

Calipers

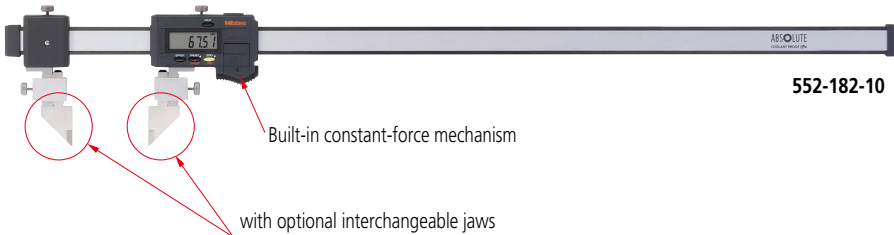
MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



ABSOLUTE Coolant Proof Carbon Fiber Caliper SERIES 552 — with Interchangeable Jaws

- Digimatic Calipers employ CFRP (Carbon-Fiber Reinforced Plastics) in the beam and jaws. Lightweight and easy to handle. The range of applications can be expanded by using interchangeable jaws.
- Rated to IP66: can be used in adverse environments where the caliper is subject to splashing by cutting fluid or coolant. The digital display can reduce human error by preventing incorrect reading of measurement results.



SPECIFICATIONS

| Metric | | | | |
|------------|------------|-----------------|--|-------------------------|
| Code No. | Range (mm) | Resolution (mm) | Maximum permissible error (mm)* ¹ | |
| | | | <i>E</i> _{MPE} | <i>S</i> _{MPE} |
| 552-181-10 | 0 - 450 | 0.01 | ±0.04 | |
| 552-182-10 | 0 - 600 | | | |
| 552-183-10 | 0 - 1000 | | | |
| 552-184-10 | 0 - 1500 | | | |
| 552-185-10 | 0 - 2000 | | | |

| Inch / Metric | | | | |
|---------------|-----------------------|-------------------|---|-------------------------|
| Code No. | Range | Resolution | Maximum permissible error* ¹ | |
| | | | <i>E</i> _{MPE} | <i>S</i> _{MPE} |
| 552-191-10 | 0 - 18 in/0 - 450 mm | 0.0005 in/0.01 mm | ±0.002 in/±0.04 mm | |
| 552-192-10 | 0 - 24 in/0 - 600 mm | | | |
| 552-193-10 | 0 - 40 in/0 - 1000 mm | | | |
| 552-194-10 | 0 - 60 in/0 - 1500 mm | | | |
| 552-195-10 | 0 - 80 in/0 - 2000 mm | | | |

- Dust/Water protection level: IP66 (IEC 60529)*²
- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Battery life: Approx. 5,000 hours in continuous use
- Response speed: Unlimited

*1 The Partial Surface Contact Error (*E*_{MPE}) and Shift Error (*S*_{MPE}) are terms defined by ISO 13385-1:2019.

*2 Rustproofing shall be applied after use if caliper was in contact with coolant.

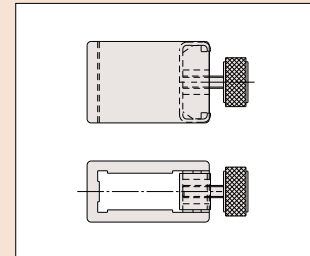
Note1: The Maximum permissible error (MPE) values described above were measured using a dedicated outside measurement inspection tool.

Note2: A constant-force mechanism is used in the finger rest; however, this is only an auxiliary mechanism to avoid measurement error caused by excessive measuring force. To measure with good accuracy, use the minimum necessary measuring force for the caliper measuring faces to make sufficient contact with the workpiece. Refer to page 13-21 for details.

Functions

- Zero-setting
- Data hold: Pressing the HOLD switch displays "H" on the LCD display and holds (retains) the display of value. Moving the slider in this state does not change the displayed value. Pressing the switch again cancels the state, allowing you to start measuring again.
- Offsetting: Pressing the OFFSET switch adds an offset for inside measurement to the displayed value so that you can directly obtain an inside measurement value.
- Presetting: This function presets a desired value as the displayed value at the origin. When using optional jaws, presetting an offset of the jaws enables you to directly obtain the necessary measurement value.
- Data output: Measurement data can be output, allowing easy incorporation of this instrument into a statistical process control or measurement system.
- Low-power and low-voltage alert: When the battery voltage becomes low, "B" appears on the LCD, signaling the need for battery replacement before the caliper stops working.
- Counting value composition error: If a measurement error occurs due to dirt on the scale, etc., an error message appears on the display and measurement stops.
- Automatic power on/off, inch/mm reading (inch/mm models): LCD display turns off after 20 minutes inactivity but the ABS scale unit origin is stored. Moving the slider restores the display.

Standard Accessories (2 pcs.)



Jaw clamps: **05GZA033**

Optional Accessories

| 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) |
| 05CZA625 | A | Connection cable for IT/DP/MUX (2 m) |
| 06AFM380A | A | USB Input Tool Direct (2 m) |
| 02AZD730G | IP67 | U-WAVE-T |
| 02AZD880G | Buzzer | U-WAVE-T |
| 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 |