

#### DESCRIPTION

The Models OGT, OGT-SF and OGT-PVC electronic lube meters are designed specifically to dispense motor oils (SAE 5...50), gear oils (SAE 80...240), automatic transmission fluid, antifreeze (Ethylene Glycol), brake fluid, windshield wiper fluid, and engine coolant solutions. Modular design, low cost, lightweight and rugged make the OGT the best choice for automated dispensing systems.

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 plastic housing.

#### OPERATION

As fluid passes through the metering chamber by entering the inlet port, the internal gears rotate, forcing the fluid to exit through the outlet port. Each rotation of the gear displaces a given volume of fluid. Controlled clearances between the gears and chamber wall minimize leakage.

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 or counter.

#### APPLICATION

This transmitter is normally connected to metering systems that have scaling capabilities and that can accept a reed switch pulse.

Typical applications are automated motor oil batching systems, antifreeze dispensing systems and other applications that require totalizing meter flow and monitoring rate of fluid flow passing through the meter.

**NOTE:** The use of meters in applications other than those described in this material may result in inaccuracy and possible meter failure. Each meter is designed for use with a specific type of fluid. Do not use petroleum-based products in a meter designed for water-based fluids, or water-based fluids in a meter designed for petroleum-based products. It is also important that fluids be properly filtered before entering the meter. Foreign particles will cause inaccuracy or malfunction of the meter. Warranties are void in the circumstances described above.



#### FEATURES

- OGT, OGT-SF: 1450 psi (100 bar) rating;  
OGT-PVC: 145 psi (10 bar)
- Leakproof magnetic drive
- Does not require external power
- Rugged, corrosion-resistant plastic enclosure
- Hermetically sealed reed switch output
- Compatible with most flow controllers and counters with scaling capabilities
- Contains only two parts, which reduces maintenance costs
- Operation temperature range 14...140° F (–10...60° C)
- Accuracy of up to  $\pm 1\%$
- Humidity- and moisture-resistant transmitter
- Two year limited warranty

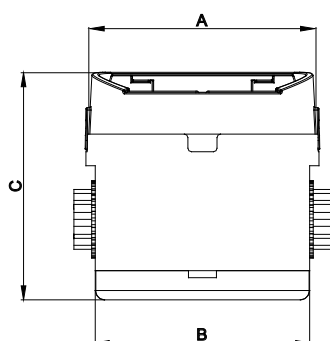
## SPECIFICATIONS

	OGT and OGT-SF (Special Fluids Meter)			OGT-PVC
Meter Size	1/2 in.	3/4 in.	1 in.	1/2 in.
Flow Range	0.25...9 gpm (1...35 lpm)	0.8...15 gpm (3.0...60 lpm)	0.8...30 gpm (3.0...115 lpm)	0.25...9 gpm (1...35 lpm)
Inlet and Outlet Connections	1/2 in. NPTF (1/2 in. BSPP)	3/4 in. NPTF (3/4 in. BSPP)	1 in. NPTF (1 in. BSPP)	1/2 in. NPTF (1/2 in. BSPP)
Operating Pressure (Maximum)	Up to 1450 psi (Up to 100 bar)			Up to 145 psi (10 bar)
Operating Temperature Range	14...122° F (–10...50° C)	14...140° F (–10...60° C)		14...122° F (–10...50° C)
Accuracy*	±0.5%			±1%
Viscosity	Up to 5000 mPas			Up to 2000 mPas
Weight	2.0 lb (0.9 kg)	1.8 lb (0.82 kg)		1.32 lb (0.6 kg)
Pulse Rate	95 pulses/quart (100 pulses/liter)	58.2 pulses/quart (61.5 pulses/liter)	58.2 pulses/quart (61.5 pulses/liter)	95 pulses/quart (100 pulses/liter)
Read Switch Rating	120V AC @ 10 watts			
Protection class	IP 42	IP 65	IP 65	IP 42

\* Tested with motor oil Mobil DTE 25

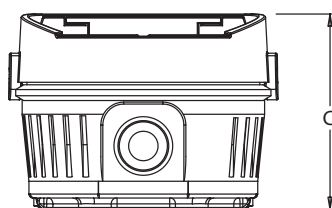
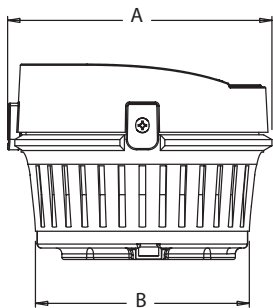
## DIMENSIONS

### High Flow Meter



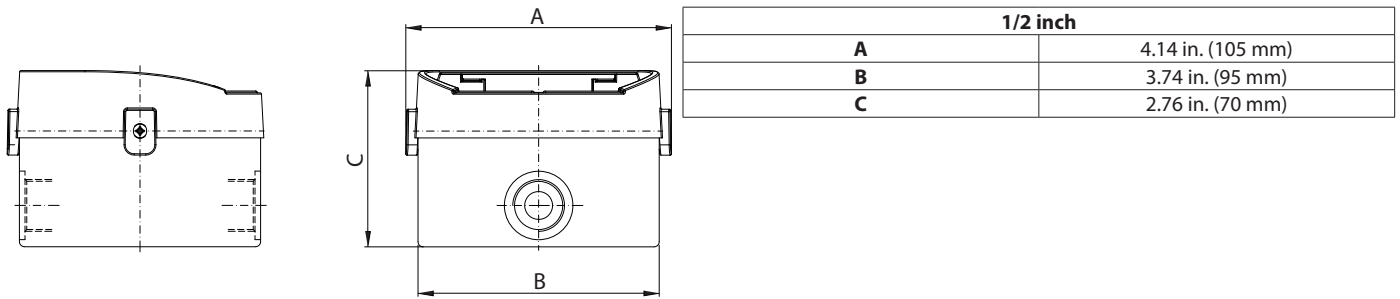
3/4 inch	
A	4.14 in. (105 mm)
B	3.62 in. (92 mm)
C	3.86 in. (98 mm)
1 inch	
A	4.14 in. (105 mm)
B	3.62 in. (92 mm)
C	3.86 in. (98 mm)

### Standard Meter

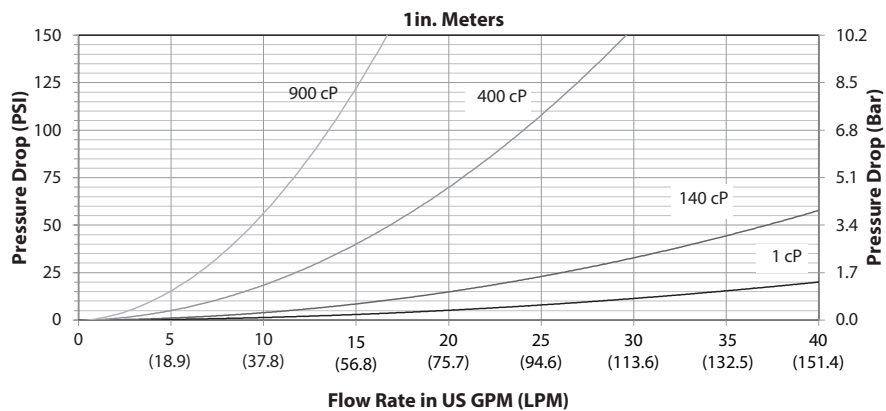
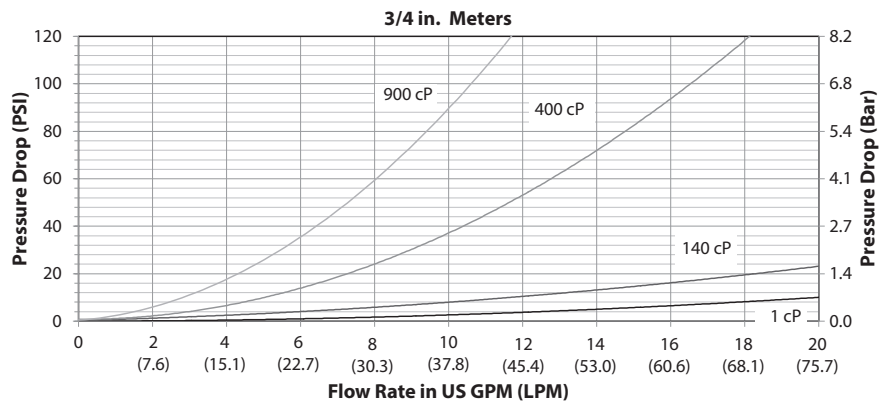
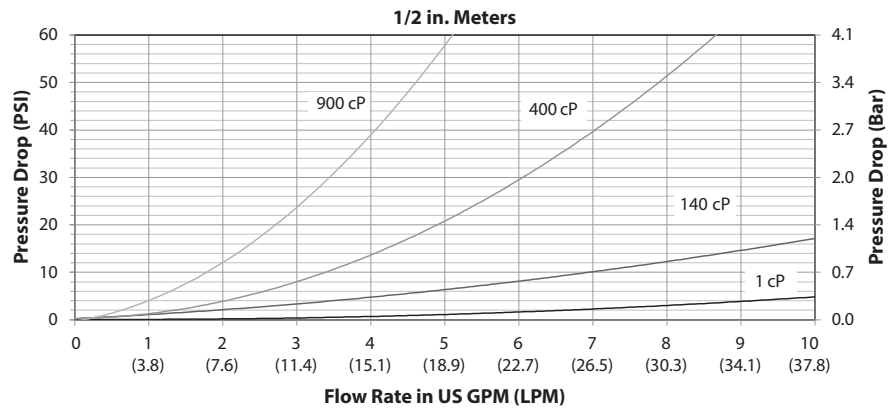


1/2 inch	
A	4.06 in. (103 mm)
B	3.23 in. (82 mm)
C	2.99 in. (76 mm)

## PVC Meter



## PRESSURE DROP CHARTS



PART NUMBER CONSTRUCTION

Automotive Products									
Inline Meter - Standard, Spc. Fluid and PVC									
<div><div>A4</div><div>-</div><div>OGT</div><div>-</div><div>W</div><div>-</div><div></div><div>-</div><div></div><div>-</div><div></div><div>-</div><div></div><div>-</div><div>X</div><div>XX</div><div>-</div><div></div></div>									
<b>METER TYPE</b>									
Inline Oval Gear Meter w/ Transmitter (Single Channel) OGT									
<b>CERTIFICATION</b>									
None W									
<b>METER SIZE</b>									
1/2 in. 005									
3/4 in.   <i>Meter Size Options "A0" and "A4" Only</i> 007									
1 in.   <i>Meter Size Options "A0" and "A4" Only</i> 010									
<b>PROCESS CONNECTIONS</b>									
NPT; Fuel; Female NBA									
BSPP; Female BBA									
<b>BASE MATERIAL</b>									
Aluminum A0									
Aluminum (Hardcoated) A4									
PVC   <i>Process Connection Option "BAA" Only</i> P5									
<b>SEALS</b>									
Buna-N   <i>Base Meter Material Option "A0" Only</i> B									
Viton®/FKM   <i>Base Meter Material Options "A4" Only</i> V									
AFLAS   <i>Base Meter Material Options "P5" Only</i> A									
<b>CONTROL HANDLE</b>									
None X									
<b>OUTLET NOZZLE</b>									
None XX									
<b>UNIT OF MEASURE/PROGRAMMING</b>									
None XXX									
Gallons GAL									
Quarts QRT									
Liters LTR									
Pints PNT									

Control. Manage. Optimize.

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