

# ABS Digimatic Indicator ID-C

## SPECIFICATIONS

**Inch/Metric** ISO/JIS Type and ANSI/AGD Type

| Order No.                                       | Measuring range | Accuracy**1 | Hysteresis*      | Repeatability*  | Measuring force | Mass                        | Remarks                  |
|-------------------------------------------------|-----------------|-------------|------------------|-----------------|-----------------|-----------------------------|--------------------------|
| Resolution .00005"/.0001"/.0005"/0.001mm/0.01mm |                 |             |                  |                 |                 |                             |                          |
| 543-391                                         | 543-391B        | .5"         | ±.00010"/0.003mm | .00010"/0.002mm | .00010"/0.002mm | 1.5N or less                | 170g —                   |
| 543-392                                         | 543-392B        | .5"         | ±.00010"/0.003mm | .00010"/0.002mm | .00010"/0.002mm | 1.5N or less                | 170g —                   |
| 543-395                                         | 543-395B        | .5"         | ±.00010"/0.003mm | .00010"/0.002mm | .00010"/0.002mm | 0.7, 0.6, 0.4N or less      | 170g Low measuring force |
| 543-396                                         | 543-396B        | .5"         | ±.00010"/0.003mm | .00010"/0.002mm | .00010"/0.002mm | 0.7, 0.6, 0.4N or less      | 170g Low measuring force |
| —                                               | 543-471B        | 1"          | ±.00010"/0.003mm | .00010"/0.002mm | .00010"/0.002mm | 1.8N or less                | 190g —                   |
| —                                               | 543-472B        | 1"          | ±.00010"/0.003mm | .00010"/0.002mm | .00010"/0.002mm | 1.8N or less                | 190g —                   |
| —                                               | 543-491B        | 2"          | ±.00020"/0.005mm | .00010"/0.002mm | .00010"/0.002mm | 2.3N or less                | 260g —                   |
| —                                               | 543-492B        | 2"          | ±.00020"/0.005mm | .00010"/0.002mm | .00010"/0.002mm | 2.3N or less                | 260g —                   |
| Resolution .0005"/0.01mm                        |                 |             |                  |                 |                 |                             |                          |
| 543-401                                         | 543-401B        | .5"         | ±.0010"/0.02mm   | .0010"/0.02mm   | .0005"/0.01mm   | 0.9N or less                | 170g —                   |
| 543-402                                         | 543-402B        | .5"         | ±.0010"/0.02mm   | .0010"/0.02mm   | .0005"/0.01mm   | 0.9N or less                | 170g —                   |
| 543-405                                         | 543-405B        | .5"         | ±.0010"/0.02mm   | .0010"/0.02mm   | .0005"/0.01mm   | 0.5, 0.4, 0.3, 0.2N or less | 170g Low measuring force |
| 543-406                                         | 543-406B        | .5"         | ±.0010"/0.02mm   | .0010"/0.02mm   | .0005"/0.01mm   | 0.5, 0.4, 0.3, 0.2N or less | 170g Low measuring force |
| —                                               | 543-475B        | 1"          | ±.0010"/0.02mm   | .0010"/0.02mm   | .0005"/0.01mm   | 1.8N or less                | 190g —                   |
| —                                               | 543-476B        | 1"          | ±.0010"/0.02mm   | .0010"/0.02mm   | .0005"/0.01mm   | 1.8N or less                | 190g —                   |
| —                                               | 543-495B        | 2"          | ±.0015"/0.04mm   | .0010"/0.02mm   | .0005"/0.01mm   | 2.3N or less                | 260g —                   |
| —                                               | 543-496B        | 2"          | ±.0015"/0.04mm   | .0010"/0.02mm   | .0005"/0.01mm   | 2.3N or less                | 260g —                   |

**Metric** ISO/JIS Type

| Order No.                 | Measuring range | Accuracy**1 | Hysteresis* | Repeatability* | Measuring force | Mass                        | Remarks                  |
|---------------------------|-----------------|-------------|-------------|----------------|-----------------|-----------------------------|--------------------------|
| Resolution 0.001mm/0.01mm |                 |             |             |                |                 |                             |                          |
| 543-390                   | 543-390B        | 12.7mm      | 0.003mm     | 0.002mm        | 0.002mm         | 1.5N or less                | 170g —                   |
| 543-394                   | 543-394B        | 12.7mm      | 0.003mm     | 0.002mm        | 0.002mm         | 0.7, 0.6, 0.4N or less      | 170g Low measuring force |
| —                         | 543-470B        | 25.4mm      | 0.003mm     | 0.002mm        | 0.002mm         | 1.8N or less                | 190g —                   |
| —                         | 543-490B        | 50.8mm      | 0.005mm     | 0.002mm        | 0.002mm         | 2.3N or less                | 260g —                   |
| Resolution 0.01mm         |                 |             |             |                |                 |                             |                          |
| 543-400                   | 543-400B        | 12.7mm      | 0.02mm      | 0.02mm         | 0.01mm          | 0.9N or less                | 170g —                   |
| 543-404                   | 543-404B        | 12.7mm      | 0.02mm      | 0.02mm         | 0.01mm          | 0.5, 0.4, 0.3, 0.2N or less | 170g Low measuring force |
| —                         | 543-474B        | 25.4mm      | 0.02mm      | 0.02mm         | 0.01mm          | 1.8N or less                | 190g —                   |
| —                         | 543-494B        | 50.8mm      | 0.04mm      | 0.02mm         | 0.01mm          | 2.3N or less                | 260g —                   |

 : ANSI/AGD Type

Note) Products with an Order No. suffixed "B" have a flat back, and other models have a back with a lug.

\* Overall hysteresis and repeatability specifications are valid for normal measurement at 20°C, and the quantizing error of ±1 count is excluded.

## COMMON SPECIFICATIONS

- Display: 6-digit LCD, sign
- Contact point: Spherical tip SR = 1.5mm (carbide tipped),  
part No. 901312 (for ISO/JIS Type)  
part No. 21BZB005 (for ANSI/AGD Type)
- Spindle orientation for measurement:
  - Standard model that has a 12.7mm measuring range: No restrictions
  - Standard model that has a 25.4mm or 50.8mm measuring range: Normally at any position between the spindle pointing vertically downward to the spindle horizontal. To perform measurement with the spindle pointing above the horizontal requires a reverse-position coil spring (special accessory).
  - Low measuring force models: See 'Setting measuring force on low measuring force models' on page 5.
- Position detection method: Capacitance type absolute linear encoder
- Battery: SR44 (silver oxide button cell) × 1, part No. 938882
- Battery life: Approximately 7,000 hours of continuous use
- Maximum response speed: Not restricted (except for scanning measurement)
- Service temperature range: 0 to 40°C
- Storage temperature range: 0 to 60°C

**Mitutoyo**

Find Quality Products Online at:

[www.GlobalTestSupply.com](http://www.GlobalTestSupply.com)

[sales@GlobalTestSupply.com](mailto:sales@GlobalTestSupply.com)