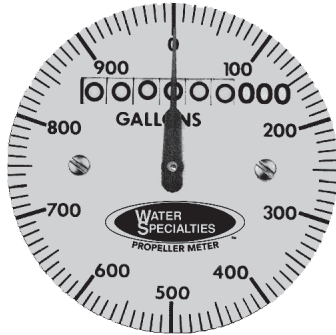




MODEL ML11
 150 psi PLAIN END TUBE METER
 SEALED METER MECHANISM - MAGNETIC DRIVE
 SEALED TOTALIZER
 SIZES 3" thru 48"



TOTALIZER



DESCRIPTION

MODEL ML11 PLAIN END TUBE METERS 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 plain end tube design permits use in a wide range of applications with up to 150 psi working pressure. Fabricated steel meter tubes have straightening vanes and are protected internally and externally with 12-15 mils of NSF approved, fusion epoxy resin.

INSTALLATION is made similar to placing a short length of plain end pipe in the line by using one of the many types of pipe couplings available. 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 five pipe diameters upstream and two pipe diameter downstreams from 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 deformation 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 purposes 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 padlock hasp, can be positioned in four different directions for the easiest possible reading when the meters are mounted in unusual positions.

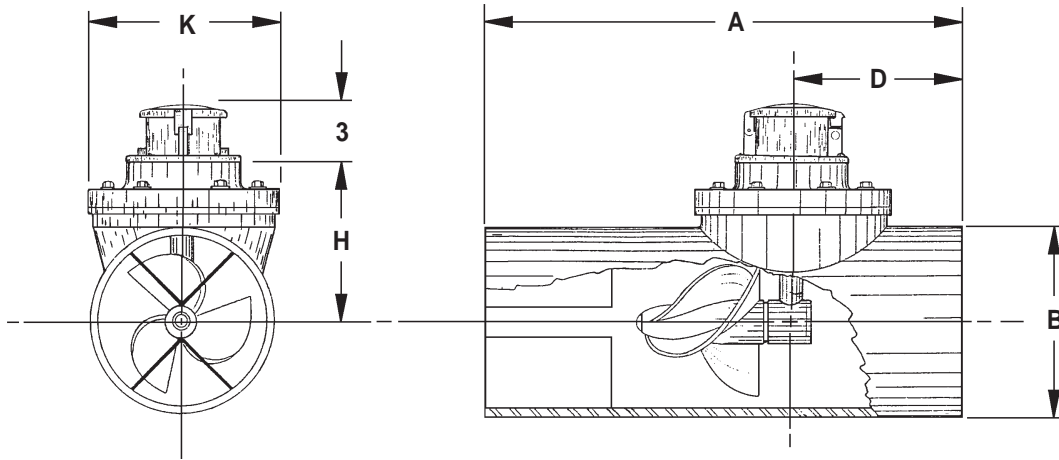
CHANGE GEARS may be easily exchanged in the field when changing the dial, or when recalibrating for different pipe sizes. It is not necessary to remove pressure from the line for these changes.

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

ACCURACY	Plus or minus 2% of actual flow within the range specified for each meter size.
PRESSURE RANGE	Up to 150 PSI maximum working pressure.
TEMPERATURE RANGE	140° F Maximum. Consult factory for special construction for higher temperatures.
MINIMUM FLOWS	As shown for each meter size and construction are required for accurate registration. See flow chart. NOTE: Minimum flow will be higher when auxiliary equipment is added.
MAXIMUM FLOWS	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 PROPELLER SPINDLE - ceramic sleeve/stainless steel PROPELLER - injection molded thermoplastic GEARBOX - cast bronze SEPARATOR - stainless steel SHAFTS - stainless steel METER HEAD BOLTS - stainless steel (3"-20"), plated steel (24"-48") METER HEAD - cast iron or fabricated steel, NSF approved, fusion epoxy coated. METER TUBE - fabricated steel with straightening vanes and coated inside and out with 12-15 mils of NSF approved, fusion epoxy by the fluidized bed method.
OPTIONAL EQUIPMENT	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.
ORDERING INFO	Must be specified by the customer and includes: 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	*LOW VELOCITY CONSTRUCTION MIN. - MAX.	FLOW RANGES, GPM		DIMENSIONS					EST. SHIPPING WEIGHT POUNDS
		STANDARD CONSTRUCTION MIN. - MAX. - INT.	HIGH VELOCITY CONSTRUCTION MIN. - MAX.	A	B	D	H	K	
3	40-250	45-250-350	N/A	17	3½	6½	53/16	9	45
4	50-500	55-500-700	200-700	17	4½	6½	53/16	9	60
6	90-1200	120-1200-1500	300-1500	21	65/8	8½	6¼	9	95
8	100-1500	150-1500-2000	400-2500	23	85/8	8½	7¼	9	115
10	125-2000	180-2000-3000	500-3500	25	10¼	9½	8¼	11	170
12	150-2800	200-3000-3500	800-5000	27	12¼	9½	9½	11	195
14	250-3750	300-4000-4500	1000-6000	41	14	11½	10½	13½	295
16	350-4750	400-5000-6000	1200-7500	47	16	11½	11½	13½	435
18	N/A	700-6000-7500	1500-9000	53	18	14½	12½	13½	520
20	N/A	850-8000-9000	2000-12000	59	20	14½	13½	13½	610
24	N/A	1000-10000-13500	3000-15000	71	24	17½	17½	21	1010
30	N/A	1800-15000-21000	4000-25000	83	30	17½	20½	21	1660
36	N/A	2000-20000-30000	5000-35000	95	36	19½	23½	21	2290
42	N/A	3000-30000-40000	6000-50000	107	42	23½	27	32	3500
48	N/A	5500-35000-50000	7000-60000	119	48	23½	30	32	3780

Standard construction will be supplied for all main line meters unless special flow range, materials, or construction are required.

* Low velocity (LV) construction has the same low and maximum flow rates as AWWA C704.



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