



## DESCRIPTION

The Badger Meter electronic Oval Gear Meter is designed specifically to dispense industrial fluids. Modular design, low cost, light weight and rugged make the Oval Gear Meter the best choice for overhead reel systems.

The electronic register module contains a microprocessor board powered by a lithium battery with an expected life of 4 years depending on use. It can be programmed to dispense in pints, quarts, liters, or gallons. A calibration factor and unit of measure are programmed during factory test. Unlike mechanical meters, these units can be electronically recalibrated in the field when necessary.

A 6-digit liquid crystal display, accurate to the second decimal place, shows the exact amount of fluid dispensed. The entire register module is protected from the wear and tear of normal shop use by a rugged, glass filled, shock resistant, nylon housing.

## OPERATION

As fluid passes through the metering chamber by entering the inlet port, it forces the internal gears to rotate and exits through the outlet port. Each rotation of the gear displaces a given volume of fluid. Controlled clearances between the gears and chamber wall provide the accuracy. As the gears rotate, a magnet on each end of the gear causes the reed switch to open and close. Contact closures from the switch are transmitted to a remote batch controller, counter or other electronic instrument capable of accepting a reed switch input as well as the ability to scale the raw pulse input.

## APPLICATIONS

The model LM OG-TI-PVC has been designed for industrial applications.

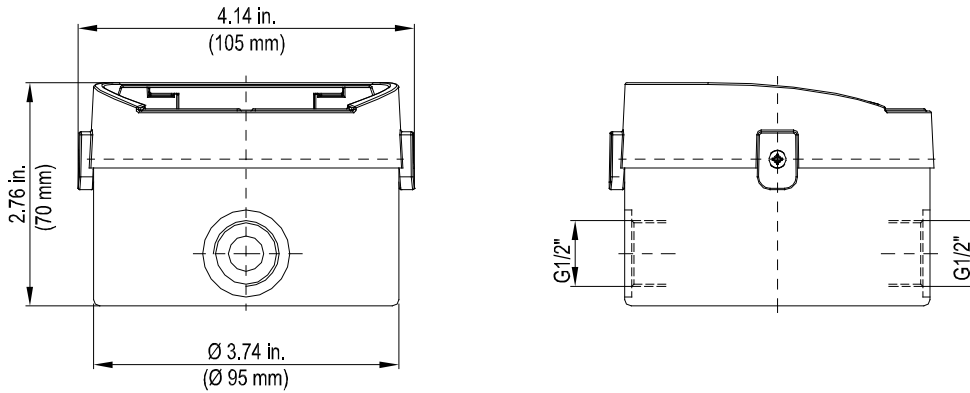


## FEATURES

- Does not require external power
- Rugged, corrosion resistant plastic enclosure
- Watertight, NEMA 4X housing
- Compatible with most flow controllers and counters with scaling capabilities
- Humidity and moisture resistant transmitter (IP65)
- Maximum operating pressure – 145 psi (10 bar)



## DIMENSIONS



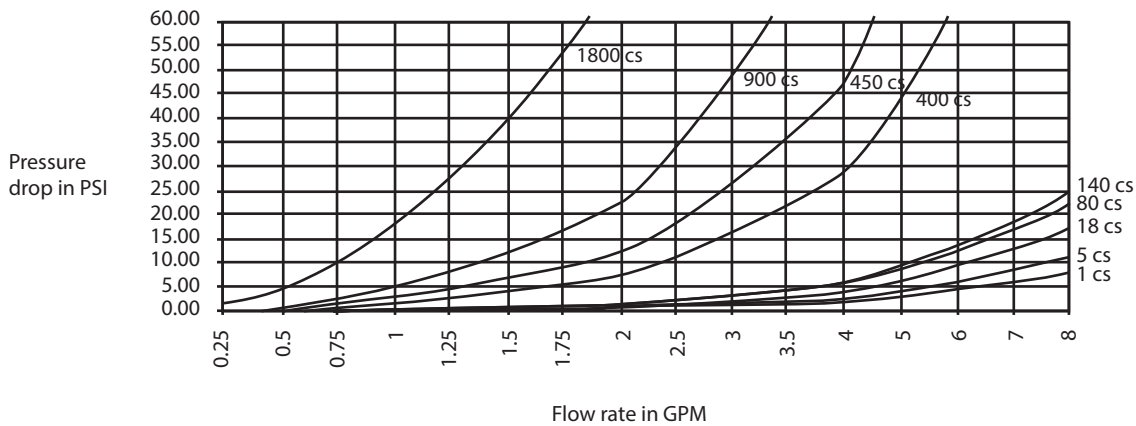
## TECHNICAL DATA

	ANSI	Metric
<b>Flow range</b>	0.13...8 gpm	0.5...35 l/min
<b>Operating pressure (maximum)</b>	145 psi	10 bar
<b>Operating pressure (minimum)</b>	4.5 psi	0.30 bar
<b>Operating temperature (maximum) range</b>	14...110° F	-10...45° C
<b>Accuracy</b>	±0.5%	±0.5%
<b>Pulse rate</b>	380 Pulses / Gal.	100 Pulses / Liter
<b>Reed switch rating (maximum)</b>	150V AC @ 10 Watts	150V AC @ 10 Watts
<b>Weight</b>	2.0 lbs	0.9 kg
<b>Inlet and outlet connections</b>	1/2 in. BSPP	1/2 in. BSPP
<b>Max. torque</b>	8 Nm	8 Nm

Materials	
<b>Meter housing/cover</b>	PVC
<b>Gears</b>	LCP (Liquid Crystal Polymer)
<b>Transmitter housing</b>	Nylon
<b>Seal material</b>	Viton

## OVAL GEAR PRESSURE DROP VS FLOW RATE FOR VARIOUS FLUIDS

Viscosities in centistokes (11-19-96)



## Control. Manage. Optimize.

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