Flowmeter



The 700 Series Flex-Flo™ meter is a simple and rugged flow rate indicator for air, water and other transparent fluids. It is particularly well adapted for applications that fall within standardized flow ranges at moderate pressures and temperatures. The 700 Series features a rugged cast aluminum housing with metal threaded connections, a full air tempered glass window and the ability to install the meter in horizontal (left to right) and vertical (up or down) flow orientations - all at an economical cost.

The unique wedge shape of the housing enhances the selfcleaning capabilities of the meter which has large internal cavities that resist accumulations of foreign material. Unlike other variable area tube and float designs, the Flex-Flo™ may be installed in a horizontal piping system or even in down flow applications.

Features

- 0 Instantaneous flow rate measurement
- Observe fluid conditions for color, clarity and flow. 0
- 0 Use in horizontal (left to right flow) or vertical (up or down flow) piping systems.
- \bigcirc Available all aluminum construction is not susceptible to deterioration from UV exposure in outdoor applications.
- 0 Design resists particulate and scale.
- 0 Low pressure loss.
- \bigcirc Rugged cast aluminum construction at pricing competitive with plastic "rotameters".

Principle of Operation

Flex-Flo™ meters are variable area flow rate meters ("rotameter"). The internal volume of the housing enlarges from the inlet to the outlet. The primary element is a tempered alloy vane with one end affixed to the apex of the meter housing. As the flow rate changes the vane flexes in direct proportion. As

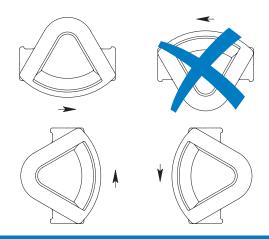
the operation of the primary sensor is not

dependant upon gravity, the Flex-Flo™ 700 Series may be used in horizontal (left to right flow) as well as vertical (up or down flow) piping systems.

Applications

- Air
- O Water
- 0 Other compatible fluids
- 0 Environmental remediation
- Process monitoring
- **OEM** systems

Mounting Positions



Specifications

Materials of Construction:

Body/Housing: Aluminum Window: Tempered Glass 17-7ph Stainless steel Vane: O-ring: EPM

Flow Orientation: Horizontal, Left to Right

Vertical, Up Vertical, Down **Pressure Limit:** 114.7psia/7.9 bar a (100psig/6.9 bar g) 212°F (100°C) **Temperature Limit:** Repeatability: ± 1% of Full Scale Accuracy: ± 5% of Full Scale @68°F and 14.7 psia

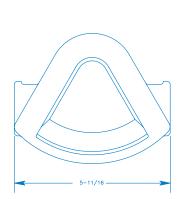
(0 psig)

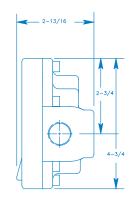
Process Connections: 1/2" **NPT**

3/4" NPT 1" NPT 11/2" NPT 2" NPT 3" NPT **NPT**

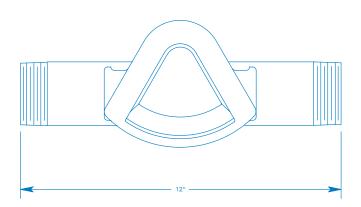
Flowmeter

ZX" to 1" connections





1ZX" to 4" connections



Flow Ranges by Connection Size:

Z\X NPT	C\∜NPT	1" NPT	1Zx" NPT	2" NPT	3" NPT	4" NPT
0.5-5	1-10	2-20	3-30	5-50	10-100	50-500
1-10	3-30	3-30	10-100	15-150	30-300	70-700
		5-50	20-200	25-250	50-500	100-1000

Model Number System

The example 711-08T150S describes a 700 Series Flex-Flo™ meter with an aluminum housing, glass window, with a 15-150 SCFM Air flow range. Connections are 2" NPT.

<u>7</u> Series	<u>1</u> Housing Material	<u>1</u> - Window Material	<u>08</u> Size	<u>T</u> Type	<u>150</u> Range	<u>S</u> Units
7 -700	1 -Aluminum	1-Tempered Glass	02-1/2" 03-3/4" 04-1" 06-11/2" 08-2" 12-3" 16-4"	T - NPT	005 0.5-5 010 1-10 020 2-20 030 3-30 050 5-50 100 10-100 150 15-150 200 20-200 250 25-250 300 30-300 500 50-500 700 70-700 1000 100-1000	G- GPM Water @ 68°F C- CFM Air @ 68°F & 14.7 psia (0 psig)