

**Manual Type Comparator
with Dual Gauge Heads
GBCD-250**

Mitutoyo Quality



Calibration instruments

Manual Type Comparator with Dual Gauge Heads GBCD-250



Features

- Gauge blocks between 0.1mm and 250mm can be easily compared with standard gauge blocks on the GBCD-250.
- Dual differential gauge heads assure the operator of high-accuracy measurement with ease of use, even for the thinnest gauge blocks.
- High-resolution linear gauging technology is used for the gauge heads to ensure precise discrimination between the reference gauge and the gauges under test.
- The gauge block can be easily and accurately positioned for measurement by using a GB positioning unit.

Specifications

Model	GBCD-250
Measuring range	0.1mm - 250mm
Measurement method	Differential with upper and lower gauging heads (dual-head system)
Resolution	0.001μm
Upper gauging head Measuring force Contact point	Linear Gage (6mm stroke, Ultra-high accuracy transmission type linear encoder) 0.4N Tungsten carbide with a spherical radius of 20mm
Lower gauging head Measuring force Contact point	Linear Gage (Ultra-high accuracy transmission type linear encoder) 0.2N Tungsten carbide with a spherical radius of 5mm
Narrow-range accuracy (at the 95% confidence level) [Nominal length is the same for both the reference gauge block and the gauge blocks to be calibrated]	$\pm(0.03+0.3L/1000)\mu\text{m}$ L: Gauge block length (mm) (Excluding uncertainty of reference gauge block length and influence of ambient temperature)
Wide-range accuracy (at the 95% confidence level) [Length difference between the reference gauge block and the gauge blocks to be calibrated not to exceed $\pm 3\text{mm}$]	$\pm(0.06+0.3L/1000)\mu\text{m}$ L: Gauge block length (mm) (Excluding uncertainty of reference gauge block length and influence of ambient temperature)
Operating temperature	20°C \pm 1°C (Rate of temperature change to be minimized and direct exposure to cold or warm air drafts to be avoided)
Operating humidity	30%RH - 60%RH
Power supply	AC100V - 120V, 200 - 240V \pm 10%, 50/60Hz
Power consumption (excluding PC)	8.4W maximum

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