# **P4000 Sealed High Pressure & Refrigeration Sensors**

### **Description**

The P4000 series of pressure sensors incorporates a stainless steel isolation diaphragm and welded construction to withstand harsh environments. The sensor uses piezo-resistive sensing technology and is paired with our custom ASIC to produce a stable, accurate output.

Using a 5 Vdc input, the sensors provide a 0.5 to 4.5 Vdc output proportional to pressure. Internal temperature compensation provides an accurate, easy to use device.

The rugged construction of the P4000 series is specifically designed to withstand high over-pressure spikes and provide compatibility with a wide range of process media including refrigerants and hydraulic oils.

#### **Features**

- Welded Stainless Steel Construction
- Isolation Diaphragm
- Absolute or Sealed Gage Reference
- Low Power Consumption
- High Vibration Tolerance
- Outstanding EMI/RFI Protection
- Amplified Linear Output
- Temperature Compensated



## Standard Pressure Ranges

- 0-100, 0-200, 0-300, 0-500, 0-750 PSI
- 0-1,000, 0-1,500, 0-2,000, 0-3,000, 0-4,000, 0-6000 PSI

### **Applications**

- On & Off-Highway Vehicle Hydraulic Systems
- Pressurized Tools
- Instruments
- Pneumatic Controls
- Refrigerant Control & Recovery

### **Technical Specifications**

Note: Performance Specifications with 5v ± 0.002 Vdc supply at 25°C

Pressure Ranges: Proof Pressure: Burst Pressure:

Supply Voltage:
Supply Current:
Output Voltage (Ratiometric):
Voltage Ratiometricity:
Total Error Band:
Output Impedance:
Operating Temperature:

Storage Temperature: Service Life: Vibration: 0-100 through 0-6,000 PSIA/PSIS See Table 0-750 PSI is 3,750 PSI 0-1,000 through 0-6,000 is 15,000 PSI 5.0 ±0.5 Vdc 3 mA Max. 0.5 to 4.5 Vdc ±1.5% of Span Max. ±2% at -40°C to +125°C < 100 Ohms

< 100 Ohms -40°C to +125°C -40°C to +125°C

1,000,000 Full Pressure Cycles Min. 10G Sinusoidal from 10-2,000 Hz Shock:
Housing Material:
Weight:
Electrical Termination:
Pressure Connection:
Recommended Interface
Impedance:

Over-Voltage Protection: Reverse Polarity Protection: 75G, ½ Sine Wave 304L Stainless Steel 3.0 oz. Max. See "How to Order" See "How to Order"

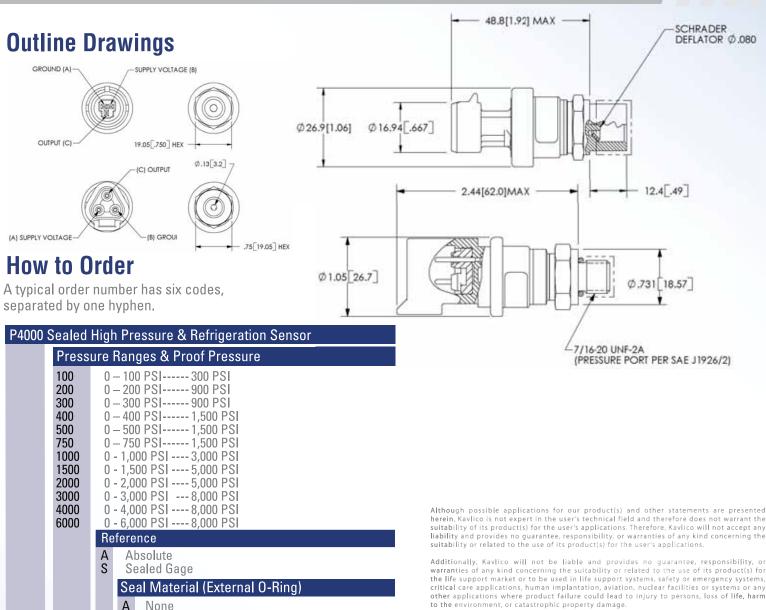
25k Ohm Min. Resistance Between Transducer Output and Ground in Parallel with 0.2 mF Max. Capacitance 16 Vdc

-6 Vdc





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Example: P4000 - 1000 A A 2 AA

0-1,000 PSIA Sensor, No External O-Ring with a 1/4" SAE Female Port and Built-in Packard Connector

Nitrile (pressure port option 3 only)

7/16-20 UNF SAE J1926/2

Built-in Deutsch

Electrical Connector **Built-in Packard** 

14" SAE Female Schrader Deflator

Pressure Connection

1/8-27 NPT

1/4-18 NPT

Contact Kavlico for accuracy options, custom packaging, alternative pressure ranges, pressure connections or other OEM or application specific requirements.



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