



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

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

- SPC Cable:
 - 905338 (1 m)
 - 905409 (2 m)
 - USB Input Tool Direct (2 m): 06AFM380F
 - Input Tool Series
 - IT-020U (USB Keyboard Signal Conversion Type): 264-020
 - IT-007R (RS-232C Communication Conversion Type): 264-007
 - Connecting Cables for U-WAVE-T (160 mm): 02AZD790F
For foot switch: 02AZE140F
 - 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.

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 C-47 and C-48 for details.



- Dedicated to inside measurement with minimum-value Hold and tolerance judgment functions*1. Use together with a Mitutoyo bore gage (refer to pages C-29 to C-46 for details).
 - Five buttons, status icons, and clear button indications allow for easy operation of a wide variety of functions.
 - Wide LCD and new analog bar graph are now standard on all models.
 - Can store up to three sets of master reference values and tolerances, alleviating the need for multiple settings to master gages.
 - 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.
 - By using the parameter setup kit (optional) and the dedicated software, the functions and the parameters can be configured using a computer.
 - Equipped with a data output port that enables incorporation into measurement networking and statistical process control systems. (Refer to page A-3)
- *1 Tolerance judgment results cannot be output.
*2 Refer to "Origin Setting of Digimatic Indicators" on page F-25.



543-310B-10

Typical application
The Bore Gage is optional.

SPECIFICATIONS

Metric		ISO/JIS type		ASME/ANSI/AGD type					
Order No.	Range (mm)	Resolution (mm)	Maximum permissible error (mm)			Measuring force MPL (N)	Power supply	Battery life (normal use)*2	Net mass (g)
			MPE _E *1	Hysteresis MPE _H	Repeatability MPE _R				
543-310B-10	12.7	0.001/0.01 (selectable)	0.003	0.002	0.002	1.5 or less	CR2032 x1 pc.	Approx. 1 year	170

Inch/Metric		ISO/JIS type		ASME/ANSI/AGD type					
Order No.	Range	Resolution	Maximum permissible error			Measuring force MPL (N)	Power supply	Battery life (normal use)*2	Net mass (g)
			MPE _E *1	Hysteresis MPE _H	Repeatability MPE _R				
543-311B-10	0.5 in/ 12.7 mm	0.00005/0.0001/ 0.0005 in,	±0.00010 in /0.003 mm	0.00010 in /0.002 mm	0.00010 in /0.002 mm	1.5 or less	CR2032 x1 pc.	Approx. 1 year	170
543-312B-10		0.001/0.01 mm (selectable)							

*1 Error of indication for the total measuring range

*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.

Note: Flat-back type only.

Digimatic Indicators

DIMENSIONS

