

FM-300H/R Chemical Meter

FM-300H/R – SPECIFICATIONS	
Design Type:	Nutating Disc with Electronic Display
Fitting Size:	1 inch
Fitting Type:	Inlet: NPT (Female) Outlet: NPT (Male)
Flow Range:	2 - 20 GPM (7 - 75 LPM)
Accuracy:	± 2.0% of reading
Pressure Rating:	50 PSIG (3.4 BAR)
Operating Temperature:	+15° F to +130° F (-9° C to +54° C)
Wetted Material:	
Housing:	PBT Polyester
Fluid Chamber:	PBT Polyester
Signal Generator Kit:	PBT Polyester / Ferrite
Seals:	Fluorocarbon
Clip:	316 Stainless Steel
Shipping Weight (approx.):	3 lbs. (1.4 kg)
Display Options:	Local Display includes: Rate of Flow, Batch and Cumulative Totals. Factory and Field Calibration.

ACCURACY: ±2.0% OF READING

APPROVALS

CE

Features and Benefits:

- ✓ Simple, small and sturdy Electronic Digital Disc Meter with rugged PBT housing.
- ✓ Mount on the end of a hose or a pipe, in-line.
- ✓ Complete meter, including disc assembly, micro-processor and LCD readout.
- ✓ Choice of gallon and litre measurement.
- ✓ Factory calibrated for thin and medium fluids. Field calibrate for more viscous fluids.

"Look for the blue label!"

ELECTRONIC CHOICES

GPI Electronics are available with a variety of features. Choosing the best combination of meter and electronics is easy using the GPI System. The Meter Application Sheet in the Reference Section can serve as a worksheet to guide you in selecting the right GPI product for your application. Your GPI Sales Representative can assist you with this process.

ELECTRONIC CHOICES

1) What meter do I need in this application?

Meter choice is determined by: Level of accuracy required, flowrate, line size, viscosity, fitting type, pressure rating, temperature, chemical compatibility and etc. The general categories below provide some basic information about meter types.

G Series Meters	G2 Series Meters	GM Series Meters
SECTION 1	SECTION 2	SECTION 3
 Precision Meters	 *"Look for the blue label!"* Wide range of materials and sizes.	 Positive Displacement Meter technology in a variety of materials and sizes.
TM Series Water Meters	**A1 Commercial Grade Meters**	**Economy Meters**
SECTION 4	SECTION 5	SECTION 6
 *"Look for the blue label!"* Water Meters	 *"Look for the silver label!"* Aluminum or Nylon Meters with display in a self-contained unit.	 *"Look for the red label!"* Water, fuel, lube and chemical meters with basic features.

2) What type of output do I need from my electronics?

Output can be simple totals, rate of flow and various types of signal output.
GPI Electronics can be mounted to the meter or to a remote location and come with or without display.

Local Display	GA Series Electronics	GG Series Electronics	GX Series Electronics	SC Series Electronics
09 Electronics	4-20 mA Output Without Display	Pulse Output With Display	4-20 mA Output With Display	Scaled Pulse Output

3) How do I place an order?

Are you buying your GPI Electronics as part of a **system**
in combination with a meter or **stand alone** (as a replacement for an existing electronics)?
Model numbers will vary depending on how the electronics unit is ordered.

Contact GPI Customer Support at:
888-996-3837 or **316-686-7361** for assistance.

ELECTRONIC CHOICE **LOCAL DISPLAY**

09 COMPUTER – SPECIFICATIONS	
Std. Factory Configuration:	2 Totals (1 Resettable, 1 Cumulative);
	Factory Calibration in gallons and litres;
	User Calibration and Rate of Flow Indication.
Computer Electronics:	09 Computer fits all A1, TM & G2 meter sizes and
	construction. Std. Display fits GM Series Meters.
Totalizing Registers:	0 to 3 available
K-Factor Limits:	Min: .01 pulses/unit Max: 999,999 pulses/unit
Field Calibration:	Field calibrate by user. Standard Method:
	Correction Factor. Six adjustable digits. Can be
	reconfigured to K-factor entry.
Readout Totals:	LCD with floating decimal
	Minimum Display = 0.01 units
	Maximum Display = 999,999 units (6 digits)
Input Pulse Rate:	Minimum (Pulse-in Input) = DC (0 Hz)
	Minimum (Coil Input) = Approximately 10 Hz
	Maximum = Approximately 1,000 Hz
Turbine Display:	
Internal Power Supply:	2 Lithium batteries at 3 volts each
Lithium Battery Life:	5 Years
Optional Power Supply:	7 to 30 VDC
Oval Gear Display:	
Internal Power Supply:	9-volt battery
Optional Power Supply:	10 to 18 VDC
Operating Temperature:	0° F to +140° F (-18° C to +60° C)
Storage Temperature:	-40° F to +158° F (-40° C to +70° C)

APPROVALS

ATEX

®

Local Display for Turbine Meter

"Look for the blue label!"

Display shown here on Oval Gear Meter

Choose the local display for G2 and GM Series Meters. Commonly used features are preprogrammed in the Computer Display. End-users can enable additional features by using a password available from the factory or on the GPI website. The 09 configuration provides a high degree of customization, matching customers' exact needs.

Using a password-protected configuration process you can enable additional features. GPI Customer Service can provide the password and instructions to unlock and reset configuration settings. This information is also available on the GPI website. **User Configuration** features include:

- Totalizers/Modes Enabled (Cumulative Total, Batch 2 Total, Flowrate Mode)
- Flowrate Timebase (Units per Minutes, Hours and Days)
- Factory Calibration Curve Units Enabled (Gallons, Imperial Gallons, Litres, Quarts, Ounces, Cubic Feet, Cubic Centimeters, Cubic Meters or Barrels (42 gal.)
- Dispense/Display or K-Factor Entry Calibration

Features and Benefits:

- ✓ 2 Totals (Batch - Resettable, Cumulative - Not Resettable).
- ✓ Flowrate display updates every 5 seconds, readout is in units/minute.
- ✓ Factory Calibration in gallons and litres is standard. Can be field calibrated to adjust to various fluid thickness.
- ✓ Correction calibration lets end user calibrate by ± percent off.
- ✓ Small, compact and totally self contained with an internal power supply.
- ✓ Non-volatile totals means amounts are retained when batteries are replaced or power is lost.
- ✓ Lithium battery life: 5 years.

GG500/GG510/5 SERIES ELECTRONIC CHOICE

Display With Pulse Output

GG500 Remote Mount

GG510 Local Mount

The GG500 is a remote mount Pulse-Out Transmitter with battery powered display. Choose the GG510 when a local mount is needed.

ACCURACY: ±0.1% READING

Features and Benefits:

- ✓ Provides communication with process control equipment.
- ✓ Works with G Series, G2 Turbine Meters and GM Oval Gear Meters.
- ✓ Industry Standard Output: Unscaled Pulse.
- ✓ Easily mounted on pipe or wall.

GG500/GG510 – SPECIFICATIONS

Accuracy:	± 0.1% of reading
Output Options:	
Primary Output:	Open Collector (NPN)
Pulse-Out:	
Max. "OFF" Voltage:	60 V
Max. "ON" Current:	200 mA
Max. "ON" Voltage Drop:	< 0.5 V @ 200 mA
Electrical:	
Strain Relief:	Hubble PG7
Strain Relief Thread:	Female 1/2-20 UNF-2B
Cable:	*Remote:* Belden 9363 (500 Series only)
	Local: No cable provided
Cable Length:	20 ft. (6 m) provided (500 Series only)
Power Supply:	9-volt battery or externally powered
Voltage Supply (Min.):	7 VDC
Voltage Supply (Max.):	30 VDC
Input Options:	Hall Effect, Reed Switch, Open Collector or Low Level Sine Wave
Remote Mounting:	Pipe or wall
Operating Temperature:	+14° F to +140° F (-10° C to +60° C)
Frequency Input:	
Low Level Coil (LLC):	0 - 1000 Hz
High Level Low Freq.:	0 - 150 Hz
High Level High Freq.:	0 - 1000 Hz
Enclosure Rating:	NEMA 4X / IP55
Shipping Weight:	*Remote:* 2.0 lbs. (.90 kg)
	Local: 1.0 lbs. (.45 kg)
Calibratable:	K-factor Entry

APPROVALS

CE

GX500/GX510/6 SERIES ELECTRONIC CHOICE

GX500/GX510 – SPECIFICATIONS

Accuracy:	± 0.1% of reading
Output Options:	
Primary Output:	Loop (4-20 mA or 0-20 mA)
Minimum:	1.5 mA
Maximum:	25 mA
Auxiliary Outputs 0-5 V:	Single Ended
Minimum:	0.1 V
Maximum:	4.9 V
Pulse-Out:	
Max. "OFF" Voltage:	60 V
Max. "ON" Current:	200 mA
Max. "ON" Voltage Drop:	< 0.5 V @ 200 mA
Electrical:	
Strain Relief:	Hubble PG7
Strain Relief Thread:	Female 1/2-20 UNF-2B
Cable:	*Remote:* Belden 9363 (500 Series only)
	Local: No cable provided
Cable Length:	20 ft. (6 m) provided (500 Series only)
Power Supply:	2-wire, loop powered
Voltage Supply (Min.):	8.5 VDC
Voltage Supply (Max.):	35 VDC
Input Options:	Hall Effect, Reed Switch, Open Collector or
	Low Level Sine Wave
Remote Mounting:	Pipe or wall
Operating Temperature:	+32° F to +140° F (0° C to +60° C)
Frequency Input:	
Low Level Coil (LLC):	0.25 - 1000 Hz
High Level Low Freq.:	0.25 - 150 Hz
High Level High Freq.:	0.25 - 1000 Hz
Optically Isolated HLLF:	w/2500 V optical isolation
Optically Isolated HLHF:	w/2500 V optical isolation
Enclosure Rating:	NEMA 4X / IP55
Shipping Weight:	*Remote:* 2.0 lbs. (.90 kg)*Local:* 1.1 lbs. (.5 kg)
Calibratable:	K-factor Entry

APPROVALS

CE

Display With 4-20 mA Output

GX500 Remote Mount

GX510 Local Mount

The GX500 is a remote mount 4-20 mA Output Transmitter with display. Choose the GX510 when a local mount is needed.

ACCURACY: ±0.1% READING

Features and Benefits:

- ✓ Provides communication with process control equipment.
- ✓ Works with G Series, G2 Turbine Meters and GM Oval Gear Meters.
- ✓ Now available with Lockout feature.
- ✓ Microprocessor-based electronics have extremely low power requirements.
- ✓ Easy to set 4-20 mA endpoints under actual flow conditions.
- ✓ A signal conditioner with industry standard current loop output.
- ✓ Easily mounted on pipe or wall.

GA500/GA510/7 SERIES ELECTRONIC CHOICE

4-20 mA Output

GA500 Remote Mount

GA510 Local Mount

The GA500 is a remote mount 4-20 mA Output Transmitter without display. Choose the GA510 when a local mount is needed.

ACCURACY: ±0.1% READING

Features and Benefits:

- ✓ Provides communication with process control equipment.
- ✓ Works with G Series, G2 Turbine Meters and GM Oval Gear Meters.
- ✓ Now available with Lockout feature.
- ✓ Microprocessor-based electronics have extremely low power requirements.
- ✓ Easy to set 4-20 mA endpoints under actual flow conditions.
- ✓ A signal conditioner with industry standard current loop output.
- ✓ Easily mounted on pipe or wall.

GA500/GA510 – SPECIFICATIONS

Accuracy:	± 0.1% of reading
Output Options:	
Primary Output:	Loop (4-20 mA or 0-20 mA)
Minimum:	1.5 mA
Maximum:	25 mA
Auxiliary Outputs 0-5 V:	Single Ended
Minimum:	0.1 V
Maximum:	4.9 V
Pulse-Out:	
Max. "OFF" Voltage:	60 V
Max. "ON" Current:	200 mA
Max. "ON" Voltage Drop:	< 0.5 V @ 200 mA
Electrical:	
Strain Relief:	Hubble PG7
Strain Relief Thread:	Female 1/2-20 UNF-2B
Cable:	*Remote:* Belden 9363 (500 Series only)
	Local: No cable provided
Cable Length:	20 ft. (6 m) provided (500 Series only)
Power Supply:	2-wire, loop powered
Voltage Supply (Min.):	8.5 VDC
Voltage Supply (Max.):	35 VDC
Input Options:	Hall Effect, Reed Switch, Open Collector or Low Level Sine Wave
Mounting:	Pipe or wall
Operating Temperature:	+32° F to +140° F (0° C to +60° C)
Frequency Input:	
Low Level Coil (LLC):	0.25 - 1000 Hz
High Level Low Freq.:	0.25 - 150 Hz
High Level High Freq.:	0.25 - 1000 Hz
Optically Isolated HLLF:	w/2500 V optical isolation
Optically Isolated HLHF:	w/2500 V optical isolation
Enclosure Rating:	NEMA 4X / IP55
Shipping Weight:	*Remote:* 2.0 lbs. (.90 kg)
	Local: 1.1 lbs. (.5 kg)

APPROVALS

CE

SC500/SC510 – SPECIFICATIONS

Accuracy:	± 0.1% of reading
Power Source:	DC powered 5 to 30 VDC
Input Signal:	Hall Effect, Reed Switch or Open Collector (NPN) or Sine Wave
Output Signal:	Open Collector (NPN)
Frequency Range:	Coil, HF = 0-1500 Hz; LF = 0-150 Hz
Operating Temperature:	-40° F to +185° F (-40° C to +85° C)
Cable:	*Remote:* 20 ft., 3-conductor, tinned drain wire, 22 AWG, PVC jacket .212 dia. Ref. Belden 9363. *Local:* No cable provided
Mechanical Connections:	*Remote:* Wall or pipe mountable with standard U-bolts. *Local:* Unit is mounted to meter body, 1" NPT.
Electrical Connections:	*Remote:* Two strain relief ports *Local:* One strain relief port; one threaded plug

APPROVALS

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Scaled Pulse Output

SC500 Remote Mount

SC510 Local Mount

The GPI Scaled Pulse Module is a switch-programmable multi-stage counter/divider with multiple inputs. The module provides selectable K-factor to convert input frequency to scaled pulse output. The SC500 connects via a 20 foot input cable. The SC510 connects directly to the 1 inch MNPT conduit connector.

ACCURACY: ±0.1% READING

Features and Benefits:

- ✓ Converts input frequency to scaled pulse output.
- ✓ Provides communication with process control equipment.
- ✓ Works with G Series, G2 and A1 Turbine Meters and Oval Gear Meters.
- ✓ Remote model mounts on pipe or wall.

DISPLAYS & OUTPUT INSTRUMENTS

R700 Explosion Proof 4-20 mA Transmitter with Display

R700 Remote Model

R700 Local Model

The R700 4-20 mA Transmitter is a loop powered transmitter with simultaneous Rate & Total indicator. The R700 features an explosion proof enclosure for hazardous location use. It also features 20 point linearization.

R700-L Local Mount R700-R Remote Mount

Features and Benefits:

- ✓ Magnetic Pickup Input, Contact Closure Input, DC Pulse Input.
- ✓ 20 point linearization.

R700 – SPECIFICATIONS	
Power Supply:	8.5-30 VDC
Accuracy:	0.01% Reading ± 1 Count
Operating Temperature:	-4° F to +158° F (-20° C to +70° C)
Output:	4-20 mA, Isolated from Ground
Display:	5-digit Rate; 8-digit Totalizer

ENCLOSURE APPROVALS

FM APPROVED · CSA · CE · NEMA 4X · CLASSIFIED C UL

R800 Explosion Proof Totalizer & Rate Indicator

R800 Remote Model

R800 Local Model

The R800 is a battery powered Totalizer & Rate Indicator. Both Local and Remote models are available The R800 features an explosion proof enclosure for hazardous location use. It also features 20 point linearization.

R800-LBAT Local Mount R800-RBAT Remote Mount

Features and Benefits:

- ✓ Magnetic Pickup Input, Contact Closure Input, DC Pulse Input.
- ✓ 20 point linearization.

R800 – SPECIFICATIONS	
Power Supply:	One C Size Lithium Battery Pack
Accuracy:	0.01% Reading ± 1 Count
Operating Temperature:	-4° F to +158° F (-20° C to +70° C)
Pulse Output:	Isolated Photomos Relay
Display:	5-digit Rate; 8-digit Totalizer

ENCLOSURE APPROVALS

FM APPROVED · CSA · CE · NEMA 4X · CLASSIFIED C UL

GRT CONTROLLER

GRT – SPECIFICATIONS

Display:	6-digit, 0.55" High LED
Input Signal:	Hall Effect, Reed Switch or Open Collector (NPN)
Output Power:	(AC powered units only) +12 VDC @ 50 mA
Memory:	EEPROM stores data for 10 years if power is lost.
Outputs:	Two; N.O. Relays: 5 amps 120/240 VAC or 28 VDC. 4-20 mA or 0-20 mA
K-Factor:	5-digit K-Factor dividers from 0.0001 - 99999
Presets:	Two control outputs; 0.1 to 99.9 sec. or latch (0 sec)
Temperature:	Operating: +32° F to +130° F (0° C to +54° C)
Securing Lockout:	User selected 5-digit code
Front Panel:	NEMA 4X / IP65
Model Numbers:	See chart below

APPROVALS

CE

GRT MODEL NUMBERING SYSTEM

GRT 110 ____

GRT SERIES

VOLTAGE

110 Volt	**110**
220 Volt	**220**

OPTIONS

Open Collector Input (leave blank)	
Open Collector Input / 4-20 mA Output / Dual Rate	**AD**
Open Collector Input / Dual Rate	**D**
Magnetic Input	**M**
Magnetic Input / 4-20 mA Output / Dual Rate	**ADM**
Magnetic Input / Dual Rate	**DM**

ENCLOSURES FOR GBM & GRT SERIES CONTROLLERS

GRT shown here in enclosure.

EN4X-2: Enclosure has two pre-drilled holes (0.875 in.)
EN4X: Enclosure has no factory drilled holes

"Great Choice For Net Use."

The GRT is a 6-digit Totalizer/Ratemeter with two-level, 5-digit preset alarm control of Total or Rate. Inputs A & B have separate scaling K-factors. The totalizer can be programmed for "A" subtract "B", "A" add "B" or A & B as separate totalizers, with display and control of the "net" total and rate of "A". If only one input is required, the unit will display the total and rate from that one channel. The GRT can accept up to 10,000 pulses per second. It has a 5-digit floating decimal scale factor allowing total readout in true engineering units and rate per second, minute or hour.

Input "A" simultaneously drives a ratemeter which can be programmed to display the basic frequency (rate per second) or factored to show rate per minute or rate per hour. Simply push the "VIEW" button to see either total or rate without losing a count. Two separate 5 A relay contacts can be set to operate at either rate or total presets in a latch or auto-recycle mode with output timing from 0.1 to 99.9 seconds.

Two control outputs can be assigned to either the totalizer or ratemeter and can automatically recycle at the batch or stay latched until reset.

When two inputs are received (A & B), the unit can either add or subtract the two inputs or display the two inputs as separate totalizers.

Features and Benefits:

- ✓ Separate scaling factors for A & B inputs.
- ✓ Separate add/subtract simultaneous inputs.
- ✓ Two Relays.
- ✓ 110 or 220 AC power or 12-15 VDC.

GBT SERIES DELUXE BATCH CONTROLLER

Featuring 8 digits of bright, .55 inch, alphanumeric display, the GBT can accept up to 20,000 pulses per second of digital count. The standard unit has two separate, 8-digit floating decimal, "K" factors to convert the inputs to meaningful total and rate data. The user, with the push of a button, can toggle back and forth to view the total of the batch, the rate of flow or the grand total of flow.

The GBT may be thought of as two separate counters and a ratemeter. The "batching" counter counts to prewarn and preset numbers entered by the user and enables separate control outputs. The "totalizing" counter gives a cumulative reading or grand total.

Finally, the ratemeter counts the number of pulses per second and, with its scaling feature, can provide gallons per minute or any other rate measurement without the totalizer losing counts. At any time, the user may view the total, the grand total or the rate while never interrupting the counting process.

Setup is done through the front panel and the menu driven software in the unit. Start-Stop control can be activated via the front panel buttons or remote inputs.

The unit operates from either 110 VAC/12 to 27 VDC or optional 220 VAC/12 to 27 VDC. If AC power is used, two built-in regulated 12 VDC @ 100 mA power supplies are offered. They can be connected to provide +12 VDC and -12 VDC or +24 VDC to drive external devices. CMOS Logic is used to provide high noise immunity and low power consumption with EEPROM to hold data a minimum of 10 years if power is interrupted.

Features and Benefits:

- ✓ Two setpoints for two-stage valve control.
- ✓ Scaled pulse output – NPN.
- ✓ 110 or 220 AC power or 12-27 VDC.

GBT – SPECIFICATIONS

Display:	Lighted 8-digit, 0.55" High, 15 segment, red-orange LED
Input Signal:	Hall Effect, Reed Switch or Open Collector (NPN)
Output Power:	(AC powered units only) +12 VDC @ 100 mA
Memory:	EEPROM stores data for 5 years if power is lost.
Control Outputs:	Two.; SPDT Relays: 10 amps 120/240 VAC or 28 VDC.
K-Factor:	8-digit K-Factor dividers from 0.0001 - 99999999
Temperature:	Operating: +32° F to +130° F (0° C to +54° C)
Securing Lockout:	User selected 4-digit code
Front Panel:	NEMA 4X / IP65
Models:	GBT110 or GBT220

NOTE: Does not accept Sine Wave pulse.

APPROVALS

CE

GBM SERIES MINI BATCHER

GBM – SPECIFICATIONS

Display:	6-digit, 0.55" High LED
Input Signal:	Hall Effect, Reed Switch or Open Collector (NPN)
Output Power:	(AC powered units only) +12 VDC @ 100 mA
Memory:	EEPROM stores data for 10 years if power is lost.
Control Outputs:	Two.; SPDT Relays: 5 amps 120/240 VAC or 28 VDC.
K-Factor:	8-digit K-Factor dividers from 0.0001 - 99999999
Temperature:	Operating: +32° F to +130° F (0° C to +54° C)
Securing Lockout:	User selected 4-digit code
Front Panel:	NEMA 4X / IP65
Models:	GBM110, GBM110-M, GBM220 and GBM220-M

NOTE: Does not accept Sine Wave pulse.

APPROVALS

CE

ENCLOSURES FOR GBM & GRT SERIES CONTROLLERS

GRT shown here in enclosure.

EN4X-2: Enclosure has two pre-drilled holes (0.875 in.)
EN4X: Enclosure has no factory drilled holes

This miniature batcher is great for basic batching functions. The display shows Batch, Rate and Grand Total. The Start and Stop buttons make batching simple.

This is a great choice for daily batching of the same amount of product every time. With just a push of a button, this controller will open your solenoid valve, count the total volume being dispensed and then close your solenoid valve at a preprogrammed amount.

This unit operates from either an Open Collector or Magnetic input.

Features and Benefits:

- ✓ Works with GPI Turbine and Oval Gear Meters that provide pulse.
- ✓ Available in both 110- and 220-volt models.
- ✓ The 6-digit LED shows both Batch and Grand Totals on an easy-to-read screen.
- ✓ Prewarn and Preset Relays for control (2 stage batching process).
- ✓ 5 digit scaling factor.
- ✓ Pulse Input - 10 kHz maximum.
- ✓ Security lockout.
- ✓ Panel Mount – NEMA 4X / IP65 front panel.

METER **APPLICATION GUIDE**

Need help with choosing the right meter? Copy this form and fill out the information. Submit the form to GPI to determine the best product for your application.

Fax: 316-686-6746
Phone: 316-686-7361
Toll Free: 888-996-3837

Company: _____ Contact: _____

Address: _____ Phone: _____

City/State/Zip: _____ Fax: _____

Describe Metering Problem: _____

_____

Fluid: _____ Viscosity: _____ @ _____ °F

Specific Gravity: _____ Density: _____

Particulate: No ____ Yes ____ Size ____

Air Elimination Req'd: No ____ Yes ____

Pulsating Flow: No ____ Yes ____

Flowrate (GPM): Min. ____ Nom. ____ Max. ____

Line Size: _____

Temperature (° F): Min. ____ Nom. ____ Max. ____

Pressure (psiG): Min. ____ Nom. ____ Max. ____

Pressure Drop: Max.

Req'd Accuracy: ____ % of reading Repeatability: _____

SKETCH BASIC APPLICATION

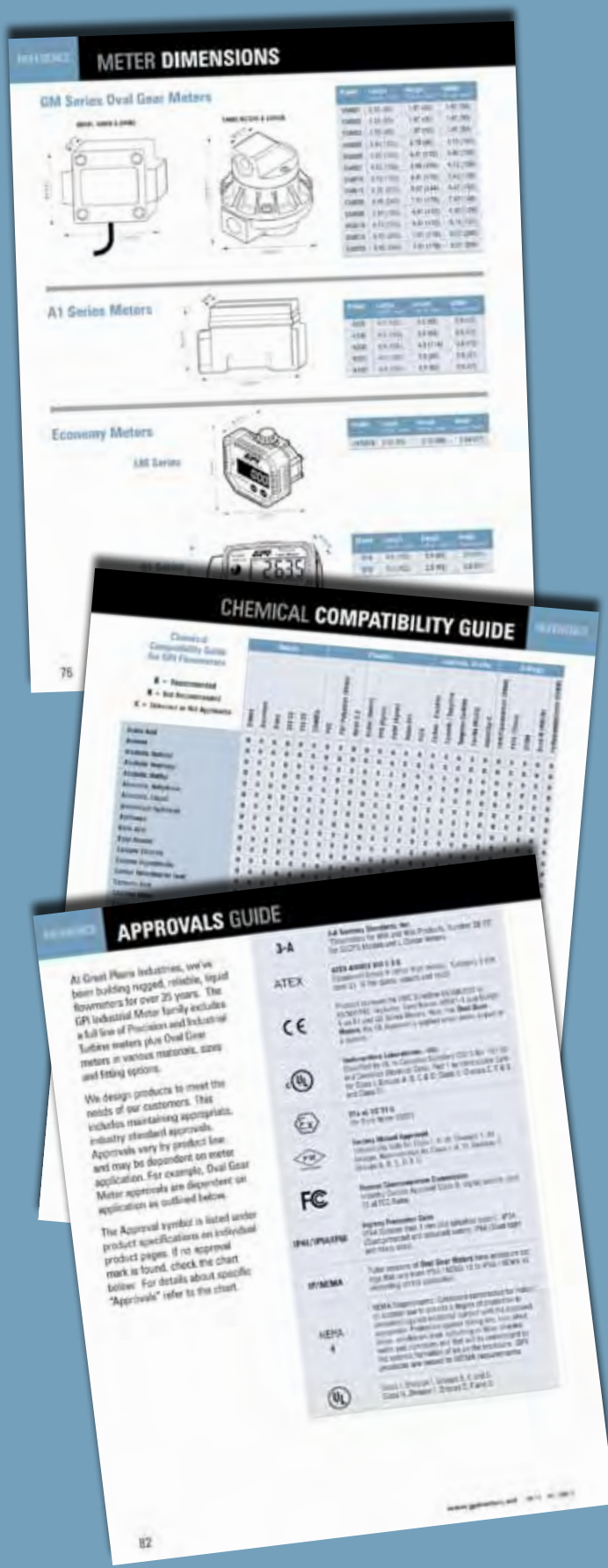
Approved Wetted Materials: _____

Unusual Fluid Properties: _____

Display: No ____ Yes ____ Local ____ Remote ____ Both ____

Output: No ____ Yes ____ Pulse ____ Current ____

Approvals Req'd: No ____ Yes ____ List _____



REFERENCE MATERIALS

This section includes general reference materials including Meter Dimensions and Chemical Compatibility Charts. Use the "Meter Application Guide" to help select the best GPI Meter for your application. Feel free to contact GPI for assistance when determining the correct Meter and Electronics.

REFERENCE MATERIALS

Chart of Approximate Viscosities of Common Liquids

Liquid	Viscosity in Centipoise @ 70°F	S S U Approximate
Sulfuric Acid	0.2	
Methyl Ethyl Ketone	0.4	
Water	1	
Milk	3	
Oil – Crude	15	80
Ethylene Glycol	16	80
Oil – Auto SAE 10	65	310
Oil – Corn	72	350
Oil – Auto SAE 20	125	585
Oil – Auto SAE 30	200	980
Varnish – Spar	420	2,050
Oil – Auto SAE 60	1,000	4,600
Honey	3,000	14,500
Ink	45,000	
Vaseline Petroleum Jelly	64,000	
Corn Syrup	110,000	

Component Materials

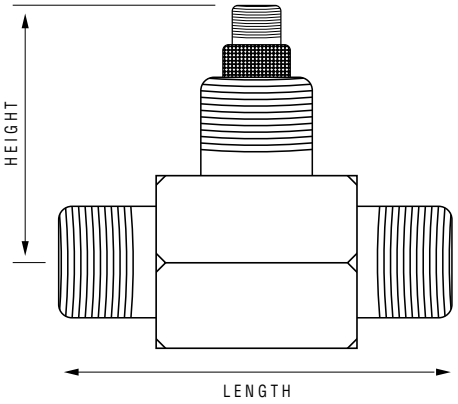
GPI offers Component Materials to assist with chemical compatibility. In some cases, trade names may be more common than the generic name. The cross reference chart here provides the generic material name and the corresponding trade name.

Generic Material Name	Trade Name
Acetal	Celcon or Delrin
Buna-N, NBR or Nitrile	Chemivic or Krynac
EPDM	Epcar
FKM or fluorocarbon	Fluorel or Viton
Nylon or polyamide	Zytel
PBT polyester	Valox
PEEK	Victrex
Perfluoroelastomer	Kalrez
Perfluoroelastomer	Chemraz
PET polyester	Rynite
Polyester film	Mylar
PPS	Ryton
PTFE	Teflon
PVDF	Kynar

G Series Precision Meters

Size	NPT and Flared Tubing		Sanitary Clamp		Flanged*	
	Length inches (mm)	**Height** inches (mm)	**Length** inches (mm)	**Height** inches (mm)	**Length** inches (mm)	**Height** inches (mm)
1/2 in.	2.75 (70)	2.56 (65)	2.75 (70)	2.56 (65)	—	—
3/4 in.	3.25 (82)	2.62 (66)	3.25 (82)	2.62 (66)	5.50 (140)	2.00 (51)
1 in.	3.56 (90)	2.75 (70)	3.56 (90)	2.75 (70)	5.50 (140)	2.12 (54)
1-1/2 in.	4.59 (116)	3.00 (76)	4.59 (116)	3.00 (76)	6.00 (152)	2.50 (63)
2 in.	6.06 (154)	3.25 (82)	6.06 (154)	3.25 (82)	6.50 (165)	3.00 (76)
3 in.	10.00 (254)	3.50 (89)	—	—	10.00 (254)	3.75 (95)

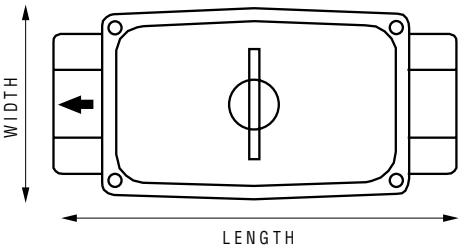
** Height on flange meters, measures from center line to top of flange.*

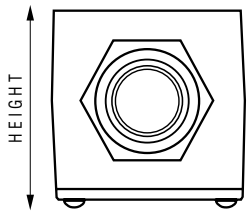


G2 Series Industrial Grade Meters

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: 09 Display adds 1.1" (28 mm) to height.



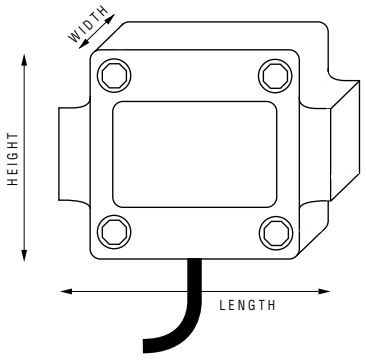


NOTE: Dimensions are for reference only and may vary by model.

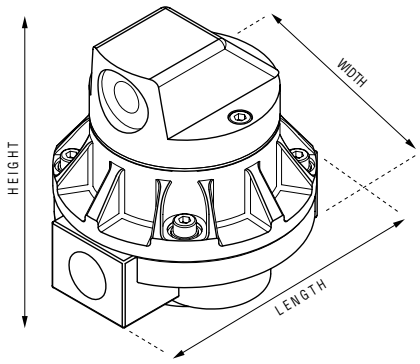
METER **DIMENSIONS**

GM Series Oval Gear Meters

GM001, GM002 & GM003

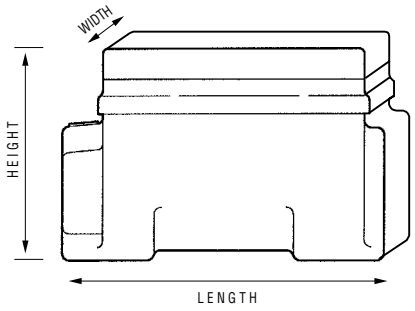


GM005 METERS & LARGER



Model	Length inches (mm)	Width inches (mm)	Height inches (mm)
GM001	2.58 (65)	1.97 (50)	1.81 (46)
GM002	2.58 (65)	1.97 (50)	1.81 (46)
GM003	2.58 (65)	1.97 (50)	1.81 (46)
GM005	3.94 (100)	3.78 (96)	4.13 (105)
GM006	5.24 (133)	4.41 (112)	4.96 (126)
GM007	4.25 (108)	3.94 (100)	4.72 (120)
GM010	5.24 (133)	4.41 (112)	5.43 (138)
GM015	5.91 (150)	5.67 (144)	6.42 (163)
GM020	9.45 (240)	7.01 (178)	7.40 (188)
GM505	3.94 (100)	4.41 (112)	4.92 (125)
GM510	5.24 (133)	4.41 (112)	6.18 (157)
GM515	9.45 (240)	7.01 (178)	8.07 (205)
GM520	9.45 (240)	7.01 (178)	8.07 (205)

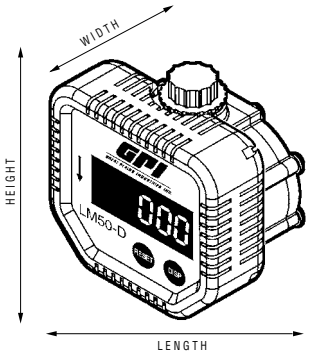
A1 Series Meters



Model	Length inches (mm)	Height inches (mm)	Width inches (mm)
A025	4.0 (102)	2.5 (63)	2.0 (51)
A100	4.0 (102)	2.5 (63)	2.0 (51)
A200	6.0 (152)	4.5 (114)	3.0 (76)
N025	4.0 (102)	2.5 (63)	2.0 (51)
N100	4.0 (102)	2.5 (63)	2.0 (51)

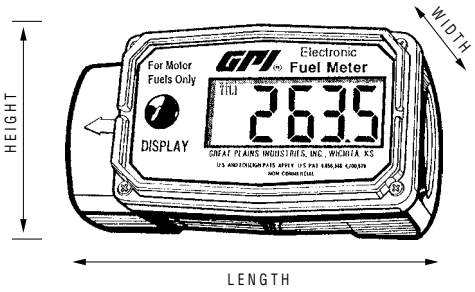
Economy Meters

LM Series



Model	Length inches (mm)	Height inches (mm)	Width inches (mm)
LM50DN	3.52 (89)	3.15 (80)	2.24 (57)

01 Series



Model	Length inches (mm)	Height inches (mm)	Width inches (mm)
01A	4.0 (102)	2.5 (63)	2.0 (51)
01N	4.0 (102)	2.5 (63)	2.0 (51)

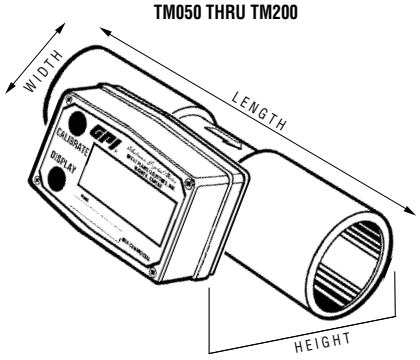
NOTE: Dimensions are for reference only and may vary by model.

TM Meters

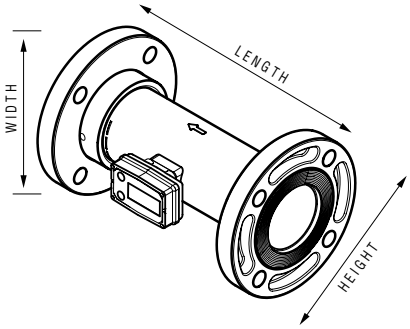
Model	Length* inches (mm)	Height** inches (mm)	Width inches (mm)
TM050	3.8 (96)	2.6 (66)	2.0 (51)
TM075	3.8 (96)	2.7 (68)	2.0 (51)
TM100	4.1 (104)	3.1 (79)	2.0 (51)
TM150	5.4 (137)	3.7 (94)	2.1 (53)
TM200	5.5 (140)	4.2 (107)	2.4 (61)
TM300 (Spigot)	11.5 (292)	5.34 (136)	3.5 (89)
TM400 (Spigot)	13.5 (343	6.34 (161)	4.5 (114)
TM300 (NPT)	14.7 (373)	5.78 (147)	4.37 (111)
TM400 (NPT)	17.0 (432)	6.76 (172)	5.34 (136)
TM300 (Flange)	12.0 (305)	7.5 (190)	7.5 (190)
TM400 (Flange)	14.0 (356)	9.0 (229)	9.0 (229)

* Length guidelines are estimates; actual length can vary up to ± 1/2".
•• Computer display adds 1.1" (28 mm) to height.

TM050 THRU TM200

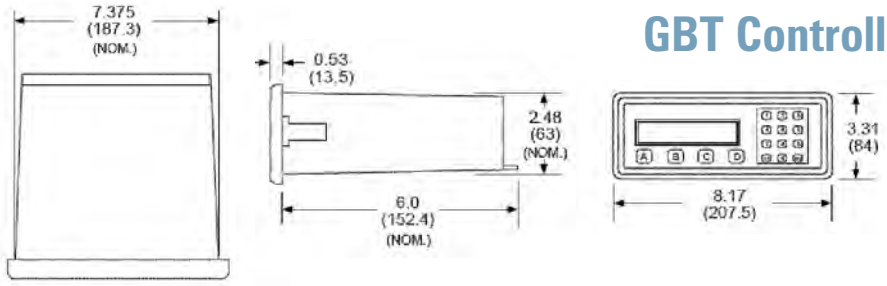


TM300 & TM400



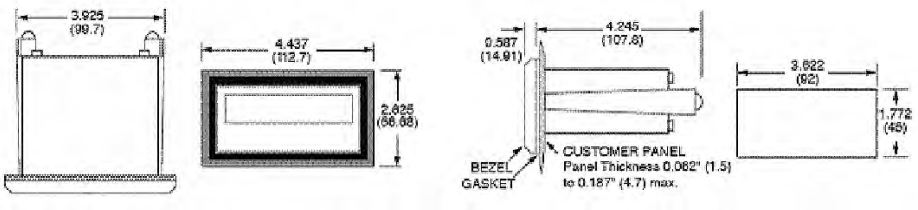
GBT Controller

Model	Depth inches (mm)	Height inches (mm)	Width inches (mm)
GBT	6.53 (165)	3.31 (84)	8.17 (207)



GBM & GRT Series Controllers

Model	Depth inches (mm)	Height inches (mm)	Width inches (mm)
GBM & GRT	4.8 (122)	2.8 (71)	4.4 (112)



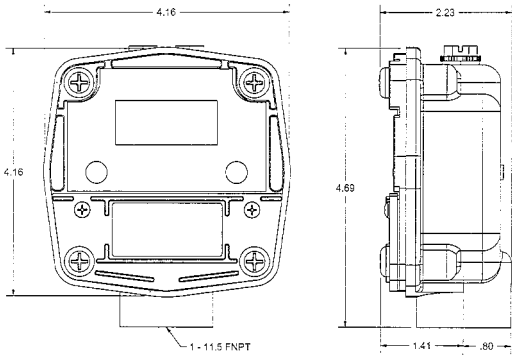
NOTE: Dimensions are for reference only and may vary by model.

METER **DIMENSIONS**

Electronic Choice - Local & Remote

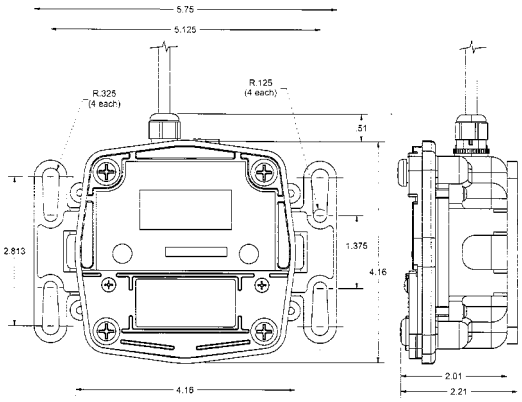
(Dimensions can vary by model.)

Local Model



Length inches (mm)	Height inches (mm)	Width inches (mm)
2.23 (57)	4.69 (119)	4.16 (106)

Remote Model



Length* inches (mm)	Height † inches (mm)	Width* inches (mm)
2.21 (56)	4.67 (119)	5.75 (146)

* Includes Mounting Bracket
† Includes Strain Relief

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

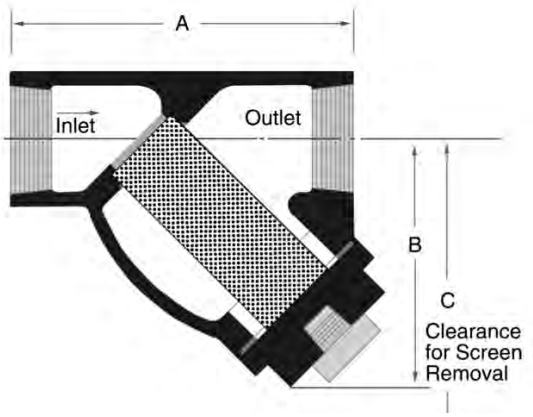
Y STRAINERS FOR OVAL GEAR METERS

Y STRAINER – SPECIFICATIONS

Blow-off Fitting:	**1/4 inch:**	1/4" NPT
	1/2 inch:	1/4" NPT
	3/4 inch:	1/4" NPT
	1 inch:	1/2" NPT
	1-1/4 inch:	1/2" NPT
	1-1/2 inch:	1/2" NPT
	2 inch:	1/2" NPT
Screen Standard:	**1/4 inch:**	200 mesh
	1/2 inch:	60 mesh
	3/4 inch:	60 mesh
	1 inch:	60 mesh
	1-1/4 inch:	60 mesh
	1-1/2 inch:	60 mesh
	2 inch:	60 mesh
Screen Opening (inch):	**1/4 inch:**	0.011"
	1/2 inch:	0.032"
	3/4 inch:	0.032"
	1 inch:	0.032"
	1-1/4 inch:	0.032"
	1-1/2 inch:	0.032"
	2 inch:	0.032"
Shipping Weight:	**1/4 inch:**	4 lbs.
	1/2 inch:	4 lbs.
	3/4 inch:	5 lbs.
	1 inch:	6 lbs.
	1-1/4 inch:	8 lbs.
	1-1/2 inch:	10 lbs.
	2 inch:	18 lbs.

PART NUMBERS & DIMENSIONS

Part Number	Size	A	B	C
125700-01	1/4 inch:	3-1/4"	2-3/16"	3"
125700-02	1/2 inch:	3-1/4"	2-3/16"	3"
125700-03	3/4 inch:	3-5/8"	2-3/4"	3-1/4"
125700-04	1 inch:	4-1/4"	3-3/16"	4-1/8"
125700-05	1-1/4 inch:	5-1/4"	3-7/8"	5"
125700-06	1-1/2 inch:	6-1/4"	4-3/4"	5-7/8"
125700-07	2 inch:	7-5/8"	6"	8-1/8"



Oval Gear Meters work best with clean fluid, free of debris. GPI carries Y Strainers to fit most models of Oval Gear Meters. These strainers range from 1/4 in. to 2 in. models. All sizes come complete with blow-off and plug.

Select Your Strainer Size:

1/4 inch 1/2 inch 3/4 inch 1 inch
1-1/4 inch 1-1/2 inch 2 inch

Features and Benefits:

- ✓ Machined, tapered seat ensures a perfect fit for the removable, 316 Stainless Steel screen.
- ✓ 316 Stainless Steel body and all screens are 316 Stainless Steel.
- ✓ All sizes come complete with blow-off and plug. These can be replaced with ball valve for on-line blow-down of particulate.
- ✓ Rated for up to 1480 PSI at 100° F for water, oil or gas.
- ✓ Female NPT threads.

CHEMICAL COMPATIBILITY GUIDE

Chemical Compatibility Guide for GPI Flowmeters

R = Recommended
N = Not Recommended
X = Unknown or Not Applicable

	Metals						Plastics								Journals, Shafts					O-Rings				
	Bronze	Aluminum	Brass	304 SS	316 SS	CD4MCu	PVC	PBT Polyester (Valox)	Nylon 6,6	Acetal (Delrin)	PPS (Ryton)	PVDF (Kynar)	Rulon 641	PEEK	Carbon - Graphite	Ceramic / Sapphire	Tungsten Carbide	Ferrite (MnZn)	Hastelloy-C	FKM/Fluorocarbon (Viton)	PTFE (Teflon)	EPDM	Buna-N (Nitrile)	Perfluoroelastomer (FFKM)
Acetic Acid	N	R	N	N	R	R	N	X	N	N	R	N	R	R	R	R	N	X	R	R	R	R	N	R
Acetone	R	R	R	R	R	R	N	N	R	R	R	N	R	R	R	R	R	R	R	N	R	R	N	R
Alcohols: Isobutyl	R	R	X	R	R	R	R	X	X	R	X	X	R	R	R	R	R	X	R	R	R	R	R	R
Alcohols: Isopropyl	R	R	X	R	R	R	R	R	R	R	X	X	R	R	R	R	R	R	R	R	R	R	R	R
Alcohols: Methyl	R	R	R	R	R	R	R	X	R	R	R	R	R	R	R	R	R	R	R	N	R	R	R	R
Ammonia, Anhydrous	N	R	N	R	R	R	R	X	X	N	R	R	R	R	X	R	R	X	R	N	R	R	R	R
Ammonia, Liquid	N	R	X	R	R	R	R	X	R	N	R	R	R	R	R	R	R	X	R	N	R	R	N	R
Ammonium Hydroxide	N	R	N	R	R	R	R	N	N	N	R	R	R	R	R	R	N	R	R	R	R	R	N	R
Antifreeze	R	R	X	X	R	X	R	X	X	N	X	X	X	R	X	R	R	R	X	R	X	R	R	R
Boric Acid	R	N	X	R	R	R	R	R	R	R	R	R	R	X	R	R	R	R	R	R	R	R	R	R
Butyl Acetate	R	R	R	R	R	R	N	R	R	R	R	R	R	R	R	R	R	R	R	N	R	R	N	R
Calcium Chloride	R	N	X	N	R	R	N	X	R	N	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Calcium Hypochlorite	N	N	X	N	R	R	R	X	X	N	R	R	R	R	R	R	N	R	R	R	R	R	N	R
Carbon Tetrachloride (wet)	R	N	R	R	R	R	X	X	X	R	R	R	R	X	R	R	X	X	R	X	R	N	N	R
Carbonic Acid	R	R	N	R	R	R	R	X	R	R	R	R	R	R	R	R	R	X	R	R	R	R	N	R
Chlorine Water	R	N	N	N	N	R	R	X	N	N	N	R	R	N	R	X	R	R	R	R	R	N	N	R
Chlorine, Anhydrous Liquid	N	N	N	N	N	N	N	X	X	R	N	R	R	N	R	N	X	N	N	R	R	R	N	R
Clorox® Bleach (Sodium Hypochlorite)	X	N	X	R	R	R	R	R	N	N	N	R	R	R	X	R	N	X	R	R	R	R	N	R
Detergents	R	R	X	R	R	R	R	R	R	R	R	R	R	R	R	R	X	R	R	R	R	R	R	R
Diesel Fuel	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	N	R	R
Ethanol	R	R	R	R	R	R	N	X	R	R	X	X	R	R	R	R	R	X	R	R	R	R	N	R
Ethylene Dichloride	N	R	R	R	R	R	N	X	X	R	R	R	R	R	R	R	R	X	R	R	R	N	N	R
Ethylene Glycol	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Ferric Chloride	N	N	N	N	N	R	R	X	N	N	R	R	R	R	R	R	N	X	R	R	R	R	R	R
Freon 113	X	X	X	X	X	R	R	X	X	R	R	R	R	R	X	R	R	R	R	R	R	N	R	R
Fuel Oils (#1 and #2)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	X	R	R	R	N	R	R
Gasoline, Unleaded	R	R	X	R	R	R	N	R	R	R	R	R	R	R	R	R	R	R	R	R	R	N	R	R
Heptane	R	R	R	R	R	R	N	X	X	R	R	R	R	R	R	R	R	X	R	R	R	N	R	R
Hydraulic Oil (Petro)	R	R	R	R	R	R	R	R	X	R	N	R	R	R	R	R	R	R	R	R	R	N	R	R
Hydraulic Oil (Synthetic)	R	R	R	R	R	R	R	R	X	X	X	R	R	R	R	R	R	R	R	R	R	R	N	R
Hydrochloric Acid 20%	N	N	X	N	N	R	R	R	N	N	N	R	R	N	R	N	N	R	R	R	R	N	X	R
Hydrochloric Acid 37%	N	N	X	N	N	R	R	X	N	N	N	R	R	R	R	N	N	R	R	R	R	R	R	R
Hydrochloric Acid 100%	N	N	N	N	N	R	N	N	N	N	N	R	R	R	R	R	N	R	R	R	R	N	N	R
Hydrofluoric Acid 20%	R	N	X	N	N	R	R	R	N	N	R	R	R	N	X	N	N	R	R	R	R	N	N	R
Hydrofluoric Acid 100%	R	N	X	R	R	R	N	N	N	N	N	R	R	N	R	N	N	R	R	R	R	N	N	R
Hydrogen Peroxide 10%	R	R	X	R	R	R	R	R	N	N	R	R	R	R	N	R	N	R	R	R	R	R	N	R
Hydrogen Peroxide 30%	R	R	X	R	R	R	R	X	N	N	R	R	R	R	N	X	N	R	R	R	R	R	N	R
Hydrogen Peroxide 100%	R	R	N	R	R	R	R	X	N	N	N	R	R	R	N	X	N	R	R	R	R	N	N	R
Isopropyl Acetate	R	N	X	N	R	R	N	X	X	N	X	N	R	R	R	R	R	X	R	N	R	R	N	R
Kerosene	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	N	R	R
Ketones	R	R	X	R	R	R	N	X	X	N	R	N	R	R	R	R	R	X	R	N	R	R	N	R

CHEMICAL COMPATIBILITY GUIDE

Chemical Compatibility Guide for GPI Flowmeters

R = Recommended
N = Not Recommended
X = Unknown or Not Applicable

	Metals						Plastics								Journals, Shafts					O-Rings				
	Bronze	Aluminum	Brass	304 SS	316 SS	CD4MCu	PVC	PBT Polyester (Valox)	Nylon 6,6	Acetal (Delrin)	PPS (Ryton)	PVDF (Kynar)	Rulon 641	PEEK	Carbon - Graphite	Ceramic / Sapphire	Tungsten Carbide	Ferrite (MnZn)	Hastelloy-C	FKM/Fluorocarbon (Viton)	PTFE (Teflon)	EPDM	Buna-N (Nitrile)	Perfluoroelastomer (FFKM)
Lacquer Thinners	R	R	R	R	R	R	N	X	X	N	X	X	R	X	R	X	R	X	R	N	R	N	N	R
Lacquers	R	R	X	R	R	R	N	X	X	N	X	N	R	R	R	R	R	X	R	N	R	N	N	R
Lye: NaOH Sodium Hydroxide	N	N	N	R	R	N	R	X	X	N	R	N	R	R	X	R	R	X	N	R	R	R	R	R
Magnesium Hydroxide	R	N	N	R	R	R	R	X	R	R	R	R	R	R	R	R	R	X	R	R	R	R	R	R
Methanol (Methyl Alcohol)	R	R	R	R	R	R	R	X	R	R	R	R	R	R	R	R	R	R	R	N	R	R	R	R
Methyl Ethyl Ketone	R	R	R	R	R	R	N	R	R	N	R	N	R	R	R	R	X	R	R	N	R	R	N	R
Motor Oil	R	R	X	R	R	X	R	R	R	R	R	R	R	R	R	R	R	R	X	X	R	N	R	R
Nitrating Acid (> 15% H2S04)	X	N	X	N	N	R	N	X	X	N	N	X	R	N	X	R	N	X	R	X	R	R	N	R
Nitric Acid (5-10%)	R	R	N	R	R	R	R	X	R	N	R	R	R	N	R	N	N	X	R	R	R	R	N	R
Nitric Acid (50%)	R	N	N	R	R	R	R	X	N	N	N	R	R	N	R	N	N	N	R	R	R	N	N	R
Nitric Acid (Concentrated)	R	N	N	R	R	R	R	R	N	N	N	R	R	N	N	N	N	N	R	R	R	N	N	R
Oils: Fuel (1, 2, 3, 5A, 5B, 6)	R	N	R	R	R	R	R	X	R	N	R	R	R	R	R	R	R	X	R	R	R	N	R	R
Oils: Hydraulic Oil (Petro)	R	R	R	R	R	R	R	R	R	R	N	R	R	R	R	R	R	X	R	R	R	N	R	R
Oils: Mineral	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	N	R	R
Oils: Transformer	X	R	X	R	R	X	R	R	X	R	X	R	R	R	R	R	R	X	X	R	R	N	R	R
Phosphoric Acid (< 40%)	R	N	N	N	N	R	R	X	N	N	R	R	R	R	R	R	N	N	R	R	R	R	N	R
Phosphoric Acid (> 40%)	R	N	N	N	N	R	R	X	N	N	R	R	R	R	R	R	N	X	R	R	R	R	N	R
Potassium Chloride	R	N	N	R	R	R	R	R	R	R	R	R	R	R	R	R	N	X	R	R	R	R	R	R
Potassium Hydroxide (Caustic Potash)	N	N	N	R	R	R	R	N	R	R	R	R	R	R	N	N	N	R	R	R	R	R	R	R
Potassium Hypochlorite	N	N	X	N	R	R	R	X	X	X	R	R	R	X	X	N	N	X	R	X	R	R	R	R
Propane (Liquefied)	R	R	R	R	R	R	R	X	R	R	X	R	R	R	R	R	R	X	R	R	R	N	R	R
Propylene Glycol	R	R	X	R	R	R	N	R	R	R	X	X	R	R	X	R	R	R	R	R	R	R	R	R
Salt Brine (NaCl Saturated)	R	R	X	R	R	R	R	X	X	X	R	R	R	R	R	X	N	X	R	R	R	R	R	R
Sea Water	R	R	N	N	N	R	R	R	X	R	R	R	R	R	R	R	N	X	R	R	R	R	R	R
Soap Solutions	R	N	R	R	R	R	R	X	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Sodium Bicarbonate	R	N	N	R	R	R	R	R	X	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Sodium Chloride	R	N	N	R	R	R	R	R	R	R	R	R	R	R	R	R	N	R	R	R	R	R	R	R
Sodium Hydroxide (20%)	R	N	R	R	R	R	R	X	R	R	R	R	R	R	R	R	N	X	R	N	R	R	R	R
Sodium Hydroxide (50%)	N	N	N	R	R	N	R	X	R	R	R	R	R	R	X	R	N	X	N	N	R	R	R	R
Sodium Hydroxide (80%)	N	N	N	N	R	R	R	N	R	N	R	R	R	R	R	R	N	N	R	N	R	R	N	R
Sodium Hypochlorite (< 20%)	N	N	N	N	N	R	R	X	N	N	R	R	R	R	R	R	N	R	R	R	R	R	R	R
Sodium Hypochlorite (100%)	N	N	N	N	N	R	R	X	N	N	R	R	R	R	N	R	N	R	R	R	R	R	N	R
Sulfuric Acid (< 10%)	R	N	X	N	R	R	R	X	N	N	R	R	R	R	R	R	N	X	R	R	R	R	R	R
Sulfuric Acid (75-100%)	R	N	X	N	N	R	N	X	N	X	R	R	R	N	N	R	N	N	R	R	R	R	N	R
Toluene (Toluol)	R	R	R	R	R	R	N	N	R	N	R	R	R	R	R	R	R	R	R	N	R	N	N	R
Trichloroethylene	R	N	X	R	R	R	N	X	R	N	R	R	R	R	R	X	R	R	R	R	R	N	N	R
Vinegar	R	N	N	R	R	R	R	R	N	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Water, Deionized	X	N	R	R	R	R	R	X	X	X	R	R	R	X	R	R	X	X	R	R	R	R	R	R
Water, Distilled	R	N	R	R	R	R	R	R	X	R	R	R	R	R	R	R	R	X	R	R	R	R	R	R
Water, Salt	R	N	N	R	R	R	R	X	X	R	R	R	R	R	R	R	R	X	R	R	R	R	R	R
Xylene	R	R	R	R	R	R	N	N	R	R	R	R	R	R	R	R	R	X	R	R	R	N	N	R

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. For example, Oval Gear Meter approvals are dependent on application as outlined below.

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

3-A	**3-A Sanitary Standards, Inc.** "Flowmeters for Milk and Milk Products, Number 28-03" for GSCPS Models and L Option Meters.
ATEX	**ATEX ANNEX VIII II 3 G** Equipment Group II (other than mines); Category 3 (for zone 2); G (for gases, vapors and mist).
CE	Product reviewed for EMC Directive 89/336/EEC or 89/392/EEC. Includes: Euro Norms 50081-1 and 50082-1 on A1 and G2 Series Meters. Note: For **Oval Gear Meters**, the CE Approval is applied when meter is part of a system.
c UL	**Underwriters Laboratories - cUL** Classified by UL to Canadian Standard C22.2 No. 157-92 and Canadian Electrical Code, Part 1 as Intrinsically Safe for Class I, Groups A, B, C & D; Class II, Groups E, F & G and Class III.
Ex	**EEx nL IIC T4 U** Per Euro Norm 50021.
FM APPROVED	**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.
FC	**Federal Communication Commission** Industry Canada Approval Class B; digital service, part 15 of FCC Rules.
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 **Oval Gear Meters** 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.*
UL	Class I, Division I, Groups B, C and D. Class II, Division I, Groups E, F and G.

WHEN **PERFORMANCE** COUNTS

Flowmeter performance can be critical to customers in the field. All flowmeters produced by GPI are quality tested at the factory. We adhere to the strictest testing procedures. We take pride in the performance of our meters and want customers to rest assured, they have purchased one of the best.

Determining flowmeter performance is important to us, so we take extra efforts when it comes to performance testing. Although there are various methods for establishing performance, we use some of the most stringent methods available.

GPI calibration equipment includes primary and secondary standards that are NIST traceable. Primary standards include ballistic calibrators and weight calibration stands.

So when Performance and Repeatability count, ***COUNT on GPI***.

Providing Quality Meters Worldwide

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