

# Micrometer

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

## Outside Micrometers SERIES 102

- Heat-insulated frame.
- Cut-away frame (behind anvil) for measuring in hard-to-reach places.
- Equipped with Ratchet Stop for constant measuring force.
- Measuring faces: Carbide.
- In addition to standard specification, a non-rotating spindle type tooth thickness micrometer (refer to page B-33 for details) is also available.



Ratchet stop  
102-301

## SPECIFICATIONS

### Metric

Order No.	Range (mm)	Graduation (mm)	Maximum permissible error $J_{MPE}$ (μm)	Flatness (μm)	Parallelism (μm)	Constant-force device
102-301	0 - 25	0.01	±2	0.6	2	Ratchet stop
102-302	25 - 50					
102-303	50 - 75					
102-304	75 - 100		±3		3	

### Metric

Order No.	Range (mm)	Graduation (mm)	Maximum permissible error $J_{MPE}$ (μm)	Flatness (μm)	Parallelism (μm)	Constant-force device
102-311	0 - 25	0.001	±1	0.3	1	Ratchet stop
102-313						Friction thimble
102-312	25 - 50					Ratchet stop

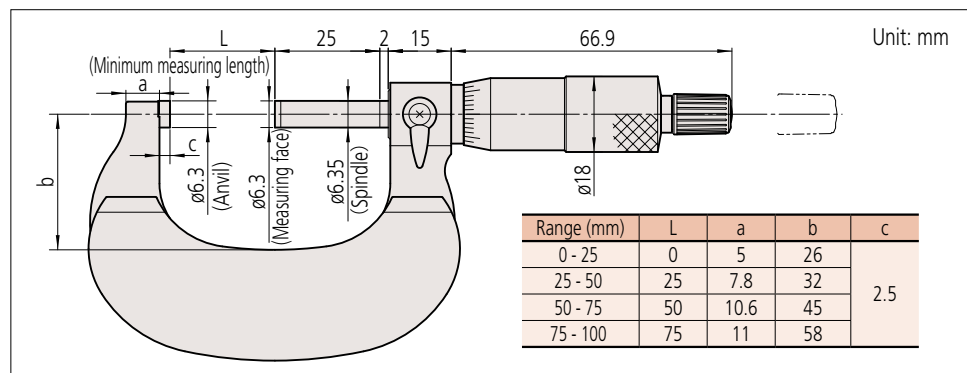
### Inch

Order No.	Range (in)	Graduation (in)	Maximum permissible error $J_{MPE}$ (in)	Flatness (in)	Parallelism (in)	Constant-force device
102-327-10	0 - 1	0.0001	±0.0001	0.000024	0.00008	Ratchet stop
102-329-10						Friction thimble
102-328-10	1 - 2					Ratchet stop
102-330-10						Friction thimble
102-331-10	2 - 3				0.00012	Ratchet stop
102-332-10	3 - 4		±0.00015			Ratchet stop

### Metric Micrometer set

Order No.	Range (mm)	Models included
102-911-40	0 - 100 (Four micrometers per set)	<ul style="list-style-type: none"> <li>• 102-301</li> <li>• 102-302</li> <li>• 102-303</li> <li>• 102-304</li> <li>• 3 micrometer standards</li> </ul>

## DIMENSIONS



An inspection certificate is supplied as standard.  
Refer to page U-9 for details.

## Common specifications

- Measuring force: 5 to 10 N
- Standard accessories: Reference bar, 1 pc. (except for measuring range 0 to 25 mm models)
- Spanner (301336), 1 pc. (for measuring range 0 to 25 mm/25 to 50 mm models)
- Spanner (200877), 1 pc. (for measuring range 50 to 75 mm/75 to 100 mm models)

Ratchet stop type



Friction thimble type



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