

Calipers

ABSOLUTE Digimatic Caliper SERIES 551 — with Nib Style and Standard Jaws

ISO13385-1 compliant

- This model has a smaller jaw for outside measurements and a larger jaw for inside and outside measurements. Use the jaws that are suitable for your application. The jaw for outside measurement has sharp tips that are helpful for measuring thin parts.
- Incorporates Mitutoyo's ABSOLUTE measurement system. No need to reset the origin after switching on.
- The digital display can reduce human error by preventing incorrect reading of measurement results. **551-3XX-20** is rated at IP67 and therefore can be reliably used at the manufacturing site.
- ID measurement value: displayed value + (a compensation value displayed on the main unit). OFFSET switch allows to input a compensation value so that the measurement value can be read directly (**Code No. 551-301-20, 551-331-20, 551-311-20 and 551-341-20**). Preset function allows to set a desired starting point (**Code No. 551-331-20 and 551-341-20**).



551-301-20

Compensation value

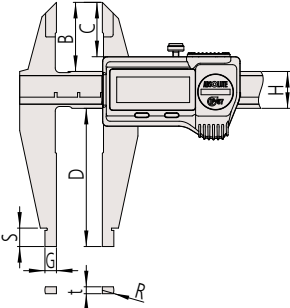
SPECIFICATIONS

| Metric | | | | | |
|------------|--------------------------|-----------------|--|--------------|---|
| Code No. | Range (mm)* ¹ | Resolution (mm) | Maximum permissible error (mm)* ² | | Remarks |
| | | | <i>E</i> MPe | <i>S</i> MPe | |
| 551-301-20 | 0 - 200 (10.1 - 210) | 0.01 | ±0.03 | ±0.03 | IP67, with offset |
| 551-331-20 | 0 - 300 (10.1 - 310) | | ±0.04 | ±0.04 | IP67, with offset/preset function for easy inside measurement |
| 551-204-10 | 0 - 500 (20.1 - 520) | | ±0.06 | ±0.06 | — |
| 551-206-10 | 0 - 750 (20.1 - 770) | | ±0.06 | ±0.06 | — |
| 551-207-10 | 0 - 1000 (20.1 - 1020) | | ±0.07 | ±0.07 | — |

| Inch / Metric | | | | | |
|---------------|---|-----------------------|---|-------------------------|---|
| Code No. | Range* ¹ | Resolution | Maximum permissible error* ² | | Remarks |
| | | | <i>E</i> MPe | <i>S</i> MPe | |
| 551-311-20 | 0 - 8 in/0 - 200 mm (0.404 - 8.4 in/10.26 - 210.16 mm) | 0.0005 in/ 0.01 mm | ±0.0015 in/ ±0.03 mm | ±0.0015 in/ ±0.03 mm | IP67, with offset |
| 551-341-20 | 0 - 12 in/0 - 300 mm (0.404 - 12.4 in/10.26 - 310.16 mm) | | ±0.002 in/ ±0.04 mm | ±0.002 in/ ±0.04 mm | IP67, with offset/preset function for easy inside measurement |
| 551-224-10 | 0 - 20 in/0 - 500 mm (0.504 - 20.5 in/12.8 - 512.7 mm) | | ±0.0025 in/ ±0.06 mm | ±0.0025 in/ ±0.06 mm | — |
| 551-226-10 | 0 - 30 in/0 - 750 mm (0.504 - 30.5 in/12.8 - 762.7 mm) | | ±0.0025 in/ ±0.06 mm | ±0.0025 in/ ±0.06 mm | — |
| 551-227-10 | 0 - 40 in/0 - 1000 mm (1.004 - 40.1 in/25.5 - 1025.4 mm) | | ±0.003 in/ ±0.07 mm | ±0.003 in/ ±0.07 mm | — |

- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Response speed: Unlimited
- *1 (): Inside measurement
- *2 The Partial Surface Contact Error (*E*MPe) and Shift Error (*S*MPe) are terms defined by ISO 13385-1:2019.

DIMENSIONS



| Range (mm) | B | C | D | G | S | H | t | R |
|--------------------------|----|------|-----|------------|----|----|-----|------------|
| 0 - 200 (0 - 8 in)* | 30 | 23.6 | 60 | 5 (5.08)* | 8 | 16 | 3 | 5 (5.08)* |
| 0 - 300 (0 - 12 in)* | 40 | 32.2 | 90 | | 10 | 20 | 3.8 | |
| 0 - 500 (0 - 20 in)* | 56 | 44.9 | 150 | 10 (6.35)* | 18 | 25 | 6 | 10 (6.35)* |
| 0 - 750 (0 - 30 in)* | 56 | | | 10 (12.7)* | 20 | 32 | 8 | 10 (12.7)* |
| 0 - 1000 (0 - 40 in)* | 56 | 43.8 | | 10 (12.7)* | 20 | 32 | 8 | 10 (12.7)* |

* Inch model

ABSOLUTE™

IP67

Dust- and Water-Protected
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ID 0000645042

Measurement example



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)* ¹ |
| 05CZA625 | A | Connection cable for IT/DP/MUX (2 m)* ¹ |
| 959149 | C | Connection cable for IT/DP/MUX (1 m)* ² |
| 959150 | C | Connection cable for IT/DP/MUX (2 m)* ² |
| 06AFM380A | A | USB Input Tool Direct (2 m)* ¹ |
| 06AFM380C | C | USB Input Tool Direct (2 m)* ² |
| 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)* ¹ |
| 02AZE140A | A | Connection cable for U-WAVE-T * ¹ For foot switch |
| 02AZD790C | C | Connection cable for U-WAVE-T (160 mm)* ² |
| 02AZE140C | C | Connection cable for U-WAVE-T * ² For foot switch |
| 264-620 | IP67 | U-WAVE-TC * ¹ |
| 264-621 | Buzzer | U-WAVE-TC * ¹ |
| 264-624 | IP67 | U-WAVE-TCB * ¹ |
| 264-625 | Buzzer | U-WAVE-TCB * ¹ |
| 02AZF310 | IP67 | Connecting unit for U-WAVE-TC/TCB * ¹ |

- *1 For IP67 models (up to 300 mm)
- *2 For series **551-2XX** and **551-22X**.