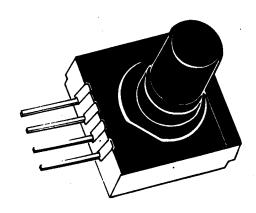
omega.com®

PX136 Series

Pressure Transducers



M0227/0302



SPECIFICATIONS:

Excitation: 10 Vdc 16 Vdc max

Hysteresis & Repeatability: 0.15%FS

Zero Balance: 1 mV gage models; 2 mV absolute models

Stability: 0.5%FS/year 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):

Zero: 2 mV typ (4 mV max); Span: 1.5%FS typ (3 %FS max) Input Resistance: 6.8 K ohms Output Resistance: 4.0 K ohms

Response Time: 1ms
Gage Type: diffused silicon
Shock: 150g @ 6 ms, half sine
Vibration: 10 to 2000 Hz @ 20g

Wetted Parts:

P1 (absolute): Dry gases only

P2 (gage): Polyester, epoxy adhesive, silicon, borosilicate glass, and silicon-to-glass bond. (not recommended for highly

ionic solutions)

Pressure Port: tube type

Weight: 5 g

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.
- Pressure transducer output remains constant regardless of pressure.
- c) In severe cases, there will be on 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 lockring. When mounted through the panel hole, the lockring 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.

	PSIG							PSIA	
Ranges	1	5	15	30	65	100	150	15	30
Output (mV)	20	50	100	79	32.5	100	60	-100	-79
Span Tol (mV)	1.5	1.5	1.5	4	2	4	4	2.5	5
Linearity BSFL (%FS)						!		
P2>P1 typical		0.1	0.1	0.1	0.1				
max	1.0	1.0	1.0	0.75	1.0	0.4	0.5		
P2 <p1 td="" typical<=""><td></td><td>0.1</td><td>0.1</td><td>0.1</td><td></td><td></td><td></td><td>0.1</td><td>0.1</td></p1>		0.1	0.1	0.1				0.1	0.1
max	0.5	0.5	0.5	0.5	0.1	`		0.5	0.5
Overpressure (PSI)	20	20	45	60	150	150	225	45	60



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It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

WARNING: These products are not designed for use in, and should not be used for, patient-connected applications.



WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA's 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 OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's 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. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been 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 are not warranted, including but not limited to contact points, fuses, and triacs.

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RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S 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.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR <u>WARRANTY</u> RETURNS, please have the following information available BEFORE contacting OMEGA:

- 1. Purchase Order 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 relative to the product.

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

- 1. Purchase Order number to cover the COST of the repair,
- 2. Model and serial number of the product, and
- 3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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