

# 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
- NEMA 4/IP65 Design
- Configurable Design

#### Model 206 Features:

- Long-Term Stability:  $< 0.5\%$ /Year
- Exceptional EMI/RFI
- Rugged Design Withstands High Shock & Vibration
- User Accessible Zero/Span
- Calibration NIST Traceable
- Wide Operating Voltage 12 VDC to 28 VDC
- Meets CE Conformance Standards
- Reverse Wire Protection

#### Applications:

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

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### ORDERING INFORMATION

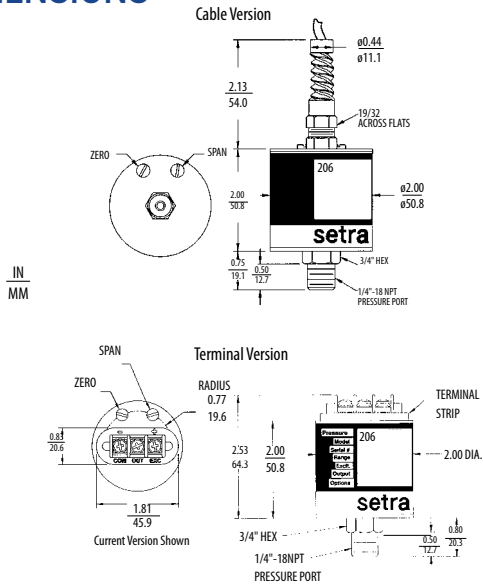


Model	Pressure Range		Pressure Type		Fitting		Output		Termination		Accuracy		Options <sup>2</sup>			
2061 = Model 206	025P	0 to 25 PSI	1R6B	0 to 1.6 Bar	G	Gauge	2M	1/4" NPT Male	11	4 to 20 mA	02	2 ft Cable	8	±0.13% FS	NN	None
	050P	0 to 50 PSI	004B	0 to 4 Bar	C	Compound	1M	1/8" NPT Male	22	0.1 - 5.1 VDC	06	6 ft Cable			C	11 Point Cal Cert
	100P	0 to 100 PSI	006B	0 to 6 Bar			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					28	1 to 6 VDC	25	25 ft Cable			F	NEMA 4 Enclosure <sup>3</sup>
	250P	0 to 250 PSI	016B	0 to 16 Bar					2T	0.1 to 10.1 VDC	XX	Special Cable Length (0-25')			G	Mating Hirshmann Con.
	500P	0 to 500 PSI	025B	0 to 25 Bar							H1	Hirshmann			L	Etched SS Tags
	10CP	0 to 1,000 PSI	040B	0 to 40 Bar							A3	1/2" Conduit w/ 2' Cable			Y	Clean For Oxygen
	30CP	0 to 3,000 PSI	060B	0 to 60 Bar							AD	1/2" Conduit w/ 6' Cable				
	50CP	0 to 5,000 PSI	100B	0 to 100 Bar							AE	1/2" Conduit w/ 10' Cable				
	10KP <sup>1</sup>	0 to 10,000 PSI	160B	0 to 160 Bar							AF	1/2" Conduit w/ 20' Cable				
			250B	0 to 250 Bar							AG	1/2" Conduit w/ 25' Cable				
			400B	0 to 400 Bar							T1	Terminal Strip <sup>4</sup>				
			700B <sup>1</sup>	0 to 700 Bar												

<sup>1</sup>Units higher than 5k PSI are only available with a 1/4" NPT male fitting  
<sup>2</sup>Both boxes must be 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>Only available with T1 termination  
<sup>4</sup>Formerly Model 207

Ordering Example: 2061025PG2M11048CN - Model 206, 0 to 25 PSIG, Gauge pressure, 1/4" NPT Male fitting, 4 to 20 mA output, 4' Cable Length, ±0.13% FS Accuracy, 11 Point Cal Cert Option.

### DIMENSIONS



### 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 cable or terminal
Hysteresis	0.08% FS	Electrical Connection	2 ft. multiconductor cable
Non-Repeatability	0.02% FS	Case	Stainless Steel
Response Time	5 milliseconds	Zero/Span Adjustments	Top External Access
Long Term Stability	0.5% FS/1 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>	0.1 to 5.1 VDC <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 <sup>11</sup>	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 <sup>7</sup>	20g 50-2000 Hz	Max. Supply Voltage (VDC) = 30 + 0.004 x (Resistance of receiver plus line)	

### PROOF PRESSURE

BAR RANGES			PSIG RANGES		
Gauge Pressure	Proof Pressure	Burst Pressure	Gauge Pressure	Proof Pressure	Burst Pressure
1.6	6	32	0-25	100	500
4.0	10	50	0-50	150	750
6.0	18	60	0-100	300	1,000
10	30	80	0-250	500	2,000
16	32	130	0-500	1,000	3,000
25	50	170	0-1,000	2,000	5,000
40	80	240	0-3,000	4,500	7,500
60	120	300	0-5,000	7,500	10,000
100	200	400	0-10,000	12,500	20,000
160	250	500			
250	380	550			
400	600	800			
700	800	1,350			

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

<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.