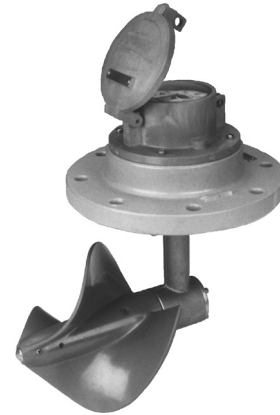
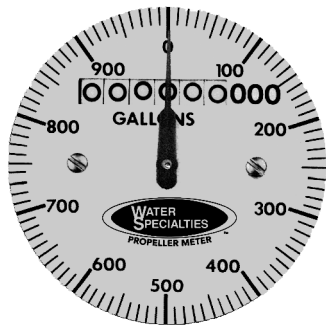


**MODEL MLT1**

150 psi REPLACEMENT METER HEAD ASSEMBLY  
SEALED METER MECHANISM - MAGNETIC DRIVE  
SEALED TOTALIZER  
SIZES 3" thru 72"



## DESCRIPTION

**MODEL MLT1 METER HEAD ASSEMBLIES** are manufactured to the highest standards. Materials used on all meters and flow ranges for the low velocity meter meet or exceed AWWA standard C704-02. The bolt-on design permits use in a wide range of existing applications with up to 150 psi working pressure. It is necessary, upon ordering, to furnish the meter size, model number and serial number of the meter it is replacing.

**INSTALLATION** is made by bolting the meter head assembly to the existing saddle or meter tube. The meter can be installed in any of the following positions; vertically, horizontally, or inclined on suction or discharge lines. The meter must have 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 and two pipe diameters downstream 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 two pipe diameters 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 propeller 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.

**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 purpose in determining flow rates. The totalizer dial can be furnished in gallons, cubic feet, acre feet, or any standard liquid measuring units. The bonnet, with pad-lock hasp, can be positioned in four different directions for the easiest possible reading when the meters are mounted in unusual positions.

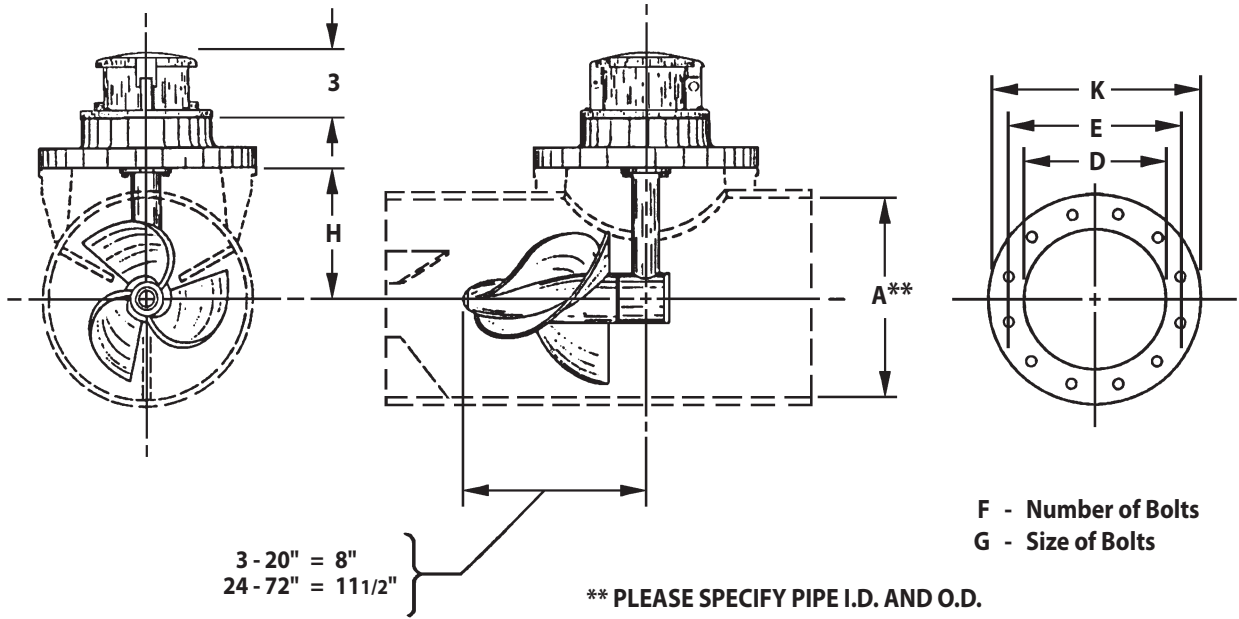
**CHANGE GEARS** may be easily exchanged in the field when changing the dial, or when recalibrating for different pipe sizes. It is not necessary to remove pressure from the line for these changes.

**O-RING SEALS** are used at the meter head and 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>PRESSURE RANGE</b>     | Up to 150 PSI maximum working pressure.  |
| <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 when auxiliary equipment is added.  |
| <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 - anticorrosive aluminized barrier coated magnets; Everlube 6155<br>INTERIOR BEARINGS - shielded stainless steel<br>PROPELLER BEARING - ceramic sleeve type<br>PROPELLER SPINDLE - ceramic sleeve/stainless steel<br>PROPELLER - injection molded thermoplastic<br>GEARBOX - stainless steel<br>SEPARATOR - stainless steel<br>SHAFTS - stainless steel<br>METER HEAD BOLTS - stainless steel<br>METER HEAD - cast iron or fabricated steel, NSF approved fusion epoxy coated. |
| <b>OPTIONAL EQUIPMENT</b> | Totalizer Extensions 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>Meter size<br>Model number<br>Serial number of the meter it is replacing<br>I.D./O.D. of pipe   |

**MODEL MLT1**  
 150 psi METER HEAD ASSEMBLY  
 SEALED METER MECHANISM - MAGNETIC DRIVE  
 SEALED TOTALIZER  
 SIZES 3" thru 72"



| METER & PIPE SIZE | FLOW RANGES, GPM                         |  | DIMENSIONS |        |        |    |       |        |        | EST SHIPPING WEIGHT POUNDS |
|-------------------|--|--|------------|--------|--------|----|-------|--------|--------|----------------------------|
|                   | STANDARD CONSTRUCTION MIN. - MAX. - INT. | HIGH VELOCITY CONSTRUCTION MIN. - MAX. | A          | D      | E      | F  | G     | H      | K      |                            |
| 3                 | 45-250-350                               | N/A                                    | 3          | 3 1/4  | 7 3/4  | 8  | 1/2   | 3 1/4  | 9      | 35                         |
| 4                 | 55-500-700                               | 200-700                                | 4          | 4 3/8  | 7 3/4  | 8  | 1/2   | 3 1/4  | 9      | 35                         |
| 6                 | 120-1200-1500                            | 300-1500                               | 6          | 5 3/8  | 7 3/4  | 8  | 1/2   | 4 1/4  | 9      | 35                         |
| 8                 | 150-1500-2000                            | 400-2500                               | 8 1/8      | 6 1/2  | 7 3/4  | 8  | 1/2   | 5 1/4  | 9      | 35                         |
| 10                | 180-2000-3000                            | 500-3500                               | 10 1/4     | 8 1/4  | 9 3/4  | 8  | 1/2   | 6 1/2  | 11     | 45                         |
| 12                | 200-3000-3500                            | 800-5000                               | 12 1/4     | 8 1/4  | 9 3/4  | 8  | 1/2   | 7 1/2  | 11     | 50                         |
| 14                | 300-4000-4500                            | 1000-6000                              | 13 1/2     | 10     | 12 1/4 | 8  | 1/2   | 8 1/2  | 13 1/2 | 55                         |
| 16                | 400-5000-6000                            | 1200-7500                              | 15 1/4     | 10     | 12 1/4 | 8  | 1/2   | 9 1/2  | 13 1/2 | 55                         |
| 18                | 700-6000-7500                            | 1500-9000                              | 17 1/4     | 10     | 12 1/4 | 8  | 1/2   | 10 1/2 | 13 1/2 | 55                         |
| 20                | 850-8000-9000                            | 2000-12000                             | 19 1/4     | 10     | 12 1/4 | 8  | 1/2   | 11 1/2 | 13 1/2 | 55                         |
| 24                | 1000-10000-13500                         | 3000-15000                             | 23 1/4     | 13 3/8 | 18 3/4 | 12 | 1     | 15 1/2 | 21     | 190                        |
| 30                | 1800-15000-21000                         | 4000-25000                             | 29         | 13 3/8 | 18 3/4 | 12 | 1     | 18 1/2 | 21     | 190                        |
| 36                | 2000-20000-30000                         | 5000-35000                             | 35         | 13 3/8 | 18 3/4 | 12 | 1 1/4 | 21 1/2 | 21     | 190                        |
| 42                | 3000-30000-40000                         | 6000-50000                             | 41         | 23 3/8 | 29 1/2 | 20 | 1 1/4 | 25     | 32     | 365                        |
| 48                | 5500-35000-50000                         | 7000-60000                             | 47         | 23 3/8 | 29 1/2 | 20 | 1 1/4 | 28     | 32     | 365                        |
| 54                | 6500-45000-55000                         | 8000-65000                             | 53         | 23 3/8 | 29 1/2 | 20 | 1 1/4 | 31     | 32     | 365                        |
| 60                | 7500-60000-80000                         | 10000-90000                            | 59         | 23 3/8 | 29 1/2 | 20 | 1 1/4 | 34     | 32     | 365                        |
| 66                | 8500-75000-95000                         | 12000-105000                           | 65         | 23 3/8 | 29 1/2 | 20 | 1 1/4 | 37     | 32     | 365                        |
| 72                | 9500-90000-115000                        | 15000-125000                           | 71         | 23 3/8 | 29 1/2 | 20 | 1 1/4 | 40     | 32     | 365                        |