

PE2000 Ceramic Capacitive OEM Pressure Sensor



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
- Fxhaust Gas Back Pressure

Standard Full Scale Pressure Ranges

0.2 up 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

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°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.







Technical Specifications

Pressure ranges	Customizable, beginning at 00.2 bar up to 025 bar (gage or absolute) Vacuum calibrations also available		
Proof pressure	3x full scale (up to 10bar), 2x full scale pressure (above 10bar)		
Burst pressure	4x full scale (up to 10bar), 3x full scale pressure (above 10bar)		
Electrical			
Output Signal	0.5 - 4.5 VDC ratiometric		
Operating supply voltage	5 ± 0.25 VDC		
Supply current	≤ 5 mA		
Load	$\geq 25 \text{ k}\Omega$		
Output impedance	< 100 Ω		
Overvoltage protection	16 VDC		
Reverse polarity protection	Yes *1)		
*1) ± 16 VDC at Vsup; -0,5	. +16 VDC at Vout		
Pin assignment			
	Pin A	Pin B	Pin C
Packard Metri-Pack 150	GND	Vsup	Vout
Response time	≤ 10 ms max. to 63 % of full scale pressu		put
Accuracy			
Reference conditions to EN 6	1298-1		
Accuracy *)	≤ 0.5 % of span		
Non-linearity **)	typ. 0.1 % of span, max. 0.2 % of span		
1-year stability	typ. 0.1 % of span, max. 0.25 % of span		
, ,	steresis, non-repeatability, zero point and full scale error (corresponds to error of measurement per IEC		
	I mounting position with pressure port dov		nus to error or measurement per 120
**) BFSL according to IEC 612	198-2		
Temperatures			
Medium	-40 °C to +125 °C (seal material dependent)		
Environmental	-40 °C to +125 °C (seal material dependent)		
Storage	-40 °C to +125 °C (seal material dependent)		
Total Error Band		-,	
20 °C ≤ T ≤ 80 °C	1.0 % of span		
T < 20 °C, T > 80 °C	2.0 % of span		
Conformity			
RoHS	According to 2002/95/EC RoHS Directive		
Vibration resistance	IEC 60068-2-64 (RANDOM) 10 PSD		
Shock resistance	75 g minimum according to EN 60068-2-	27	
Electrical connector	Packard		
	Metri-Pack 150 - 3 pole		Others
Ingress protection per IEC 60 529	IP65		Others on request
Materials			
Housing	Stainless steel 303 (1.4305)		
Wetted surface	Ceramic		
Seal material options	Silicone, Nitrile, Neoprene, Fluorocarbon, Fluorosilicone, Ethylene Propylene		
Weight Media	appr. 60 gram		

All class II fluids and gases compatible with stainless steel 303 (1.4305), ceramic and the used sealing material

Don't see what you want? Call us at +49 571 3859-174 to customize this product to meet your application-specific needs!



Before installation and operation, ensure that the appropriate pressure sensor has been selected in terms of pressure range, design and specific measuring conditions. Noncompliance can result in serious injury and/or damage to the equipment.

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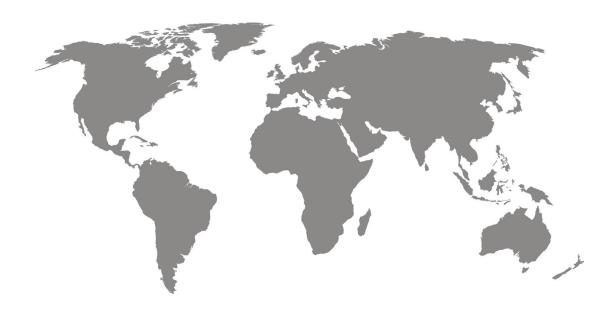
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Europe

England France Germany Italy Netherlands

Sweden Russia

Spain

Asia Pacific

China India Japan South Korea

Main Contact

Sensata Germany GmbH Potsdamer Strasse 14, 32423 Minden

Tel: +49 571 3859-0 Fax: +49 571 3859-119

www.kavlico.com www.sensata.com

Your local sales contact:

JB Controls

industrie@jbcontrols.com +33(0)1 46 91 93 30 https://jbcontrols.com/ 59 Rue Emile Deschanel 92400 COURBEVOIE, France



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