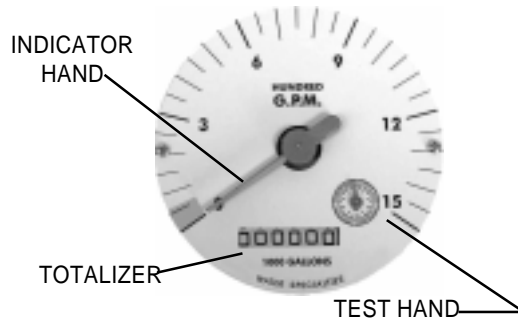




**MODEL OF-12**  
**OPEN FLOW METER**  
**SEALED METER MECHANISM - MAGNETIC DRIVE**  
**INDICATOR - TOTALIZER**  
**SIZES 10" thru 72"**



TYPICAL 4" DIAL  
 INDICATOR-TOTALIZER



#### DESCRIPTION

**MODEL OF-12 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the meter assembly to be raised approximately 2 inches permitting the column to be rotated 180 degrees and easily withdrawn.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.

**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** is a water lubricated ceramic sleeve and spindle bearing system with a ceramic/stainless steel spindle. Dual ceramic thrust bearings, standard on all meters handle flows in both forward and reverse directions. 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 life of the meter.

**INDICATOR-TOTALIZER** is mechanically driven by the meter mechanism and features a full 4" diameter, 250 degree sweep dial with a six digit, straight reading type totalizer and sweep test hand. The indicator drive mechanism is temperature compensated so the indicator will be accurate at all points on the dial when operated between 32° and 140° F. The indicator dial can be furnished in GPM, CFS, MGD or any standard liquid measuring units with choice of standard totalizer measuring units. The bonnet, with padlock hasp, is o-ring sealed to the meter head.

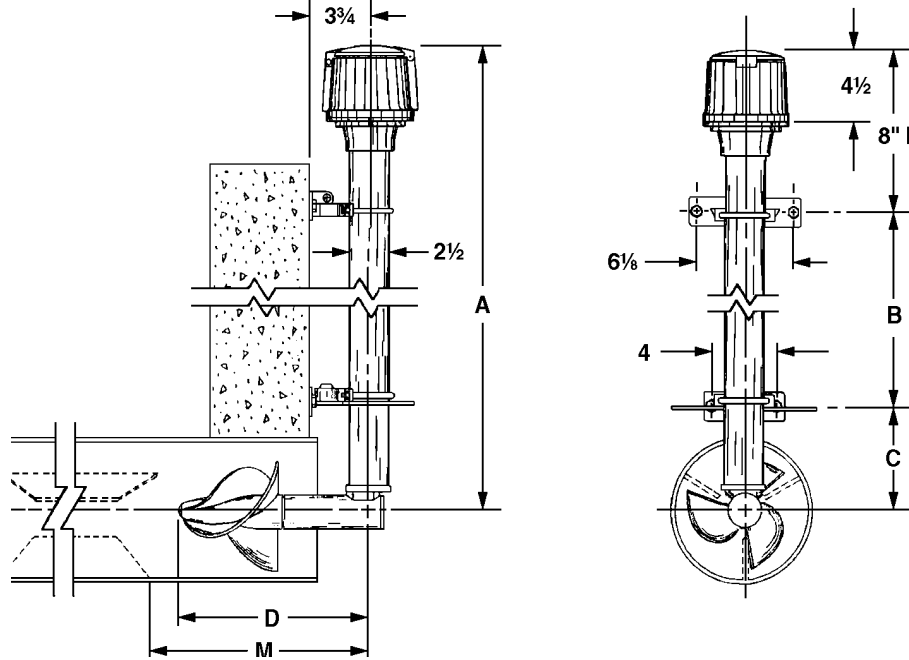
**CHANGE GEARS** may be easily exchanged in the field when changing the dial, or when recalibrating for different pipe sizes. It is not necessary to remove the meter from the line for these changes.

**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.

#### SPECIFICATIONS

|                           |  |
|---------------------------|--|
| <b>ACCURACY</b>           | Plus or minus 2% of actual flow within the range specified for each meter size.  |
| <b>TEMPERATURE RANGE</b>  | 140° F Maximum. Consult factory for special construction for higher temperatures.  |
| <b>MINIMUM FLOWS</b>      | As shown for each meter size and construction are required for accurate registration. See flow chart.<br>NOTE: Minimum flow will be higher on meters with drop pipe lengths over 6' long.  |
| <b>MAXIMUM FLOWS</b>      | As shown for each meter size and construction are rated for continuous operation. See flow chart.  |
| <b>INTERMITTENT FLOWS</b> | 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.  |
| <b>MATERIALS</b>          | Used in construction are chosen to minimize the corrosive effects of the liquids measured by the meter assembly.<br>MAGNETS - permanent ceramic type<br>INTERIOR BEARINGS - shielded stainless steel<br>PROPELLER BEARING - ceramic sleeve type<br>PROPELLER SPINDLE - ceramic coated stainless steel<br>PROPELLER - injection molded thermoplastic<br>GEARBOX - cast bronze<br>SEPARATOR - stainless steel<br>SHAFTS AND BOLTS - stainless steel<br>DROP PIPE - bronze<br>METER HEAD - cast bronze<br>MOUNTING BRACKETS - cast bronze |
| <b>OPTIONAL EQUIPMENT</b> | 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.   |
| <b>ORDERING INFO</b>      | Must be specified by the customer and includes:<br>"A" dimension (see back of data sheet)<br>Pipe I.D.<br>Minimum & maximum flow ranges<br>Temperature of meter environment<br>Indicator scale and units<br>Totalizer dial units<br>Type of materials and construction,<br>Optional equipment desired  |

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 SEALED METER MECHANISM - MAGNETIC DRIVE  
 INDICATOR-TOTALIZER  
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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                      |
| 86                | 16000            | 125000 | 150000 | 8'0"       |   |   | 11½ | 13½ | 200                      |

\* NOTE: Model OF-12 meters are equipped with a 6 foot "A" dim. unless otherwise specified. Minimum flow will be higher on meters with drop pipe lengths over 6' long.  
 \*\* NOTE: Shipping weights are approximate. Actual weight depends upon "A" dim.

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