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.



Click this icon to try the new Interactive Catalog.

Sensing and Control

Honeywell Inc. 11 West Spring Street Freeport, Illinois 61032

Pressure Sensors

Miniature Absolute, Differential, Gage/Amplified





Terminal Mount

Housing Mount

- Miniature plastic package
- Terminal and housing mount styles PCB termination
- Fully signal conditioned

180PC SERIES PERFORMANCE CHARACTERISTICS at 8.0 \pm 0.01 VDC Excitation, 25°C

	Min.	Тур.	Max.	Units
Excitation	7.00	8.00	16	VDC
Supply Current			6	mA
Current Sourcing Output			10	mA
Null Offset (184/185PC)	0.95	1.00	1.05	V
Null Offset (186PC)	3.45	3.50	3.55	V
Null Offset 185PC15AT @ 2 psia 185PC30AT @ 2 psia	1.62 1.28	1.67 1.33	1.72 1.38	V V
Output at Full Pressure (184/185PC, G,D)	5.90	6.00	6.15	V
Output at Full Pressure (185PC, A only)	5.85	6.00	6.15	V
Output at Full Pressure (186PC)	5.90	6.00	6.10	V
Span (184/185PC, G,D)	4.95	5.00	5.05	V
Span (185PC, A only)	4.90	5.00	5.10	V
Span (186PC)		5.00		V
Span (185PC15AT)	4.28	4.33	4.38	V
Span (185PC30AT)	4.62	4.67	4.72	V
Ratiometricity Error 7 to 8V or 8 to 9V 9 to 12V		±0.50 ±2.00		% Span % Span
Temperature Error (Combined null and span)	-2%	0	+2%	% Span
Stability over One Year		±0.50		% Span
Response Time			1.00	msec
Weight		12		grams
Short Circuit Protection	Output may be shorted indefinately to ground			
Output Ripple	None, DC device			
Ground Reference	Supply and output are common			

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40° to +85°C (-40° to +185°F)		
Storage Temperature	-55° to +125°C (−67° to +257°F)		
Compensated Temperature	0° to +50°C (32° to +122°F)		
Shock	MIL-STD-202, Method 213 (50 g, half sine, 6 msec)		
Vibration	MIL-STD-202, Method 204 (10 to 2000 Hz at 10 g)		
Media	P2 port Wetted materials; polyester housing, epoxy adhesive, silicon, borosilicate glass, and silicon-to-glass bond*		
	P2 port Absolute only: Factory sealed vacuum reference, no connection		
	P1 port Dry gases only		

^{*}Liquid media containing some highly ionic solutions could potentially neutralize the chip-to-glass tube bond.

Miniature Absolute, Differential, Gage/Amplified

184PC SERIES ORDER GUIDE, VACUUM GAGE TYPE

ı		Pressure	Overpressure	Linearity	, %Span
	Catalog Listing	Range psi psi Max.	psi	P2 > P1 Max.	P2 < P1 Max.
ı	184PC05GT	05	20		±1.00
ı	184PC15GT	015	45		±1.00

185PC SERIES ORDER GUIDE, DIFFERENTIAL TYPE, P2 > P1

ı		Pressure	Overpressure psi Max.	Linearity, % Span	
	Catalog Listing	Range psi		P2 > P1 Max.	P2 < P1 Max.
ı	185PC05DT	0-5	20	±2.00	±1.00
ı	185PC15DT	0-15	45	±2.00	±1.00
ı	185PC30DT	0-30	60	±1.50	±0.75

186PC SERIES ORDER GUIDE, BI-DIRECTIONAL TYPE, P2-P1

	Pressure	Overpressure	Linearity, % Span	
Catalog Listing	Range psi	psi Max.	P2 > P1 Max.	P2 < P1 Max.
186PC03DT	±2.5	20	±2.00	±1.00
186PC05DT	±5.0	20	±2.00	±1.00
186PC15DT	±15	45	±2.00	±1.00

185PC SERIES ORDER GUIDE, ABSOLUTE TYPE

	Pressure	Overpressure	Linearity, %Span	
Catalog Range Listing psi	psi Max.	P2 > P1 Max.	P2 < P1 Max.	
185PC15AT	0-15	45		±1.00
185PC30AT	0-30	60		±0.75

HOW TO ORDER

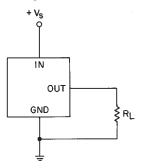
Catalog listings in the order guide are shown with mounting version ${\bf T}$ (terminal mount). ${\bf H}$ (housing mount) also available. Contact 800 number.

180PC Series

Miniature Absolute, Differential, Gage/Amplified

ELECTRICAL CONNECTIONS

Voltage Excitation



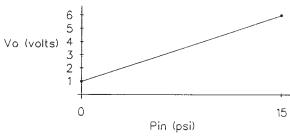
NOTES

- 1. Terminals are labeled on the sensor.
- 2. Input and output share a common ground.
- 3. R_L must be greater than or equal to 3000 ohms.

IDEAL OUTPUT AT Vs = 8.00 ± 0.01 VDC

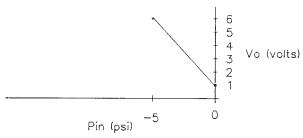
Differential

Example: 185PC15DT when $P_{IN} = P2-P1$



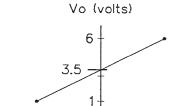
Vacuum Gage

Example: 184PC05GT where $P2 = P_{IN} P1 = Ambient$



Bi-directional

Example: 186PC05DH where $P_{IN} = P2-P1$



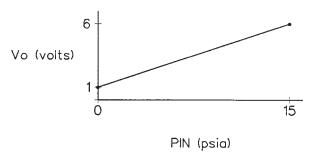
PIN (psid)

Absolute

-5

Example: 185PC15AP where P1 = P_{IN} P2 = Factory sealed vacuum

+5

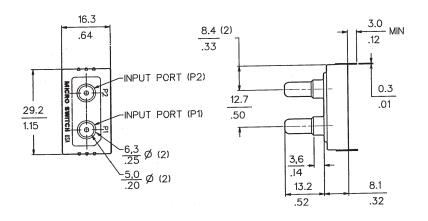


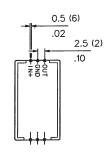
Miniature Absolute, Differential, Gage Sensored/Amplified

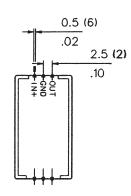
MOUNTING DIMENSIONS

$$\frac{0.0 = mm}{0.00 = in}$$

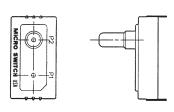
Terminal Mount (Differential "D" or Absolute "A" Housing)







(Gage "G" Housing)



Housing Mount

