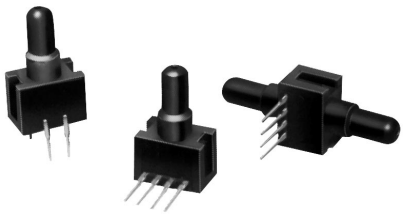
Pressure Sensors

26PC Series

Gage and Differential/Unamplified-Compensated

Temperature Compensated Sensors



FEATURES

- Lowest priced sensor with temperature compensation and calibration
- Variety of gage pressure port configurations - easily and quickly modified for your special needs
- Operable after exposure to frozen conditions
- Choice of termination for gage sensors
- Calibrated Null and Span
- Temperature compensated for Span over 0 to 50°C
- Provides interchangeability
- Can be used to measure vacuum or positive pressure
- Ideal for wet/wet differential applications

Unamplified

26PC SERIES PERFORMANCE CHARACTERISTICS at 10.0 ±0.01 VDC Excitation, 25°C

	Min.	Typ.	Max.	Units
Excitation	---	10	16	VDC
Repeatability & Hysteresis	---	±0.20	---	%Span
Response Time	---	---	1.0	msec
Input Resistance	5.5 K	7.5 K	11.5 K	ohms
Output Resistance	1.5 K	2.5 K	3.0 K	ohms
Stability over One Year	---	±0.5	---	%Span
Weight	---	2	---	grams

Total error calculation, see page 105.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	−40° to 85°C (−40° to +185°F)
Storage Temperature	−55° to +100°C (−67° to +212°F)
Compensated Temperature	0° to +50°C (32° to +122°F)
Shock	Qualification tested to 150 g
Vibration	MIL-STD-202. Method 213 (150g halfsine, 11 msec)
Media (P1 & P2)	Limited only to those media which will not attack polyetherimide, silicon, fluorosilicone, silicone, EPDM, and neoprene seals.

26PC SERIES ORDER GUIDE

Catalog Listing	Pressure Range (psi)	Linearity (% span)		Null Shift (mV)		Null Offset (mV)			Span Shift (% span)		Span (mV)			Sensitivity mV/psi	Over-pressure psi
		Typ.	Max	Typ.	Max	Min.	Typ.	Max.	Typ.	Max.	Min.	Typ.	Max.	Typ.	Max.
26PCA TYPE	1	0.25	0.5	±0.5	±1.0	−1.5	0	+1.5	±1.0	±2.0	14.7	16.7	18.7	16.7	20
26PCB TYPE	5	0.4	0.5	±0.5	±1.0	−1.5	0	+1.5	±1.0	±1.5	47	50	53	10.0	20
26PCC TYPE	15	0.25	0.5	±0.5	±1.0	−1.5	0	+1.5	±0.75	±1.5	97	100	103	6.67	45
26PCD TYPE	30	0.1	0.2	±0.75	±1.5	−1.5	0	+1.5	±0.75	±1.5	97	100	103	3.33	60
26PCF TYPE	100	0.1	0.2	±1.0	±2.0	−2.0	0	+2.0	±0.5	±1.5	95	100	105	1.0	200
26PCJ TYPE	38*	0.1	0.5	±0.7	±1.5	−1.5	0	+1.5	±1.0	±1.5	37.5	39.5	41.5	2.63	60
26PCK TYPE	38*	0.1	0.5	±0.7	±1.5	−1.5	0	+1.5	±1.0	±1.5	37.5	39.5	41.5	2.63	60

*Accuracy specifications calculated at 15 psi.

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SENSOR SELECTION GUIDE

2 Product Family	6 Circuit Type	PC Pressure Transducer	B Pressure Range	F* Type of Seal	A Type of Port	2 Termination Style	G Pressure Measurement
2 20PC family	**6** Compensated Calibrated		**A** 1 psi **B** 5 psi **C** 15 psi **D** 30 psi **F** 100 psi **J** 38 psi **K** 38 psi (passivated**)	**E** EPDM **F** Fluorosilicone **N** Neoprene **S** Silicone	**A** Straight **B** Barbed **C** Luer **D** Modular **H** M5 Thread **I** 90° Port **J** Needle **K** Reverse 90° Port **L** 1/4-28 UNF w/Cable Lock **M** 1/4 - 28 UNF w/o Cable Lock **S** Manifold	**1** 1 x 4 (.400″) **2** 2 x 2 **6** 1 x 4 (.600″)	**G** Gage **D** Differential

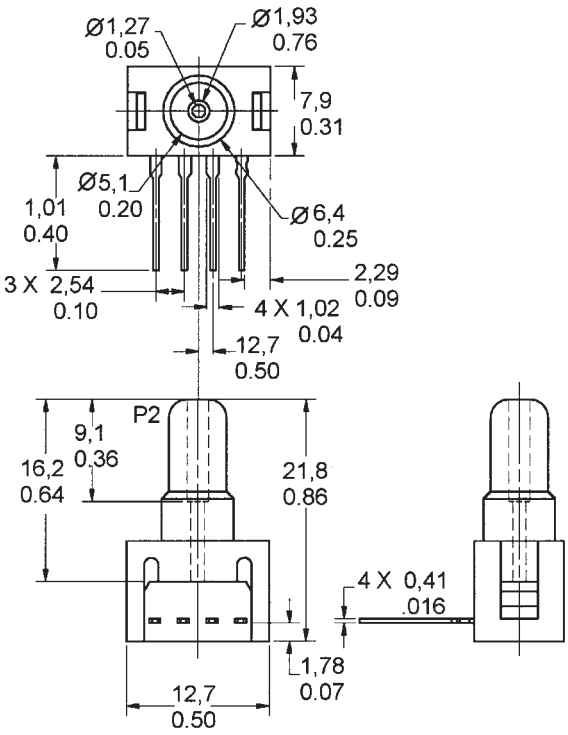
Example: 26PCBFA2G
Compensated and calibrated 5 psi sensor with fluorosilicone seal, straight port, 2 x 2 terminals, and Gage pressure measurement.
*Other media seal materials may be available.
**P2 side of die coated for environmental and dielectric protection.

See Accessories Guide, page 27.

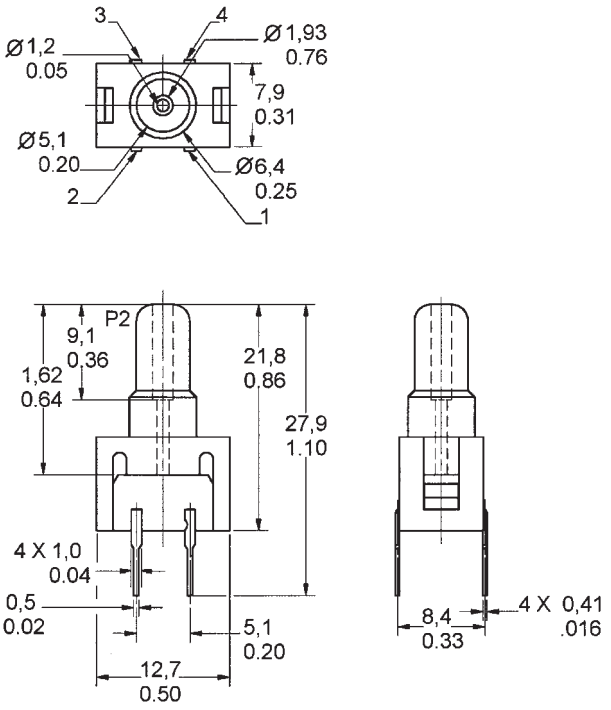
Not all combinations are established. Contact 800 number before final design.

GAGE SENSOR
Pressure is applied to port P2. Port P1 vents to ambient pressure

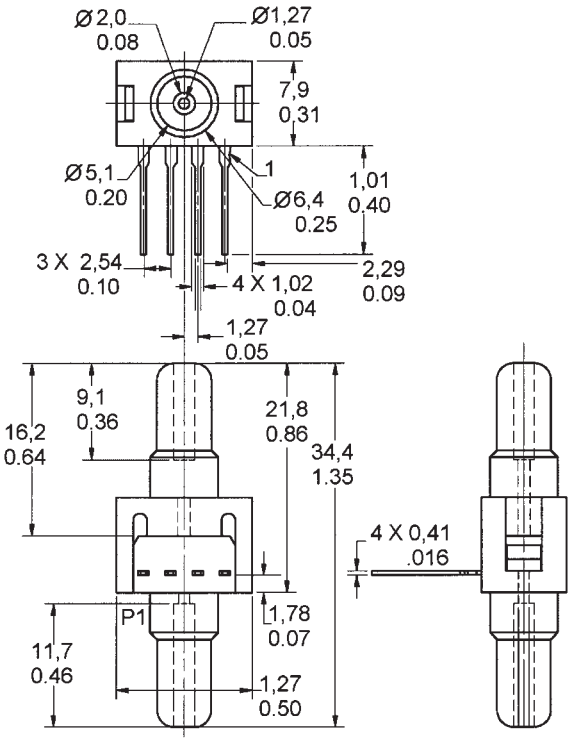
Mounting Dimensions (for reference only)
1 x 4 Termination (Style 1), Straight Port (Style A)
Pin 1 is notched, and is shown at the right of the package. Pin 2 is next to Pin 1, etc.



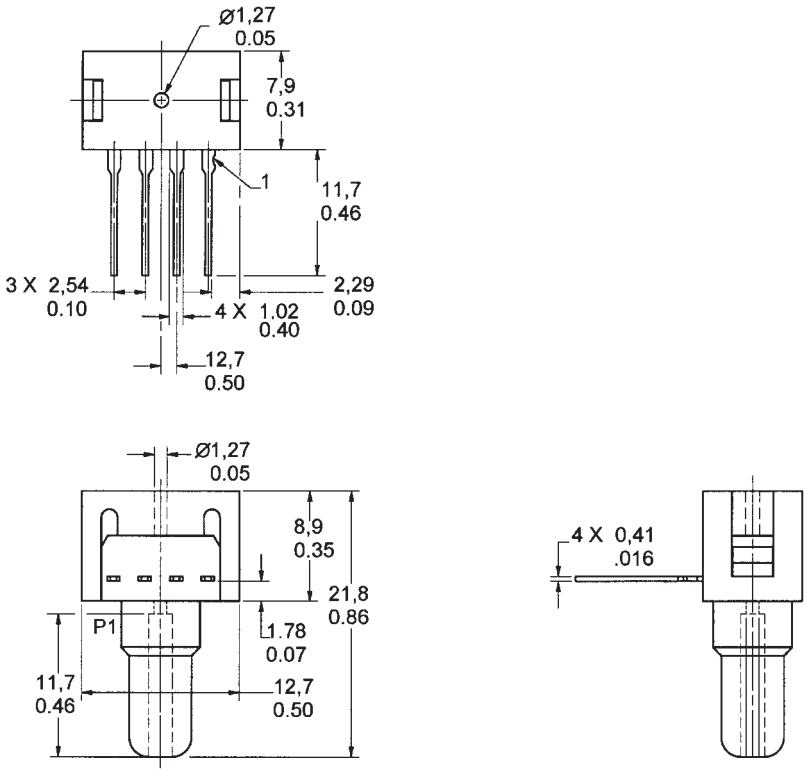
2 x 2 Termination (Style 2), Straight Port (Style A)
Pin 1 is notched and is shown at lower right corner. Pins 2, 3, and 4 are clockwise.



Straight Port, 1 x 4 Termination (Style 1) ONLY
Port 1 is near terminals

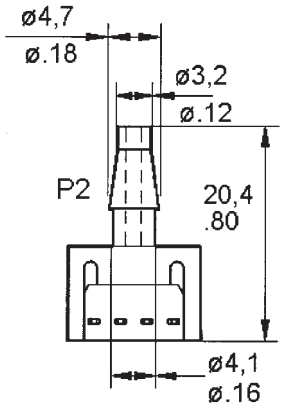


Absolute Sensor
1 x 4 Termination (Style 1), Port 1 is near terminals

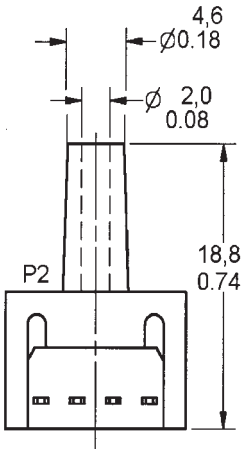


OTHER GAGE SENSOR PORT STYLES
(2 x 2 or 1 x 4 Termination)

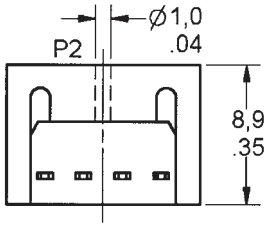
B Barbed



C Luer



D Modular



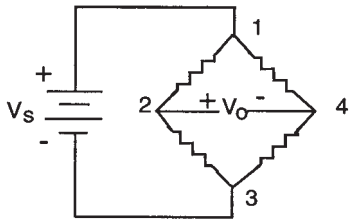
20PC SERIES CIRCUIT - NOTES

1. Circled numbers refer to Sensor Terminals (interface pins).
2. V_O increases with pressure change.
3. $V_O = V_2 - V_4$
4. Pin 1 designated with a notch.

Pin Designation

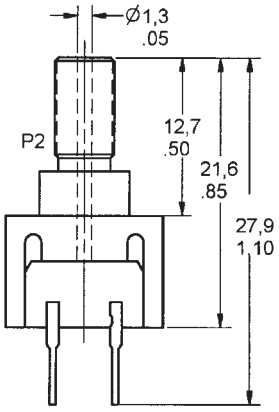
Pin 1 = V_S (+)
Pin 2 = Output (+)
Pin 3 = Ground (–)
Pin 4 = Output (–)

EXCITATION

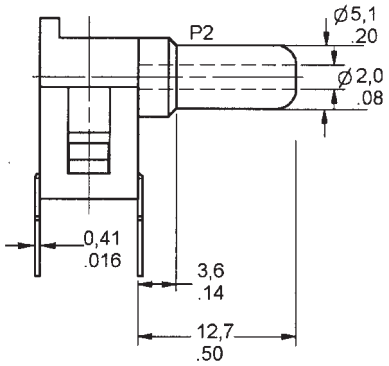


H M5 Thread

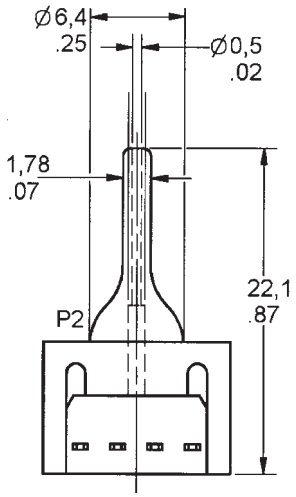
O-Ring Size 007 O-Ring Counterbore
1,02 mm (.040) deep ±0,13 (.005) x 7,6 mm (.30) ±0,8 (.003)



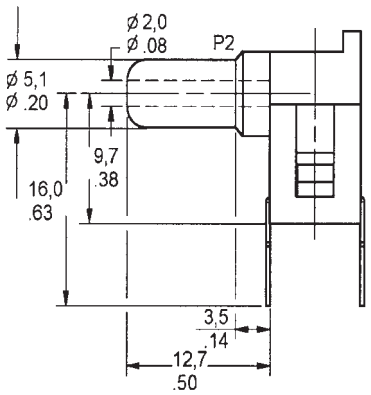
I 90°



J Needle



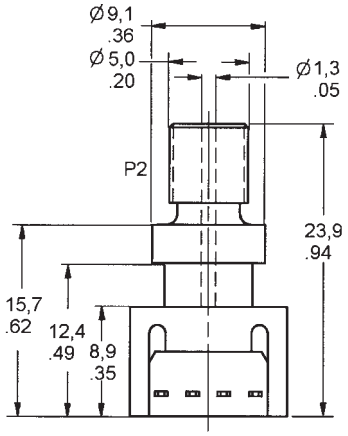
K Reverse 90°



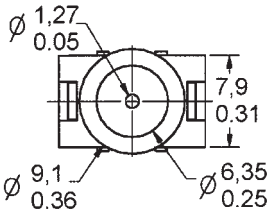
Unamplified

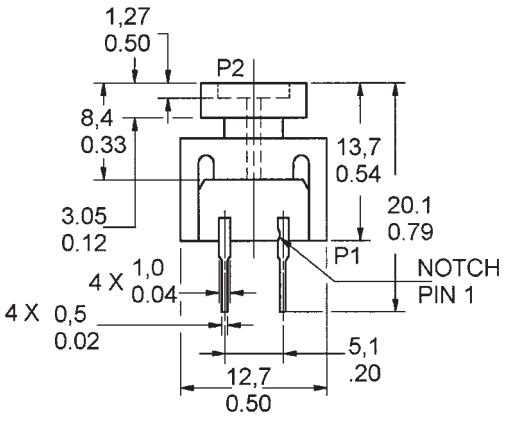
OTHER GAGE SENSOR PORT STYLES
(2 x 2 or 1 x 4 Termination)

M 1/4-28 UNF Thread
O-Ring Size 009 O-Ring Counterbore
1,02 mm (.040) deep ±0,05 (.002) x 9,1 mm (.360) ±0,8 (.003)



S Manifold





20PC Construction