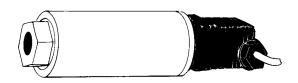
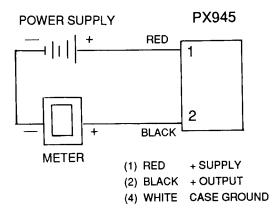


# PX945 SERIES Industrial Transmitter with Laboratory Accuracy



M1518/0692

## WIRING DIAGRAM



# 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 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.

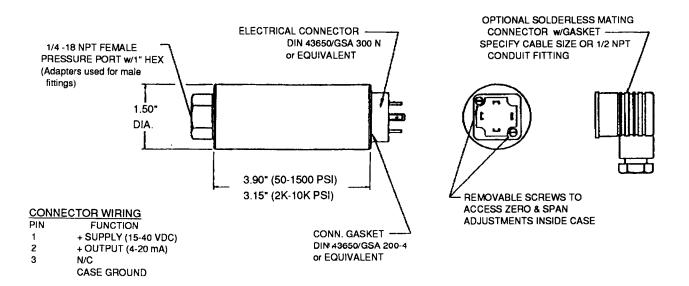
Symptoms of fluid hammer and surge's damaging effects:

- a) 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.
- b) Pressure transducer output remains constant regardless of pressure.
- c) In severe cases there will be no output.

### WIRING DIN CONNECTOR

To access the terminals inside the DIN connector, proceed as follows:

- 1. Remove the screw at the top of the connector.
- 2. Separate the DIN connector from the transducer.
- 3. Insert a small blade screwdriver in the slot provided and pry the DIN connector apart.
- 4. After wiring the terminals, snap the DIN connector back together.
- 5. Mount the DIN connector to the transducer (using rubber gasket between), observing the blade orientation.
- 6. Finish by securing the screw back into top of DIN connector.



#### **SPECIFICATIONS**

**EXCITATION:** 

15 to 40 Vdc

**OUTPUT:** 

4-20 mA (2-wire)

NIST traceable calibration, full scale output given

**ACCURACY:** 

0.1%FS (including linearity, hysteresis, and repeatability)

ZERO BALANCE:

4 ±0.015 mA

**OPERATING TEMPERATURE:** 

0 to 185°F (-18 to 85°C)

**COMPENSATED TEMPERATURE:** 

30 to 130°F (0 to 55°C)

THERMAL EFFECTS

Zero:

0.15% FS/°F

Span:

0.15% rdg/°F

**PROOF PRESSURE:** 

150% FS

**BURST PRESSURE:** 

200% FS

MAX. LOOP RESISTANCE:

(supply voltage -15) x 50 ohms

RESPONSE TIME:

2500 Hz

GAGE TYPE:

Bonded foil

ZERO & SPAN:

15% adj.

PRESSURE PORT:

1/4-18 NPTF

**ELECTRICAL CONNECTION:** 

DIN connector screw terminals (supplied with 3 ft., 29 AWG,

2 cond. shielded, pigtail leads)

**DIMENSIONS:** 

1-1/2" dia. x 5-5/16" L (38 x 150mm)

**WEIGHT:** 

13 oz. (365 g)

## WARRANTY MARKET STATES

OMEGA werrants this unit to be free of defects in materials and workmanship and to give satisfactory service 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 our customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. Our 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. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being demaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misepplication; misuse or other operating conditions outside of OMEGA's control. Components which wear or which are demaged by misuse are not warranted. These include contact points, (uses, and triacs.

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## RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to OMEGA's Customer Service Department. Call toll free in the USA and Canada: 1-800-622-2378, FAX: 203-359-7811; international: 203-359-1660, FAX: 203-359-7807.

BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, YOU MUST OBTAIN AN AUTHORIZED RETURN IARI NUMBER FROM OUR 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.

FOR <u>WARRANTY</u> RETURNS, please have the following information available BEFORE contacting OMEGA:

- P.O. number under which the product was PURCHASED,
- 2. Model and serial number of the product under warranty, and
- Repair instructions and/or specific problems you are having with the product.

FOR NON-WARRANTY REPAIRS OR CALIBRA-TION. consult OMEGA for current repair/calibration charges. Have the following information available BEFORE contacting OMEGA:

- Your P.O. number to cover the COST of the repair/calibration.
- !. Model and serial number of the product,
- Repair instructions and/or specific problems you are having with the product.