

**MODEL MLT1**

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



TOTALIZER



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

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.

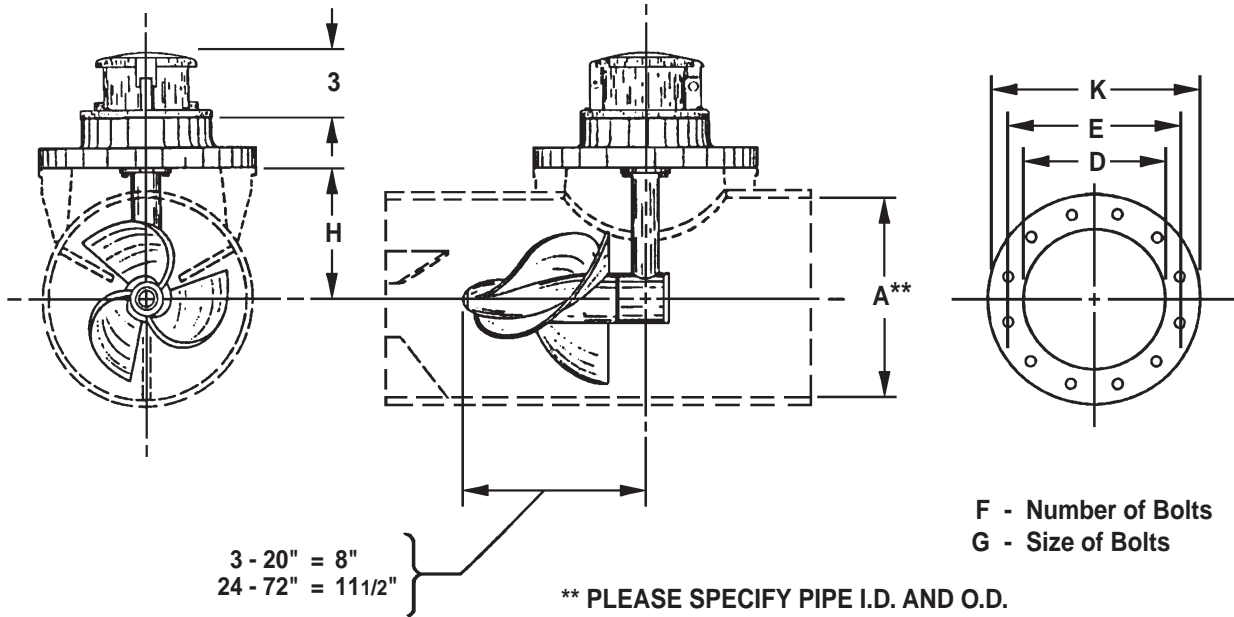
MATERIALS Used in construction are chosen to minimize the corrosive effects of the liquids measured by the meter assembly.

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
METER HEAD - cast iron or fabricated steel, NSF approved fusion epoxy coated.

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:
Meter size
Model number
Serial number of the meter it is replacing
I.D./O.D. of pipe

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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 ¹ / ₂	3 ¹ / ₄	9	35
4	55-500-700	200-700	4	4 ³ / ₈	7 ³ / ₄	8	1 ¹ / ₂	3 ¹ / ₄	9	35
6	120-1200-1500	300-1500	6	5 ³ / ₈	7 ³ / ₄	8	1 ¹ / ₂	4 ¹ / ₄	9	35
8	150-1500-2000	400-2500	8 ¹ / ₈	6 ¹ / ₂	7 ³ / ₄	8	1 ¹ / ₂	5 ¹ / ₄	9	35
10	180-2000-3000	500-3500	10 ¹ / ₄	8 ¹ / ₄	9 ³ / ₄	8	1 ¹ / ₂	6 ¹ / ₂	11	45
12	200-3000-3500	800-5000	12 ¹ / ₄	8 ¹ / ₄	9 ³ / ₄	8	1 ¹ / ₂	7 ¹ / ₂	11	50
14	300-4000-4500	1000-6000	13 ¹ / ₂	10	12 ¹ / ₄	8	1 ¹ / ₂	8 ¹ / ₂	13 ¹ / ₂	55
16	400-5000-6000	1200-7500	15 ¹ / ₄	10	12 ¹ / ₄	8	1 ¹ / ₂	9 ¹ / ₂	13 ¹ / ₂	55
18	700-6000-7500	1500-9000	17 ¹ / ₄	10	12 ¹ / ₄	8	1 ¹ / ₂	10 ¹ / ₂	13 ¹ / ₂	55
20	850-8000-9000	2000-12000	19 ¹ / ₄	10	12 ¹ / ₄	8	1 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

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