



# TRU/FLO® COMPOUND METER

SIZES: 2" HP, 3", 4", 6", AND 6" X 8"

TRU/FLO® meters combine the low-flow sensitivity of a disc-type meter with the high-flow capacity of a turbine-type meter.



All TRU/FLO® Compound water meters meet or exceed the latest performance and accuracy requirements set by the AWWA C702, and maximum continuous flow rates may be exceeded by as much as 25% for intermittent periods.

APPLICATION

The TRU/FLO Compound water meter is designed to register wide flow ranges where varying flow rates are typical. TRU/FLO meters combine the low-flow sensitivity of a disc-type meter with the high-flow capacity of a turbine-type meter.

OPERATION

The hydraulic valve transfers flow smoothly between the disc section and turbine section of the meter, minimizing the loss of accuracy in the crossover range. The turbine measuring element registers high flows and the disc measuring element registers low flows, ensuring accurate measurement at all flow rates.

CONSTRUCTION

The TRU/FLO consists of a durable lead free high copper alloy maincase, Neptune High Performance (HP) or Trident® Turbine measuring element, Neptune T-10 chamber, and two magnetic-driven, roll-sealed registers.

The 6" x 8" TRU/FLO assembly consists of two 6" x 8" concentric reducers, a 6" Neptune strainer, and a 6" Neptune TRU/FLO Compound meter.

The lead free high copper maincase is corrosion resistant, lightweight, and easy to handle.

A calibration vane allows field calibration of the UME to lengthen service life and to ensure accurate registration.

The two magnetic-driven, roll-sealed registers simplify the meter's design and reduce long term maintenance by eliminating complicated combining drive mechanisms. For reading convenience, the registers can be mounted in any one of four positions on the meter.

WARRANTY

Neptune provides a limited warranty with respect to its TRU/FLO Compound water meters for performance, materials, and workmanship.

When desired, owner maintenance is easily accomplished by in-line replacement of major components, or a factory calibrated UME.

KEY FEATURES

- Minimum loss of accuracy in the crossover range increases revenue
- Spring-loaded valve eliminates need for frequent adjustment and service
- Combined Turbine and Disc Measuring Elements
  - Industry-leading flow ranges at 98.5%–101.5% accuracy ensure maximum revenue
  - Direct coupling of rotor to gear train ensures accurate registration
  - Unitized Measuring Element (UME) makes maintenance easier and faster with less downtime
  - Calibration vane allows in-line service to extend life and ensure accurate registration
- Compact Maincase
  - Made from lead free high copper alloy
  - NSF/ANSI 61, Annex G certified and Annex F compliant
  - Lifetime guarantee
  - Compact, lightweight design provides for easy installation and in-line serviceability

SYSTEMS COMPATIBILITY

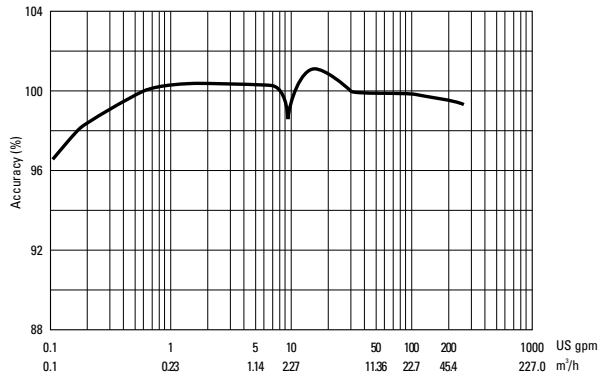
Adaptability to all present and future systems for flexibility.

Distributed By

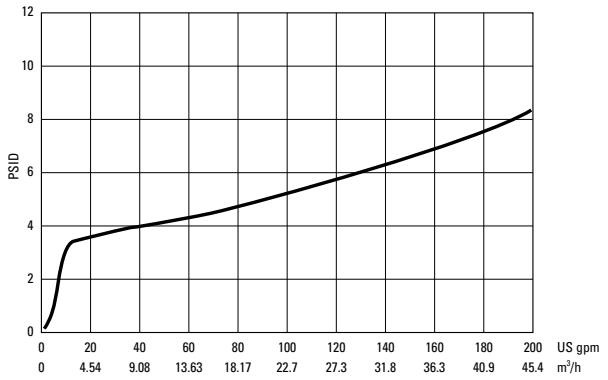


**Meter, Valve & Control**  
877-566-3837

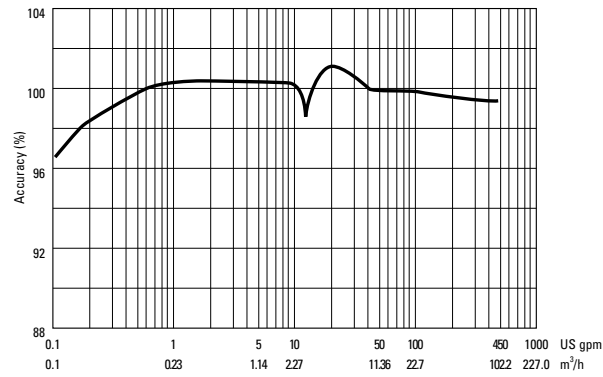
## 2" ACCURACY



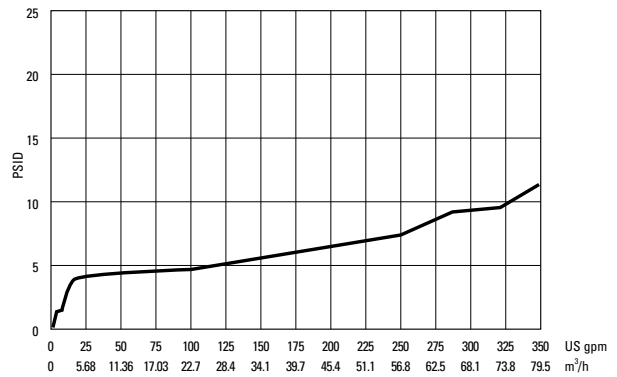
## 2" PRESSURE LOSS



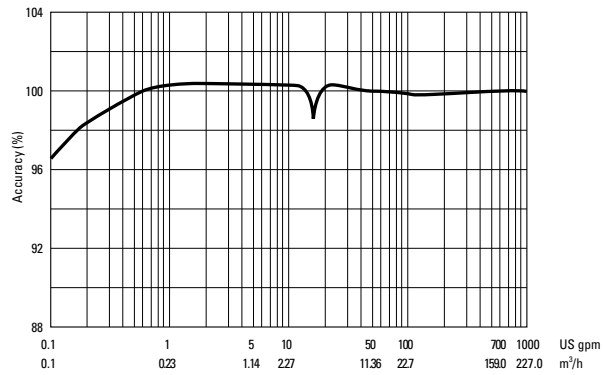
## 3" ACCURACY



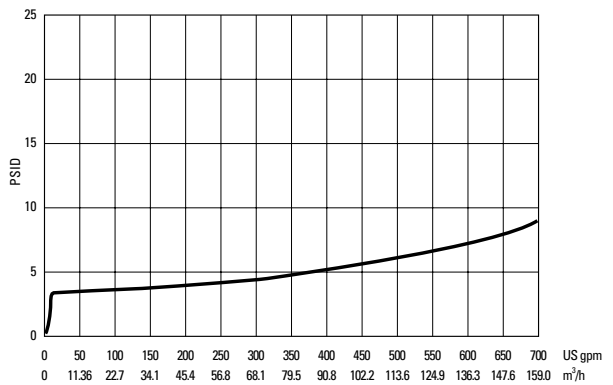
## 3" PRESSURE LOSS



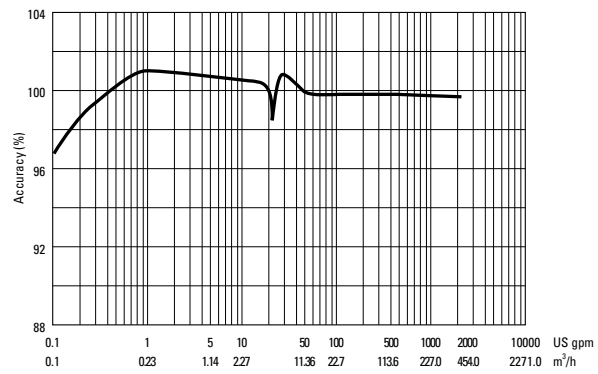
## 4" ACCURACY



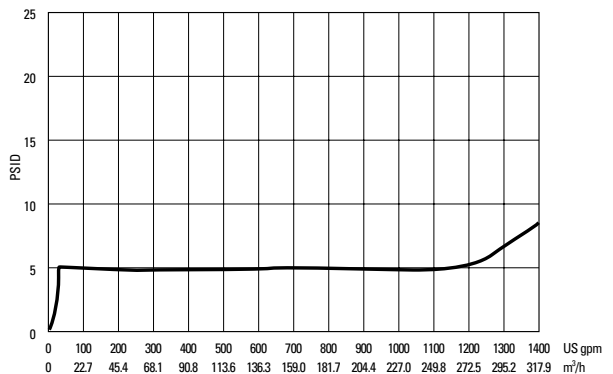
## 4" PRESSURE LOSS



## 6" ACCURACY



## 6" PRESSURE LOSS

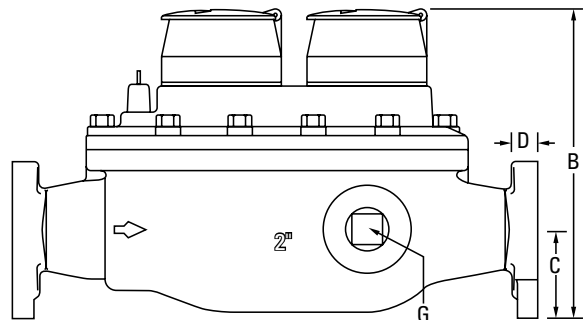
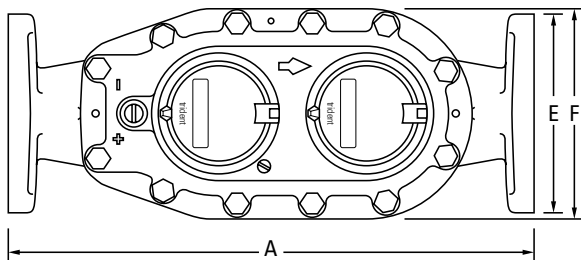


**OPERATING CHARACTERISTICS**

| Meter Size | Normal Operating Range @100% Accuracy (±1.5%) | AWWA Standard                           | Low Flow @ 95% Accuracy |
|------------|-----------------------------------------------|-----------------------------------------|-------------------------|
| 2"         | ½ to 200 US gpm<br>0.11 to 45.4 m³/h          | 1 to 160 US gpm<br>.227 to 36.34 m³/h   | ⅛ US gpm<br>0.03 m³/h   |
| 3"         | ½ to 450 US gpm<br>0.11 to 102.2 m³/h         | 2 to 350 US gpm<br>.454 to 79.5 m³/h    | ⅛ US gpm<br>0.03 m³/h   |
| 4"         | 1 to 1000 US gpm<br>0.23 to 227.1 m³/h        | 3 to 600 US gpm<br>.68 to 136.3 m³/h    | ½ US gpm<br>0.11 m³/h   |
| 6"         | 1 ½ to 2000 US gpm<br>0.34 to 454.2 m³/h      | 5 to 1350 US gpm<br>1.14 to 306.6 m³/h  | ¾ US gpm<br>0.17 m³/h   |
| 6" x 8"    | 1 ½ to 2000 US gpm<br>0.34 to 454.2 m³/h      | 16 to 1600 US gpm<br>3.63 to 363.4 m³/h | ¾ US gpm<br>0.17 m³/h   |

**DIMENSIONS**

| Meter Size | A in/mm      | B-Std in/mm | B-PRO in/mm | B-E-Coder) R900i™ in/mm | C in/mm    | D in/mm  | E in/mm    | F in/mm     | G in/mm       | Flange Type       | Weight lbs/kg |
|------------|--------------|-------------|-------------|-------------------------|------------|----------|------------|-------------|---------------|-------------------|---------------|
| 2" HP      | 15 ¼<br>387  | 8 ⅝<br>219  | 9<br>229    | 12 ⅛<br>308             | 2 ½<br>64  | 1⅜<br>21 | 5 ⅞<br>149 | 6<br>152    | 1 ½ NPT<br>38 | 2" Oval<br>150 lb | 32<br>14.5    |
| 3"         | 17<br>432    | 10 ½<br>267 | 11<br>279   | 14 ¼<br>362             | 3 ¾<br>95  | ⅝<br>16  | 7 ½<br>191 | 8 ½<br>216  | 1 ½ NPT<br>38 | 3" ANSI<br>150 lb | 72<br>32.7    |
| 4"         | 20<br>508    | 12 ½<br>318 | 13<br>330   | 16 ¼<br>413             | 4 ½<br>114 | 1⅜<br>17 | 9<br>229   | 9 ⅞<br>232  | 2 NPT<br>51   | 4" ANSI<br>150 lb | 100<br>45.4   |
| 6"         | 24<br>610    | 15 ¾<br>400 | 16 ¼<br>413 | 19 ½<br>495             | 5 ½<br>140 | 1<br>25  | 11<br>279  | 12 ¾<br>324 | 2 NPT<br>51   | 6" ANSI<br>150 lb | 208<br>94.3   |
| 6" x 8"    | 55 ¾<br>1407 | 15 ¾<br>400 | 16 ¼<br>413 | 19 ½<br>495             | 5 ½<br>140 | 1<br>25  | 11<br>279  | 12 ¾<br>232 | 2 NPT<br>51   | 8" ANSI<br>150 lb | 460<br>208.50 |



## GUARANTEED SYSTEMS COMPATIBILITY

All Neptune TRU/FLO Compound meters are guaranteed adaptable to our ARB®V, ProRead™ (ARB VI), E-Coder®)R900i™, E-Coder®, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.

## REGISTRATION

| Registration<br>(per sweep hand revolution) | Turbine Side  |                | Disc Side                  |
|---------------------------------------------|---------------|----------------|----------------------------|
|                                             | 2", 3",<br>4" | 6",<br>6" x 8" | 2", 3", 4",<br>6", 6" x 8" |
| 1,000 US Gallons                            |               | ✓              |                            |
| 1,000 Imperial Gallons                      |               | ✓              |                            |
| 100 US Gallons                              | ✓             |                |                            |
| 100 Imperial Gallons                        | ✓             |                |                            |
| 100 Cubic Feet                              |               | ✓              |                            |
| 10 US Gallons                               |               |                | ✓                          |
| 10 Imperial Gallons                         |               |                | ✓                          |
| 10 Cubic Feet                               | ✓             |                |                            |
| 10 Cubic Metres                             |               | ✓              |                            |
| 1 Cubic Foot                                |               |                | ✓                          |
| 1 Cubic Metre                               | ✓             |                |                            |
| 0.1 Cubic Metre                             |               |                | ✓                          |

| Register Capacity<br>(6-wheel odometer) | Turbine Side  |                | Disc Side                  |
|-----------------------------------------|---------------|----------------|----------------------------|
|                                         | 2", 3",<br>4" | 6",<br>6" x 8" | 2", 3", 4",<br>6", 6" x 8" |
| 1,000,000,000 US Gallons                |               | ✓              |                            |
| 1,000,000,000 Imperial Gallons          |               | ✓              |                            |
| 100,000,000 US Gallons                  | ✓             |                |                            |
| 100,000,000 Imperial Gallons            | ✓             |                |                            |
| 100,000,000 Cubic Feet                  |               | ✓              |                            |
| 10,000,000 US Gallons                   |               |                | ✓                          |
| 10,000,000 Imperial Gallons             |               |                | ✓                          |
| 10,000,000 Cubic Feet                   | ✓             |                |                            |
| 10,000,000 Cubic Metres                 |               | ✓              |                            |
| 1,000,000 Cubic Feet                    |               |                | ✓                          |
| 1,000,000 Cubic Metres                  | ✓             |                |                            |
| 100,000 Cubic Metres                    |               |                | ✓                          |

## SPECIFICATIONS

- Application: cold water measurement of flow in one direction
- Maximum operating pressure: 150 psi (1034 kPa)
- Maximum operating temperature: 80°F
- Register: direct reading, center sweep, roll-sealed, magnetic drive with low-flow indicator
- Measuring element:
  - AWWA Class II Turbine, hydrodynamically balanced rotor
  - Nutating disc

## OPTIONS

- Sizes: 2" HP, 3", 4", 6", and 6" x 8"
- Units of measure: U.S. gallons, imperial gallons, cubic feet, cubic metres
- Register types:
  - Direct reading: bronze box and cover (standard)
  - Remote reading systems\*: ProRead, E-Coder)R900i, E-Coder, TRICON/S, TRICON/E3
  - Reclaim
- Companion flanges:
  - 2", 3", 4" bronze or cast iron
  - 6", 6" x 8" cast iron
- Strainer: 2", 3", 4", 6" NSF/ANSI 61 lead free high copper alloy

\* Consult factory for meter performance specifications when fitted with ARB.

Neptune Technology Group Inc.  
1600 Alabama Highway 229  
Tallahassee, AL 36078  
USA  
Tel: (800) 633-8754  
Fax: (334) 283-7293

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) 55203 5294 / (525) 55203 5708  
Fax: (525) 55203 6503

