

Be Confident with Sustained Accuracy Over Time

Neptune® MACH 10® Ultrasonic Meter



The MACH 10® ultrasonic water meter features solid state metrology with no degradation of accuracy over time. Combined with a corrosion-resistant, lead free, high-copper alloy maincase, the MACH 10 is built to withstand demanding service conditions and deliver sustained accuracy over the life of the meter.

- Sizes 5/8", 3/4", and 1"
- Extended low-flow range for superior leak detection
- Accuracy sustained over meter life
- Can be installed in both horizontal and vertical applications
- Advanced ultrasonic technology
- Lead free, high-copper alloy maincase
- Certified to UL 327B (3/4", 1") for residential fire service applications
- No maintenance

Specifications

AWWA C715 Compliant

NSF/ANSI 61 Certified

UL327B Certified

(Optional on ¾", 1")

Application

- Cold water measurement of flow in residential potable, combination potable and fire service, and reclaim/secondary water applications.

Maximum Operating Water Pressure

- 175 psi

Operating Water Temperature Range

- +33°F to +122°F (+0.5°C to +50°C)

Environmental Conditions

- Operating temperature: +14°F to +149°F (-10°C to +65°C)
- Storage temperature: -40°F to +158°F (-40°C to +70°C)

Expected Battery Life

- 20 Years

Options

Sizes

- 5/8", 5/8" x 3/4"
- 3/4", 3/4" x 1"
- 1", 1" x 1 1/4"

Meter Options

- Potable water
- Reclaim water
- Residential fire service (combo or standalone meter service lines)

Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

System Compatibility

- Compatible with all Neptune endpoints. Also available as MACH 10®)R900i™ for an integrated radio solution and MACH 10®)TC for Sensus Touch Coupler compatibility.

Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA C715 Standard Type 1	Extended Low Flow @ 100% Accuracy (+/- 3%)
5/8"	0.10 to 25 U.S. gpm 0.02 to 5.68 m³/h	0.2 to 20 U.S. gpm 0.05 to 4.54 m³/h	0.05 U.S. gpm 0.01 m³/h
3/4"	0.10 to 35 U.S. gpm 0.02 to 7.95 m³/h	0.5 to 30 U.S. gpm 0.11 to 6.81 m³/h	0.05 U.S. gpm 0.01 m³/h
1"	0.40 to 55 U.S. gpm 0.09 to 12.49 m³/h	0.75 to 50 U.S. gpm 0.17 to 11.35 m³/h	0.25 U.S. gpm 0.06 m³/h

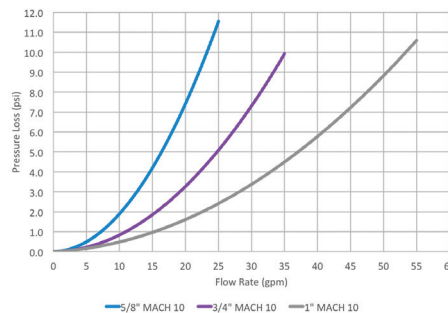
Available Units of Measure

Consumption	Rate
Gallons	GPM
Cubic Feet	GPM
Cubic Metres	LPM
Cubic Meters (International)	LPM
Imperial Gallons	GPM
Acre-Feet*	GPM
Litres*	LPM
Kilolitres*	LPM

*Unit cannot be displayed on LCD

Pressure Loss

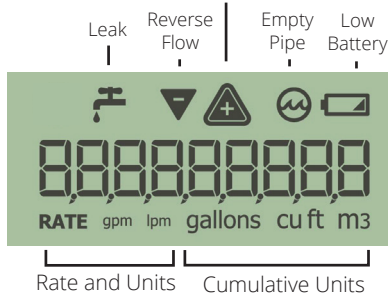
This chart shows typical meter performance. Individual results may vary.



LCD Display

9-digit display for extra resolution on manual reads.

Forward Flow + Warning for Excessive Flow



Dimensions

Meter Size	Length	Height	Threads (NPSM)
5/8"	7 1/2"	3 3/16"	3/4" - 14"
5/8" x 3/4"	7 1/2"	3 3/16"	1" - 11 1/2"
3/4"	9"	3 3/16"	1" - 11 1/2"
3/4" SL	7 1/2"	3 3/8"	1" - 11 1/2"
3/4" x 1"	9"	3 3/16"	1 1/4" - 11 1/2"
1"	10 3/4"	3 1 1/16"	1 1/4" - 11 1/2"
1" x 1 1/4"	10 3/4"	3 1 1/16"	1 1/2" - 11 1/2"

Registration

High Resolution (8-digit reading)	
0.1	U.S. Gallons
0.1	Imperial Gallons
0.01	Cubic Feet
0.001	Cubic Metres



Residential Fire Service Meter



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