

# Model 267 Very Low Differential Pressure Transducer

Setra's Model 267 is the most rugged high accuracy, low differential pressure transducer on the market. It delivers accuracies of  $\pm 0.25\%$ , 0.4%, 0.5% and  $\pm 1\%$  FS 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.



- ±0.25%, 0.4%, 0.5%, 1% FS Accuracy
- Suitable for Harsh Environments
- Optional LCD Display

#### Model 267 Features:

- 0.1" W.C. up to 100" W.C. Pressure Ranges
- Optional 3.5 Digit LCD Display w/ 0.5% FS Accuracy
- NEMA 4 Rated Housing
- PG-9, PG-13 or Conduit Electrical Termination
- Integral Static Pressure Probe
- 24 VAC or 24 VDC Excitation
- Meets CE Conformance Standards

#### **Applications:**

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

## Model 267 Very Low Differential Pressure Transducer

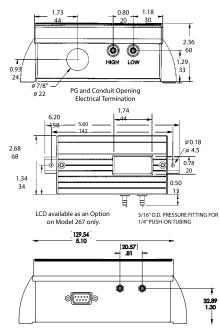


## **ORDERING INFORMATION**

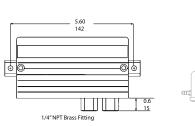
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Model	Range Output							Pressure Fitting/Elec. Termination		Accuracy (Full Scale)				
2671 = 267	Unidirectional		Bid	Bidirectional		Unidirectional		Bidirectional		4-20 mA	3/16" Barbed Brass Fitting		CN	$\pm$ 1% FS with no LCD Display
	OR1WD	0 to 0.1 "W.C.	OR1WB	±0.1″W.C.	025LD	0 to 25 Pa	025LB	±25 Pa	2D	0-5 VDC	G1	PG-13.5 Strain Relief	EN	±0.4% FS* with no LCD Display
	R25WD	0 to 0.25"W.C.	R25WB	±0.25"W.C.	050LD	0 to 50 Pa	050LB	±50 Pa	2E	0-10 VDC	G2	PG9 Strain Relief	FN	$\pm 0.25\%$ FS* with no LCD Display
	0R5WD	0 to 0.5"W.C.	OR5WB	±0.5″W.C.	100LD	0 to 100 Pa	100LB	±100 Pa			D91	9 pin D-Sub Conn.	GN	$\pm 1\%\text{FS*}$ with no LCD Display
	001WD	0 to 1"W.C.	001WB	±1.0″W.C.	250LD	0 to 250 Pa	250LB	±250 Pa			A1	1/2" Conduit Opening	HD	$\pm 0.5\%$ FS* with LDC Display
	1RSWD	0 to 1.5"W.C.	1RSWB	±1.5″W.C.	500LD	0 to 500 Pa	500LB	±500 Pa			1/4"NPTF Brass Fitting		ED	$\pm 0.4\%$ FS* with LDC Display
	2R5WD	0 to 2.5"W.C.	2R5WB	±2.5″W.C.	10CLD	0 to 1000 Pa	10CLB	±1000 Pa			1K	PG-9 Strain Relief	FD	$\pm 0.25\%\text{FS*}$ with LDC Display
	005WD	0 to 5.0"W.C.	005WB	±5.0″W.C.	25CLD	0 to 2500 Pa	25CLB	±2500 Pa			2K	PG-13.5 Strain Relief		*includes Cal Cert.
	010WD	0 to 10"W.C.	010WB	±10″W.C.	40CLD	0 to 4000 Pa	40CLB	±4000 Pa			9K	9 Pin D-Sub Conn.		
	025WD	0 to 25"W.C.	025WB	±25″W.C.	70CLD	0 to 7000 Pa	70CLB	±7000 Pa			AK	1/2" Conduit Opening		
	050WD	0 to 50"W.C	050WB	±50″W.C.							Static D	uct Probe		
	100WD	0 to 100"W.C.	100WB	±100"W.C.							1P	PG-9 Strain Relief		
					_						2P	PG-13.5 Strain Relief		
											9P	9 Pin D-Sub Conn		

Ordering Example: Part No. 2671R25WD11G2CN for a 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

### DIMENSIONS



9 pin D-sub Connector Electrical Termination





9.45 240 **GENERAL SPECIFICATIONS** 

Performance Data	1			Physical Description					
	Standard	Optional		Case	IP65/NEMA 4 Plastic Glass-Filled Polycarbonate UL94V-O Case				
Accuracy RSS <sup>1</sup> (at constant temp)	±1.0% FS	±0.4% FS ±0.25% FS		Electrical Connection	Screw Terminal Strip Inside of Case				
Non-Linearity, BFSL	±0.98% FS	±0.38% FS	±0.22% FS	Electrical Terminations	PG-9/PG13.5 Strain Relief, 1/2" Conduit Opening, or 9 Pin D-Sub Connector*				
Hysteresis	±0.10% FS	±0.10% FS ±0.10%		Zero and Span Adjustments	Accessible Inside of Case				
Non-Repeatability	±0.05% FS	±0.05% FS	±0.05% FS	Weight (approx.)	9.0 Ounces (255 grams) 9.5 Ounces (Duct Probe Assembly)				
Position Effect: Consult factory		7		Electrical Data (Current)					
Pressure Media				Circuit	2-Wire, Protected from Miswiring				
Thermal Effects <sup>2,3</sup>				Output <sup>7</sup>	4 to 20 mA4				
Compensated Range °F (°C)	+40 to +150	) (+5 to +65)		Bidirectional Output at Zero	12 mA				
Zero/Span Shift %FS/°F (°C)	±0.033 (±0.	06)		Min. Loop Supply Voltage (VDC)	9 + 0.02 x (Resistance of Receiver plus line)				
Maximum Line Pressure	10 PSI			Max. Loop Supply Voltage (VDC)	30 + 0.004 x (Resistance of Receiver plus line)				
Overpressure	Up to 10 PSI	(Range Depend	dant)	Electrical Data (Voltage)					
Long-Term Stability 0.1% FS Total				Circuit	3-Wire (Exc, Gnd, Sig), Protected from Miswi				
Environmental Da	ita			Excitation (for 0-5 VDC Output)	9 to 30 VAC /12 to 40 VDC				
Operating <sup>6</sup> Temperature °F (°C)	0 to +150 (-	18 to +65)		Excitation (for 0-10 VDC Output)	11 to 30 VAC /13 to 40 VDC				
Storage Temperature °F (°C)	-65 to +180	(-54 to +82)		Output <sup>3</sup>	0 to 5 VDC <sup>5</sup> / 0 to 10 VDC <sup>5</sup>				
0				<ol> <li><sup>1</sup> RSS of Non-Linearity, Hysteresis, and Non-Repeatability.</li> <li><sup>2</sup> Units calibrated at nominal 70° F. Maximum thermal error computed from this datum.</li> <li><sup>3</sup> Calibrated into a 50K ohm load, operable into a 5000 ohm load or greater.</li> <li><sup>4</sup> Tern ontunt factors set to within +0 16 mÅ (+0 08 mÅ for ontional accuracies). Snan</li> </ol>					

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1/2" Conduit Opening

<sup>3</sup> Calibrated into a 50K ohm load, operable into a 5000 ohm load or greatter.
<sup>4</sup> Zero output factory set to within ±0.16 mA (±0.08 mA for optional accuracies). Span (Full Scale) output factory set to within ±0.16 mA (±0.08mA for optional accuracy).
<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).
Span (Full Scale) output factory set to within ±50mV (±25 mV for optional accuracies).
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6 Operating temperature limits of the electronics only. Pressure media temperatures may be considerably higher.

<sup>7</sup> Calibrated at factory with a 24 VDC loop supply voltage and a 250 ohm load.