

# Model 206

## Industrial Pressure Transducer

The Model 206 pressure sensor is designed for Industrial and OEM customers who require high performance, reliability and versatility at an affordable price. It offers exceptional  $\pm 0.13\%$  FS accuracy for pressure ranges as low as 25 PSI up to 10,000 PSI to meet a multitude of demanding applications. The Model 206 features all stainless steel wetted materials and offers many pressure and electrical connections to satisfy challenging installation requirements. The Model 206 also features field accessible zero and span potentiometers allowing the unit to be calibrated in the field.

### Rugged Stainless Steel Design

The Model 206's rugged stainless steel design is built to withstand the rigors of the most difficult industrial applications. The unit is designed to meet NEMA 4 and IP65 environmental ratings, preventing unwanted moisture ingress.

### High Performance at an Affordable Price

The Model 206's capacitive sensor design offers Test & Measurement grade accuracy at a low price point. The sensor comes standard with  $\pm 0.13\%$  FS accuracy in ranges from 25 PSI to 10,000 PSI, exceeding most competitive products.

### Flexibility & Serviceability

The transducer's pressure and electrical fittings cover many installation configurations, allowing it to fit into most applications. The Model 206 is equipped with zero and span potentiometers, allowing the user to maintain the high performance over the life of the sensor.



- High Accuracy Sensor
- Rugged Design Withstands High Shock & Vibration
- Configurable Design

### Model 206 Features:

- User Accessible Zero/Span
- Exceptional EMI/RFI
- Absolute Pressure Option
- Long-Term Stability: <0.5%/Year
- Reverse Wire Protection
- Calibration NIST Traceable
- Wide Operating Voltage 12 VDC to 28 VDC
- CE & RoHS Compliant

### Applications:

- Industrial OEM Equipment
- Hydraulic Systems
- Compressor Control
- HVAC/R Equipment
- Industrial Engines
- Tank Level

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## Industrial Pressure Transducer



### ORDERING INFORMATION

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Model	Pressure Range		Pressure Type		Fitting		Output		Termination		Accuracy		Options <sup>2</sup>			
2061= Model 206	025P	0 to 25 PSI	1R6B	0 to 1.6 Bar	G	Gauge	2M	1/4" NPT Ext.	11	4 to 20 mA	02	2 ft Cable	8	±0.13% FS	NN	None
	050P	0 to 50 PSI	004B	0 to 4 Bar	C	Compound	1M	1/8" NPT Ext.	22	0.1 - 5.1 VDC	06	6 ft Cable			C	11 Point Cal Cert
	100P	0 to 100 PSI	006B	0 to 6 Bar	A	Absolute	J7	7/16" SAE	27	1 to 5 VDC	10	10 ft Cable			D	Mate with Datum
	200P	0 to 200 PSI	010B	0 to 10 Bar			2F	1/4" NPT Int.	28	1 to 6 VDC	25	25 ft Cable			G	Mating Hirschmann Con.
	250P	0 to 250 PSI	016B	0 to 16 Bar							XX	Special Cable Length (0-25')			L	Etched SS Tags
	500P	0 to 500 PSI	025B	0 to 25 Bar											Y	Clean For Oxygen
	10CP	0 to 1,000 PSI	040B	0 to 40 Bar							H1	Hirschmann				
	30CP	0 to 3,000 PSI	060B	0 to 60 Bar							A3	1/2" Conduit w/ 2' Cable				
	50CP	0 to 5,000 PSI	100B	0 to 100 Bar							AD	1/2" Conduit w/ 6' Cable				
	10KP <sup>1</sup>	0 to 10,000 PSI	160B	0 to 160 Bar							AE	1/2" Conduit w/ 10' Cable				
			250B	0 to 250 Bar							AF	1/2" Conduit w/ 20' Cable				
			400B	0 to 400 Bar							AG	1/2" Conduit w/ 25' Cable				
			700B <sup>1</sup>	0 to 700 Bar							T1	Terminal Strip <sup>3</sup>				

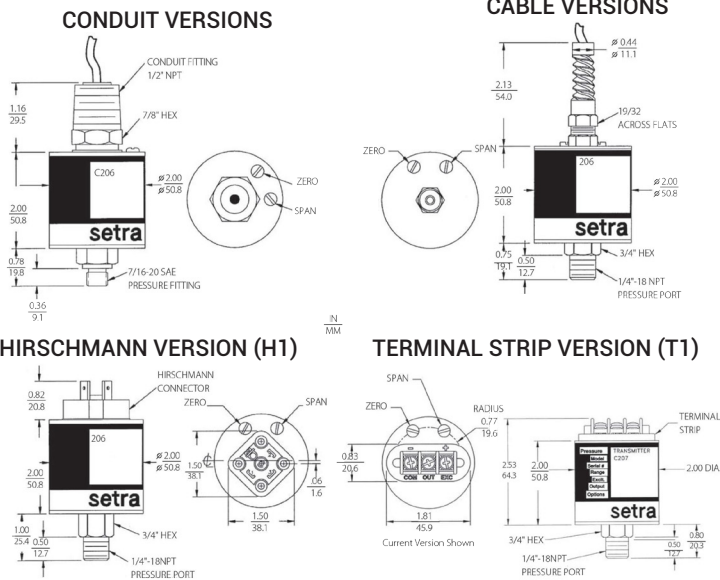
<sup>1</sup>Units higher than 5k PSI are only available with a 1/4" NPT Ext. fitting  
<sup>2</sup>Both boxes must filled in alphabetical order:  
 • If No options: N + N  
 • If 1 option: Option Code + N  
 • If 2 options: Option Code + Option Code  
<sup>3</sup> Formerly Model 207

For NEMA enclosure option, please order Setra's Model 256



Ordering Example: 2061025PG2M11068CN - Model 206, 0 to 25 PSIG, Gauge pressure, 1/4" NPT Ext. fitting, 4 to 20 mA output, 6' Cable Length, ±0.13% FS Accuracy, 11 Point Cal Cert Option.

### DIMENSIONS



### OVERPRESSURE CAPABILITY

BAR RANGES		
Gauge Pressure	Proof Pressure	Burst Pressure
0-1.6	6	32
0-4.0	10	50
0-6.0	18	60
0-10	30	80
0-16	32	130
0-25	50	170
0-40	80	240
0-60	120	300
0-100	200	400
0-160	250	500
0-250	380	550
0-400	600	800
0-700	800	1,350

PSIG RANGES		
Gauge Pressure	Proof Pressure	Burst Pressure
0-25	100	500
0-50	150	750
0-100	300	1,000
0-250	500	2,000
0-500	1,000	3,000
0-1,000	2,000	5,000
0-3,000	4,500	7,500
0-5,000	7,500	10,000
0-10,000	12,500	20,000

Note: Setra quality standards are based on ANSI-Z540-1. The calibration of this product is NIST traceable.

### GENERAL SPECIFICATIONS

Performance Data		Physical Description	
Accuracy RSS <sup>1</sup> (at constant temperature)	±0.13% FS	Pressure Fittings	See Ordering Information
Non-Linearity, (BFSL) 25 PSIG range <sup>2</sup>	±0.1% FS ±0.2% FS	Vent	Through Electrical Termination
Hysteresis	±0.08% FS	Electrical Connection	See Ordering Information
Non-Repeatability	±0.02% FS	Case	Stainless Steel
Response Time	5 milliseconds	Zero/Span Adjustments	Top External Access
Long Term Stability	0.5% FS/YR	Weight (approx.)	6 oz
Thermal Effects		Electrical Data (Voltage)	
Compensated Range	-4 to +176°F (-20 to +80°C)	Excitation/Output	12 to 28 VDC Reverse Excitation Protected
Zero Shift	±1% FS/100°F (±0.9% FS/50°C)	Power Consumption	<0.15 watts (approx. 5mA @24VDC)
Span Shift	±1.5% FS/100°F (±1.4% FS/50°C)	Output <sup>8</sup>	See Ordering Information <sup>9</sup>
Pressure Media		Output Impedance	100 ohms
Gases or liquids compatible with 17-4 PH Stainless Steel. <sup>3</sup>		Circuit	3-Wire (Exc, Out, Com)
Environmental Data		Vibration	200g Operating
Temperature		Electrical Data (Current)	
Operating <sup>4</sup>	-40 to +185°F (-40 to +85°C)	Circuit	2-Wire
Storage	-40 to +185°F (-40 to +85°C)	Output <sup>10</sup>	4 to 20 mA <sup>11</sup>
Acceleration	10g Maximum <sup>5</sup>	External Load	0 to 800 ohms
Shock <sup>6</sup>	200g Operating	Min. Supply Voltage (VDC) =	9 + 0.02 x (Resistance of receiver plus line)
Vibration	20g 50-2000 Hz	Max. Supply Voltage (VDC) =	30 + 0.004 x (Resistance of receiver plus line)
Approvals			
CE, RoHS			

<sup>1</sup>RSS of Non-Linearity, Non-Repeatability and Hysteresis  
<sup>2</sup>25 PSIG range accuracy is ±0.22% of Full Scale output  
<sup>3</sup>Hydrogen not recommended for use with 17-4 PH stainless steel.  
<sup>4</sup>The high temperature limit of the cable is 200°F (95°C)  
<sup>5</sup>Shift in output reading <0.05 psi/g typical; pressure port axis only  
<sup>6</sup>Mil-Std. 202, Method 213B, Cond. C  
<sup>7</sup>Mil-Std. 202, Method 204, Cond. C  
<sup>8</sup>Calibrated into a 50k ohm load, operable into a 5000 ohm load or greater  
<sup>9</sup>Zero output factory set to w/in ±25mV. Span (FS) output factory set to w/in ±50mV.  
<sup>10</sup>Calibrated at factory with a 24VDC loop supply voltage and 250ohm load.  
<sup>11</sup>Zero output factory set to w/in ±0.08mA. Span (FS) output factory set to w/in ±0.16mA.  
 Specifications subject to change without notice.