

# Model 264

## Low Differential Pressure Transducer

### Features

- Industry standard for very low differential pressure
- $\pm 0.25\%$ ,  $\pm 0.4\%$ ,  $\pm 1\%$  FS accuracy
- 3 year unconditional warranty
- Up to 10 PSI overpressure (range dependent)
- Installation time minimized w/ mounting options
- Reverse wiring protection
- Internal regulation permits use with unregulated DC power supplies
- Fire retardant case (UL 94 V-0 approved)
- CE & RoHS compliant

### Applications

- HVAC/R systems
- Room pressurization for critical environments
- Energy management systems
- Variable air volume and fan control (VAV)
- Environmental pollution control
- Lab & fume hood control

With millions of sensors installed world wide, Setra's 264 is the "standard" for low differential pressure measurement in HVAC building automation. The 264 very low differential pressure transducer uses a dead-ended stainless steel welded capacitive sensing element that requires minimal amplification and delivers excellent accuracy and longterm stability in critical installations. The 264 has a 3 year, unconditional warranty, giving the end-user peace of mind well beyond the initial commissioning phase and guarantees performance well after the BAS warranty. The 264 utilizes a robust design that offers brass barbed fittings, and an optional conduit cover for easy and consistent installation.

### The industry standard

The 264 has been a consistent and trusted HVAC sensor for over two decades. The reputation of reliability and quality with exceptional delivery time has helped the 264 remain the trusted choice for any low differential pressure applications.

### Convenient installation

The 264 is available in both a wall and conduit versions providing the installer with flexible mounting options. The base mount allows the sensor to be installed anywhere, allowing for a simple installation.

### The Setra sensor

The core technology of the 264 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

<b>Accuracy RSS<sup>1</sup> (at constant temp)</b>	±1.0% FS (standard); ±0.4% FS, ±0.25% FS (optional)
<b>Non-linearity, BFSL</b>	±0.96% FS (standard); ±0.38% FS, ±0.22% FS (optional)
<b>Hysteresis</b>	0.10% FS

### Thermal effects<sup>2</sup>

<b>Compensated range °F (°C)</b>	0 to +150 (-18 to +65)
<b>Zero shift %FS/100°F(50°C)</b>	±0.033 (±0.06)
<b>Span shift %FS/100°F(50°C)</b>	±0.033 (±0.06)

<b>Max. line pressure</b>	10 PSI
<b>Overpressure</b>	Up to 10 PSI (range dependent)
<b>Long term stability</b>	0.5% FS/YR

### Environmental data

<b>Operating temperature °F (°C)<sup>3</sup></b>	0 to +175 (-18 to +79)
<b>Storage temperature °F (°C)</b>	-65 to +250 (-54 to +121)

### Position effect<sup>4</sup>

Range	Zero offset (%FS/G)
0.1" W.C.	2.3
0.25" W.C.	1
0.5" W.C.	0.5
1.0" W.C.	0.3
2.5" W.C.	0.2
10" W.C.	0.15

<sup>1</sup> RSS of Non-Linearity, Hysteresis, and Non-Repeatability.

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

<sup>3</sup> Operating temperature limits of the electronics only. Pressure media temperatures may be considerably higher.

<sup>4</sup> Unit is factory calibrated at 0g effect in the vertical position.

<sup>5</sup> Calibrated into a 50K ohm load, operable into a 5000 ohm load or greater.

<sup>6</sup> Zero output factory set to within ±50mV (±25 mV for optional accuracies).

### Physical description

<b>Case</b>	Fire-retardant glass filled polyester (UL 94 V-O Approved)
<b>Electrical Connection</b>	Screw terminal strip
<b>Mounting</b>	4 screw holes on removable zinc plated steel base (designed for 2.75" snap track)
<b>Pressure Fittings</b>	3/16" O.D. barbed brass for 1/4" push on tubing
<b>Zero and Span Adjustments</b>	Accessible on top of case
<b>Weight (approx.)</b>	10 Ounces

### Electrical data (voltage)

<b>Circuit</b>	3-Wire (Com, Out, Exc)
<b>Excitation/output<sup>5</sup></b>	9 to 30 VDC / 0 to 5 VDC <sup>6,7</sup>
<b>Output impedance</b>	100 ohms
<b>Bidirectional output at zero pressure</b>	2.5 VDC <sup>6,7</sup>

### Electrical data (current)

<b>Circuit</b>	2-wire
<b>Output<sup>8</sup></b>	4 to 20 mA <sup>9,10</sup>
<b>External load</b>	0 to 800 ohms
<b>Min. loop supply voltage (VDC)</b>	9 + 0.02 x (resistance of receiver plus line)
<b>Max. loop supply voltage (VDC)</b>	30 + 0.004 x (resistance of receiver plus line)
<b>Bidirectional output at zero pressure</b>	12 mA <sup>9,10</sup>

### Pressure media

Clean air or similar non-conducting gases.

<sup>7</sup> Span (Full Scale) output factory set to within ±50mV. (±25 mV for optional accuracies).

<sup>8</sup> Calibrated at factory with a 24 VDC loop supply voltage and a 250 ohm load.

<sup>9</sup> Zero output factory set to within ±0.16mA (±0.08 mA for optional accuracies).

<sup>10</sup> Span (Full Scale) output factory set to within ±0.16mA (±0.08 mA for optional accuracies).

Specifications subject to change without notice.

Ordering information

Example part number: 26412R5WD11T1C; Model 264, 0 to 2.5 in. W.C. Range, 4 to 20 mA Output, Terminal Strip Electrical Connection, and ±1% Accuracy:

2

6

4

1

[1]

[2]

[3]

[4]

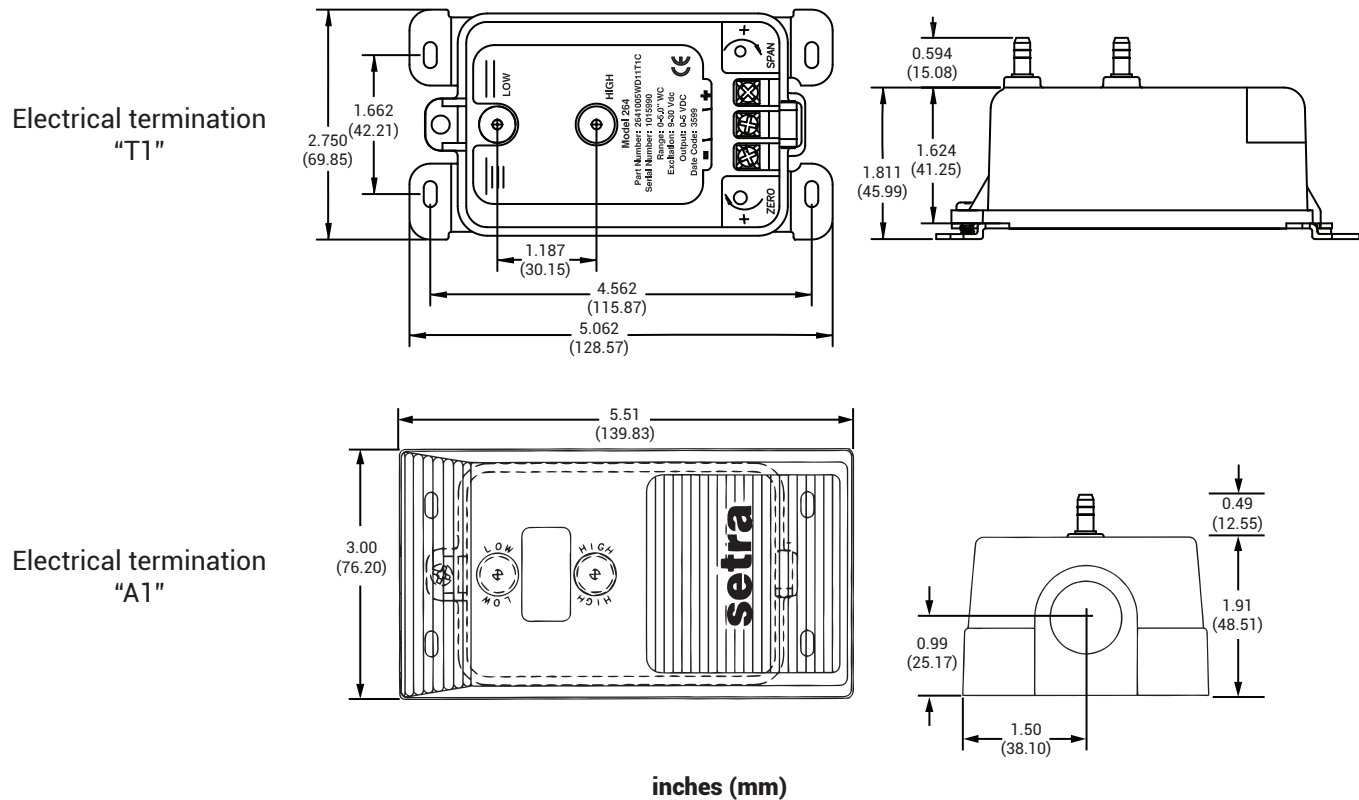
[5]

[1]	[2]	[2]	[3]	[4]	[5]
<b>Model</b>	<b>Unidirectional ranges</b>	<b>Bidirectional ranges</b>	<b>Output</b>	<b>Electrical termination</b>	<b>Accuracy<sup>1</sup></b>
<b>2641</b> Model 264	<b>0R1WD</b> 0 to 0.1" W.C.	<b>R05WB</b> ±0.05" W.C.	<b>11</b> 4 to 20 mA	<b>T1</b> Terminal strip	<b>C</b> ±1% FS
	<b>R25WD</b> 0 to 0.25" W.C.	<b>0R1WB</b> ±0.1" W.C.	<b>2D</b> 0 to 5 VDC	<b>A1</b> 1/2" conduit enc.	<b>E</b> ±0.4% FS
	<b>0R5WD</b> 0 to 0.5" W.C.	<b>R25WB</b> ±0.25" W.C.			<b>F</b> ±0.25% FS
	<b>001WD</b> 0 to 1" W.C.	<b>0R5WB</b> ±0.5" W.C.			<b>G</b> ±1% FS
	<b>1R5WD</b> 0 to 1.5" W.C.	<b>001WB</b> ±1" W.C.			
	<b>2R5WD</b> 0 to 2.5" W.C.	<b>1R5WB</b> ±1.5" W.C.			
	<b>003WD</b> 0 to 3" W.C.	<b>2R5WB</b> ±2.5" W.C.			
	<b>005WD</b> 0 to 5" W.C.	<b>005WB</b> ±5" W.C.			
	<b>010WD</b> 0 to 10" W.C.	<b>7R5WB</b> ±7.5" W.C.			
	<b>015WD</b> 0 to 15" W.C.	<b>010WB</b> ±10" W.C.			
	<b>025WD</b> 0 to 25" W.C.	<b>025WB</b> ±25" W.C.			
	<b>050WD</b> 0 to 50" W.C.	<b>050WB</b> ±50" W.C.			
	<b>100WD</b> 0 to 100" W.C.	<b>025LB</b> ±25 Pa			
	<b>025LD</b> 0 to 25 Pa	<b>050LB</b> ±50 Pa			
	<b>050LD</b> 0 to 50 Pa	<b>100LB</b> ±100 Pa			
	<b>100LD</b> 0 to 100 Pa	<b>250LB</b> ±250 Pa			
	<b>250LD</b> 0 to 250 Pa	<b>500LB</b> ±500 Pa			
	<b>500LD</b> 0 to 500 Pa	<b>10CLB</b> ±1000 Pa			
	<b>10CLD</b> 0 to 1000 Pa				

<sup>1</sup> Optional accuracy codes E, F, G, include calibration certificate.

Contact Setra for versions not shown here.

Dimensions





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