# Mitutoyo 

Catalogue No. MAP 20


MEASURING INSTRUMENTS CATALOGUE


Mitutoyo Asia Pacific

## 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-35 for details) is also available.



## SPECIFICATIONS

Metric

| Order No. | Range (mm) | Graduation <br> $(\mathrm{mm})$ | Maximum permissible <br> error JMPE $(\mu \mathrm{m})$ | Flatness <br> $(\mu \mathrm{m})$ | Parallelism <br> $(\mu \mathrm{m})$ | Constant-force device |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 0 2 - 3 0 1}$ | $0-25$ | 0.01 | $\pm 2$ | 0.6 | 2 | Ratchet stop |
| $\mathbf{1 0 2 - 3 0 2}$ | $\mathbf{2 5 - 5 0}$ |  |  | 2 |  |  |

Metric

| Order No. | Range (mm) | Graduation (mm) | Maximum permissible error JMPE ( $\mu \mathrm{m}$ ) | Flatness ( $\mu \mathrm{m}$ ) | $\begin{gathered} \hline \text { Parallelism } \\ (\mu \mathrm{m}) \end{gathered}$ | Constant-force device |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 102-311 | 0-25 | 0.001 | $\pm 1$ | 0.3 | 1 | Ratchet stop |
| 102-313 |  |  |  |  |  | friction thimble |
| 102-312 | 25-50 |  |  |  |  | Ratchet stop |
| 102-303 | 50-75 | 0.01 | $\pm 2$ | 0.6 | 2 |  |
| 102-304 | 75-100 |  | $\pm 3$ |  |  |  |

Metric Micrometer set

| Order No. | Range $(\mathrm{mm})$ | Models included |
| :---: | :---: | :---: |
|  |  | $\bullet 102-301$ |
| $102-911-40$ | $0-100$ | $102-302$ |
|  | (Four micrometers per set) | $102-303$ |
|  |  | $102-304$ |
|  |  | 3 micrometer standards |

## DIMENSIONS



## 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 $25 \mathrm{~mm} / 25$ to 50 mm models)
Spanner (200877), 1 pc.
(for measuring range 50 to $75 \mathrm{~mm} / 75$ to 100 mm models)


