

BL507 LOW PRESSURE DEADWEIGHT TESTER



A low-pressure calibration setup is different from its high-pressure counterparts. A sealed and controlled low-pressure environment is influenced by many internal and external factors such as the climate condition, direct air-flow, humidity control, pressure and temperature within the room caused by instruments, workers, and computers. With excellent pressure regulation, the model BL507 low pressure deadweight tester is ideal primary standard for defining the pressure low to 500Pa with 0.01% of reading.

FEATURES

- Minimum pressure is low to 500 Pa
- Accuracy is better than 0.01% of reading
- The piston is ceramic, which temperature coefficient is only $3.2 \times 10^{-6} \text{m}^{\circ}\text{C}$
- 20cm² Big piston areas can meet high precision float requirement
- Modular piston and cylinder design is easy to maintenance and re-calibration.
- Gas lubrication makes high sensitivity.
- Built-in air purifier on a molecule filter
- High quality needle valves provide optimum control and sealing

APPLICATION

- Primary pressure standard in lab

- Reference pressure measure on workshop

SPECIFICATION

- Pressure range: 500Pa to 40kPa
- Accuracy: 0.02%, 0.01%
- Kn Value: 5kPa/ Kg
- Start pressure: 500Pa
- Pressure step: 250Pa
- Piston material: Ceramic
- Cylinder material: Tungsten carbide
- Mass material: 304 stainless steel
- Base material: Aluminium alloy
- Seal material: Buna-N
- Medium: Dry clean air, purity class 1-2-1 (ISO 8573-1)
- Lubricated medium: Gas
- Gravity: 9.80665 m/s² or customize local gravity.
- Pressure units: kPa, mbar, inch water (optional)
- Connector: Metric, (NPT and BSP is optional)
- Dimension: 185mm (H) x 455 mm (L) x 380 mm (D)
- Base weight: Appro. 20kg

SCOPE OF DELIVERY

- BL507 Low pressure deadweight tester base
- Piston cylinder unit (0.1kg)
- 304 stainless steel mass set (8kg)
- Adapter kits
- User manual
- Transit case

OPTIONAL ACCESSORIES AND SERVICES

- ISO17025 calibration certificate (P/N:CAL-507)
- Piston cylinder unit based on Kn=10kPa/kg

ORDERING MODEL NUMBER

- BL507-500PA-1: 500Pa ~ 40kPa, 0.01%rd
- BL507-500PA-2: 500Pa ~ 40kPa, 0.02%rd
- BL507-500PA-5: 500Pa ~ 40kPa, 0.05%rd