Automotive Flow Measurement and Control Products

Control. Manage. Optimize.

Badger Meter
Automotive Flow Measurement and Control Products

When every drop counts, choose automotive flow measurement and control products from Badger Meter. Precisely control and monitor dispensing and inventory of motor oil, gear oil, automatic transmission fluid, antifreeze, brake fluid, windshield wiper fluid, and engine coolant. Badger Meter offers positive displacement meters in a wide variety of construction materials with accessories to meet the most demanding applications.

Applications
- Fleet Maintenance
- Quick Lube
- Dealerships
- Construction
- Mining
- General Automotive Service
- Specialty Service

Fluids
- Motor Oil
- Engine Coolant
- Automatic Transmission Fluid
- Brake Fluid
- Windshield Wiper Fluid
- Gear Oil
- Hydraulic Fluid
- Waste Oil
**Fluid Management System**

The Fluid Management System (FMS) controls and monitors automotive fluid product consumption and inventory balances with minimal installation and programming costs. FMS incorporates 2.4 GHz radio frequency for effective communications and the rugged EPM-3 RF flow meter.

**FMS Distributed System:**
- PC-Based Work Order Queue Software
- Transaction database Stores up to:
  - 250 Meters
  - 250 Users
  - 16 Fluid/Tanks
  - 36 Dispense Keypads

**FMS Stand-Alone System:**
The wall-mounted keypad module controls up to 30 meters and eight different fluid containers and defines up to 50 operators with unique PIN numbers.
- 2.4 GHZ Radio Frequency Communications
- 8 Fluids and Tanks

**Features**
- Low installation cost
- Controls portable fluid tanks
- Integral ticket printer
- Remote antenna (optional)

**Model EPM-3 RF Flow Meters:**
- 2.4 GHZ Radio Frequency Communications
- Standard Petroleum Product & Special Fluids
- Compatible with both Distributed and Stand-Alone FMS Systems

**Features**
- Patented lock-out helps prevent unauthorized dispenses
- Oval gear metering technology
- Measures pints, quarts, gallons, or liters
- Field replaceable AA batteries

---

See FMS Distributed System Diagram on Page 5

See FMS Stand-Alone System Diagram on Page 6
Distributed Fluid Management System

Host (ERP or DMS)  FMS Software  Printer

Dispense Keypad  Master Keypad  Dispense Keypad

Product 1  Product 2  Product 3
Stand-Alone Fluid Management System

Keypad

Up to 30 RF Meters per Keypad

Hose 1:1 with Meter

10-W-30 10-W-40 Gear Oil Trans Fluid

Up to 8 Fluid Types and 8 Tanks per Keypad

Trans Fluid
Electronic Preset Series - 2

The versatile, second generation Badger Meter Electronic Preset Meter (EPM-2) displays dispense totals in quarts, liters, pints, and gallons and can be field selected. A five-digit LCD is accurate to the second decimal place. A “stop” function stops fluid flow immediately, while pulling on the handle continues dispensing. Maximum preset volume is 99.9 units and can be totaled and dispensed up to 99,999 units. EPM-2 SF dispenses non-petroleum based products.

**Model EPM-2 STD:** Standard Register
**Model EPM-2 STD-SF:** Standard Register, Special Fluid

### Features

- Measures motor oils, gear oils, automatic transmission fluids, engine coolant, and hydraulic fluids
- Total and resettable total
- Minimum 20,000 battery life cycles
- Low battery safety lock out
- Automatic pre-set shut-off

**Model EPM-2 ADV:** Advanced Register
**Model EPM-2 ADV-SF:** Advanced Register, Special Fluid

### Features

- Six programmable presets
- History (previous five batches)
- Viewable flow rate
- Calibration factor for different fluids
- Total and resettable total
- Minimum 20,000 battery life cycles
- Low battery safety lock out
- Automatic pre-set shut-off
Oval Gear Series

When combined with electronic registers, oval gear technology delivers a simple and accurate way to measure dispensed bulk fluid. Standard Badger Meter oval gear products are used for petroleum applications and transmission fluid. A special fluid model offers an excellent solution for dispensing antifreeze, brake fluid, windshield wiper fluid, and engine coolant. The Oval Gear Enhanced (OGE) meter can handle flow rates up to 20 GPM (3/4 in. and 1 inch versions) and up to 8 GPM (1/2 inch version). These meters are the optimum choice for higher flow dispensing applications.

- 1,500 PSI pressure rating
- Large, precise six digit LCD
- Measures pints, quarts, gallons, liters
- Operating temperature range -4° F to 140° F
  - The Oval Gear Enhanced PVC (OGE-PVC) model is designed for dispensing diesel exhaust fluid, commonly used in emission systems emission systems
  - Oval Gear Transmitters (OGT) have a pulse output for interfacing with fluid control systems
  - Fully customizable with genuine Badger Meter accessories

Model OGE; Model OGE-SF;
Model OGE-HF;
Model OGE-HF-SF:
- 1/2, 3/4 and 1 in.
- Electronic Programmable Registration
- Scalable for Different Fluids

Model OGT; Model OGT-HF;
Model OGT-HF-SF:
- 1/2, 3/4 and 1 in.
- Pulse Output, Unscaled Transmitter
- Electronic Programmable Registration
- Scalable for Different Fluids

Model OGE-PVC; Model OGT-PVC:
- 1/2 in.
- Pulse Output, Unscaled Transmitter
- Electronic Programmable Registration
- Scalable for Different Fluids
Pistol Grip Series

The Pistol Grip Series (PG) works with a variety of petroleum products that service automobiles, trucks, buses, construction equipment, and similar indoor or outdoor applications. Its balanced, lightweight, rugged construction and comfort grip make it the best choice for overhead hose reels and other fluid applications. The Pistol Grip Electronic Meter has advanced microprocessing technology for electronic field recalibration.

<table>
<thead>
<tr>
<th>Model</th>
<th>Product</th>
<th>Dial Capacities</th>
<th>Lifetime Totalizer Register</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model PG</td>
<td>Pistol Grip Standard</td>
<td>Pints, Quarts, Gallons, Liters</td>
<td>Pints, Quarts, Gallons, Liters</td>
</tr>
<tr>
<td></td>
<td><strong>Model PGB, Model AF</strong></td>
<td><strong>Product</strong></td>
<td><strong>Lifetime Totalizer Register</strong></td>
</tr>
<tr>
<td></td>
<td>Pistol Grip Batch (Presetable)</td>
<td>Quarts, Gallons, Liters</td>
<td>Quarts, Gallons, Liters</td>
</tr>
<tr>
<td></td>
<td><strong>Model PGE, Model PGE-BF</strong></td>
<td><strong>Product</strong></td>
<td><strong>Dispense Totalization</strong></td>
</tr>
<tr>
<td></td>
<td>Pistol Grip Electronic (PGE) and Pittol Grip Electronic- Brake Fluid (PGE-BF)</td>
<td>Pints, Quarts, Liters, Gallons Gallons, Liters</td>
<td></td>
</tr>
</tbody>
</table>
Universal Series

For reliable inventory control for lubricant dispensing systems, rely on the robust Universal Series designed for in-line applications. Equipped with a pulsing device, the Universal Series features an outlet port that can be rotated in 90 degree increments and is available with or without a totalizing register.

| Model   | Product       | Dial Capacities | Universal Law 8 Pints
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model UL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model UH</td>
<td>Product</td>
<td>Dial Capacities</td>
<td>Universal High Ounces, Pints, Quarts, Gallons, Liters Pints, Quarts, gallons, Liters</td>
</tr>
<tr>
<td></td>
<td>Lifetime Totalizer Register</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model UP</td>
<td>Product</td>
<td>Pulses per Revolution</td>
<td>Universal Pulse 10 Pulses</td>
</tr>
<tr>
<td></td>
<td>Units of Measure</td>
<td></td>
<td>Pints, Quarts, Gallons, Liters</td>
</tr>
</tbody>
</table>

Made in America

Model UL

Model UH

Model UP
The industrial oval gear flow meter, Model IOG, is compatible with very viscous or highly corrosive fluids. It is available in two different construction materials: aluminum with liquid crystal polymer gears and stainless steel with stainless steel gears. Designed to withstand extreme conditions, the Model IOG provides high accuracy at ±0.5 percent, even in low flow environments. The meter operates up to 800 PSI and can be installed in tight spaces either vertically or horizontally and does not require a straight run of pipe or flow conditioning. Initial product offering includes 1/2, 3/4 and 1 inch sizes with inline National Pipe Thread and British Straight Pipe Thread or flanged in 150, 300 and DIN 16.

Industrial oval gear meter registers are protected with a strong, shock-resistant housing and powered by a five-year lithium battery. Four register options are available for use with the Model IOG including the ILR 700 Standard Register, ILR 710 Single Pulse Output, ILR 720 Dual Pulse Output, ILR 730 Analog Output, and ILR 740 Transmitter.

**Aluminum with Liquid Crystal:**
- Petroleum
- Non-aids
- Oil
- Paint
- Ink

**Stainless Steel with Stainless Steel Gears:**
- Cosmetic
- Acid
- Water mix
- Fertilizer

**Registers:**
- ILR 700 Standard Register
- ILR 710 Single Pulse Output
- ILR 720 Dual Pulse Output
- ILR 730 Dual Pulse Output
- ILR 740 Transmitter
Why Choose Badger Meter for Automotive Flow Measurement and Control Products?

**Experience**
With more than 100 years of experience as a trusted leader in flow measurement, Badger Meter has supplied more than 1 million automotive flow measurement and control products to commercial, retail and industrial companies worldwide.

**Selection**
Our comprehensive product line and versatile accessories assure a solution engineered both for petroleum and special fluids.

**Durable Functionality**
Rugged construction, light weight modular design and reliable, easy-to-use simplicity are built into every one of our meters, including our precision electronic models.

**Quality and Technology**
State-of-the-art manufacturing and inspection processes assure product quality and long lasting measuring accuracy. Every meter is subjected to rigorous testing to ensure quality.