



FLOW METERS FOR AGRICULTURE INDUSTRY

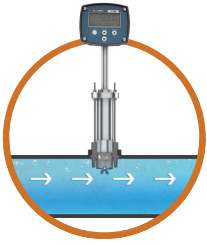


GPI / **FLOMECH**® / **GPRO**®

GREAT PLAINS INDUSTRIES



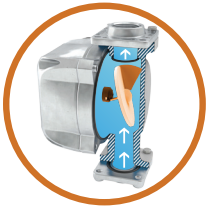
FLOW METER TECHNOLOGIES BY GREAT PLAINS INDUSTRIES



PADDLEWHEEL

Paddlewheel flow meters are known for their simplicity, cost-effectiveness, and reliability, making them ideal for applications where moderate accuracy is sufficient.

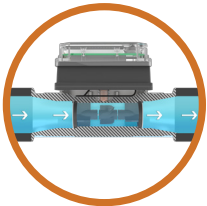
- Measure the flow of water, solvent, and other low viscosity liquids
- Extremely versatile; suited for a huge variety of pipe sizes
- Only one moving part; provides a reliable product with minimal maintenance costs
- Moderate measurement accuracy



NUTATING DISC

Nutating disc flow meters are one of the most common types of positive displacement flow meters. They operate by having a disc mounted to a central ball. When fluid enters the chamber, it causes the disc to wobble (nutate), transferring the displaced volume to the register.

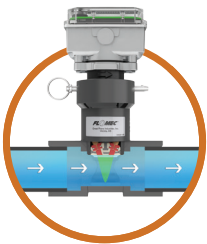
- Measure the flow of water, glycols/anti-freeze, diesel exhaust fluid (DEF/Adblue®), lubricating oils and greases, fertilizers, herbicides, insecticides, and water-based chemicals
- No requirement for flow conditioning or straight lengths of pipe before and after the meter
- Can tolerate small particles such as sand and sediment
- Operational in only one direction



TURBINE

Turbine flow meters use the mechanical energy of the fluid to rotate a “pinwheel” (rotor) in the flow stream. Blades on the rotor are angled to transform energy from the flow stream into rotational energy. The rotor shaft spins on bearings. When the fluid moves faster, the rotor spins proportionally faster. Turbine flow meters excel in applications requiring high accuracy and wide flow range capabilities.

- Extremely versatile design accurately measures high and low viscosity fluids
- High accuracy and repeatability measures every drop and saves waste in your process



ULTRASONIC

Ultrasonic flow meters transmit and receive a burst of ultrasound between two transducers. Transit time is measured in both directions. By analyzing the time it takes for the pulses to travel upstream and downstream, the velocity of the fluid can be calculated with exceptional accuracy. Since there are no moving parts required to detect flow, it continues to measure accurately in low-flow situations.

- Easy installation
- No moving, wearable parts; low-to-zero maintenance
- Low total cost of ownership
- High accuracy and repeatability, measures every drop and saves waste in your process



OVAL GEAR

Oval gear flow meters are a type of Positive Displacement flow meter used to measure the volumetric flow of liquids. These meters directly measure the volume that passes through the meter rather than the velocity or some other physical characteristic of the liquid to calculate the volumetric flow rate, making them a volumetric meter.

- Accurate with clean, viscous fluids, unaffected by temperature changes
- No flow conditioning required, they can be placed directly after pumps or valves with no effect on accuracy
- Low pressure drop
- Excellent for small volume additions



ULTRASONIC TECHNOLOGY - NO MOVING PARTS

Zero maintenance for winterization. No flow restrictions.



Insertion Water Flow Sensor with Schedule 80 PVC Tee

- Line Size: 1 in., 1½ in., 2 in., 3 in., 4 in.
- Fitting type: Socket (female)
- Flow Range: 0.1 to 15 ft/sec (0.03 to 4.6 m/s)
- Operating Temperature: +32°F to +140°F (0°C to +60°C)

The **QS200 Ultrasonic Flow Sensor** with Schedule 80 PVC tee is designed for above and below grade applications such as turf, irrigation, municipal, and underground water monitoring. Detects flow as low as 0.1 ft/sec.



Insert Water Flow Meter with Battery-Powered Display and Schedule 80 PVC Tee

- Line Size: 6 in., 8 in., 10 in., 12 in.
- Fitting type: Socket
- Flow Range: 0.1 to 15 ft/sec (0.03 to 4.6 m/s)
- Operating Temperature: +32°F to +140°F (0°C to +60°C)

AQUasonic Series Flow Meters use ultrasonic technology for unsurpassed accuracy, reliability, and convenience. With NSF 61 certification, AQUasonic supports a range of applications from monitoring irrigation flow to potable water.

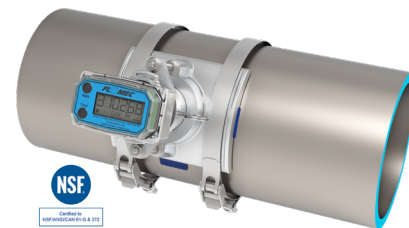
SADDLES FOR TUBE, NPS IPS, AND PIP PIPE



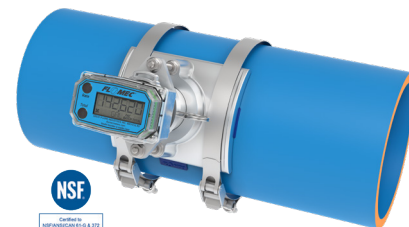
TUBE Pipe, Water Flow Meter with Battery-Powered Display and Saddle

- Line Size: 6 in., 8 in., 10 in., 12 in.
- Fitting type: Saddle
- Flow Range: 0.1 to 15 ft/sec (0.03 to 4.6 m/s)
- Operating Temperature: +32°F to +140°F (0°C to +60°C)

AQUasonic® Series Flow Meter equipped with aluminum pipe saddle. Easily installs into a 2 inch hole in pipe with saddle and band clamp, adjustable height sleeve and insertion flow meter.



NPS IPS Pipe, Water Flow Meter with Battery-Powered Display and Saddle



PIP Pipe, Water Flow Meter with Battery-Powered Display and Saddle

WATER APPLICATIONS



FLOW MEASUREMENT FOR LARGE PIPE SIZES

1½ inch to 100 in. (10-2500 mm)



**Insertion Flow Meter
with Hall Effect**

- Line Size: 1½ in. - 100 in. (40-2500 mm)
- Flow Range: 3-33 ft/sec (1-10 m/s)
- Operating Temperature: -40°F to 300°F (-40°C to 150°C)
- Hall, Reed

DP Series Insertion Flow Meters use a paddlewheel design to measure low-viscosity liquids. They are a versatile and economical solution for measuring flow in large pipes, offering moderately accurate readings at a very low cost of ownership.



**Insertion Flow Meter with Battery-Powered Display,
pulse and 4-20mA Output**

When using a **FLOMEC® Flow Rate Totalizer** with the DP Series, it creates a fully programmable self-powered local display.

WATER APPLICATIONS



VERSATILE DESIGN FOR APPLICATIONS



**Water Flow Meter with Battery-Powered Display,
Schedule 80 PVC**

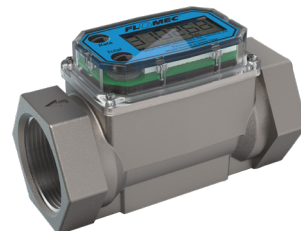
- Line Size: ½ in., ¾ in., 1 in., 1½ in., 2 in., 3 in., 4 in.
- Fitting type: NPT (female), Spigot, #150 ANSI Flange
- Flow Range: 1-600 GPM (3.8-2271 L/min)
- Operating Temperature: +32°F to +140°F (0°C to +60°C)

The **TM Series Turbine Flow Meter** is a long-lasting solution constructed of Schedule 80 PVC. It's one of the most versatile flow meters in the industry with fitting types that accommodate a range of application needs. Optional output modules, sensors, and remote display kits available.

CHEMICAL APPLICATIONS



HIGH PRESSURE APPLICATIONS



**Flow Meter with Battery Powered Display for use with
Petro Chem, Fuel, Water, and Solvents**

- Line Size: ½ in., ¾ in., 1 in., 1½ in., 2 in.
- Fitting type: NPT, ISO 7, #150 ANSI Flange, Tri-Clamp
- Flow Range: 1-200 GPM (3.8-760 L/min)
- Operating Temperature: 0°F to 129°F (-18°C to 54°C)

G2 Series Flow Meters offer high accuracy readings from ± 0.75% to 1.5%. Fitting options include NPT or ISO (female), BSPT (ISO 7 designation is RC), #150 ANSI Flange, and Tri-Clamp. It's rugged and dependable with easy to maintain internal parts.

CHEMICAL APPLICATIONS



OVAL GEAR TECHNOLOGY

Ideal for compact installations. No requirement for flow conditioning or straight pipe runs.
Various Digital Display and Batch Control Options Available



RT40

EB40



Flow Meter with Local Display, Pulse Out, 4-20mA, PPS Body For Herbicides, Pesticides, and DEF

- Line Size: 1 in.
- Fitting type: NPT (female), BSPP
- Flow Range: 2.6-40 GPM (10-150 L/min)
- Operating Temperature: -40°F to 176°F (-40°C to 80°C)

The **OM Series PPS** body provides precise volumetric flow measurement of a range of clean water-based products and aggressive chemicals. **RT14 Flow Rate Totalizer** LCD displays flow rates and totals with 4-20mA, pulse, sine wave, frequency, or alarm outputs. Blind pulse out version available.

Flow Meter with Stainless Steel Body For Clean Light Acids and Lubricants

- Line Size: 1/8 in., 1/4 in., 3/8 in., 1/2 in., 1 in., 1 1/2 in., 2 in., 3 in.
- Fitting type: NPT, #150 ANSI Flange, Tri-Clamp, BSPP
- Flow Range: 0.26 GPH - 400 GPM (0.98 L/hr - 1514 L/min)
- Operating Temperature: -40°F to 300°F (-40°C to 150°C)

The **OM Series Stainless Steel** body is an ideal choice for high-accuracy batching, dosing, or packaging of clean alcohols, mildly aggressive chemicals, lubricants, additives, and other high-viscosity fluids.

DAIRY APPLICATIONS

FLOMEC® 3A SANITARY STANDARDS



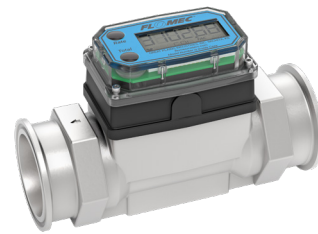
3A Certified Turbine Flow Meter with Battery-Powered Display and Tri-Clamp Fitting

- Line Size: 1 in., 1 1/2 in., 2 in.
- Fitting type: Tri-Clamp
- Flow Range: 6.7-67 GPM (25-252 L/min)
- Operating Temperature: -22°F to 176°F (-30°C to 80°C)

The **G3A High Precision Flow Meter** is the most accurate FLOMEC® turbine design. It's stainless steel design meets the strict 3A Sanitary Standards for food and beverage applications. Factory installed local rate and totalizer display available with digital, analog and flow alarm outputs.

HIGH-TEMP APPLICATIONS

FLOMEC® 185°F



High-Temp, Turbine Flow Meter with Battery-Powered Display and Tri-Clamp Fitting

- Line Size: 1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in.
- Fitting type: Tri-Clamp
- Flow Range: 1-200 GPM (3.8-760 L/min)
- Operating Temperature: 0°F to 185°F (-18°C to 85°C)

This **G2 Flow Meter** features a high-temperature riser and Tri-Clamp fitting. It's highly dependable and affordable - and features easy-to-maintain internal parts. Plug and play design allows for use with output modules, sensors, and remote display kits.



End of Hose Flow Meter, Battery-Powered Display for Fuels

- Line Size: 1 in.
- Fitting type: NPT (female)
- Flow Range: 3-30 GPM (10-114 L/min)
- Operating Temperature: 14°F to 130°F (-10°C to 55°C)

The **01A Digital Fuel Flow Meter** is factory calibrated in gallons or liters for use with diesel, gasoline, ethanol blends, or kerosene. It easily mounts to the end of a hose and is ideal for use with free-flow gravity systems or combined with an electric transfer pump.



Flow Meter, Battery Powered Display for Thin Petroleum-based Fluids

- Line Size: 1 in.
- Fitting type: NPT (female)
- Flow Range: 3-50 GPM (10-190 L/min)
- Operating Temperature: 0°F to 129°F (-18°C to 54°C)

The **A1A Series Turbine Flow Meter** features an Aluminum body and the Q9 Display. It is intrinsically safe for use in hazardous areas and offers accurate flow measurement with $\pm 1.5\%$ accuracy of reading. The A1A has output capabilities to communicate with process control equipment.

QUICK-FIT DESIGN

See next page for Quick-Fit design features



Mechanical Fuel Flow Meter, Quick-Fit Design

- Line Size: 3/4 in., 1 in.
- Fitting type: NPT (female), BSPP
- Flow Range: 5-30 GPM (19-114 L/min)
- Operating Temperature: -20°F to 125°F (-29°C to 52°C)

The **M30 Nutating Disc Positive Displacement Flow Meter** provides accurate readings, features magnetic drive mechanism to prevent leaks and reduce drag. Register rotates to read easily in any application. Four-digit display, twist knob reset.



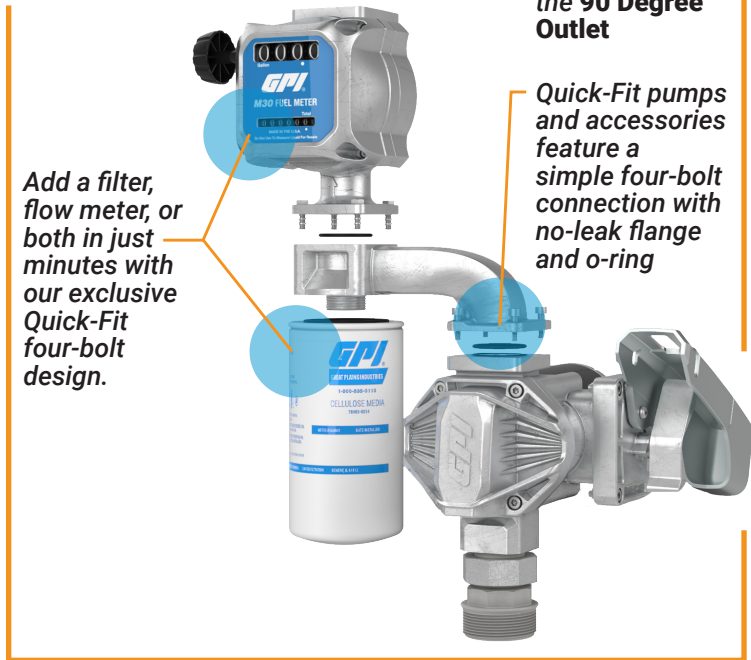
Mechanical Fuel Flow Meter, Quick-Fit Design

- Line Size: 1 in.
- Fitting type: NPT (female)
- Flow Range: 2-40 GPM (8-150 L/min)
- Operating Temperature: -20°F to 125°F (-29°C to 52°C)

The **QM40 Oval Gear Flow Meter** delivers extreme accuracy within $\pm 0.5\%$ across a flow range. It features a magnetic drive mechanism that prevents leaks and reduces drag. Register rotates to read easily in any application. Four-digit display, twist knob reset.

GPI® & GPRO® QUICK-FIT DESIGN

M30 Flow Meter shown with G20 Fuel Transfer Pump

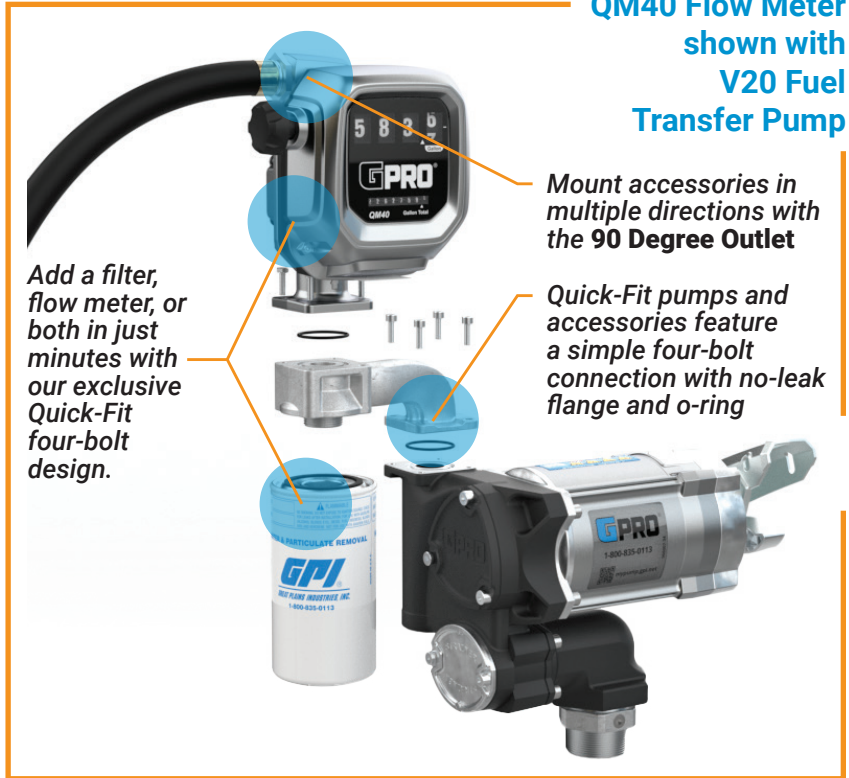


Built to stay leak-free, this modular design uses a four-bolt mount and a precision O-ring to create a tight seal, so adding a filter, flow meter, or both is quick and clean. Just four bolts and an O-ring get the job done, so you spend less time on installation and more time on the job - no mess, no downtime.

CONTACT A GPI® / GPRO® SALES REPRESENTATIVE FOR PUMP INFORMATION

Why it Matters:

- Leak-free by design: The O-ring seal and rigid four-bolt mount lock components together to prevent drips in even the harshest conditions.
- Add-ons in minutes: Attach a filter, a flow meter, or both in a few simple steps—no complex disassembly or special tools required.
- Flexibility: Mount accessories in multiple directions with a 90-degree outlet.
- Scalable system: Start with what's needed today and add more capability as operations grow.
- Faster maintenance: Add or swap components quickly and easily, cutting time and cleanup.
- Universal compatibility: The Quick-Fit system is compatible with a range of GPI G-Series and GPRO V-Series pumps.





GREAT PLAINS INDUSTRIES **GPI**

GPI / **FLOMECC** / **GPRO**

GREAT PLAINS INDUSTRIES UNITED STATES
5252 East 36th Street North
Wichita, KS 67220 USA
(800) 835-0113

DOWNLOAD OUR DIGITAL PRODUCT CATALOGS

Our digital catalogs stay up to date with just one URL to bookmark!

GPI / **GPRO**

FLOMECC



Fluid Transfer Solutions



Flow Meter & Instrumentation

North or South America: GreatPlainsIndustries.com | **Product Support:** 800-835-0113 | Support-Meters@gplains.com

Outside North or South America: FLOMECC.com.au | **Product Support:** +61 2 9540 4433 | info@flomecc.com.au

IND-1274 Rev - EN 01/26