

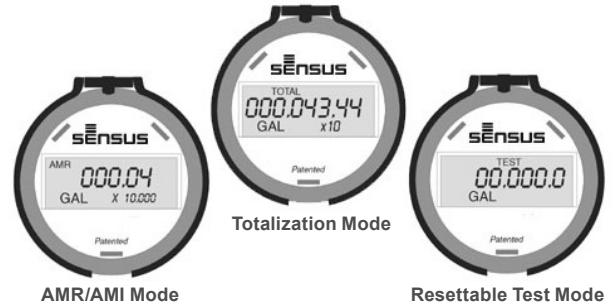
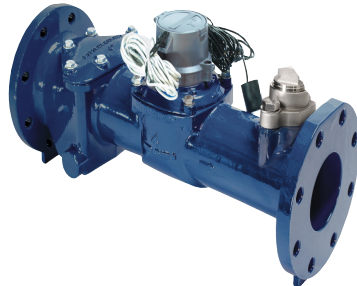
# OMNI™ T<sup>2</sup>

1-1/2", 2", 3", 4", 6", 8" and 10" OMNI T<sup>2</sup> Meter

## Description

### 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

The OMNI T<sup>2</sup> meter operation is based on advanced Floating Ball Technology (FBT).



## Features

### CONFORMANCE TO STANDARDS

The OMNI T<sup>2</sup> meter meets and far exceeds the most recent revision of AWWA Standard C701 class II standards. Each meter is performance tested to ensure compliance. All OMNI meters are NSF/ANSI Standard 61, Annex F and G approved.

### PERFORMANCE

The patented measurement principles of the OMNI T<sup>2</sup> meter assure enhanced accuracy ranges, an overall greater accuracy, and a longer service life than any other comparable class meter produced. The OMNI T<sup>2</sup> meter has no restrictions as to sustained flow rates within its continuous operating range. The floating ball measurement technology allows for flows up to its rated maximum capacity without affecting undue wear or accuracy degradation when installed in any orientation.

### CONSTRUCTION

The OMNI T<sup>2</sup> meter consists of two basic assemblies; the maincase and the measuring chamber. The measuring chamber assembly includes the "floating ball" impeller with a coated titanium shaft, hybrid axial bearings, integral flow straightener and an all electronic programmable register with protective bonnet. The maincase is made from industry proven Ductile Iron with an approved NSF epoxy coating. Maincase features are; easily removable measuring chamber, unique chamber seal to the maincase using a high pres-

sure o-ring, testing port and a convenient integral strainer.

### OMNI ELECTRONIC REGISTER

The OMNI T<sup>2</sup> electronic register consist of a hermetically sealed register with an electronic pickup containing no mechanical gearing. The large character LCD displays AMR, Totalization and a Resettable Test Totalizer. OMNI register features; AMR resolution units that are fully programmable, Pulse output frequency that are fully programmable, Integral customer data logging capability, Integral resettable accuracy testing feature compatible with the UniPro Testing Assistant Program, Large, easy-to-read LCD also displays both forward and reverse flow directions and all with a 10-year battery life guarantee.

### MAGNETIC DRIVE

Meter registration is achieved by utilizing a fully magnetic pickup system. This is accomplished by the magnetic actions of the embedded rotor magnets and the ultra sensitive register pickup probe. The only moving component in water is the "floating ball" impeller.

### MEASURING ELEMENT

The revolutionary thermoplastic, hydro dynamically balanced impeller floats between the bearings. The Floating Ball Technology (FBT) allows the measuring element to operate virtually without friction or wear, thus creating the extended

upper and lower flow ranges capable on only the OMNI T<sup>2</sup> meter.

### STRAINER

The OMNI T<sup>2</sup> with the "V" shaped integral strainer using a stainless steel screen along with Floating Ball Technology (FBT) create a design that gives far improved accuracy even in those once thought questionable settings. A removable strainer cover permits easy access to the screen for routine maintenance.

### MAINTENANCE

The OMNI T<sup>2</sup> meter is designed for easy maintenance. Should any maintenance be required, the measuring chamber and / or strainer cover can be removed independently. Parts and or a replacement measuring chamber may be utilized in the event repairs are needed. Replacement Measuring Chambers Exchange are available for the OMNI T<sup>2</sup> meters and may also be utilized for retrofitting to competitive meters to achieve increased accuracy and extended service life.

### AMR / AMI SYSTEMS:

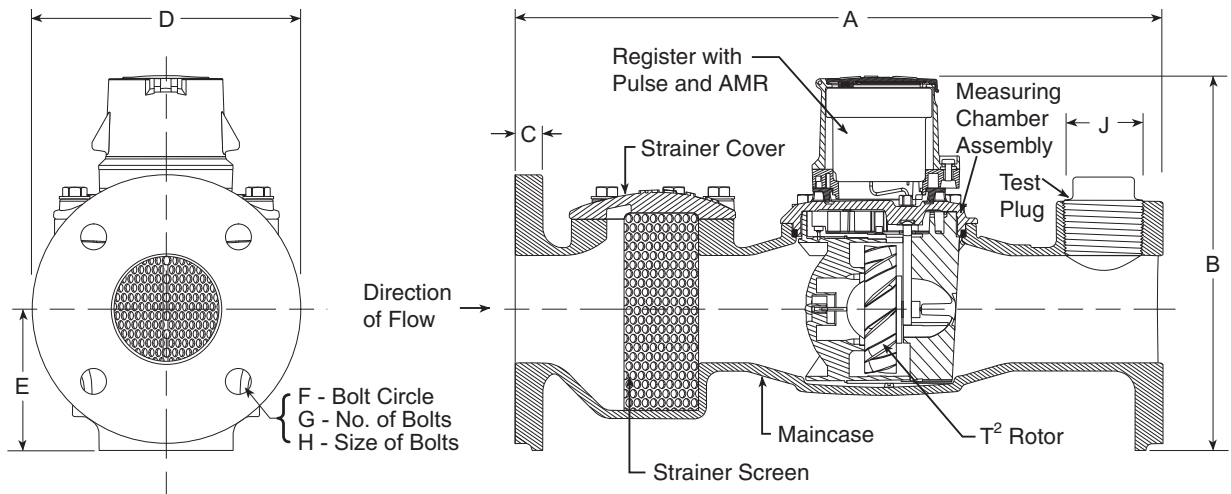
Meters and encoders are compatible with current Sensus AMR/AMI systems.

### GUARANTEE:

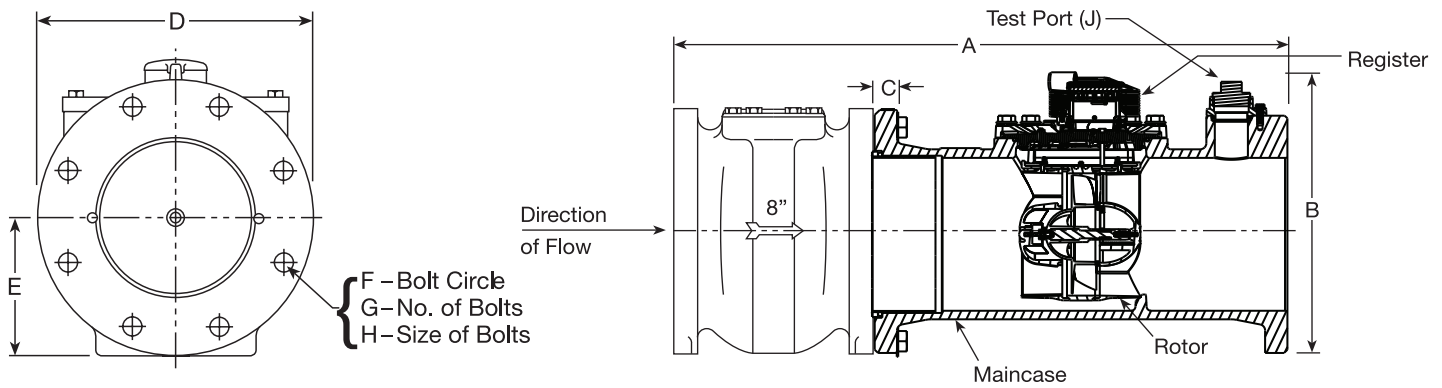
Sensus OMNI T<sup>2</sup> Meters are backed by "The Sensus Guarantee." Ask your Sensus representative for details or see Bulletin G-500.

## OMNI T<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

### OMNI T<sup>2</sup>: 1 1/2" - 6"



### OMNI T<sup>2</sup>: 8" - 10"



## DIMENSIONS AND NET WEIGHTS

Meter and Pipe Size	Normal Operating Range		Connections	A	B	C	D	E	F	G	H	J	Net Weight	Shipping Weight
1-1/2" DN 40mm	1.25 gpm .28 m <sup>3</sup> /hr	200 gpm 45 m <sup>3</sup> /hr	Flanged	13" 330mm	7-7/8" 200mm	15/16" 24mm	5-1/8" 130mm	2-5/16" 59mm	4" 102mm	2	5/8" 16mm	1" 25mm	18.8 lbs. 8.53 kg.	22.5 lbs. 10.20 kg.
2" DN 50mm	1.5 gpm .34 m <sup>3</sup> /hr	250 gpm 57 m <sup>3</sup> /hr	Flanged	17" 432mm	7-7/8" 200mm	1" 25mm	5-3/4" 146mm	2-5/16" 59mm	4-1/2" 114mm	2	3/4" 19mm	1-1/2" 40mm	27.4 lbs. 12.42 kg.	34.5 lbs. 15.65 kg.
2" without Strainer DN 50mm	1.5 gpm .34 m <sup>3</sup> /hr	250 gpm 57 m <sup>3</sup> /hr	Flanged	10" 254mm	7-7/8" 200mm	1" 25mm	5-3/4" 146mm	2-5/16" 59mm	4-1/2" 114mm	2	3/4" 19mm	N/A	17.4 lbs. 7.9 kg.	24.5 lbs. 11.11 kg.
3" DN 80mm	2.5 gpm .57 m <sup>3</sup> /hr	650 gpm 148 m <sup>3</sup> /hr	Flanged	19" 432mm	8-3/4" 222mm	3/4" 19mm	7-7/8" 200mm	4-1/8" 105mm	6" 153mm	4	5/8" 16mm	2" 50mm	48.5 lbs. 22.00 kg.	57.4 lbs. 26.04 kg.
4" DN 100mm	3.0 gpm .68 m <sup>3</sup> /hr	1250 gpm 284 m <sup>3</sup> /hr	Flanged	23" 584mm	11-3/16" 284mm	15/16" 24mm	9-1/8" 232mm	4-3/4" 121mm	7-1/2" 191mm	8	5/8" 16mm	2" 50mm	67.9 lbs. 30.80 kg.	75.8 lbs. 34.38 kg.
6" DN 150mm	4 gpm .91 m <sup>3</sup> /hr	2500 gpm 568 m <sup>3</sup> /hr	Flanged	27" 685mm	13-1/4" 336mm	15/16" 24mm	11" 279mm	5-3/4" 146mm	9-1/2" 242mm	8	3/4" 19mm	2" 50mm	140 lbs. 52.3 kg.	165 lbs. 61.6 kg.
8" DN 200mm	5 gpm 1.1 m <sup>3</sup> /hr	3500 gpm 795 m <sup>3</sup> /hr	Flanged	30-1/8" 765 mm	15" 381 mm	11/16" 17 mm	13-1/2" 343 mm	6-3/4" 172 mm	11-3/4" 300 mm	8	3/4" 19 mm	2" NPT	471 lbs. 214 kg.	521 lbs. 236 kg.
10" DN 250mm	6 gpm 1.4 m <sup>3</sup> /hr	5500 gpm 1249 m <sup>3</sup> /hr	Flanged	41-1/8"	19" 485mm	11/16" 17mm	16" 406mm	8-1/2" 216mm	14-1/4" 362mm	12	7/8" 22mm	2" NPT	685 lbs. 311 kg.	745 lbs. 338 kg.

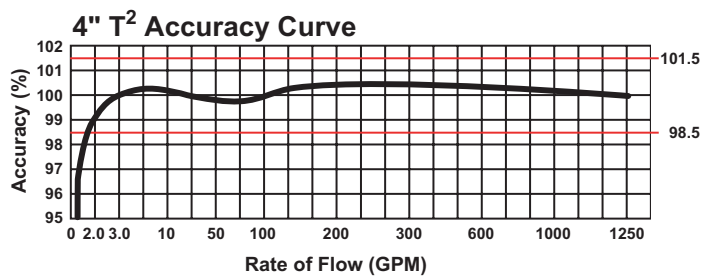
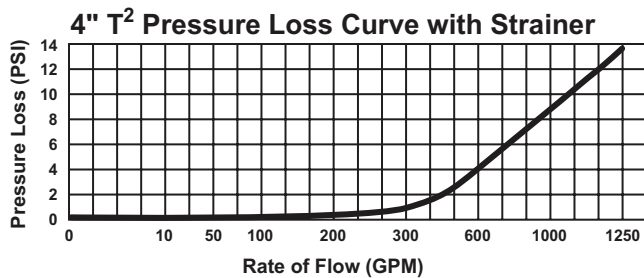
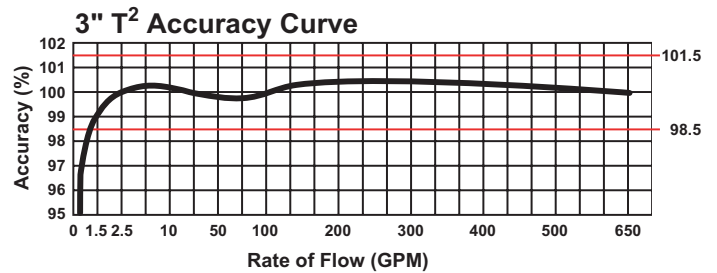
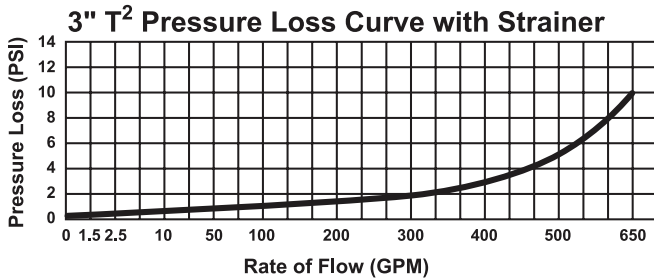
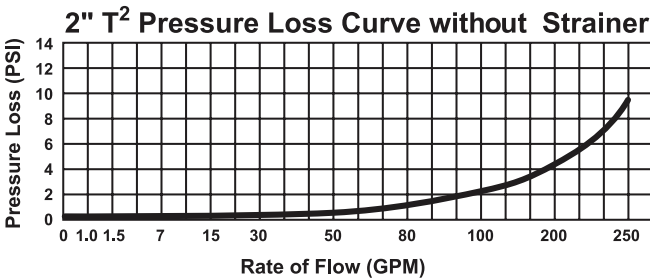
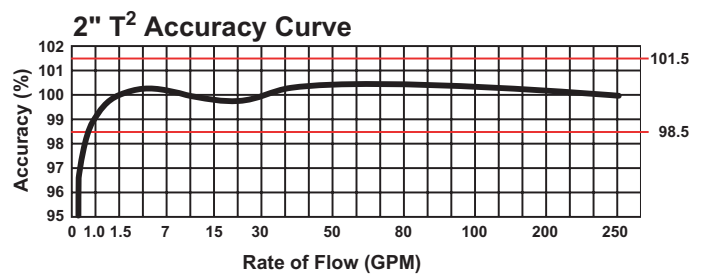
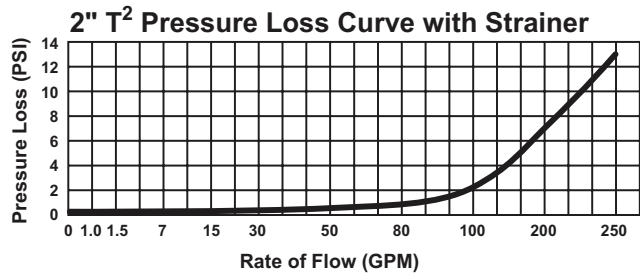
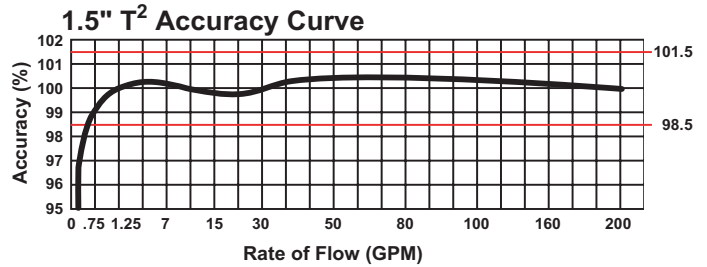
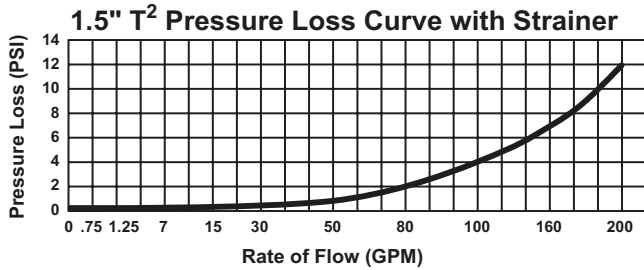
## OMNI T<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

### SPECIFICATIONS

<b>SERVICE</b>	Measurement of potable and reclaim water. Operating temperature range of 33 °F (56 °C) - 150 °F (65.6 °C)
<b>OPERATING RANGE</b> (100% ± 1.5%)	1-1/2": 1.25 – 200 GPM (.28 - 45 m <sup>3</sup> /hr) 2" and 2" without Strainer: 1.5 – 250 GPM (.34 – 57 m <sup>3</sup> /hr) 3": 2.5 – 650 GPM (.57 – 148 m <sup>3</sup> /hr) 4": 3 – 1250 GPM (.68 – 284 m <sup>3</sup> /hr) 6": 4 – 2500 GPM (.91 – 568 m <sup>3</sup> /hr) 8": 5 – 3500 GPM (1.1-795 m <sup>3</sup> /hr) 10": 6 – 5500 GPM (1.4 - 1249 m <sup>3</sup> /hr)
<b>LOW FLOW</b> (95% – 101.5%)	1-1/2": .75 GPM (.17 m <sup>3</sup> /hr) 2" and 2" without Strainer: 1.0 GPM (.23 m <sup>3</sup> /hr) 3": 1.5 GPM (.34 m <sup>3</sup> /hr) 4": 2.0 GPM (.45 m <sup>3</sup> /hr) 6": 2.5 GPM (.57 m <sup>3</sup> /hr) 8": 4 GPM (0.9 m <sup>3</sup> /hr) 10": 5 GPM (1.1 m <sup>3</sup> /hr)
<b>MAXIMUM CONTINUOUS OPERATION</b>	1-1/2": 160 GPM (36 m <sup>3</sup> /hr) 2" and 2" without Strainer: 200 GPM (45 m <sup>3</sup> /hr) 3": 500 GPM (114 m <sup>3</sup> /hr) 4": 1000 GPM (227 m <sup>3</sup> /hr) 6": 2000 GPM (454 m <sup>3</sup> /hr) 8": 3500 GPM (795 m <sup>3</sup> /hr) 10": 5500 GPM (1249 m <sup>3</sup> /hr)
<b>MAXIMUM INTERMITTENT OPERATION</b>	1-1/2": 200 GPM (45 m <sup>3</sup> /hr) 2" and 2" without Strainer: 250 GPM (57 m <sup>3</sup> /hr) 3": 650 GPM (148 m <sup>3</sup> /hr) 4": 1250 GPM (284 m <sup>3</sup> /hr) 6": 2500 GPM (568 m <sup>3</sup> /hr) 8": 4700 GPM (1067 m <sup>3</sup> /hr) 10": 7000 GPM (1590 m <sup>3</sup> /hr)
<b>PRESSURE LOSS</b>	1-1/2": 6.9 psi @ 160 GPM (48 bar @ 36 m <sup>3</sup> /hr) 2" and 2" without Strainer: 7.0 psi @ 200 GPM (.48 bar @ 45 m <sup>3</sup> /hr) 3": 5.1 psi @ 500 GPM (.35 bar @ 114 m <sup>3</sup> /hr) 4": 8.7 psi @ 1000 GPM (.60 bar @ 227 m <sup>3</sup> /hr) 6": 8.2 psi @ 2000 GPM (.56 bar @ 454 m <sup>3</sup> /hr) 8": 5.1 psi @ 3500 GPM (.35 bar @ 795 m <sup>3</sup> /hr) 10": 7.2 psi @ 5500 GPM (.50 bar @ 1249 m <sup>3</sup> /hr)
<b>MAXIMUM OPERATING PRESSURE</b>	200 PSI (13.8 bar)
<b>FLANGE CONNECTIONS</b>	U.S. ANSI B16.1 / AWWA Class 125
<b>REGISTER</b>	Fully electronic sealed register with programmable registration (Gal. /Cu.Ft./ Cu. Mtr. / Imp.Gal / Acre Ft.) Programmable AMR/AMI reading and pulse outputs Guaranteed 10 year battery life
<b>NSF APPROVED MATERIALS</b>	<b>Maincase:</b> Coated Ductile Iron <b>Measuring Chamber:</b> Thermoplastic <b>Rotor "Floating Ball":</b> Thermoplastic <b>Radial Bearings:</b> Hybrid Thermoplastic <b>Thrust Bearings:</b> Sapphire/Ceramic Jewel <b>Magnets:</b> Ceramic Magnet <b>Strainer Screen:</b> Stainless Steel <b>Strainer Cover:</b> Coated Ductile Iron <b>Test Plug:</b> Coated Ductile Iron

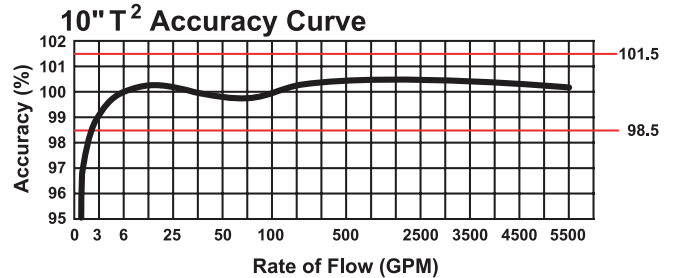
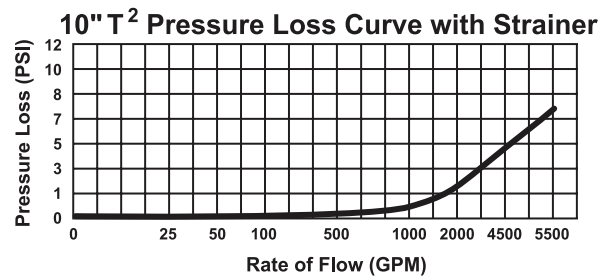
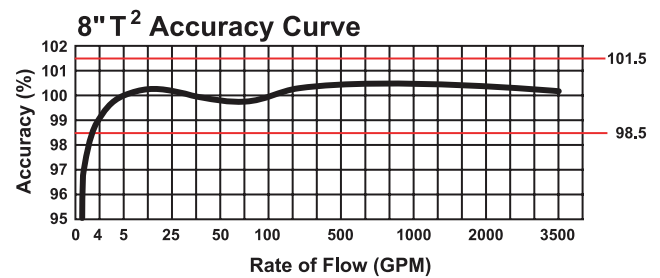
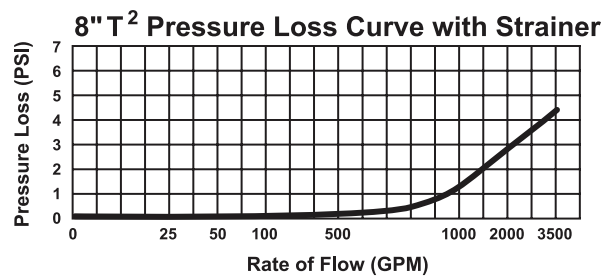
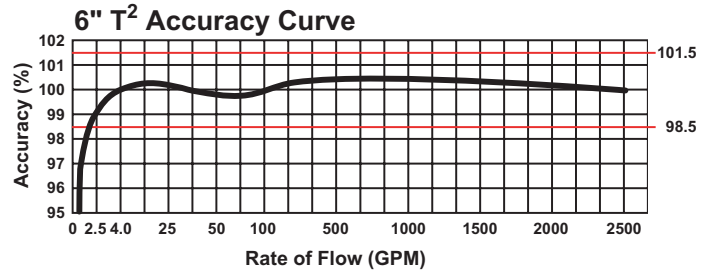
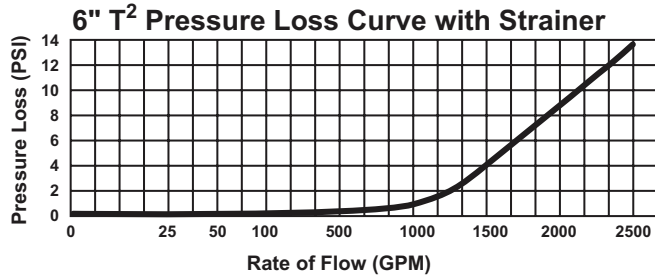
# OMNI T<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

## Headloss Curves



## OMNI T<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

### Headloss Curves



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