

AQUAsonic® SADDLE SERIES

INSERTION ULTRASONIC FLOW METER



SADDLE FOR LARGE PIPE SIZES

The **AQUAsonic® Flow Meter** takes our highly accurate Ultrasonic insert and adds our very popular Q9 Display. This flow meter provides an accurate reading of water flow rate and accumulative total. It is designed to support commercial and industrial applications. Our AQUAsonic® is available in four saddle line sizes: 6, 8, 10, 12 in.

FEATURES / BENEFITS

- Low-cost, effective and easy installation
- No moving mechanical parts (low-maintenance)
- Pin protection, four digit user selectable
- 2 Totals (Batch Total and Accumulative Total); Rate of Flow
- Diagnostic flow meter shows % of battery life
- High accuracy: $\pm 2.0\%$ of reading (compared to full scale accuracy)
- Provides extended leak detection down to 0.1 fps (0.03 m/s)
- Patented design
- Many field configurable options for ease of operation

SPECIFICATIONS

Technology:	Ultrasonic
Line Size:	6 in., 8 in., 10 in., 12 in.
Accuracy:	Typically $\pm 2\%$ of reading
Material Housing:	Aluminum
Fitting Type:	Saddle
Flow Range:	0.1 to 15 fps (0.03 to 4.6 m/s)
Transducer Excitation:	Battery Power - Lithium C
Operating Pressure:	150 psi @ 73°F (10 bar @ 23°C) 100 psi @ 140°F (7 bar @ 60°C)
Operating Temperature:	32°F to 140°F (0°C to 60°C)
Insert Wetted Materials:	Body: PPS (Ryton® R-4)
	Sensor: PEI (Utem 1000)
	O-Ring: EPDM
Saddle Wetted Materials:	Gasket: Silicone
	Saddle and Collar: Aluminum
Electronic Display:	Battery-Powered

INSERT DESCRIPTION

Designed for above and below grade (IP67) applications, such as irrigation, municipal and underground monitoring where the flow rates are between 0.1 to 15 fps (0.03 to 4.6 m/s) and temperatures are below 140°F (60°C). Available in four saddle line sizes: 6, 8, 10, 12 in.

APPLICATIONS

- Agriculture Irrigation
- Turf / Landscape Irrigation Systems
- Micro Irrigation Systems
- Groundwater Monitoring
- Sub-Metering of Facility Water System

APPROVALS / WARRANTY



IP67

CE



Wichita / Sydney

GREAT PLAINS INDUSTRIES



SADDLE ONLY SELECTION CHART



Representation
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Description	Pipe Outside Diameter (in.)	Clamp Outside Diameter (in.)	Clamp Circumference (in.)	Operating Flow Range	Maximum Water Pressure**	Meter Material	Gasket Material	Saddle Material	Clamp Material
6 in. Pipe (NPS/IPS)	6.625	6.48 - 7.13	20.36 - 22.40	.1 to 15 ft/sec (9 to 1350 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
8 in. Pipe (NPS/IPS)	8.625	8.39 - 9.04	25.36 - 28.40	.1 to 15 ft/sec (15 to 2300 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
10 in. Pipe (NPS/IPS)	10.750	10.48 - 11.13	32.9 - 34.97	.1 to 15 ft/sec (24 to 3650 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
12 in. Pipe (NPS/IPS)	12.750	12.46 - 13.11	39.14 - 41.19	.1 to 15 ft/sec (35 to 5300 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
6 in. Tube	6.000	5.91 - 6.56	18.57 - 20.61	.1 to 15 ft/sec (8 to 1230 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
8 in. Tube	8.000	7.79 - 8.44	24.47 - 26.52	.1 to 15 ft/sec (15 to 2200 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
10 in. Tube	10.000	9.73 - 10.38	30.57 - 32.61	.1 to 15 ft/sec (23 to 3500 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
12 in. Tube	12.000	11.72 - 12.37	36.82 - 38.86	.1 to 15 ft/sec (34 to 5100 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
6 in. PIP	6.140	5.91 - 6.56	18.57 - 20.61	.1 to 15 ft/sec (8 to 1230 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
8 in. PIP	8.160	7.79 - 8.44	24.47 - 26.52	.1 to 15 ft/sec (15 to 2200 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
10 in. PIP	10.200	9.73 - 10.38	30.57 - 32.61	.1 to 15 ft/sec (23 to 3500 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel
12 in. PIP	12.240	11.72 - 12.37	36.82 - 38.86	.1 to 15 ft/sec (34 to 5100 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	N/A	Silicone	Aluminum	Stainless Steel

*Nominal flow rate shown. Actual flow is dependent on pipe schedule (wall thickness).

** Maximum water pressure for larger line sizes would be based on the material of the flow sensor, adapter, and pipe. Pressure is also derated due to temperature (1.20 psi / °F).

SADDLE WITH FLOW SENSOR SELECTION CHART



Representation
of contents

Description	Pipe Outside Diameter (in.)	Operating Flow Range	Maximum Water Pressure**	Meter Material	Gasket Material	Saddle Material	Clamp Material
6 in. Pipe (NPS/IPS)	6.625	.1 to 15 ft/sec (9 to 1350 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
8 in. Pipe (NPS/IPS)	8.625	.1 to 15 ft/sec (15 to 2300 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
10 in. Pipe (NPS/IPS)	10.750	.1 to 15 ft/sec (24 to 3650 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
12 in. Pipe (NPS/IPS)	12.750	.1 to 15 ft/sec (35 to 5300 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
6 in. Tube	6.000	.1 to 15 ft/sec (8 to 1230 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
8 in. Tube	8.000	.1 to 15 ft/sec (15 to 2200 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
10 in. Tube	10.000	.1 to 15 ft/sec (23 to 3500 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
12 in. Tube	12.000	.1 to 15 ft/sec (34 to 5100 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
6 in. PIP	6.140	.1 to 15 ft/sec (8 to 1230 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
8 in. PIP	8.160	.1 to 15 ft/sec (15 to 2200 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
10 in. PIP	10.200	.1 to 15 ft/sec (23 to 3500 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel
12 in. PIP	12.240	.1 to 15 ft/sec (34 to 5100 GPM)*	150 PSI @ 73°F (10 bar @ 23°C)	Ryton®	Silicone	Aluminum	Stainless Steel

*Nominal flow rate shown. Actual flow is dependent on pipe schedule (wall thickness).

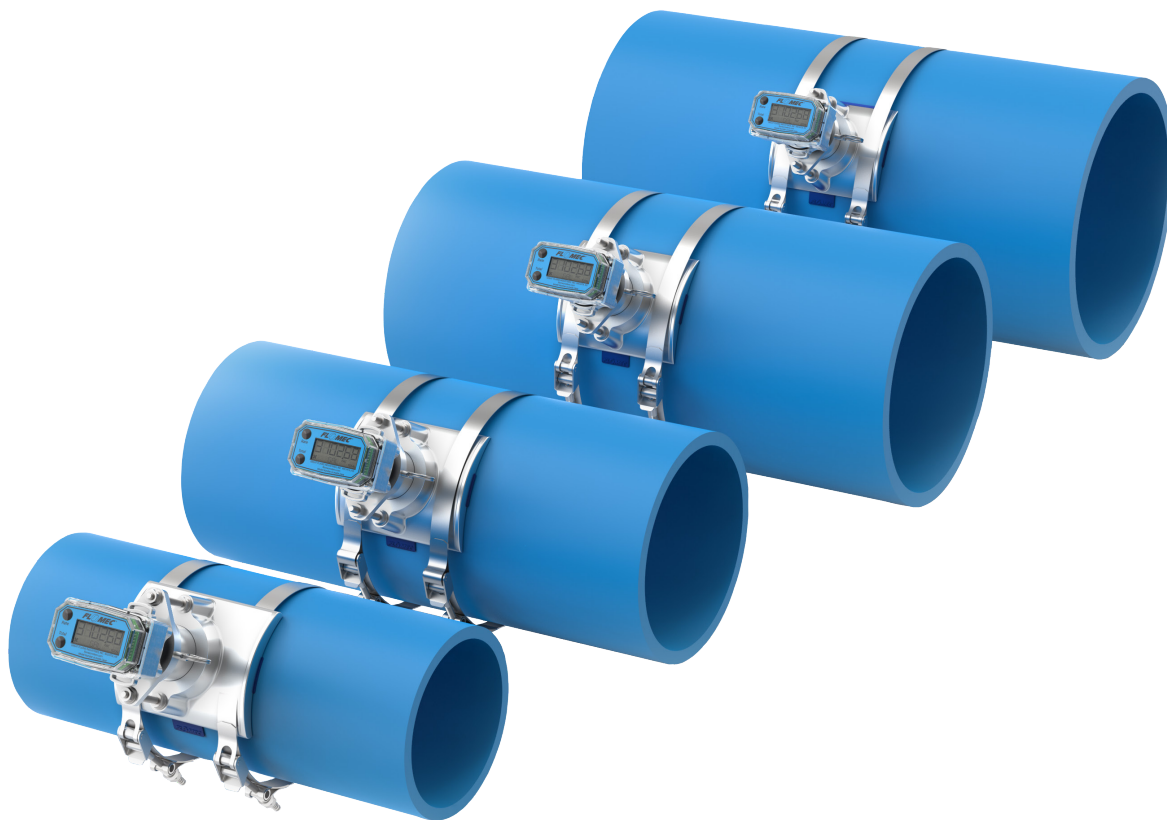
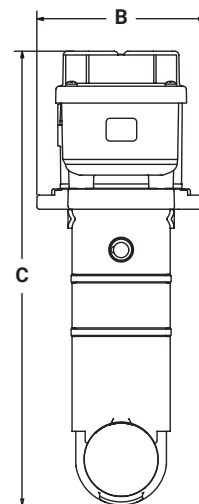
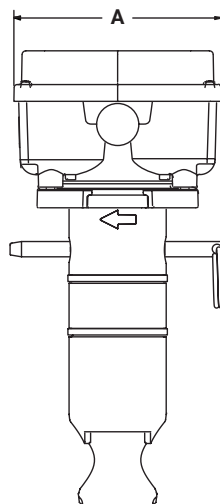
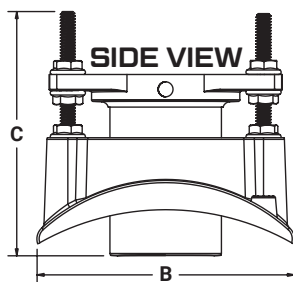
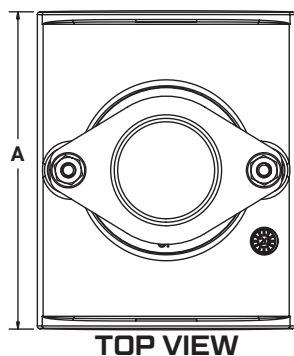
** Maximum water pressure for larger line sizes would be based on the material of the flow sensor, adapter, and pipe. Pressure is also de-rated due to temperature (1.20 psi / °F).

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INSERTION ULTRASONIC FLOW METER

DIMENSIONS

	Dimension "A"	Dimension "B"	Dimension "C"
AQUAsonic INSERT	2.0 in. (5.1 cm)	2.0 in. (5.1 cm)	5.2 in. (13.2 cm)
SADDLE	5.3 in. (13.5 cm)	4.3 in. (10.9 cm)	3.9 in. (9.9 cm)



SADDLE FAMILY LINE-UP (Shown on pipe. Pipe not included.)