P255
Stainless Steel Pressure Transducers

RoHS

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

Applications

- 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 ± 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)
Burst Pressure:	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:	
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:	< 100 Ω
Operating Temperature:	-40°C to + 125°C (Seal Material Dependant)
Storage Temperature:	-40°C to + 135°C
Service Life:	10 Million Full Pressure Cycles
Vibration:	10G P-P Sinusoidal, from 10-2000Hz
Shock:	75 G ½ Sine Wave
Stability:	±0.5% of Full Span over 1-Year
Weight:	90 grams (Max)
Electrical Termination:	Packard Electric Metri-Pack 150 Series
Pressure Connection:	See "How to Order"
Recommended Interface Impedance:	Min. Load 25 kΩ
Over-Voltage Protection:	16 Vdc
Reverse Polarity Protection:	-5 Vdc
Material - Main Housing:	316 Stainless Steel

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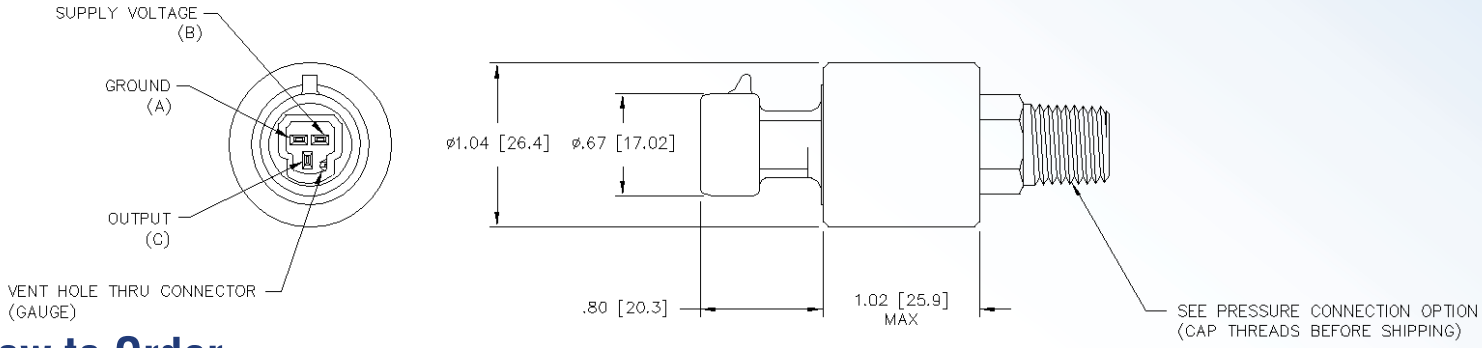
Outline Drawings



How to Order

P255 Pressure Transducer

Pressure Ranges

15	0 – 15 PSI
20	0 – 20 PSI
30	0 – 30 PSI
50	0 – 50 PSI
75	0 – 75 PSI
100	0 – 100 PSI
150	0 – 150 PSI
200	0 – 200 PSI
300	0 – 300 PSI
500	0 – 500 PSI
750	0 – 750 PSI
1000	0 – 1000 PSI

Reference

A	Absolute
G	Gage
S	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 125˚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
C	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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