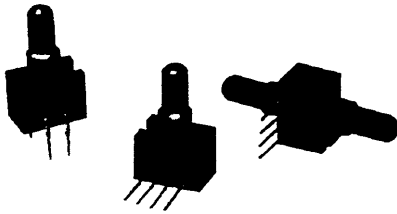


# Pressure Sensors

24PC Series

## Gage and Differential/Unamplified-Noncompensated

### Basic Sensors



### FEATURES

- Lowest priced pressure sensor
- Miniature package
- Variety of gage pressure port configurations - easily and quickly modified for your special needs

- Choice of termination for gage sensors
- 2 mA constant current excitation significantly reduces sensitivity shift over temperature\*
- Can be used to measure with vacuum or positive pressure

### 24PC SERIES PERFORMANCE CHARACTERISTICS at 10.0 ± 0.01 VDC Excitation, 25°C

	Min.	Typ.	Max.	Units
Excitation	—	10	12	VDC
Null Offset	-30	0	+30	mV
Null Shift, 25° to 0°, 25° to 50°C	—	±2.0	—	mV
Linearity, P2 > P1, BFSL	—	±0.25	±1.0	%Span
Sensitivity Shift, 25° to 0°, 25° to 50°C	—	±5.0*	—	%Span
Repeatability & Hysteresis	—	±0.15	—	%Span
Response Time	—	—	1.0	msec
Input Resistance	—	5.0 K	—	ohms
Output Resistance	—	5.0 K	—	ohms
Stability over One Year	—	±0.5	—	%Span
Weight	—	2	—	grams

### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40° to +85°C (-40° to +185°F)
Storage Temperature	-55° to +100°C (-67° to +212°F)
Shock	Qualification tested to 150 g
Vibration	Qualification tested to 0 to 2 kHz, 20 g sine
Media (P1 & P2)	Limited only to those media which will not attack polyetherimide, silicon and fluorosilicone seal

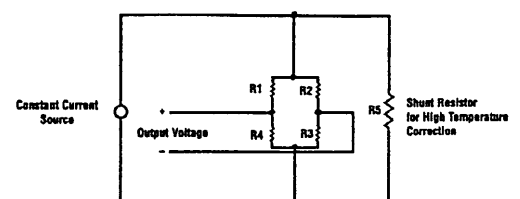
### 24PC SERIES ORDER GUIDE

Catalog Listing	Pressure Range psi	Span, mV			Sensitivity mV/psi Typ.	Overpressure psi Max.
		Min.	Typ.	Max.		
24PCE Type	0.5	24	35	46	70	20
24PCA Type	1.0	30	45	60	45	20
24PCB Type	5.0	85	115	145	23	20
24PCC Type	15	165	225	285	15	45
24PCD Type	30	240	330	420	11	60
24PCF Type	100	156	225	294	2.25	200
24PCG Type	250	145	212	280	0.85	500

\* Non-compensated pressure sensors, excited by constant current instead of voltage, exhibit temperature compensation of Span. Application Note #1 briefly discusses current excitation.

Constant current excitation has an additional benefit of temperature measurement. When driven by a constant current source, a silicon pressure sensor's terminal voltage will rise with increased temperature. The rise in voltage not only compensates the Span, but is also an indication of die temperature.

### Constant Current Excitation Schematic



*More to go!*

723 - 7753  
723 - 7756  
731 - 626 / 638  
" 640 / 651  
" 663 / 675  
" 687 / 699  
" 705 / 717  
" 729 / 730

## Gage and Differential/Unamplified-Noncompensated

### SENSOR SELECTION GUIDE

2 Product Family	4 Circuit Type	PC Pressure Transducer	A Pressure Range	F* Type of Seal	A Type of Port	2 Termination Style	G Pressure Measurement
2 20PC family	4 Noncom- pensated		A 1 psi B 5 psi C 15 psi D 30 psi E 0.5 psi F 100 psi G 250 psi	F Fluorosilicone	A Straight B Barbed C Luer D Modular H M5 Thread I 90° Port J Needle M 1/4 - 28 UNF Thread	1 1 x 4 2 2 x 2	G Gage D Differential

**Example:** 24PCAFA2G

Standard, non-compensated 1 psi sensor with fluorosilicone seal, straight port, 2 x 2 terminals, and Gage pressure measurement.  
\*Other media seal materials may be available.

### ACCESSORIES SELECTION GUIDE

Catalog Listing	Description
PC10182	Steel locking (Included with Port Style A, 1 x 4 terminals only)
PC10949	Single hole plastic bracket (Must be separately ordered)

Not all combinations are established.  
Contact 800 number before final design.  
The following listings are typically stocked in small quantities.

Unamplified