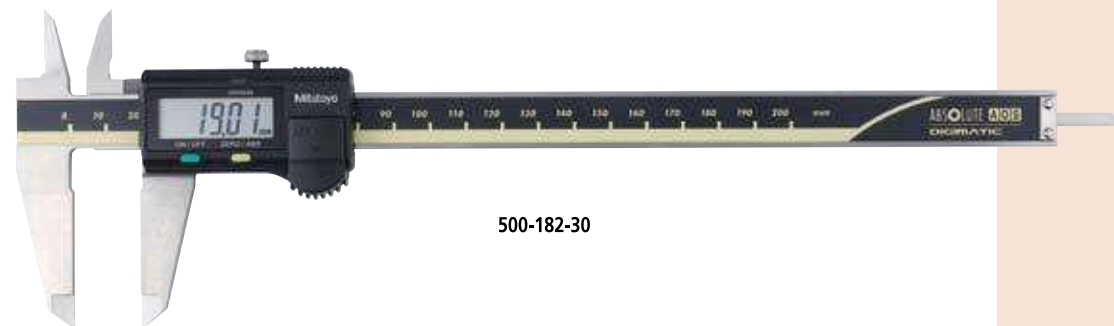
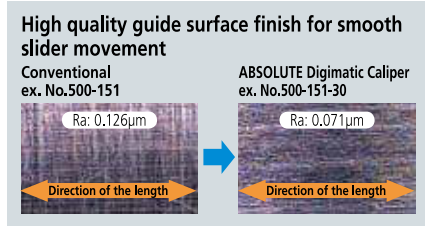


Calipers

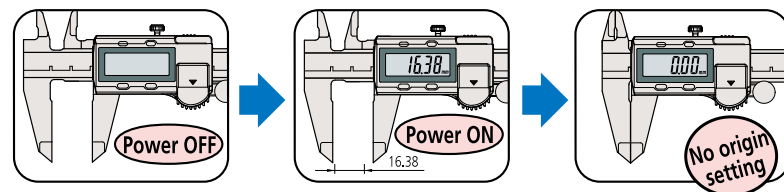
An industry standard in measuring tools

ABSOLUTE Digimatic Caliper 500 Series — with exclusive ABSOLUTE Encoder Technology

- Electromagnetic induction system allows use in workshop conditions exposed to coolant, water, dust oil.
- New ergonomic design with finger rest.
- The ZERO/ABS button allows the display to be Zero-Set at any slider position along the scale for comparison measurements. This button will also allow return to the absolute (ABS) mode and display of the true position from the origin (usually jaws closed point).
- Large and clear LCD readout.
- Smooth slider movement makes for comfortable operation.
- 18,000 hours battery life.
- Allows step measurement.
- Carbide-tipped jaw calipers are optimal for rough finished parts, castings, grinding stones, etc.
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-3.



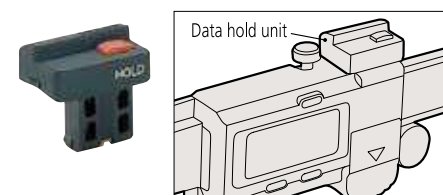
A built-in ABS (absolute) scale means that these calipers are ready to use immediately after power-on without origin resetting – just like using a vernier caliper.



Optional accessories

Dedicated for the models equipped with a digimatic output function. For details, refer to page A-21.

959143: Data hold unit



Connecting cables for IT/DP/MUX

- 959149: SPC cable with data button (1m)
- 959150: SPC cable with data button (2m)



USB Input Tool Direct

- 06ADV380C: SPC cable for USB-ITN-C (2m)

Connecting cables for U-WAVE-T

- 02AZD790C: SPC cable for U-WAVE with data button (160mm)
- 02AZE140C: SPC cable for footswitch

ABSOLUTE™ (Refer to page IX for details.)



An inspection certificate is supplied as standard. Refer to page IX for details.

Technical Data

- Accuracy: $\pm 0.02\text{mm}$ ($\leq 200\text{mm}$), $\pm 0.03\text{mm}$ ($\leq 300\text{mm}$) (excluding quantizing error)
- Resolution: 0.01mm or .0005"/0.01mm
- Repeatability: 0.01mm
- Display: LCD
- Scale type*: ABSOLUTE electromagnetic induction linear encoder
- Max. response speed: Unlimited
- Battery: **SR44** (1 pc), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 3.5 years under normal use (18,000 hours for continuous use)

Functions

Absolute measurement: After power is turned ON, measurement can be started without zero-setting if origin-setting was previously performed. The Absolute origin position can be changed by the ORIGIN button.

Incremental measurement: Display can be set to zero at any arbitrary position for comparative measurements

Low-voltage alert: If the battery voltage becomes low, a "B" appears in the display to alert the user before measurement is no longer possible. A battery change advisory alert precedes this alert.

Data output: By using the connecting cable (option), measurement data can be output.

Data hold: By using the data hold unit (option), the displayed value can be held. This cannot be used with the data output function.

SPECIFICATIONS

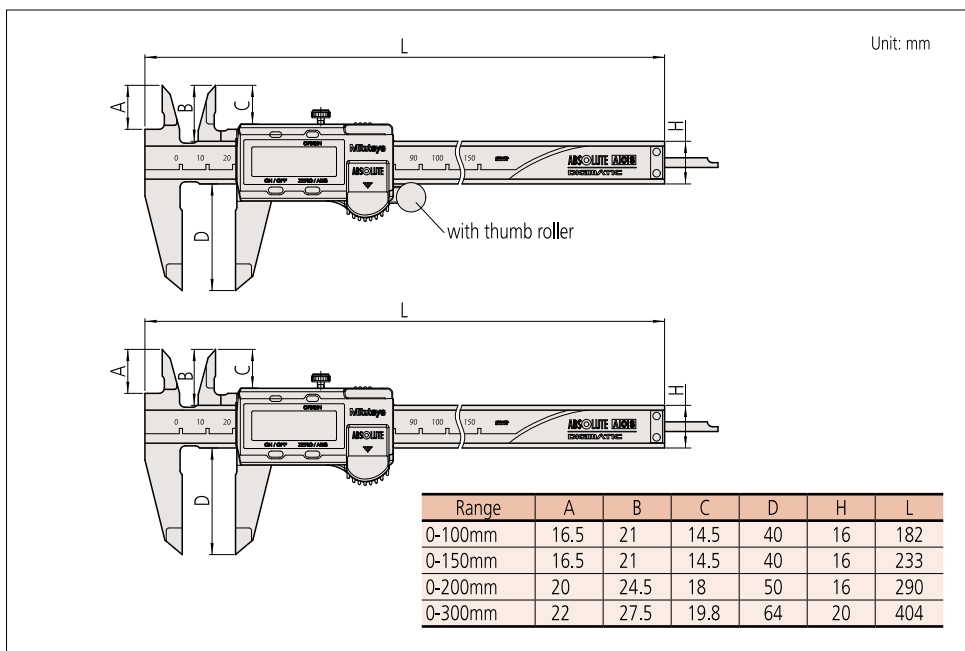
Metric					
Order No.	Range	Depth bar	Fine adjustment	Remarks	
500-150-30	0 - 100mm	ø1.9mm rod	with thumb roller	—	
500-180-30*			—		
500-151-30	0 - 150mm	Blade	with thumb roller	Carbide-tipped jaws for outside measurement	
500-154-30				Carbide-tipped jaws for outside and inside measurement	
500-155-30				—	
500-158-30	0 - 200mm	ø1.9mm rod	—	—	
500-181-30*		Blade	with thumb roller	Carbide-tipped jaws for outside measurement	
500-152-30	Carbide-tipped jaws for outside and inside measurement				
500-156-30	—				
500-157-30	—				
500-182-30*	0 - 300mm	—	with thumb roller	—	
500-153				—	

* without SPC data output

Inch/Metric					
Order No.	Range	Depth bar	Fine adjustment	Remarks	
500-170-30	0 - 4"	.075" rod	with thumb roller	—	
500-195-30*				—	
500-171-30	0 - 6"	Blade	with thumb roller	Carbide-tipped jaws for outside measurement	
500-174-30				Carbide-tipped jaws for outside and inside measurement	
500-175-30				—	
500-178-30	0 - 8"	.075" rod	with thumb roller	Carbide-tipped jaws for outside measurement	
500-196-30*				Carbide-tipped jaws for outside and inside measurement	
500-159-30*				—	
500-160-30*				—	
500-172-30	0 - 12"	Blade	with thumb roller	Carbide-tipped jaws for outside measurement	
500-176-30				Carbide-tipped jaws for outside and inside measurement	
500-177-30				—	
500-197-30*				Carbide-tipped jaws for outside measurement	
500-163-30*				Carbide-tipped jaws for outside and inside measurement	
500-164-30*	0 - 12"	—	—	—	
500-173				Carbide-tipped jaws for outside measurement	
500-167				Carbide-tipped jaws for outside and inside measurement	
500-168				—	
500-193*				Carbide-tipped jaws for outside measurement	
500-165*				Carbide-tipped jaws for outside and inside measurement	
500-166*	—				

* without SPC data output

DIMENSIONS



Calipers

An industry standard in measuring tools

ABSOLUTE™ (Refer to page IX for details.)

Long ABSOLUTE Digimatic Caliper 500 Series — with Exclusive ABSOLUTE Encoder Technology

- Long Digital caliper incorporating an ABSOLUTE scale and available with a measuring range from 450mm to 1000mm.
- Allows step measurement
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. Refer to page A-3.
- For the details of the Absolute scale and its function, refer to page D-8.



SPECIFICATIONS

Metric				
Order No.	Range	Depth bar	Fine adjustment	Remarks
500-500-10	0 - 450mm	—	—	—
500-501-10	0 - 600mm			
500-502-10	0 - 1000mm			

* without SPC data output

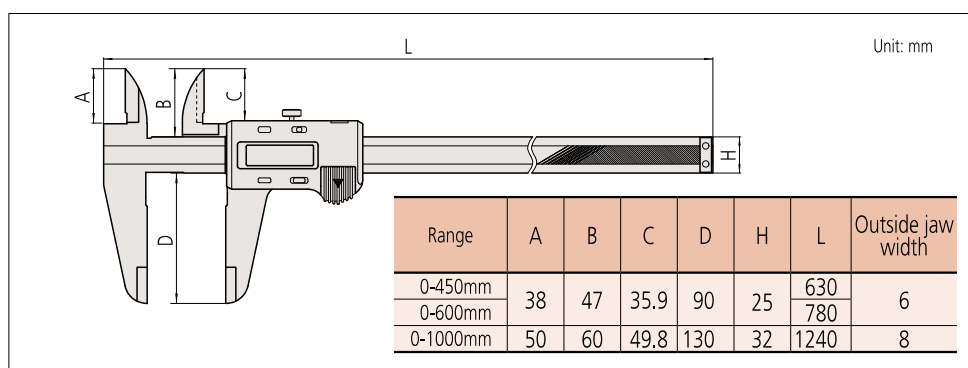
Inch/Metric				
Order No.	Range	Depth bar	Fine adjustment	Remarks
500-505-10	0 - 18"	—	—	—
500-506-10	0 - 24"			
500-507-10	0 - 40"			

* without SPC data output

Technical Data

Accuracy: $\pm 0.05\text{mm}$ ($\leq 600\text{mm}$), $\pm 0.07\text{mm}$ ($\leq 1000\text{mm}$)
(excluding quantizing error)
Resolution: 0.01mm or .0005"/0.01mm
Repeatability: 0.01mm
Display: LCD
Scale type: ABSOLUTE electrostatic capacity linear encoder
Max. response speed: Unlimited
Battery: **SR44** (1 pc, **938882**,
for initial operational checks (standard accessory))
Battery life: Approx. 3.5 years under normal use
Max. response speed: Unlimited

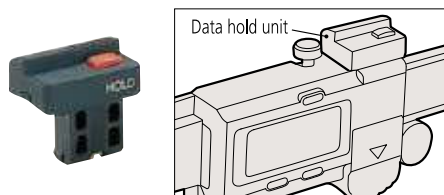
DIMENSIONS



Optional accessories

Dedicated for the models equipped with a digimatic output function. For details, refer to page A-21.

959143: Data hold unit



Connecting cables for IT/DP/MUX*

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USB Input Tool Direct

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