WATER SPECIALTIES™
PROPELLER METER

MODEL MLI1-D

150 psi METER HEAD ASSEMBLY
SOLID STATE ELECTRONIC PROPELLER METER
DIGITAL INDICATOR - TOTALIZER
SIZES 3" thru 72"

TYPICAL
DIGITAL INDICATOR-TOTALIZER

DESCRIPTION

MODEL MLI1-D FLANGED 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 bolt-on design permits use in a wide range of applications with up to 150 psi working pressure. It is necessary, upon ordering, to furnish the meter size, model number and serial number it is replacing.

INSTALLATION is made by bolting the meter head assembly to the existing saddle or meter tube. The meter can be installed 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 diameter downstream from the meter. Installations with less than ten 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. An optional kit of adapters with up to 100 feet of cable is available to locate the indicator-totalizer at remote locations.

PROPELLER is magnetically coupled with the electronic sensor through the sealed gearbox. This completely eliminates water entering the meter assembly, and eliminates all moving parts except for the propeller. 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 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.

DIGITAL INDICATOR-TOTALIZER has a non-volatile EEPROM memory to store totalizer count (updated hourly while running). Features a large two line display. Five digit top line indicates flow rate, and eight digit bottom line provides volumetric flow data. Indicator is available in 22 different units, including GPM, CFS, MGD. Totalizer is available in 20 different units, including Gallons, AF, CF. Units of measurement are user-selectable. Battery life is 6 -10 years. Housing is NEMA 4X rated.

Available with optional 4-20mA and/or pulse output.

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.
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. PROPELLER MAGNET - permanent ceramic type. PROPELLER BEARING - ceramic sleeve type. PROPELLER SPINDLE - ceramic sleeve/stainless steel. PROPELLER - injection molded thermoplastic. GEARBOX - stainless steel. SEPARATOR - stainless steel. METER HEAD BOLTS - stainless steel (3" - 20"), plated steel (24" - 72"). 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	Remote mounting kit with up to 100 feet of cable, totalizer extensions, digital transmitter, 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 Indicator scale & units Totalizer dial units Type of materials and construction Optional equipment desired

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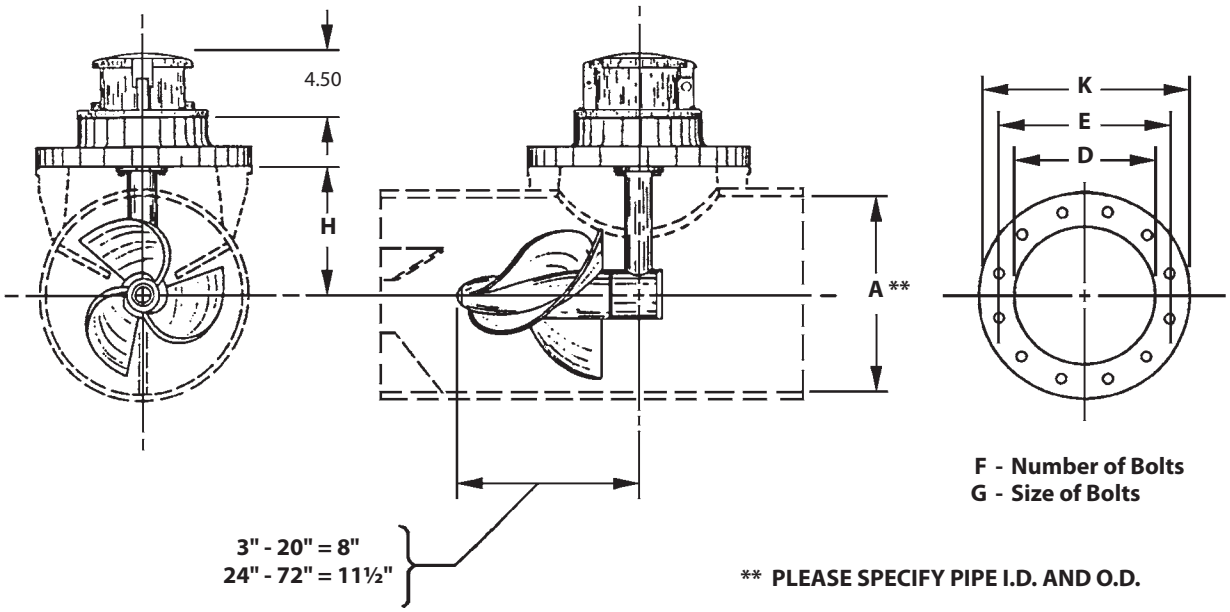

** PLEASE SPECIFY PIPE I.D. AND O.D.

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	3¼	7¾	8	1/2	3¼	9	35
4	55-500-700	200-700	4	4 3/8	7¾	8	1/2	3¼	9	35
6	120-1200-1500	300-1500	6	5 3/8	7¾	8	1/2	4¼	9	35
8	150-1500-2000	400-2500	8 1/8	6½	7¾	8	1/2	5¼	9	35
10	180-2000-3000	500-3500	10¼	8¼	9¾	8	1/2	6½	11	45
12	200-3000-3500	800-5000	12¼	8¼	9¾	8	1/2	7½	11	50
14	300-4000-4500	1000-6000	13½	10	12¼	8	1/2	8½	13½	55
16	400-5000-6000	1200-7500	15¼	10	12¼	8	1/2	9½	13½	55
18	700-6000-7500	1500-9000	17¼	10	12¼	8	1/2	10½	13½	55
20	850-8000-9000	2000-12000	19¼	10	12¼	12	1/2	11½	13½	55
24	1000-10000-13500	3000-15000	23¼	13 3/8	18¾	12	1	15½	21	190
30	1800-15000-21000	4000-25000	29	13 3/8	18¾	12	1	18½	21	190
36	2000-20000-30000	5000-35000	35	13 3/8	18¾	12	1¼	21½	21	190
42	3000-30000-40000	6000-50000	41	23 3/8	29½	20	1¼	25	32	365
48	5500-35000-50000	7000-60000	47	23 3/8	29½	20	1¼	28	32	365
54	6500-45000-55000	8000-65000	53	23 3/8	29½	20	1¼	31	32	365
60	7500-60000-80000	10000-90000	59	23 3/8	29½	20	1¼	34	32	365
66	8500-75000-95000	12000-105000	65	23 3/8	29½	20	1¼	37	32	365
72	9500-90000-115000	15000-125000	71	23 3/8	29½	20	1¼	40	32	365

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