

# 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:**

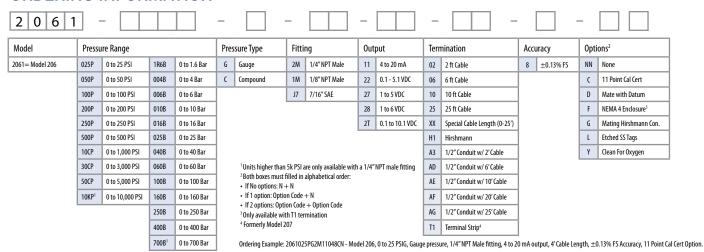
- Industrial OEM Equipment
- Hydraulic Systems
- Compressor Control
- HVAC/R Equipment
- Industrial Engines

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### Industrial Pressure Transducer

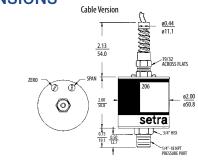


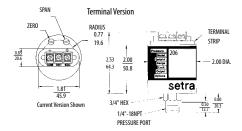
### ORDERING INFORMATION



### **DIMENSIONS**

MM





### **PROOF PRESSURE**

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

| PSIG RANGES       |                   |                   |  |  |
|-------------------|-------------------|-------------------|--|--|
| Gauge<br>Pressure | Proof<br>Pressure | Burst<br>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            |  |  |

### **GENERAL SPECIFICATIONS**

| Performance Data   |                                | Physical Desci  | Physical Description                         |  |
|--|--------------------------------|---|--|--|
| Accuracy RSS¹ (at constant temperature)  | ±0.13% FS                      | Pressure Fittings   | See Ordering Information                     |  |
| Non-Linearity, (BFSL)<br>25 PSIG range <sup>2</sup>  | ±0.1% FS<br>±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<br>Reverse Excitation Protected |  |
| Zero Shift   | ±1% FS/100°F (±0.9% FS/50°C)   | Power Consumption   | <0.15 watts<br>(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                 |   |  |  |
| <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 |                                | Max. Supply Voltage (VDC) = 30 + 0.004 x (Resistance of receiver plus line) |  |  |

<sup>3</sup>Hydrogen not recommended for use with 17-4 PH stainless steel.

The high temperature limit of the cable is 200°F (95°C) Shift in output reading < 0.05 psi/g typical; pressure port axis only

6Mil-Std. 202, Method 213B, Cond. C

7Mil-Std. 202. Method 204. Cond. C <sup>8</sup>Calibrated into a 50K ohm load, operable into a 5000 ohm load or greater

 $^9$ Zero output factory set to w/in  $\pm 25$ mV. Span (FS) output factory set to w/in  $\pm 50$ mV.

<sup>10</sup>Calibrated at factory with a 24VDC loop supply voltage and 250ohm load. 11Zero output factory set to w/in ±0.08mA. Span (FS) output factory set to w/in

Specifications subject to change without notice.

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

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