

# MUELLER

## 435 SERIES BRONZE

### 435 Bronze PD Meter - Sizes $\frac{3}{4}$ " Short, $\frac{3}{4}$ " x $\frac{3}{4}$ " Standard, $\frac{3}{4}$ " x 1"

#### FEATURES

**Applications:** The Mueller® 435 bronze is a nutating disc style, positive displacement meter designed for residential and small commercial applications where water volumes are low and low flow sensitivity is important.

**Conformance to Standards:** All Mueller 435 bronze meters meet or exceed the latest revision of the AWWA C-700 Standard for positive displacement meters. Every 435 bronze no lead meter is compliant with the latest initiatives of NSF, ANSI and EPA standards.

**Construction:** Mueller 435 water meters consist of three basic parts: maincase; measuring chamber; and permanently sealed register. The maincase is made of bronze for long life. Direction of flow arrows and model are cast into each maincase for ease of identification. The bottom cover is epoxy-coated cast iron with a molded plastic liner separating it from the waterway. Optional bronze bottom covers are available. The measuring chambers are designed for reduced wear during operation. The measuring chamber, integral strainer, nutating disc and thrust roller are thermoplastic, which is dimensionally stable and will not corrode. The meter is designed so that the register can be replaced easily without removing the meter from the service line.

**Register:** The permanently sealed solid state encoder register has a heat treated, glass lens and thermoplastic housing to eliminate dirt, moisture infiltration and fogging. An integral tamper-proof locking feature is provided to resist tampering with the register. The totalizing register has a 10 digit LCD reading display, up to 9 digit electronic output, specifiable visual back flow detection, battery life icon, and a low flow and leak detector. Visual tamper codes are displayed intermittently with the reading data in the event of register removal or magnetic tampering. The 435 bronze meter is compatible with all AMR and AMI options for increased reading efficiency.

**Operation:** Water flows through the meter's strainer where debris is screened out. The incoming water fills a known volume of the measuring chamber on one or the other side of a movable disc that separates the chamber into two sections. As water enters, it moves the disc (nutates), forcing a known volume of water out of the meter from the opposite side of the disc. The process repeats as the sections refill and empty in turn. The nutating action of the disc is sensed by the register to accurately indicate the volume of water that passes through the meter.

**Maintenance:** The Mueller 435 positive displacement meter is designed and manufactured to provide long service life with virtually no maintenance required. Repair components available include complete chamber assemblies and bottom plate gaskets. All components can be accessed without removing the meter body from the service line for simplified maintenance.

**Connections:** Supplied with external straight pipe threads (NPSM) per ANSI B1.20.1



$\frac{3}{4}$ " SHORT BRONZE 435 PD BRONZE BODIED METER  
WITH SSR REGISTER

#### MATERIALS AND SPECIFICATIONS

<b>Model</b>	435 Composite Meter
<b>Sizes</b>	$\frac{3}{4}$ " Short, $\frac{3}{4}$ " x $\frac{3}{4}$ " Standard, $\frac{3}{4}$ " x 1"
<b>Standards</b>	AWWA C-710, Most Current NSF-61, ANSI, & EPA Initiatives
<b>Service</b>	Measurement of flow in forward direction only
<b>Installation</b>	Horizontal or Vertical
<b>Operating Flow Range</b>	See charts on the following pages
<b>Accuracy</b>	See charts on the following pages
<b>Maximum Working Pressure</b>	150 psi
<b>Temperature Range</b>	33° F to 100° F water temperature
<b>Measuring Element</b>	Nutating Disc PD Chamber
<b>Register Type</b>	Solid State Register (SSR) ME-8 Register 5' flying lead wire, 5' Nicor connector, 5' Itron connector
<b>Meter Connections</b>	External straight pipe threads (NPSM)
<b>Materials</b>	Meter case - Bronze Bolts - Stainless Steel Measuring Element Chamber and Disc - Thermoplastic Disc Pin - SST Strainer - Thermoplastic
<b>Options</b>	AMR/AMI Reading Systems

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## METER REGISTRATION

METER SIZE	REGISTRATION	REGISTRATION	REGISTRATION
$\frac{3}{4}$ "	Gallons	Cubic Feet	Cubic Meters

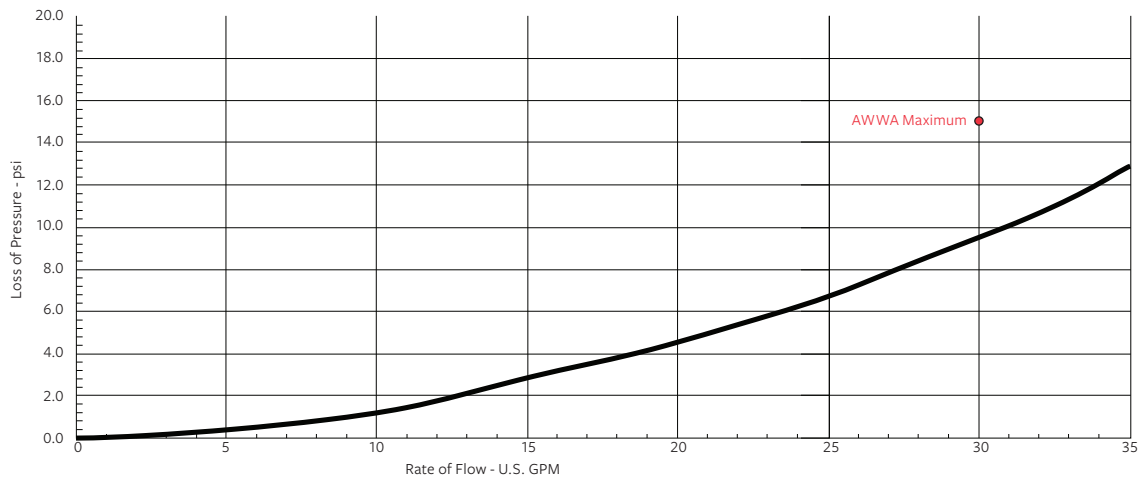
\*All registration values are factory programmable and must be specified prior to ordering.

## FLOW CHARACTERISTICS

METER SIZE	TYPICAL LOW FLOW (95% MINIMUM)	TYPICAL OPERATING RANGE (100% ± 1.5%)	MAXIMUM CONTINUOUS OPERATION
$\frac{3}{4}$ "	$\frac{1}{4}$ GPM	$\frac{3}{4}$ to 30 GPM	25 GPM

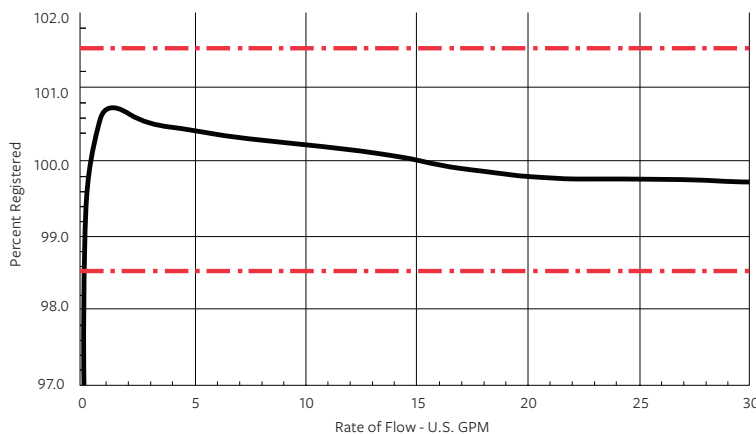
## PERFORMANCE

### HEAD LOSS



NOTE: Performance curves are typical only and NOT a guarantee of performance.

## ACCURACY



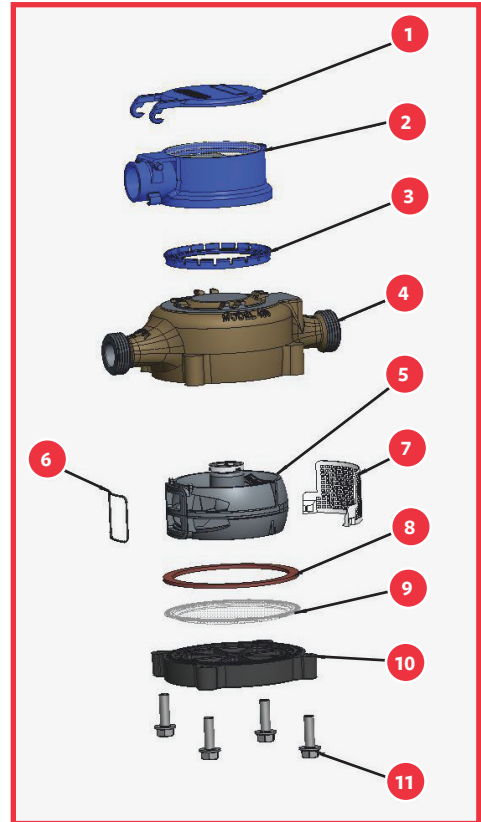
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## MODEL 435 BRONZE METER ASSEMBLY COMPONENTS

ITEM	PART #	DESCRIPTION	QTY
1	C6939	SSR Cover	1
2	CALL CS	SSR Register Assembly	1
3	B8703	SSR Housing Retainer	1
	D3707	$\frac{3}{4}$ " x $\frac{3}{4}$ " x 7.5" Model 435 Main Case	
3B	B8735	SSR Ring Wedge	1
4	D3723-1	$\frac{3}{4}$ " x $\frac{3}{4}$ " x 9" Model 435 Main Case	1
	D3723-2	$\frac{3}{4}$ " x 1" x 9" Model 435 Main Case	
5	D3705	Model 435 Chamber Assembly	1
6	A13128	Model 435 Chamber O-Ring	1
7	C6933	Model 435 Strainer Retainer	1
8	B8698	Model 435 Bronze Gasket	1
9	B8699	Model 435 Liner (Iron / Brz Bottom Only)	1
10	B8714	Model 435 Iron Bottom Plate	1
	B8715	Model 435 Bronze Bottom Plate	
11	90026	$\frac{5}{16}$ " - 18 x $\frac{7}{8}$ " Hex Bolt SS (Iron / Brz Btm)	4

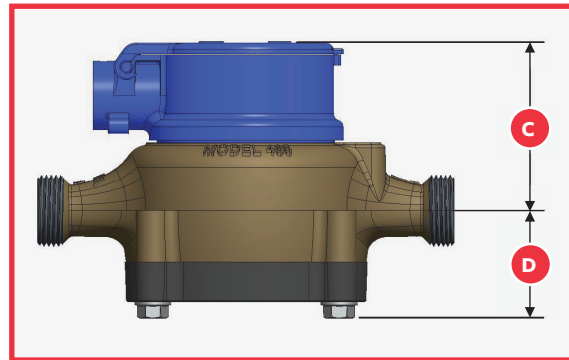
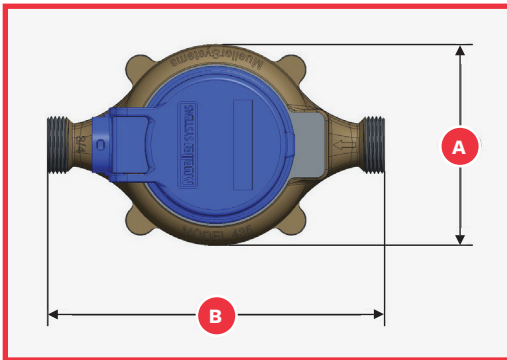


## DIMENSIONS, WEIGHTS AND PARTS

METER SIZE	¾" SHORT 7.5"	¾" STANDARD 9"	¾" X 1" X 9"
MODEL	435 BRONZE SSR REGISTER	435 BRONZE SSR REGISTER	435 BRONZE SSR REGISTER
<b>DIMENSION</b>			
<b>A</b>	4.475"	4.475"	4.475"
<b>B</b>	7.5"	9"	9"
<b>C</b>			
<b>Visual Register</b>	3.25"	3.25"	3.25"
<b>SSR Register</b>	3.035"	3.035"	3.035"
<b>ME-8 Register</b>	3.5"	3.5"	3.5"
<b>D</b>	1.925"	1.925"	1.925"
<b>Weight</b>	4.6	4.7	4.8

Weights are in pounds are approximate.

## 435 BRONZE METER



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