

## Digimatic Indicators

### ABSOLUTE Digimatic Indicator ID-SX2 SERIES 543

- A standard model of indicator that is reliable and easy to use with basic functions.
  - This model consumes less power than other advanced models and can operate longer without frequent battery replacement.
  - The ABS (ABSOLUTE) scale restores the last origin position\* automatically when the indicator is turned on, and realizes high reliability by eliminating over-speed errors.
  - Equipped with a data output port that enables incorporation into measurement networking and statistical process control systems. (Refer to page 09-3)
- \* Refer to "Precautions for use" on page 07-2.



### SPECIFICATIONS

Metric		ISO/JIS Type										
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error (MPE)*1 (mm)				Maximum permissible limit (MPL)	Back type	Battery life*2	Mass (g)	Dust/Water protection level*3	
			Partial measuring range $P_{MPE}$	Total measuring range $E_{MPE}$	Hysteresis $H_{MPE}$	Repeatability $R_{MPE}$	Measuring force (N)					
543-790-10	12.7	0.001	0.003	0.003	0.002	0.002	1.5 or less	With lug	Approx. 18,000 hours (Continuous use)	150	IP42	
543-790B-10							Flat	140				
543-794-10							2.5 or less	With lug		Approx. 5 years (Normal use)		155
543-794B-10												Flat
543-781-10		0.01	0.02	0.02	0.02	0.01	1.5 or less	With lug	Approx. 20,000 hours (Continuous use)	150	IP42	
543-781B-10								Flat		140		

Inch / Metric		ISO/JIS Type										
Code No.	Range	Resolution	Maximum permissible error (MPE)*1 (mm)				Maximum permissible limit (MPL)	Measuring force (N)	Back type	Battery life*2	Mass (g)	Dust/Water protection level*3
			Partial measuring range $P_{MPE}$	Total measuring range $E_{MPE}$	Hysteresis $H_{MPE}$	Repeatability $R_{MPE}$						
543-791-10	0.5 in/ 12.7 mm	0.00005 in/ 0.001 mm	0.003	0.003	0.002	0.002	1.5 or less	With lug	Approx. 18,000 hours (Continuous use)	Approx. 5 years (Normal use)	150	IP42
543-791B-10							Flat	140				
543-795-10		2.5 or less	With lug Flat	155	IP53							
543-795B-10						155						
543-782-10		0.0005 in/ 0.01 mm	0.02	0.02	0.02	0.01	1.5 or less	With lug	Approx. 20,000 hours (Continuous use)	Approx. 5 years (Normal use)	150	IP42
543-782B-10	Flat							140				

Inch / Metric		ASME/ANSI/AGD Type									
Code No.	Range	Resolution	Maximum permissible error (MPE)*1 (in)			Maximum permissible limit (MPL)	Measuring force (N)	Back type	Battery life*2	Mass (g)	Dust/Water protection level*3
			Overall*4	Hysteresis	Repeatability						
543-792-10	0.5 in / 12.7 mm	0.00005 in / 0.001 mm	±0.00010	0.00010	0.00010	1.5 or less	With lug	Approx. 18,000 hours (Continuous use)	Approx. 5 years (Normal use)	165	IP42
543-792B-10		0.0001 in / 0.001 mm								140	
543-793-10		0.0001 in / 0.001 mm				2.5 or less	With lug	Approx. 20,000 hours (Continuous use)	Approx. 5 years (Normal use)	165	IP53
543-793B-10		0.0005 in / 0.001 mm								140	
543-796-10	0.01 mm	0.0005 in / 0.01 mm	±0.0010	0.0010	0.0005	1.5 or less	With lug	Approx. 20,000 hours (Continuous use)	Approx. 5 years (Normal use)	155	IP42
543-796B-10										155	
543-783-10	0.01 mm	0.0005 in / 0.01 mm	±0.0010	0.0010	0.0005	1.5 or less	With lug	Approx. 20,000 hours (Continuous use)	Approx. 5 years (Normal use)	165	IP42
543-783B-10										140	

- Display: 6-digit display, sign
- Usable orientation: All
- Position detection method: ABSOLUTE electrostatic linear encoder
- Power source: SR44 battery (1 pc.), **938882** included as standard (for operational checks)
- Response speed: Unlimited (except for scanning measurement)

\*1 These values apply to normal measurements at 20 °C.

\*2 The battery life varies, depending on the number of times a Digimatic indicator is used as well as the way it is used. The values listed above are approximations.

\*3 This is only valid when the data socket cover is in place. Does not apply if the cover is removed, a lifting accessory is attached, or a connection cable is attached.

\*4 Overall magnification and linearity

MeasurLink<sup>®</sup> ENABLED  
Data Management Software by Mitutoyo

ABSOLUTE<sup>™</sup>

IP53



Applicable models:  
See **SPECIFICATIONS**

### Functions

- Origin set (Zero-setting)
- Measuring direction switching
- Data output
- Low battery voltage alarm display
- Error alarm display

### Optional Accessories

Code No.	Type	Description
<b>264-020</b>	—	USB Input Tool Series USB Keyboard Signal Conversion Type <b>IT-020U</b>
<b>905338</b>	F	Connection cable (1 m)
<b>905409</b>	F	Connection cable (2 m)
<b>06AFM380F</b>	F	USB Input Tool Direct* (2 m)
<b>02AZD790F</b>	F	Connection cable for <b>U-WAVE-T</b> (160 mm)
<b>02AZE140F</b>	F	Connection cable for <b>U-WAVE-T</b> For foot switch
<b>264-622</b>	IP67	<b>U-WAVE-TM</b>
<b>264-623</b>	Buzzer	<b>U-WAVE-TM</b>
<b>02AZD810D</b>	—	<b>U-WAVE-R</b>
<b>264-626</b>	IP67	<b>U-WAVE-TMB</b>
<b>264-627</b>	Buzzer	<b>U-WAVE-TMB</b>
<b>02AZF670</b>	—	<b>U-WAVE-TM/TMB</b> mounting bracket: for Digimatic Indicators

\* Please separately purchase **USB-ITPAK** since there is no data output switch on the measurement instrument. (Refer to pages 09-15 to 09-17 for details.)

- Lifting  
Lifting lever **21EZA198**  
Lifting knob **21EZA105**  
Lifting cable **21JZA295**  
With auto-stop function:  
**21JZA301** (overall length 300 mm)
- Contact points for Mitutoyo's Digimatic indicators (optional)  
Refer to pages 07-63 to 07-68 for details.
- Interchangeable back covers (optional)  
Refer to pages 07-69 to 07-70 for details.
- Measuring stands (optional)  
Refer to pages 07-97 to 07-103 for details.

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## DIMENSIONS

