

Functions

- Signal output
- (-NG/OK/+NG, N-ch open drain, logical invert is available)
- Remote control (peak start preset/zero-set)
- Peak detection (MAX/MIN)

- Runout range measurement (MAX MIN)

 Zero-setting (INC system)

 Presetting (ABS system)

 Measuring direction switching

 Tolerance judgment (3 pairs of ABS, INC memory function)

 Percellating systems
- Resolution switching
 Simple calculation: f(x) =Ax
- Key lock
 Calibration mode (Signal output in Digimatic code format)
- Error alarm display

Optional Accessories

• Lifting* Lifting lever 21EZA198 Lifting knob 21EZA105

 Dust-water protection is not guaranteed.
 Digimatic power supply unit: 21EZA345
 To denote your AC power cable add the following suffixes to the code No.: A for UL/CSA, D for CEE, DC for CCC, E for KC. No suffix is required for JIS/100VAC. Used in the calibration mode when executing automatic inspection using i-Checker IC2000. In such a case, purchase connection cable 21EAA194 (1 m), or 21EAA190 (2 m).

Note: It can't be used as a power source when using in the normal mode.

- Contact points for Mitutoyo's Digimatic indicators (optional)
 Refer to pages 07-63 to 07-68 for details.
- Interchangeable backs for SERIES **2** models (optional) Refer to page 07-69 for details.

Output signals and display

Wire	- NG	OK	+ NG	ABS data composition error
Orange (– NG)	Low	High	High	High
Green (OK)	High	Low	High	High
Brown (+ NG)	High	High	Low	High
LED	Red	Green	Red	Red flashing
Display	4	0	A	"x.xxE" indication

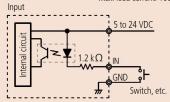
Note: Logical invert is available.

I/O Specifications

Wire	Signal	1/0	Description
Black	– V (GND)	_	Connected to minus (-) terminal
Red	+ V	_	Power supply (5 to 24 VDC)
Orange	– NG		Tolerance judgment
Green	OK	0	result output: Only the
Brown	+ NG	0	terminal corresponding to a judgment result is set to the low level.
Yellow	PRESET_RECALL ZERO	_	External input terminal: If the relevant terminal is set
Blue	PEAK_START	-	to the low level, its signal becomes true.
Shield	FG		Connected to GND (Earth)

Note: Measurement data cannot be output.

Output External power Load voltage: 5 to 24 VDC Max. load current: 100 mA or less



Input current: Max. 20 mA

ABSOLUTE Digimatic Indicator ID-C SERIES 543 — Signal Output Function Type

- Enables the Go/No-go judgment result to be output to external equipment. Output is enabled by directly connecting to an external device such as a sequencer, contributing to automation of measurement processes. It also supports logical invert of signal output.
- The GO/NG judgment result is also indicated by the green/red LED and the signs on display.
- A peak detection function is equipped for measuring and judging peak values such as
- The ABS (ABSOLUTE) scale restores the last origin position* automatically when the indicator is turned on, and realizes high reliability by eliminating over-speed errors.
 - * Refer to "Precautions for use" on page 07-2.



543-350-10

SPECIFICATIONS

Metric		ISO/JIS Type						
Code No	Range (mm)	Resolution (mm)	Maximum permissible error (MPE)*1 (mm)				Maximum permissible limit (MPL)	Mass
Code No.			Partial measuring range MPE _P	Total measuring range MPE _E	Hysteresis MPE <i>H</i>	Repeatability MPE _R	Measuring force (N)	(g)
543-350-10		0.001/0.01	01/0.01 ectable) 0.003	0.003 0.		0.002	2.5 or less	295
543-350B-10 (flat back)		(selectable)			0.003			285
Inch/Metric		ISO/JIS Type						
1			1				MA	

Į	Inch/Metric		ISO/JIS Type						
	Code No.	Dange	Resolution	Maximu	m permissible er	Maximum permissible limit (MPL)	Mass		
		Range		Partial measuring range MPE _P	Total measuring range MPE _E	Hysteresis MPE <i>H</i>	Repeatability MPE _R	Measuring force (N)	(g)
	543-351-10	0.5 in/ 12.7 mm	0.00005/ 0.0001/ 0.0005 in, 0.001/ 0.01 mm (selectable)	0.003	0.003	0.003	0.002	2.5 or less	295
	543-351B-10 (flat back)								285

Inch/Metric							
Code No.	Range	Resolution	Maximum	Maximum permissible limit (MPL)	Mass		
Code No.			Overall*2	Hysteresis	Repeatability	Measuring force (N)	(g)
543-352-10	0.5 in/ 12.7 mm	0.00005/ 0.0001/ 0.0005 in, 0.001/ 0.01 mm (selectable)	±0.00010	0.00010	0.00010	2.5 or less	295
543-352B-10 (flat back)							285

^{*1} These values apply to normal measurements at 20 °C.

Note 1: Display readout does not rotate.

Note 2: MAX/MIN holding: sample rate is 100 readings/s; max. rate of change of reading is 100 µm/s or less.

Note 3: Standard contact point: 901312 (ISO/JIS type), 21BZB005 (ANSI/AGD type)



^{*2} Overall magnification and linearity

Digimatic Indicators

ABSOLUTE Digimatic Indicator ID-C SERIES 543 — Signal Output Function Type

DIMENSIONS

