

Fluke Calibration Pneumatische Druckwaagen P3000



Wichtigste Merkmale

- Standard-Messgenauigkeit 0,015 % vom Messwert (0,008 % optional)
- 1-30 Zoll Hg Vakuum (0,03 bis 1 bar Vakuum)
- 3 bis 500 psi (0,2 bis 35 bar) Druck
- Zoll-H₂O- und mbar-Bereiche verfügbar
- Nicht magnetische Edelstahlgewichte Serie 3
- Anpassung der Geräte an die lokal vorhandene Schwerkraft möglich

Produktübersicht: Fluke Calibration Pneumatische Druckwaagen P3000

Diese vielseitigen Geräte ermöglichen Kalibrierungen von 1-30 Zoll Hg Vakuum (0,03-1 bar) und 3-500 psi (0,2-35 bar) in einem hochpräzisen und zugleich benutzerfreundlichen Primärnormal. Ein Wahlventil schaltet das Gerät vom Druckmodus in den Vakuummodus, ohne dass Kolben gewechselt werden müssen. Die Geräte werden nach den höchsten Standards mit zertifizierten Genauigkeiten hergestellt, die nach internationalen Normungsbehörden wie dem National Institute of Standards and Technology (NIST) rückführbar sind. Diese pneumatischen Kolben/Zylinder-Standards bieten eine exzellente Stabilität, Wiederholbarkeit und Genauigkeit. Eine optionale, eingebaute Handpumpe kann für die Druck- und Vakuumerzeugung hinzugefügt werden.

Technische Daten: Fluke Calibration Pneumatische Druckwaagen

P3000

Genauigkeit		
Genauigkeit ¹	±0,015 % vom Messwert (± 0,008 % optional)	
1. Genauigkeit basierend auf % des Messwerts von 10 % bis 100 % des Kolbenbereichs bei Verwendung entsprechend den Korrekturen im Kalibrierzertifikat. Unter 10 % ± (Genauigkeitsklasse) x 10 % des Kolbenbereichs.		
Masse- und PCU-Materialien		
Werkstoff mit Standardgewicht	Nicht magnetischer austenitischer Edelstahl Serie 3	
Gewichtsdichte	7,8 g/cm ³	
Optionale fraktionale Gewichte	Lösungsgeglühtes Aluminium	
Gewichtsdichte	2,7 g/cm ³	
Modelle P3011, P3012, P3013, P3022, P3023, P3025 (V)	Kolbenwerkstoff	Keramik
	Zylinderwerkstoff	Martensitischer Stahl
	Ausdehnungskoeffizient	11 ppm/°C
Modelle P3014, P3015, P3025 (P), P3031, P3032 (P & V)	Kolbenwerkstoff	Wolframkarbid
	Zylinderwerkstoff	Martensitischer Stahl
	Ausdehnungskoeffizient	16,5 ppm/°C
Modell P3016	Kolbenwerkstoff	Wolframkarbid
	Zylinderwerkstoff	Wolframkarbid
	Ausdehnungskoeffizient	11 ppm/°C
Allgemein		
Adapter für Prüflinganschlüsse	1/8, 1/4, 3/8 und 1/2 NPT oder BSP	
Gerätegewicht	68,39 kg (24 lbs)	
Geräteabmessungen (B x T x H)	17,5 x 12 x 8,5	
Festgelegtes Gewicht (typisch)	68,39 kg (65 lbs)	
Mindestabstufungen der Standardgewichte		
P3012, P3022 Druck	5 mbar, (1 inH ₂ O)	
P3013, P3023 Druck	10 mbar, (2 inH ₂ O)	
P3014, P3015, P3025 Druck	1 psi (0,1 bar)	
P3016, P3031, P3032	1 psi (0,1 bar)	
P3011, P3022, P3023, P3025 Vakuum	10 mbar, (0,2 inHg)	
Optionale fraktionale Gewichte		
P3014, P3015, P3025 Druck	0,01 bar (0,1 psi)	
Eingebaute Handpumpen		

Druckmodus	Maximaldruck 20 bar (300 psi)
Vakuummodus	Bis 90 % Vakuum
Betriebsflüssigkeit für flüssigkeitsgeschmierte Modelle	
55-655	Mineralöl (Standard)
Krytox	für sauerstoffsichere Anwendungen (optional)
Optionen	
Software PressCal	Ein Windows-basiertes Softwareprogramm, das dem Benutzer die einfache Anwendung aller erforderlichen Korrekturen zur Verbesserung der Betriebseigenschaften der Druckwaage ermöglicht. Die Kalibrierungsdetails werden dann abgespeichert und/oder zur automatischen Erstellung des Kalibrierungszertifikats verwendet. PressCal wird standardmäßig mit allen 0,008 %-Messgeräten ausgeliefert.
Krytox	Als Betriebsflüssigkeit für flüssigkeitsgeschmierte, gasbetriebene Modelle.

Modelle



Fluke P3011-4-P

Fluke Calibration P3011-4-P Pneumatic Deadweight Testers
Vacuum range 3 to 100 kPa

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Vacuum operated – single PCU
 - Built-in pump optional
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Fluke P3011-6-P

Fluke Calibration P3011-6-P Pneumatic Deadweight Testers
Vacuum range 30 to 1,000 mbar

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Vacuum operated – single PCU
 - Built-in pump optional
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Fluke P3011-8-P

Fluke Calibration P3011-8-P Pneumatic Deadweight Testers
Vacuum range 1 to 30 inHg

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Vacuum operated – single PCU
 - Built-in pump optional
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Fluke P3011-9-P

Fluke Calibration P3011-9-P Pneumatic Deadweight Testers
Vacuum range 30 to 760 mmHg

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Vacuum operated – single PCU
 - Built-in pump optional
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Fluke P3012-4-P

Fluke Calibration P3012-4-P Pneumatic Deadweight Testers
Pressure range 1.5 to 1000 kPa

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3012-6-P

Fluke Calibration P3012-6-P Pneumatic Deadweight Testers
Pressure range 15 to 1,000 mbar

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3012-7-P

Fluke Calibration P3012-7-P Pneumatic Deadweight Testers
Pressure range 400 inH₂O

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3013-4-P

Fluke Calibration P3013-4-P Pneumatic Deadweight Testers
Pressure range 3 to 200 kPa

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3013-6-P

Fluke Calibration P3013-6-P Pneumatic Deadweight Testers
Pressure range 30 to 2,000 mbar

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3013-7-P

Fluke Calibration P3013-7-P Pneumatic Deadweight Testers
Pressure range 12 to 800 inH₂O

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3014-1-P

Fluke Calibration P3014-1-P Pneumatic Deadweight Testers
Pressure range 0.2 to 10 bar

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3014-2-P

Fluke Calibration P3014-2-P Pneumatic Deadweight Testers
Pressure range 0.2 to 10 kgf/cm²

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3014-3-P

Fluke Calibration P3014-3-P Pneumatic Deadweight Testers
Pressure range 3 to 150 psi

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3014-4-P

Fluke Calibration P3014-4-P Pneumatic Deadweight Testers
Pressure range 20 to 1,000 kPa

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3014-5-P

Fluke Calibration P3014-5-P Pneumatic Deadweight Testers
Pressure range 0.02 to 1 MPa

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
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Fluke P3015-1-P

Fluke Calibration P3015-1-P Pneumatic Deadweight Testers
Pressure range 0.2 to 35 bar

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
 - Built-in pump optional
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Fluke P3015-2-P

Fluke Calibration P3015-2-P Pneumatic Deadweight Testers
Pressure range 0.2 to 35 kgf/cm²

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
 - Built-in pump optional
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Fluke P3015-3-P

Fluke Calibration P3015-3-P Pneumatic Deadweight Testers
Pressure range 3 to 500 psi

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
 - Built-in pump optional
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Fluke P3015-4-P

Fluke Calibration P3015-4-P Pneumatic Deadweight Testers
Pressure range 20 to 3,500 kPa

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
 - Built-in pump optional
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Fluke P3015-5-P

Pressure range 0.02 to 3.5 MPa

Includes:

- P3000 Series Single Pressure Model
 - Air operated – single PCU
 - Built-in pump optional
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Fluke P3022-4-P

Fluke Calibration P3022-4-P Pneumatic Deadweight Testers
Pressure range 1.5 to 100 kPa

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model

- Air operated - dual PCU
 - Vacuum Range 3 to 100 kPa
 - Built-in pump optional
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Fluke P3022-6-P

Fluke Calibration P3022-6-P Pneumatic Deadweight Testers
Pressure range 15 to 1,000 mbar

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 30 to 1,000 mbar
 - Built-in pump optional
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Fluke P3022-7-P

Fluke Calibration P3022-7-P Pneumatic Deadweight Testers
Pressure range 5 to 400 inH₂O

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 1 to 30 inHg
 - Built-in pump optional
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Fluke P3023-4-P

Fluke Calibration P3023-4-P Pneumatic Deadweight Testers
Pressure range 3 to 200 kPa

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 3 to 100 kPa
 - Built-in pump optional
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Fluke P3023-6-P

Fluke Calibration P3023-6-P Pneumatic Deadweight Testers
Pressure range 30 to 2,000 mbar

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 30 to 1,000 mbar
 - Built-in pump optional
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Fluke P3023-7-P

Fluke Calibration P3023-7-P Pneumatic Deadweight Testers
Pressure range 12 to 800 inH₂O

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 1 to 30 inHg
 - Built-in pump optional
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Fluke P3025-1-P

Fluke Calibration P3025-1-P Pneumatic Deadweight Testers
Pressure range 0.2 to 35 bar

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 30 to 1,000 mbar
 - Built-in pump optional
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Fluke P3025-2-P

Fluke Calibration P3025-2-P Pneumatic Deadweight Testers
Pressure range 0.2 to 35 kgf/cm²

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 30 to 760 mmHg
 - Built-in pump optional
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Fluke P3025-3-P

Fluke Calibration P3025-3-P Pneumatic Deadweight Testers
Pressure range 0.2 to 35 kgf/cm²

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 30 to 760 mmHg
 - Built-in pump optional
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Fluke P3025-4-P

Fluke Calibration P3025-4-P Pneumatic Deadweight Testers
Pressure range 20 to 3,500 kPa

Includes

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 3 to 100 kPa
 - Built-in pump optional
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Fluke P3025-5-P

Fluke Calibration P3025-5-P Pneumatic Deadweight Testers
Pressure range 0.02 to 3.5 MPa

Includes:

- P3000 Series Vacuum and Dual Vacuum/Pressure Model
 - Air operated - dual PCU
 - Vacuum Range 3 to 100 kPa
 - Built-in pump optional
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Fluke. Damit Ihre Welt intakt bleibt.

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