V100 with Pulse Output, Positive Displacement Meter

Waterworks and Low-lead Bronze, External Threaded Spuds

Sizes 5/8" x 1/2" and 5/8" x 3/4"

Sizes:	5/8" x 1/2"	5/8" x 3/4"
Performance		
Starting Flow	1/50	1/50
95% - 100% Accuracy GPM	1/8	1/8
95% - 101% Accurcy GPM	1/4-20	1/4-20
Continuous Flow (gpm)	15	15
Maximum Flow (gpm)	20	20
Max Continuous Flow (gpm)	20	20
Head Loss at Max Flow (psi)	under 13.0	under 13.0
Max Working Pressure (psi)	150	150
Max Working Temperature °F	120	120
Capacity of Register		
US Gallons	10,000,000	10,000,000
Cubic Meters	10,000	10,000
Register Type	Fully sealed, vacuum-filled straight reading direct drive.	
Output Pulse		
US Gallons	1 pulse = 5 USG (both sizes)	
Cubic Meters	1 pulse = 5 liters (both sizes)	
Reverse Flow Restrictor	Available upon request	
Materials		
Body	Waterwork or Low-lead Bronze	
Working Chamber	Compounded Thermoplastic	
Piston	High Impact Polymer	
Division Plate	Loaded Nylon	
Thrust Bearing Insert	Loaded Nylon	
Strainer	Polypropylene	
Register Case and Lens	Polypropylene	
Gaskets	Neoprene Rubber	

Operation. The V100, with pulse output (fomerly PSM-T), is an oscillating piston style, positive displacement water meter. The product utilizes a piston which water flow causes to rotate in a measuring chamber, each piston revolution being equivalent to a known volume of water. The piston movement is transferred, by appropriate reduction gearing, direct to straight reading liquid-filled fully sealed register.

Compliance to Standards. The meter fully complies with ISO 4064/1 and BS 5728/1 Class B and meets California Proposition 65 requirements. Every V100, with pulse output, is individually tested over its flow range before shipment.

Installation. The meter should be installed in a clean pipeline, free from any foreign materials. Install the meter with the direction of flow as indicated by the arrow cast in the register case. The meter may be installed in any position horizontal, vertical or inclined without affecting accuracy. However, the meter must have a full pipe of water to operate properly.

Application. The meter is for use only in POTABLE COLD WATER up to 120°F and working pressure up to 150 psi.

Construction. The measuring chamber case houses the oscillating piston measuring chamber and a polymer strainer. The measuring chamber is a bottom-in and top-out design consisting of a measuring chamber with division plate and thrust bearing insert, a grooved piston, a chamber cover including the drive assembly and a cover locator pin. The sealed register is liquid-filled and free from condensation and tampering. The polycarbonate register case has a magnified lens enlarging the totalizer numbers for easy reading. The meter flow direction arrows are cast on the register case. The unit of measurement is shown on the underside of the lens cover. A serial number is inscribed on the case or the lens cover, which is hinged toward the outlet of the meter. The register case is machined to accommodate a probe which when inserted, magnetically actuates a sensor. The sensor can be used to operate a remote counter or may be interfaced with data-carrying devices for off-site or automatic meter reading.

Register. The combined register and gear unit is fully sealed, liquid-filled with a simple straight-reading presentation. The unit has a reliable direct drive assembly and gears are manufactured in engineered thermoplastic to give minimum friction for extended life.

Tamperproof. The V100 with pulse output offers outstanding resistance to illegal tampering. Its unique in-line body design means it cannot be dismantled while in service and the mechanically driven counter cannot be interfered with magnetically. An individual serial number is engraved on each body.

Connections. Meter casing spuds have external straight threads conforming to ANSI B.2.1. Bronze coupling nuts and tailpieces are available.

Maintenance. The measuring chamber can be easily removed for repair or replacement. Pretested measuring chamber assemblies are available for exchange or purchase. In addition, Elster AMCO maintains a fully equipped and staffed repair facility in Ocala, FL.

Output-Pulse. The pulse unit may be installed at any time as the unit is a plug in type device. The transmitting element is a dry contact reed switch rated to 3 watts which is magnetically actuated. This device has two wires, which require power from an external source. To be wired in series. Note: 4-wire system, contact Elster AMCO for wiring information.

How to Read V100 with Pulse Output. Direct reading V100 with pulse output totalizers are read exactly as indicated on the numbers from left to right similar in fashion to reading the odometer representing miles in a U.S. automobile. Reading the small horizontal lines (if present) on the first number wheel from the right is omitted except when comparing water throughput into calibrated tank or through a test meter.

The first number wheel on the right advances one (1) number for each unit of measurement and ten (10) numbers for one complete revolution as follows:

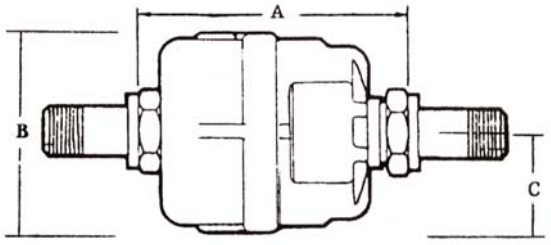
Measuring (Calibration)	Each Number Equals	Each Revolution Equals
Gallon	1	10
Cubic Meter	1/1000 or 1 liter	1/100 or 10 liters

Dimensions (Inches)

Meter Size	Length A	Width B	To Center C	Weight (lbs.)
5/8 x 1/2"	4 1/2	3 5/16	1 5/8	2
5/8 x 3/4"	4 1/2	3 5/16	1 5/8	2

Coupling Dimensions (Inches)

Meter Size	5/8" x 1/2"	5/8" x 3/4"
Coupling Size	1/2	3/4
Tailpiece Length	2 3/8	2 1/2
Tailpiece Threads	1/2	3/4
Coupling Nut Threads	3/4	1



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