FLOWSTREAM Wedge Meter

For Topside Flow Measurement

Flow Measurement Excellence

Widely recognized by the Oil, Gas & Petrochemical industries worldwide, Solartron ISA offers more than 45 years experience in the design and manufacture of Primary Differential Pressure flow meter devices.

Solartron ISA: Engineering a solution for the metering community.

Wedge Meter

Wedge Meters are used on many different process applications and conditions, especially for slurries, suspended solids or very viscous liquids. Line sizes available range from 25mm up to 800mm and greater.

Wedge Meter design provides a key cost saving benefit, as the profile is virtually immune to any wear or erosion, therefore with very little maintenance and inspection required.

Wedge Meters can be supplied to meet the requirements of your application. We offer a number of different designs to suit the needs of any pipe-work configuration, with different lengths, orientations and end connections available. Solartron ISA provides complete Engineering support from initial design and sizing concepts to manufactured final products.

Benefits

- Proven flow metering technology and robust design
- Accurate flow metering of slurries and high viscous liquids with suspended solids
- Wedge Meter profile is inherently robust with no maintenance and inspection required
- Low permanent pressure loss resulting in energy savings

Applications

- Liquids with Suspended solids
- Slurries
- High Viscosity Corrosive and Abrasive Liquids
- Bi-Directional Process Flow Measurement

Key Parameters

- Proven Technology
- Robust design
- Low Permanent Pressure Loss
- Flow Metering of Low Reynolds Numbers
- Accurate Flow Measurement
- Suitability for most process conditions

Standards

- ISA Standard Design
- ASME B31.3
- ISO9001
- PED 97/23/EC
FLOWSTREAM Wedge Meter

Specifications

Functional Specifications

Line Size
DN15 (1/2”) to DN800 (32”)
Larger lines sizes available on request

Pressure Ratings
Ranging from ANSI 150# to API 15K PSI

Types of Wedge Meters
Spark Eroded (Up to 4” Line Size),
Solid Welded (Line Size 6” to 10”),
Fabricated (Line Size 12” and Above)

End Connections
Flanged, Butt-Weld, Hub
Further connections are available on request

Types of Tappings
Flanged, Thread O’let / Socket O’let,
Remote Seals
Further types are available on request

Wedge Ratio
0.2 to 0.5
(Ratio of Wedge height to pipe diameter, determining the discharge coefficient)

Reynolds Number
≥500

Accuracy
Typically ±5% un-calibrated,
±1% calibrated

NDT Testing
Hydro-testing, Dye Penetrant, Radiography
Additional options:
Magnetic Particle, PMI, Gas and Water Calibrations
Further testing is available on request

Flow Turndown
Typically >10:1, depending on Transmitter configuration

Wedge Meter Material
Carbon Steel, Low Temperature Carbon Steel, Stainless Steel, Duplex,
Super Duplex, 6 Mo, Aluminum, Monel, Hastelloy, Inconel
Further materials are available on request