

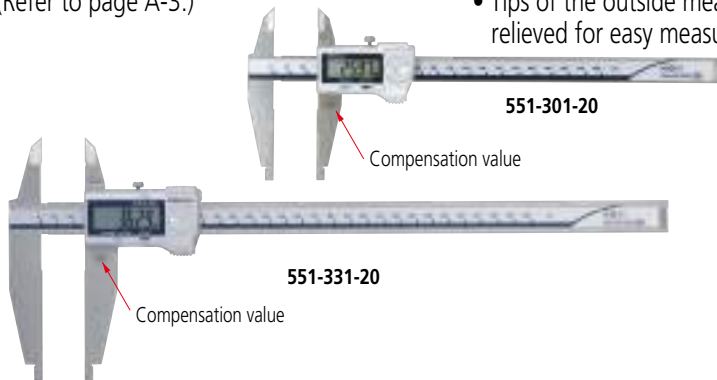
# Calipers

An industry standard measuring tool

## ABSOLUTE Digimatic Caliper SERIES 551 - with Nib Style and Standard Jaws

**MeasurLink® ENABLED**  
Data Management Software by Mitutoyo

- Offers a resolution of 0.01 mm with corresponding accuracy.
- Incorporates an Absolute measurement system. No need to reset the origin after switching on. (Refer to page D-4 and D-6 for details on the Absolute function.)
- Allows integration into statistical process control and measurement systems for models with measurement data output connector. (Refer to page A-3.)
- 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 (**Order No. 551-301-20, 551-331-20, 551-311-20 and 551-341-20**). Preset function allows to set a desired starting point (**Order No. 551-331-20 and 551-341-20**).
- Tips of the outside measurement jaw are relieved for easy measurement of thin parts.



**MeasurLink ENABLED**  
Data Management Software by Mitutoyo

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink® (refer to page A-25 for details).

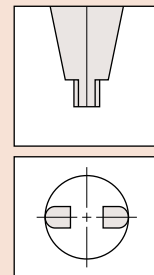
**ABSOLUTE™**

**IP67**



Dust- and Water-Protected

www.mitutoyo.com  
ID 000045042



Radiused jaws for accurate ID measurement

## SPECIFICATIONS

### Metric

Order No.	Range (mm)*1	Maximum permissible error (mm)*2		Remarks
		EMPE	SMPE	
<b>551-301-20</b>	0 - 200 (10.1 - 210)	±0.03	±0.03	IP67, with offset
<b>551-331-20</b>	0 - 300 (10.1 - 310)	±0.04	±0.04	
<b>551-204-10</b>	0 - 500 (20.1 - 520)	±0.06	±0.06	
<b>551-206-10</b>	0 - 750 (20.1 - 770)	±0.06	±0.06	
<b>551-207-10</b>	0 - 1000 (20.1 - 1020)	±0.07	±0.07	

\*1 ( ): Inside measurement

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

Note: **Series 551** is not equipped with a depth bar.

### Inch/Metric

Order No.	Range (in)*1	Maximum permissible error (in)*2		Remarks
		EMPE	SMPE	
<b>551-311-20</b>	0 - 8 (0.404 - 8.4)	±0.0015	±0.0015	IP67, with offset
<b>551-341-20</b>	0 - 12 (0.404 - 12.4)	±0.002	±0.002	
<b>551-224-10</b>	0 - 20 (0.504 - 20.5)	±0.0025	±0.0025	
<b>551-226-10</b>	0 - 30 (0.504 - 30.5)	±0.0025	±0.0025	
<b>551-227-10</b>	0 - 40 (1.004 - 41)	±0.003	±0.003	

\*1 ( ): Inside measurement

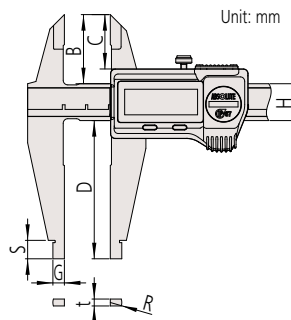
\*2 Partial Surface Contact Error, EMPE and Shift Error, SMPE are terms (notations) used in ISO 13385-1:2019.

Note: **Series 551** is not equipped with a depth bar.

## 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)*				10 (12.7)*	20	32	8	10 (12.7)*
0 - 1000 (0 - 40 in)*	56	43.8						

\* Inch model



## Technical Data

- Resolution: 0.01 mm or 0.0005 in/0.01 mm
  - Display: LCD
  - Scale type: ABSOLUTE electromagnetic induction linear encoder
  - Max. response speed: Unlimited
  - Battery: SR44 (1 pc.), **938882**, for initial operational checks (standard accessory)
  - Dust/Water protection level: IP67\* (models up to 300 mm)
- \* Rustproofing shall be applied after use if caliper was in contact with coolant.

## Optional Accessories

For details, refer to page A-21.

- **959143**: Data hold unit
- Connecting cables for **IT/DP/MUX**
  - **05CZA624**: SPC cable with data button (1 m)\*
  - **05CZA625**: SPC cable with data button (2 m)\*
  - **959149**: SPC cable with data button (1 m)
  - **959150**: SPC cable with data button (2 m)
- USB Input Tool Direct
  - **06AFM380A**: SPC cable for **USB-ITN-A** (2 m)\*
  - **06AFM380C**: SPC cable for **USB-ITN-C** (2 m)
- Connecting cables for **U-WAVE-T**
  - **02AZD790A**: SPC cable with data button (160 mm)
  - **02AZE140A**: SPC cable for foot switch

## Wireless Data Output **U-WAVE™**

- **U-WAVE-TC**: **264-620** (IP67 type)  
**264-621** (Buzzer type)
- **U-WAVE-TCB Transmitter (Mitutoyo Bluetooth® U-WAVE)**
  - **264-624** (IP67 type)
  - **264-625** (Buzzer type)

Refer to page A-10 for details.
- Connecting unit for **U-WAVE-TC/TCB**
  - **02AZF310** (IP67 type)

Note: IP67 model is water/dust-proofed suitable for the factory floor.  
Buzzer type is not water/dust-proofed.  
Refer to pages A-10 and A-12 for details.  
\* For IP67 models (up to 300 mm)