

✓ **Applications**

Range of Dead weight tester is 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 a pressure generator connected to a compressed air source, a piston / cylinder unit, a set of identified masses. The capstan can adjust the pressure by the gas through the piston. This pressure is balanced by the piston / cylinder which compares the instrument to calibrate the values of pressures generated by the standard. These scales are intended for pressure calibration on.

The Dead weight are robust and easy to use and have a high long-term stability.

✓ **Technical specifications**

- <b>Calibration :</b>	It is necessary to recalculate the pressure generated by the dead weight according to the different variables. Our dead weight are calibrated in the following terms of use : Temperature 20°C - Pressure atmos. 1013.25 hPa - Humidity 50% - acceleration 9.80665 m/s <sup>2</sup>
- <b>Source Pressure :</b>	Dry air - gas connection ¼ cylindrical female - This balance needs to be connected to a pressure source.
- <b>Check/adjust the seat :</b>	leveling bubble and adjustable feet
- <b>Connection for the instrument to be tested :</b>	swivel G1/2 standard
- <b>Rotating weigh :</b>	Training masses : manual rotation
- <b>Carter :</b>	Light alloy aluminium AG3 + high-resistance paint
- <b>Ratchet :</b>	removable for transport
- <b>Piston/cylinder :</b>	Single piston treated steel or stainless steel and hard chrome - <b>Répeatability</b> : 3.10 <sup>-5</sup> - <b>Sensitivity</b> : 1.10 <sup>-5</sup> - <b>Precision dead weight</b> : 10 <sup>-4</sup>
- <b>Weight :</b>	corrosion treated steel - <b>Weight</b> of the set of weights from 4 kg to 48 kg depending on model – Shape masses ergonomic, easy loading of the masses on the bell - <b>Marking</b> corresponding with the measuring unit (bar, mbar, KPa, PSI etc..)

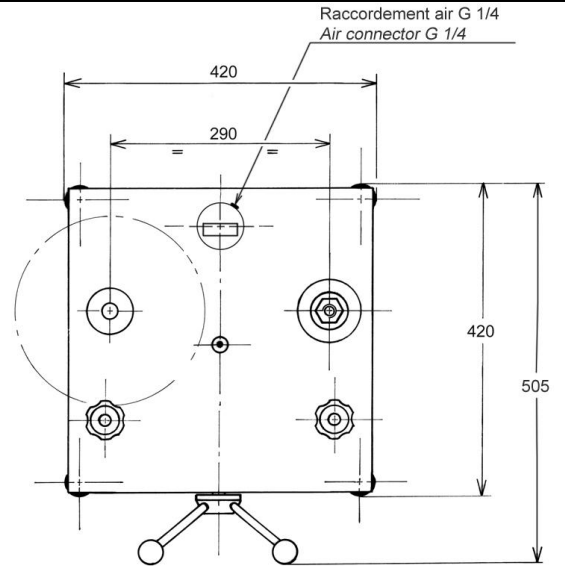
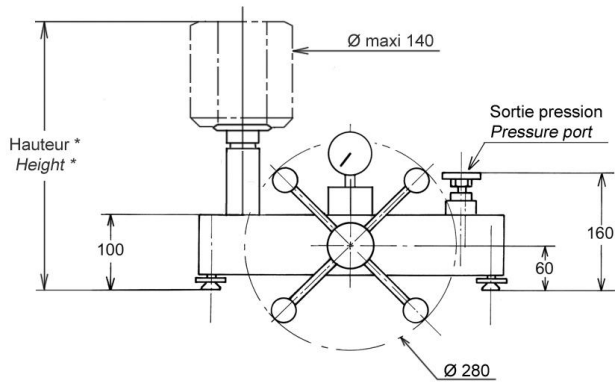
✓ **Specific Model**

- <b>Model :</b>	BA2-1B – dead weight single piston
- <b>Measuring range :</b>	15 to 1000 mbar / 1.5 to 100 kPa
- <b>Accuracy dead weight :</b>	0.00005 + (3.10 <sup>-4</sup> x P) (with P in bar)
- <b>Weight dead weight without weight :</b>	18 kg
- <b>Typical cross-section of the piston :</b>	392.016 mm <sup>2</sup>
- <b>Material piston/cylinder :</b>	stainless steel + hard chrome
- <b>Number of piston :</b>	1

✓ **Various**

- **Manuel** : a detailed operating instructions supplied with the device + Certificate
- **Maintenance** : Our technical department is at your disposition for the revision, calibration or service your unit – Calibration device recommended every 2 years

✓ **Dimensions of device**



Height with standard set of weight : (mbar, mmH<sub>2</sub>O, kPa) : 315 mm

Unit used : mm

✓ **Standard weight sets and intermediate** (for other units contact us)

Standard set			
	Pressure (mbar)	Total weight	Typical value (g)
<b>Unit : mBAR</b> (Ref. MB0008)	400	1	1600
	200	2	800
	100	1	400
	40	2	160
	20	1	80
	10	1	40
	5	1	20
Initial Pressure bell + weight adaptation	15		60
<b>TOTAL</b>	<b>1030</b>	<b>9</b>	<b>±4 kg</b>

Intermediate set			
	Pressure (mbar)	Total weight	Typical value (g)
<b>mBAR</b>	No set of intermediate weight		
<b>TOTAL</b>			

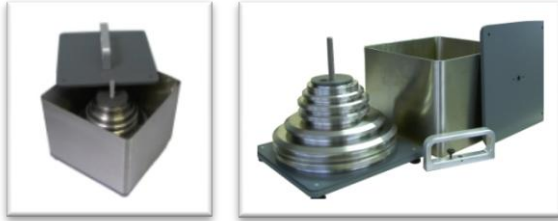
Standard set			
	Pressure (mmH <sub>2</sub> O)	Total weight	Typical value (g)
<b>Unit : mmH<sub>2</sub>O</b>	4000	1	1600
	2000	2	800
	1000	1	400
	400	2	160
	200	1	80
	100	1	40
	50	1	20
Initial Pressure bell + weight adaptation	150		60
<b>TOTAL</b>	<b>10300</b>	<b>9</b>	<b>±4 kg</b>

Intermediate set			
	Pressure (mmH <sub>2</sub> O)	Total weight	Typical value (g)
<b>mmH<sub>2</sub>O</b>	No set of intermediate weight		
<b>TOTAL</b>			

Standard set			
	Pressure (kPa)	Total weight	Typical value (g)
<b>Unit : kPa</b>	40	1	1600
	20	2	800
	10	1	400
	4	2	160
	2	1	80
	1	1	40
	0.5	1	20
Initial Pressure bell + weight adaptation	1.5		60
<b>TOTAL</b>	<b>103</b>	<b>9</b>	<b>±4 kg</b>

Intermediate set			
	Pressure (kPa)	Total weight	Typical value (g)
<b>kPa</b>	No set of intermediate weight		
<b>TOTAL</b>			

✓ **Options for weight set**



transport metal boxes  
(OP0101) : 260 x 260 x 310 mm - weight empty : 6 kg



Wood boxes for post planning and shipping  
(OP0099) large : 370 x 310 x 300 mm - weight empty : 11 kg  
(OP0099) large : 500 x 350 x 280 mm - weight empty : 11 kg

Useful for BA2-1B : Consult us ! (varies according units)

✓ **Options**

- Weight set additional base for different units
- Adjust the dead weight with a different acceleration of  $9.80665 \text{ m/s}^2$  on request
- Calibration of the instrument : Points statement AREMECA or certificate of calibration DAkKS or COFRAC
- kit motorization and visualization

✓ **Shipping and packaging**

- **Packaging** : woodpack is provided for the shipping

Designation/Reference	Dimension / carton or shipping crate	Weight empty / total weight (packaging + materiel)
<b>Dead weight without weight</b>	470 x 470 x 240 mm	Carton empty 1.5 kg Total weight $\pm 20$ kg
<b>Standard weight set</b>	300 x 300 x 170 mm	Carton empty 1.5 kg Total weight $\pm 6$ kg
<b>Wood packaging</b> SB0002	790 x 480 x 340 mm	Suitcase empty 20 kg Total weight $\pm 46$ kg (dead weight + weight set + packaging)



SB0002

- **Note** : shipping is extra.

✓ **Other models available in the range BA2**

(Datasheet is available on request)

Models single piston

Models	Accuracy	Measuring range		
		Bar or kg/cm <sup>2</sup>	PSI	kPa
BA2-200B	10 <sup>-4</sup>	2.5 to 200	25 to 3000	250 to 20000
BA2-120B	10 <sup>-4</sup>	1 to 120	10 to 1600	100 to 12000
BA2-60B	10 <sup>-4</sup>	0.5 to 60	5 to 800	50 to 6000
BA2-10B	10 <sup>-4</sup>	0.15 to 10	2.5 to 150	15 to 1000
BA2-1VB	10 <sup>-4</sup>	-15 mbar to -900 mbar		-1.5 to -90

✓ **Accessories** (Ask for our specific documentation)

- Accessory case (ref.OP0057)
- Setting gauge kit (ref.OP0125)
- Case connectors M (ref.OP0174) – Case connectors G (ref.OP0171) - Case connectors NPT (ref.OP0172) - Case connectors BSP-TR (ref.OP0173) - Case with 17 connectors M + G + NPT + BSP-TR (ref.OP0037) – unit connector (consult us)
- Carrying case for dead weight (ref.OP0002)