Product: Digital Caliper and Mechanical Micrometer Set

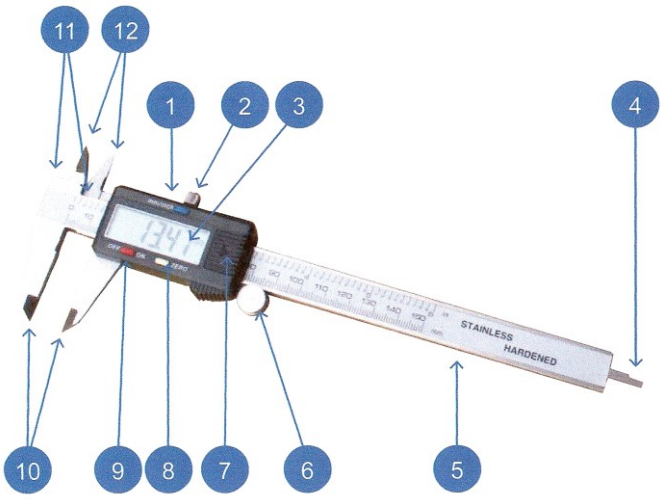
Digital Caliper and Mechanical Micrometer Set
Set contains:
1 x Electronic Caliper: 150mm/6”
1 x Mechanical Micrometer: 0-25mm
Housed in a fitted storage case

Packed Weight and Dimensions

Code	Description	Weight g	W mm	H mm	L mm
50-100-900	Digital / Mechanical Measuring Set: Metric	723	140	45	255

Electronic Caliper

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



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

Code	Range	Resolution	Repeatability	Accuracy	Ext. Jaw Length	Int. Jaw Length
49-923-150	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

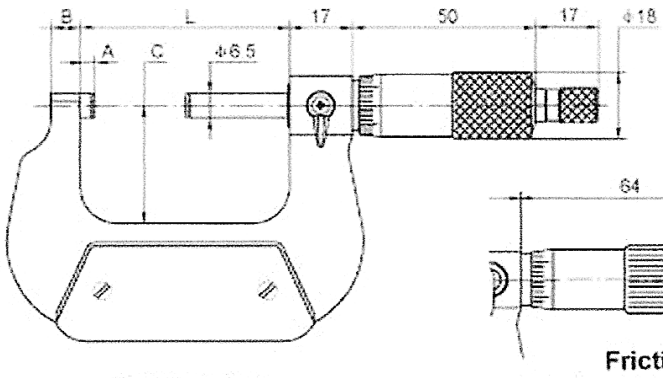
Clean measuring faces with dry soft cloth
Keep away from strong magnetic fields
Prevent ingress of oil / liquids into electronics
Remove battery if instrument is not used for a long period of time
Do not disassemble or drop the instrument
Do not mark instrument by engraving, etching or any other permanent marking method, as this will invalidate the warranty

FAULT FINDING

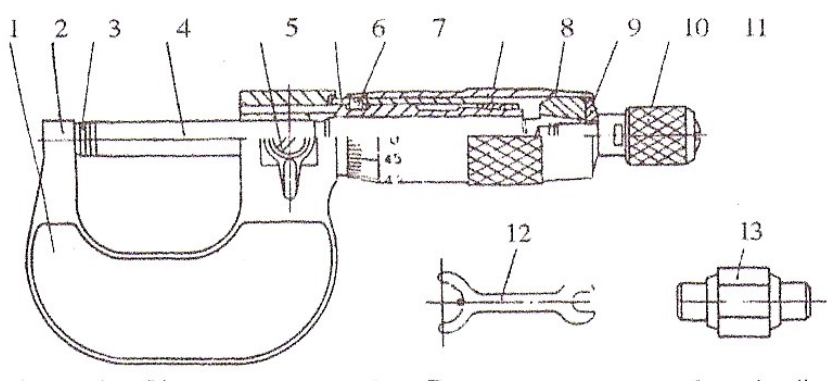
Fault	Cause	Action
Display flashes	Battery voltage below 1.45volts	Replace battery
Display frozen	Circuit overload	Remove battery and replace after 4 minutes
Accuracy below specification but within +/- 0.1mm	Dirt in sensor	Remove slider cover assembly, clean face of sensor with dry clean compressed air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

Mechanical Micrometers 50-100-Series

Accuracy conforms to DIN 863
Resolution: Metric 0.01mm, Inch 0.0001”
Models above 25mm / 1” supplied with setting rod
Micro fine graduations for accurate reading
Tungsten carbide measuring faces
Spindle locking lever
Ratchet stop
Non-glare satin chrome barrel and sleeve
Blue baked enamel hammer tone finish
Supplied in fitted case with adjustment tools



Code	Range	Code	Range	Style	A mm	B mm	C mm	L mm	Accuracy mm
Metric	mm	Inch	inch						
50-100-025	0-25	50-100-001	0-1	A	3.0	6	24.0	32	0.004



1 Heat Resistant Plate
2 Frame
3 Anvil
4 Spindle
5 Spindle Lock
6 Sleeve
7 Thimble
8 Barrel
9 Taper
10 End Cap
11 Ratchet Stop
12 Spanner
13 Setting Standard

Mechanical Micrometers 50-100-Series

Cleaning and Basic Checking Procedure

Remove any oil, grease, dust or small particles which may cause damage to the micrometer or affect its accuracy when taking measurements. Use a soft lint free cloth or paper together with a proprietary instrument cleaning agent. Do not use acetone as this can damage parts of the micrometer

Zero Point Checking and Adjustment

Use the ratchet stop to move the spindle until it touches the fixed anvil. Allow the ratchet to turn 1 ½ to 2 revolutions for the final positioning
The zero point on the thimble should now coincide with the reference graduated base line on the sleeve
For micrometers above 25mm / 1" use the supplied setting standard or a gauge block to check the zero position
If the zero point does not line up as required, it can be corrected by using the following procedure
When the zero point deviation on the thimble is under 2 divisions from the graduated base line
Turn the sleeve using the "C" spanner provided until correct alignment is achieved
When the zero point deviation on the thimble is over 2 divisions from the graduated base line
Hold the frame and the thimble and loosen the ratchet stop using the spanner provided
Disconnect the coupling of the thimble to the spindle by giving a light shock to the side of the thimble
Turn the thimble until the zero point is in alignment with the base line on the sleeve
Press the thimble against the spindle and re tighten with the spanner to achieve a positive coupling
Re check the zero position, any final small adjustment can now be made using the "C" spanner to re position the sleeve to the thimble zero

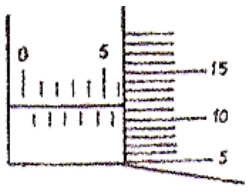
Reading the Micrometer

When reading the micrometer ensure that your line of sight is directly above the graduated scale on the sleeve and the thimble scale to avoid parallax reading errors

Ensure that the micrometer and the work piece are at the same temperature

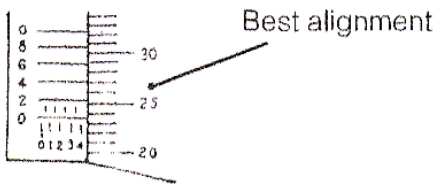
Handle the instrument with care, if it is dropped or knocked in any way it must be rechecked for correct working and accuracy as above

Reading Example: Metric



Example for division 0.01mm
Reading:
From Sleeve: 6mm
From thimble: 0.11mm
Final readings should be
6. + 0.11 = 6.11mm

Reading Example: Inch



Example for division 0.002mm
Reading:
From Sleeve: 4mm
From thimble: 0.23mm
From vernier of sleeve:
0.004mm
Final readings should be
4 + 0.23 + 0.004 = 4.234mm