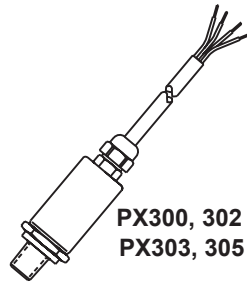
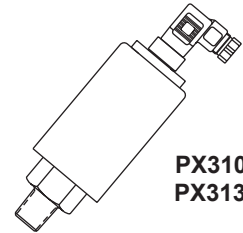




**PX300, 302, 303, 305, 310, 312, 313, and 315 Series
Pressure Transducers
M1306/0505**



**PX300, 302
PX303, 305**



**PX310, 312
PX313, 315**

COMMON SPECIFICATIONS FOR ALL UNITS

ACCURACY: (Linearity, hysteresis, and Repeatability)	0.25% BFSL	SHOCK:	50 g,s @ 11ms (MIL-STD-202, M213, Cond. G)
ZERO BALANCE:	2%	PROOF PRESSURE:	200% or 13,000 psi (whichever is less)
OPERATING TEMP:	0° TO 160°F (-18° TO 71°C)	STABILITY:	0.5% over one year
COMPENSATED TEMP:	30° TO 130°F (-1° TO 54°C)	GAGE TYPE:	Corrugated stainless steel diaphragm fluid filled with diffused semiconductor sensor
THERMAL EFFECTS:	1% over entire comp. range	ELECTRICAL	PX30X = 36", 22AWG, pigtail PX31X = MINI DIN CONNECTOR
THERMAL HYSTERESIS:	0.25%	CONNECTION:	unshield wire
VIBRATION:	15g's @ 10-200Hz MIL-STD-202, M204, Cond. B)	WETTED PARTS:	17-4 PHSS
		PRESSURE CAVITY:	0.075 cubic inches
		PRESSURE CONNECTION:	1/4" NPT

**MILLIVOLT OUTPUT FOR
PX300,302 / PX310,312**

EXCITATION:	10VDC (12 VDC max)
OUTPUT:	
PX300:	30mV± 1mV (3mV/V)
PX302:	100mV± 1mV (10mV/V)
INPUT & OUTPUT RES.:	5000 ohms nominal
RESPONSE TIME:	1msec
WEIGHT:	4.6 oz (131 grams)
WIRING:	Red / PIN 1 (+ EXC), Black / PIN 4 (- EXC), Green / PIN 3 (+ SIGNAL), White / PIN 2 (- SIGNAL)

**VOLTAGE OUTPUT FOR
PX303-xxx5V, PX303-xxx10V / PX313-xxx5V,
PX313-xxx10V**

EXCITATION:	9-30VDC (5 VDC output) 14-30VDC (10 VDC output)
OUTPUT:	0.5 - 5.5VDC 1-11VDC
SPAN:	5VDC±1% 10VDC±1%
MIN.LOAD	
RESISTANCE:	2000 ohms
QUIESCENT DRAW:	16 mA
RESPONSE TIME:	1 msec
WEIGHT:	5.8 oz (166 grams)
WIRING:	Red / PIN 1 (+EXC), Black / PIN 2(COMMON), White / PIN 3(+ OUTPUT)

CURRENT OUTPUT FOR PX305 / PX315

EXCITATION:	12-30 VDC
OUTPUT:	4-20 mA
SPAN:	16 mA±1%
MAX LOOP	
RESISTANCE:	Max resistance =
RESPONSE TIME:	50 (Voltage supply -12)
WEIGHT:	1msec
WIRING:	5.9 oz (168 grams) Red / PIN 1 (+), Black / PIN 2 (-), (Reverse polarity protected)

CALIBRATION

All models are tested to meet or exceed the published specifications. The calibration and testing were done using instrumentation and standards traceable to the National Institute of Standards and Technology (NIST) (also tested per MIL standard 45662A).

WARNING !

READ THIS BEFORE INSTALLATION

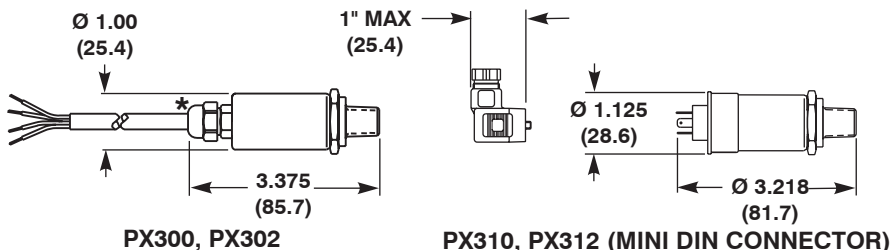
Fluid hammer and surges can destroy any pressure transducer and must always be avoided. A pressure snubber should be installed to eliminate the damaging hammer effects. Fluid hammer occurs when a pump is suddenly stopped, as with quick closing solenoid valves. Surges occur when flow is suddenly begun, 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:

1. 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.
2. Pressure transducer output remains constant regardless of pressure.
3. In severe cases, there will be no output.

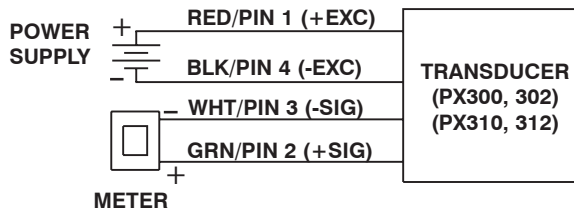
MILLIVOLT TRANSDUCERS



PX300, PX302

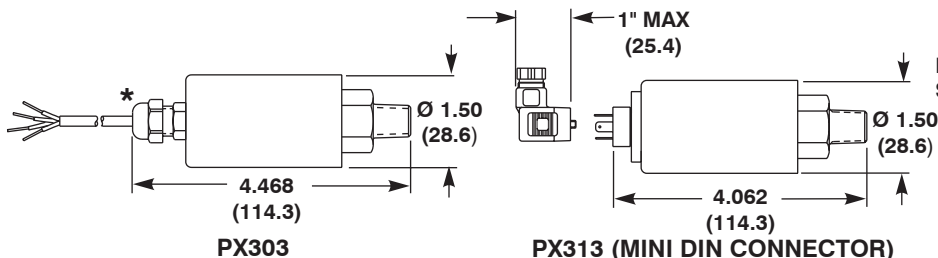
PX310, PX312 (MINI DIN CONNECTOR)

WIRING



* THE WIRES CAN NOT BE UNPLUGGED FROM THE SENSOR!

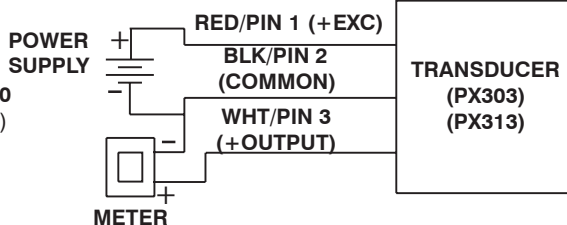
VOLTAGE OUTPUT TRANSDUCERS



PX303

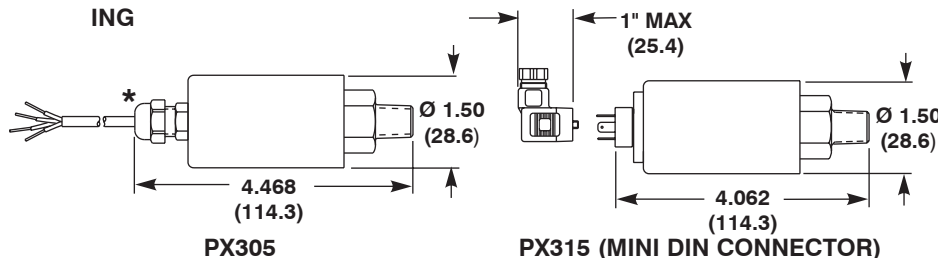
PX313 (MINI DIN CONNECTOR)

WIRING



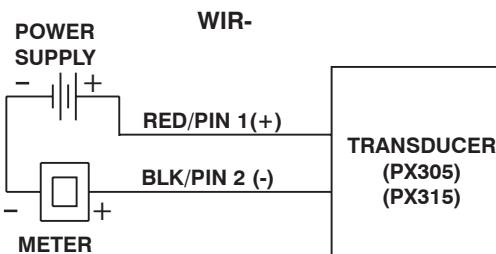
* THE WIRES CAN NOT BE UNPLUGGED FROM THE SENSOR!

CURRENT OUTPUT TRANSDUCERS



PX305

PX315 (MINI DIN CONNECTOR)



* THE WIRES CAN NOT BE UNPLUGGED FROM THE SENSOR!

DIMENSIONS IN INCHES (mm)

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CEOMEGA®

MADE IN USA

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.

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 / 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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