

Model BL502 Pneumatic Deadweight Tester



SPECIFICATION

- Accuracy: 0.05%rdg, 0.02%rdg, 0.01%rdg, 50ppm (option)
- Piston and cylinder material: Tungsten Carbide
- Mass material: Forged 316 Stainless Steel
- Hydraulic base material: Aluminium
- Seal material: Buna-N, PTFE, Cu Alloy
- Medium: Dry air (<700kPa), Pure nitrogen (>700kPa)
- Gravity: Standard 9.80665 m/s², or customize local gravity.
- Pressure units available: MPa, bar, psi (optional)
- Pressure range selectable sheet:

The model BL502 pneumatic deadweight tester is ideal primary standard for defining the pressure scale in pneumatic range from 5kPa to 10MPa.

The piston cylinder assembly is the heart of the dead weight tester and responsible for its high accuracy. We manufactures piston cylinder with accuracies from 0.05% up to 0.005% of reading.

FEATURES

- Pressure ranges from 5kPa to 10MPa
- Accuracy 0.05%rdg, 0.02%rdg, 0.01%rdg, (Increased accuracy option of 0.005%)
- The piston and cylinder is tungsten carbide, which provides stability, durability, and low thermal coefficients and distortion.
- Low pressure can be applied by built-in hand pump, while the higher pressure is applied by external gas supply
- Pneumatic base is stainless steel material
- Big piston areas to meet high precision
- Assembled 2-stages air purifier on a molecule filter level
- High quality needle valves provide optimum control and sealing
- Piston/cylinder design provides stability and repeatability
- In-field user friendly

APPLICATION

- Primary pressure standard in lab
- Reference pressure measure in workshop

P/N	Pressure	Kn Value	Area	Mass
KYQ250	(5~250) kPa	20kPa /kg	5 cm ²	12.5kg
KYQ400	(5~400) kPa	20kPa /kg	5 cm ²	20 kg
KYQ600	(10~600) kPa	20kPa /kg	5 cm ²	30 kg
KYQ1M	(20~1000) kPa	20kPa /kg	5 cm ²	50 kg
KYQ1.6M	(30~1600) kPa	50kPa /kg	2 cm ²	32 kg
KYQ2.5M	(40~2500) kPa	0.1MPa /kg	1 cm ²	25 kg
KYQ4M	(0.1~4) MPa	0.2MPa /kg	0.5 cm ²	20 kg
KYQ6M	(0.1~6) MPa	0.2MPa /kg	0.5 cm ²	30 kg
KYQ10M	(0.2~10) MPa	0.2MPa /kg	0.5 cm ²	50 kg

- Pressure connector: Metric, (NPT and BSP is optional)
- Base dimension: 185 mm (H) x 455 mm (L) x 380 mm (D)
- Base weight: Appro.15kg

SCOPE OF DELIVERY

- BL502 Pneumatic deadweight tester base
- Piston cylinder module
- "MPa" 316SS increment mass set
- Adapter kits (1/4" NPT, 1/2" NPT, 1/4" G, 1/2" G)

OPTIONAL ACCESSORIES AND SERVICES

- Customized "psi" unit 316SS mass set (P/N: IMS-PSI)
- Series connection pneumatic molecule filter (P/N: 1554)
- Parallel connection pneumatic molecule filter (P/N: 1555)
- Liquid-gas separator filter, 10MPa (P/N: 1556)
- CNAS accredited calibration certificate (P/N:9000-502)
- Nitrogen gas bottle (buy locally)

HOW TO ORDER

- Model BL502 / pressure range part number / accuracy / pressure units / gravity value