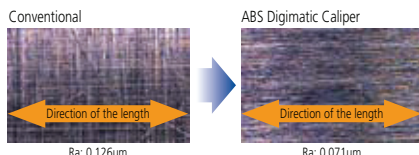


# ABSOLUTE Digimatic Caliper

## SERIES 500 — with Exclusive ABSOLUTE Encoder Technology

Mitutoyo's absolute Digimatic Caliper is the next generation of electronic calipers. It keeps track of its origin point once set. Whenever turned on, the large LCD screen displays the actual slider position ready to start measurement. No more repeated zero setting is necessary with absolute encoder technology as well as no more concerns about overspeed errors.

### High quality guide surface finish for smooth slider movement

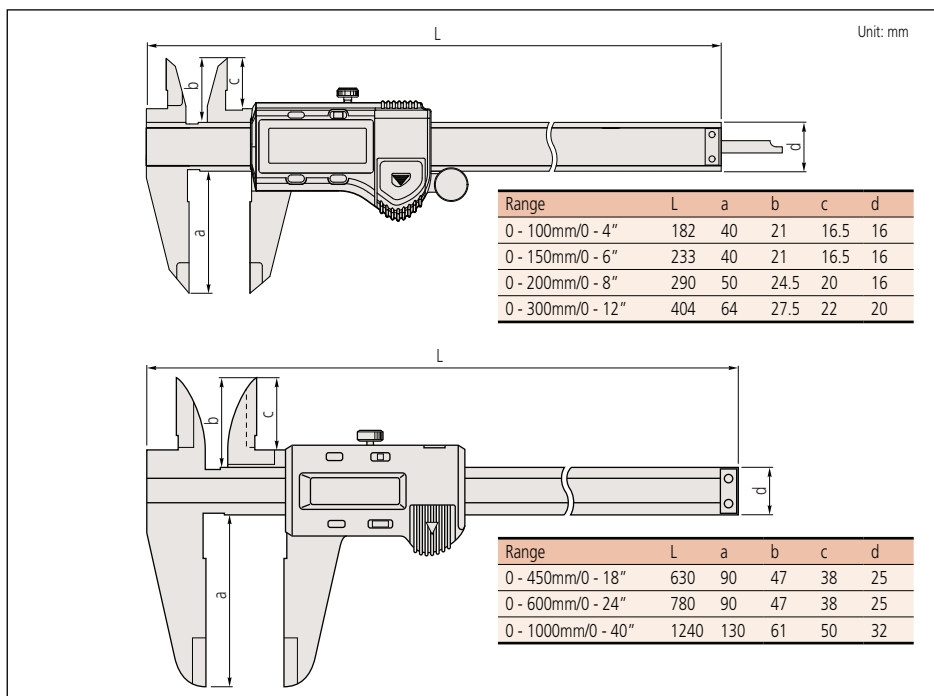


### FEATURES

- Large and clear LCD readout.
- The ZERO/ABS key allows the display to be Zero-Set at any slider position along the scale for comparison measurements. This switch will also allow return to the absolute (ABS) mode and display of the true position from the origin (usually jaws-closed point).
- Data Hold Unit (959143) is optional.
- Carbide-tipped jaw type calipers are also available.



### DIMENSIONS



Absolute System Patented by MITUTOYO

(Refer to page VIII for details.)



(Refer to page VIII for details.)  
\*Up to 300mm/12" range models.

### Technical Data

Accuracy:  $\pm 0.02\text{mm}$  ( $\leq 200\text{mm}$ ),  $\pm 0.03\text{mm}$  ( $\leq 300\text{mm}$ )  
 $\pm 0.05\text{mm}$  ( $\leq 600\text{mm}$ ),  $\pm 0.07\text{mm}$  ( $\leq 1000\text{mm}$ )  
 (excluding quantizing error)

Resolution: 0.01mm or .0005"/0.01mm

Repeatability: 0.01mm

Display: LCD

Scale type\*: ABSOLUTE electrostatic linear encoder

Max. response speed: Unlimited

Battery: SR44 (1 pc.), **938882**

Battery life: Approx. 3.5 years under normal use

### Functions

Origin-set, Zero-setting, Data output, inch/mm conversion (inch/mm models)

Alarm: Low voltage, Counting value composition error

### Optional Accessories

- 959143:** Data hold unit
- 959149:** SPC cable with data switch (1m)
- 959150:** SPC cable with data switch (2m)
- 02AZD790C:** SPC cable for U-WAVE w/ data switch (160mm)

959143



959149

## SPECIFICATIONS

### Metric

Range	Order No.	Depth bar	Fine adjustment	Remarks
0 - 100mm	<b>500-150-20</b>	ø1.9mm rod	with thumb roller	—
0 - 100mm	<b>500-180-20*</b>	ø1.9mm rod	—	—
0 - 150mm	<b>500-151-20</b>	Blade	with thumb roller	—
0 - 150mm	<b>500-154-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
0 - 150mm	<b>500-155-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside and inside measurement
0 - 150mm	<b>500-158-20</b>	ø1.9mm rod	with thumb roller	—
0 - 150mm	<b>500-181-20*</b>	Blade	—	—
0 - 200mm	<b>500-152-20</b>	Blade	with thumb roller	—
0 - 200mm	<b>500-156-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
0 - 200mm	<b>500-157-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside and inside measurement
0 - 200mm	<b>500-182-20*</b>	Blade	—	—
0 - 300mm	<b>500-153</b>	Blade	with thumb roller	—
0 - 450mm	<b>500-500-10</b>	—	—	—
0 - 600mm	<b>500-501-10</b>	—	—	—
0 - 1000mm	<b>500-502-10</b>	—	—	—

\*without SPC data output

### Inch/Metric

Range	Order No.	Depth bar	Fine adjustment	Remarks
0 - 4"	<b>500-170-20</b>	ø3/40" rod	with thumb roller	—
0 - 4"	<b>500-195-20*</b>	ø3/40" rod	with thumb roller	—
0 - 6"	<b>500-171-20</b>	Blade	with thumb roller	—
0 - 6"	<b>500-174-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
0 - 6"	<b>500-175-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside and inside measurement
0 - 6"	<b>500-178-20</b>	ø3/40" rod	with thumb roller	—
0 - 6"	<b>500-196-20*</b>	Blade	with thumb roller	—
0 - 6"	<b>500-159-20*</b>	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
0 - 6"	<b>500-160-20*</b>	Blade	with thumb roller	Carbide-tipped jaws for outside and inside measurement
0 - 8"	<b>500-172-20</b>	Blade	with thumb roller	—
0 - 8"	<b>500-176-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
0 - 8"	<b>500-177-20</b>	Blade	with thumb roller	Carbide-tipped jaws for outside and inside measurement
0 - 8"	<b>500-197-20*</b>	Blade	with thumb roller	—
0 - 8"	<b>500-163-20*</b>	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
0 - 8"	<b>500-164-20*</b>	Blade	with thumb roller	Carbide-tipped jaws for outside and inside measurement
0 - 12"	<b>500-173</b>	Blade	with thumb roller	—
0 - 12"	<b>500-167</b>	Blade	with thumb roller	Carbide-tipped jaws for outside measurement
0 - 12"	<b>500-168</b>	Blade	with thumb roller	Carbide-tipped jaws for outside and inside measurement
0 - 12"	<b>500-193*</b>	Blade	with thumb roller	—
0 - 12"	<b>500-165*</b>	Blade	—	Carbide-tipped jaws for outside measurement
0 - 12"	<b>500-166*</b>	Blade	—	Carbide-tipped jaws for outside and inside measurement
0 - 18"	<b>500-505-10</b>	—	—	—
0 - 24"	<b>500-506-10</b>	—	—	—
0 - 40"	<b>500-507-10</b>	—	—	—

\*without SPC data output



500-502-10

500-501-10

500-500-10