

Industrial Meter Catalog



SEE INSIDE FOR THESE NEW PRODUCTS:



GBM Series Mini Batcher	page	66
LM50M Mechanical Lube Meter	page	52

Contents

SECTION 1		SECTION 4	
G Series Precision Meters	1	Al Series Commercial Grade Meters	43
Build-Your-Own	2	Build-Your-Own	44
G Series Meter Number Reference	3	A1 Series Meter Number Reference	45
Stainless Steel - GBT, GIT & GNT	4	Aluminum / Nylon	46
Stainless Steel - GBP, GIP & GNP	5	Modules	48
Stainless Steel – ANSI Flange Fitting	6	Accessories	50
Stainless Steel - Sanitary Clamp Standard Fitting (3A)	7		
Stainless Steel - Sanitary Clamp Tri-Clover® Fitting	8		
Accessories	9	SECTION 5	
		Economy Electronic Digital Meters	51
		LM Series Lube Meters	
SECTION 2		TM Series Water Meter	53
G2 Series Industrial Grade Meters	11	01N Series Water Meter	53
Build-Your-Own	12	01A Series Fuel Meter	54
G2 Industrial Meter Number Reference	13	FM-300H/R Chemical Meter	54
Metal Meters:			
Stainless Steel	14		
Stainless Steel - High Pressure	15	SECTION 6	
Stainless Steel - ANSI Flange Fitting	16	Electronics Choices	55
Stainless Steel - Tri-Clover® Fitting	17	Electronics Choices	
Aluminum	18	G2 Wireless System	
Brass	19	Local Display	
Plastic Meters:		GG500/GG510 Transmitters	
PVC	20	GX500/GX510 Transmitters	
PVDF	21	GA500/GA510 Transmitters	61
Modules	22	SC500/SC510 Scaled Pulse Module	62
Accessories	26	Displays & Output Instruments	
		GRT Series Controller	
		GBT Series Deluxe Batch Controller	65
SECTION 3		GBM Series Mini Batcher	66
GM Series Oval Gear Meters	27		
Build-Your-Own	28		
GM Series Oval Gear Meter Number Reference	29	SECTION 7	
GM001	30	Reference Materials	67
GM002	31	Liquid Viscosity Chart	
GM003	32	Component Materials	
GM005	33	Meter Dimensions	69
GM505	34	Y Strainers	72
GM006	35	Chemical Compatibility Chart	73
GM007	36	Approvals	
GM010	37	• •	
GM510	38		
GM015	39		
GM515	40		
GM020	41		



G Series Precision Weters

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 Section 6.

remote	Moders
GA500	R700-R
GG500	R800-R
GX500	SC500

GA510	R700-L
GG510	R800-L
GX510	SC510

Local Models



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

Fitting Type

N = NPT (Male)

G = G Series Precision Turbine Meter

- I = ISO Taper (Male)

B = BSP (Male)

F = Flanged

SC = Sanitary Clamp

Meter Dimensions listed on pages 69-71.

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 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

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

* Electronic Choice not available on all models.

BUY SMART. BUY VALUE. BUY

(Sample Model Number)

[◆] Call GPI for Sensor & Electronics

Precision Meters - GBT, GIT & GNT



GNT shown here with Local Display

CANTON TO THE PARTY OF THE PART

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:

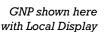
- GG510 (Display with Pulse Output)
- GX510 (Display with 4-20 mA Output)
- GA510 (4-20 mA Output)
- SC510 (Scaled Pulse Output)

SPECIFICATIONS								
Dooign Type:	SPECI							
Design Type:		Turbine						
Housing Material:		316 Stainless Steel						
Meter Sizes Availa	ıble:							
For GNT: NPT		1/2"	3/4"	1"	1-1/2"	2"	3"	
For GBT: BSP	(Male)	1/2"	3/4"	1"	1-1/2"	2"	3"	
For GIT: ISO 1		1/2"	3/4"	1"	1-1/2"	2"	3"	
For High Temp	erature*:	1/2"	3/4"	1"	1-1/2"	2"	_	
Flow Range:	1/2" (051)	0.8 - 6	.0 GPM	(3.	.0 - 22 LPI	M)		
	3/4" (075)		6 GPM		.0 - 60 LPI			
	3/4" (075E)		3 GPM		.7 - 87 LPI			
	1" (100)		7 GPM		5.2 - 252 l			
	1-1/2" (150)		177 GPN		7.0 - 670 l		1)	
	2" (200) 3" (300)		30 GPM 00 GPM		25.0 - 125 27.1 - 227			
	` ,			(2	21.1 - 221	I LPIV	1)	
Accuracy (Linearit	y):	± 0.5%	0					
Repeatability:		± 0.1%	o O					
Pressure Rating:		1/2" to	2" = 5,0	000 P	SI / 340 B	AR		
			3" = 2,5	500 P	SI / 170 B	AR		
Operating Tempera	ature Range:							
	For Tungsten Carbide:			-100°F to +225°F (-74°C to +107°C)				
For High Temp	erature *:	-450°F to +800°F (-268°C to +426°C)					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:			ainless S					
Sleeve Bearing			ten Carbi					
Thrust Bearing	:		ten Carbi					
Shaft: Rotor:			ten Carbi Cu Stain		'tool			
Rotor Supports	ų.		ainless S		1001			
Recommended Str		0.00						
necommenueu su	1/2"	40 me	ch					
	3/4"	40 me						
	1"	40 me						
	1-1/2"	18 mesh						
	2"	14 mesh						
	3"	14 me	sh					
Frequency Output:	1/2" (051)	125 -	1000 Hz					
	3/4" (075)	100 -	1000 Hz					
	3/4" (075E)	100 -	1000 Hz					
	1" (100)		1000 Hz					
	1-1/2" (150)		1000 Hz					
	2" (200)		1000 Hz					
	3" (300)	50 - 50	JU MZ					
* Requires High Te	mn Pickun							

^{*} Requires High Temp Pickup.

Precision Meters - GBP, GIP & GNP





ACCURACY: ± 0.5%

Select Your Meter Size:

1/2 inch l inch 2 inch 3/4 inch 1-1/2 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)

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: BSP (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) 17.7 - 177 GPM (67.0 - 670 LPM)					
1-1/2" (150) 2" (200)	17.7 - 177 GPM (67.0 - 670 LPM) 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 2.608					
3/4" (075E) 1" (100)	2,608 896					
1-1/2" (150						
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 316 Stainless Steel					
Rotor Supports:	310 Stairness Steen					
Recommended Strainer Size: 1/2"	40 mach					
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 2" (200)	100 - 1000 Hz 100 - 1000 Hz					
2" (200)						
* 1/2 in. (050) requires RF Pick	Jp.					

Precision Meters - ANSI Flange

Model GFT 150# RF ANSI Flange Fitting



ACCURACY: ± 0.5%

Select Your Meter Size:

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



For Your Special Application Needs:

Model GFP Model GFT HT
For Chemicals 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)

мс	DEL GFT	- SPECIFICATIONS
Design Type:		Turbine
Housing Material:		316 Stainless Steel
Meter Sizes Availal	ole:	
For GFT:		3/4" 1" 1-1/2" 2" 3"
For GFP:		3/4" 1" 1-1/2" 2" —
For High Tempe	rature:	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	r):	± 0.5%
Repeatability:		± 0.1%
Pressure Rating:		Flange Rule
Operating Tempera		
For Tungsten Ca	arbide:	-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 Tempe	erature*:	-450°F to +800°F (-268°C to +426°C)
	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 Bearing	S:	Tungsten Carbide
Thrust Bearing: Shaft:		Tungsten Carbide Tungsten Carbide
Rotor:		CD4MCu Stainless Steel
Rotor Supports:		316 Stainless Steel
Wetted Materials (
Housing:	ui i j.	316 Stainless Steel
Sleeve Bearing	s:	PTFE
Thrust Bearing:		440C Stainless Steel
Shaft:		316 Stainless Steel
Rotor:		CD4MCu Stainless Steel
Rotor Supports:		316 Stainless Steel
Recommended Stra	niner Size:	
	3/4"	40 mesh
	1"	40 mesh
	1-1/2"	18 mesh
	2"	14 mesh
	3"	14 mesh
Frequency Output:		100 - 1000 Hz
	3/4" (075E)	100 - 1000 Hz
	1" (100) 1-1/2" (150)	100 - 1000 Hz 100 - 1000 Hz
	2" (200)	100 - 1000 Hz 100 - 1000 Hz
	2 (200) 3" (300)	50 - 500 Hz
		55 550 FIE
* Requires High Ter	mp Pickup.	

Precision Meters - Sanitary Clamp



Model GSCPSStandard Sanitary Clamp



Model GSCPSLow Profile Sanitary Clamp

ACCURACY: ± 0.5%

GSCPS Stainless Steel Precision Turbine Meter



Select Your Meter Size:

l 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

MODEL GSCPS - 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: Rotor Supports:	CD4MCu Stainless Steel 316 Stainless Steel					
•	J TO JUMINICOS JUCCI					
Recommended Strainer Size:	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					
- (200)						

APPROVALS

GSCPS & "L" Option Meters carry a



Sanitary Rating.

Flowmeters for milk and milk products, Number 28-03.







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.



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

CATION STATE OF THE PARTY OF TH

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)

					_	-	
MC	DEL GSCP	- SPE	CIFIC	ATIOI	NS		
Design Type:		Turbine					
Housing Material:		316 Stainless Steel					
Meter Sizes Availa	ble (ID):	1/2" 3/4" 1" 1-1/2" 2				2"	
Meter ID: 1/2"		3/4" Fitt	ina				
1/2"		1" Fittin					
3/4"		1-1/2" F					
1"		1-1/2" F					
1-1/	2"	1-1/2" F					
2"		2" Fittin					
Flow Range: 1/2"	(050) [†]	0.6 - 6 0	PM	(22-2	22 LPM)		
	(051)	0.8 - 6 (•	22 LPM)		
	(075)	1.6 - 16		•	60 LPM)		
	(075E)	2.3 - 23		`	37 LPM)		
	100)	6.7 - 67		•	252 LPM)		
	2" (150)		77 GPM	•	670 LPM)		
	200)	33 - 330		•	- 1250 LPN	VI)	
Accuracy (Linearit		± 0.5%		,		,	
Repeatability:		± 0.1%					
Pressure Rating:				Limited by fitting size, clamp size & temp.			
Operating Tempera	rating 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 Sta	nless Ste	el			
Sleeve Bearing	js:	PTFE					
Thrust Bearing	:	440C St	ainless St	eel			
Shaft:			nless Ste				
Rotor:			ı Stainles				
Rotor Supports		316 Sta	nless Ste	el			
Recommended Str							
	1/2"	40 mest					
	3/4"	40 mesh					
	1"	40 mesh					
	1-1/2"	18 mesh					
	2"						
Frequency Output:		100 - 10					
	1/2" (051)	125 - 10					
	3/4" (075)	100 - 10					
	3/4" (075E)	100 - 10					
	1" (100)	100 - 10					
	1-1/2" (150)	100 - 10					
	2" (200)	100 - 10	IUU HZ				

[†] GSCP-050 requires RF Pickup.

G Series Precision Accessories

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.



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



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



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									work with
Part Number	Sensor Power	Temperature Range	Cable Type	Connector Required	Cable Length	Thread Size	Local	Remote	Battery Pwr Display
81006001	None	-100°F - +250°F (-73°C - +121°C)	None	None	12 in.	5/8" - 18	Х		Yes
81006000	None	-450°F - +450°F (-268°C - +232°C)	S	80001200	N/A	5/8" - 18		Χ	Yes
81007001	None	-450°F - +800°F (-268°C - +426°C)	None	None	10 ft.	5/8" - 18		X	Yes
81005002	7-30 VDC	-40°F - +248°F (-29°C - +120°C)	D	80001202	N/A	5/8" - 18		Χ	No
81003000	None	-100°F - +250°F (-73°C - +121°C)	None	None	12 in.	5/8" - 18	Х		Yes
81001000	None	-100°F - +250°F (-73°C - +121°C)	S	80001200	N/A	5/8" - 18		X	Yes
81002000	None	-450°F - +258°F (-268°C - +125°C)	S	80001200	N/A	5/8" - 18		X	Yes
81007000	None	-450°F - +800°F (-268°C - +426°C)	None	None	3 ft.	5/8" - 18		Χ	Yes
81004000	5-32 VDC	-40°F - +248°F (-29°C - +120°C)	D	80001202	N/A	5/8" - 18		Χ	No
	Number 81006001 81007001 81005002 81003000 81001000 81002000 81007000	Number Power 81006001 None 81006000 None 81007001 None 81005002 7-30 VDC 81003000 None 81001000 None 81002000 None 81007000 None	Number Power Temperature Range 81006001 None -100°F - +250°F (-73°C - +121°C) 81006000 None -450°F - +450°F (-268°C - +232°C) 81007001 None -450°F - +800°F (-268°C - +426°C) 81005002 7-30 VDC -40°F - +248°F (-29°C - +120°C) 81003000 None -100°F - +250°F (-73°C - +121°C) 81001000 None -450°F - +258°F (-268°C - +125°C) 81007000 None -450°F - +800°F (-268°C - +426°C)	Number Power Temperature Range Type 81006001 None -100°F - +250°F (-73°C - +121°C) None 81006000 None -450°F - +450°F (-268°C - +232°C) S 81007001 None -450°F - +800°F (-268°C - +426°C) None 81005002 7-30 VDC -40°F - +248°F (-29°C - +120°C) D 81003000 None -100°F - +250°F (-73°C - +121°C) None 81001000 None -100°F - +250°F (-73°C - +121°C) S 81002000 None -450°F - +258°F (-268°C - +125°C) S 81007000 None -450°F - +800°F (-268°C - +426°C) None	Number Power Temperature Range Type Required 81006001 None -100°F - +250°F (-73°C - +121°C) None None 81006000 None -450°F - +450°F (-268°C - +232°C) S 80001200 81007001 None -450°F - +800°F (-268°C - +426°C) None None 81005002 7-30 VDC -40°F - +248°F (-29°C - +120°C) D 80001202 81003000 None -100°F - +250°F (-73°C - +121°C) None None 81001000 None -100°F - +250°F (-73°C - +121°C) S 80001200 81002000 None -450°F - +258°F (-268°C - +125°C) S 80001200 81007000 None -450°F - +800°F (-268°C - +426°C) None None	Number Power Temperature Range Type Required Length 81006001 None -100°F - +250°F (-73°C - +121°C) None None 12 in. 81006000 None -450°F - +450°F (-268°C - +232°C) S 80001200 N/A 81007001 None -450°F - +800°F (-268°C - +426°C) None None 10 ft. 81005002 7-30 VDC -40°F - +248°F (-29°C - +120°C) D 80001202 N/A 81003000 None -100°F - +250°F (-73°C - +121°C) None None 12 in. 81001000 None -100°F - +250°F (-73°C - +121°C) S 80001200 N/A 81002000 None -450°F - +258°F (-268°C - +125°C) S 80001200 N/A 81007000 None -450°F - +800°F (-268°C - +426°C) None None 3 ft.	Part Number Sensor Power Temperature Range Cable Type Connector Required Cable Length Thread Size 81006001 None -100°F - +250°F (-73°C - +121°C) None None 12 in. 5/8" - 18 81006000 None -450°F - +450°F (-268°C - +232°C) S 80001200 N/A 5/8" - 18 81007001 None -450°F - +800°F (-268°C - +426°C) None None 10 ft. 5/8" - 18 81005002 7-30 VDC -40°F - +248°F (-29°C - +120°C) D 80001202 N/A 5/8" - 18 81003000 None -100°F - +250°F (-73°C - +121°C) S 80001200 N/A 5/8" - 18 81002000 None -450°F - +258°F (-268°C - +125°C) S 80001200 N/A 5/8" - 18 81007000 None -450°F - +258°F (-268°C - +125°C) S 80001200 N/A 5/8" - 18	Part Number Sensor Power Temperature Range Cable Type Connector Required Cable Length Thread Size Local 81006001 None -100°F - +250°F (-73°C - +121°C) None None 12 in. 5/8" - 18 X 81006000 None -450°F - +450°F (-268°C - +232°C) S 80001200 N/A 5/8" - 18 81007001 None -450°F - +800°F (-268°C - +426°C) None None 10 ft. 5/8" - 18 81005002 7-30 VDC -40°F - +248°F (-29°C - +120°C) D 80001202 N/A 5/8" - 18 81003000 None -100°F - +250°F (-73°C - +121°C) S 80001200 N/A 5/8" - 18 81002000 None -450°F - +258°F (-268°C - +125°C) S 80001200 N/A 5/8" - 18 81007000 None -450°F - +258°F (-268°C - +426°C) None None 3 ft. 5/8" - 18	Part Number Sensor Power Temperature Range Cable Type Connector Required Cable Length Thread Size Local Remote 81006001 None -100°F - +250°F (-73°C - +121°C) None None 12 in. 5/8" - 18 X 81006000 None -450°F - +450°F (-268°C - +232°C) S 80001200 N/A 5/8" - 18 X 81007001 None -450°F - +800°F (-268°C - +426°C) None None 10 ft. 5/8" - 18 X 81005002 7-30 VDC -40°F - +248°F (-29°C - +120°C) D 80001202 N/A 5/8" - 18 X 81003000 None -100°F - +250°F (-73°C - +121°C) S 80001202 N/A 5/8" - 18 X 81002000 None -450°F - +258°F (-268°C - +125°C) S 80001200 N/A 5/8" - 18 X 81007000 None -450°F - +268°C - +268°C - +426°C) None None 3 ft. 5/8" - 18 X

^{*} 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 weatherproof enclosures. For explosion-proof enclosures, choose N7A for the enclosure without terminal strip or the N7AT with terminal strip.

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:

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.

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		Type "T" High	Temperature

(3 Conductor)		(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

83002075

75 feet

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75 feet

83004075



G2 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. Electronic choices for the G2 Series Meters are covered in Section 6.



Build-Your-Own G2 Meter



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



Aluminum (Shown with 09 Computer)



Brass (Shown with 09 Computer)



PVC (Shown with 09 Computer)



PVDF



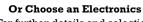
2) Need A Computer?



09 Computer



XX No Computer



(For further details and selections see page 56.)



3) Add a Module?

For further details and selections see pages 22-25.



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 page 26.



Conduit Adapter Kit



90° Display Adapter Kit



510 Conversion Kit



Pulse Access Dust Cover



GPI Electronics Programmer



G2

G2 Meter Number Reference

Product Identifier

G2 = Industrial Grade Meter

Turbine Material & Size

Metal Meters: \$05 = Stainless Steel - 1/2 in.

507 = Stainless Steel - 3/4 in. **S10** Stainless Steel - 1 in. \$15 = Stainless Steel - 1-1/2 in. S20 = Stainless Steel – 2 in.

Stainless Steel High Pressure - 1/2 in. Stainless Steel High Pressure – 3/4 in. H10 = Stainless Steel High Pressure – 1 in.

H20 = Stainless Steel High Pressure – 2 in.

H15 = Stainless Steel High Pressure - 1-1/2 in.

A05 = Aluminum – 1/2 in. A07 =Aluminum – 3/4 in. A10 Aluminum – 1 in. Aluminum -1-1/2 in. A15 =

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:

C05 = PVC - 1/2 in.C10 = PVC - 1 in.P05 = PVDF - 1/2 in.P10 = PVDF - 1 in.

Meter Dimensions listed on pages 69-71.

Fitting Type

150# ANSI Flange - available on S10, S15 and S20 only

ISO (Female) NPT (Female)

Т Tri-Clover® Fitting - available on S05 - S20 only

Solvent Weld - available on PVC only Electronics Only - for metal meters Electronics Only - for plastic meters

Electronic Choice

Turbine with Local Display

09 = 2 Button Computer, Field Configurable (2 Totals, 2 Calibrations, Rate)

19 = Vertical Mount 2-Button Computer, Field Configurable (2 Totals, 2 Calibrations, Rate)

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 = No Computer

Packaging

= Use for Turbine Only or Turbine w/Display (Sizes 05-10)

Use for Turbine Only or Turbine w/Display (Sizes 15-20)

Use for Turbine with Remote Transmitter With or Without Turbine Mounted Display (Sizes 05-20)

Use for 150# ANSI Flange Turbine Only (Size 10)

Use for 150# ANSI Flange Turbine Only (Sizes 15-20) Use for 150# ANSI Flange Turbine with Remote

Transmitter (Sizes 10, 15 or 20)

S07 09 **GM** Ā (Sample Model Number)



G2 Industrial Meters - Stainless Steel



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.

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.
- ✓ Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- ✓ High accuracy meter.
- ✓ Internal parts are simple to replace for easy maintenance.
- Powered by Lithium batteries for approximately 9,000 hours.
- √ Accessories easily upgrade meter.

	NLESS STE	EL - SPECIF		
Fitting Type:		NPT or ISO (Fer		
Housing Material:		316 Stainless S	teel	
Meter Sizes Availa	ble:	1/2" 3/4"	1" 1-1/2"	2"
Flow Range:	1/2" (\$05)	1 - 10 GPM	(3.8 - 37.9 LPM)	
	3/4" (S07)	2 - 20 GPM	(7.6 - 75.7 LPM)	
	1" (S10)		(18.9 - 190 LPM)	
	1-1/2" (S15)		(38.0 - 380 LPM)	
	2" (S20)		(76 - 760 LPM)	
Accuracy (% of Re		Turbine Only	Turbine w/Compute	r
	1/2" (S05)	± 2.0%	± 1.5%	
	3/4" (S07)	± 1.5%	± 1.0%	
	1" (\$10) 1-1/2" (\$15)	± 1.5% ± 1.0%	± 1.0% ± 0.75%	
	2" (\$20)	± 1.0%	± 0.75%	
Repeatability:	L (0L0)	± 0.1%	2 0.7070	
• •			DAD	
Pressure Rating:	alama Dari	1,500 PSI / 102		
Operating Tempera	ature Range: h Computer:		F (-40°C to +121°C) F (-10°C to +60°C)	
			(-10 6 (0 +60 6)	
Typical K-Factor:	1/2" (\$05)	2,500		
	3/4" (S07) 1" (S10)	1,100 565		
	1-1/2" (S15)	215		
	2" (S20)	100		
Wetted Materials:		316 Stainless S	teel	
Wottou matorialo.	Bearings:	Ceramic	1001	
	Shaft:	Tungsten Carbio	de	
	Rotor:	PVDF		
	Rings:	316 Stainless S	teel	
Frequency Range:	1/2" (\$05)	42 - 420 Hz @ 1	I - 10 GPM	
	3/4" (S07)	37 - 370 Hz @ 2	2 - 20 GPM	
	1" (S10)	47 - 470 Hz @ 5		
	1-1/2" (\$15)	36 - 360 Hz @ 1		
	2" (S20)	33 - 330 Hz @ 2	20 - 200 GPM	
Recommended Str		EE		
	1/2" (S05)	55 mesh		
	3/4" (S07) 1" (S10)	55 mesh 55 mesh		
	1-1/2" (S15)	28 mesh		
	2" (S20)	28 mesh		
Maximum Flow:	1/2" (S05)	15 GPM (56.8	I PM)	
	3/4" (S07)	30 GPM (113.6		
	1" (S10)	75 GPM (284 L	,	
	1-1/2" (\$15)	150 GPM (568	LPM)	
	2" (S20)	300 GPM (1,13	6 LPM)	
Wrench Flat Size:	1/2" (\$05)	1-1/16 inch (27		
	3/4" (S07)	1-5/16 inch (33	,	
	1" (\$10)	1-5/8 inch (41		
	1-1/2" (\$15)	2-3/8 inch (60	,	
Chinning Waint	2" (\$20)	3 inch (75 mm)		/ OE !.~
Shipping Weight:	1/2" (S05) 3/4" (S07)		Turbine Only: 2.1 lbs./ Turbine Only: 2.3 lbs./	
	1" (S10)		Turbine Only: 2.8 lbs.	
	1-1/2" (S15)		Turbine Only: 4.4 lbs.	
	2" (\$20)		Turbine Only: 6.6 lbs.	
		ONIC CHOIC		
Local Display, Rer				
9 Domoto Tronomi		Can Continu 6		

& Remote Transmitter Options: See Section 6.









APPROVALS





G2 Industrial Meters - High Pressure



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.

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.
- ✓ Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- Internal parts are simple to replace for easy maintenance.
- Powered by Lithium batteries for approximately 9,000 hours.

	9-1-1-1-1-1		
	RE - 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% ± 1.0% ± 0.75%		
2" (H20)			
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:	+14°F to +140°F (-10°C to +60°C)		
Typical K-Factor: 1/2" (H05)	2,500		
3/4" (H07)	1,100		
1" (H10)	565 215		
1-1/2" (H15) 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) 1-1/2" (H15)	28 mesh		
2" (H20)	28 mesh		
M- ' Fl- 4 (0.11 (110E)	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) 1" (H10)	2.4 lbs./1.1 kg - Turbine Only: 2.2 lbs./1.0 kg 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		
	RONIC CHOICES		
Local Display, Remote Display			
& Remote Transmitter Options:	See Section 6.		
·			
APPROVALS			

BUY SMART. BUY VALUE. BUY

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ML-1800-6 06/08



G2 Industrial Meters - ANSI Flange



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.

Select Your Meter Size:

l 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.
- ✓ Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- ✓ Precision accuracy meter.
- Internal parts are simple to replace for easy maintenance.
- Powered by Lithium batteries for approximately 9,000 hours.
- ✓ Accessories easily upgrade meter.

A	NSI FLANGE	- SPECIFICA	TIONS	
Fitting Type:		150# ANSI Flange		
Housing Material:		316 Stainless Steel		
Meter Sizes Availa	ble:	1" 1-1/2"	2"	
Flow Range:	1" (S10F)	5 - 50 GPM	(18.9 - 190 LPN	Л)
	1-1/2" (S15F)	10 - 100 GPM	(38.0 - 380 LPN	Л)
	2" (S20F)	20 - 200 GPM	(76 - 760 LPM)	
Accuracy (% of Re	ading):	Turbine Only	Turbine w/Co	mputer
	1" (S10F)	± 1.5%	± 1.0%	, D
	1-1/2" (S15F)	± 1.0%	± 0.75%	
	2" (S20F)	± 1.0%	± 0.75%	, D
Repeatability:		± 0.1%		
Pressure Rating:		Flange Rule		
Operating Tempera			(-40°C to +121	- /
wit	h Computer:	+14°F to +140°F	(-10°C to +60°	C)
Typical K-Factor:	1" (S10F)	565		
	1-1/2" (S15F)	215		
	2" (S20F)	100		
Wetted Materials:	Housing:	316 Stainless St	eel	
	Bearings:	Ceramic		
	Shaft:	Tungsten Carbid	le	
	Rotor:	PVDF		
	Rings:	316 Stainless St	eel	
Frequency Range:		47 - 470 Hz @ 5		
	1-1/2" (\$15F)	36 - 360 Hz @ 1		
	2" (S20F)	33 - 330 Hz @ 2	0 - 200 GPM	
Recommended Str				
	1" (S10F)	55 mesh		
	1-1/2" (S15F)	28 mesh		
	2" (S20F)	28 mesh		
Maximum Flow:	1" (S10F)	75 GPM (284 L		
	1-1/2" (\$15F)	150 GPM (568		
01.1	2" (S20F)	300 GPM (1,13		/0 .0 .1
Shipping Weight:	1" (S10F)		Turbine Only: 7.0 I	
	1-1/2" (S15F)		Turbine Only: 11.1 Turbine Only: 18.4	
	2" (S20F)	NIC CHOIC	· ·	ino./o.o kg
Local Dienley De		MIC CHOIC	Lo	
Local Display, Re	• •	Con Continue C		
& Remote Transn	· ·	See Section 6.		
	APP	ROVALS		
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G2 Industrial Meters - Tri-Clover®



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.

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.
- ✓ Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- ✓ Internal parts are easy to replace.
- Powered by Lithium batteries for approximately 9,000 hours.
- ✓ Accessories easily upgrade meter.

	RI-CLOVER	® - SPEC	IFICA'	TIONS	
Fitting Type:		Tri-Clove			
Housing Material:		316 Stair	iless Stee	:l	
Meter Sizes Availa	able:	1/2"	3/4"	1" 1-1/2"	2"
Tri-Clover® Fitting	s Available:	3/4"	1" 1-	-1/2" 2"	2-1/2"
Flow Range:	1/2" (S05T)	1 - 10 GF	PM (3.8 - 37.9 LPN	1)
_	3/4" (S07T)	2 - 20 GF	PM (7.6 - 75.7 LPN) I)
	1" (S10T)	5 - 50 GF	,	18.9 - 190 LPN	,
	1-1/2" (S15T)	10 - 100	,	38.0 - 380 LPN	
	2" (S20T)	20 - 200	,	76 - 760 LPM)	
Accuracy (% of Re	<u> </u>	Turbine		Turbine w/Com	puter
	1/2" (S05T)	± 2.0% ± 1.5%		± 1.5% ± 1.0%	
	3/4" (S07T) 1" (S10T)	± 1.5%		± 1.0% ± 1.0%	
	1-1/2" (S15T)	± 1.0%		± 0.75%	
	2" (S20T)	± 1.0%		± 0.75%	
Repeatability:	, ,	± 0.1%			
Pressure Rating:			v fittina s	size, clamp size	e & temn
Operating Temper	ature Ranne		, ,	-40°C to +121°	
	th Computer:			-10°C to +60°(
Typical K-Factor:	•	2,500	(,
Typiour it ruotori	3/4" (S07T)	1,100			
	1" (S10T)	565			
	1-1/2" (\$15T)	215			
	2" (S20T)	100			
Wetted Materials:	Housing:	316 Stain	less Stee	l	
	Bearings:	Ceramic			
	Shaft:	Tungsten	Carbide		
	Rotor:	PVDF	lana Ctan	ı	
F	Rings:	316 Stain			
Frequency Range:	3/4" (S051)	42 - 420 37 - 370			
	1" (S10T)	47 - 470			
	1-1/2" (\$15T)			· 100 GPM	
	2" (S20T)	33 - 330	Hz @ 20 -	- 200 GPM	
Recommended St	rainer Size:				
	1/2" (S05T)	55 mesh			
	3/4" (S07T)	55 mesh			
	1" (\$10T)	55 mesh			
	1-1/2" (\$15T)	28 mesh			
Movimum Flam	2" (\$20T)	28 mesh	/ECOLD	(4)	
Maximum Flow:	1/2" (S05T) 3/4" (S07T)	15 GPM 30 GPM	`	,	
	1" (S10T)	75 GPM	•	,	
	1-1/2" (\$15T)	150 GPM	`	,	
	2" (S20T)	300 GPM			
Shipping Weight:	1/2" (S05T)			rbine Only: 2.3	3 lbs./1.0 kg
	3/4" (S07T)			rbine Only: 2.7	_
	1" (S10T)			rbine Only: 3.0	
	1-1/2" (\$15T)			rbine Only: 4.5	
	2" (S20T)			rbine Only: 6.3	3 lbs./2.8 kg
	ELECTR	ONIC C	HOICE	ES	
Local Display, Re	• •				
& Remote Transn	& Remote Transmitter Options: See Section 6.				
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BUY SMART. BUY VALUE. BUY

17



G2 Industrial Meters - Aluminum



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.

Select Your Meter Size:

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



Features and Benefits:

- High precision, durable and compact turbine flowmeters.
- Modular design allows for use with Output Modules, Sensors and Remote Transmitters.
- ✓ Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- Internal parts are simple to replace for easy maintenance.
- Lightweight, compact design allows for easy installation.
- Powered by Lithium batteries for approximately 9,000 hours.

	LUMINUM	- SPECIFIC		
Fitting Type:		NPT or ISO (Fe	emaie)	
Housing Material:		Aluminum		
Meter Sizes Availa		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 20 - 200 GPM		
A (0/ - 1 D -	2" (A20)		,	
Accuracy (% of Re	ading): 1/2" (A05)	Turbine Only ± 2.0%	Turbine w/Com ± 1.5%	puter
	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 B	AR	
Operating Tempera	ature Ranne:		F (-40°C to +121°C	2)
	h Computer:		°F (-10°C to +60°C	
Typical K-Factor:	· •	2.500	,	
Typiourit ruotor.	3/4" (A07)	1,100		
	1" (A10)	565		
	1-1/2" (A15)	215		
	2" (A20)	100		
Wetted Materials:	Housing:	Aluminum		
	Bearings:	Ceramic		
	Shaft:	Tungsten Carbi	ide	
	Rotor:	PVDF	N I	
	Rings:	316 Stainless S		
Frequency Range:		42 - 420 Hz @		
	3/4" (A07) 1" (A10)	37 - 370 Hz @ 47 - 470 Hz @		
	1-1/2" (A15)	36 - 360 Hz @		
	2" (A20)	33 - 330 Hz @		
Recommended Str	· ,			
	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		
	3/4" (A07)	30 GPM (113.		
	1" (A10) 1-1/2" (A15)	75 GPM (284 150 GPM (568		
	2" (A20)	300 GPM (1,1		
Wrench Flat Size:	1/2" (A05)	1-1/16 inch (2		
	3/4" (A07)	1-5/16 inch (3	,	
	1" (A10)	1-5/8 inch (41	,	
	1-1/2" (A15)	2-3/8 inch (60		
	2" (A20)	3 inch (75 mm	·	
Shipping Weight:	1/2" (A05)		- Turbine Only: 1.1	
	3/4" (A07)		- Turbine Only: 1.2	
	1" (A10) 1-1/2" (A15)		- Turbine Only: 1.4 - Turbine Only: 2.6	
	2" (A20)		- Turbine Only: 3.7	
		ONIC CHOI		
Local Display, Rer				
& Remote Transmi		See Section 6.		
	<u> </u>	PROVALS		
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BUY SMART. BUY VALUE. BUY

19

G2 Industrial Meters - Brass



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.

Select Your Meter Size:

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



Features and Benefits:

- High precision and durable turbine flowmeters.
- Modular design allows for use with Output Modules, Sensors and Remote Transmitters.
- Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- Internal parts are simple to replace for easy maintenance.
- Powered by Lithium batteries for approximately 9,000 hours.

	BRASS - SI	PECIFICATI		
Fitting Type:		NPT or ISO (Fe	male)	
Housing Material:		Brass		
Meter Sizes Availa	ıble:	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 Re	ading):	Turbine Only	Turbine w/Compute	r
	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 BA		
Operating Temper			F (-40°C to +121°C)	
	th Computer:		F (-10°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:		Brass		
	Bearings: Shaft:	Ceramic Tungsten Carbi	do	
	Rotor:	PVDF	ue	
	Rings:	316 Stainless S	teel	
Frequency Range:		42 - 420 Hz @		
rrequency mange.	3/4" (B07)	37 - 370 Hz @ 2		
	1" (B10)	47 - 470 Hz @ !		
	1-1/2" (B15)	36 - 360 Hz @		
	2" (B20)	33 - 330 Hz @ 3	20 - 200 GPM	
Recommended St	rainer 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	LDIA	
Maximum Flow:	1/2" (B05)	15 GPM (56.8		
	3/4" (B07) 1" (B10)	30 GPM (113.6 75 GPM (284 I		
	1-1/2" (B15)	150 GPM (568		
	2" (B20)	300 GPM (1,13		
Wrench Flat Size:	1/2" (B05)	1-1/16 inch (2)		
	3/4" (B07)	1-5/16 inch (3	,	
	1" (B10)	1-5/8 inch (41	,	
	1-1/2" (B15)	2-3/8 inch (60	,	
	2" (B20)	3 inch (75 mm)	
Shipping Weight:	1/2" (B05)		Turbine Only: 2.2 lbs./1.	
	3/4" (B07)		Turbine Only: 2.4 lbs./1.	
	1" (B10)		- Turbine Only: 2.9 lbs./	
	1-1/2" (B15)		- Turbine Only: 2.9 lbs./	
	2" (B20)		- Turbine Only: 9.8 lbs./4	1.4 Kg
		ONIC CHOIC	CES	
Local Display, Rei				
& Romoto Tranem	Hay Ontional	See Section 6		

& Remote Transmitter Options: See Section 6.

APPROVALS











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ML-1800-6 06/08

G2 Industrial Meters - PVC



The G2 PVC Meter is an exceptional meter for use in **metal-free** applications. The G2 PVC Meter is an economical alternative to stainless steel meters when used for water. The PVC Meter is durable, lightweight and easy-to-install in-line. Use this meter with water, beer and mild chemicals such as alcohol.

Select Your Meter Size:

1/2 inch

l inch



Features and Benefits:

- PVC meters are economical, durable and lightweight.
- Available with Local Display or Remote Transmitter.
- ✓ Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- ✓ Accessories easily upgrade meter.
- One field replaceable internal part makes maintenance easy.

PVC - SPECIFICATIONS			
Fitting Type:		NPT or Solvent Weld (Female)	
Housing Material:		PVC	
Meter Sizes Availa	ble:	1/2" and 1"	
Flow Range:	1/2" (C05)	1.2 - 12 GPM	(4.54 - 45.42 LPM)
	1" (C10)	5 - 50 GPM	(18.9 - 190 LPM)
Accuracy (% of Re	ading):	Turbine Only	Turbine w/Computer
	1/2" (C05)	± 2.0%	± 1.5%
	1" (C10)	± 1.5%	± 1.0%
Repeatability:		± 0.3%	
Pressure Rating:		150 PSI / 10.2 E	BAR
Operating Tempera	ture Range:	+32°F to +140°F (0°C to +60°C)	
wit	h Computer:	+14°F to +140°	F (-10°C to +60°C)
Maximum Storage Temperature:		-40°F to +158°F (-40°C to +70°C)	
Typical K-Factor:	1/2" (C05)	2,400	
	1" (C10)	540	
Wetted Materials:	Housing:	PVC	
	Bearings:	Ceramic	
	Shaft:	Ceramic	
	Rotor:	PVDF	
	Rings:	Fluorocarbon	
Frequency Range:	` '	48 - 480 Hz @ 1	1.2 - 12 GPM
	1" (C10)	45 - 450 Hz @ 5	5 - 50 GPM
Recommended Str	ainer Size:		
	1/2" (C05)	55 mesh	
	1" (C10)	28 mesh	
Maximum Flow:	1/2" (C05)	15 GPM (56.8	,
	1" (C10)	75 GPM (284 L	-PM)
Shipping Weight:	1/2" (C05)	1.3 lbs./0.6 kg -	Turbine Only: 1.1 lbs./.51 kg
	1" (C10)	1.9 lbs./0.8 kg -	Turbine Only: 1.7 lbs./.77 kg
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ELECTRONIC CHOICES

Local Display, Remote Display

& Remote Transmitter Options: See Section 6.

APPROVALS



BUY SMART. BUY VALUE. BUY

20 06/08 ML-1800-6

G2 Industrial Meters - PVDF



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

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

Select Your Meter Size:

1/2 inch

l inch



Features and Benefits:

- Precision accuracy in a lightweight and durable meter.
- ✓ Installs easily.
- Available with Local Display or Remote Transmitter.
- Local Display Computer features: 2 Totals (1 Resettable, 1 Cumulative); Factory Calibration in gallons and litres; 2 User Calibrations and Flowrate.
- ✓ Accessories easily upgrade meter.
- One field replaceable internal part making maintenance easy.

PVDF - SPECIFICATIONS			
Fitting Type:		NPT or ISO (Female)	
Housing Material:	Housing Material:		
Meter Sizes Availa	ble:	1/2" and 1"	
Flow Range:	1/2" (P05)	1.2 - 12 GPM	(4.54 - 45.42 LPM)
	1" (P10)	5 - 50 GPM	(18.9 - 190 LPM)
Accuracy (% of Re	٠,	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 B	AR
Operating Tempera			(-28°C to +82°C)
with Computer:		+14°F to +140°F (-10°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:		PVDF	
	Bearings:	Ceramic - 98% A	
	Shaft:	Ceramic - 98% Alumina	
	Rotor:	PVDF	
	Rings:	Fluorocarbon	
Optional O-Ring:		PTFE	
Frequency Range:		48 - 480 Hz @ 1	
	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 L	,
	1" (P10)	75 GPM (284 L	PM)
Shipping Weight:	1/2" (P05)		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 Section 6.

APPROVALS











ATEX IP44

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ML-1800-6 06/08 21



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.

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 dustcover assembly and 10 ft. of cable. Requires a complete meter with display.

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			

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.
- Battery powered from meter; no additional power required.
- ✓ This kit can upgrade an existing GPI meter or can be purchased with a new meter.

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 dustcover assembly and 10 ft. of cable. Requires a complete meter with display.

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				



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22 06/08 ML-1800-6

Conditioned Signal Output Module (Part No. 113435-1)



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.

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 with G2 Turbine only.

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.

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	

FM Approved Sensor Kit (Part No. 120077-01)



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.

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 with G2 Turbine only.

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

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	

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ML-1800-6 06/08



4-20 mA Module (Part No. 125100-1)



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.

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.

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)



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.

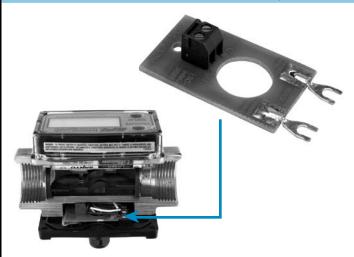
Features and Benefits:

- ✓ 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	

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External Power Module (Part No. 125070-1)



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.

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.

ML-1800-6 06/08

SPECIFICATIONS

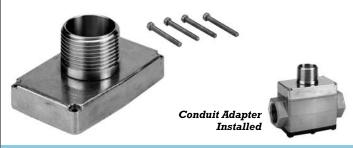
Voltage: 7 to 30 VDC @ 1 mA

APPROVALS

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G2 Meter Accessories

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.

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.

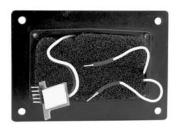
510 Conversion Kit (Part No. 11344001)





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.

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.

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.



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 Section 6.

ML-1800-6 06/08 27



Build-Your-Own GM Oval Gear 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 Electronics Section on page 56.



GA 4-20 mA Output Without Display



GG Display With Pulse Output



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 72 for strainer specifications.



GM Series Meter Number Reference

Product Identifier

GM001 +

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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 - l 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
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Body Material

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

GM Series dimensions listed on page 69.

Fitting Type

- BSP (Female) Litre
- NPT (Female) Gallon
- NPT (Female) Litre (Models GM505, GM510, GM515 & GM520)
- 150# ANSI Flange Gallon (Models GM010, GM015, GM020, GM510, GM515, GM520 Aluminum & S.S. only)
- 150# ANSI Flange Litre (Models GM510, GM515, GM520 Aluminum & S.S. only)
- 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)
- High Viscosity PPS (Models GM005, GM010, GM015, GM020, GM505, GM510, GM515 & GM520)
- 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

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

Electronics Choice

- = Pulse Out Aluminum (Models GM001, GM002, GM003, GM005, GM010, GM015 & GM020)
- 2 = Pulse Out S.S. (Models GM001, GM002, GM003, GM005, GM010, GM015
- 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)
- GA500 4-20 mA Transmitter (Models GM001, GM002, GM003, GM005, GM006, GM007, GM010, GM015 & GM020)
- 9 = Mechanical (Models GM505, GM510, GM515 & GM520)

(Sample Model Number)

* Requires PPS body material.

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ML-1800-6 06/08

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.

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:	0.528 - 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: Intermed. Pressure SS:	316 Stainless Steel
	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

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} [] 06/08 ML-1800-6

^{*} Hall Effect Sensor requires dedicated power source.

GM002 - 1/4" Oval Gear Pulse Meter



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.

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.

	- SPECIFICATIONS
Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch / Hall Effect Sensor* Combo
Rotor Material:	PPS or 316 Stainless Steel
0-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:	Alumaia uma unith DDC Cara
Aluminum: PPS:	Aluminum with PPS Cap PPS
Stainless Steel:	316 Stainless Steel
Intermed. Pressure SS:	316 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:	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

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ML-1800-6 06/08

 $^{\ ^{*}}$ Hall Effect Sensor requires dedicated power source.

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.

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 - 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:	AL .:
Aluminum: PPS:	Aluminum with PPS Cap
Stainless Steel:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Wetted Mat'l Bearings:	o to otalinood otool
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

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3**?** 06/08 ML-1800-6

 $[\]mbox{\ensuremath{^{\star}}}$ Hall Effect Sensor requires dedicated power source.

GM005 - 1/2" Oval Gear Pulse Meter



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

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.

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:	0.26 - 7.9 GPM (1 - 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 Bearings:	PPS Rotors - PPS Bearings
	SS Rotors - Carbon Bearings
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

 $[\]ensuremath{^{\star}}$ Hall Effect Sensor requires dedicated power source.



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).

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:	0.26 - 7.9 GPM (1 - 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 Bearings:	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



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

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.

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:	0.8 - 15.8 GPM (3 - 60 LPM)
Flow Range @ < 5 cps:	4.5 - 15.8 GPM (17 - 60 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 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.

GM007 - 1" Oval Gear Pulse Meter

Meter shown here with Electronic choice -5.



Use the GM007 with aggressive chemicals 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.

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:	0.8 - 21.0 GPM (3 - 80 LPM)
Flow Range @ < 5 cps:	2.1 - 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 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

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 $\}_{f 6}$

^{*} Hall Effect Sensor requires dedicated power source.

GM010 - 1" Oval Gear Pulse Meter



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.

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.

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:	1.6 - 32 GPM (6 - 120 LPM)	
Flow Range @ < 5 cps:	2.6 - 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:	400 0 DD0 / 00 DDI	
Single Pickup: Double Pickup:	136.3 PPG / 36 PPL 272.6 PPG / 72 PPL	
Wetted Mat'l Housing:	272.011 4772112	
Aluminum:	Aluminum	
Stainless Steel:	316 Stainless Steel	
Wetted Mat'l Bearings:	PPS Rotors - PPS Bearings	
	SS Rotors - Carbon Bearings	
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	
0.11	6.6 lbs. (2.9 kg) - 150# ANSI Flange	
Stainless Steel:	12.5 lbs. (5.7 kg) - Pulse	
Demote Block	14.6 lbs. (6.6 kg) - 150# ANSI Flange	
Remote Display:	Option Available: Model GG500	
Remote Transmitter:	Options Available: Models GA500 & GX500	

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ML-1800-6 06/08

^{*} Hall Effect Sensor requires dedicated power source.

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.

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:	1.6 - 32 GPM (6 - 120 LPM)	
Flow Range @ < 5 cps:	2.6 - 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 Bearings:	PPS Rotors - PPS Bearings	
	SS Rotors - Carbon Bearings	
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	
01-1-1 01	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



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.

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.

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:	2.6 - 66 GPM (10 - 250 LPM)
Flow Range @ < 5 cps:	4.0 - 62.5 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:	Aluminum 316 Stainless Steel
Wetted Mat'l Bearings:	PPS Rotors - PPS Bearings SS Rotors - Carbon Bearings
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

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 $[\]ensuremath{^{*}}$ Hall Effect Sensor requires dedicated power source.



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.

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:	2.6 - 66 GPM (10 - 250 LPM)
Flow Range @ < 5 cps:	4.0 - 62.0 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:	17005 10000
PPS Rotors: SS Rotors:	176°F / 80°C 248°F / 120°C
Typical K-Factor:	N/A
Wetted Mat'l Housing:	
Aluminum: Stainless Steel:	Aluminum 316 Stainless Steel
Wetted Mat'l Bearings:	PPS Rotors - PPS Bearings SS Rotors - Carbon Bearings
West of Marin Charles	ŭ
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
Ctainless Ctaals	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
	20.2 lbs. (0.2 kg) - 100# Altor Flange

GM020 - 2" Oval Gear Pulse Meter



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.

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.

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:	4.0 - 92.5 GPM (15 - 350 LPM)	
Flow Range @ < 5 cps:	8.0 - 79.0 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:	47005 40000	
PPS Rotors: SS Rotors:	176°F / 80°C 248°F / 120°C	
	240 F7 120 G	
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 Bearings:	PPS Rotors - PPS Bearings	
	SS Rotors - Carbon Bearings	
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	
Ctainless Ctast.	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	

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^{*} Hall Effect Sensor requires dedicated power source.

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.

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:	4.0 - 92.5 GPM (15 - 350 LPM)
Flow Range @ < 5 cps:	7.9 - 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 Bearings:	PPS Rotors - PPS Bearings
	SS Rotors - Carbon Bearings
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
01-1-1 011	20.1 lbs. (9.1 kg) - 150# ANSI Flange
Stainless Steel:	46.3 lbs. (2.1 kg) - 150# ANSI Flange

Al Commercial Grade Weters

Commercial Grade Meters are designed as self-contained,
battery powered units. These indicating meters come in
Aluminum or Nylon only. Al 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 or GM Series sections in this catalog.



Build-Your-Own Al Series Meter



Aluminum



Nylon



2) Select Your Electronic Choice

For further details see page 56.



09 Computer



XX No Computer



3) Select Your Module

For further details see page 48.



Standard Remote Kit



FM Approved Remote Kit



Conditioned Signal Module



For further details see page 50.



Display Adapter Kit



GPI Electronics Programmer

Al Series Meter Numbering Reference

Product Identifier

Al = Commercial Grade Electronic Digital Meter

Electronic Choice

09 = 2 Totals (1 Resettable, 1 Cumulative), Factory Calibration in Gallons and Litres,

2 User Calibrations and Flowrate

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

Al = 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)

 $^{{\}it * When ordering Computer Assembly Only, specify Turbine Housing size.}\\$

Al Commercial Grade Meters

GPI Commercial Grade Meters are identified by an Al 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 and Nylon.



Aluminum

Nylon

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



ACCURACY: ± 1.5% OF READING

(on models A100, A200 and N100)









APPROVALS



ATEX

IP44

Select Your Fitting Size:

Aluminum

l inch Low Flow 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; 2 User Calibrations and Flowrate.
- ✓ Output capabilities available to communicate with process control equipment.
- ✓ Lightweight, compact design allows for easy installation.
- Powered by Lithium batteries for long life.

Al Commercial Grade Meters

	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:	+14°F to +140°F	+14°F to +140°F	+14°F to +140°F	+14°F to +140°F	+14°F to +140°F
	(-10°C to +60°C)	(-10°C to +60°C)	(-10°C to +60°C)	(-10°C to +60°C)	(-10°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	09 Computer	09 Computer	09 Computer	09 Computer
	(See page 58)	(See page 58)	(See page 58)	(See page 58)	(See page 58)

 $[\]star$ Accuracy can vary up to \pm 5% depending on installation and fluid type. Field Calibration is recommended for best accuracy.

Al Meter Modules

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





Features and Benefits:

- Accommodates fluid temperatures from -40°F to $+250^{\circ}\text{F} (-40^{\circ}\text{C to } +121^{\circ}\text{C}).$
- ✓ This kit can upgrade an existing GPI meter or can be purchased with a new meter.

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 dustcover assembly and 10 ft. of cable; it also requires a 09 Computer.

Do not use on Al 2" meter. Order 113275-1.

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	

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





Features and Benefits:

- Accommodates fluid temperatures from -40°F to $+250^{\circ}F$ (-40°C to $+121^{\circ}C$).
- 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.

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 also provides the versatility of panel mounting of the LCD readout up to 100 ft. from the turbine housing.

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

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	
ADDDONAL C		



Al Meter Modules

Conditioned Signal Output Module (Part No. 113435-1)



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.

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.

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.

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	

Al Meter Accessories

90° Display Adapter Kit (Part No. 125260-1)



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

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 many GPI Electronic Digital Meters (EDMs).



Economy Electronic Digital Neters

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 Lube Meters



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 and requires no batteries.

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% of reading
Max. Working Pressure:	1,500 PSI / 103.5 BAR
Operating Temperature:	+14°F to +131°F (-10°C to +55°C)
Model Numbers:	LM50MNG (Mechanical Lube Meter 1/2" NPT
	fitting. Calibrated in gallons.) LM50MNL (Mechanical Lube Meter 1/2" NPT
	fitting. Calibrated in litres.)
	LM50MBL (Mechanical Lube Meter 1/2" BSPT
	fitting. Calibrated in litres.)
	LM50MBQ (Mechanical Lube Meter 1/2" BSPT
	fitting. Calibrated in quarts.)



Economy Electronic Digital Meters

TM Series Water Meter

TM Meter with Computer Display TM Series Meter with 90° Adapter (sold separately)

Features and Benefits:

- Economical turbine meter for use with water applications.
- ✓ Available in 1/2", 3/4", 1", 1-1/2" and 2" sizes.
- Durable construction and lightweight with gallon and litre measurement.
- ✓ Powered by Lithium batteries for approximately 9,000 hours and are easily replaced.

TM SERIES - SPECIFICATIONS		
Design Type:	Turbine	
Fitting Size:	1/2" 3/4" 1" 1-1/2" 2"	
Fitting Type:	Schedule 40 Soc or NPT (Female)	
Flow Range:		
1/2" (TM050)	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:	150 PSIG @ 73°F	
Operating Temperature:	+32°F to +140°F (0°C to +60°C)	
Wetted Material:		
Housing:	PVC	
Bearings:	Ceramic	
Shaft:	Tungsten Carbide	
Rotor:	PVDF	
Rings:	316 Stainless Steel	
Shipping Weight (approx.):	(See page 70 for meter dimensions)	
1/2" (TM050)	.80 lbs. (0.36 kg)	
3/4" (TM075)	.88 lbs. (0.39 kg)	
1" (TM100)	1.0 lbs. (0.45 kg)	
1-1/2" (TM150)	1.4 lbs. (0.63 kg)	
2" (TM200)	1.68 lbs. (0.76 kg)	
Display Features:	Local Display includes: Rate of Flow, Batch and	
	Cumulative Totals. Field Calibration available.	
Pulse Output:	Open Collector (NPN)	
	APPROVALS	



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, microprocessor 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.

01N SERIES - 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 70 for meter dimensions)
Local Display:	Includes: 2 Totals (1 Cumulative, 1 Batch);
	Permanent factory calibration for water.

APPROVALS

BUY SMART. BUY VALUE. BUY

ML-1800-6 06/08



Economy Electronic Digital Meters

01A Series Fuel Meter

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.

01A SERII	ES - 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 70 for meter dimensions)
Local Display:	Includes: 2 Totals (1 Cumulative, 1 Batch);
	Permanent factory calibration for gasoline,
	diesel fuel or kerosene.
APPROVALS	

CE

FM-300H/R Chemical Meter

ACCURACY: ± 2.0% OF READING



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, microprocessor and LCD readout.
- ✓ Choice of gallon and litre measurement.
- Factory calibrated for thin and medium fluids.
 Field calibrate for more viscous fluids.

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)	
	± 2.0% of reading	
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.	
	APPROVALS	
	C€	



Electronics 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 back of the catalog 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.

ML-1800-6 06/08



Electronics 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	Al Commerical Grade Meters	Economy Meters
SECTION 1	SECTION 2	SECTION 3	SECTION 4	SECTION 5
Precision Meters.	Wide range of materials and sizes.	Positive Displacement Meter technology in a variety of materials and sizes.	Aluminum or Nylon Meters with display in a self-contained unit.	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	GA Series	GG Series	GX Series	SC Series	Wireless
Display	Electronics	Electronics	Electronics	Electronics	System
09 Electronics	4-20 mA Output	Pulse Output	4-20 mA Output	Scaled Pulse	Transmits Signal
	Without Display	With Display	With Display	Output	To Receiver Unit



----- 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.

G2 Wireless Transmitter & Receiver



APPROVED FOR USE IN THE U.S. AND CANADA



GPI's new, battery-powered Wireless Transmitter is designed to transmit flowrate from a G2 Series meter to the Receiver. This system includes both the Transmitter and Receiver. The Wireless Transmitter is perfect in many plant applications. Both Transmitter and Receiver are color coded making installation easy for optimum signal transmissions.

WIRELESS ASSEMBLY SPECIFICATIONS		
Kit Includes:	Transmitter to fit to G2 Meter	
	Receiver with 25 feet of cable	
	Transmitter Battery Pack	
Transmission Frequency:	903.37 MHz - 921.37 MHz	
Power Supply:		
Transmitter:	Battery Pack (2 each) 1/2 AA Lithium	
	(3.6V each - 7.2V total)	
Receiver:	5 VDC - 35 VDC	
Signal:		
Transmitter:	Delayed Burst Transmission Method	
Receiver:	Open Collector (Current Sinking)	
	Max. OFF Voltage: 60V	
	Max. ON Voltage: 200 mA	
Transmission Distance:	300 ft. Maximum; Line of Sight	
Available Channels:	Eight	
Transmission Time Intervals:	Four (1 sec., 2 sec., 5 sec., 10 sec.)	
Enclosure:	NEMA 4	

APPROVALS



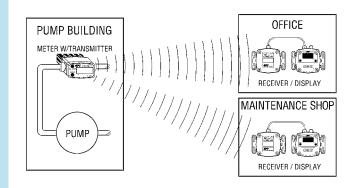
Industry Canada Approval Class B digital device, part 15 of FCC Rules

APPROVED FOR USE IN THE U.S. AND CANADA ONLY.

Features and Benefits:

- ✓ Simple to use.
- √ Affordable wireless system.
- Battery powered.
- Retro fits GPI meters.

SAMPLE APPLICATION



BUY SMART. BUY VALUE. BUY

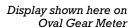
ML-1800-6 06/08

Local Display (Available for Turbine or Oval Gear Meters)

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



Local Display for Turbine Meter





GPI programmed the new 09 Computer with many new features in addition to the standard factory configuration. Disabling "unnecessary" features makes day-to-day operations simple.

Features and Benefits:

- 2 Totals (1 Resettable, 1 Cumulative).
- Flowrate display updates every 5 seconds, readout is in units/minute.
- Factory Calibration in gallons and litres.
- 2 user-defined Field Calibrations.
- Small, compact and totally self contained with an internal power supply.
- Field replaceable Lithium batteries for long life.
- Automatic on and off.

09 COMPUTER - SPECIFICATIONS		
Std. Factory Configuration:	2 Totals (1 Resettable, 1 Cumulative); Factory	
	Calibration in gallons and litres; 2 User	
	Calibrations and Flowrate	
Computer Electronics:	09 Computer fits all A1 and 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:	
	Dispense/Display. 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	
Minimum Battery Life:	9,000 hours	
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:	+14°F to +140°F (-10°C to +60°C)	
Storage Temperature:	-40°F to +158°F (-40°C to +70°C)	
	T D D D O T T T C	

SP:



Using a password-protected configuration process can enable the 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 web site. User configuration features include:

Totalizers / Modes Enabled (Cumulative Total, Batch 1 Total, Batch 2 Total, Flowrate Mode)

User can change Flowrate Update Interval

Flowrate Timebase (Minute, Hour, Day)

Factory Calibration Curve Enabled in GAL and LTR

Field Calibration Curve B and/or C Enabled

Dispense/Display or K-Factor Entry Calibration

Maximum Resolution for Field Calibration (0, 1 or 2 Decimals)

GG500/GG510/5 Series Electronic Choice

Display With Pulse Output



GG500 Remote Mount GG510 Local Mount



ACCURACY: ± 0.1% OF READING

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

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)	
Calibrateable:	K-factor Entry	
	APPROVALS	
C€		



GX500/GX510/6 Series Electronic Choice

Display With 4-20 mA Output



GX500 Remote Mount GX510 Local Mount



ACCURACY: ± 0.1% OF READING

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

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.
- Adjustable sampling time.
- Easily mounted on pipe or wall.
- ✓ Loop powered.

GX500/GX510 - SPECIFICATIONS		
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)	
Calibrateable:	K-factor Entry	
	APPROVALS	
MINOTAL		

CE

GX500/GX510 - SPECIFICATIONS

BUY SMART. BUY VALUE. BUY

R1

GA500/GA510/7 Series Electronic Choice

4-20 mA Output



GA500 Remote Mount GA510 Local Mount



ACCURACY: ± 0.1% OF READING

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

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.
- ✓ Adjustable sampling time.
- ✓ Easily mounted on pipe or wall.
- ✓ Loop powered.

GA500/GA510 - SPECIFICATIONS		
	1510 - SPECIFICATIONS	
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:	102 1 10 11 10 1 (0 0 10 100 0)	
Low Level Coil (LLC):	0.25 - 1000 Hz	
High Level Low Freg.:	0.25 - 150 Hz	
High Level High Freg.:	0.25 - 1000 Hz	
Optically Isolated HLLF:	w/2500 V optical isolation	
Optically Isolated HLHF:	w/2500 V optical isolation	
Enclosure Rating:	NFMA 4X / IP55	
•	11211111 1117 11 00	
Shipping Weight:	Remote: 2.0 lbs. (.90 kg)	
	Local: 1.1 lbs. (.5 kg)	
	APPROVALS	
	CE	

BUY SMART. BUY VALUE. BUY

ML-1800-6 06/08

SC500/SC510/8 Series Electronic Choice

Mount

Scaled Pulse Output



SC500 Remote Mount



ACCURACY: ± 0.1% OF READING

The GPI Scaled Pulse Module is a switchprogrammable 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.

Features and Benefits:

- Converts input frequency to scaled pulse
- 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.

SC500/SC510 - SPECIFICATIONS				
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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Displays & Output Instruments

R700 Explosion Proof 4-20 mA Transmitter with Display



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

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











Features and Benefits:

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

R800 Explosion Proof Totalizer & Rate Indicator



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











GRT Series Controller

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.

NEW ENCLOSURES FOR GRT SERIES CONTROLLER



GRT shown here in enclosure.

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



Features and Benefits:

- Separate scaling factors for A & B inputs.
- Separate add/subtract simultaneous inputs.
- Two Relays.

Magnetic Input

Magnetic Input / Dual Rate

Magnetic Input / 4-20 mA Output / Dual Rate

110 or 220 AC power or 12-15 VDC.

	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** 110 110 Volt 220 Volt 220 OPTIONS Open Collector Input (leave blank) AD Open Collector Input / 4-20 mA Output / Dual Rate Open Collector Input / Dual Rate M

BUY SMART. BUY VALUE. BUY

ADM

DM

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 10 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



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.

	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: 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:	GBM110, GBM110-M, GBM220 and GBM220-M

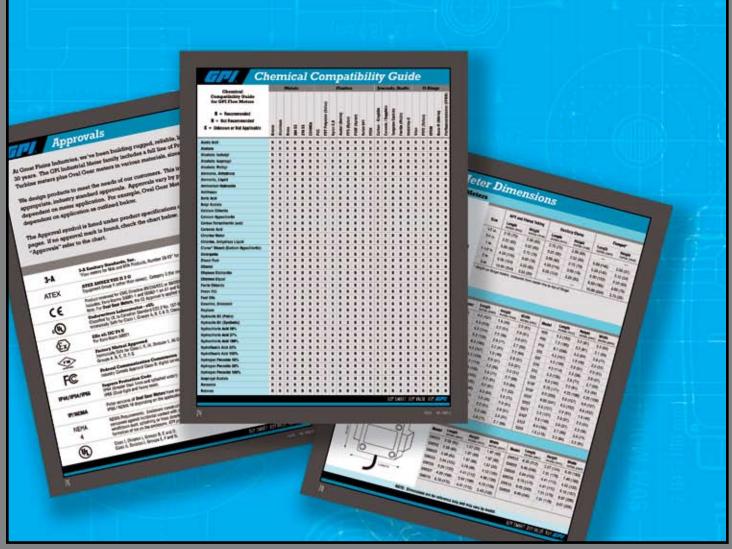
NOTE: Does not accept Sine Wave pulse.

APPROVALS



Reference Materials

This section includes general reference materials including Meter
Dimensions and Chemical Compatibility Charts. The Worksheet in
the back of the catalog can be used to help select the best GPI Meter
for your application. Feel free to contact GPI for assistance when
determining the correct Meter and Electronics.



Liquid Viscosities

Chart of Approximate Viscosities of Common Liquids	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

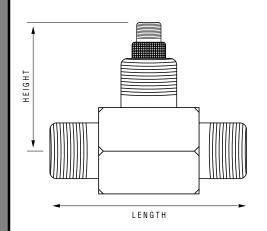
GPI offers Component Materials to assist with chemical compatibility. In some cases, trade names may be more common than the generic name. The cross reference chart below provides the generic material name and the corresponding trade name.

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



Meter Dimensions

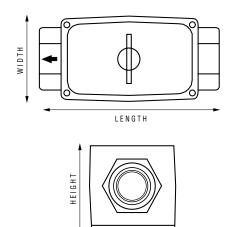
G Series Precision Meters



	NPT and Flared Tubing		Sanitary	Clamp	Flanged*		
Size	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)	

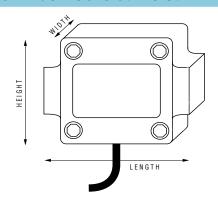
^{*} Height on flange meters, measures from center line to top of flange.

G2 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)

GM Series Oval Gear Meters



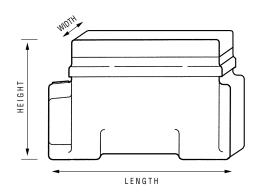
Model	Length inches (mm)	Height inches (mm)	Width inches (mm)	Model	Length inches (mm)	Height inches (mm)	Width inches (mm)
GM001	2.58 (65)	1.97 (50)	1.97 (50)	GM015	8.35 (212)	5.67 (144)	6.42 (163)
GM002	2.58 (65)	1.97 (50)	1.97 (50)	GM020	9.45 (240)	7.01 (178)	7.40 (188)
GM003	2.58 (65)	1.97 (50)	1.97 (50)	GM505	3.94 (100)	4.41 (112)	4.92 (125)
GM005	3.94 (100)	3.78 (96)	4.13 (105)	GM510	6.70 (170)	4.41 (112)	6.18 (157)
GM006	5.24 (133)	4.41 (112)	4.96 (126)	GM515	9.45 (240)	7.01 (178)	8.07 (205)
GM007	4.25 (108)	3.94 (100)	4.72 (120)	GM520	9.45 (240)	7.01 (178)	8.07 (205)
GM010	6.70 (170)	4.41 (112)	5.43 (138)				

 $\label{eq:NOTE:Dimensions} \textbf{NOTE: Dimensions are for reference only and may vary by model.}$



Meter Dimensions

Al Meters

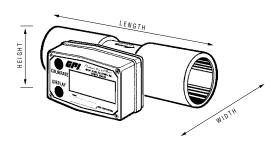


Model	Length inches (mm)	Height inches (mm)	Width inches (mm)
A025	4.0 (102)	2.5 (63)	2.0 (51)
A100	4.0 (102)	2.5 (63)	2.0 (51)
A200	6.0 (152)	4.5 (114)	3.0 (76)
N025	4.0 (102)	2.5 (63)	2.0 (51)
N100	4.0 (102)	2.5 (63)	2.0 (51)

Economy Meters



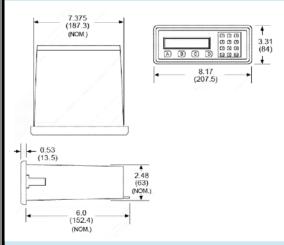
Model	Length inches (mm)	Height inches (mm)	Width inches (mm)
01A	4.0 (102)	2.5 (63)	2.0 (51)
01N	4.0 (102)	2.5 (63)	2.0 (51)



Model	Length* inches (mm)	Height inches (mm)	Width inches (mm)
TM050	4.3 (109)	2.5 (63)	2.0 (51)
TM075	5.3 (135)	2.7 (68)	2.0 (51)
TM100	6.0 (152)	3.0 (76)	2.0 (51)
TM150	7.0 (178)	3.6 (91)	2.3 (58)
TM200	7.5 (190)	4.1 (104)	2.8 (71)

 $[\]star$ Length guidelines are estimates; actual length can vary up to \pm 1/2".

GBM & GBT Controllers



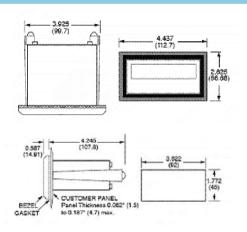
Model	Depth inches (mm)	Height inches (mm)	Width inches (mm)					
GBM or GBT	6.53 (165)	3.31 (84)	8.17 (207)					

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



Meter Dimensions

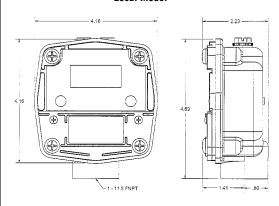
GRT Series Controller



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

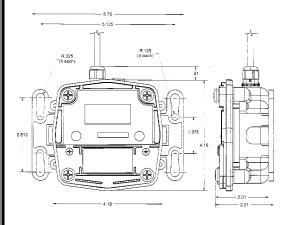
Electronics Choice - Local & Remote (Dimensions can vary by model.)

Local Model



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

Remote Model



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

Includes Mounting BracketIncludes Strain Relief

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

Y Strainers

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.



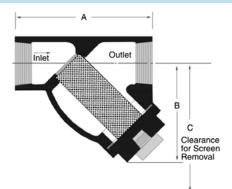
Select Your Strainer Size:

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.
- ✓ 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.



Y STRA	INERS -	SP	ECIFICATIONS
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 N	IUMBERS	&	DIMENSIONS

Part Number	Size	A	В	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"

BUY SMART. BUY VALUE. BUY



7**?** 06/08 ML-1800-6



Chemical Compatibility Guide

®														Journals, Shafts O-Rings										
Chemical			Me	tals						Plas	stics	3			Joi	ırna	als,	Sha	fts		0-	Rin	gs	
Compatibility Guide																				=				(E
for GPI Flowmeters								×												Vito				Œ
								PBT Polyester (Valox)							e e	hire	<u>e</u>			FKM/Fluorocarbon (Viton)				Perfluoroelastomer (FFKM)
\mathbf{R} = Recommended								er (Ē		5			aphi	appl	rbid	Ξ		carb	=		rile)	stor
N = Not Recommended		≣				_		yest	و	Acetal (Delrin)	PPS (Ryton)	PVDF (Kynar)	4		Carbon - Graphite	Ceramic / Sapphire	Tungsten Carbide	Ferrite (MnZn)	Hastelloy-C	o o	PTFE (Teflon)		Buna-N (Nitrile)	oela
X = Unknown or Not Applicable	nze	Aluminum	SS	SS	SS	CD4MCu		Pol	Nylon 6,6	tal (<u>E</u>	Ŧ.	Rulon 641	¥	poq	amic	gste	ite (te	Ĭ	E (T	Σ	a-N	<u>=</u>
2 Cimilani di Not Applicable	Bronze	Alu	Brass	304	316 SS	CD4	PVC	PBT	ž	Ace	PPS	PVD	툹	PEEK	Carl	Cera	Ę	Ferr	Has	Α̈́	PT	EPDM	Ban	Perl
Acetic Acid	N	R	N	N	R	R	N	Х	N	N	R	N	R	R	R	R	N	Х	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	Х	X	R	X	Х	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	n R	R	R
Alcohols: Methyl	R	R	R	R	R	R	R	Х	R	R	R	R	R	R	R	R	n R	R	R	N	R	n R	R	R
Ammonia, Anhydrous	N	R	N	R	R	R	R	X	X	N	R	R	R	R	Х	R	n R	Х	R	N	R	n R	R	R
Ammonia, Liquid	N	n R	X	n R	n R	n R	n R	Χ	A R	N	n R	n R	n R	n R	R	n R	n R	Χ	n R	N	n R	n R	n N	n R
Ammonium Hydroxide	N	n R	N	n R	n R	n R	n R	N	n N	N	n R	n R	n R	n R	n R	n R	n N	A R	n R	R	n R	n R	N	n R
Antifreeze					к R		K R							к R			N R		X					R
Boric Acid	R R	R N	X	X R	к R	X R	K R	X R	X R	N R	X R	X R	X R	Х	X	R R	к R	R R	R	R R	X 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	Х	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	Х	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
																DIIV								



Chemical Compatibility Guide

®																								
Chemical	Metals						Plastics						Journals, Shafts O-Rings											
Compatibility Guide																				Ē				₹ Z
for GPI Flowmeters								×												Z				E
								PBT Polyester (Valox)							ite	Ceramic / Sapphire	e			FKM/Fluorocarbon (Viton)				Perfluoroelastomer (FFKM)
\mathbf{R} = Recommended								ter (Ë		Ξ			aphi	арр	arbic	Zu)		cart	=		rile)	asto
N = Not Recommended		틀				=		lyes	9,	Acetal (Delrin)	PPS (Ryton)	PVDF (Kynar)	14		Carbon - Graphite	c/S	Tungsten Carbide	Ferrite (MnZn)	Hastelloy-C		PTFE (Teflon)		Buna-N (Nitrile)	roe
X = Unknown or Not Applicable	Bronze	Aluminum	Brass	1 SS	316 SS	CD4MCu	ပ	7 P	Nylon 6,6	etal	S (R	DF (Rulon 641	PEEK	- Pod	rami	ngste	rite	stell	M/FI	H H	EPDM	na-N	E S
	Æ	A	Bris	304	31	8	PVC	8	Ž	AC	品	P	2	PE	Cal	Cel	Ę	프	Ha	풒	F	굡	B	Pel
Lacquer Thinners	R	R	R	R	R	R	N	Х	Х	N	Х	Х	R	Х	R	Х	R	Х	R	N	R	N	N	R
Lacquers	R	R	X	R	R	R	N	X	Х	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	Х	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% H2SO4)	Х	N	X	N	N	R	N	X	Х	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 R	N	R	N	X	N	X N	R	R	R	N R	N	R	N	N	R	R	R	R	N	R
Toluene (Toluol)	R R	R N	R	K R	R R	R R	N N	N X	R R	N	R R	R R	R R	R	R R	R X	R R	R R	R R	N R	R R	N N	N	R R
Trichloroethylene Vinegar	K R	N	N	K R	К R	K R	N R	R	N	N R	K R	K R	K R	K R	K R	R	K R	K R	K R	R	R	R	R	R
Water, Deionized	χ		R	n R	n R	R R		χ		χ	n R		n R	χ	R R	n R			n R	R R	R		R R	
•	R	N N	K R	K R	к R	K R	R R	R	X	R	K R	R R	K R	R	K R	R R	X R	X	к R	R	R	R	R	R R
Water, Distilled Water, Salt	K R	N	K N	K R	к R	K R	K R	κ	Х	K R	K R	K R	K R	R	K R	R	к R	Х	K R	R	R	R R	R	R
Xylene		N R	R	R	R R	R R	N	N	R	R	R R	R R	R R	R	R R	n R	n R	Х	n R	R	R	N	N	R
Ayidild	R	n	п	n	n	n	IN	IA	п	n	n	п	n	п	п		n OV					IA	14	п



Approvals

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).
C€	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.
⟨£x⟩	EEx nL IIC T4 U Per Euro Norm 50021.
FM	Factory Mutual Approved Intrinsically Safe for Class I, II, III, Division 1, All Groups. Nonincendive for Class I, II, III, Division 2 Groups A, B, C, D, F, G.
F©	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 and corrosion; and that will be undamaged by the external formation of ice on the enclosure. <i>GPI products are tested to NEMA requirements</i> .
(UL)	Class I, Division I, Groups B, C and D. Class II, Division I, Groups E, F and G.
	RILY SMART RILY VALUE RILY

BUY SMART. BUY VALUE. BUY

ML-1800-6 06/08 75

Meter Application Sheet

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: 316-686-6746Phone: 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	SKETCH BASIC APPLICATION
Air Elimination Req'd:	No	Yes		SIGNOTHY EIGHTON
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:				
Approved Wetted Materials:				
Unusual Fluid Properties:				
Display:	No	Yes	Local _	Remote Both
Output:	No	Yes	Pulse _	Current
Approvals Req'd:	No	Yes	List	

When Performance and Repeatability 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*.



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