Honeywell

Interactive Catalog Replaces Catalog Pages

Honeywell Sensing and Control has replaced the PDF product catalog with the new Interactive Catalog. The Interactive Catalog is a power search tool that makes it easier to find product information. It includes more installation, application, and technical information than ever before.



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Sensing and Control

Honeywell Inc. 11 West Spring Street Freeport, Illinois 61032

Pressure Sensors Miniature Signal Conditioned

40PC Series





FEATURES

- Smallest amplified sensor package
- Minimal PCB space •
- Fully signal conditioned •
- Operating temperature range from -45° to $+125^{\circ}$ C Silicon piezoresistive technology •
- •
- Monolithic design •
- 6 Pin DIP package
- Port designed for O-ring interface
- Excellent media compatibility
- Accuracy of 0.2%



FERFUR	MANCE CHAI	ACTERISTIC	3					
Pressure F	lange	±50 mm Hg	0-15 psi	0-100 psi	0-150 psi	0-250 psi		
Overpress	ure, max.	±170 mm Hg	45 psi	200 psi	300 psi	500 psi		
Supply Voltage			5 VDC ±0.25					
Supply Cu	rrent		10 mA max.					
Output Source Current			0.5 mA max.					
Output Sink Current			1.0 mA max.					
Operating Temperature			-45° to +125°C (-49° to +257°F)					
Storage Temperature			-55° to +125°C (-67° to +257°F)					
Hysteresis & Repeatability			0.15% Span, Typ.					
Ratiometric 5.25 Suppl	city (at 4.75 to ly Voltage)		±0.2	25% Span, Ty	/p.			
Output Load Capacitance			0.05 microtarads, max.					
Full Scale <u>-50 mm Hg</u> +50 mm Hg		0.50 VDC Typ. 4.50 VDC Typ.						
All other pressure ranges			4.50 VDC Typ.					
Media Compatibi	lity	P1 port	DRY GASES epoxy based		ia must be co	ompatible with		
		Media must be compatible with glass, silicon, P2 port stainless steel, invar, Sn/Ni plating or Sn/Ag solder						

CAUTION ELECTROSTATIC SENSITIVE DEVICES DO NOT OPEN OR HANDLE EXCEPT AT A STATIC FREE WORKSTATION **ESD SENSITIVITY: CLASS I**

Amplified

40PC SERIES ORDER GUIDE

Catalog Listing	Pressure Range psi	Pressure Type	Lead Style
40PC001B1A	±50 mm Hg	Bi-directional	1-unformed
40PC001B2A	±50 mm Hg	Bi-directional	2-formed away from port
40PC001B3A	±50 mm Hg	Bi-directional	3-formed towards port
40PC015G1A	0-15	Gage	1-unformed
40PC015G2A	0-15	Gage	2-formed away from port
40PC015G3A	0-15	Gage	3-formed towards port
40PC100G1A	0-100	Gage	1-unformed
40PC100G2A	0-100	Gage	2-formed away from port
40PC100G3A	0-100	Gage	3-formed towards port
40PC150G1A	0-150	Gage	1-unformed
40PC150G2A	0-150	Gage	2-formed away from port
40PC150G3A	0-150	Gage	3-formed towards port
40PC250G1A	0-250	Gage	1-unformed
40PC250G2A	0-250	Gage	2-formed away from port
40PC250G3A	0-250	Gage	3-formed towards port

Note: For tubing and O-Ring interface recommendations, see the 40PC Application Note in the Reference Section.

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OUTPUT PERFORMANCE CHARACTERISTICS @ 25°C, 5VDC (unless otherwise noted)

Pressure Range	Null (VDC)	Span (VDC)	Sensitivity, Typ.	Linearity, B.F.S.L. (% Span) Max.		Null Shift (% Span) Max.	Span Shlft (% Span) Max.	Combined Null and Span Shift (% Span) Max.
±50 mm Hg	2.50 ± 0.050	4.00 Typ.	40.0 mV/mm Hg	0.80	+25° to +50°C	±1.50	±1.50	_
					+25° to 0°C	±1.50	±1.50	_
					+25° to -18°C	±2.00	±0.75	±2.00
					+25° to +63°C	±2.00	±0.75	±2.00
0 to 15 psi	0.50 ± 0.11	4.00 ± 0.11	266.6 mV/psi	0.20	+25° to -45°C	±2.75	±1.00	±3.00
					+25° to +85°C	±2.75	±1.00	±3.00
					+25° to +125°C	_	_	_
					+25° to -18°C	±1.25	±0.75	±1.50
					+25° to +63°C	±1.25	±0.75	±1.50
0 to 100 psi	0.50 ± 0.04	4.00 ± 0.09	40.0 mV/psi	0.10	+25° to -45°C	±2.00	±1.00	±2.50
					+25° to +85°C	±2.00	±1.00	±2.50
					+25° to +125°C	±3.00	±2.00	±3.00
					+25° to -18°C	±0.75	±0.75	±0.75
					+25° to +63°C	±0.75	±0.75	±0.75
0 to 150 psi	0.50 ± 0.04	4.00 ± 0.07	26.6 mV/psi	0.10	+25° to -45°C	±1.00	±1.00	±1.00
					+25° to +85°C	±1.00	±1.00	±1.00
					+25° to +125°C	±1.50	±1.50	±1.50
					+25° to -18°C	±0.75	±0.75	±0.75
					+25° to +63°C	±0.75	±0.75	±0.75
0 to 250 psi	0.50 ± 0.04	4.00 ± 0.07	16.0 mV/psi	0.10	$+25^{\circ}$ to -45° C	±1.00	±1.00	±1.00
					+25° to +85°C	±1.00	±1.00	±1.00
					+25° to +125°C	±2.00	±2.00	±3.00

PERFORMANCE SPECIFICATIONS, TEMPERATURE/ACCURACY

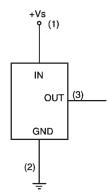
Temperature Range	Total Accuracy (% Span) Max.							
	0 to 15 psi	0 to 100 psi	0 to 150 psi	0 to 250 psi				
25°C	±0.4 (RSS)	±0.2 (RSS)	±0.2 (RSS)	±0.2 (RSS)				
-18° to +63°C	±4.0	±2.5	±2.0	±2.0				
-45° to +85°C	±4.0	±2.5	±2.0	±2.0				
-45° to +125°C		±3.0	±2.5	±3.0				

Note 1: Accuracy at 25°C is defined as RSS error for linearity, hysteresis, and repeatability.

Note 2: Total accuracy is the maximum deviation from the 25°C reference transfer function at any pressure or temperature over the specified ranges. This calculation includes null, span, linearity, hysteresis, repeatability, null shift, and span shift.

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ELECTRICAL CONNECTION



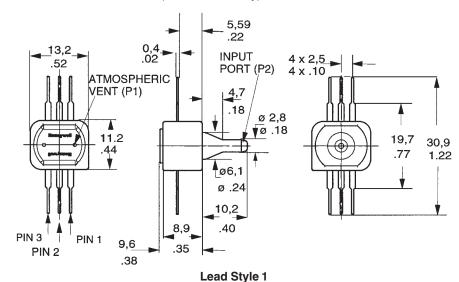
NOTES:

1. Square corner marks pin 1 (Vs).

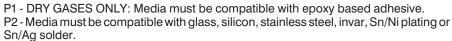
2. Output is short circuit protected.

MOUNTING DIMENSIONS (for reference only) mm/ln.

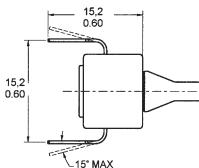
Amplified



NOTE:



Lead Style 2



Lead Style 3

