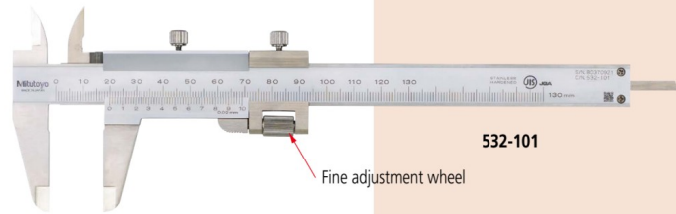


# Calipers

An industry standard measuring tool

## Vernier Caliper SERIES 532 — with fine adjustment

- Fine-adjustment aids slider positioning.
- Allows step measurement.



### SPECIFICATIONS

Metric				
Order No.	Range (mm)	Maximum permissible error (mm)*1 • EMPE (outside measurement) • SMPE (inside measurement)	Depth bar	Remarks
532-101*2	0 - 130	±0.03	Blade	with fine adjustment
532-102*2	0 - 180	±0.03		
532-103*2	0 - 280	±0.04		

Metric/Inch with metric/inch double scale					
Order No.	Range (mm)	Maximum permissible error (in)*1 • EMPE (outside measurement) • SMPE (inside measurement)	Depth bar	Graduation	Remarks
532-119	0 - 130	±0.03	Blade	0.02 mm (0.001 in)	with fine adjustment
532-120	0 - 180	±0.03			
532-121	0 - 280	±0.04			

\*1 Partial Measuring Face Contact Error, EMPE and Shift Error, SMPE are terms (notations) used in JIS B 7507: 2016, revised based on ISO 13385-1: 2011. The measurement method is the same as before. Refer to page D-39 for details.

\*2 Graduation: 0.02 mm

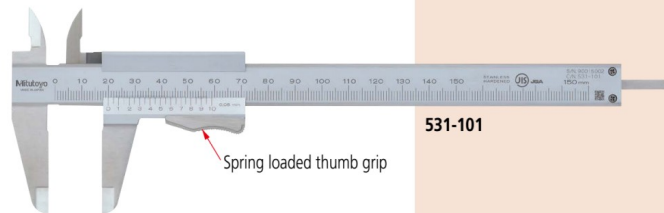
### DIMENSIONS

Range	A	B	D	E	F	H	L
0 - 130 mm/0 - 5 in	17	21.5	40	53.5	31.2	16	229
0 - 180 mm/0 - 7 in	20.5	25	50	53.5	31.2	16	288
0 - 280 mm/0 - 11 in	22	27.5	64	66.5	38	20	404

Jaw thickness: 3 mm for 0 to 130 mm/0 to 5 inch and 0 to 180 mm/0 to 7 inch models  
3.8 mm for 0 to 280 mm/0 to 11 inch model

## Vernier Caliper SERIES 531 — with thumb grip

- The slider moves only when the spring-loaded thumb grip is depressed.
- Allows step measurement.



### SPECIFICATIONS

Metric				
Order No.	Range (mm)	Maximum permissible error (mm)*1 • EMPE (outside measurement) • SMPE (inside measurement)	Depth bar	Remarks
531-101*2	0 - 150	±0.05	Blade	—
531-102*2	0 - 200			
531-103*2	0 - 300	±0.08		

Metric/Inch with metric/inch double scale					
Order No.	Range (mm)	Maximum permissible error (in)*1 • EMPE (outside measurement) • SMPE (inside measurement)	Depth bar	Graduation	Remarks
531-122	0 - 150	±0.05	Blade	0.05 mm (1/128 in)	with inch/mm conversion label
531-128		±0.03		0.02 mm (0.001 in)	High accuracy model
531-108	0 - 200	±0.05		0.05 mm (1/128 in)	—
531-129		±0.03		0.02 mm (0.001 in)	High accuracy model
531-109	0 - 300	±0.08		0.05 mm (1/128 in)	—
531-112		±0.04		0.02 mm (0.001 in)	High accuracy model

\*1 Partial Measuring Face Contact Error, EMPE and Shift Error, SMPE are terms (notations) used in JIS B 7507: 2016, revised based on ISO 13385-1: 2011. The measurement method is the same as before. Refer to page D-39 for details.

\*2 Graduation: 0.05 mm

### DIMENSIONS

Range	A	B	D	H	L
0 - 150 mm/0 - 6 in	17	21.5	40	16	229
0 - 200 mm/0 - 8 in	20.5	25	50	16	288
0 - 300 mm/0 - 12 in	22	27.5	64	20	404

Jaw thickness: 3 mm for 0 to 150 mm/0 to 6 inch and 0 to 200 mm/0 to 8 inch models  
3.8 mm for 0 to 300 mm/0 to 12 inch model



**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).

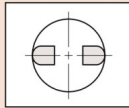
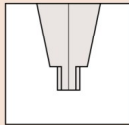
**ABSOLUTE™**

**IP67**



Dust- and Water-Protected

www.tuv.com  
ID 000045042



Radiused jaws for accurate ID measurement

**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)

**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.

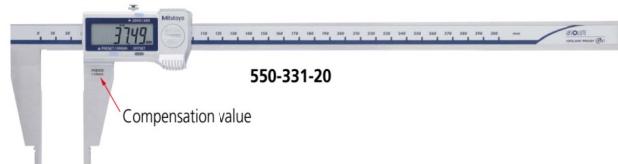
Refer to pages A-10 and A-12 for details.

\* For IP67 models (up to 300 mm)

**ABSOLUTE Digimatic Caliper SERIES 550 — with Nib Style 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.)
- **Order No. 550-301-20, 550-331-20, 550-311-20 and 550-341-20**: IP67 (Rustproofing shall be applied after use if caliper was in contact with coolant.)
- 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. 550-301-20, 550-331-20, 550-311-20 and 550-341-20**). Preset function allows to set a desired starting point (**550-331-20 and 550-341-20**).



**SPECIFICATIONS**

**Metric**

Order No.	Range (mm)*1	Maximum permissible error (mm)*2		Remarks
		EMPE	SMPE	
<b>550-301-20</b>	0 - 200 (10.1 - 210)	±0.03	±0.03	IP67, with offset
<b>550-331-20</b>	0 - 300 (10.1 - 310)	±0.04	±0.04	IP67, with offset/preset function for easy inside measurement
<b>550-203-10</b>	0 - 450 (20.1 - 470)	±0.05	±0.05	—
<b>550-205-10</b>	0 - 600 (20.1 - 620)	±0.05	±0.05	—
<b>550-207-10</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 550** is not equipped with a depth bar.

**Inch / Metric**

Order No.	Range (in)*1	Maximum permissible error (in)*2		Remarks
		EMPE	SMPE	
<b>550-311-20</b>	0 - 8 (0.404 - 8.4)	±0.0015	±0.0015	IP67, with offset
<b>550-341-20</b>	0 - 12 (0.404 - 12.4)	±0.002	±0.002	IP67, with offset/preset function for easy inside measurement
<b>550-223-10</b>	0 - 18 (0.504 - 18.5)	±0.002	±0.002	—
<b>550-225-10</b>	0 - 24 (0.504 - 24.5)	±0.002	±0.002	—
<b>550-227-10</b>	0 - 40 (1.004 - 41)	±0.003	±0.003	—

\*1 ( ): Inside measurement

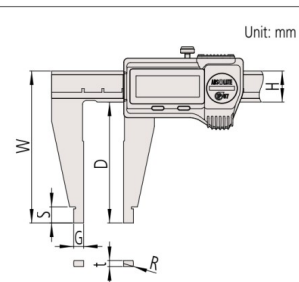
\*2 Partial Surface Contact Error, EMPE and Shift Error, SMPE are terms (notations) used in ISO 13385-1:2019.

Note: **Series 550** is not equipped with a depth bar.

**DIMENSIONS**

Range (mm)	D	G	S	W	H	t	R
0 - 200 (0 - 8 in)*	60	5 (5.08)*	8	76	16	3	5 (5.08)*
0 - 300 (0 - 12 in)*	75		12	95	20	3.8	
0 - 450 (0 - 18 in)*							
0 - 600 (0 - 24 in)*	100	10 (6.35)*	18	125	25	6	10 (6.35)*
0 - 1000 (0 - 40 in)*	140	10 (12.7)*	24	172	32	8	10 (12.7)*

\* Inch model



Mitutoyo reserves the right to change any or all aspects of any product specification, including prices, designs and service content, without notice.

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