Pressure-to-Current/Amplified



FEATURES

- Unidirectional gage pressure measurement
- 2-wire, causes a 4-20 mA change in current, linearly proportional to pressure input
- Screw-in or flat-pack mounting
- Rugged die-cast aluminum housing

249PC SERIES PERFORMANCE CHARACTERISTICS at 24.0 ± 0.01 VDC Excitation, 25 Ohm Load, 25°C

| | Min. | Тур. | Max. | Units |
|--|----------------------------|----------------------------|----------------------------|-------|
| Excitation | 10.0 | 24.0 | 32.0 | VDC |
| Response Time | | | 1.00 | msec |
| Supply Voltage Sensitivity 20-24 VDC and 24-28 VDC | | ±0.15 | | %Span |
| Stability over One Year | | ±1.0 | | %Span |
| Current Output 249PC15G at 3 psig 249PC15G at 15 psig Null (0-100 & 0-250 psig) Full pressure (0-100 & 0-250 psig) | 3.7 19.7 3.7 19.5 | 4.0 20.0 4.0 20.0 | 4.3 20.3 4.3 20.5 | mA |
| Weight | *** | 85 | | grams |
| Output Ripple | None, DC device | | | |

ENVIRONMENTAL SPECIFICATIONS

| Operating Temperature | -40° to +85°C (-40° to +185°F) | | | |
|-------------------------|--|--|--|--|
| Storage Temperature | -40° to +85°C (-40° to +185°F) | | | |
| Compensated Temperature | -18° to +63°C (0° to +145°F) | | | |
| Shock | MIL-STD-202, Method 213 (50 g, half sine, 11 msec) | | | |
| Vibration | MIL-STD-202, Method 204 (10 to 2000 Hz at 10 g) | | | |
| Media | P2 port Wetted materials; die-cast aluminum housing, O-ring seal, silicon, borosilicate glass, and silicon- to-class bond* | | | |

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

249PC SERIES ORDER GUIDE, GAGE, Buna-N O-Ring Port Seal

| Catalog Listing | Pressure Range psi | Null & Sensitivity Shift 25 to 0°C, 25 to 50°C Max. | Sensitivity mA/psi | Overpressure psi %Span Max. | Linearity & Hysteresis %Span Max. | Repeatability B.F.S.L. Typ. |
|--------------------|--------------------------|---|-----------------------|-----------------------------------|---|-----------------------------------|
| 249PC15M* | 3-15 | ±1.0 | 1.330 | 45 | ±0.75 | ±0.25 |
| 249PC100G | 0-100 | ±1.0 | 0.160 | 200 | ±0.75 | ±0.25 |
| 249PC250G | 0-250 | ±1.0 | 0.064 | 500 | ±1.00 | ±0.25 |

^{*}Adhesive between thermoplastic and aluminum instead of O-ring seal.

249PC SERIES ORDER GUIDE, GAGE, Ethylene propylene O-Ring Port Seal

| Catalog Listing | Pressure Range psi | Null & Sensitivity Shift 25 to 0°C, 25 to 50°C Max. | Sensitivity mA/psi | Overpressure psi %Span Max. | Linearity & Hysteresis %Span Max. | Repeatability B.F.S.L. Typ. |
|--------------------|--------------------------|---|-----------------------|-----------------------------------|---|-----------------------------------|
| 249PC100GS | 0-100 | ±1.0 | 0.160 | 200 | ±0.75 | ±0.25 |
| 249PC250GS | 0-250 | ±1.0 | 0.064 | 500 | ±1.00 | ±0.25 |

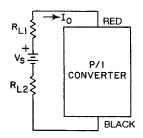
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For application help: call 1-800-537-6945.

Pressure Sensors

Pressure-to-Current/Amplified

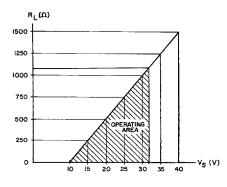
ELECTRICAL CONNECTION



NULL AND SENSITIVITY SHIFT

Current output pressure sensors are 100% tested to insure that the maximum null and sensivity temperature shift does not exceed the specification. The maximum shift occurs at temperature extremes. Therefore, if a sensor is not exposed to the entire temperature range, the maximum null and sensitivity shift will actually be less than the value specified.

EXTERNAL LOAD RESISTANCE VS SUPPLY VOLTAGE

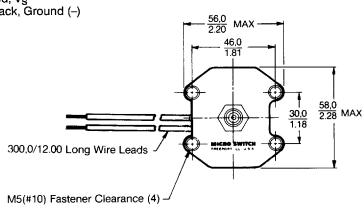


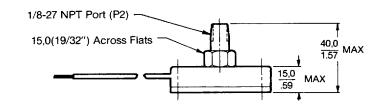
MOUNTING DIMENSIONS (For reference only)

Leadwires

1 - Red, V_S

2 - Black, Ground (-)





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