

Datos técnicos

## Comprobadores hidráulicos de calibración de peso muerto (Operados con aceite): Modelo P3100



### Características principales

- La presión alcanza hasta 60,000 psi (4000 bar)
- 0.015 % del estándar de precisión de lectura (0.008 % opcional)
- Formatos de pistón único o doble
- Estándar de bombas manuales integradas
- Nivel de burbuja montado con pies ajustables
- Las unidades se pueden ajustar a la gravedad local FOC

### Descripción general del producto: Comprobadores hidráulicos de calibración de peso muerto (Operados con aceite): Modelo P3100

Los modelos P3100 se encuentran disponibles en formatos de pistón individual o doble. Las unidades pueden proporcionarse en psi, bar, kgf/cm<sup>2</sup> y Mpa. Este resistente instrumento tiene una precisión alta y es rápido y fácil de usar. Las unidades incluyen una bomba de cebado integrada para aplicaciones de gran volumen, indicadores de flotación del pistón y una prensa de tornillo de alta calidad para un control preciso de la presión.

### Especificaciones: Comprobadores hidráulicos de calibración de peso

## muerto (Operados con aceite): Modelo P3100

Rangos de presión	
Funciona con aceite	Alcanza hasta 20,000 psi (1400 bar)
Precisión	
Precisión <sup>1</sup>	±0.015 % de la lectura (±0.008 % opcional)
1. Precisión basada en el % de lectura de 10 % a 100 % del rango del pistón cuando se usa de acuerdo con las correcciones indicadas en el certificado de calibración. Por debajo del 10 % ± (clase de precisión) x 10 % del rango del pistón.	
Materiales de construcción	
Material de peso estándar	Acero inoxidable austenítico y diamagnético serie 3
Densidad de peso	7.8 g/cm <sup>3</sup>
Pesos fraccionarios opcionales	Aluminio tratado con calor de solución
Densidad de peso	2.7 g/cm <sup>3</sup>
Material del pistón	Carburo de tungsteno con aglutinante de níquel Densidad: 15.0 g/cm <sup>3</sup>
Material del cilindro	Acero martensítico endurecido Carburo de tungsteno (agua sobre 500 psi, 35 bar)
Coefficientes térmicos de expansión	Pistón/cilindro de aceite 16.5 ppm/ °C Agua (sobre 500 psi, 35 bar) 11 ppm/ °C
General	
Adaptadores de puerto de prueba	1/8, 1/4, 3/8 y 1/2 NPT o BSP
Peso del instrumento	36 lb. (16 kg)
Tamaño del instrumento (anch. x prof. x alt.)	17.5 x 12 x 8.5
Peso del conjunto de masas (típico)	80 lb. (36 kg)
Volumen del depósito	150 cc
Desplazamiento de la prensa de tornillo	5.5 cc
Desplazamiento de la bomba	4.7 cc por carrera
Materiales de la junta tórica	Buna N como estándar, Viton y EPDM disponibles
Incrementos de peso	
Incrementos mínimos del peso estándar	Hasta 500 psi (35 bar): 1 psi (0.1 bar) 500 a 5000 psi (35 a 350 bar): 10 psi (1 bar) 5000 a 20,000 psi (350 a 1400 bar): 20 psi (2 bar) Modelo P3112: 1 psi (0.1 bar)

Pesos fraccionarios opcionales	Hasta 500 psi (35 bar): 0,1 psi (0.01 bar) 500 a 5000 psi (de 35 a 350 bar): 1 psi (0.1 bar) 5000 a 20,000 psi (350 a 1400 bar): 2 psi (0.2 bar)
<b>Fluido operativo</b>	
Aceite mineral	Aceite para husillo Shell 22, nuestra referencia 55-655, viscosidad 40 cs a 20 °C
<b>Opciones:</b>	
Software PressCal	Programa de software de Windows que permite a los usuarios aplicar fácilmente todas las correcciones necesarias para mejorar el rendimiento del comprobador de peso muerto. Posteriormente, los detalles de calibración se almacenan o se usan para crear automáticamente un certificado de calibración. PressCal se proporciona como estándar con todos los instrumentos de 0.008 %.
Fluidos	Se pueden proporcionar instrumentos para su uso con Skydrol o líquidos de freno. Debido a la naturaleza agresiva de estos fluidos, los sellos de nitrilo y el tubo del depósito acrílico estándares se reemplazarán por sellos de Viton o EPDM (según corresponda) y un tubo del depósito de aluminio. Para obtener más información sobre esta o cualquier otra aplicación especial del fluido, consulte al fabricante.

## Modelos



### Fluke P3111-2

Fluke Calibration P3111-2 Hydraulic Deadweight Testers  
Calibration Hydraulic Deadweight Testers

Includes:

- Hydraulic Deadweight Tester
- Oil operated - single PCU
- Pressure Range 1 to 35 kgf/cm<sup>2</sup>

### Fluke P3111-1

Fluke Calibration P3111-1 Hydraulic Deadweight Testers  
Calibration Hydraulic Deadweight Testers

Includes:

- Hydraulic Deadweight Tester
- Oil operated - single PCU
- Pressure Range 1 to 35 bar

### Fluke P3111-3

Fluke Calibration P3111-3 Hydraulic Deadweight Testers  
Calibration Hydraulic Deadweight Testers

Includes:

- Hydraulic Deadweight Tester
- Oil operated - single PCU
- Pressure Range 10 to 500 psi

### **Fluke P3111-4**

Fluke Calibration P3111-4 Hydraulic Deadweight Testers  
100 to 3,500 kPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3111-5**

Fluke Calibration P3111-5 Hydraulic Deadweight Testers  
0.1 to 3.5 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3112-1**

Fluke Calibration P3112-1 Hydraulic Deadweight Testers  
4 to 140 bar

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Includes:

- Hydraulic Deadweight
  - Oil operated - single PCU
- 

### **Fluke P3112-2**

Fluke Calibration P3112-2 Hydraulic Deadweight Testers  
4 to 140 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3112-3**

Fluke Calibration P3112-3 Hydraulic Deadweight Testers  
40 to 2,000 psi

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3112-4**

Fluke Calibration P3112-4 Hydraulic Deadweight Testers  
400 to 14,000 kPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3112-5**

Fluke Calibration P3112-5 Hydraulic Deadweight Testers  
0.4 to 14 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3113-1**

Fluke Calibration P3113-1 Hydraulic Deadweight Testers  
10 to 350 bar

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3113-2**

Fluke Calibration P3113-2 Hydraulic Deadweight Testers  
10 to 350 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3113-3**

Fluke Calibration P3113-3 Hydraulic Deadweight Testers  
100 to 5,000 psi

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Includes:

- Hydraulic Deadweight
  - Oil operated - single PCU
- 

### **Fluke P3113-4**

Fluke Calibration P3113-4 Hydraulic Deadweight Testers  
1,000 to 35,000 kPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3113-5**

Fluke Calibration P3113-5 Hydraulic Deadweight Testers  
1 to 35 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3114-1**

Fluke Calibration P3114-1 Hydraulic Deadweight Testers  
20 to 700 bar

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3114-2**

Fluke Calibration P3114-2 Hydraulic Deadweight Testers  
20 to 700 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3114-3**

Fluke Calibration P3114-3 Hydraulic Deadweight Testers  
200 to 10,000 psi

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3114-4**

Fluke Calibration P3114-4 Hydraulic Deadweight Testers  
2,000 to 70,000 kPa

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Includes:

- Hydraulic Deadweight Tester

- Oil operated - single PCU
- 

### **Fluke P3114-5**

Fluke Calibration P3114-5 Hydraulic Deadweight Testers  
2 to 70 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3115-1**

Fluke Calibration P3115-1 Hydraulic Deadweight Testers  
20 to 1,100 bar

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3115-2**

Fluke Calibration P3115-2 Hydraulic Deadweight Testers  
20 to 1,100 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3115-3**

Fluke Calibration P3115-3 Hydraulic Deadweight Testers  
200 to 16,000 psi

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3115-4**

Fluke Calibration P3115-4 Hydraulic Deadweight Testers  
2,000 to 110,000 kPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
-



### **Fluke P3115-5**

Fluke Calibration P3115-5 Hydraulic Deadweight Testers  
2 to 110 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3116-1**

Fluke Calibration P3116-1 Hydraulic Deadweight Testers  
20 to 1,400 bar

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3116-2**

Fluke Calibration P3116-2 Hydraulic Deadweight Testers  
20 to 1,400 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3116-3**

Fluke Calibration P3116-3 Hydraulic Deadweight Testers  
200 to 20,000 psi

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3116-4**

Fluke Calibration P3116-4 Hydraulic Deadweight Testers  
2,000 to 140,000 kPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3116-5**

Fluke Calibration P3116-5 Hydraulic Deadweight Testers

2 to 140 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - single PCU
- 

### **Fluke P3123-1**

Fluke Calibration P3123-1 Hydraulic Deadweight Testers  
1 to 350 bar

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3123-2**

Fluke Calibration P3123-2 Hydraulic Deadweight Testers  
1 to 350 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3123-3**

Fluke Calibration P3123-3 Hydraulic Deadweight Testers  
10 to 5,000 psi

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3123-4**

Fluke Calibration P3123-4 Hydraulic Deadweight Testers  
100 to 35,000 kPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3123-5**

Fluke Calibration P3123-5 Hydraulic Deadweight Testers  
0.1 to 35 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3124-1**

Fluke Calibration P3124-1 Hydraulic Deadweight Testers  
1 to 700 bar

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3124-2**

Fluke Calibration P3124-2 Hydraulic Deadweight Testers  
1 to 700 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3124-3**

Fluke Calibration P3124-3 Hydraulic Deadweight Testers  
10 to 10,000 psi

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3124-4**

Fluke Calibration P3124-4 Hydraulic Deadweight Testers  
100 to 70,000 kPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3124-5**

Fluke Calibration P3124-5 Hydraulic Deadweight Testers  
0.1 to 70 MPa

---

Includes:

- Hydraulic Deadweight Tester

- Oil operated - dual PCU
- 

### **Fluke P3125-1**

Fluke Calibration P3125-1 Hydraulic Deadweight Testers  
1 to 1,100 bar

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3125-2**

Fluke Calibration P3125-2 Hydraulic Deadweight Testers  
1 to 1,100 kgf/cm<sup>2</sup>

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3125-3**

Fluke Calibration P3125-3 Hydraulic Deadweight Testers  
10 to 16,000 psi

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3125-4**

Fluke Calibration P3125-4 Hydraulic Deadweight Testers  
100 to 110,000 kPa

---

Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
- 

### **Fluke P3125-5**

Fluke Calibration P3125-5 Hydraulic Deadweight Testers  
0.1 to 110 MPa

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Includes:

- Hydraulic Deadweight Tester
  - Oil operated - dual PCU
-

**Fluke.** *Manteniendo su mundo en marcha.*

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02/2024

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