

Technical data

# P5514B Hydraulic Pressure Comparator

## **Easily Generate Pressure**

To 10 000 psi (70 MPa)

## **Vernier Fine Adjustment Control**

Enables cardinal point calibrations

## **Tool Free Test Connectors**

For easy, leak free connections

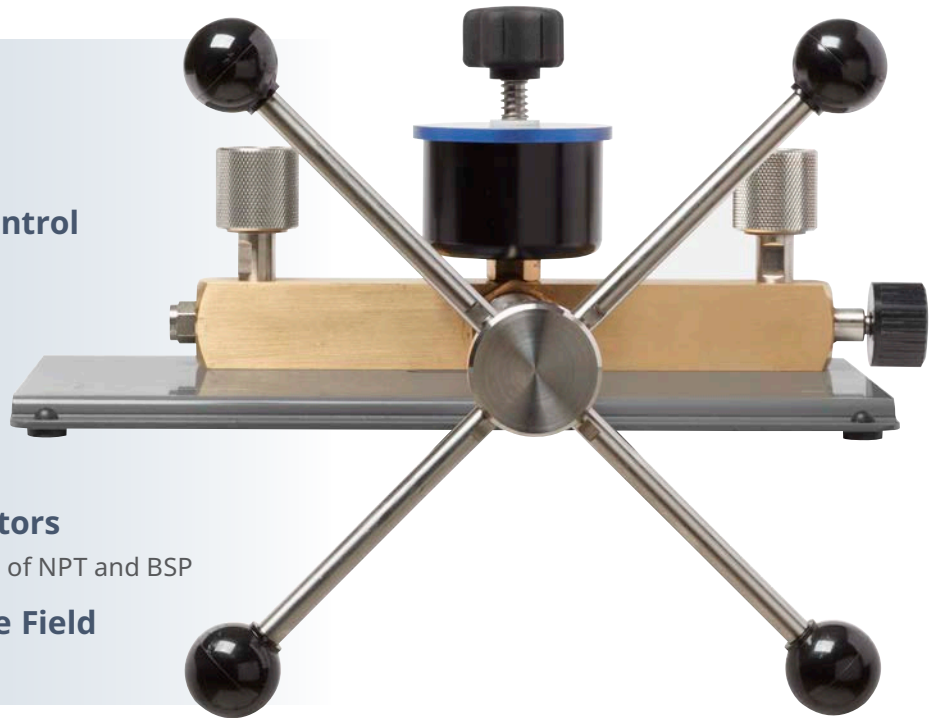
## **Robust Design**

Improved reservoir valve sealing

## **Improved Test Port Connectors**

Adapters included for common sizes of NPT and BSP

## **Use On The Bench Or In The Field**



## **P5514B Hydraulic Pressure Comparator**

The P5514B Hydraulic Pressure Comparator is a simple, robust and economical pressure test pump for calibrating gauges, switches and transducers with accurate, fine adjust capabilities. It generates pressure to 10 000 psi (70 MPa), with a new Vernier that enables cardinal point calibrations.

The P5514B can be mounted easily on a bench or used in mobile applications. Its robust design, with improved reservoir valve sealing, makes it a more stable pressure generator than previous versions of this model.

The test ports have been improved with a rotating collar design that make it a snap to connect devices under test (DUTs). Test port connections include adapters for common sizes of NPT and BSP. Connections are tool free, another improvement over the previous model.



## About pressure comparators

A pressure comparator or hydraulic test pump supplies the same precisely controlled pressure to both a reference gauge and device under test for calibration. Fluke Calibration hydraulic test pumps are used for checking pressure measuring instruments against master test gauges, indicators or transducers. These cost-effective instruments, which include several features from our popular line of hydraulic deadweight testers, are capable of easily generating high pressures and often include a Vernier for precise control for important calibration requirements.

## Make it a pressure calibrator

The Fluke Calibration P5514B 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 P5514B 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 P5514B-2700G-3 is a P5514B Pressure Comparator, bundled together with 2700G-G70M, 2700G-G20M, 2700G-BG7M. This calibrator has three pressure ranges corresponding to the three 2700G Reference Pressure Gauges in the bundle and covers a total pressure range of -12 psi to 10 000 psi (-80 kPa to 70 MPa).

## Specifications

Pressure Range	0 to 10,000 psi (700 bar)
Test Port Adapters	(2 sets) 1/8, 1/4, 3/8 and 1/2 NPT or BSP
Instrument Size (W x D x H)	11 x 11 x 10 in (280 x 280 x 254 mm)
Instrument Weight	11 lb (5 kg)
Reservoir Volume	75 cc
Screw Press Displacement	20 cc
Fluid Media	<p>The standard O-ring seals are Viton®. Ethylene Propylene seals are available for use with solvents, fuel oils, brake fluids or other similar aggressive fluids.</p> <p>P5514B-70M: Viton® Seals P5514B-70M-EP: Ethylene Propylene Seals</p>

## Ordering information

Models	Description
P5514B-70M	Hydraulic Comparison Test Pump, Viton Seals Pressure range 0 to 10 000 psi (70 MPa)
P5514B-70M-EP	Hydraulic Comparison Test Pump, EP Seals Pressure range 0 to 10 000 psi (70 MPa)
P5514B-2700G-1	P5514B Hydraulic Calibrator, 70 MPa, 1 Gauge
P5514B-2700G-3	P5514B Hydraulic Calibrator, 70 MPa, 3 Gauges
P5510/14B-2700G-4	P5510/P5514B Pressure Calibrator, 4 Gauges
P5510/14B-2700G-6	P5510/P5514B Pressure Calibrator, 6 Gauges
P5514B-2700G-1/C	P5514B Hydraulic Calibrator, 70 MPa, 1 Gauge Accredited
P5514B-2700G-3/C	P5514B Hydraulic Calibrator, 70 MPa, 3 Gauges, Accredited
P5510/14B-2700G-4/C	P5510/P5514B Pressure Calibrator, 4 Gauges, Accredited
P5510/14B-2700G-6/C	P5510/P5514B Pressure Calibrator, 6 Gauges, Accredited
Accessories	Description
P5521 and P5522 Liquid-to-Liquid Separators	These liquid-to-liquid separators connect directly to the test port of a hydraulic deadweight tester or comparison test pump. A flexible diaphragm separates the fluids, protecting the calibrator from contamination, and allows calibration of the device in its specific working fluid.
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.
SK-P5514B-70M	Replacement seal kit for the P5514B-70M
SK-P5514B-70M-EP	Replacement seal kit for the P5514B-70M-EP



**Fluke Calibration.** *Precision, performance, confidence.™*

Electrical | RF | Temperature | Humidity | **Pressure** | Flow | Software