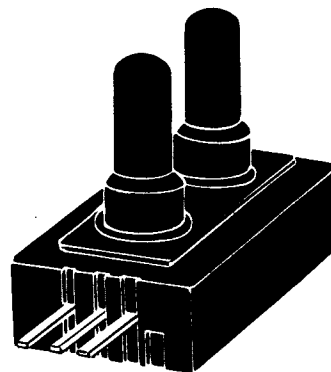




**PX184, PX185 Series
Vacuum & Pressure Transducers
Operator's Manual: M1114/1092**



SPECIFICATIONS:

Excitation: 8 Vdc (7-16 Vdc) @ 6 mA regulated
Hysteresis & Repeatability: 0.15%FS
Zero Balance: 1 ±0.05 Vdc (PX186 3.5 ±0.05 Vdc)
Storage Temp: -55 to 125°C
Operating Temp.: -40 to 85°C
Compensated Temp.: 0 to 50°C
Thermal Effects (25-0°C/25-50°C): 2 %FS
 (combined zero and span effects)
Response Time: 1ms
Gage Type: diffused silicon
Shock: 50g @ 11 ms, half sine
Vibration: 10 to 2000 Hz @ 10g
Wetted Parts:
 P1: Dry gases only
 P2 (Vacuum PX184): Polyester, epoxy adhesive, silicon, borosilicate glass, and silicon-to-glass bond. (not recommended for highly ionic solutions)
Pressure Port: tube type
Electrical Conn.: 0.01" x 0.02" pins at 0.10" spacing
Mating Conn.: CX136-4
Weight: 12 g

UNPACKING

Remove the Packing List and verify that you have received all equipment. If you have any questions about the shipment, please call the OMEGA Customer Service Department at 1-800-622-2378 or (203) 359-1660.

When you receive the shipment, inspect the container and equipment for any signs of damage. Note any evidence of rough handling in transit. Immediately report any damage to the shipping agent.

NOTE: The carrier will not honor any claims unless all shipping material is saved for their examination. After examining and removing contents, save packing material and carton in the event reshipment is necessary.

WARNING!

READ BEFORE INSTALLATION

Fluid hammer and surges can destroy any pressure transducer and must always be avoided. A pressure snubber should be installed to eliminate the damaging hammer effects.

Fluid hammer occurs when a liquid flow is suddenly stopped, as with quick closing solenoid valves. Surges occur when flow is suddenly begun, as when a pump is turned on at full power or a valve is quickly opened.

Liquid surges are particularly damaging to pressure transducers if the pipe is originally empty. To avoid damaging surges, fluid lines should remain full (if possible), pumps should be brought up to power slowly, and valves opened slowly. To avoid damage from both fluid hammer and surges, a surge chamber should be installed, and a pressure snubber should be installed on every transducer.

Symptoms of fluid hammer and surge's damaging effects:

- a) Pressure transducer exhibits an output at zero pressure (large zero offset). If zero offset is less than 10% FS, user can usually re-zero meter, install proper snubber and continue monitoring pressures.
- b) Pressure transducer output remains constant regardless of pressure.
- c) In severe cases, there will be no output.

SOLDERING

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

CLEANING

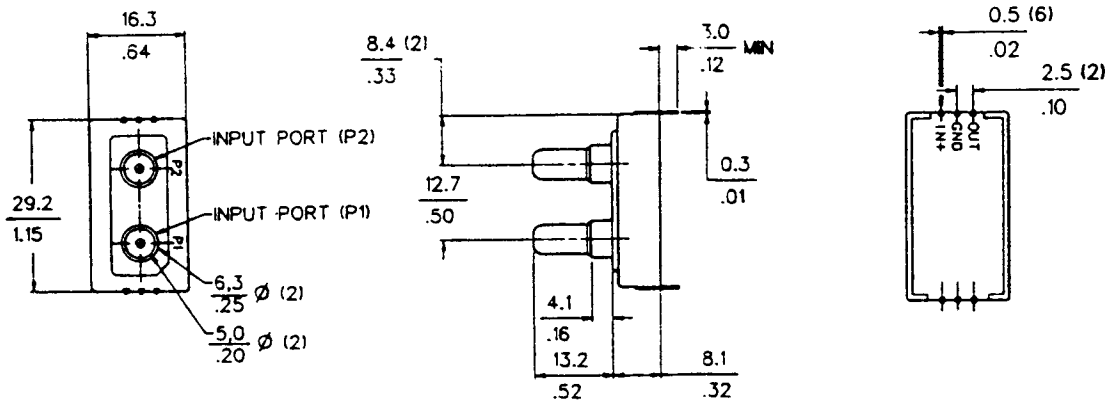
Proper cleaning fluids should be selected, based on the type of contami be removed. OMEGA recommends alcohols or fluorinated solvents.

MOUNTING AND INTERFACE

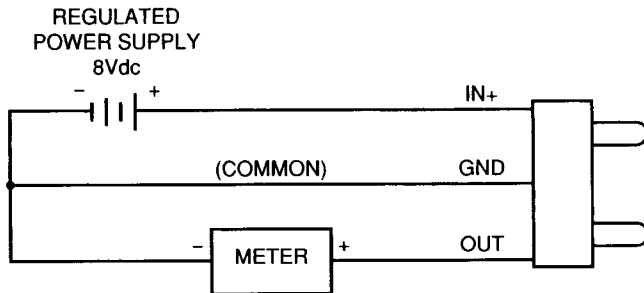
Each sensor is furnished with an unassembled steel locking. When mounted through the panel hole, the locking is forced onto the mounting and locks the sensor to the panel. Pin have 0.25" square cross section to facilitate wire wrap or solder connect are on .100" centers.

	PGID PX185			VACUUM PX184		BI-DIRECTIONAL PX186		
	5	15	30	5	15	±2.5	±5	±15
Ranges								
Linearity BSFL (%FS)								
P2>P1 typical	2.0	2.0	1.5	---	---	2.0	2.0	2.0
P2<P1 typical	1.0	1.0	0.75	1.0	1.0	1.0	1.0	1.0
Overpressure (PSI)	20	45	60	20	45	20	20	45

MOUNTING DIMENSIONS $0.0 = \text{mm}$
 $0.00 = \text{in.}$



WIRING



WARRANTY

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of **13 months** from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that our customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. Our Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

We are glad to offer suggestions on the use of our various products. Nevertheless, OMEGA only warrants that the parts manufactured by it will be as specified and free of defects.

OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

LIMITATION OF LIABILITY: The remedies of buyer set forth herein are exclusive and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

Every precaution for accuracy has been taken in the preparation of this manual; however, OMEGA ENGINEERING, INC. neither assumes responsibility for any omissions or errors that may appear nor assumes liability for any damages that result from the use of the products in accordance with the information contained in the manual.

SPECIAL CONDITION: Should this equipment be used in or with any nuclear installation or activity, buyer will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the equipment in such a manner.



Servicing USA and Canada: Call OMEGA Toll Free

<p>USA One Omega Drive, Box 4047 Stamford, CT 06907-0047 USA Telephone: (203) 359-1660 FAX: (203) 359-7700</p>	<p>Canada 976 Bergar Laval (Quebec) H7L 5A1 Telephone: (514) 856-6928 FAX: (514) 856-6886</p>
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Sales Service: 1-800-826-6342 / 1-800-TC-OMEGA™
 Customer Service: 1-800-622-2378 / 1-800-622-BEST™
 Engineering Service: 1-806-872-9436 / 1-800-USA-WHEN™
 TELEX: 996404 EASYLINK: 62968934 CABLE OMEGA

Servicing Europe: United Kingdom Sales and Distribution Center
 25 Swannington Road, Broughton Astley, Leicestershire
 LE9 6TU, England

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA ENGINEERING Customer Service Department. Call toll free in the USA and Canada: 1-800-622-2378, FAX: 203-359-7811; International: 203-359-1660, FAX: 203-359-7807.

BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, YOU MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OUR CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

1. P.O. number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems you are having with the product.

FOR NON-WARRANTY REPAIRS OR CALIBRATION, consult OMEGA for current repair/calibration charges. Have the following information available BEFORE contacting OMEGA:

1. P.O. number to cover the COST of the repair/calibration,
2. Model and serial number of product, and
3. Repair instructions and/or specific problems you are having with the product.

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