

Typical Applications

Industrial

Compressors
Instruments & Test Equipment
Air Pressure
Hydraulic Systems

Transportation

Oil & Fuel Pressure
Coolant Pressure
Agricultural Equipment
CNG & Natural Gas Engines
Urea Dosing
Exhaust Gas Back Pressure

Description

The RoHS compliant PE2000 Ceramic Capacitive OEM Pressure Sensor incorporates Kavlico's 4th generation ceramic capacitive sense element with the latest state-of-the-art ASIC. Designed for harsh environments, this pressure sensor is offered in a rugged stainless steel housing, has superior EMI protection, high overpressure capability, outstanding shock and vibration performance, and exceptional long term stability.

The sensor is temperature compensated with an operating and storage temperature of -40°C to $+125^{\circ}\text{C}$ (dependent upon seal material selection), and it is offered with seal materials suitable for diverse applications. Standard pressure ranges are available in PSI or Bar. The standard electrical connection for this product would be the Packard Metri-pack 150 series, and it is available with various popular pressure connection thread options.

Specifically intended for both rugged industrial and transportation applications, the PE2000 delivers the optimal solution without compromising performance or reliability.

Standard Full Scale Pressure Ranges

0.2 to 25 Bar (Absolute or Gage)

Features

- Wet & Dry Media
- Superior Long Term Stability
- High Overpressure Capability
- Superior EMI protection
- Temperature Compensated
- Minimum Life Expectancy: 10 Million Cycles
- Outstanding Shock & Vibration Performance



Technical Specifications

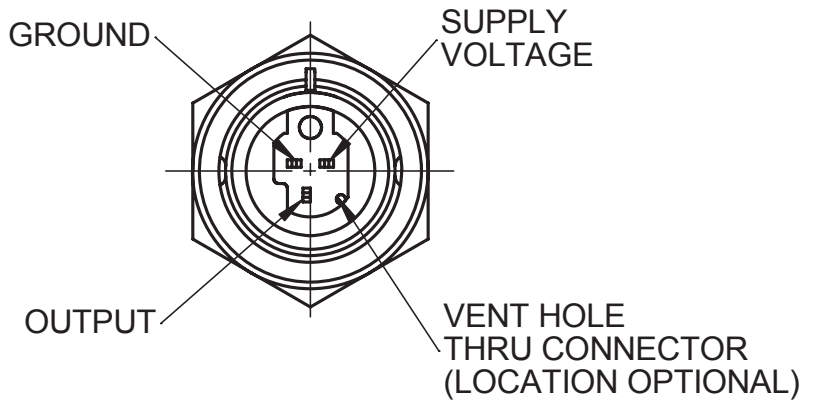
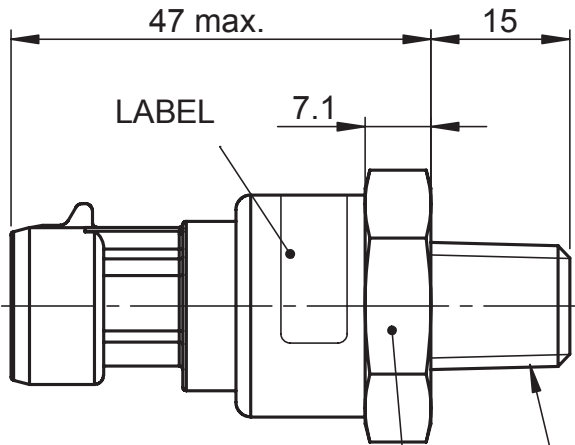
Sensor Technology:	Ceramic Capacitive
Pressure Range:	0.2 to 25 Bar Absolute or Gage
Proof Pressure:	3x F.S. Pressure (up to 10 bar) 2x F.S. Pressure (above 10 bar)
Burst Pressure:	4x F.S. Pressure (up to 10 bar) 3x F.S. Pressure (above 10 bar)
Nominal Output Voltage:	0.5Vdc to 4.5Vdc
Zero/Null Pressure	0.5 Vdc
Full Pressure	4.5Vdc
Total Error Band (TEB)¹:	$\pm 1.0\%$ of Span ($20^{\circ}\text{C} \leq T \leq 80^{\circ}\text{C}$) $\pm 2.0\%$ of Span ($T < 20^{\circ}\text{C}$, $T > 80^{\circ}\text{C}$)
Accuracy²:	$< 0.5\%$ of Span
Supply Current:	$< 5\text{mA}$
Supply Voltage:	$5\text{Vdc} \pm 0.25\text{Vdc}$
Stability:	$\pm 0.1\%$ typ. / $\pm 0.25\%$ of Full Span for 1-Year
Housing Material Options:	303 Stainless Steel
Standard Seal Material Options:	Silicone; Nitrile; Neoprene; Fluorocarbon; Fluorosilicone; Ethylene Propylene (Contact Factory for Additional / Custom Options)
Seal Type:	O-Ring
Wetted Surface:	Ceramic
Media Compatibility:	Seal Dependent
Operating Temperature:	-40°C to $+125^{\circ}\text{C}$ (Seal Material Dependent)
Storage Temperature:	-40°C to $+125^{\circ}\text{C}$ (Seal Material Dependent)
Vibration:	10g's Peak-to-Peak Sine (10 to 2,000 Hz)
Mechanical Shock:	75g's, 1/2 Sine Wave
Weight:	< 60 grams
Service Life:	10 Million Full Pressure Cycles (Minimum)
Standard Pressure Connection	
Port Options:	1/4-18 NPT (Contact Factory for Additional / Custom Options)
Standard Electrical Connector	
Options	Packard Metripack 150 (Contact Factory for Additional / Custom Options)

¹ Accuracy is the sum of linearity, repeatability and hysteresis errors at 25°C

² Total Error Band includes all sources of error, including effects of Offset, Span, Temperature and Accuracy

PE2000 Ceramic Capacitive OEM Pressure Sensor

Dimensions in: mm [inches]



DATE CODE
PERMANENTLY MARKED
LOCATION OPTIONAL

1/4-18 NPT

Don't see exactly what you want?

*Call us at +49-571-3859-0 to
customize this product to meet your
application-specific needs!*



Kavlico GmbH
Potsdamer Str. 14 32423 Minden, Germany
Tel: +49-571-3859-0 • Fax: +49-571-3859-119
Web: www.kavlico.com
Email: info@kavlico.de

Kavlico's General Terms & Conditions apply and can be found at www.kavlico.com

