

### FEATURES

- 0...1 to 0...250 psi  
gage or differential
- High impedance bridge
- Miniature package
- Different pinning configurations
- Usable for wet/wet applications<sup>8</sup>

### SERVICE

All media compatible with

port 1: - polyetherimide  
- silver-filled silicone  
- silicon nitride

port 2<sup>9</sup>: - polyetherimide  
- fluor-silicone  
- silicon



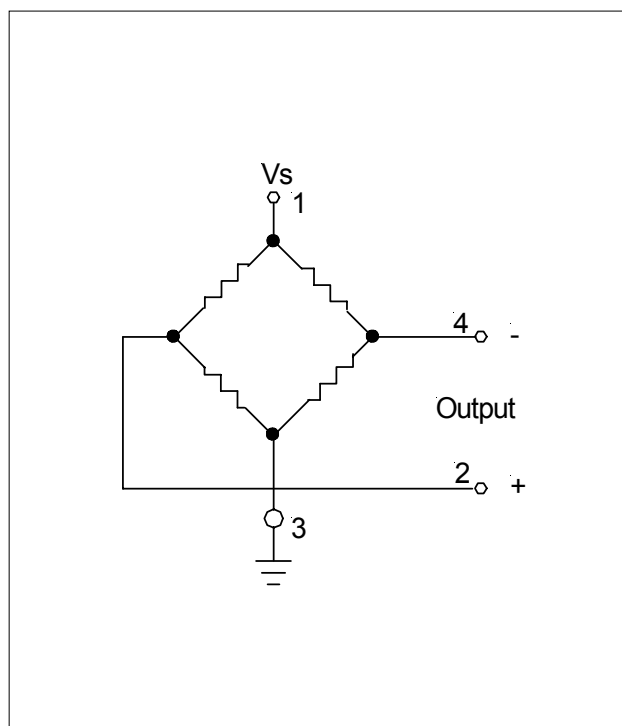
Scale: 1 cm  
1 inch

### SPECIFICATIONS

#### Maximum ratings

Supply voltage	16 V
Temperature limits	
Storage	-55 to +100°C
Operating	-40 to +85°C
Lead temperature (10 sec. soldering)	300°C
Humidity limits	0...100 %RH
Vibration (MIL-STD-202, Meth. 213)	150 g half sine 11 msec.
Mechanical shock (qualification tested)	150 g
Proof pressure <sup>1</sup>	
all 1 and 5 psi devices	20 psi
all 15 psi devices	45 psi
all 30 psi devices	60 psi
all 100 psi devices	200 psi
all 250 psi devices	500 psi

### ELECTRICAL CONNECTION



### PRESSURE SENSOR CHARACTERISTICS

$V_s = 10.0 \pm 0.01$  V,  $t_{amb} = 20^\circ\text{C}$  (unless otherwise noted)

Listing	Order number	Operating pressure	Full-scale span <sup>2</sup>		
			Min.	Typ.	Max.
26PCAFaxx	26PC0070xxA	0 - 1 psi (69 mbar)	14.7 mV	16.7 mV	18.7 mV
26PCBFaxx	26PC0350xxA	0 - 5 psi (345 mbar)	47 mV	50 mV	53 mV
26PCCFaxx	26PC1000xxA	0 - 15 psi (1034 mbar)	97 mV	100 mV	103 mV
26PCDFaxx	26PC2000xxA	0 - 30 psi (2068 mbar)	97 mV	100 mV	103 mV
26PCFFaxx	26PC7000xxA	0 - 100 psi (6.9 bar)	95 mV	100 mV	105 mV
26PCGFaxx	26PC17K0xxA	0 - 250 psi (17.2 bar)	143 mV	150 mV	157 mV

### COMMON PERFORMANCE CHARACTERISTICS

$V_s = 10.0 \pm 0.01$  V,  $t_{amb} = 25^\circ\text{C}$  (unless otherwise noted)

Characteristics		Min.	Typ.	Max.	Unit
Zero pressure offset	all 100 psi devices	-2.0		+2.0	mV
	all other devices	-1.5		+1.5	
Temperature effects (0 - 50°C) <sup>4</sup>					
Offset	all 1 to 15 psi devices		±0.5	±1.0	
	all 30 psi devices		±0.75	±1.5	
	all other devices		±1.0	±2.0	
Span	all 1 psi devices		±1.0	±2.0	% span
	all other devices		±0.75...±1.0	±1.5	
Linearity (P2 > P1, BSL) <sup>3</sup>	all 1 to 15 psi devices		±0.25	±0.5	
	all 30 psi devices		±0.1	±0.2	
	all other devices		±0.1	±0.7	
Repeatability and hysteresis <sup>5</sup>			±0.2		
Long term stability <sup>7</sup>			±0.5		
Input impedance		5.5	7.5	11.5	kΩ
Output impedance		1.5	2.5	3.0	
Response time <sup>6</sup>				1.0	ms

#### Specification notes:

1. The maximum specified pressure which may be applied to the sensor without causing a permanent change in the output characteristics.
2. Span is the algebraic difference between the output voltage at full-scale pressure and the output at zero pressure. Span is ratiometric to the supply voltage.
3. Linearity (BSL), the deviation of measured output at constant temperature (25°C) from "Best Straight Line" determined by three points, offset pressure, full-scale pressure and half full-scale pressure.

$$\left[ V_{\frac{1}{2} \text{ full scale}} - \left\{ \frac{V_{\text{full scale}} - V_{\text{offset}}}{(\text{full scale pressure})} \times \left( \frac{1}{2} \text{ full scale pressure} \right) + V_{\text{offset}} \right\} \right] : 2 (V_{\text{full scale}}) \times 100 \%$$

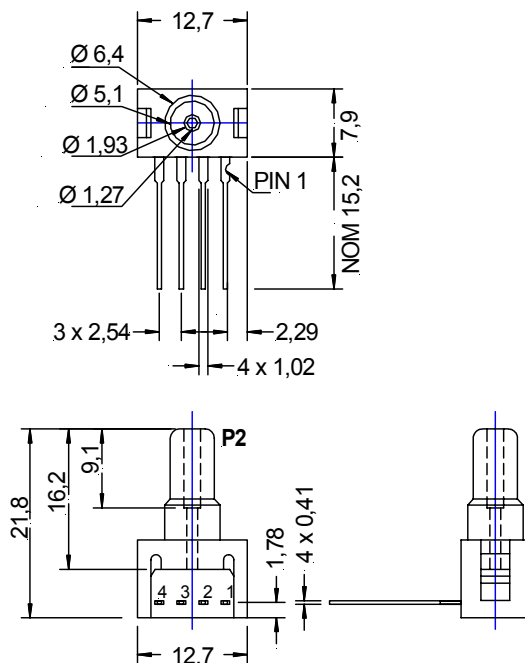
where: V = measured value for each device

4. Error band of the offset voltage, span or bridge impedance in the specified temperature range, relative to the 25°C reading.
5. Repeatability, the deviation in output readings for successive application of any given input pressure (all other conditions remaining constant). Hysteresis, the error defined by the deviation in output signal obtained when a specific pressure point is approached first with increasing pressure, then with decreasing pressure or vice versa (all other conditions remaining constant).
6. Response time for 0 to full-scale pressure step change, readings taken at 10 % and 90 % of full-scale pressure.
7. Long term stability of offset and span over a period over one year.
8. The sensors might be used on both ports, for media compatible with the components, specified under "Service" (page 1).
9. Other sealing materials are available on request. Minimum order quantities might be required.
10. Other pressure port styles, like barbed ones, luers, modular, M5, needle style or flow through connection, are available on request. Minimum order quantities might be required.

### OUTLINE DRAWINGS<sup>9</sup>

#### 26PCxxxxG6A, gage pressure devices (single inline pinning, 1 x 4)

26PCxFA6G

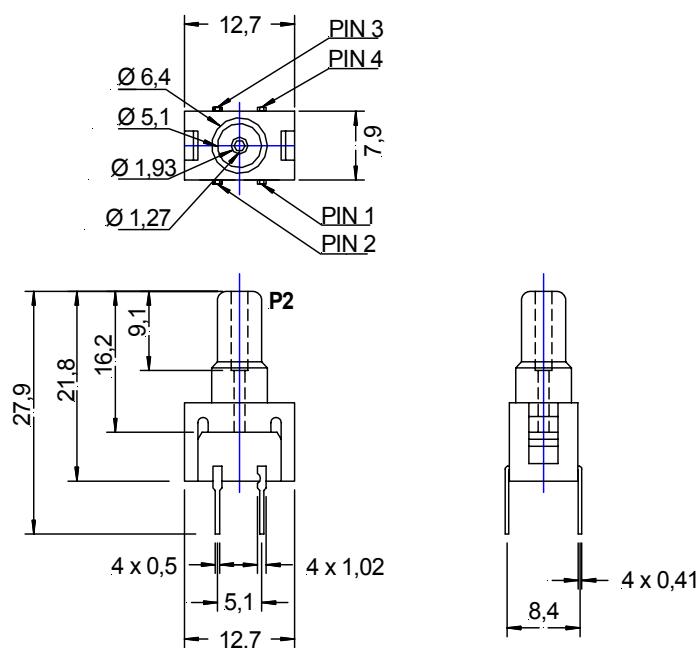


mass: 2 g

dimensions in mm

#### 26PCxxxxG2A, gage pressure devices (dual inline pinning, 2 x 2)

26PCxFA2G



mass: 2 g

dimensions in mm

