



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 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, 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.

See Neptune Meter Warranty Statement for warranty details.

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

KEY BENEFITS

- 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 61 Certified
 - NSF/ANSI 372 Certified
 - 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
 - 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

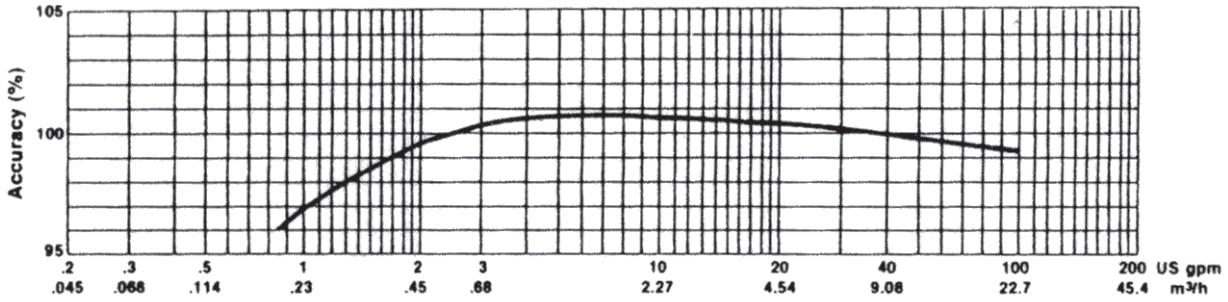
Adaptability to all present and future systems for flexibility is available only with Neptune's ARB® Utility Management Systems™.

SYSTEMS COMPATIBILITY

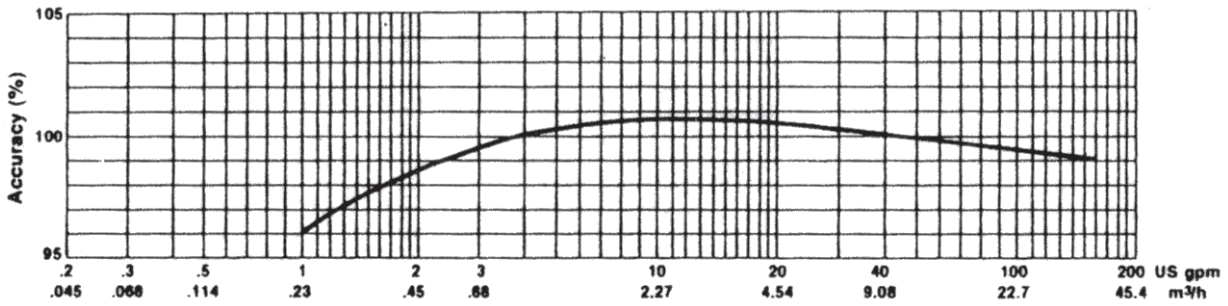
CONSTRUCTION

WARRANTY

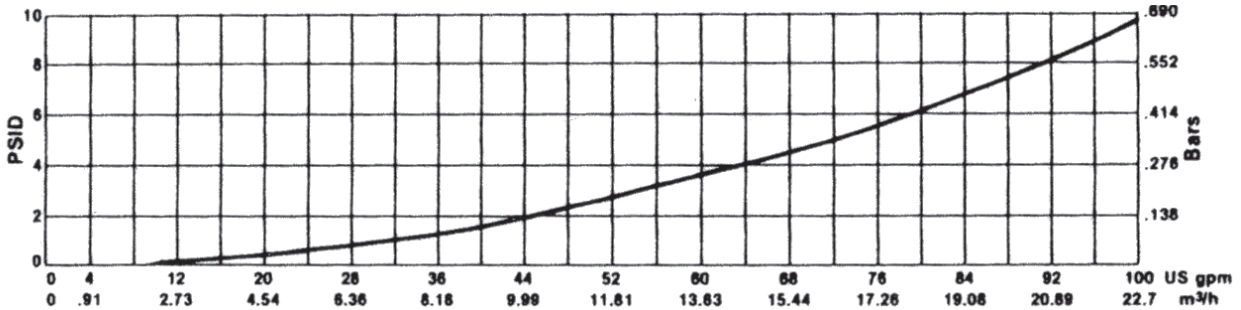
1 1/2" ACCURACY



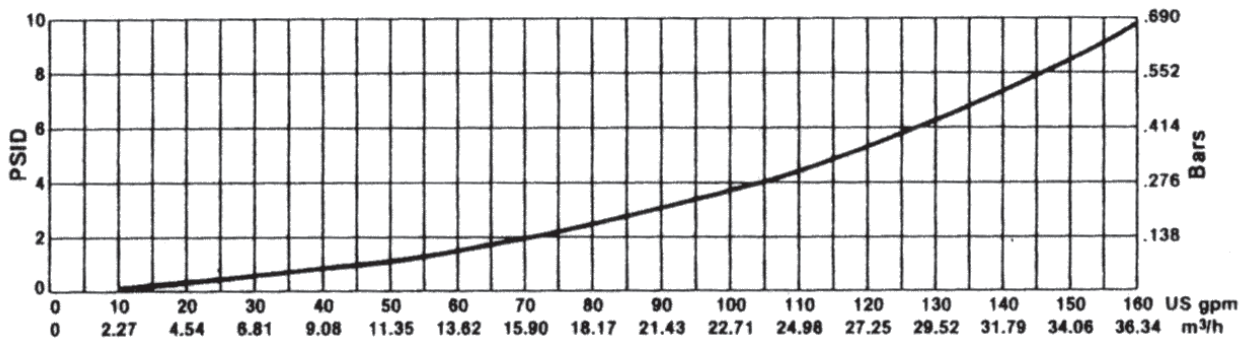
2" ACCURACY



1 1/2" PRESSURE LOSS



2" PRESSURE LOSS



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

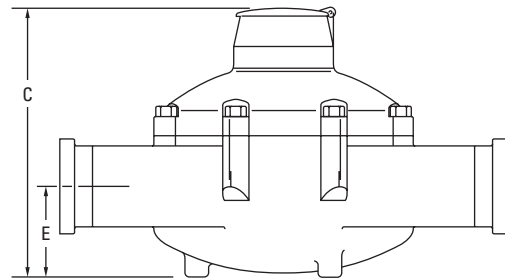
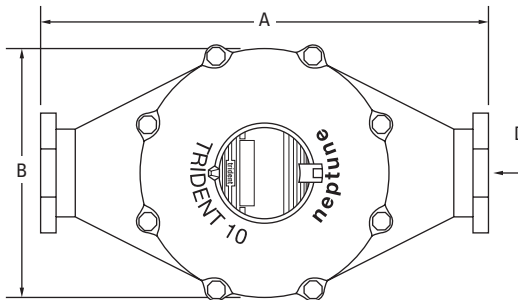
OPERATING CHARACTERISTICS

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

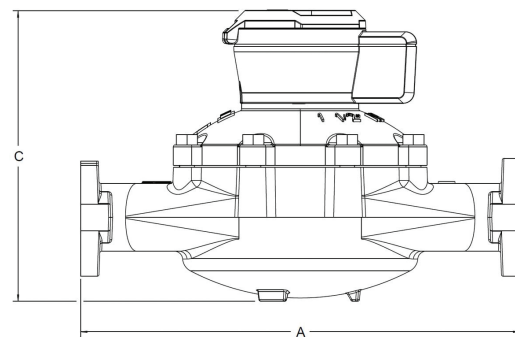
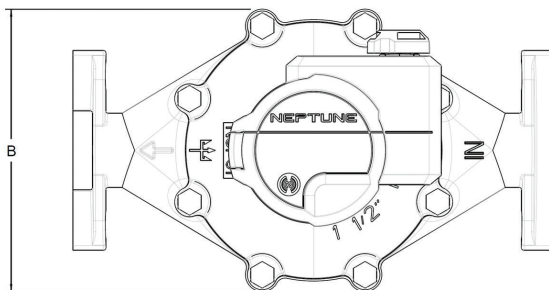
DIMENSIONS

| Meter Size | A in/mm | B in/mm | C-Std. in/mm | C-ARB in/mm | C-E-Coder®) R900i | D-Threads per inch | D-Thread Type | E in/mm | Weight lbs/kg |
|-----------------------|---------------|---------------|-----------------|------------------|----------------------|-----------------------|------------------|--------------|------------------|
| 1 1/2" Screw End | 12 5/8 321 | 8 1/16 205 | 8 1/8 206 | 8 13/16 220.3 | 8 3/8 213 | 11 1/2 | 1 1/2 NPT | 2 9/16 65 | 31 14.1 |
| 1 1/2" Flanged End | 13 330 | 8 1/16 205 | 8 1/8 206 | 8 13/16 220.3 | 8 3/8 213 | — | — | 2 9/16 65 | 35 15.9 |
| 2" Screw End | 15 1/4 387 | 9 7/16 240 | 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 7/16 240 | 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®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/E®3, and Neptune ARB Utility Systems without removing the meter from service.

REGISTRATION

| ProRead Registration | | | |
|------------------------------------|------------------|---------------|-----------|
| (per sweep hand revolution) | | 1 1/2" | 2" |
| 100 | US Gallons | ✓ | ✓ |
| 100 | Imperial Gallons | ✓ | ✓ |
| 10 | Cubic Feet | ✓ | ✓ |
| 1 | Cubic Metre | | ✓ |
| .01 | Cubic Metre | ✓ | |
| Register Capacity | | | |
| ProRead & E-Coder | | 1 1/2" | 2" |
| 100,000,000 | US Gallons | ✓ | ✓ |
| 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 1/2" | 2" |
| 1 | US Gallons | ✓ | ✓ |
| 1 | Imperial Gallons | ✓ | ✓ |
| 0.1 | Cubic Feet | ✓ | ✓ |
| 0.01 | Cubic Metres | | ✓ |
| 0.001 | Cubic Metres | ✓ | |

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

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, E-Coder, E-Coder/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)

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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