

# BA2-200B Pneumatic Deadweight Tester



- Primary-Normal Measuring Range: 2.5 to 200 bar 25 to 3000 psi
- Accuracy: 0.015 % rdg.
- Quick Connectors, no tools necessary
- Medium: Air or Nitrogen

# **Scope of Application**

This deadweight tester is designed for testing, adjusting and calibrating mechanical or electronic measuring devices (pressure gauges, transmitters, pressure sensors or switches) by comparison with a reference device.

It consists of a pressure generator, connected to a compressed source of gas, a pistoncylinder unit and a set of weights. The capstan allows to adjust the pressure by pushing the gas through the piston. The pressure is compensated by the piston-cylinder unit, which compares the pressure values of the instrument to be calibrated with the pressure generated by the standard.

Model BA2-200B requires an external gas supply.

The deadweight tester is robust, easy to operate and has a long-term stability.

### **Technical Specification**

#### Medium

Dry air or nitrogen Connection for gas supply: G  $\frac{1}{4}$ " female on the reverse side of the basic unit.

#### Alignment:

4 adjustable feet, controlled by leveling bubble.

#### Connection for instrument to be tested

Quick connector G1/2"-female, other connectors on request (e.g. NPT or metric)

By DAkkS accredited laboratory according to DIN EN ISO / IEC 17025: 2018. The accreditation is valid only for the quantities listed in the accreditation scope. (Our Laboratory number is D-K-15055-01-00). © 31.05.2017 Pressure • Electrical Quantities • Temperature • Flow • Humidity • Masses and Scales



#### Housing

Aluminum with resistant paint **Piston/Cylinder-Unit** Single piston, made of stainless steel Repeatability: 3.10<sup>-5</sup> Sensitivity: 1.10<sup>-5</sup>

#### Weights

Non-corrosive stainless steel Weight of the set of weights from 4 to 48 kg (depending on model) The masses are marked with the corresponding measuring untis (bar, mbar, kPa or psi, etc.)

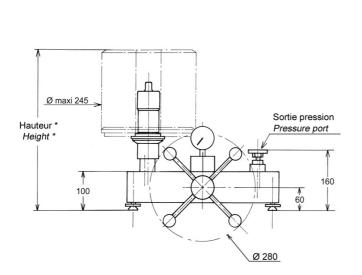
# Model-specific Informationen

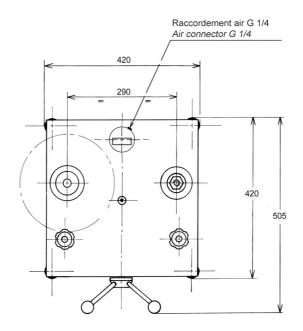
Model	BA2-200B – Single Piston Deadweight Tester		
Measuring Range	2.5 to 200 bar / 25 to 3000 psi		
Accuracy	0.015 % of reading		
Weight of Deadweight Tester (without masses)	18 kg		
Total Weight (incl. masses)	51 kg		
Scope of Supply (standard)	User manual (German)		
Accessories (optional)	DAkkS-Calibration		
	Additional set of weights for further units		
	Adjustment of the deadweight tester to local gravitational acceleration		
	Accessory kit for deadweight testers		
	Separator for gas/fluids		
	Transport case for deadweight tester		
	Adapter set		
	Cleaning system for deadweight tester		
	Transport trolley		
	LED display and visualization of the reference heigt		
	Motor drive module		
	Adopter kit M, Adopter kit G, Adopter kit NPT, Adopter kit BSP-TR, Adopter kit with17 adopters M + G + NPT + BSP-TR (contact us)		

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# **Dimensions**





Hight with standard set of weights (bar, kPa): 395 mm

**Dimensions in mm** 

# **Standard Weights**

Standard Set of Weights					
Unit: bar	Pressure (bar)	Total Number	Typical Value (g)		
	50	2	8000		
	47.5	1	7600		
	25	1	4000		
	10	2	1600		
	5	1	800		
	2.5	1	400		
	1	2	160		
	0.5	1	80		
Pressure bell +	2.5		400		
weight adaptation					
Total	205	11	±33 kg		

Intermediate Set of Weights					
Unit: bar	Pressure (bar)	Total Number	Typical Value (g)		
	0.25	1	40		
	0.1	2	16		
	0.05	1	8		
	0.02	2	3.2		
	0.01	1	1.6		
Total	0.43	7	88 g		



### **Other Devices of BA2 Series**

(Data sheets are available on request)

#### Models with single piston

		Measuring Range	
Model	Accuracy	bar or kg/cm <sup>2</sup>	kPa
BA2-120B	1 x 10 <sup>-4</sup> = 0.015 % rdg.	1 to 120	100 to 12000
BA2-60B	1 x 10 <sup>-4</sup> = 0.015 % rdg.	0.5 to 60	50 to 6000
BA2-10B	1 x 10 <sup>-4</sup> = 0.015 % rdg.	0.15 to 10	15 to 1000
BA2-1B	1 x 10 <sup>-4</sup> = 0.015 % rdg.	15 mbar to 1 bar	1.5 to 100
BA2-1VB	1 x 10 <sup>-4</sup> = 0.015 % rdg.	-15 mbar to -900 mbar	-1.5 to -90