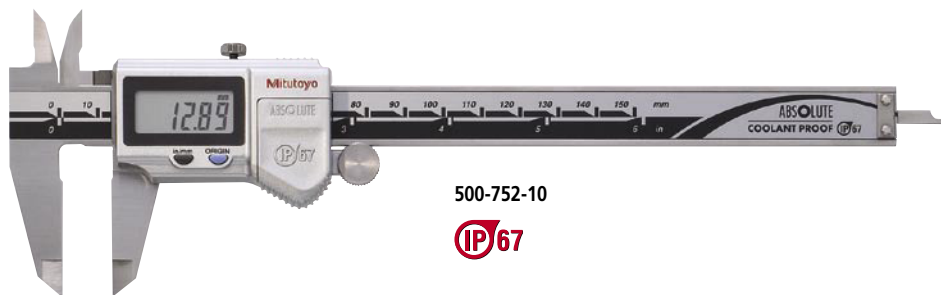
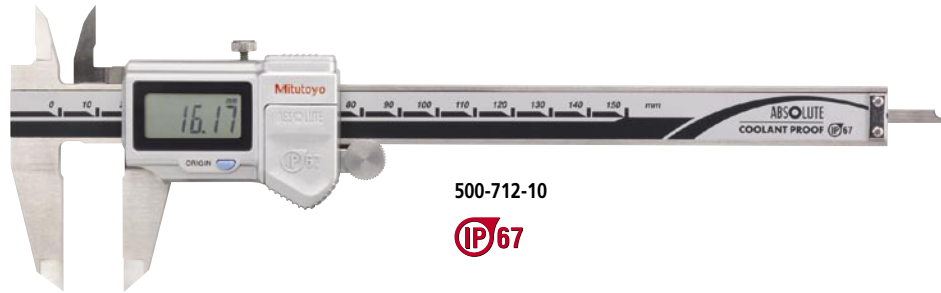


ABSOLUTE Coolant Proof Caliper

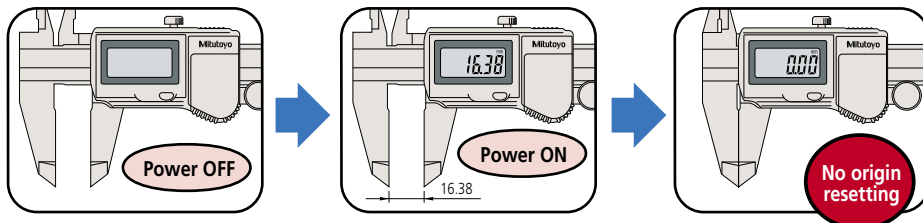
SERIES 500 — with Dust/Water Protection Conforming to IP67 Level

FEATURES

- Can be used in workshop conditions exposed to coolant, water, dust or oil.
- Easy to use - no need to wipe or clean the scale.
- Advanced design styling.
- Incorporates absolute measurement system.
- Automatic power-on/off.
- Data output function.



Built-in ABS (absolute) scale means that these calipers are ready to use immediately after power-on without origin resetting. It's as easy as vernier caliper measurements.



Certificate of inspection

CERTIFICATE OF INSPECTION / CERTIFICAT DE CONTROLE		Inspection result/Résultats			(GR/FP)
Product name/Désignation	Digital Caliper/Échelle à course Digitale	Measuring length/	Permissible values	Instrumental accuracy/Erreur	International
Model No./Modèle	CC-157B	Position de mesure	Erreur admissible	Erreur	International
Code No./Référence	500-622				
Serial No./No. de série	03419811				
Measuring length/Échelle de mesure	0-150mm	0	±0.01	±0.01	
Minimum resolution/Résolution	0.01mm	50	±0.02	±0.01	0.01
Standard Temperature /	20°C	100		-0.01	0.00
Temperature de Référence		150			Unit:mm
		190			Unit:mm
		200			Unit:mm
QC Manager/Responsable Qualité Contrôle	<i>J. J. J.</i>	0-0.16	±0.005		
		0			
		2			
		4	±0.0010		
		6			Unit:inch
		8			Unit:inch
Inspection standard: Mitutoyo standard					
Based on: JISB7507 1993 CN052 1985					
Traceable to: NIST by 4285 No. 2030 NIST via 62-101863M-03					
PTB via 3785 PTB 02-4340 PTB 03					
Overall Judgment: Passed/Passed/Conformité: conforme					

Mitutoyo Corporation

Measurement data output function is available with a water-resistant SPC cable.



SPC

ABSOLUTE®
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)



IP67

(Refer to the page 9 for details.)



(Refer to the page 9 for details.)

Technical Data

- Accuracy: ±0.02mm (≤200mm), ±0.03mm (>200mm) (excluding quantizing error)
- Resolution: 0.01mm or .0005"/0.01mm
- Repeatability: 0.01mm
- Display: LCD
- Length standard: ABSOLUTE electromagnetic induction linear encoder
- Max. response speed: Unlimited
- Battery: SR44 (1 pc.), **938882**
- Battery life: Approx. 3 years under normal use (1 year: over 300mm models)
- Dust/Water protection level: IP67

Function

- Origin-set, Zero-setting, Automatic power on/off, Data output, inch/mm conversion (inch/mm models)
- Alarm: Low voltage, Counting value composition error

Optional Accessory

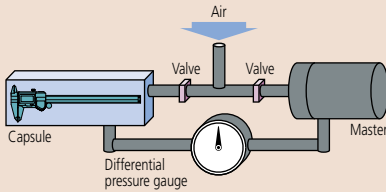
- 05CZA624**: SPC cable with data switch (1m)
- 05CZA625**: SPC cable with data switch (2m)



05CZA624

Air leakage detection system used for water-proof testing

Generally, air leakage tests are performed to evaluate water resistance. Testing begins by placing a measuring tool into the capsule. Next, air with equivalent pressure is supplied to the capsule and the master, then the valves are closed. If none of the air in the capsule seeps into the measuring tool, it will create an air pressure difference in the amount indicated by the differential pressure gauge. Thus, detection of air pressure differences is used as a criterion for judging leakage. Every single unit of the ABS Coolant Proof calipers and Coolant Proof micrometer is tested this way for air leakage to help ensure product quality.



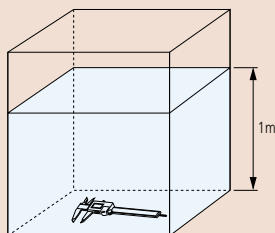
IP66 protection level

- Level 6: Dust-tight
No ingress of dust.
- Level 6: Protected against powerful water jet.
Water projected in powerful jets* against the enclosure from any direction shall have no harmful effects.
*Size of direct jets: uses 12.5 mm (inner diameter) nozzle emitting a 100 kPa jet of water at 100 liters per minute for at least 3 minutes from a distance of approx. 3 meters.



IP67 protection level

- Level 6: Dust-tight
No ingress of dust.
- Level 7: Protected against the effects of temporary immersion in water.
Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed 1 meter in water under standardized conditions of pressure and time (30 min.).



SPECIFICATIONS

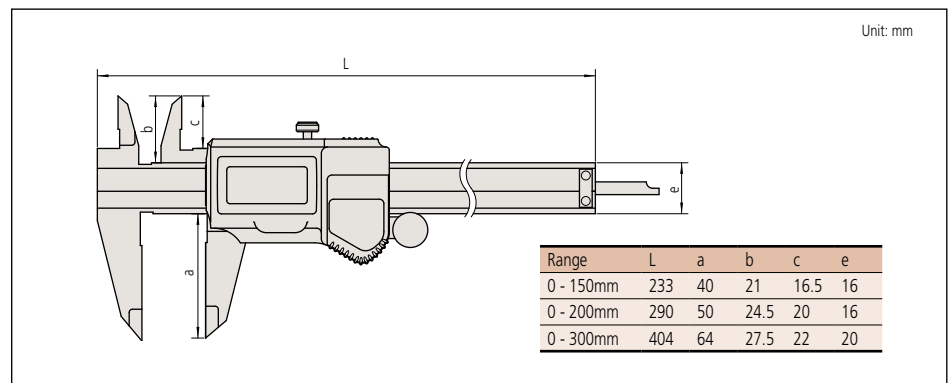
Metric				
Range	Order No.	Remarks (depth measuring bar / thumb roller / others)		
0 - 150mm	500-702-10*	Blade	with thumb roller	—
0 - 150mm	500-712-10	Blade	with thumb roller	—
0 - 150mm	500-706-11*	Blade	—	—
0 - 150mm	500-716-11	Blade	—	—
0 - 150mm	500-709-11*	ø1.9mm rod	—	—
0 - 150mm	500-719-10	ø1.9mm rod	with thumb roller	—
0 - 150mm	500-721-10	Blade	with thumb roller	Carbide-tipped jaws for ID measurement
0 - 150mm	500-723-10	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 150mm	500-727-11	Blade	—	Carbide-tipped jaws for OD & ID measurement
0 - 200mm	500-703-10*	Blade	with thumb roller	—
0 - 200mm	500-713-10	Blade	with thumb roller	—
0 - 200mm	500-707-11*	Blade	—	—
0 - 200mm	500-717-11	Blade	—	—
0 - 200mm	500-722-10	Blade	with thumb roller	Carbide-tipped jaws for ID measurement
0 - 200mm	500-724-10	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 200mm	500-728-11	—	—	Carbide-tipped jaws for OD & ID measurement
0 - 300mm	500-714-10	—	with thumb roller	—
0 - 300mm	500-718-11	—	—	—
0 - 300mm	500-704-10*	—	with thumb roller	—
0 - 300mm	500-708-11*	—	—	—

*without SPC data output

Inch/Metric				
Range	Order No.	Remarks (depth measuring bar / thumb roller / others)		
0 - 6"	500-752-10*	Blade	with thumb roller	—
0 - 6"	500-762-10	Blade	with thumb roller	—
0 - 6"	500-768-10*	ø3/40" rod	with thumb roller	—
0 - 6"	500-769-10	ø3/40" rod	with thumb roller	—
0 - 6"	500-731-10*	Blade	with thumb roller	Carbide-tipped jaws for ID measurement
0 - 6"	500-735-10	Blade	with thumb roller	Carbide-tipped jaws for ID measurement
0 - 6"	500-733-10*	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 6"	500-737-10	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 8"	500-753-10*	Blade	with thumb roller	—
0 - 8"	500-763-10	Blade	with thumb roller	—
0 - 8"	500-732-10*	Blade	with thumb roller	Carbide-tipped jaws for ID measurement
0 - 8"	500-736-10	Blade	with thumb roller	Carbide-tipped jaws for ID measurement
0 - 8"	500-734-10*	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 8"	500-738-10	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 12"	500-764-10	—	with thumb roller	—
0 - 12"	500-754-10*	—	with thumb roller	—

*without SPC data output

DIMENSION

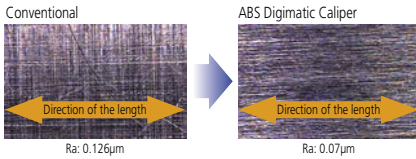


ABSOLUTE Digimatic Caliper

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 the absolute encoder technology as well as no more care for overspeed errors.

High quality guide surface finish for smooth slider movement

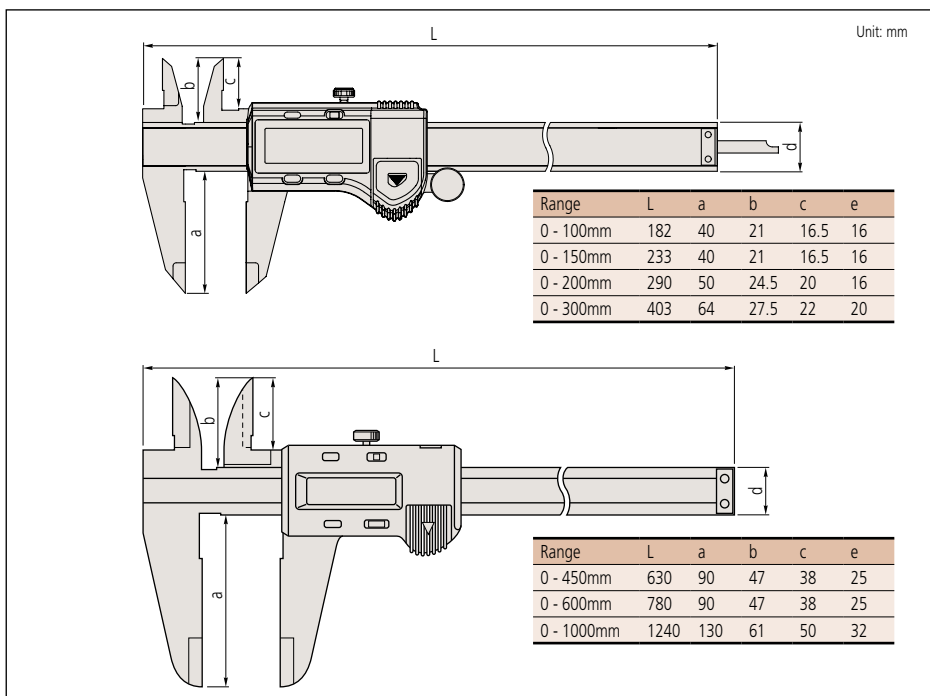


FEATURES

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



DIMENSION



(Refer to the page 9 for details.)



(Refer to the page 9 for details.)

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
 Length standard: ABSOLUTE electrostatic capacitance type linear encoder
 Max. response speed: Unlimited
 Battery: SR44 (1 pc.), **938882**
 Battery life: Approx. 3.5 years under normal use

Function

Origin-set, Zero-setting, Data output, inch/mm conversion (inch/mm models)
 Alarm: Low voltage, Counting value composition error

Optional Accessory

- 959143:** Data hold unit
- 959149:** SPC cable with data switch (1m)
- 959150:** SPC cable with data switch (2m)

959143



959149

SPECIFICATIONS

Metric

Range	Order No.	Remarks (depth measuring bar / thumb roller / others)		
0 - 100mm	500-150-20	ø1.9mm rod	with thumb roller	—
0 - 100mm	500-180-20*	ø1.9mm rod	—	—
0 - 150mm	500-151-20	Blade	with thumb roller	—
0 - 150mm	500-154-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 150mm	500-155-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 150mm	500-158-20	ø1.9mm rod	with thumb roller	—
0 - 150mm	500-181-20*	Blade	—	—
0 - 200mm	500-152-20	Blade	with thumb roller	—
0 - 200mm	500-156-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 200mm	500-157-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 200mm	500-182-20*	Blade	—	—
0 - 300mm	500-153	Blade	with thumb roller	—
0 - 450mm	500-500-10	—	—	—
0 - 600mm	500-501-10	—	—	—
0 - 1000mm	500-502-10	—	—	—

*without SPC data output

Inch/Metric

Range	Order No.	Remarks (depth measuring bar / thumb roller / others)		
0 - 4"	500-170-20	ø3/40" rod	with thumb roller	—
0 - 4"	500-195-20*	ø3/40" rod	with thumb roller	—
0 - 6"	500-171-20	Blade	with thumb roller	—
0 - 6"	500-174-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 6"	500-175-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 6"	500-178-20	ø3/40" rod	with thumb roller	—
0 - 6"	500-196-20*	Blade	with thumb roller	—
0 - 6"	500-159-20*	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 6"	500-160-20*	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 8"	500-172-20	Blade	with thumb roller	—
0 - 8"	500-176-20	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 8"	500-177-20	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 8"	500-197-20*	Blade	with thumb roller	—
0 - 8"	500-163-20*	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 8"	500-164-20*	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 12"	500-173	Blade	with thumb roller	—
0 - 12"	500-167	Blade	with thumb roller	Carbide-tipped jaws for OD measurement
0 - 12"	500-168	Blade	with thumb roller	Carbide-tipped jaws for OD & ID measurement
0 - 12"	500-193*	Blade	with thumb roller	—
0 - 12"	500-165*	Blade	—	Carbide-tipped jaws for OD measurement
0 - 12"	500-166*	Blade	—	Carbide-tipped jaws for OD & ID measurement
0 - 18"	500-505-10	—	with thumb roller	—
0 - 24"	500-506-10	—	with thumb roller	—
0 - 40"	500-507-10	—	with thumb roller	—

*without SPC data output

