

<p>Model FSMA-01</p>	<p>10" Model FSMA-01 FM Approved - 175 PSI Flanged UL Listed Fire Series Meter Turbine Meter with Strainer</p>	<p>Technical Brief</p>
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DESCRIPTION

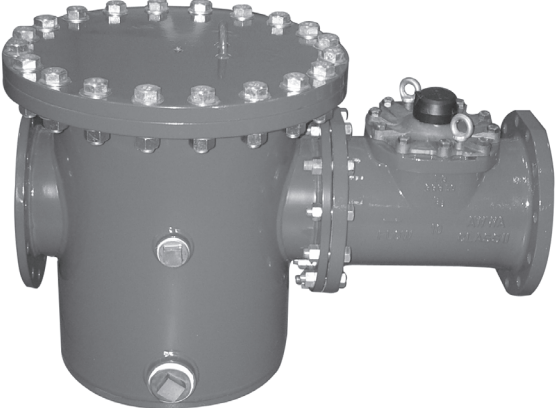
MODEL FSMA-01 FIRE SERIES METER consists of at least a six times open area strainer and a 10" Recordall® Turbo Series Meter with AWWA class II measuring chamber. The Fire Series Meter is designed to measure high volume usage, such as when a building's fire sprinklers are activated, through a single water supply line.

INSTALLATION is made similar to placing a length of flanged end pipe in the line. The 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.

STRAINER is at least six times open area and is used exclusively in fire series systems to prevent clogging. The strainer is equipped with two 3" flushing ports for flushing debris from the upstream side of the strainer screen. Optional valve available for flushing port.

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. Throughout the normal operating range of the meter, the rotor floats between the thrust bearing system.



SPECIFICATIONS

TYPICAL OPERATING RANGE	50-7000 GPM.
	(100% ± 1.5%)
MAXIMUM OPERATING PRESSURE	175 PSI.
MAXIMUM OPERATING TEMPERATURE	120° F.
TYPICAL LOW FLOW (95% MIN.)	40 GPM.
MAXIMUM CONTINUOUS OPERATION	5500 GPM.
MAXIMUM INTERMITTENT FLOW	7000 GPM.

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, zinc plated carbon steel
TURBINE SHAFTS & BOLTS	stainless steel
METER HOUSING	fusion bonded epoxy coated ductile cast iron
STRAINER SCREEN	stainless steel
STRAINER BODY	fusion epoxy coated steel

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

SHIPPING WEIGHT 765 pounds shipped fully assembled.

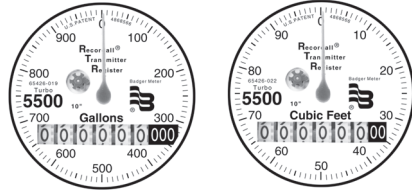
CERTIFICATION Fire Series Meter conforms to UL 327, FM 1044 and AWWA C703. Strainer conforms to UL 321 and FM 5551. Strainer open area is at least six times the area of the nominal pipe size. Meter measuring chamber is AWWA class II.

ORDERING INFO Must be specified by the customer and includes: Size, minimum & maximum flow range, register units, optional equipment desired.

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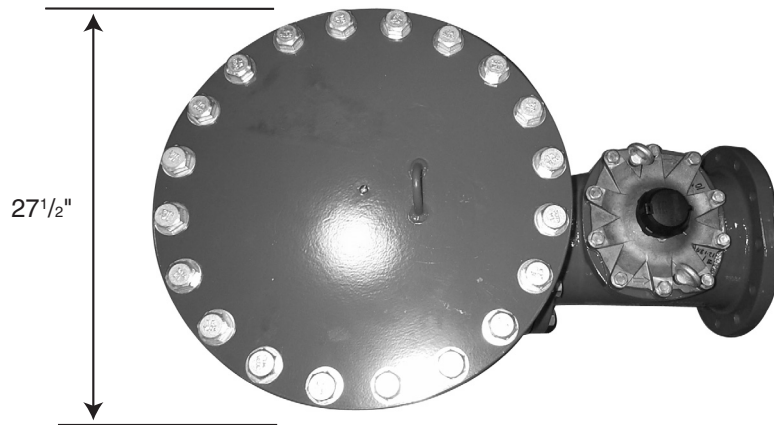
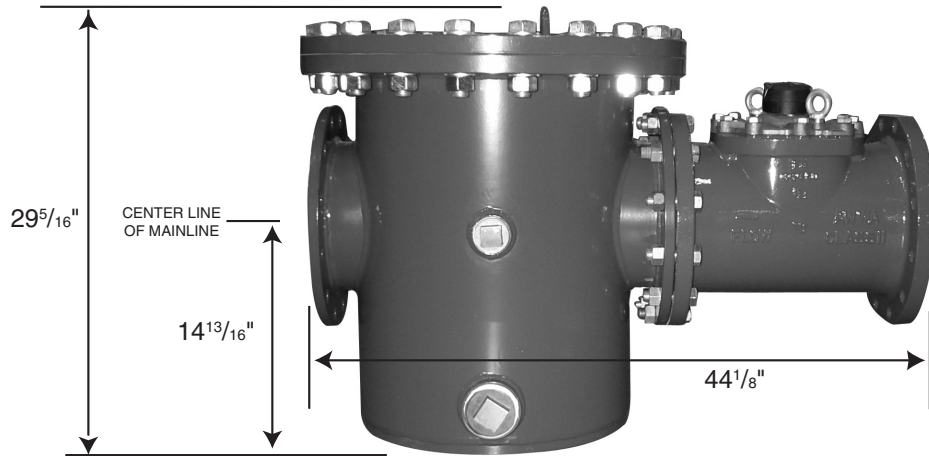
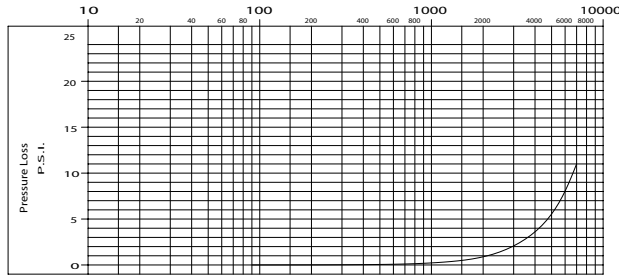
10" MODEL FSMA-01

SERVICE APPLICATIONS



REGISTERS

PRESSURE LOSS CHART
CONSISTS OF CAST IRON TSM WITH AMES SHORT STRAINER
RATE OF FLOW IN GALLONS PER MINUTE



Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists.



BadgerMeter, Inc.

P.O. Box 245036, Milwaukee, WI 53224-9536
(800) 876-3837 / Fax: (888) 371-5982
www.badgermeter.com



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www.badgermeter.com
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