

Measurement example



Optional Accessories

Order No.	Type	Description
05CZA624	A	Connecting cables for IT/DP/MUX (1 m)* ¹
05CZA625	A	Connecting cables for IT/DP/MUX (2 m)* ¹
959149	C	Connecting cables for IT/DP/MUX (1 m)* ²
959150	C	Connecting cables 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
02AZD790A	A	Connecting cables for U-WAVE-T (160 mm)* ¹
02AZD790C	C	Connecting cables for U-WAVE-T (160 mm)* ²
02AZE140A	A	Connecting cables for U-WAVE-T* ¹ For foot switch
02AZE140C	C	Connecting cables 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 Transmitter* ¹
264-625	Buzzer	U-WAVE-TCB Transmitter* ¹
02AZF310	IP67	Connecting unit for U-WAVE-TC/TCB* ¹

*1 For IP67 models (up to 300 mm)

*2 For series 550-2XX and 550-22X.

ABSOLUTE Digimatic Caliper
SERIES 550 — with Nib Style Jaws

- Ideal for inside diameter measurement by the rounded faces of the jaws.
- 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	Resolution (mm)	Maximum permissible error (mm)* ²		Remarks
			EMPE	SMPE	
550-301-20	0 - 200 (10.1 - 210)	0.01	±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	—

Inch / Metric					
Order No.	Range* ¹	Resolution	Maximum permissible error* ²		Remarks
			EMPE	SMPE	
550-311-20	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
550-341-20	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
550-223-10	0 - 18 in/0 - 450 mm (0.504 - 18.5 in/12.8 - 462.7 mm)		±0.002 in/ ±0.05 mm	±0.002 in/ ±0.05 mm	—
550-225-10	0 - 24 in/0 - 600 mm (0.504 - 24.5 in/12.8 - 612.7 mm)		±0.002 in/ ±0.05 mm	±0.002 in/ ±0.05 mm	—
550-227-10	0 - 40 in/0 - 1000 mm (1.004 - 41 in/25.5 - 1025.4 mm)		±0.003 in/ ±0.07 mm	±0.003 in/ ±0.07 mm	—

• Battery: SR44 (1 pc.), 938882, for initial operational checks (standard accessory)

• Scale type: ABSOLUTE electromagnetic induction linear encoder

• Max. response speed: Unlimited

*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

Unit: mm

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)*	100	10 (6.35)*	18	125	25	6	10 (6.35)*
0 - 600 (0 - 24 in)*			24	172	32	8	10 (12.7)*
0 - 1000 (0 - 40 in)*	140	10 (12.7)*	24	172	32	8	10 (12.7)*

* Inch model