

# ***P265***

## ***Stainless Steel***

### ***Pressure Transducers***

#### ***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

#### ***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



#### ***Description***

The model P265 is based on Kavlico's field-proven ceramic capacitive technology with the latest state-of-the-art ASIC. Featuring a 316SS housing, the P265 is designed for general use wherever a rugged and reliable pressure transducer is required.

The P265 package has a built-in Metri-Pack 150, electrical connector and supports popular process connection threads. The P265 is offered with a variety of seal materials and is suitable for many diverse applications. Specifically intended for OEM applications, the P265 delivers a cost effective solution without compromising performance or reliability.

## Technical Specifications

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

|                              |                                                                                                |
|------------------------------|------------------------------------------------------------------------------------------------|
| Pressure Ranges:             | 0 – 15 PSI through 0 – 1,000 PSI<br>Absolute, Gage or Sealed Gage                              |
| Proof Pressure:              | 5x (FSO) (15 through 75 PSI)<br>3x (FSO) (100 through 500 PSI)<br>2x (FSO) (750 and 1,000 PSI) |
| Burst Pressure:              | 1,000 (15 through 75 PSI)<br>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<br>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:              | $\pm 0.5\%$ of Span                                                                            |
| Total Error Band:            | 2.0% of Span ( $-20^\circ\text{C}$ to $+100^\circ\text{C}$ )                                   |
| Output Impedance:            | $< 100\ \Omega$                                                                                |
| Operating Temperature:       | $-40^\circ\text{C}$ to $+125^\circ\text{C}$<br>(Seal Material Dependant)                       |
| Storage Temperature:         | $-40^\circ\text{C}$ to $+135^\circ\text{C}$                                                    |
| Service Life:                | 10 Million Full Pressure Cycles                                                                |
| Vibration:                   | 10G P-P Sinusoidal, from 10-2000Hz                                                             |
| Shock:                       | 75 G $\frac{1}{2}$ Sine Wave                                                                   |
| Ingress Protection:          | IP67                                                                                           |
| Stability:                   | $\pm 0.5\%$ of Full Span over 1-Year                                                           |
| Weight:                      | 100 grams (Max)                                                                                |
| Electrical Termination:      | Packard Electric Metri-Pack 150 Series                                                         |
| Pressure Connection:         | See "How to Order"                                                                             |
| Output Load:                 | $> 25\text{k}\ \Omega$                                                                         |
| Over-Voltage Protection:     | 16 Vdc                                                                                         |
| Reverse Polarity Protection: | -5 Vdc                                                                                         |
| Main Housing Material:       | 316 Stainless Steel                                                                            |

## How to Order

### P265 Pressure Transducer

#### Pressure Range

|      |              |
|------|--------------|
| 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 $+121^\circ\text{C}$ |
| C | Neoprene           | $-34$ to $+107^\circ\text{C}$ |
| D | Fluorocarbon       | $-20$ to $+125^\circ\text{C}$ |
| E | Fluorosilicone     | $-40$ to $+125^\circ\text{C}$ |
| F | Ethylene Propylene | $-40$ to $+121^\circ\text{C}$ |

#### 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 |
| B | 12", 18 AWG Leads                          |
| C | Metri-Pack 150 Series Connector            |

P265 - 500 - S - F - 1 - A

Example: P265 - 500 - S - F - 1 - A

Description: P265 Pressure Transmitter, 0 - 500 PSIS (Sealed Gage),  
with Ethylene Propylene Seal Material, 1/4 - 18 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.

Warning: The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Kavlico reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.

© 2013 Kavlico. All rights reserved.

**Don't see what you want?**  
Call us at +1 (619) 710-2068 to customize this product  
to meet your application-specific needs!