

# Specification Sheet

## Generator Remote Meter Reading System for Model C700 *Magnetic Drive, Positive Displacement Meters*



### Description

**Operation.** The Generator Remote Meter Reading System consists of a pulse-type generator and remote wall unit. The system is designed to permit visual remote reading of the generator's pulses each of which is equivalent to a known volume of water. The generator is magnetically driven by the piston movements in the meter's measuring chamber. The generator totalizes water throughput and sends pulses to the wall unit via a 2-conductor wire. The pulses are counted and displayed on the wall unit totalizer for visual reading.

**Compliance to Standards.** The Generator Remote Meter Reading System complies with all design, performance and material requirements of the American Water Works Association Standard C706, as most recently revised.

**Installation.** Place the *POTABLE COLD WATER METER* in the service line as recommended by the Installation and Start-up instructions and install the two (2) wire cable and wall unit according to the instructions accompanying the equipment. Test the generator's circuit and remote wiring with a pulse simulator/closed circuit tester.

**Application.** The Generator Remote Meter Reading System is an option for our C700 meter. It facilitates visual remote meter reading when applied to meters in basements, crawl spaces, shopping centers, condominiums or industrial plants when lockouts, security, location or similar reasons disallow regular direct meter reading. Pit set applications are not recommended. Accuracy tests of our water meter and the Generator Remote Meter

### **Sizes 5/8" - 2"**

### Generator Specifications

	<u>Size:</u>	<u>5/8" - 1"</u>	<u>1 1/2" - 2"</u>
<u>1 Rev Test Hand</u>			
US Gallons	1	10	
Cubic Feet	1/10	1	
m <sup>3</sup> - Cubic Meters	1/10	1/10*	
Imperial Gallons	1	10	
<u>Totalizer Capacity</u>			
US Gallons (millions)	10	100	
Cubic Feet (millions)	1	10	
m <sup>3</sup> - Cubic Meters (millions)	1/10	1/10	
Imperial Gallons (millions)	10	100	
<u>Units per Pulse</u>			
US Gallons	100	1000	
Cubic Feet	10	100	
m <sup>3</sup> - Cubic Meters	1*	1*	
Imperial Gallons	100	1000	
			*2" - 10m <sup>3</sup>
<u>Fixed Zeros on Generator</u>			
US Gallons	None	1	
Cubic Feet	None	None	
m <sup>3</sup> - Cubic Meters	None	None	
Imperial Gallons	None	1	
Generator Type	Permanently sealed pulse type assembly		
<u>Technical Data</u>			
Pulse Amplitude	8 Volts DC Off Load Min.		
Pulse Duration	15 Milliseconds Off Load Min.		
Cable Connection	2 Knurled Nut Terminals		
<u>Materials</u>			
Generator Can	90% Copper Alloy		
Generator Lens Cover	Polycarbonate		
Terminal Cover	Polyphenylene Oxide		
Terminal Nuts	Brass		
Generator Housing	Synthetic Polymer or Bronze		



Reading System are made before shipment. Should further accuracy tests be required by the utility, a test circle and test hand are provided on the generator's dial. Follow the test procedures of AWWA Manual M6.

**Generator Assembly.** The generator is magnetically driven and is permanently sealed. The generator can is formed from 90% copper alloy. The thick lens cover is highly resistant to breakage and allows full viewing of the totalizer, test hand, test circle and dial markings. The can is roll-sealed over an L-shaped gasket. The numbers are large and color coded for easy direct meter reading. The test hand moves clockwise during operation. The generator assembly measures 3 7/8" in height and 3 3/8" to 3 7/8" in width and weighs 16 ounces.

**C700 Height (Inches) with Generator Register**

<u>5/8"</u>	<u>3/4 x 3/4"</u>	<u>1"</u>	<u>1 1/2"</u>	<u>2"</u>
6 7/8"	8 3/8"	9 1/2"	9 7/8"	11 1/4"

**Remote Wall Unit.** The remote wall unit is electro-mechanical in design. It consists of a base plate, solenoid, ratched arm and spring, 5 digit totalizer, face plate and a transparent lens cover which seals out weather and magnifies the totalizer numbers for easy reading. The number wheels are resettable. It measures 4" in height, 3" in width, 1 1/4" in depth and weighs 6 ounces.

**Generator Remote Meter Reading Covered to the Encoder Meter Reading System.** The generator assemblies and remote wall units may be exchanged for our Encoder Register with wall or pitpad from spares available at our warehouses in the U.S. and Canada. Retrofitting is simple. The Encoder replaces the generator and the wall or pitpad replaces the remote wall unit. The existing cable is used to connect the encoder and pad. Our visual display unit or other manufacturer's hand-held is interfaced with a wall mounted or pit-lid installed Pad. Meter readings are visually displayed on an LCD screen and may be stored in memory for processing and billing.

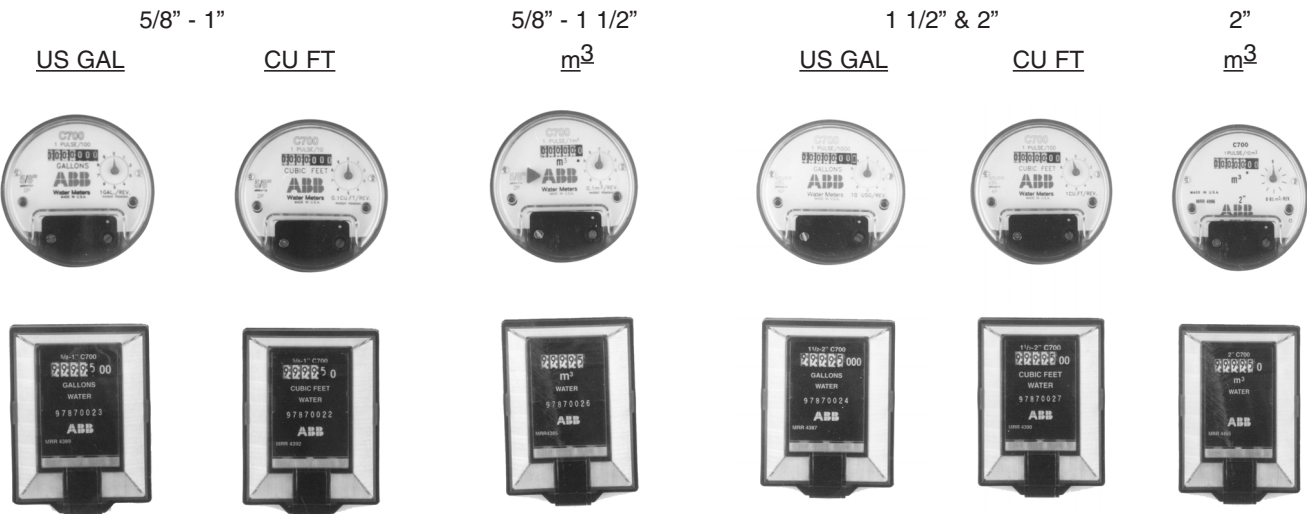
**Wall Unit Specifications**

Technical Data

Operation Temperature Range	-40°F to + 150°F(-22°C to 83°)
Cable Connection	2 #6 Screw Terminals
Coil Wire Size	31 Guage
Coil Resistance	37.0 Ohms ± 5%

Material

Base	UV Stabilized Black Acetal Resin
Cover	UV Stabilized Clear Polycarbonate
Lens Window	Magnified Polycarbonate
Counter Frame	Plated Steel
Terminal Screws and Clamps	Plated Steel



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.

**ABB Water Meters**  
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