

## Technical Data

Graduation: $0.01 \mathrm{~mm}, 0.001 \mathrm{~mm}, .001$ " or .0001 "
Flatness: $\quad 0.6 \mu \mathrm{~m} / .000024^{\prime \prime}$
Parallelism: $2 \mu \mathrm{~m} / .00008^{\prime \prime}$
Measuring faces: Carbide tipped
Measuring force: 5-10N


Rotating the thimble/speeder sleeve when the workpiece is between the anvil and spindle causes the ratchet mechanism to tap the spindle and apply a constant measuring force to the workpiece.

Thimble sleeve
Speeder sleeve


Ratchet mechanism


## Ratchet Thimble Micrometer

SERIES 101, 102 - New smoother action Ratchet Thimble

## FEATURES

- Ratchet function works both from the thimble and the speeder, allowing easy one-handed operation.
- Clearly audible ratchet operation for reassurance that measurement is being performed at constant, preset force.
- Provided with a Certificate of Inspection.
-With a standard bar except for 0-25mm and 0-1" models.
- Supplied in fitted plastic case.


102-908S
Set includes a 102-717 and 102-718. Also included in the set are two each of the red, yellow and blue color speeder sleeves.

## SPECIFICATIONS

| Metric |  |  |  |
| :--- | :--- | :--- | :--- |
| Range | Graduation | Order No. | Accuracy |
| $0-25 \mathrm{~mm}$ | 0.01 mm | $102-701$ | $\pm 2 \mu \mathrm{~m}$ |
| $0-25 \mathrm{~mm}$ | 0.001 mm | $102-707^{*}$ | $\pm 2 \mu \mathrm{~m}$ |
| $25-50 \mathrm{~mm}$ | 0.01 mm | $102-702$ | $\pm 2 \mu \mathrm{~m}$ |
| $25-50 \mathrm{~mm}$ | 0.001 mm | $102-708^{*}$ | $\pm 2 \mu \mathrm{~m}$ |

* 0.001 mm reading is obtained with vernier.

Inch

| Range | Graduation | Order No. | Accuracy |
| :--- | :--- | :--- | :--- |
| $0-1^{\prime \prime}$ | $.001^{\prime \prime}$ | $101-711$ | $\pm .0001^{\prime \prime}$ |
|  | $.0001^{\prime \prime}$ | $101-717^{*}$ | $\pm .0001^{\prime \prime}$ |
|  | $.001^{\prime \prime}$ | $102-711$ | $\pm .0001^{\prime \prime}$ |
|  | $.0001^{\prime \prime}$ | $102-717^{*}$ | $\pm .0001^{\prime \prime}$ |
| $1-2{ }^{\prime \prime}$ | $.001^{\prime \prime}$ | $102-712$ | $\pm .0001^{\prime \prime}$ |
|  | $.0001^{\prime \prime}$ | $102-718^{*}$ | $\pm .0001^{\prime \prime}$ |

*. 0001 " reading is obtained with vernier.

| Inch | Micrometer set 0001 " Graduation model |  |
| :--- | :--- | :--- |
| Range | Order No. | Included in set |
| $0-2{ }^{\prime \prime}$ | $102-908 \mathrm{~S}$ | $102-717,102-718$ |
| 2 pcs. set |  | 6 pcs. of speeder sleeves |

DIMENSIONS AND MASS

Unit: mm


## Outside Micrometers

## SERIES 102

## FEATURES

- Heat-insulated frame, tapered (on the anvil side) for hard-to-reach places.
- With a standard bar except for $0-25 \mathrm{~mm}$ / 0-1" model.



## SPECIFICATIONS

| Metric |  |  |  |
| :--- | :--- | :--- | :--- |
| With ratchet stop |  |  |  |
| Range | Graduation | Order No. | Accuracy |
| - 25 mm | 0.01 mm | $102-301$ | $\pm 2 \mu \mathrm{~m}$ |
|  | 0.001 mm | $102-307^{*}$ | $\pm 2 \mu \mathrm{~m}$ |
| $25-50 \mathrm{~mm}$ | 0.01 mm | $102-302$ | $\pm 2 \mu \mathrm{~m}$ |
|  | 0.001 mm | $102-308^{*}$ | $\pm 2 \mu \mathrm{~m}$ |
| $50-75 \mathrm{~mm}$ | 0.01 mm | $102-303$ | $\pm 2 \mu \mathrm{~m}$ |
| $75-100 \mathrm{~mm}$ | 0.01 mm | $102-304$ | $\pm 3 \mu \mathrm{~m}$ |

* 0.001 mm reading is obtained with vernier.

Metric
With ratchet thimble

| Range | Graduation | Order No. | Accuracy |
| :--- | :--- | :--- | :--- |
| $0-25 \mathrm{~mm}$ | 0.01 mm | $102-305$ | $\pm 2 \mu \mathrm{~m}$ |
|  | 0.001 mm | $102-309^{*}$ | $\pm 2 \mu \mathrm{~m}$ |
| $25-50 \mathrm{~mm}$ | 0.01 mm | $102-306$ | $\pm 2 \mu \mathrm{~m}$ |

* 0.001 mm reading is obtained with vernier.

Metric
Micrometer set 0.01 mm Graduation model

| Range | Order No. | Included in set |
| :--- | :--- | :--- |
| $0-100 \mathrm{~mm}$ | 102-911-01 | $\bullet 102-701^{*}$ |
| $(4 \mathrm{pcs} / \mathrm{set})$ |  | $102-302$ |
|  |  | $102-303$ |
|  |  | $102-304$ |
|  |  | $\bullet 3$ micrometer standards |

*Ratchet thimble micrometer.

- A ratchet stop or ratchet thimble for a constant measuring force.
- Supplied in a fitted plastic case.



## Technical Data

Graduation: $0.01 \mathrm{~mm}, 0.001 \mathrm{~mm}, .001$ " or $.0001^{1 "}$ Flatness: $\quad 0.3 \mu \mathrm{~m} / .000012^{\prime \prime}$
Parallelism: $1 \mu \mathrm{~m} / .00004^{\prime \prime}$ for $25 \mathrm{~mm} / 1^{\prime \prime}$ model $3 \mu \mathrm{~m} / .00012^{\prime \prime}$ for models up to $100 \mathrm{~mm} / 4^{\prime \prime}$
Measuring faces: Carbide tipped

## Ratchet stop type



## Ratchet thimble type



DIMENSIONS AND MASS


