Calipers

SERIES 500 - ABSOLUTE Digimatic Coolant Proof Caliper

- Can be used in workshop conditions exposed to coolant, water, dust or oil. Other specifications and price are the same as the conventional products. 100% inspection by air leak test is performed to ensure quality and reliability.
- Large LCD characters make the display easy to read.
- Easy to use advanced design styling with only 1 button.
- Incorporates Mitutoyo's ABSOLUTE measurement system. No need to reset the origin.
- SPC data output models can be integrated into statistical process control and measurement systems.
- Can measure outside and inside dimensions, depth, and steps.
- The automatic power-on/off function shuts down the LCD display after 20 minutes inactivity, but the ABS scale unit origin is stored. Power is restored when the slider is moved.
- A convenient interface input tool is available so that measurement data can be converted to keyboard signals and input directly to commercial spreadsheet software.
- An inspection certificate is supplied as standard. (However, this cannot be used as a calibration certificate as it is undated.)



Specifications Inch/Metric

| Code No. | Range | Accuracy* | Remarks | Price | | |
|-------------------------|---------------------|----------------------|--------------------------------------------------------|-------|--|--|
| With SPC data output | | | | | | |
| 500-762-20 | 0-150 mm (0-6") | | — | | | |
| 500-735-20 | | | Carbide-tipped jaws for outside measurement | | | |
| 500-737-20 | | ±0.02 mm | Carbide-tipped jaws for outside and inside measurement | | | |
| 500-763-20 | 0-200 mm (0-8") | (.001") | — | | | |
| 500-736-20 | | | Carbide-tipped jaws for outside measurement | | | |
| 500-738-20 | | | Carbide-tipped jaws for outside and inside measurement | | | |
| 500-764-20 | 0-300 mm (0-12") | ±0.03 mm (.0015") | _ | | | |
| Without SPC data output | | | | | | |
| 500-752-20 | U-150 mm (0-6") | | _ | | | |
| 500-731-20 | | | Carbide-tipped jaws for outside measurement | | | |
| 500-733-20 | | ±0.02 mm | Carbide-tipped jaws for outside and inside measurement | | | |
| 500-753-20 | 0-200 mm (0-8") | (.001") | — | | | |
| 500-732-20 | | | Carbide-tipped jaws for outside measurement | | | |
| 500-734-20 | | | Carbide-tipped jaws for outside and inside measurement | | | |
| 500-754-10 | 0-300 mm (0-12") | ±0.03 mm (.0015") | _ | | | |

* Excluding quantizing error.



Technical Data

| Resolution: | 0.01 mm (.0005") |
|----------------------------|-------------------------------------|
| Repeatability: | 0.01 mm |
| Quantizing error: | Not including ±1 count |
| Dust/water protection | |
| level: | IP67* |
| Scale type: | ABSOLUTE electromagnetic induction |
| | linear encoder |
| Max. response speed: | Unlimited |
| Battery: | SR44 (1 pc.), 938882 |
| Battery life: | Approx. 5 years under normal use (1 |
| | year for models over 300 mm) |
| * Dustano ofin a trastment | to be applied after use |

* Rustproofing treatment to be applied after use.

Functions

ABSOLUTE system measurement:

After power is turned ON, measurement can be started without zero-setting if origin-setting was previously performed. The ABS (absolute) origin position can be changed by the ORIGIN button.

Zero-setting (INC measurement mode):

Displayed value can be set to zero at any arbitrary position of the slider for comparative measurements.

Auto ON/OFF:

The reading on the LCD disappears after this instrument is idle for a short time, but the origin point is retained. Moving the slider causes the reading on the LCD to reappear. Data output:

Models equipped with this function have an output port for transferring measurement data to a Statistical Process Control (SPC) system.

Inch/mm selection:

Switches the units of measurement (at any time). Alerts:

In the unlikely event of a display overflow or calculation error, an error message is displayed and measurement stops. Measurement cannot continue until the error is corrected. If the battery voltage drops below a certain point, the battery indicator will turn on before measurement becomes impossible, warning the user that the battery needs to be replaced. If contamination on the surface of the scale causes a calculation error, an error message is displayed and measurement stops.



Optional Accessories*

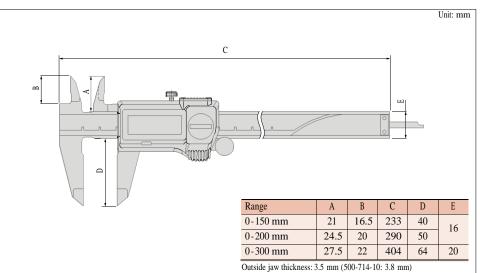
| Code No. | Description | Price | | |
|----------------------------------------------|------------------------------------------|-------|--|--|
| 264-620 | U-WAVE-TC transmission unit | | | |
| 02AZF310 | U-WAVE-TC connection unit | | | |
| 05CZA624 | SPC data cable with pushbutton (1 m) | | | |
| 05CZA625 | SPC data cable with pushbutton (2 m) | | | |
| 06AFM380A | USB input tool direct USB-ITN-C (2 m) | | | |
| * Only for models with data output function. | | | | |





U-WAVE transmitter with buzzer fitted to a Digimatic caliper.

Dimensions





Carbide-tipped jaws for outside measurement.

Smooth slider movement makes for comfortable operation. High quality guide surface finish for smooth slider movement.

