## CALIPERS

## Digimatic Calipers with Absolute Encoders

Series 500 - Featuring Position Memory and 3.5 Year Battery Life


## Optional Accessories

SPC Connecting Cables
No.959149(1m), No.959150(2m)


Features built-in Data Switch

MITUTOYO's new Absolute Encoder Digimatic Caliper offers special functions which allow it to always remember its measuring position even after the gage has been switched off.

- Origin: Allows setting of an origin starting point to be used as reference in subsequent measurements (generally set to closed jaw
position). Once set, the Absolute Encoder caliper will switch on showing its true position from the origin point rather than 0.0000 as with standard models.
- Zero/ABS: Allows the display to be Zero-Set at any point along the slider for incremental comparison measurements. This switch will also allow return to the absolute

Add-on

mode and display of the true position from the origin point. Also provided is inch/mm conversion and SPC data output. Another outstanding feature of the Absolute Encoder Digimatic Caliper is 3.5 years of use under normal working conditions from just a single SR44 battery cell. (541980)

## Specifications

## Digimatic Calipers with Absolute Encoder

Metric (SPC output models)

| Order No. | Range | LCD <br> Resolution | Accuracy | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{5 0 0 - 1 5 0}$ | $0-100 \mathrm{~mm}$ | 0.01 mm | $\pm 0.02 \mathrm{~mm}$ | 1.9 mm Round Depth Bar. |
| $\mathbf{5 0 0 - 1 5 1}$ | $0-150 \mathrm{~mm}$ | 0.01 mm | $\pm 0.02 \mathrm{~mm}$ |  |
| $\mathbf{5 0 0 - 1 5 2}$ | $0-200 \mathrm{~mm}$ | 0.01 mm | $\pm 0.02 \mathrm{~mm}$ |  |
| $\mathbf{5 0 0 - 1 5 3}$ | $0-300 \mathrm{~mm}$ | 0.01 mm | $\pm 0.03 \mathrm{~mm}$ |  |
| $\mathbf{5 0 0 - 5 0 0 - 1 0}$ | $0-450 \mathrm{~mm}$ | 0.01 mm | $\pm 0.05 \mathrm{~mm}$ | without Depth Bar, Absolute <br> Function Type |
| $\mathbf{5 0 0 - 5 0 1 - 1 0}$ | $0-600 \mathrm{~mm}$ | 0.01 mm | $\pm 0.05 \mathrm{~mm}$ | without Depth Bar, Absolute <br> Function Type |

[^0]Replacement Battery: 541980 (1pc), 541980-10 (10 pcs/SET)

## CALIPERS



Dimensions

| Order No. | A | B | C | D | E | F | G | L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 500-170, 500-195 | 1.57" | .83" | .65" | 2.26" | 1.42" | .63" | .138" | 7.09" |
| $\begin{aligned} & 500-171,500-196, \\ & 500-159,500-160, \\ & 500-175,500-178, \\ & 500-174 \end{aligned}$ | 1.57" | .83" | .65" | $2.26 "$ | 1.42" | .63" | .138" | $9.10^{\prime \prime}$ |
| 500-172, 500-197, 500-163, 500-164, 500-176, 500-177 | 1.97" | .96" | .79" | 2.26" | 1.42" | .63" | .138" | 11.34" |
| 500-173, 500-193, 500-165, 500-166, 500-167, 500-168 | 2.52 " | 1.08" | .86" | 2.80" | 1.60" | .79" | .15" | 15.87" |
| 500-505-10 | 3.54" | 1.85" | 1.50" | 3.61" | 2.44 " | .98" | .24" | $24.80{ }^{\prime \prime}$ |
| 500-506-10 | 3.54" | 1.85" | 1.50" | 3.61" | 2.44" | .98" | 24 | $30.70{ }^{\prime \prime}$ |
| 500-507-10 | $5.11{ }^{\prime \prime}$ | $2.36{ }^{\prime \prime}$ | 1.65" | 4.49" | 2.87" | 1.26" | . 31 " | 48.82" |
| 500-150 | 1.57" | .83" | .65" | $2.26{ }^{\prime \prime}$ | 1.42" | .63" | .138" | 7.09" |
| 500-151 | 1.57" | .83" | .65" | $2.26{ }^{\prime \prime}$ | 1.42" | .63" | .138" | 9.10" |
| 500-152 | 1.97" | .96" | .79" | 2.26 " | 1.42" | .63" | .138" | 11.34" |
| 500-153 | 2.52 " | 1.08" | .86" | $2.80{ }^{\prime \prime}$ | 1.60" | .79" | .15" | 15.87" |
| 500-500-10 | 3.54" | 1.85" | 1.50" | $3.61{ }^{\prime \prime}$ | $2.44{ }^{\prime \prime}$ | .98" | . 24 " | $24.80{ }^{\prime \prime}$ |
| 500-501-10 | 3.54" | 1.85" | 1.50" | 3.61" | 2.44" | .98" | .24" | $30.70{ }^{\prime \prime}$ |

Digimatic Caliper with Absolute Encoder
Inch/Metric (SPC output Models)

| Order No. | Range | LCD <br> Resolution | Accuracy | Remarks |
| :---: | :---: | :---: | :---: | :---: |
| 500-170 | $\begin{aligned} & 0-4 " \\ & 0-100 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005 " \\ & 0.01 \mathrm{~mm} \end{aligned}$ | $\pm .001{ }^{\prime \prime}$ | .075" Round Depth Bar. |
| 500-171 | $\begin{aligned} & 0-6 " \\ & 0-150 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .001{ }^{\prime \prime}$ |  |
| 500-174 | $\begin{aligned} & 0-6 " \\ & 0-150 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .001{ }^{\prime \prime}$ | with OD Carbide Jaw, Absolute Function Type |
| 500-175 | $\begin{aligned} & 0-6^{\prime \prime} \\ & 0-150 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .001{ }^{\prime \prime}$ | with OD, ID Carbide Jaw, Absolute Function Type |
| 500-178 | $\begin{aligned} & \hline 0-6 " \\ & 0-150 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005 \mathrm{"} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .001{ }^{\prime \prime}$ | . 075 Round Depth Bar, Absolute Function Type |
| 500-172 | $\begin{aligned} & 0-8^{\prime \prime \prime} \\ & 0-200 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .001 "$ |  |
| 500-176 | $\begin{aligned} & 0-8 " \\ & 0-200 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .001{ }^{\prime \prime}$ | with OD Carbide Jaw, Absolute Function Type |
| 500-177 | $\begin{aligned} & 0-8 " \\ & 0-200 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .001{ }^{\prime \prime}$ | with OD, ID Carbide Jaw, Absolute Function Type |
| 500-167 | $\begin{aligned} & 0-12^{\prime \prime} \\ & 0-300 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .0015{ }^{\prime \prime}$ | with OD Carbide Jaw |
| 500-168 | $\begin{aligned} & \hline 0-12^{\prime \prime} \\ & 0-300 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .0015^{\prime \prime}$ | with OD, ID Carbide Jaw |
| 500-173 | $\begin{aligned} & 0-12^{\prime \prime} \\ & 0-300 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .0015{ }^{\prime \prime}$ |  |
| 500-505-10 | $\begin{aligned} & 0-18^{\prime \prime} \\ & 0-450 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .002{ }^{\prime \prime}$ | without Depth Bar, Absolute Function Type |
| 500-506-10 | $\begin{aligned} & \hline 0-24^{\prime \prime} \\ & 0-600 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .002{ }^{\prime \prime}$ | without Depth Bar, Absolute Function Type |
| 500-507-10 | $\begin{aligned} & 0-40^{\prime \prime} \\ & 0-1,000 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\begin{aligned} & .0005^{\prime \prime} \\ & 0.01 \mathrm{~mm} \\ & \hline \end{aligned}$ | $\pm .003 "$ | without Depth Bar, Absolute Function Type |

For SPC output order Connecting Cable 959149 (1m) or 959150 (2m).
Replacement Battery: 541980 (1pc), 541980-10 (10 pcs/SET)


[^0]:    For SPC output order Connecting Cable 959149 (1m) or 959150 (2m).

