

Calipers

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

- 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**).



SPECIFICATIONS

Metric					
Code No.	Range (mm)* ¹	Resolution (mm)	Maximum permissible error (mm)* ²		Remarks
			EMPE	SMPE	
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)		±0.02 in/	±0.002 in/	
551-207-10	0 - 1000 (20.1 - 1020)		±0.07	±0.07	

Inch / Metric					
Code No.	Range* ¹	Resolution	Maximum permissible error* ²		Remarks
			EMPE	SMPE	
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)		±0.003 in/ ±0.07 mm	±0.003 in/ ±0.07 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 (EMPE) and Shift Error (SMPE) are terms defined by ISO 13385-1:2019.

DIMENSIONS

Unit: mm									
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								
0 - 1000 (0 - 40 in)*	56	43.8		10 (12.7)*	20	32	8	10 (12.7)*	

* Inch model

MeasurLink[®] ENABLED Data Management Software by Mitutoyo

U-WAVE^{fit}

ABSOLUTE[™]

IP67

TÜV Rheinland
CERTIFIED
Dust- and
Water-
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www.tuv.com
ID 000045042

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**.