P255 Stainless Steel Pressure Transducers



Description

The model P255 is based on Kavlico's field-proven ceramic capacitive technology with the latest state-of-the-art ASIC. The 316SS housing surrounds a pressure transducer designed for general use wherever a rugged, reliable, pressure transducer is required.

The P255 package has a built-in Metri-Pack 150, electrical connector and supports popular process connection threads. The P255 is offered with a variety of seal materials and is suitable for many diverse applications. Specifically intended for OEM applications, the P255 delivers a cost effective solution without compromising performance or reliability.

Features

- · Wet & Dry Media
- Superior Long Term Stability
- Excellent Repeatability/Hysteresis
- Superior EMI/RFI Rejection
- Low Power Consumption
- Linear Amplified Output
- Temperature Compensated
- Over-Voltage, Reverse Polarity & Short Circuit Protection
- Ten Million Cycle Life Expectancy
- Outstanding Shock & Vibration Performance



- Steam Sterilizers
- Gasoline & Diesel Engines
- Natural Gas & CNG Engines
- Agricultural Chemical Equipment
- Hydraulic Systems
- Level Measurement
- Test Equipment
- Injection Molding
- Coolant Pressure
- Industrial Compressors

Standard Full Scale **Pressure Ranges**

0-15, 20, 30, 50, 75, 100, 150, 0-200, 300, 500, 750 and 1000 PSIA, PSIG, PSIS

Technical Specifications

Note: Performance Specifications with $5v \pm 0.002$ Vdc supply at 25°C

Pressure Ranges: 0 - 15 PSI through 0 - 1,000 PSI

Absolute, Gage or Sealed Gage **Proof Pressure:** 5x (FSO) (15 through 75 PSI)

3x (FSO) (100 through 500 PSI)

2x (FSO) (750 and 1,000 PSI) 1,000 (15 through 75 PSI)

2,000 PSI (100 through 1,000 PSI)

Supply Voltage: 4.50 Vdc to 5.50 Vdc

Supply Current: 5 mA (Max)

Response Time: 15ms Max to 63% of F.S. Pressure with Step Change on Input

Output Voltage:

Burst Pressure:

Zero/Null Pressure: 0.50 ±0.08 Vdc Full Pressure: 4.50 ±0.08 Vdc Ratiometricity: ±0.5% of Span

Total Error Band: ≤ 2.0% of Span (-20°C to 100°C) Output Impedance: **Operating Temperature:**

Storage Temperature:

Service Life:

Vibration: Shock:

Stability: Weight:

Electrical Termination: Pressure Connection: Recommended Interface

Impedance:

Over-Voltage Protection: Reverse Polarity Protection:

Material - Main Housing:

 $< 100 \Omega$

-40°C to + 125°C

(Seal Material Dependant)

-40°C to + 135°C

10 Million Full Pressure Cycles

10G P-P Sinusoidal, from 10-2000Hz

75 G 1/2 Sine Wave

±0.5% of Full Span over 1-Year

90 grams (Max)

Packard Electric Metri-Pack 150 Series

See "How to Order"

Min. Load 25 kΩ

16 Vdc -5 Vdc

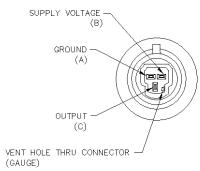
316 Stainless Steel

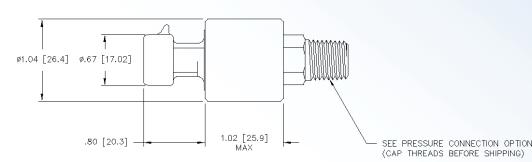


P255

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Outline Drawings





How to Order

P255 Pressure Transducer

Pressure Ranges

0 - 15 PSI 15 0 - 20 PSI 20 30 0 - 30 PSI 50 0 - 50 PSI75 0 - 75 PSI 100 0 - 100 PSI 0 - 150 PSI 150 200 0 - 200 PSI

300 0 – 300 PSI 500 0 – 500 PSI

750 0 – 500 PSI

1000 0 - 1000 PSI

Reference

A AbsoluteG GageS Sealed Gage

Seal Material

B Nitrile -40 to 121°C
C Neoprene -34 to 107°C
D Fluorocarbon -20 to 125°C
E Fluorosilicone -40 to 121°C
F Ethylene Propylene -40 to 121°C

Pressure Connection

- 1 1/4-18 NPT (External Threads)
- 2 3/8-24 UNF-2A (Male)
- 3 3/8-24 UNF-2B (Female)
- 4 1/8-27 NPT

Electrical Connection

A With mating connector, w/12", 18 AWG leads

Metri-Pack 150 Series Connector

P255 500 S F 1 A Example: P255-500S-FIA

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



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