

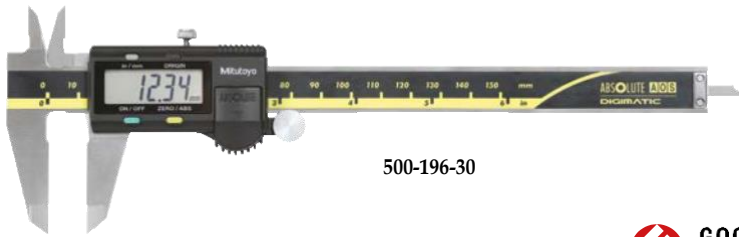
Calipers

SERIES 500 – ABSOLUTE Digimatic Caliper

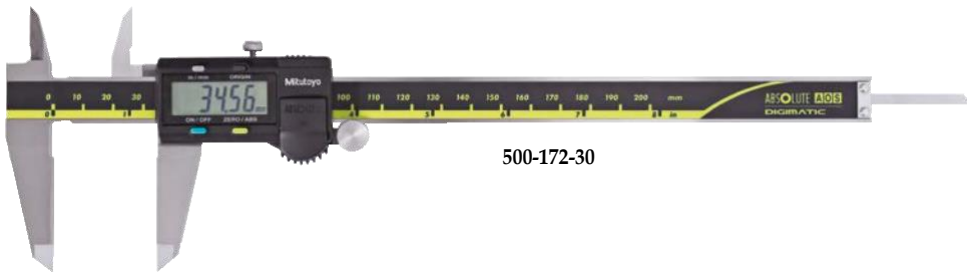
- The ZERO/ABS button allows the display to be Zero-Set at any slider position along the scale for comparison measurements. This button will also allow return to the absolute (ABS) mode and display of the true position from the origin (usually jaws closed point).
- Large and clear LCD readout.
- Smooth slider movement makes for comfortable operation.
- 20,000 hours battery life.
- Can measure outside and inside dimensions, depth, and steps.
- Carbide-tipped jaw calipers give the longest life when measuring rough finished parts, castings, grinding wheels, etc.
- Data output function allows integration into statistical process control and measurement systems.

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE



500-196-30



500-172-30

Specifications

Inch/Metric

Code No.	Range	Accuracy*	Remarks	Price
With SPC data output				
500-171-30	0-150 mm (0-6")	±0.02 mm (.001")	—	
500-174-30			Carbide-tipped jaws for outside measurement	
500-175-30			Carbide-tipped jaws for outside and inside measurement	
500-172-30	0-200 mm (0-8")	±0.02 mm (.001")	—	
500-176-30			Carbide-tipped jaws for outside measurement	
500-177-30			Carbide-tipped jaws for outside and inside measurement	
500-173	0-300 mm (0-12")	±0.03 mm (.0015")	—	
500-167-30			Carbide-tipped jaws for outside measurement	
500-168-30			Carbide-tipped jaws for outside and inside measurement	
Without SPC data output				
500-196-30	0-150 mm (0-6")	±0.02 mm (.001")	—	
500-159-30			Carbide-tipped jaws for outside measurement	
500-160-30			Carbide-tipped jaws for outside and inside measurement	
500-197-30	0-200 mm (0-8")	±0.02 mm (.001")	—	
500-163-30			Carbide-tipped jaws for outside measurement	
500-164-30			Carbide-tipped jaws for outside and inside measurement	
500-193-30	0-300 mm (0-12")	±0.03 mm (.0015")	—	
500-165-30			Carbide-tipped jaws for outside measurement	
500-166-30			Carbide-tipped jaws for outside and inside measurement	

* Excluding quantizing error.

Technical Data

Resolution:	0.01 mm (.0005")
Repeatability:	0.01 mm
Scale type:	ABSOLUTE electrostatic linear encoder
Max. response speed:	Unlimited
Battery:	SR44 (1 pc.), 938882
Battery life:	Approx. 5 years under normal use (20,000 hours for continuous use)

Functions

ABSOLUTE system measurement:

After power is turned ON, measurement can be started without zero-setting if origin-setting was previously performed. The ABS (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.

Scale contamination detection:

Contamination on the surface of the scale is detected and an error message (ErrC) is displayed.

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:

Models equipped with this function have an output port for transferring measurement data to a Statistical Process Control (SPC) system.

Data hold:

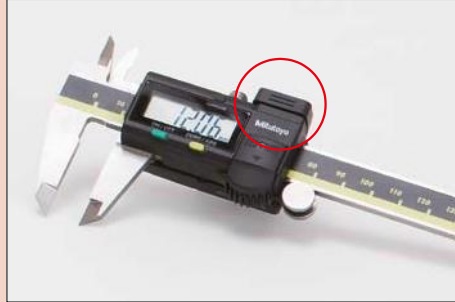
By using the data hold unit (option), the displayed value can be held. This cannot be used with the data output function.



Optional Accessories*

Code No.	Description	Price
264-621	U-WAVE-TC transmission unit	
959143	Data hold unit	
959149	SPC data cable with pushbutton (1 m)	
959150	SPC data cable with pushbutton (2 m)	
02AZF300	U-WAVE-TC connection unit	
06AFM380C	USB input tool direct USB-ITN-C (2 m)	

* Only for models with data output function.



U-WAVE transmitter with buzzer fitted to a Digimatic caliper.

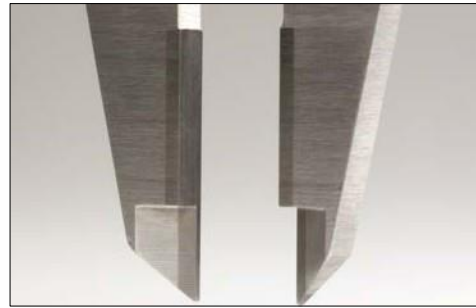


Data hold unit fitted to a Digimatic caliper (no data output possible).

Dimensions

Unit: mm

Range	A	B	C	D	E
0-150 mm	21	16.5	233	40	16
0-200 mm	24.5	20	290	50	16
0-300 mm	27.5	22	404	64	20

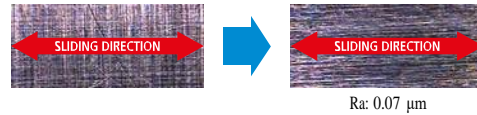


Carbide-tipped jaws for outside measurement.



Carbide-tipped jaws for inside measurement.

Smooth slider movement makes for comfortable operation.
High quality guide surface finish for smooth slider movement.



Ra: 0.126 μm

Ra: 0.07 μm