

SMARTLINE SMV 800 MULTIVARIABLE TRANSMITTER

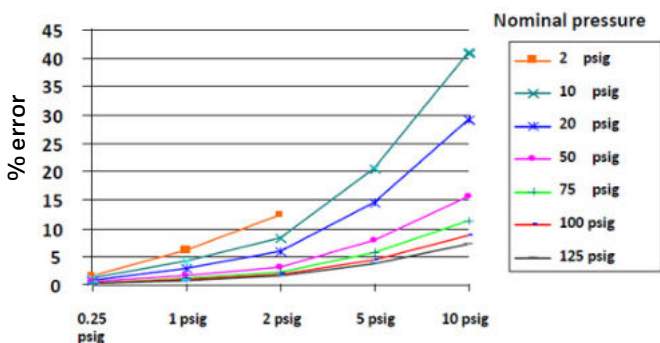
Optimizing energy



INDUSTRY CHALLENGE

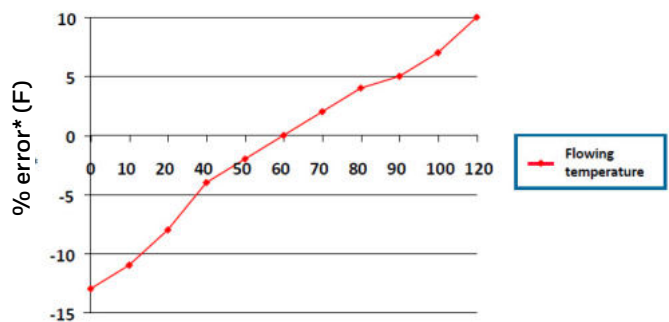
Flow measurements are affected by changes in process pressure and temperature, specifically compressible fluids like gases and steam. Variations in pressure and/or temperature induce significant error in flow measurement, rendering even most accurate DP transmitters inefficient for flow measurement.

Gas measurement % error if meters are **not pressure compensated**



Tolerance around nominal pressure

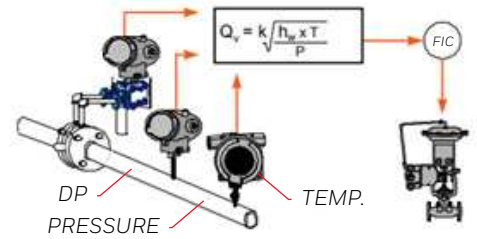
Gas measurement % error if meters are **not temperature compensated**



* - assumes 60 F reference design temperature

TRADITIONAL APPROACH

The traditional approach requires three separate transmitters for differential Pressure, static pressure, process temperatures and a computing unit on top of that to calculate compensated mass flow. Flow computing unit could be a Flow computer, RTU, PLC or DCS.



THE 'ENHANCED' FLOW APPROACH - SMARTLINE SMV800

The SmartLine SMV800 multivariable transmitter combines differential pressure, static pressure and process temperature measurement in one unit. With advanced microprocessor technology, it delivers dynamically compensated mass flow measurement for gases, steam, vapors and multi-phase fluids.



BENEFITS OF HONEYWELL SOLUTION

- Replace three devices with one, minimize process intrusions, improve safety
- Reduce installation hardware and labor cost
- Save number of channels on analog input card of the host (PLC/DCS) and additional complex engineering calculations.
- Reduce inventory cost and total cost of ownership
- Flexibility and ease of integration with different host systems.



SMV800 KEY FEATURES

- Flow accuracy of 0.6%
- Universal sensor inputs - RTDs & Thermocouples
- Low power consumption of upto 70mW
- Drop-in replacement for legacy installations
- High Galvanic isolation of 2000VDC for higher reliability
- Polarity insensitive electrical connections
- High Turndown ratio of up to 400:1
- Failsafe flow measurement
- Multi-screen graphical display
- External buttons for PV configuration
- Compensated flow with all protocols - HART/Modbus/DE

FLOW ALGORITHMS

- Orifice Plates (ASME MCF-3M, ISO 5167, AGA 3, GOST 8.586)
- Integral Orifice
- Small Bore Orifice (ASME MFC-14M)
- Conditional Orifice (ISO 5167-2003)
- Nozzles (ASME MCF-3M, ISO 5167, GOST 8.586)
- Venturi Tubes (ASME MFC-3M, ISO 5167, GOST)
- Averaging Pilot Tubes
- V-Cone®, Wafer Cone and Wedge

Minimize process intrusions; maximize safety and savings.

Discover the [SmartLine SMV800](#).

**APPLICATION
VALIDATION TOOL**

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**THE
FUTURE
IS
WHAT
WE
MAKE IT**

Honeywell