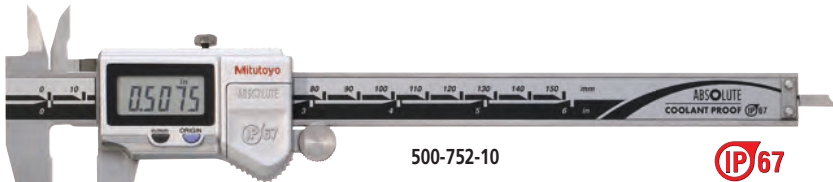


# ABSOLUTE Coolant Proof Caliper

**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.
- With thumb roller.
- Supplied in fitted plastic case.



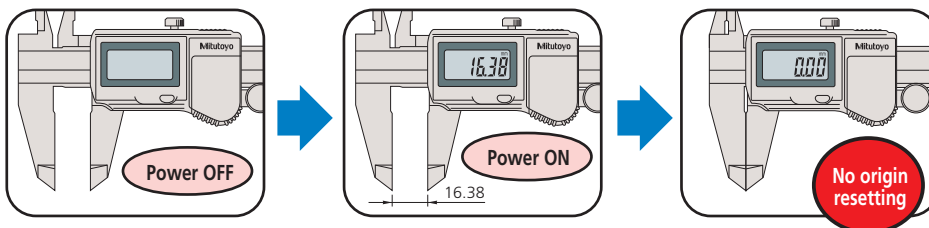
500-752-10



500-763-10



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				(GRY/P)
Product name/Designation	Caliper/Calibre	Inspection length	0.01	0.01	0.01	
Model No./Modèle	CD-1093	Inspection diameter	0.01	0.01	0.01	
Case No./Matricule	902452	Inspection width	0.01	0.01	0.01	
Serial No./No. de série	03416911	Inspection depth	0.01	0.01	0.01	
Measuring range/Capacité de mesure	0-150mm	Inspection hole diameter	0.01	0.01	0.01	
Minimum indicator resolution	0.01mm	Inspection hole diameter	0.01	0.01	0.01	
Standard Temperature /	20°C	Inspection hole diameter	0.01	0.01	0.01	
Temperature de Référence /	20°C	Inspection hole diameter	0.01	0.01	0.01	
QC Manager/Responsable Qualité Contrôle	<i>[Signature]</i>	Inspection hole diameter	0.01	0.01	0.01	
Inspection Standard / Mitutoyo standard		Inspection hole diameter	0.01	0.01	0.01	
Based on / Basé sur	JIS B 7503	Inspection hole diameter	0.01	0.01	0.01	
Inspected by / Inspecté par	Y. S. [Signature]	Inspection hole diameter	0.01	0.01	0.01	
Inspected on / Inspecté le	2011/03/03	Inspection hole diameter	0.01	0.01	0.01	
Inspected at / Inspecté à	Mitutoyo Corp. (USA) 3000 N. 17th St. Aurora, IL 60504	Inspection hole diameter	0.01	0.01	0.01	
Inspected by / Inspecté par	Y. S. [Signature]	Inspection hole diameter	0.01	0.01	0.01	
Inspected on / Inspecté le	2011/03/03	Inspection hole diameter	0.01	0.01	0.01	
Inspected at / Inspecté à	Mitutoyo Corp. (USA) 3000 N. 17th St. Aurora, IL 60504	Inspection hole diameter	0.01	0.01	0.01	
Overall Judgment /	Passed / Passé Conformité conforme	Inspection hole diameter	0.01	0.01	0.01	



## Technical Data

Accuracy: Refer to the list of specifications  
 Resolution: .0005" / 0.01mm or 0.01mm  
 Repeatability: .0005" / 0.01mm  
 Display: LCD  
 Length standard: ABSOLUTE electromagnetic induction linear encoder  
 Max. response speed: Unlimited  
 Battery: SR44 (1 pc./2 pcs\*), **938882**  
 Battery life: Approx. 3 years under normal use (1 year: over 12" / 300mm models)  
 Dust/Water protection level: IP67  
 \*0 - 300mm model

## Function

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

## Optional Accessories

- 05CZA624: SPC cable with data switch (40" / 1m)
- 05CZA625: SPC cable with data switch (80" / 2m)



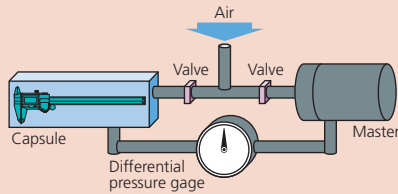
05CZA624



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

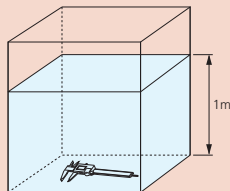
## Air leakage detection system used for water-proof testing

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, the capsule's air pressure will remain equal to that in the master, and the differential pressure gage will continue to point to the center. However, if some air does seep into the measuring tool, it will create an air pressure difference in the amount indicated by the differential pressure gage. 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.



## 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 IP67 model

Range	Order No.	Accuracy	Resolution	Remarks
0-150mm	<b>500-702-10*</b>	+/-0.02mm	0.01mm	
0-150mm	<b>500-712-10</b>	+/-0.02mm	0.01mm	
0-150mm	<b>500-719-10</b>	+/-0.02mm	0.01mm	dia. 1.9mm rod depth bar
0-150mm	<b>500-721-10</b>	+/-0.02mm	0.01mm	carbide-tipped jaws for ID measurement
0-150mm	<b>500-723-10</b>	+/-0.02mm	0.01mm	carbide-tipped jaws for OD & ID measurement
0-200mm	<b>500-703-10*</b>	+/-0.02mm	0.01mm	
0-200mm	<b>500-713-10</b>	+/-0.02mm	0.01mm	
0-200mm	<b>500-722-10</b>	+/-0.02mm	0.01mm	carbide-tipped jaws for ID measurement
0-200mm	<b>500-724-10</b>	+/-0.02mm	0.01mm	carbide-tipped jaws for OD & ID measurement
0-300mm	<b>500-704-10*</b>	+/-0.03mm	0.01mm	
0-300mm	<b>500-714-10</b>	+/-0.03mm	0.01mm	

\*without SPC data output

### Inch/Metric IP67 model

Range	Order No.	Accuracy	Resolution	Remarks
0-6"/0-150mm	<b>500-752-10*</b>	+/- .001"	.0005"/0.01mm	
0-6"/0-150mm	<b>500-762-10</b>	+/- .001"	.0005"/0.01mm	
0-6"/0-150mm	<b>500-768-10*</b>	+/- .001"	.0005"/0.01mm	.075" rod depth bar
0-6"/0-150mm	<b>500-769-10</b>	+/- .001"	.0005"/0.01mm	.075" rod depth bar
0-6"/0-150mm	<b>500-731-10*</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for ID measurement
0-6"/0-150mm	<b>500-735-10</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for ID measurement
0-6"/0-150mm	<b>500-733-10*</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for OD & ID measurement
0-6"/0-150mm	<b>500-737-10</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for OD & ID measurement
0-8"/0-200mm	<b>500-753-10*</b>	+/- .001"	.0005"/0.01mm	
0-8"/0-200mm	<b>500-763-10</b>	+/- .001"	.0005"/0.01mm	
0-8"/0-200mm	<b>500-732-10*</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for OD measurement
0-8"/0-200mm	<b>500-736-10</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for ID measurement
0-8"/0-200mm	<b>500-734-10*</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for OD & ID measurement
0-8"/0-200mm	<b>500-738-10</b>	+/- .001"	.0005"/0.01mm	carbide-tipped jaws for OD & ID measurement
0-12"/0-300mm	<b>500-754-10*</b>	+/- .0015"	.0005"/0.01mm	
0-12"/0-300mm	<b>500-764-10</b>	+/- .0015"	.0005"/0.01mm	

\*without SPC data output

## DIMENSIONS AND MASS

Unit: mm

Range	L	a	b	c	e	Mass (g)
0 - 6" / 0 - 150mm	233	40	21	16.5	16	168
0 - 8" / 0 - 200mm	290	50	24.5	20	16	198
0 - 12" / 0 - 300mm	404	64	27.5	22	20	350