

# Specification Sheet

## C700 Positive Displacement Meter for Reclaimed Water

Bronze, Magnetic Drive, External Threaded Spuds

Size: 5/8" to 1"



### Description

**Operation.** The C700 is an oscillating piston style, positive displacement water meter. The product utilizes a piston that water rotates in a measuring chamber, each piston revolution being equivalent to a known volume of water. The piston movement is transferred by a magnetic drive to a straight reading sealed register that contains the appropriate reduction gearing.

**Compliance to Standards.** The meter fully complies with American Water Works Association Standard C700 as most recently revised for potable cold water.

**Installation.** The meter should be installed in a clean pipeline, free from any foreign materials. Install the meter with direction of flow as indicated by the arrow cast in the meter case. The meter may be installed in horizontal or inclined lines.

**Application.** The meter is for use only with HIGHLY TREATED, RECLAIMED NON-POTABLE COLD WATER up to 120°F (50°C) and working pressures up to 150 psi.

**Construction.** The meter consists of a straight through-flow main case, dual inlet measuring chamber, vertically grooved oscillating piston, high capacity strainer, removable bottom plate, full rubber liner, body bolts with integral washers and a magnetically driven register. The main case is cast in waterworks bronze with raised characters designating model, size and direction of flow. A choice of frostproof or standard bottom plates are available. The 2-piece snap-fit measuring chamber is of a top and bottom inlet, side outlet design and features a unique self-flushing sediment well. Other features include a removable, contoured division plate, captive drive bar and high torque magnet complete with a nylon bushing. The flow-stream balanced piston has a unique thrust bearing insert and features a Turbulence Seal™ system which passes debris while sustaining the most linear accuracy curve in the industry. Each register is secured to the main case with a tamperproof plug to eliminate tampering.

### Specifications

Size:	5/8" x 1/2"	3/4" x 3/4"		
	5/8" x 3/4"	3/4" x 3/4" S		
		3/4" x 1"		1"

#### Accuracy (GPM):

95% - 101%	1/4	1/2	3/4
98.5% - 101.5%	1-20	2-30	3-50
Continuous Flow (gpm)	10	15	25
Maximum Flow (gpm)	20	30	50
Operating Pressure (psi)	150	150	150
Operating Temperature (°F)	120	120	120

#### Sweep Hand Registers:

US Gallons	10	10	10
Cubic Feet	1	1	1
Cubic Meters (Canada)	1/10	1/10	1/10
Cubic Meters (Intl.)	1/100	1/100	1/10

#### Capacity of Register (millions):

US Gallons	10	10	10
Cubic Feet	1	1	1
Cubic Meters (Canada)	1/10	1/10	1/10
Cubic Meters (Intl.)	1/10	1/10	1

#### Register Type:

Permanently sealed direct reading register

#### Materials:

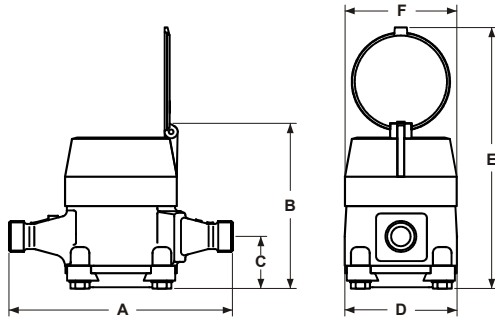
Main Case	Bronze
Bottom Plate 5/8" - 3/4"	Bronze, Cast Iron or Polymer
Bottom Plate 1"	Bronze or Cast Iron
Bottom Gasket-Liner	Nitrile
Body Bolts	Stainless Steel
Measuring Chamber	Compounded Polymer
Division Plate	Loaded Nylon
Piston	High Impact Polymer
Thrust Bearing Insert	Loaded Nylon
Driving Bar	Loaded Nylon
Strainer	Polypropylene
Register Can	90% Copper Alloy
Register Lens	Tempered Glass
Register Housing and Lid	Polymer (lilac)

**Register.** The register is contained within a 90% copper seamless can which is oven-cured at 150°F for 90 minutes to eliminate condensation. The 5 mm true tempered glass lens is secured with an "L" shaped gasket, then roll sealed to produce a permanently sealed design. To assure easy reading, the totalizer wheels are large and color coded. The applicable size, model, registration, part number and date code are printed on the calibrated dial face. Moving clockwise during operation, the extra-thin center sweep hand does not interfere with meter reading, and the 1:1 piston ratio low-flow indicator gives visual indication of plumbing leaks. For accurate meter testing, 100 clear graduations appear at the register's circumference.

**Magnetic Drive.** The magnetic drive design facilitates coupling between the measuring chamber and the external register. The coupling is absolute at all rated flows.

**Connections.** The meter casing spuds have external straight threads conforming to ANSI B.1.20.1. Bronze coupling nuts and tailpieces are available. Both coupling nuts and tailpieces have external taper pipe threads conforming to ANSI B.1.20.1. Their lengths and thread sizes are as specified by AWWA Standards.

**Reclaimed Designation.** The reclaimed meter is equipped with an universally accepted and distinctively colored (lilac pantone 522) register housing and lid. One of the meter's bottom plate bolt is tamper-proof type that will not allow access to the measuring chamber.



**Dimensions and Net Weights**

Meter Size	Dimensions (inches)						Weight (lbs.)
	A	B	C	D	E	F	
5/8" x 1/2"	7 1/2	5 1/2	1 1/2	4	8 3/4	3 3/4	3 1/2
5/8" x 3/4"	7 1/2	5 1/2	1 1/2	4	8 3/4	3 3/4	3 1/2
3/4" x 3/4" S	7 1/2	6 3/16	2 1/16	3 7/8	9 1/2	3 3/4	4 3/5
3/4" x 3/4"	9	6 3/16	2 1/16	3 7/8	9 1/2	3 3/4	4 4/5
3/4" x 1"	9	6 3/16	2 1/16	3 7/8	9 1/2	3 3/4	4 4/5
1"	10 3/4	6 5/8	2 1/8	6 15/16	9 3/4	3 3/4	10 1/5



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The company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained herein without notice. These products have been manufactured with current technology and in accordance with applicable AWWA Standards.

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