

Micrometer

Indicating Micrometers SERIES 510

- The micrometer with a built-in dial indicator enables accurate Go/No-go judgement without interruption. Pushing the retractable anvil button causes the anvil and pointer to move, enabling speedy measurements.
- Easy to use when operating one-handed due to retractable anvil.
- Measuring faces: Carbide tipped
- In the 25 mm measuring range, models are available that offer 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.



510-121

SPECIFICATIONS

Metric												
Code No.	Range (mm)	Spindle feed error (μm)	Flatness (μm)	Parallelism (μm)	Dispersion of indication (μm)	Dial indication accuracy (μm)	Indicating range (mm)	Graduation (mm)	Dial graduation (mm)	Measuring force (N)	Anvil retraction button	Mass (g)
510-121	0 - 25	3	0.3	0.6	0.4	1	± 0.06	0.001	0.001	5 - 10	Right side	520

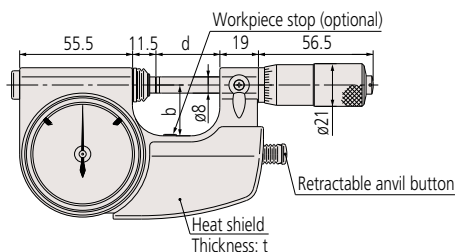
Inch												
Code No.	Range (in)	Spindle feed error (in)	Flatness (in)	Parallelism (in)	Dispersion of indication (in)	Dial indication accuracy (in)	Indicating range (in)	Graduation (in)	Dial graduation (in)	Measuring force (N)	Anvil retraction button	Mass (g)
510-131	0 - 1	0.00015	0.000012	0.000024	0.00002	0.00005	± 0.0023	0.0001	0.00005	5 - 10	Right side	520

• Standard Accessories: Spanner (200154), 1 pc.

DIMENSIONS

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

Unit: mm



Range (mm)	b	d	t
0 - 25	25	31.5	16.4



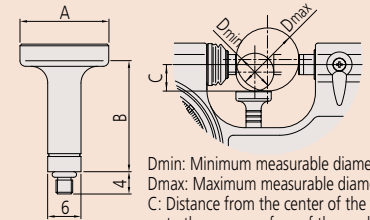
Measurement example



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



Dmin: Minimum measurable diameter
Dmax: Maximum measurable diameter
C: Distance from the center of the workpiece to the upper surface of the workpiece stop

• Code 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



Tài liệu được tổng hợp bởi đội ngũ kỹ thuật của NPOWER
Bản quyền nội dung thuộc về Mitutoyo

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Measurement example



510-141

SPECIFICATIONS

Metric												
Code No.	Range (mm)	Spindle feed error (μm)	Flatness (μm)	Parallelism (μm)	Dispersion of indication (μm)	Dial indication accuracy (μm)	Indicating range (mm)	Graduation (mm)	Dial graduation (mm)	Measuring force (N)	Anvil retraction button	Mass (g)
510-141	0 - 25	3	0.3	0.6	0.4	1	±0.06	0.001	0.001	5 - 10	Left side	530
510-122	25 - 50			670								
510-123	50 - 75			820								
510-124	75 - 100			970								

Inch												
Code No.	Range (in)	Spindle feed error (in)	Flatness (in)	Parallelism (in)	Dispersion of indication (in)	Dial indication accuracy (in)	Indicating range (in)	Graduation (in)	Dial graduation (in)	Measuring force (N)	Anvil retraction button	Mass (g)
510-151	0 - 1	0.00015	0.000012	0.000024	0.00002	0.00005	±0.0023	0.0001	0.00005	5 - 10	Left side	530
510-132	1 - 2			670								
510-133	2 - 3			820								
510-134	3 - 4			970								

• Standard Accessories: Setting standard, 1 pc. (except for measuring range 0 to 25 mm (0 to 1 in) models)
Spanner (200154), 1 pc.

DIMENSIONS

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

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

Unit: mm

Range (mm)	b	d	t
0 - 25	25	31.5	16.2
25 - 50	38	56.5	16
50 - 75	50	81.5	
75 - 100	63	106.5	



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