

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.



543-781-10
ID-S1012X2

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 MPE _P	Total measuring range MPE _E	Hysteresis MPE _H	Repeatability MPE _R					
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	IP53
543-794B-10								Flat		155	
543-781-10	12.7	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)	Back type	Battery life*2	Mass (g)	Dust/Water protection level*3
			Partial measuring range MPE _P	Total measuring range MPE _E	Hysteresis MPE _H	Repeatability MPE _R					
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)	150	IP42
543-791B-10								Flat		140	
543-795-10							2.5 or less	With lug	Approx. 5 years (Normal use)	155	IP53
543-795B-10								Flat		155	
543-782-10	0.5 in / 12.7 mm	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)	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)	Back type	Battery life*2	Mass (g)	Dust/Water protection level*3						
			Overall*4	Hysteresis	Repeatability	Measuring force (N)										
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)	165	IP42						
543-792B-10		Flat					140									
543-793-10		With lug					165									
543-793B-10		Flat					140									
543-796-10		0.00005 in / 0.001 mm	±0.00010	0.00010	0.00010	2.5 or less	With lug	Approx. 5 years (Normal use)	155	IP53						
543-796B-10		Flat					155									
543-783-10		0.0005 in / 0.01 mm					±0.0010		0.0010		0.0005	1.5 or less	With lug	Approx. 20,000 hours (Continuous use)	165	IP42
543-783B-10		Flat											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[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



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
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U
905338	F	Connection cable (1 m)
905409	F	Connection cable (2 m)
06AFM380F	F	USB Input Tool Direct* (2 m)
02AZD790F	F	Connection cable for U-WAVE-T (160 mm)
02AZE140F	F	Connection cable for U-WAVE-T For foot switch
264-622	IP67	U-WAVE-TM
264-623	Buzzer	U-WAVE-TM
02AZD810D	—	U-WAVE-R
264-626	IP67	U-WAVE-TMB
264-627	Buzzer	U-WAVE-TMB
02AZF670	—	U-WAVE-TM/TMB 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 backs for **SERIES 2** models (optional)
Refer to page 07-69 for details.
- Measuring stands (optional)
Refer to pages 07-97 to 07-103 for details.

DIMENSIONS

