

ZENNER Residential Fire Sprinkler Meters Multi-Jet Type Magnetic Drive Cold or Hot Water Meters

Model ZMF/PMF

Sizes: 3/4", 1", 1-1/2" and 2"

U.S.A. Patent No. US 6345541 B1

U.S.A. Patent No. US 6931946 B1



ZMF07

INTRODUCTION: ZENNER Residential Fire Sprinkler Meters utilize a unique patented multi-jet and dual element strainer to measure low flow rates comparable to traditional positive displacement meters with the high flows required of residential fire service meters. These Meters are designed for use in any application where residential fire suppression systems are being used. They are designed to measure cold potable water where flow is in one direction only in residential and domestic use applications.

OPERATION: Water flows through the meter's dual strainer and into the measuring chamber where it drives the impeller. A drive magnet transmits the motion of the impeller to a driven magnet located within the hermetically sealed register. Powerful two pole Rare Earth magnets eliminate slipping and uncoupling to increase overall accuracy. The magnet is connected to a gear train which translates the impeller's rotation into volume totalization which is displayed on the register dial face. The design of these meter measuring elements allow suspended particulate matter to pass through the meter without locking up the meter and restricting the flow.

HIGH TEMPERATURE CONSTRUCTION: ZENNER Residential Fire Sprinkler Meters consist of three basic components: main case, measuring chamber and sealed register. The main cases are constructed using C89833 Brass Alloy. Measuring Chambers, encapsulated in a dual element strainer (surface area of the screen openings are a minimum of 2 times the cross-sectional area of the pipe waterway) are constructed of a durable high temperature synthetic polymer. These meters can withstand super heated water back-flowing into the meter without melting and blocking the flow of water to the sprinklers located in the dwelling.

REGISTRATION: ZENNER Residential Fire Sprinkler Meters utilize a magnetically driven, hermetically sealed design. The sealed design eliminates dirt and moisture infiltration as well as prevents fogging. The register includes a large odometer-type totalization display, center sweep hand (360°) test circle, low flow leak detector. All ZENNER Meters have electronic output capabilities for easy conversion to Automated Meter Reading. 3/4" through 1" capacities are: 10,000,000 Gallons, 1,000,000 Cubic Feet, 100,000 Cubic Meters, 6 odometer wheels. 1-1/2" registration capacities are: 100,000,000 Gallons, 10,000,000 Cubic Feet, 1,000,000 Cubic Meters, 6 odometer wheels.

CONFORMANCE: ZENNER Residential Fire Sprinkler Meters are tested and comply with AWWA C714, AWW C708 and UL Subject 327A. These Meters comply with the lead-free provisions of the Safe Drinking Water Act and are certified to NSF/ANSI Standard 372.

APPLICATIONS: International building code, International fire code, International residential code, NFPA 101 life safety code, NFPA 5000 building construction and safety code, NFPA 1 uniform fire code and national fire sprinkler association standards NFPA 13D and NFPA 13R. The above listed codes all now require sprinkler protection for all new single family dwelling units, up to four stories in height.

TAMPERPROOF FEATURES: Customer removal of the register to obtain free water is prevented through the use of a locking device that requires a special tool, only available to water utilities.

Residential Fire Meters

MODEL		ZMF03 PMF03	ZMF07 PMF07	ZMF09	ZMF12
SIZE		3/4" Short	1"	1-1/2" Flanged	2" Flanged
Maximum Continuous Flow	USGPM	30	50	80	100
Normal Flow	USGPM	2 - 30	3 - 50	5 - 100	8 - 160
Low Flow (Manufacturers Tested Low Flow Rate)	USGPM	3/4	1	1-1/2	2
Extreme High Flow (Intermittent)	USGPM	50	100	160	180
Maximum Working Pressure	P.S.I.	175	175	175	175
Maximum Temperature	Deg. F	194	194	194	194
Length	Inches	7 1/2	10 3/4	13	17
Length With Couplings	Inches	12 1/2	16 1/2	-	-
Height	Inches	5 3/8	7	7	7
Weight	Pounds	7	13	20	25



ZMF09



ZMF03