

DESCRIPTION

McCrometer's award-winning Mc Mag3000™ provides growers and irrigators with a new alternative for flow measurement. With a 5-year meter warranty, a 5-year battery life, and saddle mount design, the Mc Mag3000 delivers the dependability and ease-of-installation McCrometer has provided to the agricultural market for over 65 years. The electromagnetic sensor offers accuracy as good as $\pm 1\%$ while being designed to naturally shed debris.

The meter is available to fit a common range of agricultural line sizes, from 4" to 12" diameter pipe.

The innovative design of the Mc Mag3000 saddle mount meter features a multi-point angled sensor that sheds debris, making it ideal for use in surface water, livestock waste lagoons, and other dirty water applications.

Using electromagnetic technology to measure the water flow, the Mc Mag3000's precision sensor corrects for shifting velocity in the pipe by constantly obtaining the mean velocity from its multiple electrodes. The result is a highly accurate (as low as $\pm 1\%$) flow meter.

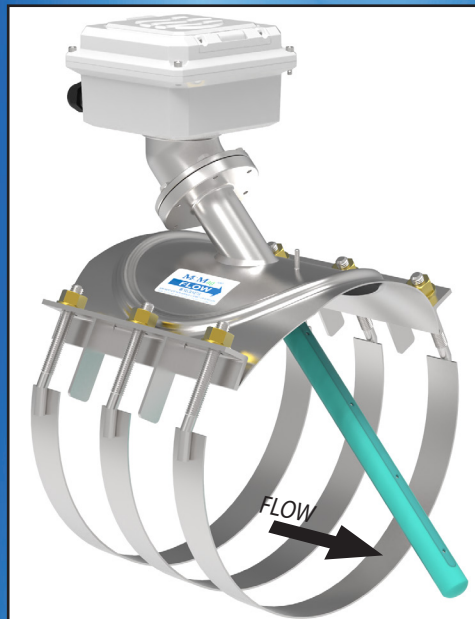
The meter combines an innovative saddle, precision sensor, and a battery powered integrated electronic converter package with data logging capability to provide accurate flow measurement for full-pipe flow monitoring applications.

The integrated electronic converter is secured with tamper resistant screws to protect against unauthorized access. The meter offers flow rate and total water used and a 5-year warranty. The Mc Mag3000 features three 3.6V lithium-thionyl chloride (Li-SOCI₂) D size batteries, with two AA batteries serving as back-up power. The batteries are easily replaced in the field. Pulse, 4-20mA, and AMI output are available for remote meter reading or SCADA. The Mc Mag3000 is McCrometer CONNECT wireless system compatible, which allows users to access flow data by simply logging on to the Internet. This eliminates costly manual meter reading.

INSTALLATION

The Mc Mag3000 offers hassle-free installation, even in tight spaces. No flanges or costly welding is involved. Users simply cut a 3" diameter hole in the top of their pipe and slide the sensor into the hole, and then cinch the meter onto the pipe using the Factory provided U-straps.

The meter can be mounted in a horizontal or vertical position with a full pipe of water. A minimum of three pipe diameters upstream of a flow disturber and one pipe diameter downstream from the meter are required to ensure optimal accuracy of $\pm 2\%$. A $\pm 1\%$ accuracy is available with a Factory consultation prior to order.



KEY FEATURES

- 5-year meter warranty
- 5-year battery warranty
- Battery power version available, including pulse, 4-20mA, and AMI output
- Remote mount option available
- Durable design – Proven in tough environments
- 10 minute DIY replaceable battery pack, keeps your meter running
- Made in the USA

APPLICATIONS

- Irrigation
- Center Pivot Systems
- Well Monitoring
- Water Distribution
- Chemigation
- Livestock Waste Lagoons
- Surface Water
- Golf Courses and Park Management

Flow Meter Part Number Structure

G3		-	-	-	-	-	-	-	-	-	-
Line Size											
4 in	04										
6 in	06										
8 in	08										
10 in	10										
12 in	12										
Outside Diameter Range											
4" Meter	3.90 - 4.14"	0									
	4.35 - 4.64"	1									
	4.65 - 4.90"	2									
	4.91 - 5.15"	3									
6" Meter	5.50 - 5.89"	1									
	5.90 - 6.75"	2									
	6.76 - 7.49"	3									
8" Meter	7.50 - 7.79"	3									
	7.80 - 8.93"	4									
	8.94 - 9.19"	5									
10" Meter	9.20 - 9.69"	5									
	9.70 - 10.94"	6									
	10.95 - 11.29"	7									
12" Meter	11.30 - 11.69"	7									
	11.70 - 12.94"	8									
	12.95 - 13.39"	9									
Converter Mounting and Cable Connector Options											
Meter Mount Converter (<i>Standard</i>)		M									
Strain Relief [25 ft Remote Mount]		R									
Quick Connect [25 ft Remote Mount]		Q									
Strain Relief [25 ft Remote Mount] (Potted)		P									
Quick Connect [25 ft Remote Mount] (Potted)		C									
Converter Power Options											
Battery Power (<i>Standard</i>)		B									
Solar Power, Battery Backup		S									
A/C Power, Battery Backup		E									
DC Power, Battery Backup		F									

continued on next page

Flow Meter Part Number Structure

G3		-	-	-	-	-	-	-	-	-	-	-
Converter Output Options												
No Outputs (Standard)		-										
No Outputs, DC Power cable only		0										
Two Digital Out		1										
4-20mA Analog only		2										
4-20mA Analog + Two Dig Out		3										
AMI Smart Output only		4										
AMI Smart Output + Two Dig Out		5										
AMI Smart Output + 4-20mA Analog		6										
AMI Smart Output + 4-20mA Analog + Two Dig Out		7										
DC Power/ Analog Out Cable Options												
No DC Power or Outputs (Standard)		-										
No Cable - Output Configured (Quick Conn)		0										
6 ft (Open Leads - Strain Relief)		1										
25 ft (Open Leads)		2										
50 ft (Open Leads)		3										
Pulse Cable Length Options												
No Outputs (Standard)		-										
No Cable - Output Configured (Strain Relief or Quick Conn)		0										
6 ft (Open Leads)		1										
25 ft (Open Leads)		2										
50 ft (Open Leads)		3										
25 ft (7-Pin Male connector for Telemetry)		4										
50 ft (7-Pin Male connector for Telemetry)		5										
Output Cable Terminal Options												
Strain Relief (Standard)									1			
Quick Connect (25 & 50 ft Cable length only)									2			
Smart Output Protocol Options (*5 or 6 output option required)												
No AMI Outputs		-										
Sensus Protocol (6ft cable, Nicor Connector hardwired only)											SEN	
Itron 6 digit Protocol (6ft cable, Nicor Connector hardwired only)											IT6	
Itron 9 digit [100W] Protocol (6ft cable, Nicor Connector hardwired only)											IT9	
ATT Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)											ATT	
Verizon Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)											VZW	
High Accuracy Calibration Option												
Standard Accuracy 2% Calibration		-										
High Accuracy 1% calibration		HA										

ProComm Go Converter Part Number Structure

PG	-							
Converter Mounting Options								
Meter Mount Converter (Standard)	M							
Remote Mount	R							
Converter Power Options								
Battery Power (Standard)	B							
Solar Power, Battery Backup	S							
A/C Power, Battery Backup	E							
DC Power, Battery Backup	F							
Converter Output Options								
No Outputs (Standard)	-							
No Outputs, DC Cable Only	0							
Two Digital Out	1							
4-20mA Analog only	2							
4-20mA Analog + Two Dig Out	3							
AMI Smart Output Only	4							
AMI Smart Output + Two Dig Out	5							
AMI Smart Output + 4-20mA Analog	6							
AMI Smart Output + 4-20mA Analog + Two Dig Out	7							
DC Power/ Analog Out Cable Options								
No DC Power or Outputs (Standard)	-							
No Cable - Output Configured (Quick Conn)	0							
6 ft (Open Leads - Strain Relief)	1							
25 ft (Open Leads)	2							
50 ft (Open Leads)	3							
Pulse Cable Length Options								
No Outputs (Standard)	-							
No Cable - Output Configured (Strain Relief or Quick Conn)	0							
6 ft (Open Leads)	1							
25 ft (Open Leads)	2							
50 ft (Open Leads)	3							
25 ft (7-Pin Male connector for Telemetry)	4							
50 ft (7-Pin Male connector for Telemetry)	5							
Output Cable Terminal Options								
Strain Relief (Standard)	1							
Quick Connect (25 & 50 ft Cable length only)	2							
Smart Output Protocol Options (*4 - 7 output option required)								
No AMI Outputs	-							
Sensus Protocol (6ft cable, Nicor Connector hardwired only)	SEN							
Itron 6 digit Protocol (6ft cable, Nicor Connector hardwired only)	IT6							
Itron 9 digit [100W] Protocol (6ft cable, Nicor Connector hardwired only)	IT9							
Neptune Protocol (6ft cable, Nicor Connector hardwired only)	NEP							
ATT Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)	ATT							
Verizon Wireless Telemetry System (RTU, Solar Panel, 15 ft 7 pin Cable)	VZW							

Flow Meter Specifications

Physical Specifications

Measurement Method	Volumetric flow in filled flow conduits 4" to 12" utilizing saddle installed sensor. Flow indication in English Standard or Metric units
Directionality	Single direction
Pipe Sizes	4", 6", 8", 10", 12"
Body Style	Saddle mount
Materials	Sensor Body: Fusion bonded epoxy coated stainless steel (316)
	Electrodes: Stainless steel (316)
	Saddle Mount: Stainless steel (304)
	Saddle Hardware: Stainless steel (304)
	Electronic Housing: IP-67 Certified diecast aluminum, powder coated enclosure w/ tamper resistant seal, 6½" x 6½" x 43/8" tall
Power	O-Ring: SBR rubber D-ring
	Boot Cover: EPDM rubber
	Battery: Standard: three 3.6V lithium-thionyl chloride (Li-SOCl ₂) D size batteries with two AA backup batteries
Electrical Connections	AC Power: 100-240VAC
	DC Power: Linear power supply 10-35VDC, 2.4W
	<ul style="list-style-type: none"> Optional shielded cable for 10-32VDC/4-20 mA output Optional shielded cable for pulse out
Outputs	Digital output: Digital pulse (open collector) output for volumetric <ul style="list-style-type: none"> - Two isolated digital pulse (open collector) outputs for volumetric - AMI output
	Analog output: 4-20mA: Galvanically Isolated, 16 Bit resolution. All power configurations (including battery). Note: 9-30 VDC loop power required (not supplied via converter)

Performance and Operational Specifications

Operating Temperature	-4° to 140°F (-20° to 60°C) sensor
Storage Temperature	-40° to 149°F (-40° to 65°C)
	Note: During freezing conditions and when meter is not in use, sensor must be removed from pipe and stored in dry conditions. NOTE: Damage to the sensor caused by allowing the sensor freeze in the pipe is not covered by the warranty.
Operating Pressure	150 PSI
IP Rating	IP68 (submersible sensor)
Pressure Range	150 psi (10.3 bar) working pressure
Empty Pipe Detection	Hardware/software, conductivity-based (optional)
Accuracy	<ul style="list-style-type: none"> Standard: +/- 2% of measured value ±0.006 ft/s (±0.0018 m/s) Optional: +/- 1% of measured value ±0.006 ft/s (±0.0018 m/s)
Conductivity	Minimum conductivity of 50µS/cm. For lower conductive fluid consult factory.
Battery Life	Five-year expected battery life, five-year battery warranty
Pipe Run Requirements	3D Upstream / 1D Downstream

Flow Meter Specifications

Display and Measurement

Display	<ul style="list-style-type: none"> • 2-Line LCD display (no backlight) • Non-volatile memory • Anti-reverse totalizer (standard) • Total (to 9 digits of precision) • Flow rate and velocity (to 5 digits of precision) • Two alarms: low battery and empty pipe (optional) • Opening lid activates display 		
	Digits 5 Rate, 9 Total		
Units	Gallons per minute	Imperial gallons per minute	Cubic feet per minute
	Million gallons per day		Barrels per minute (55G)
	Cubic feet per second	Miner's inch (9G)	Barrels per hour (55G)
	Megaliters per day	Miner's inch (11.22G)	Barrels per day (55G)
	Liters per second	Acre-feet per day	Barrels per minute (42G)
	Cubic meters per hour	Kiloliters per hour	Barrels per hour (42G)
	Liters per minute	Liters per hour	Barrels per day (42G)
	Gallons per hour	Cubic meters per minute	
Unit Rate Scales		seconds, minutes, hours, days	

Other Specifications

Options and Accessories	<ul style="list-style-type: none"> • Data Logger - included as standard with five years of data storage at default (12hr) interval. (Cable sold separately) • Bidirectional • Epoxy coated carbon steel flanged spool piece • AC, DC, and battery powered with battery backup powered available • Remote mount (25' cable length only) • Annual verification / calibration • Stainless Steel ID tag 		
	Meter: 5-year standard warranty Battery: 5-year warranty Liner: Lifetime guarantee		
Warranty			

ProComm GO Converter Specifications

Physical Specifications

Electronic Housing	Diecast aluminum, powder coated enclosure w/ tamper resistant seal, 6½" x 6½" x 43/8" tall
Converter Dimensions	See page 21 for meter mount and remote mount converter dimensions.
Power	Battery: Standard: three 3.6V lithium-thionyl chloride (Li-SOCl ₂) D size batteries with two AA backup batteries AC Power: 100-240VAC/45-66Hz (4W) DC Power: Linear power supply 10-35VDC (4 W)
Electrical Connections	<ul style="list-style-type: none"> Optional shielded cable for 10-32VDC/4-20 mA output Optional shielded cable for pulse out

Performance and Operational Specifications

Battery Life	Five-year expected battery life, five-year battery warranty
Location	Indoor or outdoor use
Altitude	Operating: 2000 meters Storage: 12,000 meters
Operating Temperature	-4° to 140° F (-20° to 60° C)
Storage Temperature	-4° to 140° F (-20° to 60° C)
Relative Humidity	0% to 100%
IP Rating	IP67 Die cast aluminum converter
Outputs	Digital output: Digital pulse (open collector) output for volumetric - Two isolated digital pulse (open collector) outputs for volumetric - AMI output Analog output: 4-20mA: Galvanically Isolated, 16 Bit resolution. All power configurations (including battery). Note: 9-30 VDC loop power required (not supplied via converter)

Display and Measurement

Display	<ul style="list-style-type: none"> 2-Line LCD display (no backlight) Non-volatile memory Anti-reverse totalizer (standard) Total (to 9 digits of precision) 	<ul style="list-style-type: none"> Flow rate and velocity (to 5 digits of precision) Two alarms: low battery and empty pipe (optional) Opening lid activates display
Digits	5 Rate, 9 Total	
Units	GPM Gallons per minute IGM Imperial gal per minute CFM Cubic feet per minute MGD Mega gal per day MI9 Miners inch (9G) B5M Barrels per minute (55G) CFS Cubic feet per second MI1 Miners inch (11.22G) B5H Barrels per hour (55G) MLD Megaliters per day APD Acre feet per day B5D Barrels per day (55G) LPS Liters per second KLH Kiloliters per hour B4M Barrels per minute (42G) CMH Cubic meters per hour LPH Liters per hour B4H Barrels per hour (42G) LPM Liters per minute CMM Cubic meters per minute B4D Barrels per day (42G) GPH Gallons per hour CFM Cubic feet per minute	

ProComm GO Converter Specifications

Totalizer Units	GAL	Gallons	B42	Barrel (42G)	MH1	Miners	Inch	Hour
	CUF	Cubic Feet	B46	Barrel (46G)				(11.22G)
	AFT	Acre Feet	B55	Barrel (55G)	MD1	Miners	Inch Day	(11.22G)
	CUM	Cubic Meters	IMG	Imperial Gallon	MH9	Miners	Inch Hour	(9G)
	LIT	Liters	AIN	Acre Inch	MD9	Miners	Inch Day	(9G)
	MML	Megaliter	TON	Ton (Short)	KGL	Kilo	Gallons	
	MTT	Metric Ton (KL)	MM1	Miners Inch Minute (11.22G)	MGL	Mega	Gallons	
	B31	Barrel (31G)	MM9	Miners Inch Minute (9G)	IN3	Cubic	Inch	
Data Logger	Standard with all models, minimum of five years of data stored							

Other Specifications

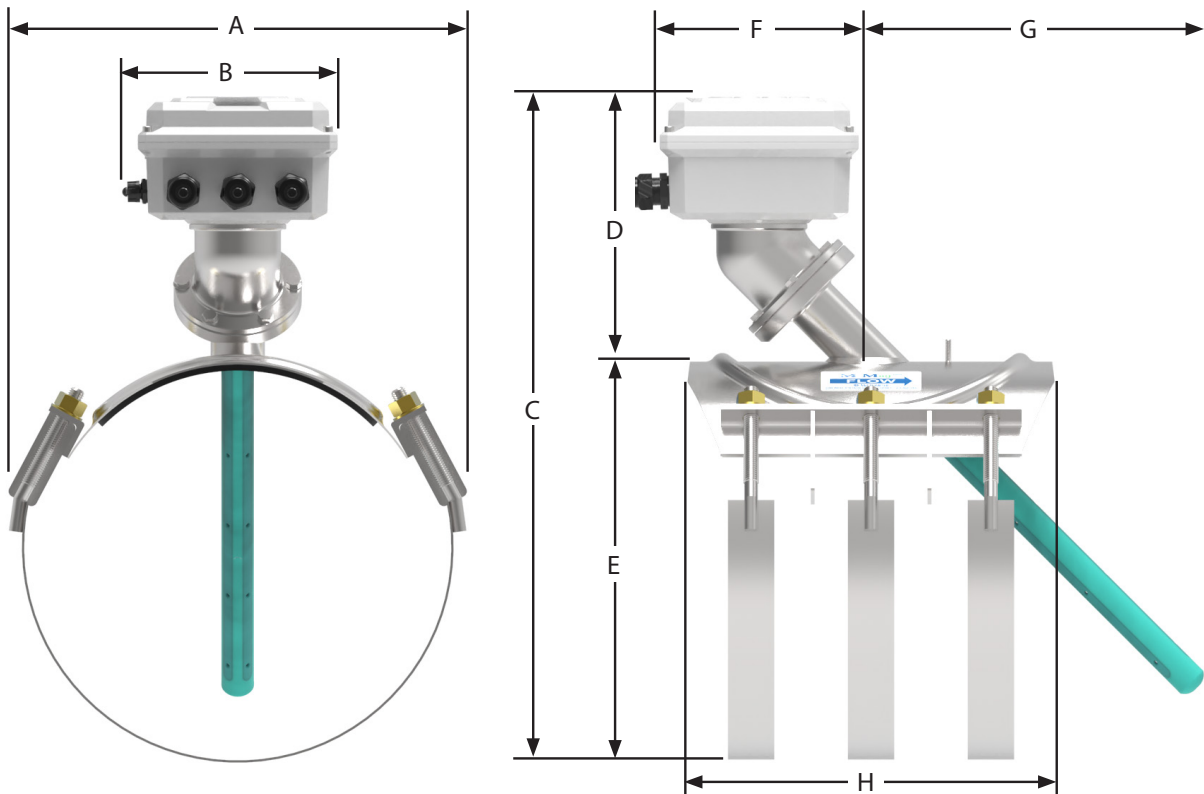
Options and Accessories

- Data Logger - included as standard with five years of data storage at default (12hr) interval. (Cable sold separately)
- AC, DC, and battery powered with battery backup powered available

Safety

- IEC 61010-1, Pollution Degree II
- Overvoltage protection Category III

Dimensions and Weights



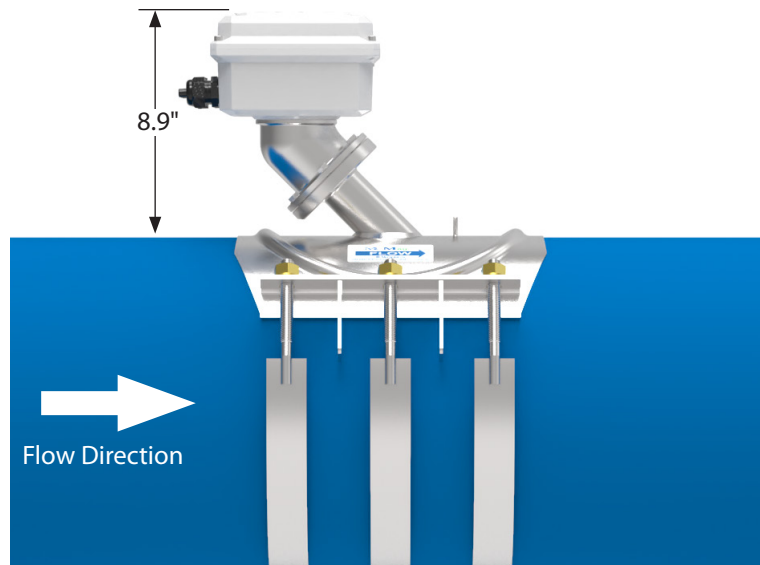
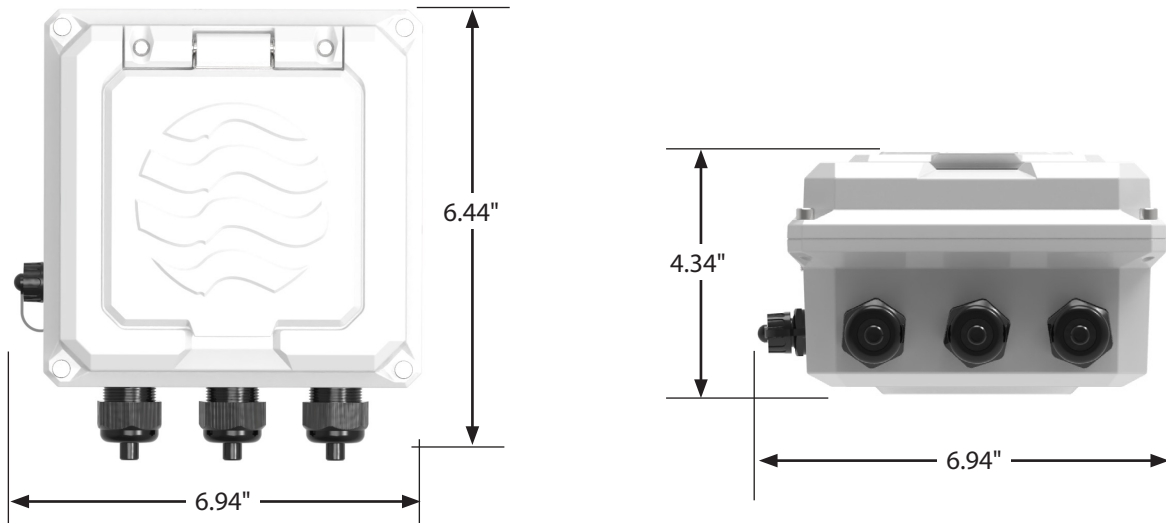
Max/Min Flow And Weight	Nominal Pipe Size*				
	4"	6"	8"	10"	12"
Maximum Flow U.S. GPM	600	1350	2350	3700	5300
Minimum Flow U.S. GPM	40	90	150	240	350
Approximate Shipping Weight lbs.	23	26	29	30	32

Dimensions (Inches)	4"	6"	8"	10"	12"
A	7.50	13.00	12.50	13.25	15.25
B	6.94	6.94	6.94	6.94	6.94
C	13.50	15.50	17.50	19.75	21.75
D	8.90	8.90	8.90	8.90	8.90
E	4.50	6.625	8.625	10.75	12.75
F	7.37	7.37	7.37	7.37	7.37
G	3.56	4.93	7.32	8.38	10.77
H	8.00	12.00	12.00	12.00	12.00

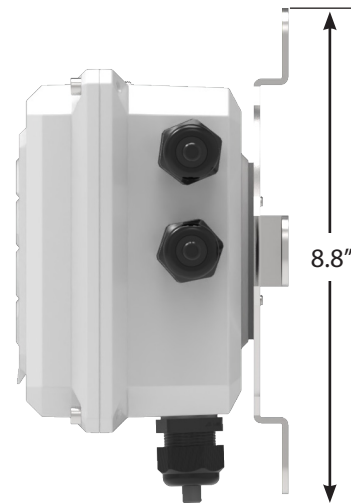
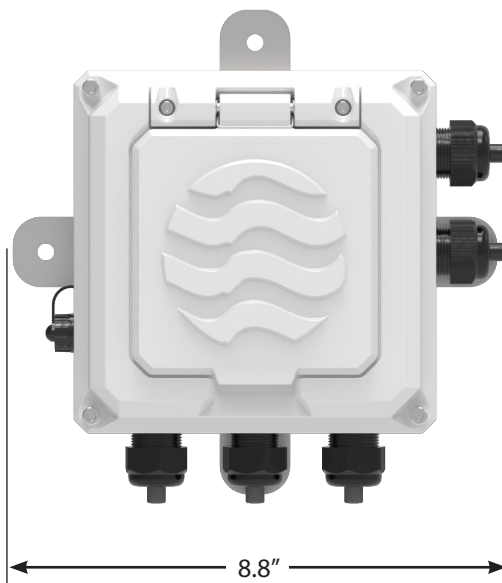
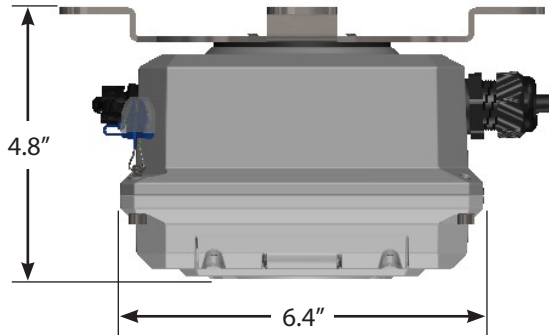
All Dimensions based on ANSI B36.10 Nominal Pipe

*** Note:** Meters can be installed in Water Specialties bolt saddle meter cutouts for 6" meters and 8"-12" meters as well as in McCrometer bolt on saddle meter cutouts for 12" OD pipe. **The meter CANNOT be installed in Water Specialties bolt on saddle meter cutouts for 4" meters.** If replacing an existing meter, consult Factory.

Dimensions and Weights



Dimensions and Weights



Copyright © 2028 McCrometer, Inc. All printed material should not be changed or altered without permission of McCrometer. Any published pricing, technical data, and instructions are subject to change without notice. Contact your McCrometer representative for current pricing, technical data, and instructions.

3255 WEST STETSON AVENUE • HEMET, CALIFORNIA 92545 USA
TEL: 951-652-6811 • 800-220-2279 • FAX: 951-652-3078
www.mccrometer.com