

# EXTERNAL PRESSURE MODULES FOR PCL340 SERIES, PCL1000, AND PCL1200 CALIBRATORS

**Product Discontinued**

- ✓ Compatible with OMEGA® PCL340, PCL1000, and PCL1200
- ✓ NIST-Traceable Certificate Included
- ✓ 24 Standard Ranges
- ✓ Gage, Vacuum, Absolute, Compound, and Differential Measurements
- ✓ Accuracy Specified over 15 to 35°C Range
- ✓ Isolated and Non-Isolated Measurements, Range Dependent
- ✓ Gage, Absolute, and Compound Types are Isolated and Accept Any Media Compatible with 316 SS
- ✓ Vacuum and Differential Types are Compatible with Pressure Media that are Clean, Dry, Non-Corrosive Air or Gas

OMEGA® offers 24 standard external pressure modules for use with PCL340, PCL1000, and PCL1200 Series calibrators. These modules cover gage, vacuum, absolute, compound, and differential measurements. Pressure ranges can be displayed in any of 13 user-selectable units. Water density correction factors of 4°C, 20°C, or 60°F can be selected for either water column unit. Note that a pressure unit's resolution limitations will determine whether it's the right choice for a particular application.

PCL-PMA, pressure module adaptor, shown smaller than actual size.

PCL-PM1KG, pressure module, shown smaller than actual size.

1/8 FNPT pressure port.

PCL-PM1KG, mated with PCL-PMA, shown smaller than actual size.

# EXTERNAL PRESSURE MODULES

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PRESSURE INSTRUMENTS

To Order				
MODEL NO.	PARAMETER RANGE GAGE (psig)	ACCURACY (% FS)	OVER PRESSURE	NOTES
<b>PCL-PMA</b>	Pressure module adaptor (one required)			
<b>PCL-PM005G</b>	0 to 5 (0 to 350 mbar)	±0.025%, ±0.003 psi	400%	9
<b>PCL-PM007G</b>	0 to 7.2 (0 to 500 mbar)	±0.035%, ±0.0025 psi	300%	4 and 7
<b>PCL-PM010G</b>	0 to 10 (0 to 700 mbar)	±0.025%, ±0.0025 psi	300%	9
<b>PCL-PM030G</b>	0 to 30 (0 to 2 bar)	±0.025%	300%	
<b>PCL-PM050G</b>	0 to 50 (0 to 3.5 bar)	±0.03%	300%	
<b>PCL-PM100G</b>	0 to 100 (0 to 7 bar)	±0.025%	300%	
<b>PCL-PM150G</b>	0 to 150 (0 to 10 bar)	±0.035%	200%	4
<b>PCL-PM300G</b>	0 to 300 (0 to 20 bar)	±0.025%	200%	
<b>PCL-PM1KG</b>	0 to 1000 (0 to 70 bar)	±0.05%	200%	6
<b>PCL-PM1.5KG</b>	0 to 1500 (0 to 100 bar)	±0.05%	200%	4
<b>PCL-PM3KG</b>	0 to 3000 (0 to 200 bar)	±0.1%	200%	
<b>PCL-PM5KG</b>	0 to 5000 (0 to 340 bar)	±0.1%	200%	
<b>VACUUM (psig) AMBIENT PRESSURE: 0</b>				
<b>PCL-PM005VAC</b>	0 to -5 (0 to -350 mbar)	±0.025%, ±0.003 psi	400%	9
<b>PCL-PM015VAC</b>	0 to -15 (0 to -1 mbar)	±0.025%, ±0.0025 psi	300%	7
<b>ABSOLUTE (psia) FULL VACUUM: 0</b>				
<b>PCL-PM015A</b>	0 to 15 (0 to 1 bar)	±0.025%, ±0.0025 psi	300%	7
<b>PCL-PM030A</b>	0 to 30 (0 to 2 bar)	±0.025%	300%	
<b>PCL-PM050A</b>	0 to 50 (0 to 3.5 bar)	±0.03%	300%	
<b>PCL-PM100A</b>	0 to 100 (0 to 7 bar)	±0.025%	300	
<b>PCL-PM300A</b>	0 to 300 (0 to 20 bar)	±0.025%	200%	
<b>COMPOUND (psig) AMBIENT PRESSURE: 0</b>				
<b>PCL-PM015C</b>	-15 to 15 (-1 to 1 bar)	±0.025%, ±0.0025 psi	300%	7
<b>PCL-PM030C</b>	-15 to 30 (-1 to 2 bar)	±0.025%, ±0.0025 psi	300%	
<b>DIFFERENTIAL (psid): SEE NOTE 1</b>				
<b>PCL-PM005D</b>	0 to 5 (0 to 350 mbar)	±0.025%, ±0.003 psi	400%	5 and 8
<b>PCL-PM030D</b>	0 to 30 (0 to 2 bar)	±0.025%	300%	5
<b>PCL-PM050D</b>	0 to 50 (0 to 3.5 bar)	±0.03%	300%	5

Comes complete with **NIST-traceable** calibration certificate.

**Ordering Example:** **PCL-PMA**, pressure module adaptor (one required to interface with calibrators), **PCL-PM015C**, -15 to +15 psi compound range pressure module.

**Notes:** 1. Accuracy is percent of full scale range, over the 15 to 35°C temperature range. Includes the pressure/temperature hysteresis in psi. The accuracy statement shown in the specification table is the base accuracy from 15 to 35°C. Outside this temperature range, add an additional ±0.0015% of FS per °C. To calculate the allowed deviation of a particular pressure module, use the following formula:

Deviation = ±%FS, ±T/P H, ±tempco where ±T/P H = thermal/pressure hysteresis in psi where applicable, and ±tempco = ±0.0015% FS/°C when the temperature is outside the 15 to 35°C range.

2. Gage, vacuum and compound type range measurements are relative to atmospheric pressure. The absolute type is a measurement made relative to absolute zero (perfect vacuum). The differential type is a measurement made relative to the pressure applied to the low-pressure port of the module.

3. Units for display: pounds per square inch (psi), millibars (mbar), kilopounds per square centimeter (kp/cm<sup>2</sup>, also kg/cm<sup>2</sup>), atmospheres physical (atmos), kilopascals (kPa), megapascals (MPa), inches of mercury @ 0 °C (inHg), millimeters of mercury @ 0 °C (mmHg), inches of water column (inWc), centimeters of water column (cmWc) or one user-defined pressure unit.

4. These extended ranges are de-rated because the calibrated range of the module does not match the range of the sensor.

5. The maximum static pressure is 200 psig (14 bar).

6. Relative to the calibration standard.

7. Thermal and pressure hysteresis = 0.0025 psi (0.1724 mbar).

8. Thermal and pressure hysteresis = 0.0030 psi (0.2068 mbar); all other ranges = no hysteresis.

9. 0 to 7.2 psi, 0 to 150 psi and 0 to 1500 psi are extended ranges.

10. Gage, absolute and compound types are isolated and accept any media compatible with 316 SS. Vacuum and differential types are compatible with pressure media that are clean, dry, non-corrosive air or gas.