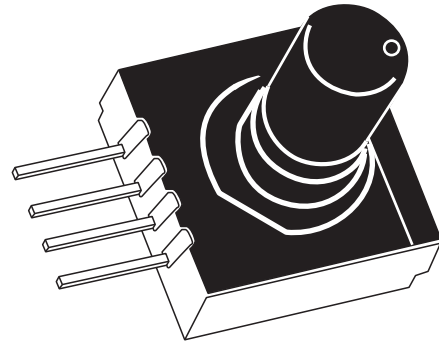


# Ω OMEGA™

## PX26 SERIES

### Pressure Transducers



**INSTRUCTION  
SHEET**

**M1608/1018**

Shop online at: [omega.com](http://omega.com) e-mail: [info@omega.com](mailto:info@omega.com)  
For latest product manuals: [omegamanual.info](http://omegamanual.info)

## 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](http://omega.com) e-mail: [info@omega.com](mailto: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.

**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 in event reshipment is necessary.

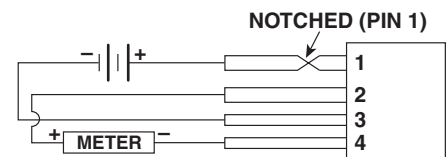
## MEDIA COMPATIBILITY

Input media are limited to those media which will not attack polyester, fluorsilicon, 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:

- 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.
- Pressure transducer output remains constant regardless of pressure.
- In severe cases, there will be no output.

## SPECIFICATIONS

**EXCITATION:**

**OUTPUT:**

**ACCURACY:**

**LINEARITY:**

**HYSTERESIS & REPEATABILITY:**

**SPAN TOLERANCE:**

**STORAGE TEMPERATURE:**

**OPERATING TEMPERATURE:**

**COMPENSATED TEMPERATURE:**

**THERMAL EFFECTS:**

(25 to 50°C, 25 to 0°C)

**PROOF PRESSURE:**

**INPUT RESISTANCE:**

**OUTPUT RESISTANCE:**

**RESPONSE TIME:**

**SHOCK:**

**VIBRATION:**

**GAGE TYPE:**

**WETTED PARTS:**

**MATING CONNECTOR:**

**PRESSURE PORT:**

**ELECTRICAL CONNECTION:**

**WEIGHT:**

10Vdc, 16Vdcmax @ 2mA

100mV, 1 10mV/V

(16.7mV, 1.67mV/V for

1 PSI range)

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

1% FS

1.0% FS BFSL

0.2% FS

±1.5mV

±3.0 mV

-67° to 212°F (-55° to 100°C)

-40 to 185°F (-40° to 85°C)

32° to 122°F (0° to 50°C)

**ZERO:** 1 mV

**SPAN:** 1% Rdg

20 PSI for 1 and 5 PSI range

45 PSI for 15 PSI range

60 PSI for 30 PSI range

200 PSI for 100 PSI range

500 PSI for 250 range

7.5k Ω

2.5k Ω

1 msec.

Qualified to 150 G

Qualified to 2kHz @ 20 G sine

Silicon sensor

Polyester, Silicon, flurosilicon

CX136-4, not included

0.20" dia. & 0.25" collar dia.

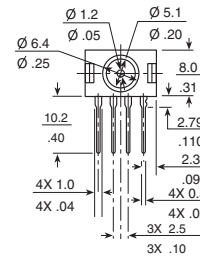
**Pin 1** +EXC (notched)

**Pin 2** +OUT

**Pin 3** -EXC

**Pin 4** -OUT

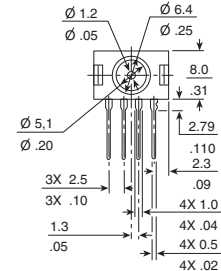
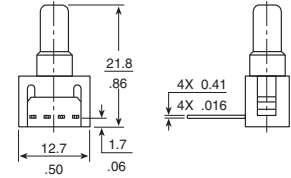
Approx 0.07 oz (2 gm)



### Gage Sensor

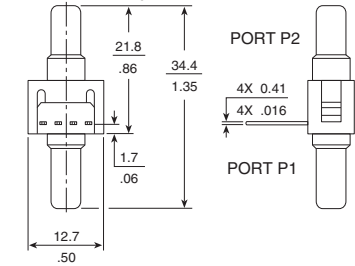
Pressure is applied to Port P2

Port P1 vents to ambient pressure



### Differential Sensor

Port P1 is near terminals.





omega.com info@omega.com

### Servicing North America:

#### U.S.A. Headquarters:

Omega Engineering, Inc.  
Toll-Free: 1-800-826-6342 (USA & Canada only)  
Customer Service: 1-800-622-2378 (USA & Canada only)  
Engineering Service: 1-800-872-9436 (USA & Canada only)  
Tel: (203) 359-1660 Fax: (203) 359-7700  
e-mail: info@omega.com

### For Other Locations Visit [omega.com/worldwide](http://omega.com/worldwide)

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

## 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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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 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.

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