3PP8 SERIES | HERMETIC PRESSURE SENSORS
5 Vdc Supply, Ratiometric Output

Introduction
The 3PP8 series sensor uses silicon MEMs strain gage technology. The strain gage is glass bonded to a stainless steel diaphragm. Additional benefits include digital temperature compensation, EEPROM memory and self diagnostic capability. It is ideal for the most demanding applications.

Sensata Technologies has been a leading global supplier of pressure sensors & switches for over 50 years.

Features and Benefits
- High accuracy
- Stainless steel housing
- Hermetically sealed
- Low cost
- Capable of pressure ranges up to 15000 psi
- Small size

Applications
- Agriculture & Construction Equipment
- Vehicle Systems
- CO2 Compressors
- Pumps
- Hydraulics & Pneumatics
- Engine Controls & Monitors
- Air Conditioning & Refrigeration

TECHNICAL SPECIFICATIONS

Performance

<table>
<thead>
<tr>
<th></th>
<th>Accuracy</th>
<th>Total Error Band</th>
<th>Operating Temperature</th>
<th>Storage Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>±0.7% at 25°C span (linearity, hysteresis, repeatability, and calibration)</td>
<td>0°C to 50°C ±1.0% span</td>
<td>-40°C to 125°C ±1.7% span</td>
<td>-40°C to 150°C</td>
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### Physical

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| **Proof**      | 2X F.S. 500 - 3500 psi  
|                | 1.5X F.S. 3500 - 15000 psi |
| **Burst**      | 3X Full Scale (Typical) |
| **Cycle Life** | 10 Million + F.S. Cycles |
| **Vibration**  | 26g rms 20-2800 Hz  
|                | Random Profile     |
| **Drop**       | 1.5 m              |

Pressure Ranges
0-500 psis to 0-15000 psis

### Electrical

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<table>
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<tbody>
<tr>
<td><strong>Supply</strong></td>
<td>5 ± 0.25 Vdc</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>0.5 to 4.5 Vdc typical</td>
</tr>
<tr>
<td><strong>Supply Current</strong></td>
<td>15 mA max</td>
</tr>
<tr>
<td><strong>Output Load</strong></td>
<td>1.1K ohm pull-up typical</td>
</tr>
<tr>
<td><strong>Output Response Time</strong></td>
<td>10 ms max</td>
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</table>
| **EMC**        | 1-400MHz, 400MHz-1GHz  
|                | 100 V/m, 50 V/m     |
| **ESD**        | 15 kV air discharge  
|                | (human body model)   |
| **Supply Overvoltage Protection** | 16 Vdc              |
| **Supply Reverse Voltage Protection** | -16 Vdc            |
| **Output Short Circuit Protection** | 0 V / 16 Vdc  
|                | Ground / Supply     |
Standard Offerings

**Pressure Connections (24mm hex body)**
- 1/8" NPTF male (for pressures up to 10,000 psi)
- 1/4" NPTF male (for pressures up to 10,000 psi)
- 3/8"-24 UNF male o-ring
- M10 x 1 male o-ring
- M12 x 1.5 male o-ring

For other pressure connections please contact Sensata Technologies

**Electrical Connection**
- Standard Packard Metri-Pack™ (for pressures up to 5000 psi)
- AMP MQS™
- AMP EJII™ (for pressures over 5000 psi)

For other electrical connections please contact Sensata Technologies

**Pressure Ranges**
- 0 - 500 psis
- 0 - 1000 psis
- 0 - 3000 psis
- 0 - 5000 psis
- 0 - 7500 psis
- 0 - 10000 psis
- 0 - 12500 psis
- 0 - 15000 psis

For other pressure ranges please contact Sensata Technologies