

160PC SPECIFICATIONS at 8.0 ± 0.01 VDC, 25°C

Parameter	Min.	Typ.	Max.	Units
F.S.O. (Full Scale Output)*	4.85	5.00	5.15	Volts
Null Offset	0.95	1.00	1.05	Volts
Excitation	6.00	8.00	12.0	VDC
Overpressure	---	---	5	psi
Operating Temperature	-40° to +85°C (-40° to +185°F)			
Storage Temperature	-55° to +125°C (-65° to +257°F)			

\*F.S.O. is the algebraic difference between end points (null and full scale pressure outputs). Output voltage at full pressure equals 6.0 ± 0.20 volts at 8.0 VDC.

TYPICAL OUTPUT VOLTAGES for 163PC01D36 and 164PC01D37 Listings @ 8.0 ± 0.1 VDC, 25°C

Listing	Pressure Range	Vo (volts)
163PC01D36	-5" H <sub>2</sub> O	1.0
	0	3.5
	+5" H <sub>2</sub> O	6.0
	F.S.O.	5.0
164PC01D37	0	1.0
	10" H <sub>2</sub> O	6.0
	F.S.O.	5.0

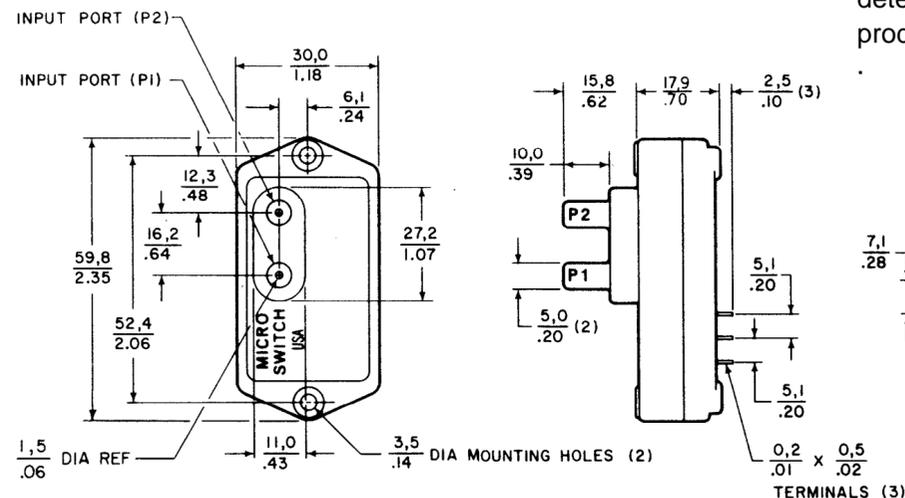
WARRANTY/REMEDY

Seller warrants its products to be free from defects in design, material and workmanship under normal use and service. Seller will repair or replace without charge any such product it finds to be so defective on its return to Seller within 18 months after date of shipment by Seller. **The foregoing is in lieu of all other expressed or implied warranties (except of title), including those of merchantability and fitness for a particular purpose.**

The foregoing is also purchaser's sole remedy and is in lieu of all other guarantees, obligations, or liabilities or any consequential, incidental, or punitive damages attributable to negligence or strict liability, all by way of example.

While we provide application assistance on MICRO SWITCH products, personally and through our literature, it is up to the customer to determine the suitability of the product in the application.

MOUNTING DIMENSIONS (for reference only)



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GENERAL INFORMATION

160PC sensors provide an output voltage proportional to applied pressure. They operate from a single, positive supply voltage ranging from 6.0 to 12 VDC. Signal conditioning results in directly usable outputs. Temperature compensation provides predictable performance over specified temperature ranges.

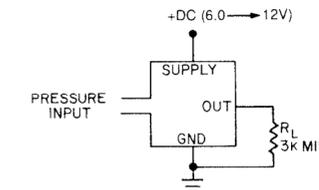
MEASURAND COMPATIBILITY

**P2** Wetted materials: polyester housing, epoxy adhesive, silicon, borosilicate-glass, silicon-to-glass bond (passive side of IC)\*. **P1** Dry gases only (active side of IC).

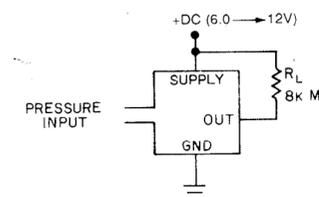
\*Liquid media containing some highly ionic solutions could potentially neutralize the chip to-glass tube bond.

Type	Measurand Applied to Port
Differential (D)	P1 and P2
Gage (G)	P2 only
Vacuum	
(Gage) (G)	P2 only

ELECTRICAL AND PRESSURE CONNECTIONS  
Current Source



Current Sink



SOLDERING

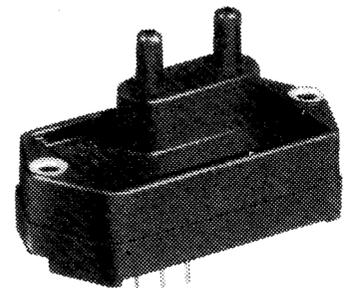
Limit soldering to 315°C (600°F) maximum, with 10 seconds maximum duration.

CLEANING

Proper cleaning fluids should be selected, based on type of contaminant to be removed. MICRO SWITCH recommends use of alcohols and fluorinated solvents.

MOUNTING

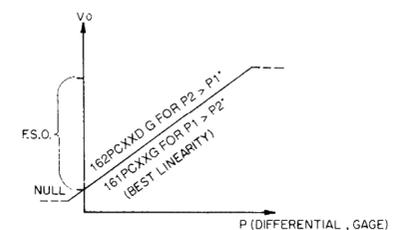
Null offset output will shift less than 20 mV (at 8 VDC supply) when mounting sensor with 6-32, 7/8 inch long fasteners torqued less than 75 inch ounces.



**PRESSURE REFERENCE**  
Differential pressure sensors apply P1 to the active (connection) side of the chip and P2 to the passive side.

**Gage** pressure is measured with respect to atmospheric (room) pressure reference.

Reversing the pressure relationship of 161PC or 162PC will cause output to saturate below null.



**WARNING**

Damage may result from reversal of supply and ground connections.

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