

# | P265

## STAINLESS STEEL PRESSURE TRANSDUCER

### Introduction

The model P265 is based on Kavlico’s field proven ceramic capacitive technology with the latest state-of-the-art ASIC. Featuring a 303SS housing, the P265 is designed for general use wherever a rugged and reliable pressure transducer is required. The P265 package has a built-in MetriPack 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.



### Features

- Dry Media <sup>(1)</sup>
- Superior Long Term Stability
- Excellent Repeatability/Hysteresis
- Superior EMI/RFI Rejection
- Low Power Consumption
- Linear 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
- Level Measurement
- Test Equipment
- Injection Molding
- Coolant Pressure
- Industrial Compressors

### MAIN FEATURES

<b>Pressure Ranges</b>	0 to 15 up to 0 to 1000 PSI
<b>Electrical Connection</b>	Packard Electric Metri-Pack 150 Series, 12" 20" AWG leads
<b>Pressure Connection</b>	1/4-18 NPT (external), 3/8-24 UNF-2A (male) <sup>(2)</sup>
<b>Housing Material</b>	303 Stainless Steel
<b>Output Signal</b>	0.5 - 4.5 VDC



## Pressure Ranges

From 0 to ...	PSIA, PSIG, PSIS (gage)	15	20	30	50	75	100	150	200	300	500	750	1000
Proof pressure	PSIA, PSIG, PSIS	75	100	150	250	375	300	450	600	900	1500	1500	2000
Burst pressure	PSIA, PSIG, PSIS	1000	1000	1000	1000	1000	2000	2000	2000	2000	2000	2000	2000

## Physical

Operating Life Cycle	min. 10 million full pressure cycles over the full range
Vibration Resistance	10 G's peak to peak sinusoidal (10 to 2000 Hz)
Shock Resistance	75 G's ½ sinewave
Drop Test	1 meter drop on concrete as per SAE J1455 / DIN EN 60068-2-3-1
Weight	≤ 100 grams (without mating connector)
Ingress Protection	IP 65 or IP67 - depending on electrical connector
Operating Temperature	-40°C to 125°C (depending on seal material) <sup>(2)</sup>
Storage Temperature	-40°C to 125°C (depending on seal material) <sup>(2)</sup>
Media	All class II fluids and gases compatible with stainless steel 303 and the internal seal ring material

## Performance

Total error band <sup>(3)</sup>	+/-2% of span (-20 ≤ T ≤ 100° C) +/-3% of span (T < -20° C, T < 100° C)
Stability coefficient	+/-0.5 % of full span over 1 year
Temp. Coefficients - Zero	0.2 % of span / 10 K within temperature range 0°C to + 80°C.2 %
Temp. Coefficients - Span	0.2 % of span / 10 K within temperature range 0°C to + 80°C.2 %

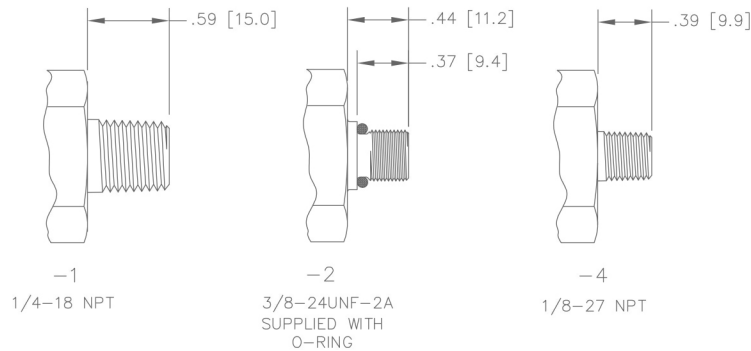
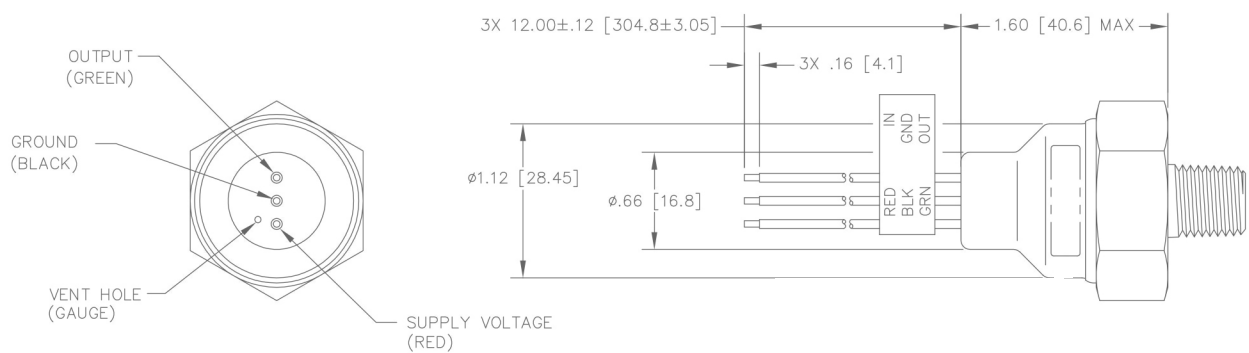
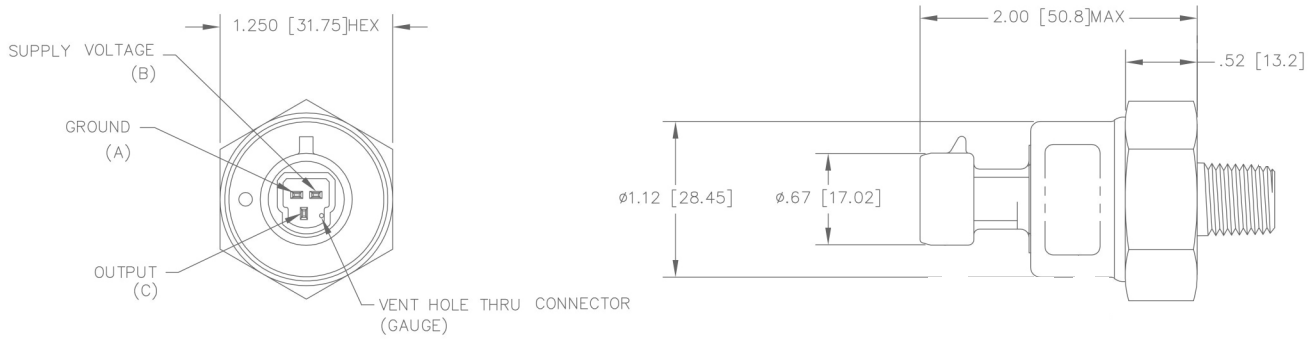
## Electrical

Output Signal	0.5...4.5 VDC Ratiometric
Operating Supply Signal	5 VDC ± 10%
Power Consumption	≤ 25 mW
Overvoltage Protection	16 VDC
Short-circuit Proofness	Yes <sup>(4)</sup>
Insulation Voltage	500 VDC
Reverse Polarity Protection	Yes <sup>(5)</sup>
Load	≥ 25 kΩ
Response Time	15 ms max. to 63% of full scale pressure with step change on input



# DIMENSIONS

Dimensions in mm [Inch]



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.



# GENERAL NOTES

- <sup>(1)</sup> For wet conductive media please contact us
- <sup>(2)</sup> For more options see Ordering Options
- <sup>(3)</sup> Including non-linearity, hysteresis, non-repeatability, zero point and full scale error corresponds to error of measurement per IEC 61298-2). Adjusted in vertical mounting position with pressure port down
- <sup>(4)</sup> For min. 3 intervals at 5 minutes each
- <sup>(5)</sup> For min. 10 seconds on assigned pins