

Pressure Sensors

Pressure-to-Current/Amplified

249PC Series



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.	Typ.	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				mA
249PC15G at 3 psig	3.7	4.0	4.3	
249PC15G at 15 psig	19.7	20.0	20.3	
Null (0-100 & 0-250 psig)	3.7	4.0	4.3	
Full pressure (0-100 & 0-250 psig)	19.5	20.0	20.5	
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, 6 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-glass 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

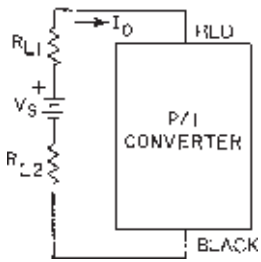
Amplified

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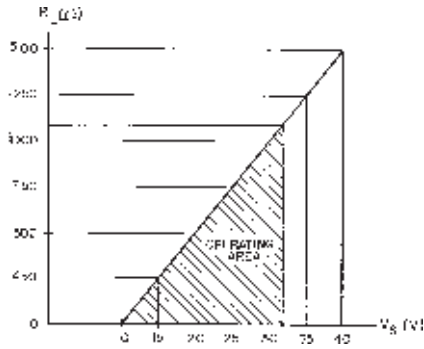
ELECTRICAL CONNECTION



NULL AND SENSITIVITY SHIFT

Current output pressure sensors are 100% tested to insure that the maximum null and sensitivity 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 (-)

