PRODUCT OVERVIEW 2018
QSE MAG METER
Non-Intrusive (No moving parts)
Electromagnetic Flow Meter

- Turf / Irrigation
  - Agriculture Irrigation
  - Turf Irrigation Systems
  - Micro Irrigation Systems
- HVAC
- EMS (Energy Management Systems)
- BAS (Building Automation Systems)
- Institutional
  - Chilled water
  - Domestic water (hot and cold)
  - Micro Irrigation Systems
- Energy sub-merging (BTU hot and cold)
- Process (blow down, make up, boiler feed, etc.)

Accuracy: +/- 0.5% of reading (from 0.25 to 15 fps [0.08 to 4.57 m/s])
Flow Range: 0.16 to 600 GPM (0.63 to 2270 L/min)
Operating Temperature: ½" to 2": 32° to 210° F (0° to 99° C)
                     3" - 4": 32° to 180° F (0° to 82° C)
Ambient Temperature: 0° to 140° F (-18° to 60° C)
Pressure: 150 psi @ 73° F (10 bar @ 23° C)
Line Sizes: ½", ¾", 1", 1 ¼", 2", 3", 4"
Meter Body Materials: Noryl™ housing and flow tube
Fitting Connections: ½" to 2" - NPT (Male), BSPP (Male) (ISO 228)
                   3" & 4" ANSI Flanged - Polymer or Steel
                   3" & 4" DIN Flanged - Steel

QSTAR ULTRASONIC METER
Non-Intrusive Flow Measurement

- Power Stations
- Food & Beverage
- Building Services Engineering
- Water / Waste Water
- Large Pipe Applications
- Chemicals & Petrochemicals

Accuracy: Up to +/- 1% of reading
Flow Velocity Range: +/- 98.42 ft/sec (30 m/s)
Operating Temperature: -4° to 140° F (-20° to 60° C)
Transducer Temperature: -40° to 300° F (-40° to 150° C)
Pipe Sizes: ½" to 240” (10 mm to 6 m)
OM SERIES
Medium to Heavy Viscosity Fluids

- Oils
- Fuel
- Diesel
- Batching
- Molasses
- Chemical Additive Injection
- Bunker C Fuel Oil
- Clean Fluids
- Oil-Based Paints
- Industrial Fluids
- Truck Metering
- Chemical Feed Lines

Accuracy: +/- 1% of reading (1/8” to 3/4”) +/- 0.5% of reading (1/2” to 4”)
Flow Range: 0.26 GPH to 660 GPM (1 L/hr to 2,500 L/min)
Temperature: -40° to 300° F (-40° to 150° C)
Pressure: 70 to 5,800 psi (5 to 400 bar)
Meter Sizes: 1/8” to 4” (4 mm to 100 mm)
Meter Body Materials: Aluminum, Stainless Steel and PPS
Fitting Connections: NPT, BSPP, Sanitary and Flange
Output Options: Pulse and 4-20mA

EGM SERIES
High to Low Viscosity Fluids

- Chemical Additive Injection
- Bunker C Fuel Oil
- Clean Fluids
- Oil-Based Paints
- Industrial Fluids
- Truck Metering
- Chemical Feed Lines
- Batching
- Molasses
- Oils
- Fuel
- Diesel

Accuracy: +/- 1% of reading (1/8” to 3/4”) +/- 0.5% of reading (1/2” to 3/4”)
Flow Range: 0.26 GPH to 21.1 GPM (1 L/hr to 80 L/min)
Temperature: 5° to 176° F (-15° to 80° C)
Max. Pressure (AL): 1/4” to 1/2”: 500 psi (34 bar), 1/4” to 3/4”: 290 psi (20 bar)
Max. Pressure (SS): 1/4” to 1/2”: 800 psi (55 bar), 1/4” to 3/4”: 500 psi (34 bar), 1/2” to 3/4”: 290 psi (20 bar)
Meter Sizes: 1/8” to 3/4” (4 to 20 mm)
Meter Body Materials: Aluminum and Stainless Steel
Fitting Connections: NPT and BSPP

FUEL CONSUMPTION SYSTEM OPTIONS

Marine (SS) or Land and Gen-Sets (AL)
A complete fuel monitoring system that includes 2 EGM meters (SS or AL depending on kit) and a net use display for accurate measurement of fuel consumption rates and total fuel consumption.

Not Available in the U.S.A.

The Fuel Consumption System is designed for Diesel Fuel. Diesel fuel is not considered a flammable fluid in most of the world, but it is in the USA. The Fuel Consumption System does not have FM Approval and should not be sold for use in the USA.
POSITIVE DISPLACEMENT
(Oval Gear)

AIM BLOCK
(Additive Injection Manifold)

- Lubricants
- Dyes & Colorings
- Denaturants
- Detergents
- Odorizing
- Anti-freeze
- Anti-corrosion
- Anti-static
- Anti-detonating
- Anti-icing
- Anti-foaming
- Emulsifiers

Accuracy: ± 1% @ 3cP
Repeatability: 0.25% reading
Flow Range: 0.26 - 145 GPM (1 - 550 L/min)
Temperature: 5° to 149° F (-15° to 65° C)
Meter Sizes: ¼” - ¾” (4 mm - 8 mm)
Meter Body Materials*: Stainless Steel
Max. Pressure (Static): 440 psi (30 bar)
Max. Pressure (Operating): DC Solenoid Coils; 100 psi (7 bar)
AC Solenoid Coils; 295 psi (20 bar)

D SERIES
DEISEL METER
High accuracy oval gear technology with low pressure drop

- Fleet Depots
- Mine Sites
- Construction Sites
- Farms
- Marine Facilities
- Portable Fueling Applications

Accuracy: ± 1% of reading
Flow Range: 0.26 - 660 GPM (1 - 2500 L/min)
Temperature: 5° to +176° F (-15° to +80° C)
Meter Sizes: ½” - 4” (15 mm - 100 mm)
Wetted Materials*: Aluminium, stainless steel, hardened steel, PPS, Viton, Nitrile
Compatible Fluids: Diesel, Gasoline (Intrinsically Safe electronic display only), Kerosene, Light Oils

*Typical wetted materials - subject to change and may vary between models

Not Available in the U.S.A.

The D-Series is designed for Diesel Fuel. Diesel fuel is not considered a flammable fluid in most of the world, but it is in the USA. The D-Series meter does not have FM Approval and should not be sold for use in the USA.
### G SERIES
Thin Viscosity Fluids Under 100 Centipoise

<table>
<thead>
<tr>
<th>Applications</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food &amp; Beverage</td>
<td>Accuracy: +/- 0.5% of reading</td>
</tr>
<tr>
<td>Petro Chemicals</td>
<td>Flow Range: 0.6 to 600 GPM (2.2 to 2,271 L/min)</td>
</tr>
<tr>
<td>Fuel</td>
<td>Temperature: -450° to 800° F (-268° to 426° C)</td>
</tr>
<tr>
<td></td>
<td>Pressure: 2,500 to 5,000 PSI (170 to 340 Bar)</td>
</tr>
<tr>
<td></td>
<td>Meter Sizes: 1/2” to 3” (15 to 80 mm)</td>
</tr>
<tr>
<td></td>
<td>Meter Body Materials: Stainless Steel</td>
</tr>
<tr>
<td></td>
<td>Fitting Connections: NPT, BSPT, BSPP, Sanitary &amp; ANSI Flange</td>
</tr>
<tr>
<td></td>
<td>Output Options: Pulse and 4-20mA</td>
</tr>
<tr>
<td></td>
<td>High Precision</td>
</tr>
<tr>
<td></td>
<td>High Pressure</td>
</tr>
</tbody>
</table>

### TP SERIES
Low Viscosity Fluids

<table>
<thead>
<tr>
<th>Applications</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>Accuracy: +/- 0.5% of reading</td>
</tr>
<tr>
<td>Alcohols</td>
<td>Flow Range: 0.5 to 1200 GPM (1.8 to 4500 L/min)</td>
</tr>
<tr>
<td>Solvents</td>
<td>Temperature: -40° to +450° F (-40° to +232° C)</td>
</tr>
<tr>
<td></td>
<td>Max. Pressure: 3625 psi (250 bar)</td>
</tr>
<tr>
<td></td>
<td>Suits Pipe Sizes: 1/2” to 4” (15 mm - 100 mm)</td>
</tr>
<tr>
<td></td>
<td>Pipe Connections: NPT, BSP, ANSI #150, ANSI #300, PN16 DIN</td>
</tr>
<tr>
<td></td>
<td>Wetted Materials: 316 SS bearing support and body, 431 SS rotor, tungsten carbide bearing</td>
</tr>
</tbody>
</table>

⚠️ Not Available in the U.S.A.
TURBINE Flowmeters

**G2 SERIES**
**General Purpose Meter**

- Batching
- Blending
- Water
- Food & Beverage Processing
- Harsh Chemicals (Sulfuric Acid & Bleach)
- Chemical Feed Lines
- Monitoring Clean Fluids
- Chemical Feed Lines
- Industrial Fluids
- Plant Process Water

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>+/- 1.5% to 0.75% of reading (Depending on Pipe Size)</td>
</tr>
<tr>
<td>Flow Range</td>
<td>1.0 to 200 GPM (3.8 to 760 L/min)</td>
</tr>
<tr>
<td>Temperature</td>
<td>-40° to 250° F (max 140° F with display)</td>
</tr>
<tr>
<td></td>
<td>(-40° to 121° C [max 60° C with display])</td>
</tr>
<tr>
<td>Pressure</td>
<td>100 to 3,000 psi (6.9 to 207 bar)</td>
</tr>
<tr>
<td>Meter Sizes</td>
<td>1/2&quot; to 2&quot; (15 mm to 50 mm)</td>
</tr>
<tr>
<td>Meter Body Materials</td>
<td>Aluminum, Stainless Steel, Brass and PVDF</td>
</tr>
<tr>
<td>Fitting Connections</td>
<td>NPT, ISO, Sanitary, 150# ANSI and True Union</td>
</tr>
<tr>
<td>Output Options</td>
<td>Pulse and 4-20mA</td>
</tr>
</tbody>
</table>

Integrated Display • Output Options

**A1 SERIES RATE & TOTAL METER**
**Self-Contained Application Specific Meters**

- Fuel Transfer
- Plant Process Water
- Batching / Blending
- Chemical Feed Lines
- Aluminum - Fuel Products
- Nylon - Water / Non-Aggressive Chemicals
- Ag Chemicals
- Solvents / Glycol

✔ Field Calibration
✔ Higher Accuracy

“Look for the silver label.”

<table>
<thead>
<tr>
<th>MODEL</th>
<th>A025, A100 (1&quot;) &amp; A200 (2&quot;)</th>
<th>N025 &amp; N100 (1&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>+/- 1.5% of reading</td>
<td></td>
</tr>
<tr>
<td>Flow Range</td>
<td>0.3-300 GPM (1-1135 L/min)</td>
<td>0.3 - 50 GPM (1 - 190 L/min)</td>
</tr>
<tr>
<td>Temperature</td>
<td>-40° to 250° F (-40° to 121° C)</td>
<td></td>
</tr>
<tr>
<td>Temp. w/Display</td>
<td>14° to 140° F (-10° to 60° C)</td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
<td>300 psi (21 bar)</td>
<td>150 psi (10.3 bar)</td>
</tr>
<tr>
<td>Meter Sizes</td>
<td>1&quot; to 2&quot; (25 mm to 50 mm)</td>
<td>1&quot; (25 mm)</td>
</tr>
<tr>
<td>Meter Body Materials</td>
<td>Aluminum</td>
<td>Nylon</td>
</tr>
<tr>
<td>Fitting Connections</td>
<td>NPT and ISO</td>
<td></td>
</tr>
</tbody>
</table>

TURBINE Flowmeters
TM SERIES
Light-Weight, In-Line Water Meter

- Batching
- Irrigation
- Blending
- Water Treatment Processing
- Water Based Cooling Systems
- Sub-Metering of Facility Water Usage
- Plant Process Water
- Monitoring Clean Fluids

Accuracy: +/- 3% of reading
Flow Range: 1 to 600 GPM (3.8 to 2271 L/min)
Temperature: 32° to 140° F (0° to 60° C)
Pressure: 225 psi at 73° F (15.3 bar at 23° C)
Meter Sizes: 1/2 to 4" (15 to 100 mm)
Meter Body Materials: PVC Plastic (Schedule 80)
Fitting Connections: NPT, BSP, #150 ANSI or DIN Flange and Spigot
Display/Output Options: Blind Pulse, Display with Pulse, and Display only

01N, 01A & FM-300
Thin Viscosity Fluids Under 100 Centipoise

- Water
- Fuel
- Chemicals

<table>
<thead>
<tr>
<th>MODEL:</th>
<th>01N Turbine</th>
<th>01A Turbine</th>
<th>FM-300 H/R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy:</td>
<td>+/- 5.0% of reading</td>
<td>+/- 5.0% of reading</td>
<td>+/- 2.0% of reading</td>
</tr>
<tr>
<td>Flow Range:</td>
<td>3-30 GPM (11-113 L/min)</td>
<td>3-30 GPM (11-113 L/min)</td>
<td>2-20 GPM (7-75 L/min)</td>
</tr>
<tr>
<td>Temperature:</td>
<td>14° to 130° F (-10° to 54° C)</td>
<td>14° to 130° F (-10° to 54° C)</td>
<td>15° to 130° F (-9° to 54° C)</td>
</tr>
<tr>
<td>Pressure:</td>
<td>150 psi (10.3 bar)</td>
<td>300 psi (21 bar)</td>
<td>50 psi (3.4 bar)</td>
</tr>
<tr>
<td>Meter Sizes:</td>
<td>1&quot; (25 mm)</td>
<td>Aluminum</td>
<td>PBT Polyester</td>
</tr>
<tr>
<td>Meter Body Materials:</td>
<td>Nylon</td>
<td>Aluminum</td>
<td>PBT Polyester</td>
</tr>
<tr>
<td>Fitting Connections:</td>
<td>NPT and BSP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“Look for the red label.”
**O2N & O2A SCALED PULSE**

Works with an Endless Variety of Applications

- Irrigation
- Data Logger
- Wireless Communications
- Programmable Logic Controller (Batch Control)
- OEM (Connect to Flow Switch - Low Cost Meter)
- Building Automation (Chillers)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>02N Turbine</th>
<th>02A Turbine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accuracy</td>
<td>+/- 5.0% of reading</td>
<td></td>
</tr>
<tr>
<td>Flow Range</td>
<td>3 - 30 GPM (11 - 113 L/min)</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td>14° to 130° F (-10° to 55° C)</td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
<td>150 psi (10.3 bar)</td>
<td>300 psi (21 bar)</td>
</tr>
<tr>
<td>Diameter</td>
<td>1&quot; (25 mm)</td>
<td></td>
</tr>
<tr>
<td>Meter Body Materials</td>
<td>Nylon</td>
<td>Aluminum</td>
</tr>
<tr>
<td>Fitting Connections</td>
<td>NPT, BSPP and BSPT</td>
<td></td>
</tr>
</tbody>
</table>

**Water • Fuel • Chemicals**

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**LM51DN LUBE METER**

Maximum 1,000 Centipoise

- Engine Oils
- Hydrocarbons
- Transmission Fluid
- Paints
- Lubricants
- Liquid Soaps

<table>
<thead>
<tr>
<th>Accuracy</th>
<th>+/- 0.5% of reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Range</td>
<td>0.25 - 8 GPM (1 - 30 L/min)</td>
</tr>
<tr>
<td>Temperature</td>
<td>-4° to 140° F (-20° to 60° C)</td>
</tr>
<tr>
<td>Pressure</td>
<td>1,500 psi (103 bar)</td>
</tr>
<tr>
<td>Meter Body Materials</td>
<td>Aluminum</td>
</tr>
<tr>
<td>Fitting Connections</td>
<td>1/2&quot; NPT</td>
</tr>
</tbody>
</table>
DP SERIES
Simple Flow Measurement for Clear Fluid Applications

- Batching / Blending
- Irrigation
- Industrial Chemicals
- Water/Waste Water Treatment Processing
- HVAC (Hot & Chilled Water)
- Municipal & Industrial Water

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accuracy:</strong></td>
<td>+/- 1.5% of reading</td>
</tr>
<tr>
<td><strong>Flow Velocity Range:</strong></td>
<td>3 to 33 ft/s (1 to 10 m/s)</td>
</tr>
<tr>
<td><strong>Temperature:</strong></td>
<td>-40°F to 300°F (-40°C to 150°C)</td>
</tr>
<tr>
<td><strong>Pressure:</strong></td>
<td>1,160 psi (80 bar)</td>
</tr>
<tr>
<td><strong>Pipe Sizes:</strong></td>
<td>1-1/2” to 100” (40 mm to 2500 mm)</td>
</tr>
<tr>
<td><strong>Meter Body Materials:</strong></td>
<td>Stainless Steel</td>
</tr>
</tbody>
</table>

Water  •  Large Pipes  •  Industrial Chemicals
09 Display
- Total & Rate
- Gallons & Litres Calibration
- Field Calibration Capability

QSI Interface Board
- Communication options available: Modbus®, RTU and BACnet® MS/TP (pending)
- Built-in Bluetooth® Wireless Technology
- External Programming FLOMEC® App available for Mobile Devices
- Receive in-field firmware updates
- Standard process outputs: Pulse out and 4-20mA

RT40
- Total & Rate

RT14
- Total & Rate
- Signal Outputs
- High & Low Alarm Outputs
- 4-20 mA Output
- Intrinsically Safe (Optional)

EB10
- Batch Controller
- Total & Rate
- Signal Outputs

E Series (E018)
- Total & Rate
- Signal Outputs
- Explosion Proof Display
- 4-20 mA (isolated)
- HART Protocol (E018)

F Series (F018 / F115 / F127 / F130)
- Total & Rate
- Pulse Outputs
- High / Low Alarm Outputs (F018)
- 4-20 mA Output (F018)
- Batching (F130)
- HART Protocol (F018)
- Temperature Compensation (F127)
FLOMEC® has partnered with Obvius, a leading energy solutions provider, to offer the optimum solutions for data collection and connectivity.

Obvius manufactures data acquisition and wireless connectivity products specifically for energy management.

**Solutions offered include:**
- Data Acquisition
- Wireless Communication
- Meters & Sensors
- Custom Packaged Solutions
- Integration & Software Partners

**Data Acquisition Servers**

**AcquiSuite EMB A8810**
- Collect energy data from meters and environmental sensors
- Designed to connect to IP-based applications

**AcquiLite EMB A7810**
- Collect energy data from pulse output meters
- Designed to connect to IP-based applications

**Data Acquisition Modules**

**Flex I/O Module A8332-8F2D**
- Cost-effective way to collect data from meters or sensors
- Can be incorporated with data acquisition and wireless metering devices

**HD Pulse Module A8911-23**
- Cost-effective, simple way to collect data from multiple pulse meters
- Can be incorporated with meter enclosures, data acquisition and wireless metering

**Wireless Metering**

**ModHopper R9120-5**
- Breakthrough mesh technology design that makes connecting Modbus and pulse devices simple and cost effective
- Eliminate the need for costly wiring runs
- Collect meter points in existing buildings with minimum down-time or disruption of day-to-day operations
BETTER performance

HIGHER quality

LOWER cost