

Industrial Turbo Meters

Sizes 2" through 6"

DESCRIPTION

The Badger Meter Industrial Turbine is a rugged, reliable meter ideally suited for chemical or industrial fluid applications. Its compact size and ease of serviceability without removal from the line, coupled with a choice of materials, make this a cost-effective selection. Designed with performance in mind, the meter provides a high level of accuracy over a wide flow range with a minimum of pressure loss.

The Badger Meter Turbine is available in line sizes of 2", 3", 4" and 6" with a choice of flange ratings and three different body materials, including stainless steel. Its unique straight-through flow profile and ceramic bearing design optimize performance.

To complement the meter, Badger Meter offers a complete line of accessories that includes mechanical, electromechanical and state-of-the-art electronic transmitters, totalizers, indicators and process controllers.

OPERATION

The Badger Meter Industrial Turbine is a volumetric liquid flow meter that works on the time proven principle of a rotor turning at an angular velocity proportional to the fluid velocity through the turbine. The meter has straightening vanes and a nose cone in the inlet side to minimize upstream turbulence and direct the flow to the rotor effectively. Electronic pickups generate signals from the rotor magnet. The signal is translated to 4...20 mA and/or open collector-transistor pulse outputs. Mechanical pickups and electromechanical outputs are also available.

APPLICATIONS

The Turbine meter is used in a wide range of fluid applications covering from water to oils, solvents to acids. The meter is used in water treatment systems, loading and unloading of tankers or rail cars, batching systems, or simply inventory control of a process fluid. Anywhere high volume and/or high flow rates are sometimes required in the application, the Turbo meter is likely the right choice.

FEATURES

- Long lasting ceramic bearings
- · Simple in-line serviceability
- Three housing materials available
- 1.5% accuracy
- · 0.25% repeatability
- Low pressure loss



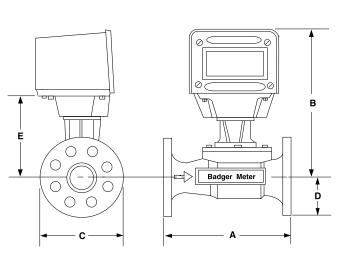
SPECIFICATIONS

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Accuracy	± 1.5%			
Repeatability*	± 0.25%			
Temperature Range	−30250° F			
Flow Range – GPM	2"	2" 8160		
	3"	10350		
	4"	251000		
	6"	402000		
Maximum Operating	Standard: 125150 psi			
Pressure	Optional: 250300 psi			
	(Cast iron/bronze only)			
Flange Face Configurations (ANSI Standards)				
Flat Faced Flanges	125 lb cast iron,			
	150 lb and 300 lb bronze housings			
Raised Face Flanges	250 lb cast iron,			
	150 lb stainless steel housings			
Materials				
Housing	Cast iron, bronze, 316 stainless steel			
Head	Bronze, stainless steel			
Rotor and Nose Cone				
Bearings	Ceramic			
Straightening Vanes				
O-Ring and Tetraseal	Buna N (standard), EPR, Viton			
Head Gasket	• N	litrile binder		
	(ι	used with Buna N seals)		
	 Chloroprene binder 			
	(ι	used with EPR and Viton seals)		

^{*} Reading over full range tested with potable water at 60° F.

DIMENSIONAL DRAWINGS

Dimensions shown are of meter with a PC100 meter mount. Dimensions for other system configurations will vary. Please consult with the factory.

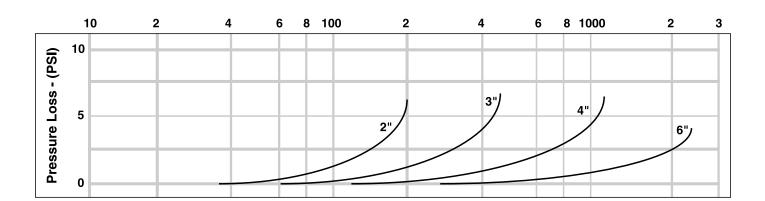


Installation Dimensions in Inches

	2"	3"	4"	6"
		3	4	0
Α	10.00	12.00	14.00	18.00
В	13.67	13.67	15.34	16.84
C – 150 lb	6.00	7.50	9.00	11.00
C – 300 lb	6.50	8.25	10.00	12.50
D – 150 lb	2.75	3.50	4.25	5.25
D – 300 lb	3.00	3.87	4.75	6.00
E	6.86	6.86	8.53	10.03
Estimated Weight per Unit in Lb	3040	4050	6075	100125

PRESSURE LOSS CHART

Rate of flow is in gallons per minute.



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