

# 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, an EnviroBrass<sup>®</sup> II 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 EnviroBrass II 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.

## Systems Compatibility

Adaptability to all present and future systems for flexibility is available only with Neptune's ARB<sup>®</sup> Water Revenue System™.

## 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

### ■ EnviroBrass II Maincase

- Made from EnviroBrass II
- ANSI/NSF 61 Certified
- Lifetime guarantee
- Resists internal pressure stresses and external damage
- Handles in-line piping variations and stresses
- EnviroBrass II provides residual value vs. plastic
- Electrical grounding continuity

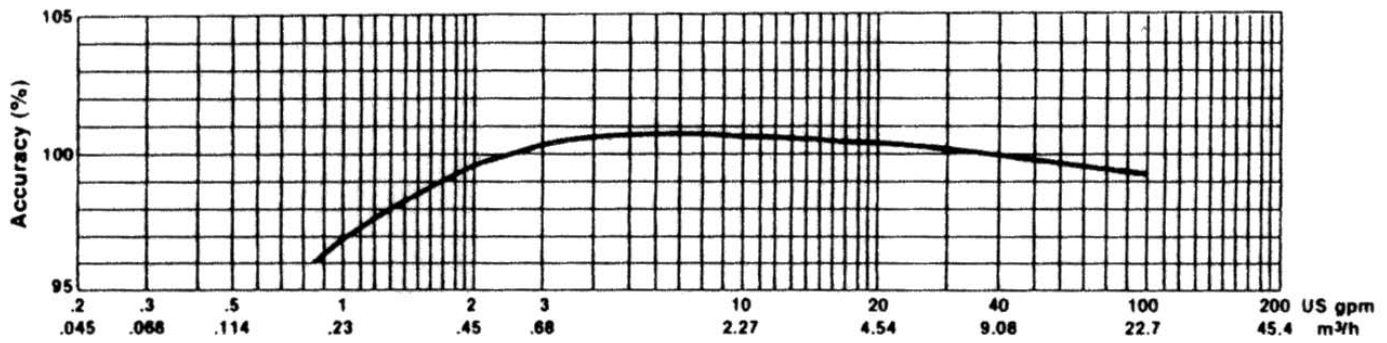
### ■ Nutating Disc Measuring Chamber

- 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

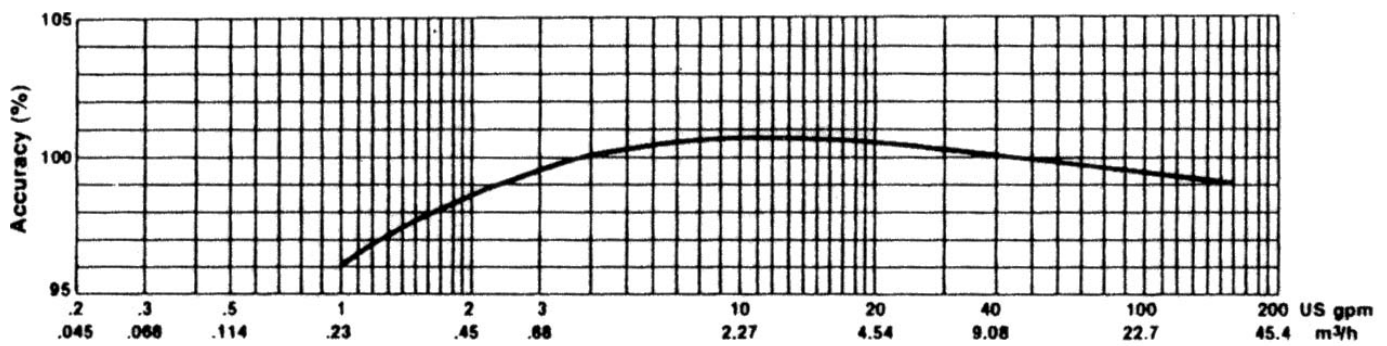
# T-10 Meter

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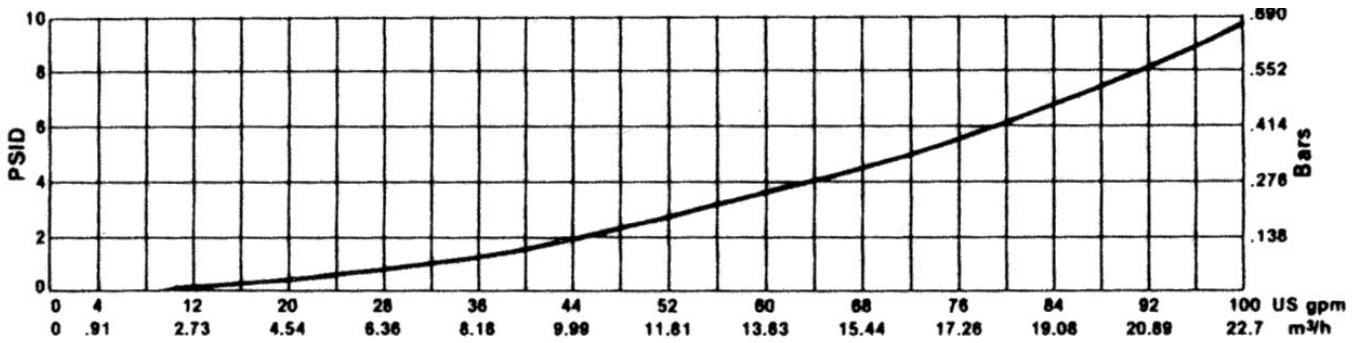
## 1 1/2" Accuracy



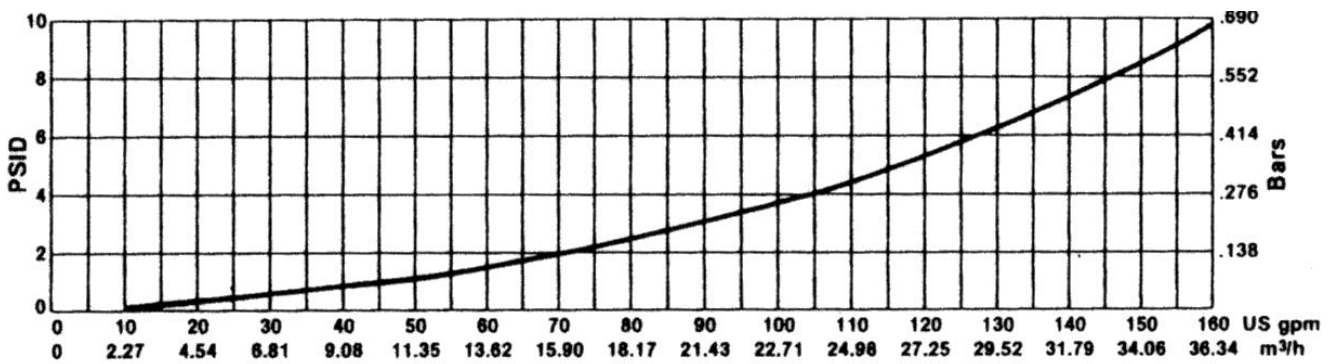
## 2" Accuracy



## 1 1/2" Pressure Loss



## 2" Pressure Loss



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

## Operating Characteristics

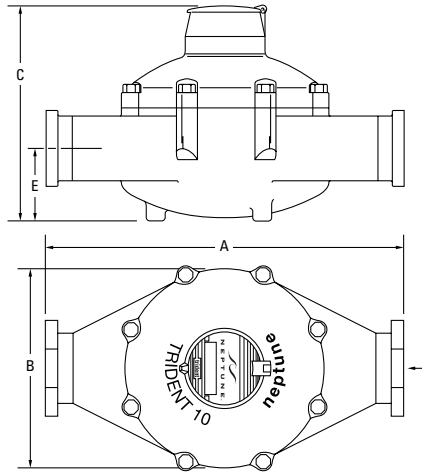
Meter Size	Normal Operating Range @100% Accuracy (±1.5%)	AWWA Standard	Low Flow @ 95% Accuracy
1 1/2"	2 to 100 US gpm 0.46 to 22.73 m <sup>3</sup> /h	5 to 100 US gpm 1.1 to 22.7 m <sup>3</sup> /h	3/4 US gpm 0.17 m <sup>3</sup> /h
2"	2 1/2 to 160 US gpm 0.57 to 36.36 m <sup>3</sup> /h	8 to 160 US gpm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

## Registration

Registration (per sweep hand revolution)		
	1 1/2"	2"
100 US Gallons	✓	✓
100 Imperial Gallons	✓	✓
10 Cubic Feet	✓	✓
1 Cubic Metre		✓
0.1 Cubic Metre	✓	

Register Capacity (6-wheel odometer)		
	1 1/2"	2"
100,000,000 US Gallons	✓	✓
100,000,000 Imperial Gallons	✓	✓
10,000,000 Cubic Feet	✓	✓
1,000,000 Cubic Metres		✓
100,000 Cubic Metres	✓	



## Dimensions

Meter Size	A	B	C-Std.	C-ARB	D-Threads	D-Thread	E	Weight
	in/mm	in/mm	in/mm	in/mm	per inch	Type	in/mm	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 AutoDetect, TRICON®/S, TRICON/E3®, and Neptune meter reading systems without removing the meter from service.

## Specifications

- Certification: ANSI/ NSF 61
- Application: cold water measurement of flow in one direction
- Maximum operating pressure: 150 psi (1034 kPa)
- Maximum operating 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 AutoDetect Absolute Encoder, TRICON/S, TRICON/E3
  - Reclaim
- Measuring chamber: synthetic polymer
- Companion flanges: cast iron or EnviroBrass II



www.neptunetg.com

**Neptune Technology Group Inc.**  
1600 Alabama Highway 229  
Tallahassee, AL 36078, USA  
Tel: (800) 645-1892  
Fax: (334) 283-7299

**Neptune Technology Group (Canada) Ltd.**  
7275 West Credit Avenue  
Mississauga, Ontario L5N 5M9, Canada  
Tel: (905) 858-4211  
Fax: (905) 858-0428

**Neptune Technology Group Inc.**  
Ejército Nacional No. 418  
Piso 12, Desp. 1201-1202  
Col. Chapultepec Morales  
Delegación Miguel Hidalgo  
11570 México, Distrito Federal  
Tel: (525) 5203 5294 / (525) 5203 5708  
Fax: (525) 5203 6503

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