

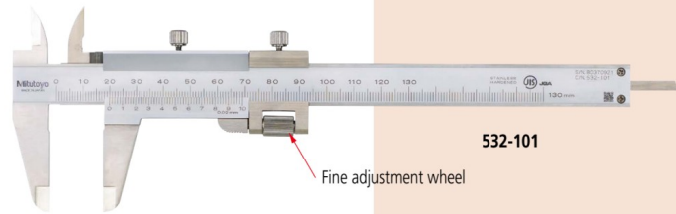


Calipers

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

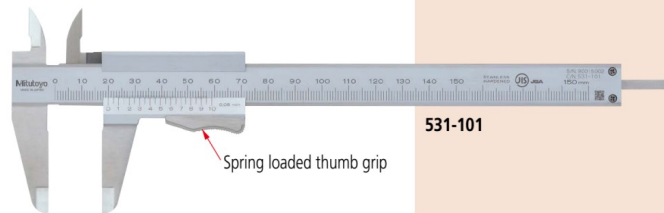
Range	A	B	D	E	F	H	L
0 - 130 mm/0 - 5 in	17	21.5	40	53.5	31.2	16	229
0 - 180 mm/0 - 7 in	20.5	25	50	53.5	31.2	16	288
0 - 280 mm/0 - 11 in	22	27.5	64	66.5	38	20	404

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

Unit: mm

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			

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

Unit: mm

* (): Dimension in 0 to 300 mm/0 to 12 inch model



D-11

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



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).

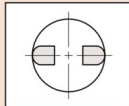
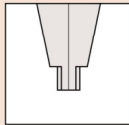
ABSOLUTE™

IP67



Dust- and Water-Protected

www.mitutoyo.com
ID 000045042



Radiused jaws for accurate ID measurement

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.

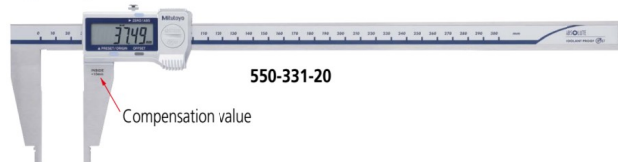
Refer to pages A-10 and A-12 for details.

* 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	
550-301-20	0 - 200 (10.1 - 210)	±0.03	±0.03	IP67, with offset
550-331-20	0 - 300 (10.1 - 310)	±0.04	±0.04	IP67, with offset/preset function for easy inside measurement
550-203-10	0 - 450 (20.1 - 470)	±0.05	±0.05	—
550-205-10	0 - 600 (20.1 - 620)	±0.05	±0.05	—
550-207-10	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	
550-311-20	0 - 8 (0.404 - 8.4)	±0.0015	±0.0015	IP67, with offset
550-341-20	0 - 12 (0.404 - 12.4)	±0.002	±0.002	IP67, with offset/preset function for easy inside measurement
550-223-10	0 - 18 (0.504 - 18.5)	±0.002	±0.002	—
550-225-10	0 - 24 (0.504 - 24.5)	±0.002	±0.002	—
550-227-10	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

