



PX171, PX172, PX173 Pressure Transducers/Transmitters



M5200/0712

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IMPORTANT NOTE: All Omega PX171, PX172, and PX173 Pressure Transducers/Transmitters are designed and manufactured in accordance with sound engineering practice as defined by the Pressure Equipment Directive 97/23/EC. This product must not be used as a "safety accessory" as defined by the Pressure Equipment Directive, Article 1, Paragraph 2.1.3. The CE Mark on the unit does not relate to the Pressure Equipment Directive.

GENERAL NOTES: The pressure range of the unit must be compatible with the maximum pressure being measured. The functional temperature range must be adhered to. For a detailed account of accuracy over a specific temperature range, consult Omega Engineering, Inc.

Materials: All wetted parts 17-4 PH Stainless Steel.

Ingress Protection: All Transducers/Transmitters have a minimum IP rating of IP67 in accordance with BS EN 60529:1992 when fitted with proper mating connectors.

Installation: Transducers and Transmitters can be installed by either spanner or deep socket. Size 22 A/F. The tightening torque should not exceed 30Nm. Standard taper threads require the use of a sealing compound

Vibration: 40g peak to peak sinusoidal (Random Vibration: 20 to 1000 Hz @ approx. 40G peak per MIL-STD-810E)

Operation: Having installed the transducers as instructed, they are ready for use. Before applying power, check that the correct polarity and excitation levels are being applied.

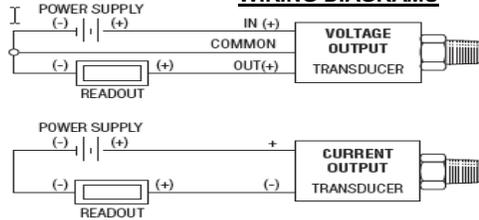
Maintenance: Routine Inspection not required except for periodic inspection of the cable and connector to ensure that these are neither damaged nor softened by incompatible liquid.

Notes: The diameter of all cans is 19 mm (0.748")
Hex is 22 mm (0.866") Across Flats (A/F) for deep socket mounting.
NPT Threads 2-3 turns from finger tight (TFFT), then wrench tighten 2-3 turns.

ELECTRICAL: Outputs: PX171, PX172, and PX173 Transducer/Transmitters conform to one of the following electrical variations:
Frequency Response: <1ms for Conditioned Outputs
Maximum Current Draw: 2-wire Transmitter = 20mA, Transducer in voltage mode = 4.5 mA
EMC Data: Meets the requirements of CE.

Input Description	Output Description
8 to 24V	4 to 20mA
8 to 30V	0 to 5V

WIRING DIAGRAMS



ELECTRICAL CONNECTORS

Din 9.4 mm	M12 x 1P	Packard MetrIPack
PX171	PX172	PX173

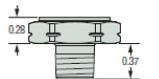
Pin #	Voltage Mode	Current Mode	Voltage Mode	Current Mode	Voltage Mode	Current Mode	
1	V _{supply}	V _{supply}	V _{supply}	Supply	V _{out 1} (pressure)	No Connect	C
2	Common	Return	V _{out 1} (pressure)	No Connect	Ground	Return	A
3	V _{out}	No Connect	Ground	Return	V _{supply}	Supply	B
4	No Connect	No Connect	V _{out 2} (temp)	No Connect	—	—	

MECHANICAL

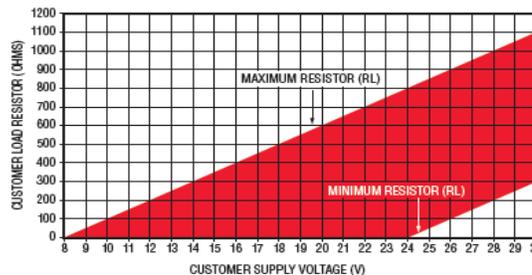
Pressure Ranges: See Table below

Pressure Range PSI	Proof Pressure (x Full Scale)	Burst Pressure (x Full Scale)
Vac-0	3.00 x FS	150 x FS
Vac-15		200 x FS
Vac-30		125 x FS
Vac-50		85 x FS
Vac-100		150 x FS
0-15	2.00 x FS	200 x FS
0-30		125 x FS
0-50		40 x FS
50-300		20 x FS
500-1,500		10 x FS
2,000-6,000	1.40 x FS	4 x FS
7,500-9,000		1.8 x FS
10,000		
15,000		
25,000		

PRESSURE PORT



Fitting Code: 1/8" - 27 NPT
Torque: 2-3 TFFT



CURRENT OUTPUT MODE (load resistor range)

Minimum Resistor Value = 50 + (+V-24) for +V>24V
Maximum Resistor Value = 50 + (+V-8) for +V>8V

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WARNING: These products are not designed for use in, and should not be used for, human 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 in which wear is not warranted, include but are 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 **WARRANTY** 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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