ENLENIDA[®]

Product Application Reference Micro-Differential Pressure Transmitters

EMPT29 Micro-differential Pressure Transmitter



Summary

EMPT29 series of Micro-differential pressure transmitters introduce a new ceramic fulcrum lever technology. The transmitters deliver the accurate measuring signals in standard voltage or current outputs. They are the ideal collecting-and-measuring tools for the air-conditioning system of laboratory, clean room (air and non-corrosive gases).

EMPT29 Micro-differential pressure transmitter is designed to measure the difference between two sensed pressures to produce 0-10VDC proportional output. The differential pressure as sensed by the sensing ports is applied to both sides or a mass air flow sensor, directed across the surface of the sensing element. The output voltage varies in proportion to the differential temperature of sensing elements as a consequence of increasing / decreasing in the mass air flow through the inlet and outlet ports caused by sensed differential pressure.

Max pressure	500 mbar	
Accuracy	Linear output:	
	Zero point	
	0 ~ 0.1 mbar	
	Linearity inclusive	
	hysteresis 0 ~ 1 mbar	
Material	Seal: Viton, EPDM, NBR, Silicon, CR	1
Diaphragm	Two-component Silicon LSR	
Temperature influence	Medium and ambient temperature	
	Storage temperature	
	TC zero point with linear output	
	TC sensitivity	
Dynamic response	Suitable for dynamic measurements. Response time < 10ms	
	Load change <10Hz Imbar Fs :<0.2%Fs 3-50mbar Fs :<0.1%Fs	
Load impedance	3 - wire cable:	
	0 - 10 V > 10 kOhm	
	0 - 20 mA < 400 Ohm	
	4 - 20 mA < 400 Ohm	
	2-wire cable:	
	4 – 20 mA (supply voltage – 11V/0.02A) ohm	
Current consumption	3 - wire cable:	
	0 - 10 V < 10 mA	
	0 - 20mA < 30 mA	
	4 - 20mA < 30 mA	
	2 - wire cable: 4 - 20mA	
Shipping weight	200g	

Specifications