OPERATION INSTRUCTION

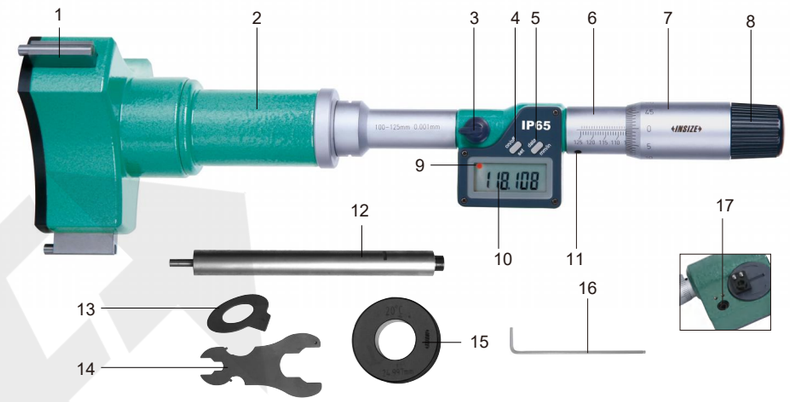
Digital Three Points Internal Micrometers

Individual (mm)

Code	Range	Resolution	Accuracy	Setting ring	Extension rod(included)
3127-2	2-2.5mm/0.08-0.10"	0.001mm/0.00005"	6μm	Ø2.5(included)	—
3127-3	2.5-3mm/0.10-0.12"	0.001mm/0.00005"	6μm	Ø2.5(included)	—
3127-4	3-4mm/0.12-0.16"	0.001mm/0.00005"	6μm	Ø4(included)	—
3127-5	4-5mm/0.16-0.20"	0.001mm/0.00005"	6μm	Ø5(included)	—
3127-6	5-6mm/0.20-0.24"	0.001mm/0.00005"	6μm	Ø6(included)	—
3127-8	6-8mm/0.24-0.31"	0.001mm/0.00005"	4μm	Ø6(included)	100
3127-10	8-10mm/0.31-0.39"	0.001mm/0.00005"	4μm	Ø8(included)	100
3127-12	10-12mm/0.39-0.47"	0.001mm/0.00005"	4μm	Ø10(included)	100
3127-16	12-16mm/0.47-0.63"	0.001mm/0.00005"	4μm	Ø16(included)	150
3127-20	16-20mm/0.63-0.79"	0.001mm/0.00005"	4μm	Ø16(included)	150
3127-25	20-25mm/0.79-0.98"	0.001mm/0.00005"	4μm	Ø25(included)	150
3127-30	25-30mm/0.98-1.18"	0.001mm/0.00005"	4μm	Ø25(included)	150
3127-40	30-40mm/1.18-1.57"	0.001mm/0.00005"	4μm	Ø40(included)	150
3127-50	40-50mm/1.57-1.97"	0.001mm/0.00005"	5μm	Ø40(included)	150
3127-63	50-63mm/1.97-2.48"	0.001mm/0.00005"	5μm	Ø62(included)	150
3127-75	62-75mm/2.44-2.95"	0.001mm/0.00005"	5μm	Ø62(included)	150
3127-88	75-88mm/2.95-3.46"	0.001mm/0.00005"	5μm	Ø87(included)	150
3127-100	87-100mm/3.43-3.94"	0.001mm/0.00005"	5μm	Ø87(included)	150
3127-125	100-125mm/3.94-4.92"	0.001mm/0.00005"	6μm	optional	150
3127-150	125-150mm/4.92-5.91"	0.001mm/0.00005"	6μm	optional	150
3127-175	150-175mm/5.91-6.89"	0.001mm/0.00005"	7μm	optional	150
3127-200	175-200mm/6.89-7.87"	0.001mm/0.00005"	7μm	optional	150
3127-225	200-225mm/7.87-8.86"	0.001mm/0.00005"	8μm	optional	150
3127-250	225-250mm/8.86-9.84"	0.001mm/0.00005"	8μm	optional	150
3127-275	250-275mm/9.84-10.83"	0.001mm/0.0001"	9μm	optional	150
3127-300	275-300mm/10.83-11.81"	0.001mm/0.0001"	9μm	optional	150

Set

Code	Range	Micrometers included	Setting ring (included)	Extension rod (included)
3127-232	2-3mm/0.08-0.12"	2-2.5mm, 2.5-3mm	Ø2.5mm	—
3127-363	3-6mm/0.12-0.24"	3-4mm, 4-5mm, 5-6mm	Ø4mm, Ø5mm, Ø6mm	—
3127-123	6-12mm/0.24-0.47"	6-8mm, 8-10mm, 10-12mm	Ø6mm, Ø8mm, Ø10mm	100mm
3127-202	12-20mm/0.47-0.79"	12-16mm, 16-20mm	Ø16mm	150mm
3127-504	20-50mm/0.79-1.97"	20-25mm, 25-30mm, 30-40mm, 40-50mm	Ø25mm, Ø40mm	150mm
3127-1004	50-100mm/1.97-3.94"	50-63mm, 62-75mm, 75-88mm, 87-100mm	Ø62mm, Ø87mm	150mm



1-Measuring jaws
2-Measuring head
3-Locking spanner
4-'on/off…set' button
5-'data…mm/in' button
6-Sleeve
7-Friction thimble
8-Ratchet stop
9-Data output signal light
10-LCD display
11-Adjustment screw
12-Extension rod
13-Q spanner
14-Open spanner
15-Setting ring
16-Spanner
17-Data output

1. The micrometer is dustproof and waterproof (IP65).
2. Install battery:
   ---Turn the battery cover 45° counterclockwise with the Q spanner (fig.1), then remove it.---Put CR2032 battery into battery house, positive side of battery(+) should face out (fig.2).---Tilt the battery cover to align it with the snap position and press it down, then use a spanner to turn the battery cover clockwise to lock it. (fig.3)

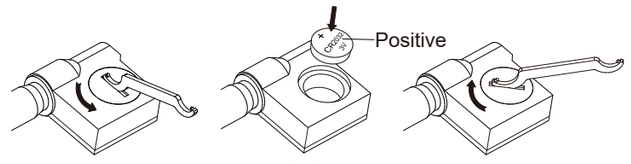


fig.1 fig.2 fig.3

MN-3127-E
V1

3. Buttons:
on/off…set
---short press(<2 sec.): power on/off
---long press(>2 sec.): "set" flashes, the value displayed is the default initial value. If there is no need to reset the initial value, press the button briefly to exit the setting mode. If you need to reset the initial value, long press this button, "set" flashes, long press again to display the digits flashing from left to right, short press this button to change the value of the flashing digits (from 0 to 9). When the setting is finished, press and hold until "set" flashes again, then press briefly to exit the setting mode.
data…mm/inch
---short press(<2 sec.): for data transmit, send one data each time.
---long press(>2 sec.): metric/inch conversion
Data output signal light
--- for short press data…mm/inch, the red light flashes once

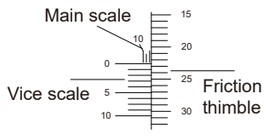
4. Before measurement, do micrometer calibration with the setting ring. First, set the initial value same as the normal value of setting ring, clean the measuring head and setting ring's face with soft cloth, make sure measuring head contact setting ring's face completely, when you hear click to long press ' on/off…set ' to set the initial value same as the normal value of setting ring.
If sleeve and friction thimble's value same as the normal value of setting ring to measure. If not, use spanner to set zero.
How to use the spanner:
Use the spanner to rotate adjustment screw, adjust the reading is zero.

5. During measurement, rotate ratchet stop to make sure measuring head' diameter less than the measured hole's. Put micrometer into measured hole vertically, and then rotate ratchet stop, shake micrometer gently to make sure measuring head to contact hole fully. Now you can get result until you hear click. When finishing, rotate ratchet stop to return back measuring head firstly, take micrometer out of the hole vertically.

6. During reading, the sight should be perpendicular to the scale to avoid parallax reading.
When graduation is 0.001mm, the reading is the sum of sleeve main scale, friction thimble, sleeve vice scale.
When graduation is 0.005mm, the reading is the sum of sleeve , friction thimble.

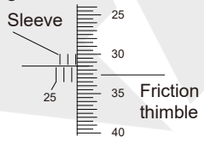
Caution: When the measuring faces is close , but not in contact with the piece, do not apply excessive force to rotate the ratchet stop, as it will lead to inaccurate results and may damage the internal precision threads.

graduation: 0.001mm



Main scale reading: 8.5 mm
Friction thimble reading: 0.22 mm
Vice scale reading: 0.006mm
Reading: 8.726mm

graduation: 0.005mm



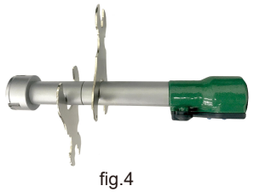


fig.4

Sleeve reading: 22 mm
Friction thimble reading: 0.315mm
Reading: 22.315mm

7. Install extension rod to measure deep hole. Use open spanner to separate measuring head from main stem, install extension rod between measuring head and main stem, and use open spanner to tight it (fig.4).
Caution: Don't hold the micrometer head by hand.

8. When measuring head are closed completely, please do not rotate ratchet stop any more, or may damage internal part of micrometer.

9.Optional accessary: data output cable (code 7315-31, 7302-30), micrometer stand and clamp (code 6301 and 6301-2) .

10. Automatic power off in about 20 minutes. Press any button to turn on micrometer.

11. The battery can be used for half a year. If there is nothing on display or digits blurring, battery voltage is too low, please replace battery. If digits do not change when buttons are pressed or friction thimble is rotated, take out battery and put it back after 1 minute. Remove battery if micr ometer is not be used for a long period of time, otherwise, liquid may leak from the battery and damage the micrometer.

12. Working temperature is 0-40°C/32-104°F.10. Automatic power off in about 20 minutes. Press any button to turn on micrometer.