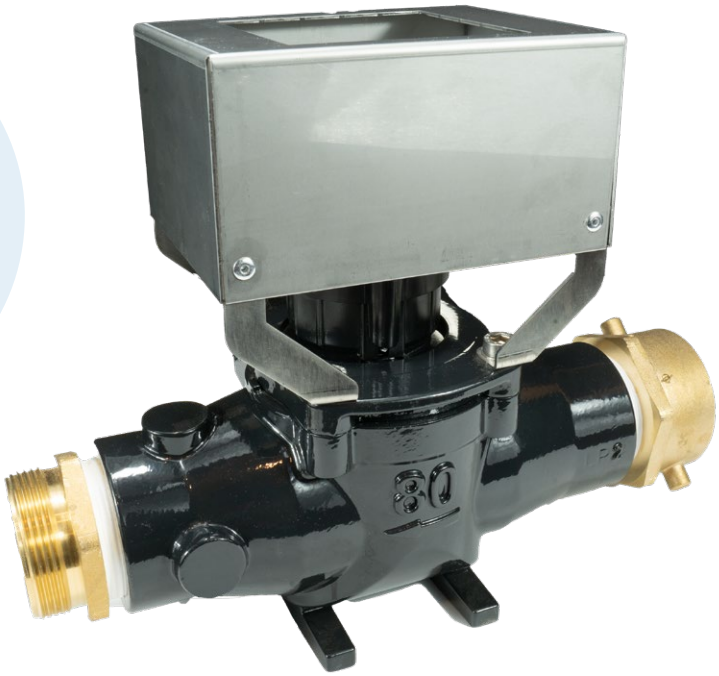
METRON Spectrum® HYDRANT



Spectrum® Hydrant Meter

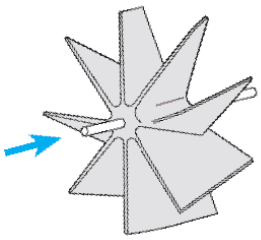
Product Datasheet

Applications

The Spectrum Hydrant is a hydrant meter with a flow range suitable for measuring fire hydrants and other fire service systems. The lightweight, aluminum body meter can be fitted for any utility or construction requirements. The Spectrum Hydrant has a robust turbine measuring element capable of withstanding the high flow and start/stop punishment of these applications. A full cage can be provided to protect the register and optional GPS unit from damage at construction sites and during transportation.

Fitting the Spectrum Hydrant meter with a Prism™ register conveniently provides remote cellular-based readings via Metron's Waterscope System. This allows the utility to track reads and consumption during the meter's field time. An optional GPS unit also allows the utility to track the location of the meter on Google™ Maps.

Operations



The Spectrum Hydrant meter utilizes an innovative bearing design based on the proven Woltman turbine concept. A turbine is mounted on a shaft oriented parallel to the flow stream. The water forces the blades of the turbine to rotate the shaft in proportion to the velocity of the flow.

Due to the advanced bearing design, the meter maintains accuracy at almost any orientation, including vertical.

Design Features

- Calibratable measuring chamber
- Field replaceable measuring chamber
- Protective register cage
- Lightweight epoxy coated aluminum body
- For horizontal or vertical installation
- Outstanding long-term accuracy through hydraulic bearing relief
- Register head can be rotated 365° for easier reading
- Compatible with Prism electronic registers
- Optional GPS tracking device

Materials

The Spectrum Hydrant meter is designed and manufactured to meet or exceed AWWA C701 Class II standards design and performance specifications.

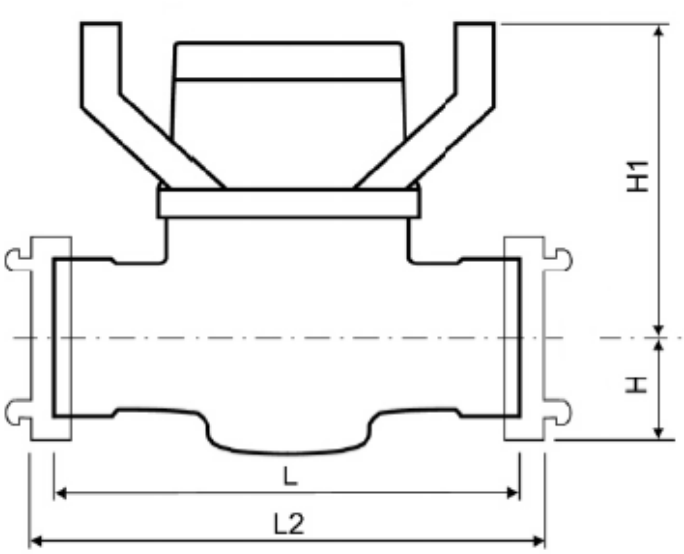
Standards

AWWA C701 Class II – Cold Water Meters - Turbine Type, for Customer Service

Mechanical Specifications

DIMENSIONS

Size	3”
Nominal Thread Diameter	2.5”
Lay Length (no couplings)	11.8”
Overall Height	9.875”
Bottom Centerline Height	3.375”
Top Centerline Height	5.5”
Overall Width	6.5”
Weight	18.35 lbs



MATERIALS

Body	Aluminum
Register housing	Thermoplastic

MARKINGS

Engraved on meter body: Model, Direction of Flow arrow

Flow & Pressure Specifications

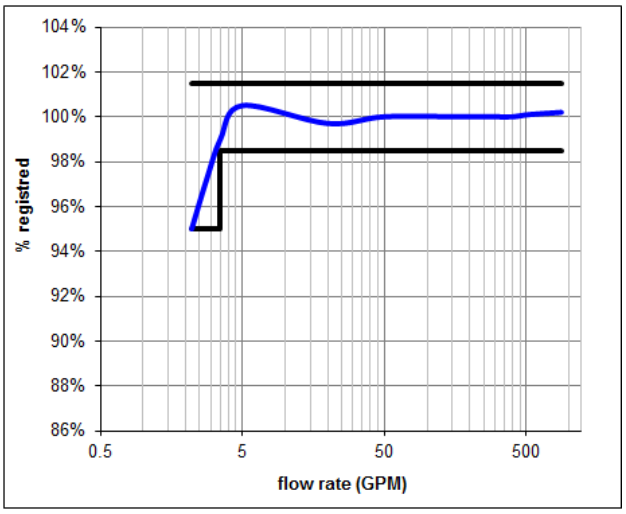
Normal Operating Range (98.5 to 101.5%)	3.5 to 528 gpm	(0.8 to 636 m3/hr)
Low Flow (95% min)	2.2 gpm	(0.5 m3/hr)
Max Continuous Duty[1]	528 gpm	(636 m3/hr)
Max Intermittent[2]	880 gpm	(200 m3/hr)
Pressure Loss at Max Continuous	1.45 psi	(0.1 bar)
Max Operating Pressure	230 psi	(15.9 bar)
Max Operating Temperature	140 °F	(60 °C)

Notes

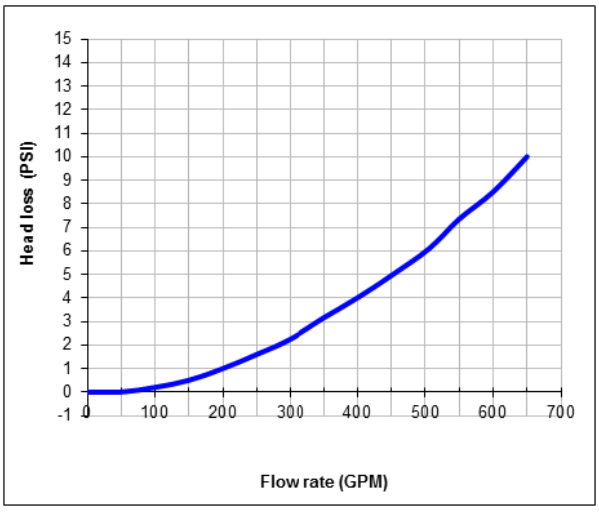
1 Max Continuous defined by AWWA as flow rate which can be maintained 24 hrs/day x 7 days/week

2 Max Intermittent defined as flow rate which can be maintained 1 hr/day average

Flow Accuracy

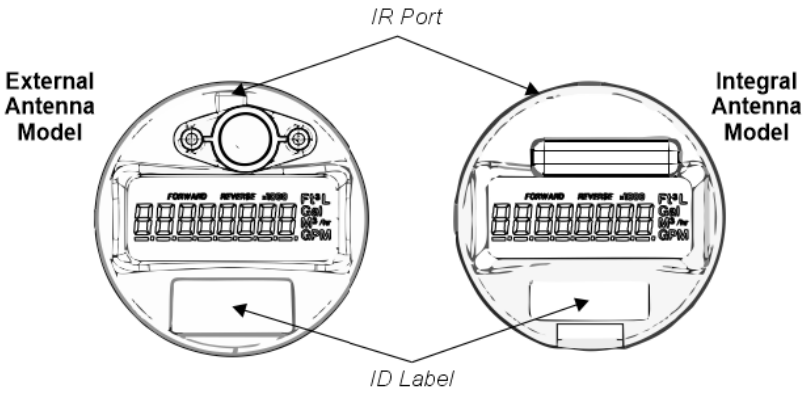


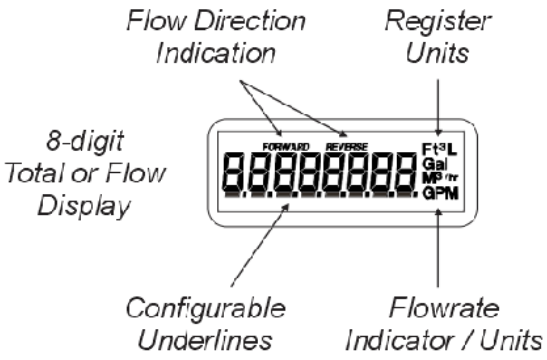
Pressure Drop



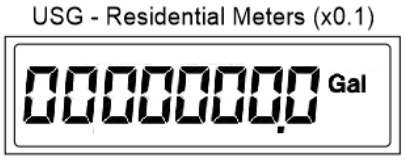
Registers

The Prism™ electronic register is the water industry's new standard for register performance, offering maximum resolution, a multitude of standard features, on-board data logging and a variety of cellular, AMI, AMR and SCADA output options. The Prism is designed for all environments and incorporates the largest battery available for utility applications. It can be deployed on any Metron Spectrum Jet, Spectrum Hydrant and Spectrum PD water meter.

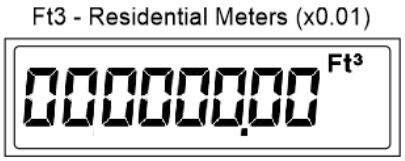


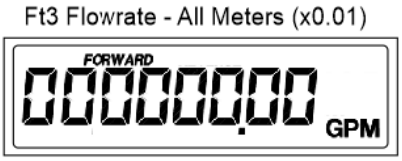


USG Configuration
0.1 Gallon Resolution

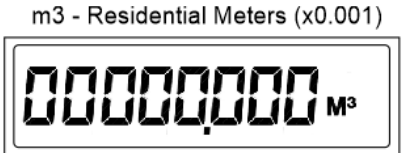


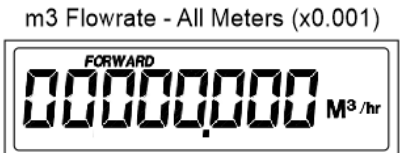
Ft3 Configuration
0.01 Ft3 Resolution





m3 Configuration
0.001 m3 Resolution





Warranty

Please contact your Metron representative for formal warranty certificates.

Legal

Due to updated regulations and product improvements, Metron reserves the right to change the product specifications without notice.