

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*
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 back covers (optional)
Refer to pages 07-69 to 07-70 for details.

Output signals and display

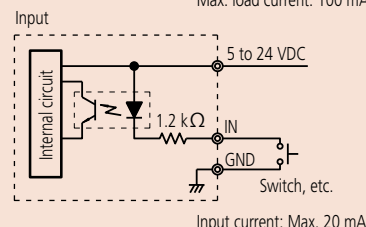
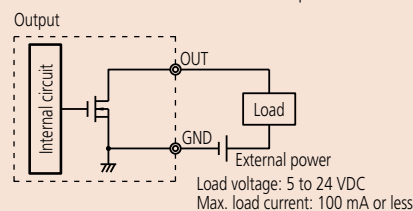
Wire	- NG	OK	+ NG	ABS data composition error
Orange (- NG)	Low	High	High	High
Green (OK)	High	Low	High	High
Brown (+ NG)	High	High	Low	High
LED	Red	Green	Red	Red flashing
Display	◀	○	▶	"x.xx" indication

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
Green	OK	O	result output: Only the terminal corresponding to a judgment result is set to the low level.
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.



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

- Enables the GO/NG 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 runout.
- 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						Mass (g)
Code No.	Range (mm)	Resolution (mm)	Maximum permissible error (MPE)*1 (mm)				Maximum permissible limit (MPL)	
			Partial measuring range P_{MPE}	Total measuring range E_{MPE}	Hysteresis H_{MPE}	Repeatability R_{MPE}	Measuring force (N)	
543-350-10	12.7	0.001/0.01 (selectable)	0.003	0.003	0.003	0.002	2.5 or less	295
543-350B-10 (flat back)								285

Inch / Metric		ISO/JIS Type						Mass (g)
Code No.	Range	Resolution	Maximum permissible error (MPE)*1 (mm)				Maximum permissible limit (MPL)	
			Partial measuring range P_{MPE}	Total measuring range E_{MPE}	Hysteresis H_{MPE}	Repeatability R_{MPE}	Measuring force (N)	
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		ASME/ANSI /AGD type						Mass (g)
Code No.	Range	Resolution	Maximum permissible error (MPE)*1 (in)			Maximum permissible limit (MPL)	Measuring force (N)	
			Overall*2	Hysteresis	Repeatability			
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.

*2 Overall magnification and linearity

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 μ m/s or less.

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

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

DIMENSIONS

