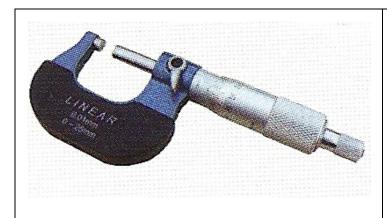
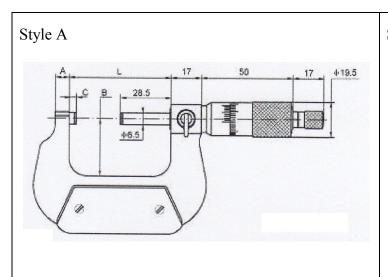
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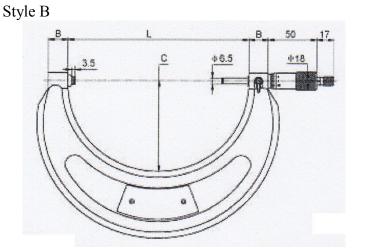
## Mechanical Micrometers 50-100-Series



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





Style A

Code	Range	Code	Range	A	В	С	L	Accuracy
				mm	mm	mm	mm	mm
Metric	mm	Inch	inch					
50-100-025	0-25	50-100-001	0-1	6.0	24	3.0	32	0.004
50-100-050	25-50	50-100-002	1-2	8.0	32	3.0	57	0.004
50-100-075	50-75	50-100-003	2-3	8.0	45	3.0	82	0.005
50-100-100	75-100	50-100-004	3-4	8.0	57	3.0	107	0.005
50-100-125	100-125	50-100-005	4-5	8.0	70	3.0	133	0.006
50-100-150	125-150	50-100-006	5-6	8.0	82	3.0	158	0.006
50-100-175	150-175	50-100-007	6-7	8.0	95	5.5	183	0.007
50-100-200	175-200	50-100-008	7-8	8.0	107	5.5	209	0.007

Style B

Code	Range	Code	Range	В	С	L	Accuracy
				mm	mm	mm	mm
Metric	mm	Inch	inch				
50-100-225	200-225	50-100-009	8-9	20	124.0	235.8	0.008
50-100-250	225-250	50-100-010	9-10	20	136.5	261.2	0.008
50-100-275	250-275	50-100-011	10-11	20	149.0	286.6	0.009
50-100-300	275-300	50-100-012	11-12	20	162.0	312.0	0.009

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## Mechanical Micrometers 50-100-Series

# Packed Weight and Dimensions

Code	Range	Code	Range	Weight g	W mm	H mm	L mm
Metric	mm	Inch	inch				
50-100-025	0-25	50-100-001	0-1	317	83	29	157
50-100-050	25-50	50-100-002	1-2	465	98	29	195
50-100-075	50-75	50-100-003	2-3	604	113	30	218
50-100-100	75-100	50-100-004	3-4	775	132	30	250
50-100-125	100-125	50-100-005	4-5	1150	170	48	305
50-100-150	125-150	50-100-006	5-6	1525	190	48	335
50-100-175	150-175	50-100-007	6-7	1745	230	38	380
50-100-200	175-200	50-100-008	7-8	1950	265	38	425
50-100-225	200-225	50-100-009	8-9	1655	250	38	420
50-100-250	225-250	50-100-010	9-10	1850	290	40	500
50-100-275	250-275	50-100-011	10-11	2060	290	40	500
50-100-300	275-300	50-100-012	11-12	2760	365	40	555

# Mechanical Micrometer Sets 50-200-Series



Sets contain micrometers from the 50-100-series and have the same specifications

All sets supplied with setting rods and adjustment tools and housed in deluxe fitted boxes

Code	Metric Range	Graduation	Code	Inch Range	Graduation	Micrometers
	mm	mm		inch	inch	In set
50-200-075	0-75	0-01	50-200-003	0-3	0-0001	3
50-200-100	0-100	0-01	50-200-004	0-4	0-0001	4
50-200-150	0-150	0-01	50-200-006	0-6	0-0001	6
50-200-200	150-300	0-01	50-200-009	6-12	0-0001	6
50-200-300	0-300	0-01	50-200-012	0-12	0-0001	12

# Packed Weight and Dimensions

Code	Metric Range	Code	Inch Range	Weight g	W mm	H mm	L mm
	mm		inch				
50-200-075	0-75	50-200-003	0-3	1520	220	60	320
50-200-100	0-100	50-200-004	0-4	2515	275	60	395
50-200-150	0-150	50-200-006	0-6	4785	320	165	170
50-200-200	150-300	50-200-009	6-12	13510	520	335	310
50-200-300	0-300	50-200-012	0-12	18590	550	340	420

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#### Mechanical Micrometers

#### **Instructions and Care**

Check all new and in use micrometers for correct zero setting prior to use

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

Larger micrometers should be clamped in a suitable stand to make setting easier

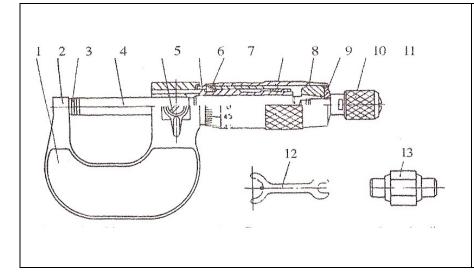
Ensure that the spindle lock is off

For 0-25mm and 0-1" micrometers: Advance the spindle towards the fixed anvil. Use the ratchet stop to finally close the 2 anvils together. Rotate the ratchet stop 1 ½ to 2 revolutions to exert a constant measuring force For larger micrometers a setting standard should be placed between the anvils and the ratchet stop should be used as above to obtain the zero position

In the closed position the zero position on the thimble should coincide with the horizontal line on the sleeve If the two lines do not coincide, small adjustments can be made by using the "C" spanner provided Insert the "C" spanner into the hole at the back of the sleeve and gently turn the sleeve in the direction required to achieve line up

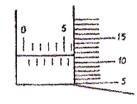
The micrometer is now set and ready for use

Clean micrometers and check zero position regularly during use to ensure their continued accuracy After use always clean and replace the micrometer in its box



- 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

Reading Examples: Metric

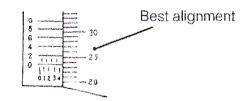


Example for division 0.01mm

Reading:

From Sleeve: 6mm
From thimble: 0.11mm
Final readings should be

6. + 0.11 = 6.11mm



Example for division 0.002mm

Reading:

From Sleeve: 4mm
From thimble: 0.23mm
From vernier of sleeve:

0.004mm

Final readings should be

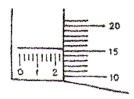
4 + 0.23 + 0.004 = 4.234mm

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#### Mechanical Micrometers

Reading Examples: Inch



Example for division .001"

Reading:

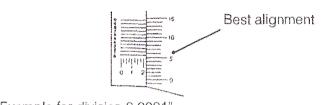
From sleeve:

$$.2 + .025 = .225$$
"

From thimble: .0150"

Final readings should be:

.2000" + .0250" + .0150" = .2400"



Example for division 0.0001"

Reading:

From Sleeve:

$$.2 + .025 = .225$$
"

From thimble: .0050"

From vernier of sleeve: .0004"

Final readings should be

.2000" + .0250" + .0050" + .0004" = .2304"

### 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

Before use check that the ratchet mechanism functions correctly

Check the spindle movement by using the ratchet stop to traverse the spindle though it's complete travel

Check that the measuring faces are in good condition

Check the locking mechanism works correctly

## 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

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