

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 25mm 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 1µm.
- Water-proof to protection level IP54.
- 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/±NG testing, are easily set.
- Measuring faces: Carbide



510-121



510-141



SPECIFICATIONS

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

Inch							
Order No.	Range	Indicating range	Graduation	Dial graduation	Measuring force	Anvil retraction button	Mass
510-131	0 - 1"	±.0023"	.0001"	.00005"	5 - 10N	Right side	520g
510-151						530g	
510-132	1" - 2"					Left side	670g
510-133	2" - 3"					820g	
510-134	3" - 4"	970g					

DIMENSIONS

Up to 25mm measuring range (anvil-retraction button on the right side) Unit: mm

Over 50mm measuring range (anvil-retraction button on the left side)

Up to 25mm measuring range (anvil-retraction button on the left side)

Range	b	d	t
0 - 25mm	25	31.5	16.4
25 - 50mm	38	56.5	16
50 - 75mm	50	81.5	
75 - 100mm	63	106.5	



(Refer to page X for details.)

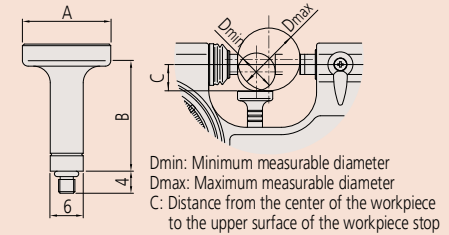
Technical Data

Flatness: 0.3µm/.000012"
 Parallelism: 0.6µm/.000024" for models up to 50mm/2"
 1µm/.00004" for models over 50mm/2"
 Accuracy: ±2µm
 Spindle feed error: 3µm/.00015"
 Dispersion of indication: 0.4µm/.00002"
 Dial indication accuracy: 1µm/.00005"
 Standard accessories: Reference bar, 1 pc
 (except for measuring range 0-25mm (0-1") models)
 Spanner (200154), 1 pc

Workpiece stop (optional)

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

Range	Unit: mm	
	A	B
Workpiece stop A 04AZA124	ø16	23
Workpiece stop B 04AZA125	ø14	20.5
Workpiece stop C 04AZA126	ø14	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