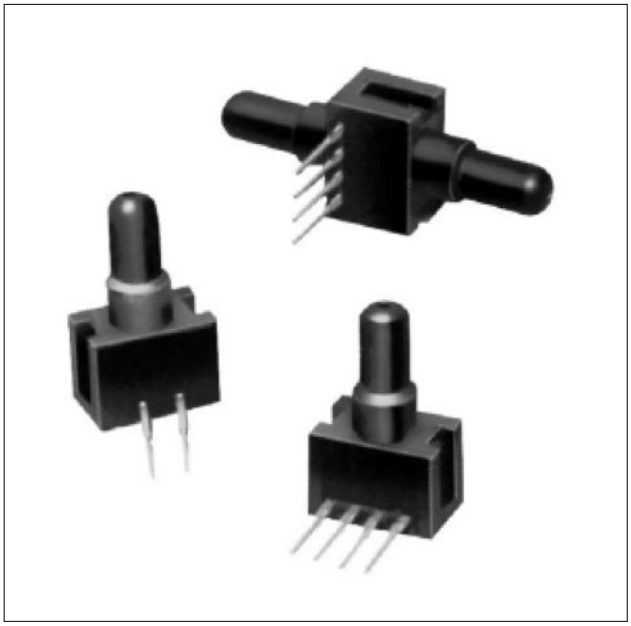
FEATURES

- **0...50 mbar to 0...16 bar gage or differential**
- **High impedance bridge**
- **Miniature package**
- **Different pinning configurations**
- **Usable for wet/wet applications[8]**



Scale: 1 cm
1 inch

SERVICE

All media compatible with

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

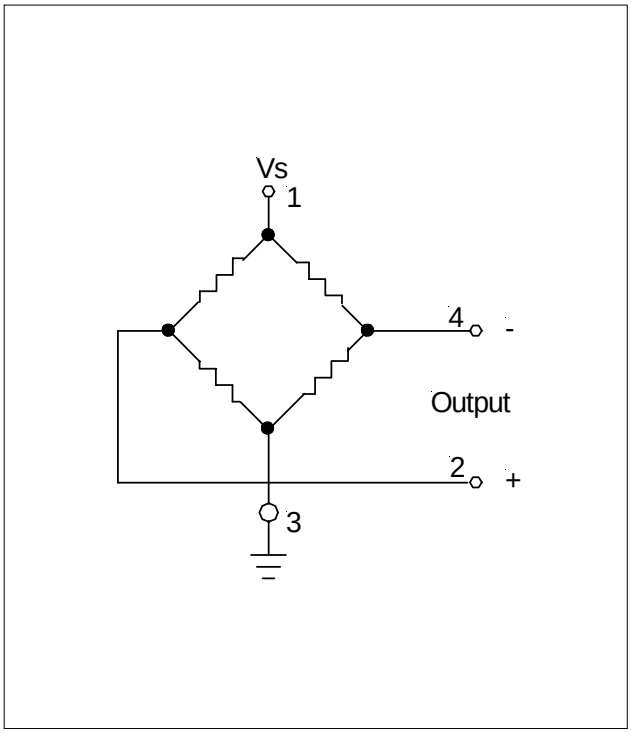
port 2[9]: - polyetherimide
- fluor-silicone
- silicon

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[1]	
all 50, 100 and 250 mbar devices	1.4 bar
all 1 bar devices	3 bar
all 2 bar devices	4 bar
all 5 bar devices	12 bar
all 10 and 16 bar devices	35 bar

ELECTRICAL CONNECTION



PRESSURE SENSOR CHARACTERISTICS

V_s = 10.0 ± 0.01 V, t_{amb} = 20°C (unless otherwise noted)

Part number	Operating pressure	Full-scale span[2]			Sensitivity typ.
		Min.	Typ.	Max.	
26PC0050xxA	0 - 50 mbar	10.5 mV	12.0 mV	13.6 mV	240 µV/mbar
26PC0100xxA	0 - 100 mbar	20.0 mV	24.0 mV	27.0 mV	240 µV/mbar
26PC0250xxA	0 - 250 mbar	33.5 mV	36.0 mV	38.5 mV	144 µV/mbar
26PC01K0xxA	0 - 1 bar	93.0 mV	97.0 mV	100.0 mV	97 µV/mbar
26PC02K0xxA	0 - 2 bar	91.0 mV	97.0 mV	100.0 mV	48.5 mV/bar
26PC05K0xxA	0 - 5 bar	69.0 mV	72.0 mV	76.0 mV	14.4 mV/bar
26PC10K0xxA	0 - 10 bar	82.0 mV	87.0 mV	92.0 mV	8.7 mV/bar
26PC16K0xxA	0 - 16 bar	133.0 mV	140.0 mV	147.0 mV	8.7 mV/bar

COMMON PERFORMANCE CHARACTERISTICS

V_s = 10.0 ± 0.01 V, t_{amb} = 25°C (unless otherwise noted)

Characteristics		Min.	Typ.	Max.	Unit
Zero pressure offset	all 5 bar devices	-2.0		+2.0	mV
	all other devices	-1.5		+1.5	
Temperature effects (0 - 50°C)[4]					mV
Offset	all 50 to 1000 mbar devices		±0.5	±1.0	
	all 2 bar devices		±0.75	±1.5	
	all other devices		±1.0	±2.0	
Span	all 50 and 100 mbar devices		±1.0	±2.0	% span
	all other devices		±0.75...±1.0	±1.5	
Linearity (P2 > P1, BSL)[3]	all 50 to 1000 mbar devices		±0.25	±0.5	% span
	all 2 bar devices		±0.1	±0.2	
	all other devices		±0.1	±0.7	
Repeatability and hysteresis[5]			±0.2		% span
Long term stability[7]			±0.5		% span
Input impedance		5.5	7.5	11.5	kΩ
Output impedance		1.5	2.5	3.0	kΩ
Response time[6]				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.

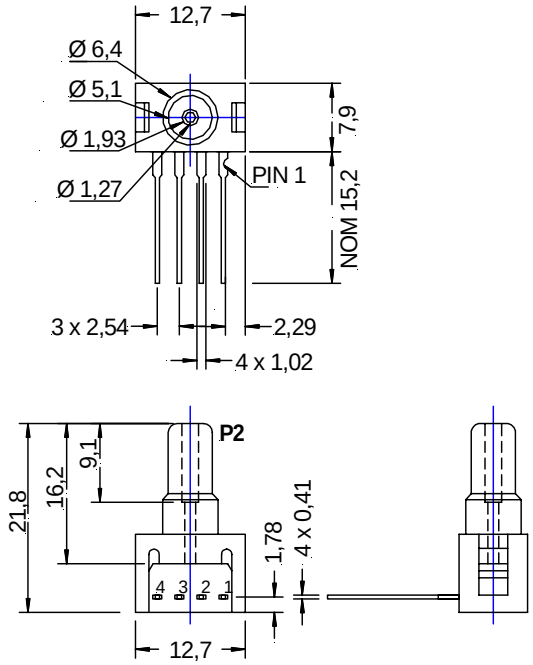
$$\left[V_{½\ \text{full scale}} - \left\{ \frac{V_{\text{full scale}} - V_{\text{offset}}}{(\text{full scale pressure})} \times (½\ \text{full scale pressure}) + V_{\text{offset}} \right\} \right] : 2\ (V_{\text{full scale}}) \times 100\ \%$$

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[10]

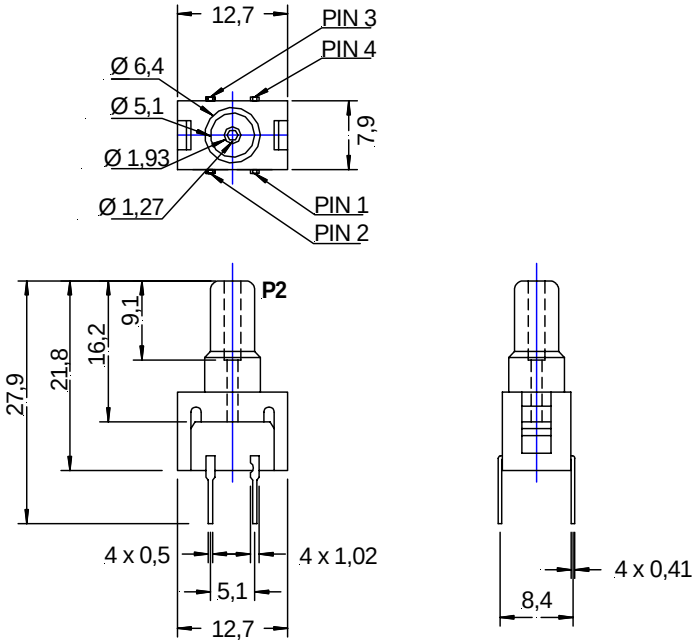
26PCxxxxG6A (single inline pinning, 1 x 4), *gage pressure devices*



mass: 2 g

dimensions in mm

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

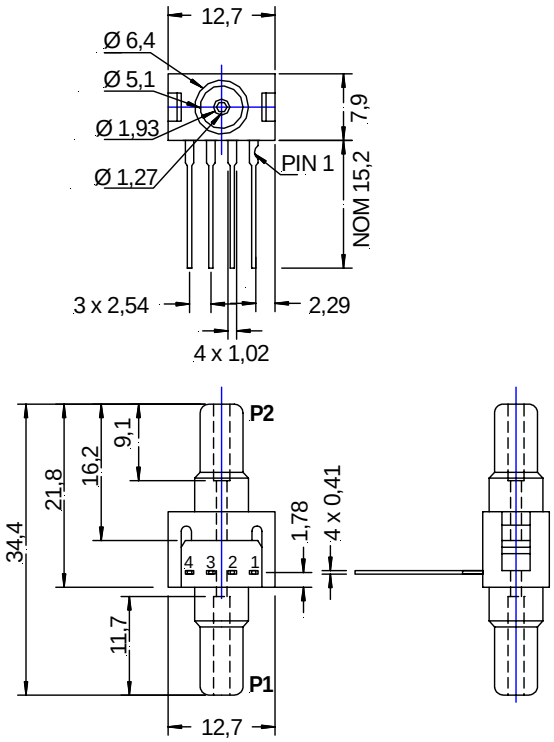


mass: 2 g

dimensions in mm

OUTLINE DRAWINGS[10]

26PCxxxxD6A (single inline pinning, 1 x 4), *differential pressure devices*



mass: 2 g

dimensions in mm

ORDERING INFORMATION

2 6 PC xxxx x x A[10]

26PC series

compensated

Pressure range

0050:	0 - 50 mbar
0100:	0 - 100 mbar
0250:	0 - 250 mbar
01K0:	0 - 1 bar
02K0:	0 - 2 bar
05K0:	0 - 5 bar
10K0:	0 - 10 bar
16K0:	0 - 16 bar

Pressure port (Ø 5.1 mm)

Pinning

2: dual inline pinning, 2 x 2 (not available for differential devices)

6: single inline pinning, 1 x 4

Pressure mode

D: differential pressure

G: gage pressure

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