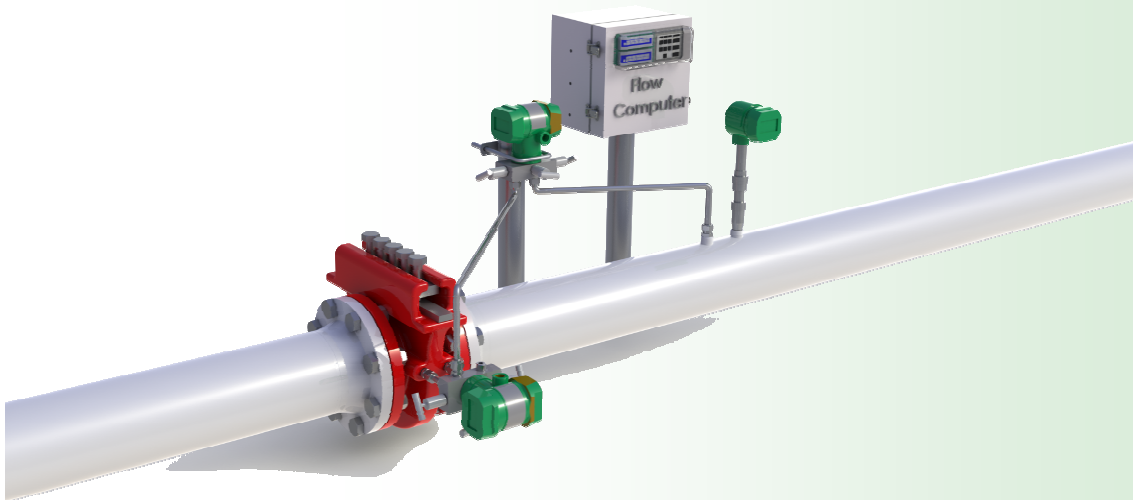


DP DIAGNOSTICS

MONITOR, VERIFY, AND TRUST YOUR DP METER

Orifice Plate Flow Meters - with Diagnostic Capabilities
The Most Advanced Orifice Meter System on the Market



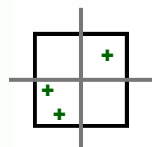
- DP Diagnostics Supply Diagnostic Capable Orifice Plate Meters
- The Most Widely Used Differential Pressure (DP) Meter
- Simple & Reliable
- No Moving Parts
- ISO / API Stated Uncertainty Up to 0.5%
- Accurate & Repeatable Flow Metering

DP Diagnostics Supplies Orifice Meters to All Industries

- Size: As stated by ISO 5167 (50mm / 2" ≤ D ≤ 1000mm / 40")
- Flanges: #150 - #2500
- Material: All standard materials available.
- Length: A standard orifice meter is approximately 5D long. A diagnostic ready orifice meter is approximately 12D long.
- DP Transmitter: Any DP transmitters may be used.
- Calibration Requirements: Meter and diagnostics performance are predictable from ISO / API. No calibration is required for standard installations.
- Installation Requirements: Orifice meters are installed according to the recommendations made by ISO / API.
- Performance: Orifice meters give a discharge coefficient performance of ±0.5% (an excepted industry standard). Turndowns of up to 8:1 without transmitter stacking.



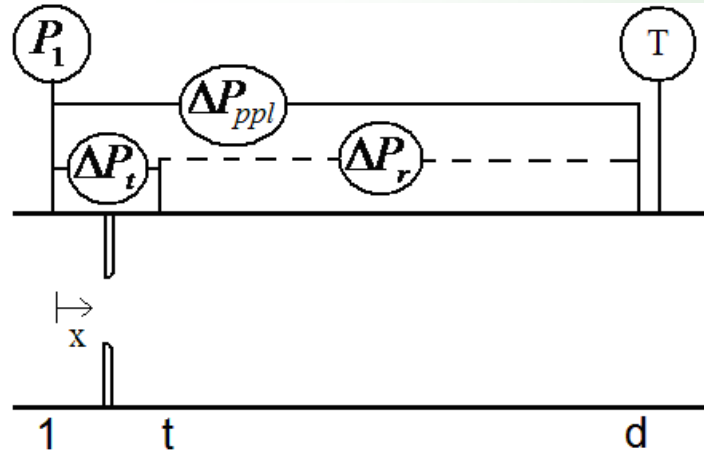
A Orifice Meter Installed with Diagnostics.



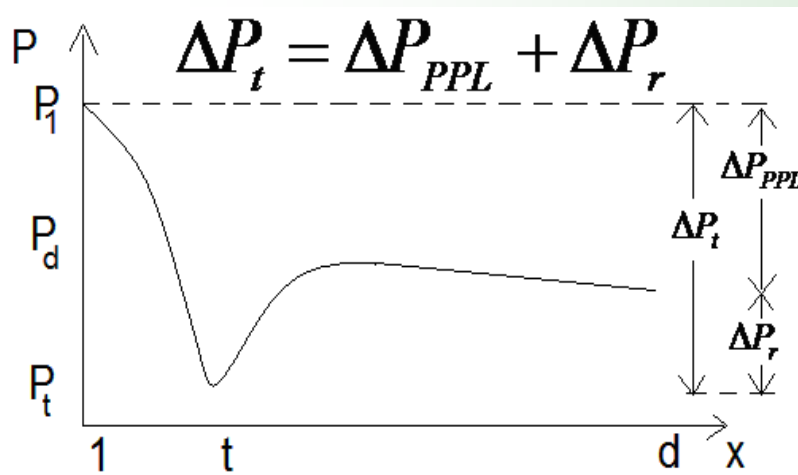
DP DIAGNOSTICS

MONITOR, VERIFY, AND TRUST YOUR DP METER

DP Diagnostics Supplies a **Unique**, Powerful, Industrially Proven, **Patent Pending** Diagnostics System

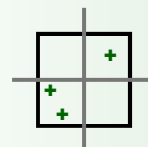


Orifice Meter with Optional Extra DP Transmitters for Diagnostic Capabilities



Pressure Field through the Orifice Meter

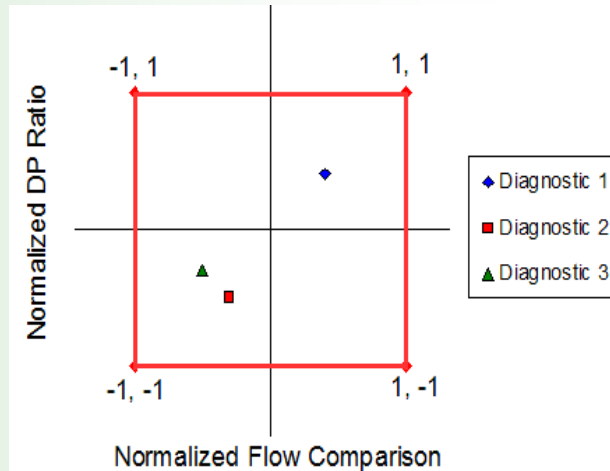
- A Downstream Pressure Tap Allows 3 DP's to be Read.
- The Pressure Field Through the Meter is Monitored.
- The Diagnostic System Multiplies the Meters Capability.
- 3 DP's are Compared to Assure Correct Meter Operation.
- A Simple Live Diagnostics Plot is Shown in the Control Room.



DP DIAGNOSTICS

MONITOR, VERIFY, AND TRUST YOUR DP METER

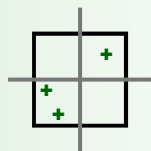
The Diagnostics Results are Represented as 3 Points and a Box.
If the Points Remain in the Box this Ensures Good Flow Measurement.



Orifice Meter Problems that Produce a Warning with Diagnostics Include:

1. Incorrect Inlet or Throat Diameter Keypad Entry.
2. Two-Phase Flow.
3. Excessive Flow Disturbance Upstream of the Meter.
4. Contamination Build-Up Through the Meter.
5. Blocked Impulse Lines.
6. Saturated & Drifting DP Transmitter.
7. A Buckled Plate
8. A Plate Installed Backwards.
9. A Worn or Damage Orifice Leading Edge.
10. Incorrectly Spanned DP Transmitter, etc..

DP Diagnostics can retrofit a diagnostic system to an existing 3rd party orifice meter if a downstream tap is supplied. Downstream pressure tapplings at >6D can be used due to the availability of a correction factor.



DP DIAGNOSTICS

MONITOR, VERIFY, AND TRUST YOUR DP METER

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