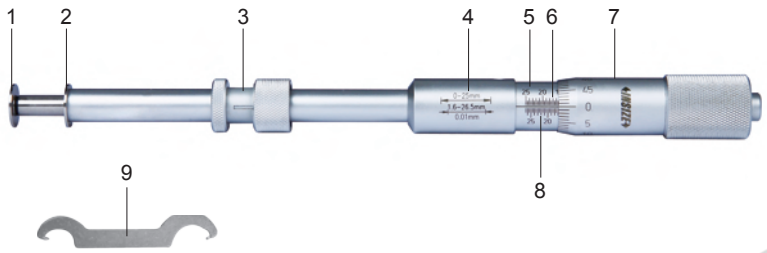
OPERATION INSTRUCTION

Groove Micrometer
Series 3287

Code	Range(outside)	Range(inside)	Accuracy
3287-25A	0-25mm	1.6-26.5mm	10μm
3287-50A	25-50mm	26.5-51.5mm	10μm
3287-75A	50-75mm	51.5-76.5mm	10μm
3287-100A	75-100mm	76.5-101.5mm	10μm



1-Flexible measuring head
2-Measuring head
3-Locating nut
4-Label
5-Sleeve
6-Scale for outside messurement
7-Friction thimble
8-Scale for inside messurement
9-Spanner

1. Groove micrometer is used for measuring width of groove and position.

2. Measurement: outside measurement(Fig.1), inside measurement(Fig.2), location measurement(Fig.3, 4).

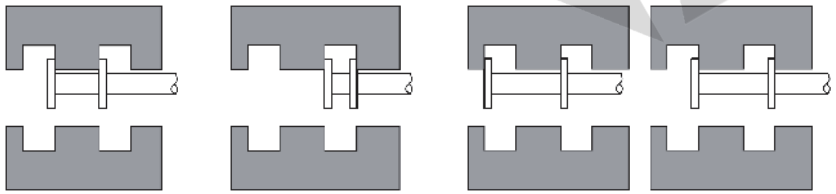


Fig.1 Fig.2 Fig.3 Fig.4

3. It is necessary to calibrate groove micrometer before measurement:

---Outside measurement, do calibration with gage block or the standard workpiece (close the two measuring faces to do calibration for 0-25mm). Groove micrometer measures gage block, if the result is equal to the normal value of gage block, groove micrometer is ready to measure; otherwise, insert the wrench into the hole on the opposite side of the scale, and rotate the sleeve to set reading equal to the normal value of gage block.

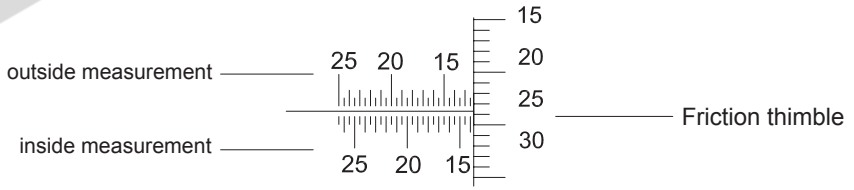
---Inside measurement, do calibration with outside micrometer or the standard workpiece. Set outside micrometer the fixed value. Groove micrometer measures the outside micrometer, if the result is equal to the fixed value, groove micrometer is ready to measure; otherwise, insert the wrench into the hole on the opposite side of the scale, and rotate the sleeve to set reading equal to the fixed value.

4. Clean the measuring faces and the workpiece with soft cloth to avoid the measuring error. The locating nut is used for assisted position, so as to find groove location.

Note: ---When the measuring face is close to the workpiece, do not apply excessive force to rotate the ratchet stop, which may lead to inaccurate results and damage the internal precision threads.

---Do not apply excessive force to twist groove micrometer to avoid measuring head fractured during measurement.

5. During reading, the sight is perpendicular to the scale to avoid parallax reading. There are two index lines on sleeve, the upper one is for outside measurement, another one is for inside measurement. The result should calculate the thickness of measuring head (0.75mm) for position measurement. The inside reading should minus 0.75mm(Fig.3). The outside reading should plus 0.75mm(Fig.4). The reading is following:



outside measurement reading:

Sleeve reading: 12mm
Friction thimble reading: 0.237mm
Reading: 12.237mm

inside measurement reading:

Sleeve reading: 13.5mm
Friction thimble reading: 0.237mm
Reading: 13.737mm

6. Measuring faces should be carefully protected from being scratched or damaged. Micrometer should be oiled to prevent rust after use.

MN-3287-E

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