

OPERATION INSTRUCTION Gear Root Diameter Micrometers

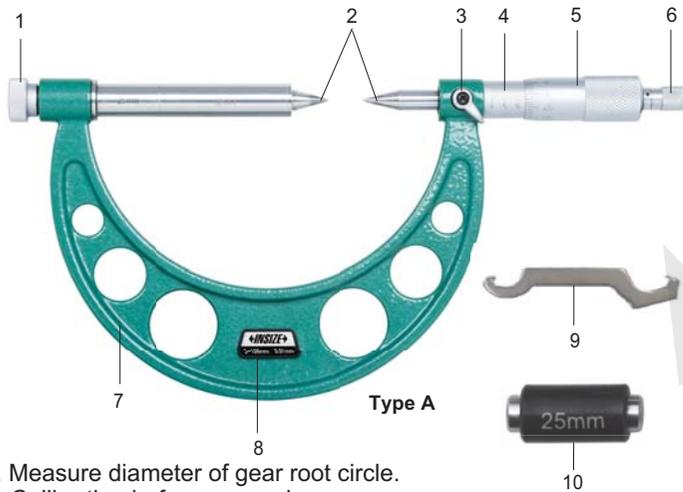
Note: When the micrometer is calibrated to zero, the support mode should be the same as the actual measurement, otherwise the measurement error will be caused by the influence of self-weight deformation of ruler frame.

Graduation: 0.01mm

Code	Range	Type	Accuracy
3297-100	5-100mm	A	5μm
3297-200	100-200mm	A	7μm
3297-300	200-300mm	B	9μm
3297-400	300-400mm	B	11μm
3297-500	400-500mm	B	13μm
3297-600	500-600mm	B	15μm
3297-700	600-700mm	B	16μm
3297-800	700-800mm	B	18μm
3297-900	800-900mm	B	20μm



Type B



Type A

- 1-Locking nut
- 2-measuring face
- 3-Locking screw
- 4-Sleeve
- 5-Thimble
- 6-Ratchet thimble
- 7-Frame
- 8-Plate
- 9-Zeroing spanner
- 10-Setting standard

1. Measure diameter of gear root circle.
2. Calibration before measuring:
 - Clean the measuring surface of the micrometer with soft cloth.
 - Loosen the locking nut, rotate the thimble to make the two measuring face close to each other, and rotate the ratchet thimble when it is about to contact until the spindle no longer moves forward. At this time, continue to rotate the ratchet thimble three turns so that the two measuring face are in full contact.

- After tighten the locking nut and use the zeroing spanner to set zero.
- For the micrometers above 25mm, do calibration with setting standard. Same as the above method.

Zeroing spanner adjustment method:

- Tighten the locking nut, use zeroing spanner to rotate sleeve (Fig.1), adjust the reading to zero.
- Finish calibration.

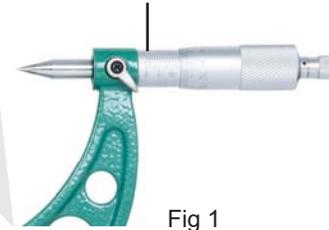
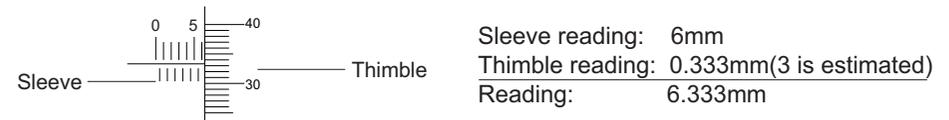


Fig 1

3. Measurement:
 - During measurement, make sure there are no cutting chips or other debris on the measuring faces and workpiece surface, or it will lead to inaccurate results.
 - Adjust size of the micrometer to slightly larger than measured workpiece, and then put measured workpiece into micrometer, rotate silent ratchet thimble, when the two measuring face are about to contact, rotate silent ratchet thimble until the spindle no longer moves forward, at this time continue to rotate silent ratchet thimble three circles, so that measuring face is fully in contact with measured workpiece, read the measurement result.
4. During reading, the sight should be perpendicular to the scale, to avoid parallax reading. The reading is the sum of sleeve and thimble. The reading results are as follows:



5. Optional accessory: setting standards (code 7386)
6. With micrometer base, it is more convenient to measure. optional micrometer base code 6300, 6301, 6302
7. Working temperature is 0-40°C/32-104°F.
8. Precautions: When using the micrometer, be sure to hold the heat insulation plate or choose the micrometer holder to use, to avoid the measurement error caused by the inconsistency between the temperature of micrometer and the measured workpiece.