



Turbine Meter 2" thru 8"



Features and Benefits

- ⇒ Meets or exceeds AWWA C701 Standard
- ⇒ Tamper Resistant
- ⇒ Epoxy Coated Cast Iron Construction
- ⇒ 5-year New Meter Accuracy
- ⇒ Rated to 140°F
- ⇒ Large Easy to Read Numbers
- ⇒ Tempered Glass Resists Scratching
- ⇒ Hermetically Sealed, Copper Canned Register
- ⇒ Brass Housing and Lid

Application The C701 Meter is used for measuring potable cold water up to 140°F (60°C) and working pressures up to 160 psi. It can be used in commercial or industrial applications, where water flows in one direction only.

Main Case The main case is constructed out of epoxy coated cast iron with raised characters showing the direction of flow and size of the meter.

Magnetic Drive Direct magnetic drive through the use of high strength magnets provides linkage between measuring element and register. No intermediate gearing is required thus no gearing is exposed to water.

Servicing BluTower meters are designed and manufactured to provide long-term service with minimal maintenance.

Connector Flanges of various sizes are available as an option.

Operation Water flows through the measuring element of the turbine thus causing the rotor to turn proportionately to the quantity of water flowing through the meter. Rotor revolutions are transferred to a register by a magnetic drive. The only moving parts in the meter are the rotor assembly and vertical shaft.

Strainers BluTower recommends the use of a separate strainer upstream from the turbine meters. Strainers reduce the chance of damage to the rotor as well as the frequency in which it must be removed for inspection. The lack of a strainer may void the warranty of the turbine meter. Various size strainers are available for purchase.

Installation The meter must 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 meter case. The meter may be installed in horizontal or inclined vertical lines. BluTower recommends that all turbine meters be installed with 10 pipe diameters of undisturbed flow upstream of the meter, and five pipe diameters downstream.

METER OPERATING CHARACTERISTICS/DIMENSIONS

Sizes	(Inches)	2"	3"	4"	6"	8"
Typical Operating Range	(GPM)	3 - 200	5 - 550	10 - 1250	20 - 2500	30 - 4500
Low Flow	(GPM)	2	2 ½	5	12	20
Maximum Continuous Operating Flow	(GPM)	200	450	1000	2000	3500
Maximum Operating Capacity	(GPM)	400	550	1250	2500	4500
Pressure Loss at Max. Continuous Flow	(PSI)	2.0	5.0	5.4	2.8	2.0
Maximum Operating Temperature	(F)	140	140	140	140	140
Maximum Operating Pressure	(PSI)	160	160	160	160	160
Length	(Inches)	7 ¾	8 7/8	9 7/8	11 7/8	13 ¾
Height	(Inches)	9 ½	10 ¼	11	12 7/8	14 ¼
Width	(Inches)	7	7 ½	9	11	13 ½
Weight	(lbs)	24	32	38	88	126
Number of Holes per Flange		4	4	8	8	8

Register

The standard register consists of an odometer type display, showing the total amount of water use. It is copper canned and vacuum sealed, making it impossible for the register to fog. The lens is scratchproof and made of tempered glass. Choose an optional ESP integrated AMR Register for use in mobile and fixed network AMR/AMI systems.

Materials

Main Case	Epoxy Coated Cast Iron
Measuring Chamber	Thermoplastic
O-Ring	Nitrile Rubber
Magnet	Ceramic Ferrite
Register Lens	Tempered Glass
Register Housing and Lid	Bronze or Thermoplastic
Gearing Wheels	Thermoplastic
Register Can	Copper Alloy

Register includes the following

- Size of Meter
- Company Name
- Month and Year of Manufacture
- Center Sweep Hand
- Large, Easy to Read Numbers
- Low Flow/Leak Indicator
- Type of Reading (US Gallon, Cubic Feet)

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