

KPA Series Industrial/OEM Pressure Sensor

USA
KOBOLD Instruments, Inc
1801 Parkway View Drive
Pittsburgh, PA 15205
Tel: 412-788-2830

Canada
9A Aviation
Pointe-Claire, QC
H9R 4Z2
Tel: 514-428-8090



- **0.25% of Full Scale Accuracy**
- **Precision Machined Diaphragm with no Welds or O-ring Seals**
- **Pressure Ranges 0-50 through 0-10,000 PSIG**
- **All Stainless Steel Wetted Parts**
- **Unique Sensor Fusing Technology for Exceptional Cycle Life at Low Cost**
- **All of the Features with None of the Cost**

www.kobold.com

The Kobold KPA series Industrial/OEM pressure sensors are a breakthrough that combine unique features, yielding an exceptionally tough and accurate sensor at a low cost. The fitting and pressure sensing diaphragm are precision machined out of a single piece of 17-4 PH stainless steel. There are no welds or O-ring seals which results in an exceptionally high cycle life. The semiconductor strain gauges are kiln fused to the diaphragm making a highly stable molecular bond. Molecular bonding of the sensing element produces a pressure sensor that will have exceptional long term stability in demanding applications characterized by high pulsations. The KPA series has a 4-20 mA, 2-wire transmitter and 1/4" NPT fitting as standard. Other outputs and fitting options are available in OEM quantities. The KPA also provides significant levels of RFI, EMI and ESD protection to make the KPA an excellent choice for industrial and mobile applications.



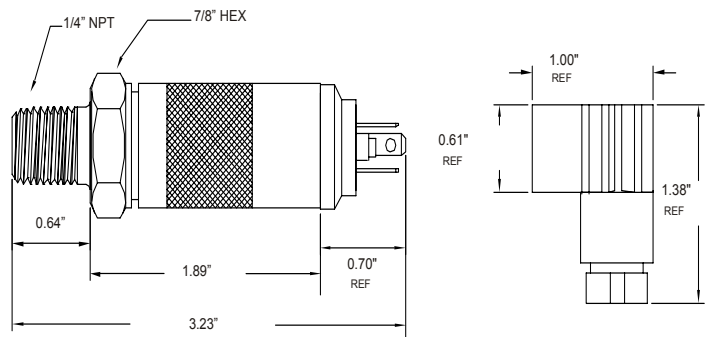
Specifications

Pressure Ranges: 0-50 PSIG through 0-10,000 PSIG
Accuracy: 0.25% of full scale BFLS
Temp. Drift Coefficient: ±0.0065% of full scale/°F over the compensated temperature range
Process Temp. Range: -40 to 250°F
Compensated Temp. Range: 0 to 185°F
Wetted Materials: 17-4 PH Stainless Steel

Proof Pressure: 2X measuring range
Burst Pressure: 5X measuring range
Vibration Resistance: 20G at 20-200 Hz
Shock Resistance: 11G / 11 ms
Output:
Standard: 4-20 mA, 2-wire, 9-30 VDC
Optional: Others available in OEM quantities
Electrical Connection
Standard: Mini-DIN 43650C
Optional: Others available in OEM quantities
Electrical Protection: NEMA 4X/ IP 65

Ordering Information

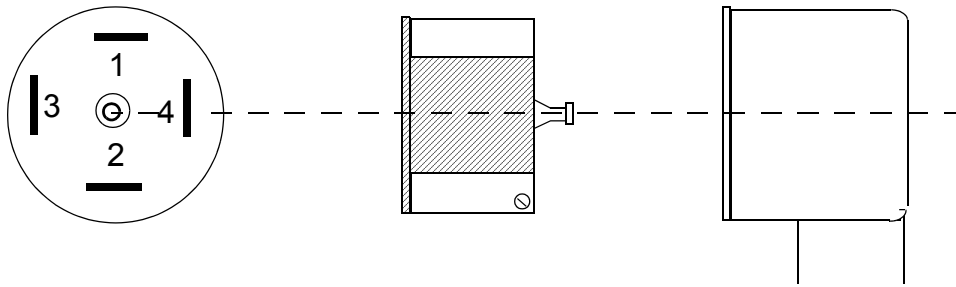
Range (PSIG)	Model Number	Range (PSIG)	Model Number
0-50	KPA-565P055	0-1000	KPA-565P115
0-100	KPA-565P065	0-3000	KPA-565P140
0-200	KPA-565P085	0-5000	KPA-565P150
0-300	KPA-565P090	0-10000	KPA-565P175
0-500	KPA-565P100		



When quality counts, count on KOBOLD

Argentina, Austria, Belgium, Brazil, Canada, Chile, Czech Republic, France, Germany, Indonesia, Italy, Malaysia, Mexico, Netherlands, Peru, Slovakia, Switzerland, Thailand, United Kingdom, USA, Venezuela, Vietnam

Wiring - Standard DIN 43650C Plug



Pin Assignments

Standard 4-20 mA Output (2-wire)

- Pin 1 = +9-30 VDC
- Pin 2 = 4-20 mA Out
- Pin 3 = Not Connected
- Pin 4 = Not Connected

Optional 0-5 VDC, 0-10 VDC, 1-5 VDC, 0.5-4.5 VDC Outputs (3-wire)

- Pin 1 = +8-30 VDC
- Pin 2 = + Signal Out
- Pin 3 = - VDC
- Pin 4 = Not Connected

Wiring - w/Optional Integral Cable

Output Type	Wiring
4-20 mA Output (2-wire)	Red = + 9-30 VDC Supply Black = 4-20 mA Out
0-5 VDC, 0-10 VDC, 1-5 VDC & 0.5-4.5 VDC Outputs (3-wire)	Red = + 8-30 VDC Supply White = + Signal Out Black = - DC Supply

- **User's Responsibility for Safety:** KOBOLD manufactures a wide range of process sensors and technologies. While each of these technologies are designed to operate in a wide variety of applications, it is the user's responsibility to select a technology that is appropriate for the application, to install it properly, to perform tests of the installed system, and to maintain all components. The failure to do so could result in property damage or serious injury.
- **Proper Installation and Handling:** Use a proper sealant with all installations. Never overtighten the sensor within its fitting. Always check for leaks prior to system start-up.
- **Wiring and Electrical:** Because this is an electrically operated device, only properly trained personnel should install and maintain this product. Be sure that the power supplied to the sensor is appropriate for the electronics version supplied. Electrical wiring of the sensor should be performed in accordance with all applicable national, state and local codes.
- **Temperature and Pressure:** The KPA is designed for use in process temperatures from -40°F to 250°F. Operation outside these limitations will cause damage to the unit.
- **Material Compatibility:** The wetted parts are all 17-4 PH stainless steel. Make sure that the unit is chemically compatible with the application fluids. While the sensor's outer housing is liquid and spray resistant when installed properly, it is not designed to be immersed. It should be mounted in such a way that it will not be submerged in liquid.
- **Flammable, Explosive and Hazardous Applications:** The KPA is not an explosion-proof design. It should not be used in applications where an explosion-proof design is required.
- **Make a Fail-Safe System:** Design a fail-safe system that accommodates the possibility of sensor or power failure. In critical applications, KOBOLD recommends the use of redundant backup systems and alarms in addition to the primary system.