

Micrometer

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-40 for details) is also available.



SPECIFICATIONS

| Metric    |            |                 |                     |                                          |               |                  |                          |  |  |
|-----------|------------|-----------------|---------------------|------------------------------------------|---------------|------------------|--------------------------|--|--|
| Order No. | Range (mm) | Graduation (mm) | Measuring force (N) | Maximum permissible error $J_{MPE}$ (μm) | Flatness (μm) | Parallelism (μm) | Constant measuring force |  |  |
| 102-301   | 0 - 25     | 0.01            | 5 - 10              | ±2                                       | 0.6           | 2                | Ratchet stop             |  |  |
| 102-302   | 25 - 50    |                 |                     |                                          |               |                  |                          |  |  |
| 102-303   | 50 - 75    |                 |                     | ±3                                       |               | 3                |                          |  |  |
| 102-304   | 75 - 100   |                 |                     |                                          |               |                  |                          |  |  |

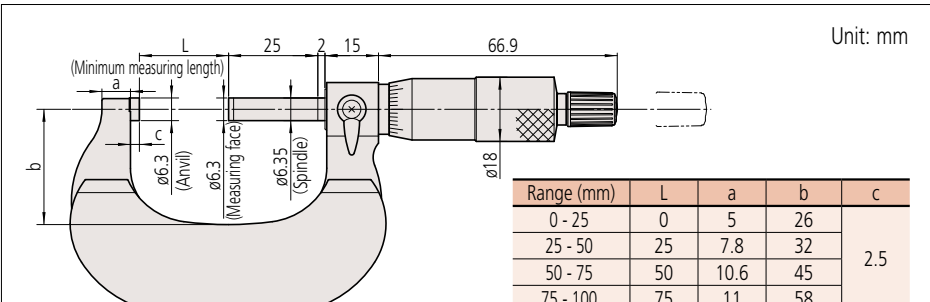
| Metric    |            |                 |                     |                                                       |               |                  |                          |
|-----------|------------|-----------------|---------------------|-------------------------------------------------------|---------------|------------------|--------------------------|
| Order No. | Range (mm) | Graduation (mm) | Measuring force (N) | Maximum permissible error <i>J<sub>MPE</sub></i> (μm) | Flatness (μm) | Parallelism (μm) | Constant measuring force |
| 102-311   | 0 - 25     | 0.001           | 5 - 10              | ±1                                                    | 0.3           | 1                | Ratchet stop             |
| 102-313   |            |                 |                     |                                                       |               |                  | Friction thimble         |
| 102-312   | 25 - 50    |                 |                     |                                                       |               |                  | Ratchet stop             |

| Inch       |            |                 |                     |                                          |               |                  |                          |
|------------|------------|-----------------|---------------------|------------------------------------------|---------------|------------------|--------------------------|
| Order No.  | Range (in) | Graduation (in) | Measuring force (N) | Maximum permissible error $J_{MPE}$ (in) | Flatness (in) | Parallelism (in) | Constant measuring force |
| 102-327-10 | 0 - 1      | 0.0001          | 5 - 10              | ±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                                    |               | Ratchet stop     |                          |
| 102-332-10 | 3 - 4      |                 |                     | ±0.00015                                 |               | 0.00012          | Ratchet stop             |

| Metric     |                                       |                                                                        | Micrometer set |
|------------|---------------------------------------|------------------------------------------------------------------------|----------------|
| Order No.  | Range (mm)                            | Models included                                                        |                |
| 102-911-40 | 0 - 100<br>(Four micrometers per set) | • 102-301<br>102-302<br>102-303<br>102-304<br>• 3 micrometer standards |                |

- Standard accessories: Setting standard, 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)

DIMENSIONS



Measurement example



Mechanism

