

# Low Flow Venturi

## Specialty Flow Meter – FV-LF Series

### Description

The FVLF is a specially designed venturi meter combining performance elements of both orifice and venturi type devices. Based on the highly successful PFS HVT design, which performs exceptionally down to 75,000 Reynolds, the FVLF further increases the stable range of accurate flow measurement down to 6000 Reynolds. The trade off for increased low flow stability is an increase in overall pressure loss, however unlike an orifice device, there is significant pressure recovery in the outlet divergent region of the FVLF leading to considerably less overall pressure loss than an orifice plate type meter.

### Specifications

**Line Size:** 3/8 to 12 inches

**Head loss % of Differential:** 20 to 40 percent

**Basic Accuracy (% of Total):** +/- 0.25 to 0.9 beta dependent, +/- 0.25 (Calibrated)

**Minimum pipe Reynolds number:** Must be greater than 6,000

**Required Straight Piping:** 2D – 13D

**Beta Range:** 0.30 through 0.75

**Useful Service Life:** Very Long

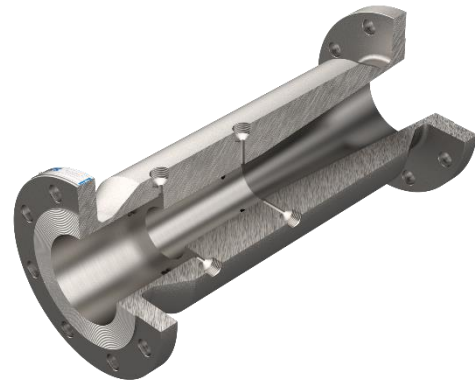
**Service Functional Limits:** Clean liquids & gases

### Common Materials

Carbon Steel      304 / 316SS      Chrome Moly

### Other Available Materials

Aluminum      Zirconium      Hastelloy B & C  
Monel      Duplex S/S      Titanium  
Tantalum      321 SS



### Applications

- Raw Water / Wellfields
- WTP Influent / Effluent
- Pumping Stations
- Water Distribution / Billing
- Reclaimed Water
- Industrial
- Commercial
- Oil and Gas

### Special Features

- Extended product life with no moving parts
- No downstream installation effect; minimal upstream effect
- No annular chambers therefore no plugging
- Especially useful for flow measurement at low flows (low Reynolds)
- Turndown ratio of 10:1, 20:1, 50:1 and greater can be achieved depending on the specific model and design of the meter as well as the type of secondary instrumentation system utilized
- Repeatability of  $\pm 0.10\%$
- Mounts in any position
- Plasma spray treatment available for additional hardness in abrasive flow applications

**PFS**  
**Primary Flow Signal**

The Leader in Reliable Flow Measurement