

VERNIER CALIPER OPERATION INSTRUCTIONS

● **OUTLINE**

Vernier Caliper is a common kind of length measuring tool, based on vernier principle, to measure the relative displacement between two measuring jaws. Choosing different types of vernier calipers can measure internal dimension, external dimension, depth, step, and holes' distance.

Vernier Caliper can make direct measurement and comparative measurement.

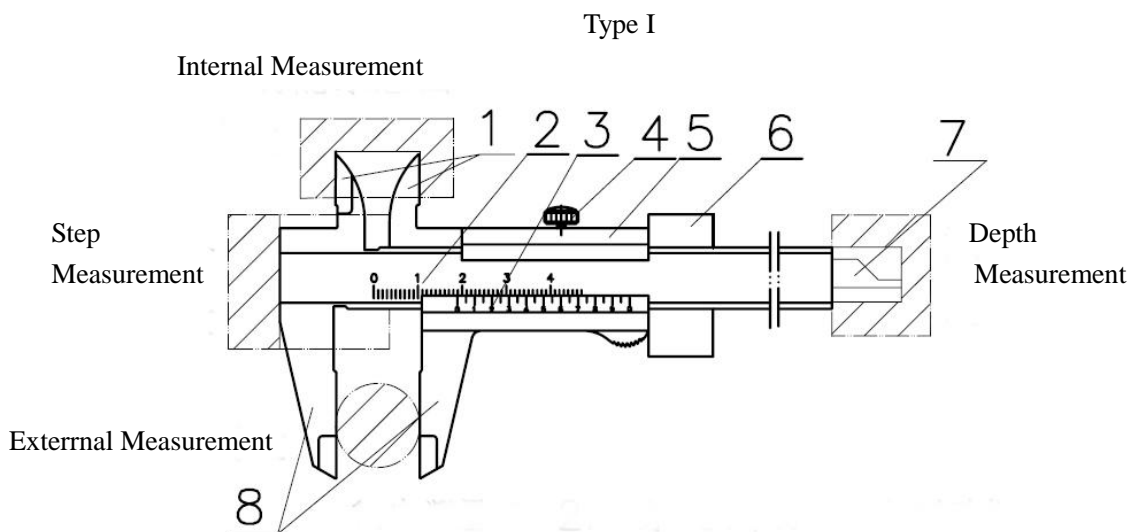
● **FEATURES**

1. There are 5 types of Vernier Calipers: Type I, Type II, Type III, Type IV, Type V
 3-way measurements: Internal Dimension, External Dimension, Depth
 4-way measurements: Internal Dimension, External Dimension, Depth, Step
2. Vernier Caliper is made of Stainless Steel, or Carbon Steel
3. Equipped with fine adjustment for range more than 200mm.

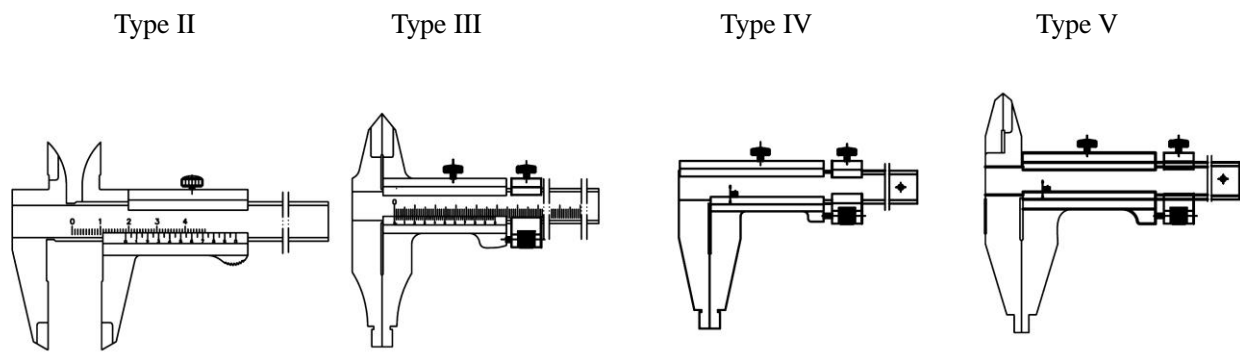
● **TECHNICAL SPECIFICATIONS**

	Range	Reading
Metric	0-100mm, 0-125mm, 0-150mm, 0-200mm, 0-250mm, 0-300mm, 0-400mm, 0-500mm, 0-600mm, 0-630mm, 0-800mm, 0-1000mm, 0-1500mm, 0-2000mm, 0-2500mm, 0-3000mm, 0-3500mm, 0-4000mm, 0-5000mm	0.02mm, 0.05mm, 0.10mm
Inch	0-4", 0-5", 0-6", 0-8", 0-10", 0-12", 0-16", 0-20", 0-24", 0-32", 0-40", 0-60", 0-80", 0-100", 0-120", 0-140", 0-160", 0-200"	0.001", 1/128"

● **NOMENCLATURE**



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|----------------------------|--------------------|--------------------------|----------------------------|
| 1. Internal measuring jaws | 2. Main Scale | 3. Vernier | 4. Locking screw |
| 5. Slider | 6. Fine Adjustment | 7. Depth measuring blade | 8. External measuring jaws |



● READING METHOD

1. Before use, set zero.
2. Reading method:
 - a.) When measuring, on the main scale read the mm round number nearest to the left side of “0” vernier marking line.
 - b.) Observe the vernier marking lines and find the vernier marking line which fully aligns to a certain marking line on the main scale. Count the vernier marking line’s number, and that vernier marking line’s number times Reading (0.02mm, 0.05mm, or 0.10mm) will be the mm decimal number.
 - c.) Plus the above-mentioned mm round number and mm decimal number will be the dimension of the workpiece to be measured.

Remarks: The reading method for inch vernier caliper is similar.

● PREPARATIONS

1. Before use, set zero. Otherwise the measured value should be amended accordingly.
2. When make measurement, use proper measuring power. If a vernier caliper is equipped with the fine adjustment, please use the fine adjustment..
3. Measurement should be made in static state.
4. After finish measuring external dimension, to avoid damaging the measuring faces, please do not take out the vernier caliper violently. When measuring internal dimension, keep the measuring jaws in the diameter direction, prevent the vernier caliper from slanting.