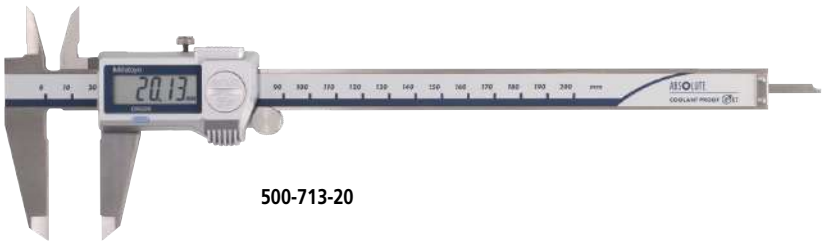
ABSOLUTE Coolant Proof Caliper
SERIES 500 — with Dust/Water Protection Conforming to IP67 Level

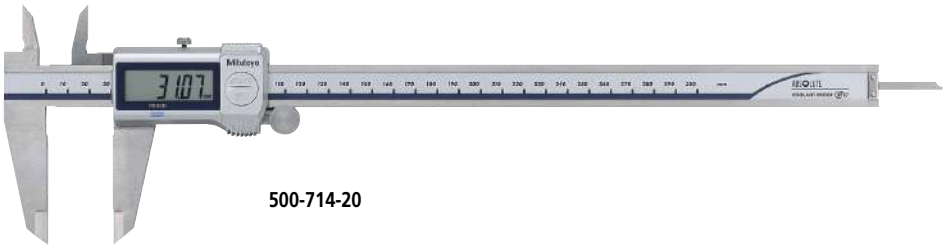
- Rated to IP67: can be used in workshop conditions exposed to coolant, water, dust or oil. The digital display can reduce human error by preventing incorrect reading of measurement results.
- Incorporates Mitutoyo's ABSOLUTE measurement system. No need to reset the origin after switching on. Eliminates overspeed errors.
- Battery cap does not require a screw driver for battery replacement.
- SPC data output models can be integrated into statistical process control and measurement systems. (Refer to page 09-3.)
- Carbide-tipped jaw calipers are optimal for rough finished parts, castings, grindingstones, etc.



500-712-20



500-713-20



500-714-20

MeasurLink® ENABLED
Data Management Software by Mitutoyo

U-WAVE fit

ABSOLUTE™

IP67

Dust- and Water-Protected
TÜVRheinland CERTIFIED
www.tuv.com ID 0000045042

PROPRIETARY INSPECTION CERTIFICATE

Functions

- Origin-set: ABSOLUTE origin position can be changed.
- Data output: Models equipped with this function have an output port for transferring measurement data to a Statistical Process Control (SPC) system.
  Note: Excludes models without measurement output data port. See SPECIFICATIONS on page 04-4.
- Automatic power on/off: Turns off the LCD display if the caliper remains unused for approximately 20 minutes after measurement, although the origin is still memorized. Moving the slider restores the display.
- Alarm: Should a computing error occur, the display shows an error message, causing the measurement function to stop. This prevents an instrument from giving an erroneous reading. Also, when the battery voltage drops to a certain level, the "B" mark appears to indicate low battery voltage before the measurement becomes unavailable.

Optional Accessories

(Note: Usable only for models with SPC data output. Refer to page 09-23 for details.)

Code No.	Type	Description
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type **IT-020U**
05CZA624	A	Connection cable for **IT/DP/MUX** (1 m)*1
05CZA625	A	Connection cable for **IT/DP/MUX** (2 m)*1
06AFM380A	A	USB Input Tool Direct (2 m)
02AZD730G	IP67	**U-WAVE-T***2
02AZD880G	Buzzer	**U-WAVE-T***2
02AZE200	—	**U-WAVE-T** mounting bracket
02AZD790A	A	Connection cable for **U-WAVE-T** (160 mm)
02AZE140A	A	Connection cable for **U-WAVE-T** For foot switch
264-620	IP67	**U-WAVE-TC***2
264-621	Buzzer	**U-WAVE-TC***2
264-624	IP67	**U-WAVE-TCB***2
264-625	Buzzer	**U-WAVE-TCB***2
02AZF310	IP67	Connecting unit for **U-WAVE-TC/TCB**

*1 Cannot be used for other than water resistant type Digital calipers with external output function.
*2 IP67 model is water/dust-proofed suitable for the factory floor. Buzzer type is not water/dust-proofed.

Mitutoyo reserves the right to change any or all aspects of any product specification, including prices, designs and service content, without notice.

LCD



Remarkably easy to read display

IP67 protection level



SPECIFICATIONS

Metric

Code No.	Range (mm)	Resolution (mm)	Maximum permissible error (mm)*1 E_{MPE}	Maximum permissible error (mm)*1 S_{MPE}	Measurement data output port	Mass (g)	Thumb roller	Remarks
500-702-20*3	0 - 150	0.01	±0.02	±0.04	—	168	✓	—
500-703-20*3	0 - 200					198		
500-706-20*3	0 - 150					168	—	
500-707-20*3	0 - 200					198		
500-709-20	0 - 150					168		Depth bar ø1.9 mm
500-716-20					✓	168		—
500-717-20	0 - 200					198		
500-712-20	0 - 150					168	—	
500-713-20	0 - 200					198		
500-719-20	0 - 150					168		Depth bar ø1.9 mm
500-721-20	0 - 150					168	✓	Carbide-tipped jaws for outside measurement
500-722-20	0 - 200					198		
500-723-20	0 - 150					168	—	Carbide-tipped jaws for outside and inside measurement
500-724-20	0 - 200					198		
500-727-20	0 - 150					168		
500-728-20	0 - 200					198		
500-714-20	0 - 300		±0.03	±0.05		350	✓	—
500-718-20						345	—	
500-704-20*3					—	350	✓	
500-708-20*3						345	—	

Inch / Metric

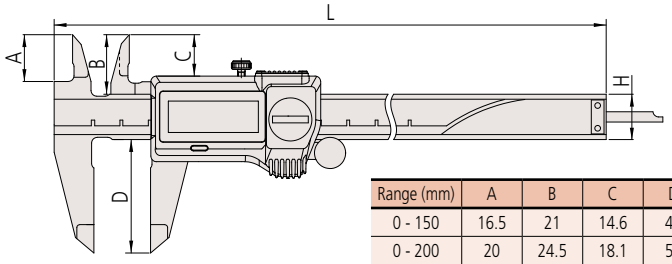
Code No.	Range	Resolution	Maximum permissible error*1 E_{MPE}	Maximum permissible error*1 S_{MPE}	Measurement data output port	Mass (g)	Thumb roller	Remarks
500-720-20	0 - 6 in/0 - 150 mm	0.0005 in/ 0.01 mm	±0.001 in/ ±0.02 mm	±0.002 in/ ±0.04 mm	✓	168	—	Depth bar ø1.9 mm
500-731-20*3					—		✓	Carbide-tipped jaws for outside measurement
500-732-20*3	0 - 8 in/0 - 200 mm					198		
500-733-20*3	0 - 6 in/0 - 150 mm					168		Carbide-tipped jaws for outside and inside measurement
500-734-20*3	0 - 8 in/0 - 200 mm					198		
500-735-20	0 - 6 in/0 - 150 mm				✓	168		Carbide-tipped jaws for outside measurement
500-736-20	0 - 8 in/0 - 200 mm					198		
500-737-20	0 - 6 in/0 - 150 mm					168		Carbide-tipped jaws for outside and inside measurement
500-738-20	0 - 8 in/0 - 200 mm					198		
500-752-20*3	0 - 6 in/0 - 150 mm				—	168		—
500-753-20*3	0 - 8 in/0 - 200 mm					198		
500-762-20	0 - 6 in/0 - 150 mm				✓	168		
500-763-20	0 - 8 in/0 - 200 mm					198		
500-768-20*3	0 - 6 in/0 - 150 mm				—	168		Depth bar ø1.9 mm
500-769-20					✓	168		Depth bar ø1.9 mm
500-764-20	0 - 12 in/0 - 300 mm		±0.0015 in/ ±0.03 mm	±0.0025 in/ ±0.05 mm	✓	350	✓	—
500-754-20*3					—	350		

- Dust/Water protection level: IP67 (IEC60529)*2
- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Position detection method: ABSOLUTE electromagnetic induction linear encoder
- Battery life: Approx. 5 years under normal use
- Response speed: Unlimited
- With depth bar

*1 The Partial Surface Contact Error (E_{MPE}) and Shift Error (S_{MPE}) are terms defined by ISO 13385-1:2019.
*2 Although these models are IP67 rated, care should be taken to dry tool after use.
*3 Without SPC data output.

DIMENSIONS

Unit: mm



Range (mm)	A	B	C	D	H	L
0 - 150	16.5	21	14.6	40	16	233
0 - 200	20	24.5	18.1	50		290
0 - 300	22	27.5	19.8	64	20	404

Outside jaw thickness = 3.5 mm for 0 to 150 mm/0 to 200 mm models
3.8 mm for 0 to 300 mm model

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