



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

Functions

- Zero-setting (INC system)
- Presetting (ABS system)
- Direction switching
- Tolerance judgment
- LCD readout reversal
- Resolution switching
(For 0.001 mm or 0.00005 in resolution models)
- Data output
- Display value holding
(when no external device is connected)
- Low battery voltage alarm display
- Error alarm display

Digimatic Indicators

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

ABSOLUTE Digimatic Indicator ID-N/B SERIES 543 — with Dust/Water Protection Conforming to IP66

MeasurLink[®] ENABLED
Data Management Software by Mitutoyo

- Our unique ABS scale restores the last origin position automatically when the indicator is turned on.
- The chance of overspeed errors has been eliminated thanks to the ABS scale.
- Rated to IP66: can be used satisfactorily even in adverse environments where the indicator is subject to splashing by cutting fluid or coolant.
- Slim body design (body width: only 35 mm) is advantageous in multipoint measurement situations where space is restricted. The LCD readout can also be rotated 180° to allow reading from the most convenient direction.
- Succeeded in digitalization of the Back Plunger type widely used for dial indicators for ID-B. A 5 mm-stroke plunger with a higher degree of accuracy has been implemented by adopting a direct reading scale for plunger displacement.

- Tolerance judgment can be performed by setting upper and lower tolerance limits. The judgment result (GO/NO-GO) can be displayed in full-size characters.
- Equipped with a data output port that enables incorporation into measurement networking and statistical process control systems. (Refer to page A-3)

543-575



543-585



Rated to IP66 water- and dust-proofing standard and oil resistance improved.



Body width 35 mm



LCD readout reversal function

SPECIFICATIONS

Metric							ISO/JIS type	ASME/ANSI/AGD type
Order No.	Range (mm)	Resolution (mm)	Maximum permissible error (mm)			Measuring force MPL (N)	Remarks	
			MPE _E *	Hysteresis MPE _H	Repeatability MPE _R			
543-570	12.7	0.01	0.02	0.02	0.01	2.5 or less	Slim type	
543-580	5.0					2.0 or less	Back Plunger type	
543-575	12.7	0.01/0.001 (selectable)	0.01/0.003	0.02	0.002	2.5 or less	Slim type	
543-585	5.0					2.0 or less	Back Plunger type	

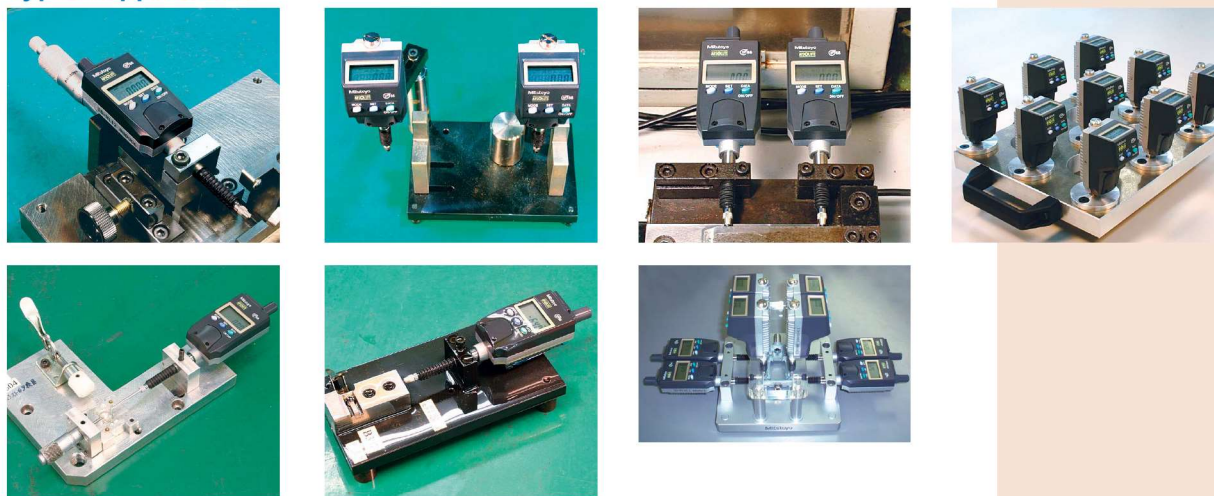
Inch / Metric							ISO/JIS type	ASME/ANSI/AGD type
Order No.	Range (in)	Resolution	Maximum permissible error			Measuring force MPL (N)	Remarks	
			MPE _E *	Hysteresis MPE _H	Repeatability MPE _R			
543-571	0.5	0.0005 in/0.01 mm	±0.001 in/0.02 mm	0.001 in/0.02 mm	0.0005 in/0.01 mm	2.5 or less	Slim type	
543-581	0.2					2.0 or less	Back Plunger type	
543-576	0.5	0.00005/0.0005 in 0.001/0.01 mm (selectable)	±0.0001 in/0.003 mm	0.0001 in/0.002 mm	0.0001 in/0.002 mm	2.5 or less	Slim type	
543-586	0.2					2.0 or less	Back Plunger type	

* Error of indication for the total measuring range
Note: One silver oxide button cell (SR44) for monitor included

Digimatic Indicators

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

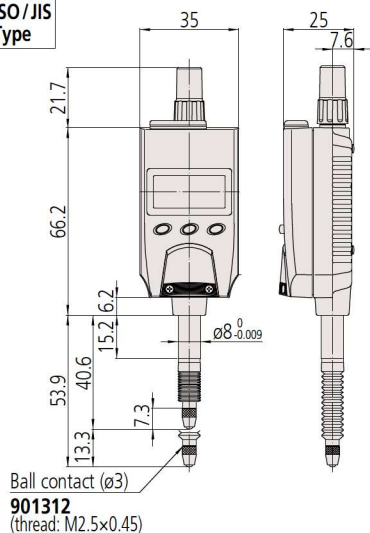
Typical applications



DIMENSIONS

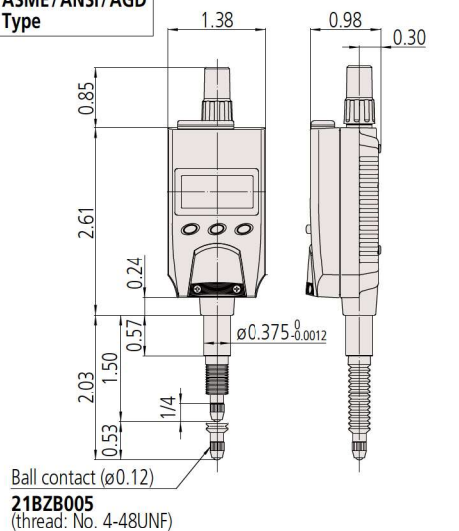
Slim Type ID-N

ISO/JIS
Type



Unit: mm

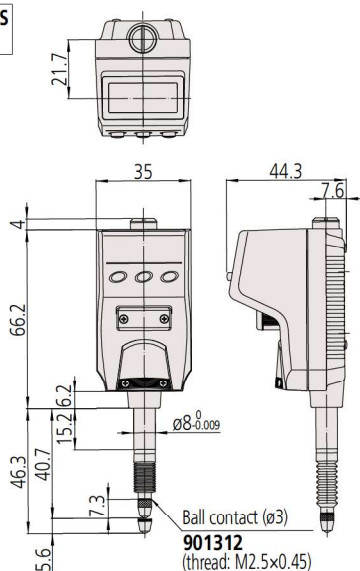
ASME/ANSI/AGD
Type



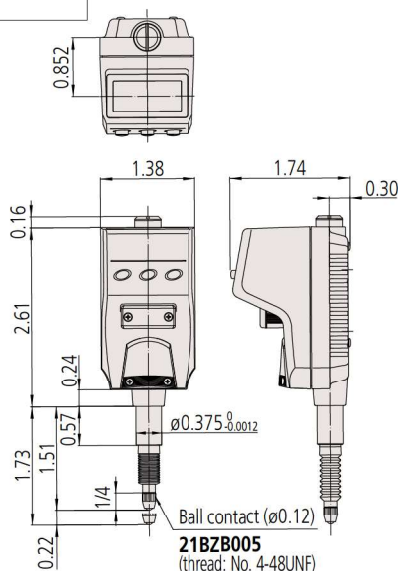
Unit: in

Back plunger Type ID-B

ISO/JIS
Type



ASME/ANSI/AGD
Type



Optional Accessories

- Lifting knob (only for ID-N)
 - 21EZA105 (ISO/JIS type)
 - 21EZA150 (ASME/ANSI/AGD type)
- Spindle can be manually lifted. Remove the spindle cap for ID-N and attach the lifting knob to the spindle. Note that water resistance is not maintained in this configuration.

Typical application using the lifting knob



- Lug
 - 21EZA145 (ISO/JIS type)
 - 21EZA146 (ASME/ANSI/AGD type)
- Arm for ID-B (made-to-order)
- Rubber boot
 - For oil resistance (NBR) 21EAA423 (for ID-N)
 - 21AAB562 (for ID-B)
 - For durability (silicone) 238774 (for ID-N)
 - 21EAA212 (for ID-B)

- SPC cable:
 - 21EAA194 (1 m)
 - 21EAA190 (2 m)



- USB Input Tool Direct (2 m): 06AFM380G
 - 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): 02AZD790G
 - For foot switch: 02AZE140G (Refer to pages A-19 to A-21 for details.)
 - Digimatic Mini-Processor DP-1VA LOGGER: 264-505
 - Bifurcated connecting cable with zero-setting terminal:
 - 21EAA210 (1 m)
 - 21EAA211 (2 m)
- Two of the wires inside the cable are separated for zero setting without touching the SET switch on the main body. Use these wires in combination with commercially available switches. Zero setting is performed by briefly connecting these two wires together (less than a second), and ABS preset & recall by connecting for a second or more.
- Contact points for Mitutoyo's dial indicators. (Refer to pages F-57 to F-60 for details.)