

P4000

Hermetically Sealed Pressure Sensor

Typical Applications

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

Standard Full Scale 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, 0-5,000 PSI

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



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.

Technical Specifications

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

Pressure Ranges:	0-100 through 0-5,000 PSI (Absolute or Sealed Gage)
Proof Pressure:	See "How to Order"
Burst Pressure:	3,750 PSI (0-100 PSI through 0-750 PSI) 15,000 PSI (0-1,000 PSI through 0-6,000 PSI)
Supply Voltage:	5.0 ±0.5 Vdc
Supply Current:	3 mA Max.
Output Voltage (Ratiometric):	0.5 to 4.5 Vdc
Total Error Band:	±2% of Span (-40°C to +125°C)
Output Impedance:	< 100 Ω
Operating Temperature:	-40°C to +125°C
Storage Temperature:	-40°C to +125°C
Service Life:	1,000,000 Full Pressure Cycles Min.
Vibration:	10 g's Sinusoidal from 10 to 2,000 Hz
Shock:	75 g's ½ Sine Wave
Ingress Protection:	IP67
Housing Material:	304L Stainless Steel
Weight:	3.0 oz. Max.
Electrical Termination:	See "How to Order"
Pressure Connection:	See "How to Order"
Output Load:	>25 kΩ
Over-Voltage Protection:	16 Vdc
Reverse Polarity Protection:	-6 Vdc

How to Order

Use this diagram, working top to bottom and left to right to construct your model number. An example is shown below. Custom OEM options are also available.

P4000 Hermetically Sealed Pressure Sensor

Pressure Ranges & Proof Pressure

100	0 - 100 PSI----	300 PSI
200	0 - 200 PSI----	900 PSI
300	0 - 300 PSI----	900 PSI
400	0 - 400 PSI----	1,500 PSI
500	0 - 500 PSI----	1,500 PSI
750	0 - 750 PSI----	1,500 PSI
1000	0 - 1,000 PSI---	3,000 PSI
1500	0 - 1,500 PSI---	5,000 PSI
2000	0 - 2,000 PSI---	5,000 PSI
3000	0 - 3,000 PSI---	8,000 PSI
4000	0 - 4,000 PSI---	8,000 PSI
5000	0 - 5,000 PSI---	8,000 PSI

Reference

A	Absolute
S	Sealed Gage

Seal Material (External O-Ring)

A	None
B	Nitrile (pressure port option 3 only)

Pressure Connection

1	1/8 - 27 NPT
2	¼" SAE Female Schrader Deflator
3	7/16 - 20 UNF SAE J1926/2
5	¼ - 18 NPT

Electrical Connector

AA	Built-in Packard
BA	Built-in Deutsch

P4000-1000 - A - A - 2 - AA

Example: P4000 - 1000 - A - A - 2 - AA

Description: P4000 Sensor, 0 - 1,000 PSI Absolute, No External O-Ring, 1/4" SAE Female Schrader Deflator Pressure Connection, with Built-in Packard Connector



Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions.

Non-compliance can result in serious injury and/or damage to the equipment.

Don't see what you want?
Call us at +1 (619) 710-2068 to customize this product to meet your application-specific needs!

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