ARB® UTILITY MANAGEMENT SYSTEMS™

NEPTUNE TECHNOLOGY GROUP

T-10 METER

SIZES: 1 1/2" and 2"

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

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

CONSTRUCTION

The T-10 water meter consists of three major assemblies: a register, a no-lead 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 no-lead 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.

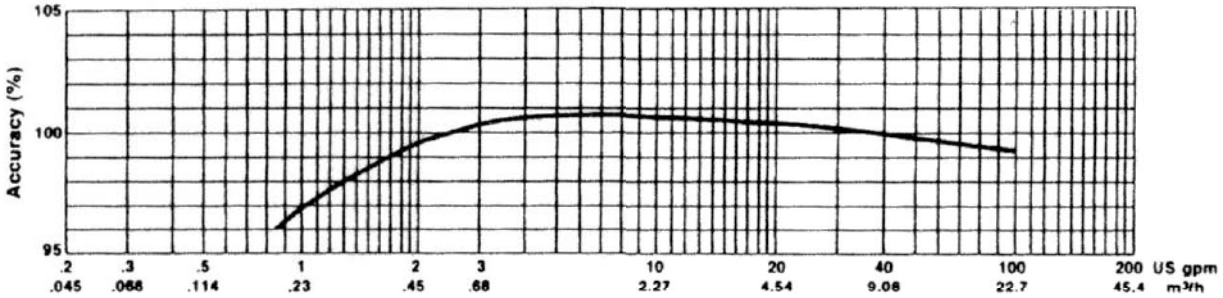
KEY FEATURES

- 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
- No-Lead Maincase
  - Made from no-lead high copper alloy
  - ANSI/NSF 61 Certified
  - Lifetime guarantee
  - Resists internal pressure stresses and external damage
  - Handles in-line piping variations and stresses
  - No-lead high copper alloy provides residual value vs. plastic
  - 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

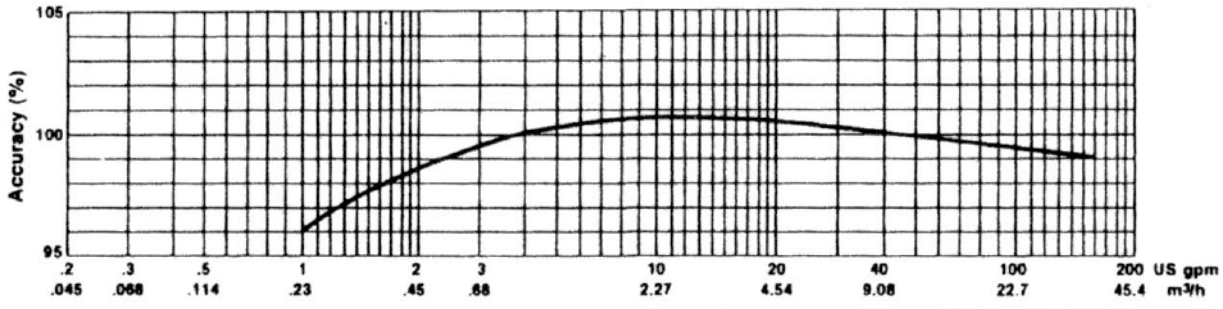
SYSTEMS COMPATIBILITY

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

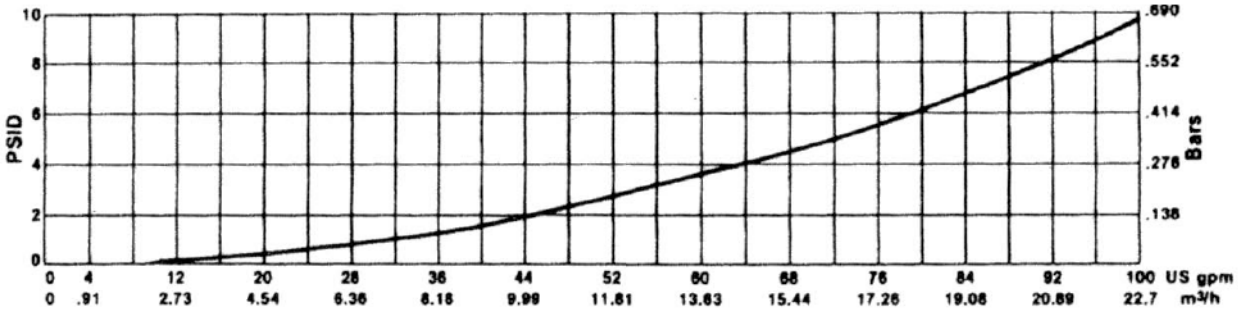
1 1/2" ACCURACY



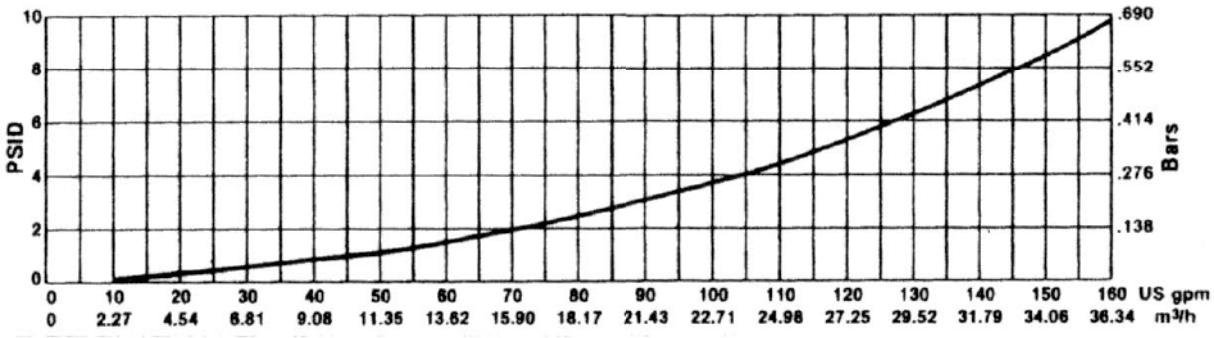
2" ACCURACY



1 1/2" PRESSURE LOSS



2" PRESSURE LOSS



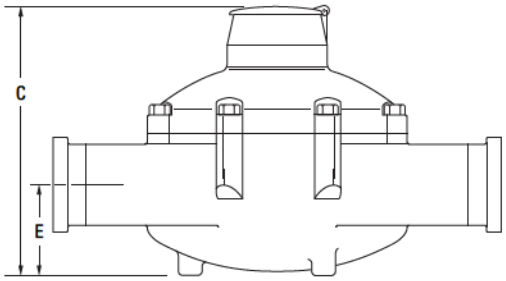
These charts show typical meter performance. Individual results may vary.

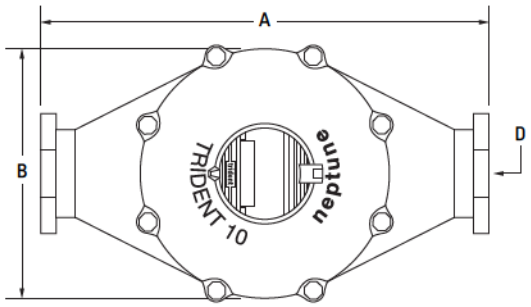
OPERATING CHARACTERISTICS

Meter Size	Normal Operating Range @100% Accuracy (±1.5%)	AWWA Standard	Low Flow @ 95% Accuracy
1 1/2"	2 to 100 US gpm	5 to 100 US gpm	3/4 US gpm
	0.46 to 22.73 m³/h	1.1 to 22.7 m³/h	0.17 m³/h
2"	2 1/2 to 160 US gpm	8 to 160 US gpm	1 US gpm
	0.57 to 36.36 m³/h	1.8 to 36.3 m³/h	0.23 m³/h

DIMENSIONS

Meter Size	A in/mm	B in/mm	C-Std. in/mm	C-ARB in/mm	D-Threads per inch	D-Thread Type	E in/mm	Weight lbs/kg
1 1/2"	12 5/8	8 1/16	8 1/8	8 9/16	11 1/2	1 1/2"	2 9/16	31
Screw End	321	205	206	217		NPT	65	14.1
1 1/2"	13	8 1/16	8 1/8	8 9/16	—	—	2 9/16	35
Flanged End	330	205	206	217			65	15.9
2"	15 1/4	9 7/16	9 5/16	9 3/4	11 1/2	2"	3 1/8	40
Screw End	387	240	237	248		NPT	79	18.1
2"	17	9 7/16	9 5/16	9 3/4	—	—	3 1/8	44
Flanged End	432	240	237	248			79	20.0





GUARANTEED SYSTEMS COMPATIBILITY

All T-10 meters are guaranteed adaptable to our ARB®V, ProRead (ARB VI), E-CODER™(ARB VII), E-Coder)R900*i*, TRICON®/S, TRICON/E3®, and Neptune meter reading systems without removing the meter from service.

REGISTRATION

ProRead Registration (per sweep hand revolution)		**1 ½"**	**2"**
100	US Gallons	✓	✓
100	Imperial Gallons	✓	✓
10	Cubic Feet	✓	✓
1	Cubic Metre		✓
0.1	Cubic Metre	✓	
Register Capacity ProRead & E-coder		**1 ½"**	**2"**
1	US Gallons	✓	✓
1	Imperial Gallons	✓	✓
0.1	Cubic Feet	✓	✓
0.001	Cubic Metres	✓	✓
E-Coder High Resolution (8-digit reading)		**1½"**	**2"**
1	US Gallons	✓	✓
1	Imperial Gallons	✓	✓
.1	Cubic Feet	✓	✓
0.001	M^3	✓	✓

SPECIFICATIONS

- Certification: ANSI/ NSF 61
- Application: cold water measurement of flow in one direction
- 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:
  - 1 ½" flanged or threaded end
  - 2" flanged or threaded end
- Units of measure: U.S. gallons, imperial gallons, cubic feet, cubic metres
- Register types:
  - Direct reading: Bronze box and cover (standard)
  - Remote reading: ProRead Absolute Encoder, E-Coder, E-Coder)R900*i*, TRICON/S, TRICON/E3
  - Reclaim
- Measuring chamber: synthetic polymer
- Companion flanges: cast iron or no-lead high copper alloy
- Environmental Conditions:
  - Operating temperature: 33ºF to 149ºF (0ºC to 65ºC)
  - Storage temperature: 33ºF to 158ºF (0ºC to 70ºC)