

Digimatic Indicators

ABSOLUTE Digimatic Indicator ID-CAX SERIES 543 — Peak-Value Hold Type

- The Peak Hold-Type Digimatic Indicator. GO/NG judgment is performed by setting the upper and lower tolerances for max., min. and runout values.*1
- Five buttons, status icons, and clear button indications allow easy operation and various functions.
- Wide display and new analog bar graph are standard on all models.
- The ABS (ABSOLUTE) scale restores the last origin position*2 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 09-3)
- By using the parameter setup kit (optional) and the dedicated software, the functions and the parameters can be configured using a computer.

*1 Tolerance judgment results cannot be output.

*2 Refer to "Precautions for use" on page 07-2.



543-300-10

SPECIFICATIONS

Metric		ISO/JIS Type							
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error (MPE)*1 (mm)				Maximum permissible limit (MPL)	Battery life (normal use)*2	Mass (g)
			Partial measuring range P_{MPE}	Total measuring range L_{MPE}	Hysteresis H_{MPE}	Repeatability R_{MPE}	Measuring force (N)		
543-300-10	12.7	0.001/0.01 (selectable)	0.003	0.003	0.003	0.002	1.5 or less	Approx. 1 year	180
543-300B-10 (flat back)									170

Inch / Metric		ISO/JIS Type							
Code No.	Range	Resolution	Maximum permissible error (MPE)*1 (mm)				Maximum permissible limit (MPL)	Battery life (normal use)*2	Mass (g)
			Partial measuring range P_{MPE}	Total measuring range L_{MPE}	Hysteresis H_{MPE}	Repeatability R_{MPE}	Measuring force (N)		
543-301-10	0.5 in / 12.7 mm	0.00005 / 0.0001 / 0.0005 in, 0.001 / 0.01 mm (selectable)	0.003	0.003	0.003	0.002	1.5 or less	Approx. 1 year	180
543-301B-10 (flat back)									170

Inch / Metric		ASME/ANSI /AGD type						
Code No.	Range	Resolution	Maximum permissible error (MPE)*1 (in)			Maximum permissible limit (MPL)	Battery life (normal use)*2	Mass (g)
			Overall*3	Hysteresis	Repeatability	Measuring force (N)		
543-302-10	0.5 in / 12.7 mm	0.00005 / 0.0001 / 0.0005 in, 0.001 / 0.01 mm (selectable)	±0.00010	0.00010	0.00010	1.5 or less	Approx. 1 year	195
543-302B-10 (flat back)								170

• Power source: CR2032 battery (1 pc.), included as standard (for operational checks)

*1 These values apply to normal measurements at 20 °C.

*2 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.

*3 Overall magnification and linearity

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



Functions

- Peak detection (MAX/MIN)
- Runout (MAX - MIN) Hold
- Note: Peak detection
 - 1) Sampling rate: 50 readings/s
 - 2) Capturing speed: 50 μm/s (max.)
- Zeroret (INC system)
- Preset function (ABS system)
- Measuring direction switching
- Tolerance judgment (3 pairs of ABS, INC memory function)
- Resolution selection
- Simple calculation $f(x) = Ax$
- Analog bar resolution selection
- Key lock
- in/mm conversion (inch/mm type)
- Display hold (when no external device is connected)
- Data output
- External PC setting input
- Display rotation (330°)
- Low battery voltage alarm display
- Error alarm display

Optional Accessories

Code No.	Type	Description
264-020	—	USB Input Tool Series USB Keyboard Signal Conversion Type IT-020U
905338	F	Connection cable (1 m)
905409	F	Connection cable (2 m)
06AFM380F	F	USB Input Tool Direct (2 m)
02AZD790F	F	Connection cable for U-WAVE-T (160 mm)
02AZE140F	F	Connection cable for U-WAVE-T For foot switch
264-622	IP67	U-WAVE-TM
264-623	Buzzer	U-WAVE-TM
02AZD810D	—	U-WAVE-R
264-626	IP67	U-WAVE-TMB
264-627	Buzzer	U-WAVE-TMB
02AZF670	—	U-WAVE-TM/TMB mounting bracket: for Digimatic Indicators

- Lifting
 - Lifting lever 21EZA198
 - Lifting knob 21EZA105
- Parameter setup kit: 21EZA313
- Note: Parameter setting software (can be downloaded for free from the Mitutoyo website) is also required.



Parameter setup kit



Parameter setting software

- Contact points for Mitutoyo's Digimatic indicators (optional)
Refer to pages 07-63 to 07-68 for details.
- Interchangeable back covers (optional)
Refer to pages 07-69 to 07-70 for details.
- Measuring stands (optional)
Refer to pages 07-97 to 07-103 for details.

DIMENSIONS

