

# SILICON ON SAPPHIRE PRESSURE TRANSMITTER

## OUTSTANDING PERFORMANCE AND STABILITY

Vacuum to 6000 psi  
5 V Output

### PX4202 Series



- ✓ Silicon on Sapphire Construction
- ✓ Titanium Wetted Parts for Media Compatibility
- ✓ 0.25% Accuracy
- ✓ 5 V Output is Compatible with Most PLC's and Control Systems
- ✓ High Operating Temperature
- ✓ IP65 Enclosure

OMEGA's PX4202 Series Transmitters bring state-of-the-art Silicon-on-Sapphire (SOS) sensor technology to the industrial arena. SOS construction uses very stable solid state silicon strain gages on a Sapphire carrier which is glass bonded to a titanium diaphragm. This combination provides a very durable transducer which has excellent stability over a wide temperature range. Additionally, the all titanium wetted parts provide maximum corrosion resistance to harsh industrial chemicals.

### SPECIFICATIONS

**Excitation:** 13 to 30 Vdc @ 10 mA  
reverse polarity protected

**Supply Effects:** 1 mV/V

**Output:** 0 to 5 Vdc

**Zero Offset:** ±2%

**Load Driving Capacity:** 2.5 kΩ

**Accuracy:** ±0.25% full scale includes Linearity, and Hysteresis

**Repeatability:** ±0.1% full scale

**Long Term Stability:** ± 0.2% full scale (1 year)

**Media Temperature:**  
-50 to 120°C (-58 to 248°F)

**Ambient Temperature:**  
-40 to 80°C (-40 to 175°F)

**Thermal Zero Effect:** <±0.016% full scale/°F

**Thermal Span Effect:** <±0.016% full scale/°F

**Maximum Overpressure:** 200% full scale

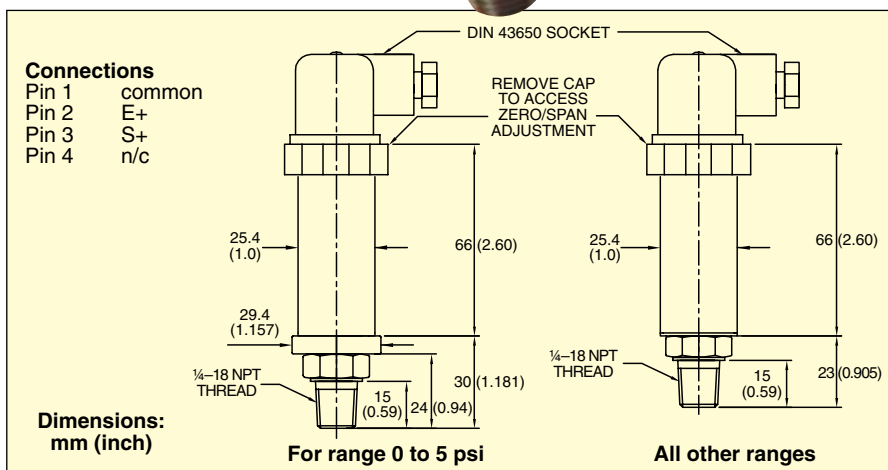
**Sensor:** Silicon on Sapphire

**Wetted Parts:** Titanium

**Case Material:** Stainless Steel, IP65

PX4202-100G5V, shown smaller than actual size.

**Pressure Port:** ¼ NPT male  
**Electrical Connection:**  
Din 43650 Plug  
Mating Connector Supplied  
**Response Time:** 10 ms  
**Weight:** 90 g (3.2 oz)



### To Order

RANGE (psig)	MODEL NO.	COMPATIBLE METERS
0 to 30 inHg	PX4202-30VAC5V	DP41-E, DP25-E, DP-7700
0 to 5	PX4202-005G5V	DP41-E, DP25-E, DP-7700
0 to 10	PX4202-010G5V	DP41-E, DP25-E, DP-7700
0 to 15	PX4202-015G5V	DP41-E, DP25-E, DP-7700
0 to 30	PX4202-030G5V	DP41-E, DP25-E, DP-7700
0 to 60	PX4202-060G5V	DP41-E, DP25-E, DP-7700
0 to 100	PX4202-100G5V	DP41-E, DP25-E, DP-7700
0 to 150	PX4202-150G5V	DP41-E, DP25-E, DP-7700
0 to 200	PX4202-200G5V	DP41-E, DP25-E, DP-7700
0 to 300	PX4202-300G5V	DP41-E, DP25-E, DP-7700
0 to 600	PX4202-600G5V	DP41-E, DP25-E, DP-7700
0 to 1000	PX4202-1KG5V	DP41-E, DP25-E, DP-7700
0 to 1500	PX4202-1.5KG5V	DP41-E, DP25-E, DP-7700
0 to 3000	PX4202-3KG5V	DP41-E, DP25-E, DP-7700
0 to 6000	PX4202-6KG5V	DP41-E, DP25-E, DP-7700

Comes with complete operator's manual.

Ordering Example: PX4202-100G5V, 0 to 100 psig range with 5 Vdc output.