



Wedge-X Flow Meter

Description

The Wedge-X design is derived from the standard wedge flow meter but allows for a direct coupled differential pressure transmitter and a replaceable restriction wedge which results in a compact and cost-effective turnkey device. The replaceable wedge feature is an extremely fast and cost-effective way of addressing situations like erosion of the wedge and can also be replaced with a different size to increase or decrease the dP as needed. A Wedge-X can be supplied complete with a dP transmitter resulting in a solution that simply needs to be installed into the pipeline. With all major components in one assembly the Wedge-X can eliminate the time and headaches that result from multiple sourced purchases, assembly of impulse lines and potential leak points.

See "Wedge Flow Meter" datasheet for a fundamental wedge

Common Materials

- Carbon Steel
- 316SS

Applications

- Liquids with suspended solids
- Chemical and Petrochemical industry
- Pulp and paper industry
- Mining, oil, gas and refineries
- High Viscosity Corrosive and Abrasive Liquids

Special Features

- Extended product life with no moving parts
- Lower susceptibility to erosion
- Wide Turndown ratio Repeatability of $\pm 0.2\%$
- Mounts in any position
- Bi-directional measurement possible
- Allows for wedge replacement due to wear or changes in flow

Model Types

- WXT - Wedge, X, Threaded Ends
- WXF - Wedge, X Flanged Ends
- WXW - Wedge, X, Wafer Ends
- WXV - Wedge, X, Victaulic Ends

Specifications

Line Size: 2" (casting with integral manifold), 3" (machined from barstock)

Head loss % of Differential: 25 to 60 percent

Basic Accuracy (% of Total):	<u>Line Size</u>	<u>Wet Calibrated</u>	<u>Uncalibrated</u>
	2" & 3"	+/- 0.50	+/- 3.00

Minimum pipe Reynolds number: Must be greater than 5000 for basic accuracy

Required Straight Piping: 10D upstream, 2D downstream

H/D Ratio: 0.2 to 0.7

Useful Service Life: Medium to Long depending on service

Service Functional Limits: Clear Liquids, Gas and Steam, Slurries, Suspended Solids, Viscous Liquids