

# INSTRUMENT AND FLOW ELEMENT

## MEDIA COMPATIBILITY:

All gases and liquids compatible with 31 6L stainless steel and Hastelloy C22

## PROCESS CONNECTION:

- Insertable: 1/2" NPT for use with 2"-18" pipe
- Tube tee 1/4", 3/8" and 1/2" tubing

## ACCURACY:

±1% of reading, ±0.5% of full scale ±0.05 SFPS  
All calibrations on NIST traceable flow stands

## REPEATABILITY:

±0.5% of reading

## FLOW RANGE:

From 0 to 100 ft/sec velocity; flow range depends on pipe or tube tee area

## OPERATING PRESSURE:

Tube tee ePV™: 500 psig  
Insertable ePV™ with compression fitting:  
• 150 psig Teflon ferrule  
• 500 psig Stainless steel ferrule

## OPERATING TEMPERATURE:

All Models: -40°F to 250°F

## MATERIALS OF CONSTRUCTION:

(Wetted parts) 316L stainless steel with Hastelloy C-22 thermowells

## TRANSMITTER/ELECTRONICS

### ENCLOSURE:

NEMA 4X, anodized aluminum

### OPERATING TEMPERATURE:

-40°F to 160°F

### OUTPUT SIGNALS:

- 4-20 mA (500 Ω max. load) User scalable, general purpose, output proportional flow rate for trend monitoring
- RS232C Input/Output Connection
- 10 LED Array

### INPUT POWER:

24 Vdc (21.5 Vdc to 30 Vdc); maximum

## AGENCY APPROVALS

### INPUT POWER:

Class I, Division 2, Groups A, B, C & D  
Class II, Division 2, Groups E, F & G  
Class III, T4 @ Ta = 71°C Type 4X

NEMA ENCLOSURE: Nonincendive

# ePV™

TUBE TEE<sup>ePV</sup>



INSERTABLE<sup>ePV</sup>



# ELECTRONIC PACKING VENT MONITOR



## FOR COMPRESSOR PACKING CASE VENT FLOW ANALYSIS

ePV™ is a vent flow analysis tool specifically designed to monitor gas compressor packing cases. The ePV™ can be permanently mounted or used as a portable device to meet the EPA Greenhouse Gases Reporting Rule Subpart 'W' requirements for emissions monitoring.

The ePV™ utilizes proven thermal-dispersion flow measurement technology with equal mass sensing to achieve outstanding sensitivity and repeatability. The instrument's wetted parts are superior corrosion-resistant 316L stainless steel with Hastelloy-C sensor tips.

The sensor element has no moving parts to foul, clog, or maintain which ensures continuous reliability and no maintenance costs. There are no cavities, orifices or dead-legs to trap or contaminate samples which preserves sample integrity and faster system sampling times.

ePV™ electronics are packaged in a rugged, fully-sealed, aluminum housing which provides exceptional protection and long-life under all process conditions.

A 4-20mA output can be assigned to flow rate or temperature. The ePV™ unit can be programmed by the sensor push buttons or through the RS232 connection with the provided software.

## FEATURES

- No moving parts, non-clogging
- Handles gases and liquids
- For use in tubing & piping up to 6" diameter
- Superior low-flow sensing (0-100 FPS)
- Single configuration meets all flow ranges.

Outputs include both:

- 4-20 mA Analog Output
- Serial RS232C I/O
- 10 LED Array on sensor face
- No cavities or dead-legs
- Simple, screw-in installation
- Lowest-cost solution for end-users and system integrators.
- Self-contained unit
- Does not require calibration in the field.

# ePV™