

FEATURES

- Digital stainless steel caliper and electronic chrome-plated micrometer set
- Imperial and metric units
- Caliper capacity of 150 mm (6 in)
- Micrometer capacity of 0 to 25 mm (0 to 0.98 in)
- LCD display
- Silver-oxide SR44 battery included
- Lockable, foam-lined storage case
- Caliper accuracy of ± 0.03 mm (0.0015 in)
- Micrometer accuracy of ± 0.02 mm (0.001 in)
- Resolution of 0.01mm (0.0005 in)
- Caliper repeatability of 0.01 mm (0.0005in)
- Micrometer repeatability of 0.001mm (0.00005in)

RS PRO 150mm Digital Caliper & Micrometer Set 0.01 mm, Metric & Imperial

RS Stock No.: 841-2521



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

This digital caliper and electronic micrometer set lets you measure objects and distances in a broad range of situations. For convenience and versatility, it measures in both imperial and metric units. A handy case keeps it safe and ensures it's portable.

Both the caliper and the micrometer feature a clear LCD display that's easy to read, and they each run on a single silver-oxide battery. They're built for durability and resilience. The caliper's frame and jaws are made from hardened stainless steel, while the micrometer is chrome plated with tungsten-carbide anvils. The compact carry case for this set is lockable and foam-lined for protection and security.

General Specifications

Caliper Type	Digital
Imperial Or Metric	Both
Display Type	Digital
Accuracy	0.4mm, Micrometer $\pm 0.02\text{mm}$ (0.001 in)
Resolution	0.01mm
Repeatability	0.01mm (0.0005in), Micrometer 0.001mm (0.00005in)
Style Of Caliper	Standard
Set Contains	1 x Electronic Caliper: 150mm / 6in 1 x Electronic Micrometer: 0mm-25mm / 0in-1in
Applications	Manufacturing and workshop environments and is ideal for woodworking applications

Electrical Specifications

Power	Silver-oxide SR44
Battery	Yes
Battery Type	SR44

Mechanical Specifications

Capacity	150mm
External Jaw Length	40mm
Internal Jaw Length	18mm
Metric Grads	0.02mm
Accuracy External Jaws	±0.04mm
Accuracy Internal Jaws & Depth Rod	±0.04mm

Operation Environment Specifications

Operating Temperature	0°C to 40°C (Micrometer)
Storage Temperature	-20°C to 60 °C (Micrometer)

Protection Category

IP Rating	IP54
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Electronic Caliper

	<ul style="list-style-type: none"> Hardened stainless steel frame and measuring jaws Thumbroll adjustment Knurled locking screw Depth rod Clear LCD Display Large 11mm digits Inch/Metric conversion Origin setting Resolution: 0.01mm / 0.0005" Repeatability: 0.01mm / 0.0005" 4 Way measurement: Individual serial numbers Power: 1 x Silver oxide battery SR44 - 1.55v Operating temperature: 5 - 40°C Relative humidity: Maximum 80% Warranty: 1 year
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	<ul style="list-style-type: none"> 1 Metric/ Inch Conversion Button 2 Knurled Locking Screw 3 LCD Display 4 Depth Measuring Blade 5 Caliper Beam 6 Thumbroll Fine Adjustment 7 Battery Cover 8 Zero Set Button 9 Power Button ON/OFF 10 External Measuring Jaws 11 Step Measuring Faces 12 Internal Measuring Jaws
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Code	Range	Resolution	Repeatability	Accuracy	Ext. Jaw Length	Int. Jaw Length
8412518	150mm / 6"	0.01mm / 0.0005"	0.01mm / 0.0005"	±0.03mm	40mm	18mm

Electronic Caliper

OPERATING INSTRUCTIONS

When using the Caliper for the first time or after a period of non-use, wipe the beam scale with a dry clean cloth to remove any condensation or oil deposits.

Prior to setting the caliper for measuring, first clean the measuring faces with a soft clean cloth or paper.

Switch Caliper ON

Move Caliper jaws together.

Select required measuring mode Inch / Metric.

Zero display, caliper is now ready for direct measurement.

Caliper can be zeroed at any position within its range, to provide relative measurements.

Caliper provides 4 way measurements, External, Internal, Step and Depth.

OPERATING CARE

- Clean measuring faces with dry soft cloth
- Keep away from strong magnetic fields
- Prevent ingress of oil / liquids into electronics
- Remove battery if instrument is not used for a long period of time
- Do not disassemble or drop the instrument

Do not mark instrument by engraving, etching or any other permanent marking method, as this will invalidate the warranty

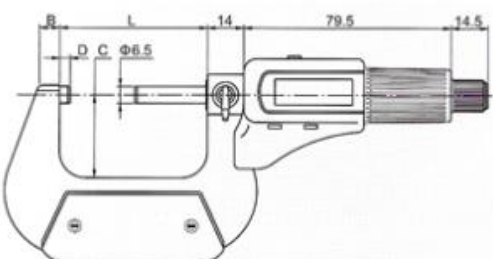
FAULT FINDING

Fault	Cause	Action
Display flashes	Battery voltage below 1.45volts	Replace battery
Display frozen	Circuit overload	Remove battery and replace after 4 minutes
Accuracy below specification but within +/- 0.1mm	Dirt in sensor	Remove slider cover assembly, clean face of sensor with dry clean compressed air (5kg/cm2)
No display	Poor battery contact	Remove battery and carefully adjust battery contacts, replace battery.
	Dead battery	Replace battery.

Electronic Micrometer

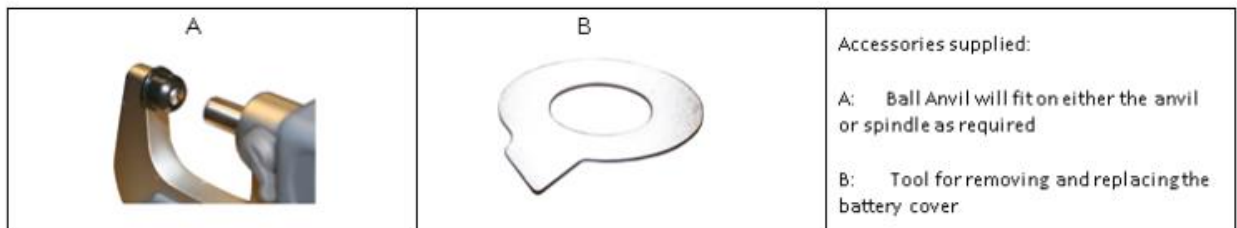
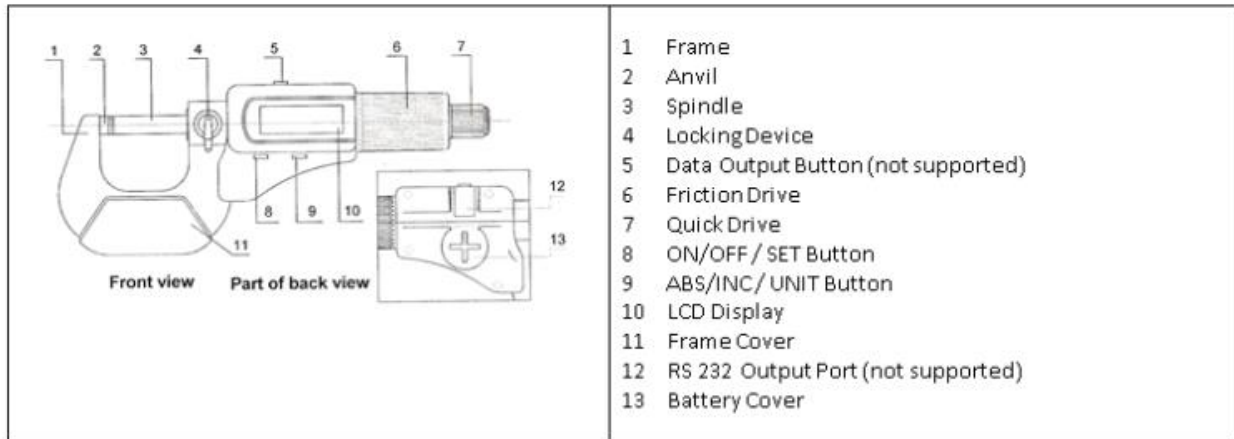


- Protection: IP 54 Splash Proof
- DIN 863/1
- Clear LCD Display
- Metric/Inch Conversion
- Relative & Absolute Modes
- Resolution 0.001mm/0.00005"
- Tungsten Carbide Anvils
- Auto Power Off after 5 minutes
- Friction Thimble
- Spindle Lock Lever
- Plastic Heat Guard
- Chrome Plated Frame
- Supplied with Ball Anvil Attachment
- Supplied in fitted case



Range	C	L	B	D	Accy
mm/Inch	mm	mm	mm	mm	mm
0-25/0-1"	24	32	6	3	0.002

- Repeatability: 0.001mm
- Measuring force: 5 – 10N
- Operating temperature; 0 to 40° C
- Relative humidity: Maximum 80%
- Power: 1 x SR44: 1.5V battery



Electronic Micrometer

<p>Display options</p>	<ul style="list-style-type: none"> Battery low voltage indicator ABS Absolute measuring mode INC Relative measuring mode Set Origin set Data output (not supported) in Inch or metric display
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Setting and Use Instructions

Clean micrometer spindle and measuring anvils with soft cloth or paper to remove any oil or particles which may affect the measurements

Ensure that the micrometer is thermally stabilised with the temperature where it is to be used

Ensure that the spindle lock is off

Absolute Measurement

Press and release the ON/OFF / SET button to power up the micrometer. (ABS will show on the display)

Choose either inch or metric measuring system by pressing the ABS/INC / UNIT button for 2 seconds (mm or in will show on the display)

Advance the spindle towards the fixed anvil. Use the friction thimble to finally close the 2 anvils together. Rotate the thimble 1 ½ to 2 revolutions to exert a constant measuring force

To zero the micrometer in this position press and hold the ON/OFF / SET button for 2 seconds

The micrometer is now ready to use in Absolute mode

Relative Measurement

Press and release the ON/OFF / SET button to power up the micrometer. (ABS will show on the display)
 Seat the micrometer anvil and spindle across the desired setting piece using the friction thimble
 Press and release the ASBS/INC / UNIT button (INC will show on the display) and the display will show zero
 The micrometer is now ready to take measurements and will indicate either + or – variations from the original setting piece size

Operating Care

Clean measuring faces with a clean soft cloth only
 Do not use any organic solvent for cleaning such as acetone etc.
 Keep instrument away from strong magnetic fields and high voltage environments which can affect the correct working of the electronic pack
 Prevent the ingress of oil and liquids into the electronics
 Do not use or store the micrometer in direct sunlight, or in an excessively hot or cold environment
 The Instrument can be turned on by either using the ON/OFF button or simply by turning the thimble
 To conserve the battery the instrument should be turned off using the ON/OFF button or it will turn off automatically after 5 minutes of non use
 Remove battery if the instrument is not to be used for a long period of time
 Do not disassemble or drop the instrument

Electronic Micrometer

Specifications:

Measuring Force: 5 – 10N
 Power Consumption: Greater than 35 milliamps
 Operating Temperature: 0 – 40 deg.C
 Storage Temperature: -20 to 60 deg. C
 Protection Class: IP54 (resistant to water splash)

Fault Finding

Failure	Causes	Remedy
Display: "E 1"	Measured value is over display range	Reset the origin or change to relative mode
Display: "E 3"	1 The micrometer is disturbed 2 Something wrong with sensor	1 Reset the battery 2 return the micrometer for repair
Measured value is not correct	1 Measuring surfaces are not clean 2 The origin is incorrect	1 Clean measuring surfaces 2 Reset the origin
Display is confused or dead	Strong disturbance to micrometer	Reset battery
No display Display is blurring Battery sign appears	Battery voltage below 1.45V	Replace battery