

APPLICATIONS

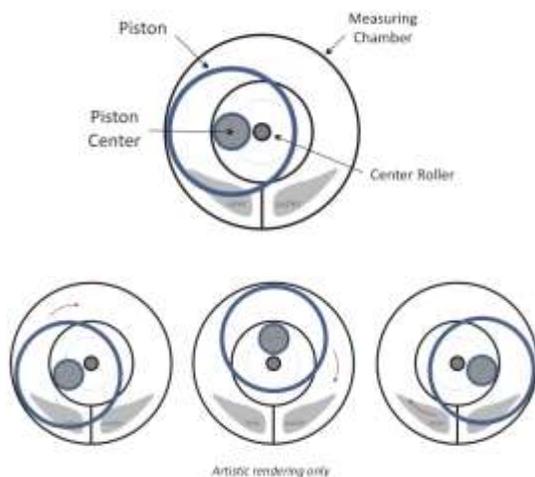
The Altair is a high performance oscillating piston water meter providing extreme low flow measurement. The Altair improves upon traditional positive displacement meters with a unique self-cleaning mechanism, which allows the meter to operate with dirty, gritty water. The composite meter is extremely light and does not require any straight pipe for installation.

The Altair is paired with the innov8 series of registers to provide smart metering capabilities with high resolution datalogging and a variety of AMR and AMI options.

This combination of design simplicity, superior grade materials, and high quality manufacturing standards allows for years of virtually new meter performance with no maintenance.

OPERATIONS

The Altair is designed with an oscillating piston with unique features to eliminate friction due to debris in the water. As shown, water enters from inlet, drives the piston around the center roller and then exits the outlet.



To maintain accuracy, the meter must be installed horizontally ($\pm 10^\circ$) in the direction of water flow.

Altair residential meters utilize innov8 registers. These sealed electronic registers provide a high resolution interface to the meter and have multiple cellular, AMR, AMI and SCADA outputs. All registers are attached with a robust tamper-resistant housing.



DESIGN FEATURES

- High accuracy – exceeding high and low range of AWWA residential standards
- Accurate measurement above 1/30th gpm
- Unaffected by sand or small debris in line
- Resistant to friction wear
- No measurement of air in line
- No straight pipe requirements upstream or downstream of meter
- No strainer requirement
- Lightweight and tough composite meter body

MATERIALS

The Altair meters are designed and manufactured to meet or exceed AWWA C710 standards design and performance specifications. All Models are maintained with NSF-61G lead-free certifications.

STANDARDS

AWWA C710 – C710 Displacement Type, Plastic Case
NSF-61G – Drinking Water System Components Health Effects

MECHANICAL SPECIFICATIONS

DIMENSIONS

Size	AWWA 5/8x3/4" (15x20mm)
Lay Length	7.5" (190 mm)
Overall Height	6.5" (165 mm)
Centerline Height	5.75" (146 mm)
Overall Width	3.4" (86 mm)
Weight	2.05 lb (0.93 kg)
Threads	1" NPSM

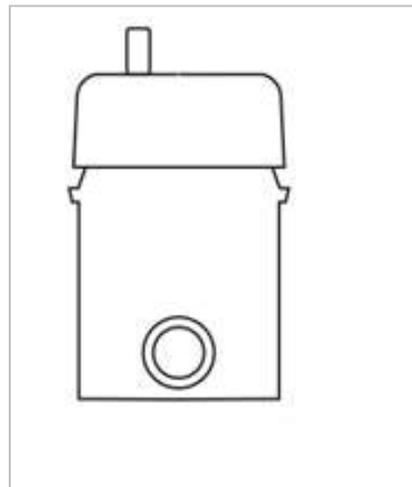
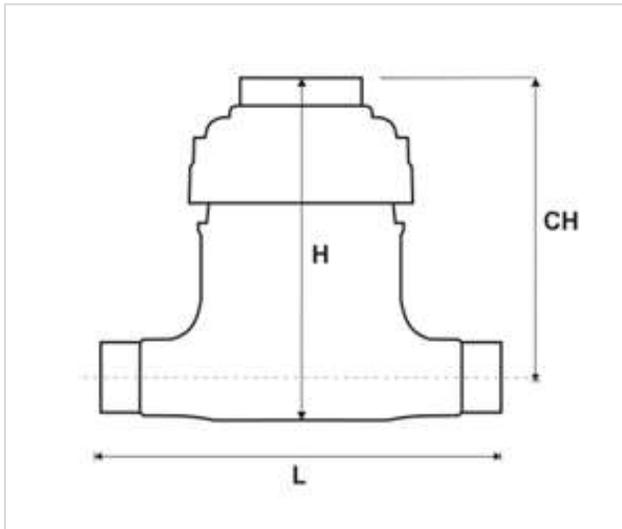
MATERIALS

Body & Top-plate:	Nylon Composite
Register Housing:	Thermoplastic

MARKINGS

Engraved on Meter Body:	Model
	Serial Number
	Date of Manufacture
	NSF-6
	Direction of Flow Arrow

Altair- 5/8x3/4"



FLOW & PRESSURE SPECIFICATIONS

Altair – 5/8x3/4” Model

Normal Operating Range (98.5 to 101.5%)	0.10 to 25 gpm	(0.022 to 5.68 m3/hr)
Low Flow (95% min)	0.03 gpm	(0.0068 m3/hr)
Max Continuous Duty ¹	15 gpm	(2.3 m3/hr)
Safe Maximum Operating Capacity ²	30 gpm	(6.8 m3/hr)
Pressure Loss at Max Continuous	4.0 psi	(0.28 bar)
Max Operating Pressure	230 psi	(15.9 bar)
Max Operating Temperature	140 °F	(60 °C)

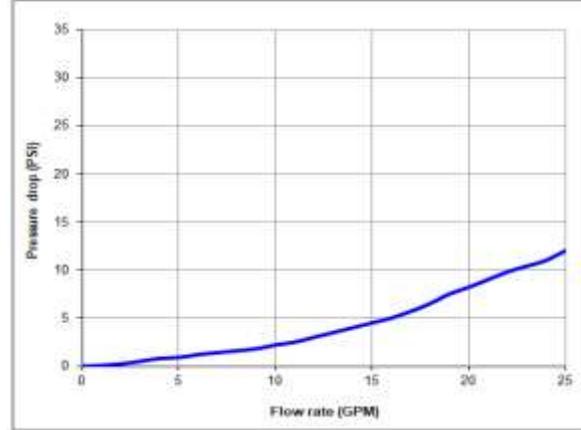
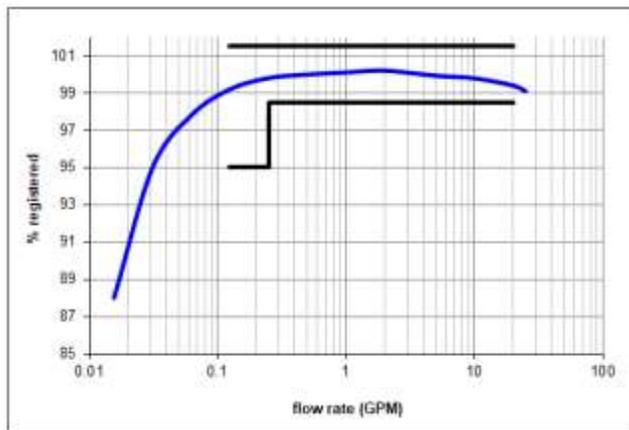
Notes

- 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

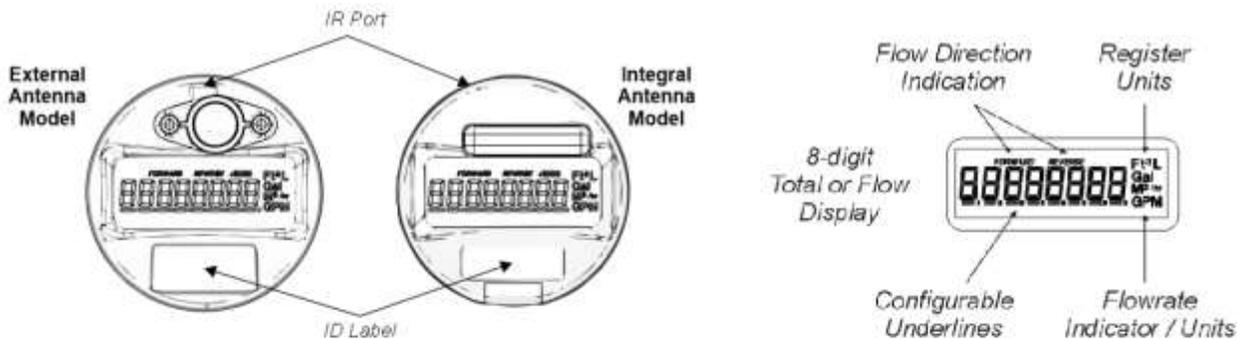
PRESSURE DROP

Altair



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 water meter.



<p>USG Configuration 0.1 Gallon Resolution</p>	<p>USG - Residential Meters (x0.1)</p>	<p>USG Flowrate - All Meters (x0.01)</p>
<p>Ft3 Configuration 0.01 Ft3 Resolution</p>	<p>Ft3 - Residential Meters (x0.01)</p>	<p>Ft3 Flowrate - All Meters (x0.01)</p>
<p>m3 Configuration 0.001 m3 Resolution</p>	<p>m3 - Residential Meters (x0.001)</p>	<p>m3 Flowrate - All Meters (x0.001)</p>

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.

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