

ULTRA-HIGH-PRESSURE TRANSMITTER

LIGHTNING-PROTECTED HEAD STYLE

PX91 Series

4 to 20 mA Output
0-5000 to 0-200,000 psi
0-350 to 0-14,000 bar

1 bar = 14.5 psi
1 kg/cm² = 14.22 psi
1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar



Starts at
\$860



PX91N5-50KSI, \$860, shown smaller than actual size.

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

OMEGA's PX91 amplified output series comprises rugged, high-temperature/ultra high-pressure transducers. They are hermetically sealed, with all stainless steel construction, and are designed for the harshest test chamber environments. The PX91 is available in sealed gage pressures from 5000 psi to 200,000 psi. The electrical connection is either a sealed Bendix connector or lightning-protected amplifier housing. The pressure connection is via a high-pressure ferrule. An FM Approved Intrinsically Safe rating is standard.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

RANGE	MODEL NO.	PRICE	COMPATIBLE METERS**
PROTECTED HEAD STYLE, SEALED GAGE PRESSURE, 4 to 20 mA OUTPUT			
0 to 5000 psi	0 to 345 bar	PX91N5-5KSI	\$860 DP41-E, DP25B-E, DP24-E
0 to 10,000 psi	0 to 689 bar	PX91N5-10KSI	860 DP41-E, DP25B-E, DP24-E
0 to 15,000 psi	0 to 1034 bar	PX91N5-15KSI	860 DP41-E, DP25B-E*, DP24-E*
0 to 20,000 psi	0 to 1379 bar	PX91N5-20KSI	860 DP41-E, DP25B-E*, DP24-E*
0 to 30,000 psi	0 to 2068 bar	PX91N5-30KSI	860 DP41-E, DP25B-E*, DP24-E*
0 to 35,000 psi	0 to 2413 bar	PX91N5-35KSI	860 DP41-E, DP25B-E*, DP24-E*
0 to 50,000 psi	0 to 3447 bar	PX91N5-50KSI	860 DP41-E, DP25B-E*, DP24-E*
0 to 60,000 psi	0 to 4137 bar	PX91N5-60KSI	860 DP41-E, DP25B-E*, DP24-E*
0 to 80,000 psi	0 to 5516 bar	PX91P5-80KSI	1580 DP41-E, DP25B-E*, DP24-E*
0 to 100,000 psi	0 to 6895 bar	PX91P5-100KSI	1580 DP41-E, DP25B-E*, DP24-E*
0 to 120,000 psi	0 to 8274 bar	PX91P5-120KSI	1580 DP41-E, DP25B-E*, DP24-E*
0 to 150,000 psi	0 to 10,342 bar	PX91P5-150KSI	1800 DP41-E, DP25B-E*, DP24-E*
0 to 200,000 psi	0 to 13,790 bar	PX91P5-200KSI	1900 DP41-E, DP25B-E*, DP24-E*

Comes with complete operator's manual. Metric ranges available – consult Engineering.

* 4-digit meter. ** See section D for compatible meters.

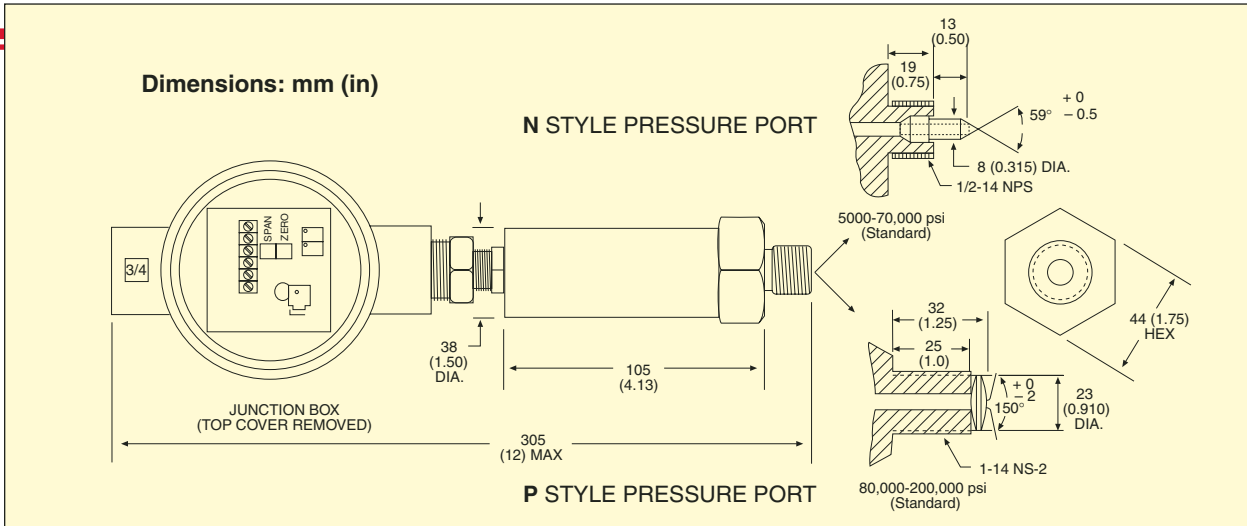
Ordering Examples: **PX91N5-60KSI**, 60,000 psi sealed gage model with 4 to 20 mA output, 1/2-14 NPSM fitting and lightning-protected amplifier housing, **\$860**. **PX91P5-80KSI**, 80,000 psi sealed gage model with 4 to 20 mA output, 1-14 NS fitting and lightning-protected amplifier housing, **\$1580**.

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
EE-2455	\$170	Reference Book: The Engineering Handbook



ULTRA-HIGH-PRESSURE TRANSMITTER



SPECIFICATIONS

4 to 20 mA Output

ELECTRICAL

Excitation: 12 to 40 Vdc

Output: 4 to 20 mA $\pm 10\%$ adj

Zero Balance: 4 mA $+10\%$ -2% adj

Agency Approvals: FM Intrinsically Safe IS/I.II.III/1/CDEFG standard

Linearity: $\pm 0.35\%$ FSO $\leq 75K$ psi
 $\pm 0.50\%$ FSO $> 70K$ psi

Hysteresis: $\pm 0.10\%$ FSO

Repeatability: $\pm 0.10\%$ FSO

Operating 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/ $^\circ\text{F}$

Zero: 0.005% FSO/ $^\circ\text{F}$

Proof Pressure:

$\leq 70K$ psi: 120% of rated pressure

$> 70K$ psi: 110% of rated pressure

Burst Pressure:

$\leq 70K$ psi: 150% of rated pressure

$> 70K$ psi: 120% of rated pressure

Wetted Parts:

$\leq 70K$ psi: 17-4 PH stainless steel

$> 70K$ psi: 455 stainless steel

Pressure Port:

$\leq 70K$ psi: $\frac{1}{2}$ -14 NPSM

(use 0.315" dia. 59° ferrule)

$> 70K$ psi: 1-14 NS-2

(use 0.910" dia. 150° ferrule)

Electrical Connection: Terminal strip inside lightning-protected amplifier housing

Optional: Bendix PTIH-10-6P or equal

Mating Connector: PT06F-10-6S (not included)

CUSTOM CONFIGURATIONS

SERIES	PRESSURE PORT	ELECTRICAL CONNECTION	RANGE (psi)	UNITS	OUTPUT	OPTIONS
PX91	[1]	[2]	[3]	[4]	[5]	[6]
Ranges $\leq 70,000$ psi N = $\frac{1}{2}$-14 NPSM (use with 0.315" dia 59° ferrule) Ranges $> 70,000$ psi P = 1-14 NS-2 (use with 0.910" dia. 150° ferrule)			5K 10K 15K 20K 30K 35K 50K 60K 80K 100K 120K 150K 200K	S = Sealed gage 5 V 4 to 20 mA \$860 \$860 \$1580 \$1580 \$1580 \$1580 \$1800 \$1800 \$1900 \$1900	V = mV/V 5T = 0 to 5 Vdc I = 4 to 20 mA	See page B-12 for additional options.
Amplified Models Only 0 = 3 m (10') PTFE cable \$4.50/ft over 3 m (10') 1 = PTIH-10-6P connector (or equal, no charge). Mating connector (not included), order PT06F-10-6S \$26.50 5 = Lightning-protected amplifier housing (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

Metric ranges available – consult Engineering.

To order extra cable on cable style models, add suffix “-(Length in feet) FT” and \$4.50/ft beyond the standard 3 m (10') length.

Ordering Examples: PX91P5-100KSI, 100,000 psi sealed gage pressure range model with 4 to 20 mA output, 1-14 NS-2 fitting and lightning-protected amplifier housing, \$1500. PX91P1-80KS5T, 80,000 psi sealed gage pressure range model with 0 to 5 Vdc output, 1-14 NS-2 fitting and integral connector, \$1500. PT06F-10-6S, mating connector (not included), \$26.50. PX91N0-50KSV-25FT, 50,000 psi sealed gage pressure range model with mV/V output, $\frac{1}{2}$ -14 NPSM fitting and 7.6 m (25') cable, \$845 + 67.50 = \$912.50. PX91P0-100KSI, 100,000 psi sealed gage pressure range model with 4 to 20 mA output, 1-14 NS fitting and integral Bendix connector, \$1500. PT06F-10-6S, mating connector (not included), \$26.50.

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• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters