

COOLANT PROOF™ IP66



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

SLIM WATERPROOF DIGITAL INDICATORS

SMALL TOOL INSTRUMENTS
AND DATA MANAGEMENT



ABSOLUTE
Absolute System Patented by MITUTOYO

IP66



• Staubdicht und wasser-
geschützt IP66

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.



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.



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

4. Improvement in LCD readout rotation function

The LCD readout can be rotated 180° to allow for easy measurement where space is restricted.



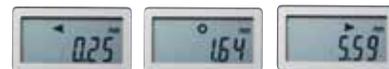
5. Back plunger design

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.



Measuring value and tolerance judgment



Only tolerance judgment

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.

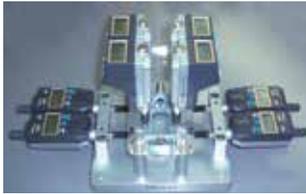
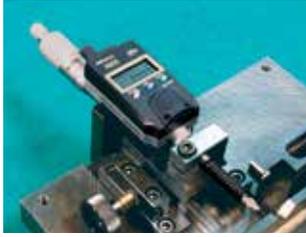
9. Waterproof data output connector

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.

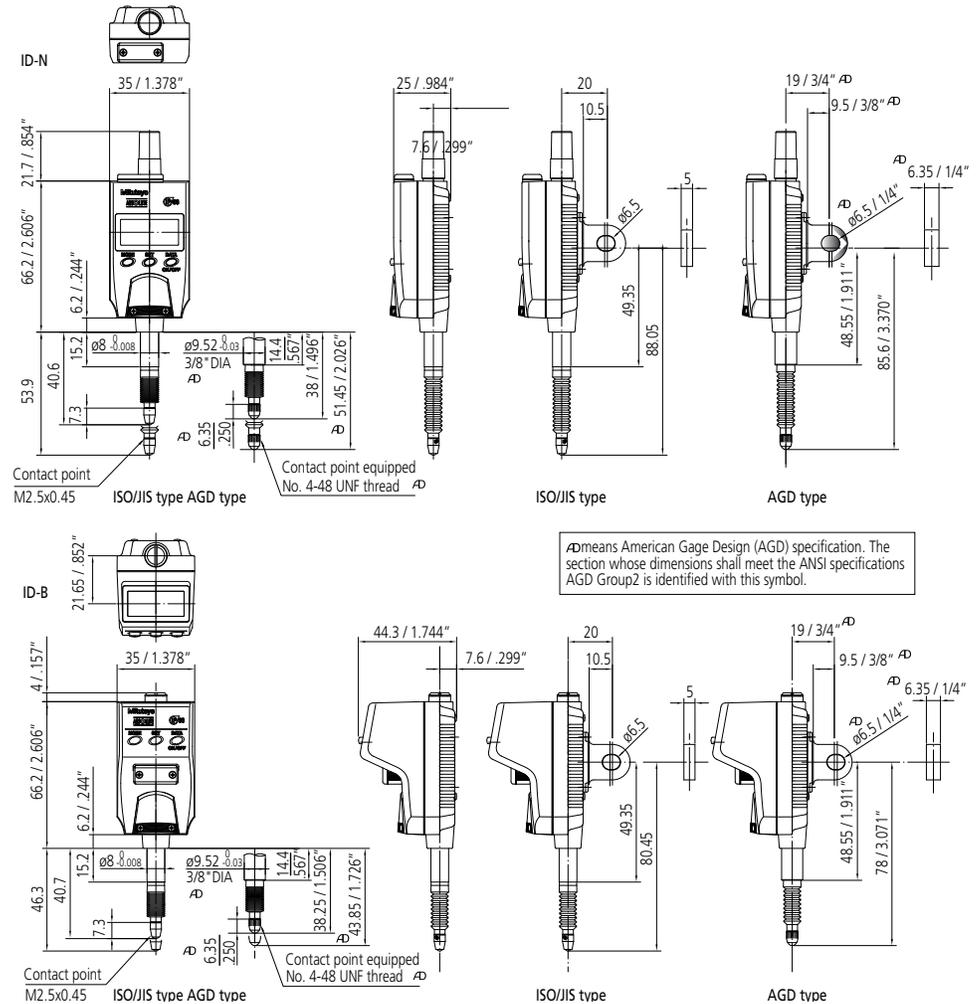
10. Built-in hold preset function

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.

Examples



Dimensions



Specifications

Model No.	ID-N	ID-B	ID-N	ID-B	ID-N	ID-B	ID-N	ID-B
Order No.	543-570	543-580	543-575	543-585	543-571	543-581	543-576	543-586
Measuring Range	12.7mm	5.08mm	12.7mm	5.08mm	.5"(12.7mm)	.2"(5.08mm)	.5"(12.7mm)	.2"(5.08mm)
Resolution	0.01mm		0.001mm/0.01mm		.0005"/0.01mm		.00005"/.0005" 0.001mm/0.01mm	
Accuracy*1	0.02mm		0.003mm/0.01mm		.0008"/0.02mm		.00012"/.0004" 0.003mm/0.01mm	
Stem	Ø8mm				3/8" DIA (Ø9.52mm)			
Contact point	Carbide (M2.5 x 0.45)				Carbide (#4-48UNF)			
Protection level	IP-66							
Measuring force	2.5N	2N	2.5N	2N	2.5N	2N	2.5N	2N
Plunger direction	Measures in both directions							
Battery	SR44(938882) x 1pc							
Battery life	Approx. 7,000 hours of continuous use*2							
Scale	Electrostatic capacitance absolute linear encoder							
Quantizing error	1 count							
Operating temp.	32°F to 104°F (0°C to 40°C)							
Storage temp.	14°F to 140°F (-10°C to 60°C)							
Mass	.29 lbs.(130g)							

*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).

Optional Accessories

- **No. 21EZA105:** Lifting knob (for ISO/JIS model)
- **No. 21EZA150:** Lifting knob (for AGD model)
- **No. 21EZA145:** Lug (for JIS/ISO model)
- **No. 21EZA146:** 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)

Standard Accessories

- User's manual
- Battery: SR44 (938882) x 1pc
- Screwdriver (05CZA619)



**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.



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