

Fire Service Meter without Bypass

Sizes 3", 4", 6", 8", 10"

Features

APPLICATIONS: The Hersey® Meters FM³ fire service meter is designed for combined fire service and domestic water where a single supply line supports both fire and domestic or process needs and usage is consistently moderate to high. The meter may be utilized in automatic sprinkler systems and fire service, as a master meter for an entire water system, as a master meter for zoned systems, and for domestic or processed water where accuracy across a broad range of flows is critical. The FM³ meter eliminates the need for secondary service lines, saving time and reducing installation expenses and is compliant for all UL®, FM®, NSF®-61 fire service meter applications.

CONSTRUCTION: Every Hersey FM³ meter is manufactured with epoxy coated ductile iron construction which eliminates additional gaskets and fasteners, reducing ongoing maintenance costs. The unique, Hersey strainer design protects the horizontal turbine meter measuring element in a unibody construction that reduces meter vault and installation costs due to its compact size and reduced weight while providing the specified strainer surface area. The unitized turbine measuring element is easily accessed through the epoxy coated top case of the meter and o-ring seals simplify field service.

REGISTER: The permanently sealed registers use proven magnetic drive design and the exclusive Hersey triple seal provides clarity and error free meter reading. Internal gears are self lubricating, molded plastic for minimal friction and a long service life. Standard visual read and electronic Translator® registers offer odometer wheels with a totalizing display and 360° degree test circle with center sweep hand and a low flow indicator. All Hersey FM³ models are available with electronic meter reading system components to meet any utility requirement and are protected by the unique Hersey locking pin.

OPERATION: During operation, all water flows through the sensitive horizontal turbine measuring element for accurate registration. The element employs Hersey's unique Retro-Thrust® feature to divide wear across multiple points, increasing accuracy, reducing friction and extending the life of the measuring element. Integral flow straightening vanes on the inlet and outlet sides of the measuring element contribute to the long term accuracy of the meter.

INSTALLATION: Hersey FM³ meters are designed for horizontal installation with a minimum of five times the inlet pipe diameter of straight pipe prior to the meter and a minimum of three times the pipe diameter after the meter.

MAINTENANCE: All service components for the FM³ are unitized for easy replacement. Access to components is accomplished through the top side of the meter for full in-line service. Drop In Measuring Elements (DIMEs) are available in pre-tested configurations which include a new measuring element, top case, register and o-ring for utilities that require quick field change outs. A calibration vane permits field adjustments to ensure accurate registration and extend the service life of the measuring element. The calibration vane is protected by the register and the locking pin for added security. For additional information regarding Mueller Systems' unitized replacement options, please contact the Mueller Systems Sales and Technical Support Group at 800-323-8584.



3" FM³ Fire Meter

FM³ without Bypass

Materials and Specifications

MODEL	FM ³ Fire Service Meter
SIZES	3", 4", 6", 8", 10"
STANDARDS	Manufactured and tested to meet or exceed all applicable parts of AWWA C703, FM® approved; UL® listed, NSF®-61 compliant
INSTALLATION	Horizontal only with 5X pipe diameter of straight pipe (same size as meter) on inlet and 3X on outlet side of meter
OPERATING FLOW RANGE	See Chart on the following page
ACCURACY	See Chart on the following page
PRESSURE LOSS	See Chart on the following page
MAXIMUM WORKING PRESSURE	175 PSI
WATER TEMPERATURE RANGE	33°F to 100°F
MEASURING ELEMENT	Mainline: Horizontal Turbine Element Drop In Measuring Elements (DIME)
METER CONNECTIONS	ANSI class 125 standard end flanges
Options	All AMR/AMI Reading Systems

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FM³ without Bypass

Meter Registration

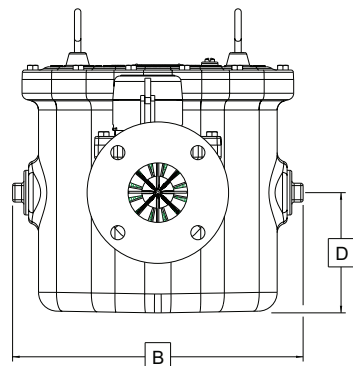
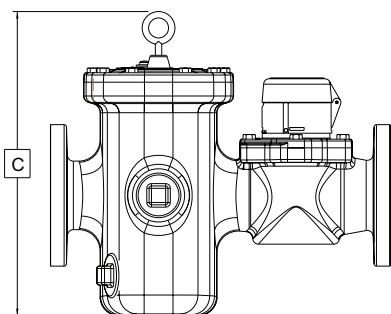
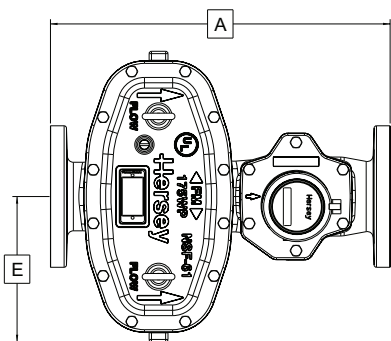
Meter Size	Initial Dial*	Capacity	Initial Dial*	Capacity
3"	100 Gallons	100 Million	10 Cubic Feet	10 Million
4"	100 Gallons	100 Million	10 Cubic Feet	10 Million
6"	1000 Gallons	1 Billion	100 Cubic Feet	100 Million
8"	1000 Gallons	1 Billion	100 Cubic Feet	100 Million
10"	1000 Gallons	1 Billion	100 Cubic Feet	100 Million

*Registration equal to one full revolution of the sweep hand.

Flow Characteristics

Meter Size	Typical Low Flow (95% Minimum)	Typical Operating Range (100% ± 1.5%)	Maximum Continuous Operation	Maximum Intermittent Flow
3"	3 GPM	6 to 600 GPM	600 GPM	750 GPM
4"	4 GPM	8 to 1000 GPM	1000 GPM	1250 GPM
6"	9 GPM	15 to 2000 GPM	2000 GPM	2600 GPM
8"	18 GPM	30 to 3500 GPM	3500 GPM	4400 GPM
10"	30 GPM	40 to 5500 GPM	5500 GPM	7000 GPM

Dimensions and Weights

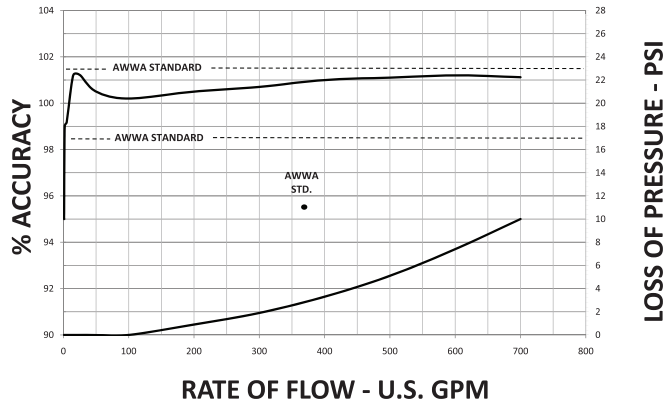


Meter Size	3"	4"	6"	8"	10"
Dimension					
A	18"	20"	24"	28"	39-1/4"
B	16"	15-15/16"	22"	26-1/4"	33-1/4"
C	16"	19"	24-1/4"	25-15/16"	31-7/16"
D	6-3/8"	9-3/8"	11-1/2"	11-9/16"	14"
E	8"	8"	11"	13-1/8"	16-5/8"
Weight	120	140	340	465	960

NOTE: Weights are in pounds and are approximate.

Performance

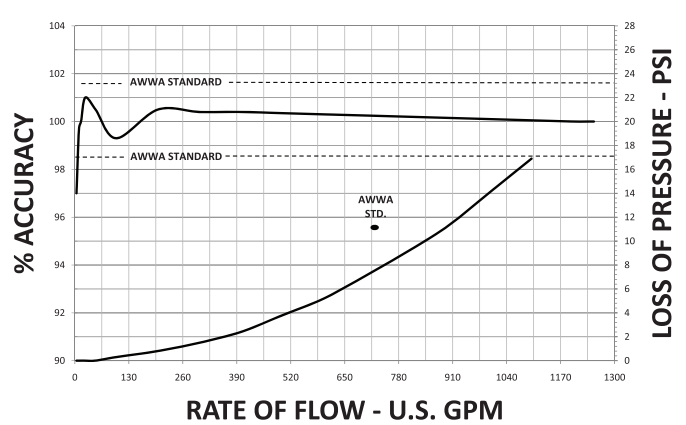
Head Loss and cy – 3"



NOTE: Performance curves are typical only and NOT a guarantee of performance.

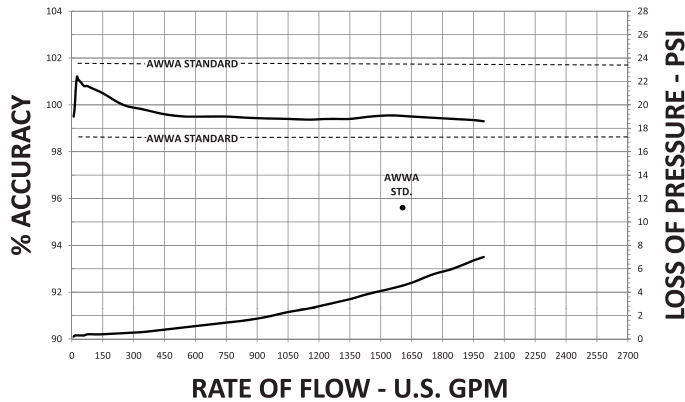
Performance

Head Loss and Accuracy – 4"



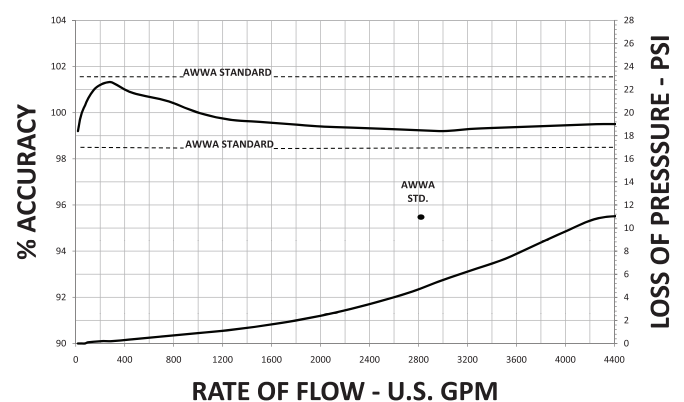
NOTE: Performance curves are typical only and NOT a guarantee of performance.

Head Loss and Accuracy – 6"



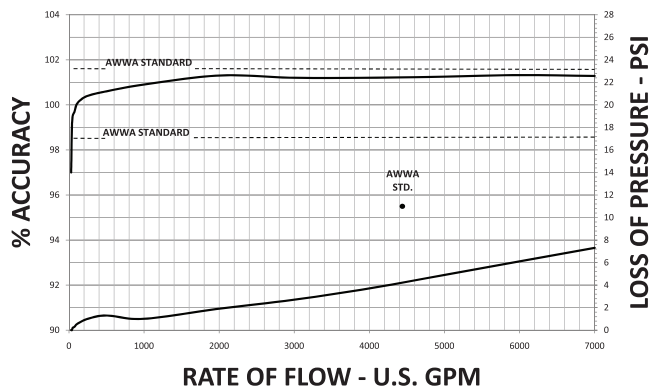
NOTE: Performance curves are typical only and NOT a guarantee of performance.

Head Loss and Accuracy – 8"



NOTE: Performance curves are typical only and NOT a guarantee of performance.

Head Loss and Accuracy – 10"



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