

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

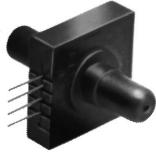
Freeport, Illinois 61032

Pressure Sensors

Low Pressure Gage & Differential/Unamplified

170PC Series

Temperature Compensated Sensors



FEATURES

- Miniature package
- Low pressure measurement
- Calibrated Null and Span
- Temperature compensated for Span over 0 to 50°C
- Provides interchangeability

176PC SERIES PERFORMANCE CHARACTERISTICS at 10.0 ±0.01 VDC Excitation, 25°C

| | Min. | Typ. | Max. | Units |
|---|------|-------|-------------------|-------|
| Excitation | --- | 10 | 16 | VDC |
| Null Offset | -2 | 0 | +2 | mV |
| Null Shift, 25° to 0°, 25° to 50°C | --- | ±3.0 | --- | mV |
| Sensitivity Shift, 25° to 0°, 25° to 50°C | --- | --- | ±4.0 ¹ | %Span |
| | | | ±3.5 ² | %Span |
| Repeatability & Hysteresis | --- | ±0.25 | --- | %Span |
| Response Time | --- | --- | 1.0 | msec |
| Input Resistance | --- | 6.3 K | --- | ohms |
| Output Resistance | --- | 4.0 K | --- | ohms |
| Stability over One Year | --- | ±0.5 | --- | %Span |
| Weight | --- | 7 | --- | grams |

Key: 1 = 0-7", 0-14" H₂O only
2 = 0-28" H₂O only

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 (150 g, half sine, 11 msec) |
| Vibration | MIL-STD-202, Method 204 (10 to 2000 Hz at 20 g) |
| Media | P2 port Wetted materials; polyester housing, epoxy adhesive, silicon, borosilicate glass, and silicon-to-glass bond* P1 port Dry gases only |

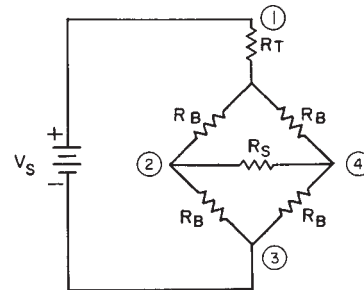
* Liquid media containing some highly ionic solutions could potentially neutralize the chip-to-glass tube bond.

176PC SERIES ORDER GUIDE

| Catalog Listing | Pressure Range H ₂ O | Span, mV | | | Sensitivity mV/"H ₂ O Typ. | Overpressure "H ₂ O Max. | Linearity, %Span | |
|-----------------|---------------------------------|----------|------|------|---------------------------------------|-------------------------------------|------------------|--------------|
| | | Min. | Typ. | Max. | | | P2 > P1 Max. | P2 < P1 Max. |
| 176PC07HG2 | 0-7 | 26 | 28 | 30 | 4.00 | 140 | ±3.00 | ±1.50 |
| 176PC07HD2 | 0-7 | 26 | 28 | 30 | 4.00 | 140 | ±3.00 | ±1.50 |
| 176PC14HG2 | 0-14 | 33 | 35 | 37 | 2.50 | 140 | ±3.00 | ±1.50 |
| 176PC14HD2 | 0-14 | 33 | 35 | 37 | 2.50 | 140 | ±3.00 | ±1.50 |

ELECTRICAL CONNECTIONS

(Internal Circuitry Shown)



NOTES

1. Circled numbers refer to sensor termination.
2. $V_0 = V_2 - V_4$ (referenced to pin 3).
3. R_B = Strain gage resistors (~4.8 kΩ).
4. R_T = Sensitivity temperature compensation resistor.
5. R_S = Sensitivity calibration resistor.

When a positive pressure is applied to port P2, the differential voltage $V_2 - V_4$ (voltage at pin 2, with respect to ground, increases and voltage at pin 4 decreases) increases linearly with respect to the input pressure. When a vacuum pressure is applied to port P1 the voltage $V_2 - V_4$ decreases linearly with respect to the input pressure.

Unamplified

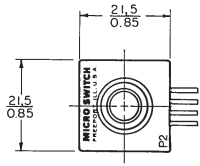
Pressure Sensors

Low Pressure Gage & Differential/Unamplified

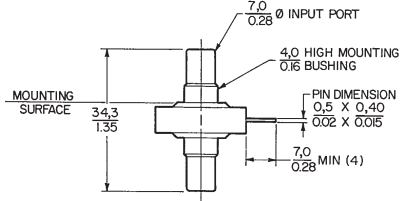
170PC Series

MOUNTING DIMENSIONS (For reference only)

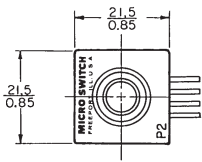
Differential Types



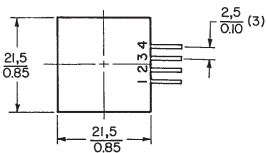
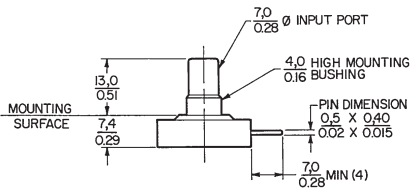
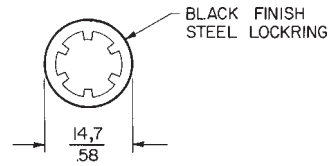
- Terminals
 1 – Vs (+)
 2 – Output A
 3 – Ground (-)
 4 – Output B



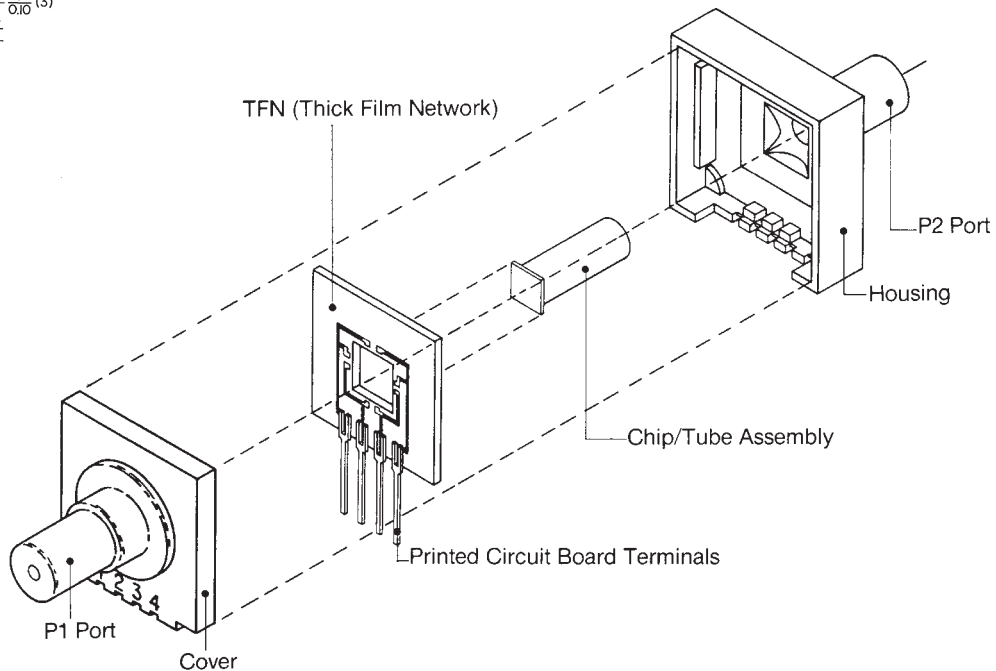
Gage Types



Mounting Hardware - PC10198



170PC CONSTRUCTION



Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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