Pressure Sensors — continued

Basic Sensors – 24PC Series

Honeywell

Differential: H = 8.0 (excl. pins), W = 12.7, D = 34.4, Pressure ports O/D = 5.1

Gauge, Absolute: H = 8.0 (excl. pins), W = 12.7, D = 21.8, Pressure port O/D = 5.1

High pressure gauge: H = 8.0 (excl. pins), W = 12.7, D = 23.8, Pressure port = ¼-28UNF, flange dia. = 9.14

Connections (2.5 spacing): 1 = V_S (+) (notched pin), 2 = Output (+), 3 = Ground (-), 4 = Output (-)

- Measure vacuum or positive pressures in air, gas or liquids
- High pressure gauge types (100psig and 250psig) have threaded ports

A range of miniature low cost basic sensors. The sensors have wet/wet capability, incorporating a seal either side of the diaphram, one of which is unique conductive seal offering improved reliability for the product range.

Supply voltage	10V dc (nom.), 12V dc (max.)
Linearity (typ.)	Gauge, differential = 0.25% span, 15 psia = 0.10% span, 30 psia = 0.16% span
Null offset	Gauge, differential = 0 ± 30mV, 15 psia = -16 ± 30mV, 30 psia = -16 ± 45mV
Sensitivity shift	Gauge, differential = ± 5.0% span, 15 psia = 15mV/psia typ, 30 psia = 11mV/psi typ. (see note below)
Repeatability and hysteresis	Gauge, differential = ± 0.15%, absolute = 0.5%
Input/output resistance	5.0kΩ
Temperature range	-40°C to +85°C
Media	Wet or dry, compatible with polyetherimide, silicon and fluorosilicone seal

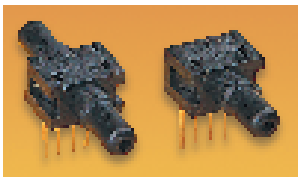
Note: Although non-compensated, these sensors exhibit extremely good temperature stability (0.5% of span) when driven by current rather than voltage (1.6 to 2.0mA recommended).

SEN204X

Absolute	Mftrs. List No.	Order Code	Price Each 1+	10+	25+	50+
2 - 15 psia	24PCCFA6A	**723-7753**				
2 - 30 psia	24PCDFA6A	**723-7765**				
Differential						
0 - 0.5 psid	24PCEFA6D	**731-626**				
0 - 1 psid	24PCAFA6D	**731-638**				
0 - 5 psid	24PCBFA6D	**731-640**				
0 - 15 psid	24PCCFA6D	**731-651**				
0 - 30 psid	24PCDFA6D	**731-663**				
Gauge						
0 - 0.5 psig	24PCEFA6G	**731-675**				
0 - 1 psig	24PCAFA6G	**731-687**				
0 - 5 psig	24PCBFA6G	**731-699**				
0 - 15 psig	24PCCFA6G	**731-705**				
0 - 30 psig	24PCDFA6G	**731-717**				
0 - 100 psig	24PCFFM6G	**731-729**				
0 - 250 psig	24PCGFM6G	**731-730**				

Temperature Compensated Sensors – 26 PC Series

Honeywell



Differential: H = 8.0 (excl. pins), W = 12.7, D = 34.4, Pressure ports O/D = 5.1

Gauge: H = 8.0 (excl. pins), W = 12.7, D = 21.8, Pressure port O/D = 5.1

Connections (2.5 spacing)
1 = V_S (+) (notched pin) 2 = output (+)
3 = Ground (-) 4 = output (-)

- Calibrated null and span
- Temperature compensated for span
- Can be used to measure vacuum or positive pressures in air, gas or liquids

Miniature low cost pressure sensors with compensated outputs. Wet/wet capability of the sensor incorporates a seal either side of the diaphragm, one of which is a unique conductive seal offering improved reliability for the product range.

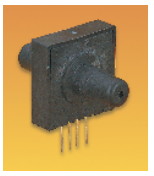
Supply voltage	10V dc (nom.), 16V dc (max.)	Input resistance	7.5kΩ
		Output resistance	2.5kΩ
Null offset	±1.5mV	Temperature range	-40°C to +85°C (0-50°C compensated)
Linearity	0.25% span		
Sensitivity shift (0-50°C)	±1.0% span	Media	Wet or dry, compatible with polyetherimide, silicon and fluorosilicone seal
Repeatability and hysteresis	0.2% span		
Response time	1ms (max.)		

SEN192X

Differential	Mftrs. List No.	Order Code	Price Each 1+	10+	25+	50+	100+
0-1 psid	26PCAFA6D	**731-742**					
0-5 psid	26PCBFA6D	**731-754**					
0-15 psid	26PCCFA6D	**731-766**					
0-30 psid	26PCDFA6D	**731-778**					
Gauge							
0-1 psig	26PCAFA6G	**731-780**					
0-5 psig	26PCBFA6G	**731-791**					
0-15 psig	26PCCFA6G	**731-808**					
0-30 psig	26PCDFA6G	**731-810**					

Low Pressure Differential Sensors
Temperature Compensated – 176 PC Series

Honeywell



Connections
1. V_S (+)
2. Output A
3. Ground (-)
4. Output B

- Miniature package
- Low pressure measurement
- Calibrated null and span
- Temperature compensated for span over 0°C - 50°C

This range of very low pressure sensors utilizes the latest silicon technology to achieve a higher sensitivity and lower null shift than was previously achievable.

Higher sensitivity requires less amplification and improves the signal to noise ratio.

H = 21.5, W = 21.5, D = 34.3 (overall).
Pressure port O/D = 7

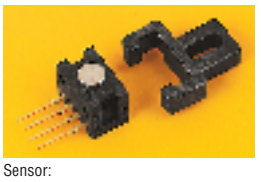
Supply voltage	10V dc (nom.), 16V dc (max.)
Null offset	±2.0mV
Linearity	0.25% FS
Sensitivity shift 0-50°C	±4.0% span (0-14"), ±3.5% span (0-28")
Repeatability and hysteresis	0.25% span
Temperature range	-40°C to +85°C (0°C to 50°C compensated)
Media	Port 2: wetted compatible with polyester housing, epoxy adhesive silicon, borosilicate and silicon-to-glass bond. Port 1: Dry gases only

SEN203X

Operating Pressure	Mftrs. List No.	Order Code	Price Each 1+	5+	10+	25+
0 to 7" H_2O	176PC07HD2	**.731-821**				
0 to 14" H_2O	176PC14HD2	**.731-833**				
0 to 28" H_2O	176PC28HD2	**.731-845**				

Force Sensor

Honeywell



Sensor:
H = 9, W = 12.7, D = 8 (721-6671),
H = 3.75, W = 14.22, D = 5.59 (310-7620)
Actuator: H = 1.3, Dia. = 5.08
Mounting bracket: Slot 5.9 3.3.

- Robust performance characteristics
- Extremely low deflection, typically 30 microns at full scale
- Precise force sensing
- Electrically ratiometric output
- Mounting brackets available separately

Piezo-resistive sensing element in Wheatstone bridge circuit. Force is applied through stainless steel plunger directly to sensing element. Applications include load and compression sensing, variable tension control, contact sensing, robotic end effectors, medical.

	721-6671	310-7620
Supply voltage	10V dc (nom.)	10V dc (nom.)
Force range	1500 grams	500 grams
Overforce	5500 grams (max.)	4500 grams
Span	290 to 430mV (360mV typ.)	60mV (at 5V dc)
Response time	1m sec	1m sec
Temperature range	-40°C to +85°C	+2°C to +40°C

Mftrs. List Nos: FSG-15NIA = 721-66671, PC-15132 = 721-6683, FSL05N2C = 310-7620

SEN274

	Order Code	Price Each 1+	5+	10+	25+
Force sensor	**.721-6671**				
Force sensor	**310-7620**				
Mounting brackets, pack of 5	**721-6683**				

Pressure Transducers and Transmitters

Transducers, Signal Conditioned
Miniature

Honeywell

- Excellent liquid media compatibility
- Fully signal conditioned (4V output)
- 6 pin DIP package
- Operating temperature -40°C to +125°C
- Smallest amplified sensor package

H = 19.1, W = 11.2 (pin 30.9), D = 13.2

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