



ABSOLUTE®

Absolute System Patented by MITUTOYO

(Refer to page VIII for details.)

Technical Data

Accuracy: Refer to the list of specifications (excluding quantizing error)
 Resolution: 0.01mm/0.001mm or .00005"/.0001"/.0005"/.001"/0.001mm/0.01mm
 Display: LCD Character Height 8.5mm
 Scale type: ABSOLUTE electrostatic linear encoder
 Max. response speed: Unlimited
 Measuring force: 1.8N/2.3N* or less (*50mm range models)
 Stem dia.: 8mm (ISO/JIS type) or 3/8" (ANSI/AGD type)
 Contact point: Carbide ball with M2.5x0.45 (ISO/JIS type)
 Carbide ball with #4-48UNF (ANSI/AGD type)
 Power supply: 9V DC (via AC adaptor)

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

936937: SPC cable (1m)
965014: SPC cable (2m)
02AZD790E: SPC cable for U-WAVE(160mm)
540774: Spindle lifting cable (stroke: 25mm)
02ACA571: Auxiliary spindle spring for 25mm/1" models*
02ACA773: Auxiliary spindle spring for 50mm/2" models*
264-504: Digimatic Min-processor DP-1VR
543-004-1: Digimatic presetter
215-154: Granite comparator stand
215-504: Comparator stand
215-821: Comparator stand
 —: Backs (See page F-40.)
 —: Contact points (See page F-36.)

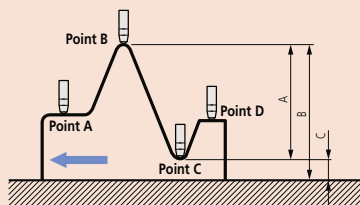
*Required when orienting the indicator upside down.

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.



ABSOLUTE Digimatic Indicator ID-F

SERIES 543 — with Back-lit LCD Screen

FEATURES

- With the ABSOLUTE Linear Encoder technology, once the measurement reference point has been set it will not be lost when the power is turned off.
- GO/±NG judgment is performed by setting upper and lower tolerances. If a judgment result shows an out of tolerance condition, the display backlighting changes from green to red, so tolerance judgment can be made at a glance.



- The maximum, minimum, or runout value can be displayed during measurement.
- An analog bar indicator has been integrated to handle upper/lower limit approaching and zero approaching. It enhances the ease of operation in the same manner as a dial indicator. The display range of the analog bar can be changed.
- SPC data output.

SPECIFICATIONS

Metric			
Resolution	Order No.*	Range	Accuracy
0.001mm, 0.01mm	543-551	25mm	0.003mm
	543-557	50mm	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 EK, **No suffix** is required for JIS/100V



Inch/Metric			
Resolution	Order No.*	Range	Accuracy
.00002", .00005", .0001", .0005", .001", 0.001mm, 0.01mm	543-552	1"	.00012"
	543-558	2"	.00012"
	543-554	2"	.00024"

* 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 EK, **No suffix** is required for JIS/100V

ISO/JIS type

ANSI/AGD type

DIMENSIONS

