



# OPERATION INSTRUCTION

## Large Stroke Digital Indicators

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

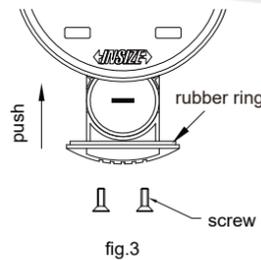
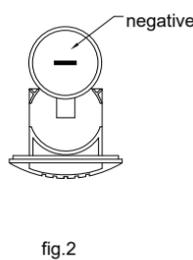
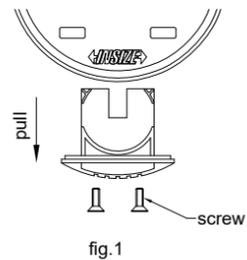
Code	Range	Resolution	Accuracy	Hysteresis	Remark
2117-100	100mm/4"	0.01mm/0.0005"	30μm	10μm	lug back
2117-1001	100mm/4"	0.001mm/0.00005"	9μm	3μm	lug back
2117-100P	100mm/4"	0.01mm/0.0005"	30μm	10μm	flat back, with lift cap
2117-1001P	100mm/4"	0.001mm/0.00005"	9μm	3μm	flat back, with lift cap



- 1-lift cap
- 2-'MODE' button
- 3-LCD display
- 4-Data output
- 5-'ZERO' button
- 6-'SET' button
- 7-Battery cover
- 8-Stem(diameter Ø8mm)
- 9-Contact point(thread M2.5X0.45)

### 1. Install battery:

- Screw out locking screws, remove the battery cover (fig.1).
- Put CR2032 battery into battery house, the negative side of battery (-) should face out (fig.2)
- Close the battery cover, screw in locking screws(fig.3).



### 2. Buttons:

#### ZERO

- When display is turn off: short press to turn on ;
- When display is turn on: short press to zero on absolute measuring mode, long press to turn off .

#### MODE

- Short press for absolute and relative measuring mode conversion.
- Long press to enter the setting mode, short press ZERO to switch TOL, CAL, mm / in and dir .
- TOL: Short press SET to set lower limit, short press ZERO to switch digit, short press SET to change the digit, short press MODE to set upper limit, short press MODE to save setting
- CAL: Short press SET to set initial reading, short press ZERO to switch digit, short press SET to change the digit, short press MODE to save setting
- mm/in: Short press SET to switch mm/in, short press MODE to save setting
- dir: Short press SET to switch direction, short press MODE to save setting

#### SET

- Short press to switch the normal measurement mode, TOL and RAN
- TOL: Measurement is within tolerance range will display OK, less than the lower limit will display ↓ larger than the upper limit will display ↑
- RAN: Short press MODE to switch maximum value track (↑ display), minimum value track (↓ display), maximum and minimum difference (↑ and ↓ display)
- Fake shutdown function: Long press the ZERO button to shut down or leave it without any operation for about 2 hours. This is a fake shutdown state. In this state, it has data memory function, and the original data is still retained when it is turned on.
- Real shutdown time setting : After shutting down, press and hold the MODE button, short press the ZERO button to turn on, after displaying '----', release the MODE 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 no operation, short press MODE button can switch between 0 and 99 hours with 1 hour step. When the switch display is '0.0', it means the digital indicator will not automatically shut down.
- High and low frequency switching settings: After shutting down, press and hold the SET key, and shortly press the ZERO key to turn on, after displaying '----', release the SET key to enter the high and low frequency switching mode setting, short press the SET 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.

In the 'Fr-on' mode, 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. In the 'Fr-oF' mode, the gage will continue to maintain high frequency, high power consumption, and

3. Digital indicator should be clamp on rigidity indicator holder.
4. Pull lift cap to lift point (fig.3)
5. During measurement, the spindle should be vertical to the workpiece surface, otherwise, the measurement may not be correc. Caution: please do not move the spindle quickly or apply lateral force on the spindle.
6. After measurement, please apply oil the contact point. the spindle should not be oiled, otherwise, the movement of the spindle will not be smooth.
7. If the digital indicator drops or be shocked, please inspect the measuring accuracy before using.
8. Optional accessories: data output cable(7302-,7305-,7315-), contact points(series 6282), backsNote: in order to get accurate measurement, it is necessary to select contact point according to the shape of the workpiece Measuring columned workpiece should choose knife edge point, measuring spherical workpiece should choose flat point, the needle point should be chosen when measuring concave or complex shape workpiece.
9. One battery can last for one year use. 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.
10. Working temperature is 0~40°C/32~104°F.



fig.4