

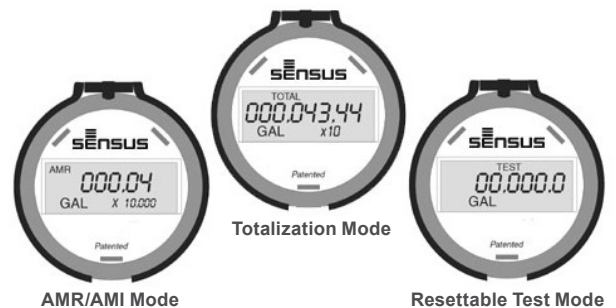
OMNI™ C²

1-1/2", 2", 3", 4", 6", 8" and 10" OMNI C² Meter

Description

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

The OMNI C² meter operation is based on advanced Floating Ball Technology (FBT).



Features

CONFORMANCE TO STANDARDS

The OMNI C² meter meets and far exceeds the most recent revision of 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/ANSI Standard 61, Annex F and G approved 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 OMNI 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 when installed in any orientation.

CONSTRUCTION

The OMNI 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 an AWWA compliant strainer.

OMNI ELECTRONIC REGISTER

The OMNI C² electronic register is hermetically sealed 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 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, hydrodynamically 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 C² meter.

STRAINER

The OMNI C² with the AWWA compliant "V" shaped 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 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 Measuring Chambers are available for the OMNI C² meters and may also be utilized for retrofitting to competitive meters to achieve increased accuracy and extended service life.

AMR / AMI SYSTEMS:

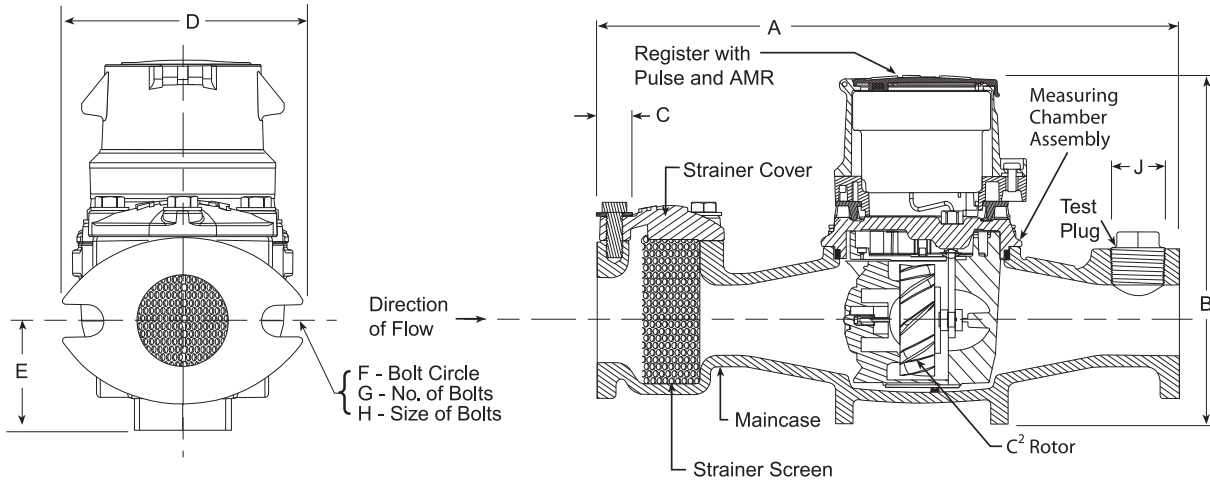
Meters and encoders are compatible with current Sensus AMR/AMI systems.

GUARANTEE:

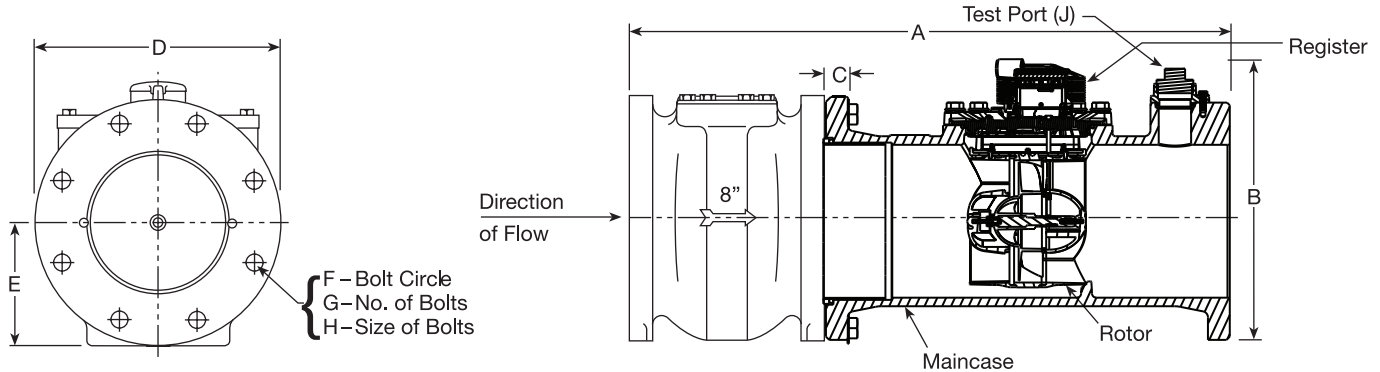
Sensus OMNI C² Meters are backed by "The Sensus Guarantee." Ask your Sensus representative for details or see Bulletin G-500.

OMNI C²: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

OMNI C²: 1 1/2" - 6"



OMNI C²: 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 | .5 gpm .11 m ³ /hr | 200 gpm 45 m ³ /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 | .5 gpm .11 m ³ /hr | 200 gpm 45 m ³ /hr | Flanged | 15-1/4" 387mm | 7-7/8" 200mm | 1" 25mm | 5-3/4" 146mm | 2-5/16" 59mm | 4-1/2" 114mm | 2 | 3/4" 19mm | 1" 25mm | 25.4 lbs. 11.39 kg. | 32.5 lbs. 14.74 kg. |
| 3" DN 80mm | 1 gpm .23 m ³ /hr | 500 gpm 114 m ³ /hr | Flanged | 17" 432mm | 8-3/4" 222mm | 3/4" 19mm | 7-7/8" 200mm | 4-1/8" 105mm | 6" 153mm | 4 | 5/8" 16mm | 1" 25mm | 45 lbs. 20.41 kg. | 72.8 lbs. 33.02 kg. |
| 4" DN 100mm | 1.5 gpm .34 m ³ /hr | 1000 gpm 227 m ³ /hr | Flanged | 20" 508mm | 11-3/16" 284mm | 15/16" 24mm | 9-1/8" 232mm | 4-3/4" 121mm | 7-1/2" 191mm | 8 | 5/8" 16mm | 1-1/2" 40mm | 64.9 lbs. 29.44 kg. | 72.8 lbs. 33.02 kg. |
| 6" DN 150mm | 3 gpm .68 m ³ /hr | 2500 gpm 5687 m ³ /hr | Flanged | 24" 610mm | 13-1/4" 336mm | 15/16" 24mm | 11" 279mm | 5-3/4" 146mm | 9-1/2" 242mm | 8 | 3/4" 19mm | 1-1/2" 40mm | 130 lbs. 48.5 kg. | 155 lbs. 57.8 kg. |
| 8" DN 200mm | 4 gpm .91 m ³ /hr | 2700 gpm 614 m ³ /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 | 5 gpm 1.1 m ³ /hr | 4000 gpm 908 m ³ /hr | Flanged | 41-1/8" 1045mm | 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. |

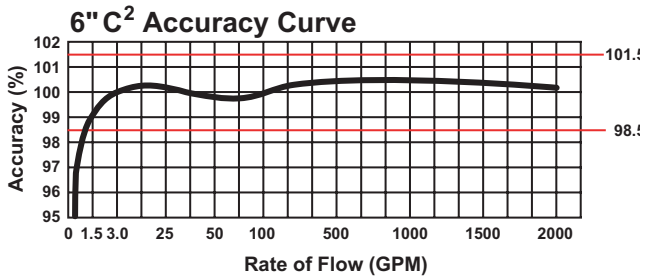
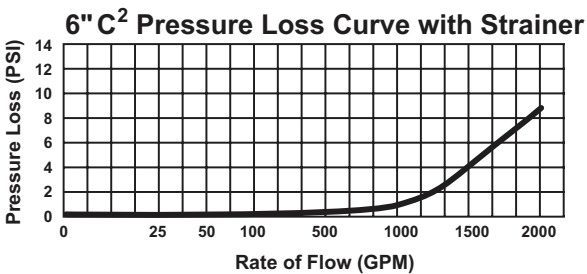
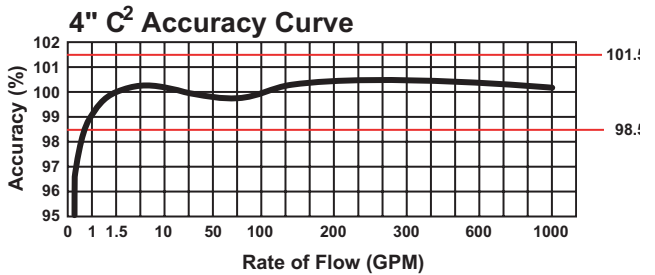
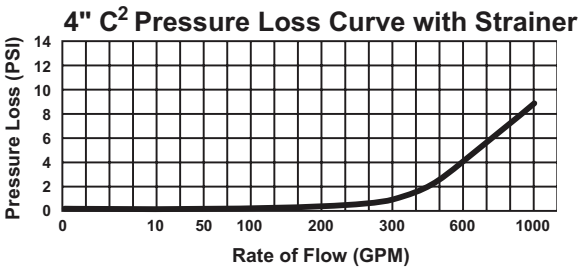
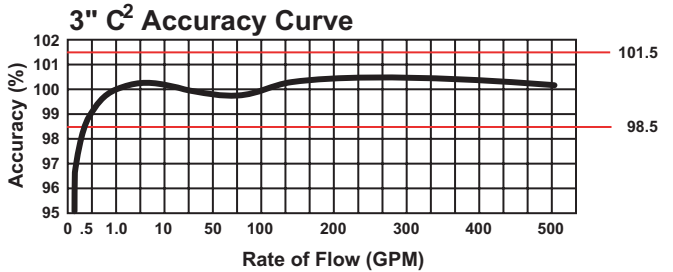
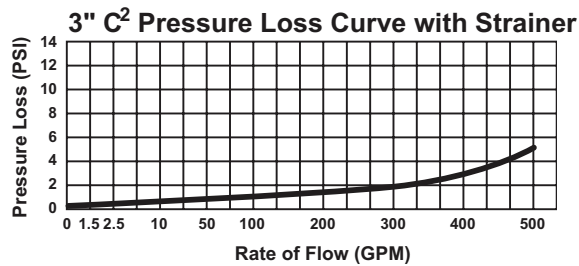
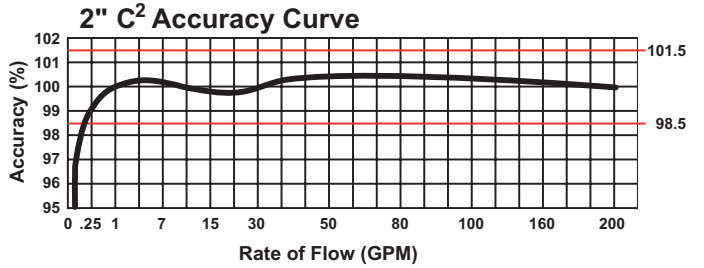
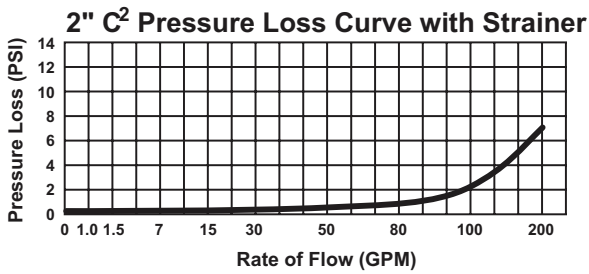
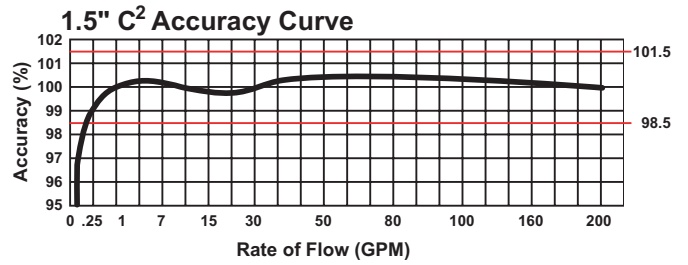
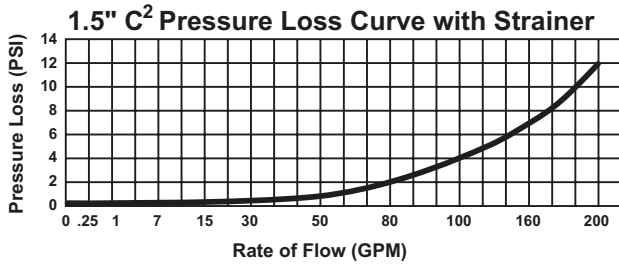
OMNI C²: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

SPECIFICATIONS

| | |
|---|--|
| SERVICE | Measurement of potable and reclaim water. Operating temperature range of 33 °F (56 °C) - 150 °F (65.6 °C) |
| OPERATING RANGE (100% ± 1.5%) | 1-1/2": .5 – 200 GPM (.11 - 45 m ³ /hr) 2": .5 – 200 GPM (.11 - 45 m ³ /hr) 3": 1.0 – 500 GPM (.23 - 114 m ³ /hr) 4": 1.5 – 1000 GPM (.34 - 227 m ³ /hr) 6": 3 – 2000 GPM (.68 - 454 m ³ /hr) 8": 4 – 2700 GPM (0.91 – 614 m ³ /hr) 10": 5-4000 GPM (1.1-908 m ³ /hr) |
| LOW FLOW (95% – 101.5%) | 1-1/2": .25 GPM (.06 m ³ /hr) 2": .25 GPM (.06 m ³ /hr) 3": .5 GPM (.11 m ³ /hr) 4": .75 GPM (.17 m ³ /hr) 6": 1.5 GPM (.34 m ³ /hr) 8": 2.5 GPM (0.57 m ³ /hr) 10": 3.5 GPM (0.8 m ³ /hr) |
| MAXIMUM CONTINUOUS OPERATION | 1-1/2": 160 GPM (36m ³ /hr) 2": 160 GPM (36 m ³ /hr) 3": 400 GPM (91 m ³ /hr) 4": 800 GPM (182 m ³ /hr) 6": 1600 GPM (363 m ³ /hr) 8": 2700 GPM (614 m ³ /hr) 10": 4000 GPM (908 m ³ /hr) |
| MAXIMUM INTERMITTENT OPERATION | 1-1/2": 200 GPM (45 m ³ /hr) 2": 200 GPM (45 m ³ /hr) 3": 500 GPM (114 m ³ /hr) 4": 1000 GPM (227 m ³ /hr) 6": 2000 GPM (454 m ³ /hr) 8": 3400 GPM (773 m ³ /hr) 10": 5000 GPM (1136 m ³ /hr) |
| PRESSURE LOSS | 1-1/2": 6.9 psi @ 160 GPM (48 bar @ 36 m ³ /hr) 2": 4.3 psi @ 160 GPM (.30 bar @ 36 m ³ /hr) 3": 3.2 psi @ 400 GPM (.22 bar @ 91 m ³ /hr) 4": 6.4 psi @ 800 GPM (.51 bar @ 182 m ³ /hr) 6": 5.5 psi @ 1600 GPM (.56 bar @ 363 m ³ /hr) 8": 4 psi @ 2700 GPM (.27 bar @ 614 m ³ /hr) 10": 4.5 psi @ 4000 GPM (.31 bar @ 908 m ³ /hr) |
| MAXIMUM OPERATING PRESSURE | 200 PSI (13.8 bar) |
| FLANGE CONNECTIONS | 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 |

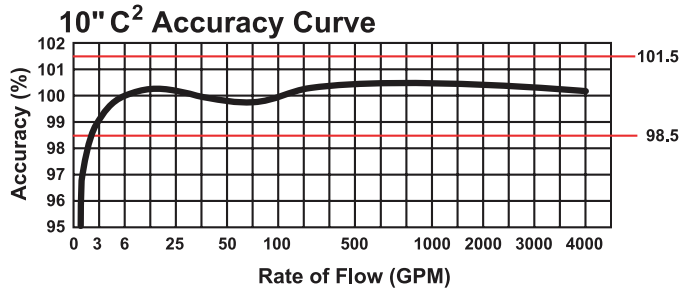
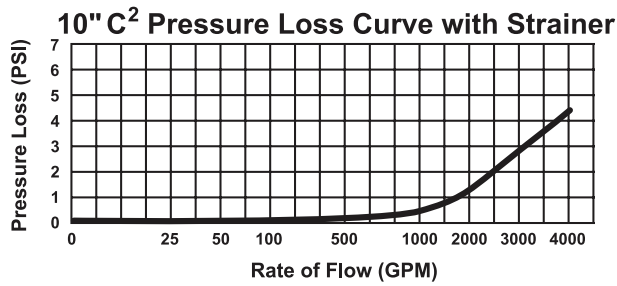
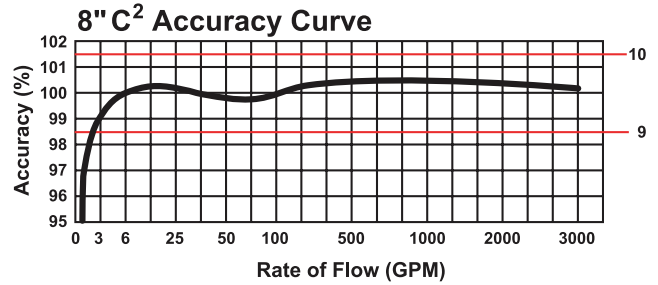
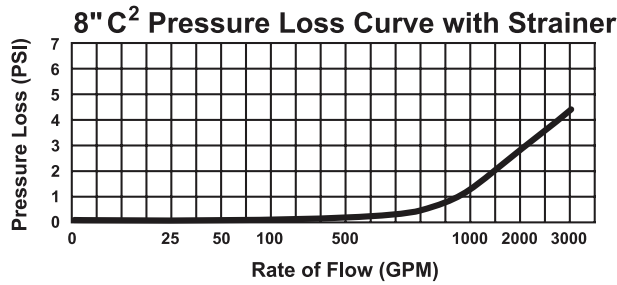
OMNI C²: 1-1/2", 2", 3", 4", and 6" Sizes

Headloss Curves



OMNI C²: 8” and 10” Sizes

Headloss Curves



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