

Digimatic Indicators

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

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 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) | 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) | Battery life (normal use)* ² | Mass (g) |
| | | | Overall* ³ | Hysteresis | Repeatability | Measuring force (N) | | |
| 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.

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

ABSOLUTE[™]



Example of use with a bore gage (sold separately)



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.

DIMENSIONS

