

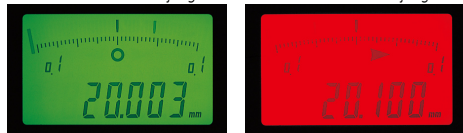
Digimatic Indicators

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

ABSOLUTE Digimatic Indicator ID-F SERIES 543 — with Back-light LCD Screen

- GO/±NG judgment function: If a judgment result shows an out of tolerance condition, the display backlighting changes from green to red.
- An analog bar indicator has been integrated to make upper/lower limit and turnover point reading more comfortable.

Green indication for GO judgment Red indication for ±NG judgment



- With Mitutoyo's ABSOLUTE Linear Encoder technology, once the measurement reference point has been set it will not be lost when the power is turned off. Also, reliability has been increased due to the elimination of over-speed errors.

Note: Regarding origin setting, refer to "Origin Setting of Digimatic Indicators" on page F-18.

- Easy-to-read large LCD readout with the character height of 8.5mm.
- External power supply type: battery change is not necessary. Power can also be supplied via the AC adaptor supplied as a standard accessory.

- The resolution can be switched between 0.001mm / 0.01mm (or .001" / .0005" / .0001" / .00005").
- Equipped with a data output port that enables incorporation into measurement networking and statistical process control systems.

Multi-functional model



SPECIFICATIONS

Metric			
Order No.*	Range	Resolution	Accuracy**
543-551	25mm		0.003mm
543-557	50mm	0.001mm, 0.01mm	0.003mm
543-553	50mm		0.006mm

* To denote your AC power cable add the following suffixes to the order No.: **A** for UL/CSA, **D** for CEE, **DC** for CCC, **E** for BS, **K** for KC, **No suffix** is required for JIS/100V

**Quantizing error of ±1 count is excluded.

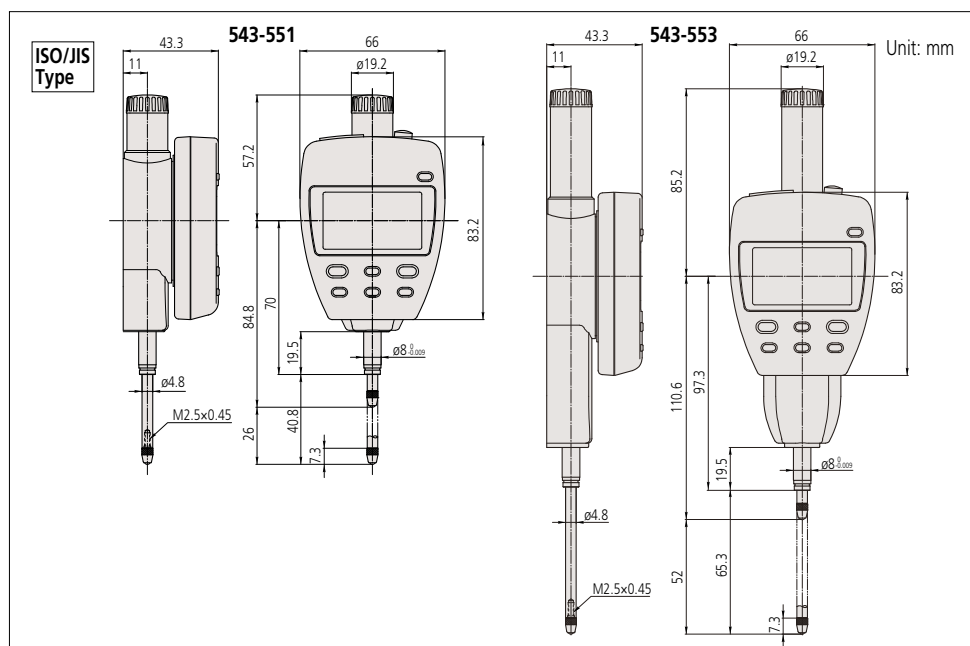
Inch/Metric			
Order No.*	Range	Resolution	Accuracy**
543-552	1" / 25.4mm	.00005", .0001", .00012" / 0.003mm	.00012" / 0.003mm
543-558	2" / 50.8mm	.0005", .001", .00012" / 0.003mm	.00012" / 0.003mm
543-554	2" / 50.8mm	0.001mm, 0.01mm	.00024" / 0.006mm

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**Quantizing error of ±1 count is excluded.

ISO/JIS type ASME/ANSI/AGD type

DIMENSIONS



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.

Mitutoyo

ABSOLUTE™ (Refer to page X for details.)

Technical Data

Resolution: 0.01mm/0.001mm or .00005"/.0001"/.0005"/.001"/0.001mm/0.01mm

Display: 6-digit LCD, sign, and analog bar with 2-color backlight

Scale type: ABSOLUTE electrostatic linear encoder

Max. response speed: Unlimited

Measuring force: 1.8N or less (25.4mm models)
2.3N or less (50.8mm models)

Spindle orientation: Between the spindle pointing vertically downward to the spindle horizontal

Stem dia.: 8mm (ISO/JIS type) or 3/8" (ANSI/AGD type)

Power supply: 9V DC (via AC adaptor) **06AEG302**

Lifting lever: **137693**

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Functions

Preset, Zero set, GO/±NG judgment, Max/Min value hold, Runout measurement, Resolution switching, Counting direction switching, Power ON/OFF, Data output, inch/mm conversion (inch/mm models)

Alarm: Counting value composition error, Overflow error, Tolerance limit setting error

Optional Accessories

- Lifting cable: **No.540774** (stroke 25.4mm)

- Auxiliary spindle spring:

No.02ACA571 (25.4mm/1" models)*

No.02ACA773 (50.8mm/2" models)*

- Lug-on-center back:

No.101040 (ISO/JIS type)

No.101306 (ASME/ANSI/AGD type)

- * Required when orienting the indicator upside down.

- SPC cable:

No.936937 (1m)

No.965014 (2m)

- USB Input Tool Direct (2m) : **No.06ADV380F**

- Connecting Cables for U-WAVE-T (160mm) :

No.02AZD790D

For footswitch: **No.02AZE140D**

Refer to page F-60 for details.

- Digimatic Mini-Processor DP-1VR: **264-504**

- Contact points for Mitutoyo's dial indicators *4

- Interchangeable backs for Series 2 models*5

- Measuring stands

* 4 Refer to pages F-46 to F-49 for details.

* 5 Refer to page F-50 for details.

Application

Difference/Runout measurement

Example: Indicator travel from points A to D

Difference (or Total Runout) is displayed as A. Dimensions B (maximum value) and C (minimum value) can be recalled from memory with a simple key sequence.

