

A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

T-10[®] METER

SIZES: 1 1/2" and 2"

Construction

Every Neptune® 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.

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 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 for performance, materials and workmanship. See warranty statement for details.



KEY FEATURES

Register

- Magnetic-driven, 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

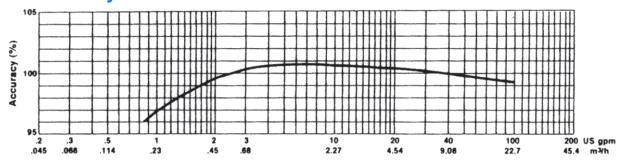
Lead Free Maincase

- Made from lead free, high-copper alloy
- NSF/ANSI 61 Certified
- NSF/ANSI 372 Certified
- Lifetime guarantee
- Resists internal pressure stresses and external damage
- Handles in-line piping variations and stresses
- Provides residual value vs. plastic
- Electrical grounding continuity

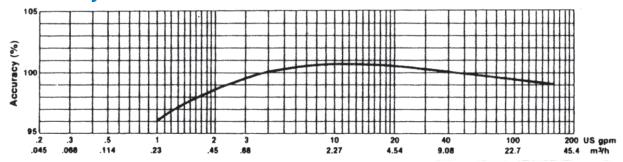
Nutating Disc Measuring Chamber

- 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

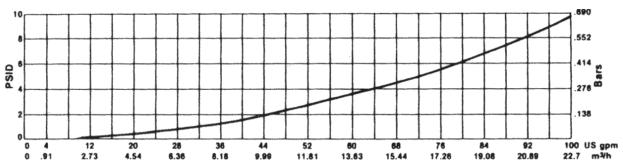
1 ½" Accuracy



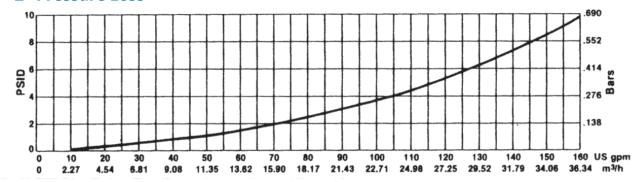
2" Accuracy



1 1/2" Pressure Loss



2" Pressure Loss



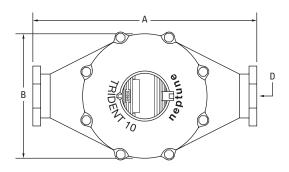
Operating Characteristics

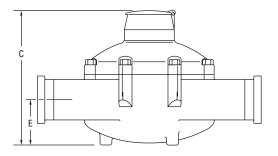
Meter	Normal Operating Range	AWWA	Low Flow
Size	@100% Accuracy (±1.5%)	Standard	@ 95% Accuracy
1 ½"	2 to 100 US gpm	5 to 100 US gpm	³/₄ US gpm
	0.46 to 22.73 m ³ /h	1.1 to 22.7 m³/h	0.17 m³/h
2"	2 ¹ / ₂ to 160 US gpm	8 to 160 US gpm	1 US gpm
	0.57 to 36.36 m³/h	1.8 to 36.3 m³/h	0.23 m³/h

Dimensions

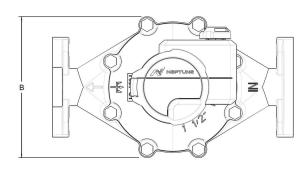
Meter Size	A in/mm	B in/mm	C-Std. in/mm	C-ARB in/mm	C- E-CODER®) R900i™ or ProCoder™) R900i™	D- Threads per inch	D- Thread Type	E in/mm	Weight lbs/kg
1 ½" Screw End	12 ½ 321	8 ½ ₆ 205	8 ½ 206	8 ¹³ / ₁₆ 220.3	8 ³ / ₈ 213	11 ¹ / ₂	1 ¹ / ₂ NPT	2 ^{9/} 16 65	31 14.1
1 ½" Flanged End	13 330	8 ½ ₁₆ 205	8 ½ 206	8 ¹³ / ₁₆ 220.3	8 ³ / ₈ 213	_	_	2 ⁹ / ₁₆ 65	35 15.9
2" Screw End	15 ¼ 387	9 ¾ ₆ 240	9 5⁄16 237	9 ¹⁵ / ₁₆ 248.4	9 ¹ / ₂ 241	11 ¹ / ₂	2" NPT	3 ¹ / ₈ 79	40 18.1
2" Flanged End	17 432	9 ¾ ₁₆ 240	9 5/ ₁₆ 237	9 ¹⁵ / ₁₆ 248.4	9 ¹ / ₂ 241	_	_	3 ¹ / ₈ 79	44 20.0

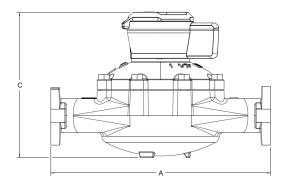
T-10 With Standard Register





T-10 With E-CODER®)R900*i*™ or ProCoder™)R900*i*™ Pit Register





Guaranteed Systems Compatibility

All T-10 meters are guaranteed adaptable to our ProRead[™], ProCoder[™], E-CODER[®], E-CODER[®])R450*i*[™], ProCoder[™])R900*i*[™], TRICON[®]/S, TRICON/E[®]3, and Neptune Utility Systems[™] without removing the meter from service.

Specifications

Certification

• NSF/ANSI 61, NSF/ANSI 372

Application

Cold water measurement of flow in one direction

Maximum Operating Water Pressure

• 150 psi (1,034 kPa)

Maximum Operating Water Temperature

• 80°F

Measuring Chamber

 Nutating disc technology design made from proprietary synthetic polymer

Registration

ProRead Registration (per sweep hand revo	olution)	1 ½"	2"
	US Gallons	✓	✓
100	Imperial Gallons	✓	✓
10	Cubic Feet	✓	✓
1	Cubic Metre		✓
.01	Cubic Metre	✓	
Register Capacity ProRead, ProCoder, a	and E-CODER	1 ½"	2"
100,000,000	US Gallons	1	✓
100,000,000	Imperial Gallons	✓	✓
10,000,000	Cubic Feet	✓	✓
100,000	Cubic Metres	/ *	
1,000,000	Cubic Metres	√ **	✓
E-CODER High Resolution (8-digit reading)		1 ½"	2"
1	US Gallons	✓	✓
1	Imperial Gallons	✓	✓
0.1	Cubic Feet	✓	✓
0.01	Cubic Metres		✓
0.001	Cubic Metres	✓	
ProCoder High Resolution (8-digit reading)		1 ½"	2"
1	US Gallons	1	✓
1	Imperial Gallons	1	✓
0.1	Cubic Feet	✓	✓
0.01	Cubic Metres	✓	✓

^{*}ProRead and E-CODER only **ProCoder only



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
- Remote reading: ProRead Absolute Encoder, ProCoder, E-CODER, E-CODER)R900i, E-CODER)R450i, ProCoder)R900i, TRICON/S, TRICON/E3
- Reclaim

Measuring Chamber

Synthetic polymer

Companion Flanges

• Lead free, 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" (optional)



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Neptune Technology Group

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