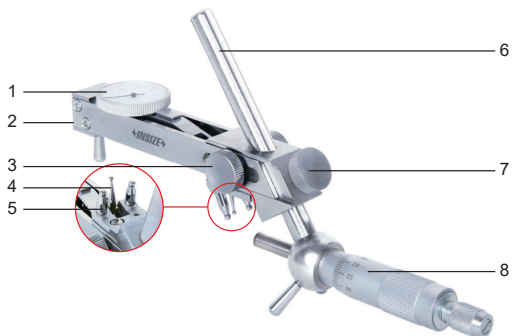


Code	Range		Division value	Accuracy	Length
	Outer diameter of shaft	Width of keyway			
4865-14	14-110mm	5-28mm	0.01mm	0.02mm	100mm



- 1-Lever gauge
- 2-Lever gauge locking screw
- 3-Side plate locking screw
- 4-Lever gauge probe
- 5-Fixed probe
- 6-Diameter adjustment lever
- 7-Locking screw
- 8-Micrometer head

1. For measuring the symmetry of shaft keyways.

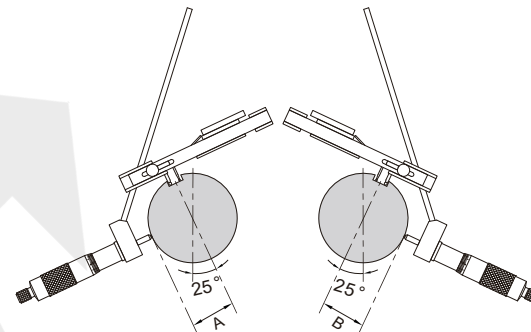
2. Usage Instructions:

- Turn the side plate locking screws anticlockwise, move the lever table section so that the distance between the two fixed probes and the lever table probe is about 2/3 of the width of the measured keyway slot, and tighten the side plate locking screws clockwise.
- Turn the locking screw counterclockwise, move the diameter adjusting lever so that the centre line of the micrometer head and the axis of the workpiece to be measured are located in the same horizontal line, and tighten the locking screw clockwise.
- Measurement of the shaft keyway tilted in the direction of the measurement of about 25°, the amount of fixed probe and the keyway of the bottom and one side of the contact at the same time, rotate the micrometer head so that the micrometer head measuring surface and the workpiece tangent to the outer circle, rotate the dial of the lever table to make the pointer to zero and write down this time the micrometer head readings A; will be 180° workpiece flip, rotate the micrometer head to make the needle of the lever table to reach the zero position and write down the readings of the micrometer head B.

Get $\Delta 1 = |A - B| / 2$

Repeat for different measurement positions to get $\Delta 2$

Note: The larger absolute value is $\Delta 1$, the smaller is $\Delta 2$.



3. Calculate the symmetry error value.

Calculate the symmetry error of the shaft keyway according to GB/T1958-2004 shape and positional tolerance testing regulations.

$$f = \frac{2\Delta 2h + d(\Delta 1 - \Delta 2)}{d - h}$$

In the formula:

d-Diameter of shaft
h-keyway depth

4. Precautions:

- Lever gauge should be zeroed and measured with the same amount of pressure.
- When the lever gauge is zeroed and measured, the amount of its pressure gauge should be the same, half a turn is appropriate.
- The measured keyway should be free from dirt and burrs.
- When not in use for a long time, anti-corrosion oil should be applied to the measuring surfaces of the probe and micrometer head to prevent rusting.