

P6000/P6010

Miniature Pressure Sensors



Description

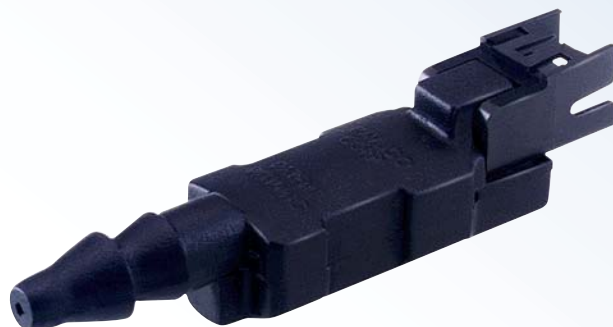
The P6000 series pressure sensors incorporate a silicon piezoresistive sensing element in a compact package.

Using a 5v input, the sensors provide a 0.5 to 4.5Vdc output proportional to pressure. Internal temperature compensation provides an accurate, easy to use device.

The innovative remote mounting capability and customization features allow system designers to decouple their pressure sensing from PCB's.

Features

- Rugged, Miniature Package
- Amplified, Temperature Compensated Linear Output
- Remote Mounting Option
- EMI/RFI & ESD Protected
- Enhanced Accuracy Option (P6010)
- Custom Packaging and Pressure Ranges



Applications

- Medical
 - Oxygen Concentrators
 - Respirators
 - Sleep Apnea
- Industrial
 - Instrumentation
 - Pneumatic Controls
 - Robotics

Standard Full Scale Pressure Ranges

- 10" H₂O, 30 cm H₂O
- 1, 5, 15, 30, 50 PSIA and PSIG
- Vacuum

Technical Specifications

Note: Performance Specifications with 5v $\pm$.002 Vdc supply at 25°C

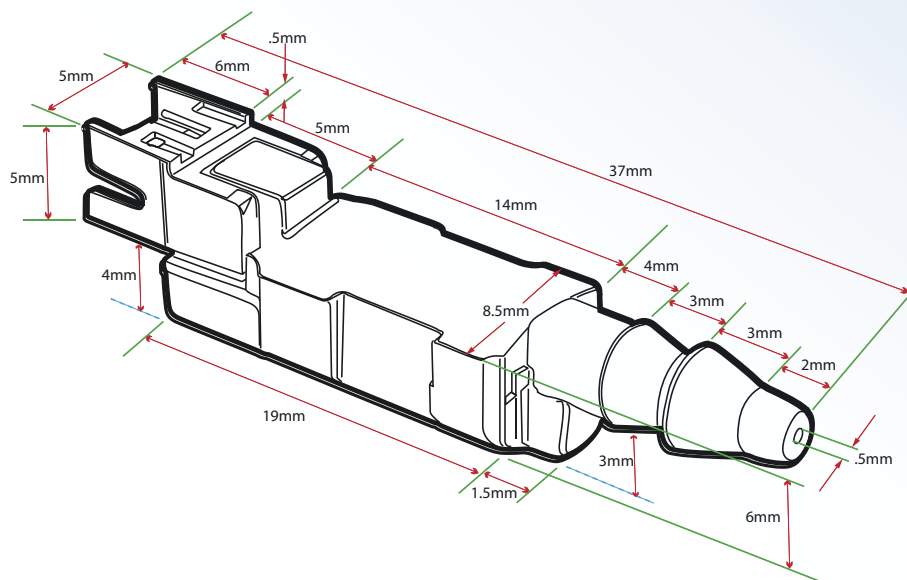
Pressure Ranges:	0-1, 0-5, 0-15, 0-30, 0-50, 0-100 PSIA/PSIG, 0-30 cm H ₂ O	Humidity:	95% RH, non-condensing
Proof Pressure:	2X Max. Pressure (150 PSI Max)	Weight:	1.3 grams Max.
Burst Pressure:	3X Max. Pressure (200 PSI Max)	Electrical Termination:	Pin Header
Supply Voltage:	5.0 $\pm$ 0.25 Vdc	- Option A	Pin Header with Mating Connection
Supply Current:	4mA Max.	- Option B	with Lead wires 12" long
Output Voltage (Ratiometric):	.5 to 4.5 Vdc	Preferred Mounting Position:	Position Insensitive
Voltage Ratiometricity:	$\pm$ 1.5% of span Max.	Pressure Connection:	Barb for 3/16 ID tubing
Total Error Band:	$\pm$ 2% Span Max. (P6000) or $\pm$ 1% Span Max. (P6010)	Recommended Interface Impedance:	5K Ohm Min. resistance between transducer output and ground, in parallel with 0.2 mF Max. capacitance
Output Impedance:	100 Ohms Max.	Over-Voltage Protection:	16 Vdc
Operating Temperature:	-20 to 85°C	Reverse Polarity Protection:	-6 Vdc
Storage Temperature:	-40°C to +125°C		
Service Life:	10,000,000 cycles min.		
Vibration:	10 G From 20 Hz to 2000 Hz		
Shock:	50 G 1/2 sine wave		



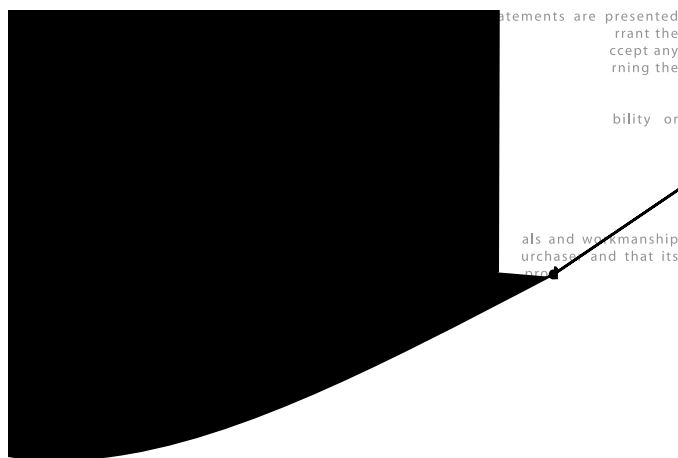
P6000/P6010

Miniature Pressure Sensors

Outline Drawings



How to Order



14501 Princeton Avenue | Moorpark, CA 93021
Tel (805) 523-2000 | Fax (805) 523-7125
Web: www.kavlico.com | E-Mail: sales@kavlico.com