

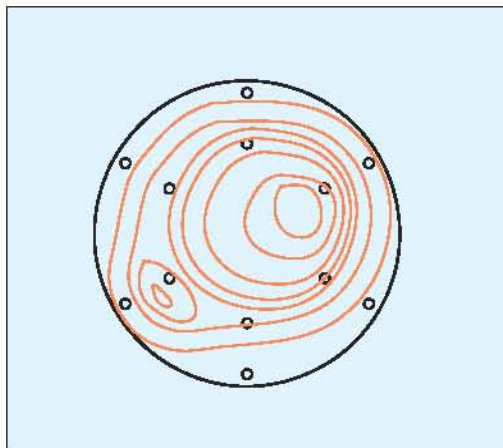
Model

MPA

Multi Point Averaging Flowmeter

Introduction

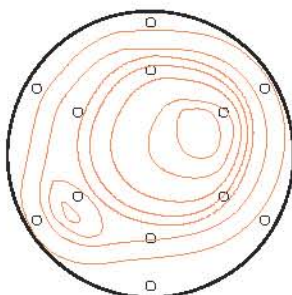
Multi-Point Averaging (MPA) Flowmeter is a new Differential Pressure type flowmeter that can be used in place of an Averaging Pitot Tube, Orifice or Venturi flowmeter. Pressure sensing holes of MPA are placed by Tchebyshef method across the entire cross-section of the pipe so that highly accurate flow measurement is achieved regardless of the approaching velocity distribution.



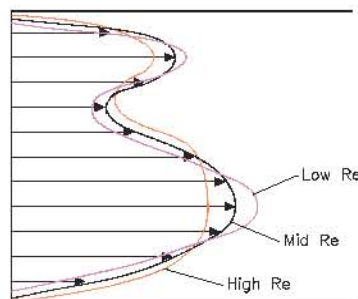
Features

- Significantly more accurate than Orifice, Venturi and Averaging Pitot Tubes.
- Accuracy of discharge coefficients (C_d) is $\pm 0.2\%$ of rate within 12:1 range.
- Can be used with clean liquid, gas or steam.
- Permanent pressure loss is much lower compared to Orifices.
- Highly resistant to seismic or mechanical vibration.
- Wafer style body makes it easy to install.

Principle



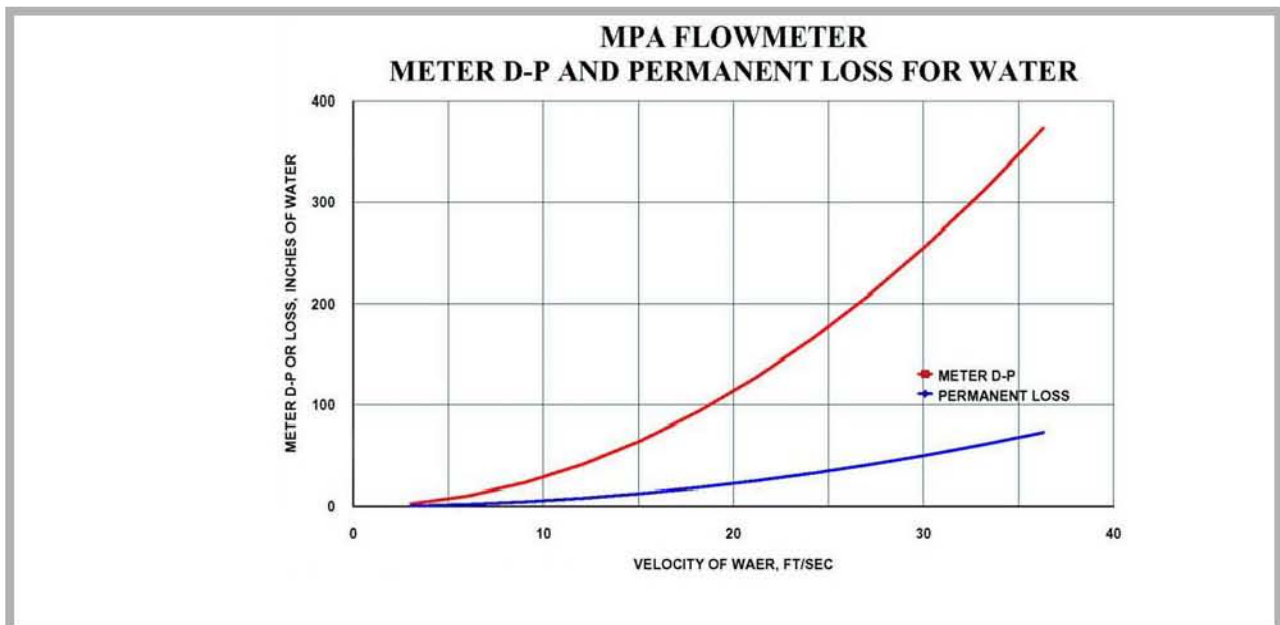
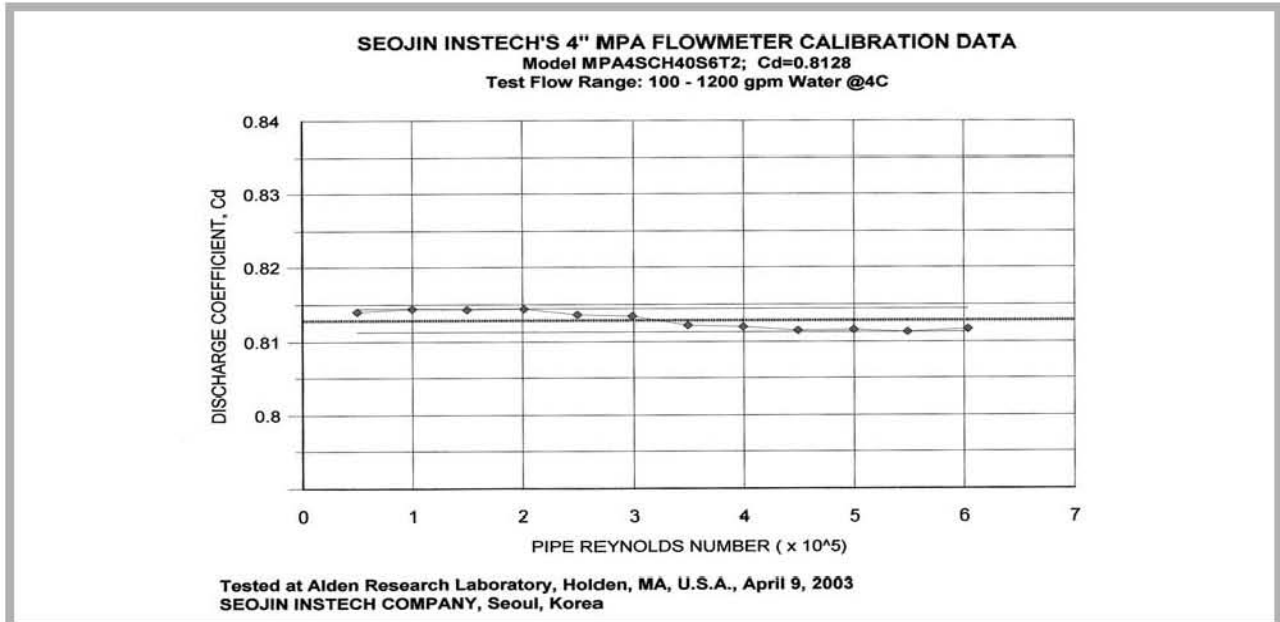
FRONT VIEW



VELOCITY PROFILE

The 12 pressure sensing holes placed widely across the entire cross-sectional area of the pipe responds correctly to any velocity distribution and naturally accommodate Reynolds Number Effect, and produce differential pressures that represent highly accurate average velocity.

Results of 4-inch MPA Calibration at ARL



Specifications

Model: MPA Flowmeter

Process: Clean liquid, gas or steam

Application pressure limits: 3,000 psig Max.

Application temperature limits: 600°C Max.

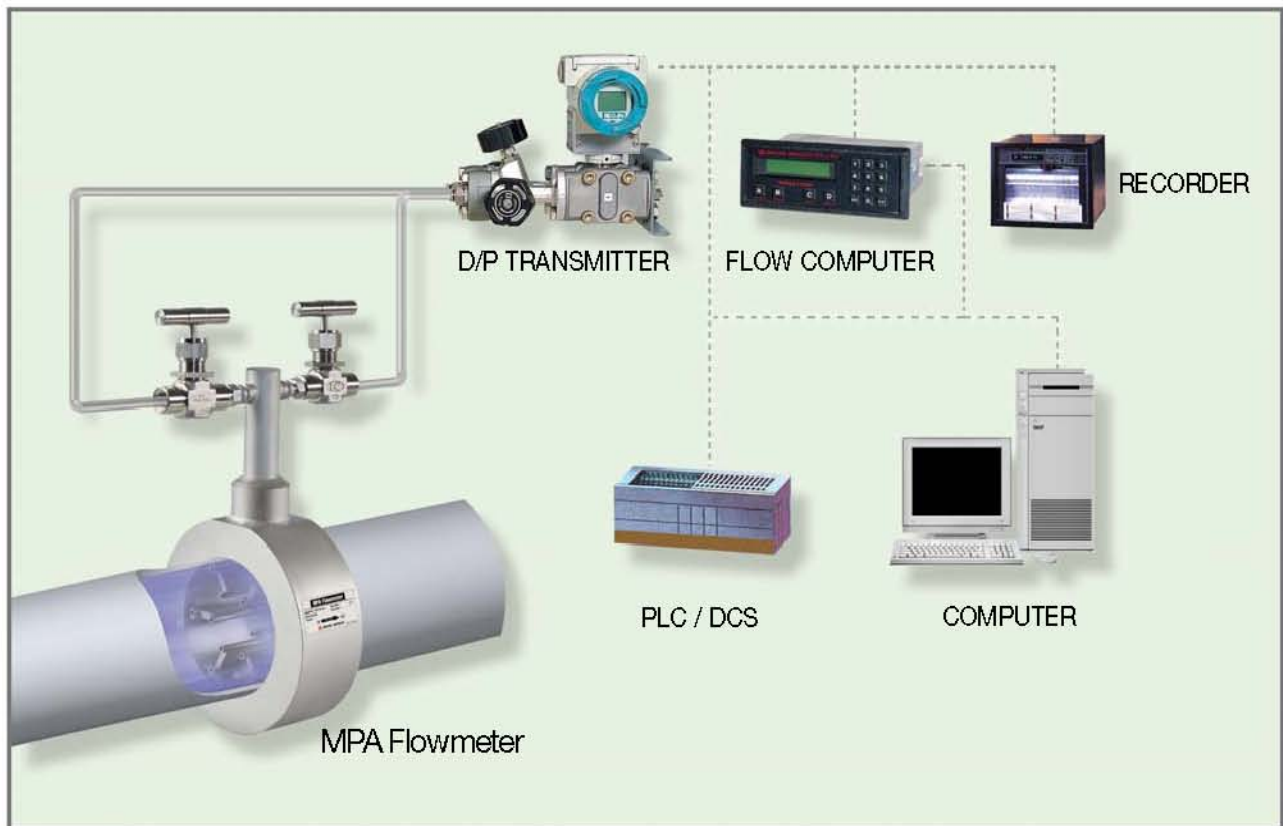
Accuracy: $\pm 0.2\%$ of rate

Turn down ratio : 12 : 1

Material: 316SS

Minimum measurable velocity: 0.7 m/sec (for water)

Complete Flow Loops



Ordering Informations

MPA Flowmeter

Please send your order inquiry with the following information:

- Type of fluid :
- Max. Flow rate :
- Min. Flow rate :
- Range of operating pressure:
- Range of operating temperature:
- Density :
- Viscosity :
- Pipe size and schedule:
- Flange type and rating: