

# 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.

29



## 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



### 3) Select Your Electronics Choice

For further details and selections see Electronics Section on page 58.



**GA500** 4-20 mA Output Without Display (Remote)



**GG510** Local Display With Pulse Output



**GX500** 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 come complete with blow-off and plug. See page 73 for strainer specifications.



GM001 + A

### GM Series Meter Number Reference

### Product Identifier

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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)
- Bronze (Models GM010, GM015 & GM510) PPS w/Hastalloy C Shafts (Model GM007 only)
- High Pressure Stainless Steel (Models GM002 & GM003)
- 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 70.

### 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)
- 5 = 150# ANSI Flange Litre (Models GM510, GM515, GM520 Aluminum & S.S. only)
- 6 = Tri-Clover® Fitting Gallon (Models GM010, GM015 S.S. only)

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

- 1 = Fluorocarbon
- 2 = PTFE

### **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.

## GM001 - 1/8" Oval Gear Pulse Meter





Shown here with Local Display

The GM001 is one of three compact meters in the Oval Gear 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 particles sizes to 0.005"/0.127 mm.
- 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.

GM001	- SPECIFICATIONS
Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch or Hall Effect Sensor*
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: Intermed. Pressure SS:	2.0 lbs. (0.91 kg)
	2.0 lbs. (0.91 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

<sup>\*</sup> 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 particles sizes to 0.005"/0.127 mm.
- ✓ Comes with Reed Switch as standard, Hall Effect Sensor\* optional.
- ✓ Durable and serviceable on-site.
- ✓ Certificate of Accuracy supplied with meter.

GT 5000	
	- SPECIFICATIONS
Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Material:	PPS or 316 Stainless Steel
O-Ring:	Fluorocarbon (Std.), Perfluoroelastomer
	(Optional)
Output Options:	
Aluminum:	Pulse Out or Local 4-20 mA Transmitter
PPS:	Pulse Out or Local 4-20 mA Transmitter
Stainless Steel:	Pulse Out or Local 4-20 mA Transmitter
High Pressure SS: Intermed. Pressure SS:	Pulse Out Pulse Out or Local 4-20 mA Transmitter
Display Options:	Local Display Local Display with 4-20 mA Output
Flow Bonne	· · ·
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
High Pressure SS: Intermed, Pressure SS:	8.000 PSI / 544 BAR 800 PSI / 55 BAR
	000 PSI / 33 BAN
Maximum Temperature: Aluminum:	176°F / 80°C
PPS:	176°F / 80°C
Stainless Steel:	248°F / 120°C
High Pressure SS:	248°F / 120°C
Intermed. Pressure SS:	248°F / 120°C
Typical K-Factor:	3785.4 PPG / 1000 PPL
Wetted Mat'l Housing:	
Aluminum:	Aluminum with PPS Cap
PPS:	PPS
Stainless Steel:	316 Stainless Steel
High Pressure SS:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Wetted Mat'l Bearings:	
Aluminum:	Bronze
PPS Rotor: Stainless Steel:	N/A Ceramic
High Pressure SS:	Ceramic
Intermed. Pressure SS:	Ceramic
Wetted Mat'l Shaft:	
Aluminum:	316 Stainless Steel
PPS:	Hastalloy C / Stainless Steel
Stainless Steel:	316 Stainless Steel
High Pressure SS:	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. $(0.45 \text{ kg})$ ,
	High Pressure Stainless Steel = 8 lbs. (3.63 kg),
	SS/Intermediate Pressure SS = 2 lbs. (0.91 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500
* Hall Effect Sensor require	es dedicated power source.

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ML-1800-5 Rev. B 03/07 33

## 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 particles sizes to 0.005"/0.127 mm.
- ✓ 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.

CM003	- SPECIFICATIONS
Fitting Type:	BSP or NPT (Female)
Sensor Options:	Reed Switch or Hall Effect Sensor*
Rotor Materials:	PPS, 316 Stainless Steel or High Viscosity SS
0-Ring:	Fluorocarbon (Std.), Perfluoroelastomer
U-nilly.	(Optional)
Output Options:	(Optional)
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
maximum viscosity.	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	riigii riccoon, riccoon rijooc, coo cpc
Aluminum:	75 PSI / 5 BAR
PPS:	75 PSI / 5 BAR
Stainless Steel:	150 PSI / 10 BAR
High Pressure SS:	8,000 PSI / 544 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
High Pressure SS: Intermed. Pressure SS:	248°F / 120°C 248°F / 120°C
Typical K-Factor:	1514.2 PPG / 400 PPL
Wetted Mat'l Housing: Aluminum:	Aluminum with PPS Cap
PPS:	PPS
Stainless Steel:	316 Stainless Steel
High Pressure SS:	316 Stainless Steel
Intermed. Pressure SS:	316 Stainless Steel
Wetted Mat'l Bearings:	
Aluminum:	Bronze
PPS Rotor:	N/A
Stainless Steel:	Ceramic
High Pressure SS:	Ceramic
Intermed. Pressure SS:	Ceramic
Wetted Mat'l Shaft:	210 Chainless Chaol
Aluminum: PPS:	316 Stainless Steel Hastalloy C / Stainless Steel
Stainless Steel:	316 Stainless Steel
High Pressure SS:	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),
omphing troight (approx.).	High Pressure Stainless Steel = 8 lbs. (3.63 kg),
	SS/Intermediate Pressure SS = 2 lbs. (0.91 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500
* Hall Effect Sensor requires	s aeaicated 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 particles 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: SS Rotors:	176°F / 80°C 248°F / 120°C
Typical K-Factor: Single Pickup: Double Pickup:	424 PPG / 112 PPL 848 PPG / 224 PPL
Wetted Mat'l Housing: Aluminum: Stainless Steel:	Aluminum 316 Stainless Steel
Wetted Mat'l Bearings:	PPS / Carbon
Wetted Mat'l Shaft:	316 Stainless Steel
Frequency Range:	1.8 - 55.8 Hz @ 0.26 - 7.9 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.): Aluminum: Stainless Steel:	3.25 lbs. (1.5 kg) 6.0 lbs. (2.7 kg)
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

 $<sup>\</sup>ensuremath{^{\star}}$  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 Oval Gear 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 particles 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 Stainless Steel



### Features and Benefits:

- ✓ Extremely accurate even with viscous fluids.
- ✓ Handles particles 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
Double Pickup:	394 PPG / 104 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

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ML-1800-5 Rev. B 03/07 37

<sup>\*</sup> 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 particles 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
Double Pickup:	394 PPG / 104 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

<sup>\*</sup> Hall Effect Sensor requires dedicated power source.

## GM010 - 1" Oval Gear Pulse Meter



The GM010 Meter is a 1-inch meter available in Aluminum, Bronze and 316 Stainless Steel body materials. Optional 150# ANSI Flanges and Tri-Clover® Fittings are available on the GM010.

### ACCURACY: ± 0.5% OF READING

### Select Your Body Material:

Aluminum
Bronze
Stainless Steel



### Features and Benefits:

- Extremely accurate even with viscous fluids.
- ✓ Handles particles 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
Bronze:	BSP or NPT (Female)
Stainless Steel:	BSP or NPT (Female), 150# ANSI Flange, or
	Tri-Clover® Fittings
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
Dispidy Options.	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
maximum viocotty:	High Viscosity Rotors: 1,000,000 cps
Pressure Rating:	800 PSI / 55 BAR or Flange Rule
Maximum Temperature:	
PPS Rotors:	176°F / 80°C
SS Rotors:	248°F / 120°C
Typical K-Factor:	
Single Pickup:	136.3 PPG / 36 PPL
Double Pickup:	272.6 PPG / 72 PPL
Wetted Mat'l Housing:	
Aluminum:	Aluminum
Bronze: Stainless Steel:	Bronze 316 Stainless Steel
Wetted Mat'l Bearings:	PPS / Carbon
Wetted Mat'l Shaft:	316 Stainless Steel
Frequency Range:	3.6 - 72.7 Hz @ 1.6 - 332 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	OU IIIO3II
Aluminum:	4.9 lbs. (2.2 kg) - Pulse
,	6.6 lbs. (2.9 kg) - 150# ANSI Flange
Bronze:	12.7 lbs. (5.7 kg) - Pulse
Stainless Steel:	12.5 lbs. (5.7 kg) - Pulse
	14.6 lbs. (6.6 kg) - 150# ANSI Flange
	10.8 lbs. (4.9 kg) - Tri-Clover® Fittings
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500

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ML-1800-5 Rev. B 03/07

 $<sup>\</sup>ensuremath{^{*}}$  Hall Effect Sensor requires dedicated power source.

## GM510 - 1" Oval Gear Mechanical Meter



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

### ACCURACY: ± 1.0% OF READING

### Select Your Body Material:

Aluminum
Bronze
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 particles 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
Bronze: Stainless Steel:	BSP or NPT (Female) 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
Bronze:	Bronze
Stainless Steel:	316 Stainless Steel
Wetted Mat'l Bearings:	PPS / Carbon
Wetted Mat'l Shaft:	316 Stainless Steel
Frequency Range:	N/A
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	4.9 lbs. (2.2 kg) - Pulse
D	7.0 lbs. (3.1 kg) - 150# ANSI Flange
Bronze: Stainless Steel:	12.0 lbs. (5.4 kg) - Pulse 11.7 lbs. (5.3 kg) - Pulse
Statilless Steet.	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 Flanges and Tri-Clover® 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
Bronze
Stainless Steel



### Features and Benefits:

- ✓ Extremely accurate even with viscous fluids.
- √ Handles particles 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
Bronze:	BSP or NPT (Female)
Stainless Steel:	BSP or NPT (Female), 150# ANSI Flange or
	Tri-Clover® Fittings
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
Bronze:	800 PSI / 55 BAR
Stainless Steel:	800 PSI / 55 BAR or Flange Rule
Maximum Temperature:	17005 / 0000
PPS Rotors: SS Rotors:	176°F / 80°C 248°F / 120°C
	240 F / 120 G
Typical K-Factor:	54.9 PPG / 14.5 PPL
Single Pickup: Double Pickup:	109.8 PPG / 29 PPL
Wetted Mat'l Housing:	
Aluminum:	Aluminum
Bronze:	Bronze
Stainless Steel:	316 Stainless Steel
Wetted Mat'l Bearings:	PPS / Carbon
Wetted Mat'l Shaft:	316 Stainless Steel
Frequency Range:	2.4 - 60.4 Hz @ 2.6 - 66 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	10.0 lbs. (4.5 kg) - Pulse
	12.0 lbs. (5.4 kg) - 150# ANSI Flange
Bronze:	18.7 lbs. (8.49 kg) - Pulse
Stainless Steel:	18.4 lbs. (8.4 kg) - Pulse 20.9 lbs. (9.4 kg) - 150# ANSI Flange
	19.2 lbs. (8.7 kg) - Tri-Clover® Fittings
Remote Display:	Option Available: Model GG500
Remote Transmitter:	Options Available: Models GA500 & GX500
Hemole Hansililler.	Options Available. Would's GASOU & GASOU

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41

ML-1800-5 Rev. B 03/07

 $<sup>\</sup>ensuremath{^{*}}$  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.
- ✓ BSP or NPT fittings are standard, optional 150#
  ANSI Flanges are available.
- Extremely accurate even with viscous fluids.
- ✓ Handles particles 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: Stainless Steel:	500 PSI / 34.5 BAR 500 PSI / 34.5 BAR or Flange Rule
Maximum Temperature: PPS Rotors: SS Rotors:	176°F / 80°C 248°F / 120°C
Typical K-Factor:	N/A
Wetted Mat'l Housing: Aluminum: Stainless Steel: Wetted Mat'l Bearings:	Aluminum 316 Stainless Steel PPS / Carbon
Wetted Mat'l Shaft:	316 Stainless Steel
Frequency Range:	N/A
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.): Aluminum: Stainless Steel:	9.9 lbs. (4.5 kg) - Mechanical 12.0 lbs. (5.4 kg) - 150# ANSI Flange 17.6 lbs. (8.0 kg) - Mechanical
Statiliess Steet.	20.2 lbs. (9.2 kg) - 150# ANSI 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:

- ✓ NPT or BSP fittings are standard, 150# ANSI Flanges are optional.
- Extremely accurate even with viscous fluids.
- √ Handles particles 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:	000 001 /55 040 51
Aluminum: Stainless Steel:	800 PSI / 55 BAR or Flange Rule Flange Rule
Maximum Temperature:	i lange itule
PPS Rotors:	176°F / 80°C
SS Rotors:	248°F / 120°C
Typical K-Factor:	
Single Pickup:	25.3 PPG / 6.7 PPL
Double Pickup:	50.6 PPG / 13.4 PPL
Wetted Mat'l Housing:	
Aluminum: Stainless Steel:	Aluminum 316 Stainless Steel
Wetted Mat'l Bearings:	PPS / Carbon
Wetted Mat'l Shaft:	316 Stainless Steel
Frequency Range:	1.7 - 39.0 Hz @ 4.0 - 92.5 GPM
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.): Aluminum:	17.1 lbo (7.9 kg). Dules
Alummum:	17.1 lbs. (7.8 kg) - Pulse 20.1 lbs. (9.1 kg) - 150# ANSI Flange
Stainless Steel:	20.1 lbs. (9.1 kg) - 130# ANSI Flailge 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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ML-1800-5 Rev. B 03/07

<sup>\*</sup> 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 particles 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: Stainless Steel:	500 PSI / 34.5 BAR or Flange Rule Flange Rule
	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:	N/A
Aluminum:	Aluminum
Stainless Steel:	316 Stainless Steel
Wetted Mat'l Bearings:	PPS / Carbon
Wetted Mat'l Shaft:	316 Stainless Steel
Frequency Range:	N/A
Recommended Strainer Size:	60 mesh
Shipping Weight (approx.):	
Aluminum:	17.1 lbs. (7.7 kg) - Mechanical
01-1-1 011	20.1 lbs. (9.1 kg) - 150# ANSI Flange
Stainless Steel:	46.3 lbs. (2.1 kg) - 150# ANSI Flange