

# ABSOLUTE Digimatic Indicator ID-C

## SERIES 543 — Standard Type

### FEATURES

- As compact as standard Series 2 dial indicators.
- Large, easy-to-read LCD.
- ZERO/ABS key: Allows the display to be Zero-Set at any spindle position for comparison measurements. This switch will also allow return to the absolute coordinate and display of the true position from the origin point.
- GO/±NG judgment can be performed by setting upper and lower tolerance limits. The judgment result (GO/±NG) can be displayed in full-size characters.
- Internal calculations using the simple formula of  $[F(x) = Ax]$  are available.
- The positive/negative count resulting from the spindle's up/down movement can be toggled.
- Unlimited response speed eliminates spindle over-speed errors.
- The indicator face can be rotated 330° to an appropriate angle for easy reading.
- With SPC data output.



SPC

ABSOLUTE®  
Absolute System Patented by MITUTOYO

(Refer to the page 9 for details.)

### Technical Data

Accuracy: Refer to the list of specifications (excluding quantizing error)

Resolution:

0.01mm type	0.01mm
0.001mm type	0.001mm/0.001mm
.0005"/0.01mm type	.0005"/0.01mm
.00005"/0.001mm type	.0005"/.0001"/.00005"/0.01mm/0.001mm

Display: LCD  
Length standard: ABSOLUTE electrostatic capacitance type linear encoder

Max. response speed: Unlimited

Measuring force: Refer to the list of specifications

Stem dia.: 8mm (ISO/JIS type) or 3/8" (ANSI/AGD type)

Contact point: Carbide ball with M2.5x0.45 (ISO/JIS type)  
Carbide ball with #4-48UNF (ANSI/AGD type)

Battery: SR44 (1 pc.), **938882**

Battery life: Approx. 7,000 hours under normal use

Dust/Water protection level: IP42

### Function

Origin-set/Preset, Zeroset, GO/±NG judgment, Counting direction switching, Power ON/OFF, Simplified calculation, Function lock, Data hold, Data output, inch/mm conversion (inch/mm models)

Alarm: Low voltage, Counting value composition error, Over-flow error, Tolerance limit setting error

### Optional Accessory

**905338**: SPC cable (1m)

**905409**: SPC cable (2m)

**21EZA198**: Spindle lifting lever (12.7mm/.5" ISO/JIS type)

**21EZA199**: Spindle lifting lever (12.7mm/.5" ANSI/AGD type)

**21EZA105**: Spindle lifting knob (12.7mm/.5" ISO/JIS type)\*

**21EZA150**: Spindle lifting knob (12.7mm/.5" ANSI/AGD type)\*

**21EZA197**: Spindle lifting knob (25.4mm/1", 50.8mm/2" models)

**540774**: Spindle lifting cable

**02ACA571**: Auxiliary spindle spring (25.4mm/1" models)\*\*

**02ACA773**: Auxiliary spindle spring (50.8mm/2" models)\*\*

Backs (See page 266.)

—: Lug-on-center back (25.4mm/1" and

50.8mm/2", ISO/JIS type)

—: Lug-on-center back (25.4mm/1" and

50.8mm/2", ANSI/AGD type)

—: Contact points (See page 264.)

\*Not available for low measuring force models.

\*\*Required when orienting the indicator upside down.

## SPECIFICATIONS

**Metric**

ISO/JIS type

ANSI/AGD type

Resolution*	Order No. (w/ lug, flat-back)	Range	Accuracy	Measuring force	Remarks	
0.001mm	<b>543-390</b>	<b>543-390B</b>	12.7mm	0.003mm	1.5N or less	—
0.001mm	<b>543-394</b>	<b>543-394B</b>	12.7mm	0.003mm	0.4N - 0.7N	Low measuring force
0.001mm	—	<b>543-470B</b>	25.4mm	0.003mm	1.8N or less	—
0.001mm	—	<b>543-490B</b>	50.8mm	0.005mm	2.3N or less	—
0.01mm	<b>543-400</b>	<b>543-400B</b>	12.7mm	0.02mm	0.9N or less	—
0.01mm	<b>543-404</b>	<b>543-404B</b>	12.7mm	0.02mm	0.2N - 0.5N	Low measuring force
0.01mm	—	<b>543-474B</b>	25.4mm	0.02mm	1.8N or less	—
0.01mm	—	<b>543-494B</b>	50.8mm	0.04mm	2.3N or less	—

**Inch/Metric**

Resolution*	Order No. (w/ lug, flat-back)	Range	Accuracy	Measuring force	Remarks	
.00005"/0.001mm	<b>543-391</b>	<b>543-391B</b>	.5"	.0001"	1.5N or less	—
.00005"/0.001mm	<b>543-392</b>	<b>543-392B</b>	.5"	.0001"	1.5N or less	—
.00005"/0.001mm	<b>543-395</b>	<b>543-395B</b>	.5"	.0001"	0.4N - 0.7N	Low measuring force
.00005"/0.001mm	<b>543-396</b>	<b>543-396B</b>	.5"	.0001"	0.4N - 0.7N	Low measuring force
.00005"/0.001mm	—	<b>543-471B</b>	1"	.0001"	1.8N or less	—
.00005"/0.001mm	—	<b>543-472B</b>	1"	.0001"	1.8N or less	—
.00005"/0.001mm	—	<b>543-491B</b>	2"	.0002"	2.3N or less	—
.00005"/0.001mm	—	<b>543-492B</b>	2"	.0002"	2.3N or less	—
.0005"/0.01mm	<b>543-401</b>	<b>543-401B</b>	.5"	.001"	0.9N or less	—
.0005"/0.01mm	<b>543-402</b>	<b>543-402B</b>	.5"	.001"	0.9N or less	—
.0005"/0.01mm	<b>543-405</b>	<b>543-405B</b>	.5"	.001"	0.2N - 0.5N	Low measuring force
.0005"/0.01mm	<b>543-406</b>	<b>543-406B</b>	.5"	.001"	0.2N - 0.5N	Low measuring force
.0005"/0.01mm	—	<b>543-475B</b>	1"	.001"	1.8N or less	—
.0005"/0.01mm	—	<b>543-476B</b>	1"	.001"	1.8N or less	—
.0005"/0.01mm	—	<b>543-495B</b>	2"	.0015"	2.3N or less	—
.0005"/0.01mm	—	<b>543-496B</b>	2"	.0015"	2.3N or less	—

## DIMENSION

