

### Technical overview

The PA267 is designed for overpressure, under pressure, and differential pressure measurements of air and other neutral gases. It is recommended that for applications where control is involved, the high accuracy version is used.

The measurement cell uses an advanced design of capacitive element to ensure excellent linearity and zero stability. The differential pressure to be measured induces a movement of the stainless steel diaphragm which is converted to an electronic output signal by a capacitance measurement and a unique electronic circuit.

- 2 accuracy levels to suit the application
- Available in ranges as low as 0-25Pa
- Overpressure safety margin 10 psi
- IP65 housing with 20mm cable entry and gland



### Specification:

Accuracy	Standard	High
Overall	± 1.00% fsd	± 0.40% fsd
Linearity	± 0.98% fsd	± 0.33% fsd
Hysteresis	± 0.20% fsd	± 0.20% fsd
Repeatability	± 0.10% fsd	± 0.10% fsd
Temperature error	< ±0.06% across range (@ 21°C)	
Overpressure	10 psi	
Rupture	10 psi	
Pressure connections	Push fit for 6mm ID tube	
Output:		
Current	4-20mA, load = 100 to 800Ω	
Voltage	0-10Vdc (o/p impedance <100kΩ)	
Power supply:		
Current output	Min. 9 + (0.02 x load resistance) Vdc Max. 30 + (0.004 x load resistance) Vdc	
Voltage output	9-30Vac or 12-40Vdc	
Speed of reaction:		
Without filter	20ms	
With filter	40ms	
Electrical connections:-	Screw terminal for 1.5mm <sup>2</sup> max. cable	
Diaphragm	Stainless steel	
Housing	Glass-filled Polycarbonate to UL94V-0	
Protection	IP65	
Operating temp.	-18°C to +65°C	
Dimensions	158 x 80 x 60mm max.	
Weight	255 g	
Country of origin	USA	

#### NB

When both ports are unconnected,  
There may be a small output.  
This is normal for this unit.

### Product Codes:

#### NB

For 0.4% accuracy add **-AH** suffix  
For voltage output add **-V** suffix

<b>PA267-25</b>	0 to 25Pa
<b>PA267-50</b>	0 to 50Pa
<b>PA267-100</b>	0 to 100Pa
<b>PA267-150</b>	0 to 150Pa
<b>PA267-300</b>	0 to 300Pa
<b>PA267-500</b>	0 to 500Pa
<b>PA267-1000</b>	0 to 1000Pa
<b>PA267-1600</b>	0 to 1600Pa
<b>PA267-2500</b>	0 to 2500Pa
<b>PA267-LCD</b>	Integral LCD option

A 'duct fixing kit' is supplied with the **PA267** consisting of 2m of 6mm ID plastic tubing, 2 x pilot tubes, 4 x fixing screws.

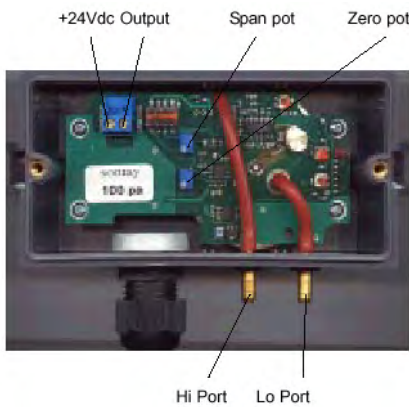
### Velocity Measurement:

The PA267 can be used for accurate air velocity measurement in applications such as variable fan speed control in VAV applications. If the BEMS control system is not capable of calculating the velocity from the differential pressure reading (performing a square root extraction) then an IO-VP/AV module can be used to provide a velocity output to the controller.

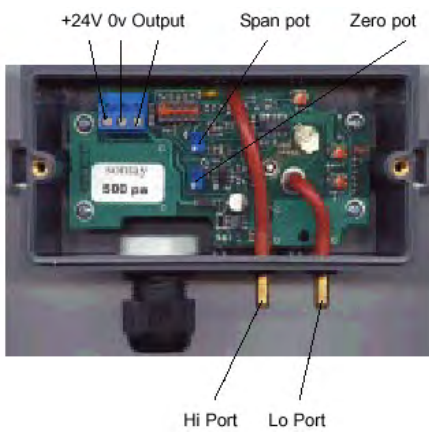
#### NB

The units are calibrated with the transducer in the vertical position. The zero adjustment may be used to correct any shift in output resulting in mounting the unit other than vertically.

**Fig. 1** 4-20mA output version



**Fig. 2** 0-10Vdc output version

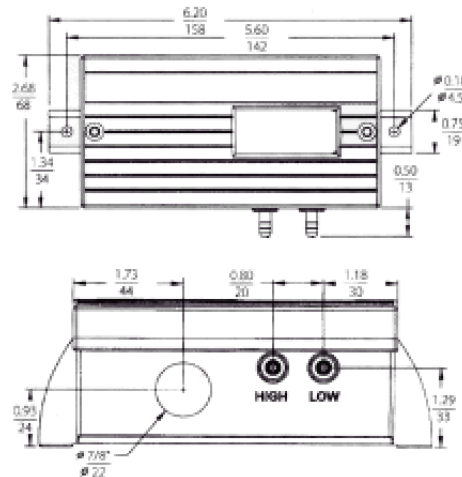


**Installation:**

- 1) Mount the unit on the duct or wall by drilling two holes at 142mm centres and fixing the unit with self-tapping pan head screws.
- 2) Push fit the pressure tubing onto the pressure ports on the unit. Ensure that the Hi and Lo ports have been correctly identified.
- 3a) PA267 4-20mA output version  
Wire to the unit with 2 core screened cable. Do not connect the screen at the sensor end, but ensure it is earthed at the controller end. **See Fig. 1**
- 3b) PA267-V 0-10Vdc output version  
Wire to the unit with 3 core screened cable. Do not connect the screen at the sensor end, but ensure it is earthed at the controller end.

**See Fig. 2**

**Dimensions:**



**Trend scaling factors:**

Current Output									
Range	25Pa	50Pa	100Pa	150Pa	300Pa	500Pa	1000Pa	1600Pa	2500Pa
Exponent	3	3	3	3	3	4	4	4	4
Trange	25	50	100	150	300	500	1000	1600	2500
Brange	-37.5	-75	-150	-225	-450	-750	-1500	-2400	-3750
Upper	25	50	100	150	300	500	1000	1600	2500
Lower	0	0	0	0	0	0	0	0	0

Voltage Output									
Range	25Pa	50Pa	100Pa	150Pa	300Pa	500Pa	1000Pa	1600Pa	2500Pa
Exponent	3	3	3	3	3	4	4	4	4
Trange	25	50	100	150	300	500	1000	1600	2500
Brange	-25	-50	-100	-150	-300	-500	-1000	-1600	-2500
Upper	25	50	100	150	300	500	1000	1600	2500
Lower	0	0	0	0	0	0	0	0	0