

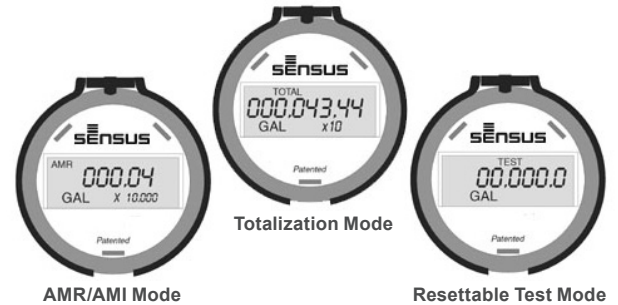
# OMNI™ T<sup>2</sup>S

1-1/2", 2", and 3" OMNI T<sup>2</sup>S Meter

## Description

### 1-1/2", 2", and 3" Sizes

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



## Features

### CONFORMANCE TO STANDARDS

The OMNI T<sup>2</sup>S 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>S 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>S 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>S 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 304 Stainless Steel. Maincase features are: easily removable measuring chamber, unique chamber seal to the maincase using a high pressure o-ring, testing port and a convenient integral strainer.

### OMNI ELECTRONIC REGISTER

The OMNI T<sup>2</sup>S 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>S meter.

### STRAINER

The OMNI T<sup>2</sup>S 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>S 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>S meters and may also be utilized for retrofitting to competitive meters to achieve increased accuracy and extended service life.

### AMR / AMI SYSTEMS

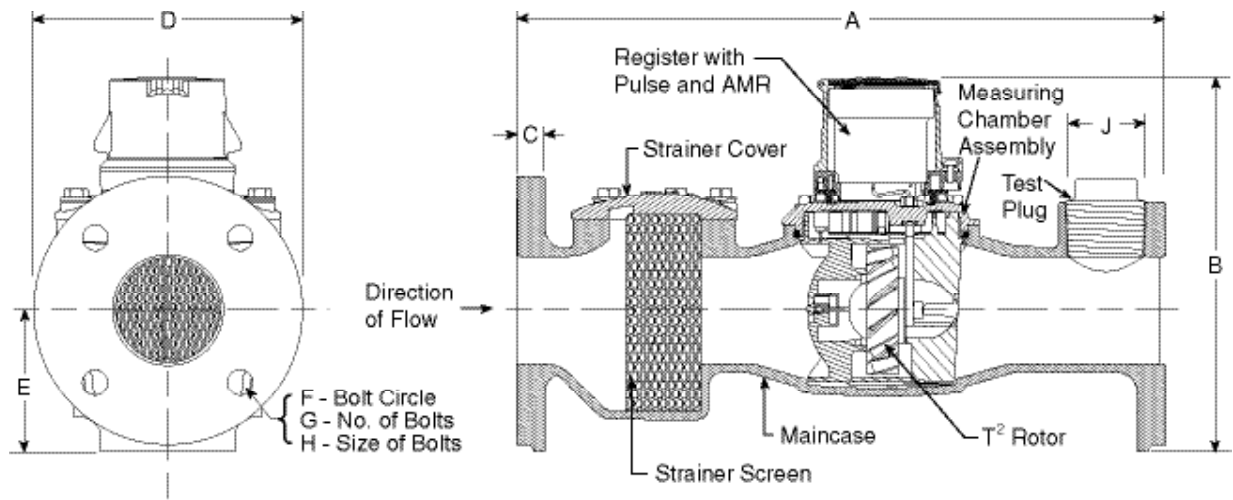
Meters and encoders are compatible with current Sensus AMR/AMI systems.

### GUARANTEE

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

### OMNI T<sup>2</sup>S: 1-1/2", 2", and 3" Sizes

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



### DIMENSIONS

Meter and Pipe Size	A	B	C	D	E	F	G	H	J	K
1-1/2" DN 40mm	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	3/8" 10mm
2" DN 50mm	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	1/2" 13mm
3" DN 80mm	19" 483mm	8-3/4" 222mm	3/4" 19mm	7-7/8" 200mm	4-1/8" 105mm	6" 153mm	4	5/8" 16mm	2" 50mm	1/2" 13mm

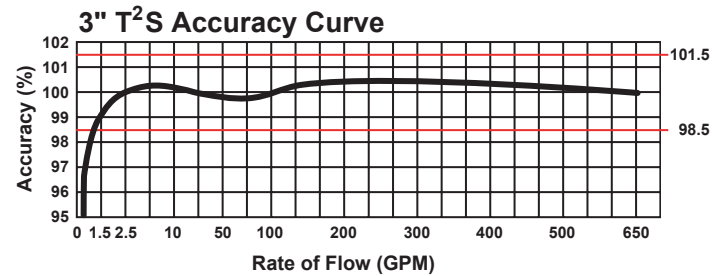
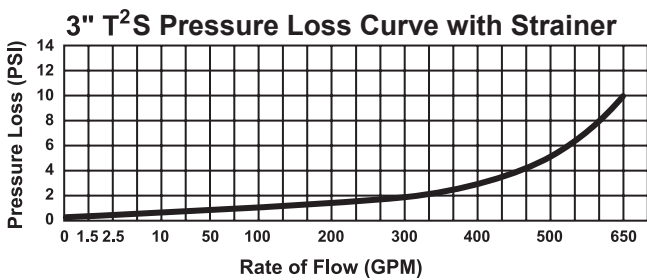
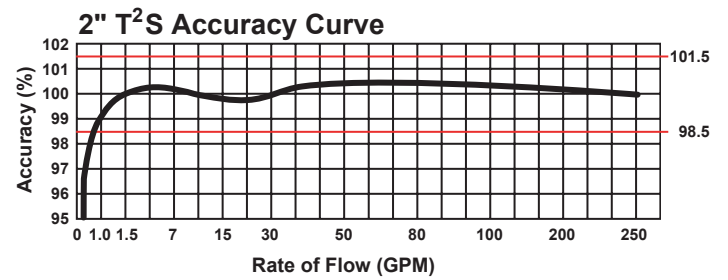
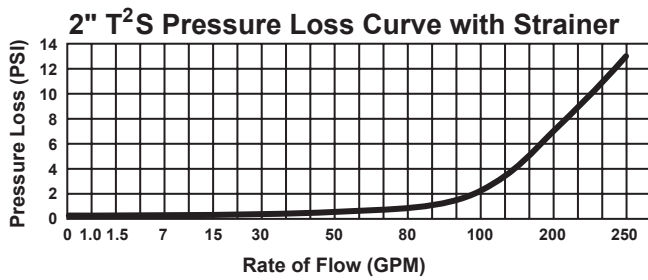
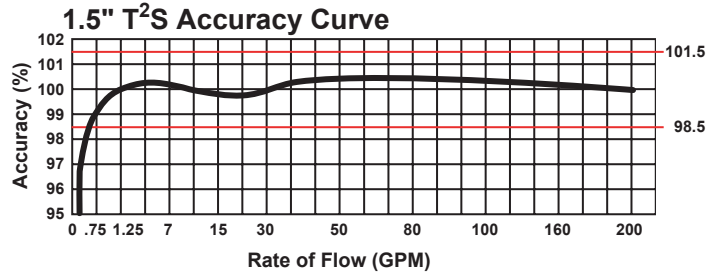
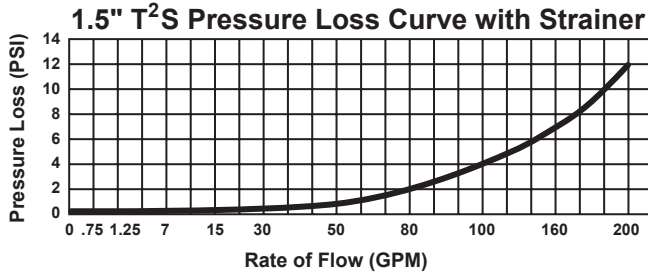
## OMNI T<sup>2</sup>S: 1-1/2", 2", and 3" Sizes

### SPECIFICATIONS

	Meter and Pipe Size		
	1-1/2" DN 40mm	2" DN 50mm	3" DN 80mm
<b>NET WEIGHT</b>	18.5 lbs. 8.4 kg.	25 lbs. 11.3 kg.	52.5 lbs. 22.8 kg.
<b>SHIPPING WEIGHT</b>	23.1 lbs. 10.4 kg.	29.5 lbs. 13.4 kg.	57 lbs. 25.9 kg.
<b>OPERATING RANGE (100% ± 1.5%)</b>	1.25 gpm — 200 gpm (.28 m <sup>3</sup> /hr — 45 m <sup>3</sup> /hr)	1.5 gpm — 250 gpm (.34 m <sup>3</sup> /hr — 57 m <sup>3</sup> /hr)	2.5 gpm — 650 gpm (.57 m <sup>3</sup> /hr — 148 m <sup>3</sup> /hr)
<b>LOW FLOW (95%-101.5%)</b>	.75 GPM (.17 m <sup>3</sup> /hr)	1.0 GPM (.23 m <sup>3</sup> /hr)	1.5 GPM (.34 m <sup>3</sup> /hr)
<b>MAXIMUM CONTINUOUS OPERATION</b>	160 GPM (36m <sup>3</sup> /hr)	200 GPM (45m <sup>3</sup> /hr)	500 GPM (114 m <sup>3</sup> /hr)
<b>MAXIMUM INTERMITTENT OPERATION</b>	200 GPM (45 m <sup>3</sup> /hr)	250 GPM (57 m <sup>3</sup> /hr)	650 GPM (148 m <sup>3</sup> /hr)
<b>PRESSURE LOSS</b>	6.9 psi @ 160 GPM (.48 bar @ 36 m <sup>3</sup> /hr)	7.0 psi @ 200 GPM (.48 bar @ 45 m <sup>3</sup> /hr)	5.1 psi @ 500 GPM (.35 bar @ 114 m <sup>3</sup> /hr)
<b>MAXIMUM OPERATING PRESSURE</b>	200 PSI (13.8 bar)		
<b>CONNECTIONS</b>	Flanged, U.S. ANSI B16.1 / AWWA Class 125		
<b>SERVICE</b>	Measurement of potable and reclaim water. Operating temperature range of 33 °F (56 °C) - 150 °F (65.6 °C)		
<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> <b>Measuring Chamber:</b> <b>Rotor "Floating Ball":</b> <b>Radial Bearings:</b> <b>Thrust Bearings:</b> <b>Magnets:</b> <b>Strainer Screen:</b> <b>Strainer Cover:</b> <b>Test Plug:</b>	304 Stainless Steel Thermoplastic Thermoplastic Hybrid Thermoplastic Sapphire/Ceramic Jewel Ceramic Magnet Stainless Steel 304 Stainless Steel 304 Stainless Steel	

## OMNI T<sup>2</sup>S: 1-1/2", 2", and 3" Sizes

### Headloss Curves



© All products purchased and services performed are subject to Sensus' terms of sale, available at either; <http://na.sensus.com/TC/TermsConditions.pdf> or 1-800-638-3748. Sensus reserves the right to modify these terms and conditions in its own discretion without notice to the customer.

This document is for informational purposes only, and SENSUS MAKES NO EXPRESS WARRANTIES IN THIS DOCUMENT. FURTHERMORE, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. ANY USE OF THE PRODUCTS THAT IS NOT SPECIFICALLY PERMITTED HEREIN IS PROHIBITED.