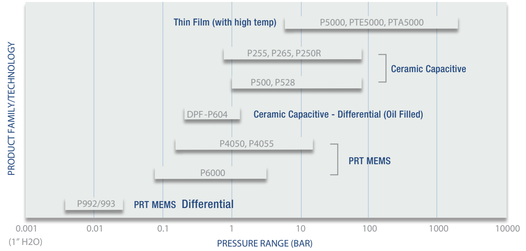
Pressure Sensor Application Matrix



Sensor Selection Guide

TYPICAL APPLICATIONS	COMMON PRESSURE RANGE	RECOMMENDED PRODUCT FAMILY
HVAC - Refrigeration and Chillers	0-7 Bar to 0-42 Bar	P528, P250, P5000, PTE5000, PTA5000
HVAC - Duct Air Flow	0-2.5 mBar to 0-25 mBar	P992, P993
Compressors	0-7 Bar to 0-35 Bar	P255, P265, P4055, PTE5000, PTA5000
Standby Power Generation	0-7 Bar to 0-20 Bar	P500, P4055, P255, P265, P2000
Filter Restriction	0-35 mBar to 0-350 mBar	P4055, P6000
Vacuum Sensors	-1-0 Bar to 0-7 Bar	P4055, P6000
Engine Oil, Coolant, Fuel Pressure	0-1 to 0-20 Bar	P500, P4055, P255, P265, P2000
Urea Dosing	0.2 to 25 Bar	PE2000
EGR Sensors	0-350 mBar to 0-3.5 Bar	P321
DPF Sensors	0-350 mBar to 0-3.5 Bar	DPF-P604, P321
Aerospace Cabin Pressure	0-2.5 mBar to 0-25 mBar	P992, P993
Anesthesia/Oxygen Control	0-2.5 mBar to 0-25 mBar	P992, P993
Crankcase Ventilation	-200 to +200 mBar	P4055, PE2000
Test Instrumentation	0-6 Bar to 0-400 Bar	P265, P500, P5000, PTE5000, PTA5000
Leak Detection	0-35 to 0-350 mBar	P356, P6000, P992, P993
Sterilizers	0-7 Bar	P500, P255, P265
CNG & LPG	0 to 200 Bar	PTE5000, PTA5000
Industrial Transmitters	0-10 Bar to 0-600 Bar	PTE5000, PTA5000
Hydraulics	0-100 Bar to 0-600 Bar	P5000, PTE5000, PTA5000

Application Considerations for Product Selection include: Media Compatibility, Physical Requirements (Vibration, Thermal, EMC), Accuracy, and Production Volume.

CST and Kavlico Pressure Sensors Worldwide

Contact Information

Americas (USA/Canada)
Kavlico Corporation
235 E. Main St., Suite 102A
Northville, MI 48167, USA
Phone: +1 (248) 465-0815
Fax: +1 (248) 465-0810
E-mail: pressure.sensors@kavlico.com

Germany
Potsdamer Strasse 14
32423 Minden, Germany
Phone: +49 571 3859-0
Fax: +49 571 3859-119
E-mail: info@kavlico.de

China
CST Asia (Shanghai) Ltd.
13th Floor, Chang Feng
International Tower,
89 Yunling Road (east), Putuo District
Shanghai - 200062, China
Phone: +86 (21) 6065-6888
Fax: +86 (21) 6065-7749
E-mail: china@cstsensors.com

India
CST Sensors India Ltd.
Trident Tower, No. 23, 4th Floor, 100 Feet Road
Ashoka Pillar Road, 2nd Block, Jaydnagar
Bangalore - 560011, India
Phone: +91 80 4113-2204/05
Fax: +91 80 4113-2206
E-mail: india@cstsensors.com

South Korea
14F, Kbiz DMC Tower, 189,
Seongam-ro, Mapo-gu,
Seoul, Korea 121-904
Phone: +82 2 2629-8312
Fax: +82 2 2629-8310
E-mail: korea@cstsensors.com

Taiwan and other East Asian and Pacific Countries
2F, No. 39, Ji-Hu Road Nei-Hu Dist.,
Taipei 114, Taiwan, R.O.C.
Phone: +886 2 8751 6388
Fax: +886 2 2657 8725
Taiwan E-mail: taiwan@cstsensors.com
EAP E-mail: eap@cstsensors.com

KAVLICO

Product Overview

Pressure Sensors, Transducers and Transmitters

- Standard Products and Custom Solutions
- Robust Designs for Demanding Applications
- Quality Products, Quality Service
- Multiple Sensing Technologies

Kavlico Pressure Sensors

For more than 50 years Kavlico Pressure Sensors, a brand of Custom Sensors & Technologies, has been an leading pioneer in designing, developing, and manufacturing a broad range of precision pressure and temperature, fluid level, and specialty sensors using four innovative sensing technologies: Thin Film, Ceramic Capacitive, Piezo-resistive and Silicon Capacitive.

Focused on premium products to meet customer needs, Kavlico Pressure Sensors is providing most reliable sensor solutions for the Transportation, Industrial OEM, Building & Equipment, Energy & Infrastructure, Food & Beverage, Commercial OEMs, Medical and Aerospace & Defense markets across the globe.

Custom Sensors and Technologies

Custom Sensors & Technologies (CST) is a specialist in sensing, control and motion products.

Through its brands, BEI Kimco, BEI Sensors, BEI PSSC, Crouzet, Crydom, Kavlico, Newall and Systron Donner Inertial, CST offers customizable, reliable and efficient components for mission-critical systems in Aerospace & Defense, Transportation, Energy & Infrastructures, Commercial & Industrial OEMs, Medical, Food and Beverage and Building Equipment markets.

Focused on premium value offers and committed to excellence, CST, with 4,400 employees worldwide, is the dependable and adaptable partner for the most demanding customers.
www.cstsensors.com

Custom Design Solutions

Your Options, Your Choice. At Kavlico Pressure Sensors, we put the custom in customer. By matching our sensor technology to your application-specific design criteria, your performance is maximized. This essential element of our approach supports your program development and creates a long-term strategic partnership.

Outstanding Sensor Features

All Kavlico Pressure sensors are rugged by design, allowing for installation in hostile measurement environments.

- Our sensors feature:
- Repeatable, accurate measurements over the lifetime of your equipment
- High shock and vibration tolerance on heavy machinery
- EMI/RFI and ESD protection, high overpressure protection, and high humidity tolerance
- Compensation over a wide temperature range

With a 10-year minimum shelf life and a lifetime in millions of cycles, Kavlico Pressure sensors are built to last. And with so many OEM and custom options, choosing Kavlico for your measurement requirements just makes sense.

Types of Pressure References

Absolute Pressure - Absolute Pressure sensors measure pressure compared with a vacuum.

Gage Pressure - Gage Pressure sensors measure pressure using the ambient outside pressure as the reference rather than a vacuum. This outside pressure varies with altitude so sensor output will adjust to altitude.

Sealed Gage - Sealed Gage Pressure sensors are Absolute Pressure sensors with the reference shifted from a vacuum to atmospheric pressure at sea level (14.7 PSI). The output of these sensors will not vary with altitude.

A brand of CST CUSTOM SENSORS & TECHNOLOGIES

www.kavlico.com
www.cstsensors.com

Kavlico specializes in custom solutions. Contact Kavlico to customize any product shown below.

	P500	P528	P2000	PE2000	P265
	Next Generation Ceramic Pressure Sensor	Refrigeration Ceramic Pressure Sensor	Ceramic Capacitive OEM Pressure Sensor	Ceramic Capacitive OEM Pressure Sensor	General Purpose Ceramic Pressure Sensor - Outside Hex
TECHNICAL SPECS:					
Sensor Technology	Ceramic Capacitive	Ceramic Capacitive	Ceramic Capacitive	Ceramic Capacitive	Ceramic Capacitive
Pressure Range	0-15 to 0-1,000 PSI 0-1 to 0-70 Bar Absolute or Sealed Gage	0-100 to 0-1000 PSI 0-6 to 0-70 Bar Absolute or Sealed Gage	0-15 to 0-300 PSI Absolute or Gage	0-0.2 to 0-25 Bar Absolute or Gage	0-15 to 0-1,000 PSI Absolute, Gage, or Sealed Gage
Nominal Output Signal	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc	0.5Vdc ± to 4.5Vdc
Total Error Band (TEB)[1]	±1.5% of Span (0°C ≤ T ≤ 85°C) ±2.0% of Span (T < 0°C, T > 85°C)	±1.5% of Span (0°C ≤ T ≤ 85°C) ±2.0% of Span (T < 0°C, T > 85°C)	±1.5% of Span (10°C ≤ T ≤ 85°C) ±3.0% of Span (T < 10°C, T > 85°C)	±1.0% of Span (20°C ≤ T ≤ 80°C) ±2.0% of Span (T<20°C, T>80°C)	±2.0% of Span (-20°C ≤ T ≤ +100°C) ±3.0% of Span (T < -20°C, T > +100°C)
Accuracy[2]	< 0.5% of Span	< 0.5% of Span	< 0.5% of Span	< 0.5% of Span	< 0.5% of Span
Supply Current	< 5mA	< 5mA	< 5mA	< 5mA	< 5mA
Supply Voltage	5Vdc ± 0.5Vdc	5Vdc ± 0.5Vdc	5Vdc ± 0.5Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.5Vdc
Over Voltage Protection	36Vdc	36Vdc	16Vdc	16Vdc	16Vdc
Reverse Polarity Protection	-36Vdc	-36Vdc	-5Vdc	+/- 16Vdc Vsupply -0.5 / +16Vdc Vout	-5Vdc
Output Impedance	<100Ω	<100Ω	<100Ω	<100Ω	<100Ω
Response Time	< 2ms to 63% of Final Output Voltage with step change in Input Pressure	< 2ms to 63% of Final Output Voltage with step change in Input Pressure	< 15ms to 63% of Final Output Voltage with step change in Input Pressure	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 15ms to 63% of Final Output Voltage with step change in Input Pressure
Housing Material Options	Brass (P ≤ 350 PSIA [24 BarA]) 304 Stainless Steel (P > 350 PSIA [24 BarA])	Brass (P ≤ 350 PSIA [24 BarA]) 304 Stainless Steel (P > 350 PSIA [24 BarA])	304 Stainless Steel	303 Stainless Steel	303 Stainless Steel
Standard Seal Material Options *(Contact Factory for Additional/Custom Options)*	Fluorocarbon; Fluorosilicone; Ethylene Propylene	Neoprene; Ethylene Propylene; HNBR	Fluorocarbon; Fluorosilicone	Silicone; Nitrile; Neoprene; Fluorocarbon; Fluorosilicone; Ethylene Propylene	Nitrile; Neoprene; Fluorocarbon; Fluorosilicone; Ethylene Propylene
Seal Type	O-Ring	O-Ring	O-Ring	O-Ring	O-Ring
Wetted Surface	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Media Compatibility	Seal Dependent	Seal Dependent	Seal Dependent	Seal Dependent	Seal Dependent
Operating Temperature	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)
Storage Temperature	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)
Vibration	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz)
Mechanical Shock	75g's, 1/2 Sine Wave	75g's, 1/2 Sine Wave	75g's, 1/2 Sine Wave	75g's, 1/2 Sine Wave	75g's, 1/2 Sine Wave
Weight	< 50 grams	< 50 grams	< 85 grams	< 60 grams	< 128 grams
Standard Pressure Connection Port Options *(Contact Factory for Additional/Custom Options)*	1/4-18 NPT; 1/8-27 NPT; G 1/4; G 1/4 (Internal); 3/8-24 UNF-2A; 3/8-24 UNF-2B	1/4-18 NPT; 1/4 SAE Female Schrader Deflator; 7/16-20 UNF-2A; 1/8-27 NPT	1/8-27 NPT; 1/4-18 NPT		1/4-18 NPT	1/4-18 NPT; 3/8-24 UNF-2A; 1/8-27 NPT
Standard Electrical Connector Options *(Contact Factory for Additional/Custom Options)*	Packard Metripack 150 with mating connector with 12" leads; Packard Metripack 150	Packard Metripack 150 with mating connector with 12" leads; Packard Metripack 150	Packard Metripack 150 with mating connector with 12" leads; Packard Metripack 150; DIN 72585; DIN 72585 with mating connector with 12" leads		Packard Metripack 150; DIN 72585	Packard Metripack 150 with mating connector with 12" leads; 3-Lead Wires, 20 AWG, Insulated; Packard Metripack 150
QUALITY CERTIFICATIONS:					
RoHS Compliant	Yes	Yes	No	Yes	No
CE Mark	Yes	Yes	No	**	**
UL Certification	Yes	Yes	No	**	**

1) TEB = Linearity + Hysteresis + Repeatability + Temp. Coeff. + Zero + Span Tolerance 2) Accuracy = Linearity (best fitted straight line) including Hysteresis + Repeatability
**Contact Factory

All products are not shown to scale.

Kavlico specializes in custom solutions. Contact Kavlico to customize any product shown below.

	P255	P356	P5162	PS312	P6000
	General Purpose Ceramic Pressure Sensor - Inside Hex	Low Pressure Differential/ Gage Pressure Sensor	OEM High Pressure Sensing Module	OEM Low Pressure Sensing Module	Remote Mount Miniature Pressure Sensor
TECHNICAL SPECS:					
Sensor Technology	Ceramic Capacitive	Ceramic Capacitive	Ceramic Capacitive	Ceramic Capacitive	Piezo Resistive
Pressure Range	0-15 to 0-1,000 PSI Absolute, Gage, or Sealed Gage	0-0.5 to 0-5.0 PSI Gage or Differential	0-200 mBar to 0-200 Bar	50 mBar to 20 Bar	0-2.5 to 0-5 PSI (Gage) 0-15 to 0-100 PSI (Absolute or Gage) 0-200 to 0-500 mBar (Gage) 0-1 to 0-7 Bar (Absolute or Gage)
Nominal Output Signal	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc or 1Vdc to 4Vdc	0.5Vdc to 4.5Vdc or 1Vdc to 4Vdc	0.5Vdc to 4.5Vdc
Total Error Band (TEB)[1]	±2.0% of Span (-20°C ≤ T ≤ +100°C) ±3.0% of Span (T < -20°C, T > +100°C)	±3% of Span (-30°C to +100°C)	±1% of Span (typical) (20°C to 85°C)	±1% of Span (typical) (20°C to 85°C)	±2% of Span above 2.5 PSI and 200 mBar and ±3% of Span for 2.5 PSI and 200 mBar (0°C to 85°C)
Accuracy[2]	< 0.5% of Span	< 0.5% of Span	< 0.5% of Span	< 0.5% of Span	< 0.5% of Span
Supply Current	< 5mA	< 3mA	< 3mA	< 3mA	< 5mA
Supply Voltage	5Vdc ± 0.5Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.25Vdc
Over Voltage Protection	16Vdc	16Vdc	16Vdc	16Vdc	16Vdc
Reverse Polarity Protection	-5Vdc	-5Vdc	+/- 16Vdc Vsupply -0.5 / +16Vdc Vout	+/- 16Vdc Vsupply -0.5 / +16Vdc Vout	-6Vdc
Output Impedance	< 100Ω	< 100Ω	< 100Ω	< 100Ω	< 100Ω
Response Time	< 15ms to 63% of Final Output Voltage with step change in Input Pressure	< 15ms to 63% of Final Output Voltage with step change in Input Pressure	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 10ms to 63% of Final Output Voltage with step change in Input Pressure
Housing Material Options	316 Stainless Stee	CA360 Brass	Brass spacer	Brass spacer	PA 66, 30% Glass
Standard Seal Material Options *(Contact Factory for Additional/Custom Options)*	Nitrile; Neoprene; Fluorocarbon; Fluorosilicone; Ethylene Propylene	Fluorocarbon; Fluorosilicone	**	**	Fluorosilicone
Seal Type	O-Ring	O-Ring	N/A	N/A	Adhesive
Wetted Surface	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic, Silicon, PA66 (30% GF)
Media Compatibility	Seal Dependent	Seal Dependent	Broad Compatibility	Broad Compatibility	Air and Compatible Fluids
Operating Temperature	-40°C to +125°C (Seal Material Dependent)	-30°C to +100°C (Seal Material Dependent)	-40°C to +125°C	-40°C to +125°C	0°C to +85°C
Storage Temperature	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C (Seal Material Dependent)	-40°C to +125°C	-40°C to +125°C	-30°C to +100°C
Vibration	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (5 to 2,000 Hz)
Mechanical Shock	75g's, 1/2 Sine Wave	75g's, 1/2 Sine Wave	50g's, 1/2 Sine Wave	50g's, 1/2 Sine Wave	50g's, 1/2 Sine Wave
Weight	< 100 grams	< 128 grams	< 20 grams	< 40 grams	< 1.3 grams
Standard Pressure Connection Port Options *(Contact Factory for Additional/Custom Options)*	1/4-18 NPT; 3/8-24 UNF-2A; 3/8-24 UNF-2B; 1/8-27 NPT	1/4-18 NPT; 9/16-18 UNRF-2vvA; M16x1.5	Custom Connection (contact factory)	Custom Connection (contact factory)	Barb for 3/16 ID tubing
Standard Electrical Connector Options *(Contact Factory for Additional/Custom Options)*	Packard Metripack 150 with mating connector with 12", 16 AWG Leads; Packard Metripack 150	Packard Metripack 150 with mating connector with 12", 16 AWG Leads; Packard Metripack 150	3 Isolated Wires 0.15mm, 2–75mm Long (Red: +Vcc, Green: +Out, Black: GND)	3 Isolated Wires 0.15mm, 2–75mm Long (Red: +Vcc, Green: +Out, Black: GND)	Pin Header; Pin Header with Mating Connector with Lead wires 12" long
QUALITY CERTIFICATIONS:					
RoHS Compliant	Yes	No	Yes	Yes	Yes
CE Mark	**	**	**	**	Yes
UL Certification	**	**	**	**	**

1) TEB = Linearity + Hysteresis + Repeatability + Temp. Coeff. + Zero + Span Tolerance 2) Accuracy = Linearity (best fitted straight line) including Hysteresis + Repeatability
**Contact Factory

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	P312	DPF-P604 Ceramic	P5000	P4055/P4056	DPF-P4050 PRT
	Pressure Sensing Module	Diesel Particulate Filter (DPF) Pressure Sensor	Hermetically Sealed High Pressure Sensor	Piezo Resistive OEM Pressure Sensor	Low Profile Diesel Particulate Filter (DPF) Pressure Sensor
TECHNICAL SPECS:					
Sensor Technology	Ceramic Capacitive	Oil-Filled Ceramic Capacitive	Thin Film	Piezo Resistive	Piezo Resistive
Pressure Range	0-5 to 0-100 PSI Absolute or Gage	0-5 to 0-50 PSI Differential	0-1,000 to 0-8,000 PSI 0-65 to 0-600 Bar Gage	0-3 to 0-300 PSI 0-200 mBar to 0-20 Bar Absolute, Gage, or Sealed Gage	0 to 90 kPa Differential
Nominal Output Signal	0.5Vdc to 4.5Vdc (Ratiometric to Supply Voltage)	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc	0.5Vdc to 4.5Vdc
Total Error Band (TEB)[1]	±3.0% of Span (-30°C to +100°C)	±3.0% of Span (25°C ≤ T ≤ 125°C) ±5.0% of Span (-40°C ≤ T ≤ +25°C)	±1.5% of Span (0°C ≤ T ≤ 100°C) ±3.0% of Span (T<0°C, T>100°C)	±2.0% of Span (-20°C ≤ T ≤ +100°C) ±3.0% of Span (T < -20°C, T > +100°C)	±1.5% of Span (0°C to 100°C)
Accuracy[2]	< 0.5% of Span	< 2% of Span	< 0.5% of Span	< 0.5% of Span	< 0.5% of Span
Supply Current	< 7mA	< 5mA	< 5mA	< 5mA	< 5mA
Supply Voltage	4.75Vdc to 7Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.5Vdc
Over Voltage Protection	7Vdc	16Vdc	16Vdc	16Vdc	16Vdc
Reverse Polarity /Protection	**	-5Vdc	-5Vdc	-5Vdc	-5Vdc
Output Impedance	< 100Ω	<100Ω	<100Ω	< 100Ω	< 100Ω
Response Time	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 140ms to 63% of Final Output Voltage with step change in Input Pressure	< 5ms to 63% of Final Output Voltage with step change in Input Pressure	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 5ms to 63% of Final Output Voltage with step change in Input Pressure
Housing Material Options	304 Stainless Steel	Valox 420	304L Stainless Steel	Brass	PPS (40% glass)
Standard Seal Material Options *(Contact Factory for Additional/Custom Options)*	Silicone; Nitrile; Neoprene; Fluorocarbon; Fluorosilicone	Silicone	External seal options: Nitrile; Fluorosilicone; Aluminum Washer; Copper Washer	Fluorosilicone	Fluorosilicone
Seal Type	O-Ring	O-Ring	Weld	O-Ring	Adhesive
Wetted Surface	Ceramic	Ceramic	Stainless Steel	Ceramic	Ceramic, Silicon, PPS (40% GF)
Media Compatibility	Seal Material Dependent	Diesel Exhaust	Broad Compatibility	Broad compatability	Broad compatability (including diesel exhaust)
Operating Temperature	-30°C to +100°C (Seal Material Dependent)	-40°C to +125°C	-40°C to +140°C	-40°C to +125°C	-40°C to +140°C
Storage Temperature	-40°C to +125°C (Seal Material Dependent)	-40°C to +130°C	-55°C to +150°C	-40°C to +125°C	-40°C to +155°C
Vibration	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	25g's Peak-to-Peak Random (10 to 2,000 Hz)	10g's Peak-to-Peak Sine (10 to 2,000 Hz)	20g's Peak-to-Peak Random (10 to 2,000 Hz)
Mechanical Shock	50g's, 1/2 Sine Wave	100gs, 1/2 Sine Wave	50g's, 1/2 Sine Wave	75g's, 1/2 Sine Wave	50g's, 1/2 Sine Wave
Weight	< 100 grams	<90 grams	< 60 grams	< 50 grams	< 30 grams
Standard Pressure Connection Port Options *(Contact Factory for Additional/Custom Options)*	Custom Connection (contact factory)	Pressure Hose Fitting Connection	1/4-18 NPTF; 7/16-20 UNF-2A; 1/8-27 NPTF; G1/4; M10x1; M12x1.5; M14x1.5; 1/4-19 BSPT (R1/4); 3/8-24 UNF-2A; 9/16-18 UNF-2A	1/4-18 NPT; 1/8-27 NPT; M10x1; M12x1.5; M14x1.5; M18x1.5; G1/4; 1/4-19 BSPT; 7/16-20 UNF-2A; 1/8-28 BSPT	Dependent on Requested Design; Custom Connection (contact factory)
Standard Electrical Connector Options *(Contact Factory for Additional/Custom Options)*	3 Isolated Wires 0.15mm, 2–75mm Long (Red: +Vcc, Green: +Out, Black: GND)	Framatome FCI Connector	Packard Metripack 150; M12; 9.4mm; 18mm; Quad-Lok; Quad-Lok with mating connector with 12" leads	Packard Metripack 150 with mating connector with 12" leads; Packard Metripack 150	**
QUALITY CERTIFICATIONS:					
RoHS Compliant	No	No	Yes	Yes	Yes
CE Mark	**	No	**	Yes	No
UL Certification	**	No	**	**	No

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**Contact Factory

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	P992	P993	P994	PTA5000	PTE5000
	Low Range Differential Pressure Sensor	Low Range Differential Pressure PCB Sensor	Low Range Differential Pressure PCB Mount Sensor	Hermetically Sealed Modular Pressure Sensor	Hermetically Sealed Modular Pressure Sensor
TECHNICAL SPECS:					
Sensor Technology	Capacitive MEMS	Capacitive MEMS	Capacitive MEMS	Thin Film	Thin Film
Pressure Range	2, 5, 10, ±1, ±2, and ±5 inches of H20 Differential 0-5 mBar to 0-25 mBar Differential	2, 5, 10, ±1, ±2, and ±5 inches of H20 Differential 0-5 mBar to 0-25 mBar Differential	1, 2, 5, 10, ±1, ±2, and ±5 inches of H20 Differential 0-5 mBar to 0-25 mBar Differential	0-100 to 0-10,000 PSI Gage	0-6 to 0-600 Bar Gage
Nominal Output Signal	0.25Vdc to 4Vdc	0.25Vdc to 4Vdc	0.25Vdc to 3.75Vdc	4mA to 20mA; 0Vdc to 10Vdc; 0.5Vdc to 4.5Vdc ratiometric	4mA to 20mA; 0.5Vdc to 4.5Vdc ratiometric; 0Vdc to 5Vdc; 0Vdc to 10Vdc
Total Error Band (TEB)[1]	±2.0% of Span (10°C to 40°C)	±2.0% of Span (10°C to 40°C)	±2.0% of Span (10°C to 40°C)	TC zero 0.2% / 10 K + TC span 0.2% / 10 K + Accuracy	TC zero 0.2% / 10 K + TC span 0.2% / 10 K + Accuracy
Accuracy[2]	< 0.5% of Span	< 0.5% of Span	<0.5% of Span	< 0.5% of Span	< 0.5% of Span
Supply Current	< 4mA	< 4mA	<4mA	< 5mA	< 5mA
Supply Voltage	5Vdc ± 0.25Vdc	5Vdc ± 0.25Vdc	5Vdc ± 0.25Vdc	8-30Vdc for output 4 to 20 mA; 5Vdc ± 5% for output 0.5 to 4.5Vdc; 14-30Vdc for output 0 to 10Vdc	8-30Vdc for output 4 to 20 mA (0 to 5Vdc); 5Vdc ± 5% for output 0.5 to 4.5Vdc; 14-30Vdc for output 0 to 10Vdc
Over Voltage Protection	16Vdc	16Vdc	16Vdc	33Vdc	33Vdc
Reverse Polarity Protection	-6Vdc	-6Vdc	-6Vdc	Yes	Yes
Output Impedance	< 100Ω	< 100Ω	< 100Ω	< 100Ω	< 100Ω
Response Time	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 10ms to 63% of Final Output Voltage with step change in Input Pressure	< 2ms to 63% of Final Output Voltage with step change in Input Pressure	< 2ms to 63% of Final Output Voltage with step change in Input Pressure
Housing Material Options	PET, 30% Glass	PET, 30% Glass	PET, 30% Glass	304 Stainless Steel	304 Stainless Steel
Standard Seal Material Options *(Contact Factory for Additional/Custom Options)*	Fluorosilicone	Fluorosilicone	Silicone	Fluorocarbon; Aluminum Washer; Copper Washer	Fluorocarbon; Aluminum Washer; Copper Washer
Seal Type	Adhesive	Adhesive	Adhesive	Weld	Weld
Wetted Surface	Ceramic, Fluorosilicon, PET (30% GF)	Ceramic, Fluorosilicon, PET (30% GF)	Ceramic, Silicone, PET (30% GF)	Stainless Steel	Stainless Steel
Media Compatibility	Dry Air	Dry Air	Dry Air	Broad Compatibility	Broad Compatibility
Operating Temperature	-10°C to +60°C	-10°C to +60°C	-0°C to +60°C	-30°C to +100°C (limitations according to exact sensor configuration; broader temperature range for other connectors)	-30°C to +100°C (limitations according to exact sensor configuration; broader temperature range for other connectors)
Storage Temperature	-40°C to +95°C	-40°C to +95°C	-40°C to +95°C	-30°C to +100°C	-30°C to +100°C
Vibration	1g Peak-to-Peak Sine (20 to 1,200 Hz)	1g Peak-to-Peak Sine (20 to 1,200 Hz)	1g Peak-to-Peak Sine (20 to 1,200 Hz)	IEC 60068-2-6 (Sinusoidal), 20G IEC 60068-2-64 (Random) 20PSD	IEC 60068-2-6 (Sinusoidal), 20G IEC 60068-2-64 (Random) 20PSD
Mechanical Shock	10g's, 1/2 Sine Wave	10g's, 1/2 Sine Wave	10g's, 1/2 Sine Wave	25 g's Minimum	25 g's Minimum
Weight	< 20 grams	< 20 grams	<3.5 grams	< 60 grams	< 60 grams
Standard Pressure Connection Port Options *(Contact Factory for Additional/Custom Options)*	1/8" diameter tube fitting with barb for 3/16 ID tubing	1/8" diameter tube fitting with barb for 3/16 ID tubing	Barb for 5/32 ID soft tubing	1/4-18 NPT	G1/4; 7/16-20 UNF-2A; 7/16-20 UNF-2B;
Standard Electrical Connector Options *(Contact Factory for Additional/Custom Options)*	PCB Mount; 3 Foot PCB (Compatible with Kavlico P592); 2 Foot PCB with lead wires (Compatible with Kavlico P592/P593)	3 solderable pins, tin plated	PCB Plug-in (Mates to PCB installed receptacle)	Packard Metripack 150; M12-4 pole	M12-4 pole; 16mm DIN; 9.4-mm GDI-307; Packard Metripack 150
QUALITY CERTIFICATIONS:					
RoHS Compliant	Yes	Yes	Yes	Yes	Yes
CE Mark	Yes	Yes	**	Yes	Yes
UL Certification	Yes	**	**	Yes	Yes

1) TEB = Linearity + Hysteresis + Repeatability + Temp. Coeff. + Zero + Span Tolerance 2) Accuracy = Linearity (best fitted straight line) including Hysteresis + Repeatability
**Contact Factory

All products are not shown to scale.