



OPERATION INSTRUCTION

External screw thread micrometers

Graduation: 0.01mm



- 1-Frame
- 2-Zero adjustment device
- 3-Locking screw
- 4-Probe
- 5-Spindle
- 6-Sleeve
- 7-Friction thimble
- 8-Ratchet stop
- 9-Insulation plate
- 10-Spanner
- 11-60° setting standard (except 0-25mm)

1. The product is used to measure pitch diameter of screw thread.

2. The micrometer should be zeroed before measuring:

- Install the probe that is consistent with the thread pitch and tooth profile angle to be measured, and wipe the measuring surface of the probe with a clean soft cloth;
- Loosen the locking screw and turn the friction thimble to make the zero line on the friction thimble coincide with the longitudinal engraved line on the sleeve, and make the edge of the friction thimble and the zero line on the sleeve tangent;
- Push the zero adjustment device to make the V-shaped probe and the cone (knife-edge) probe come into contact with each other, and tighten the lock screw. Turn the ratchet stop to check the zero adjustment, if there is any deviation, use the spanner to adjust.
- Thread micrometers with a lower limit more than 25mm are required to be zeroed. Procedure is same with above.

Zero adjustment method:

- Insert the spanner into the small hole of the sleeve, and turn the sleeve slightly until the zero mark of the friction thimble is aligned with the mark of the sleeve (Fig.1) to complete the calibration.

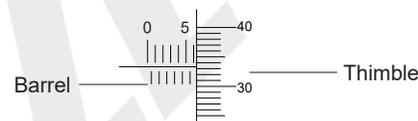


fig.1

3. Measurement:

- Measurement, should ensure that the micrometer measuring surface and workpiece surface clean, do not allow burrs and other debris, which will lead to measurement error.
- Adjust the size of the micrometer slightly, to make it larger than the measured workpiece. Put the workpiece into the micrometer, rotating friction thimble, when the probe and the workpiece are about to contact, turn the ratchet thimble. Reading after you hear the giggle sound.

4. During reading, the line of sight is perpendicular to the scale, in order to avoid parallax . The reading is the sum of barrel, thimble, results are as follows:



Barrel reading: 6mm
Thimble reading: 0.333mm(3 is estimated)
Reading: 6.333mm

5. Optional accessory: 55° setting standards, measuring tips (code: 7381)

Whitworth thread (55° thread angle)

Code	Pitch
7381-T21	60-48TPI
7381-T22	48-40TPI
7381-T23	40-32TPI
7381-T24	32-24TPI
7381-T25	24-18TPI
7381-T26	18-14TPI
7381-T27	14-10TPI
7381-T28	10-7TPI
7381-T29	7-4.5TPI
7381-T210	4.5-3.5TPI
7381-T2S	10 pairs/set, including all above tips

Metric and unified thread (60° thread angle)

Code	Pitch
7381-T11	0.4-0.5mm/ 64-48TPI
7381-T12	0.6-0.9mm/ 44-28TPI
7381-T13	1-1.75mm/ 24-14TPI
7381-T14	2-3mm/ 13-9TPI
7381-T15	3.5-5mm/ 8-5TPI
7381-T16	5.5-7mm/ 4.5-3.5TPI
7381-TS	6 pairs/set, including all above tips

6. Notice:

- During storage, there should be a gap of 0.1mm to 1mm between the measuring surfaces. Do not store the micrometer in a clamped state.
- The micrometer has been stored for a long time, and there is a protective oil film on the spindle. When using it, wipe the oil film on the spindle with a dust-free cloth.

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