# **G SERIES** PRECISION METERS **G SERIES**





# G SERIES PRECISION METERS

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



### **Authorized Distributor:**

**Clark** Clark Solutions 10 Brent Drive Hudson, MA 01749

> Toll Free: 800-253-2497 Tel: 978-568-3400 Fax: 978-568-0060 e-mail: sales@clarksol.com www.clarksol.com

# **BUILD-YOUR-OWN G SERIES METER**



**Threaded Models** 

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### ----- 1) Select Your Turbine



Sanitary Clamp Models



**Flange Models** 



2) Select Your Sensor



.....



Local Pickup Wire Lead

### 3) Select Your Electronic Choice

For further details and selections see the Electronics Section.

Remote	Models
GA500	R700-R
GG500	R800-R
GX500	SC500

. . . . . . .

Local	Models
GA510	R700-L
GG510	R800-L
GX510	SC510

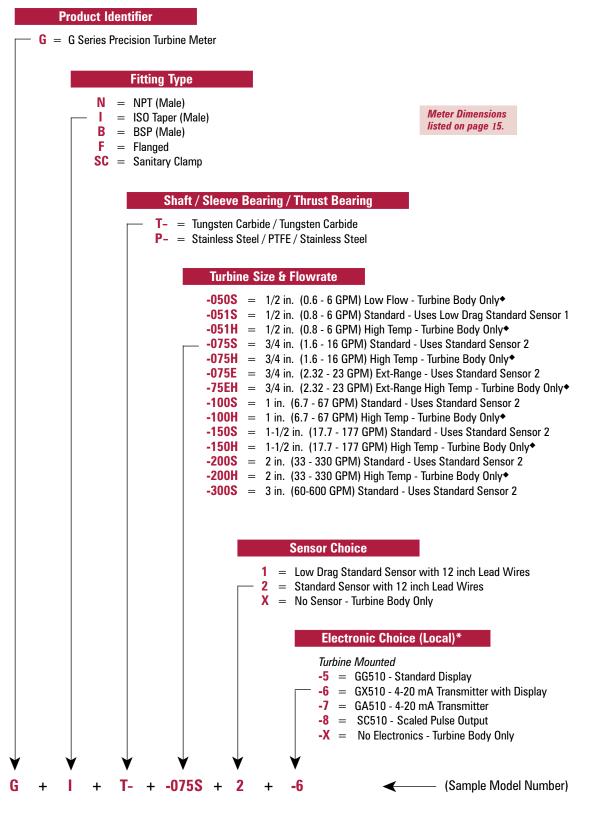
### 4) Do You Want It Assembled?

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

Contact the factory for details on Custom System Assembly.

# G SERIES METER NUMBER REFERENCE

#### USE THIS AS A GUIDE – SIZES VARY BY FITTING TYPE. (Does not apply to model GSCPS - 3A Meters)



\* Electronic Choice not available on all models.

# **GBT, GIT & GNT** PRECISION METERS



GNT shown here with Local Display



2 inch

3 inch

For complete part number, see "Number Reference" chart on page 3.

#### ACCURACY: ± 0.5%

#### Select Your Meter Size:

1/2 inch 3/4 inch

1 inch 1-1/2 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			
Design Type:		Turbine	
Housing Material:		316 Stainless Steel	
Meter Sizes Availa	ble:		
For GNT: NPT	Taper (Male)	1/2" 3/4" 1" 1-1/2" 2" 3"	
For GBT: BSPP		1/2" 3/4" 1" 1-1/2" 2" 3"	
For GIT: ISO T		1/2" 3/4" 1" 1-1/2" 2" 3"	
For High Temp		1/2" 3/4" 1" 1-1/2" 2" —	
Flow Range:	1/2" (051)	0.8 - 6.0 GPM (3.0 - 22 LPM)	
	3/4" (075) 3/4" (075E)	1.6 - 16 GPM (6.0 - 60 LPM) 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	y):	± 0.5%	
Repeatability:		± 0.1%	
Pressure Rating:		1/2" to 2" = 5,000 PSI / 340 BAR	
		3" = 2,500 PSI / 170 BAR	
Operating Tempera	ature Range:	-450° F to +800° F (-268° C to +426° C)	
Typical K-Factor:	1/2" (051)	10,000	
	3/4" (075)	3,750	
	3/4" (075E)	2,608	
	1" (100)	896	
	1-1/2" (150) 2" (200)	340 181	
	3" (300)	50	
Wetted Materials:	<b>x y</b>		
Housing:		316 Stainless Steel	
Sleeve Bearing	IS:	Tungsten Carbide	
Thrust Bearing	:	Tungsten Carbide	
Shaft:		Tungsten Carbide	
Rotor: Rotor Supports	•	CD4MCu Stainless Steel 316 Stainless Steel	
Recommended Str	1/2"	40 mesh	
	3/4"	40 mesh	
	1"	40 mesh	
	1-1/2"	18 mesh	
	2"	14 mesh	
	3"	14 mesh	
Frequency Output:		125 - 1000 Hz	
	3/4" (075) 3/4" (075E)	100 - 1000 Hz 100 - 1000 Hz	
	3/4 (075E) 1" (100)	100 - 1000 Hz	
	1-1/2" (150)	100 - 1000 Hz	
	2" (200)	100 - 1000 Hz	
	3" (300)	50 - 500 Hz	
<b>Calibration Report</b>		Comes standard with G Series meters.	
		N.I.S.T. – Certification available.	
	Λ	PROVALS	
	A	CE	

- + ISO 228-1 designation is G.

# **GBP, GIP & GNP** PRECISION METERS

SPECIFICATIONS			
Design Type:	Turbine		
Housing Material:	316 Stainless Steel		
Meter Sizes Available:		_	
For GNP: NPT (Male)	1/2" 3/4" 1" 1-1/2" 2"		
For GBP: BSPP <sup>+</sup> (Male)			
For GIP: ISO Taper (M			
Flow Range: 1/2" (05	-		
1/2" (05			
3/4" (07			
3/4" (07		_	
1" (100			
1-1/2" (			
2" (200			
Accuracy (Linearity):	± 0.5%		
Repeatability:	± 0.1%		
Pressure Rating:	1/2" to 2" = 5,000 PSI / 340 BAR		
Operating Temperature Ra	nge: -450° F to +800° F (-268° C to +426° C)		
Typical K-Factor: 1/2" (0	<b>50)*</b> 10,000		
1/2" (0			
3/4" (0			
3/4" (01	<b>75E)</b> 2,608		
1" (100	•		
1-1/2"			
2" (200	<b>))</b> 181		
Wetted Materials:			
Housing:	316 Stainless Steel		
Sleeve Bearings:	ings: PTFE		
Thrust Bearing:	440C Stainless Steel	s	
Shaft:	316 Stainless Steel		
Rotor:	CD4MCu Stainless Steel		
Rotor Supports:	316 Stainless Steel		
Recommended Strainer Siz			
1/2"	40 mesh		
<u> </u>	40 mesh		
1-1/2"	40 mesh 18 mesh		
2"	14 mesh		
Frequency Output: 1/2" (0)		-	
3/4" (0			
3/4" (0			
1" (100	D) 100 - 1000 Hz		
1-1/2"			
2" (200	• •		
Calibration Report	Comes standard with G Series meters.		
can sharrow hoport	N.I.S.T. – Certification available.		
APPROVALS			

### CE

\* 1/2 in. (050) requires RF Pickup.

+ ISO 228-1 designation is G.



#### Select Your Meter Size:

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

#### **Sensor Options:**

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

#### **Electronics Options:**

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

# **ANSI FLANGE** PRECISION METERS

### **Model GFT** 150# RF ANSI Flange Fitting



see "Number Reference" chart on page 3.

#### ACCURACY: ± 0.5%

#### Select Your Meter Size:

3/4 inch 1 inch

1-1/2 inch 3 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)

SPECIFICATIONS			
Design Type:	Turbine		
Housing Material:	316 Stainless Steel		
Meter Sizes Available:			
For GFT:	3/4" 1" 1-1/2" 2" 3"		
For GFP:	3/4" 1" 1-1/2" 2" —		
For High Temperature:	3/4" 1" 1-1/2" 2" —		
Flow Range: 3/4" (075)	1.6 - 16 GPM (6.0 - 60 LPM)		
3/4" (075E)	2.3 - 23 GPM (8.7 - 87 LPM)		
1" (100)	6.7 - 67 GPM (25.2 - 252 LPM)		
1-1/2" (150) 2" (200)	17.7 - 177 GPM (67.0 - 670 LPM) 33 - 330 GPM (125.0 - 1250 LPM)		
3" (300)	60 - 600 GPM (227.1 - 2271 LPM)		
Accuracy (Linearity):	± 0.5%		
	± 0.1%		
Repeatability:			
Pressure Rating:	Flange Rule		
Operating Temperature Range:			
For Tungsten Carbide: For SS/PTFE:	-450° F to +800° F (-268° C to +426° C) -100° F to +185° F (-74° C to +85° C)		
	3.750		
Typical K-Factor: 3/4" (075) 3/4" (075E)	2,608		
1" (100)	896		
1-1/2" (150)	340		
2" (200)	181		
3" (300)	50		
Wetted Materials (GFT):			
Housing:	316 Stainless Steel		
Sleeve Bearings:	Tungsten Carbide		
Thrust Bearing: Shaft:	Tungsten Carbide Tungsten Carbide		
Rotor:	CD4MCu Stainless Steel		
Rotor Supports:	316 Stainless Steel		
Wetted Materials (GFP):			
Housing:	316 Stainless Steel		
Sleeve Bearings:	PTFE		
Thrust Bearing:	440C Stainless Steel		
Shaft:	316 Stainless Steel		
Rotor: Rotor Supports:	CD4MCu Stainless Steel 316 Stainless Steel		
Recommended Strainer Size:			
Recommended Strainer Size: 3/4"	40 mesh		
1"	40 mesh		
1-1/2"	18 mesh		
2"	14 mesh		
3"	14 mesh		
Frequency Output: 3/4" (075)	100 - 1000 Hz		
3/4" (075E)	100 - 1000 Hz		
1" (100) 1-1/2" (150)	100 - 1000 Hz 100 - 1000 Hz		
2" (200)	100 - 1000 Hz		
3" (300)	50 - 500 Hz		
Calibration Report	Comes standard with G Series meters.		
N.I.S.T. – Certification available.			
APPROVALS			
	CE		

\* Requires High Temp Pickup.

# SANITARY CLAMP PRECISION METERS

SPE(	CIFICATIONS			
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: Rotor:	316 Stainless Steel CD4MCu Stainless Steel			
Rotor Supports:	316 Stainless Steel			
Recommended Strainer Size:				
1"	40 mesh			
1-1/2"	18 mesh			
2"	14 mesh			
Frequency Output: 1" (100)	100 - 1000 Hz			
1-1/2" (150)	100 - 1000 Hz			
2" (200)	100 - 1000 Hz			
Calibration Report	Comes standard with G Series meters.			
	N.I.S.T. – Certification available.			

#### APPROVALS

GSCPS & "L" Option Meters carry a



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

CE





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

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

# Model GSCPS

Standard Sanitary Clamp



Model GSCPS Low Profile Sanitary Clamp



For complete part number, see "Number Reference" chart on page 3.

#### ACCURACY: ± 0.5%

GSCPS Stainless Steel Precision Turbine Meter



#### Select Your Meter Size:

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

# PRECISION METERS SANITARY CLAMP

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

# **Model GSCP** Tri-Clover<sup>®</sup> Clamp



For complete part number, see "Number Reference" chart on page 3.

#### ACCURACY: ± 0.5%

#### Select Your Meter Size:

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



#### **Sensor Options:**

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

#### **Electronics Options:**

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

SPECIFICATIONS						
Design Type:	Turbine					
Housing Material:		316 Stainless Steel				
Meter Sizes Availabl	e (ID) <sup>.</sup>				2"	
Meter ID: 1/2"						-
1/2"		3/4" Fit 1" Fittir	•			
3/4"		1-1/2"				
		1-1/2"	-			
1-1/2"		1-1/2"				
2"		2" Fitti	•			
Flow Range: 1/2" (I	150) <sup>†</sup>	0.6 - 6	Ŭ.	(22-	22 LPM)	
1/2" (1	•	0.8 - 6		· ·	22 LPM)	
3/4" (1		1.6 - 10		· ·	60 LPM)	
3/4" (1		2.3 - 23		•	87 LPM)	
1" (10		6.7 - 67		•	- 252 LPM)	
1-1/2"			177 GPM	•	- 670 LPM)	
2" (20			0 GPM	· ·	0 - 1250 LPI	M)
Accuracy (Linearity)	•	± 0.5%				
Repeatability:		± 0.1%				
Pressure Rating:		Limited	l by fitting	size, c	amp size &	temp.
Operating Temperat	ire Range:	-100° F	to +185°	F (-74	° C to +85°	C)
Typical K-Factor: 1	/2" (050)†	10,000				
	/2" (051)	10,000				
	/4" (075)	3,750				
	/4" (075E)	2,608				
1	" (100)	896				
1	-1/2" (150)	340				
2	" (200)	181				
Wetted Materials:						
Housing:		316 Sta	ainless Ste	eel		
Sleeve Bearings:		PTFE				
Thrust Bearing:		440C S	tainless S	iteel		
Shaft:			ainless Ste			
Rotor:			Cu Stainles			
Rotor Supports:		316 Sta	ainless Ste	eel		
Recommended Strai						
	/2"	40 mes				
3	/4"	40 mes				
1		40 mes				
	-1/2"	18 mes				
	,,,,	14 mes				
Frequency Output: 1			000 Hz			
	/2" (051)		000 Hz			
	/4" (075) (4" (075)		000 Hz			
	/4" (075E)		000 Hz			
	" (100) 1/2" (150)	100 - 1000 Hz 100 - 1000 Hz				
	-1/2" (150) " (200)					
	(200)	100 - 1000 Hz				
Calibration Report					Series meter	rs.
		N.I.S.T.	. – Certific	ation av	/allable.	

<sup>+</sup> 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.



**G SERIES** 

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 SIZ	1/2 INCH METER SIZES Magnetic Pickups work with				work with					
Description	Part Number	Sensor Power	Temperature Range	Cable Type	Connector Required	Cable Length	Thread Size	Local	Remote	Battery Pwr Display
Wire Lead Low Drag	81006001	None	-100° F - +250° F (-73° C - +121° C)	None	None	12 in.	5/8" - 18	Х		Yes
Low Drag	81006000	None	-100° F - +250° F (-73° C - +121° C)	S	80001200	N/A	5/8" - 18		Х	Yes
High Temp., Low Drag (10 ft. cable)	81007001	None	-450° F - +800° F (-268° C - +426° C)	None	None	10 ft.	5/8" - 18		Х	Yes
* RF (required for GNP-050,	81005002	7-30 VDC	-40° F - +248° F (-29° C - +120° C)	D	80001202	N/A	5/8" - 18		Х	No
GTP-050 & GSCP-050)										
3/4 TO 3 INCH MET	ER SIZES									
Wire Lead Standard	81003000	None	-100° F - +250° F (-73° C - +121° C)	None	None	12 in.	5/8" - 18	Х		Yes
Standard	81001000	None	-100° F - +250° F (-73° C - +121° C)	S	80001200	N/A	5/8" - 18		Х	Yes
Herm / High Temperature	81002000	None	-450° F - +258° F (-268° C - +125° C)	S	80001200	N/A	5/8" - 18		Х	Yes
High Temperature, Standard	81007000	None	-450° F - +800° F (-268° C - +426° C)	None	None	3 ft.	5/8" - 18		Х	Yes
* Digital (Di-Mag)	81004000	5-32 VDC	-40° F - +248° F (-29° C - +120°C )	D	80001202	N/A	5/8" - 18		Х	No

\* Externally powered pickups for pulse output only.

### **Pickup Enclosures**



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

ENCLUSURES – PART NUM	BERS
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

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# G SERIES PRECISION ACCESSORIES

### **Connectors**



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

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

## **Cable Assemblies**



GPI Cable Assemblies include the connector.

CABLE ASSEMBLY – PART NUMBERS				
Type "S" Star (2 Cond		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			
2 C C C C C C C C C C C C C C C C C C C	Type "D" Di-Mag or RF (3 Conductor)		Temperature uctor)	
Cable Length	Part No.	Cable Length	Part No.	
8 inch	83002001	8 inch	83004001	
5 feet	83002005	5 feet	83004005	
10 feet	83002010	10 feet	83004010	
15 feet	83002015	15 feet	83004015	
20 feet	83002020	20 feet	83004020	
25 feet	83002025	25 feet	83004025	
30 feet	83002030	30 feet	83004030	
40 feet	83002040	40 feet	83004040	
50 feet	83002050	50 feet	83004050	
75 feet	83002075	75 feet	83004075	

# **GG500/GG510/5 SERIES** ELECTRONIC CHOICE

# **Display With Pulse Output**

GG500 Remote Mount





GG510 Local Mount

**Calibratable:** 

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

#### ACCURACY: ±0.1% READING

#### **Features and Benefits:**

Provides communication with process control equipment.

Works with G Series, G2 Turbine Meters and GM Oval Gear Meters.

2 Totals (Batch = Resettable, Cumulative = Non-Resettable); Rate of Flow. Factory calibrated in gallons and litres. Field calibratable. Allows user calibration. Includes non-volatile totals.



Industry Standard Output: Unscaled Pulse.

Easily mounted on pipe or wall.

Output Options: Primary Output:Open Collector (NPN)Pulse-Out: Max. "OFF" Voltage: Max. "ON" Current: 200 mAOven Collector (NPN)Pulse-Out: Max. "ON" Current: Max. "ON" Voltage Drop: Strain Relief: Cable: <th>GG500/GG</th> <th>510 – SPECIFICATIONS</th>	GG500/GG	510 – SPECIFICATIONS
Primary Output:Open Collector (NPN)Pulse-Out:Max. "OFF" Voltage:60 VMax. "OFF" Voltage:60 VMax. "ON" Current:200 mAMax. "ON" Voltage Drop:< 0.5 V @ 200 mA	Accuracy:	± 0.1% of reading
Pulse-Out:Image: Construction of the second sec	Output Options:	
Max. "OFF" Voltage:60 VMax. "ON" Current:200 mAMax. "ON" Voltage Drop:< 0.5 V @ 200 mAElectrical:Strain Relief:Hubble PG7Strain Relief:Hubble PG7Strain Relief Thread:Female 1/2-20 UNF-2BCable:Remote:Belden 9363 (500 Series only)Local: No cable providedCable Length:20 ft. (6 m) provided (500 Series only)Power Supply:9-volt battery or externally poweredVoltage Supply (Min.):7 VDCVoltage Supply (Max.):30 VDCInput Options:Hall Effect, Reed Switch, Open Collector or Low Level Sine WaveRemote Mounting:Pipe or wallOperating Temperature:+14° F to +140° F (-10° C to +60° C)Frequency Input: Low Level Coil (LLC):0 - 1000 HzHigh Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote: 2.0 lbs. (.90 kg)	Primary Output:	Open Collector (NPN)
Max. "ON" Current:200 mAMax. "ON" Voltage Drop:< 0.5 V @ 200 mAElectrical:Hubble PG7Strain Relief:Hubble PG7Strain Relief Thread:Female 1/2-20 UNF-2BCable:Remote:Belden 9363 (500 Series only)Local:No cable providedCable Length:20 ft. (6 m) provided (500 Series only)Power Supply:9-volt battery or externally poweredVoltage Supply (Min.):7 VDCVoltage Supply (Max.):30 VDCInput Options:Hall Effect, Reed Switch, Open Collector or Low Level Sine WaveRemote Mounting:Pipe or wallOperating Temperature:+14° F to +140° F (-10° C to +60° C)Frequency Input: Low Level Coil (LLC):0 - 1000 HzHigh Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote:2.0 lbs. (.90 kg)	Pulse-Out:	
Max. "ON" Voltage Drop:< 0.5 V @ 200 mA	Max. "OFF" Voltage:	60 V
Electrical:    Hubble PG7      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    Pipe or wall      Operating Temperature:    +14° F to +140° F (-10° C to +60° C)      Frequency Input:    0 - 1000 Hz      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)	Max. "ON" Current:	200 mA
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    Pipe or wall      Operating Temperature:    +14° F to +140° F (-10° C to +60° C)      Frequency Input:    0 - 1000 Hz      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 Ibs. (.90 kg)	Max. "ON" Voltage Drop:	< 0.5 V @ 200 mA
Strain Relief Thread:Female 1/2-20 UNF-2BCable:Remote:Belden 9363 (500 Series only)Local:No cable providedCable Length:20 ft. (6 m) provided (500 Series only)Power Supply:9-volt battery or externally poweredVoltage Supply (Min.):7 VDCVoltage Supply (Max.):30 VDCInput Options:Hall Effect, Reed Switch, Open Collector or Low Level Sine WaveRemote Mounting:Pipe or wallOperating Temperature:+14° F to +140° F (-10° C to +60° C)Frequency Input: Low Level Coil (LLC):0 - 1000 HzHigh Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote:2.0 lbs. (.90 kg)	Electrical:	
Cable:Remote:Belden 9363 (500 Series only)Local:No cable providedCable Length:20 ft. (6 m) provided (500 Series only)Power Supply:9-volt battery or externally poweredVoltage Supply (Min.):7 VDCVoltage Supply (Max.):30 VDCInput Options:Hall Effect, Reed Switch, Open Collector or Low Level Sine WaveRemote Mounting:Pipe or wallOperating Temperature:+14° F to +140° F (-10° C to +60° C)Frequency Input: Low Level Coil (LLC):0 - 1000 HzHigh Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote: 2.0 lbs. (.90 kg)	Strain Relief:	Hubble PG7
Local: No cable providedCable Length:20 ft. (6 m) provided (500 Series only)Power Supply:9-volt battery or externally poweredVoltage Supply (Min.):7 VDCVoltage Supply (Max.):30 VDCInput Options:Hall Effect, Reed Switch, Open Collector or Low Level Sine WaveRemote Mounting:Pipe or wallOperating Temperature:+14° F to +140° F (-10° C to +60° C)Frequency Input:0 - 1000 HzLow Level Coil (LLC):0 - 1000 HzHigh Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight: <i>Remote:</i> 2.0 lbs. (.90 kg)	Strain Relief Thread:	Female 1/2-20 UNF-2B
Cable Length:20 ft. (6 m) provided (500 Series only)Power Supply:9-volt battery or externally poweredVoltage Supply (Min.):7 VDCVoltage Supply (Max.):30 VDCInput Options:Hall Effect, Reed Switch, Open Collector or Low Level Sine WaveRemote Mounting:Pipe or wallOperating Temperature:+14° F to +140° F (-10° C to +60° C)Frequency Input:0 - 1000 HzLow Level Coil (LLC):0 - 1000 HzHigh Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight: <i>Remote:</i> 2.0 lbs. (.90 kg)	Cable:	Remote: Belden 9363 (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:    0 - 1000 Hz      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: No cable provided
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:	Cable Length:	20 ft. (6 m) provided (500 Series only)
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:	Power Supply:	9-volt battery or externally powered
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:	Voltage Supply (Min.):	7 VDC
Low Level Sine Wave      Remote Mounting:    Pipe or wall      Operating Temperature:    +14° F to +140° F (-10° C to +60° C)      Frequency Input:	Voltage Supply (Max.):	30 VDC
Remote Mounting:    Pipe or wall      Operating Temperature:    +14° F to +140° F (-10° C to +60° C)      Frequency Input:	Input Options:	Hall Effect, Reed Switch, Open Collector or
Operating Temperature:    +14° F to +140° F (-10° C to +60° C)      Frequency Input:		Low Level Sine Wave
Frequency Input:    0 - 1000 Hz      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)	Remote Mounting:	Pipe or wall
Low Level Coil (LLC):0 - 1000 HzHigh Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote: 2.0 lbs. (.90 kg)	Operating Temperature:	+14° F to +140° F (-10° C to +60° C)
High Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote: 2.0 lbs. (.90 kg)	Frequency Input:	
High Level Low Freq.:0 - 150 HzHigh Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote: 2.0 lbs. (.90 kg)		0 - 1000 Hz
High Level High Freq.:0 - 1000 HzEnclosure Rating:NEMA 4X / IP55Shipping Weight:Remote: 2.0 lbs. (.90 kg)		0 - 150 Hz
Shipping Weight: Remote: 2.0 lbs. (.90 kg)		0 - 1000 Hz
	Enclosure Rating:	NEMA 4X / IP55
	Shipping Weight:	Remote: 2.0 lbs. (.90 kg)
		( 0)

K-factor Entry

#### GX500/GX510/6 SERIES ELECTRONIC CHOICE **ELECTRONICS**

GX500/GX510 – SPECIFICATIONS		
Accuracy:	± 0.1% of reading	
Output Options:		
Primary Output:	Loop (4-20 mA or 0-20 mA)	
Minimum:	1.5 mA	
Maximum:	25 mA	
Auxiliary Outputs 0-5 V:	Single Ended	
Minimum:	0.1 V	
Maximum:	4.9 V	
Pulse-Out:		
Max. "OFF" Voltage:	60 V	
Max. "ON" Current:	200 mA	
Max. "ON" Voltage Drop:	< 0.5 V @ 200 mA	
Electrical:		
Strain Relief:	Hubble PG7	
Strain Relief Thread:	Female 1/2-20 UNF-2B	
Cable:	Remote: Belden 9363 (500 Series only)	
	Local: No cable provided	
Cable Length:	20 ft. (6 m) provided (500 Series only)	
Power Supply:	2-wire, loop powered	
Voltage Supply (Min.):	8.5 VDC	
Voltage Supply (Max.):	35 VDC	
Input Options:	Hall Effect, Reed Switch, Open Collector or	
	Low Level Sine Wave	
Remote Mounting:	Pipe or wall	
Operating Temperature:	+32° F to +140° F (0° C to +60° C)	
Frequency Input:		
Low Level Coil (LLC):	0.25 - 1000 Hz	
High Level Low Freq.:	0.25 - 150 Hz	
High Level High Freq.:	0.25 - 1000 Hz	
Optically Isolated HLLF:	w/2500 V optical isolation	
Optically Isolated HLHF:	w/2500 V optical isolation	
Enclosure Rating:	NEMA 4X / IP55	
Shipping Weight:	Remote: 2.0 lbs. (.90 kg)Local: 1.1 lbs. (.5 kg)	
Calibratable:	K-factor Entry	

### **Display With 4-20 mA Output**



GX500 **Remote Mount** 

GX510 Local Mount



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

#### ACCURACY: ±0.1% READING

#### Features and Benefits:

Provides communication with process control equipment.

Works with G Series, G2 Turbine Meters and GM Oval Gear Meters.

2 Totals (Batch = Resettable, Cumulative = Non-Resettable); Rate of Flow. Factory calibrated in gallons and litres. Field calibratable. Allows user calibration. Includes non-volatile totals.

Now available with Lockout feature.

- Microprocessor-based electronics have extremely low power requirements.
- Easy to set 4-20 mA endpoints under actual flow conditions.
- A signal conditioner with industry standard current loop output.
- Easily mounted on pipe or wall.

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#### ELECTRONICS

# GA500/GA510/7 SERIES ELECTRONIC CHOICE

### 4-20 mA Output

GA500 Remote Mount

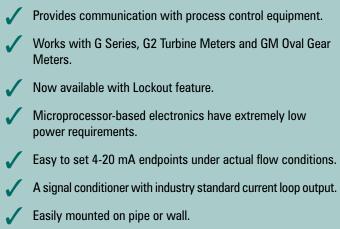




The GA500 is a remote mount 4-20 mA Output Transmitter without display. Choose the GA510 when a local mount is needed.

#### ACCURACY: ±0.1% READING

#### Features and Benefits:



GA500/GA510 – SPECIFICATIONS			
Accuracy:	± 0.1% of reading		
Output Options:			
Primary Output:	Loop (4-20 mA or 0-20 mA)		
Minimum:	1.5 mA		
Maximum:	25 mA		
Auxiliary Outputs 0-5 V:	Single Ended		
Minimum:	0.1 V		
Maximum:	4.9 V		
Pulse-Out:			
Max. "OFF" Voltage:	60 V		
Max. "ON" Current:	200 mA		
Max. "ON" Voltage Drop:	< 0.5 V @ 200 mA		
Electrical:			
Strain Relief:	Hubble PG7		
Strain Relief Thread:	Female 1/2-20 UNF-2B		
Cable:	Remote: Belden 9363 (500 Series only)		
	Local: No cable provided		
Cable Length:	20 ft. (6 m) provided (500 Series only)		
Power Supply:	2-wire, loop powered		
Voltage Supply (Min.):	8.5 VDC		
Voltage Supply (Max.):	35 VDC		
Input Options:	Hall Effect, Reed Switch, Open Collector or		
	Low Level Sine Wave		
Mounting:	Pipe or wall		
Operating Temperature:	+32° F to +140° F (0° C to +60° C)		
Frequency Input:			
Low Level Coil (LLC):	0.25 - 1000 Hz		
High Level Low Freq.:	0.25 - 150 Hz		
High Level High Freq.:	0.25 - 1000 Hz		
Optically Isolated HLLF:	w/2500 V optical isolation		
Optically Isolated HLHF:	w/2500 V optical isolation		
Enclosure Rating:	NEMA 4X / IP55		
Shipping Weight:	Remote: 2.0 lbs. (.90 kg)		
	Local: 1.1 lbs. (.5 kg)		

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# SC500/SC510/8 SERIES ELECTRONIC CHOICE ELECTRONICS

SC500/SC510 - SPECIFICATIONS		
Accuracy:	± 0.1% of reading	
Power Source:	DC powered 5 to 30 VDC	
Input Signal:	Hall Effect, Reed Switch or Open Collector (NPN) or Sine Wave	
Output Signal:	Open Collector (NPN)	
Frequency Range:	Coil, HF = 0-1500 Hz; LF = 0-150 Hz	
Operating Temperature:	-40° F to +185° F (-40° C to +85° C)	
Cable:	<i>Remote:</i> 20 ft., 3-conductor, tinned drain wire, 22 AWG, PVC jacket .212 dia. Ref. Belden 9363. <i>Local:</i> 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:	<i>Remote:</i> Two strain relief ports <i>Local:</i> One strain relief port; one threaded plug	

### **Scaled Pulse Output**



SC510 Local Mount



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.

#### ACCURACY: ±0.1% READING

#### Features and Benefits:

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

# METER **DIMENSIONS**

HEIGHT

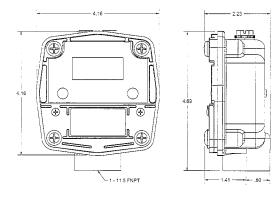
## **G Series Precision Meters**

	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.						



(Dimensions can vary by model.)

#### **Local Model**



**Remote Model** 

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

LENGTH

Length <sup>*</sup>	Height †	Width*
inches (mm)	inches (mm)	inches (mm)
2.21 (56)	4.67 (119)	5.75 (146)

\* Includes Mounting Bracket
 Includes Strain Relief