



Badger Meter Europa

## Model LM OG-TI for industrial applications

### General

The Badger Meter oval gear meter with pulse transmitter, model LM OG-TI, is an economical, rugged yet accurate meter.

The transmitter, mounted on the meter, can be wired to batch controllers, remote counters and other electronically operated instruments that can accept pulses from a reed switch, and have scaling capabilities. The oval gear transmitter is contained in a glass filled plastic housing with a NEMA 4X rating.



### 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

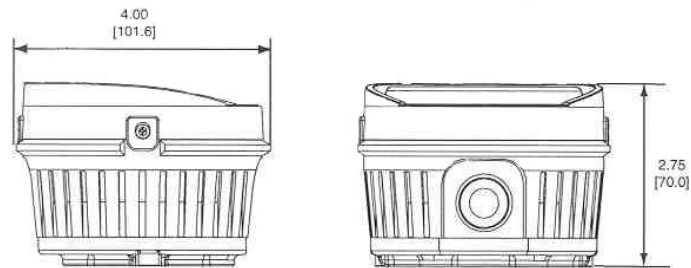
The model LM OG-TI is designed for a wide range of applications, including petroleum based fluids, fuels, diesel, water solutions, and any other liquid compatible with the materials of construction that require totalizing meter flow and/or monitoring rate of fluid flow passing through the meter.

### 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
- Maximum operating pressure – 1015 psi
- For use in Ex-zone 1 (with suitable drive)

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## Dimensional drawing



## Specifications

	ANSI	Metric
Flow range	.25 – 8 gpm	1 – 35 liters/minute
Operating pressure (maximum)	1015 psi	70 bar
Operating pressure (minimum)	5 psi	0.35 bar
Operating temperature (maximum) range	-10° to 110° F	-20° to 45° C
Accuracy	±0.75%	±0.75%
Pulse rate	380 Pulses / Gal.	100 Pulses / Liter
Reed switch rating (maximum)	150 VAC @ 10 Watts	150 VAC @ 10 Watts
Weight	2.0 lbs	0.9 kg
Inlet and outlet connections	½" NPTF	½" BSPP

## Materials of construction

Meter housing/cover	: Cast aluminium with hardcoat black anodize per Mil 8625 III Class 2
Gears	: LCP (Liquid Crystal Polymer)
Transmitter housing	: Glass filled nylon
Seal material	: Viton

## Oval gear pressure drop vs flow rate for various fluids

Viscosities in centistokes (11-19-96)

