PDV-A

Minute Differential Pressure Transducer



For wind pressure measurement

- **Rated capacity: 1 to 7 kPa**
- **Voltage output (±5 V)**
- **Noise resistant**

Slight differential pressure sensors with a diffusional semiconductor strain gage formed on a silicon diaphragm, and a built-in amplifier that detects pressure as a variation in resistance and converts it into an electrical signal.

To Ensure Proper Usage

- Use general gas. Please contact us if using with other gases.
- Not drip-proof. Ensure that there is no condensation or freezing (Including at the pressure inlet).
- Water, etc. entering the LOW side will result in malfunction.

Specifications

Performance	
Rated Capacity	See table below.
Nonlinearity	Within ±0.5% RO (25GA: Within ±0.7% RO)
Hysteresis	Within ±0.3% RO
Rated Output	High side: +5±0.03 V
	Low side: Approx. -5 V
Sensitivity Difference due to Loading Directions	
	Within ±5% RO
Environmental Characteristics	
Safe Temperature	-20 to 70 ℃ (non-condensing.)
Safe Humidity	20 to 85% (At 0 to 50℃)
Compensated Temperature	0 to 50 ℃ (non-condensing.)
Temperature Effect on Zero	Within ±0.08% RO/℃ (10GA: Within ±0.1% RO/℃)
Temperature Effect on Output	Within ±0.08%/℃ (10GA: Within ±0.1%/℃)
Pressure Medium	General air (Non-corrosive gas)
Electrical Characteristics	
Load Resistance	5 kΩ or more
Power Supply	12 VDC (11 to 15 V), 30 mA or less
Cable	4-conductor (0.05 mm²) chloroprene shielded cable, 3 mm diameter by 3 m long, bared at the tip (Shield wire is not connected to the case.)
Mechanical Properties	
Safe Overloads	300% (10GA: 600%)
Maximum Line Pressure	100 kPa (positive pressure only)
Natural Frequencies	Approx. 1.7 kHz
Weight	Approx. 100 g (Excluding cable)
Posture Effect	Zero drift: Within ±0.3% RO (10GA: Within ±0.8% RO)
	when inclined by 90° referring to horizontal condition
Internal Volume	High side: Approx. 200 mm³(0.2 mL)
	Low side: Approx. 1000 mm³ (1 mL)
Pressure Connection	4.7 mm diameter barb fitting

Models

Model	Rated Capacity
PDV-10GA	1 kPa
PDV-25GA	2.5 kPa
PDV-50GA	5 kPa
PDV-70GA	7 kPa

Dimensions



