



DIGITAL LENGTH  
MEASURING  
SYSTEM

# DIGIMICRO

MF-1001 / MF-501 / MH-15M

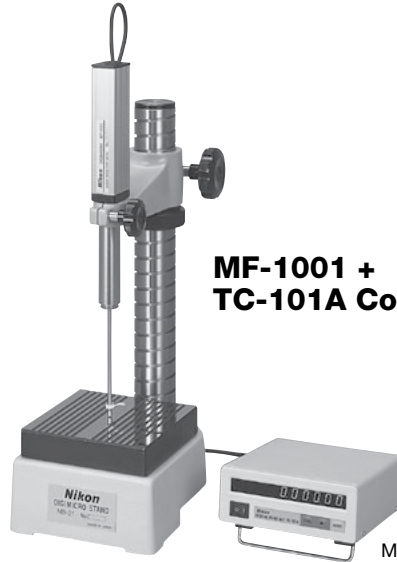


## Readings from 1 $\mu$ m to 0.01 $\mu$ m; Extreme Accuracy Guaranteed



**MF-1001 +  
MFC-101A Counter**

MF-1001 + MFC-101A counter + MS-21



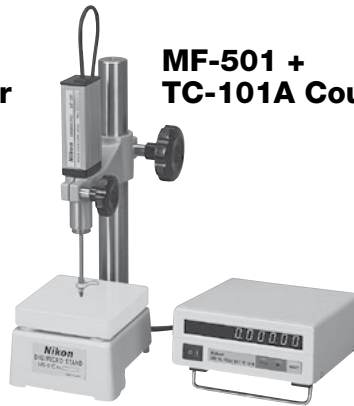
**MF-1001 +  
TC-101A Counter**

MF-1001 + TC-101A counter + MS-21



**MF-501 +  
MFC-101A Counter**

MF-501 + MFC-101A counter + MS-11C



**MF-501 +  
TC-101A Counter**

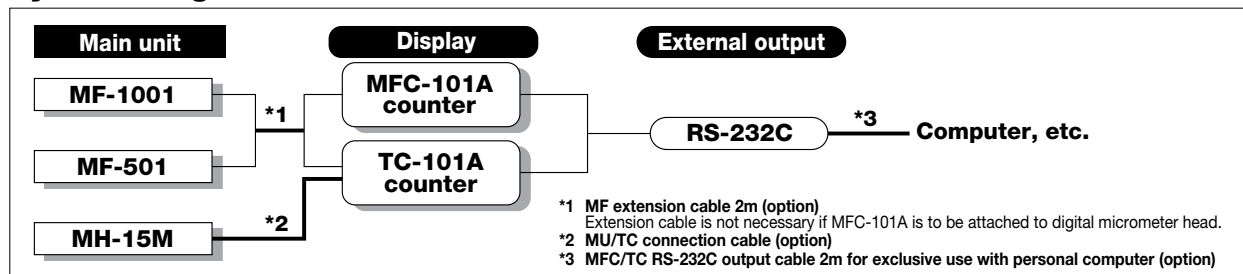
MF-501 + TC-101A counter + MS-11C



**MH-15M +  
TC-101A Counter**

MH-15M + TC-101A counter + MS-5C

### System Diagram

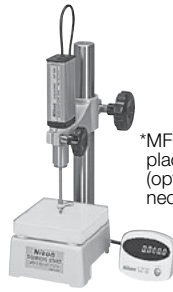


### Specifications

Main unit + counter	MF-1001 + MFC-101A	MF-1001 + TC-101A	MF-501 + MFC-101A	MF-501 + TC-101A	MH-15M + TC-101A
Measurement range	0-100 mm		0-50 mm		0-15 mm
Minimum readable value	0.1 $\mu$ m; can be switched to 0.5 $\mu$ m or 1 $\mu$ m	0.01 $\mu$ m; can be switched to 0.05 $\mu$ m, 0.1 $\mu$ m, 1 $\mu$ m, or 5 $\mu$ m	0.1 $\mu$ m; can be switched to 0.5 $\mu$ m or 1 $\mu$ m	0.0 1 $\mu$ m; can be switched to 0.05 $\mu$ m, 0.1 $\mu$ m, 1 $\mu$ m, or 5 $\mu$ m	
Accuracy (20 °C)	3 $\mu$ m		1 $\mu$ m		0.7 $\mu$ m
Response speed	500 mm/sec. or less				100 mm/sec. or less
Measuring force	Downward 1.225 to 1.813 N (variable to about 0.441 N), lateral 0.637 to 1.225 N		Downward 1.127 to 1.617 N (variable to about 0.294 N), lateral 0.637 to 1.225 N		Upward 0.245 N, downward 0.637 N, lateral 0.441 N * With lifting release
External output	RS-232C				
Operating temperature	0 to +40 °C				
Weight (main unit)	Approx. 480 g		Approx. 310 g		Approx. 220 g

# Accessories

## Counters



\*MFC-101A counter placed next to equipment (optional cord is necessary to connect)



### MFC-101A

A compact, single-shaft counter for exclusive use with MF-501 and MF-1001. Offers display and resolution switching, directing switching, and display unit switching functions. The MFC-101A can be used attached to the head or placed next to equipment.

### Specifications

Display	7-segment LED (green); 8 digits (including - sign); zero blanking; floating minus sign
Minimum readable value	0.1 $\mu\text{m}$ (can be switched to 0.5 $\mu\text{m}$ or 1 $\mu\text{m}$ )
Other functions	Reset Error alarm (excess speed, etc.) RS-232C output Dedicated printer output
Input power supply	Dedicated AC adapter (12V 350 mA)
Ambient temperature	Operating temperature: 0 to +40 °C Storage temperature: -20 to +60 °C
Compatible micrometers	MF-501, MF-1001
Dimensions (WxDxH)	80 x 25.5 x 60 mm [D is 32.2 mm with connectors]
Weight	Approx. 95g

### TC-101A

Smallest readable value is 0.01 $\mu\text{m}$ . The TC-101A counter can be used with older digital micrometers and rotary encoders.

### Specifications

Display	7-segment LED (green); 10 digits (including - sign); zero blanking; floating minus sign
Minimum readable value	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 $\mu\text{m}$ )
Other functions	Reset/preset/pulse check Error alarm (excess speed, etc.) RS-232C output Dedicated printer output
Input power supply	Dedicated AC adapter (12V 2.5A)
Ambient temperature	Operating temperature: 0 to +40 °C Storage temperature: -20 to +60 °C
Compatible micrometers	MF-501, MF-1001, previous micrometers MU Series, rotary encoders
Dimensions (WxDxH)	150 x 176 x 67 mm
Weight	Approx. 980 kg (excluding AC adapter)

## Dust Bellows

Protects head spindle of the digital micrometer head from dust and dirt, increasing the equipment lifetime.



## Measurement attachments

Standard



Pin



Plastic



Off-center



Flat attachment



Roller attachment



## Measurement stands

### Specifications

	Platform material	Platform size
MS-11C	Ceramics	110 x 110 mm
MS-21	Steel	150 x 150 mm
MS-31G*	Granite	120 x 180 mm
MS-4G	Granite	400 x 300 mm
MS-5C	Ceramics	$\phi$ 100 mm

\* It is also possible to place the object being measured on a large platform, and make measurements using the lower surface as a reference.



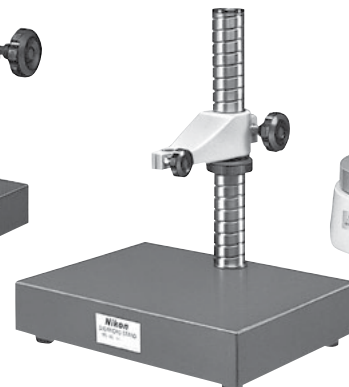
MS-11C



MS-21



MS-31G



MS-4G



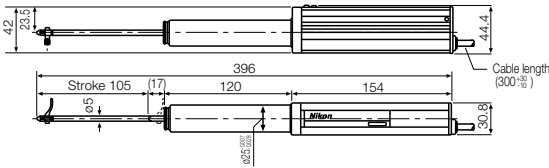
MS-5C

# Dimensions (Unit: mm)

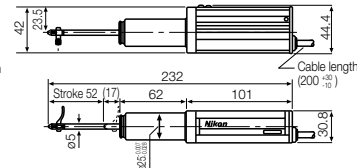


## Micrometer head

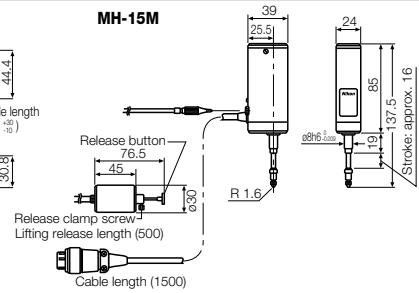
**MF-1001**



**MF-501**

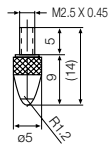


**MH-15M**

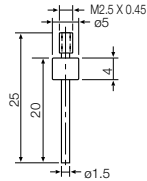


## Measurement attachments

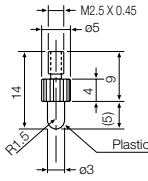
**Standard**



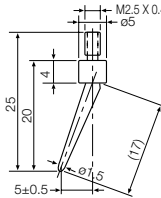
**Pin**



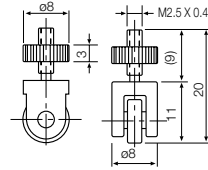
**Plastic**



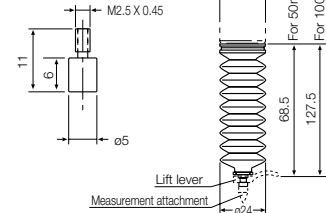
**Off-center**



**Roller**

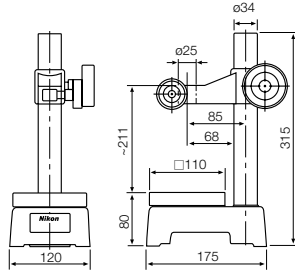


**Flat**

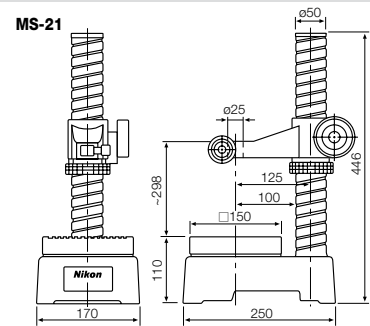


## Measurement stands

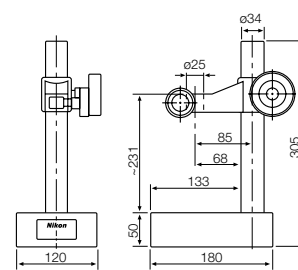
**MS-11C**



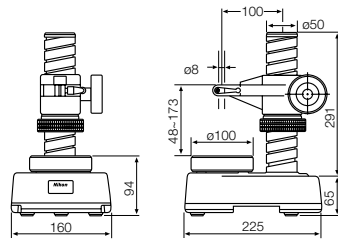
**MS-21**



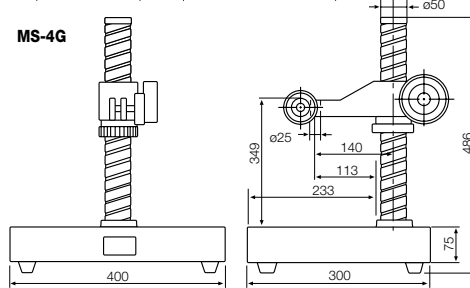
**MS-31G**



**MS-5C**



**MS-4G**



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. February 2019.



**WARNING**

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

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\*Products: Hardware and its technical information (including software)



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