ISO9001:2000

DIGITAL CALIPER WITHIN 300mm
OPERATING INSTRUCTION

INSTRUCTIONS:

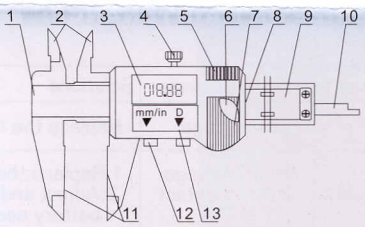
1. Before using the Digital Caliper, clean the surface of the protective sticker with dry and clean cloth(or soaked with cleaning oil).
2. Never apply voltage on any part of Digital Caliper or engrave with an electroprobe for fear of damaging the electronics.
3. Take out the battery or turn off its switch if Digital Caliper will stay idle for a long time.

TECHNICAL SPECIFICATIONS:

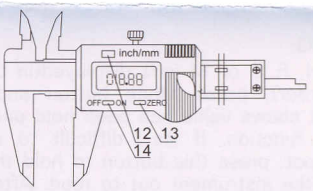
Resolution: 0.01mm
Power: One 1.5V button cell
Measuring Speed: ≤1.5m/s
Working temperature: 0 ~ + 40℃
Relative humidity: <80%
Storage temperature: -10 ~ + 60℃
VARIOUSTYPES

Diagrammatic Sketch of Structure

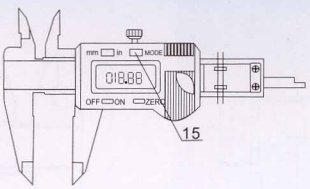
1. Step Measuring Face
2. Internal Measuring Faces
3. LCD display screen
4. Locking Screw
5. Data Output
6. One 1.5V button cell
7. Battery Cover
8. Slider
9. Protective Sticker
10. Depth Measuring Blade
11. External Measuring Faces
12. Inch/mm Interchange
13. Zero Setting Button
14. On/Off Button
15. Function Button(MODE,HOLD,ABS,TOL)



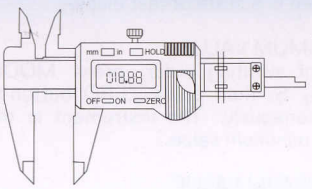
A: Two-button Digital Caliper



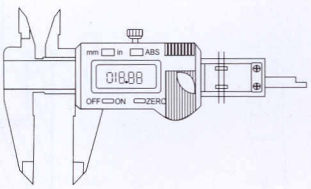
B: Three-button Digital Caliper



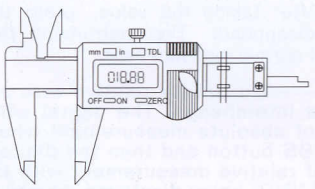
C: Four-button MODE Digital Caliper



D: Four-button HOLD Digital Caliper



E: Four-button ABS Digital Caliper



F: Four-button TOL Digital Caliper

FUNCTIONS:

1. Zero setting at any position, easy to take relative measurements.
2. Metric/Inch system interchange at any position.
3. With data output interface (optional), data can be input to a special printer or a computer via special cable for data processing and printing.
   Interface Type : Synchronous serial.
   Data: Binary code, 24bits. Each datum will be transferred twice. The cycle is 300ms(20ms in fast reading state).
   Transmitting time: 0.5ms.
   Four wires(from left to right):Negative power(-),Clock pulse CP, Data D, positive Power(+).
   Pulse range of data:"0" Level < 0.2V, Level" 1"> 1.3V.
   Clock Pulse CP: 90KHz. effective for high electrical level.
4. Special function: With data holding, fast display, fast tracingMaximum and Minimum value during measurements, conversion between relative and absolute measurement and tolerance zone setting.

OPERATION:

1 .Preparations:

(1) Clean the surface of the protective sticker (please refer to the above - mentioned instructions) and all the measuring faces.
(2) Loosen the locking screw and move the display and slider assmbly to check whether the LCD and all the buttons work properly.

2. Measurement:

(1) Press On/Off button to switch on the power.
(2) Press mm/In button to select a desired unit system.
(3) Move the slider to make two outside measuring faces touch gently, then press Zero button to set zero and you can start measuring.

3.Operation of Special function button:

(1) MODE Button.

(a) DATA HOLDING:
When any of H, F, S or M isn't displayed(in the state of awaiting order), press Mode button and H will be displayed. It shows value has been held unchanged, namely HOLD function. If it's difficult to read the value on the spot, press this button to hold the value, and then take the instrument out to read. After taking the value, press this button three times. "H" will disappear and HOLD function will be canceled. The state of awaiting order is restored. In other state, press MODE button one or more times and the state of awaiting order can be also restored.

(b) FAST DISPLAY
In the state of awaiting order, press MODE button to display H, press ZERO button to display F. The instrument is then in a state of fast display.

(c) TRACING MINIMUM VALUE
In the state of awaiting order, press MODE button twice to display S, then press ZERO button to display F and S simultaneously. The instrument is then in a state of tracing minimum value.

(d) TRACING MAXIMUM VALUE
In the state of awaiting order, press MODE button three times to display M, then press ZERO button to display F and M. The instrument is then in a state of tracing maximum value.

(2) HOLD Button
Press HOLD button to display H. The displayed value will be held unchanged, namely the HOLD function.
If it's difficult to read on the spot, press this button to hold measured value and then take the instrument out to read. After taking the value, press this button and then H disappears. The instrument then turns into the state of normal measurement.

(3) ABS Button ------ Button for relative zero point and absolute value interchange. The digital caliper will be in a state of absolute measurement when power is on. Press ABS button and then the digital caliper is in a state of relative measurement with the value being zero and "ING" being displayed, namely, setting relative zero point and being in a state of relative measurements. Press ABS button for a second time to be in a state of absolute measurement again, keeping the original zero position unchanged.

(4)TOL Button ------ Button for setting tolerance range
Make sure the correct origin has been set and no triangle mark appears, then press TOL button, ▲ mark is displayed; Move the slider to display its maximum value; press TOL button again, ▼mark is displayed; move the slider to display its minimum value; press TOL for the last time. The triangle mark disappears and tolerance range setting has been finished.
If the workpiece being measured is bigger than the maximum value, the ▲ mark twinkles. It shows it's beyond the maximum value. If the workpiece being measured is smaller than the minimum value, the ▼mark twinkles. It shows it's beyond the minimum value.
If the workpiece is within the tolerance range, OK mark twinkles, It shows the workpiece is up to standard.

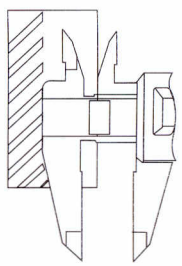
BATTERY REPLACEMENT:

Abnormal display (digits flashing or even no display)shows a flat and weak battery. To replace the battery, just push the battery cover as the arrow directs and replace it with a new one. Please note the positive side of the battery must face out. If the battery bought from a market doesn't work satisfactorily (The power may wear down because of its long-term storage or the battery's automatic discharge etc.), Please do not hesitate to contact the battery supplier.

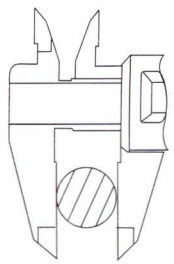
BRIEF ON MAINTENANCE:

Troubles	Possible causes	Solutions
Flashing digits	Low voltage	Replace the battery
No display	1.Low voltage 2.Poor contact	1.Replace the battery 2.Adjust and clean the battery seat
Fixed digits	Accidental troubel in circuit	Take out the battery and put it back after one minute.

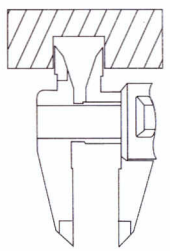
Examples of Types of measurements



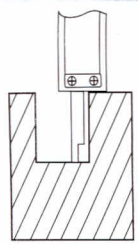
Steps measurements



External measurements



Internal measurements



Depth measurements