ABS COOLANT-PROOF DIGIMATIC INDICATOR
ID-N/ID-B

SLIM WATERPROOF DIGITAL INDICATORS
Absolute Coolant-Proof Digimatic Indicator ID-N/ID-B
The world’s highest waterproof- and dustproof-rating (IP66) combined with a slim body design.*

1. Proven ABS (Absolute) sensor
Mitutoyo’s unique ABS (Absolute) sensor automatically restores the last origin position when the indicator is turned on, allowing quick-start operation. Incremental measurements can be made from any arbitrary position at the touch of a button, with easy restoration to ABS measurement mode.

2. Waterproof, dustproof (rated IP66) and oil-resistant
This indicator can be used in harsh environments where it is subjected to cutting fluid and coolant.

3. Slim waterproof and dustproof (IP66) rated digital indicators
Slim design allows for multiple measurements in a confined space.

4. Improvement in LCD readout rotation function
The LCD readout can be rotated 180° to allow for easy measurement where space is restricted.

5. Back plunger design
A .20" (5mm) stroke plunger with a higher degree of accuracy has been implemented by adopting a direct reading scale for plunger displacement.

6. Built-in tolerance judgment function
This function provides go/no-go judgment of measurement with respect to the preset upper and lower limit values. If required, only the go/no-go judgment can be displayed.

7. Switchable resolution
The .00005" (0.001mm) model can be switched to .0005" (0.01mm) resolution. Accuracy remains constant regardless of the resolution setting.

8. Carbide contact points (standard)
Standard carbide contact points provide outstanding durability. The full range of interchangeable Mitutoyo indicator contact points, spindle extension rods, etc., are also available to extend the range of application.

9. Waterproof data output connector
Maintaining the water resistance of the indicator, the data output connector enables you to develop an SPC measuring system based on the measurement data collected. The connector has external zero-set and external preset recall terminals so not only can you perform zero-setting or preset recall remotely, but also batch zero-setting or preset recalls.

10. Built-in hold preset function
This function allows you to set a display value that has been held as a preset value. If a master workpiece is available, it is possible to set a preset value using the switch operation.

*Based on Mitutoyo Corporation’s research (2005), this model has the smallest body width of digital indicators with built-in displays.
### Specifications

<table>
<thead>
<tr>
<th>Model No.</th>
<th>ID-N</th>
<th>ID-B</th>
<th>ID-N</th>
<th>ID-B</th>
<th>ID-N</th>
<th>ID-B</th>
<th>ID-N</th>
<th>ID-B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring Range</td>
<td>12.7mm</td>
<td>12.7mm</td>
<td>12.7mm</td>
<td>12.7mm</td>
<td>.5”(12.7mm)</td>
<td>.2”(5.08mm)</td>
<td>.5”(12.7mm)</td>
<td>.2”(5.08mm)</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.01mm</td>
<td>0.001mm/0.01mm</td>
<td>0.0005”/0.01mm</td>
<td>0.00005”/0.001mm</td>
<td>.00005”/ .0005”</td>
<td>.001mm/0.01mm</td>
<td>.00005”/ .0005”</td>
<td>.001mm/0.01mm</td>
</tr>
<tr>
<td>Accuracy*1</td>
<td>0.02mm</td>
<td>0.003mm/0.01mm</td>
<td>.0008”/0.02mm</td>
<td>.00012”/.0004”</td>
<td>.0003mm/0.01mm</td>
<td>0.001mm/0.01mm</td>
<td>.00005”/ .0005”</td>
<td>.001mm/0.01mm</td>
</tr>
<tr>
<td>Stem ø8mm</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>1/4”ø6.5</td>
<td>1/4”ø6.5</td>
<td>1/4”ø6.5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Contact point</td>
<td>Carbide (M2.5 x 0.45)</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Protection level</td>
<td>IP-66</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Measuring force</td>
<td>2.5N</td>
<td>2N</td>
<td>2N</td>
<td>2N</td>
<td>2N</td>
<td>2N</td>
<td>2N</td>
<td>2N</td>
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<tr>
<td>Plunger direction</td>
<td>Measures in both directions</td>
<td>Measures in both directions</td>
<td>Measures in both directions</td>
<td>Measures in both directions</td>
<td></td>
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</tr>
<tr>
<td>Battery</td>
<td>SR44(938882) x 1pc</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Battery life</td>
<td>Approx. 7,000 hours of continuous use*2</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Scale</td>
<td>Electrostatic capacitance absolute linear encoder</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Quantizing error</td>
<td>1 count</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Operating temp.</td>
<td>32°F to 104°F (0°C to 40°C)</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Storage temp.</td>
<td>14°F to 140°F (-10°C to 60°C)</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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<tr>
<td>Mass</td>
<td>2.9 lbs (130g)</td>
<td>3/8” DIA (ø9.52mm)</td>
<td>ISO/JIS type AGD type</td>
<td>ISO/JIS type AGD type</td>
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</table>

*1: 20°C, excluding quantizing error
*2: The battery life is reduced when this instrument is connected to an external device (e.g. a counter).
User’s manual
Battery: SR44 (938882) x 1pc
Screwdriver (05CZA619)

**Standard Accessories**
- Lifting knob (for ISO/JIS model)
- Lifting knob (for AGD model)
- Lug (for JIS/ISO model)
- Lug (for AGD model)
- No. 02ACA376: Rubber boot (for ID-N, NBR)
- No. 238774: Rubber boot (for ID-N, silicon)
- No. 125317: Rubber boot (for ID-B, NBR)
- No. 21EAA212: Rubber boot (for ID-B, silicon)
- No. 21EAA194: Connecting cable (1m)
- No. 21EAA190: Connecting cable (2m)
- No. 21EAA210: Bifurcated connecting cable with zero-setting terminal (1m)
- No. 21EAA211: Bifurcated connecting cable with zero-setting terminal (2m)

**Optional Accessories**
- No. 21EZA105:
- No. 21EZA150:
- No. 21EZA145:
- No. 21EZA146:
- No. 02ACA376:
- No. 238774:
- No. 125317:
- No. 21EAA212:
- No. 21EAA194:
- No. 21EAA190:
- No. 21EAA210:
- No. 21EAA211:

Whatever your challenges are, Mitutoyo supports you from start to finish.

Mitutoyo is not only a manufacturer of top-quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.