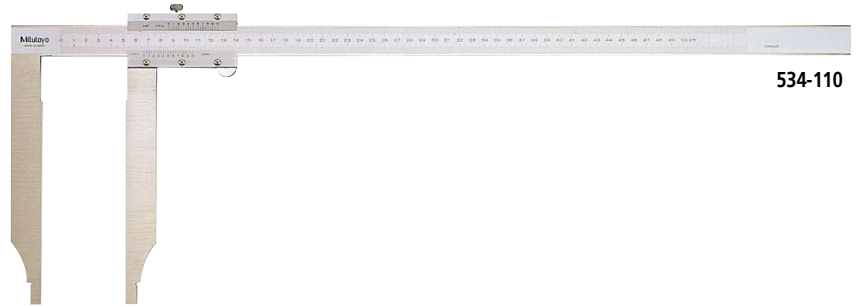


## Long Jaw Vernier Caliper SERIES 534

- Long jaws for measuring hard-to-reach workpiece features.
- Inside and outside measurements can be read directly from the upper and lower vernier scales.
- Inside measurement is possible upwards from the minimum inside measuring length (jaws closed).



### SPECIFICATIONS

| Metric    |                          | with inside measurement vernier scale |  |                         |                         |
|-----------|--------------------------|---------------------------------------|--|-------------------------|-------------------------|
| Order No. | Range (mm)* <sup>1</sup> | Graduation (mm)                       | Maximum permissible error (mm)* <sup>2</sup> |                         | Remarks                 |
|           |                          |                                       | <i>E</i> <sub>MPE</sub>                      | <i>S</i> <sub>MPE</sub> |                         |
| 534-109   | 0 (10.1) - 300           | 0.05                                  | ±0.07  | ±0.07                   | without fine adjustment |
| 534-110   | 0 (20.1) - 500           |                                       | ±0.13  | ±0.13                   |                         |

\*1 ( ): Minimum dimension in ID measurement

\*2 Partial Surface Contact Error, *E*<sub>MPE</sub> and Shift Error, *S*<sub>MPE</sub> are terms (notations) used in ISO 13385-1:2019.

| Metric/Inch |   | with metric/inch double scale |   |                          |  |
|-------------|---|-------------------------------|---|--------------------------|--|
| Order No.   | Range* <sup>1</sup>                                     | Graduation                    | Maximum permissible error* <sup>2</sup> |                          | Remarks  |
|             |   |                               | <i>E</i> <sub>MPE</sub>                 | <i>S</i> <sub>MPE</sub>  |  |
| 534-101     | 0 - 300 mm/0 - 12 in<br>(10.1 - 300 mm/0.398 - 12 in)   | 0.05 mm/<br>1/128 in          | ±0.07 mm/<br>±0.5/128 in                | ±0.07 mm/<br>±0.5/128 in | +10 mm/0.394 in to reading in inside measurement without fine adjustment |
| 534-105     | 0 - 300 mm/0 - 12 in<br>(10.1 - 300 mm/0.398 - 12 in)   | 0.02 mm/<br>0.001 in          | ±0.04 mm/<br>±0.002 in                  | ±0.04 mm/<br>±0.002 in   |  |
| 534-102     | 0 - 500 mm/0 - 20 in<br>(20.1 - 500 mm/0.791 - 20 in)   | 0.05 mm/<br>1/128 in          | ±0.13 mm/<br>±0.5/128 in                | ±0.13 mm/<br>±0.5/128 in | +20 mm/0.787 in to reading in inside measurement without fine adjustment |
| 534-106     |   | 0.02 mm/<br>0.001 in          | ±0.06 mm/<br>±0.003 in                  | ±0.06 mm/<br>±0.003 in   |  |
| 534-103     | 0 - 750 mm/0 - 30 in<br>(20.1 - 750 mm/0.791 - 30 in)   | 0.05 mm/<br>1/128 in          | ±0.16 mm/<br>±1/128 in                  | ±0.16 mm/<br>±1/128 in   |  |
| 534-107     |   | 0.02 mm/<br>0.001 in          | ±0.08 mm/<br>±0.004 in                  | ±0.08 mm/<br>±0.004 in   |  |
| 534-104     | 0 - 1000 mm/0 - 40 in<br>(20.1 - 1000 mm/0.791 - 40 in) | 0.05 mm/<br>1/128 in          | ±0.2 mm/<br>±1/128 in                   | ±0.2 mm/<br>±1/128 in    |  |
| 534-108     |   | 0.02 mm/<br>0.001 in          | ±0.1 mm/<br>±0.004 in                   | ±0.1 mm/<br>±0.004 in    |  |

\*1 ( ): Minimum dimension in ID measurement

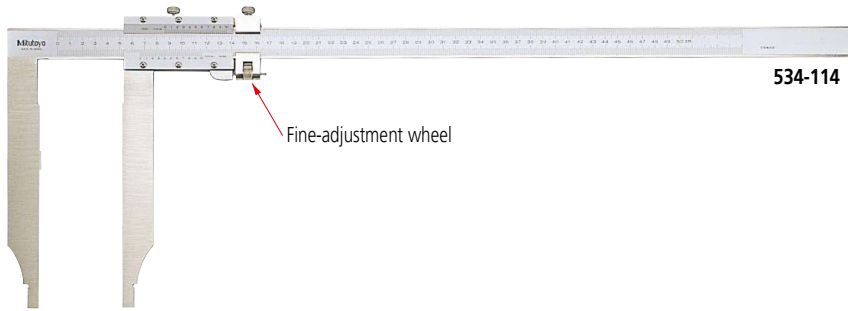
\*2 Partial Surface Contact Error, *E*<sub>MPE</sub> and Shift Error, *S*<sub>MPE</sub> are terms (notations) used in ISO 13385-1:2019.

Note: For external dimensions, refer to page D-25.

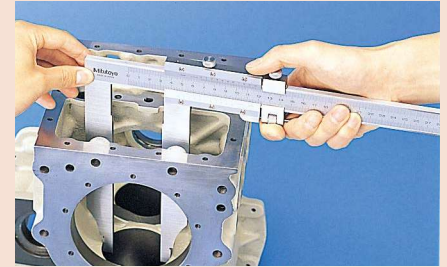
# Calipers

## Long Jaw Vernier Caliper SERIES 534

- Long jaws for measuring hard-to-reach workpiece features.
- Inside and outside measurements can be read directly from the upper and lower vernier scales.
- The fine-adjustment wheel enables precise feed and adjustment.
- Inside measurement is possible upwards from the minimum inside measuring length (jaws closed).



### Measurement example



## SPECIFICATIONS

**Metric** \_\_\_\_\_ with inside measurement vernier scale

| Order No. | Range (mm)* <sup>1</sup> | Graduation (mm) | Maximum permissible error (mm)* <sup>2</sup> |           | Remarks              |
|-----------|--------------------------|-----------------|--|-----------|----------------------|
|           |                          |                 | $E_{MPE}$                                    | $S_{MPE}$ |                      |
| 534-113   | 0 (10.1) - 300           | 0.02            | ±0.04  | ±0.04     | with fine adjustment |
| 534-114   | 0 (20.1) - 500           |                 | ±0.06  | ±0.06     |                      |
| 534-115   | 0 (20.1) - 750           |                 | ±0.08  | ±0.08     |                      |
| 534-116   | 0 (20.1) - 1000          |                 | ±0.10  | ±0.10     |                      |

\*1 ( ): Minimum dimension in ID measurement

\*2 Partial Surface Contact Error,  $E_{MPE}$  and Shift Error,  $S_{MPE}$  are terms (notations) used in ISO 13385-1:2019.

**Inch** \_\_\_\_\_ with inside measurement vernier scale

| Order No. | Range (in)* <sup>1</sup> | Graduation (in) | Maximum permissible error (in)* <sup>2</sup> |           | Remarks              |
|-----------|--------------------------|-----------------|--|-----------|----------------------|
|           |                          |                 | $E_{MPE}$                                    | $S_{MPE}$ |                      |
| 534-117   | 0 (0.304) - 12           | 0.001           | ±0.002                                       | ±0.002    | with fine adjustment |
| 534-118   | 0 (0.804) - 20           |                 | ±0.003                                       | ±0.003    |                      |
| 534-119   | 0 (0.804) - 30           |                 | ±0.004                                       | ±0.004    |                      |
| 534-120   | 0 (0.804) - 40           |                 | ±0.004                                       | ±0.004    |                      |

\*1 ( ): Minimum dimension in ID measurement

\*2 Partial Surface Contact Error,  $E_{MPE}$  and Shift Error,  $S_{MPE}$  are terms (notations) used in ISO 13385-1:2019.

## DIMENSIONS

