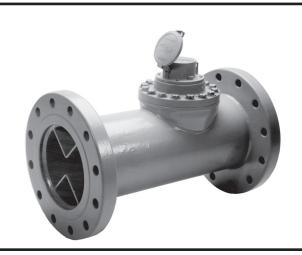


MODEL ML07

300 psi FLANGED TUBE METER SEALED METER MECHANISM - MAGNETIC DRIVE SEALED TOTALIZER

SIZES 2" thru 48"





DESCRIPTION

MODEL ML07 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 flanged end tube design permits use in a wide range of applications with up to 300 psi working pressure. Flanged ends are 300 lb. AWWA class "F" raised face steel flanges. 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 flanged end pipe in the line. 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 one pipe diameter downstream 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 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 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 **TEMPERATURE** RANGE MINIMUM FLOWS

Up to 300 PSI maximum working pressure. 140° F Maximum. Consult factory for special construction for higher temperatures.

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

INTERMITTENT **FLOWS**

As shown for each meter size and construction are rated for continuous operation. See flow chart. 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

PROPELLER - injection molded thermoplastic.

GEARBOX - cast bronze. SEPARATOR - stainless steel.

SHAFTS - stainless steel.

METER HEAD BOLTS - stainless steel (2"-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.

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:

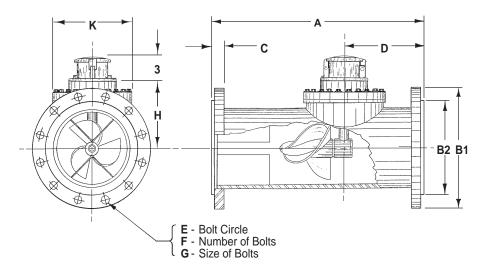
Minimum & maximum flow ranges Temperature of meter environment

Totalizer dial units

Type of materials and construction Optional equipment desired

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METER & PIPE	*LOW VELOCITY	•	HIGH VELOCITY CONSTRUCTION MIN MAX.	DIMENSIONS										
SIZE	MIN MAX.			Α	B1	B2	С	D	E	F	G	Н	K	POUNDS
2	N/A	40-160-225	N/A	18	6 ¹ / ₂	3 5/8	7/8	7	5	8	3/4	5 ³ / ₁₆	9	85
3	40-250	45-250-350	N/A	18	8 1/4	5	1 1/8	7	6 ⁵ / ₈	8	3/4	5 ³ / ₁₆	9	85
4	50-500	55-500-700	200-700	18	10	6 ³ / ₁₆	1 ¹ / ₈	7	7 ⁷ / ₈	8	3/4	5 ³ / ₁₆	9	122
6	90-1200	120-1200-1500	300-1500	22	12 ¹ / ₂	8 1/2	1 ³ / ₈	9	10 ⁵ / ₈	12	3/4	6 ¹ / ₄	9	167
8	100-1500	150-1500-2000	400-2500	24	15	10 ⁵ / ₈	1 ⁹ / ₁₆	9	13	12	7/8	7 1/4	9	237
10	125-2000	180-2000-3000	500-3500	26	17 1/2	12 ³ / ₄	1 ⁵ / ₈	10	15 ¹ / ₄	16	1	8 1/2	11	310
12	150-2800	200-3000-3500	800-5000	28	20 1/2	15	1 ¹³ / ₁₆	10	17 ³ / ₄	16	1 ¹ / ₈	9 1/2	11	400
14	250-3750	300-4000-4500	1000-6000	42	23	16 ¹ / ₄	1 15/16	12	20 1/4	20	1 1/8	10 1/2	13 ¹ / ₂	600
16	350-4750	400-5000-6000	1200-7500	48	25 1/2	18 ¹ / ₂	2 1/16	12	22 1/2	20	1 1/4	11 ¹ / ₂	13 ¹ / ₂	800
18	N/A	700-6000-7500	1500-9000	54	28	21	2 3/16	15	24 3/4	24	1 1/4	12 ¹ / ₂	13 1/2	1080
20	N/A	850-8000-9000	2000-12000	60	30 1/2	23	2 7/16	15	27	24	1 1/4	13 1/2	13 ¹ / ₂	1260
24	N/A	1000-10000-13500	3000-15000	72	36	27 1/4	2 11/16	18	32	24	1 1/2	17 ³ / ₄	23	2040
30	N/A	1800-15000-21000	4000-25000	84	43	35	2 15/16	18	39 ¹ / ₄	28	1 ³ / ₄	20 3/4	23	3220
36	N/A	2000-20000-30000	5000-35000	96	50	42	3 ³ / ₁₆	20	46	32	2	23 3/4	23	4550
42	N/A	3000-30000-40000	6000-50000	96	57	50 ⁷ / ₁₆	3 ⁷ / ₁₆	24	52 ³ / ₄	36	2	28	36	5900
48	N/A	5500-35000-50000	7000-60000	96	65	58 ⁷ / ₁₆	3 9/16	24	60 ³ / ₄	40	2	31	36	7200

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.

