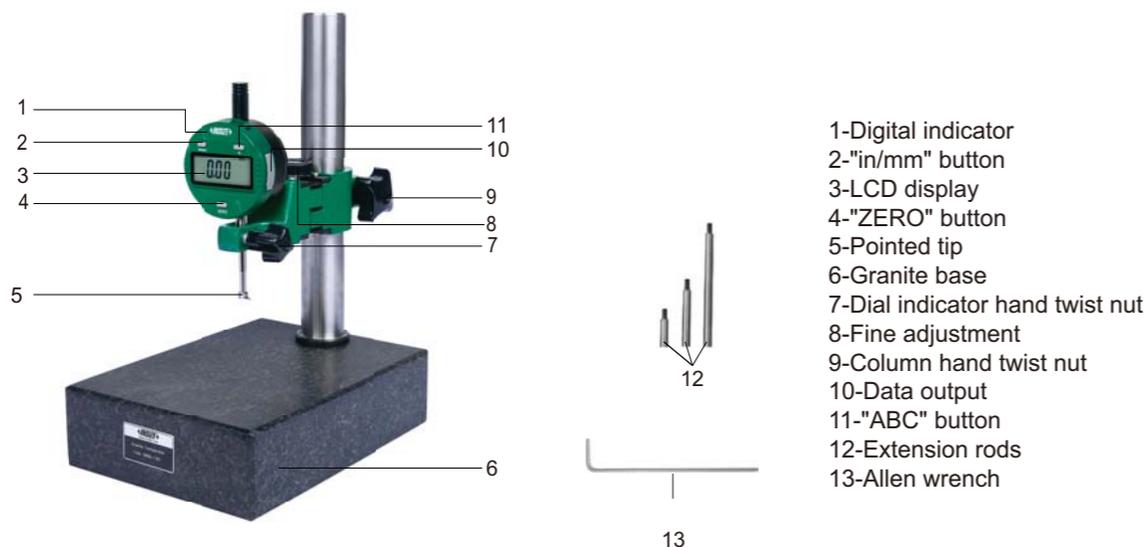


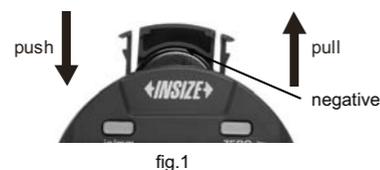
**Caution: Prevent liquid from getting into indicator to damage electronics.**

Code	Range	Resolution	Accuracy	Holding stem	Base
6870-150	12.7mm/0.5	0.01mm/0.0005	±20µm	Ø8mm	flatness 2.5µm
6870-1501	12.7mm/0.5	0.001mm/0.00005	±5µm	Ø8mm	flatness 2.5µm



6870-150

1. Install and remove battery(CR2032), the negative side of battery should face out(fig.1).



2. Buttons:

'in/mm' ---short press: inch and mm conversion; long press: change measuring direction.

'ABS' --- short press: absolute and relative measuring mode conversion; long press : set initial reading, short press "in/mm" to change the digit from 0 to 9, short press "ZERO" button to position the digit, long press "ABS" again to exit.

'ZERO' --- short press: set zero; long press: power off (It's fake shutdown).

Fake shutdown function:

Long press the ZERO button to shut down or leave the screen without any operation for about 2 hours. At this time, it is in a fake shutdown state. In this state, it has a data memory function, and the original data is still retained when it is turned on.

High and low frequency switching settings:

After shutting down, press and hold the in/mm key, and shortly press the ZERO key to turn on, after displaying "----", release the in/mm key to enter the high and low frequency switching mode setting, short press the in/mm key to adjust the switching mode, display "Fr-on" means that the automatic frequency switching function is turned on. After 3 seconds without button operation and push rod operation, it will automatically switch to high frequency. Display "Fr-oF", which means that the automatic frequency switching function is turned off, and the sensor keeps the high frequency state unchanged. Short press the ZERO button to confirm and save the high and low frequency switching mode settings, and exit to the working state.

When the automatic frequency hopping is enabled, the meter is powered on again or short press the ZERO button to turn it on, and LL will be displayed for one second, indicating that the automatic frequency hopping is currently enabled. When the meter is not operated for 3 seconds in this mode, the meter will automatically switch to low frequency, so the power consumption is lower, and it is more power-saving, suitable for use in the routine measurement state.

When the automatic frequency hopping is turned off, the meter is powered on again or short press the ZERO button to turn it on, and HH will be displayed for one second, indicating that the meter is currently maintaining high frequency without frequency hopping.

In this mode, the gauge will continue to maintain high frequency, high power consumption, and reduced battery life. It is suitable for occasions where high-speed movement of the measuring rod is required.

Shutdown time setting (It's real shutdown):

After shutting down, press and hold the ABS button, short press the ZERO button to turn on, after displaying "----", release the ABS button to enter the shutdown time mode setting, the default display is "6.0", which means it will automatically shut down after 6 hours of standing, short press ABS The key can switch the value, and it can switch between 0 and 99 hours every 1 hour. When the switch display is "0.0", it means that the gauge will not automatically shut down.

3. Instructions:

---Take down the pointed tip, install the digital display on the granite base , and lock it by turning the dial indicator hand twist nut manually , then install the pointed tip on the digital display to ensure that the measuring head is installed firmly and reliably.

---Adjust the digital display to the appropriate location by turning the column hand twist nut manually.

---Before use, select the appropriate extension rod according to the shape and size of the workpiece to be tested. The extension rods should be installed in order from longest to shortest.

---Ensure that both pointed tip and granite base are tidy and clean.

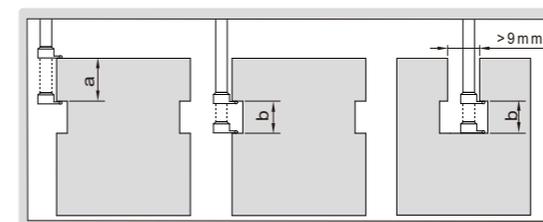
4. Measurement:

Measure the groove width (a)

Put the inner groove gauge on the workpiece to be measured, make the probe contact the upper surface of the workpiece, set the meter reading to zero, move the workpiece, put the inner groove gauge into the groove of the workpiece, pull the dust prevention cap to make the probe contact the upper end of the groove, and read the meter reading a1, the groove width  $a=a1-1$  (the diameter of the ball head of the groove probe is 1mm).

Measuring groove depth (b)

Put the inner groove gauge into the groove of the workpiece to be tested, pull the dust prevention cap to make the probe contact the upper end of the groove, set the meter reading to zero; loosen the dust prevention cap to make the probe contact the bottom of the groove, and read the meter reading b1, the groove depth  $b=b1+1$  (the diameter of the ball head of the groove probe is 1mm).



5. After measurement, please oil pointed tip, extension rods.

6. Optional accessories: data output cable (7315-, 7302-, 7305-)

7. If there is nothing on display or digits blurring, battery voltage is too low, please replace battery. If the digits do not change when buttons are pressed or spindle is moved, take out battery and put it back after 1 minute. If the indicator is not be used for a long period of time, please remove the battery. Otherwise, liquid may leak from the battery and damage the indicator.

8. Working temperature is 0-40°C/32-104°F, relative humidity should not exceed 80%.