



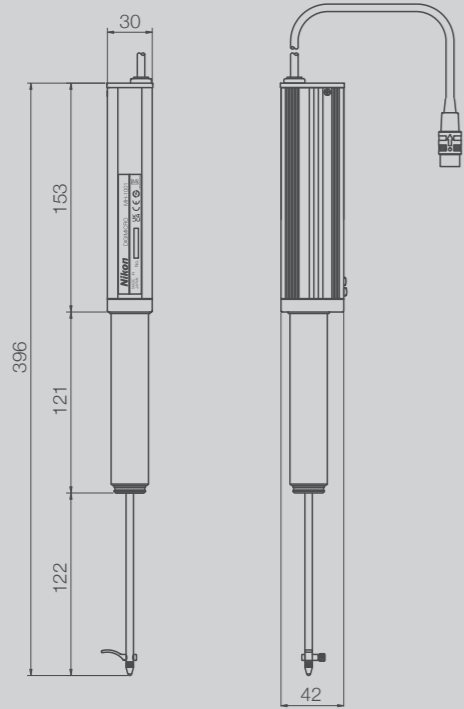
DIGITAL LENGTH MEASURING SYSTEM

**DIGIMICRO**

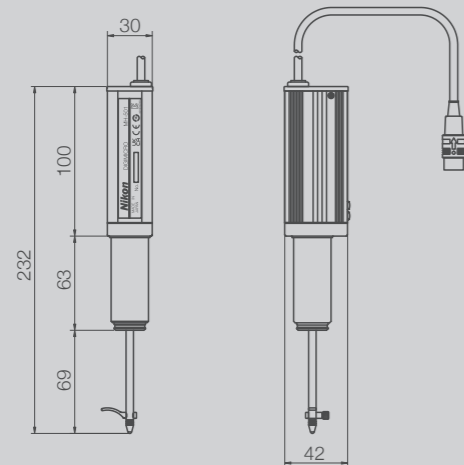
# DIGIMICRO HEADS

A line-up of three models designed for high precision

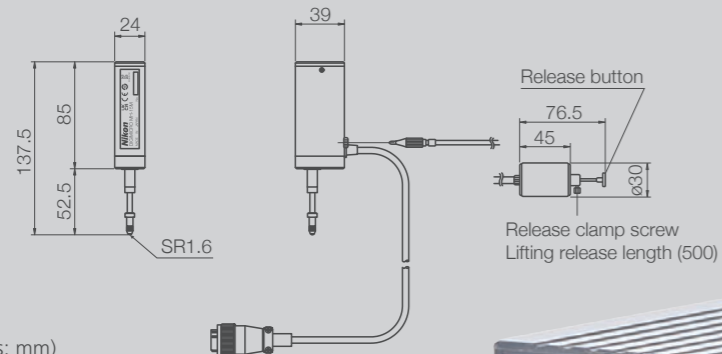
MF-1001



MF-501



MH-15M



(Dimension Units: mm)



## MF-1001

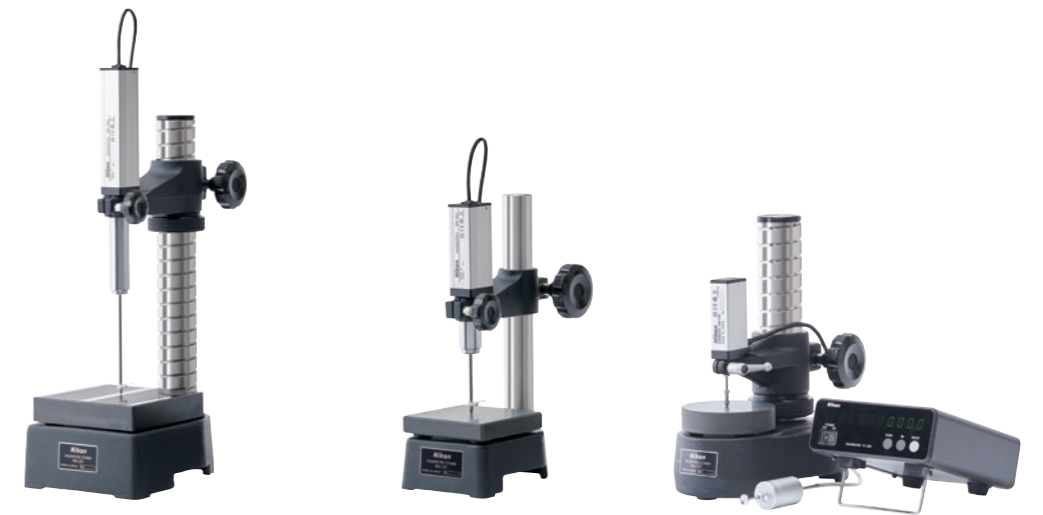
- Measurement length: 100 mm. A DIGIMICRO system that achieves accuracy of 3  $\mu\text{m}$  (at 20  $^{\circ}\text{C}$ ).
- Compatible counters: MFC-200 (head mounted), TC-200 (externally placed)
- Compatible stands: MS-12C, MS-22S, MS-32G, MS-41G

## MF-501

- Measurement length: 50 mm. A DIGIMICRO system that achieves accuracy of 1  $\mu\text{m}$  (at 20  $^{\circ}\text{C}$ ).
- Compatible counters: MFC-200 (head mounted), TC-200 (externally placed)
- Compatible stands: MS-12C, MS-22S, MS-32G, MS-41G

## MH-15M

- Measurement length: 15 mm. A compact, high-precision DIGIMICRO system that achieves accuracy of 0.7  $\mu\text{m}$  (20  $^{\circ}\text{C}$ ).
- Compatible counters: TC-200 (externally placed)
- Compatible stands: MS-51C



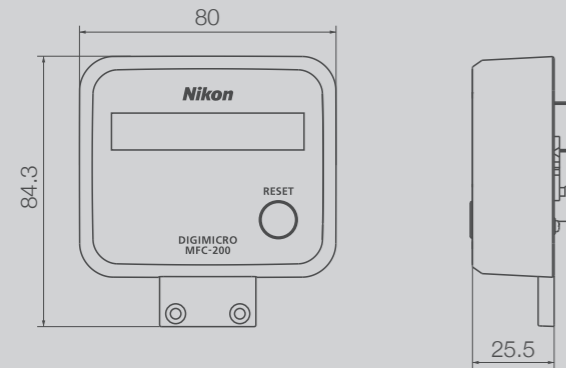
Model	MF-1001	MF-501	MH-15M
Measurement range	0–100 mm	0–50 mm	0–15 mm
Minimum displayed value	0.1 $\mu\text{m}$ (switchable to 0.5 $\mu\text{m}$ or 1 $\mu\text{m}$ )		—
	0.01 $\mu\text{m}$ (can be switched to 0.05 $\mu\text{m}$ , 0.1 $\mu\text{m}$ , 0.5 $\mu\text{m}$ , 1 $\mu\text{m}$ , or 5 $\mu\text{m}$ )		
Accuracy (20 $^{\circ}\text{C}$ )	3 $\mu\text{m}$	1 $\mu\text{m}$	0.7 $\mu\text{m}$
Response speed	500 mm/sec. or less	500 mm/sec. or less	100 mm/sec. or less
Measuring force	Downward 1.23 to 1.81N (variable to about 0.44N), laterally 0.64 to 1.23N	Downward 1.13 to 1.62N (variable to about 0.29N), laterally 0.64 to 1.23N	Upward 0.25N, downward 0.64N, laterally 0.44N (Lifting release included)
Operating temperature range	0 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$	0 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$	0 $^{\circ}\text{C}$ to +40 $^{\circ}\text{C}$
Weight	Approx. 480 g	Approx. 310 g	Approx. 220 g
Compatible counters	MFC-200, TC-200		TC-200
Compatible stands	MS-12C, MS-22S, MS-32G, MS-41G		MS-51C



# COUNTER

Two counter units support high accuracy measuring for different applications

MFC-200

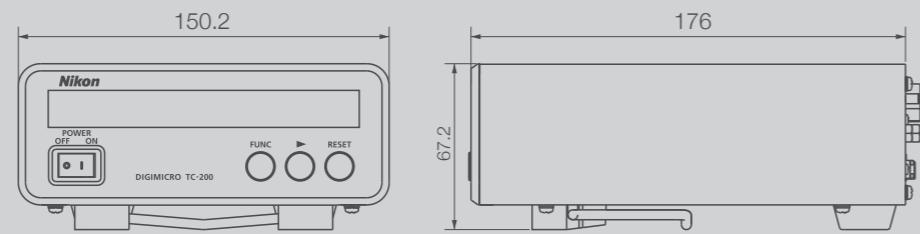


(Dimension Units: mm)

MF-501  
+Counter MFC-200  
+MS-12C



TC-200



(Dimension Units: mm)

MF-501  
+Counter TC-200  
+MS-12C  
(2m MF extension cable required.)



## MFC-200

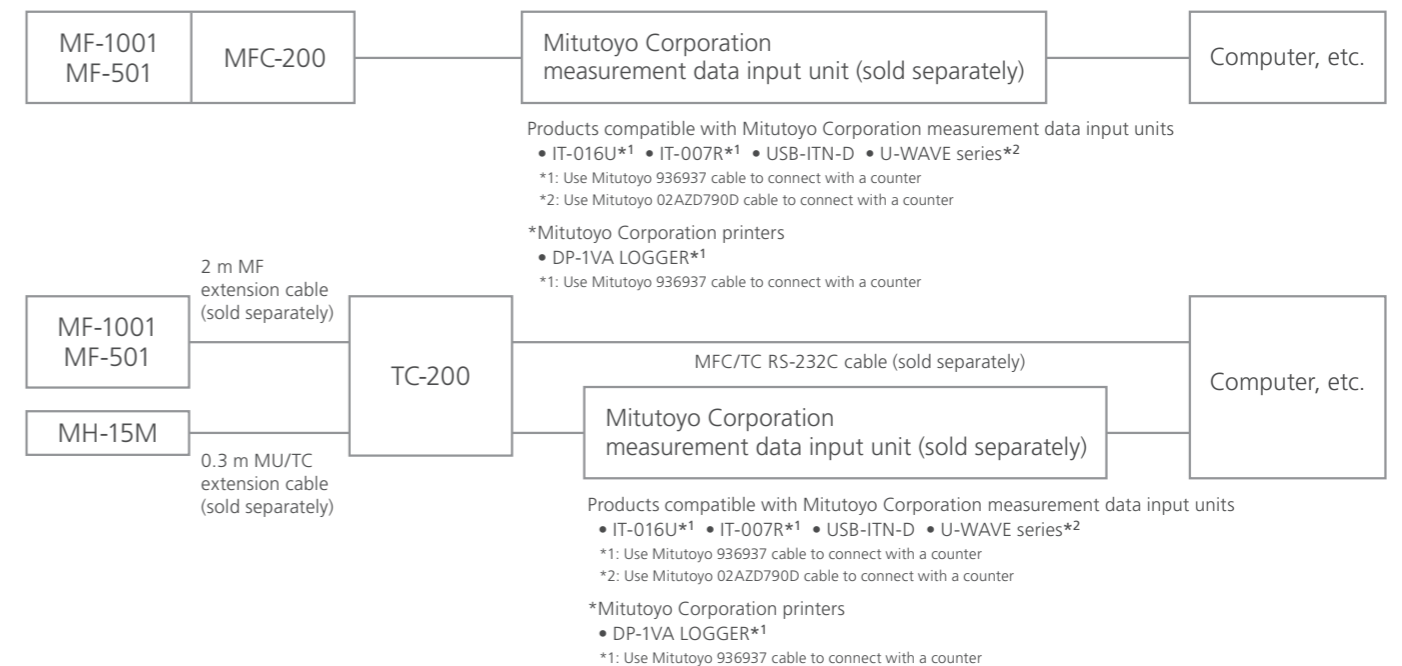
- A compact single-axis counter exclusively for MF-1001 and MF-501
- Equipped with display and resolution switching, direction switching, and display unit switching functions
- Head-mounted type
- Compatible with Mitutoyo Corporation measurement data input units (sold separately)

## TC-200

- Compatible with MF-1001, MF-501, and MH-15M
- A compact and high-precision counter that supports a minimum displayed value of 0.01  $\mu\text{m}$
- Offers display and resolution switching, direction switching, and display unit switching functions
- Externally placed type
- Supports RS-232C output; compatible with Mitutoyo Corporation measurement data input units (sold separately)

Model	MFC-200	TC-200
Display	7-segment LED (green); 8 digits (including minus [-] sign); zero blanking; floating minus sign	7-segment LED (green); 10 digits (including minus [-] sign); zero blanking; floating minus sign
Minimum displayed value	0.1 $\mu\text{m}$ (can be switched to 0.5 $\mu\text{m}$ or 1 $\mu\text{m}$ )	0.01 $\mu\text{m}$ (can be switched to 0.05 $\mu\text{m}$ , 0.1 $\mu\text{m}$ , 0.5 $\mu\text{m}$ , 1 $\mu\text{m}$ , or 5 $\mu\text{m}$ )
Functions	Reset error alarm (overspeed, etc.) Compatible with Mitutoyo Corporation measurement data input units (sold separately)	Reset/preset/pulse check; error alarm (overspeed, etc.) Supports RS-232C output; compatible with Mitutoyo Corporation measurement data input units (sold separately)
Input power supply	Dedicated AC adapter (12V 5A)	Dedicated AC adapter (12V 5A)
Ambient temperature	Operating temperature range 0°C to +40°C Storage temperature range -20°C to +60°C	Operating temperature range 0°C to +40°C Storage temperature range -20°C to +60°C
Compatible models	MF-1001, MF-501	MF-1001, MF-501, MH-15M
Dimensions (mm)	80 (W) x 84.3 (H) x 25.5 (including 32.2mm connector) (D) mm	150.2 (W) x 67.2 (H) x 176(D) mm
Weight	Approx. 95 g	Approx. 1 kg

## System Diagram

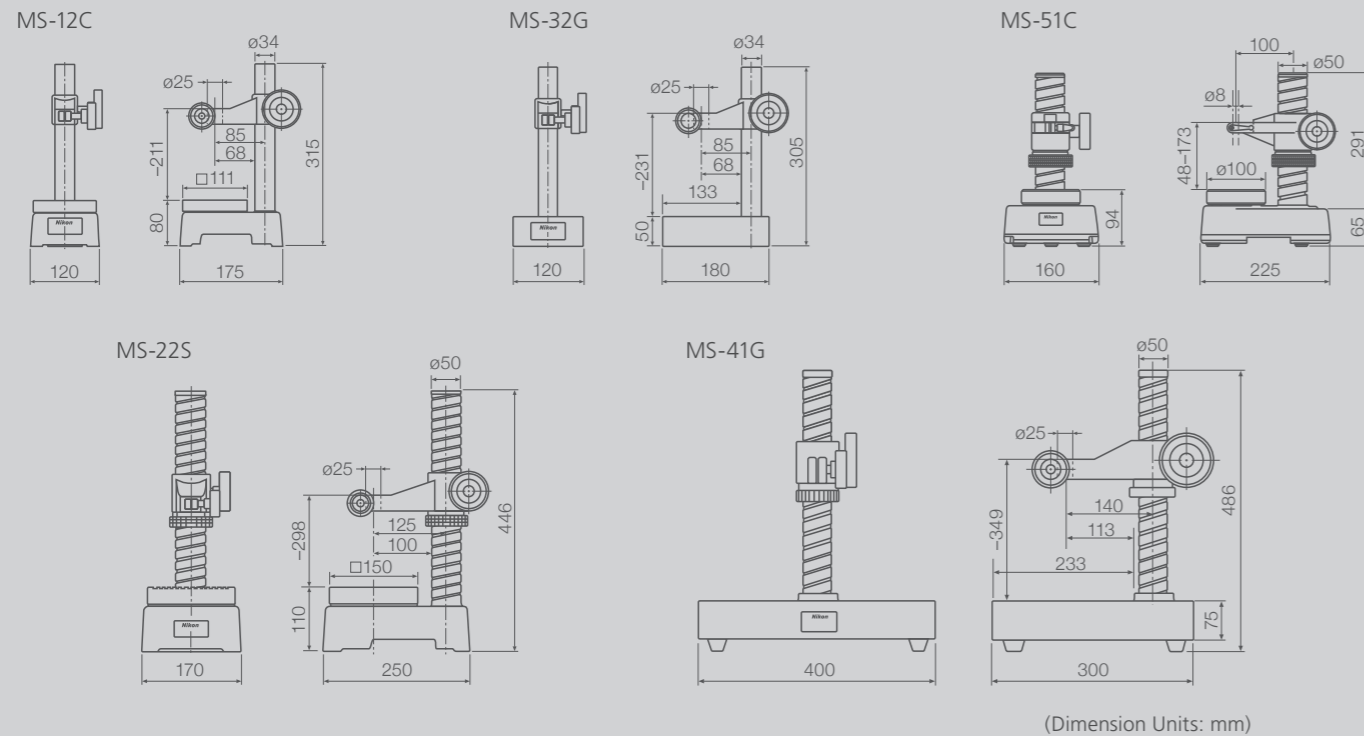


Please inquire to Mitutoyo Corporation for information on Mitutoyo Corporation products (sold separately)

Information on Mitutoyo Corporation measurement data input units: <https://www.mitutoyo.co.jp/products/data-management/i-o-devices/>

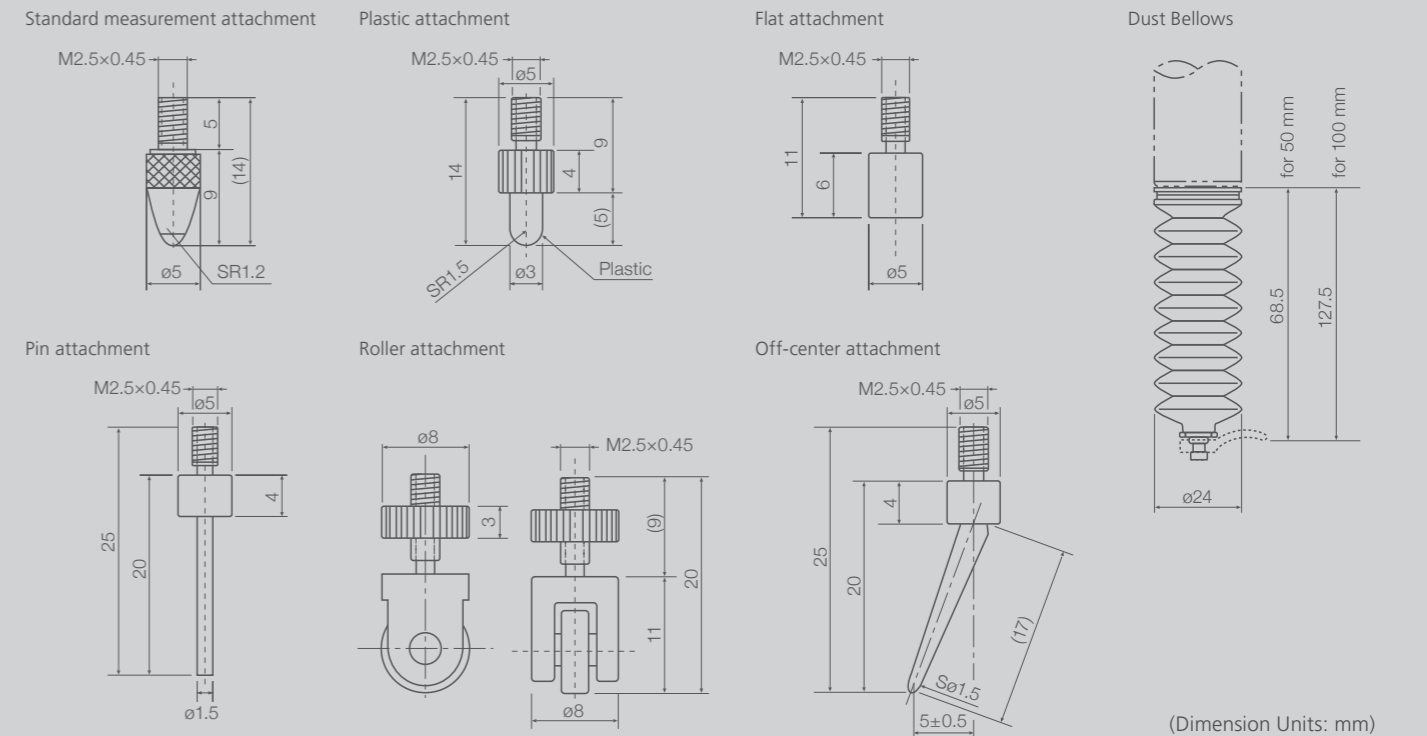
# MEASUREMENT STANDS

A lineup of five types of measurement stands to meet varied needs



# OPTIONS

Probes attachments to meet varied needs. Dust bellows for the DIGIMICRO head.



Model	MS-12C	MS-22S	MS-32G	MS-41G	MS-51C
Platform material	Ceramic	Steel	Granite	Granite	Ceramic
Stage dimensions	111x111 mm	150x150 mm	120x180 mm	400x300 mm	ø100 mm
Weight	6 kg	18.4 kg	6 kg	36 kg	11 kg
Compatible DIGIMICRO	MF-1001, MF-501				MH-15M

## Measurement attachments



## Dust bellows

- Protects the DIGIMICRO head spindle from dirt and dust to enhance durability
- MF-1001 for 100 mm
- MF-501 for 50 mm



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. June 2022 ©2022 NIKON CORPORATION

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クラス1レーザ製品  
CLASS 1 LASER PRODUCT



**WARNING**

TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING THE EQUIPMENT.



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