Honeywell

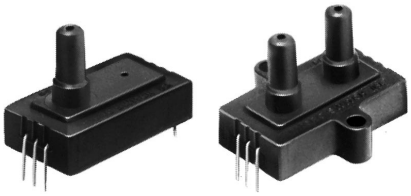
Interactive Catalog Replaces Catalog Pages

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.

Pressure Sensors

Miniature Absolute, Differential, Gage/Amplified



Terminal Mount Housing Mount

FEATURES

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

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

	Min.	Typ.	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	1.62	1.67	1.72	V
185PC30AT @ 2 psia	1.28	1.33	1.38	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	---	±0.50	---	% Span
9 to 12V	---	±2.00	---	% 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.

184PC SERIES ORDER GUIDE, VACUUM GAGE TYPE

Catalog Listing	Pressure Range psi	Overpressure psi Max.	Linearity, %Span	
			P2 > P1 Max.	P2 < P1 Max.
184PC05GT	0-–5	20	---	±1.00
184PC15GT	0-–15	45	---	±1.00

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

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

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

Catalog Listing	Pressure Range psi	Overpressure psi Max.	Linearity, %Span	
			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

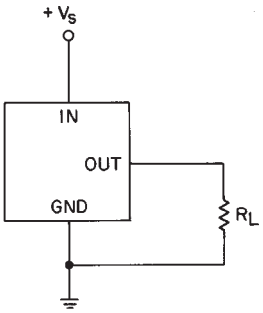
Catalog Listing	Pressure Range psi	Overpressure psi Max.	Linearity, %Span	
			P2 > P1 Max.	P2 < P1 Max.
185PC15AT	0-15	45	---	±1.00
185PC30AT	0-30	60	---	±0.75

HOW TO ORDER

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

ELECTRICAL CONNECTIONS

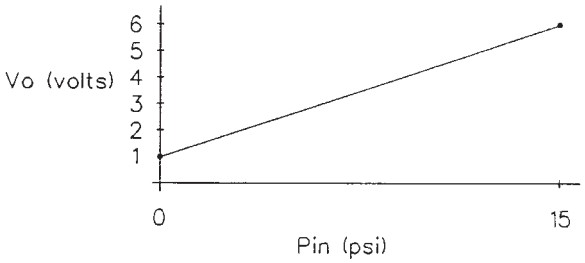
Voltage Excitation



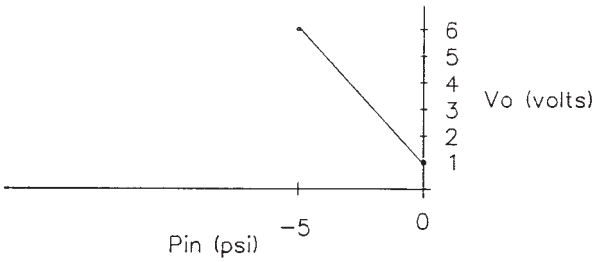
NOTES
1. Terminals are labeled on the sensor.
2. Input and output share a common ground.
3. R_L must be greater than or equal to 3000 ohms.

IDEAL OUTPUT AT Vs = 8.00 ± 0.01 VDC

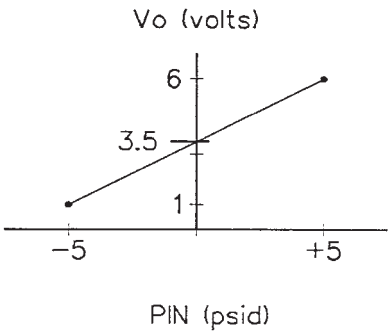
Differential
Example: 185PC15DT when P_{IN} = P2-P1



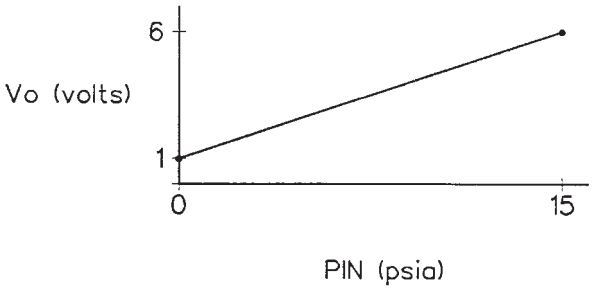
Vacuum Gage
Example: 184PC05GT where P2 = P_{IN} P1 = Ambient



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



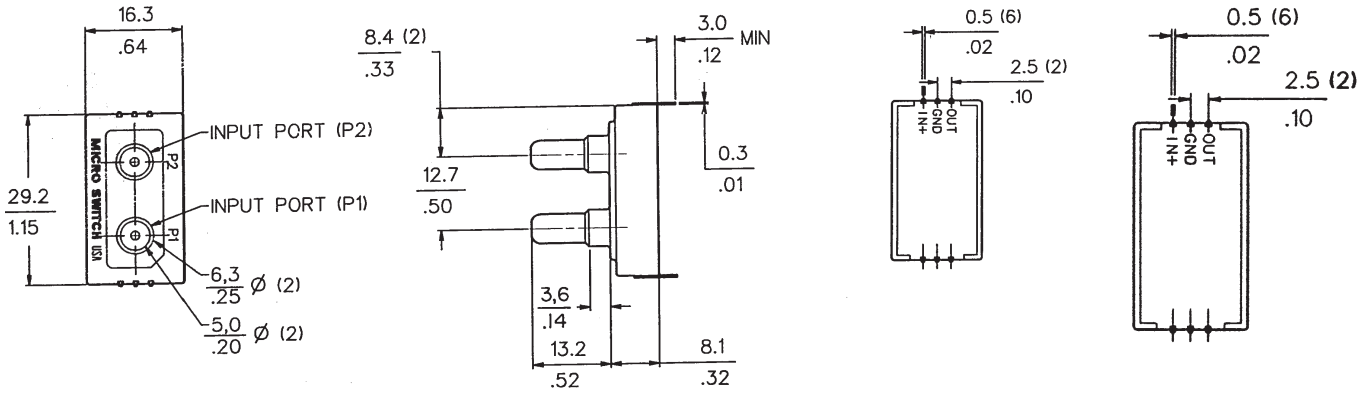
Absolute
Example: 185PC15AP where P1 = P_{IN} P2 = Factory sealed vacuum



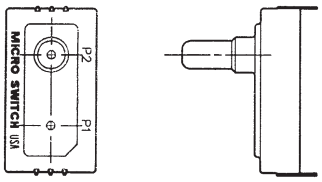
Amplified

MOUNTING DIMENSIONS 0.0 = mm
0.00 = in.

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



(Gage "G" Housing)



Housing Mount