

## Model OG

### Modular Oval Gear Meter

# Technical Brief

#### GENERAL

The Badger electronic lube meter is designed specifically to dispense motor oils (S.A.E. 5-50), gear oils (S.A.E. 80-240), automatic transmission fluid, antifreeze (Ethylene Glycol), brake fluid, engine coolant, and windshield wiper fluid solutions. Modular design, low cost, lightweight and rugged make the OG 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 3 to 5 years depending on use. It can be programmed to dispense in pints, quarts, liters, or gallons and will totalize in 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 5-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 insure minimum leakage. As the gears rotate, a magnet on each end of the gear activates the microprocessor in the register.

Depressing the RESET button before each use resets the totalizer to zero. Squeezing the trigger handle dispenses the fluid.

The total amount of fluid dispensed from inventory can be checked periodically by depressing the TOTAL button. If the units dispensed are pints, quarts, or gallons, the totalizer will read in gallons. If the units dispensed are liters, the totalizer will read in liters.

#### **⚠ CAUTION**

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-



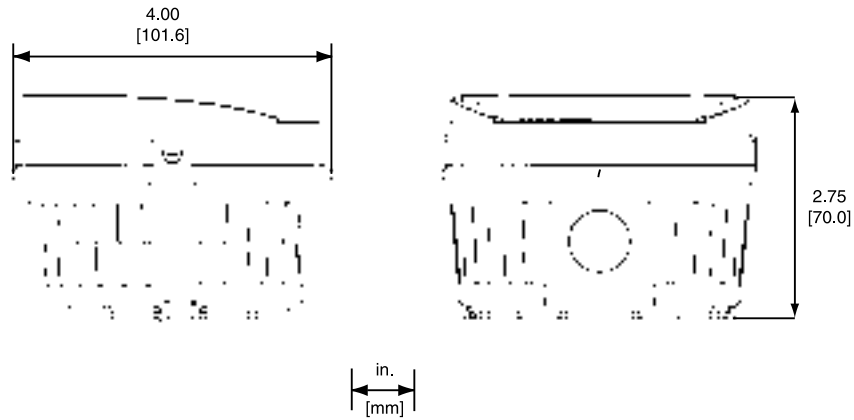
based products. It is also important that fluids be properly filtered before entering the meter. Foreign particles will cause inaccuracy as well as possible malfunction of the meter. Warranties are void in the circumstances described above.

#### FEATURES

- Oval Gear Driven Meter
- Large LCD Display
- Two Decimal Point Precision
- Push Button Calibration
- Totalization in Gallons or Liters
- Delivery in Pints, Quarts, Liters, or Gallons
- Accuracy to  $\pm 0.3\%$
- Minimum Three Year Battery Life
- Low Battery Indicator
- Replaceable Battery
- Battery Shelf Life — 10 Years



## Dimensional Drawing



## SPECIFICATIONS

	OG Oil Meter		Brake Fluid/Waste Oil Meter	
	English	Metric	English	Metric
Maximum Flow *	8 gpm	35 liters/minute	8 gpm	35 liters/minute
Minimum Flow *	0.25 gpm	1.0 liters/minute	0.25 gpm	1.0 liters/minute
Operating Pressure (Maximum)	1500 psi	103 bar	1500 psi	103 bar
Operating Pressure (Minimum)	5 psi	.35 bar	5 psi	.35 bar
Operating Temperature (Maximum)	110° F	45° C	110° F	45° C
Operating Temperature (Minimum)	-10° F	-20° C	-10° F	-20° C
Accuracy (Non-Approved Version)	+/- 0.5%	+/-0.5%	+/- 0.5%	+/-0.5%
Accuracy (Approved Version)	+/- 0.4%	+/- 0.3%	n/a	n/a
Weight, Less Handle	2.0 lbs.	0.9 kg	2.0 lbs.	0.9 kg
5- Digit LCD Display, 5/16" High (8 mm)	Pints-Quarts-Gallons	Liters	Pints-Quarts-Gallons	Liters
Inlet & Outlet Connections	1/2" NPTF	1/2" BSPP	1/2" NPTF	1/2" BSPP

\* Tested with Mobil DTE-25 motor oil at ambient temperature. Min. Max. flow rates will vary with fluid viscosity.

	Engine Coolant/Wiper Fluid	
	English	Metric
Maximum Flow *	6 gpm	23 liters/minute
Minimum Flow *	1.0 gpm	3.8 liters/minute
Operating Pressure (Maximum)	1500 psi	103 bar
Operating Pressure (Minimum)	5 psi	.35 bar
Operating Temperature (Maximum)	110° F	45° C
Operating Temperature (Minimum)	-10° F	-20° C
Accuracy (Non-Approved Version)	+/- 1.0%	+/-1.0%
Accuracy (Approved Version)	n/a	n/a
Weight, Less Handle	2.0 lbs.	0.9 kg
5- Digit LCD Display, 5/16" High (8 mm)	Pints-Quarts-Gallons	Liters
Inlet & Outlet Connections	1/2" NPTF	1/2" BSPP

\* Tested with water at ambient temperature.

Please ensure that the fluid is properly filtered before entering meter. Foreign particles will cause inaccuracy as well as malfunction of meter.



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