



**PX91 Series**  
**4-20 mA Output**  
**0-5,000 to 0-200,000 psi**  
**0-350 to 0-14,000 bar**

1 bar = 14.5 psi  
 1 kg/cm<sup>2</sup> = 14.22 psi  
 1 Atmosphere = 14.7 psi = 29.93 in-Hg = 760.2 mm-Hg = 1.014 bar

- ☑ Ranges up to 200,000 psi
- ☑ FM and CSA Approved Intrinsically Safe
- ☑ All Stainless Steel Case
- ☑ High Operating Temperature 121°C (250°F)
- ☑ Lightning Protected Amplifier Housing

The OMEGADYNE™ PX91 amplified output series is a rugged, high temperature/ ultra high pressure transducer. They are hermetically sealed, have all stainless steel construction and are designed for the harshest environments encountered in very high pressure/ high temperature test chambers. The PX91 is available in sealed gage pressures from 5,000 psi to 200,000 psi. Electrical connection are either a sealed Bendix connector or lightning protected amplifier housing. Pressure connection is via a high pressure ferrule connection. FM/CSA approved Intrinsically Safe is standard.

**For Sales and Service**  
**In U.S.A. and Canada**

**1-800-872-3963**  
**1-800-USA-DYNE**

**International Customers Dial**  
**(614) 965-9340**  
**24-Hour FAX (614) 965-9438**

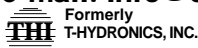
**OMEGADYNE<sup>SM</sup> FAX**

OMEGADYNE's 24-Hour  
 On-Line Publishing Service

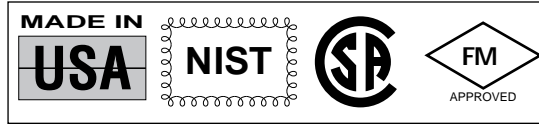
**1-800-344-3963**  
**1-800-DIG-DYNE**

Document # 3713

**OMEGADYNE, Inc.**  
 149 Stelzer Court, Sunbury, OH 43074  
<http://www.omegadyne.com>  
 e-mail: [info@omegadyne.com](mailto:info@omegadyne.com)



© COPYRIGHT 1996 OMEGADYNE, INC. ALL RIGHTS RESERVED.



Interchangeable with  
 Model TH-HPT-VA

**SPEC SHEET**  
**PX91-I-HEAD**

# ULTRA HIGH PRESSURE TRANSMITTER

## Lightning Protected Head Style



**\$860**

**Model PX91N5-50KSI**

*Shown Smaller Than Actual Size*

► **Most Popular Models Highlighted** ◀

*Prices Shown in U.S. Dollars*

| <b>To Order: (Specify Model Number)</b>                          |               |       |                    |
|--|---------------|-------|--------------------|
| Range (psi)  | Model Number  | Price | Compatible Meters  |
| <b>Protected Head Style, Sealed Gage Pressure, 4-20mA Output</b> |               |       |                    |
| 0-5,000  | PX91N5-5KSI   | \$860 | INFP, INFCP, IDP   |
| 0-10,000   | PX91N5-10KSI  | 860   | INFP, INFCP, IDP   |
| 0-15,000   | PX91N5-15KSI  | 860   | INFP, INFCP*, IDP* |
| 0-20,000   | PX91N5-20KSI  | 860   | INFP, INFCP*, IDP* |
| 0-30,000   | PX91N5-30KSI  | 860   | INFP, INFCP*, IDP* |
| 0-35,000   | PX91N5-35KSI  | 860   | INFP, INFCP*, IDP* |
| 0-50,000   | PX91N5-50KSI  | 860   | INFP, INFCP*, IDP* |
| 0-60,000   | PX91N5-60KSI  | 860   | INFP, INFCP*, IDP* |
| 0-80,000   | PX91P5-80KSI  | 1500  | INFP, INFCP*, IDP* |
| 0-100,000  | PX91P5-100KSI | 1500  | INFP, INFCP*, IDP* |
| 0-120,000  | PX91P5-120KSI | 1580  | INFP, INFCP*, IDP* |
| 0-150,000  | PX91P5-150KSI | 1800  | INFP, INFCP*, IDP* |
| 0-200,000  | PX91P5-200KSI | 1900  | INFP, INFCP*, IDP* |

\* 4 Digit Meter

Interchangeable with Model TH-HPT-VA

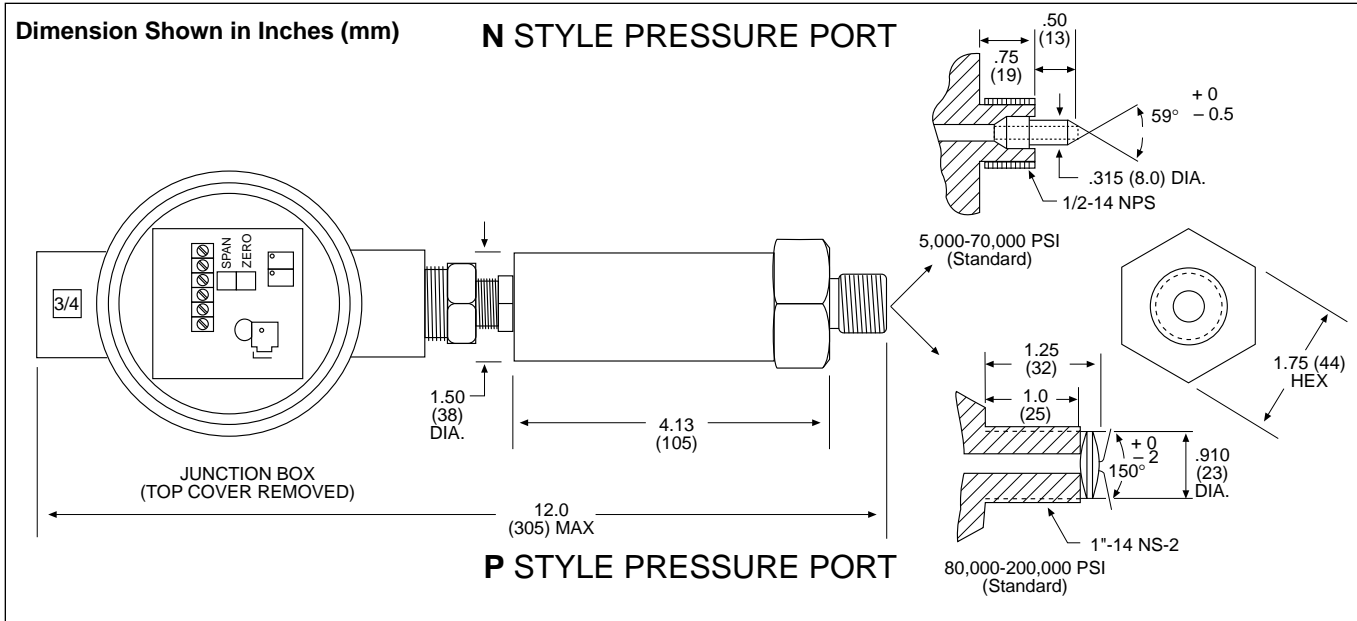
Metric Ranges Available - Consult Engineering

**Ordering Examples: 1.) PX91N5-60KSI** is a 60,000 psi sealed gage model with 4-20 mA output, a 1/2-14 NPS fitting and lightning protected amplifier housing, **\$860**.

**2.) PX91P5-80KSI** is an 80,000 psi sealed gage model with 4-20 mA output, a 1-14 NS fitting and lightning protected amplifier housing, **\$1500**.

Printed On Recycled Paper



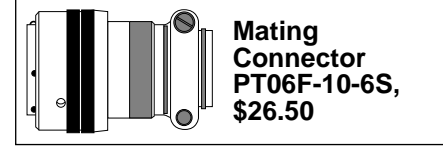


**SPECIFICATIONS: 4-20 mA Output**

**Electrical:**  
**Excitation:** 12-40 Vdc  
**Output:** 4-20 mA ±10% adj.  
**Zero Balance:** 4 mA +10% -2% adj  
**Agency Approvals:** FM/CSA  
 Intrinsically Safe IS/I.II.III/1/CDEFG  
 Standard  
**Performance:**  
**Accuracy Class:** 0.5%  
**Linearity:** ±0.35% FSO <75K psi  
 ±0.50% FSO ≥75K psi  
**Hysteresis:** ±0.10% FSO  
**Repeatability:** ±0.10% FSO

**Environmental:**  
**Operational Temp Range:**  
 -46 to +121°C (-50 to +250°F)  
**Compensated Temp Range:**  
 +17 to +71°C (+60 to +160°F)  
**Thermal Effects:**  
 Span: 0.005% Rdg/°F  
 Zero: 005% FSO/°F  
**Pressure:**  
**Proof Pressure:**  
 5K to 50K psi: 120% of rated pressure  
 60K to 200K psi: 110% of rated pressure  
**Burst Pressure:**  
 5K to 50K psi: 150% of rated pressure  
 60K to 200K psi: 120% of rated pressure

**Wetted Parts:**  
 5 to 50K: 17-4 PH Stainless Steel  
 60K to 200K: 455 Stainless Steel  
**Pressure Port:** 5K to 70K psi:  
 1/2-14 NPS (use .315 dia. 59° ferrule)  
 > 70K psi: 1-14 NS-2 (use .910 dia.  
 150° ferrule)  
**Electrical Connection:** Terminal Strip  
 inside Lightning Protected Amplifier  
 Housing; Optional: Bendix PT1H-10-6P  
 or equal  
**Mating Connector:** PT06F-10-6P  
 (not included)



**CUSTOM CONFIGURATIONS:**

| SERIES  | PRESSURE PORT  | ELECTRICAL CONNECTION | RANGE (PSI) | UNITS  | OUTPUT                                 | OPTIONS |
|---|--|-----------------------|-------------|--|--|---------|
| PX91  | [ 1 ]  | [ 2 ]                 | [ 3 ]       | [ 4 ]  | [ 5 ]                                  | [ 6 ]   |
| <b>Ranges ≤ 70,000 psi</b><br>N = 1/2-14 NPS use with<br>.315" dia 59° ferrule<br><b>Ranges &gt; 70,000 psi</b><br>P= 1-14 NS-2 use with .910"<br>dia. 150° ferrule |  |                       | 5K          | S = Sealed Gage<br><br>mV/V 5 Volt 4-20mA<br>\$845 \$860 \$860 | V = mV/V<br>5T = 0-5Vdc<br>I = 4-20 mA |         |
|   |  |                       | 10K         |  |  |         |
|   |  |                       | 15K         |  |  |         |
|   |  |                       | 20K         |  |  |         |
|   |  |                       | 30K         |  |  |         |
|   |  |                       | 35K         |  |  |         |
|   |  |                       | 50K         |  |  |         |
|   |  |                       | 60K         |  |  |         |
|   |  |                       | 80K         |  |  |         |
|   |  |                       | 100K        |  |  |         |
| 120K  | \$1450 \$1580 \$1580   |                       |             |  |  |         |
| 150K  | \$1600 \$1800 \$1800   |                       |             |  |  |         |
| 200K  | \$1800 \$1900 \$1900   |                       |             |  |  |         |
| Amplified Models Only   | 0 = 10 ft (3m) Teflon Cable<br>\$4.50/ft over 10 ft (3m)<br>1 = PT1H-10-6P Connector<br>or Equal (no charge).<br>Mating Connector<br>(not included) order<br><b>PT06F-10-6S \$26.50</b><br>5 = Lightning Protected<br>Amplifier Housing<br>(no charge) |                       |             |  |  |         |
|   |  |                       |             |  |  |         |
|   |  |                       |             |  |  |         |

**To Order a Custom Configuration:**  
 1. Select a Pressure Port  
 2. Select Electrical Connection  
 3. Select a Pressure Range  
 4. Select Pressure Units  
 5. Select Output  
 6. Select Agency Approvals

Interchangeable with Model HPT, HPT-V, HPT-VA  
 Metric Ranges Available - Consult Engineering  
 To order extra cable on Cable Style models, add suffix "--(length in feet)FT" and \$4.50/ft over the standard 10 ft (3m) length.  
**Ordering Examples:** 1.) **PX91P5-100KSI** is a 100,000 psi Sealed Gage Pressure range model with 4-20 mA output, 1-14 NS-2 fitting and a lightning protected amplifier housing, \$1500.  
 2.) **PX91P1-80KS5T** is an 80,000 psi Sealed Gage Pressure range model with 0 to 5 Vdc output, a 1-14 NS-2 fitting and an integral connector, \$1500. Mating Connector (not included) **PT06F-10-6S, \$26.50.**  
 3.) **PX91N0-50KSV-25FT** is a 50,000 psi Sealed Gage Pressure range model with mV/V output, 1/2-14 NPS fitting and 25ft (7.6m) cable, \$845+67.50 = **\$912.50**  
 4.) **PX91P0-100KSI** is a 100,000 psi Sealed Gage Pressure range model with 4-20 mA output, 1-14 NS fitting and integral Bendix Connector \$1500. Mating Connector (not included) **PT06F-10-6S, \$26.50.**