

OMNI™ C²

2" OMNI C² Meter

DESCRIPTION

Model: The OMNI C² meter operation is based on advanced Floating Ball Technology (FBT) with an operating range of .25 GPM (.06 m³/hr) @ 95% min. to 200 GPM (45 m³/hr) @ 100% +/- 1.5% registration of actual throughput. The meter is also rated for continuous flows up to 160 GPM (36 m³/hr).

Conformance to Standards: The OMNI C² meter meets and far exceeds the most recent revision of ANSI / AWWA Standard C701 and C702 class II. Additionally, the meter does not require a valve to meet these 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 C² meter assure enhanced accuracy ranges, an overall greater accuracy, and a longer service life than any other comparable class meter produced. The C² 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 undue wear or accuracy degradation.

Construction: The C² 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.

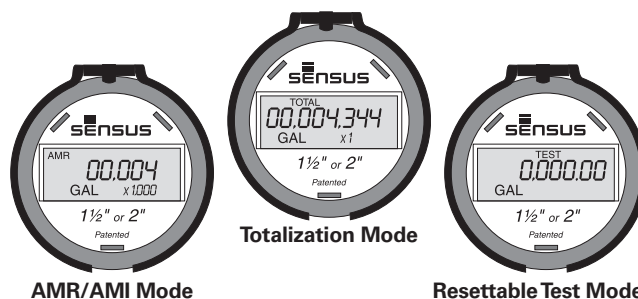
OMNI Electronic Register: The C² electronic register is hermetically sealed with electronic pickup containing no mechanical gearing. The large character LCD displays AMR, Totalization and a Resettable Test Totalizer. OMNI register features; AMR resolution units that are fully programmable, Pulse output 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, hydrodynamically balanced impeller floats between the bearings. The Floating Ball Technology (FBT) allows the



2" OMNI C²



AMR/AMI Mode

Totalization Mode

Resettable Test Mode

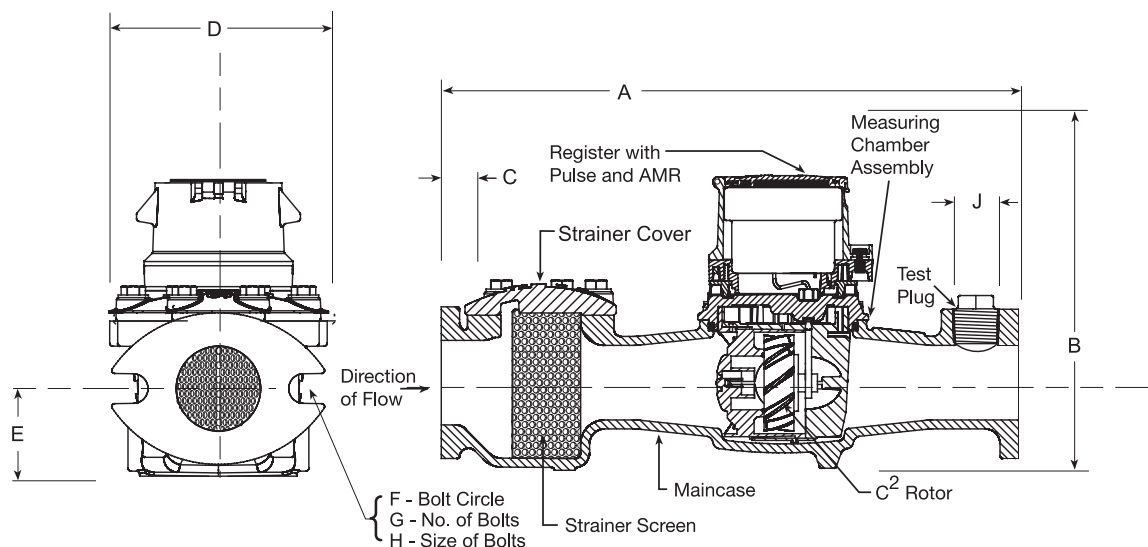
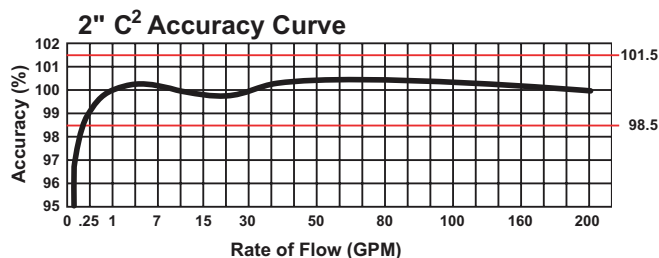
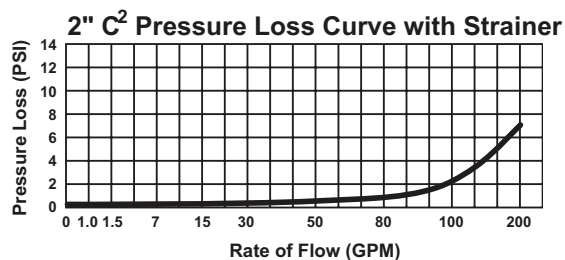
measuring element to operate virtually without friction or wear, thus creating the extended upper and lower flow ranges capable on only the OMNI C² meter.

Strainer: The OMNI C² 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 C² 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 C² 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 C² 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	A	B	C	D	E	F	G	H	J	Net Weight	Shipping Weight
2"	.25 gpm	200 gpm	15-1/4"	7-7/8"	1"	5-3/4"	2-5/16"	4-1/2"	2	3/4"	1"	25.4 lbs.	32.5 lbs.
DN 50mm	.06 m ³ /hr	45 m ³ /hr	387mm	200mm	25mm	146mm	59mm	114mm	2	19mm	25mm	11.39 kg.	14.74 kg.

SPECIFICATIONS

SERVICE	Measure of potable water. Operating temperature range of 33°F (.56°C) – 150°F (65.6°C).
OPERATING RANGE	100% ± 1.5% from .5 – 200 GPM (.11 - 45 m ³ /hr)
LOW FLOW	95% – 101.5% @ .25 GPM (.06 m ³ /hr)
MAXIMUM CONTINUOUS OPERATION	160 GPM (36 m ³ /hr)
MAXIMUM INTERMITTENT OPERATION	200 GPM (45 m ³ /h)
PRESSURE LOSS	4.3 psi @ 160 GPM (.30 bar @ 36 m ³ /hr)
MAXIMUM OPERATING PRESSURE	200 PSI (13.8 bar)

FLANGE CONNECTIONS	2" U.S. ANSI B16.1 / AWWA Class 125
REGISTER	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
NSF APPROVED MATERIALS	Maincase: Coated Ductile Iron Measuring Chamber: Thermoplastic Rotor "Floating Ball": Thermoplastic Radial Bearings: Hybrid Thermoplastic Thrust Bearings: Sapphire/Ceramic Jewel Magnets: Ceramic Magnet Strainer Screen: Stainless Steel Strainer Cover: Coated Ductile Iron Test Plug: Coated Ductile Iron