



# Hot Water Meters

## 5/8" to 2"

Rugged, durable and highly accurate, these meters can take the heat.



Velocity-type meter meeting or exceeding the performance requirements of AWWA Standard C-708. Water, evenly distributed through multiple inlet ports, flows past an impeller in the measuring chamber, creating an impeller velocity directly proportional to water flow rate.

The meter's register integrates velocity into totalized flow. Meters are designed to operate up to 194 degrees Fahrenheit.

### FEATURES & BENEFITS

- Operates up to 194 degrees Fahrenheit
- Meets All AWWA Standards
- Tamper Detection and Prevention
- High-Quality, Long-Life Parts
- Durable Basket Strainer Protects From Damage

### TECHNICAL SPECIFICATIONS:

**Application** Measurement of clean hot water in one direction only, typically found in residential services, submetering service or similar applications.

**Design/Operation** Velocity type meter where in-flowing water, distributed through multiple inlet ports, flows past an impeller in the measuring chamber, creating a velocity directly proportional to water velocity. The meter's register integrates velocity into total flow.

**Temperature** Designed for continuous operation at liquid temperatures up to 155°F with occasional short duration excursions to a liquid temperature of a maximum of 194°F.

**Main Case** Bronze main case of either 81 percent copper or of un-leaded bronze composition, trimmed in red to designate hot water application. 5/8" to 1" sizes provided with externally threaded ends. 1-1/2" and 2" supplied with either threaded ends or oval flanged ends. 5/8" to 1" designs incorporate wrench pads to aid installation.

**Measuring Chamber** The measuring chamber housing and measurement element are constructed of a durable synthetic polymer, and can be easily removed from the main case without removal of the meter from the line. The chamber housing is constructed in two parts, to allow access to the impeller.

Measurement surfaces are not wear surfaces, providing sustained accuracy despite the presence in the water of entrained solids. In the normal flow range, the meter's impeller is suspended in the water flow; no wear occurs because there is no surface contact between impeller and chamber. At very low flows, when the impeller can ride against the chamber shaft, a long-life, sapphire rotor bearing serves as a wear surface to significantly extend meter life.

**Magnetic Drive** A reliable, direct magnetic drive provides linkage between measurement element and register. No intermediate gearing is required; no gearing is exposed to water.

**Register** Direct read, DIALOG® Meter Reading System and Electrical Output Registers are available. A six wheel odometer is standard. Direct read and Electrical Output Registers incorporate high resolution test circles.

**Register Sealing** All registers are permanently sealed, with stainless steel base and wrap-around gasket to prevent intrusion of dirt or moisture. Direct read and DIALOG System registers incorporate a tempered glass lens.

**Registration Units** Registration available in U.S. gallons, cubic feet, or cubic metres.

**Low Flow/Leak Indicator** Center mounted indicator, with high sensitivity, resulting from direct measurement element linkage.

**Strainer** A rugged, 360-degree polymer strainer protects the critical measuring element from damage due to entrained solids.

**Adjusting Port** Sealed after factory calibration. Port is accessible for utility recalibration, to compensate for inaccuracy in older meters without parts replacement.

**Tamper Detection** The Master Meter Multi-jet adjusting port is sealed to prevent tampering and provides a visual indication of tampering.

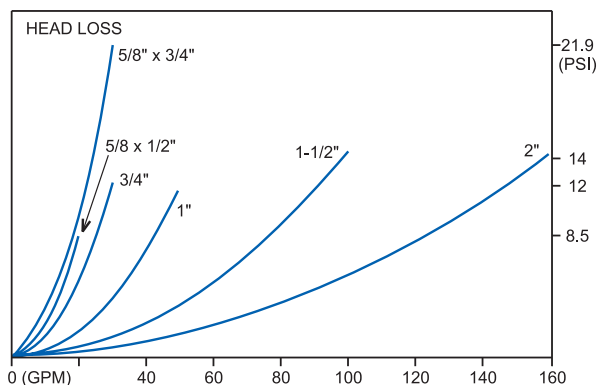
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METER OPERATING CHARACTERISTIC/DIMENSION	5/8" X 1/2"	5/8" X 3/4"	3/4"	1"	1-1/2"	2"
Maximum Flow Rating (gpm)	20	20	30	50	100	160
Continuous Flow (gpm)	10	10	15	25	50	80
Normal Flow Range (gpm)	1-20	1-20	2-30	3-50	5-100	8-160
Low Flow (gpm)	1/4	1/4	1/2	3/4	1-1/2	2
Maximum Working Pressure (psi)	150	150	150	150	150	150
Continuous Operating Temperature (F)	155°	155°	155°	155°	155°	155°
Length	7-1/2"	7-1/2"	9"	10-3/4"	FL: 13" TH: 12-5/8"	FL: 17" TH: 15-1/8"
Height (standard register with lid)	4-1/8"	4-1/8"	4-1/8"	3-7/8"	6-3/4"	7-5/8"
Height (DIALOG Equipped)	4-7/8"	4-7/8"	4-7/8"	4-5/8"	7-1/2"	8-3/8"
Width	3-3/4"	3-3/4"	3-3/4"	4-1/8"	5-3/8"	5-3/4"
Width (DIALOG Equipped)	4-1/2"	4-1/2"	4-1/2"	4-1/2"	5-3/8"	5-3/4"
Weight (lbs.)	3.75	4	4.25	5	FL: 12 TH: 11	FL: 24 TH: 20
Packed To Carton	6	6	6	4	1	1
Carton Weight (lbs)	46	25.4	35	21.5	FL: 14 TH: 12	FL: 26 TH: 22

FL = Flanged  
TH = Threaded

Head Loss Curves



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MMDS MJHWM-582 Rev11/02/06



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