

accuMAG™ Meters

1-1/2", 2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20" and 24"

Description

1-1/2", 2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20" and 24" Sizes

The accuMAG meter operation is based on electromagnetic flow (EMF) technology.

Distributed By



Meter, Valve & Control
877-566-3837



Features

CONFORMANCE TO STANDARDS

The accuMAG meter meets and far exceeds the flow requirements of the most recent revision of AWWA Standard C701 class II. Each meter is performance tested to ensure accuracy compliance. The accuMAG meters meet NSF/ANSI Standard 61, Annex F and G.

PERFORMANCE

The measurement principles of the accuMAG meter assure enhanced accuracy ranges, and an extended service life. The accuMAG meter has no restrictions as to sustained flow rates within its continuous operating range. The measuring tube allows for flows up to its rated maximum capacity without undue wear or accuracy degradation due to no moving parts.

CONSTRUCTION

The accuMAG meter consists of two basic assemblies; the measuring tube and the liner. The measuring tube consists of polyurethane coated steel housing and a nonmagnetic alloy tube with an obstruction-less cross section and a homogenous magnetic field. The liner of the measuring tube is made of Rilsan® and is resistant to corrosion, aging and abrasion.

ELECTRONIC REGISTER

The accuMAG electronic register can be supplied either attached to the meter or a remote design. In the remote design, the register can be installed (between 30 to 75 feet) on the wall or on a post. Additionally, the large character LCD displays AMR, Totalization and a Resettable Test Totalizer. accuMAG register features; AMR resolution units that are fully programmable, Pulse output units are fully programmable, Integral resettable accuracy testing feature compatible with UniPro Testing Assistant Programs, Large, easy-to-read LCD also displays both forward and reverse flow directions. The accuMAG register has extremely low power consumption and with a sampling rate of 1/15 Hz, the water meter can operate for more than ten years before the batteries would need to be replaced.

MEASURING TECHNOLOGY

An electrically conductive fluid flows inside an electrically insulating pipe through a magnetic field. The magnetic field is generated by a current, flowing through a pair of field coils. Inside of the fluid, a voltage is generated. The signal voltage is picked off by

electrodes and is proportional to the mean flow velocity and thus the flow rate. The signal voltage is very small. The register amplifies the signal voltage, filters it and converts it into signals for totalization, recording and output processing. When installed in any orientation.

MAINTENANCE

The accuMAG meter is designed for easy maintenance. With no moving parts, the maintenance consists of inspecting the measuring tube for deposits or abrasions and battery health.

AMR / AMI SYSTEMS:

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

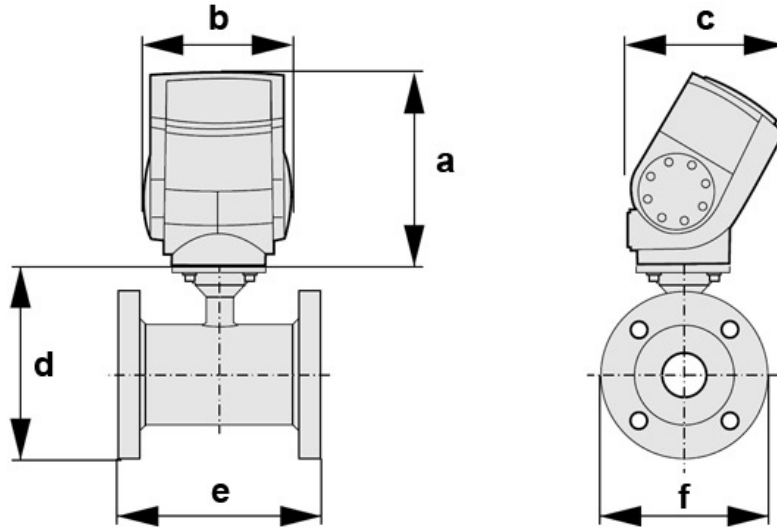
GUARANTEE

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



accuMAG: 1-1/2", 2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20" and 24" Sizes

Register Mounted to Meter

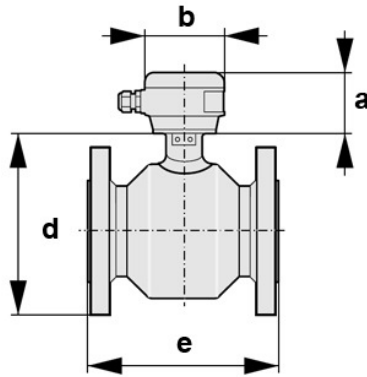


DIMENSIONS AND NET WEIGHTS

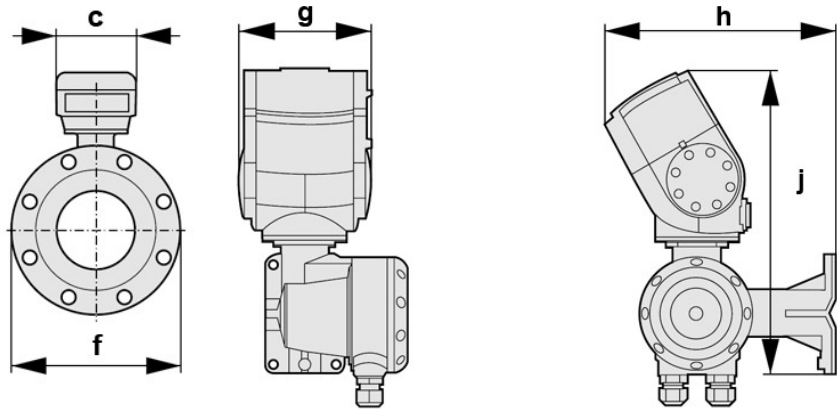
Meter and Pipe Size	Normal Operating Range		Connections	A	B	C	D	E	F	Net Weight
1-1/2" DN 40mm	.7 gpm .16 m ³ /hr	180 gpm 40.9 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	6" 152mm	5.91" 150mm	4.92" 125mm	21 lbs. 9.5 kg.
2" DN 50mm	1.2 gpm .27 m ³ /hr	320 gpm 72.7 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	7.05" 180mm	7.87" 200mm	5.98" 152mm	34 lbs. 15.4 kg.
3" DN 80mm	2.8 gpm .63 m ³ /hr	720 gpm 163 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	8.03" 204mm	7.87" 200mm	7.5" 190mm	42 lbs. 17 kg.
4" DN 100mm	5 gpm 1.13 m ³ /hr	1250 gpm 284 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	9.49" 240mm	9.84" 250mm	9" 228mm	56 lbs. 17 kg.
6" DN 150mm	11 gpm 2.5 m ³ /hr	2850 gpm 647 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	11.69" 297mm	11.81" 300mm	11" 280mm	80 lbs. 29 kg.
8" DN 200mm	19.5 gpm 4.4 m ³ /hr	5100 gpm 1158 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	14.25" 362mm	13.78" 350mm	13.5" 343mm	100 lbs. 36 kg.
10" DN 250mm	31 gpm 7.0 m ³ /hr	8000 gpm 1816 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	16.3" 414mm	15.75" 400mm	16" 406mm	148 lbs. 50 kg.
12" DN 300mm	44.5 gpm 10.1 m ³ /hr	11500 gpm 2610 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	18.78" 477mm	19.69" 500mm	19" 482mm	212 lbs. 60 kg.
14" DN 350mm	182 gpm 41.3 m ³ /hr	15700 gpm 3564 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	20.67" 525mm	27.56" 700mm	21" 533mm	289 lbs. 80 kg.
16" DN 400mm	237 gpm 53.8 m ³ /hr	20500 gpm 4654 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	22.95" 583mm	31.5" 800mm	23.5" 597mm	369 lbs. 103 kg.
18" DN 450mm	300 gpm 68.1 m ³ /hr	26000 gpm 5902 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	24.72" 628mm	31.5" 800mm	25" 635mm	415 lbs. 113 kg.
20" DN 500mm	370 gpm 84 m ³ /hr	32100 gpm 7287 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	26.67" 677mm	31.5" 800mm	27.5" 698mm	497 lbs. 132 kg.
24" DN 600mm	385 gpm 87.4 m ³ /hr	33400 gpm 7582 m ³ /hr	Flanged	6.7" 170mm	4.8" 122mm	5.5" 140mm	31.38" 797mm	31.5" 800mm	32" 813mm	680 lbs. 167 kg.

accuMAG: 1-1/2", 2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20" and 24" Sizes

Remote Register Version



Remote Register for Wall or Post Mount



DIMENSIONS AND NET WEIGHTS

Meter and Pipe Size	Normal Operating Range		Connections	A	B	C	D	E	F	G	H	J	Net Weight
1-1/2" DN 40mm	.7 gpm .16 m³/hr	180 gpm 40.9 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	6" 152mm	5.91" 150mm	4.92" 125mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	21 lbs. 9.5 kg.
2" DN 50mm	1.2 gpm .27 m³/hr	320 gpm 72.7 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	7.05" 180mm	7.87" 200mm	5.98" 152mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	34 lbs. 15.4 kg.
3" DN 75mm	2.8 gpm .63 m³/hr	720 gpm 163 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	8.03" 204mm	7.87" 200mm	7.5" 190mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	42 lbs. 17 kg.
4" DN 100mm	5 gpm 1.13 m³/hr	1250 gpm 284 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	9.49" 240mm	9.84" 250mm	9" 228mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	56 lbs. 17 kg.
6" DN 150mm	11 gpm 2.5 m³/hr	2850 gpm 647 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	9.49" 240mm	11.81" 300mm	11" 280mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	80 lbs. 29 kg.
8" DN 200mm	19.5 gpm 4.4 m³/hr	5100 gpm 1158 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	14.25" 362mm	13.78" 350mm	13.5" 343mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	100 lbs. 36 kg.
10" DN 250mm	31 gpm 7.0 m³/hr	8000 gpm 1816 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	16.3" 414mm	15.75" 400mm	16" 406mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	148 lbs. 50 kg.
12" DN 300mm	44.5 gpm 10.1 m³/hr	11500 gpm 2610 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	18.78" 477mm	19.69" 500mm	19" 482mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	212 lbs. 60 kg.
14" DN 350mm	182 gpm 41.3 m³/hr	15700 gpm 3564 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	20.67" 525mm	27.56" 700mm	21" 533mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	289 lbs. 80 kg.
16" DN 400mm	237 gpm 53.8 m³/hr	20500 gpm 4654 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	22.95" 583mm	31.5" 800mm	23.5" 597mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	369 lbs. 103 kg.
18" DN 450mm	300 gpm 68.1 m³/hr	26000 gpm 5902 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	24.72" 628mm	31.5" 800mm	25" 635mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	415 lbs. 113 kg.
20" DN 500mm	370 gpm 84 m³/hr	32100 gpm 7287 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	26.67" 677mm	31.5" 800mm	27.5" 698mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	497 lbs. 132 kg.
24" DN 600mm	385 gpm 87.4 m³/hr	33400 gpm 7582 m³/hr	Flanged	3.1" 79mm	5.5" 140mm	4.2" 107mm	31.38" 797mm	31.5" 800mm	32" 813mm	4.8" 122mm	13.2" 335mm	12.2" 310mm	680 lbs. 167 kg.

accuMAG: 1-1/2", 2", 3", 4", 6", 8", 10", 12", 14", 16", 18", 20" and 24" Sizes

SPECIFICATIONS

SERVICE	Measurement of potable and reclaim water. Operating temperature range of 23 °F (-5 °C) to 158 °F (70 °C)	MAXIMUM INTERMITTENT OPERATION	1-1/2" - 225 GPM (51.1 m ³ /hr)																
OPERATING RANGE (100% ± 1.5%)	1-1/2" - 0.7 - 180 GPM (.16 - 40.9 m ³ /hr) 2" - 1.2 - 320 GPM (.27 - 72.7 m ³ /hr) 3" - 2.8 - 720 GPM (.63 - 163 m ³ /hr) 4" - 5 - 1,250 GPM (1.13 - 284 m ³ /hr) 6" - 11 - 2,850 GPM (2.5 - 647 m ³ /hr) 8" - 19.5 - 5,100 GPM (4.4 - 1,158 m ³ /hr) 10" - 31 - 8,000 GPM (7.0 - 1,816 m ³ /hr) 12" - 44.5 - 11,500 GPM (10.1 - 2,610 m ³ /hr) 14" - 182 - 15,700 GPM (41.3 - 3,564 m ³ /hr) 16" - 237 - 20,500 GPM (53.8 - 4,654 m ³ /hr) 18" - 300 - 26,000 GPM (68.1 - 5,902 m ³ /hr) 20" - 370 - 32,100 GPM (84.0 - 7,287 m ³ /hr) 24" - 385 - 33,400 GPM (87.4 - 7,582 m ³ /hr)		2" - 400 GPM (90.8 m ³ /hr) 3" - 900 GPM (204 m ³ /hr) 4" - 1,560 GPM (355 m ³ /hr) 6" - 3,560 GPM (809 m ³ /hr) 8" - 6,375 GPM (1,447 m ³ /hr) 10" - 10,000 GPM (2,270 m ³ /hr) 12" - 14,375 GPM (3,263 m ³ /hr) 14" - 19,625 GPM (4,455 m ³ /hr) 16" - 25,625 GPM (5,817 m ³ /hr) 18" - 32,500 GPM (7,378 m ³ /hr) 20" - 40,125 GPM (9,108 m ³ /hr) 24" - 41,750 GPM (9,477 m ³ /hr)																
LOW FLOW (> 95%)	1-1/2" - .3 GPM (.07 m ³ /hr) 2" - .4 GPM (.09 m ³ /hr) 3" - .7 GPM (.16 m ³ /hr) 4" - 1.3 GPM (.29 m ³ /hr) 6" - 3 GPM (.68 m ³ /hr) 8" - 5.5 GPM (1.25 m ³ /hr) 10" - 8.4 GPM (1.91 m ³ /hr) 12" - 12 GPM (2.72 m ³ /hr) 14" - 49 GPM (11.1 m ³ /hr) 16" - 64.5 GPM (14.6 m ³ /hr) 18" - 82 GPM (18.6 m ³ /hr) 20" - 101 GPM (22.9 m ³ /hr) 24" - 105 GPM (23.8 m ³ /hr)	MAXIMUM OPERATING PRESSURE	175 PSI (12.1 bar)																
MAXIMUM CONTINUOUS OPERATION	1-1/2" - 180 GPM (40.9 m ³ /hr) 2" - 320 GPM (72.7 m ³ /hr) 3" - 720 GPM (163 m ³ /hr) 4" - 1,250 GPM (284 m ³ /hr) 6" - 2,850 GPM (647 m ³ /hr) 8" - 5,100 GPM (1,158 m ³ /hr) 10" - 8,000 GPM (1,816 m ³ /hr) 12" - 11,500 GPM (2,610 m ³ /hr) 14" - 15,700 GPM (3,564 m ³ /hr) 16" - 20,500 GPM (4,654 m ³ /hr) 18" - 26,000 GPM (5,902 m ³ /hr) 20" - 32,100 GPM (7,287 m ³ /hr) 24" - 33,400 GPM (7,582 m ³ /hr)	FLANGE CONNECTIONS	U.S. ANSI B16.1 / AWWA Class 150																
		REGISTER	Fully electronic register with programmable registration (Gal. /Cu.Ft. / Cu. Mtr. / Imp.Gal / Acre Ft.) Programmable AMR/AMI reading and pulse outputs 8-15 year field replaceable battery life (based on configuration)																
		NSF APPROVED MATERIALS	<table border="0"> <tbody> <tr> <td>Measuring Tube Housing:</td> <td>Polyurethane Coated Steel</td> </tr> <tr> <td>Measuring Tube:</td> <td>Non-magnetic Alloy Steel</td> </tr> <tr> <td>Flanges:</td> <td>Steel</td> </tr> <tr> <td>Liner:</td> <td>Rilsan (1 1/2" - 12") Hard Rubber (14"-24")</td> </tr> <tr> <td>Measuring Electrodes:</td> <td>Stainless Steel</td> </tr> <tr> <td>Grounding Electrode:</td> <td>Stainless Steel</td> </tr> <tr> <td>Register Housing:</td> <td>Polyurethane coated Die-cast Aluminum</td> </tr> <tr> <td>Register Connection Box: (for remote version only)</td> <td>Polyurethane coated Die-cast Aluminum</td> </tr> </tbody> </table>	Measuring Tube Housing:	Polyurethane Coated Steel	Measuring Tube:	Non-magnetic Alloy Steel	Flanges:	Steel	Liner:	Rilsan (1 1/2" - 12") Hard Rubber (14"-24")	Measuring Electrodes:	Stainless Steel	Grounding Electrode:	Stainless Steel	Register Housing:	Polyurethane coated Die-cast Aluminum	Register Connection Box: (for remote version only)	Polyurethane coated Die-cast Aluminum
Measuring Tube Housing:	Polyurethane Coated Steel																		
Measuring Tube:	Non-magnetic Alloy Steel																		
Flanges:	Steel																		
Liner:	Rilsan (1 1/2" - 12") Hard Rubber (14"-24")																		
Measuring Electrodes:	Stainless Steel																		
Grounding Electrode:	Stainless Steel																		
Register Housing:	Polyurethane coated Die-cast Aluminum																		
Register Connection Box: (for remote version only)	Polyurethane coated Die-cast Aluminum																		

© 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.