

$$P = F/S$$

**✓ Applications**

This primary standard Range are designed to test, adjust and calibrate measuring instruments, mechanical or electronic pressure by comparison (pressure gauges, pressure transmitters or sensors or switches)

They consist of two pressure generators, two piston / cylinder units, two sets of weights identified and made for this pistons.

This reference instrument are used in factory or calibration laboratory. They are robust and easy to use and have a high long-term stability.

**✓ Technical specifications of the range BDA3**

- **Calibration :** Our dead weight tester are calibrated under the following conditions of use :  
Temperature 20°C - Pressure atmos. 1013.25 hPa - Humidity 50% - acceleration 9.80665 m/s<sup>2</sup>  
In case you don't use it under the conditions mentioned above, it is necessary to recalculate the pressure generated by the dead weight according to the different variables.
- **Fluid :** The system of automatic lubrication integrated into the dead weight avoids the risks of contamination piston/cylinder. Colorless, compatible mineral oil with medical or food uses - volume of the reservoir 20 cm<sup>3</sup>
- **Source pressure :** Dry air - gas connection ¼ cylindrical female - This balance needs to be connected to a pressure source / Azote type U
- **Check/adjust the seat :** leveling bubble and adjustable feet
- **Connecting for the instrument to be tested :** swivel G1/4 standard – other optional fittings
- **Motorization :** Driving of the rotating weight with display of the position of the piston leds luminous
- **Crankcase :** Light alloy aluminium AG3 + high-resistance paint
- **Capstan :** removable for transport
- **Piston/cylinder :** Single piston treated steel - **Repetability:** 2.10<sup>-5</sup> - **Sensitivity :** 1.10<sup>-5</sup> - **Precision dead weight :** 10<sup>-4</sup>
- **Weight :** non magnetic stainless steel – **Total weight** of the set of weights from 4 kg to 48 kg depending on model –Ergonomic shape of the masses, easy loading of the masses on the bell - **Marking** corresponding with the measuring unit choose (bar, mbar, KPa, PSI etc..)  
**Gravity :** standard (9.80665 m/s<sup>2</sup>) or local gravity without supplement
- **Operating temperature:** 18 to 28°C – 64 to 82°F

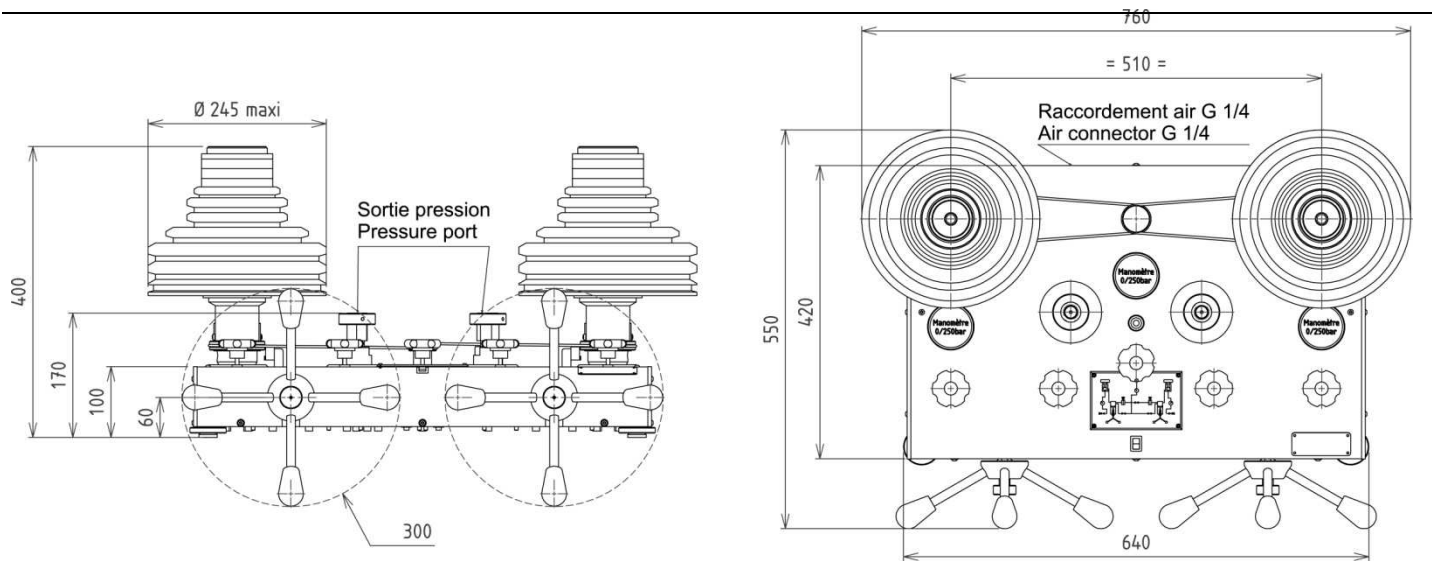
**✓ Specific Model**

- **Model :** BDA3-200B - dead weight simple piston
- **Measuring range :** 2.5 à 200 bar / 25 à 3000 PSI / 250 à 20000 kPa
- **Uncertainty of the pressure measured by the DWT :** the total uncertainty of the balance is less than 0.01% of the pressure differential + 0.002% of the static pressure
- **Weight dead weight without weight :** 40 kg
- **Fluid :** Air
- **Material Piston/Cylinder :** P = tungsten carbide / C = treated steel
- **Number of piston :** 2

- Unit supplied with : Operating instructions / AREMECA calibration certificate traceable to national standards / unit data sheet / 0.5 liter mineral oil / G1/2 outlet connector / tools

Note: All our documents can be delivered in English, French or German.

✓ **Dimensions of device**



**CHOOSING OPTIONS**

☒ **Gravitation option OFFERED** :: we will adjust your weight set to the standard or special G (give us the desired value).

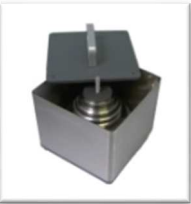



Standard set			
Unités : BAR (Ref. MB0031)	Pressure (bar)	Total weight	Typical value (g)
	50	2	8000
	47.5	1	7600
	25	1	4000
	10	2	1600
	5	1	800
	2.5	1	400
	1	2	160
	0.5	1	80
Initial Pressure bell + weight adaptation		2.5	400
TOTAL		205	11
			±33 kg

Intermediate set			
BAR (Ref. MB0032)	Pressure (bar)	Total weight	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

Intermediate set			
BAR (Ref. MB0032)	Pressure (bar)	Total weight	Typical value (g)
	0.25	1	40
	0.1	2	16
TOTAL		0.43	7
			88 g

The tare scale has a set of weights similar to the standard scale. We provide a box of balancing weight from 1mg to 50g

☐ **Carrying case option :**

 	<b>Ref OP0101</b> - Metal box for mass transport Dimensions : 260 x 260 x 310 mm - unloaded weight : 6 kg 7 weights max per box
 	<b>Ref OP0257</b> – carrying case for the masses

## ✓ Accessories



Ref OP0057 Accessories suitcase

ref OP0037 Suitcase with 17 adaptors type M + G + NPT + BSP-TR / Pressure max 1200 bar

Ref OP0062 Cleaning bench

Ref OP0171 Suitcase adaptors type G / Ref OP0172 Suitcase adaptors type NPT / Ref OP0173 Suitcase adaptors type BSP-TR / Ref OP0174 Suitcase adaptors type M

## ✓ Transport and packaging

Designation/Reference	Dimension / carton or shipping crate	total weight (packaging + materiel)
Wooden over-wrapping		(DWT + set of weights + cardboard packaging)
DWT without options or accessories	79 x 48 x 34 cm	Total weight ±115 kg
If option	98 x 70 x 50 cm	Total weight to be defined



- Note: Shipping is extra. Size may vary if accessories are purchased with the unit.

## ✓ Other models available in the range BDA3

(Datasheet is available on request or on our website : [www.aremeca-instrumentation.com](http://www.aremeca-instrumentation.com))

Models simple piston

Consult us ! Nous consulter !	Accuracy	Measuring range		
		Bar or kg/cm <sup>2</sup>	Bar or kg/cm <sup>2</sup>	Bar or kg/cm <sup>2</sup>