

Digimatic Indicators

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

- Enables GO/NG judgment to be output to external equipment for a measurement result against the peak values set. Solid-state switching provides high reliability by avoiding metallic switch contacts.
- The signal can be output to an external device such as a sequencer. The GO/NG judgment result is also indicated by the green/red LED and the signs on LCD.
- A peak-detection function makes runout measurements easy.
- 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.
- Provided with a 4 m cable.
- External power supply required is 5-24 VDC / 100 mA (max.).
- Dust-water protection level: IP54.

* Refer to "Origin Setting of Digimatic Indicators" on page F-25.



543-350-10

SPECIFICATIONS

□ ISO/JIS type □ ASME/ANSI/AGD type

Metric	Order No.	Range (mm)	Resolution (mm)	Maximum permissible error (mm)			Measuring force MPL (N)	Net mass (g)
				MPE _E *1	Hysteresis MPE _H	Repeatability MPE _R		
	543-350-10	12.7	0.001/0.01 (selectable)	0.003	0.002	0.002	2.5 or less	295
	543-350B-10*2							285

Inch/Metric	Order No.	Range	Resolution	Maximum permissible error			Measuring force MPL (N)	Net mass (g)
				MPE _E *1	Hysteresis MPE _H	Repeatability MPE _R		
	543-351-10	0.5 in / 12.7 mm	0.00005/0.0001 / 0.0005 in, 0.001/0.01 mm (selectable)	±0.00010 in / 0.003 mm	0.0001 in / 0.002 mm	0.0001 in / 0.002 mm	2.5 or less	295
	543-351B-10*2							285
	543-352-10							295
	543-352B-10*2							285

*1 Error of indication for the total measuring range

*2 Flat back

Note 1: LCD 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)

ABSOLUTE™



IP54

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

Optional Accessories

- Lifting*1
 - Lifting lever **21EZA198**
 - Lifting knob **21EZA105**
 - Digimatic power supply unit: **21EZA345**
 - To denote your AC power cable add the following suffixes to the order 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 connecting cable **21EAA194** (1 m), or **21EAA190** (2 m).
 - Note: It can't be used as a power supply when using in the normal mode.
 - Contact points for Mitutoyo's digimatic indicators.*2
 - Interchangeable backs for SERIES 2 models (Refer to page F-61 for details.)
- *1 Dust-water protection is not guaranteed.
*2 Refer to pages F-57 to F-60 for details.

Output signals and LCD display

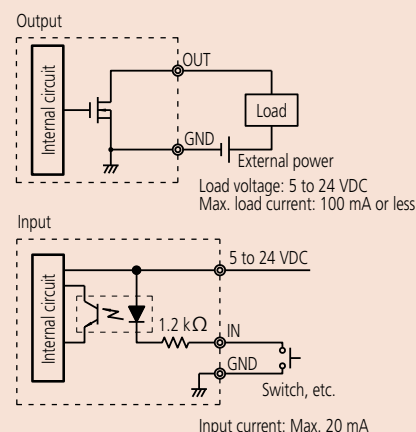
Wire	- NG	OK	+ NG	ABS data composition error
Orange (- NG)	Low	High	High	High
Green (OK)	High	Low	High	High
Brown (+ NG)	High	High	Low	High
LED	Red	Green	Red	Red flashing
LCD	◀	○	▶	"x.xxE" indication

Note: Logical invert is available.

I/O Specifications

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

Note: Measurement data cannot be output.



DIMENSIONS

