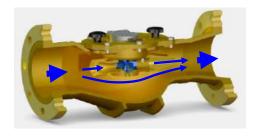
Metron-Farnier Smart Water Meters & Systems

APPLICATIONS

The Enduro water meters are single element, wide range industrial meters. The Enduro Model-D meters utilize a top-loading chamber to insert a small diameter Spectrum meter within the flow stream. This unique system allows for unparalleled accuracy and durability at both high and low flows within a compact meter body. The Enduro meters are an ideal solution for most industrial metering applications.

OPERATIONS

Water enters the meter passing over an in-line water conditioner that directs the water through a small diameter Spectrum meter that proportionally measures the total water flow. This incoming water rotates a suspended impeller in the measuring chamber. A low friction pivot bearing supports the impeller at low flow rates while an upper thrust bearing provides the support at high flow rates. The impeller has an attached magnet at its top for the register interface.



All bearing materials are fortified for minimal wear during high-flow stress. The impeller shaft utilizes tungsten tips to minimize wear and ensure long-term accuracy. The Enduro Model-D meters come with integral flanges (either 6" or 8").

To maintain accuracy, the meter must be installed horizontally ($\pm 10^{\circ}$) in the direction of water flow. Enduro meters come with an integral test port on the outlet. Although regular maintenance is not required, the Enduro meters have a top-loading measurement chamber for simple access without removing the meter from service.

All Enduro meters utilize innov8 registers. These sealed electronic registers provide a high resolution interface to the meter and have multiple output options. All registers are attached with a robust tamper-resistant housing.



DESIGN FEATURES

- High accuracy
- Wide range 1000:1 turndown
- Superior low flow registration
- Minimal pressure loss
- Long-term durability
- Low and high flow models to accommodate variety of industrial applications
- No regular maintenance
- Small, compact design for simple installations
- Excellent performance in adverse conditions
- Unaffected by sand or small debris in line
- No straight pipe requirements upstream or downstream of meter
- Strainers available for FM Fire Service
- 5-year flange-to-flange warranty

MATERIALS

All Enduro meters are designed and manufactured to meet or exceed AWWA C712 standards design specifications. All Enduro meters meet or exceed AWWA C701 standards Class II turbine meter performance.

All Models are maintained with NSF-61G lead-free certifications.

STANDARDS

AWWA C712 – Single-Jet Meters NSF-61G – Drinking Water System Components Health Effects

MECHANICAL SPECIFICATIONS

 Enduro 2800
 6-inch (150mm)
 8-inch (200 mm)

 Flanges
 Round 8-bolt
 Round 8-bolt

 Lay Length
 24" (610 mm)
 24" (610 mm)

 Dimensions
 See drawing
 See drawing

 Weight
 121 lb (54.88 kg)
 142 lb (64.4 kg)

Test Port Integral 2" NPT threads Integral 2" NPT threads

 Enduro 3600
 6-inch (150mm)
 8-inch (200 mm)

 Flanges
 Round 8-bolt
 Round 8-bolt

 Lay Length
 24" (610 mm)
 24" (610 mm)

 Dimensions
 See drawing
 See drawing

 Weight
 121 lb (54.88 kg)
 142 lb (64.4 kg)

Test Port Integral 2" NPT threads Integral 2" NPT threads

Strainers Fireflow-rated strainers available

Contact Metron for additional information

MATERIALS

Body & Top-plate: ASTM C917 - Lead Free Brass

Impeller:PolypropyleneImpeller Bearings:Tungsten CarbideImpeller Shaft:AISI 303, Nivaflex tipRegister Housing:Thermoplastic

TAMPER FEATURES

Register Tamper-resistant screw

MARKINGS

Engraved on Meter Body: Model

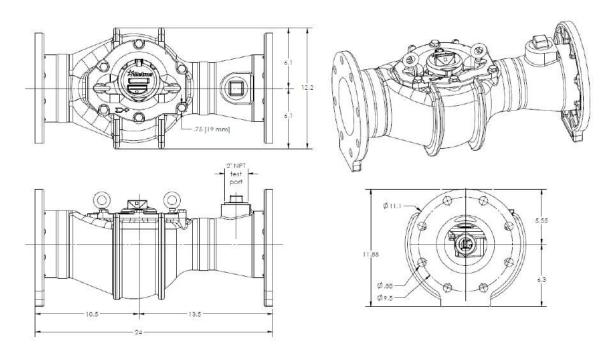
Serial Number
Date of Manufacture

NSF-61G

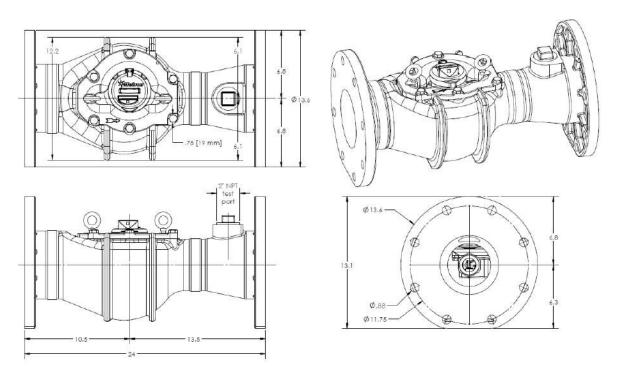
Direction of Flow

DIMENSIONS

Enduro 2800D / 3600D - 6-inch Model



Enduro 2800D / 3600D - 8-inch Model



FLOW & PRESSURE SPECIFICATIONS

Enduro 2800D-6" and 8" Model

Operating Range (98.5 to 101.5%)	6 to 2800 gpm	(1.38 to 636 m3/hr)
Low Flow (95% min)	4.4 gpm	(1 m3/hr)
Max Continuous Flow ²	2400 gpm	(545 m3/hr)
Max Intermittent Flow ³	2800 gpm	(636 m3/hr)
Pressure Loss at Max Continuous	6.40 psi	(0.44 bar)
Max Operating Pressure	230 psi	(15.9 bar)
Max Operating Temperature	120 °F	(48.9 °C)

Enduro 3600D-6" and 8" Model

Operating Range (98.5 to 101.5%)	14 to 3600 gpm	(3.2 to 818 m3/hr)
Low Flow (95% min)	8 gpm	(1.82 m3/hr)
Max Continuous Flow ²	2800 gpm	(636 m3/hr)
Max Intermittent Flow ³	3600 gpm	(818 m3/hr)
Pressure Loss at Max Continuous	11 psi	(0.76 bar)
Max Operating Pressure	230 psi	(15.9 bar)
Max Operating Temperature	120 °F	(48.9 °C)

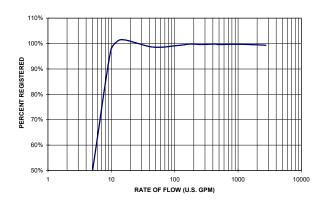
Notes

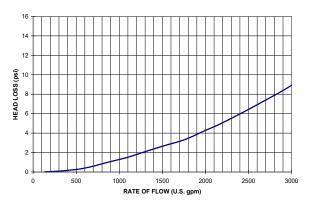
- 1 Starting flow rate for reference only
- 2 Max Continuous defined by AWWA as flow rate which can be maintained 24 hrs/day x 7 days/week
- 3 Max Intermittent defined as flow rate which can be maintained 1 hr/day average

FLOW ACCURACY

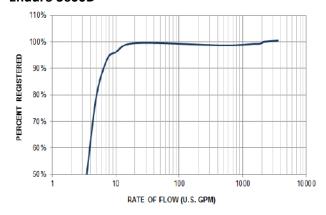
PRESSURE DROP

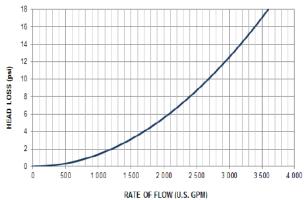
Enduro 2800D





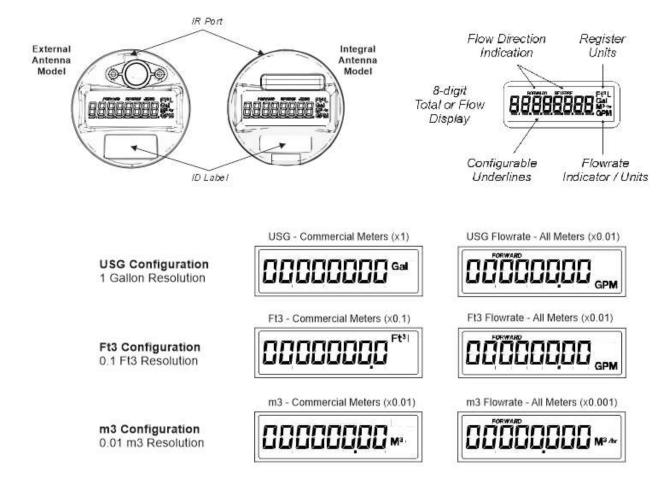
Enduro 3600D





REGISTERS

The innov8 electronic register is the water industry's new standard for register performance. The innov8 offers maximum resolution, a multitude of standard features, on-board datalogging and a variety of cellular, AMI, AMR and SCADA output options. The innov8 is designed for all environments and incorporates the largest battery available for utility applications. The innov8 can be deployed on any Metron Spectrum or Enduro Model D water meter.



WARRANTY

Please contact your Metron representative for formal warranty certificates.

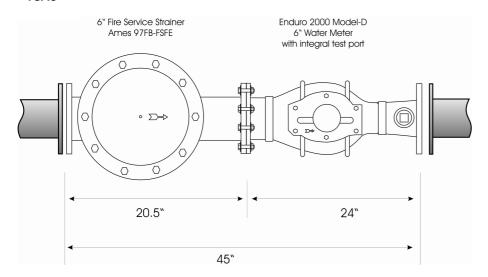
LEGAL

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

DS version Apr-2020A

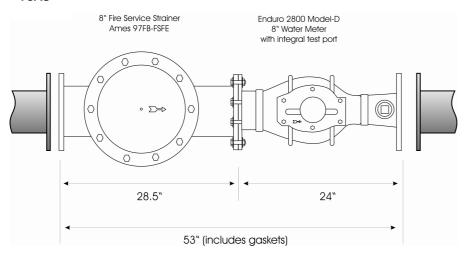
Fire Service Configurations

FSA6



6-inch Assembly 45-inch LL See Fire Service Brochure for more information

FSA8



8-inch Assembly 53-inch LL See Fire Service Brochure for more information