





# **Model 267**

Very Low Differential Pressure Transducer

## **Features**

- Optional 3.5 Digit LCD Display w/ 0.5% FS Accuracy
- · NEMA 4 Rated Housing
- · Optional Static Pressure Probe
- PG-9, PG-13 or Conduit Electrical Termination
- 24 VAC or 24 VDC Excitation
- CE & RoHS Compliant
- · Suitable for Harsh Environments
- · Optional LCD Display
- ±0.25%, 0.4%, 0.5%, 1% FS Accuracy

## **Applications**

- HVAC Systems
- · Energy Management Systems
- · Static Duct Pressure
- · Cleanroom Pressure
- Oven Pressurization & Furnace Draft Controls

Setra's Model 267 is the most rugged high accuracy, low differential pressure transducer on the market. It delivers accuracies of  $\pm 1\%$  FS (without display),  $\pm 0.5\%$  FS (with display), and optional  $\pm 0.25\%$  FS and  $\pm 0.4\%$  FS accuracies, and pressure ranges from 0.1" W.C. up to 100" W.C. The 267 is housed in a robust, NEMA 4 rated enclosure and has an optional static pressure probe reducing installation and material costs. The 267 is offered with an optional LCD display and a standard accuracy of  $\pm 0.5\%$  making it ideal for high accuracy Pharmaceutical applications.

### Customization is standard

The 267, unlike most competitors, offers many mechanical and electrical options that can be integrated into existing designs. The optional 0.25" diameter pressure probe is made of sturdy extruded aluminum and is designed with baffles to prevent velocity pressure errors which saves money and reduces time on the job site.

# Robust enclosure for difficult applications

The 267 is housed in a NEMA 4 rated housing and is built to withstand harsh environments. The 267 is available in both wall and duct mount providing the installer with flexible mounting options. The wall mount allows the sensor to be installed anywhere, whereas the duct probe configuration is designed to maximize space efficiency in difficult applications.

## The Setra sensor

The core technology of the 267 is the all stainless steel capacitive sensing element. Setra designs and manufactures all of their sensing elements resulting in full control over the process and quality of every single sensor. The welded dead-ended capacitive sensors requires minimal amplification and delivers excellent accuracy and longterm stability. Setra's technology has been used in over 8 million installations and has the highest field acceptance rate in the industry.



# Specifications

#### **Performance data**

	Standard	Optional
Accuracy RSS¹ (at constant temp)	±1.0% FS	±0.4% FS ±0.25% FS
Non-linearity, BFSL	±0.98% FS	±0.38% FS ±0.22% FS
Hysteresis	±0.10% FS	±0.10% FS ±0.10% FS
Non-repeatability	±0.05% FS	±0.05% FS ±0.05% FS
Position effect: consult factory		

#### **Physical description**

Case	IP65/NEMA 4 Plastic Glass-Filled Polycarbonate UL94V-O Case
Electrical connection	Screw Terminal Strip Inside of Case
Electrical Terminations	PG-9/PG13.5 Strain Relief, 1/2" Conduit Opening, or 9 Pin D-Sub Connector*
Zero and Span Adjustments	Accessible Inside of Case
Weight (approx.)	9.0 Ounces (255 grams) 9.5 Ounces (Duct Probe Assembly)

#### **Electrical data (Voltage)**

Circuit	3-Wir e (Exc, Gnd, Sig), Protected from Miswiring	
Excitation (for 0-5 VDC Output)	9 to 30 VAC /12 to 40 VDC	
Excitation (for 0-10 VDC Output)	11 to 30 VAC /13 to 40 VDC	
Output <sup>3</sup>	0 to 5 VDC <sup>5</sup> / 0 to 10 VDC <sup>5</sup>	

#### $^{\rm 1}\,{\rm RSS}$ of Non-Linearity , Hysteresis, and Non-Repeatability .

#### **Electrical data (current)**

Circuit	2-Wir e, Protected from Miswiring
Output <sup>7</sup>	4 to 20 mA <sup>4</sup>
Bidirectional Output at Zero	12 mA
Min. Loop Supply Voltage (VDC)	9 + 0.02 x (Resistance of Receiver plus line)
Max. Loop Supply Voltage (VDC)	30 + 0.004 x (Resistance of Receiver plus line)

#### Pressure media

Thermal Effects <sup>2,3</sup>	
Compensated Range °F (°C)	+40 to +150 (+5 to +65)
Zero/Span Shift %FS/°F (°C)	±0.033 (±0.06)
Maximum Line Pressure	10 PSI
Overpressure	Up to 10 PSI (Range Dependent)
Long-Term Stability	0.1% FS Total

#### **Environmental data**

Operating <sup>6</sup> Temperature °F (°C)	0 to +150 (-18 to +65)
Storage Temperature °F (°C)	-65 to +180 (-54 to +82)

<sup>&</sup>lt;sup>2</sup> Units calibrated at nominal 70°F. Maximum thermal error computed from this datum.

<sup>&</sup>lt;sup>3</sup> Calibrated into a 50K ohm load, operable into a 5000 ohm load or gr eater.

 $<sup>^4</sup>$  Zero output factory set to within  $\pm 0.16$  mA ( $\pm 0.08$  mA for optional accuracies). Span (F ull Scale) output factory set to within  $\pm 0.16$  mA ( $\pm 0.08$  mA for optional accuracy).

<sup>&</sup>lt;sup>5</sup>Zero output factory set to within ±50mV (±25 mV for optional accuracies).

Span (Full Scale) output factory set to within ±50mV (±25 mV for optional accuracies)

<sup>&</sup>lt;sup>6</sup> Operating temperature limits of the electronics only. Pressure media temperatures may be considerably higher.

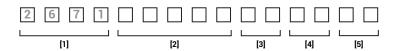
<sup>&</sup>lt;sup>7</sup>Calibrated at factory with a 24 VDC loop supply v oltage and a 250 ohm load.



# Ordering information

Example part number: 2671R25WD11G2CN

0 to .25 in. WC Unidirectional Range, 4-20 mA Output, 3/16" Barbed Brass Fitting, PG-9 Electrical Termination, 1% Accuracy with LCD Display



[1]	
Model	
2671	267

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Range <sup>1</sup> (unidirectional)				re range¹ ectional)
OR1WD	0 to 0.1 "W.C.		OR1WB	±0.1" WC
R25WD	0 to 0.25"W.C.		R25WB	±0.25" WC
OR5WD	0 to 0.5"W.C.		OR5WB	±0.5" WC
001WD	0 to 1"W.C.		001WB	±1" WC
1RSWD	0 to 1.5"W.C.		1RSWB	±1.5"W.C.
2R5WD	0 to 2.5"W.C.		2R5WB	±2.5"W.C.
005WD	0 to 5.0"W.C.		005WB	±5.0"W.C.
010WD	0 to 10"W.C.		010WB	±10"W.C.
025WD	0 to 25"W.C.		025WB	±25"W.C.
050WD	0 to 50"W.C		050WB	±50"W.C.
100WD	0 to 100"W.C.		100WB	±100"W.C.
025LD	0 to 25 Pa		025LB	±25 Pa
050LD	0 to 50 Pa		050LB	±50 Pa
100LD	0 to 100 Pa		100LB	±100 Pa
250LD	0 to 250 Pa		250LB	±250 Pa
500LD	0 to 500 Pa		500LB	±500 Pa
10CLD	0 to 1000 Pa		10CLB	±1000 Pa
25CLD	0 to 2500 Pa		25CLB	±2500 Pa
40CLD	0 to 4000 Pa		40CLB	±4000 Pa
70CLD	0 to 7000 Pa		70CLB	±7000 Pa

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Output		
11	4-20 mA	
2D	0-5 VDC	
2E	0-5 VDC	

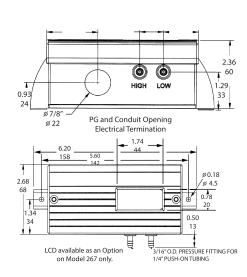
Pressure Fitting/Elec. Termination		
3/	16" Barbed Brass Fitting	
G1	PG-13.5 Strain Relief	
G2	PG9 Strain Relief	
D91	9 pin D-Sub Conn.	
A1	1/2" Conduit Opening	
1/4"NPTF Brass Fitting		
1K	PG-9 Strain Relief	
2K	PG-13.5 Strain Relief	
9К	9 Pin D-Sub Conn.	
AK	1/2" Conduit Opening	
	Static Duct Probe	
1P	1/2" Conduit Opening	
2P	PG-13.5 Strain Relief	
9P	9 Pin D-Sub Conn	
AP	1/2" Conduit Opening	

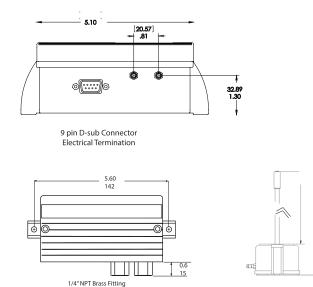
[4]

	[5]			
	Accuracy (Full Scale)			
CN	±1% FS with no LCD Display			
CD	±1% FS with LCD Display			
EN	±0.4% FS* with no LCD Display			
FN	±0.25% FS* with no LCD Display			
GN	±1% FS* with no LCD Display			
HD	±0.5% FS* with LDC Display			
ED	±0.4% FS* with LDC Display			
FD	±0.25% FS* with LDC Display			

\*Includes Cal. Cert

## **Dimensions**





Static Duct Probe



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