

Micrometer

The origin of Mitutoyo's trustworthy brand of small tool instruments

Indicating Micrometers SERIES 510

- Suited to the measurement of low-volume manufactured parts.
- Easy to use when operating one-handed due to retractable anvil.
- In the 25 mm measuring range, the model lineup offers a choice of left or right positioning of the anvil-retraction button.
- Greatly improved accuracy: indication error and graduation of 1 μm .
- IP protection level: 54, coolant-splash resistant during grinding process.
- Hard-coated crystal: enhanced oil and scratch resistance.
- Indicator scale is large and easy to read.
- The zero position and adjustable limit markers, for GO/ \pm NG testing, are easily set.
- Measuring faces: Carbide.

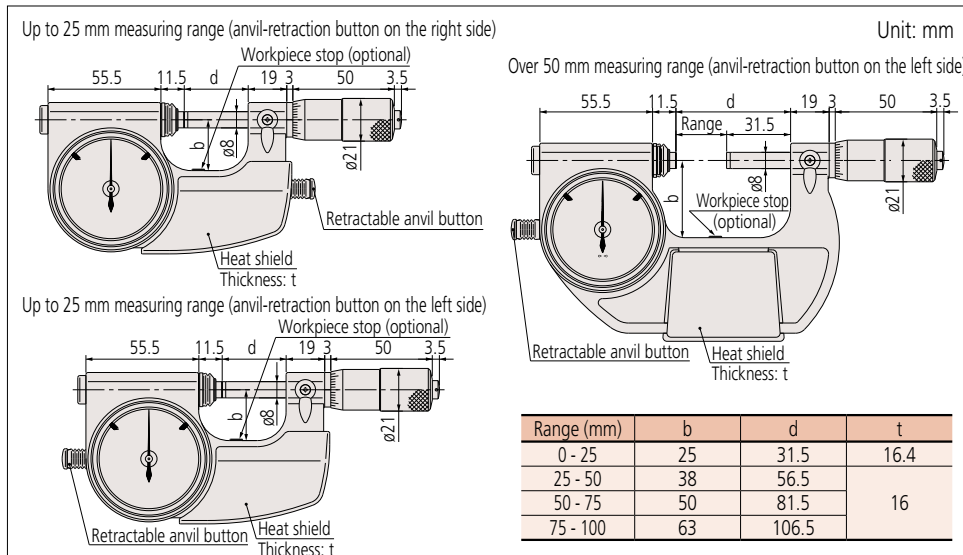


SPECIFICATIONS

Metric							
Order No.	Range (mm)	Indicating range (mm)	Graduation (mm)	Dial graduation (mm)	Measuring force (N)	Anvil retraction button	Mass (g)
510-121	0 - 25	± 0.06	0.001	0.001	5 - 10	Right side	520
510-141						530	
510-122	25 - 50					670	
510-123	50 - 75					820	
510-124	75 - 100	970					

Inch							
Order No.	Range (in)	Indicating range (in)	Graduation (in)	Dial graduation (in)	Measuring force (N)	Anvil retraction button	Mass (g)
510-131	0 - 1	± 0.0023	0.0001	0.00005	5 - 10	Right side	520
510-151						530	
510-132	1 - 2					670	
510-133	2 - 3					820	
510-134	3 - 4	970					

DIMENSIONS



Technical Data

- Flatness: 0.3 $\mu\text{m}/0.000012$ in
- Parallelism: 0.6 $\mu\text{m}/0.000024$ in for models up to 50 mm/2 in
1 $\mu\text{m}/0.00004$ in for models over 50 mm/2 in
- Accuracy: $\pm 2 \mu\text{m}/\pm 0.0001$ in
- Spindle feed error: 3 $\mu\text{m}/0.00015$ in
- Dispersion of indication: 0.4 $\mu\text{m}/0.00002$ in
- Dial indication accuracy: 1 $\mu\text{m}/0.00005$ in

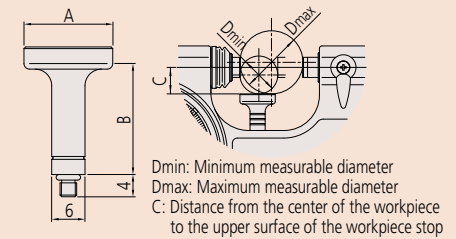
Standard Accessories

Reference bar, 1 pc.
(except for measuring range 0-25 mm (0-1 in) models)
Spanner (200154), 1 pc.

Workpiece Stop (optional)

- Produces more stable measurement.
- Three types are available to suit workpieces of different sizes.

Range	Unit: mm	
	A	B
Workpiece stop A 04AZA124	$\phi 16$	23
Workpiece stop B 04AZA125	$\phi 14$	20.5
Workpiece stop C 04AZA126	$\phi 14$	15



- Order No 510-121, 510-141, 510-131, 510-151 Unit: mm

	Dmin	Dmax	C
Workpiece stop A	N/A	N/A	N/A
Workpiece stop B	4	16	5.0
Workpiece stop C	15	25	10.5

- 510-122 and 510-132

	Dmin	Dmax	C
Workpiece stop A	25	37	15.5
Workpiece stop B	30	42	18.0
Workpiece stop C	41	50	23.5

- 510-123 and 510-133

	Dmin	Dmax	C
Workpiece stop A	50	61	27.5
Workpiece stop B	54	66	30.0
Workpiece stop C	65	75	35.5

- 510-124 and 510-134

	Dmin	Dmax	C
Workpiece stop A	75	87	40.5
Workpiece stop B	80	92	43.0
Workpiece stop C	91	100	48.2