

User's Guide

CE



<http://www.omega.com>

email: info@omega.com

MODEL PX2760
Pressure Transducer



Servicing North America:

USA:
ISO 9001 Certified
Tel: (203) 359-1660
e-mail: info@omega.com
Canada:
Laval (Quebec) H7L 5A1
Tel: (514) 856-6928
e-mail: info@omega.com

One Omega Drive, Box 4047
Stamford, CT 06907-0047
FAX: (203) 359-7700

976 Bergar

FAX: (514) 856-6886

For immediate technical or application assistance:

USA and Canada
Customer Service:
Engineering Service:
TELEX:996404
Mexico and Latin America:

Sales Service: 1-800-826-6342/1-800-TC-OMEGASM
1-800-622-2378/1-800-622-BESTSM
1-800-872-9436/1-800-USA-WHENSM
EASYLINK: 62968934 CABLE: OMEGA
Tel: (95) 800-826-6342 FAX: (95) 203-359-7807
En Espanol: (95) 203-359-7803 email: espanol@omega.com

Servicing Europe:

Benelux:
Tel: (31) 20 6418405

Postbus 8034, 1180 LA Amstelveen, The Netherlands
FAX: (31) 20 6434643
Toll Free in Benelux: 0800 0993344
e-mail: nl@omega.com

Czech Republic
Tel: 420 (69) 6311899

ul. Rude armady 1868, 733 01 Karvina-Hranice
FAX: 420 (69) 611114
Toll Free: 0800-1-66342 e-mail: czech@omega.com

France:
Tel: (33) 130-621-400

9, rue Denis Papin, 78190 Trappes
FAX: (33) 130-699-120
Toll Free in France: 0800-4-06342
e-mail: france@omega.com

Germany/Austria:
Tel: 49 (07056) 3017

Daimlerstrasse 26, D-75392 Deckenpfronn, Germany
FAX: 49 (07056) 8540
Toll Free in Germany: 0130 11 21 66
e-mail: info@omega.com

United Kingdom:
ISO 9002 Certified

One Omega Drive, River Bend Technology Centre
Northbank, Irlam, Manchester
M44 5EX, England
Tel: 44 (161) 777-6611 FAX: 44 (161) 777-6622
Toll Free in the United Kingdom: 0800-488-488
e-mail: info@omega.co.uk

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.

General Information

Your pressure transducer has been carefully calibrated before shipment to you and it should be handled with the same care given any precision instrument. Accuracy and dimensions are reported on the specification bulletin for the transducer. The label on the unit specifies the calibrated output voltages at the low end and the high end of its pressure range.

Environmental Conditions

Do not use in ambient conditions corrosive to the stainless steel housing or PVC jacketed cable, submerge in liquids or subject to spray or vibration environment.

Temperature - The PX2760 is designed to operate and be stored with the following temperature limitations:

Operating: 0 to 175°F (-20 to 80°C)
Storage: -65 to 250°F (-55 to 120°C)

Media Compatibility - The media exposed to the wetted portions of the PX2760 must be Non-condensing air or gas compatible with stainless steel, alumina ceramics, gold and elastomers (silicone).

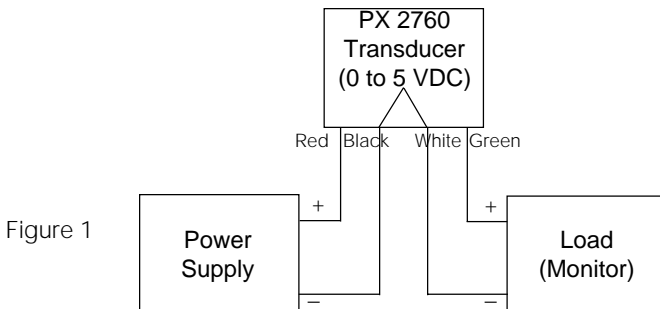
Induced Environments - The PX2760 can withstand the following environments for vibration, shock and acceleration. Keep in mind that the unit accuracy is affected by each of these conditions and means should be made to avoid these induced environments to the best extent possible:

Vibration: 2g from 5 to 500 Hz
Shock: 50g operating, 1/2 sine 10 ms
Acceleration: 10g maximum

Electrical Connections

The PX2760 is provided with a standard 2 foot multiconductor "Belden" cable. The electrical connections by color code are listed below:

Function	"Belden" Cable Lead (#8723 Grey Cable)
Positive Excitation	Red
Positive Output	Green
Negative Output	White
Negative Excitation	Black
Case	Shield



Input Power

The electrical circuit is a 3-terminal circuit. Separate leads for negative output (White) and negative excitation (Black) are provided for convenience in wiring but are internally commoned (see Figure 1). Use of these leads also avoids errors in voltage reading caused by ground loops, which can occur in 3-wire devices.

The pressure transducer should be operated with the shield connected either to the negative excitation wire or to the negative output wire. Failure to do this may result in unsatisfactory operation of the unit.

The PX2760 is designed to operate at 12 VDC input voltages. The 12 VDC unit has a 0.1 to 5.1 VDC output. The input voltage limit is 9.0 to 14.5 VDC.

Note: The circuit is not protected against mis-wiring. Use extreme care in wiring the positive excitation voltage to the red wire, and ensure all four leads are correctly connected before applying power. Reversed or mis-wired excitation may cause permanent damage to the transducer.

In some instances, use of long cable (several hundred feet long) may introduce enough cable capacitance into the output circuit to cause oscillation. If encountered, this oscillation may be eliminated by connecting a 100 ohm resistor (1/8 watt or larger) in series to each of the output leads at the end of the 2 foot transducer cable. These series resistors add to the output resistance.

Mounting and Pressure Fitting

The PX2760 is provided with an integral bracket for mounting. The bracket contains two (2) #11 holes for mounting the unit to the intended surface.

The PX2760 is provided with a 1/8" O.D. plastic push on tube fitting.

Calibration

This unit has been precision calibrated at the factory. It has been designed to be inherently stable; recalibration adjustments are not normally field accessible. If you do wish to perform a recalibration, and have access to a high accuracy primary pressure standard, call the factory for instructions on field access to the calibration adjustments.

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 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.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only 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, EXPRESS 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 purchaser 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.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRES

Direct all warranty and repair requests/inquires 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. This affords our customers the latest in technology and engineering.

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