

Digimatic Indicators

ABSOLUTE Digimatic Indicator ID-SX2 SERIES 543

- Cost-effective oriented design
ID-SX2 indicators come with the minimum of functionality for ease of use. There is a choice of models in the lineup allowing selection of 0.01 mm, 0.001 mm or inch-based measurement resolutions.
- IP53 dust/water protection level
The models listed below also provide IP53 dust/water protection level specifications:
543-794(B)-10, 543-795(B)-10 and 543-796(B)-10

- 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 A-3)

* Refer to "Origin Setting of Digimatic Indicators" on page F-25.



SPECIFICATIONS

Metric										
Order No.	Range (mm)	Resolution (mm)	Maximum permissible error*1 (mm)			Measuring force MPL (N)	Back type	Battery life*3	Net mass (g)	Dust/Water protection level*4
			MPE _E *2	Hysteresis MPE _H	Repeatability MPE _R					
543-790-10	12.7	0.001	0.003	0.002	0.002	1.5 or less	With lug Flat	Approx. 18,000 hours (Continuous use)	150	IP42
543-790B-10										
543-794-10										
543-794B-10										
543-781-10										
543-781B-10	0.01	0.02	0.02	0.01	1.5 or less	With lug Flat	Approx. 20,000 hours Approx. 5 years (Normal use)	140	IP42	

Inch/Metric										
Order No.	Range	Resolution	Maximum permissible error*1			Measuring force MPL (N)	Back type	Battery life*3	Net mass (g)	Dust/Water protection level*4
			MPE _E *2	Hysteresis MPE _H	Repeatability MPE _R					
543-791-10	0.5 in/ 12.7 mm	0.00005 in /0.001 mm	±0.0001 in /0.003 mm	0.0001 in /0.002 mm	0.0001 in /0.002 mm	1.5 or less	With lug Flat	Approx. 18,000 hours (Continuous use)	150	IP42
543-791B-10										
543-792-10										
543-792B-10										
543-793-10										
543-793B-10										
543-795-10										
543-795B-10										
543-796-10										
543-796B-10										
543-782-10	0.0005 in /0.01 mm	±0.0010 in /0.02 mm	0.0010 in /0.02 mm	0.0005 in /0.01 mm	1.5 or less	With lug Flat	Approx. 20,000 hours (Continuous use)	150	IP42	
543-782B-10										
543-783-10										
543-783B-10										

*1 These values apply at 20 °C.

*2 Error of indication for the total measuring range

*3 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.

*4 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 connecting cable is attached.

Note: Regarding origin setting, refer to "Origin Setting of Digimatic Indicators" on page F-25.

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



Applicable models:
See **SPECIFICATIONS**

Technical Data

- Display: 6-digit LCD, sign
- Usable orientation: All
- Scale type: ABSOLUTE electrostatic linear encoder
- Battery: SR44 (1 pc.), **938882** for initial operational checks (standard accessory)
- Maximum response speed: Unlimited (except for scanning measurement)

Functions

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

Optional Accessories



- Lifting
Lifting lever **21EZA198**
Lifting knob **21EZA105**
Lifting cable **21JZA295**
- SPC Cable:
905338 (1 m)
905409 (2 m)
- USB Input Tool Direct (2 m): **06AFM380F**
Note: Please separately purchase **USB-ITPAK** since there is no data output switch on the measurement instrument.
- Input Tool Series
IT-020U (USB Keyboard Signal Conversion Type):
264-020
IT-007R (RS-232C Communication Conversion Type):
264-007
- Connecting Cables for **U-WAVE-T** (160 mm):
02AZD790F
For foot switch: **02AZE140F**
- Digimatic Mini-Processor **DP-1VA LOGGER: 264-505**
- Contact points for Mitutoyo's digimatic indicators (Refer to pages F-57 to F-60 for details.)
- Interchangeable backs for SERIES 2 models (Refer to page F-61 for details.)
- Measuring stands (Refer to pages F-84 to F-91 for details.)

IP53 dust/water protection level*

Level 5: Dust protection

While complete protection against intrusion of dust is not provided, protection is adequate to prevent dust intrusion in amounts that would inhibit the prescribed operations and safety of the electronic equipment.

Level 3: Protection against spraying water

The product suffers no harmful effects when subjected to water sprayed at an angle of up to 60° on both sides.

For details on the dust/water protection level test conditions, refer to IEC 60529: 2001 and JIS C 0920: 2003.

* IP code is the degree of protection against the intrusion of solid foreign objects and water. Mitutoyo offers a lineup of coolant proof, **ID-N/B** indicators that have excellent resistance to oil, water and dust and so are suitable for use in environments that include splashing cutting fluid. (Refer to page F-8 for details.)

DIMENSIONS

