

Positive Displacement Water Meter with Sensus® Electronic Register+™

The Sensus accuSTREAM $^{\text{m}}$ meter is for measurement of cold water flow usage in residential services.

FEATURES

- 5/8" (DN 15mm), 3/4" (DN 20mm), and 1" (DN 25mm) Sizes
- Sensus® Electronic Register+™ advanced electronic register
- Hydrodynamically cushioned 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

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 a sensor located within the register. The sensor is connected to an integrated circuit that measures the rotations of the measuring chamber. It calculates the rotations into volume totalization units displayed on the register LCD.

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 of 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.

Magnetic Drive

The accuSTREAM features a hydrodynamically cushioned 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.

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. This information helps utilities make better informed decisions.





Smart Alarms

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

Tampering

Detect register removal and magnetic interference to reduce apparent water losses and protect against unauthorized activities.

Low batterv

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 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.

Conformance to Standards

Sensus accuSTREAM meters meet the requirements of NSF/ANSI Standard 61, Annex F and G and comply with AWWA Standard C710-latest revision. Each meter is tested to ensure compliance with AWWA standards.

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.

AMR/AMI Systems

Meters and encoders are compatible with current Sensus AMR/AMI systems.

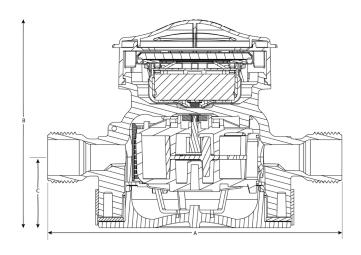
Guarantee

Sensus accuSTREAM water meters are backed by "the Sensus Guarantee." Ask your Sensus representative for details or see Bulletin G-500.









Dimensions and Net Weights

Meter Size	А	В	С	Width	Net Weight
5/8"	7-1/2"	5.3"	1-3/4"	4-3/4"	2.3 lb.
(DN 15mm)	(190 mm)	(135 mm)	(44 mm)	(121 mm)	(1.04 kg)
5/8" x 3/4")	7-1/2"	5.3"	1-3/4"	4-3/4"	2.4 lb.
(DN 15mm x 33mm)	(190 mm)	(135 mm)	(44 mm)	(121 mm)	(1.09 kg)
3/4"	9"	5.8"	2-1/8"	6"	3.3 lb.
(DN 20mm)	(229 mm)	(147 mm)	(54 mm)	(152 mm)	(1.5 kg)
3/4" Short	7-1/2"	5.8"	2-1/8"	6"	3.3 lb.
(DN 20mm)	(190 mm)	(147 mm)	(54 mm)	(152 mm)	(1.5 kg)
1"	10-3/4"	6.9"	2-5/8"	7-1/8"	5.6 lb.
(DN 25mm)	(273 mm)	(175 mm)	(67 mm)	(181 mm)	(2.5 kg)

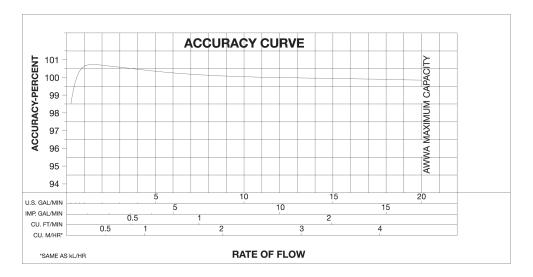
Specifications

Service	Measurement of potable and reclaim water. Water temperature range of 33 °F (0.55 °C) to 80 °F (26.7 °C)					
Normal operating flow range (100% ±1.5%)	5/8" (DN 15mm) size: 1 to 20 gpm (0.25 to 4.5 m³/hr)	3/4" (DN 20mm) size: 2 to 30 gpm (0.45 to 7.0 m³/hr)		1" (DN 25mm) size: 3 to 50 gpm (0.07 to 11.0 m³/hr)		
Low flow registration (95% - 101%)	5/8" (DN 15mm) size: 1/4 gpm (0.06 m³/hr)			1" (DN 25mm) size: 3/4 gpm (0.15 m³/hr)		
Maximum pressure loss	5/8" (DN 15mm) size: 8.0 psi at 15 gpm (0.55 bar at 3.4 m³/hr)	3/4" (DN 20mm) size: 4.0 psi at 15 gpm (0.27 bar at 3.4 m³/hr)		1" (DN 25mm) size: 3.5 psi at 25 gpm (0.24 bar at 5.7 m³/hr)		
Maximum operating pressure	150 psi (10.0 bar)					
Measurement element	Oscillating piston					
Register	Straight reading, hermetically sealed, magnetic drive. Remote reading unit optional.					
Capacity	10,000,000 gallons, 1,000,000 cubic feet or 100,000 m³ capacity. 8 odometer wheels.					
Meter Registration	Electronic: 0.1 gallons/imperial gallons, 0.001 m ³	0.01 cubic foot, or	Standard: 10 gallons, 1 cubic foot, or 0.01 m³/ or 0.1 m³/ sweep hand revolution.			
Meter Connections	5/8" (DN 15mm) size: 3/4" (19) threads 3/4" (DN 20mm) size: 1" (33.25mm) threads 1" (DN 25mm) size: 1-1/4" (32) threads		5/8" x 3/4" (DN 15mm x 33mm) size: 1" (25) threads 3/4" x 1" (DN 20mm x 42mm) size: 1-1/4" (32) threads			
	(All threads are straight pipe, external type, conforming to ANSI B1.20.1 or ISO R228, if specified.)					
Materials	Maincase - Composite Register Box - Synthetic polymer	Measuring chamber - Rocksyn® Bottom plate - Composite		Magnets - Ceramic Strainer - Synthetic polymer		





Performance Curves



Headloss Curves

