

NEW



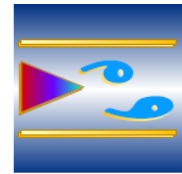
Multivariable Vortex Flow Meter

DVH

WAFER - Design



- **Sensor Design w/o sealing**
- **Fully welded sensor**
- **Integrated temperature and pressure measurement (optional)**
- **Measurement of mass and density possible**
- **High temperature version 400°C**
- **High pressure version up to 100 bar**
- **Energy monitoring ability**
- **Field configurable ranges, outputs and displays**
- **2-wire AND 4-wire power supply available**
- **Up to 3 Analog Outputs and 3 Alarms available**
- **HART protocol**
- **MODBUS communications**



The **Heinrichs'** DVH multivariable Vortex meters utilize three primary sensing elements

- a **vortex shedding velocity sensor,**
- an **RTD temperature sensor,**
- and a **solid-state pressure transducer**

to measure the mass flow rate of gases, liquids and steam.

Systems that use external process measurements may not provide adequate compensation for the fact that process conditions can change radically between the point of velocity measurement and the point where upstream or downstream pressure and temperature measurements are being made. Because the DVH multivariable flow meter measures all of these parameters in a single location, it delivers a more accurate process measurement.

Integrating multivariable output capability with a single line penetration also simplifies system complexity and helps reduce initial equipment cost, installation cost and maintenance costs.

DVH-V flow meter provides cost effective volumetric flow monitoring solution for most liquids

DVH-T incorporates temperature sensing to provide a compensated mass flow reading of saturated steam

DVH-P multivariable meter delivers mass flow, temperature, pressure and density readings from a single installed device.

**Available pipe sizes DN 15 to DN 100
1/2" to ANSI 4",**

Easy to install and commission

Field- configurable ranges, outputs and displays

HART protocol communications

ATEX / IEC EX / FM approvals

Model DVH-V

The Model DVH-V delivers a direct reading of volumetric flow rate-- generally the most cost-effective solution for liquid flow monitoring - in applications ranging from general water flows to hydrocarbon fuel flow measurement

Model DVH-T

The Model DVH-T integrates a precision 1000 Ohm platinum RTD temperature sensor that can be used to calculate and output a compensated mass reading. This device is typically used to measure flow rates of saturated steam.

Model DVH-P

The Model DVH-P offers you flow computer functionality in a compact field device.

This multivariable instrument incorporates temperature and pressure sensors to provide an instantaneous reading of compensated mass flow rate of gases, liquids and steam.

In addition to outputs for totalized mass and alarm settings, the field-configurable electronics deliver up to three analog 4-20 mA outputs of five process measurements, including volumetric flow rate, mass flow rate, pressure and density

Model DVH-M

The Model DVH-M Energy Monitoring option permits real-time calculation of energy consumption for a facility or process. The meter can be programmed to measure steam, hot water or chilled water. The Model DVH-P flow meter monitors one side of the process, either sent or return, and uses the input from a second separate temperature sensor on the opposite leg of the process to calculate the change in energy.

Selectable energy units include Btu, joules, calories, Watt-hours, Megawatt-hours and Horsepower-hours. The local or remote electronics indicate two temperatures, delta T, mass total and energy total.

(Not approved for custody transfer applications)