ARB® UTILITY MANAGEMENT SYSTEMS™

NEPTUNE TECHNOLOGY GROUP

T-10™ METER

SIZES: 5/8", 3/4", and 1"

Every T-10™ water meter meets or exceeds the latest AWWA C700 Standard. Its nutating disc, positive displacement principle has been time-proven for accuracy and dependability since 1892, ensuring maximum utility revenue.

T-10™ water meters are warranted for performance, materials, and workmanship.

CONSTRUCTION

The T-10 water meter consists of three major assemblies: a register, a lead free, high-copper alloy maincase, and a nutating disc measuring chamber.

The T-10 meter is available with a variety of register types. For reading convenience, the register can be mounted in one of four positions on the meter.

The corrosion-resistant, lead free, high-copper alloy maincase will withstand most service conditions; internal water pressure, rough handling, and in-line piping stress.

The innovative floating chamber design of the nutating disc measuring element protects the chamber from frost damage while the unique chamber seal extends the low flow accuracy by sealing the chamber outlet port to the maincase outlet port. The nutating disc measuring element utilizes corrosion-resistant materials throughout and a thrust roller to minimize wear.

WARRANTY

Neptune provides a limited warranty with respect to its T-10 water meters for performance, materials, and workmanship.

When desired, maintenance is easily accomplished either by replacement of major assemblies or individual components.

GUARANTEED SYSTEMS COMPATIBILITY

All T-10 water meters are guaranteed adaptable to our ARB®V, ProRead™ (ARB VI) AutoDetect, E-Coder® (ARB VII), E-Coder®)R900*i*™, E-Coder®)R450*i*™, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.

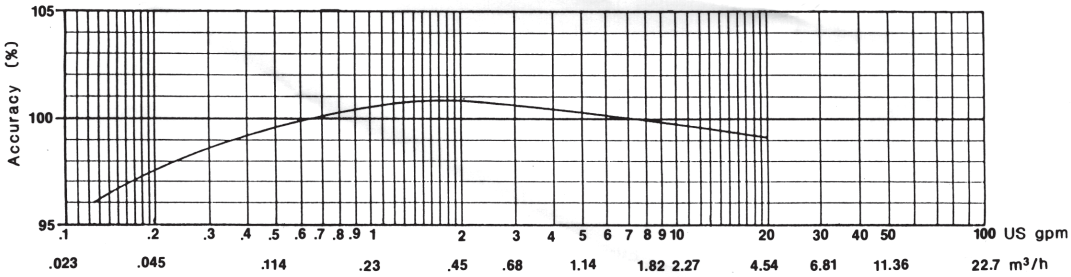
KEY FEATURES

- Register
  - Magnetic drive, low torque registration ensures accuracy
  - Impact-resistant register
  - High resolution, low flow leak detection
  - Bayonet-style register mount allows in-line serviceability
  - Tamperproof seal pin deters theft
  - Date of manufacture, size, and model stamped on dial face
- Lead Free Maincase
  - Made from lead free, high-copper alloy
  - NSF/ANSI 372 certified and NSF/ANSI 61 compliant
  - Lifetime guarantee
  - Resists internal pressure stresses and external damage
  - Handles in-line piping variations and stresses
  - Lead free, high-copper alloy provides residual value vs. plastic or composite
  - Electrical grounding continuity
- Nutating Disc Measuring Chamber
  - Positive displacement
  - Widest effective flow range for maximum revenue
  - Proprietary polymer materials maximize long-term accuracy
  - Floating chamber design is unaffected by meter position or in-line piping stresses

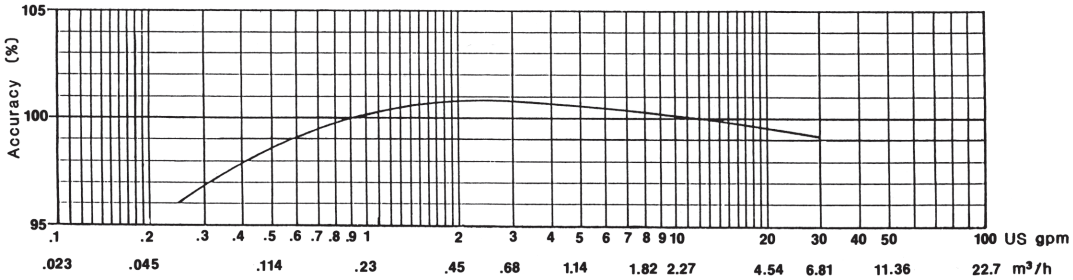
SYSTEMS COMPATIBILITY

Adaptability to all present and future systems for flexibility is available only with Neptune's ARB® Utility Management Systems™.

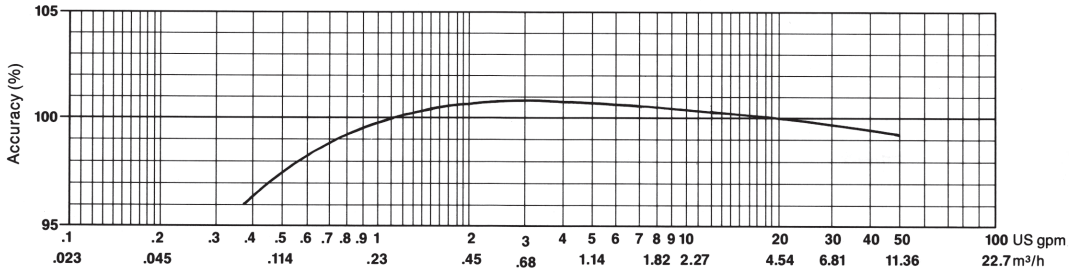
5/8" ACCURACY



3/4" ACCURACY



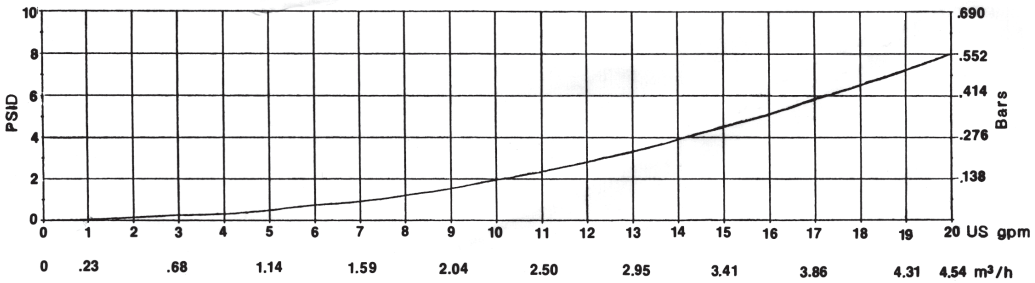
1" ACCURACY



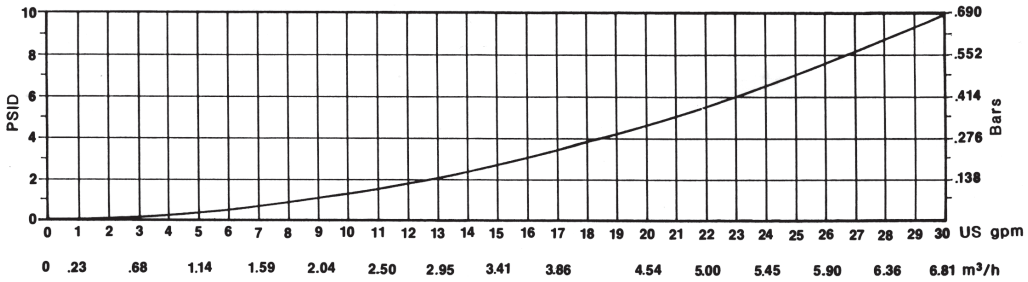
DIMENSIONS

Meter Size	A in/mm	B in/mm	C-Std. in/mm	C-ARB in/mm	C E-Coder®) R900*i*™	D Threads per inch	D-OD in/mm	E in/mm	F in/mm	Weight lbs/kg
5/8"	7 1/2 191	3 5/8 92	4 3/8 111	5 1/4 133	6 7/8 175	14	1.03 26	1 1/2 38	2 1/2 64	3 1/4 1.4
5/8" x 3/4"	7 1/2 191	3 5/8 92	4 3/8 111	5 1/4 133	6 7/8 175	11 1/2	1.29 33	1 1/2 38	2 5/8 67	3 3/8 1.5
Circa 2011 5/8"	7 1/2 191	3 5/8 92	4 7/8 124	5 3/4 146	7 3/8 187	14	1.03 26	1 5/8 41	2 1/2 64	3 3/4 1.7
Circa 2011 5/8" x 3/4"	7 1/2 191	3 5/8 92	4 7/8 124	5 3/4 146	7 3/8 187	11 1/2	1.29 33	1 5/8 41	2 5/8 67	4 1.8
3/4"	9 229	4 3/8 111	5 1/2 140	6 1/4 159	7 7/8 200	11 1/2	1.29 33	1 7/8 48	2 5/8 67	6 2.7
3/4" SL	7 1/2 911	4 3/8 111	5 1/2 140	6 1/4 159	7 7/8 200	11 1/2	1.29 33	1 7/8 48	2 5/8 67	5 1/2 2.5
3/4" x 1"	9 229	4 3/8 111	5 1/2 140	6 1/4 159	7 7/8 200	11 1/2	1.62 41	1 7/8 48	2 3/4 70	6 1/2 2.9
1"	10 3/4 273	6 1/2 165	6 3/8 162	7 1/8 181	8 3/4 222	11 1/2	1.62 41	2 1/8 54	2 3/4 70	9 3/4 4.4
1" x 1 1/4"	10 3/4 273	6 1/2 165	6 3/8 162	7 1/8 181	8 3/4 222	11 1/2	1.86 47	2 1/8 54	2 13/16 71	10 1/4 4.6

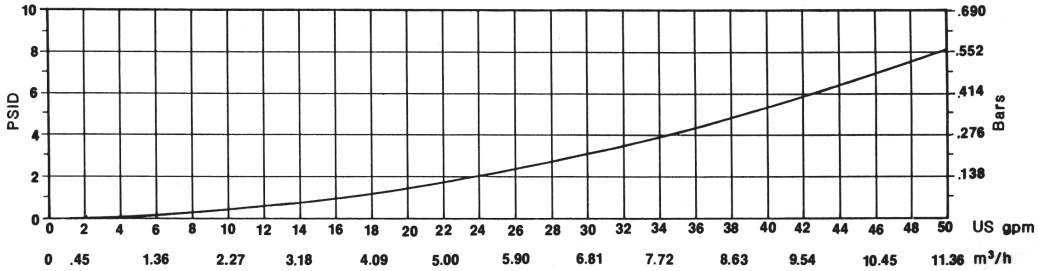
5/8" PRESSURE LOSS

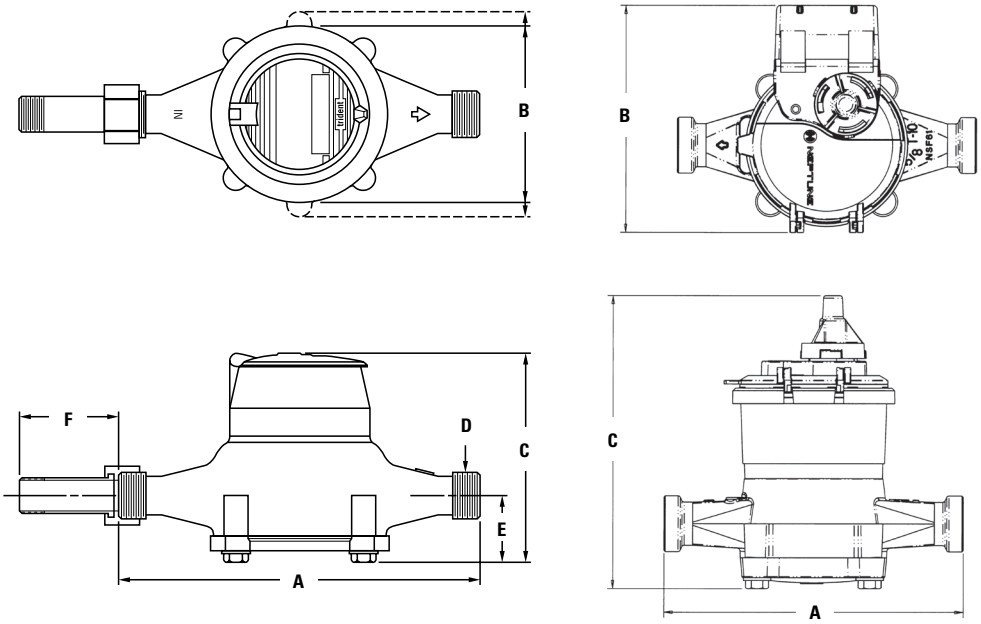


3/4" PRESSURE LOSS



1" PRESSURE LOSS





OPERATING CHARACTERISTICS:

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA Standard	Low Flow @ 95% Accuracy
⅝"	1/2 to 20 US gpm 0.11 to 4.55 m^3/h	1 to 20 US gpm 0.23 to 4.5 m^3/h	⅛ US gpm 0.03 m^3/h
¾"	3/4 to 30 US gpm 0.17 to 6.82 m^3/h	2 to 30 US gpm 0.45 to 6.8 m^3/h	¼ US gpm 0.06 m^3/h
1"	1 to 50 US gpm 0.23 to 11.36 m^3/h	3 to 50 US gpm 0.68 to 11.4 m^3/h	⅜ US gpm 0.09 m^3/h

REGISTRATION:

Pro Read Registration (per sweep hand revolution)		⅝"	¾" & 1"
10	US Gallons	√	√
10	Imperial Gallons	√	√
1	Cubic Foot	√	√
0.1	Cubic Metre	√	√
0.01	Cubic Metre	√	

Register Capacity ProRead & E-Coder		⅝"	¾" & 1"
10,000,000	US Gallons	√	√
10,000,000	Imperial Gallons	√	√
1,000,000	Cubic Feet	√	√
100,000	Cubic Metres	√	√
10,000	Cubic Metres	√	

E-Coder High Resolution (8-digit reading)		⅝"	¾" & 1"
0.1	US Gallons	√	√
0.1	Imperial Gallons	√	√
0.01	Cubic Feet	√	√
0.001	Cubic Metres	√	√

SPECIFICATIONS

- NSF/ANSI 372 certified and NSF/ANSI 61 compliant
- National Type Evaluation Program (NTEP) certification
- Application: Cold water measurement of flow in one direction in residential service applications
- Maximum operating water pressure: 150 psi (1034 kPa)
- Maximum operating water temperature: 80°F
- Measuring chamber: Nutating disc technology design made from proprietary synthetic polymer

OPTIONS

- Sizes:
  - ⅝", ⅝" x ¾"
  - ¾", ¾" SL, ¾" x 1"
  - 1", 1" x 1 ¼"
- Units of measure: U.S. gallons, imperial gallons, cubic feet, cubic metres
- Register types:
  - Direct reading: bronze box and cover (standard)
  - Remote reading: ProRead Encoder, E-Coder, E-Coder)R900*i*, E-Coder)R450*i*, TRICON/S, TRICON/E3
  - Reclaim
- Bottom caps:
  - Synthetic polymer (⅝" only)
  - Cast iron
  - Lead free, high-copper alloy
- Connections:
  - Lead free, high-copper alloy, straight or bent
- Environmental conditions:
  - Operating temperature: 33° F to 149° F (0° C to 65° C)
  - Storage temperature: 33° F to 158° F (0° C to 70° C)

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