



**Aqua Metric Sales Company**

13406 Seymour Myers, Unit 8, Covington LA 70433

Phone: (210) 967-6300 • Facsimile: (210) 967-6305



**Jefferson Parish**

Purchasing Department

200 Derbingy Street

General Government Building, Suite 4400

Gretna, LA 70053

Donna Reamey

[dreamey@jeffparish.net](mailto:dreamey@jeffparish.net)

(504) 364-2684

**Bid Number: 50-123452**

**Two Year Contract for Water Meters and Components  
for All Water Districts for the Parish of Jefferson**

**Due: July 12, 2018 at 2:00 PM**

**Primary Contact:**

Gary Ragusa

Southeast Territory Manager

Phone: (504) 251-0140

Email: [gary.ragusa@aqua-metric.com](mailto:gary.ragusa@aqua-metric.com)

**Prepared:**

July 12, 2018



July 12, 2018

Donna Reamey  
Jefferson Parish, Purchasing Department  
200 Derbingy Street  
General Government Building, Suite 4400  
Gretna, LA 70053

RE: Bid No. 50-123452, Water Meters and Components

Dear Ms. Reamey,

Thirkettle Corporation dba Aqua-Metric Sales Company is pleased to propose our water meter solution to Jefferson Parish for Bid Number 50-123452, Two Year Contract for Water Meters and Components for All Water Districts for Parish of Jefferson, due July 12, 2018.

Thirkettle Corporation has been involved in over one-hundred-and-eighty AMR/AMI system deployments, sized from 300 to more than 100,000 meters, and served the utility sector in multiple states for over twenty years. Our all-inclusive, turnkey approach makes us unique to the industry and our customers, whom we view as partners. The enclosed proposal provides Sensus' revolutionary residential and commercial Omni metrology capable of both manual readings and integrating into Jefferson Parish's current and future electronic reading system of choice.

We understand additional options are being evaluated by Jefferson Parish, but rest assured, when a Utility chooses partnership with Aqua Metric and Sensus they are receiving proven technology with best-in-class service that does not have an expiration date. We will not disappoint you, and your decision to partner with us will never be regretted. We appreciate the opportunity and thank you in advance for your time and thoughtful consideration.

Sincerely,



Kristy Segarra  
Manager, Bids & Proposals  
Aqua-Metric Sales Company  
Phone: (210) 967-6300  
Email: kristy.segarra@aqua-metric.com

**All Public Work Projects are required to use the Louisiana Uniform Public Work Bid Form**

All prices must be held firm unless an escalation provision is requested in this bid. Jefferson Parish will allow one escalation during the term of the contract, which may not exceed the U.S. Bureau of Labor Statistics National Index for all Urban Consumers, unadjusted 12 month figure. The most recently published figure issued at the time an adjustment is requested will be used. A request must be made in writing by the vendor, and the escalation will only be applied to purchases made after the request is made.

Are you requesting an escalation provision?

YES \_\_\_\_\_ NO X \_\_\_\_\_

MAXIMUM ESCALATION PERCENTAGE REQUESTED \_\_\_\_\_%

INITIAL BID PRICES WILL REMAIN FIRM THROUGH THE DATE OF \_\_\_\_\_

For the purposes of comparison of bids when an escalation provision is requested, Jefferson Parish will apply the maximum escalation percentage quoted by the bidder to the period to which it is applied in the bid. The initial price and the escalation will be used to calculate the total bid price. It will be assumed, for comparison of prices only, that an equal amount of material or labor is purchased each month throughout the entire contract.

**DELIVERY: FOB JEFFERSON PARISH**

INDICATE DELIVERY DATE ON EQUIPMENT AND SUPPLIES

Estimated Four Weeks from Order Date

**LOUISIANA CONTRACTOR'S LICENSE NO.:** (if applicable) \_\_\_\_\_

**THIS SECTION MUST BE COMPLETED BY BIDDER:**

FIRM NAME: Thirkettle Corporation dba Aqua-Metric Sales Company

ADDRESS: 6700 Guada Coma Drive

CITY, STATE: Schertz, Texas ZIP: 78154

TELEPHONE: ( 210 ) 967-6300 FAX: ( 210 ) 967-6305

EMAIL ADDRESS: Kristy.Segarra@aqua-metric.com

In the event that addenda are issued with this bid, bidders MUST acknowledge all addenda on the bid form. Bidder must acknowledge receipt of an addendum on the bid form as indicated. Failure to acknowledge any addendum on the bid form will result in bid rejection.

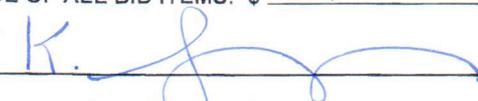
Acknowledge Receipt of Addenda: NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

NUMBER: \_\_\_\_\_

TOTAL PRICE OF ALL BID ITEMS: \$ 424,744.77

AUTHORIZED SIGNATURE: 

Kristy Segarra

Printed Name

TITLE: Manager, Bids and Proposals

SIGNING INDICATES YOU HAVE READ AND COMPLY WITH THE INSTRUCTIONS AND CONDITIONS.

**NOTE: All bids should be returned with the BID NUMBER and BID OPENING DATE indicated on the outside of the envelope submitted to the Purchasing Department.**

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00123452

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			TWO YEAR CONTRACT FOR WATER METERS AND COMPONENTS FOR ALL WATER DISTRICTS FOR THE PARISH OF JEFFERSON.		
1	10.00	EA	0080 COMPOUND METER (FLOATING BALL TECHNOLOGY) 2 INCH	\$829.49	\$8,294.90
2	5.00	EA	0090 COMPOUND METER (FLOATING BALL TECHNOLOGY) 3 INCH	\$1,153.94	\$5,769.70
3	35.00	EA	0100 COMPOUND METER (FLOATING BALL TECHNOLOGY) 4 INCH	\$1,741.94	\$60,967.90
4	10.00	EA	0110 COMPOUND METER (FLOATING BALL TECHNOLOGY) 6 INCH	\$3,069.14	\$30,691.40
5	10.00	EA	0120 COMPOUND METER (FLOATING BALL TECHNOLOGY) 8 INCH	\$5,563.94	\$55,639.40
6	10.00	EA	0130 COMPOUND METER (FLOATING BALL TECHLOLOGY)10 INCH	\$7,172.54	\$71,725.40
7	10.00	EA	0210 TURBINE METER (FLOATING BALL TECHNOLOGY) 2 INCH	\$551.25	\$5,512.50
8	5.00	EA	0220 TURBINE METER (FLOATING BALL TECHNOLOGY) 3 INCH	\$677.25	\$3,386.25
9	10.00	EA	0230 TURBINE METER (FLOATING BALL TECHNOLOGY) 4 INCH	\$934.49	\$9,344.90
10	10.00	EA	0240 TURBINE METER (FLOATING BALL TECHNOLOGY) 6 INCH	\$1,626.45	\$16,264.50
11	10.00	EA	0250 TURBINE METER (FLOATING BALL TECHNOLOGY) 8 INCH	\$4,443.60	\$44,436.00
12	10.00	EA	0260 TURBINE METER (FLOATING BALL TECHNOLOGY) 10 INCH	\$5,145.00	\$51,450.00
			<p>Note: Freight Allowed on Individual Orders Over \$7,500.00                      Orders below \$7,500 will incur a freight charge of 2.5%</p>		

## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00123452

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
13	1.00	EA	0270 - FIRE SERVICE METER (FLOATING BALL TECHNOLOGY)4 INCH	\$5,197.50	\$5,197.50
14	1.00	EA	0280 - FIRE SERVICE METER(FLOATING BALL TECHNOLOGY)6 INCH	\$6,908.79	\$6,908.79
15	1.00	EA	0290 - FIRE SERVICE METER(FLOATING BALL TECHNOLOGY)8 INCH	\$10,330.43	\$10,330.43
16	1.00	EA	0310 - FIRE SERVICE METER(FLOATING BALL TECHNOLOGY)10 INCH	\$14,765.21	\$14,765.21
17	1.00	EA	0320 - RESIDENTIAL TURBINE METER (FLOATING BALL TECHNOLOGY)2 INCH	\$559.39	\$559.39
18	1.00	EA	0330 - REPLACEMENT MEASURING CHAMBER FOR COMPOUND METER(FLOATING BALL TECHNOLOGY)2 INCH	\$783.41	\$783.41
19	1.00	EA	0340 - REPLACEMENT MEASURING CHAMBER FOR COMPOUND METER (FLOATING BALL TECHNOLOGY)3 INCH	\$1,089.83	\$1,089.83
20	1.00	EA	0350 - REPLACEMENT MEASURING CHAMBER FOR COMPOUND METER(FLOATING BALL TECHNOLOGY) 4 INCH	\$1,407.09	\$1,407.09
21	1.00	EA	0360 - REPLACEMENT MEASURING CHAMBER FOR COMPOUND METER(FLOATING BALL TECHNOLOGY) 6 INCH	\$1,839.36	\$1,839.36
22	1.00	EA	0370 - REPLACEMENT MEASURING CHAMBER FOR COMPOUND METER(FLOATING BALL TECHNOLOGY) 8 INCH	\$1,961.86	\$1,961.86
23	1.00	EA	0380 - REPLACEMENT MEASURING CHAMBER FOR COMPOUND METER(FLOATING BALL TECHNOLOGY)10 INCH	\$1,961.86	\$1,961.86
<p>Note: Freight Allowed on Individual Orders Over \$7,500.00 Orders below \$7,500 will incur a freight charge of 2.5%</p>					

## INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00123452

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
24	1.00	EA	0390 - REPLACEMENT MEASURING CHAMBER FOR TURBINE METER(FLOATING BALL TECHLOLOGY)2 INCH	\$536.42	\$536.42
25	1.00	EA	0410 - REPLACEMENT MEASURING CHAMBER FOR TURBINE METER(FLOATING BALL TECHLOLOGY)3 INCH	\$672.23	\$672.23
26	1.00	EA	0420 - REPLACEMENT MEASURING CHAMBER FOR TURBINE METER(FLOATING BALL TECHLOLOGY)4 INCH	\$672.23	\$672.23
27	1.00	EA	0430 - REPLACEMENT MEASURING CHAMBER FOR TURBINE METER(FLOATING BALL TECHLOLOGY)6 INCH	\$1,252.20	\$1,252.20
28	1.00	EA	0440 - REPLACEMENT MEASURING CHAMBER FOR TURBINE METER(FLOATING BALL TECHLOLOGY)8 INCH	\$1,613.16	\$1,613.16
29	1.00	EA	0450 - REPLACEMENT MEASURING CHAMBER FOR TURBINE METER(FLOATING BALL TECHLOLOGY)10 INCH	\$1,613.16	\$1,613.16
30	1.00	EA	0460 - REPLACEMENT MEASURING CHAMBER FOR FIRE SERVICE METER (FLOATING BALL TECHLOLOGY)4 INCH	\$1,232.44	\$1,232.44
31	1.00	EA	0460 - REPLACEMENT MEASURING CHAMBER FOR FIRE SERVICE METER (FLOATING BALL TECHLOLOGY)8 INCH	\$2,324.99	\$2,324.99
32	1.00	EA	0470 - REPLACEMENT MEASURING CHAMBER FOR FIRE SERVICE METER (FLOATING BALL TECHLOLOGY)6 INCH	\$1,875.54	\$1,875.54
33	1.00	EA	0490 - REPLACEMENT MEASURING CHAMBER FOR FIRE SERVICE METER (FLOATING BALL TECHLOLOGY)10 INCH	\$2,324.99	\$2,324.99
34	1.00	EA	0510 - REPLACEMENT MEASURING CHAMBER FOR RESIDENTIAL TURBINE METER (FLOATING	\$339.83	\$339.83
			<u>Note:</u> Freight Allowed on Individual Orders Over \$7,500.00 Orders below \$7,500 will incur a freight charge of 2.5%		

INVITATION TO BID FROM JEFFERSON PARISH - continued

BID NO.: 50-00123452

SEALED BID

ITEM NUMBER	QUANTITY	U/M	DESCRIPTION OF ARTICLES	UNIT PRICE QUOTED	TOTALS
			<p>BALL TECHLOLOGY) 2 INCH</p> <p><u>Note:</u> Freight Allowed on Individual Orders Over \$7,500.00 Orders below \$7,500 will incur a freight charge of 2.5%</p>		

July 10, 2018

**Aqua-Metric Sales Company**

Kristy Segarra - Manager, Bids and Proposals  
 6700 Guada Coma Dr. | Schertz, TX 78154  
 Phone: (210) 967-6300 | Facsimile: (210) 967-6305

Quote for: Jefferson Parish, LA  
 Attention: Donna Reamey  
 Project: Bid Number 50-123452  
 Address: 200 Derbingy Street  
 City, State, ZIP: Gretna, LA 70053  
 Phone: (504) 364-2684  
 Email: dreamey@jeffparish.com

Quantity	Description	Unit Price	Line Total
10	2" OMNI C2 Compound Meter with 25' Itron Inline Connector	\$829.49	\$8,294.90
5	3" OMNI C2 Compound Meter with 25' Itron Inline Connector	\$1,153.94	\$5,769.70
35	4" OMNI C2 Compound Meter with 25' Itron Inline Connector	\$1,741.94	\$60,967.90
10	6" OMNI C2 Compound Meter with 25' Itron Inline Connector	\$3,069.14	\$30,691.40
10	8" OMNI C2 Compound Meter with 25' Itron Inline Connector	\$5,563.94	\$55,639.40
10	10" OMNI C2 Compound Meter with 25' Itron Inline Connector	\$7,172.54	\$71,725.40
10	2" OMNI T2 Turbo Meter with 25' Itron Inline Connector	\$551.25	\$5,512.50
5	3" OMNI T2 Turbo Meter with 25' Itron Inline Connector	\$677.25	\$3,386.25
10	4" OMNI T2 Turbo Meter with 25' Itron Inline Connector	\$934.49	\$9,344.90
10	6" OMNI T2 Turbo Meter with 25' Itron Inline Connector	\$1,626.45	\$16,264.50
10	8" OMNI T2 Turbo Meter with 25' Itron Inline Connector	\$4,443.60	\$44,436.00
10	10" OMNI T2 Turbo Meter with 25' Itron Inline Connector	\$5,145.00	\$51,450.00
1	4" OMNI F2 Fire Service Meter, Compact Length, with 25' Itron Inline Connector	\$5,197.50	\$5,197.50
1	6" OMNI F2 Fire Service Meter, Compact Length, with 25' Itron Inline Connector	\$6,908.79	\$6,908.79
1	8" OMNI F2 Fire Service Meter, Compact Length, with 25' Itron Inline Connector	\$10,330.43	\$10,330.43
1	10" OMNI F2 Fire Service Meter, Compact Length, with 25' Itron Inline Connector	\$14,765.21	\$14,765.21
1	2" OMNI R2 Residential Meter with 25' Itron Inline Connector	\$559.39	\$559.39
1	2" OMNI C2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$783.41	\$783.41
1	3" OMNI C2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,089.83	\$1,089.83
1	4" OMNI C2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,407.09	\$1,407.09
1	6" OMNI C2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,839.36	\$1,839.36
1	8" OMNI C2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,961.86	\$1,961.86
1	10" OMNI C2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,961.86	\$1,961.86
1	2" OMNI T2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$536.42	\$536.42
1	3" OMNI T2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$672.23	\$672.23
1	4" OMNI T2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$672.23	\$672.23
1	6" OMNI T2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,252.20	\$1,252.20
1	8" OMNI T2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,613.16	\$1,613.16
1	10" OMNI T2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,613.16	\$1,613.16
1	4" OMNI F2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,232.44	\$1,232.44
1	8" OMNI F2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$2,324.99	\$2,324.99
1	6" OMNI F2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$1,875.54	\$1,875.54
1	10" OMNI F2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$2,324.99	\$2,324.99
1	2" OMNI R2 Measuring Chamber Assembly with 25' Itron Inline Connector	\$339.83	\$339.83
		<b>Total:</b>	<b>\$424,744.77</b>

This quote for the product and services named above is subject to the following terms:

1. All quotes are subject to the Aqua-Metric Terms of Sale.
2. Quote is valid through two-year term of contract
3. Orders below \$7,500 will incur a freight charge of 2.5%
4. Freight allowed on individual orders exceeding \$7,500.00
5. Net Thirty Days to Pay
6. Returned product may be subject to a 25% restocking fee.
7. Sales Tax and/or Freight charges are approximated and may vary on final invoice.

Non-Public Works Bid

AFFIDAVIT

STATE OF Texas

PARISH/COUNTY OF Guadalupe

BEFORE ME, the undersigned authority, personally came and appeared: Kristy Segarra  
\_\_\_\_\_, (Affiant) who after being by me duly sworn, deposed and said that  
he/she is the fully authorized Manager, Bids and Proposals Thirkettle Corporation dba  
of Aqua-Metric Sales Company (Entity),  
the party who submitted a bid in response to Bid Number 50-123452, to the Parish of  
Jefferson.

Affiant further said:

Campaign Contribution Disclosures

**(Choose A or B, if option A is indicated please include the required attachment):**

Choice A \_\_\_\_\_ Attached hereto is a list of all campaign contributions, including the date and amount of each contribution, made to current or former elected officials of the Parish of Jefferson by Entity, Affiant, and/or officers, directors and owners, including employees, owning 25% or more of the Entity during the two-year period immediately preceding the date of this affidavit or the current term of the elected official, whichever is greater. Further, Entity, Affiant, and/or Entity Owners have not made any contributions to or in support of current or former members of the Jefferson Parish Council or the Jefferson Parish President through or in the name of another person or legal entity, either directly or indirectly.

Choice B X there are **NO** campaign contributions made which would require disclosure under Choice A of this section.

Debt Disclosures

**(Choose A or B, if option A is indicated please include the required attachment):**

**Choice A** \_\_\_\_\_ Attached hereto is a list of all debts owed by the affiant to any elected or appointed official of the Parish of Jefferson, and any and all debts owed by any elected or appointed official of the Parish to the Affiant.

**Choice B** X \_\_\_\_\_ There are **NO** debts which would require disclosure under Choice A of this section.

Affiant further said:

That Affiant has employed no person, corporation, firm, association, or other organization, either directly or indirectly, to secure the public contract under which he received payment, other than persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project or in securing the public contract were in the regular course of their duties for Affiant; and

*[The remainder of this page is intentionally left blank.]*

That no part of the contract price received by Affiant was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the Affiant whose services in connection with the construction, alteration or demolition of the public building or project were in the regular course of their duties for Affiant.

  
\_\_\_\_\_  
Signature of Affiant

Kristy Segarra, Manager, Bids and Proposals  
\_\_\_\_\_  
Printed Name of Affiant

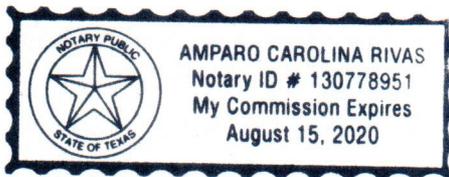
SWORN AND SUBSCRIBED TO BEFORE ME  
ON THE 10<sup>th</sup> DAY OF July, 2018.

  
\_\_\_\_\_  
Notary Public

Amparo Carolina Rivas  
\_\_\_\_\_  
Printed Name of Notary

130778951  
\_\_\_\_\_  
Notary/Bar Roll Number

My commission expires Aug. 15, 2020.



**CORPORATE RESOLUTION ON AUTHORIZED REPRESENTATIVE  
OF  
THIRKETTLE CORPORATION**

We hereby certify that it was RESOLVED by a quorum of the directors of the Thirkettle Corporation, meeting this Tuesday, January 2, 2018, that Clint Arnold, Michael Cartwright, Chris Newville, Kristy Segarra, Jeremy Lancon, and Michael Wood be, and hereby are authorized to act on behalf of Thirkettle Corporation and its subsidiaries Aqua Metric Sales Company and Utiliuse as its representative in all business transactions conducted in the State of Louisiana, and:

That all above resolution was unanimously ratified by the Board of Directors at said meeting and the resolution has not been rescinded or amended and is now in full forces and effect and;

In authentication of the adoption of this resolution, we subscribe our names and affix the seal of the corporation this Tuesday, January 2, 2018.



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Tommy Thirkettle  
President/CEO

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Lea Thirkettle  
Vice President/Secretary



# CERTIFICATE OF LIABILITY INSURANCE

THIRK-1

OP ID: JP

DATE (MM/DD/YYYY)

07/10/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> R. T. Beers & Co. Ins.Services 100 Oceangate, Suite 850 Long Beach, CA 90802-4653 Lejani Sarian	<b>CONTACT NAME:</b> Lejani Sarian <b>PHONE (A/C, No, Ext):</b> 562-901-4605 <b>E-MAIL ADDRESS:</b> Isarian@rtbeers.com		<b>FAX (A/C, No):</b> 562-901-4601
	<b>INSURER(S) AFFORDING COVERAGE</b>		<b>NAIC #</b>
<b>INSURED</b> <b>Thirkettle Corporation</b> <b>DBA: Aqua Metric Sales Company</b> <b>6700 Guada Coma Drive</b> <b>Schertz, TX 78154</b>	<b>INSURER A :</b> Hanover American		<b>41840</b>
	<b>INSURER B :</b> Allmerica Financial Benefit		<b>22292</b>
	<b>INSURER C :</b> Hanover Insurance Company		
	<b>INSURER D :</b>		
	<b>INSURER E :</b>		
<b>INSURER F :</b>			

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> GENERAL LIABILITY	X		ZH3 A664940 03	07/01/2018	07/01/2019	EACH OCCURRENCE \$ <b>1,000,000</b>
	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ <b>100,000</b>
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						MED EXP (Any one person) \$ <b>10,000</b>
							PERSONAL & ADV INJURY \$ <b>1,000,000</b>
							GENERAL AGGREGATE \$ <b>2,000,000</b>
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMP/OP AGG \$ <b>2,000,000</b>
	<input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						<b>Emp Ben.</b> \$ <b>1,000,000</b>
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY	X		AW3 A665023 03	07/01/2018	07/01/2019	COMBINED SINGLE LIMIT (Ea accident) \$ <b>1,000,000</b>
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> ALL OWNED AUTOS	<input type="checkbox"/> SCHEDULED AUTOS					BODILY INJURY (Per accident) \$
	<input checked="" type="checkbox"/> HIRED AUTOS	<input checked="" type="checkbox"/> NON-OWNED AUTOS					PROPERTY DAMAGE (PER ACCIDENT) \$
							\$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB			UH3 A664942 03	07/01/2018	07/01/2019	EACH OCCURRENCE \$ <b>10,000,000</b>
	<input type="checkbox"/> EXCESS LIAB						AGGREGATE \$ <b>10,000,000</b>
	<input type="checkbox"/> CLAIMS-MADE						\$
	DED RETENTION \$						
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b>	Y/N	N/A	WH3 A652982 03	07/01/2018	07/01/2019	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)						E.L. EACH ACCIDENT \$ <b>1,000,000</b>
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$ <b>1,000,000</b>
							E.L. DISEASE - POLICY LIMIT \$ <b>1,000,000</b>
C	Prof Liab/Tech E&O			LH3 A665809 03	07/01/2018	07/01/2019	Ea. Claim <b>2,000,000</b> Aggregate <b>2,000,000</b>

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)  
Jefferson Parish is named as additional insured for the General Liability & Auto Liability per attached form #421-2915 0615 & form #461-0155.

**CERTIFICATE HOLDER****CANCELLATION**

<b>JEFFPAR</b>  <b>Jefferson Parish</b> <b>200 Derbigny Street</b> <b>Gretna, LA 70053</b>	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  <b>AUTHORIZED REPRESENTATIVE</b>  <i>Lejani Sarian</i>
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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

## BLANKET ADDITIONAL INSURED – PRIMARY AND NON-CONTRIBUTORY

This endorsement modifies insurance provided under the following:

### BUSINESS AUTO COVERAGE FORM

**A. The following is added to SECTION II – LIABILITY COVERAGE, Paragraph A.1. Who Is An Insured:**

**Additional Insured if Required by Contract**

If you agree in a written contract, written agreement or written permit that a person or organization be added as an additional "insured" under this Coverage Part, such person or organization is an "insured"; but only to the extent that such person or organization qualifies as an "insured" under paragraph **A.1.c.** of this Section.

If you agree in a written contract, written agreement or written permit that a person or organization be added as an additional "insured" under this Coverage Part, the most we will pay on behalf of such additional "insured" is the lesser of:

- (1) The Limits of Insurance for liability coverage specified in the written contract, written agreement or written permit; or
- (2) The Limits of Insurance for Liability Coverage shown in the Declarations applicable to this Coverage Part.

Such amount shall be part of and not in addition to the Limits of Insurance shown in the Declarations applicable to this Coverage Part. Regardless of the number of covered "autos", "insureds", premiums paid, claims made or vehicles involved in the "accident", the most we will pay for the total of all damages and "covered pollution cost or expense" combined resulting from any one "accident" is the Limit of Insurance for Liability Coverage shown in the Declarations.

**B. The following is added to SECTION IV – BUSINESS AUTO CONDITIONS, Paragraph B. General Conditions, subparagraph 5. Other Insurance:**

**Primary and Non-Contributory**

If you agree in a written contract, written agreement or written permit that the insurance provided to a person or organization who qualifies as an additional "insured" under **SECTION II – LIABILITY COVERAGE, Paragraph A.1. Who Is An Insured, subparagraph Additional Insured if Required by Contract** is primary and non-contributory, the following applies:

The liability coverage provided by this Coverage Part is primary to any other insurance available to the additional "insured" as a Named Insured. We will not seek contribution from any other insurance available to the additional "insured" except:

- (1) For the sole negligence of the additional "insured"; or
- (2) For negligence arising out of the ownership, maintenance or use of any "auto" not owned by the additional "insured" or by you, unless that "auto" is a "trailer" connected to an "auto" owned by the additional "insured" or by you; or
- (3) When the additional "insured" is also an additional "insured" under another liability policy.

**C. This endorsement will apply only if the "accident" occurs:**

1. During the policy period;
2. Subsequent to the execution of the written contract or written agreement or the issuance of the written permit; and
3. Prior to the expiration of the period of time that the written contract, written agreement or written permit requires such insurance to be provided to the additional "insured".

**D. Coverage provided to an additional "insured" will not be broader than coverage provided to any other "insured" under this Coverage Part.**

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

## COMMERCIAL GENERAL LIABILITY BROADENING ENDORSEMENT

This endorsement modifies insurance provided under the following:

### COMMERCIAL GENERAL LIABILITY COVERAGE PART

#### SUMMARY OF COVERAGES

1.	Additional Insured by Contract, Agreement or Permit	Included
2.	Additional Insured – Primary and Non-Contributory	Included
3.	Blanket Waiver of Subrogation	Included
4.	Bodily Injury Redefined	Included
5.	Broad Form Property Damage – Borrowed Equipment, Customers Goods & Use of Elevators	Included
6.	Knowledge of Occurrence	Included
7.	Liberalization Clause	Included
8.	Medical Payments – Extended Reporting Period	Included
9.	Newly Acquired or Formed Organizations - Covered until end of policy period	Included
10.	Non-owned Watercraft	51 ft.
11.	Supplementary Payments Increased Limits	
	- Bail Bonds	\$2,500
	- Loss of Earnings	\$1000
12.	Unintentional Failure to Disclose Hazards	Included
13.	Unintentional Failure to Notify	Included

This endorsement amends coverages provided under the Commercial General Liability Coverage Part through new coverages, higher limits and broader coverage grants.

#### 1. Additional Insured by Contract, Agreement or Permit

The following is added to **SECTION II – WHO IS AN INSURED:**

##### Additional Insured by Contract, Agreement or Permit

- a. Any person or organization with whom you agreed in a written contract, written agreement or permit that such person or organization to add an additional insured on your policy is an additional insured only with respect to liability for “bodily injury”, “property damage”, or “personal and advertising injury” caused, in whole or in part, by your acts or omissions, or the acts or omissions of those acting on your behalf, but only with respect to:

- (1) "Your work" for the additional insured(s) designated in the contract, agreement or permit;
- (2) Premises you own, rent, lease or occupy; or
- (3) Your maintenance, operation or use of equipment leased to you.
- b. The insurance afforded to such additional insured described above:
- (1) Only applies to the extent permitted by law; and
- (2) Will not be broader than the insurance which you are required by the contract, agreement or permit to provide for such additional insured.

- (3) Applies on a primary basis if that is required by the written contract, written agreement or permit.
  - (4) Will not be broader than coverage provided to any other insured.
  - (5) Does not apply if the "bodily injury", "property damage" or "personal and advertising injury" is otherwise excluded from coverage under this Coverage Part, including any endorsements thereto.
- c. This provision does not apply:
- (1) Unless the written contract or written agreement was executed or permit was issued prior to the "bodily injury", "property damage", or "personal injury and advertising injury".
  - (2) To any person or organization included as an insured by another endorsement issued by us and made part of this Coverage Part.
  - (3) To any lessor of equipment:
    - (a) After the equipment lease expires; or
    - (b) If the "bodily injury", "property damage", "personal and advertising injury" arises out of sole negligence of the lessor
  - (4) To any:
    - (a) Owners or other interests from. whom land has been leased which takes place after the lease for the land expires; or
    - (b) Managers or lessors of premises if:
      - (i) The occurrence takes place after you cease to be a tenant in that premises; or
      - (ii) The "bodily injury", "property damage", "personal injury" or "advertising injury" arises out of structural alterations, new construction or demolition operations performed by or on behalf of the manager or lessor.
  - (5) To "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of or the failure to render any professional services.
- This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" or the offense which caused the "personal and

advertising injury" involved the rendering of or failure to render any professional services by or for you.

- d. With respect to the insurance afforded to these additional insureds, the following is added to **SECTION III – LIMITS OF INSURANCE**:

The most we will pay on behalf of the additional insured for a covered claim is the lesser of the amount of insurance:

- 1. Required by the contract, agreement or permit described in Paragraph a.; or
- 2. Available under the applicable Limits of Insurance shown in the Declarations.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

## 2. Additional Insured – Primary and Non-Contributory

The following is added to **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**, Paragraph 4. **Other insurance**:

### Additional Insured – Primary and Non-Contributory

If you agree in a written contract, written agreement or permit that the insurance provided to any person or organization included as an Additional Insured under **SECTION II – WHO IS AN INSURED**, is primary and non-contributory, the following applies:

If other valid and collectible insurance is available to the Additional Insured for a loss covered under Coverages **A** or **B** of this Coverage Part, our obligations are limited as follows:

#### a. Primary Insurance

This insurance is primary to other insurance that is available to the Additional Insured which covers the

Additional Insured as a Named Insured. We will not seek contribution from any other insurance available to the Additional Insured except:

- (1) For the sole negligence of the Additional Insured;
- (2) When the Additional Insured is an Additional Insured under another primary liability policy; or
- (3) when b. below applies.

If this insurance is primary, our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described in c. below.

## b. Excess Insurance

(1) This insurance is excess over any of the other insurance, whether primary, excess, contingent or on any other basis:

(a) That is Fire, Extended Coverage, Builder's Risk, Installation Risk or similar coverage for "your work";

(b) That is Fire insurance for premises rented to the Additional Insured or temporarily occupied by the Additional Insured with permission of the owner;

(c) That is insurance purchased by the Additional Insured to cover the Additional Insured's liability as a tenant for "property damage" to premises rented to the Additional Insured or temporarily occupied by the Additional with permission of the owner; or

(d) If the loss arises out of the maintenance or use of aircraft, "autos" or watercraft to the extent not subject to Exclusion g. of **SECTION I – COVERAGE A – BODILY INJURY AND PROPERTY DAMAGE LIABILITY.**

(2) When this insurance is excess, we will have no duty under Coverages **A** or **B** to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

(3) When this insurance is excess over other Insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

(a) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and

(b) The total of all deductible and self insured amounts under all that other insurance.

We will share the remaining loss, if any, with any other insurance that is not described in this Excess Insurance provision and was not bought specifically to apply in excess of the Limits of Insurance shown in the Declarations of this Coverage Part.

## c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each

insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first. If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers

## 3. Blanket Waiver of Subrogation

The following is added to **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS, Paragraph 8. Transfer Of Rights Of Recovery Against Others To Us:**

We waive any right of recovery we may have against any person or organization with whom you have a written contract that requires such waiver because of payments we make for damage under this coverage form. The damage must arise out of your activities under a written contract with that person or organization. This waiver applies only to the extent that subrogation is waived under a written contract executed prior to the "occurrence" or offense giving rise to such payments.

## 4. Bodily Injury Redefined

**SECTION V – DEFINITIONS, Definition 3.** "bodily injury" is replaced by the following:

3. "Bodily injury" means bodily injury, sickness or disease sustained by a person including death resulting from any of these at any time. "Bodily injury" includes mental anguish or other mental injury resulting from "bodily injury".

## 5. Broad Form Property Damage – Borrowed Equipment, Customers Goods, Use of Elevators

a. **SECTION I – COVERAGES, COVERAGE A – BODILY INJURY AND PROPERTY DAMAGE LIABILITY, Paragraph 2. Exclusions** subparagraph j. is amended as follows:

Paragraph (4) does not apply to "property damage" to borrowed equipment while at a jobsite and not being used to perform operations.

Paragraphs (3), (4) and (6) do not apply to "property damage" to "customers goods" while on your premises nor do they apply to the use of elevators at premises you own, rent, lease or occupy.

b. The following is added to **SECTION V – DEFINITIONS:**

24. "Customers goods" means property of your customer on your premises for the purpose of being:

- a. worked on; or
- b. used in your manufacturing process.
- c. The insurance afforded under this provision is excess over any other valid and collectible property insurance (including deductible) available to the insured whether primary, excess, contingent

**6. Knowledge of Occurrence**

The following is added to **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**, Paragraph **2. Duties in the Event of Occurrence, Offense, Claim or Suit**:

- e. Notice of an "occurrence", offense, claim or "suit" will be considered knowledge of the insured if reported to an individual named insured, partner, executive officer or an "employee" designated by you to give us such a notice.

**7. Liberalization Clause**

The following is added to **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**:

**Liberalization Clause**

If we adopt any revision that would broaden the coverage under this Coverage Form without additional premium, within 45 days prior to or during the policy period, the broadened coverage will immediately apply to this Coverage Part.

**8. Medical Payments – Extended Reporting Period**

- a. **SECTION I – COVERAGES, COVERAGE C – MEDICAL PAYMENTS**, Paragraph **1. Insuring Agreement**, subparagraph **a.(3)(b)** is replaced by the following:
  - (b) The expenses are incurred and reported to us within three years of the date of the accident; and
- b. This coverage does not apply if **COVERAGE C – MEDICAL PAYMENTS** is excluded either by the provisions of the Coverage Part or by endorsement.

**9. Newly Acquired Or Formed Organizations**

**SECTION II – WHO IS AN INSURED**, Paragraph **3.a.** is replaced by the following:

- a. Coverage under this provision is afforded until the end of the policy period.

**10. Non-Owned Watercraft**

**SECTION I – COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY**, Paragraph **2. Exclusions**, subparagraph **g.(2)** is replaced by the following:

**g. Aircraft, Auto Or Watercraft**

- (2) A watercraft you do not own that is:
  - (a) Less than 51 feet long; and
  - (b) Not being used to carry persons or property for a charge;

This provision applies to any person who, with your consent, either uses or is responsible for the use of a watercraft.

**11. Supplementary Payments Increased Limits**

**SECTION I – SUPPLEMENTARY PAYMENTS COVERAGES A AND B**, Paragraphs **1.b.** and **1.d.** are replaced by the following:

- 1.b.** Up to \$2,500 for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.
- 1.d.** All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to \$1000 a day because of time off from work.

**12. Unintentional Failure to Disclose Hazards**

The following is added to **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**, Paragraph **6. Representations**:

We will not disclaim coverage under this Coverage Part if you fail to disclose all hazards existing as of the inception date of the policy provided such failure is not intentional.

**13. Unintentional Failure to Notify**

The following is added to **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**, Paragraph **2. Duties in the Event of Occurrence, Offense, Claim or Suit**:

Your rights afforded under this policy shall not be prejudiced if you fail to give us notice of an "occurrence", offense, claim or "suit", solely due to your reasonable and documented belief that the "bodily injury" or "property damage" is not covered under this policy.

ALL OTHER TERMS, CONDITIONS, AND EXCLUSIONS REMAIN UNCHANGED.

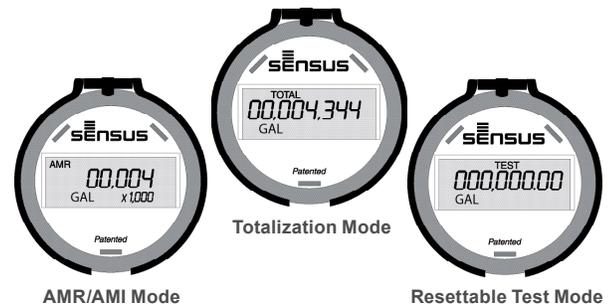
# OMNI™ R<sup>2</sup>

1-1/2" and 2" OMNI R<sup>2</sup> Meter

## Description

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

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



## Features

### CONFORMANCE TO STANDARDS

The OMNI R<sup>2</sup> meter meets and far exceeds the most recent revision of ANSI/AWWA Standard C701 class II standards and exceeds ANSI/AWWA C700 Residential Standard using Sensus Turbo technology. 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 R<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 R<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 R<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.

### OMNI ELECTRONIC REGISTER

The OMNI R<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, 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 R<sup>2</sup> meter.

### STRAINER

The OMNI R<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 R<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 are available for the OMNI R<sup>2</sup> meters and may be utilized for retrofitting to competitive meters to achieve increased accuracy and extended service life.

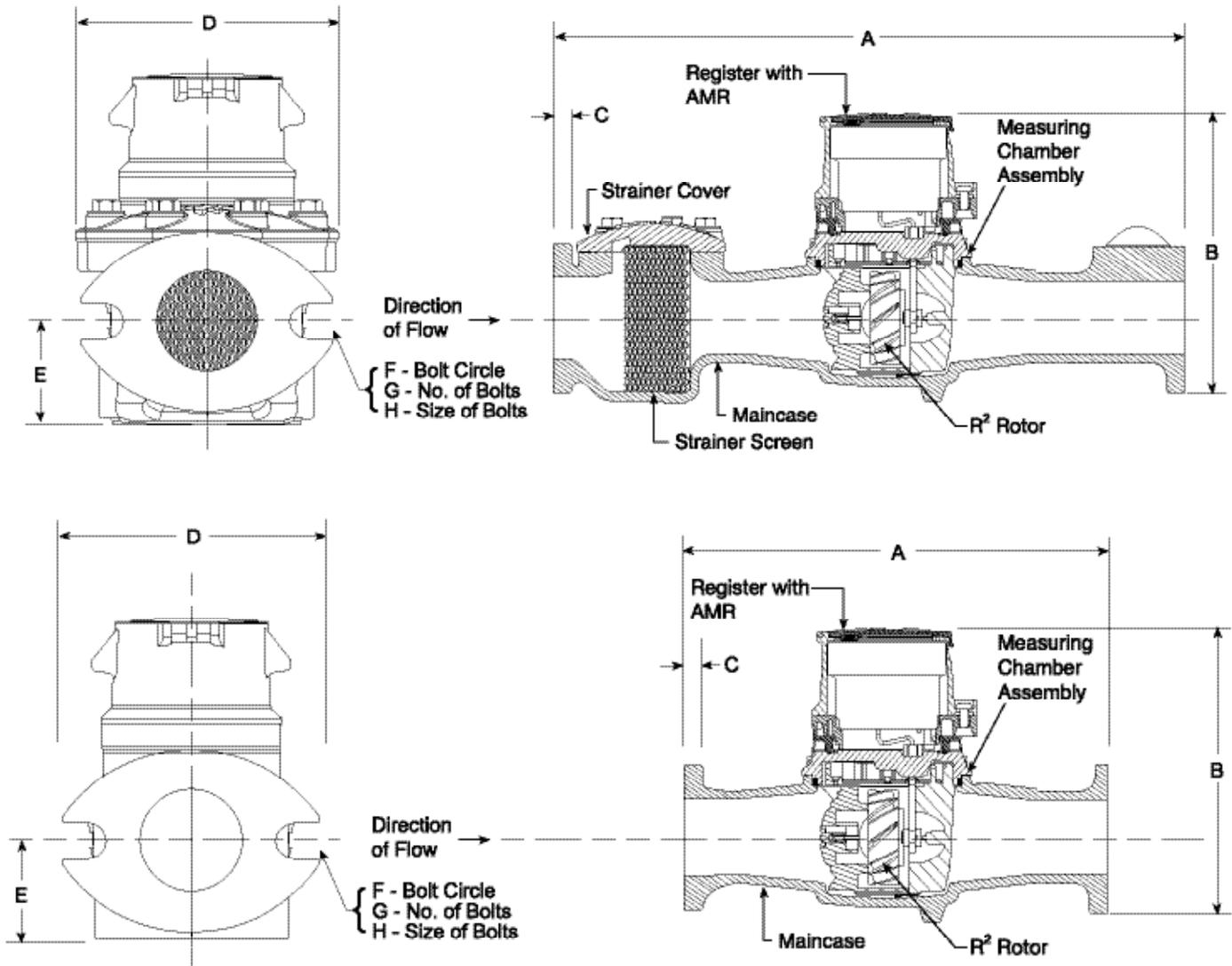
### AMR / AMI SYSTEMS

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

### GUARANTEE

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

### OMNI R<sup>2</sup>: 1-1/2" and 2" Sizes



### 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	2 gpm .45 m <sup>3</sup> /hr	150 gpm 34 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	2.5 gpm .56 m <sup>3</sup> /hr	200 gpm 45 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" 25mm	27.4 lbs. 12.42 kg.	34.5 lbs. 15.65 kg.
2" without Strainer DN 80mm	2.5 gpm .56 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	1" 25mm	17 lbs. 7.9 kg.	24.5 lbs. 11.11 kg.

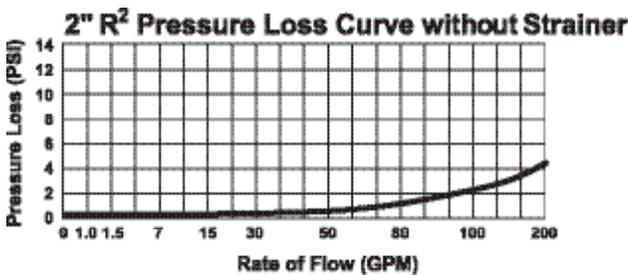
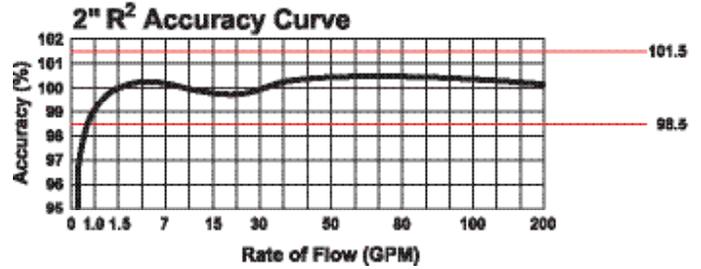
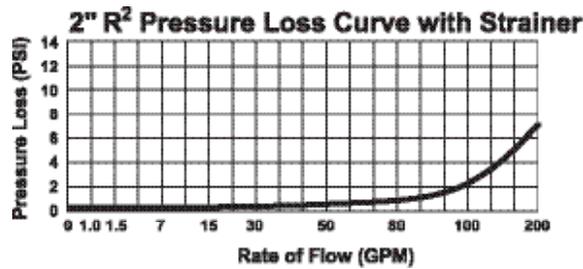
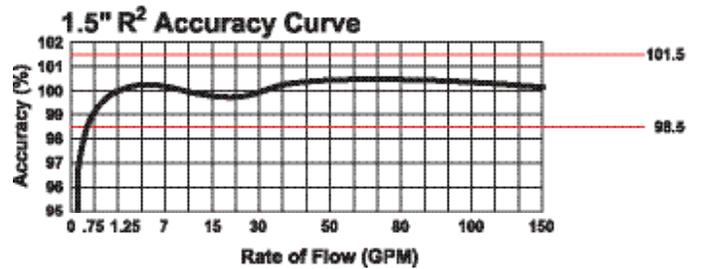
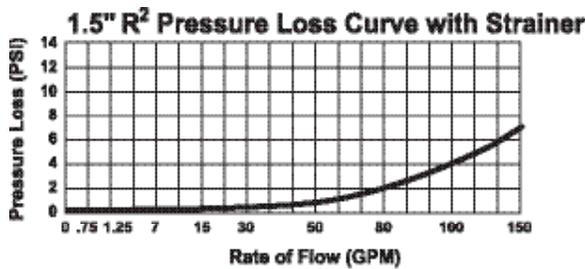
## OMNI R<sup>2</sup>: 1-1/2" and 2" Sizes

### 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": 2 – 150 GPM (.45 - 34 m <sup>3</sup> /hr) 2": 2.5 – 200 GPM (.56 – 45 m <sup>3</sup> /hr) 2" without Strainer: 2.5 – 200 GPM (.56 – 45 m <sup>3</sup> /hr)
<b>LOW FLOW</b> (95% – 101.5%)	1-1/2": .75 GPM (.17 m <sup>3</sup> /hr) 2": 1.0 GPM (.23 m <sup>3</sup> /hr) 2" without Strainer: 1.0 GPM (.23 m <sup>3</sup> /hr)
<b>PRESSURE LOSS</b>	1-1/2": 6.7 psi @ 150 GPM (0.46 bar @ 34 m <sup>3</sup> /hr) 2": 7.0 psi @ 200 GPM (.48 bar @ 45 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 output 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

### Headloss Curves



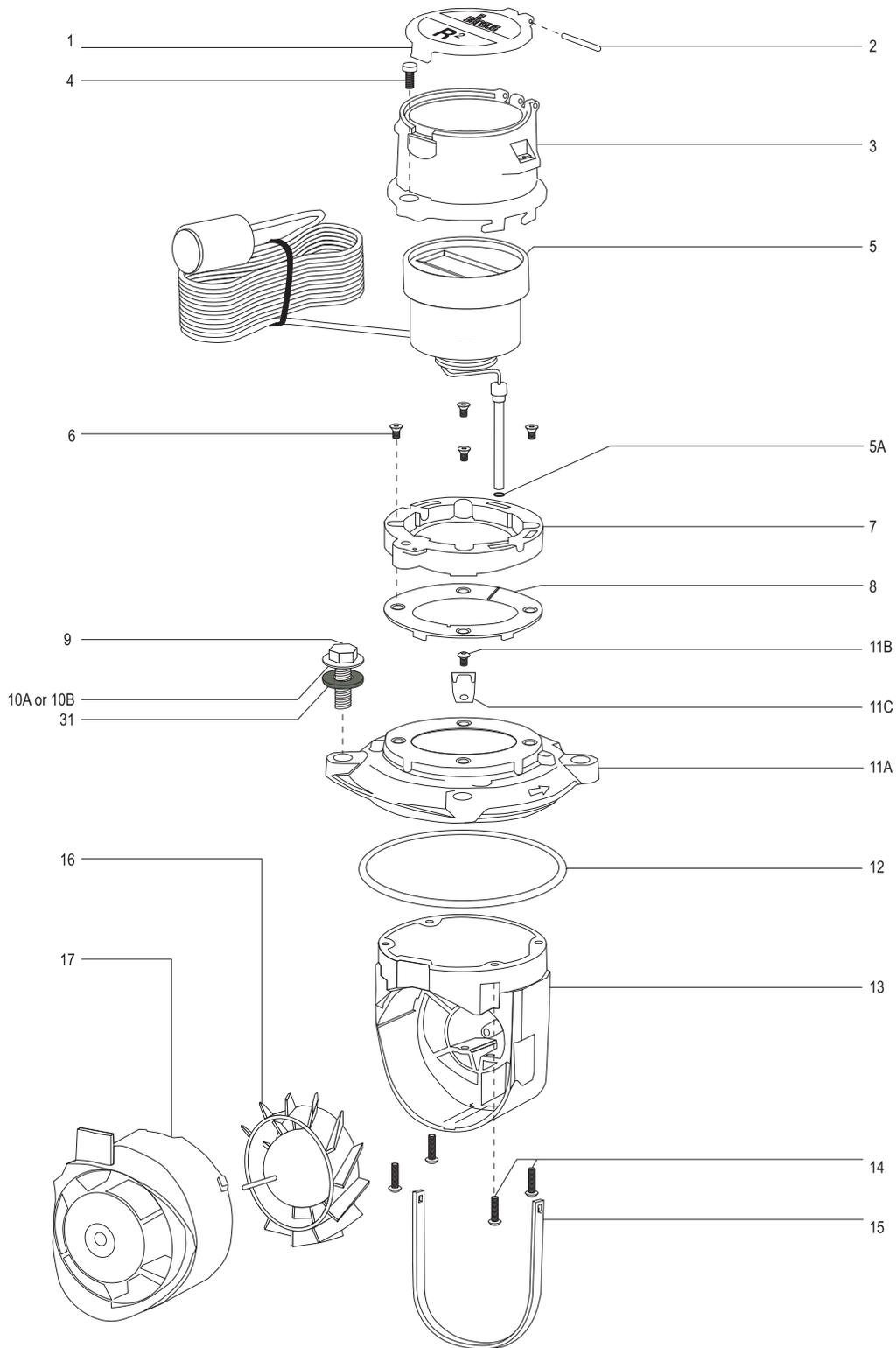
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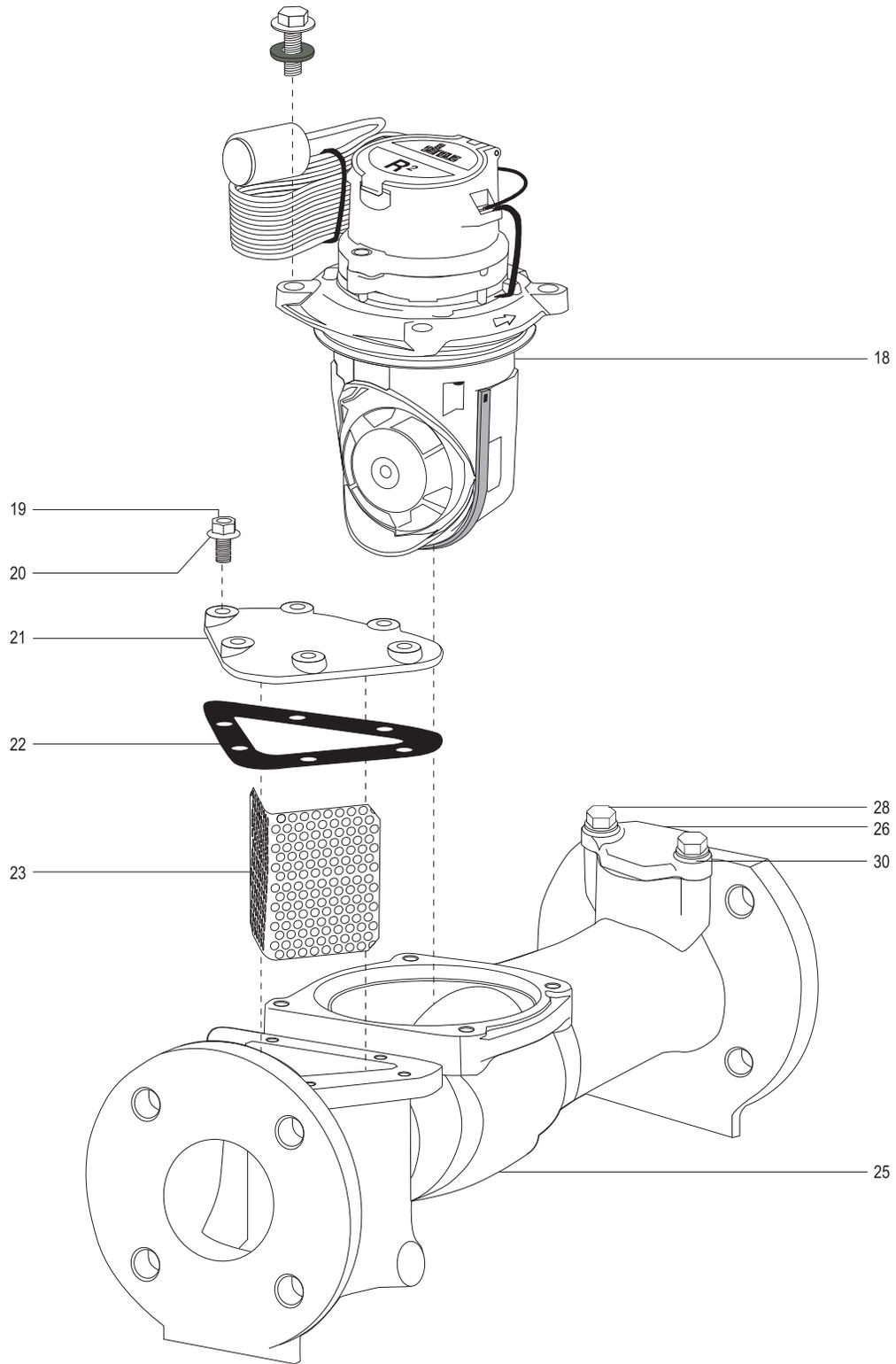
## OMNI R<sup>2</sup>: 1 1/2" and 2"



### OMNI R<sup>2</sup>: 1-1/2" and 2"



### OMNI R<sup>2</sup>: 1-1/2" and 2"



**OMNI R<sup>2</sup>: 1-1/2" and 2"**

ILL. No.	Name of Part
1	R2 Bonnet Lid
2	Hinge Pin
3	Bonnet
4	Bonnet Seal Screw
5	Register w/ AMR and Pulse Wire
5A	Register Probe O-Ring
6	Locking Ring Screw
7	Locking Ring
8	Fixing Ring
9	Chamber Cover Bolt
10A	Chamber Cover Bolt Washer
10B	Chamber Cover Bolt Washer 316SS
11A	Chamber Cover
11B	Screw — Spring Hold Down
11C	Spring
12	Chamber Cover O-Ring
13	Measuring Insert with Brg and Thrust Assy
14	Measuring Chamber Screw
15	Chamber Seal Gasket
16	R2 Rotor and Shaft Assy
17	OMNI Balance Plate w/brg and thrust assy
18	Measuring Chamber Assy
19	Strainer Cover Cap Screw
20	Strainer Cover Bolt Washer
21	Strainer Cover
22	Strainer Cover Gasket
23	Strainer Screen
24	Test Plug — Stainless Steel (not shown)
25	R2 Maincase
26	Test Port Cover
27	Test Port Adapter (not shown)
28	Test Port Cap Screws
29	Test Port O-ring (not shown)
30	Test Port Washer
31	Chamber Cover and Strainer Cover Washer — Black Nylon

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# 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:

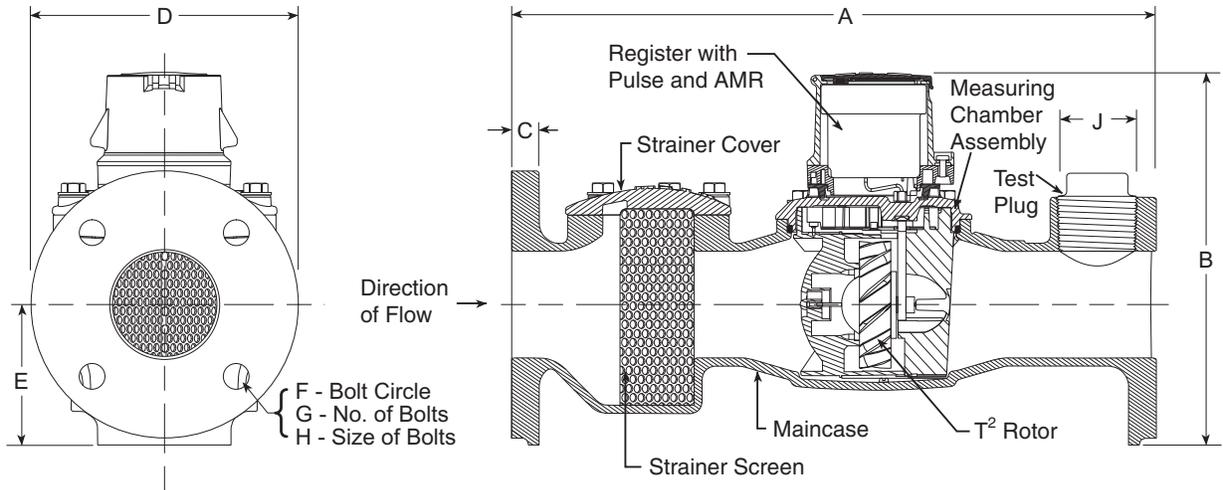
Meters and encoders are compatible with current Sensus AMR/AMI systems.

### GUARANTEE:

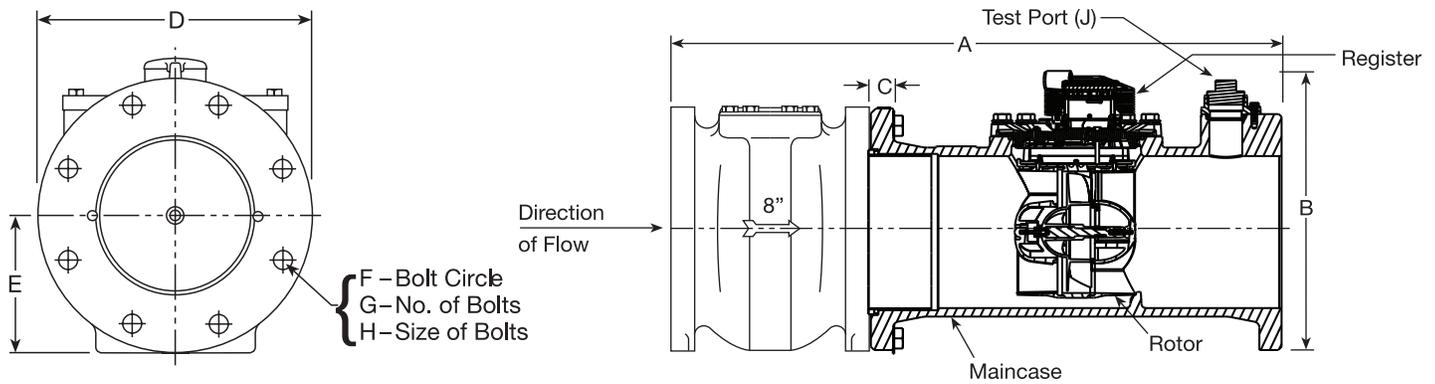
Sensus OMNI T<sup>2</sup> Meters are backed by "The Sensus Guarantee." Ask your Sensus representative for details or see Bulletin G-500.

## 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.

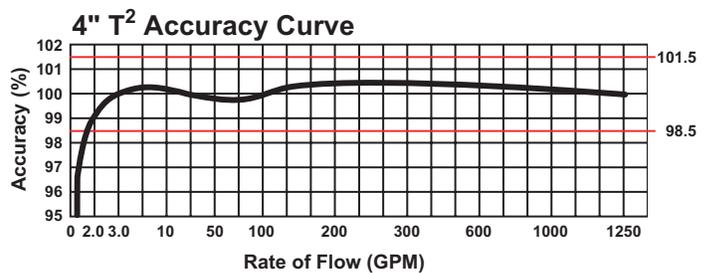
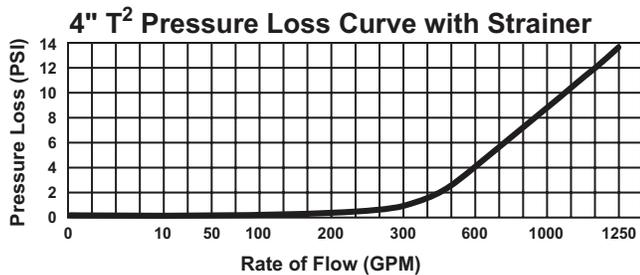
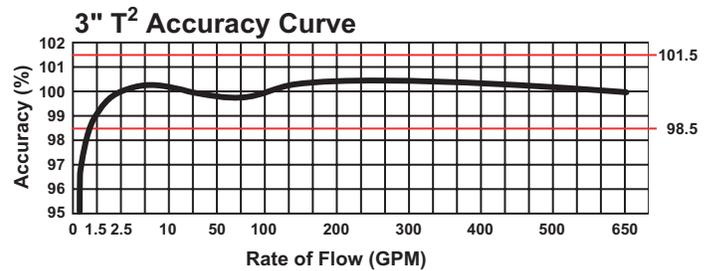
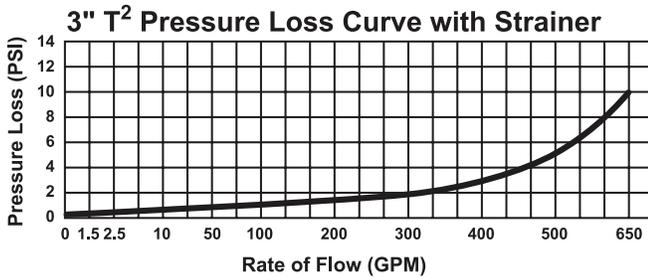
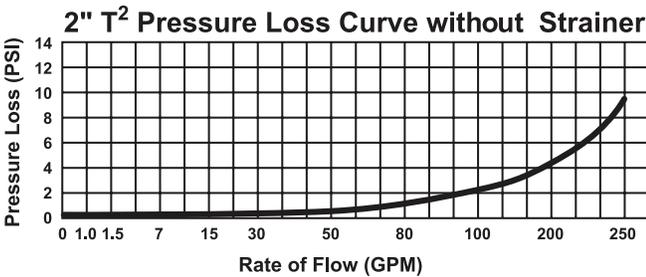
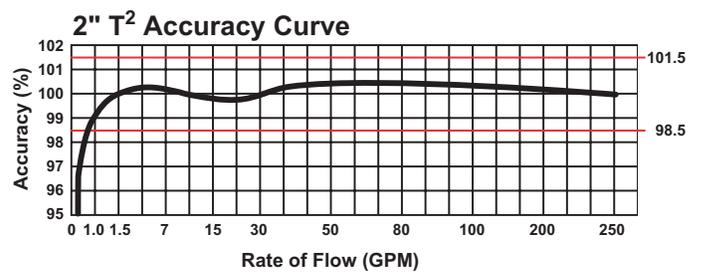
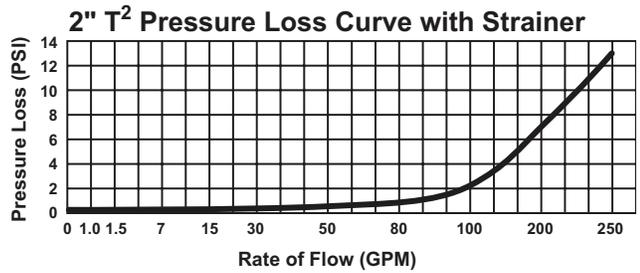
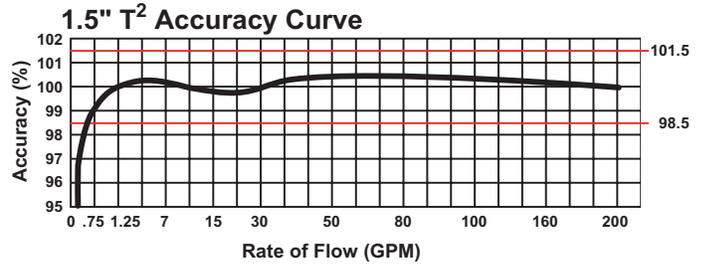
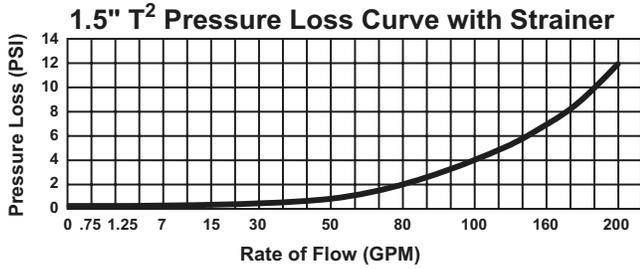
## OMNI T<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

### 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

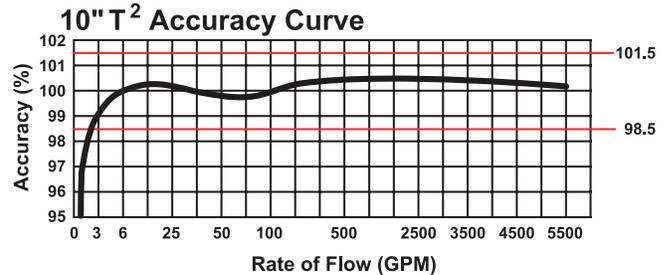
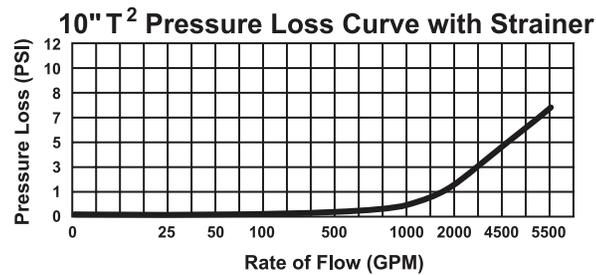
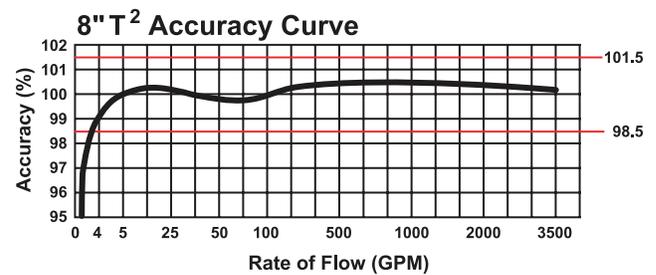
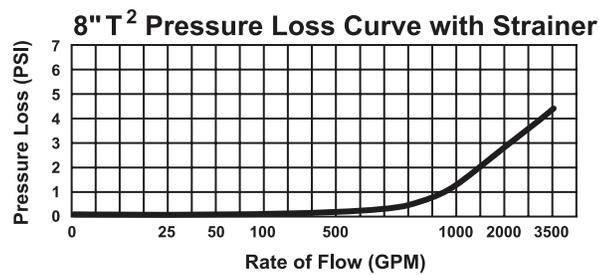
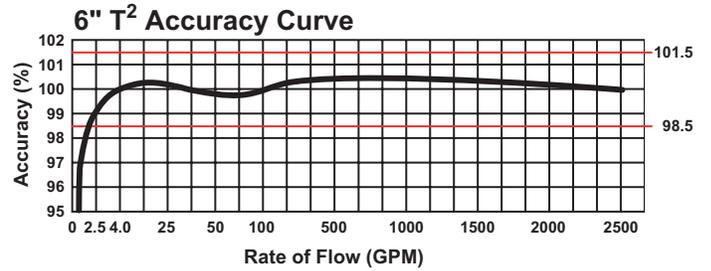
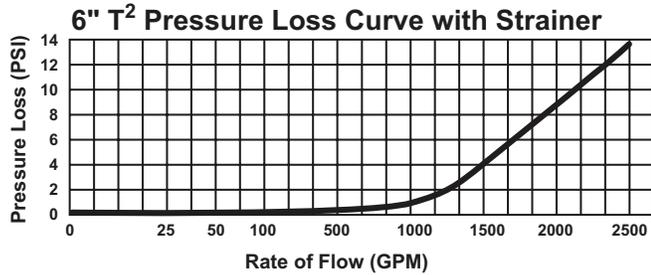
# OMNI T<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

## Headloss Curves



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

### Headloss Curves



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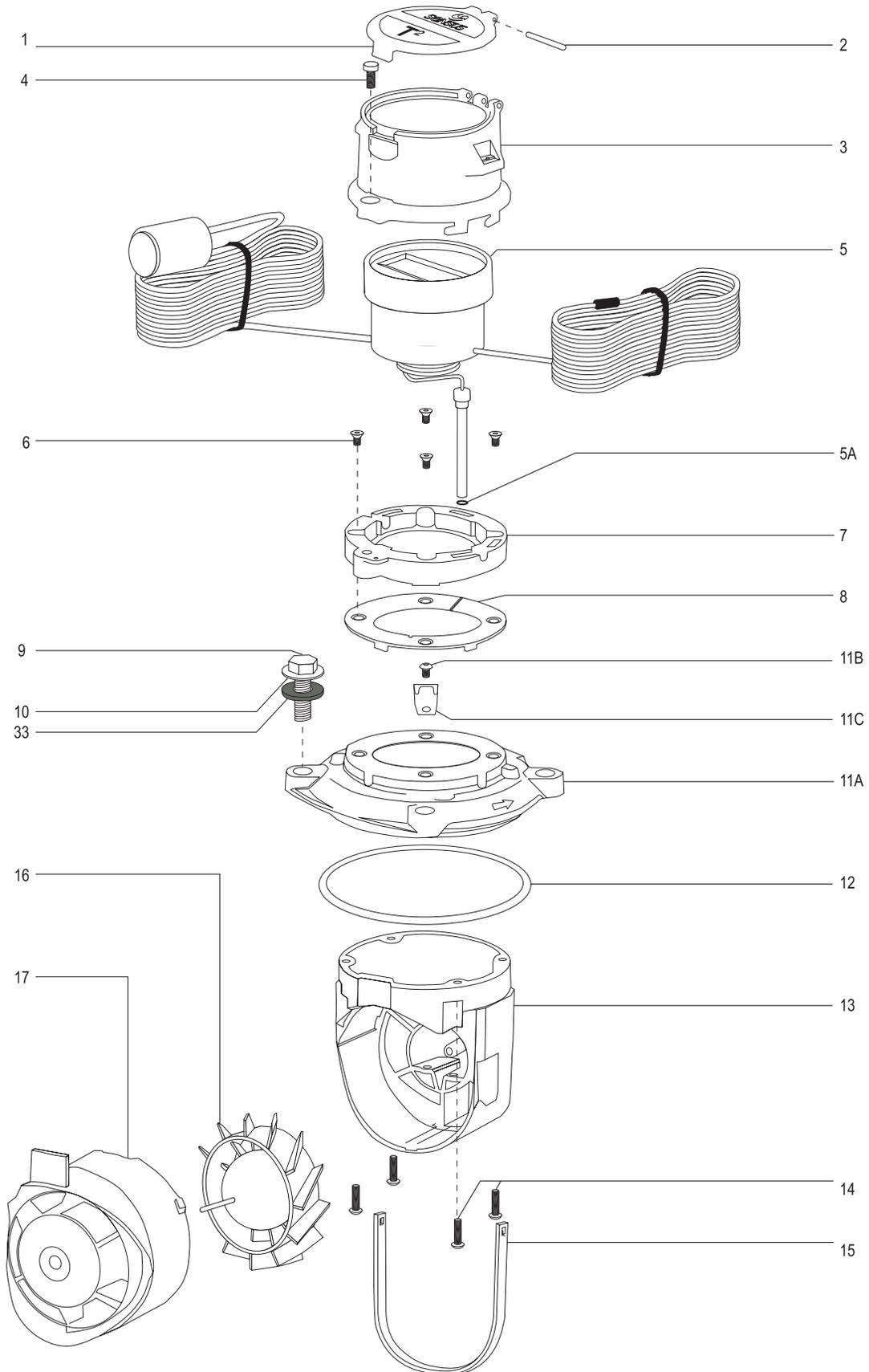
# OMNI™ T<sup>2</sup>

## Parts List

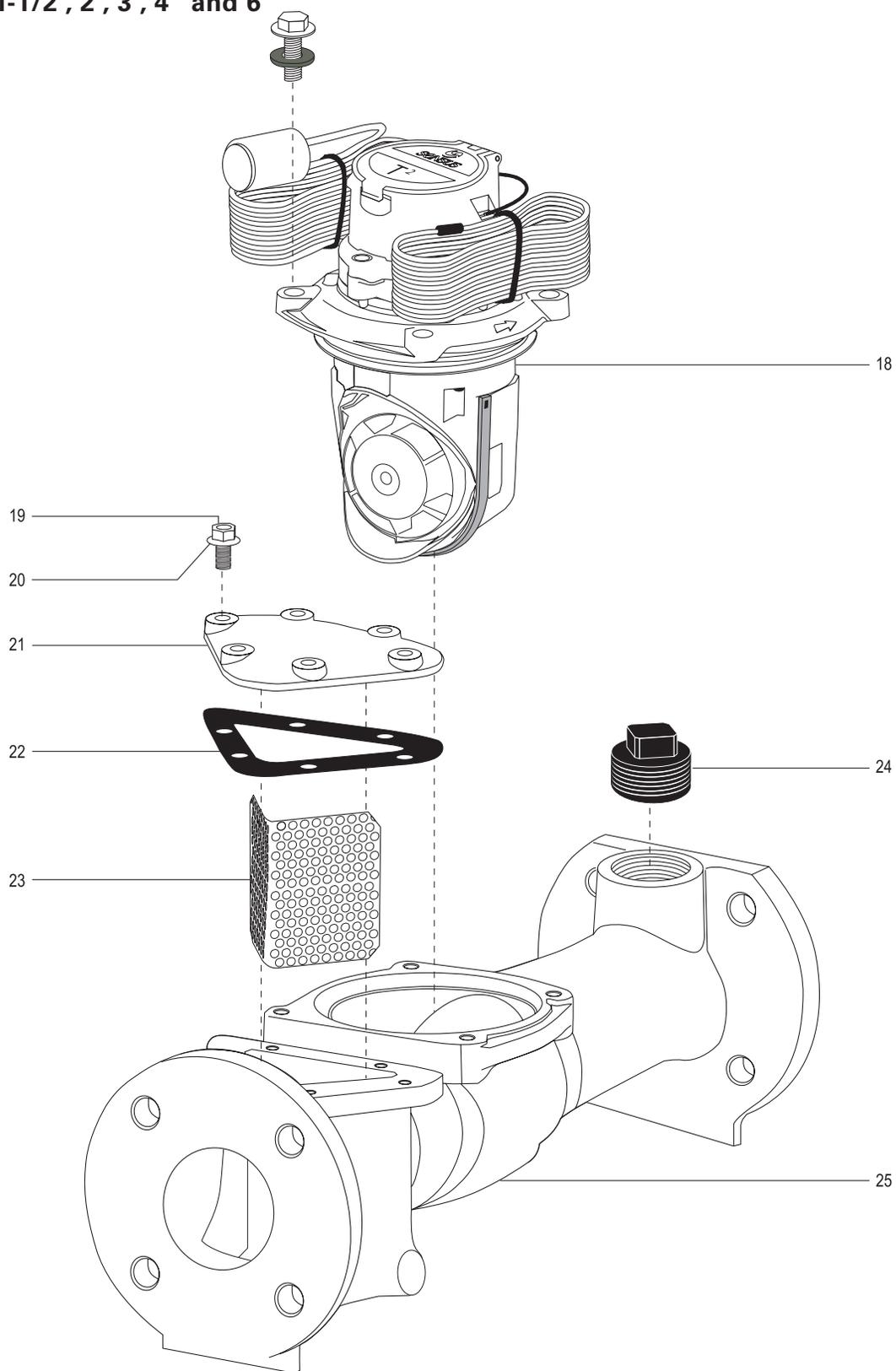
OMNIT<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10"



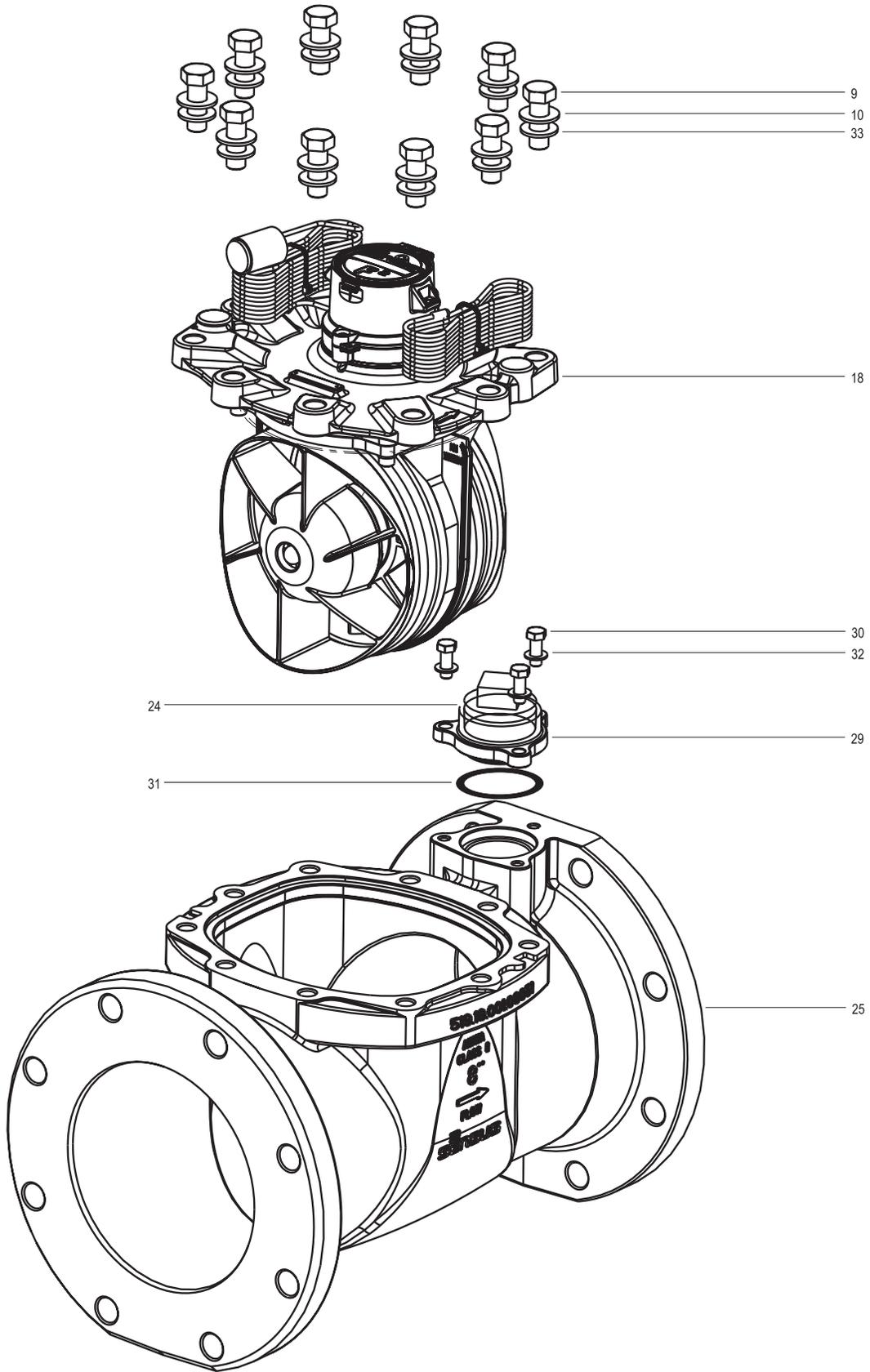
**OMNIT<sup>2</sup>: 1-1/2", 2", 3", 4" and 6"**



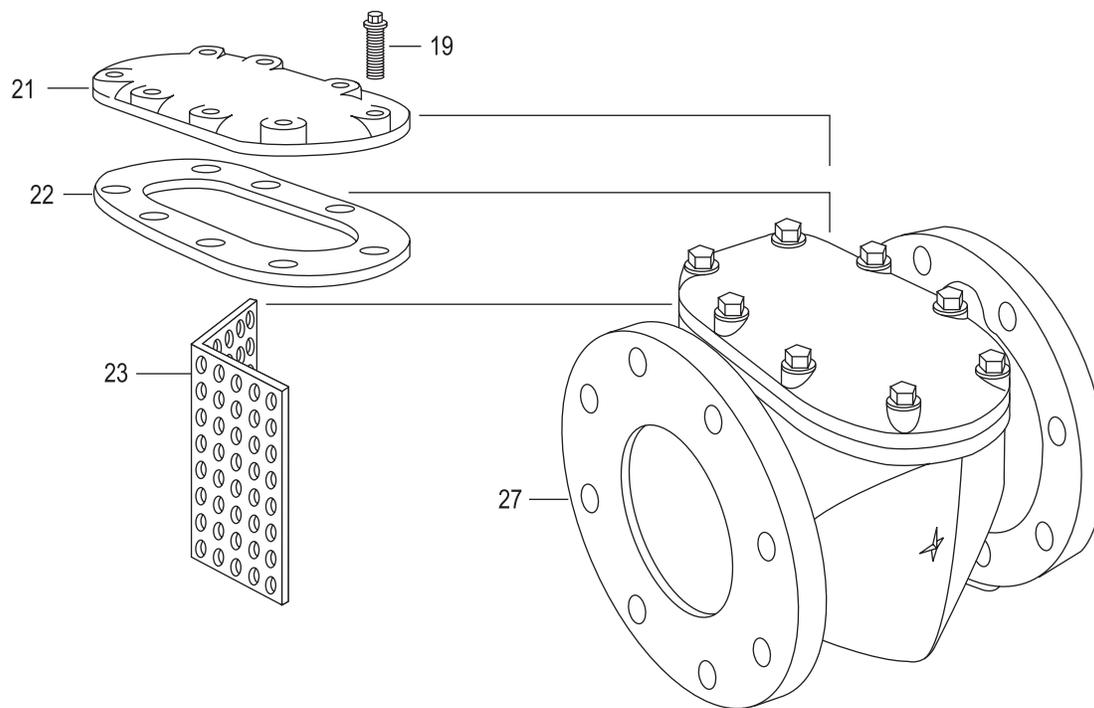
OMNIT<sup>2</sup>: 1-1/2", 2", 3", 4" and 6"



# OMNIT<sup>2</sup>: 8" and 10"



# OMNIT<sup>2</sup>: 8" and 10"



**OMNIT<sup>2</sup>: 1-1/2", 2", 3", 4" and 6"**

<b>ILL. No.</b>	<b>Name of Part</b>
1	T2 Bonnet Lid
2	Hinge Pin
3	Bonnet
4	Bonnet Seal Screw
5	Register
5A	Pick-Up Probe O-Ring
6	Locking Ring Screw
7	Locking Ring
8	Fixing Ring
9	Chamber Cover Bolt
10	Chamber Cover Bolt Washer
11A	Chamber Cover
11B	Screw, Spring Hold Down
11C	Spring
12	Chamber Cover O-Ring or Gasket
13	Measuring Insert
14	Measuring Insert Screw
15	Chamber Seal Gasket
16	T2 Rotor
17	T2 Balance Plate
18	Measuring Chamber
19	Strainer Cover Cap Screw
20	Strainer Cover Bolt Washer
21	Strainer Cover
22	Strainer Cover Gasket
23	Strainer Screen
24	Test Plug
25	T2 Maincase
27	Strainer Body
28	Test Port Cap (not shown)
29	Test Port Cap Adapter
30	Test Port Cap Screws
31	Test Port O-Ring
32	Test Port Washer
33	Chamber Cover Washer — Black Nylon



# OMNI™ C<sup>2</sup>

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

## Description

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

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



## Features

### CONFORMANCE TO STANDARDS

The OMNI C<sup>2</sup> 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 C<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 C<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 undue wear or accuracy degradation when installed in any orientation.

### CONSTRUCTION

The OMNI C<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 an AWWA compliant strainer.

### OMNI ELECTRONIC REGISTER

The OMNI C<sup>2</sup> 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 C<sup>2</sup> meter.

### STRAINER

The OMNI C<sup>2</sup> 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 C<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 are available for the OMNI C<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:

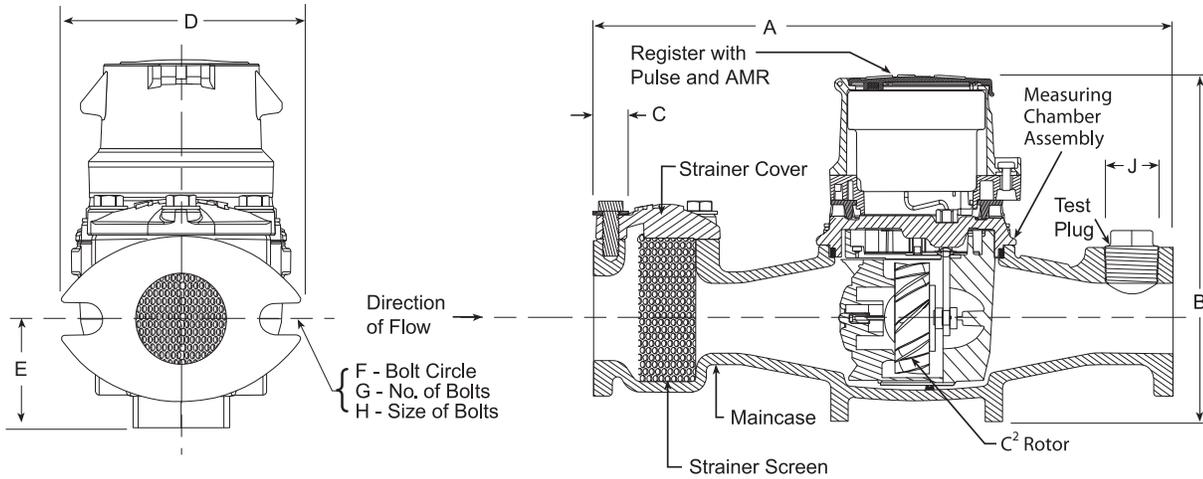
Meters and encoders are compatible with current Sensus AMR/AMI systems.

### GUARANTEE:

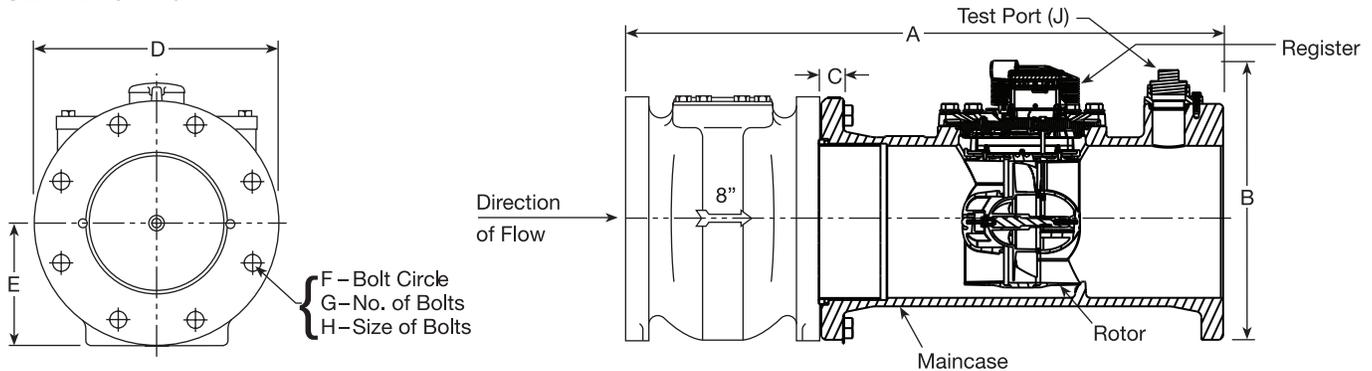
Sensus OMNI C<sup>2</sup> Meters are backed by "The Sensus Guarantee." Ask your Sensus representative for details or see Bulletin G-500.

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

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



### OMNI C<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	.5 gpm .11 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	.5 gpm .11 m <sup>3</sup> /hr	200 gpm 45 m <sup>3</sup> /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 <sup>3</sup> /hr	500 gpm 114 m <sup>3</sup> /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 <sup>3</sup> /hr	1000 gpm 227 m <sup>3</sup> /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 <sup>3</sup> /hr	2500 gpm 5687 m <sup>3</sup> /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 <sup>3</sup> /hr	2700 gpm 614 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	5 gpm 1.1 m <sup>3</sup> /hr	4000 gpm 908 m <sup>3</sup> /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.

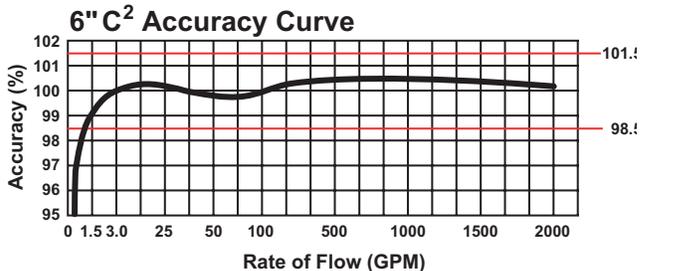
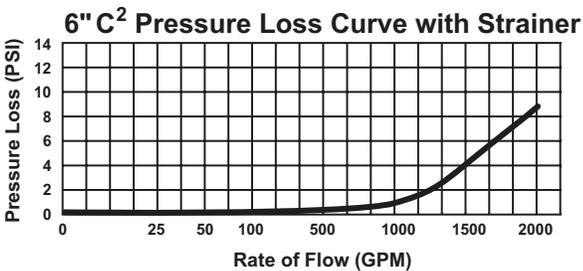
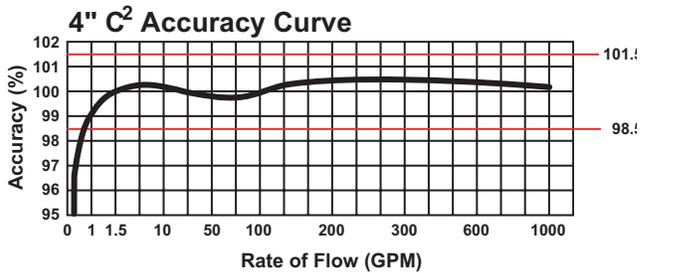
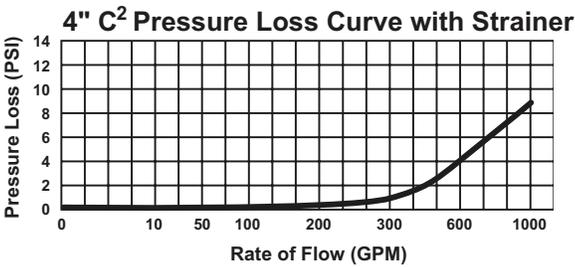
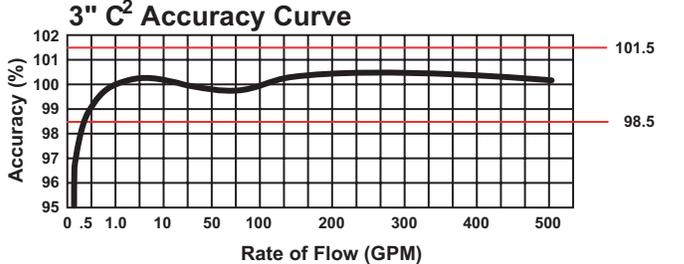
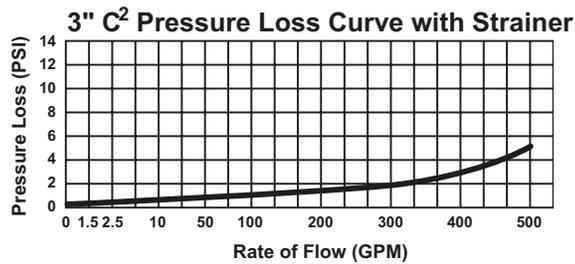
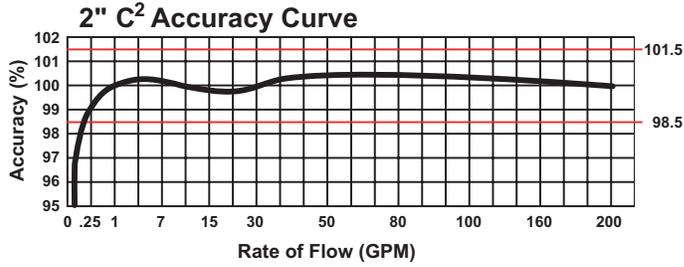
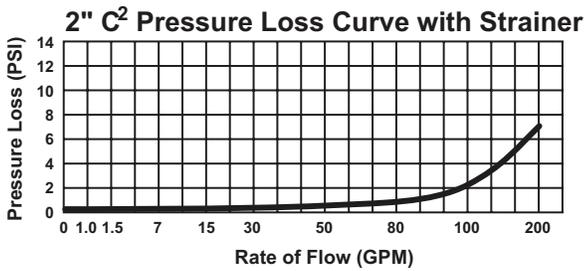
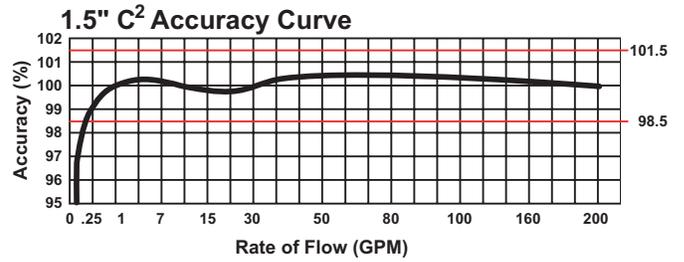
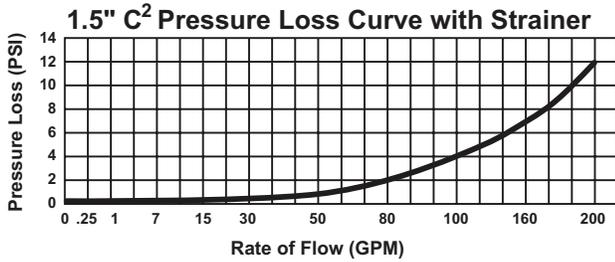
## OMNI C<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10" Sizes

### 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": .5 – 200 GPM (.11 - 45 m <sup>3</sup> /hr) 2": .5 – 200 GPM (.11 - 45 m <sup>3</sup> /hr) 3": 1.0 – 500 GPM (.23 - 114 m <sup>3</sup> /hr) 4": 1.5 – 1000 GPM (.34 - 227 m <sup>3</sup> /hr) 6": 3 – 2000 GPM (.68 - 454 m <sup>3</sup> /hr) 8": 4 – 2700 GPM (0.91 – 614 m <sup>3</sup> /hr) 10": 5-4000 GPM (1.1-908 m <sup>3</sup> /hr)
<b>LOW FLOW</b> (95% – 101.5%)	1-1/2": .25 GPM (.06 m <sup>3</sup> /hr) 2": .25 GPM (.06 m <sup>3</sup> /hr) 3": .5 GPM (.11 m <sup>3</sup> /hr) 4": .75 GPM (.17 m <sup>3</sup> /hr) 6": 1.5 GPM (.34 m <sup>3</sup> /hr) 8": 2.5 GPM (0.57 m <sup>3</sup> /hr) 10": 3.5 GPM (0.8 m <sup>3</sup> /hr)
<b>MAXIMUM CONTINUOUS OPERATION</b>	1-1/2": 160 GPM (36m <sup>3</sup> /hr) 2": 160 GPM (36 m <sup>3</sup> /hr) 3": 400 GPM (91 m <sup>3</sup> /hr) 4": 800 GPM (182 m <sup>3</sup> /hr) 6": 1600 GPM (363 m <sup>3</sup> /hr) 8": 2700 GPM (614 m <sup>3</sup> /hr) 10": 4000 GPM (908 m <sup>3</sup> /hr)
<b>MAXIMUM INTERMITTENT OPERATION</b>	1-1/2": 200 GPM (45 m <sup>3</sup> /hr) 2": 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": 3400 GPM (773 m <sup>3</sup> /hr) 10": 5000 GPM (1136 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": 4.3 psi @ 160 GPM (.30 bar @ 36 m <sup>3</sup> /hr) 3": 3.2 psi @ 400 GPM (.22 bar @ 91 m <sup>3</sup> /hr) 4": 6.4 psi @ 800 GPM (.51 bar @ 182 m <sup>3</sup> /hr) 6": 5.5 psi @ 1600 GPM (.56 bar @ 363 m <sup>3</sup> /hr) 8": 4 psi @ 2700 GPM (.27 bar @ 614 m <sup>3</sup> /hr) 10": 4.5 psi @ 4000 GPM (.31 bar @ 908 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

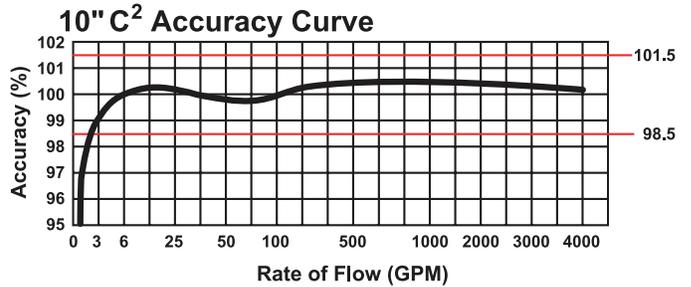
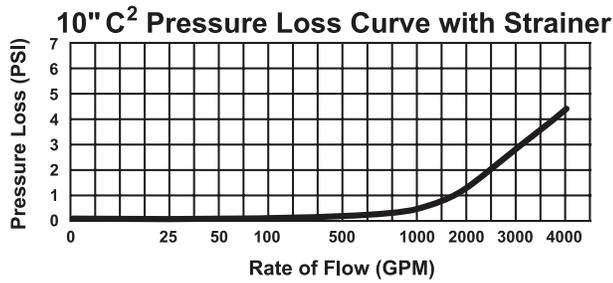
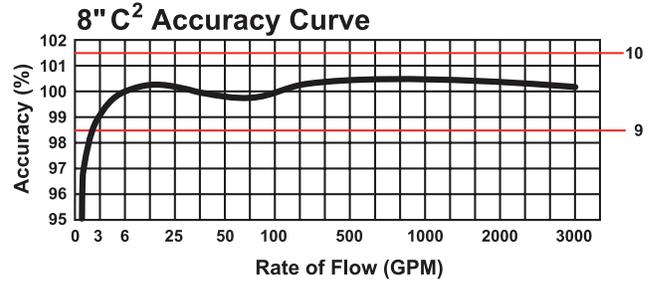
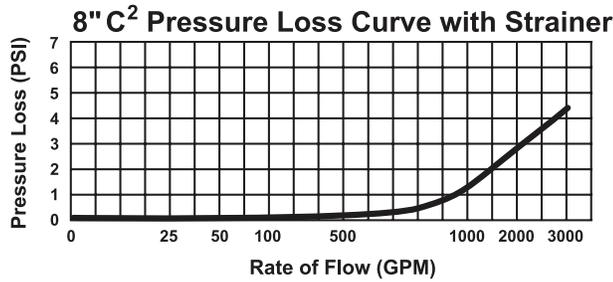
## OMNI C<sup>2</sup>: 1-1/2", 2", 3", 4", and 6" Sizes

### Headloss Curves



## OMNI C<sup>2</sup>: 8" and 10" Sizes

### Headloss Curves



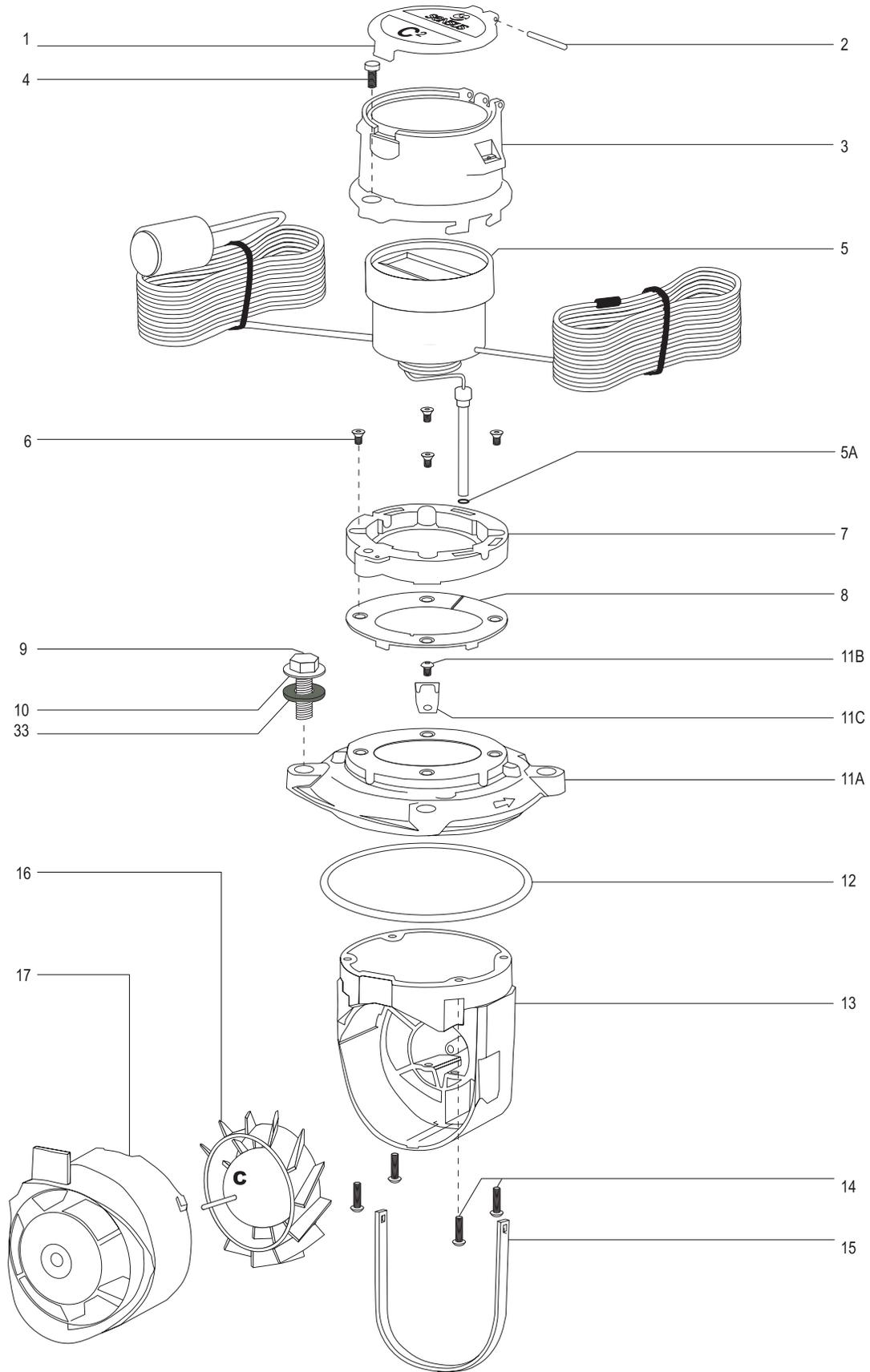
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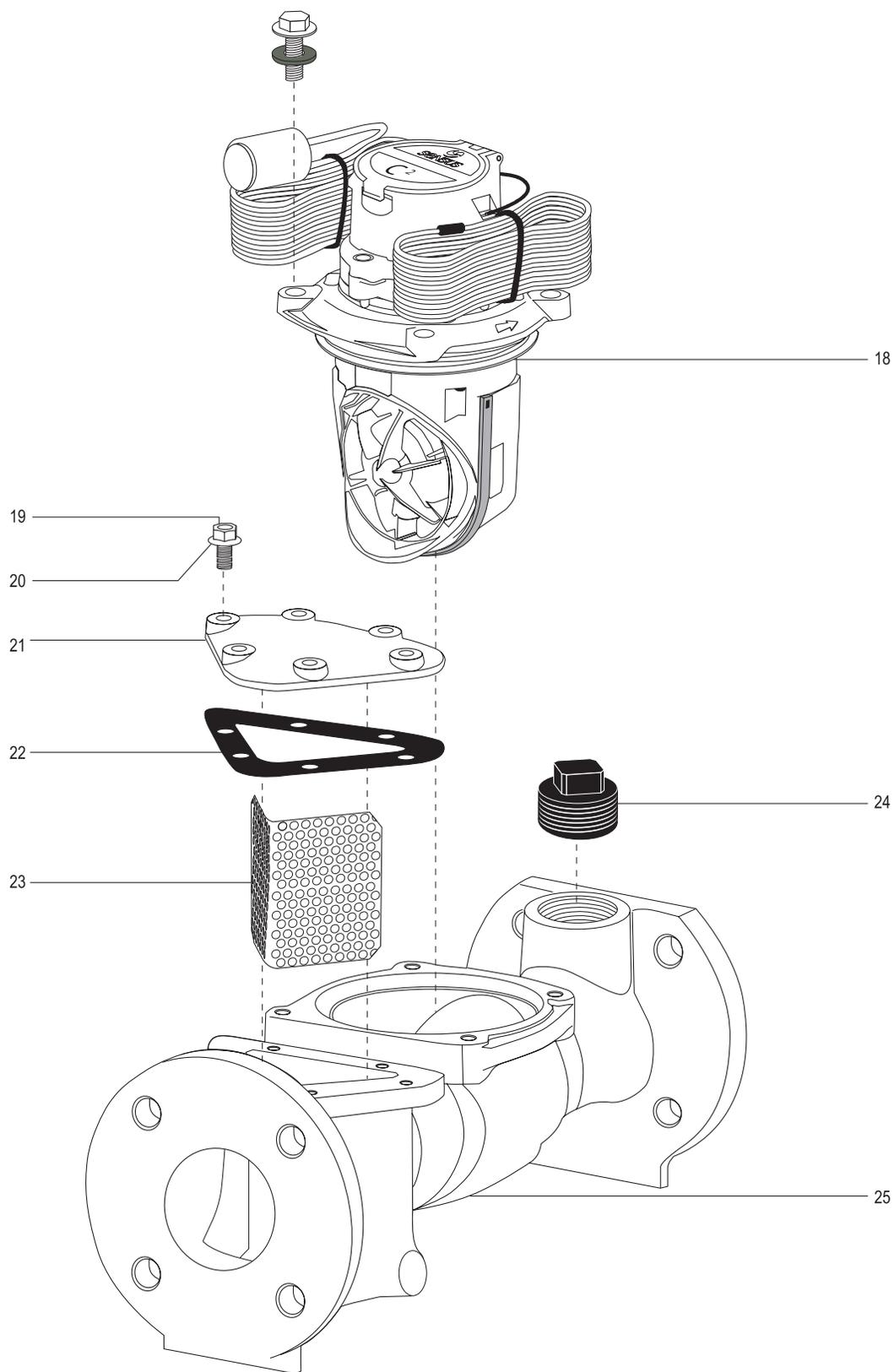
**OMNI C<sup>2</sup>: 1-1/2", 2", 3", 4", 6", 8" and 10"**



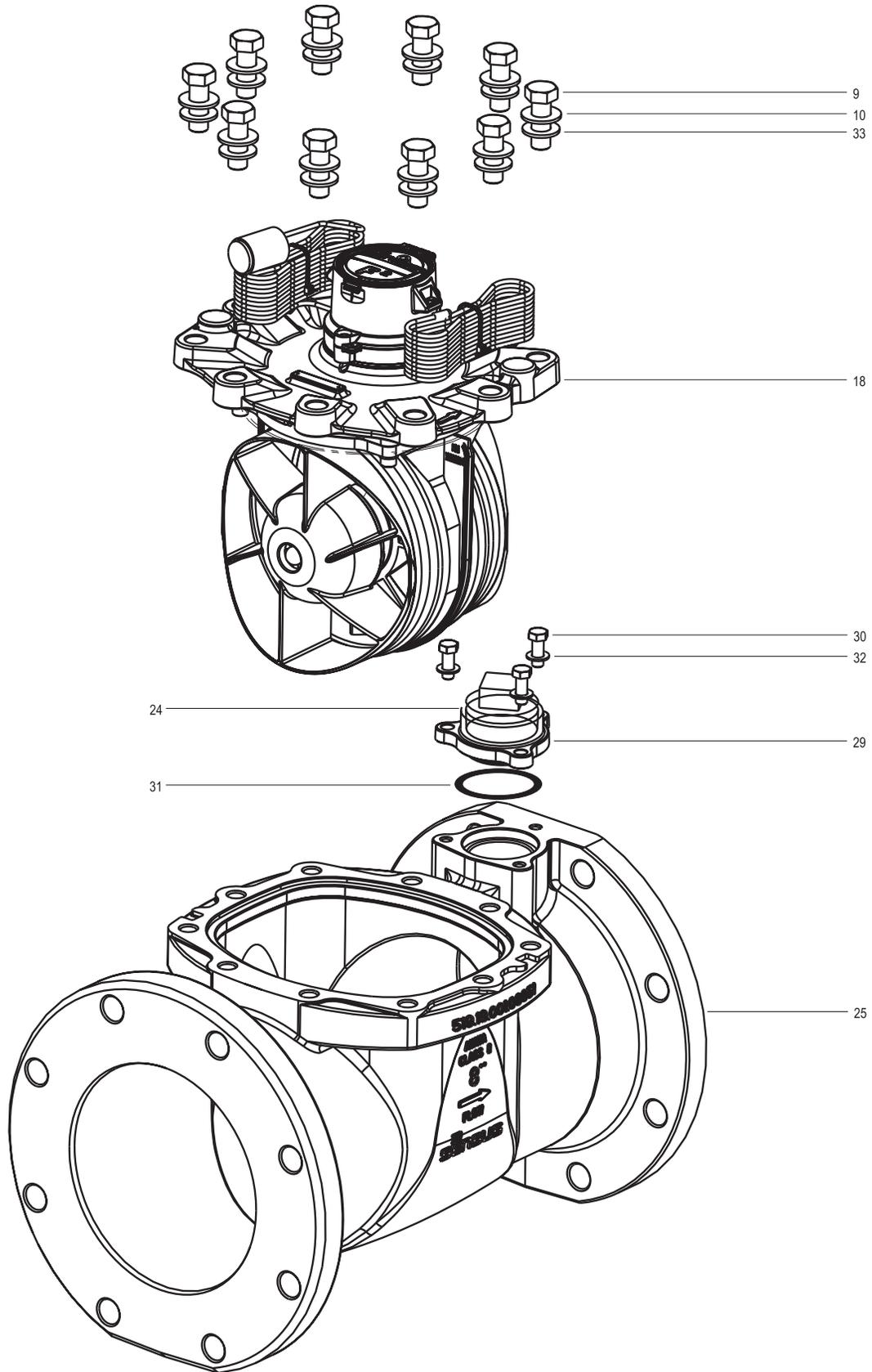
**OMNI C<sup>2</sup>: 1-1/2", 2", 3", 4", and 6"**

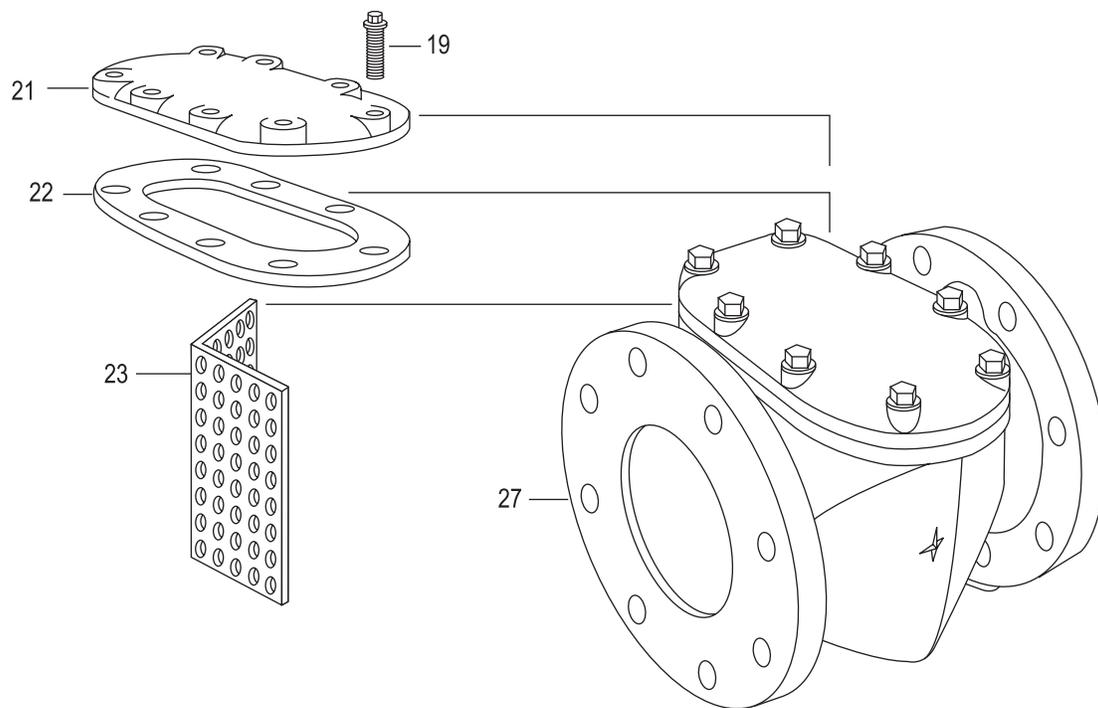


**OMNI C<sup>2</sup>: 1-1/2", 2", 3", 4" and 6"**



# OMNI C<sup>2</sup>: 8" and 10"



OMNI C<sup>2</sup>: 8" and 10"

## OMNI C<sup>2</sup>: 1-1/2", 2", 3", 4" and 6"

ILL. No.	Name of Part
1	C <sup>2</sup> Bonnet Lid
2	Hinge Pin
3	Bonnet*
4	Bonnet Seal Screw
5	Register
5A	Pick-Up Probe O-Ring
6	Locking Ring Screw
7	Locking Ring
8	Fixing Ring
9	Chamber Cover Bolt
10	Chamber Cover Bolt Washer
11A	Chamber Cover
11B	Screw
11C	Spring
12	Chamber Cover O-Ring or Gasket
13	Measuring Insert
14	Measuring Insert Screw
15	Chamber Seal Gasket
16	C <sup>2</sup> Rotor*
17	T <sup>2</sup> Balance Plate
18	Measuring Chamber
19	Strainer Cover Cap Screw
20	Strainer Cover Bolt Washer
21	Strainer Cover
22	Strainer Cover Gasket
23	Strainer Screen
24	Test Plug
25	C <sup>2</sup> Maincase
27	Strainer Body
28	Test Port Cap (not shown)
29	Test Port Cap Adapter
30	Test Port Cap Screws
31	Test Port O-Ring
32	Test Port Washer
33	Chamber Cover Washer — Black Nylon

\* For 3" or 4" C<sup>2</sup> rotor / bonnet replacement, order either for the 3" meter size or 4" meter size (See size on front of register bonnet).

# OMNI™ F<sup>2</sup>

4", 6", 8" and 10" OMNI F<sup>2</sup> Meter

## Description

### 4", 6", 8" and 10" Sizes

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



## Features

### CONFORMANCE TO STANDARDS

The OMNI F<sup>2</sup> meter meets and far exceeds the most recent revision of AWWA Standard C703 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. The OMNI F<sup>2</sup> meter is UL (Underwriters Laboratories) Listed and FM (Factory Mutual) approved for use on fire protection and domestic water applications.

### PERFORMANCE

The patented measurement principles of the OMNI F<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 F<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 undue wear or accuracy degradation.

### CONSTRUCTION

The OMNI F<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 OMNI F<sup>2</sup> 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 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 F<sup>2</sup> meter.

### STRAINER

The OMNI F<sup>2</sup> meter includes the Sensus designed "V" shaped UL Listed/FM approved strainer which utilizes a stainless steel screen along with Floating Ball Technology (FBT) to 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 F<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 are available for the OMNI F<sup>2</sup> meters.

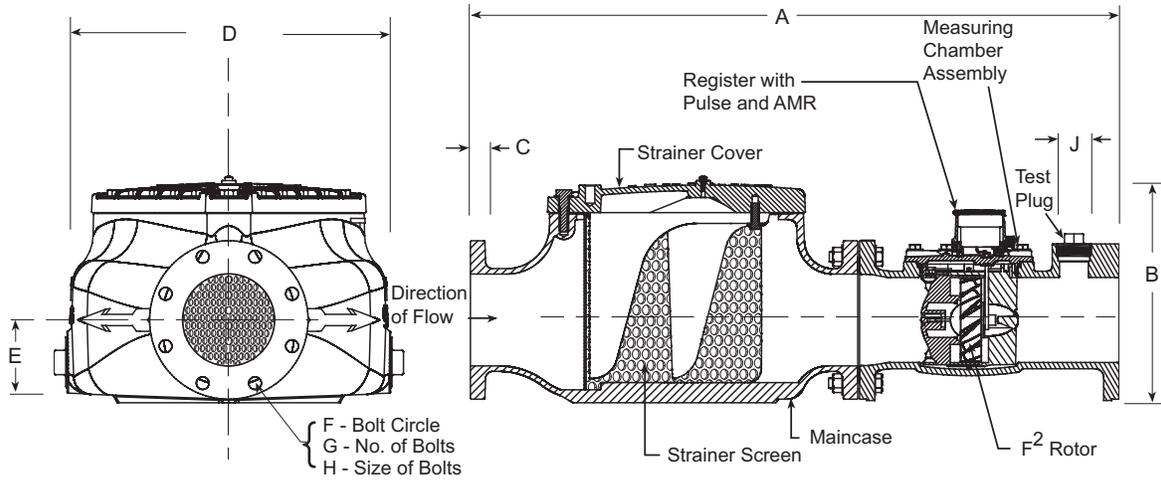
### AMR / AMI SYSTEMS

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

### GUARANTEE

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

**OMNI F<sup>2</sup>: 4", 6", 8" and 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	Standard Fireline
4" DN 100mm	1.5 gpm .34 m <sup>3</sup> /hr	1000 gpm 227 m <sup>3</sup> /hr	Flanged	33" 838mm	13-11/16" 348mm	15/16" 24mm	17-1/2" 446mm	4-3/4" 121mm	7-1/2" 191mm	8	5/8" 16mm	2" 50mm	212 lbs. 96 kg.	252 lbs. 115 kg.	51-7/8" (1317mm)
6" DN 150mm	3.0 gpm .681 m <sup>3</sup> /hr	2000 gpm 454 m <sup>3</sup> /hr	Flanged	45" 1143mm	15-3/4" 400mm	15/16" 24mm	22-3/8" 569mm	5-3/4" 146mm	9-1/2" 242mm	8	3/4" 19mm	2" 50mm	394 lbs. 179 kg.	449 lbs. 204 kg.	67-5/8" (1717mm)
8" DN 200mm	4 gpm .91 m <sup>3</sup> /hr	3500 gpm 795 m <sup>3</sup> /hr	Flanged	53" 1346mm	18-1/2" 470mm	11/16" 17mm	31" 787mm	6-3/4" 172mm	11-3/4" 298mm	8	3/4" 19mm	2" NPT	736 lbs. 334 kg.	786 lbs. 357 kg.	77" (1956mm)
10" DN 250mm	5 gpm 1.1 m <sup>3</sup> /hr	5500 gpm 1249 m <sup>3</sup> /hr	Flanged	68" 1727mm	22-1/4" 565mm	11/16" 17mm	37-1/3" 947mm	8-1/2" 216mm	14-1/4" 362mm	12	7/8" 22mm	2" NPT	1155 lbs. 524 kg.	1215 lbs. 551 kg.	90" (2286mm)

\*Standard Fireline lay length with optional spool piece added.

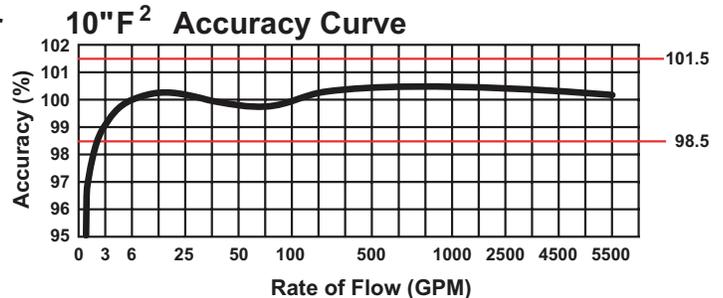
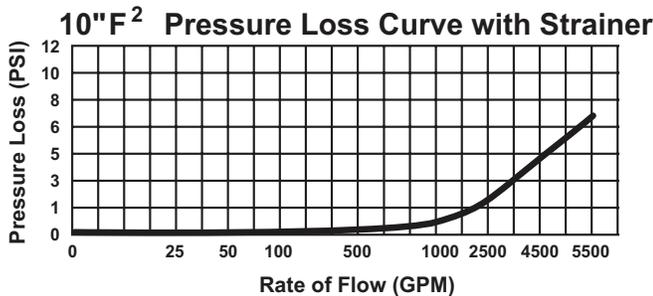
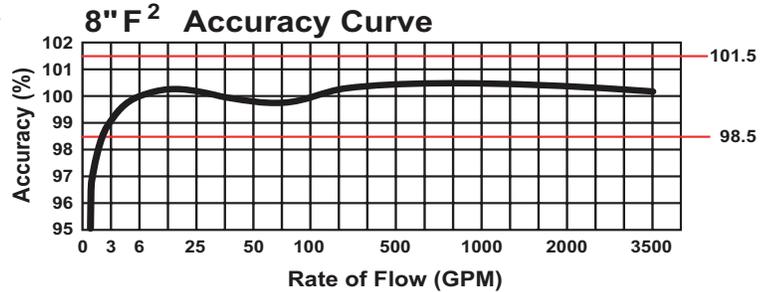
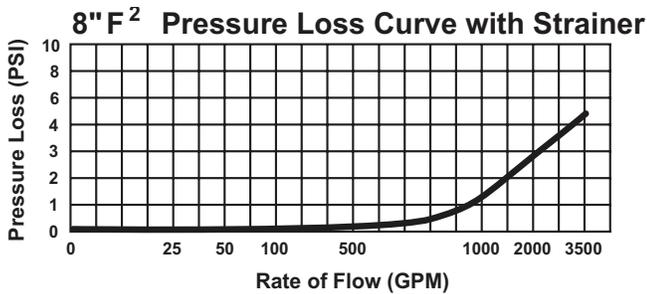
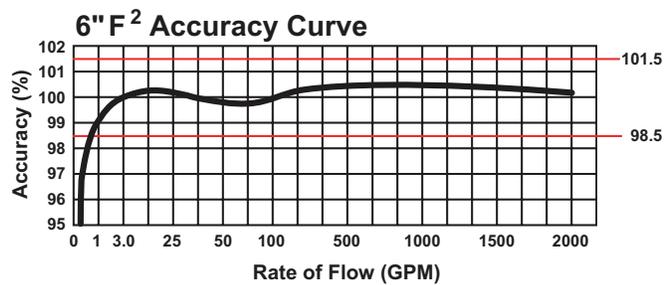
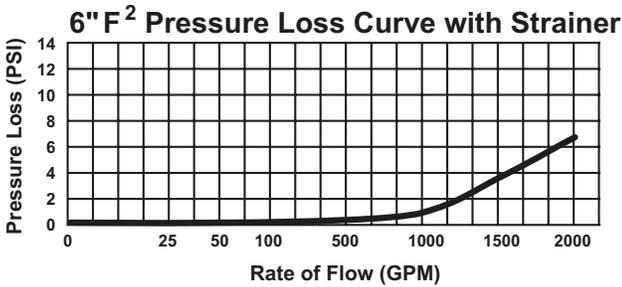
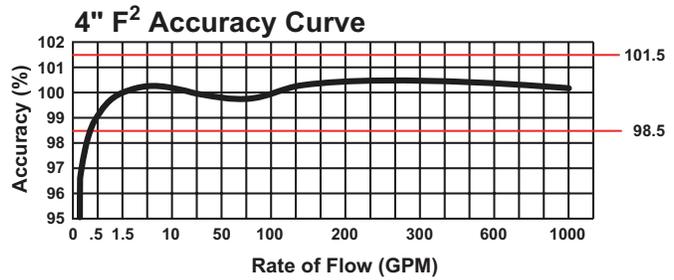
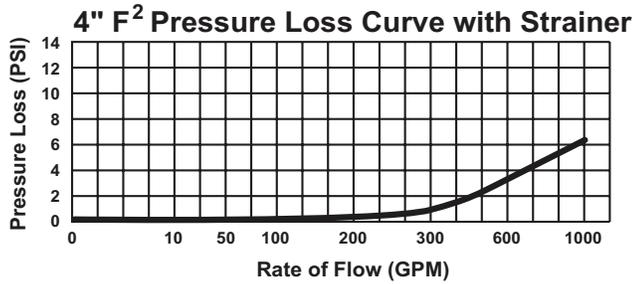
**SPECIFICATIONS**

<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 (100% ± 1.5%)</b>	4": 1.5 – 1000 GPM (.34 - 227 m <sup>3</sup> /hr) 6": 3.0 – 2000 GPM (.34 - 227 m <sup>3</sup> /hr) 8": 4 – 3500 GPM (0.91-795 m <sup>3</sup> /hr) 10": 5 – 5500 GPM (1.1-1249 m <sup>3</sup> /hr)
<b>LOW FLOW (95% – 101.5%)</b>	4": .75 GPM (.06 m <sup>3</sup> /hr) 6": 1.5 GPM (.06 m <sup>3</sup> /hr) 8": 2.5 GPM (0.57 m <sup>3</sup> /hr) 10": 3.5 GPM (0.8 m <sup>3</sup> /hr)
<b>UL MINIMUM FLOW</b>	8": 97% @ 3 GPM (0.68 m <sup>3</sup> /hr) 10": 97% @ 4 GPM (0.9 m <sup>3</sup> /hr)
<b>MAXIMUM CONTINUOUS OPERATION</b>	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>	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>	4": 6.4 psi @ 1000 GPM (.60 bar @ 227 m <sup>3</sup> /hr) 6": 6.7 psi @ 2000 GPM (.56 bar @ 454 m <sup>3</sup> /hr) 8": 5 psi @ 3500 GPM (.34 bar @ 795 m <sup>3</sup> /hr) 10": 7 psi @ 5500 GPM (.48 bar @ 1249 m <sup>3</sup> /hr)
<b>MAXIMUM OPERATING PRESSURE</b>	175 PSI (12 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 F<sup>2</sup>: 4", 6", 8" and 10"

### Headloss Curves



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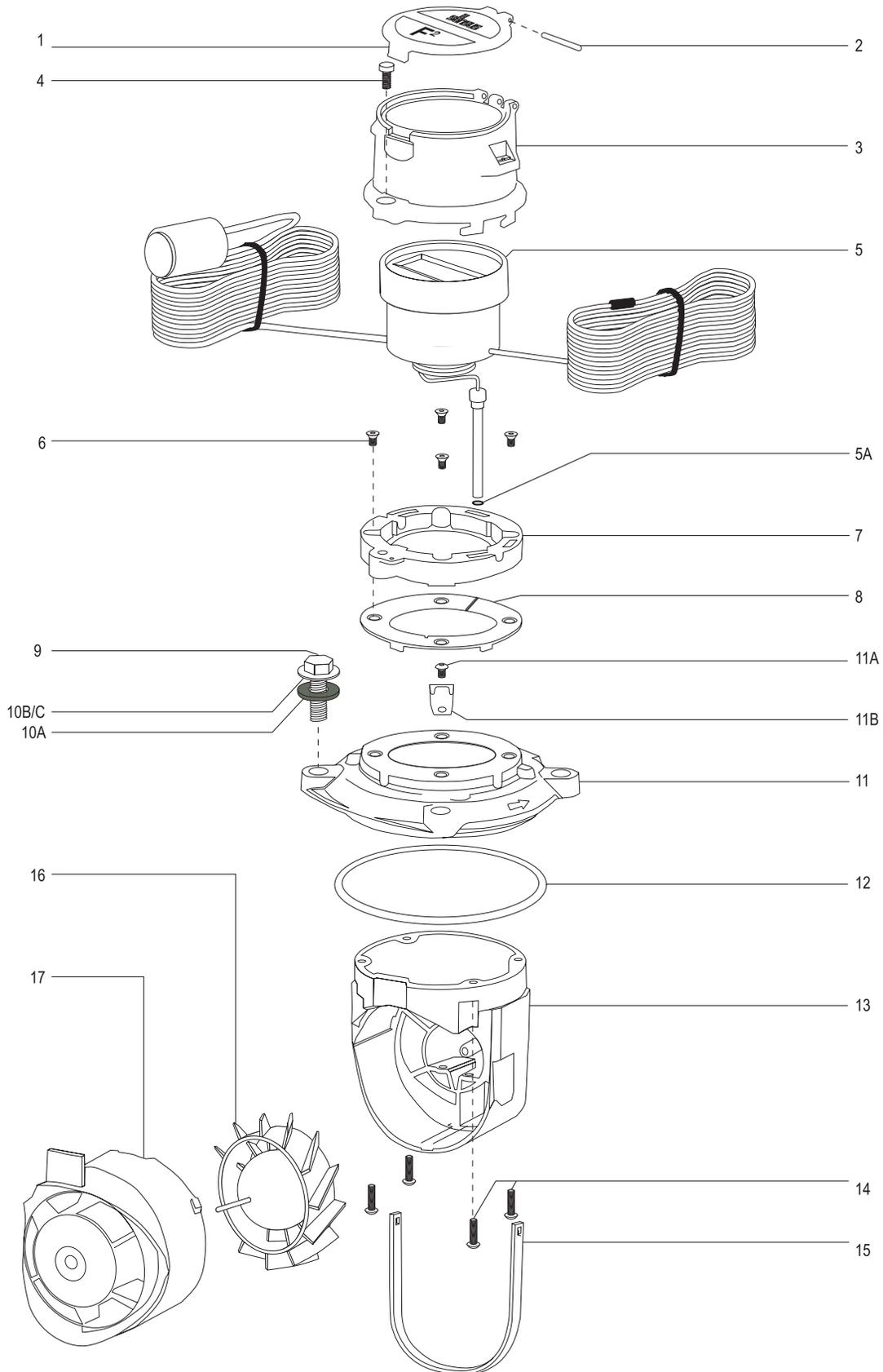
# OMNI™ F<sup>2</sup>

## Parts List

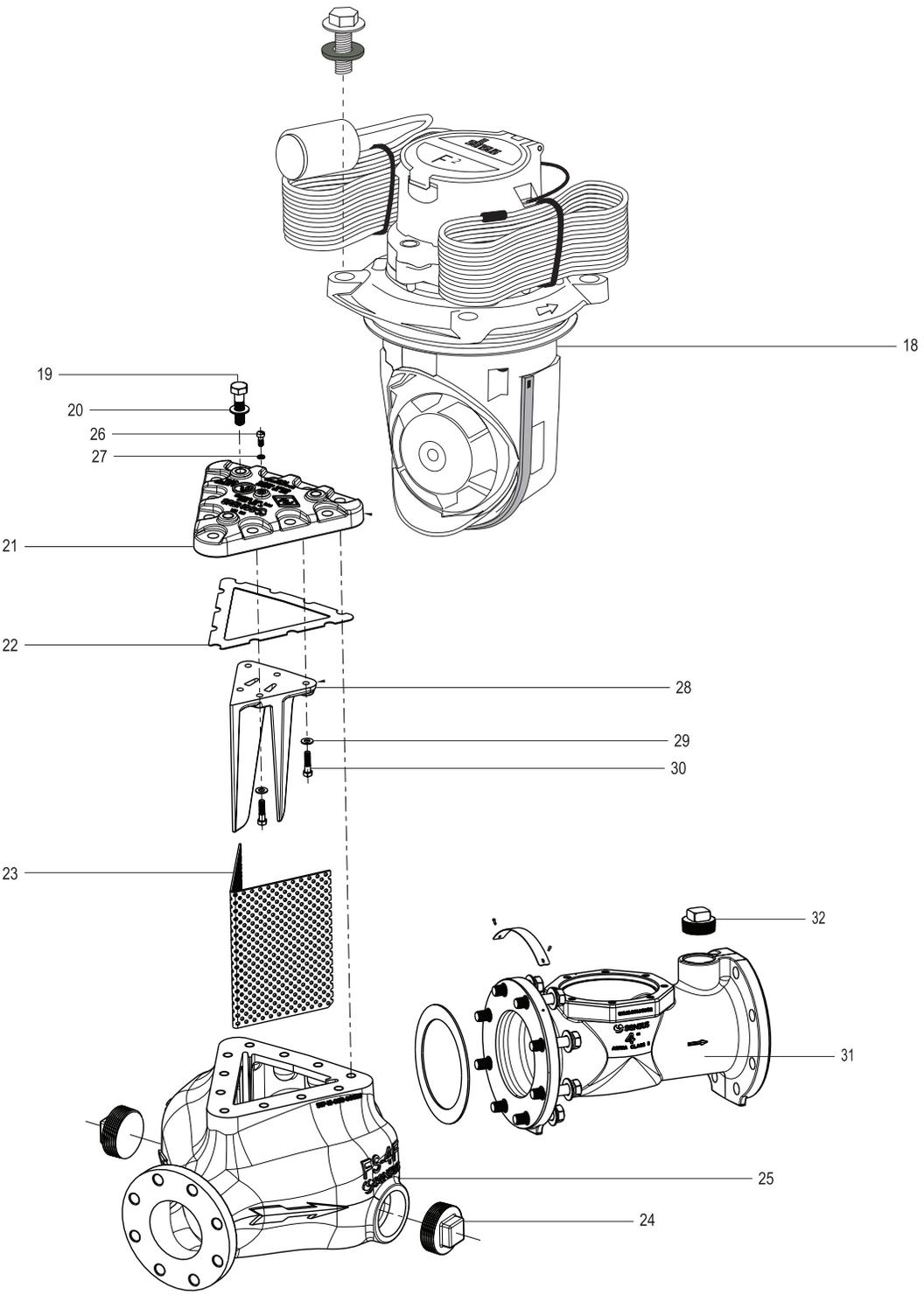
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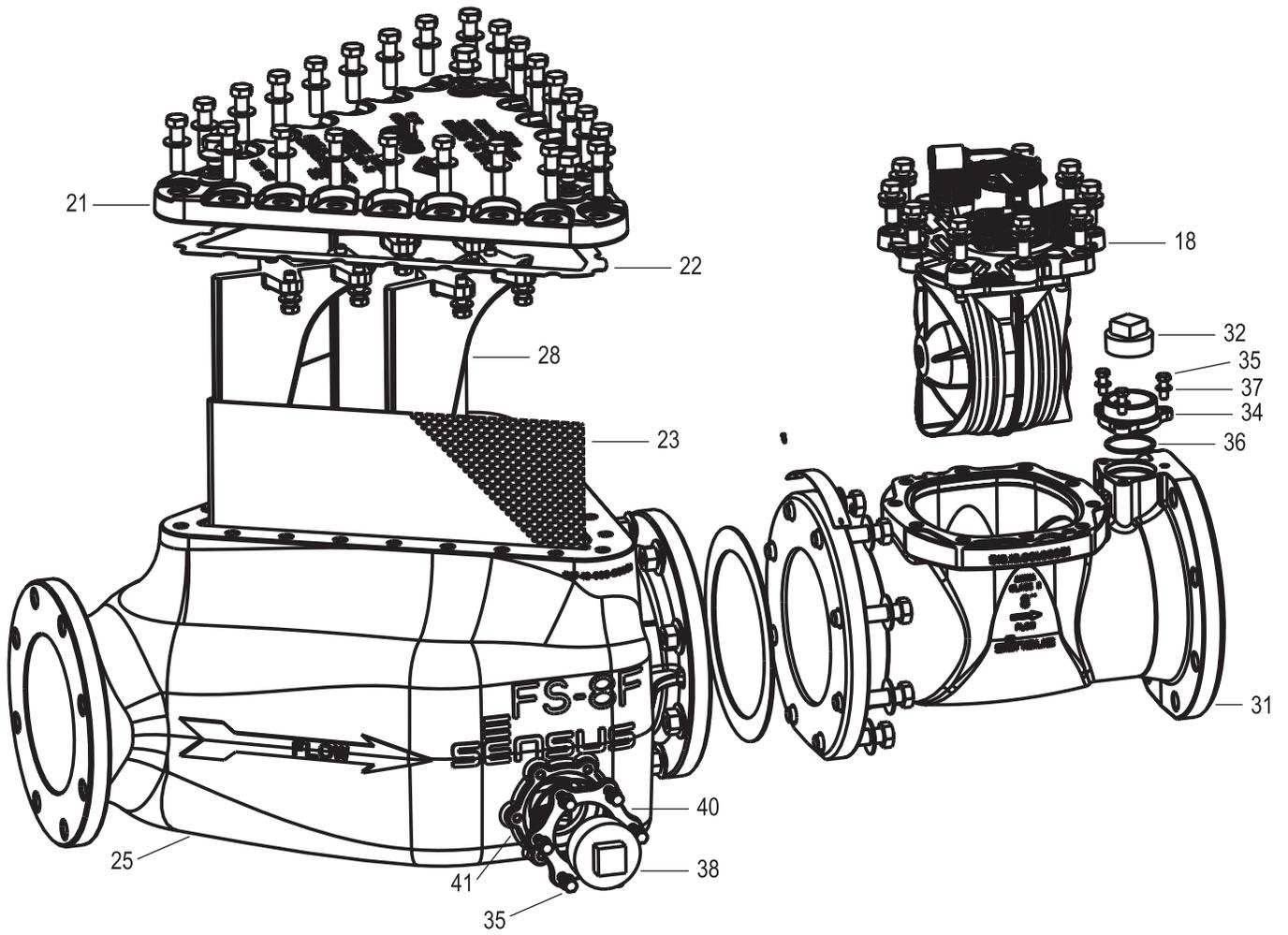
OMNI F<sup>2</sup>: 4" and 6"



OMNI F<sup>2</sup>: 4" and 6"



OMNI F<sup>2</sup>: 8" and 10"



## OMNI F2: 4" and 6"

ILL. No.	Name of Part
1	F2 Bonnet Lid
2	Hinge Pin
3	Bonnet
4	Bonnet Seal Screw
5	Register
5A	Pick-Up Probe O-Ring
6	Locking Ring Screw
7	Locking Ring
8	Fixing Ring
9	Chamber Cover Bolt
10B/C	Chamber Cover Bolt Washer
10A	Chamber Cover Washer — Black Nylon
11	Chamber Cover
11A	Screw, Spring Hold Down
11B	Spring
12	Chamber Cover O-Ring / Gasket
13	Measuring Insert
14	Measuring Chamber Screw
15	Chamber Seal Gasket
16	F2 Rotor
17	F2 Balance Plate
18	Measuring Chamber
19	Strainer Cover Cap Screw
20	Strainer Cover Bolt Washer
21	Strainer Cover
22	Strainer Cover Gasket
23	Strainer Screen
24	Drain Port
25	F2 Strainer Body
26	Vent Screw
27	Vent Washer
28	Strainer Screen Support
29	Washer
30	Screw
31	F2 Maincase
32	Test Plug
33	Test Port Cap (not shown)
34	Test Port Adapter
35	Test Port and Drain Port Cap Screws
36	Test Port O-Ring
37	Test Port and Drain Port Washer
38	Drain Port Plug
39	Drain Port Cap (not shown)
40	Drain Port Adapter
41	Drain Port O-Ring

# How to Read the OMNI

## Quick Guide

### THE SENSUS OMNI METER

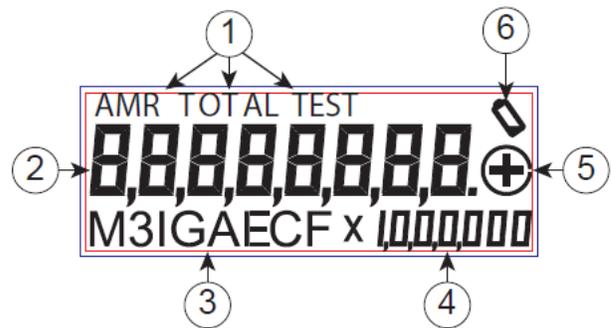
The patented measurement principles of the OMNI meter ensure enhanced accuracy ranges, an overall greater accuracy, and a longer service life than any other comparable class meter produced. The OMNI meter has no restrictions in sustained flow rates within its continuous operating range. The floating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

### ELECTRONIC REGISTER

The OMNI electronic register consists 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. The electronic register includes the following partial list of features:

- AMR resolution units that are fully programmable
- Pulse output frequency that is fully programmable
- Integral customer data logging capability
- Integral resettable accuracy testing feature compatible with the UniPro testing Assistant Program
- Large, easy-to-read LCD display that shows both forward and reverse flow directions
- 10-year battery life warranty

### REGISTER DISPLAY



#### 1. Reading Mode

**AMR:** Shows the reported units

**Total:** Shows the total registration through the meter (all 8 digits)

**Test:** Shows the registration through the meter, but can be reset to 0 to perform a test

2. **AMR Digit Bar** (4 to 8 Digits)—The AMR digit bar shows which digits will be reported when the meter is read through the communications interface.

3. **Unit of Measure**—Gallon (GAL), Cubic Feet (CF), Cubic Meter (M<sup>3</sup>), Imperial Gallon (IGAL), Acre Feet (AF)

4. **AMR Value Multiplier** (Only in AMR Mode)

#### 5. Flow Icon:

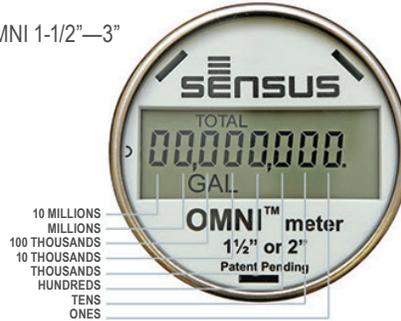
Display	Indicates
Flashing circle with +	Positive Flow
Flashing circle with -	Negative Flow
No Icon/Icon Not Flashing	Flow Stopped

6. **Battery Icon**—The Battery Icon will turn on when the battery is near the end of line (≈11 years). AMR Digits will sequentially blink before the battery dies (≈15 years).

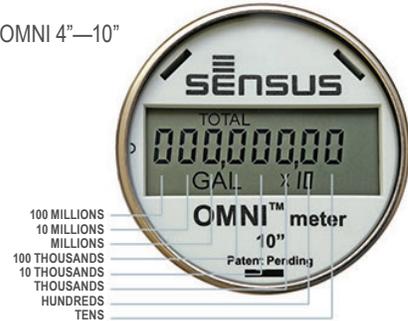
## READING THE OMNI REGISTER

### Gallons Registers

OMNI 1-1/2"–3"

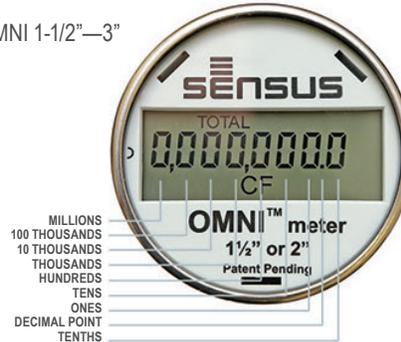


OMNI 4"–10"

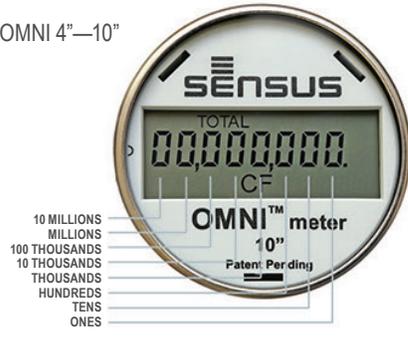


### Cubic Feet Registers

OMNI 1-1/2"–3"

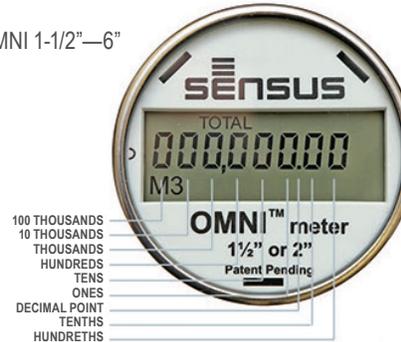


OMNI 4"–10"

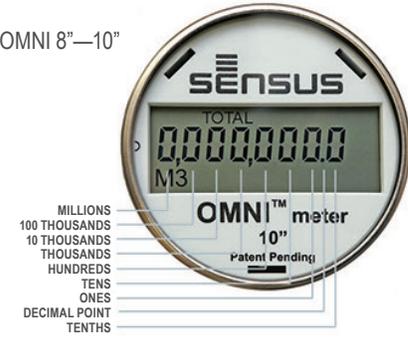


### Cubic Meter Registers

OMNI 1-1/2"–6"

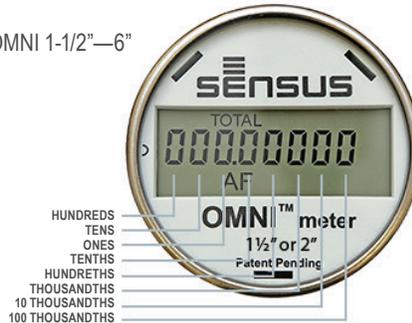


OMNI 8"–10"

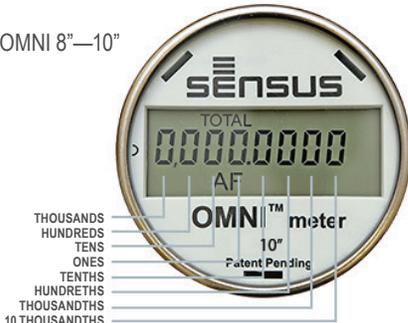


### Acre Feet Registers

OMNI 1-1/2"–6"



OMNI 8"–10"



© 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-METER-IT. 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.

# Sensus Limited Warranty

**1. General Product Coverage.** Unless otherwise provided herein, Sensus USA Inc. ("Sensus") warrants its products and parts to be free from defects in material and workmanship for one (1) year from the date of Sensus shipment and as set forth below. All products are sold to customer ("Customer") pursuant to Sensus' Terms of Sale, available at: [sensus.com/TC](http://sensus.com/TC) ("Terms of Sale").

**2. SR II® and accuSTREAM™ 5/8", 3/4" & 1" Meters** are warranted to perform to AWWA New Meter Accuracy Standards for five (5) years from the date of Sensus shipment or until the registration shown below, whichever occurs first. Sensus further warrants that the SR II and accuSTREAM meters will perform to at least AWWA Repaired Meter Accuracy Standards for fifteen (15) years from the date of Sensus shipment or until the registration shown below, whichever occurs first:

	New Meter Accuracy	Repair Meter Accuracy
5/8" SR II Meter and accuSTREAM Meter	500,000 gallons	1,500,000 gallons
3/4" SR II Meter and accuSTREAM Meter	750,000 gallons	2,250,000 gallons
1" SR II Meter and accuSTREAM Meter	1,000,000 gallons	3,000,000 gallons

**3. ally® Meters** that register water flow are warranted to perform to the accuracy level set forth in the ally Data Sheet available at [sensus.com/ally/datasheet](http://sensus.com/ally/datasheet) for fifteen (15) years from the Date of Installation, but no longer than sixteen (16) years from date of manufacture, not including the meter's sensors, valve, and gear motor, which are warranted under different terms described below. As used herein, "Date of Installation" means the date after which the ally Meter has been out of empty pipe for seven (7) consecutive days, as those days are measured by the ally Meter and stored in the meter's nonvolatile memory.

**4. iPERL® Meters** that register water flow are warranted to perform to the accuracy levels set forth in the iPERL Data Sheet available at [sensus.com/ipperl/datasheet](http://sensus.com/ipperl/datasheet) or by request from 1-800-METER-IT, for twenty (20) years from the date of Sensus shipment. The iPERL System Component warranty does not include the external housing.

**5. Maincase** of the SR II in both standard and low lead alloy meters are warranted to be free from defects in material and workmanship for twenty-five (25) years from the date of Sensus shipment. Composite and E-coated maincases will be free from defects in material and workmanship for fifteen (15) years from the date of Sensus shipment.

**6. Sensus OMNI™ Meters and Propeller Meters** are warranted to perform to AWWA New Meter Accuracy Standards for one (1) year from the date of Sensus shipment.

**7. Sensus accuMAG™ Meters** are warranted to be free from defects in material and workmanship, under normal use and service, for 18 months from the date of Sensus shipment or 12 months from startup, whichever occurs first.

**8. Sensus Registers** are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the periods stated below or until the applicable registration for AWWA Repaired Meter Accuracy Standards, as set forth above, are surpassed, whichever occurs first:

5/8" thru 2" SR II, accuSTREAM Standard Registers	25 years
5/8" thru 2" SR II, accuSTREAM Encoder Registers	10 years
All HSPU, IMP Contactor, R.E.R. Elec. ROFI	1 year
Standard and Encoder Registers for Propeller Meters	1 year
OMNI Register with Battery	10 years

**9. Sensus Electric and Gas Meters** are warranted pursuant to the General Limited Warranty available at [sensus.com/TC](http://sensus.com/TC).

**10. Batteries, iPERL System Components, AMR and FlexNet® Communication Network AMI Interface Devices** are warranted to be free from defects in material and workmanship from the date of Sensus shipment for the period stated below:

Electronic TouchPad	10 years
Act-Pak® Remote Monitoring Instruments	1 year
Gas SmartPoint® Modules and Batteries	20 years <sup>1</sup>
6500 series Hand-Held Device	2 years
Vehicle Gateway Base Station (VGB) and other AMR Equipment	1 year
FlexNet Base Station (including the R100NA and M400 products)	1 year
iPERL System Battery and iPERL System Components	20 years <sup>2</sup>
Sensus® Electronic Register+™	20 years <sup>1</sup>
Sensus® Smart Gateway Sensor Interface	1 year
SmartPoint® 510M/520M Modules and Batteries	20 years <sup>2</sup>

Footnote 1: Sensus will repair or replace non-performing:

- Gas SmartPoint Modules (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries;
- Sensus Electronic Register+ with hourly reads

for the first ten (10) years from the date of Sensus shipment, and for the remaining ten (10) years, at a prorated percentage, applied towards the published list prices in effect for the year product is accepted by Sensus under warranty conditions according to the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	16	55%
11	30%	17	60%
12	35%	18	65%
13	40%	19	70%
14	45%	20	75%
15	50%	>20	100%

Footnote 2: Sensus will repair or replace non-performing:

- iPERL System Batteries, and/or the iPERL System flowtube, the flow sensing and data processing assemblies, and the register ("iPERL System Components") with hourly reads
- SmartPoint 510M/520M Modules (configured to the factory setting of six transmissions per day under normal system operation of up to one demand read to each SmartPoint Module per month and up to five firmware downloads during the life of the product) and batteries, unless the SmartPoint 510M/520M Module is ever paired with an ally Meter, which event immediately amends the warranty terms to those described in Section 11;

at no cost for the first fifteen (15) years from the date of Sensus shipment, and for the remaining five (5) years at a prorated percentage, applied towards the published list price in effect for the year the product is accepted by Sensus under the warranty conditions according to the following schedule:

Years	Replacement Price
1 – 15	0%
16	30%
17	40%
18	50%
19	60%
20	70%
>20	100%

**11. ally® Meter Batteries and Components, including SmartPoint 510M/520M Modules** are warranted to be free from defects in material and workmanship from the Date of Installation, as defined in Section 3, for the period stated below:

Batteries	15 years <sup>3</sup>
Sensors	5 years
Valve & Gear Motor	5 years <sup>4</sup>
SmartPoint 510M/520M Modules and Batteries in service w/ally	15 years <sup>3</sup>

Footnote 3: If applicable, any SmartPoint 510M/520M Modules ever paired with an ally Meter are warranted with the following limitations:

- When configured to the default installation setting of six transmissions of metrology and pressure per day and one update of temperature per day, the SmartPoint is warranted to perform up to five (5) firmware upgrades for the SmartPoint Module and up to five (5) firmware upgrades for the ally Meter;
- 2500 Operational Commands, where "Operational Commands" include on demand reads (such as consumption, pressure, temperature), an ally valve command, or a configuration command; and
- 15 Diagnostic Commands, which includes two-way communications tests and installations

for the first ten (10) years from Date of Installation at no cost. For the remaining five (5) years, Customer will pay the reduced Replacement Price of the then-current list price in effect at the time the product is accepted for return in accordance with the following schedule:

Years	Replacement Price	Years	Replacement Price
1 – 10	0%	14	65%
11	35%	15	75%
12	45%	>15	100%
13	55%		

Footnote 4: Notwithstanding the foregoing, valve and gear motor components of ally Meters are not warranted beyond two thousand (2000) Valve State Operations, even if the warranty period provided herein has not yet expired. As used herein, "Valve State Operations" means adjustments of the Meter to open, close, or reduce flow.

**12. iPERL and ally Connectors and Cables** are warranted to be free from defects in materials and workmanship, under normal use and service, for ten (10) years from the date of Sensus shipment. Nicor or Itron connectors included with a Sensus product are warranted according to the terms for Third-Party Devices in Section 13.

**13. Third-Party Devices** are warranted to be free from defects in materials and workmanship, under normal use and service, for one (1) year from the date of Sensus shipment. As used in this Sensus Limited Warranty, "Third Party Devices" means any product, device, or component part used with a Sensus product that is manufactured or sold by any party that is not Sensus. Failure of a Third Party Device which subsequently causes failure to a Sensus device shall be the responsibility of the manufacturer of the Third Party Device.

**14. Software.** Software supplied and/or licensed by Sensus is supported according to the terms of the applicable software license or usage agreement. Sensus warrants that any network and monitoring services shall be performed in a professional and workmanlike manner.

**15. Return.** Sensus' obligation, and Customer's exclusive remedy, under this Sensus Limited Warranty is, at Sensus' option, to either (i) repair or replace the product, provided the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location; or (ii) deliver replacement components to the Customer, provided the Customer installs, at its cost, such components in or on the product (as instructed by Sensus), provided, that if Sensus requests, the Customer (a) returns the product to the location designated by Sensus within the warranty period; and (b) prepays the freight costs both to and from such location. In all cases, if Customer does not return the product within the time period designated by Sensus, Sensus will invoice, and Customer will pay within thirty days of the invoice date, for the cost of the replacement product and/or components.

The return of products for warranty claims must follow Sensus' Returned Materials Authorization (RMA) procedures. Water meter returns must include documentation of the Customer's test results. Test results must be obtained according to AWWA standards and must specify the meter serial number. The test results will not be valid if the meter is found to contain foreign materials. If Customer chooses not to test a Sensus water meter prior to returning it to Sensus, Sensus will repair or replace the meter, at Sensus' option, after the meter has been tested by Sensus. The Customer will be charged Sensus' then current testing fee. All product must be returned in accordance with the RMA process. For all returns, Sensus reserves the right to request meter reading records by serial number to validate warranty claims.

For products that have become discontinued or obsolete ("Obsolete Product"), Sensus may, at its discretion, replace such Obsolete Product with a different product model ("New Product"), provided that the New Product has substantially similar features as the Obsolete Product. The New Product shall be warranted as set forth in this Sensus Limited Warranty.

THIS SECTION 15 SETS FORTH CUSTOMER'S SOLE REMEDY FOR THE FAILURE OF THE PRODUCTS, SERVICES OR LICENSED SOFTWARE TO CONFORM TO THEIR RESPECTIVE WARRANTIES.

**16. Warranty Exceptions and No Implied Warranties.** This Sensus Limited Warranty does not include costs for removal or installation of products, or costs for replacement labor or materials, which are the responsibility of the Customer. The warranties in this Sensus Limited Warranty do not apply to goods that have been: installed improperly or in non-recommended installations; installed to a socket that is not functional, or is not in safe operating condition, or is damaged, or is in need of repair; tampered with; modified or repaired with parts or assemblies not certified in writing by Sensus, including without limitation, communication parts and assemblies; improperly modified or repaired (including as a result of modifications required by Sensus); converted; altered; damaged; read by equipment not approved by Sensus; for water meters, used with substances other than water, used with non-potable water, or used with water that contains dirt, debris, deposits, or other impurities; subjected to misuse, improper storage, improper care, improper maintenance, or improper periodic testing (collectively, "Exceptions."). If Sensus identifies any Exceptions during examination, troubleshooting or performing any type of support on behalf of Customer, then Customer shall pay for and/or reimburse Sensus for all expenses incurred by Sensus in examining, troubleshooting, performing support activities, repairing or replacing any Equipment that satisfies any of the Exceptions defined above. The above warranties do not apply in the event of Force Majeure, as defined in the Terms of Sale.

**THE WARRANTIES SET FORTH IN THIS SENSUS LIMITED WARRANTY ARE THE ONLY WARRANTIES GIVEN WITH RESPECT TO THE GOODS, SOFTWARE, SOFTWARE LICENSES AND SERVICES SOLD OR OTHERWISE PROVIDED BY SENSUS. SENSUS EXPRESSLY DISCLAIMS ANY AND ALL OTHER REPRESENTATIONS, WARRANTIES, CONDITIONS, EXPRESSED, IMPLIED, STATUTORY OR OTHERWISE, REGARDING ANY MATTER IN CONNECTION WITH THIS SENSUS LIMITED WARRANTY OR WITH THE TERMS OF SALE, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT AND TITLE.**

**SENSUS ASSUMES NO LIABILITY FOR COSTS OR EXPENSES ASSOCIATED WITH LOST REVENUE OR WITH THE REMOVAL OR INSTALLATION OF EQUIPMENT. THE FOREGOING REMEDIES ARE CUSTOMER'S SOLE AND EXCLUSIVE REMEDIES FOR THE FAILURE OF EQUIPMENT, LICENSED SOFTWARE OR SOFTWARE SERVICES, AND OTHER SERVICES TO CONFORM TO THEIR RESPECTIVE WARRANTIES.**

**17. Limitation of Liability.** SENSUS' AGGREGATE LIABILITY IN ANY AND ALL CAUSES OF ACTION ARISING UNDER, OUT OF OR IN RELATION TO THIS AGREEMENT, ITS NEGOTIATION, PERFORMANCE, BREACH OR TERMINATION (COLLECTIVELY "CAUSES OF ACTION") SHALL NOT EXCEED THE TOTAL AMOUNT PAID BY CUSTOMER TO SENSUS UNDER THIS AGREEMENT. THIS IS SO WHETHER THE CAUSES OF ACTION ARE IN TORT, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE OR STRICT LIABILITY, IN CONTRACT, UNDER STATUTE OR OTHERWISE.

AS A SEPARATE AND INDEPENDENT LIMITATION ON LIABILITY, SENSUS' LIABILITY SHALL BE LIMITED TO DIRECT DAMAGES. SENSUS SHALL NOT BE LIABLE FOR: (I) ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES; NOR (II) ANY REVENUE OR PROFITS LOST BY CUSTOMER OR ITS AFFILIATES FROM ANY END USER(S), IRRESPECTIVE OF WHETHER SUCH LOST REVENUE OR PROFITS IS CATEGORIZED AS DIRECT DAMAGES OR OTHERWISE; NOR (III) ANY IN/OUT COSTS; NOR (IV) MANUAL METER READ COSTS AND EXPENSES; NOR (V) DAMAGES ARISING FROM MAINCASE OR BOTTOM PLATE

BREAKAGE CAUSED BY FREEZING TEMPERATURES, WATER HAMMER CONDITIONS, OR EXCESSIVE WATER PRESSURE. "IN/OUT COSTS" MEANS ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN TRANSPORTING GOODS BETWEEN ITS WAREHOUSE AND ITS END USER'S PREMISES AND ANY COSTS AND EXPENSES INCURRED BY CUSTOMER IN INSTALLING, UNINSTALLING AND REMOVING GOODS. "END USER" MEANS ANY END USER OF ELECTRICITY/WATER/GAS THAT PAYS CUSTOMER FOR THE CONSUMPTION OF ELECTRICITY/WATER/GAS, AS APPLICABLE.

The limitations on liability set forth in this Agreement are fundamental inducements to Sensus entering into this Agreement. They apply unconditionally and in all respects. They are to be interpreted broadly so as to give Sensus the maximum protection permitted under law.