

Calipers

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



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

- IP66 Absolute Digital Caliper (Refer to page D-5 for details on the Absolute function.)
- Lightweight Digimatic Calipers that employ CFRP (Carbon Fiber Reinforced Plastics) in the beam.



552-151-10

SPECIFICATIONS

| Order No. | Range (mm)* ¹ | Resolution (mm) | Maximum permissible error (mm)* ² | |
|------------|--------------------------|-----------------|--|-------|
| | | | EMPE | SMPE |
| 552-150-10 | 0 - 450 (20.1 - 470) | 0.01 | ±0.06 | ±0.06 |
| 552-151-10 | 0 - 600 (20.1 - 620) | | ±0.06 | ±0.06 |
| 552-152-10 | 0 - 1000 (20.1 - 1020) | | ±0.07 | ±0.07 |
| 552-153-10 | 0 - 1500 (20.1 - 1520) | | ±0.11 | ±0.11 |
| 552-154-10 | 0 - 2000 (20.1 - 2020) | | ±0.14 | ±0.14 |

| Order No. | Range* ¹ | Resolution | Maximum permissible error* ² | |
|------------|---|-------------------|---|---------------------|
| | | | EMPE | SMPE |
| 552-160-10 | 0 - 18 in/0 - 450 mm (0.504 - 18.5 in/12.8 - 462.7 mm) | 0.0005 in/0.01 mm | ±0.0025 in/±0.06 mm | ±0.0025 in/±0.06 mm |
| 552-161-10 | 0 - 24 in/0 - 600 mm (0.504 - 24.5 in/12.8 - 612.7 mm) | | ±0.003 in/±0.07 mm | ±0.003 in/±0.07 mm |
| 552-162-10 | 0 - 40 in/0 - 1000 mm (1.004 - 41 in/25.5 - 1025.4 mm) | | ±0.0045 in/±0.11 mm | ±0.0045 in/±0.11 mm |
| 552-163-10 | 0 - 60 in/0 - 1500 mm (1.004 - 61 in/25.5 - 1525.4 mm) | | ±0.0055 in/±0.14 mm | ±0.0055 in/±0.14 mm |
| 552-164-10 | 0 - 80 in/0 - 2000 mm (1.004 - 81 in/25.5 - 2025.4 mm) | | | |

- Dust/Water protection level: IP66 (IEC 60529)*³
- Battery: SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
- Battery life: Approx. 5,000 hours in continuous use
- Max. response speed: Unlimited
- Material of jaws: Stainless Steel Hardened

*1 (): Dimension in inside measurement

*2 Partial Surface Contact Error, EMPE and Shift Error, SMPE are terms (notations) used in ISO 13385-1:2019.

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

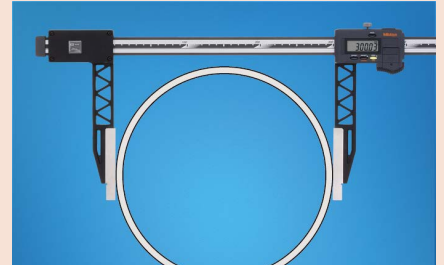
Note: A constant-force mechanism is used in the finger rest; however, this is only an auxiliary mechanism to avoid measurement error caused by excessive measuring force. To measure with good accuracy, use the minimum necessary measuring force for the caliper measuring faces to make sufficient contact with the workpiece. Refer to page D-45 for details.

DIMENSIONS

Unit: mm

| Range | E | F | H | K | L | N | P |
|-------------|-------|------|----|-------|------|-----|----|
| 0 - 450 mm | 91.8 | 65.5 | 25 | 173 | 680 | 89 | 8 |
| 0 - 600 mm | | | | | 830 | | |
| 0 - 1000 mm | 113.8 | 73 | 32 | 170.5 | 1280 | 110 | 12 |
| 0 - 1500 mm | | | | | 1790 | | |
| 0 - 2000 mm | | | | | 2300 | | |

Measurement example



Functions

- Zero-setting
- Data hold
- Offsetting
- Presetting
- Data output
- Low-power and low-voltage alert
- Counting value composition error
- Automatic power on/off, inch/mm reading (inch/mm models)

Optional Accessories

| Order No. | Type | Description |
|-----------|------|--|
| 05CZA624 | A | Connecting cables for IT/DP/MUX (1 m) |
| 05CZA625 | A | Connecting cables for IT/DP/MUX (2 m) |
| 06AFM380A | A | USB Input Tool Direct (2 m) |
| 02AZD790A | A | Connecting cables for U-WAVE-T (160 mm) |
| 02AZE140A | A | Connecting cables for U-WAVE-T For foot switch |