

# Digimatic Indicators

## SERIES 543 – ABSOLUTE Digimatic Indicator ID-CNX

- With the ABSOLUTE Linear Encoder technology, once the measurement reference point has been set it will not be lost when the power is turned off.
- This range includes models with resolution switchable down to 0.5µm.
- On-screen calibration reminder.
- Easy-to-read large back-lit LCD readout with a character height of 11 mm and an analogue scale.
- A newly designed data port allows for bi-directional communication. With the addition of the appropriate data cable, parameters, remote zeroing, and presetting can all be implemented from a connected PC.

**MeasurLink** ENABLED  
Data Management Software by Mitutoyo

**ABSOLUTE**



543-701B



543-721B



543-736B

### Specifications

Inch/Metric

Code No.	Range	Max. permissible error* <sup>1</sup>			Measuring force	Interface
		MPE <sub>E</sub> * <sup>2</sup>	Hysteresis MPE <sub>H</sub>	Repeatability MPE <sub>R</sub>		
Resolution: .0005" / .0001" / .00005" / .00002" / 0.01 mm / 0.001 mm / 0.0005 mm (selectable)						
543-701B	.5" / 12.7 mm	±.00012" / 0.003 mm	.00008" / 0.002 mm	.00008" / 0.002 mm	1.5 N or less	d1 / d2 / S1
543-706B	.5" / 12.7 mm				0.4 N - 0.7 N* <sup>3</sup>	
543-721B	1" / 25.4 mm				1.8 N or less	
543-731B	2" / 50.8 mm	±.0002" / 0.005 mm	2.3 N or less			
Resolution: .0005" / 0.01 mm						
543-711B	.5" / 12.7 mm	±.001" / 0.02 mm	.001" / 0.02 mm	.0005" / 0.01 mm	0.9 N or less	d1 / S1
543-716B	.5" / 12.7 mm				0.2 N - 0.5 N* <sup>3</sup>	
543-726B	1" / 25.4 mm				1.8 N or less	
543-736B	2" / 50.8 mm				±.0015" / 0.04 mm	

\*<sup>1</sup> These values apply at 20 °C.

\*<sup>2</sup> Error of indication for the total measuring range.

\*<sup>3</sup> Low measuring force.

### Technical Data

Display:	7-digit LCD and analogue bar (±20 scale)
Scale type:	ABSOLUTE electrostatic linear encoder
Max. response speed:	Unlimited
Stem diameter:	8 mm
Standard contact point:	<b>901312</b>
Battery:	CR2032 (1 pc.), <b>055AA217</b>
Battery life:	Approx. 2.5 years under normal use

### Functions

Preset, zero-set, peak detection (max, min, TIR), counting direction switching, resolution selecting, tolerance judgement, simplified calculation, analogue bar display ON/OFF, analogue bar scale selecting, key customize, function lock, calibration schedule warning function, data hold, data output, inch/mm reading, auto OFF, reset all settings

Alarm: Notifications for setting errors, sensor error, and display overflow.

### Setting Measuring Force on Low Measuring Force Model

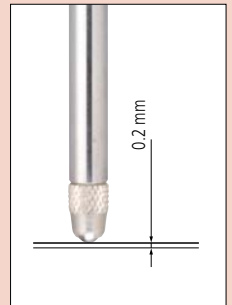
Plunger orientation	Spring	Weight (approx. 0.1 N)	Max. measuring force
Pointing vertically downward	Yes	Yes	0.7 N or less
	Yes	No	0.6 N or less
	No	Yes	0.4 N or less
	No	No	Not guaranteed
Horizontal	Not guaranteed		

Note: Operation using configurations other than shown above is not guaranteed.

### Origin Setting of Digimatic Indicators

Repeatability in the range of 0.2 mm from the lowest rest point is not guaranteed for Digimatic indicators.

When setting the origin or presetting a specific value, be sure to lift the spindle at least 0.2 mm from the lowest rest point.



### Calibration Period Notification Function

The LCD displays an icon to notify the user when the set calibration time approaches. This facilitates the proper precision management of ID-C NX.

