

# BL512 High Pressure Deadweight Tester



*The model BL512 high pressure deadweight testers are applicable in very wide variety of pressure calibration and measurement tasks. The pressure ranges is up to 600MPa. 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. To give an idea of the manufacturing skills, the space between the piston and the cylinder is in the um range and can only be measured in a climate room.*

## KEY FEATURES

- 5MPa to 500MPa, ...10MPa to 600MPa
- 0.005%, 0.01%, 0.02%, 0.05% accuracy
- With piston rotation electric motor
- 3.5 inch LED displays piston location, ambient temperature and humidity
- 400ml oil reservoir
- 16mm thick aluminum alloy base
- Piston position can be easily calibrated
- Modulized piston and cylinder unit
- The piston and cylinder is made of the high intensity, extreme hardness and lowest thermal expansion tungsten carbide, which, density is 15 g/cm<sup>3</sup>, thermal coefficient of expansion is 16.5 ppm/°C

## APPLICATION

- Pressure calibration labs
- Pressure measurement in field

## PRESSURE RANGE SELECTABLE SHEET

Part #	Pressure	Piston	Mass	Accuracy
XY250	(5~250) MPa	1kg	49kg	0.05, 0.02, 0.01, 0.005
XY300	(5~300) MPa	1kg	59kg	0.05, 0.02, 0.01, 0.005
XY400	(5~400) MPa	1kg	79kg	0.05, 0.02, 0.01
XY500	(5~500) MPa	1kg	99kg	0.05, 0.02, 0.01
XY600	(10~600)MPa	2kg	118kg	0.05, 0.02, 0.01

## SPECIFICATIONS

- Piston material: Tungsten carbide
- Cylinder material: Tungsten carbide
- Mass set material: 304 non-magnetic stainless steel
- Hydraulic base material: Aluminium alloy
- Transforming and lubrication medium: Sebacate
- Piston diameter: 0.16cm
- Effective area: 0.02cm<sup>2</sup>
- Reservoir volume: 400ml
- Connector: Metric (NPT and BSP is option)
- Pressure units available: MPa, bar, PSI
- Base size: 360 mm (H) x 710 mm (L) x 510 mm (D)
- Base weight: 30kg (40kg for 500MPa and 600MPa)

## SCOPE OF DELIVERY

- BL512 High Pressure deadweight tester base
- Piston cylinder unit
- 304 non-magnetic stainless steel mass set
- Mass carrier
- Adapter kits (1/4" NPT, 1/2" NPT, 1/4" G, 1/2" G)
- User manual
- Transit case

## OPTIONAL ACCESSORIES AND SERVICES

- ISO17025 calibration certificate (P/N:9000-511)

## ORDERING MODEL NUMBER

- BL512 / part number / accuracy / gravity value