



✓ **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, a piston/cylinder unit, a set of weigh identified. The capstan is used to generate a pressure pushing the fluid through the piston. This pressure is balanced by the piston/cylinder assembly which allows to compare the instrument to be calibrated to the pressure values generated by the standard. These scales are intended for the calibration gauge.

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>Fluid :</b>	Mineral oil colorless, compatible with medical or food uses – tank volume 125 cm <sup>3</sup>
- <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 hardened steel - <b>Répeatability</b> : 1.10 <sup>-4</sup> - <b>Sensitivity</b> : 5.10 <sup>-5</sup> - <b>Precision dead weight</b> : 10 <sup>-3</sup>
- <b>Weight :</b>	corrosion trated steel - <b>Weight</b> of the set of weights from 12 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..)

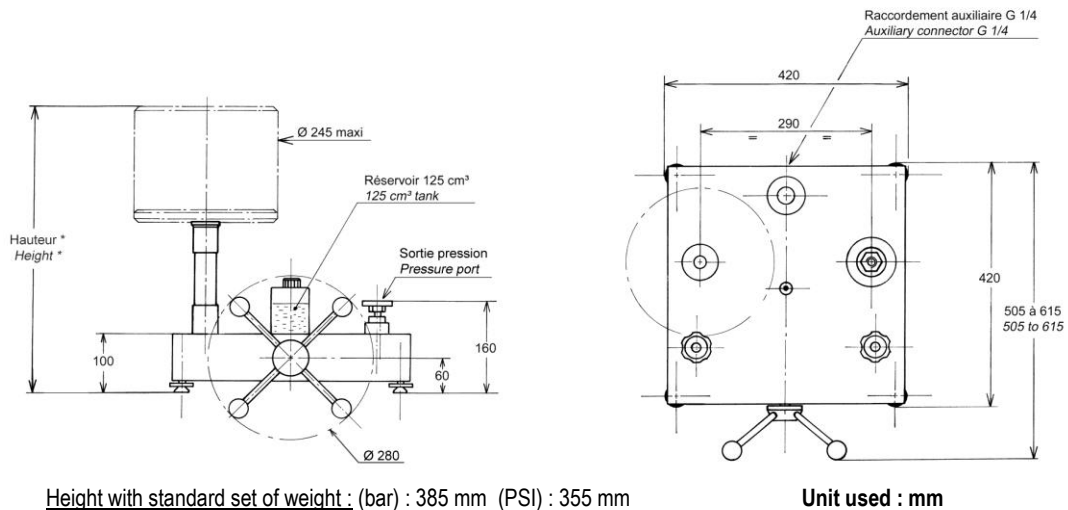
✓ **Specific Model**

- <b>Model :</b>	BH1-300B – dead weight single piston
- <b>Measuring range :</b>	5 to 300 bar / 100 to 4000 PSI / 500 to 30000 kPa
- <b>Accuracy dead weight :</b>	0.02 +(1.10 <sup>-3</sup> x P) (with P in bar)
- <b>Weight dead weight without masses :</b>	18 kg
- <b>Fluid :</b>	Oil H40 – fluid density : 860 kg/m <sup>3</sup>
- <b>Typical cross-section of the piston :</b>	3.9245 mm <sup>2</sup>
- <b>Material piston/cylinder :</b>	steel
- <b>Number of piston :</b>	1

✓ **Various**

- **Manuel** : a detailed operating instructions supplied with the device + Certificate + 0.5 liter Oil
- **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**



✓ **Standard weight sets and intermediate**

Standard set			
	Pressure (bar)	Total weight	Typical value (g)
<b>Unit : BAR</b> (Ref. MB0005)	100	1	4000
	95	1	3800
	50	1	2000
	25	1	1000
	10	2	400
	5	1	200
Initial Pressure bell + weight adaptation	5		200
<b>TOTAL</b>	<b>300</b>	<b>7</b>	<b>±12 kg</b>

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

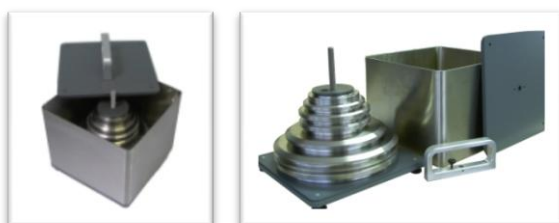
Standard set			
	Pressure (PSI)	Total weight	Typical value (g)
<b>Unit : PSI</b> (Ref. MB0011)	1900	1	5244
	1000	1	2760
	400	2	1104
	200	1	552
	100	1	276
	Initial Pressure bell + weight adaptation	100	
<b>TOTAL</b>	<b>4100</b>	<b>6</b>	<b>±11 kg</b>

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

Standard set			
	Pressure (Kpa)	Total weight	Typical value (g)
<b>Unit : kPa</b>	10000	1	4000
	9500	1	3800
	5000	1	2000
	2500	1	1000
	1000	2	400
	500	1	200
	Initial Pressure bell + weight adaptation	500	
<b>TOTAL</b>	<b>30000</b>	<b>7</b>	<b>±12 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



Suitcase for post planning and transportation  
(OP0099) large : 500 x 350 x 280 mm - weight empty : 11 kg

Useful for BH1-300B : Consult us !

## ✓ 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
- Tin oil : 1 liter, 2 liters or 5 liters of oil

## ✓ Transport 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 $\pm 14$ kg
<b>Wood packaging</b> SB0002	790 x 480 x 340 mm	Suitcase empty 20 kg Total weight $\pm 55$ kg (dead weight + weight set + packaging)



SB0002

- Note : shipping is extra.

## ✓ Other models available in the range BH1

(Datasheet is available on request)

### Models single piston

Models	Accuracy	Measuring range		
		Bar or $\text{kg/cm}^2$	PSI	kPa
BH1-1200B	$10^{-3}$	5 to 1200	100 to 16000	500 to 120000
BH1-600B	$10^{-3}$	5 to 600	100 to 8000	500 to 60000
BH1-120B	$10^{-3}$	0.5 to 120	10 to 1600	50 to 12000
BH1-60B	$10^{-3}$	0.5 to 60	10 to 800	50 to 6000
BH1-30B	$10^{-3}$	0.5 to 30	10 to 400	50 to 3000

## ✓ Accessories (Ask for our specific documentation)

- Accessory case (ref.OP0057)
- Setting gauge kit (ref.OP0125)
- Separator all fluids up to 800 bar (ref.OP0023)
- 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)
- Kit drain tank (ref.OP0025)
- Bench cleaning (ref.OP0062)
- Carrying case (ref.OP0002)