

**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.



Model UL (Universal Low) No Totalizer

Dial Capacity			
8 US Pints			
4 Liters			



Model UH (Universal High) With Totalizer

<b>Dial Capacity</b>	Totalizer		
8 Pints	Pints		
416 Quarts	Quarts		
416 Quarts	US Gallons		
110 Liters	Liters		
410 Liters	Liters		

### 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" NPTF (1/2" BSPP)	

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



Model UP (Universal Pulse) With Switch Assembly

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

# **Product Data Sheet**

#### DIMENSIONS



	Model UL	Model UH without Inner Circle Pointer	Model UH with Inner Circle Pointer	Model UP
Α	3.93 in. (99.8 mm)	3.93 in. (99.8 mm)	3.93 in. (99.8 mm)	3.93 in. (99.8 mm)
В	3.78 in. (96 mm)	4.75 in. (120.7 mm)	5.0 in. (127 mm)	4.16 in. (105.7 mm)
С	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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#### www.badgermeter.com

 The Americas | Badger Meter | 4545 West Brown Deer Rd | PO Box 245036 | Milwaukee, WI 53224-9536 | 800-876-3837 | 414-355-0400

 México | Badger Meter de las Americas, S.A. de C.V. | Pedro Luis Ogazón N°32 | Esq. Angelina N°24 | Colonia Guadalupe Inn | CP 01050 | México, DF | México | +52-55-5662-0882

 Europe, Middle East and Africa | Badger Meter Europe GmbH | Nurtinger Str 76 | 72639 Neuffen | Germany | +49-7025-9208-0

 Europe, Middle East Branch Office | Badger Meter Europe | PO Box 341442 | Dubai Silicon Oasis, Head Quarter Building, Wing C, Office #C209 | Dubai / UAE | +971-4-371 2503

 Czech Republic | Badger Meter Slovakia s.r.o. | Maříkova 2082/26 | 621 00 Brno, Czech Republic | +420-5-41420411

 Slovakia | Badger Meter Slovakia s.r.o. | Maříkova 2082/26 | 621 00 Brno, Czech Republic | +420-5-41420411

 Slovakia | Badger Meter Slovakia s.r.o. | Maříkova 2082/26 | 621 00 Brno, Czech Republic | +420-5-41420411

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 Slovakia | Badger Meter Slovakia s.r.o. | Maříkova 2082/26 | 621 00 Brno, Czech Republic | +420-5-41420411

 Slovakia | Badger Meter Slovakia s.r.o. | Maříkova 2082/26 | 503 portal +421-2-44 63 88 01

 Asia Pacific | Badger Meter | 80 Marine Parade Rd | 21-06 Parkway Parade | 500 parkey 91+65-63464836

 China | Badger Meter | 7-1202 | 99 Hangzhong Road | Minhang District | Shanghaï | China | 86-21-5763 5412
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