



# 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.

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.

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

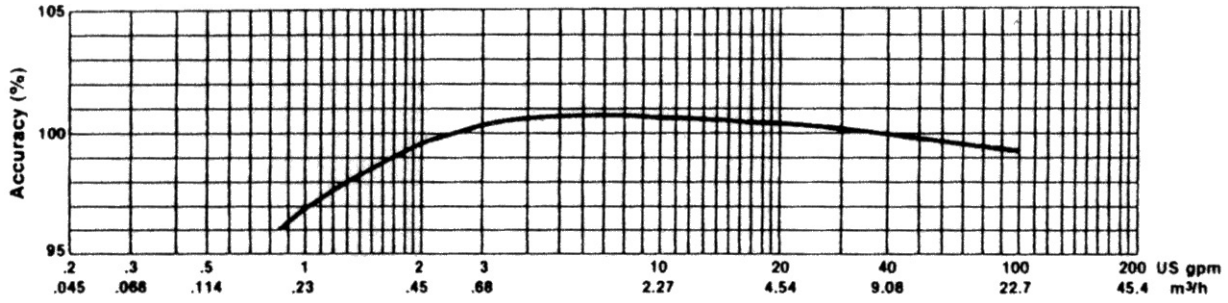
SYSTEMS COMPATIBILITY

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

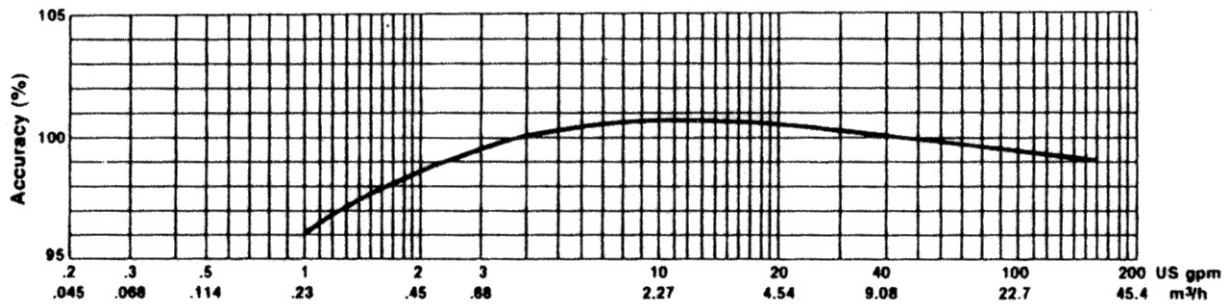
CONSTRUCTION

WARRANTY

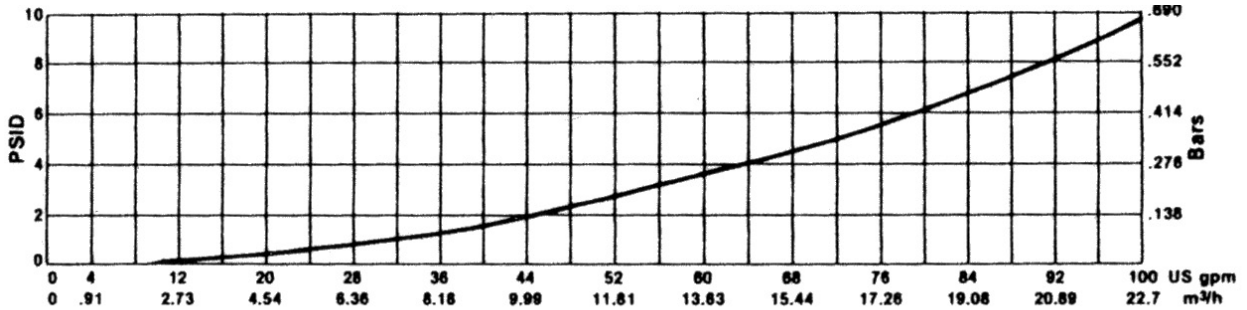
## 1 1/2" ACCURACY



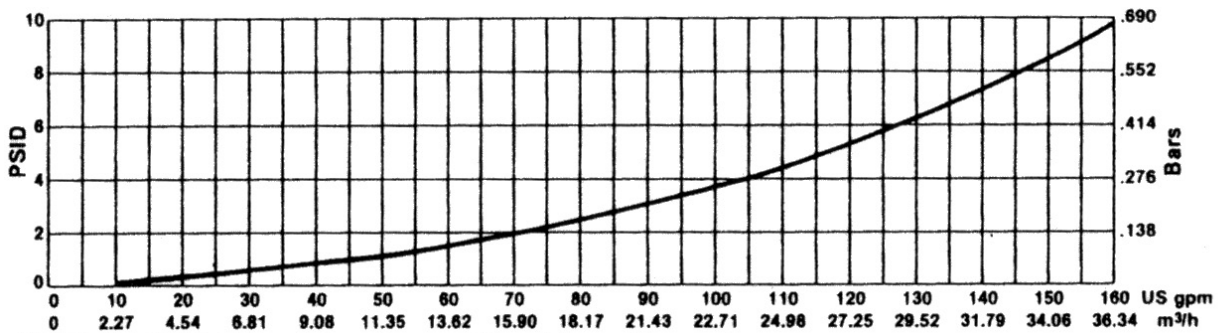
## 2" ACCURACY



## 1 1/2" PRESSURE LOSS



## 2" PRESSURE LOSS



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

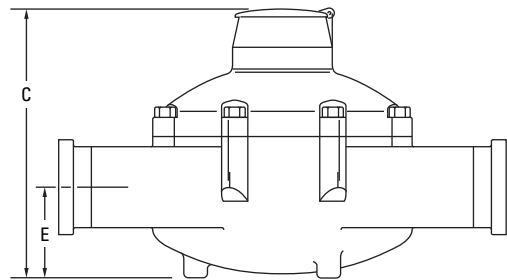
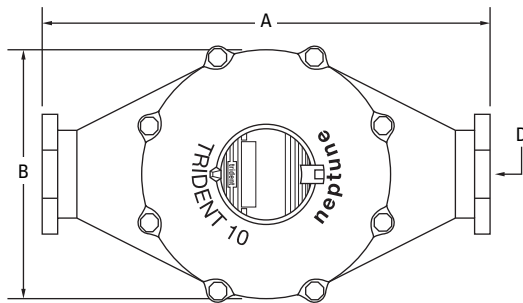
## OPERATING CHARACTERISTICS

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

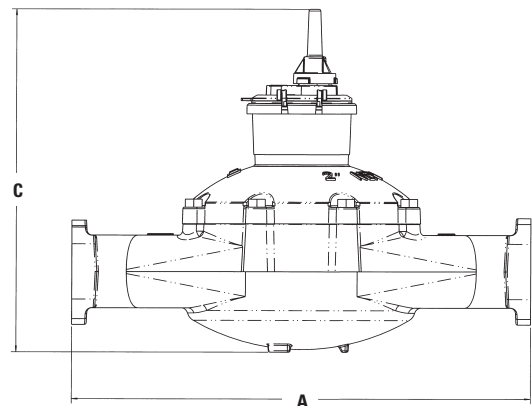
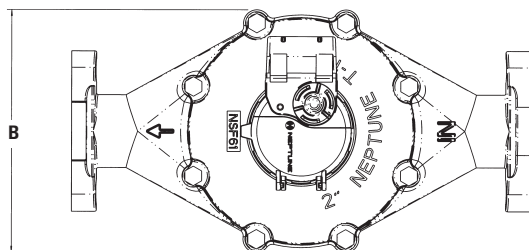
## DIMENSIONS

Meter Size	A in/mm	B in/mm	C-Std. in/mm	C-PRO in/mm	C-E-Coder) R900i™	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 7/8	11 1/2	1 1/2" NPT	2 9/16	31
Screw End	321	205	206	217	225.4			65	14.1
1 1/2" Flanged End	13 330	8 1/16 205	8 1/8 206	8 9/16 217	11 7/8 225.4	—	—	2 9/16 65	35 15.9
2"	15 1/4	9 7/16	9 5/16	9 3/4	13 1/64	11 1/2	2" NPT	3 1/8	40
Screw End	387	240	237	248	330.6			79	18.1
2" Flanged End	17 432	9 7/16 240	9 5/16 237	9 3/4 248	13 1/64 330.6	—	—	3 1/8 79	44 20.0

### T-10 WITH STANDARD REGISTER



### T-10 WITH E-CODER/R900i/PIT REGISTER



## GUARANTEED SYSTEMS COMPATIBILITY

All T-10 meters are guaranteed adaptable to our ARB®V, ProRead™ (ARB VI), E-CODER® (ARB VII), E-Coder)R900i™, TRICON®/S, TRICON/E3®, and Neptune meter reading systems without removing the meter from service.

## REGISTRATION

<b>ProRead Registration</b>			
<b>(per sweep hand revolution)</b>			
	<b>1 1/2"</b>	<b>2"</b>	
100 US Gallons	✓	✓	
100 Imperial Gallons	✓	✓	
10 Cubic Feet	✓	✓	
1 Cubic Metre		✓	
0.1 Cubic Metre	✓		
<b>Register Capacity</b>			
<b>ProRead &amp; E-Coder</b>			
	<b>1 1/2"</b>	<b>2"</b>	
1 US Gallons	✓	✓	
1 Imperial Gallons	✓	✓	
0.1 Cubic Feet	✓	✓	
0.001 Cubic Metres	✓	✓	
<b>E-Coder High Resolution</b>			
<b>(8-digit reading)</b>			
	<b>1 1/2"</b>	<b>2"</b>	
1 US Gallons	✓	✓	
1 Imperial Gallons	✓	✓	
.1 Cubic Feet	✓	✓	
0.001 M <sup>3</sup>	✓	✓	

### 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 1/2" 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)R900i, TRICON/S, TRICON/E3
  - Reclaim
- Measuring chamber: synthetic polymer
- Companion flanges: cast iron or no-lead high copper alloy
- 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)
- Test Ports: 1"

Neptune engages in ongoing research and development to improve and enhance its products. Therefore, Neptune reserves the right to change product or system specifications without notice.

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