

DESCRIPTION

THE 8" RECORDALL COMBO METER ASSEMBLY consists of a stainless steel spool with bypass port, a 8" Recordall® Turbo Series Meter with AWWA class II measuring chamber, a Check Valve with bypass piping, valves, and a M120 Recordall Disc Meter. The Meter Assembly is designed to measure both low flow domestic use and high volume usage through a single water supply line.

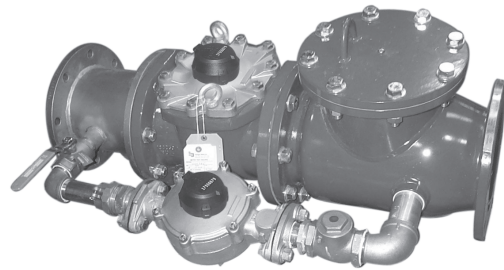
INSTALLATION is made similar to placing a length of flanged end pipe in the line. The 175 lb. AWWA Class "D" steel flanged end design permits use in a wide range of applications. The meter must have a full flow of liquid for proper accuracy. It must be installed in horizontal applications only.

TURBINE METER: Water flows into the meter's measuring element contacting the multi-vaned rotor. Flow readings are obtained by rotor revolutions transmitted by magnetic drive coupling through the meter's cover plate to the sealed register. Magnetic drive is achieved by a right angle worm drive, coupling the rotor to a vertical transmission spindle, driving a gear set rotating the magnet carrier. A ceramic magnet in a carrier rotates around a vertical axis. Rotor rotation is transmitted to the register gearing through this magnetic coupling.

The turbo measuring element is designed to greatly reduce wear by reducing friction potential between the moving parts of the rotor and bearing system. Less wear, in this critical area of the design, provides the utility manager with a lower life cycle cost for meter application.

CHECK VALVE is a spring loaded check valve on the downstream side of the clapper to hold the clapper in a normally closed position. Small water flows by-pass the clapper and are registered on the 1½" by-pass meter. This allows for accurate registration of domestic use. When a major flow is required, the water pressure will overcome the mechanical advantages of the spring loaded clapper and push it open, permitting full pipe capacity flow during high flow demand. A small amount of water will continue to flow through the by-pass when the spring loaded clapper is fully open. The check valve contains dual bypass ports, allowing an extra 2" NPT connection as a test port.

BY-PASS LINE consists of piping with a 1½" Recordall Model 120 Disc Meter, an isolation valve, and back flow preventing check valve. The by-pass line can be installed on the right hand side (as shown) or left hand side when specified.



SPECIFICATIONS

TYPICAL OPERATING RANGE (100% ± 1.5%)	2½-4500 GPM.
MAXIMUM OPERATING PRESSURE	150 PSI.
MAXIMUM OPERATING TEMPERATURE	105° F.
TYPICAL LOW FLOW (95% MIN.)	1¼ GPM.
MAXIMUM CONTINUOUS OPERATION	3500 GPM.
MAXIMUM INTERMITTENT FLOW	4500 GPM.
PRESSURE LOSS AT MAXIMUM CONTINUOUS OPERATION	6.3 PSI.

MATERIALS

NOSE CONE AND STRAIGHTENING VANES	thermoplastic
ROTOR	thermoplastic
ROTOR RADIAL BEARINGS	lubricated thermoplastic
ROTOR THRUST BEARINGS	sapphire jewels
ROTOR BEARING PIVOTS	passivated 316 stainless steel
CALIBRATION MECHANISM	stainless steel and thermoplastic
MAGNET	ceramic
REGISTER LID AND SHROUD	thermoplastic, bronze
TRIM	stainless steel
BY-PASS MEASURING CHAMBER	injection molded thermoplastic
METER HOUSING	fusion bonded epoxy coated ductile cast iron
BY-PASS METER HOUSING	cast bronze (B81), Low Lead Alloy (LL)
CLAPPER	stainless steel
CLAPPER SPRING	stainless steel
CLAPPER HINGE & PINS	stainless steel
CLAPPER SEAL	elastomer, EPDM
VALVE SEAT	cast brass
VALVE BODY AND COVER PLATE	fusion bonded epoxy coated steel
VALVE COVER PLATE GASKET	elastomer sheet
BY-PASS	Water works brass piping conforming to AWWA C800
SPOOL BODY	Stainless steel, with stainless steel bypass port. Standard steel flange connections (ANSI/AWWA C-207 class D) with zinc chromate plating

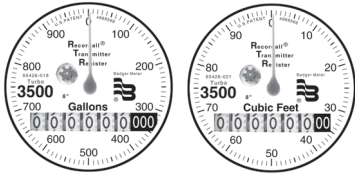
OPTIONAL EQUIPMENT Includes transmitters with remote read capabilities, companion flanges, and various pipe sizes are available in Cl or bronze.

SHIPPING WEIGHT 357 pounds shipped fully assembled.
CERTIFICATION Valve conforms to UL 312 and FM 1045. Turbine meter measuring chambers are AWWA class II. Disc meter conforms to AWWA C700.

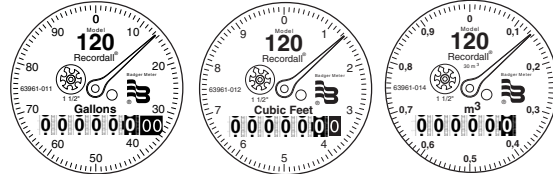
ORDERING INFO Must be specified by the customer and includes: Size, minimum & maximum flow range, totalizer dial units, optional equipment desired. Standard side for by-pass meter is right hand (shown above) unless specified otherwise.



8" RECORDALL® COMBO METER

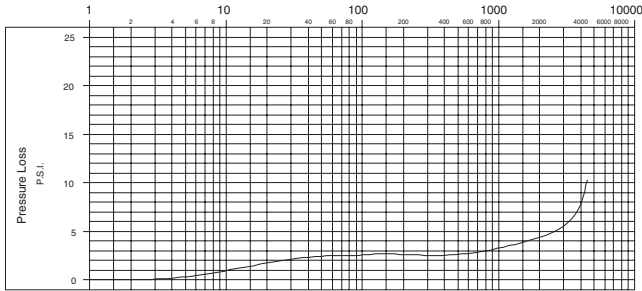


Mainline Registers

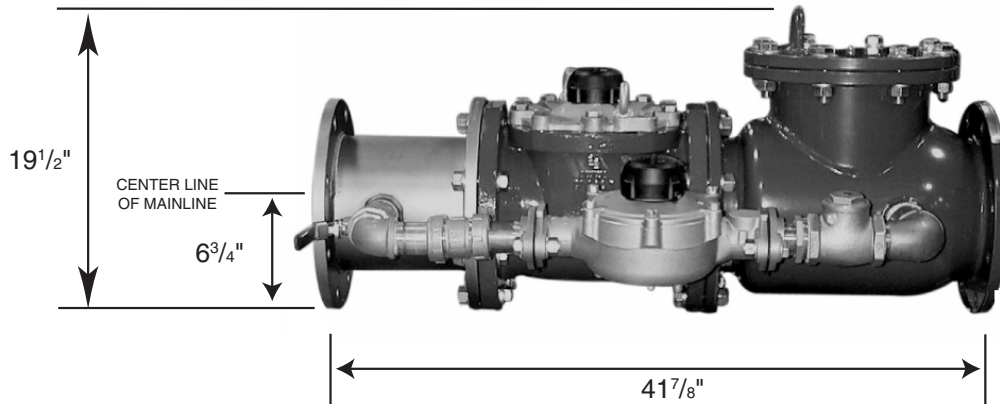
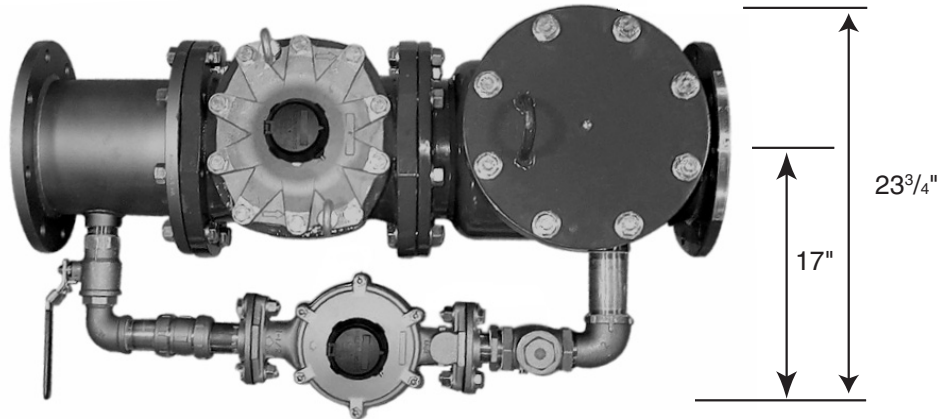
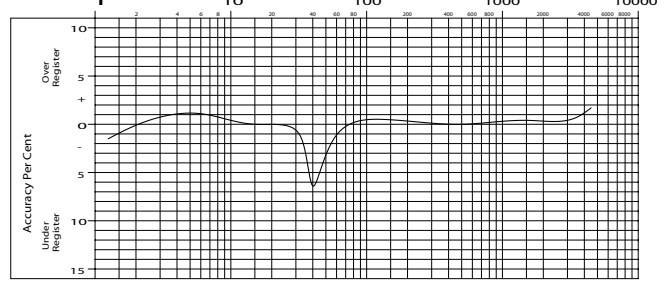


By-Pass Registers

PRESSURE LOSS CHART
Rate of Flow, in Gallons per Minute



ACCURACY CHART
Rate of Flow, in Gallons per Minute



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