

# **Precision Pressure Gauge Calibrator – F4**

Deadweight testers are the basic primary standard used worldwide for the accurate calibration of pressure gauges, pressure transducers etc.





#### **Demonstration capabilities**

- ► The direct measurement of pressure (p=F/A)
- ► Masses added are proportional to the target pressure
- ► Calibration of pressure gauges by deadweight method to an accuracy better than 0.015% of reading
- ▶ Dual pistons allow calibration over a wide range of pressures

### Description

The equipment is self-contained and portable, so it may be used in lecture theatre demonstrations or as a master calibrator for the laboratory.

The Armfield F4 Precision Dead Weight Pressure gauge operates between 1-120 bar. The unit is top loading for ease of use and weight sets are fully interchangeable.

The base features a dual area screw press which allows low pressure priming and high-pressure control. The F4 is a proven design using a 1/40in<sup>2</sup> fully hardened and stabilised tool steel piston/cylinder unit.

The design incorporates an auxiliary piston unit which minimises the possibility of damage to the measuring system. This makes the unit sensitive enough to for accurate calibration and robust enough for heavy industrial us.

The base is aluminium with an ABS cover having four levelling screws, four location mounts are also provided for bench mounting.

This gauge incorporates a base test gauge accuracy with a maximum of 500 graduations where possible, along with a knife edged pointer and an anti-parallax mirror to help reduce the chance of human error.

The standard test gauge meets all the requirements of EN837 and all units are supplied with a detailed calibration certificate with is traceable to National Standards. The gauge is also dust and splash proof to IP 54 standards. Recalibration is simplified with the inclusion of a micrometer adjustable pointer as a standard feature.

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#### Supplied weights

The unit is supplied with a set of 11 weights manufactured from Austenitic non-magnetic 300 series Stainless Steel.

The weights are all top loaded to reduce the requirement for an overhung weight carrier assembly.

- ▶ Piston = 2 bar
- ▶ 4 wts 50 bar
- ▶ 1 wt 5 bar

- 1 wt 3 bar
- ▶ 1 wt 25 bar
- 1 wt 2.5 bar

- ▶ 1 wt 45 bar
- ▶ 2 wts 10 bar

Overall dimensions		
Length	0.43m	
Width	0.28m	
Depth	0.22m	

Dimensions				
	Weights	Base		
Length	0.40m	0.401m		
Width	0.31m	0.397m		
Depth	0.31m	0.155m		

рерип	0.31m	0.155M		
Packed and crated shipping specifications				
Volume	0.5m <sup>3</sup>			
Gross weight	85kg			
Ordering Code				

F4

URL: http://www.armfield.co.uk/f4

Armfield standard warranty applies with this product

## **Knowledge base**

- > 28 years' expertise in research & development technology > 50 years' providing engaging engineering teaching equipment
- Benefit from our experience, just call or email to discuss your laboratory needs, latest project or application.



## **Aftercare**

Installation Commissioning Training Service and maintenance Support: armfieldassist.com