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

Products equipped with the measurement data output function can be connected to the measurement data network system MeasurLink (refer to page A-5 for details).

### **Functions**

- Minimum value detection Note: Peak detection
  - 1) Sampling rate: 50 readings/sec
  - 2) Capturing speed: 50 µm/sec (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)

(Refer to pages A-27 to A-29 for details.)

- 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 A-14 for details.)

• Connecting Cables for **U-WAVE-T** (160 mm): 02AZD790F

For foot switch: 02AZE140F (Refer to pages A-19 to A-21 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.

### 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-43 and C-44 for details.



# **Digimatic Indicators**

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

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

**MeasurLink®** ENABLED Data Management Software by Mitutoyo

- Dedicated to inside measurement with minimum-value Hold and tolerance judgment functions\*1.
- Use together with a Mitutoyo bore gage (refer to pages C-27 to C-42 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 Regarding origin setting, refer to "Origin Setting of Digimatic Indicators" on page F-25.



## **SPECIFICATIONS**

| Metric SO/JIS type ASME/ANSI/AGD type |               |                            |                                |                                |                                   |               |                  |                |                 |
|---------------------------------------|---------------|----------------------------|--------------------------------|--------------------------------|-----------------------------------|---------------|------------------|----------------|-----------------|
|                                       | Range<br>(mm) | Resolution<br>(mm)         | Maximum permissible error (mm) |                                |                                   | Measuring     | Douger           | Datton, life   | Not mass        |
| Order No.                             |               |                            | MPE <sub>E</sub> *3            | Hysteresis<br>MPE <sub>H</sub> | Repeatability<br>MPE <sub>R</sub> | force MPL (N) | 117              | (normal use)*4 | Net mass<br>(g) |
| 543-310B                              | 12.7          | 0.001/0.01<br>(selectable) | 0.003                          | 0.002                          | 0.002                             | 1.5 or less   | CR2032<br>×1 pc. | Approx. 1 year | 170             |
|                                       |               |                            |                                |                                |                                   |               |                  |                |                 |

| Inch / Metric |                    |                               |                           |                    |                                   |                            |                  |                                |                 |
|---------------|--------------------|-------------------------------|---------------------------|--------------------|-----------------------------------|----------------------------|------------------|--------------------------------|-----------------|
|               |                    |                               | Maximum permissible error |                    |                                   | Massuring                  | D                | Dattan life                    | Matana          |
| Order No.     | Range              | Resolution                    | MPE <sub>E</sub> *3       | Hysteresis<br>MPEн | Repeatability<br>MPE <sub>R</sub> | Measuring<br>force MPL (N) | Power            | Battery life<br>(normal use)*4 | Net mass<br>(g) |
| 543-311B      | 0.5 in/<br>12.7 mm | 0.00005/0.0001/<br>0.0005 in, | ±0.00010 in               | 0.00010 in         |                                   | 1.5 or less                | CR2032<br>×1 pc. | Approx. 1 year                 | 170             |
| 543-312B      |                    | 0.001/0.01 mm<br>(selectable) | /0.003 mm                 | /0.002 mm          |                                   |                            |                  |                                |                 |

<sup>\*3</sup> Error of indication for the total measuring range

<sup>\*4</sup> 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.

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

# **DIMENSIONS**



