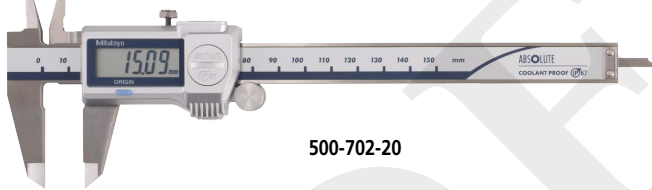
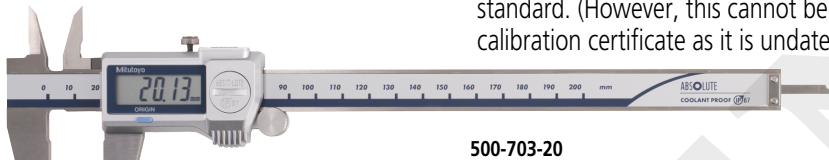


# Calipers

An industry standard in measuring tools

## ABSOLUTE Coolant Proof Caliper SERIES 500 — with Dust/Water Protection Conforming to IP67 Level

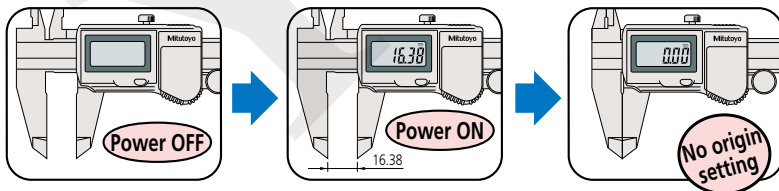
- ABS Coolant Proof Caliper with Dust/Water Protection conforming to IP67 Level. Can be used in workshop conditions exposed to coolant, water, dust or oil. 100% air-leak test ensures every caliper conforms to IP67.
- Font height is 9mm (increased by 22%) and visibility is improved (except for 0 - 300mm/ 0 - 12" models).
- Battery cap does not require a screw driver for battery replacement (except for 0 - 300mm / 0 - 12" models).
- Extended battery life of 5 years due to low current integrated circuit (except for 0 - 300mm/0 - 12" models).
- Easy to use — advanced ergonomic design uses only 1 button.
- Incorporates Mitutoyo's ABSOLUTE measurement system. No need to reset the origin.
- The automatic power-on/off function shuts down the LCD display after 20 minutes inactivity, but the ABS scale origin is unaffected. Power is restored to the display when the slider is moved.
- Stepped features can be measured.
- Can be integrated into statistical process control and measurement systems.
- An inspection certificate is supplied as standard. (However, this cannot be used as a calibration certificate as it is undated.)



Remarkably easy to read display



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

For details, refer to page D-39.



### Connecting cables for IT/DP/MUX\*

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



### USB Input Tool Direct

- 06ADV380A: SPC cable for USB-ITN-A (2m)

### Connecting cables for U-WAVE-T

- 02AZD790A: SPC cable for U-WAVE with data button (160mm)
- 02AZE140A: SPC cable for footswitch

\* Cannot be used for other than water resistant type Digital calipers with external output function

ABSOLUTE™ (Refer to page X for details.)



(Refer to page X for details.)



(Refer to page X for details.)



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

### Smooth slider movement makes for comfortable operation.

High quality guide surface finish for smooth slider movement



### Technical Data

- Resolution: 0.01mm or .0005"/0.01mm
  - Repeatability: 0.01mm or .0005"/0.01mm
  - Quantizing error: Not including ±1 count
  - Dust/Water protection level: IP67 (IEC60529)\*
  - 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. 5 years under normal use (1 year: 0 - 300mm/0 - 12" models)
- \* Although these models are IP67 rated, care should be taken to dry tool after use.

## Functions

- Origin-set: Absolute origin position can be changed.
- Data output: Measurement data output connector allows integration into statistical process control and measurement systems.
- Automatic power on/off: LCD display will turn off after 20 minutes inactivity, but the ABS scale unit origin is stored. Power is restored when the slider is moved.
- Alarm: Error message is displayed if error in calculation is found and measurement is stopped. Measurement will not be continued while error is displayed. Also, if the battery voltage becomes low, "B" appears to alert the user before measurement is no longer possible.

## IP67 protection level

IP 6 7

First characteristic number	Protection from solid objects (people or things)		Second characteristic number	Protection from liquids (water, etc.)	
	Brief description	Description		Brief description	Description
6	Dust-proof.	No ingress of dust allowed.	7	Protected against water penetration.	Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time.

For details of the test conditions used in evaluating each degree of protection, please refer to the original standard.

## SPECIFICATIONS

Metric									
Order No.	Range	Accuracy*	Mass	Measurement data output port	Thumb roller	Remarks			
500-702-20	0 - 150mm	±0.02mm	168g	—	—				
500-703-20	0 - 200mm		198g						
500-712-20	0 - 150mm		168g						
500-713-20	0 - 200mm		198g						
500-719-20	0 - 150mm		168g				✓	✓	Depth bar ø1.9mm
500-721-20	0 - 150mm		168g						Carbide-tipped jaws for outside measurement
500-722-20	0 - 200mm		198g						Carbide-tipped jaws for outside and inside measurement
500-723-20	0 - 150mm		168g						
500-724-20	0 - 200mm		198g				✓	—	
500-714-10	0-300mm		±0.03mm						
500-718-11		345g							
500-704-10		350g							
500-708-11		345g							

\* Not including quantizing error of ±1 count in LSD

Inch/Metric									
Order No.	Range	Accuracy*	Mass	Measurement data output port	Thumb roller	Remarks			
500-731-20	0 - 6"	±.001"/ ±0.02mm	168g	—	—	Carbide-tipped jaws for outside measurement			
500-732-20	0 - 8"		198g						
500-733-20	0 - 6"		168g			✓	✓	Carbide-tipped jaws for outside and inside measurement	
500-734-20	0 - 8"		198g						
500-735-20	0 - 6"		168g						
500-736-20	0 - 8"		198g						
500-737-20	0 - 6"		168g			✓	✓	Carbide-tipped jaws for outside measurement	
500-738-20	0 - 8"		198g						
500-752-20	0 - 6"		168g			—	—		
500-753-20	0 - 8"		198g						
500-762-20	0 - 6"		168g			✓	—	Depth bar ø1.9mm	
500-763-20	0 - 8"		198g						
500-768-20	0 - 6"		168g			✓	—	Depth bar ø1.9mm	
500-769-20	0 - 6"		168g						
500-764-10	0-12"		±.0015"/ ±0.03mm			350g	✓	✓	
500-754-10						350g			

\* Not including quantizing error of ±1 count in LSD

## DIMENSIONS

