



# Model 206 Industrial Pressure Transducer

# 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

The Model 206 pressure sensor is designed for industrial and OEM customers who require high performance, reliability and versatility at am affordable price. It offers exceptional ±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 industrials applications. The unit is designed to meet NEMA 4 and IP65 environmental ratings, preventing unwanted moisture ingress.

## High performance at the 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 fitting cover many installation configurations, allowing it to fir 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.





## Specifications

### Performance data

Accuracy RSS <sup>1</sup> (at constant temperature)	±0.13% FS
Non-linearity, (BFSL) 25 PSIG range <sup>2</sup>	±0.1% FS ±0.2% FS
Hysteresis	±0.08% FS
Non-repeatability	±0.02% FS
Response time	5 milliseconds
Long term stability	0.5% FS/YR

### **Thermal effects**

Compensated range	-4 to +176°F (-20 to +80°C)
Zero shift	±1% FS/100°F (±0.9% FS/50°C)
Span shift	±1.5% FS/100°F (±1.4% FS/50°C)

#### **Electrical data (voltage)**

Excitation/ output	12 to 28 VDC reverse excitation protected
Power consumption	<0.15 watts (approx. 5mA @24VDC)
Output <sup>®</sup>	See ordering information <sup>9</sup>
Output impedance	100 ohms
Circuit	3-wire (exc, out, com)
Vibration	200g operating

### Approvals

CE, RoHS

<sup>1</sup>RSS of non-linearity, non-repeatability 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

## 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
1-16	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

### **Physical description**

Pressure fittings	See ordering information
Vent	Through electrical termination
Electrical connection	See ordering information
Case	Stainless steel
Zero/Span adjustments	Top external access
Weight (approx.)	6 oz.

### **Environmental data**

Operating temperature <sup>4</sup>	-40 to 185°F (-40 to +85°C)
Storage temperature	-40 to +185°F (-40 to +85°C)
Acceleration	10g Maximum⁵
Shock <sup>6</sup>	200g operating
Vibration	20g 50-2000 Hz

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

Circuit	2-wire
Output <sup>10</sup>	4 to 20 mA <sup>11</sup>
External load	See ordering information
Min. supply voltage (VDC)= 9 + 0.0	2 x (resistance of receiver plus line)

Max. supply voltage (VDC)= 30 + 0.004 x (resistance of receiver plus line)

#### Pressure media

Gases or liquids compatible with 17-4 PH stainless steel.<sup>3</sup>

<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 ±25VDC loop supply voltage and 2500hm load <sup>11</sup>Zero output factory set to w/in ±0,08mA. Span (FS) output factory set to win ±0,16mA

\*Specifications subject to change without notice.

#### **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
1-500	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

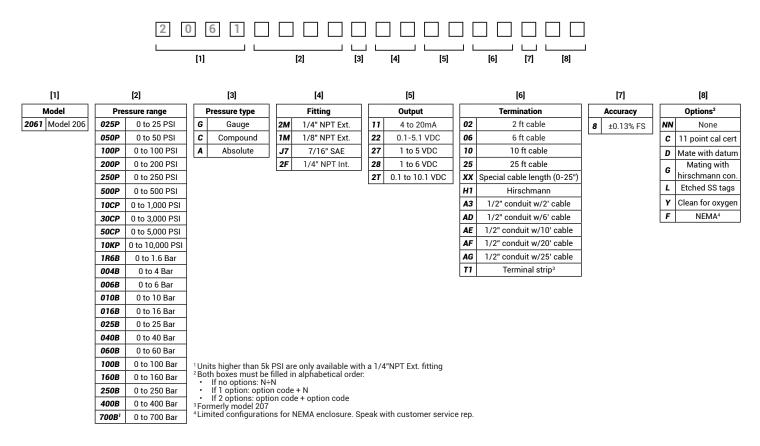
NOTE: Setra quality standards are based on ANSI-Z540-1. The calibration of this product is NIST traceable.



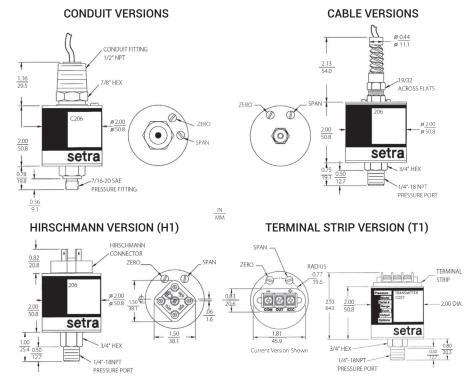
## Ordering information

Example part number: 2061025PG2M11068CN

Model 206, 0 to 25 PSIG, Gauge pressure type, 1/4" NPT Ext. Fitting,4 to 20mA output, 6' cable length, ±0.13% FS accuracy, 11 point cal. cert. option.



### Dimensions





**Setra Systems, Inc.** 159 Swanson Road Boxborough, MA 01719

800.257.3872 www.setra.com © Setra Systems, Inc. All rights reserved.

The Setra Systems name and logo are trademarks of Setra Systems, Inc.