# **P255 Stainless Steel**

Pressure Transducers

#### **Typical Applications**

- Steam Sterilizers
- Gasoline & Diesel Engines
- Natural Gas & CNG Engines
- Agricultural Chemical Equipment
- 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

#### **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

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#### **Description**

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





#### **Technical Specifications**

Note: Performance Specifications with  $5v \pm 0.002$  Vdc supply at  $25^{\circ}$ C

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Pressure Ranges:	0 – 15 PSI through 0 – 1,000 PSI Absolute, Gage or Sealed Gage
Proof Pressure:	5x (FS0) (15 through 75 PSI) 3x (FS0) (100 through 500 PSI) 2x (FS0) (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:	$0.50 \pm 0.08  \text{Vdc}$
Full Pressure:	$4.50 \pm 0.08  \text{Vdc}$
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
Ingress Protection:	IP67
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 Seriess
Pressure Connection:	See "How to Order"
Output Load:	$>$ 25k $\Omega$
Over-Voltage Protection:	16 Vdc
Reverse Polarity Protection:	-5 Vdc
Main Housing Material:	316 Stainless Steel

## How to Order

P255 Pressure Transducer								
Pressure Range								
	15 20 30 50 75 100 150 200 300 500 750 1000	0 - 2 0 - 3 0 - 3 0 - 3 0 - 3 0 - 3 0 - 3 0 - 3	30 P 50 P 75 P 100 I 150 I 200 I 300 I 500 I	SI SI SI PSI PSI PSI PSI PSI				
	Reference							
		A G S	Absolute Gage Sealed Gage Seal Material B Nitrile -40 to + 121° C C Neoprene -34 to + 107° C					
			Ε	Fluc	orosi	arbon licone	-20 to + 125° C -40 to + 125° C -40 to + 121° C	
	F Ethylene Propylene -40 to + 121° C  Pressure Connection							
				1 2	1/4 - 18 NPT (External Threads) 3/8 - 24 UNF-2A (Male) 3/8 - 24 UNF-2B (Female) 1/8 - 27 NPT			
					A C		connector, w/12", 18 AWG Leads 50 Series Connector	
0055	500	0		4	Λ			

P255 - 500 - S - F - 1 - A

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

Description: P255 Pressure Transducer, 0 - 500 PSIS (Sealed Gage),

with Ethylene Propylene Seal Material,

1/4 NPT Pressure Connection, and Mating Connector



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

#### Don't see what you want?

Call us at +1 (619) 710-2068 to customize this product to meet your application-specific needs!

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