

# Model BL533 Automatic Hydraulic Piston Gauge



The model BL533 series automatic hydraulic piston gauge performs great pressure accuracy and an excellent long term stabilization as a primary standard. It is perfect solution in accredited pressure metrology institute and industrial pressure calibration laboratory.

## KEY FEATURES

- Hydraulic pressure from 0.1MPa to 250MPa
- Pressure accuracy is 0.005% of reading
- Auto apply pressure
- Auto fine adjust pressure
- Auto select mass
- Auto rotate floating mass set
- Electric control and gas control
- Piston floating position limitation control
- Advanced rotation system can release mass set with fix speed, no effects for measure
- Terminal can indicate real atmosphere pressure, ambient temperature, ambient humidity by using internal sensors
- Terminal can test piston temperature, rotation speed, decline speed and location
- Terminal can correct the real local gravity, head difference, deformation coefficient, diameter changes and media density
- RS232 and USB communication
- With mA, V measure and 24V loop power

## SPECIFICATION

- Piston material: Tungsten carbide
- Cylinder material: Tungsten carbide
- Mass material: Forged non-magnetic 316SS

- Accuracy: 0.005% of reading
- Pressure range selectable sheet

Part Number	Range (MPa)	Area cm <sup>2</sup>	Piston Kn value	Optional Mini P
KY-Z2-6	0.1~6	01	0.1MPa/kg	0.005MPa
KY-Z2-25	1~25	0.1	1MPa/kg	0.05 MPa
KY-Z2-60	1~60	0.1	1MPa/kg	0.05 MPa
KY-Z2-100	1~100	0.1	1MPa/kg	0.05 MPa
KY-Z2-160	2~160	0.05	2 MPa/kg	0.1MPa
KY-Z2-250C	2~250	0.05	2 MPa/kg	0.1MPa

- Medium: Mineral Oil(<25MPa); Sebacate (≥25MPa)
- Connector on manifold: Metric (NPT and BSP is option)
- Current measure:  $\pm 30.000\text{mA}$ ,  $\pm(0.01\%RD+0.003\%FS)$
- Voltage measure:  $\pm 30.000\text{V}$ ,  $\pm(0.01\%RD+0.003\%FS)$
- Voltage source: DC24 V (max.50mA),  $\pm 0.5\text{V}$
- Power Supplier: 220VAC, 50/60Hz
- Mass selector and base: 46x46x58cm / 45kg
- Pressure controller: 24x40x55cm / 20kg
- Calculator and Terminal: 35x30x24cm / 5kg

## SCOPE OF DELIVERY

- BL533 Hydraulic piston gauge base
- Piston-cylinder module
- Forged non-magnetic 316SS increment mass set
- Mass auto selector
- Hydraulic pressure controller
- Pressure calculator and terminal
- Pressure manifold
- Adapter kits includes NPT and BSP
- Pressure connection tube
- Three pieces of 1.5-meter test leads
- 110V/220V external power adapter
- Transit cases
- Gas bottle (buy locally)

## OPTIONAL ACCESSORIES AND SERVICES

- Accredited Calibration, include mass set (P/N:9000-533)
- Optional minimum pressure weight
- Trim weight set, F1, 316 stainless steel. (P/N: 1550-F1)

## HOW TO ORDER

- Model BL533 / pressure range part number