

Temperature, Pressure & Flow rate Integrated Monitor-PT-500

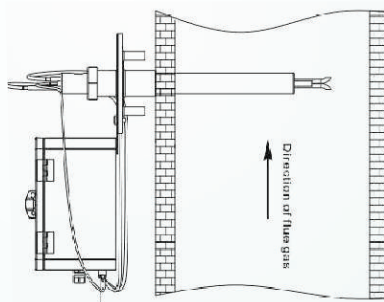
Overview

PTF temperature pressure & flow rate integrated monitor is a new generation of online monitoring instrument, which can monitor the temperature, pressure and flow rate of flue gas in the pipeline / stack under severe conditions. It is an important parameter to calculate the pollutant emission in the continuous monitoring system (CEMS). PTF has high precision micro differential pressure / static pressure sensor with equipped blowback unit. Compared with conventional integrated monitor, it is able to measure not only the value of purging pressure, aslo determine whether there is pressure or not. In addition, the lower limit of velocity can reach as low as 1 m/s. It also owns functions of auto-timing or manual pressure & velocity calibration. LCD screen displays all measuring data and signals, convenient for reading and debugging. It is convenient for transportation, installation and maintenance for its small size. Our Flow Meter has provision for Multipoint Single Pitot Tube and Multipoint Multiple Pitot Tube **Meeting CPCB Directions for Emission Monitoring.**

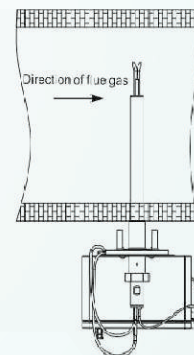


Principle

The PTF temperature pressure & flowrate integrated monitor is based on the principle of pitot differential pressure. When insert the pitot probe into the pipe .Total pressure hole face to the flow, Static pressure hole back to flow , The total pressure and static pressure are transferred to the pressure transmitter, and the flow rate is calculated according to the formula.



Vertical



Horizontal

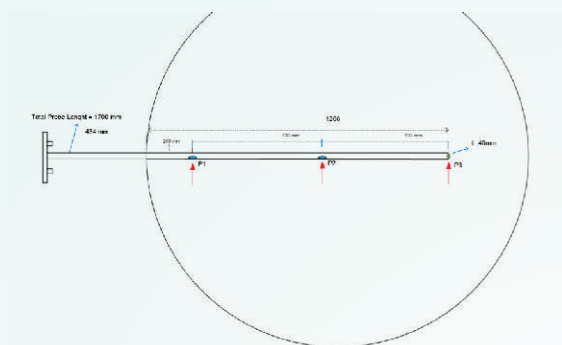
When taking differential pressure, differential pressure transmitter needs to measure total pressure and static pressure. There are two installation methods, vertical installation and Horizontal Installation, as following figure.

Features

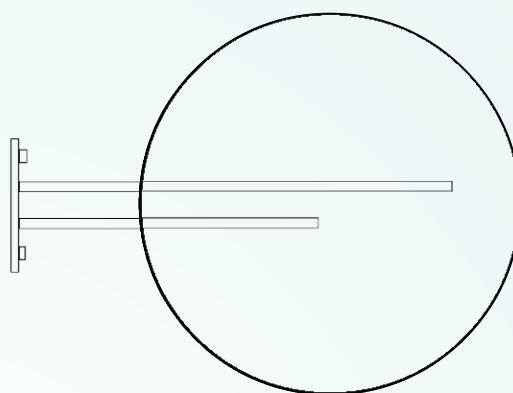
- 2m/s low flowrate measurement by pressure sensor of ultra-low range
- Settable parameters: timing purge, velocity field, pitot coefficient and etc
- Protection for over pressure to avoid damage to pressure sensor and lower operation cost
- Automatic zero calibration, the output signal strong
- Pitot tube anti-blocking & anticorrosive
- Better precision, smaller volume, pipeline design is more simple
- Measure the air pressure value

Multi - Point PTF Analyzer Solutions:

Option 1 :- Single pitot tube with three measuring points, get an average result from all of them.



Option 2 :- Double pitot tube with one measuring point on each, get measurement separately then calculate the average value (or output two data if client requires).



Specification

Range	0~40m/s; 0~15.5m/s (Optional)	Pressure limit of differential pressure transmitter	1.0MPa
Accuracy	±2%FS	Range of pressure transmitter	-5kPa ~ 5kPa . — 1 0kPa ~ +1 0Pa (customizable)
Principle	pitot	Pitot insert length	400-1700mm (Optional)
Output signal	3x 4-20m A, 1x232/485	Range of temperature transmitter	-0 Deg C - 300 Deg C (customizable)
Pitot material	316, 316L SS	Temperature range of flue gas	-40 Deg-C-300 Deg C (customizable)
Purge pressure	0.3MPa ~ 0.8MPa	Work temperature	-40 Deg C ~ 70 Deg C
Storage temperature	0-50 Deg c	Storage humidity	0 -85%RH

Ordering Code

PT	500	-	-----	-----	-----	-----	-----
Product Series		Probe Length 400 ---- 1700 mm (Customizable)		Range 01 - 0 - 40 m/s 02 - 0 - 15.5 m/s (Optional)		Fluorine Coating Y - Yes N - No	
		Probe Material S - SS316 L - SS316L		Communication 01 - RS232 02 - RS485			

Sample ordering for 600 mm length
PT 500-600/01/S/Y/02