FPD500 Series
DP flowmeters
Compact, rugged, simple and versatile
Each member of the Compact DP flowmeter family is offered for either volumetric or mass (corrected volume) flow, fully assembled, leak tested and configured before shipment.

**OriMaster**
Compact orifice meter offered in line sizes from DN25 to DN300 (1 to 12 in.) with optional removable orifice plate in sizes DN100 to DN300 (4 to 12 in.). Suitable for installation with flange rating up to PN100 (ANSI Cl. 600).

- Easy, low cost, accurate installation
  - Reduces installation cost by up to 50 percent
- Simplified sizing and selection
  - Only two beta ratios: 0.4, 0.65
- Enhanced accuracy
  - Alignment tool provided to eliminate errors due to incorrect installation
- Low cost maintenance
  - Removable orifice plate option for on-site maintenance, offering a low cost solution to process changes or wear/damage

**Flow element coefficient comparison chart**

WedgeMaster maintains performance at low values of Re.
WedgeMaster
Compact Wedge flowmeter in line sizes from DN25 to DN150 (1 to 6 in.); choice of 4 H/D ratios; rugged construction with wear-resistant metering element; multivariable or DP transmitter with optional PILD (Plugged Impulse Line Detection) and TTG (Through The Glass) technologies

- Reduces cost and footprint of process piping
  - Requires only 5D upstream and 2D downstream of straight pipe; can measure bi-directional flow
- Excellent long term stability
  - No critical surface dimensions to wear
  - Durable design and construction
- Wide flow and application range
  - Stable meter factor down to Re = 500
  - Extends operating flow range of element

IOMaster
Compact Integral Orifice meter in line sizes DN15, DN25 and DN40 (½, 1 and 1½ in.); choice of several beta ratios; process connections either threaded or via flanged pipe sections; multivariable or DP transmitter with optional PILD and TTG technologies

- Versatile metering for low flowrates and small pipelines
  - Available with or without upstream/downstream pipework
  - Wide choice of plate bores to suit application conditions
- Easy, low cost, accurate installation
  - ‘Right first time’ installation
- Low cost reconfiguration
  - Removable orifice plates for on site, low cost solutions to changes in process data or element wear/damage
PitoMaster
Compact averaging pitot meter in line sizes from DN100 to DN600 (4 to 24 in.); threaded, flanged and end-supported mountings; multivariable or DP transmitter with optional PILD and TTG technologies

- Low operating costs with small carbon footprint
  - Low profile design creates minimal pressure losses
  - Large savings in energy usage and CO₂ emissions
- Economical metering in larger pipe sizes
  - Low rate of cost increase with increasing pipe size
- Low cost, easy installation into existing pipelines
  - Simple one or two hole mounting
  - No need to cut pipe and weld in flanges

PitoMaster averages the velocity profile across the pipe
Compact DP
Benefits

Compact DP flowmeters offer many benefits that may not be found with other conventional flowmeter devices

- Sizing and coding configuration made easy via intuitive free software
- Greatly simplifies the procurement process
  - All the components are from one supplier under a single part number
  - Combines primary element, manifold, transmitter and optional temperature element in a single assembly
  - Reduces cost of procurement and order-progressing
  - Ensures application-matching of the transmitter with the primary DP device
- Simplifies installation and commissioning
  - Simple, compact one-piece assembly to install
  - No separate impulse lines
- Enhances reliability
  - Integral impulse lines enhance response
- Available with PILD (Plugged Impulse Line Detection) that can detect any potential blockage of impulse lines
- Eliminates multiple mechanical joints to reduce chances of leakage and fugitive emissions

Replace all this with one OriMaster meter
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