

Digimatic Indicators

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



ABSOLUTE Digimatic Indicator ID-CGX SERIES 543 — Bore Gage Type

- Dedicated to inside diameter measurement with minimum-value holding and tolerance judgment functions*. Use together with a Mitutoyo bore gage (refer to pages 08-31 to 08-48 for details).
- Five buttons, status icons, and clear button indications allow easy operation and various functions.
- Wide display and analog bar graph are standard on all models.
- Up to three sets of master values and upper/lower tolerance values can be stored to simplify the master setting.
- By using the parameter setup kit (optional) and the dedicated software, the functions and the parameters can be configured using a computer.

* Tolerance judgment results cannot be output.



543-310B-10

Example of use with a bore gage (sold separately)



SPECIFICATIONS

Metric		ISO/JIS Type							
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error (MPE)* ¹ (mm)				Maximum permissible limit (MPL) Measuring force (N)	Battery life (normal use)* ²	Mass (g)
			Partial measuring range P_{MPE}	Total measuring range E_{MPE}	Hysteresis H_{MPE}	Repeatability R_{MPE}			
543-310B-10	12.7	0.001/0.01 (selectable)	0.003	0.003	0.003	0.002	1.5 or less	Approx. 1 year	170

Inch / Metric		ISO/JIS Type							
Code No.	Range	Resolution	Maximum permissible error (MPE)* ¹ (mm)				Maximum permissible limit (MPL) Measuring force (N)	Battery life (normal use)* ²	Mass (g)
			Partial measuring range P_{MPE}	Total measuring range E_{MPE}	Hysteresis H_{MPE}	Repeatability R_{MPE}			
543-311B-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	170

Inch / Metric		ASME/ANSI /AGD type						
Code No.	Range	Resolution	Maximum permissible error (MPE)* ¹ (in)			Maximum permissible limit (MPL) Measuring force (N)	Battery life (normal use)* ²	Mass (g)
			Overall* ³	Hysteresis	Repeatability			
543-312B-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	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

Note: Flat-back type only.

Functions

- Minimum value detection
- Note: Peak detection
 - 1) Sampling rate: 50 readings/s
 - 2) Capturing speed: 50 μm/s (max.)
- Preset (3 Preset values can be stored)
- Tolerance judgment (3 sets of upper and lower limits can be stored)
- Resolution selection
- Analog bar resolution selection
- Key lock
- Display hold (when no external device is connected)
- Data saving/calling (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

Refer to page 07-13.

- Parameter setup kit (optional)
Refer to page 07-13 for details.

The ABSOLUTE Digimatic Bore Gage



ABSOLUTE Digimatic Bore Gages, which integrate the display with a bore gage measuring unit, are also available. Refer to pages 08-49 and 08-50 for details.