

P5510 Pneumatic Pressure Comparator

Highlights

A pressure comparator supplies the same precisely controlled pressure to both a reference gauge and device under test for calibration. The P5510 is uniquely suited for your low pressure pneumatic calibration workload.

- Dual pressure/vacuum capability
- Bench mount design
- Built-in handpump as pressure/vacuum source
- High quality needle valve for fine control
- Test port adapters that require no PTFE tape or wrenches
- Can be used with the [2700G Reference Pressure Gauge](#) to provide a complete calibration solution

Make it a pressure calibrator (P5510-2700G)

The Fluke Calibration P5510 Pressure Comparator when combined with the 2700G Reference Pressure Gauges becomes an easy-to-use alternative to traditional deadweight testers that covers a wide range of workload. For convenience, the P5510 is bundled together with selected 2700G Reference Pressure Gauges for a complete bench top pressure calibration solution. These pressure calibrators provide the accuracy, reliability, and capability you need to calibrate dial gauges, digital test gauges and pressure transmitters.

For example, the P5510-2700G-3 is a P5510 Pressure Comparator, bundled together with 2700G-BG2M, 2700G-BG700K, 2700G-BG100K. This calibrator has three pressure ranges corresponding to the three 2700G Reference Pressure Gauges in the bundle and covers a total pressure range of -15 psi to 300 psi (-100 kPa to 2 MPa).

The accuracy of the calibrator is equal to the accuracy of the 2700G Reference Pressure Gauge being used: $\pm 0.02\%$ full scale of positive pressure or $\pm 0.05\%$ of full scale for vacuum.

Description

Pressure range 0 to 300 psi (20 bar); vacuum range 0 to 24 inHg (800 mbar)

This pneumatic pressure comparator is designed for testing pressure measuring instruments against master test instruments. This cost effective instrument provides precise control for important calibration requirements and include many features found in our popular line of pneumatic deadweight testers.

Specifications

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Pressure Range	0 to 300 psi (20 bar)
Vacuum Range	0 to 27 inHg (915 mbar 90% vacuum)
Instrument Size (W x D x H)	9.5 x 13 x 7 in (240 x 330 x 180 mm)
Instrument Weight	7.5 lb (3.5kg)
Test Port Adapters	2 sets 1/8, 1/4, 3/8, and 1/2 NPT or BSP

Models and Accessories

Model Name	Description
P5510-2M	Pneumatic Comparison Test Pump
P5510/14-2700G-4	P5510/P5514 Pressure Calibrator, with 4 Gauges (2700G-G70M, 2700G-BG7M, 2700G-BG2M, 2700G-BG200K)
P5510/14-2700G-4/C	P5510/P5514 Pressure Calibrator, with 4 Gauges Accredited
P5510/14-2700G-6	P5510/P5514 Pressure Calibrator, with 6 Gauges (2700G-G70M, 2700G-G20M, 2700G-BG7M, 2700G-BG2M, 2700G-BG700K, 2700G-BG100K)
P5510/14-2700G-6/C	P5510/P5514 Pressure Calibrator, with 6 Gauges Accredited
P5510-2700G-1	P5510 Pneumatic Calibrator, 2 MPa (300 psi), 1 Gauge (2700G-BG2M)
P5510-2700G-1/C	P5510 Pneumatic Calibrator, 2 MPa (300 psi), 1 Gauge Accredited
P5510-2700G-3	P5510 Pneumatic Calibrator, 2 MPa (300 psi), 3 Gauges (2700G-BG2M, 2700G-BG700K, 2700G-BG100K)
P5510-2700G-3/C	P5510 Pneumatic Calibrator, 2 MPa (300 psi), 3 Gauges Accredited

Accessories common to all models:

Accessory	Description
P5540 Metric and P5541 BSP Adapter Sets	<p>P5540 Metric M14 x 1.5, M20 x 1.5, 1/8 and 1/4 BSP</p> <p>P5541 BSP 1/8, 1/4, 3/8 and 1/2 BSP</p> <p>P5542 NPT 1/8, 1/4, 3/8 and 1/2 NPT</p>
P5543 Angle Adapter	To calibrate gauges with the pressure connection on the rear (for example, panel mount gauges) in their correct operating position, an angle adaptor should be used. The angle adapter uses the standard gauge adapters and positions the gauges at 90°. The maximum working pressure of this unit is 10,000 psi (700 bar).
P5544 Two Gauge Stand	This adapter mounts directly to the test port of the calibrator and allows for the calibration of two instruments at the same time, or the connection of a reference test instrument. Maximum working pressure is 10,000 psi (700 bar).
P5551 Pointer Remover / Punch	This tool is designed to quickly remove and consistently refit the pointer of a pressure gauge.

Knowledge_and_information

Product Manuals

 [P5510 Pneumatic Comparison Test Pump Users Manual \(1.13 MB\)](#)

Brochures

 [Pressure Calibration Applications and Solutions \(7.34 MB\)](#)

 [Druckkalibrierung Anwendungsgebiete und Lösungen \(12.71 MB\)](#)

 [Calibración de presión Aplicaciones y soluciones \(12.79 MB\)](#)

 [Étalonnage de pression Applications et solutions \(12.49 MB\)](#)

 [Drukkalibratie Toepassingen en oplossingen \(12.54 MB\)](#)

 [圧力校正 用途とソリューション \(12.67 MB\)](#)

 [압력 교정 응용 분야 및 해결 방법 \(12.66 MB\)](#)

 [Calibração de Pressão Causas e soluções \(12.51 MB\)](#)

 [Калибровка давления Сферы применения и решения \(37.45 MB\)](#)

 [压力校准 应用和解决方案 \(12.87 MB\)](#)

Application Notes

 [How to Choose a Pressure Comparator \(2.72 MB\)](#)

 [How to evaluate pressure measurement specifications \(2.21 MB\)](#)

Data Sheets

 [P5500 Series Data Sheet \(1.21 MB\)](#)

Video

[P551X and 2700G Introduction and Demonstration Video](#)

Press Releases

[Fluke Calibration 2700G Series Reference Pressure Gauges provide a highly accurate, versatile pressure measurement solution](#)

Product Images



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Links:

[1] [https://us.flukecal.com/lightboxform/webform_client_form_98799?](https://us.flukecal.com/lightboxform/webform_client_form_98799?product=P5510%20Pneumatic%20Pressure%20Comparator&family=08a0ec52-599c-e611-80c4-00155dfe6b1a)

[product=P5510%20Pneumatic%20Pressure%20Comparator&family=08a0ec52-599c-e611-80c4-00155dfe6b1a](https://us.flukecal.com/lightboxform/webform_client_form_98799?product=P5510%20Pneumatic%20Pressure%20Comparator&family=08a0ec52-599c-e611-80c4-00155dfe6b1a)

[2] <https://us.flukecal.com/literature/articles-and-education/pressure-calibration/video/p551x-and-2700g-introduction-and-demons>

[3] https://us.flukecal.com/print/products/pressure-calibration/manual-pressure-calibration/pneumatic-pressure-control/p5510-pneumatic?quicktabs_product_details=4#quicktabs-product_details