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

189PC Series

Pressure Sensors

Gage Amplified





FEATURES

- Manifold mount/O-ring sealed
- Fully signal conditioned
- PCB termination
- Operating temperature up to 125°C
 Glass chip tube (non-outgassing)

189PC PERFORMANCE CHARACTERISTICS @ 8.0 \pm 0.01 VDC Excitation, 25°C

| | Min | Тур | Max | Units | |
|---|------------------------------|--|------|------------------|--|
| Excitation | 7.00 | 8.00 | 16.0 | VDC | |
| Supply Current | | _ | 6 | mA | |
| Current Sourcing Output | _ | _ | 10 | mA | |
| Null Offset | 0.95 | 1.00 | 1.05 | V | |
| Output at Full Pressure | 5.80 | 6.00 | 6.15 | V | |
| Ratiometricity Error 7 to 8V or 8 to 9V 9 to 12 V | | ±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 | mS | |
| Weight | _ | 12 | _ | grams | |
| Short Circuit Protection | Output | Output may be shorted indefinitely to ground | | | |
| Output Ripple | None, DC Device | | | | |
| Ground Reference | Supply and output are common | | | | |

ENVIRONMENTAL SPECIFICATIONS

| Operating Temp | perature | -40°C 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 (50g, 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* | |

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

Pressure Sensors

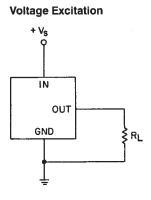
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189PC SERIES ORDER GUIDE GAGE TYPE

| | Pressure | Overpressure | Linearity, % Span |
|--------------------|--------------|--------------|-------------------|
| Catalog Listing | Range psi | psi Max. | P2 > P1 Max. |
| 189PC15GM | 0-15 | 45 | ±2.00 |
| 189PC100GM | 0-100 | 250 | ±1.50 |
| 189PC150GM | 0-150 | 250 | ±1.50 |

Electrical Connections

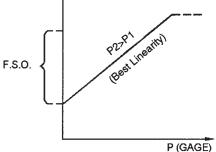


Pin Designation Pin 1 = V_{SS}

 $\begin{array}{l} \text{Pin } 2 = \text{V}_{\text{Out}} \\ \text{Pin } 3 = \text{GND} \\ \text{Pin } 4 = \text{No Connect} \\ \text{Pin } 5 = \text{V}_{\text{CC}} \end{array}$



Pressure Reference Gage



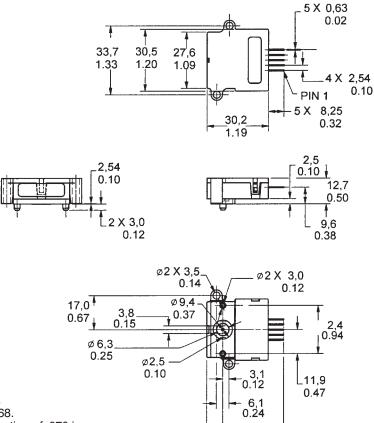
NOTES

1. Input and output share a common ground.

2. R_{L} must be greater than or equal to 3000

ohms.

MOUNTING DIMENSIONS (for reference only)



29.9

1.18

O-Ring provided with sensor. O-Ring Part Number: SS-12168. O.D. of .114 in. and a cross section of .070 in. Material is 70 Durometer Fluorocarbon.

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