



accuSTREAM™ Water Meter

Positive Displacement Water Meter with Sensus® Electronic Register+™

The Sensus accuSTREAM™ meter is for measurement of potable and reclaimed water flow usage in residential services.

Operation

Water flows through the meter's strainer and into the measuring chamber where it drives the piston. The hydrodynamically balanced piston oscillates around a central hub, guided by the division plate. A drive magnet transmits the motion of the piston to an electronic sensor located within the register. The Electronic Register+ calculates the rotations into volume totalization units displayed on the register LCD.

FEATURES

- 5/8", 5/8" x 3/4", 3/4" and 1" Sizes
- Sensus® Electronic Register+™ advanced electronic register
- Hydrodynamically balanced piston design
- Compatible with current Sensus AMI/AMR systems

BENEFITS

- Enable more cost-effective, accurate meter readings
- Deliver a wide range of flows
- Provide lasting measurement accuracy for years of dependable service
- Integrate seamlessly with the FlexNet SmartPoint® module
- Tamper resistant
- Improve customer service
- Environmental and public health conscience

Construction

Sensus accuSTREAM meters consist of three basic components: maincase, measuring chamber and sealed register. Maincases (including the bottom plate) are made of composite material with externally-threaded spuds. Registers are housed in a bonnet of synthetic polymer. Measuring chambers are Rocksyn®, a corrosion-resistant, tailored thermoplastic material formulated for long-term performance and especially suitable for aggressive water conditions. The accuSTREAM can be installed horizontally.

Sensus Electronic Register+

The Sensus Electronic Register+™ is an advanced electronic register with 120 days of hourly data logging with 30-day data pull intervals available. It provides greater reliability, higher-resolution readings, and more advanced features than any other electronic communication register previously available.

Magnetic Drive

The accuSTREAM features a hydrodynamically balanced piston design that eliminates premature wear of components. The meter utilizes a patented positive reliable drive coupling. The high strength magnets eliminate "drive slip" in normal use and also provide adequate strength to drive remote register units.

Maintenance

accuSTREAM meters are engineered to provide long-term value and virtually maintenance-free operation. Simplicity of components allows interchangeability of parts of like-size meters, reduced parts inventory requirements and ease of maintenance. The register can be removed without relieving the water pressure or removing the maincase from the installation.

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Smart Alarms

Electronic Register+ has several user configurable smart alarms. Get alerts and address these issues before they become more costly:

- Tampering
Detect register removal as well as magnetic interference to reduce apparent water losses and protect against unauthorized activities.
- Low Battery
Replace your meters before they stop recording consumption through alerts indicating battery capacity to the meter is running low.
- Customer Leak
Detect continual consumption of water over a configurable period of time to indicate downstream leaks. This can reduce water loss and leak adjustment costs.
- Reverse Flow
Keep untreated water from re-entering your distribution system or deter tampering attempts when reverse flow is detected.
- High Flow
Detect broken pipes, high usage and reduce property damage through an alert triggered when excessive flow rates are recorded.

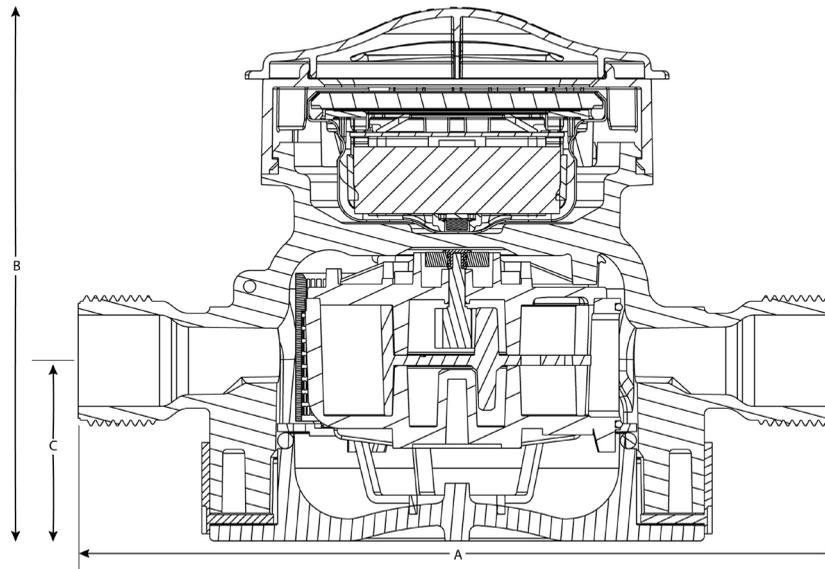


SPECIFICATIONS

Service	Measurement of potable and reclaim water. 0-100% humidity. Fully submersible. IP68+rated.			
Temperature Ranges	Water operating:	33 °F (0.55 °C) to 80 °F (26.7 °C)		
	Ambient air operating:	-22 °F (-30 °C) to 140 °F (60 °C)		
	Storage air:	-30 °F (-34.4 °C) to 158 °F (70 °C)		
Low flow registration (95% - 101.5%)	5/8" (DN 15 mm) size: 1/4 gpm (0.06 m ³ /hr)	5/8" x 3/4" (DN 15 x 20 mm) size: 1/4 gpm (0.06 m ³ /hr)	3/4" (DN 20 mm) size: 1/2 gpm (0.10 m ³ /hr)	1" (DN 25 mm) size: 3/4 gpm (0.15 m ³ /hr)
Normal operating flow range (100% ±1.5%)	5/8" (DN 15 mm) size: 1 to 20 gpm (0.25 to 4.5 m ³ /hr)	5/8" x 3/4" (DN 15 mm) size: 1 to 20 gpm (0.25 to 4.5 m ³ /hr)	3/4" (DN 20 mm) size: 2 to 30 gpm (0.45 to 7.0 m ³ /hr)	1" (DN 25 mm) size: 3 to 50 gpm (0.07 to 11.0 m ³ /hr)
Maximum pressure loss	5/8" (DN 15 mm) size: 8.0 psi at 15 gpm (0.55 bar at 3.4 m ³ /hr)	5/8" x 3/4" (DN 15 mm) size: 8.0 psi at 15 gpm (0.55 bar at 3.4 m ³ /hr)	3/4" (DN 20 mm) size: 4.0 psi at 15 gpm (0.27 bar at 3.4 m ³ /hr)	1" (DN 25 mm) size: 3.5 psi at 25 gpm (0.24 bar at 5.7 m ³ /hr)
Maximum operating pressure	150 psi (10.0 bar)			
Measurement element	Oscillating piston			
Register	Electronic Register+: Hermetically sealed, communication of smart alarms with cable output options. 9 available digits. Direct Read: Hermetically sealed, no communication output. 6 odometer wheels.			
Capacity	10,000,000 gallons, 1,000,000 cubic feet or 100,000 m ³ capacity.			
Register Resolution	Electronic: .01 gallons/imperial gallons, .001 cubic foot, or .0001 m ³ . Direct Read: 10 gallons, 1 cubic foot, or 0.01 m ³ / or 0.1 m ³ /sweep hand revolution.			
Meter Connections	5/8" (DN 15 mm) size: 3/4" (20 mm) threads 3/4" (DN 20 mm) size: 1" (25 mm) threads		5/8" x 3/4" (DN 15x20 mm) size: 1" (25 mm) threads 1" (DN 25mm) size: 1-1/4" (32 mm) threads	
	(All threads are straight pipe, external type, conforming to ANSI B1.20.1 or ISO R228, if specified.)			
Conformance to Standards	Meets the requirements of NSF 61, Annex G and NSF 372. Complies with the most current AWWA Standard C710.			
Materials	Maincase - Composite Register Box - Synthetic polymer Measuring chamber - Rocksyn®		Bottom plate - Composite Magnets - Ceramic Strainer - Synthetic polymer	

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DIMENSIONS AND NET WEIGHTS

Meter Size	A	B	C	Width	Net Weight
5/8" (DN 15mm)	7-1/2" (190 mm)	5.3" (135 mm)	1-3/4" (44 mm)	4-3/4" (121 mm)	2.3 lb. (1.04 kg)
5/8" x 3/4" (DN 15mm x 20mm)	7-1/2" (190 mm)	5.3" (135 mm)	1-3/4" (44 mm)	4-3/4" (121 mm)	2.4 lb. (1.09 kg)
3/4" Short (DN 20mm)	7-1/2" (190 mm)	5.8" (147 mm)	2-1/8" (54 mm)	6" (152 mm)	3.3 lb. (1.5 kg)
3/4" (DN 20mm)	9" (229 mm)	5.8" (147 mm)	2-1/8" (54 mm)	6" (152 mm)	3.4 lb. (1.54 kg)
1" (DN 25mm)	10-3/4" (273 mm)	6.9" (175 mm)	2-5/8" (67 mm)	7-1/8" (181 mm)	5.6 lb. (2.5 kg)

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Head Loss Curves

