

EP-BG10

Pneumatic Testing Device



- **Primary Standard with measuring range from 0.1 bar to 10 bar**
- **Weight set up to 10 bar**
- **Lever pump with fine adjustment**
- **Quick-connect fittings, no tools required**
- **Accuracy: 0,015% Rd**

EP-BG10 test devices are primary standards (piston manometers) used to calibrate pressure gauges, pressure transmitters, pressure switches, and secondary standards. The weighted piston-cylinder unit with cross-section "A" is pressurized by a lever pump to a pressure "p" until exact equilibrium is achieved with the weights "m". The highly accurate reference pressure $p = (m \times g) / A$, generated in this way, is then transferred to the test specimen for calibration. The value "g" corresponds to the acceleration due to gravity.

Tecnical Data (20° C)

Medium: Clean and dry gas, e.g., nitrogen/air
The piston is air-lubricated.

Gas supply: G1/2" female thread on the rear of the spindle pump

Features of the pressure generator (see data sheet model ADT914A)

Piston-cylinder unit:

Material: Measuring range 10 bar: Stainless steel (top plate: Aluminum))
Repeatability: $4 \cdot 10^{-5} \times p$

Masses/weights:**Material:** burnished steel (density 7200 kg/m³)**Mass distributions:**

Number of masses	Single weight	Total weight
6 pcs. at 1.25 kg/cm ²	7.50 kg/cm ²	= 7.35 bar
4 pcs. at 0.5 kg/cm ²	2.00 kg/cm ²	= 1.96 bar
4 pcs. at 0.25 kg/cm ²	1.00 kg/cm ²	= 0.98 bar
2 pcs. at 0.05 kg/cm ²	0.10 kg/cm ²	= 0.1 bar
10.60 kg/cm ² + piston weights		10.4 bar + 0.07 bar

Measurement units: kg/cm²**Fine weights: (optional)****Material:** Light metal

Accessories (optional)

- Other units of measurement available on request
- Other measuring ranges available on request
- Weights adjusted to local gravity
- Certificate of approval from our accredited laboratory (DAkkS, etc.)

Operation

The suitable transmission medium is clean, dry air. Mount the cleaned test specimen on the test port and tighten by hand. Place weights on the piston-cylinder unit according to the desired test pressure. Close the valve. Finely adjust the pressure using the lever and adjusting wheel until the piston is in equilibrium with the weights applied. Compare the generated reference pressure with the pressure gauge on the test specimen and record it. Release the pressure from the test device via the release valve. Do not remove the test specimen until it is completely depressurized.

Scope of delivery

- Pressure pump type ADT914A (with accessories)
- Piston cylinder unit
- Weight set
- Operating instructions