Digimatic Indicators

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

ABSOLUTE Solar-Powered Digimatic Indicator ID-SS SERIES 543

- Solar powered
  An environmentally friendly measuring instrument that does not require batteries, eliminating the hassle and cost of battery replacement. Can operate under minimum light conditions of 40 lux—lower than the level in a warehouse.
- Built-in recharger
  The large-capacity built-in reservoir capacitor allows you to use the indicator for long periods of time under light conditions below the minimum level.*
- User-friendly buttons
  All functions can be accessed by using the two or three large buttons on the front of the indicator.
- Origin recorded even if display disappears.
  The indicator includes an ABS (absolute) sensor that allows the previously set origin to be restored even if the display disappears due to insufficient light, making it easy to resume measurement. This feature makes ID-SS ideal for long-time or multi-point measurement.

543-500

SPECIFICATIONS

Metric

ISO/JIS type ASME/ANSI/AGD type

Order No.	Range	Resolution	Accuracy			Remarks
			Overall*	Hysteresis*	Repeatability*	
543-500	12.7mm	0.001mm	0.003mm	0.002mm	0.002mm	With lug
543-500B						Flat
543-505		0.01mm	0.02mm	0.02mm	0.01mm	With lug
543-505B						Flat

Inch/Metric

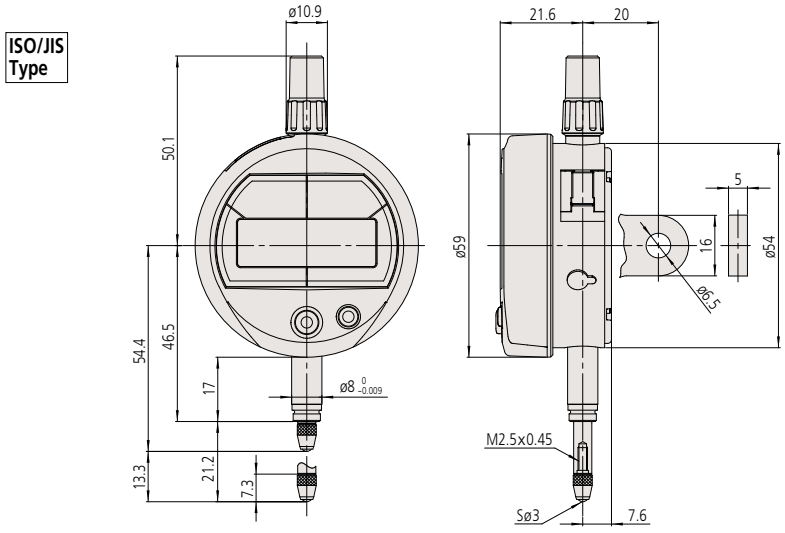
Order No.	Range	Resolution	Accuracy			Remarks
			Overall*	Hysteresis*	Repeatability*	
543-501	.5"	.00005"/0.001mm	±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug
543-501B						Flat
543-502						With lug
543-502B						Flat
543-506		.0005/0.01mm	±.0010"/0.02mm	.0010"/0.02mm	.005"/0.01mm	With lug
543-506B						Flat
543-507						With lug
543-507B						Flat

* Quantizing error of ±1 count is excluded.

Dimensions

ISO/JIS Type

Unit: mm



Note 1: Dimensions of the inch (ANSI/AGD Type) dial indicator partly differ from those of the metric (ISO/JIS Type) indicator.
Note 2: Inch (ANSI/AGD Type) dial indicators are provided with a stem of 3/8" dia. and #4-48UNF thread mount for the contact point.

ABSOLUTE™ (Refer to page X for details.)

An inspection certificate is supplied as standard. Refer to page X for details.

Technical Data

Display: 6-digit LCD and sign
Scale type: ABSOLUTE electrostatic linear encoder
Measuring force: 1.5 N or less
Usable positions: All
Power supply: Solar battery (for indoor use)
Minimum Operating light: 40 lux
Note: A built-in reservoir capacitor allows a fully charged ID-SS to be used for about 3.5 hours under light conditions below the minimum level.
The charging time differs depending on the environment, but it usually takes about 1.5 hours for a fully discharged ID-SS to fully recharge under light conditions of 500 lux.
Maximum response speed: No limit (scan-type measurement is not supported)
Stem dia: 8mm (ISO/JIS type) or 3/8"(ANSI/AGD type)

Functions

Origin set (zero-set)
Count direction switching
inch/mm conversion (inch/mm models)
Data output
Alarm: Counting value composition error
Insufficient illumination intensity or change

Optional accessories

Lifting lever

Lifting knob

Lifting release

Optional Accessories

- **Lifting**
  Lifting lever **No.21EZA198** (ISO/JIS/DIN Type), **No.21EZA199** (ASME/ANSI/ AGD Type)
  Lifting knob **No.21EZA105** (ISO/JIS/DIN Type), **No.21EZA150** (ASME/ANSI/ AGD Type)
  Lifting cable (**No. 540774**)
- SPC Cable:
  No.905338 (1m)
  No.905409 (2m)
- USB Input Tool Direct (2m) : **06ADV380F**
- Connecting Cables for **U-WAVE-T** (160mm):
  No.02AZD790F
  For footswitch **02AZE140F**
  Refer to page F-60 for details.
- Digimatic Mini-Processor DP-1VR: **264-504**
- Contact points for Mitutoyo's dial indicators
  (Refer to pages F-51 to F-54 for details.)
  Interchangeable backs for 2 series
  (Refer to page F-55 for details.)
- Measuring stands (Refer to page F-79 to F-85 for details.)

- ID-SS can be used in standard work environments.

The following is excerpted from JIS Z9110:2010 General rules of recommended lighting levels; 5.4 Factories:

Luminance (lux)	Location (permissible work)
1500	Very detailed visual work
750	Detailed visual work; design and drawing work
500	Regular visual work such as work carried out in a factory; monitoring work such as using instrument panels and control panels
300	Administrative work carried out in a warehouse
200	Control rooms, bathrooms, and places where manual light work is carried out
150	Work such as loading, unloading, and shifting loads
100	Hallways, corridors, entrances and exits, and warehouses
50	Indoor emergency staircases