

# Compact Rugged Pressure Transmitters



**15 to 5000 psi, 1 to 345 bar**  
**4 to 20 mA Output**

**PX119 Series**



- ✓ Low Cost
- ✓ Compact Size
- ✓ 0.50% BFSL Accuracy
- ✓ All Stainless Steel Body

The PX119 pressure transmitter series is ideally suited for material handling, industrial and mobile equipment applications where space constraints require a small body size. The body is machined from a single piece of stainless steel to provide added protection for the internal electronics. A piezoresistive ceramic sensor along with ASIC signal conditioning provide an excellent thermally compensated output.

## Specifications

**Accuracy:** 0.50% BFSL Accuracy

**Pressure Range:** 15 to 5000 psi (345 bar)

**Output/Supply Voltage:** 4 to 20 mA:  
8 to 30 Vdc

**Output Connections:** DIN 43650C (mini DIN)

**Output Wiring:** Pin 1: Supply +,  
Pin 2: Supply -

**Long Term Drift:** <0.3% FS  
@ 25°C (77°F)

### Thermal Error:

**7.5 psi ≥ 100 psi:** 0.01% FS/°F  
(0.018% FS/°C)

**100 psi > 400 psi:** 0.009% FS/°F  
(0.016% FS/°C)

**400 psi ≥ 1000 psi:** 0.011% FS/°F  
(0.019% FS/°C)

**1000 psi > 3000 psi:** 0.012% FS/°F  
(0.021% FS/°C)

**3000 psi ≥ 5000 psi:** 0.018% FS/°F  
(0.028% FS/°C)

**Compensated Temperature:**  
0 to 85°C (32 to 185°F)

**Operating Temperatures:**  
-40 to 135°C (-40 to 257°F)

**Process Connection:** ¼ NPT male  
**Construction:** 304 SS

**Wetted Materials:** 304 SS and  
Ceramic Al<sub>2</sub>O<sub>3</sub>, NBR Standard

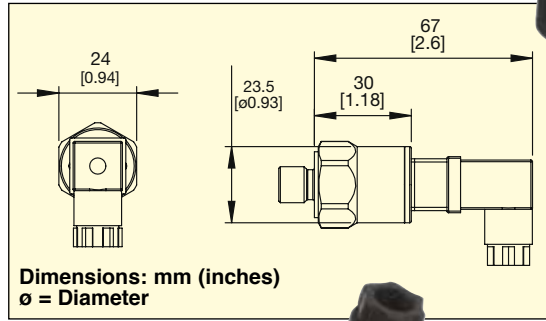
**Vibration:** 10 g (20 to 2000 Hz) for  
<58 psi (4 bar); 20 g (20 to 500 Hz) for  
ranges >58 psi (4 bar)

**Protection:** Overvoltage, short  
circuit, reverse polarity

**Response Time:** 1 ms

**Ingress Protection:** IP65

**Weight:** 70 g (0.15 lb)



PX119, both models shown smaller than actual size.



## To Order

| Ranges                   |           | % Proof (FS) | % Burst (FS) | mini DIN Connection |
|--------------------------|-----------|--------------|--------------|---------------------|
| psi                      | bar       |              |              |                     |
| <b>Absolute Pressure</b> |           |              |              |                     |
| 0 to 15                  | 0 to 1    | 193.4%       | 386.7%       | PX119-015AI         |
| 0 to 30                  | 0 to 2.1  | 193.4%       | 241.7%       | PX119-030AI         |
| 0 to 100                 | 0 to 6.9  | 290.1%       | 362.6%       | PX119-100AI         |
| 0 to 150                 | 0 to 10.3 | 193.4%       | 241.7%       | PX119-150AI         |
| 0 to 300                 | 0 to 21   | 193.4%       | 241.7%       | PX119-300AI         |
| 0 to 600                 | 0 to 42   | 241.7%       | 290.1%       | PX119-600AI         |
| 0 to 1000                | 0 to 69   | 290.1%       | 362.6%       | PX119-1KAI          |
| 0 to 1500                | 0 to 103  | 193.4%       | 241.7%       | PX119-1.5KAI        |
| 0 to 3000                | 0 to 207  | 193.4%       | 241.7%       | PX119-3KAI          |
| 0 to 5000                | 0 to 345  | 188.5%       | 188.5%       | PX119-5KAI          |
| <b>Gage Pressure</b>     |           |              |              |                     |
| 0 to 15                  | 0 to 1    | 193.4%       | 386.7%       | PX119-015GI         |
| 0 to 30                  | 0 to 2.1  | 193.4%       | 241.7%       | PX119-030GI         |
| 0 to 100                 | 0 to 6.9  | 290.1%       | 507.6%       | PX119-100GI         |
| 0 to 150                 | 0 to 10.3 | 193.4%       | 338.4%       | PX119-150GI         |
| 0 to 300                 | 0 to 21   | 193.4%       | 338.4%       | PX119-300GI         |
| 0 to 600                 | 0 to 42   | 241.7%       | 362.6%       | PX119-600GI         |
| 0 to 1000                | 0 to 69   | 290.1%       | 362.6%       | PX119-1KGI          |
| 0 to 1500                | 0 to 103  | 193.4%       | 241.7%       | PX119-1.5KGI        |
| 0 to 3000                | 0 to 207  | 193.4%       | 217.5%       | PX119-3KGI          |
| 0 to 5000                | 0 to 345  | 188.5%       | 188.5%       | PX119-5KGI          |

**Ordering Examples:** PX119-3KGI, 3000 psi gage pressure transmitter with 4 to 20 mA output and mini DIN termination.

PX119-015AI, 15 psi absolute pressure transmitter with 4 to 20 mA output and mini DIN termination.

## Accessories

| Model No.           | Description   |
|---------------------|---|
| CA-319-4PC24-XXX-WP | Vented cable used for PX119 ≤100 psig, terminated in a clean dry area that is open to atmosphere for correct operation*                                 |
| CA-319-4PC24-XXX    | Standard cable for PX119 >100 psig and all absolute ranges, terminated in a dry location or sealed to prevent water from getting into the cable/sensor* |
| DP8PT               | PLATINUM™ Series ¼ DIN 4-digit single display panel meter   |

\*All PX119 are vented through a hole in the connector and through the mating connector. OMEGA recommends purchase and use of ready-made Cable Assemblies using part # structure "CA-319-4PC24-XXX-WP" (and non-WP version) as shown above, where "XXX" is the length in feet of the desired cable (e.g. "030" stands for 30 ft).