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# OMNI™ T<sup>2</sup>

## 3" OMNI T<sup>2</sup> Meter

### DESCRIPTION

**Model:** The OMNI<sup>T2</sup> meter operation is based on advanced Floating Ball Technology (FBT) with an operating range of 1.5 GPM (.34 m<sup>3</sup>/hr) @ 95% min. to 650 GPM (148 m<sup>3</sup>/hr) @ 100% +/- 1.5% registration of actual throughput. The meter is also rated for continuous flows up to 500 GPM (114 m<sup>3</sup>/hr).

**Conformance to Standards:** The OMNI<sup>T2</sup> meter meets and far exceeds the most recent revision of ANSI / AWWA Standard C701 class II standards. Each meter is performance tested to ensure compliance. All OMNI meters are NSF Approved to the latest standards.

**Performance:** The patented measurement principles of the OMNI<sup>T2</sup> meter assure enhanced accuracy ranges, an overall greater accuracy, and a longer service life than any other comparable class meter produced. The 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.

**Construction:** The 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 pressure o-ring, testing port and a convenient integral strainer with optional drain/debris-flushing ports.

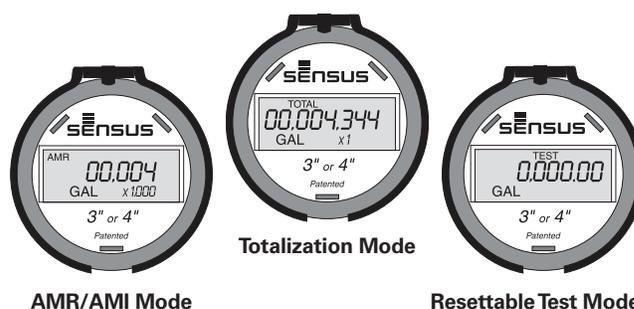
**OMNI Electronic Register:** The T<sup>2</sup> electronic register consist of a hermetically sealed register with an electronic pickup containing no mechanical gearing. The large character LCD displays AMR, Totalization and a Resettable Test Totalizer. OMNI register features; AMR resolution units that are fully programmable, Pulse output frequency that are fully programmable, Integral customer data logging capability, Integral resettable accuracy testing feature compatible with AR-5000 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



3" OMNI<sup>T2</sup>



AMR/AMI Mode

Totalization Mode

Resettable Test Mode

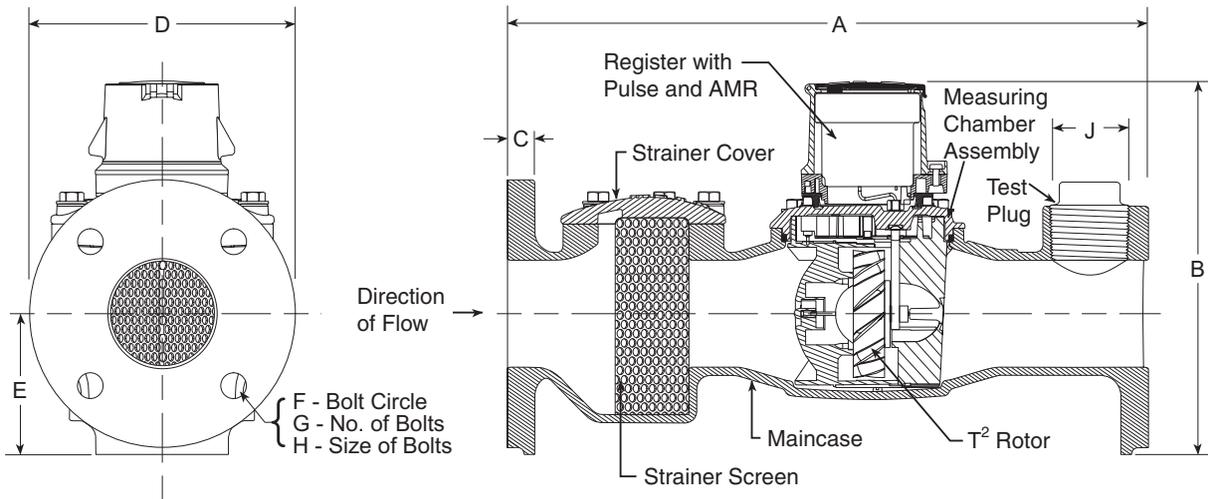
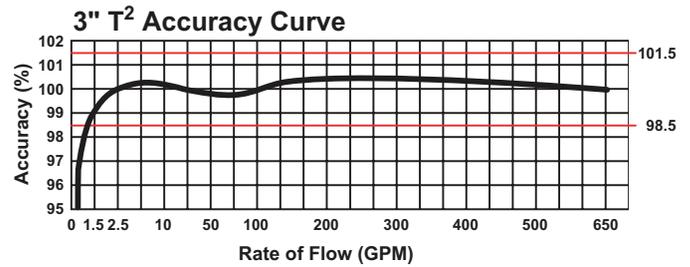
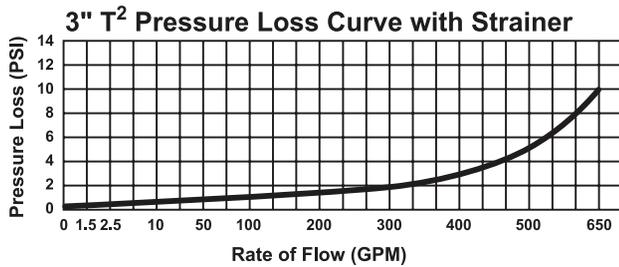
or wear, thus creating the extended upper and lower flow ranges capable on only the OMNI<sup>T2</sup> meter.

**Strainer:** The OMNI<sup>T2</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. Optional drain ports, located at the back lower corners of the strainer body, allow for easy discharging of debris without the need to remove the cover.

**Maintenance:** The OMNI<sup>T2</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 and Measuring Chamber Exchange are available under the Sensus MMP Program for the T<sup>2</sup> meters and this program 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<sup>T2</sup> Meters are backed by "The Sensus Guarantee." Ask your Sensus representative for details or see Bulletin G-500.



**DIMENSIONS AND NET WEIGHTS**

Meter and Pipe Size	Normal Operating Range		Connections	Dimensions								Net Weight	Shipping Weight	
				A	B	C	D	E	F	G	H	J		
3"	1.5 gpm	650 gpm	Flanged	19"	8-3/4"	3/4"	7-7/8"	4-1/8"	6"	4	5/8"	2"	48.5 lbs.	57.4 lbs.
DN 80mm	.57 m <sup>3</sup> /hr	148 m <sup>3</sup> /hr		483mm	222mm	19mm	200mm	105mm	153mm	4	16mm	50mm	22.00 kg	26.04 kg.

**SPECIFICATIONS**

<b>SERVICE</b>	Measure of potable water. Operating temperature range of 33°F (.56°C) – 150°F (65.6°C).
<b>OPERATING RANGE</b>	100% ± 1.5% from 2.5 – 650 GPM (.57 – 148 m <sup>3</sup> /hr)
<b>LOW FLOW</b>	95% – 101.5% @ 1.5 GPM (.34 m <sup>3</sup> /hr)
<b>MAXIMUM CONTINUOUS OPERATION</b>	500 GPM (114 m <sup>3</sup> /hr)
<b>MAXIMUM INTERMITTENT OPERATION</b>	650 GPM (148 m <sup>3</sup> /hr)
<b>PRESSURE LOSS</b>	5.1 psi @ 500 GPM (.35 bar @ 114 m <sup>3</sup> /hr)
<b>MAXIMUM OPERATING PRESSURE</b>	200 PSI (13.8 bar)

<b>FLANGE CONNECTIONS</b>	3" 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