

ULTRA HIGH-PRESSURE TRANSDUCER WITH HIGH OPERATING TEMPERATURE RANGE

mV/V Output

0-5000 to 0-200,000 psi

0-350 to 0-14,000 bar

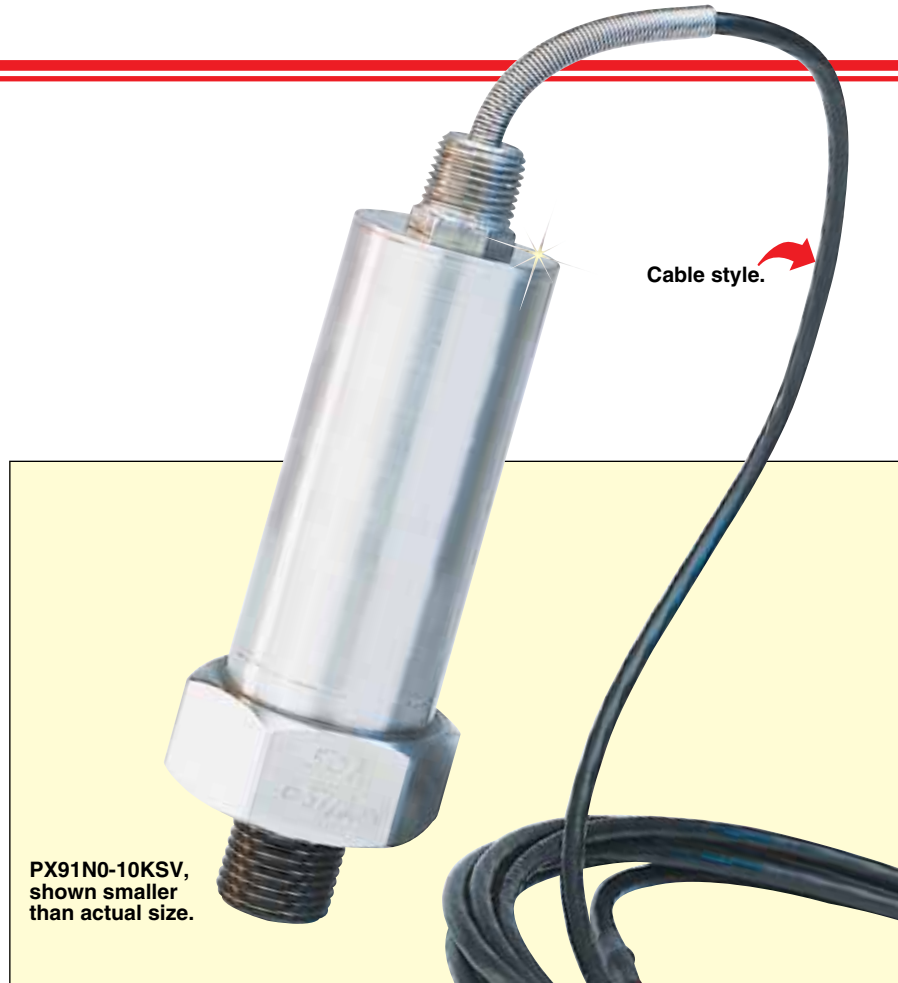
1 bar = 14.5 psi

1 kg/cm² = 14.22 psi

1 atmosphere = 14.7 psi = 29.93

inHg = 760.2 mmHg = 1.014 bar

PX91 Series



- ✓ All Stainless Steel Construction
- ✓ High Operating Temperature, Up to 204°C (400°F)
- ✓ Hermetically Sealed for Harsh Environments

OMEGA's PX91 is a rugged, ultra-high pressure transducer series. Hermetically sealed, with all stainless steel construction, it is designed for use in test chambers. The PX91 is available in sealed gage pressures up to 200,000 psi. It has a high operating temperature up to 204°C (400°F). The pressure connection is via a high-pressure ferrule connection.

To Order			
RANGE		MODEL NO.	COMPATIBLE METERS**
CABLE STYLE, SEALED GAGE PRESSURE			
0 to 5000 psi	0 to 345 bar	PX91N0-5KSV	DP41-S, DP25B-S
0 to 10,000 psi	0 to 689 bar	PX91N0-10KSV	DP41-S, DP25B-S
0 to 15,000 psi	0 to 1034 bar	PX91N0-15KSV	DP41-S, DP25B-S*
0 to 20,000 psi	0 to 1379 bar	PX91N0-20KSV	DP41-S, DP25B-S*
0 to 30,000 psi	0 to 2068 bar	PX91N0-30KSV	DP41-S, DP25B-S*
0 to 35,000 psi	0 to 2413 bar	PX91N0-35KSV	DP41-S, DP25B-S*
0 to 50,000 psi	0 to 3447 bar	PX91N0-50KSV	DP41-S, DP25B-S*
0 to 60,000 psi	0 to 4137 bar	PX91N0-60KSV	DP41-S, DP25B-S*
0 to 80,000 psi	0 to 5516 bar	PX91P0-80KSV	DP41-S, DP25B-S*
0 to 100,000 psi	0 to 6895 bar	PX91P0-100KSV	DP41-S, DP25B-S*
0 to 120,000 psi	0 to 8274 bar	PX91P0-120KSV	DP41-S, DP25B-S*
0 to 150,000 psi	0 to 10,342 bar	PX91P0-150KSV	DP41-S, DP25B-S*
0 to 200,000 psi	0 to 13,790 bar	PX91P0-200KSV	DP41-S, DP25B-S*

Comes complete with 5-point NIST traceable calibration.

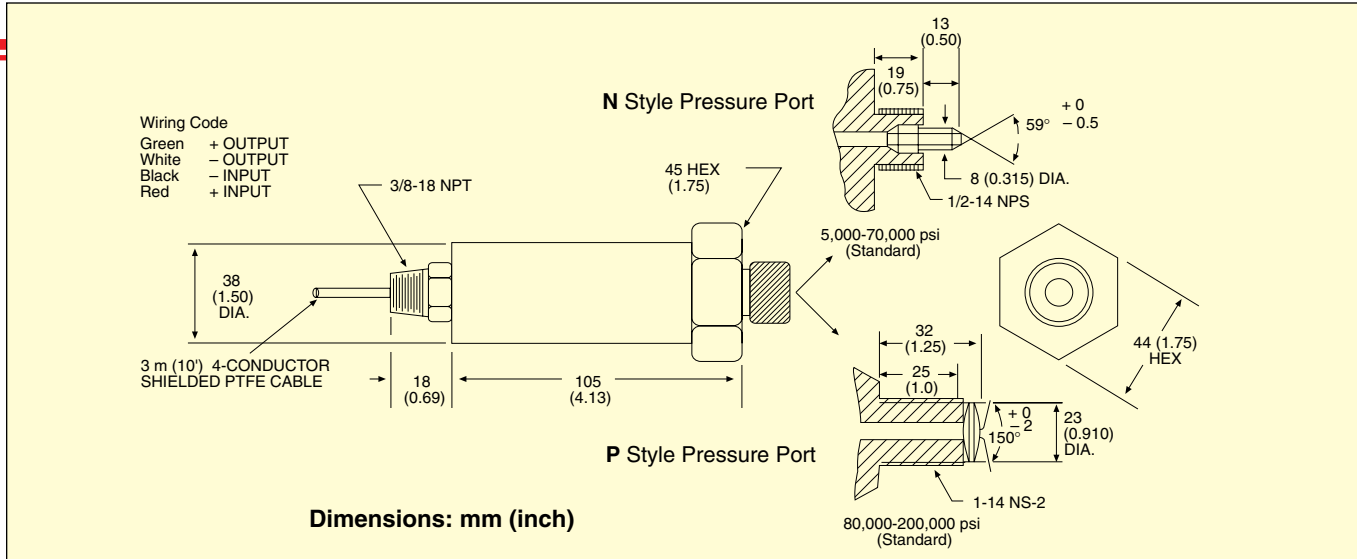
Metric ranges available – consult Engineering.

* 4-digit meter. ** Visit us online for compatible meters.

Ordering Examples: PX91P0-100KSV, 100,000 psi sealed gage model with 1-14 NS fitting and 3 m (10') cable.

PX91N0-15KSV, 15,000 psi sealed gage model with ½-14 NPSM fitting and 3 m (10') cable.

HIGH-TEMPERATURE/HIGH-PRESSURE TRANSDUCER



SPECIFICATIONS

mV/V Output

Excitation: 10 Vac/Vdc (15V max)

Output: 1 mV/V ±0.5%

Bridge Resistance: 350 Ω nominal

Zero Balance: ±2.5%

Linearity:

≤70K psi: ±0.35% FSO

>70K psi: ±0.50% FSO

Hysteresis: ±0.10% FSO

Repeatability: ±0.10% FSO

Operating Temp Range:

-56 to 204°C (-70 to 400°F)

Compensated Temp Range:

21 to 218°C (70 to 425°F)

Thermal Effects:

Span: 0.01% rdg/°F

Zero: 0.01% FSO/°F

Proof Pressure:

≤70K psi: 120% of rated pressure

>70K psi: 110% of rated pressure

Burst Pressure:

≤70K psi: 150% of rated pressure

>70K psi: 120% of rated pressure

Wetted Parts:

≤70K psi: 17-4 PH stainless steel

>70K psi: 455 stainless steel

Pressure Port:

≤70K psi: ½-14 NPSM

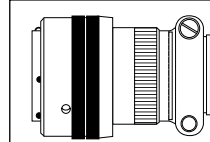
(use with 0.315" dia. 59° ferrule)

>70K psi: 1-14 NS-2

(use with 0.910" dia 150° ferrule)

Electrical Connection:

3 m (10') 4-conductor shielded cable



**Mating Connector
PT06F10-6S**

CUSTOM CONFIGURATIONS

PX91 SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION [2]	RANGE (psi) [3]	UNITS [4]	OUTPUT [5]	OPTIONS [6]
			5K	S = Sealed gage	V = mV/V	Visit us online for additional options.
			10K			
			15K			
			20K			
			30K			
			35K			
			50K			
			60K			
			80K			
			100K			
			120K			
			150K			
			200K			
0 = 3 m (10') PTFE cable						

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

Metric ranges available – consult Engineering.

To order extra cable on cable style models, add suffix “-(length in feet) FT” for additional cost per foot beyond the standard 3 m (10') length.

Ordering Examples: PX91N0-50KSV-25FT, 50,000 psi sealed gage pressure range model with mV/V output, ½-14 NPSM fitting and 7.6 m (25') cable.

PX91P0-100KSV, 100,000 psi sealed gage pressure range model with mV output, 1-14 NS-2 fitting and 3 m (10') cable.