

Gauge Block Calibration



Gauge Block Comparator GBCD-250
SERIES 565 — Manual Comparator with Dual Gage Heads

- Measures Rectangular Gauge Blocks and Square Gauge Blocks through manual comparison with an appropriate Reference gauge block in the size range 0.1 mm to 250 mm.
- The measurement result is not affected by any warping of thinner gauge blocks due to the use of upper and lower gage heads (dual-head system).



SPECIFICATIONS

Metric						
Range		Resolution (Effective indication)	Accuracy (95% confidence interval) [Comparison measurement of the same nominal length]		Accuracy (95% confidence interval) [Dimensional deviations between Reference gauge block and measurement gauge block: ±3 mm]	
0.1 mm - 250 mm		0.001 μm (0.01 μm)	±(0.03 + 0.3L/1000) μm* L=Gauge block length (mm)		±(0.06 + 0.3L/1000) μm* L=Gauge block length (mm)	
Upper gaging head			Lower gaging head			Operating conditions
Type	Measuring force	Contact point	Type	Measuring force	Contact point	
Linear Gage	0.4 N	Carbide contact point of radius 20 mm	Linear Gage	0.2 N	Carbide contact point of radius 5 mm	20 °C±1 °C Humidity: 30% RH to 60% RH (Under less temperature change, and hot or cold direct air flow should be avoided.)

* Not including the uncertainty of reference gauge block and influence of temperatures.