

****Please read through this instruction carefully before using the tool. Use the tool for its intended purpose only.**

Absolute Origin® Digital Bore Gauge Instruction

Absolute encoder digital indicator memorize absolute origin zero or preset value. It will indicate absolute position when turned on and ready to use. 330° rotation for indicator face.

• Description

1. In/mm: interchange between inch and metric reading
2. +/-: Change measure direction
3. : Power On / Off
4. Origin: Press 3 seconds to set Origin zero
5. MIN: minimum diameter
6. Preset: Preset data use a Master ring
7. CAL: Memorize MIN Data
8. SPC/USB data port
9. LCD Digital Display
10. Battery compartment
11. 3/8" diameter shank
12. 4-48 thread carbide point
13. Cap



• Specification

Bore gauge measure range: 1.4-6"

Bore gauge total error: 0.0006"

Bore gauge self-centering error: 0.00025"

Indicator measure range: 0-0.25" / 0-6.85mm

Resolution: 0.00005" / 0.001mm

Indicator Accuracy: 0.0003" / 0.008mm

Indicator Repeatability: 0.00005" / 0.001mm

Battery: 3V CR 2032 battery

• Calibration using a Master Ring Gauge

1. Long press the "PRESET" key for 3 seconds to enter the preset mode. "P" and "+" will begin to flash. By short pressing "PRESET" key, numerical digits will flash one by one. Press either the "in/mm" or "MIN" to change the value of the flashing digit. "In/mm" to increase, "MIN" to decrease. After complete the presetting process, long press the "PRESET" key to exit PRESET mode. A new preset value has been stored.
2. Long press "ORIGIN" key, the LCD will display the preset value. Short press "MIN" key to enter MIN mode. Put the gauge into a Ring gauge and swing the Bore Gauge to get the MIN value; remove the Ring gauge afterward.
3. Long press "CAL" key for 3 seconds to store the MIN value. The LCD will display "OK", then "OK" will disappear. At the same time, LCD will flash the preset value for 2 seconds. The gauge will calculate the value as the calibration is been finished.

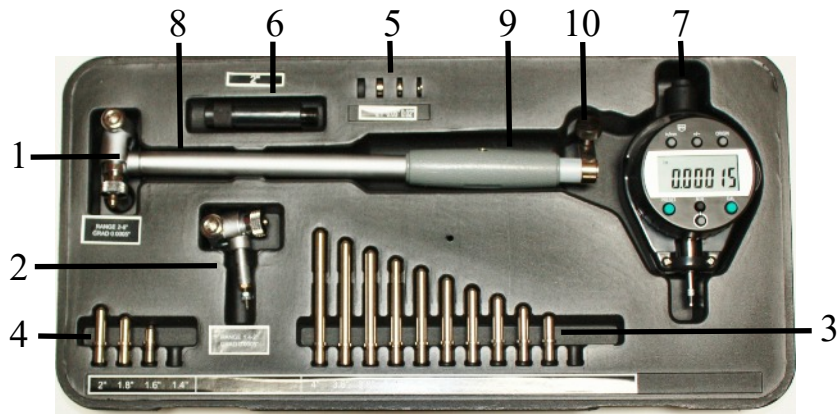
• Data Output

1. The output interface is a standard USB.
2. The gauge can be connected to a computer USB port by using an SPC cable kit, item# 100-700-USB.
3. When not using the interface, always keep the output connect lid in place.



*data cable kit optional
*computer not included

• **Parts**



1. 2-6” Measure head
2. 1.4-2” Measure head
3. 2-6” Anvils (2” anvil pre-installed in 2-6” Measure head)

Range	Anvil Quantity	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	No.11
2-6”	11	2.0”	2.2”	2.4”	2.6”	2.8”	3.0”	3.2”	3.4”	3.6”	3.8”	4.0”

4. 1.4-2” Anvils (1.4” anvil pre-installed in 1.4-2” Measure head)

Range	Anvil Quantity	No.1	No.2	No.3	No.4
1.4-2.0”	4	1.4”	1.6”	1.8”	2.0”

5. Spacers: 0.02”, 0.05”, 0.1” (one space left empty intentionally)

Spacer Quantity	No.1	No.2	No.3
3	0.02”	0.05”	0.1”

6. 2” range extension (for measurement 4” or above)
7. Indicator with protective housing
8. Joint
9. Handle
10. Clamp and Clamp screw

- Temporarily loose and remove the Cap in order to insert or remove the indicator from the housing.
- Insert the indicator’s stem into the bore gage handle and tighten the clamp. Make sure indicator is inserted deep enough to function properly.
- Measure heads: There are two measure head provided depending on your measuring requirement. Measure heads are interchangeable; unscrew the measure head from the joint and screw in the desired head.
- Anvils & Spacers: Each anvil measures up to the dimension in its specified range. Use appropriate spacer to fit dimensions in between anvil ranges. For example: for 3.07” measurement, uses No.6 anvil, and spacer No.1 and No.2. For 4.0” or above measurement, use 2.0” extension must also be installed on the bore gage.

When measuring bore diameter, take several measurements in different positions to achieve most accurate reading.



- Do not disassemble the instrument.
- Do not subject the instrument to blows or shock.
- Do not store the instrument under direct sun light.
- Avoid exposing unit to strong magnetic fields and live voltage.
- Use soft cloth to clean instrument before and after usage. Never use organic solvents such as acetone or benzene to clean.