Model 209
OEM Pressure Transducer

The Model 209 pressure transducer is designed for Industrial and OEM customers who require high performance, reliability, and versatility at an affordable price. It offers exceptional ±0.25% FS accuracy with pressure ranges from 1 PSI up to 10,000 PSI to meet a multitude of demanding applications. The 209 features all stainless steel wetted materials and offers many pressure and electrical connections to satisfy challenging installation requirements. The 209 features a patented overpressure stop to protect the sensor against unexpected spikes or in high pulsation applications.

True Low Range Sensor
The Model 209’s capacitive transducer is designed for industrial applications with demanding price and performance requirements. The Model 209 offers exceptional reliability in typical industrial grade environments. The true low range sensor design offers high performance with no additional amplification required to meet range requirements down to 1 PSI.

Flexibility for Many Applications
The 209 transducer offers many pressure and electrical fittings covering many installation configurations. It minimizes additional engineering time to accommodate the sensor, allowing for earlier project completion and quicker time to market.

Robust Design & Construction for Reliable Service
The Model 209 is designed and built to withstand demanding applications. The industrial construction, with optional positive overpressure stop, enables the sensor to withstand overpressure conditions up to 16X the rated range.

- Rugged For Demanding Applications
- Full Span Ranges Down to 1 PSI
- Highly Configurable Design

Model 209 Features:

- High Overpressure Option Available on Select Ranges
- Operates Over a Wide Temperature Band
- Compatible w/ a Variety of Gases & Liquids
- Operates on Low Cost Unregulated DC Power
- Suitable For High Shock & Vibration Applications
- No Seals or O-Rings to Cause Leakage
- No Brazed Joints Susceptible to Corrosion Problems
- CE & RoHS Compliant

Applications:

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

DIMENSIONS

CONDUIT VERSION

CABLE ANCHOR

OPTIONAL HIRSCHMANN CONNECTOR
Type: G4A1M #931807-106

OPTIONAL 3-Pin PACKARD CONNECTOR
Type: P2S Series 150

Top View
Mating Hirschmann Connector G4WIF available. See table below to order.

Top View
Mating Packard Connectors available. See table below to order.
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WIRING

CABLE ANCHOR

Voltage Output
The Model 209 voltage output is a 3-wire circuit. If the 209 is supplied with 2 feet of cable, the electrical connection is as follows:

Current Output
The Model 209 True 2-wire device. If the 209 is supplied with 2 feet of cable, the electrical connection is as follows:

3-PIN PACKARD CONNECTOR

Voltage

Current

HIRSCHMANN CONNECTOR

Voltage

Current

4-PIN PACKARD CONNECTOR

Voltage

Current

CONDUIT VERSION
## Model 209
### OEM Pressure Transducer

### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Model</th>
<th>Range Code</th>
<th>Range Code</th>
<th>Pressure Type</th>
<th>Pressure Fitting</th>
<th>Output</th>
<th>Elect. Termination</th>
<th>Options</th>
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<tbody>
<tr>
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<td>0 to 1</td>
<td>500P</td>
<td>0 to 500</td>
<td>2M</td>
<td>11</td>
<td>4-20 mA</td>
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<tr>
<td>002P</td>
<td>0 to 2</td>
<td>10CP</td>
<td>0 to 1,000</td>
<td>J7</td>
<td>24</td>
<td>0.5 to 5.5 VDC</td>
<td>P1</td>
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<td>15CP</td>
<td>0 to 1,500</td>
<td>1/4 Male</td>
<td>28</td>
<td>1 to 6 VDC</td>
<td>P3</td>
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<td>50CP</td>
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<td>201P</td>
<td>0 to -14.7 PSI</td>
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<td>250P</td>
<td>0 to 250</td>
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### ACCESSORIES

- 577 3-Pin Mating Packard Kit
- 581 Cable Assembly - Packard, 3-pin (3 ft.)
- 582 Cable Assembly - Packard, 3-pin (6 ft.)
- 590 Mating Hirschmann Kit
- 857 4-Pin Mating Packard Kit

### PROOF PRESSURE

<table>
<thead>
<tr>
<th>Pressure Type</th>
<th>Option</th>
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<td>Pressure (PSI)</td>
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<tr>
<td>Burst (PSI)</td>
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<tr>
<td>Compensated Range °F (°C)</td>
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<tr>
<td>Hysteresis %</td>
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<tr>
<td>Non-Repeatability %</td>
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<tr>
<td>Non-Linearity, BFSL</td>
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</tr>
<tr>
<td>Hysteresis</td>
<td>±0.22% FS</td>
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<tr>
<td>Non-Repeatability</td>
<td>±0.05% FS</td>
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</table>
| Non-Linearity, BFSL | ±1.3%

### PERFORMANCE DATA

- **Accuracy Class**: ±0.25% FS
- **Non-Linearity, BFSL**: ±0.22% FS
- **Hysteresis**: ±0.10% FS
- **Non-Repeatability**: ±0.02% FS
- **Non-Linearity, BFSL**: ±1.5%

### ELECTRICAL DATA (Voltage)

- **Operating Temperature**: -40 to + 185 (-40 to +85)
- **Storage Temperature**: -40 to + 185 (-40 to +85)
- **Shock**: 200g-operating
- **Acceleration**: 10g-Maximum
- **Vibration**: 20g

### ELECTRICAL DATA (Current)

- **Case**: Stainless Steel & Valox
- **Wetted Material**: 17-4 PH Stainless Steel
- **Electrical Connection**: 2 ft. multiconductor cable
- **Minimum supply voltage (VDC)**: 9.0 + 0.02 x (Resistance of receiver plus line)
- **Maximum supply voltage (VDC)**: 30 + 0.004 x (Resistance of receiver plus line)
- **Weight (approx.)**: 2.3 ounces (65 grams)

### GENERAL SPECIFICATIONS

- **Zero Shift**: ±0.25%/°F (±0.16%/°C)
- **Span Shift**: ±0.22%/°F (±0.16%/°C)
- **Zero Output**: Factory set to ±50mV
- **Span Output**: Factory set to ±50mV
- **Calibration**: Into a 50K ohm load, operable into a 5000 ohm load or greater
- **Electrical Insulation**: 30+ 0.004 x (Resistance of receiver plus line)
- **Case**: Stainless Steel & Valox
- **Wetted Material**: 17-4 PH Stainless Steel
- **Electrical Connection**: 2 ft. multiconductor cable
- **Minimum supply voltage (VDC)**: 9.0 + 0.02 x (Resistance of receiver plus line)
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