



**MODEL OF-11**  
**OPEN FLOW METER**  
**SEALED METER MECHANISM - MAGNETIC DRIVE**  
**SEALED TOTALIZER**  
**SIZES 10" thru 72"**



**TOTALIZER**



**DESCRIPTION**

**MODEL OF-11 OPEN FLOW METERS** are designed for accurate metering of ditch turnouts, reservoir outlets, closed conduits or other similar installations.

The rigid, light weight construction and simple installation allow easy removal for winter storage or transfer to other locations. The upper mounting plate is equipped with a padlock hasp. The lower bracket has suitable guides for easy installation. An optional revolving mounting bracket, with padlock hasp, is also available. The revolving mounting bracket allows the meter assembly to be raised approximately 2 inches permitting the column to be rotated 180 degrees and easily withdrawn. The revolving mounting bracket is ideal when high velocity flow conditions exist.

**INSTALLATION** can be made to any wall or vertical structure which will center the propeller in the flow measuring area. The meter location must have a controlled flow measuring area and a full flow of liquid for proper accuracy. Fully opened gate valves, fittings or other obstructions that tend to set up flow disturbances should be a minimum of ten pipe diameters upstream from the meter. Installations with less than ten pipe diameters of straight pipe require straightening vanes. Meters with straightening vanes require at least five pipe diameters upstream and one pipe diameter downstream of the meter.

**PROPELLER** is magnetically coupled with the drive mechanism through the sealed oil filled gearbox. This completely eliminates water entering the meter assembly, as well as the need for any packing gland. The propeller is a conical shaped three bladed propeller, injection molded of thermoplastic material resistant to normal water corrosion and deformity due to high flow velocities.

**BEARING** in 10" thru 48" propellers is a water lubricated ceramic sleeve and spindle bearing system with a ceramic/stainless steel spindle. Dual ceramic thrust bearings, standard on all 10"-48" meters and 54"-72" high velocity meters, handle flows in both forward and reverse directions. The low velocity 54"-72" propeller bearings are sealed stainless steel ball bearings that ride on a stainless steel spindle. The bearing design promotes extended periods of maintenance free propeller operation. Bearings within the sealed meter mechanism are shielded precision stainless steel bearings and are factory lubricated for the meter's life.

**TOTALIZER** is O-ring sealed and magnetically coupled with the driving mechanism, and features a six digit totalizer with a full 3" diameter, 100 division, center sweep dial that permits extremely accurate readings for timing purposes in determining flow rates. The totalizer dial can be furnished in any standard liquid measuring units. The bonnet, with padlock hasp, can be positioned in four different directions for easy reading.

**CHANGE GEARS** may be easily exchanged in the field when changing the dial, or when recalibrating for different pipe sizes. It is not necessary to remove the meter from the line for these changes.

**O-RING SEALS** are used at all points where seals are required, making the meter mechanism completely immune to any of the corrosive effects of atmospheric moisture or the liquids measured by the meter assembly.

**CALIBRATED TOTALIZERS** are available and interchangeable with the totalizer mounted on the meter, each totalizer is enclosed in its own plastic case. These totalizers are calibrated for additional pipe I.D. sizes as specified by the customer to allow use of one meter on more than one installation. The totalizer dials can be furnished in any standard liquid measuring units. The calibrated pipe size is clearly indicated on the totalizer dial face.

**SPECIFICATIONS**

**ACCURACY**

Plus or minus 2% of actual flow within the range specified for each meter size.

**TEMPERATURE RANGE**  
**MINIMUM FLOWS**

140° F Maximum. Consult factory for special construction for higher temperatures.

As shown for each meter size and construction are required for accurate registration. See flow chart.

**MAXIMUM FLOWS**

NOTE: Minimum flows will be higher on meters with drop pipe lengths over 6' long.

As shown for each meter size and construction are rated for continuous operation. See flow chart.

**INTERMITTENT FLOWS**

As shown for each meter size are rated for 10% to 15% of the total time the meter is operating. Consult factory for High Velocity construction when intermittent flows are higher than shown on flow chart and/or when longer operating periods are required.

**MATERIALS**

Used in construction are chosen to minimize the corrosive effects of the liquids measured by the meter assembly.

**MAGNETS** - permanent ceramic type  
**INTERIOR BEARINGS** - shielded stainless steel  
**PROPELLER BEARING** - ceramic sleeve type (10"-48" STD. & 54"-72" H.V.) or sealed stainless steel ball type (54"-72" L.V.)

**PROPELLER SPINDLE** - ceramic coated stainless steel (10"-48" STD. & 54"-72" H.V.) or stainless steel (54"-72" L.V.)

**PROPELLER** - injection molded thermoplastic

**GEARBOX** - cast bronze

**SEPARATOR** - stainless steel

**SHAFTS AND BOLTS** - stainless steel

**DROP PIPE** - bronze

**METER HEAD** - cast bronze

**MOUNTING BRACKETS** - cast bronze

**OPTIONAL EQUIPMENT**

A meter mounted Forward and Reverse Totalizer and a wide range of controls and instruments for indicating, totalizing and recording flow data for each meter. Special constructions and materials are available upon request.

**ORDERING INFO**

Must be specified by the customer and includes:

"A" dimension (see back of data sheet),

Pipe I.D.

Minimum & maximum flow ranges

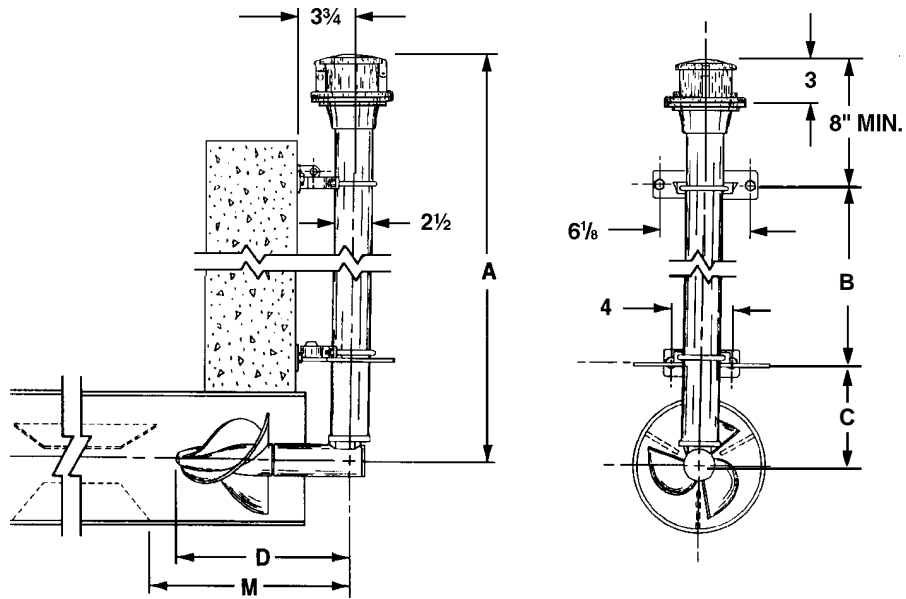
Temperature of meter environment

Totalizer dial units

Type of materials and construction

Optional equipment desired

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METER & PIPE SIZE	FLOW RANGES, GPM			DIMENSIONS					SHIPPING WEIGHT POUNDS**
	MIN.	MAX.	INT.	A*	B	C	D	M	
10	300	2000	3000				11½	13½	80
12	400	3000	3500				11½	13½	80
14	500	4000	4500				11½	13½	80
16	600	5000	6000				11½	13½	80
18	800	6000	7500				11½	13½	80
20	900	8000	9000				11½	13½	80
24	1000	10000	13500				11½	13½	80
30	1800	15000	21000				11½	13½	80
36	2000	20000	30000				11½	13½	80
42	3000	30000	40000				11½	13½	80
48	5500	35000	50000				11½	13½	80
54	6500	45000	55000				11½	13½	200
60	7500	60000	80000				11½	13½	200
66	8500	75000	95000				11½	13½	200
72	9500	90000	115000				11½	13½	200

\* NOTE: Model OF-11 meters are equipped with a 6 foot "A" dim. unless otherwise specified.  
 Minimum flows will be higher on meters with drop pipe lengths over 6' long.

\*\* NOTE: Shipping weights are approximate. Actual weight depends upon "A" dim.

**WATER SPECIALTIES**

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