

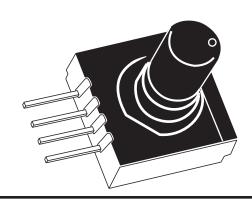
PX26 SERIES

Pressure Transducers



M1608/1204

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GENERAL INFORMATION

OMEGA's Pressure sensors are four-active piezoresistive bridge devices. When pressure is applied, a different output voltage proportional to that pressure, is produced.

Wet/Wet Differential Pressure Sensors simultaneously accept independent pressure sources. Gage Pressure Sensors provide a form of differential pressure measurement in which atmospheric pressure is used as a reference.

The PX26 is available in variety of PSI ranges and as differential and gage sensors:

MODEL NUMBER (GAGE)	RANGE	MODEL NUMBER (DIFFERENTIAL)	RANGE
PX26-001GV	0-1 PSIG	PX26-001 DV	0-1 PSID
PX26-005GV	0-5 PSIG	PX26-005DV	0-5 PSID
PX26-015GV	0-10 PSIG	PX26-015DV	0-15 PSID
PX26-030GV	0-30 PSIG	PX26-030DV	0-30 PSID
PX26-100GV	0-100 PSIG	PX26-100DV	0-100 PSID
PX26-250GV	0-250 PSIG	PX26-250DV	0-250 PSID

UNPACKING

Remove the packing list and verify that all equipment has been received. If there are any questions about the shipment, please call OMEGA Customer Service Department at 1-800-622-2378 or 203-359-1600. We can also be reached on the Internet at omega.com e-mail: info@omega.com

Upon receipt of shipment, inspect the container and equipment for any signs of damage. Take particular note of any evidence of rough handling in transit. Immediately report any damage to the shipping agent.

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

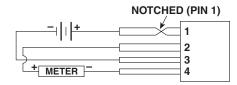
MEDIA COMPATIBILITY

Input media are limited to those media which will not attack polyester, flurosilicon, or silicon, such as oils, lacquer thinner, hydraulic fluid, most petroleum products, water and salt water. Not recommended for freons.

SOLDERING

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

ELECTRICAL CONNECTION



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 transducers if pipe is original empty. To avoid damaging surges, fluid lines should remain full (if possible), puts should be 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 surges damaging effects:

- a) Pressure transducer exhibits an output at zero pressure (large zero offset). If 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.

SPECIFICATIONS

EXCITATION: OUTPUT:

10Vdc, 16Vdcmax @ 2mA 100mV, 110mV/V (16.7mV, 1.67mV/V for

1 PSI range)

(50mV, 5mV/V for 5PSI range)

ACCURACY: 1.0% FS BFSL

LINEARITY: **HYSTERESIS & REPEATABILITY:**

0.2% FS ZERO BALANCE: $\pm 1.5 mV$ **SPAN TOLERANCE:** ±3.0 mV

-67° to 212°F (-55° to 100°C) STORAGE TEMPERATURE: **OPERATING TEMPERATURE:** -40 to 185°F (-40° to 85°C) 32° to 122°F (0° to 50°C) **COMPENSATED TEMPERATURE:**

THERMAL EFFECTS: ZERO: 1 mV (25 to 50°C, 25 to 0°C) SPAN: 1% Rdg

20 PSI for 1 and 5 PSI range **PROOF PRESSURE:** 45 PSI for 15 PSI range

60 PSI for 30 PSI range 200 PSI for 100 PSI range 500 PSI for 250 range

INPUT RESISTANCE: $7.5k \Omega$ $2.5k\Omega$ **OUTPUT RESISTANCE: RESPONSE TIME:** 1 msec.

SHOCK: Qualified to 150 G

VIBRATION: Qualified to 2kHz @ 20 G sine

GAGE TYPE: Silicon sensor

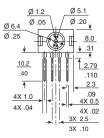
WETTED PARTS: Polyester, Silicon, flurosilicon

MATING CONNECTOR: CX136-4, not included 0.20" dia. & 0.25" collar dia. PRESSURE PORT:

Pin 1 +EXC (notched) **ELECTRICAL CONNECTION:**

Pin 2 +OUT Pin 3 -EXC Pin 4-OUT

WEIGHT: Approx 0.07 oz (2 gm)



Gage Sensor

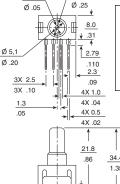
Pressure is applied to Port P2

Port P1 vents to ambient pressure



Ø 6.4

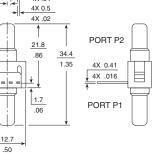




Sensor Port P1 is near

Differential

terminals.



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Canada:

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Servicing North America:
Omega Engineering, Inc., One Omega Drive, P.O. Box 4047
Stamford, CT 06907-0047
Tel: (203) 559-1660
FAX: (203) 359-7700 U.S.A.: ISO 9001 Certified

e-mail: info@omega.com

976 Bergar

7/6 Bergar Laval (Quebec), H7L 5A1 Canada Toll-Free: 1-800-826-6342 FAX: (514) 856-6886

TEL: (514) 856-6928

U.S.A. and Canada: Sales Service: 1-800-826-6342/1-800-TC-OMEGA®

Customer Service: 1-800-622-2378/1-800-622-BEST

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For immediate technical or application assistance:

-mail: espanol@omega.com mega.com.r

Servicing Europe:

Benelux:

Managed by the United Toll-Free: 0800 099 3344 FAX: +31 20 643 46 43 TEL: +31 20 347 21 21 e-mail: sales@omegaeng.nl

Frystatska 184 733 01 Karviná, Czech Republic Toll-Free: 0800-1-66342 Czech Republic:

TEL: +420-59-6311899 FAX: +420-59-6311114 e-mail: info@omegashop.cz Managed by the United Kingdom Office Toll-Free: 0800 466 342 FAX: +33 (0) 130 57 54 27

TEL: +33 (0) 161 37 29 00

e-mail: sales@omega.fr

e-mail: info@omega.de

Germany/Austria:

Daimlerstrasse 26 D-75392 Deckenpfronn, Germany Toll-Free: 0800 6397678 FAX: +49 (0) 7056 9398-29 TEL: +49 (0) 7056 9398-0

United Kingdom: ISO 9001 Certified

OMEGA Engineering Ltd.
One Omega Drive, River Bend Technology Centre, Northbank Irlam, Manchester M44 5BD United Kingdom

TEL: +44 (0) 161 777-6611 Toll-Free: 0800-488-488 FAX: +44 (0) 161 777-6622 e-mail: sales@omega.co.uk

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■ 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 evid 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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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/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

- PLIRCHASED
- Model and serial number of the product under warranty, and
- Repair instructions and/or specific problems relative to the
- FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

- Nurhase Order number to cover the COST of the repair,
 Model and serial number of the product, and
 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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