EcoMaster™

SIZES AVAILABLE: 5/8 x 3/4"

Precise Revenue Generation Reliably For Decades.

Everyone aims to shrink their eco-footprint and address expanding national 'clean water' legislation. EcoMaster reflects smart innovation in structural design science that retains 100% structural rigidity not found in competitive plastic or composite designs. This ensures protection from excessive torqueing, and shifting from seismic forces or ground settling.

The internal chamber science comes unchanged from our highly touted MMPD Positive Displacement meter series with independently proven accuracy that meets AWWA new meter standards after 4,000,000 USG of continual use (35+ years simulated wear). Benchmark accuracy is the result of innovative Computational Fluid Dynamic (CFD) software and modeling tools previously not available. CFD science delivers both EcoMaster and MMPD measurement solutions an engineering trifecta; lowest pressure drop, Whisper Quiet™ harmonics, and unparalleled lifetime accuracy.

Quick Facts

- Traditional metal exoskeleton rigidity with eco smart interior.
- No metal in contact with water.
- Assures compliance with coming changes to Safe Drinking Water Act (SDWA)
- Eco design provides full compliance with ANSI/NSF 372 (AB 1953 or NSF61G)
- Independently tested new meter accuracy to 4,000,000 USG

Technical Specifications

AWWA Standard - Meets or exceeds all performance sections of Standard ANSI / AWWA C700 and ANSI/AWWA C710.

NSF/ANSI Standard 372 - NSF 372 certification pending.

Design/Operation - Incoming water is continuously divided into crescent-shaped volumes by the action of the inlet ports, chamber interior and piston walls as controlled by the division plate and controller assembly. This hydraulic action causes the center of the oscillating piston measuring element to make continuous circular movements. A drive spindle formed integrally with the piston web moves the drive magnet. A magnetically-coupled follower magnet in the register assembly is directly connected to a gear system in the register that totalizes those movements into the desired billing units. The register assembly is removable under line pressure permitting seamless, simplified upgrades in AMR reading technology.

Measuring Chamber - The measuring chamber housing and piston measuring element are constructed of smoothly-finished, non-hydrolyzing engineered polymer materials. The removable chamber is sealed to the main case by a unique elastomeric chamber seal that resists the chances of back pressure seal blowouts or fouling of the sealing surfaces and adverse effects on accuracy due to normal pipeline distortions. Measuring chamber surfaces that serve as bearing areas are generously dimensioned out of continual water-lubricated, non-hydrolyzing polymer material. These broad surface areas act to disperse any potential wear over a greater area. Advanced chamber design combined with a unique mechanical control process, provide greater operating clearances yet deliver outstanding low flow accuracy and sustained overall accuracy over a long operating life. Key small wear components such as the division plate, control roller and drive dog are constructed from hydrolytically-stable, lubricated nylon that minimizes localized wear.

Register - Standard Direct Read and DIALOG 3G AMR System registers are available. Six wheel odometers are standard. Together, an integrated and migratable technology environment is attained; direct, proximity (wand), mobile AMR, and Fixed Network AMI, using AccuLinx.

Register Sealing - All Direct read and DIALOG® registers are IP-68+ rated, permanently sealed with a scratch resistant glass lens, stainless steel base and wrap-around gasket to prevent intrusion of dirt or moisture.

Register Units - Registration available in either U.S. gallons, cubic feet or cubic meters.

Magnetic Drive - A reliable, direct magnetic drive provides linkage between measuring element and register so that no gearing is exposed to water.

Test Circle - Large center sweep hand with one hundred (100) clearly marked gradations near the periphery of the dial face.



Low Flow/Leak Indicator - Clearly visible leak indicator with high sensitivity resulting from direct one-to-one linkage to the measuring element.

Hybrid Main Case Construction - Rigid outer exoskeleton reinforcing saddle is a proprietarily coated non-wetted metallic part constructed of either copper alloy or marine quality Type 356 aluminum.

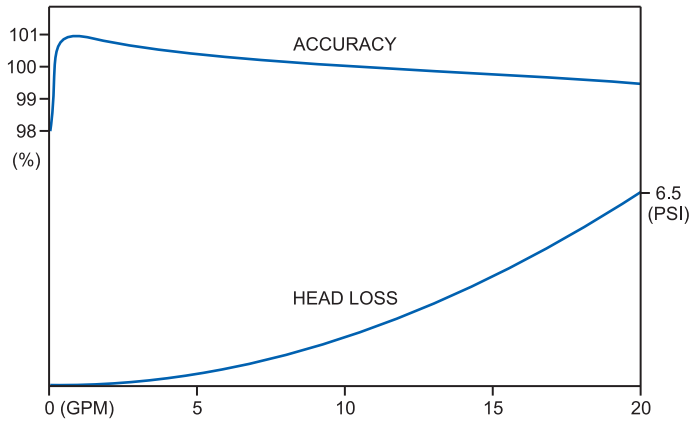
At assembly this saddle is preferentially preloaded to assist the meter body to resist the stresses and strains associated with sifting earth movement, water loads from water hammer, excessive pressure excursions and/or provides additional resistance to the stripping of metal threads due to excessive applied tightening torque and/or cross threading. This proprietary design provides continuous electrical conductivity without the need for ground strap.

Internal Measuring Element - Internal wetted surfaces are identical to the proven Master Meter PD product design that utilizes non-hydrolyzing polypropylene materials of construction to mitigate wear and assure it will not break down over time.

Bottom Plates - Engineered Polymer.

Strainer - A rigid, advanced polymer strainer is provided with more than 2 times the open area of the pipe. The unique strainer design smoothes the flow of water entering into the meter creating a flow profile that is gentle on the meter's internal components. Tough materials operating in a smooth, balanced environment enable the meters to perform more accurately over time.

METER OPERATING CHARACTERISTIC/DIMENSION	5/8 x 3/4"
Flow Rating (gpm)	20
Continuous Flow (gpm)	10
Normal Flow Range (gpm)	1-20
Low Flow (gpm @ > 97%)	1/4
Extended Low Flow (gpm @ > 95%)	1/8
Maximum Working Pressure (psi)	150
Maximum Working Temperature (°F)	105
Specific Displacement (revs/gallon)	56.4/1
Headloss at Maximum Flow Rate (psi)	6.5
Length (A below)	7.5"
Width (B below)	5
Height (C below)	5-4/5"
Weight (lbs)	3.55
Packed To Carton	6
Carton Weight (lbs)	21.8



Standard EcoMaster Water Meter