

Willrich Precision  
Ph 866-945-5742  
email: [sales@willrich.com](mailto:sales@willrich.com)

## Digital Indicator with Simplified Key Functions and Reasonable price

# ABS Digimatic Indicator ID-SX



### Type emphasizing cost performance

This indicator uses a button-type battery (SR44), stresses ease of use, and comes with the minimum of functionality. Indicators that can display measurements at resolutions of 0.01 mm and 0.001 mm are included in the lineup.

### IP53 dust/water protection level

Some of models are also available and provides IP53 dust/water protection level specifications. See below:

543-794, 543-794B

543-795, 543-795B

543-796, 543-796B

### ABS (absolute) sensor

These Digimatic indicators employ Mitutoyo's proprietary ABS (absolute) sensor, which makes it possible to restore the origin point even if the power is turned off. This eliminates the need to perform origin matching each time the power is turned on. Furthermore, this sensor ensures that overspeed errors do not occur, which improves reliability.

**ABSOLUTE™**

### Long battery life

One button battery (SR44) provides approximately 20,000 hours of continuous use for resolution .0005"/0.01mm models.

**Mitutoyo**

## Specifications

Metric						ISO/JIS/DIN Type	ASME/ANSI/AGD Type			
Order No.	Range	Resolution	Accuracy*1			Back type	Measuring force	Battery life*3	Dust/Water protection level*4	Mass
			Overall*2	Hysteresis	Repeatability					
543-790	12.7 mm	0.001 mm	0.003 mm	0.002 mm	0.002 mm	With lug	1.5N or less	18,000 hours under normal use	IP42	150g
543-790B						Flat				140g
543-794		0.001 mm	0.003 mm	0.002 mm	0.002 mm	With lug	2.5N or less		IP53	155g
543-794B						Flat				155g
543-781		0.01 mm	0.02 mm	0.02 mm	0.01 mm	With lug	1.5N or less	20,000 hours under normal use	IP42	150g
543-781B						Flat				140g

Inch/Metric											
Order No.	Range	Resolution	Accuracy*1			Back type	Measuring force	Battery life*3	Dust/Water protection level*4	Mass	
			Overall*2	Hysteresis	Repeatability						
543-791	.5"/12.7 mm	.00005"/0.001mm	±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug	1.5N or less	18,000 hours under normal use	IP42	150g	
543-791B						Flat				140g	
543-792		.00005"/0.001mm	±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug	1.5N or less	18,000 hours under normal use	IP42	165g	
543-792B						Flat				140g	
543-793		.0001"/0.001mm	±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug	1.5N or less	18,000 hours under normal use	IP42	165g	
543-793B						Flat				140g	
543-795		.00005"/0.001mm	±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug	2.5N or less	18,000 hours under normal use	IP53	155g	
543-795B						Flat				155g	
543-796		.00005"/0.001mm	±.0001"/0.003mm	.0001"/0.002mm	.0001"/0.002mm	With lug	2.5N or less	18,000 hours under normal use	IP53	155g	
543-796B						Flat				155g	
543-782		.0005"/0.01mm	±.0010"/0.02mm	.0010"/0.02mm	.0005"/0.01mm	With lug	1.5N or less	20,000 hours under normal use	IP42	150g	
543-782B						Flat				140g	
543-783		.0005"/0.01mm	±.0010"/0.02mm	.0010"/0.02mm	.0005"/0.01mm	With lug	1.5N or less	20,000 hours under normal use	IP42	165g	
543-783B						Flat				140g	

\*1 These values apply at 20°C, and do not include ±1 count allowance for quantization error.

\*2 Overall magnification and linearity

\*3 The battery life varies, depending on the number of times the Digimatic indicator is used as well as the way it is used. The values listed above are approximations.

\*4 This is only valid when the data socket cover is in place. Does not apply if the cover is removed, a lifting accessory is attached, or a connecting cable is attached.

## Common specifications

Display: 6-digit LCD, sign

Contact point: Spherical tip SR = 1.5 mm (carbide tipped)

part No. **901312** (for ISO/JIS/DIN Type), part No. **21BZB005** (for ASME/ANSI/AGD Type)

Usable orientation: All

Power supply: SR44, part No. **938882**

Maximum response speed: No limit (scan-type measurement is not supported)

Operating temperature range: 0 to 40°C

Storage temperature range: -10 to 60°C

## Features

Origin set (zero-set): The display can be zeroed at any chosen position.

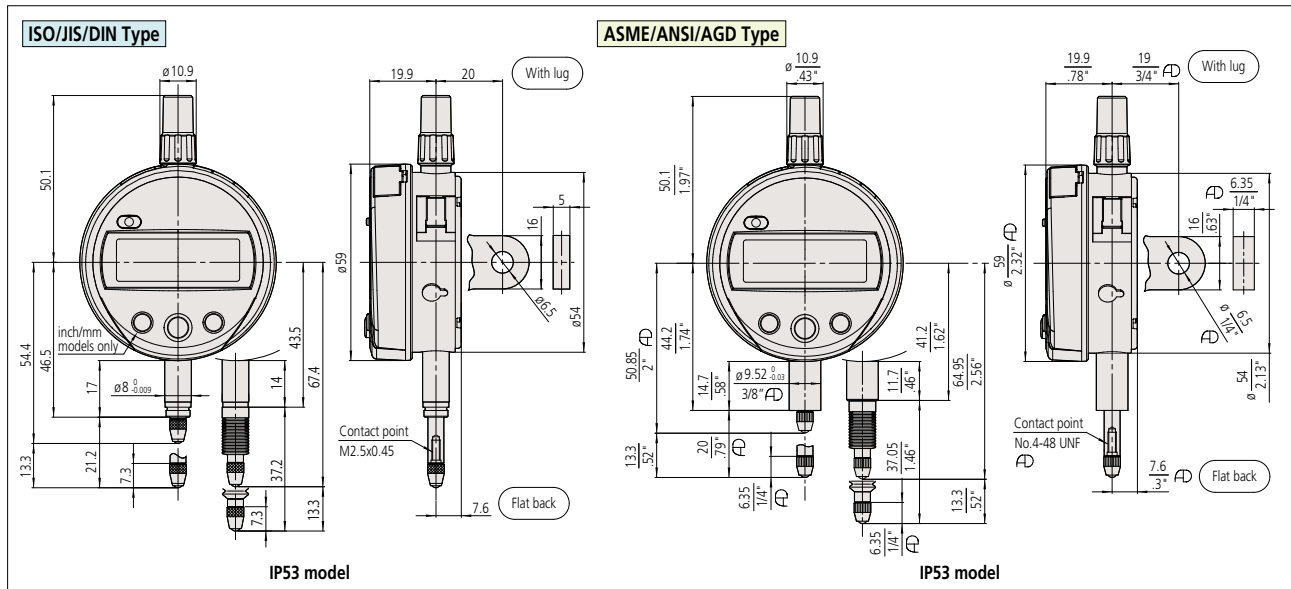
Direction switching: The measuring direction can be switched.

in/mm reading (inch/mm models only)

Measurement data output: These indicators have a measurement data output socket, which makes it possible to output measurement to the DP-1VR mini processor or to a PC through an input tool. Furthermore, the U-WAVE measurement data wireless communication system can be used to wirelessly input measurement data to a PC.

Error warning

## Dimensions



## Optional accessories

### Lifting

Lifting lever No. **21EZA198** (ISO/JIS/DIN Type), No. **21EZA199** (ASME/ANSI/AGD Type)

Lifting knob No. **21EZA105** (ISO/JIS/DIN Type), No. **21EZA150** (ASME/ANSI/AGD Type)

Lifting cable (No. **540774**)

• SPC connecting cables 1m (No. **905338**) 2m (No. **905409**)

• Data processing products

• Contact points for Mitutoyo dial indicators

• Backs for Mitutoyo standard (2 series) dial indicators

• Stands

## IP53 dust/water protection level

### Level 5: Dust protection

While complete protection against invasion of dust is not provided, protection is adequate to prevent dust amounts that would inhibit the prescribed operations and safety of the electronic equipment.

### Level 3: Protection against spraying water

The product suffers no harmful effects when subjected to water sprayed at an angle of up to 60 degrees on both sides.

For details on the dust/water protection level test conditions, please refer to IEC 60529:2001 and JIS C 0920:2003.

IP code is the degree of protection against solid foreign objects and water.

Mitutoyo offers a lineup of Coolant proof type, ID-N/B series, which is Excellent resistance against oil, water, and dust in the situations that include splashing cutting fluid.



### A rich variety of Digimatic indicators

- ① ID-CX: A standard digital indicator
- ② ID-N/B: A waterproof product with a slim body 35 mm wide and equipped with a large range of functions
- ③ ID-H: Product with a remote control, high measurement accuracy, and equipped with a large range of functions
- ④ ID-U: General-purpose product with a measuring range of 25.4 mm
- ⑤ ID-CRB: Product with a built-in calculation function
- ⑥ ID-CA: Product with a peak hold function
- ⑦ ID-CGB: Dedicated product designed for bore gages

Note: All information regarding our products, and in particular the illustrations, drawings, dimensional and performance data contained in this pamphlet, as well as other technical data are to be regarded as approximate average values. We therefore reserve the right to make changes to the corresponding designs, dimensions and weights. The stated standards, similar technical regulations, descriptions and illustrations of the products were valid at the time of printing. Only quotations submitted by ourselves may be regarded as definitive.

Our products are classified as regulated items under Japanese Foreign Exchange and Foreign Trade Law. Please consult us in advance if you wish to export our products to any other country. If the purchased product is exported, even though it is not a regulated item (Catch-All controls item), the customer service available for that product may be affected. If you have any questions, please consult your local Mitutoyo sales office.

Export permission by the Japanese government may be required for exporting our products according to the Foreign Exchange and Foreign Trade Law. Please consult our sales office near you before you export our products or you offer technical information to a nonresident.

Coordinate Measuring Machines

Vision Measuring Systems

Form Measurement

Optical Measuring

Sensor Systems

Test Equipment and  
Seismometers

Digital Scale and DRO Systems

Small Tool Instruments and  
Data Management

### Mitutoyo Corporation

20-1, Sakado 1-Chome,  
Takatsu-ku, Kawasaki-shi,  
Kanagawa 213-8533, Japan  
T +81 (0) 44 813-8230  
F +81 (0) 44 813-8231  
<http://www.mitutoyo.co.jp>

**Mitutoyo**