# **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

#### **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

## **Technical Specifications**

0 – 15 PSI through 0 – 1,000 PSI **Pressure Ranges:** 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) 4.50 Vdc to 5.50 Vdc Supply Voltage: Supply Current: 5 mA (Max) Response Time: 15ms Max to 63% of F.S. Pressure with Step Change on Input Output Voltage:

> 0.50 ±0.08 Vdc 4.50 ±0.08 Vdc ±0.5% of Span ≤ 2.0% of Span (-20°C to 100°C)

#### Output Impedance: Operating Temperature:

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

Storage Temperature: Service Life: Vibration: Shock: Stability: Weight: Electrical Termination: Pressure Connection: Recommended Interface Impedance: Over-Voltage Protection: Reverse Polarity Protection: Material - Main Housing:



#### Standard Full Scale Pressure Ranges

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

< 100 Ω -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 ½ 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



Zero/Null Pressure:

Full Pressure:

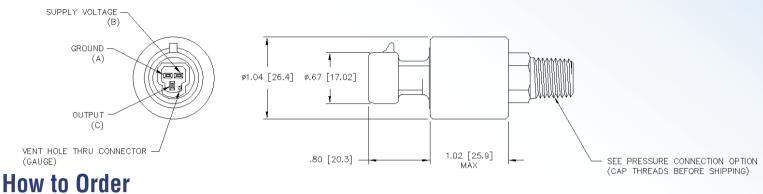
Ratiometricity:

**Total Error Band:** 

# RoHS

## P255 **Stainless Steel Pressure Transducers**

### **Outline Drawings**



#### P255 Pressure Transducer

	Pressure	Ranges
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	Pres	sure	e Ra	nge	ges					
	15 20 30 50 75 100 150 200 300 500 750 1000		- 15 - 20 - 50 - 75 - 10 - 15 - 20 - 30 - 30 - 50 - 75 - 75	PSI PSI PSI 0 PSI 0 PS 0 PS 0 PS 0 PS 0 PS	51 51 51 51 51					
		Re	fere	nce						
		A G S	Ga Se	ge alec	solute					
			Sea	al M	l Material					
			B C D E F	Ne Flu Flu	trile -40 to 121°C eoprene -34 to 107°C uorocarbon -20 to 125°C uorosilicone -40 to 125°C hylene Propylene -40 to 121°C					
				Pr	ressure Connection					
				1 2 3 4	1/4-18 NPT (External Threads) 3/8-24 UNF-2A (Male) 3/8-24 UNF-2B (Female) 1/8-27 NPT Electrical Connection					
					A With mating connector, w/12", 18 AWG leads C Metri-Pack 150 Series Connector					
5	500	S	F	1	A					

P25 Example: P255-500S-FIA

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

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