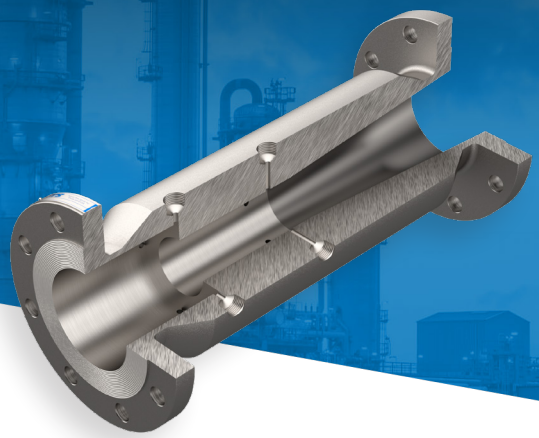

PRODUCT DATASHEET

Low Flow Fabricated Venturi

Specialty Flow Meter
FVLF Series

Description

The FVLF (prior Model HBX-1) 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.

Common Materials

- Carbon Steel
- 304 / 316SS
- Chrome Moly

Other Available Materials

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

Model Types

- FVFLF– Fabricated Venturi, Flanged, Low Flow
- FVWLF – Fabricated Venturi, Butt Weld Ends, Low Flow

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 ± 0.10%
- Mounts in any position
- Plasma spray treatment available for additional hardness in abrasive flow applications

Specifications

Line Size: 3/8 to 12 inches

Head loss % of Differential: 20 to 40 percent

Basic Accuracy (% of Total dP): +/- 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

PFS Primary Flow Signal

Providing Reliable Flow Measurement Since 1983

Toll Free 877-737-3569 | sales@primaryflowsignal.com | primaryflowsignal.com

MADE IN U.S.A.