



Badger Meter

Universal Meters

Models UH, UL and UP

DESCRIPTION

The Universal meters use an oscillating piston to measure SAE 5...50 motor oils, SAE 80...240 gear oils, and antifreeze fluid (ethylene glycol). Used primarily as a inventory control device in lubricant dispensing systems, they are accurate, rugged, and light weight. These are truly universal meters, adaptable to a variety of applications. They are available with or without a totalizing register. When equipped switches, they can be used as pulsing devices for a remote totalizer or command module. The outlet ports can be rotated in 90 degree increments to meet your requirements.

OPERATION

After all entrapped air and foreign particles are removed from the supply line, clean oil continuously passes through the metering chamber by entering the inlet port, displacing the piston, and exiting the outlet port. Each oscillation of the piston equates to a given amount of fluid. Controlled clearances between the piston and chamber wall minimize leakage. As the piston oscillates, the center hub rotates the output shaft through a gear train. A pointer knob affixed to the output shaft rotates around a graduated dial, indicating the amount dispensed. After delivery, reset the knob to zero by turning it counter-clockwise.

SPECIFICATIONS

Maximum Flow *	4 gpm (15 lpm)
Minimum Flow *	0.4 gpm (1.5 lpm)
Operating Pressure (Maximum)	1000 psi (67 bar)
Operating Temperature (Maximum)	150° F (70° C)
Accuracy	±0.65%
Weight	3.3 lb (1.5 kg)
Inlet and Outlet Connections	1/2 in. NPTF (1/2 in. BSPP)

* Tested with Mobil DTE-25 motor oil. Flow rates vary with fluid viscosity.



*Model UL (Universal Low)
No Totalizer*

Dial Capacity
8 US Pints
4 Liters



*Model UH (Universal High)
With Totalizer*

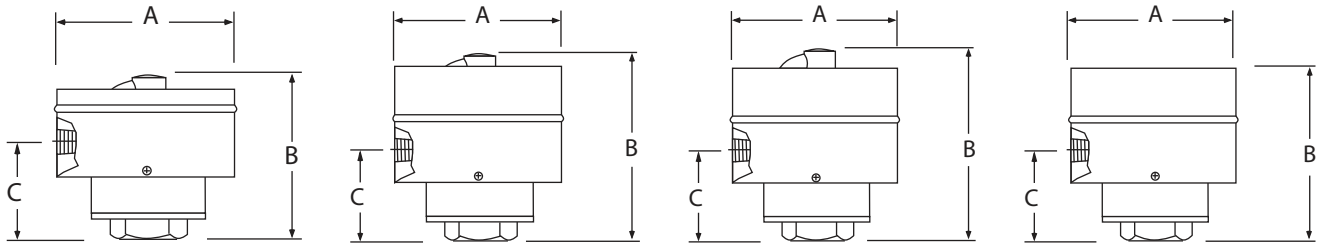
Dial Capacity	Totalizer
8 Pints	Pints
4...16 Quarts	Quarts
4...16 Quarts	US Gallons
1...10 Liters	Liters
4...10 Liters	Liters



*Model UP (Universal Pulse)
With Switch Assembly*

Unit Per Shaft Revolution
1 US Pint
1 US Quart
1 Liter
1 US Gallon

DIMENSIONS



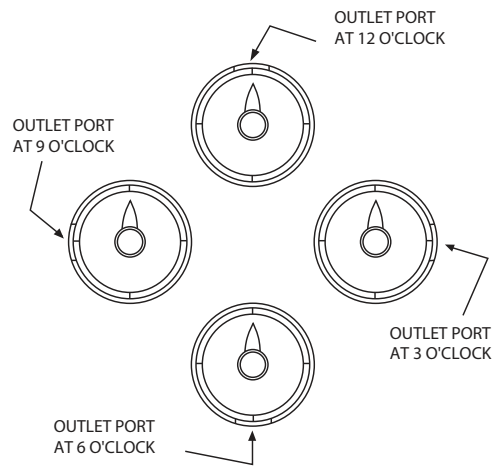
	Model UL	Model UH without Inner Circle Pointer	Model UH with Inner Circle Pointer	Model UP
A	3.93 in. (99.8 mm)	3.93 in. (99.8 mm)	3.93 in. (99.8 mm)	3.93 in. (99.8 mm)
B	3.78 in. (96 mm)	4.75 in. (120.7 mm)	5.0 in. (127 mm)	4.16 in. (105.7 mm)
C	2.12 in. (53.9 mm)	2.12 in. (53.9 mm)	2.12 in. (53.9 mm)	2.12 in. (53.9 mm)

OUTLET PORT POSITIONS IN RELATION TO DIAL

The outlet port in a universal type meter can be set at any one of four positions, namely, 3, 6, 9, or 12 o'clock. The four positions are illustrated on the right, all in relation to the cipher on the dial. All meters, unless otherwise specified at the time ordered, will be set at the 6 o'clock position.

To change positions in the field, simply remove the shroud, the reset knob, and the dial. Rotate the dial until the outlet port is in the desired position, and reassemble the parts in reverse sequence.

NOTE: Always reset the knob to zero by turning it counter-clockwise. If you turn it CLOCKWISE, severe internal damage will occur.



Control. Manage. Optimize.

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