

# TRU/FLO® COMPOUND METER

SIZES: 2"HP, 3", 4", 6", AND 6"X8"

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.

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 turbinetype meter.

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.

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.

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

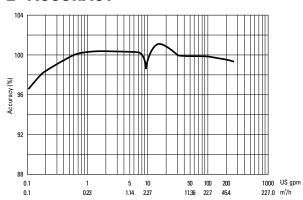
When desired, owner maintenance is easily accomplished by in-line replacement of major components, or a factory-calibrated UME.

- 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 372 certified and NSF/ANSI 61 compliant
  - Lifetime guarantee
  - Compact, lightweight design provides for easy installation and in-line serviceability

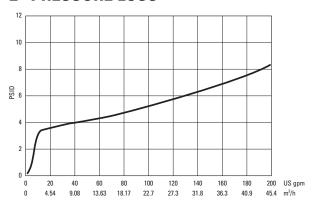
Adaptability to all present and future systems for flexibility.

SYSTEMS COMPATIBILITY

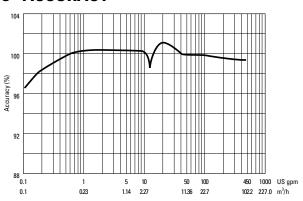
### 2" ACCURACY



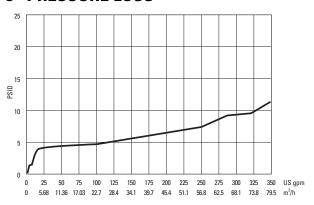
### 2" PRESSURE LOSS



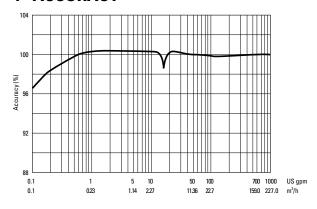
### 3" ACCURACY



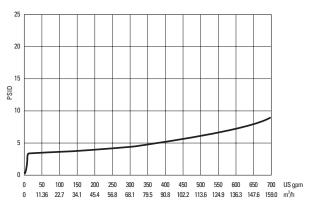
### 3" PRESSURE LOSS



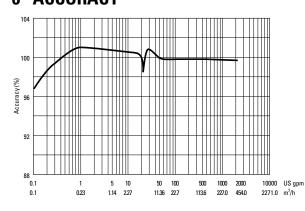
### 4" ACCURACY



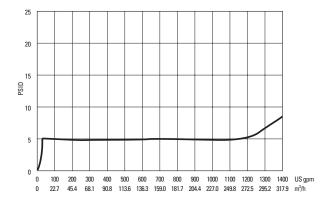
## 4" PRESSURE LOSS



### **6" ACCURACY**



## **6" PRESSURE LOSS**

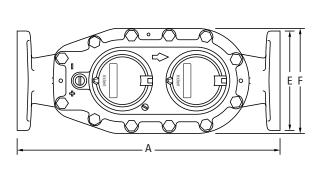


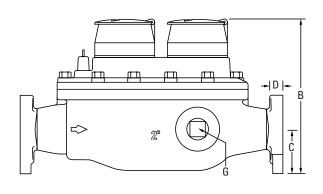
#### **OPERATING CHARACTERISTICS**

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

#### **DIMENSIONS**

Meter Size	A in/mm	B-Std. in/mm	B-PRO in/mm	B- E-Coder®) R900 <i>i</i> ™ 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	8 %	9	12 ½	2 ½	<sup>13</sup> / <sub>16</sub>	5 %	6	1 ½ NPT	2" Oval	32
	387	219	229	308	64	21	149	152	38	150 lb	14.5
3"	17	10 ½	11	14 ¼	3 ¾	%	7 ½	8 ½	1 ½ NPT	3" ANSI	72
	432	267	279	362	95	16	191	216	38	150 lb	32.7
4"	20	12 ½	13	16 ¼	4 ½	<sup>11</sup> / <sub>16</sub>	9	9 1/8	2 NPT	4" ANSI	100
	508	318	330	413	114	17	229	232	51	150 lb	45.4
6"	24	15 ¾	16 ¼	19 ½	5 ½	1	11	12 ¾	2 NPT	6" ANSI	208
	610	400	413	495	140	25	279	324	51	150 lb	94.3
6" x 8"	55 ¾	15 ¾	16 ¼	19 ½	5 ½	1	11	12 ¾	2 NPT	8" ANSI	460
	1407	400	413	495	140	25	279	232	51	150 lb	208.50





#### **GUARANTEED SYSTEMS COMPATIBILITY**

All Neptune TRU/FLO Compound meters are guaranteed adaptable to our ARB®V, ProRead™ (ARB VI), E-Coder®, E-Coder®)R900*i*™, E-Coder®)R450*i*™, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.

#### REGISTRATION

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

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

 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, rollsealed, magnetic drive with low-flow indicator
- Measuring element:

SPECIFICATIONS

- AWWA Class II Turbine, hydrodynamically balanced rotor
- Nutating disc
- 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, E-Coder)R900i, E-Coder)R450i,
    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 372 and NSF/ANSI 61 lead free, high-copper alloy
- \* Consult factory for meter performance specifications when fitted with ARB.

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