

ABSOLUTE Coolant-Proof Caliper

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

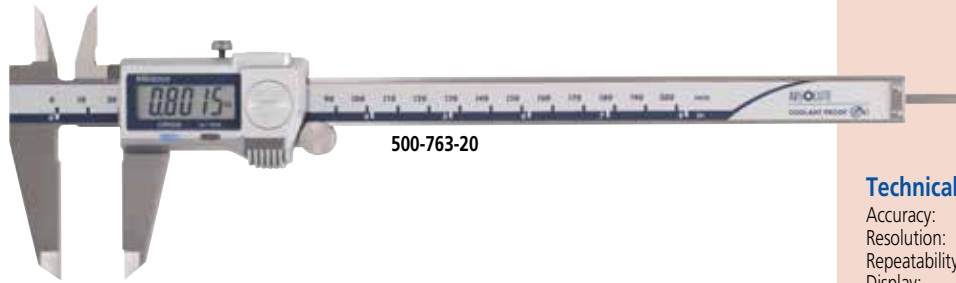


FEATURES

- 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.
- Character height increased from 7.4mm to 9.0mm for improved readability.
- Redesigned battery cover eliminates the need for a screwdriver.
- Incorporates absolute measurement system.
- Automatic power-on/off.
- Data output function.
- With thumb roller.
- Supplied in fitted plastic case.



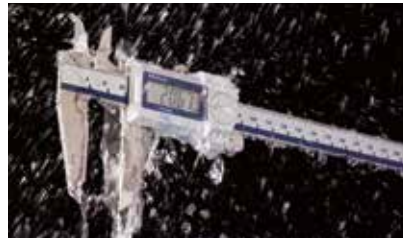
500-752-20



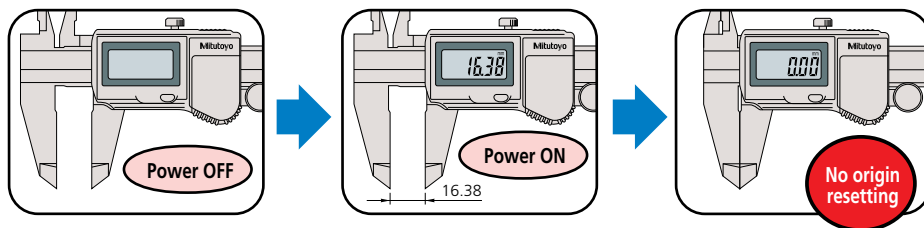
500-763-20

COOLANT PROOF™ IP67

COOLANT PROOF is the universal term of Mitutoyo Digimatic Small Tool Instruments that are free from measurement error and physical deterioration due to routine exposure to water, cutting oil or coolant. This high performance is achieved by using encoders that are inherently immune to contamination, where exposure is inevitable, combined with comprehensive sealing techniques and extremely oil-resistant materials to guarantee a long working life under normal operating conditions.



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)(P)
Product name/Désignation	Digimatic Caliper/Pied à coulisse Digimatic	Measuring length/Position de mesure	Permissible values/Erreur admissible	Instrumental error/Erreur instrumentale	
Model No./Modèle	CD-15PB		±0.01	---	±0.01
Code No./Référence	500-752		-0.03	---	---
Serial No./No. de série	0478911	0	0.00	0.00	0.01
Measuring range/Capacité de mesure	0-150mm	60	0.20	0.20	0.01
Minimum indication/Résolution	0.01mm	100	±0.02	-0.01	0.00
Standard Temperature/Température de Référence	20°C	160	---	-0.01	0.00
QC Manager/Responsable Qualité Contrôle	<i>g. g. g.</i>	200	---	---	---
		0	+0.0005	---	---
		1	-0.0015	---	---
		2	---	---	---
		3	---	---	---
		4	±0.0010	---	---
		5	---	---	---
		6	---	---	---
		7	---	---	---
		8	---	---	---
Inspection standard: Mitutoyo standard					
Based on: JIS B 7507:1995/EN 620:1996					
Traceable to: NMI/LAIST by JCSIR No.2020/NIST via 821098634.03					
PTB via 3785-PTB 02-4340-PTB 03					
Overall Judgment: Passed / Passé Conformité: conforme					

Mitutoyo Corporation



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. 5 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)



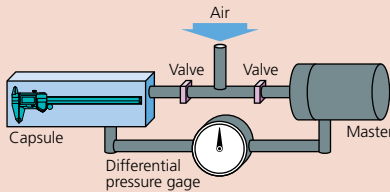
05CZA624



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

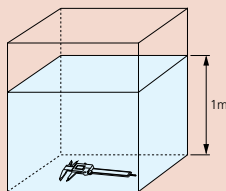
Air leakage detection system used for water-proof testing

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 of the master, and the differential pressure gage will continue to point to the center. However, if some air seeps 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	500-702-20*	+/-0.02mm	0.01mm	
0-150mm	500-712-20	+/-0.02mm	0.01mm	
0-150mm	500-719-20	+/-0.02mm	0.01mm	dia. 1.9mm rod depth bar
0-150mm	500-721-20	+/-0.02mm	0.01mm	carbide-tipped jaws for ID measurement
0-150mm	500-723-20	+/-0.02mm	0.01mm	carbide-tipped jaws for OD & ID measurement
0-200mm	500-703-20*	+/-0.02mm	0.01mm	
0-200mm	500-713-20	+/-0.02mm	0.01mm	
0-200mm	500-722-20	+/-0.02mm	0.01mm	carbide-tipped jaws for ID measurement
0-200mm	500-724-20	+/-0.02mm	0.01mm	carbide-tipped jaws for OD & ID measurement
0-300mm	500-704-10*	+/-0.03mm	0.01mm	
0-300mm	500-714-10	+/-0.03mm	0.01mm	

*without SPC data output

Inch/Metric IP67 model

Range	Order No.	Accuracy	Resolution	Remarks
0-6" / 0-150mm	500-752-20*	+/- .001"	.0005" / 0.01mm	
0-6" / 0-150mm	500-762-20	+/- .001"	.0005" / 0.01mm	
0-6" / 0-150mm	500-768-20*	+/- .001"	.0005" / 0.01mm	.075" rod depth bar
0-6" / 0-150mm	500-769-20	+/- .001"	.0005" / 0.01mm	.075" rod depth bar
0-6" / 0-150mm	500-731-20*	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD measurement
0-6" / 0-150mm	500-735-20	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD measurement
0-6" / 0-150mm	500-733-20*	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD & ID measurement
0-6" / 0-150mm	500-737-20	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD & ID measurement
0-8" / 0-200mm	500-753-20*	+/- .001"	.0005" / 0.01mm	
0-8" / 0-200mm	500-763-20	+/- .001"	.0005" / 0.01mm	
0-8" / 0-200mm	500-732-20*	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD measurement
0-8" / 0-200mm	500-736-20	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD measurement
0-8" / 0-200mm	500-734-20*	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD & ID measurement
0-8" / 0-200mm	500-738-20	+/- .001"	.0005" / 0.01mm	carbide-tipped jaws for OD & ID measurement
0-12" / 0-300mm	500-754-10*	+/- .0015"	.0005" / 0.01mm	
0-12" / 0-300mm	500-764-10	+/- .0015"	.0005" / 0.01mm	

*without SPC data output

DIMENSIONS AND MASS

