

| 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 ⁽¹⁾
- 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

Pressure Ranges	0 to 15 up to 0 to 1000 PSI
Electrical Connection	Packard Electric Metri-Pack 150 Series, 12" 20" AWG leads
Pressure Connection	1/4-18 NPT (external), 3/8-24 UNF-2A (male) ⁽²⁾
Housing Material	303 Stainless Steel
Output Signal	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) ⁽²⁾
Storage Temperature	-40°C to 125°C (depending on seal material) ⁽²⁾
Media	All class II fluids and gases compatible with stainless steel 303 and the internal seal ring material

Performance

Total error band ⁽³⁾	+/-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 %

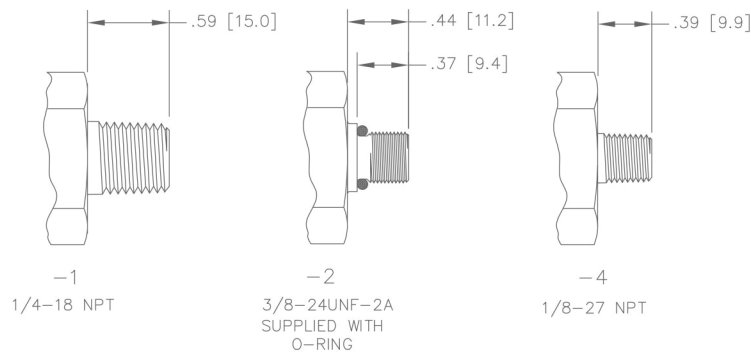
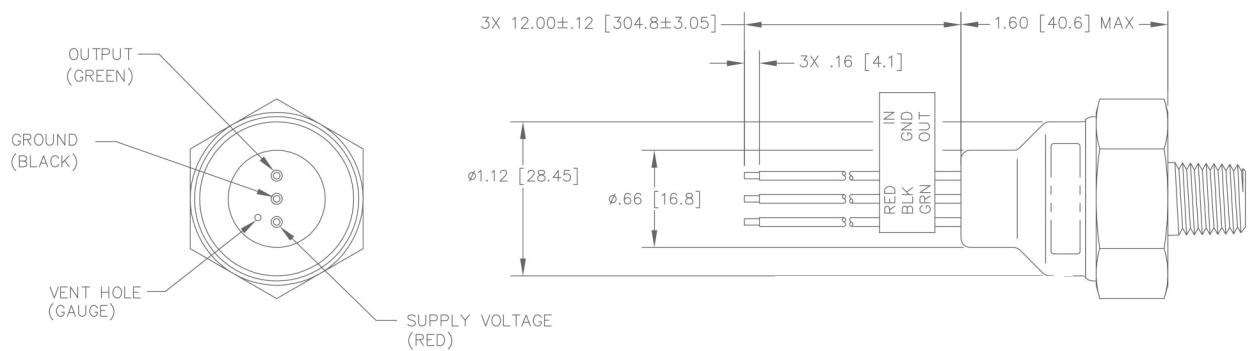
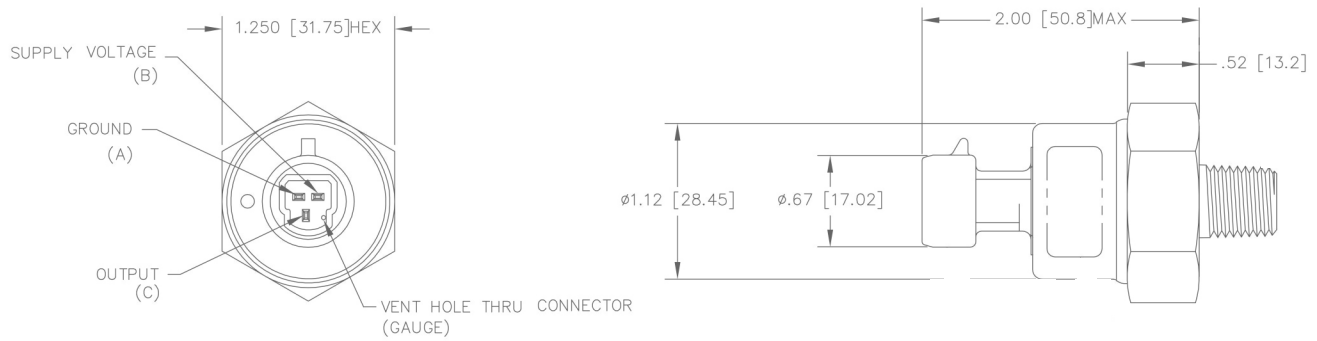
Electrical

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 ⁽⁴⁾
Insulation Voltage	500 VDC
Reverse Polarity Protection	Yes ⁽⁵⁾
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

- ⁽¹⁾ For wet conductive media please contact us
- ⁽²⁾ For more options see Ordering Options
- ⁽³⁾ 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
- ⁽⁴⁾ For min. 3 intervals at 5 minutes each
- ⁽⁵⁾ For min. 10 seconds on assigned pins



ORDERING OPTIONS

Example : P265-500S-F1-A

P265 Pressure Transmitter, 0-500 PSIS (Sealed Gage), with Ethylene Propylene Seal Material, 1/4 - 18 NPT Pressure Connection and Mating Connector

Family	P265	500	S	F	1	A
P265						
Pressure Ranges						
15: 0 - 15 PSI	150: 0 - 150 PSI					
20: 0 - 20 PSI	200: 0 - 200 PSI					
30: 0 - 30 PSI	300: 0 - 300 PSI					
50: 0 - 50 PSI	500: 0 - 500 PSI					
75: 0 - 75 PSI	750: 0 - 750 PSI					
100: 0 - 100 PSI	1000: 0 - 1000 PSI					
Reference						
A: Absolute						
G: Gage						
S: Sealed Gauge						
Seal Material						
B: Nitrile						
C: Neoprene						
D: Fluorocarbon						
E: Fluorosilicone						
F: Ethylene Propylene						
Pressure Connection						
1: 1/4 - 18 NPT (External Threads)						
2: 3/8 - 24 UNF-2A (Male)						
4: 1/8 - 27 NPT						
Built-in Electrical Connection						
A: Packard with Mating Connector						
B: 12", 18 AWG Leads						
C: Packard without Mating Connector						



AGENCY APPROVALS & CERTIFICATIONS



ROHS 2011/65/EU ROHS Directive

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

Americas

+1 (800) 350 2727

sensors@sensata.com

Europe, Middle East & Africa

+33 (3) 88 20 8080

position-info.eu@sensata.com

Asia Pacific

sales.isasia@list.sensata.com

China +86 (21) 2306 1500

Japan +81 (45) 277 7117

Korea +82 (31) 601 2004

India +91 (80) 67920890

Rest of Asia +886 (2) 27602006
ext 2808

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Sensata:

[P265-200G-E1A](#) [P265-200G-D4A](#) [P265-150G-C1B](#) [P265-100G-E4A](#) [P265-150A-D1C](#) [P265-100S-E4C](#) [P265-100A-D1C](#) [P265-30A-D4B](#) [P265-50A-E4A](#) [P265-50A-E4C](#) [P265-30A-E1A](#) [P265-30A-E2A](#) [P265-20A-E4C](#) [P265-500A-E1C](#)