



ELECTRONIC DIGITAL THREE-POINT INTERNAL MICROMETERS

INSTRUCTION MANUAL

Part Number : MCD3385-***HT
<combined>

Thank you for purchasing the Digital 3-Point Micrometer.
Please read this manual thoroughly before use for proper operation.

FEATURES

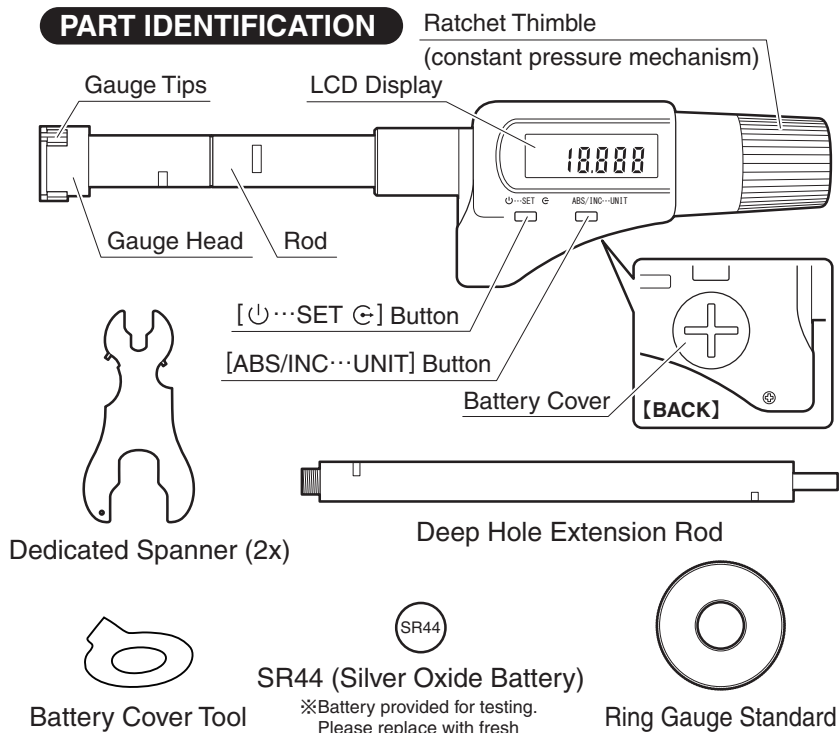
- Easy to read digital display.
- High accuracy 3-point ID measurements.
- Includes extension rod (Deep Hole Extension Rod) for measurements in deep measurements.
- Ring Gauge standard included for origin setting.
- With constant pressure ratchet mechanism.

SPECIFICATIONS

- Resolution : 0.001mm
- Body Material : High Carbon Chromium Bearing Steel
- Power : SR44 (Silver Oxide Battery) ※1x included for testing

Model No.	Measuring Range (mm)	Maximum Error (μm)
MCD3385-0608HT	6 – 8	4
MCD3385-0810HT	8 – 10	
MCD3385-1012HT	10 – 12	
MCD3385-1216HT	12 – 16	
MCD3385-1620HT	16 – 20	
MCD3385-2025HT	20 – 25	
MCD3385-2530HT	25 – 30	5
MCD3385-3040HT	30 – 40	
MCD3385-4050HT	40 – 50	
MCD3385-5063HT	50 – 63	
MCD3385-6275HT	62 – 75	
MCD3385-7588HT	75 – 88	
MCD3385-87100HT	87 – 100	

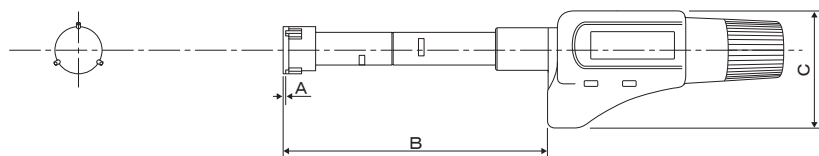
PART IDENTIFICATION



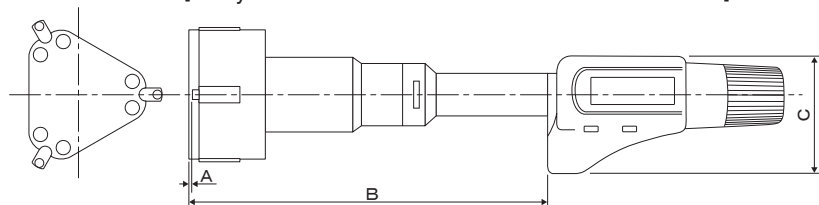
Dimensions (mm)

Model No.	A	B	C	D
MCD3385-0608HT	Less than 2	85	43	100
MCD3385-0810HT				
MCD3385-1012HT				
MCD3385-1216HT	Less than 1	100		150
MCD3385-1620HT		105		
MCD3385-2025HT		110		
MCD3385-2530HT		127		
MCD3385-3040HT				
MCD3385-4050HT				
MCD3385-5063HT				
MCD3385-6275HT				
MCD3385-7588HT				
MCD3385-87100HT				

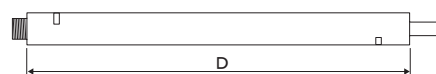
[Body : MCD3385-0608HT ~ MCD3385-4050HT]



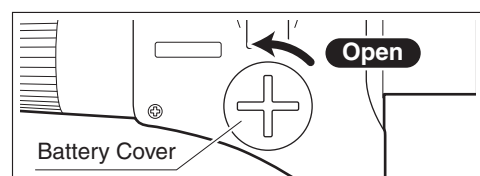
[Body : MCD3385-5063HT ~ MCD3385-87100HT]



[Deep Hole Extension Rod]



INSERTING THE BATTERY



1. Using the battery cover tool, open the battery cover by rotating in the direction of the arrow.
2. Insert battery with "+" side outward.
3. Replace battery cover.

PLEASE NOTE

Use only SR44 type battery.

Reverse Side -- How to Use →

SETTING THE ORIGIN

Set the origin to be used for measurement.

The origin is stored even when power is off, so it does not have to be reset every time power is turned on. When the battery is replaced, the origin will have to be reset.

1. Prepare instrument and ring gauge by cleaning measurement head and ring gauge inner diameter with appropriate cleaner.
2. Press the [⏏SET⏏] button to turn on power.
3. Press and hold the [⏏SET⏏] button for more than three seconds, "Set" will display on LCD and will start blinking when you release the button. Confirm that the displayed value matches the dimensions of the ring gauge standard. If they do not match, use the following procedure to modify.

With "Set" flashing on LCD, a long press on the [⏏SET⏏] button will move the blinking to the readout digits in sequence. A short press on the [⏏SET⏏] button will change the value at the cursor. Repeat until correct value has been entered and "Set" blinks.

4. Insert the measurement head into the ring gauge and turn the thimble until the measuring surfaces make contact with the inside of the ring gauge. Continue turning until ratchet stop "clicks" 1~3 times. **See Figure 1**
5. Press the [⏏SET⏏] button. The flashing "Set" will disappear. The displayed value should match the dimension of the ring gauge standard, and origin setting is complete.

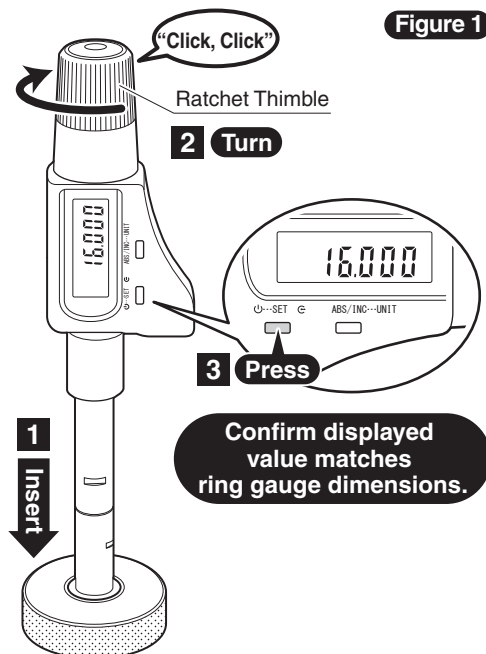


Figure 1

DEEP HOLE EXTENSION ROD

Use the following procedure and the special spanners provided to attach the deep hole extension rod.

1. Place the accessory spanners into the notches above and below the split in the rod and turn to separate the rod into two parts, the "gauge head" and "display unit." **See Figure 2**
2. Attach the extension rod to the measurement head and then attach to the display unit. Tighten with accessory spanners. **See Figure 3**
3. Re-set the origin using the procedure above -- "Setting the origin"

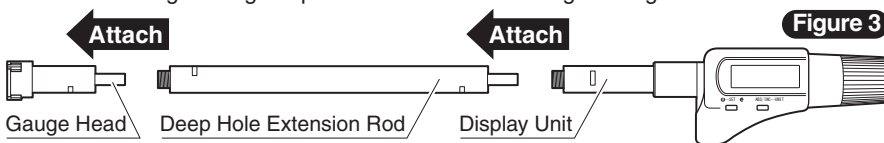


Figure 3

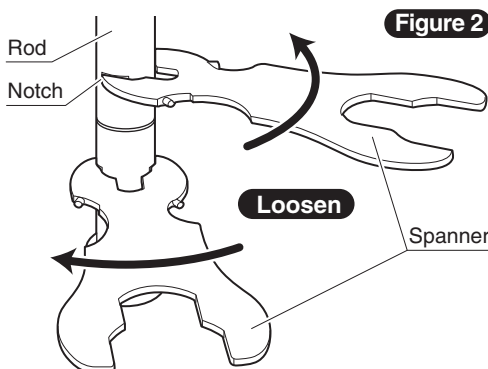


Figure 2

OPERATION

1. Remove any grease and dust from the measuring surfaces with a clean cloth, such as a lens cleaning cloth. Make sure no foreign objects are adhered to the surfaces.
2. Press the [⏏SET⏏] button to turn on power.
3. Make sure "ABS" is displayed on the LCD; press the [ABS/INC...UNIT] if required.
4. Insert the measurement head into object to be measured and turn ratchet thimble until the measuring surfaces make contact with the inside diameter. Continue turning until ratchet "clicks" 1~3 times and then read the measurement off the LCD display.

INC Mode

Press the [ABS/INC...UNIT] button to reset display to zero while retaining the origin setting in memory. To return to normal (absolute) measurement mode, press the [ABS/INC...UNIT] button again.

TROUBLESHOOTING

ERROR CONDITION	CORRECTIVE ACTION
Measured value is wrong	<ul style="list-style-type: none"> ● Check if measuring surfaces are dirty. Clean with lens cloth. ● Check to insure origin-point is correct. → refer to section "Setting the origin"
Gauge head does not retract	<ul style="list-style-type: none"> ● When stored at low temperature, or not used for a while, the internal grease may become stiff. Allow sufficient time for grease to warm up. ● Wearing dust-free gloves, use hand to push in.
<ul style="list-style-type: none"> ● Nothing is displayed on LCD ● Display is not stable ● Display is not clear 	<ul style="list-style-type: none"> ● Remove and reinsert battery to cycle power. ● Replace the battery.

※If error continues, or if you have any questions, please contact distributor or place of purchase.

※Please note, manufacturer is unable to respond to inquiries or provide service directly. Please contact distributor or place of purchase.

CAUTION

- Always remove dirt from measuring surfaces with a lens cloth before use.
- Do not turn thimble more than 3mm above upper measurement range.
- This is a precision instrument, handle with care. Do not drop or subject to excessive forces.
- Keep instrument away from direct sunlight or high temperatures such as in a car, or near a stove or heat source.
- Keep instrument away from water and oil.
- Please do not disassemble or modify.
- Remove dust and cutting chips after use and apply rust preventative oil to metallic surfaces. Please keep out of reach of children.
- When instrument will be idle for one month or more, please remove the battery to prevent damage from battery fluid leakage.
- Please do not use organic solvents to clean the instrument body.
- Only use as directed. Improper use may cause accident or injury.

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