



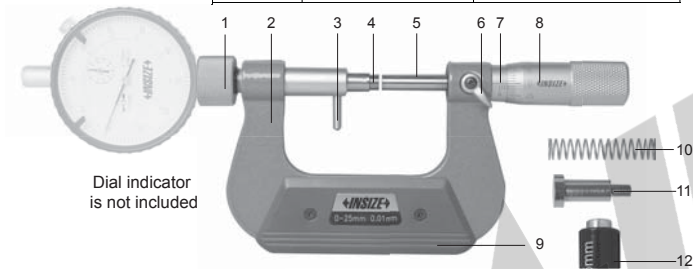
OPERATION INSTRUCTION

Indicating Micrometer Series 3331

Micrometer head graduation: 0.01mm

Anvil retracting range: 8mm

| Code | Micrometer head range | Micrometer head accuracy |
|-----------|-----------------------|--------------------------|
| 3331-25A | 0-25mm | 4μm |
| 3331-50A | 25-50mm | 4μm |
| 3331-75A | 50-75mm | 5μm |
| 3331-100A | 75-100mm | 5μm |
| 3331-125A | 100-125mm | 6μm |
| 3331-150A | 125-150mm | 6μm |
| 3331-175A | 150-175mm | 7μm |



- 1-Locking nut
- 2-Frame
- 3-Lifting lever
- 4-Anvil with carbide measuring face
- 5-Spindle with carbide measuring face
- 6-Locking spanner
- 7-Barrel
- 8-Thimble
- 9-Insulating plate
- 10-Spring
- 11-Flat head measuring
- 12-Setting standard(except 3331-25A)

1. This product is convenient for Go/No-Go judgement for mass production.
2. Select indicator before use. Optional indicator: 2308-10FA(range: 10mm, graduation: 0.01mm), 2104-10F(range: 12.7mm/0.5", graduation: 0.01mm/0.0005"), 2103-10F (range: 12.7mm/ 0.5", graduation: 0.001mm/0.00005").

3. Install indicator:

- Take down contact point, spring(10) is sheathed in the spindle, and then install flat head measuring(11) in the spindle of indicator(Fig.1)
- Clean the stem and measuring faces with soft cloth before installing indicator into micrometer
- Loosen the locking spanner, rotate the thimble to align the index line with thimble zero graduation line, and then tighten the locking spanner
- Loosen the locking nut, install indicator into micrometer(Fig.2). Confirm both measuring faces(range: 0-25mm) gently contact, rotate the bezel to make pointer point the zero(as micrometer is used to measure mass production, indicator should be prepressing 1-2mm, digital indicator is set zero by "ZERO" button), tighten the locking nut. When the range is more than 25mm, install indicator with using setting standard as before
- Press the lifting lever, release it and ensure the lifting lever go back the original position, get the reading zero on the indicator. If there is a deviation, rotate the bezel to make pointer point the zero



Fig.1

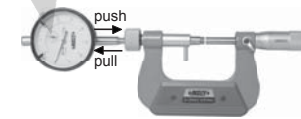


Fig.2

4. Measurement:

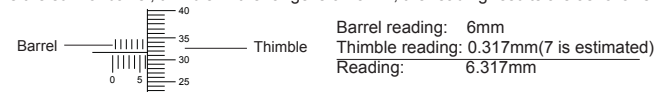
Go/No-Go judgement for mass production

- According the measured workpiece's value, set the nominal value by turning the thimble, tighten the locking spanner
- Press the lifting lever, place the workpiece to the measuring faces, release the lifting lever, make the workpiece and measuring faces contact completely
- Get the result from indicator, set tolerance range to judge workpiece Go or No-Go(set the tolerance range according the indicator's user manual)
- Get the result, press the lifting lever to take down the workpiece

Notice: In order to obtain accurate results. During measurement, measure the standard workpiece or the same size gage block first, ensure the pointer point the zero, and measure the standard workpiece or gage block regularly to get accurate results.

Direct measurement: The measuring method is as before. Make workpiece and measuring faces contact, rotate the thimble to make pointer point the zero, and get the result.

5. During reading, the sight is perpendicular to the scale to avoid parallax reading. The reading is the sum of barrel, thimble. If the range is 0-25mm, the reading results are as follows:



6. Optional accessories: 6300, 6301(micrometer stand).

MN-3331-E

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