



An inspection certificate is supplied as standard. Refer to page U-11 for details.

Functions

- Calculation $f(x') = Ax' + B + Cx'^{-1}$ ($x' = x + \text{offset}$)
- Peak detection (MAX/MIN)
- Runout value Hold (difference between max. and min. value)
- Peak detection sampling rate (Switchable)
10 times/s (FAST Mode OFF)
50 times/s (FAST Mode ON)
- Zero-setting (INC system)
- Preset (ABS system)
- Tolerance judgment (P1, P2, P3, and INC can be stored)
- Analog bar resolution selectable
- Key lock
- Display hold (when external device is connected)
- Data output
- External PC setting input
- Display rotation (330°)
- Low battery voltage alarm display
- Error alarm display
- Resolution switching*

Resolution (mm)			Resolution (inch)		
0.0002	0.005	0.1	0.00001	0.0002	0.005
0.0005	0.01	0.2	0.00002	0.0005	0.01
0.001	0.02	0.5	0.00005	0.001	0.02
0.002	0.05	1	0.0001	0.002	0.05

* Since the calculation resolution is one micrometer (0.001 mm), using sub-micrometer resolution settings may result in the 4th-place digit being unreliable, particularly when B is set to a very low value and C = 0. It does not change at all with certain combinations of calculation coefficient (for example, A = 1, B = C = 0). The 3rd-place digit representing micrometers (if displayed) is always reliable.

Optional Accessories

- Lifting lever **21EZA198** (ISO/JIS/DIN Type), **21EZA199** (ASME/ANSI/AGD Type)
- Lifting knob **21EZA105** (ISO/JIS/DIN Type), **21EZA150** (ASME/ANSI/AGD Type)
- Lifting cable **540774**
- SPC Cable: **905338** (1 m), **905409** (2 m)
- USB Input Tool Direct (2 m): **06AFM380F**
- Input Tool Series **IT-016U** (USB Keyboard Signal Conversion Type): **264-016-10**
IT-007R (RS-232C Communication Conversion Type): **264-007**
Refer to page F-66 for details.
- Connecting Cables for **U-WAVE-T** (160 mm): **02AZD790F**
For foot switch: **02AZE140F**
Refer to page F-66 for details.
- Digimatic Mini-Processor **DP-1VA LOGGER: 264-505**
- Parameter setup kit: **21EZA313**
Note: Parameter setting software (can be downloaded for free from the Mitutoyo website) is also required.
- Contact points for Mitutoyo's dial indicators (Refer to pages F-57 to F-60 for details.)
- Measuring stands (Refer to pages F-84 to F-92 for details.)

Digimatic Indicators

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

ABSOLUTE Digimatic Indicator ID-C SERIES 543 — Calculation Type

- Calculation function operates on spindle displacement. Entering the appropriate formula factors for a fixture dedicated to the application enables direct measurement readout, thereby eliminating any need for the conversion tables previously needed for those applications where fixtures are typically used.
- Simple operation of many functions with five buttons and status icons.
- Wide LCD and new analog bar graph are now standard on all models.
- The ABS (absolute) scale restores the last origin position*¹ automatically when the indicator is turned on, and realizes high reliability by eliminating over-speed errors.
- By using the parameter setup kit (optional) and the dedicated software, the functions and the parameters can be configured using a computer.

*¹ Regarding origin setting, refer to "Origin Setting of Digimatic Indicators" on page F-25.



543-342B

SPECIFICATIONS

Metric		ISO/JIS type		ASME/ANSI/AGD type					
Order No.	Range (mm)	Resolution (selectable)	Accuracy* ² (mm)			Measuring force (N)	Power supply	Battery life (normal use)* ⁵	Net weight (g)
			Overall* ³	Hysteresis	Repeatability				
543-340B	12.7	12 steps* ⁵	0.003	0.002	0.002	1.5 or less	CR2032 x 1 pc.	Approx. 1 year	170
543-590B	25.4					1.8 or less* ⁴			190
543-595B	50.8					2.3 or less* ⁴			260
Inch / Metric		ISO/JIS type		ASME/ANSI/AGD type					
Order No.	Range	Resolution (selectable)	Accuracy* ²			Measuring force (N)	Power supply	Battery life (normal use)* ⁵	Net weight (g)
			Overall* ³	Hysteresis	Repeatability				
543-341B	0.5 in	12 steps* ⁵	±0.0001 in / 0.003 mm	0.0001 in / 0.002 mm	0.0001 in / 0.002 mm	1.5 or less	CR2032 x 1 pc.	Approx. 1 year	170
543-342B	/12.7 mm					1.8 or less* ⁴			190
543-591B	1 in					2.3 or less* ⁴			260
543-592B	/25.4 mm								
543-596B	2 in								
543-597B	/50.8 mm								

*² Quantizing error of ±1 count is excluded. Valid for resolution set to 0.001 mm/0.00005 inch and coefficients A=1, B=0 and C=0.
*³ Overall magnification and linearity.
*⁴ Applies for a spindle orientation between the spindle pointing vertically downward to the spindle horizontal.
*⁵ Applies only if not connected to a data processor. Battery life depends on use of the indicator. Use the above value as a guide only.
Note: Flat back type only.

Digimatic Indicators

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

DIMENSIONS

