

# Commercial Grade High Pressure Sensors

## 20PC Family

## 20PC Series

### FEATURES

- Lowest priced sensor with temperature compensation and calibration
- Variety of gage pressure port configurations; easily modified for special needs
- Operable after exposure to frozen conditions
- Choice of terminations for gage sensors
- Calibrated Null and Span
- Temperature compensated for Span over 0°C to 50°C provides interchangeability
- Measures vacuum or positive pressure
- Ideal for wet/wet applications

### TYPICAL APPLICATIONS

#### Medical

- Oxygen and nitrogen gas distribution in hospitals
- Dental chairs
- Water flow measurement

#### Environmental

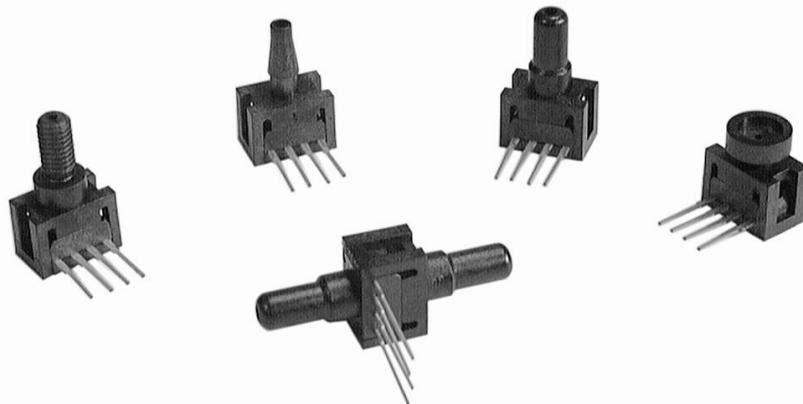
- Water control valves
- Instrumentation
- Irrigation equipment
- Filter monitoring equipment

#### Industrial Instrumentation

- Robotics
- Pressure valves
- Leak detection
- Air compressors

#### Analytical Instrumentation

- Gas chromatography



The 20PC family has added a new range to its already high pressure sensor family. The 250 psi range is now being offered in our 26PC family. This pressure range completes a full complement of pressure ranges that are compensated over temperature and calibrated at zero and full scale. The addition of the 250 psi pressure range permits greater flexibility in the design of this product family.

The factory calibrated 26PC Series sensors are temperature compensated (0 to 50°C), allowing part interchangeability, high performance, reliability, and accuracy. The lower cost noncompensated 24PC Series sensors are ideal for on-system calibration applications. These versatile 20PC Series products can meet many pressure sensing requirements in the commercial/consumer marketplace. Pressure ranges are from 0.5 psi to 250 psi in the 20PC family.

The extensive port options available for the 20PC Series sensors promote the application flexibility of Honeywell's commercial grade high pressure sensing options.

### **WARNING**

#### MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as product installation information.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

### **WARNING**

#### PERSONAL INJURY

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

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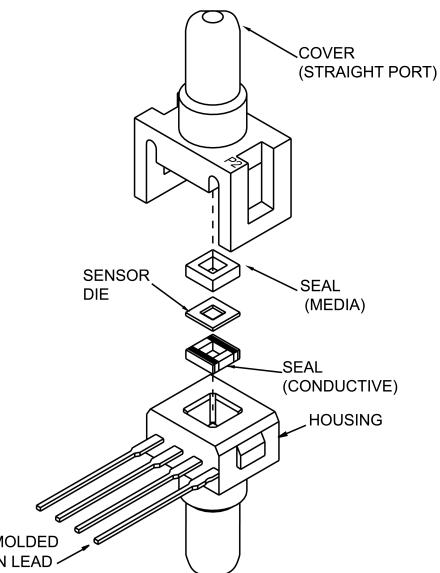
**26PC Series Performance Characteristics at  $10.0 \pm 0.01$  Vdc  
Excitation,  $25^\circ\text{C}$**

	Min.	Typ.	Max.	Units
Excitation	—	10	16	Vdc
Response Time	—	—	1.0	ms
Input Resistance	5.5 k	7.5 k	11.5 k	Ohm
Output Resistance	1.5 k	2.5 k	3.0 k	Ohm
Weight		2		gram

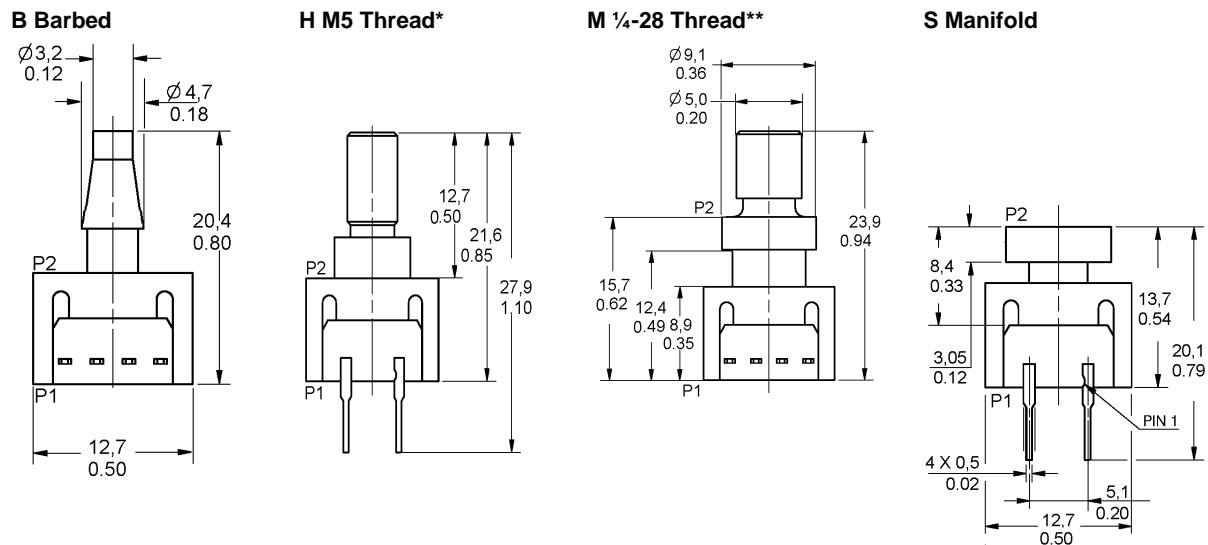
### Environmental Specifications

Operating Temperature	-40°C to +85°C (-40°F to +185°F)
Storage Temperature	-55°C to +100°C (-67°F to +212°F)
Compensated Temperature	0°C to +50°C (32°F to +122°F)
Shock	Qualification tested to 150 g
Vibration	MIL-STD-202, Method 213 (0 to 2 kHz, 20 G sine)

NOTE: For media compatibility specifications, refer to Catalog 15, 007908-11, or web site: [www.honeywell.com/sensing](http://www.honeywell.com/sensing)



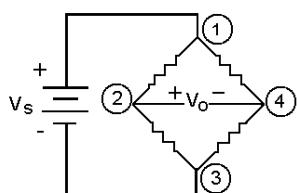
### 26PC PORT VARIATIONS (dimensions for reference only) mm/in



\*Recommended torque for sealing is 4 in-lb. Do not exceed 6 in-lb of torque. Use size 007 O-Ring. O-Ring counterbore dimensions are  $0.04 \pm .005$  in D x  $0.300 \pm .003$  in Dia.

\*\*Recommended torque for sealing is 8 in-lb. Do not exceed 12 in-lb. Use size 009 O-Ring. O-Ring counterbore dimensions are  $.040 \pm .002$  in D x  $0.360 \pm .003$  in Dia.

### 26PC CIRCUIT TERMINATION



Pin 1 = Vs (+)  
 Pin 2 = Output (+)  
 Pin 3 = Ground (-)  
 Pin 4 = Output (-)  
 Pin 1 is notched, Pin 2 is next to Pin 1, etc.

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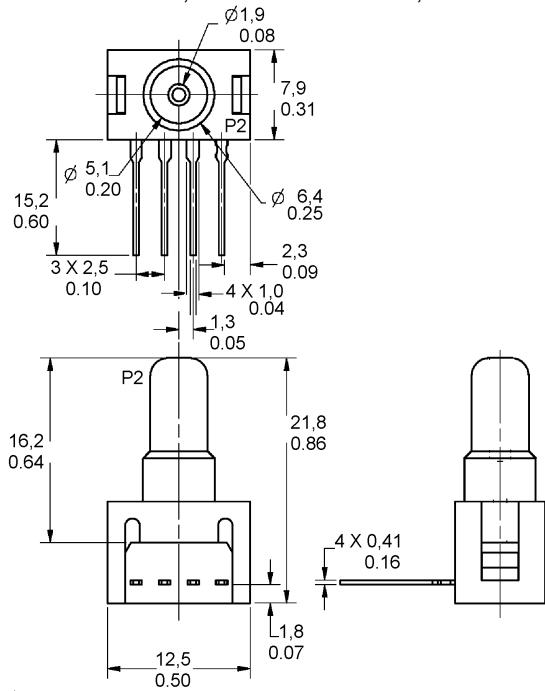
## 20PC Series

### MOUNTING DIMENSIONS (for reference only) mm/in

#### GAGE SENSOR

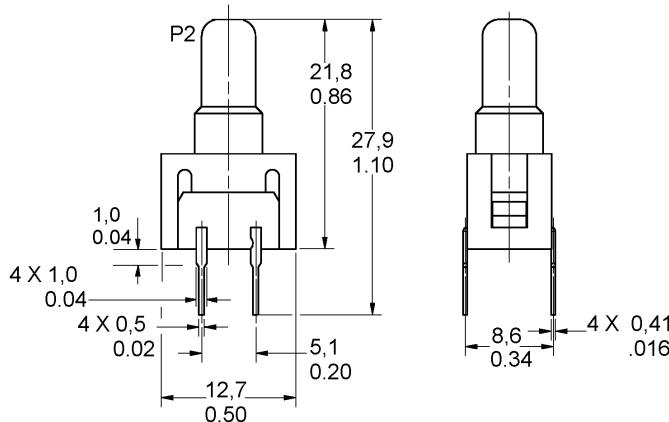
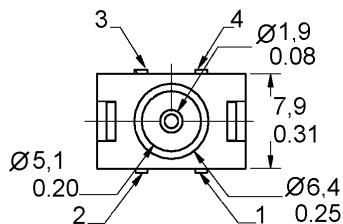
##### 1 x 4 Termination (Style 6) Port Style A, Straight

Pin 1 is notched, Pin 2 is next to Pin 1, etc.



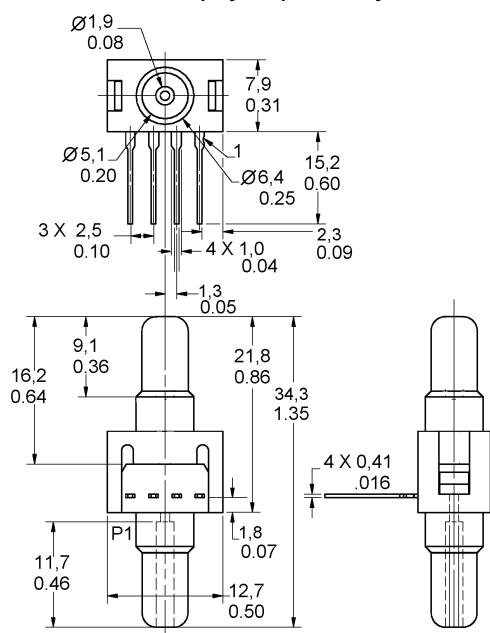
#### 2 x 2 Termination (Style 2) Port Style A, Straight

Pin 1 is notched, Pin 1 is shown at lower right corner. Pins 2, 3, 4 are clockwise.



#### DIFFERENTIAL SENSOR

##### 1 X 4 Termination (Style 6) Port Style A, Straight (Only)



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## 26PC FAMILY SENSOR SELECTION GUIDE

2	6	PC	G	F	A	2	G	
Product Family	Circuit Type	Pressure Sensor	Pressure Range	Seal Type	Port Type	Termination Style	Pressure Measurement	
2 20PC Family	6 Compensated Calibrated			A 1 psi B 5 psi C 15 psi D 30 psi F 100 psi G 250 psi J 38 psi K 38 psi*	E EPDM F Fluorosilicone N Neoprene S Silicone	A Straight B Barbed H M5 Thread M 1/4-28 Thread S Manifold	2 4-pin DIP 6 4-pin SIP	G Gage D Differential

**Example:** 26PCGFA2G

Compensated, calibrated 250 psi sensor with fluorosilicone seal, straight port, 2 X 2 termination and gage pressure measurement.

\* Passivated (P2 side of die is coated for environmental and dielectric protection)

### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.**

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

For application assistance, current specifications, or name of the nearest Authorized Distributor, check the Honeywell web site or call:

1-800-537-6945 USA

1-800-737-3360 Canada

1-815-235-6847 International

### FAX

1-815-235-6545 USA

### INTERNET

[www.honeywell.com/sensing](http://www.honeywell.com/sensing)

[info.sc@honeywell.com](mailto:info.sc@honeywell.com)

**Honeywell**

### Sensing and Control

Honeywell

11 West Spring Street  
Freeport, Illinois 61032



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