



DIGITAL LENGTH
MEASURING
SYSTEM

DIGIMICRO

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

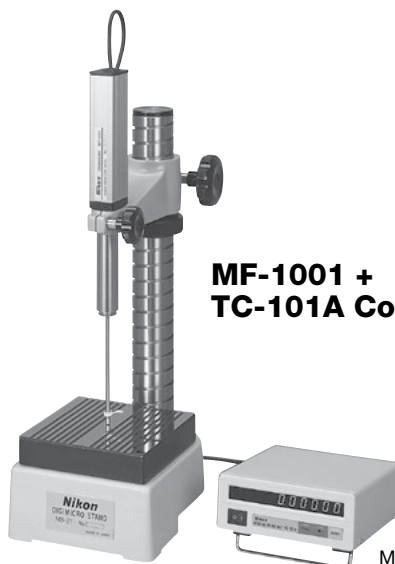


Readings from 1μm to 0.01μm; Extreme Accuracy Guaranteed



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

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



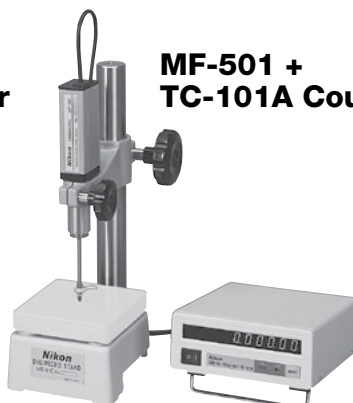
**MF-1001 +
TC-101A Counter**

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



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

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



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

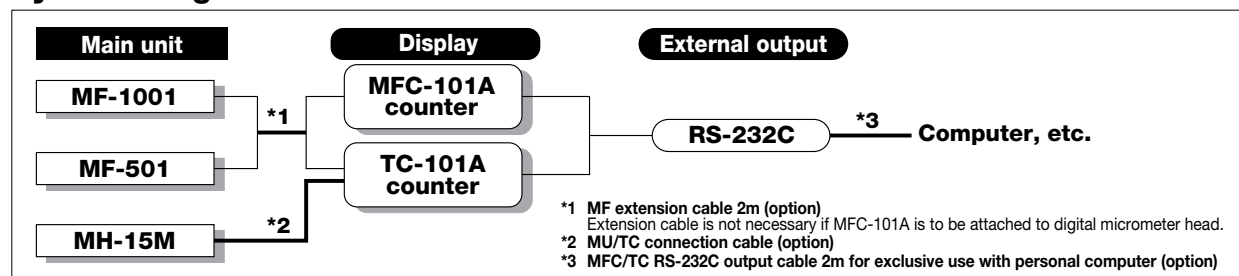
MF-501 + TC-101A counter + MS-11C



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

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

System Diagram

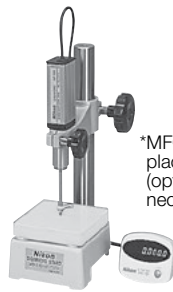


Specifications

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 μm; can be switched to 0.5 μm or 1 μm	0.01 μm; can be switched to 0.05 μm, 0.1 μm, 1 μm, or 5 μm	0.1 μm; can be switched to 0.5 μm or 1 μm	0.0 1 μm; can be switched to 0.05 μm, 0.1 μm, 1 μm, or 5 μm	
Accuracy (20 °C)	3 μm		1 μm		0.7 μm
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 μm (can be switched to 0.5 μm or 1 μm)
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 μm . 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 μm (can be switched to 0.05 μm , 0.1 μm , 0.5 μm , 1 μm , or 5 μm)
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	ø100 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.



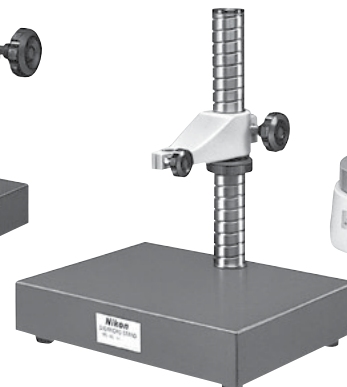
MS-11C



MS-21



MS-31G



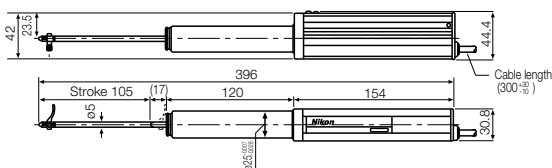
MS-4G



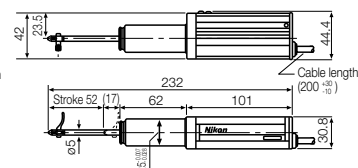
MS-5C

Micrometer head

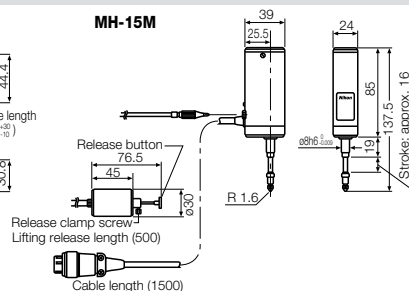
MF-1001



MF-501

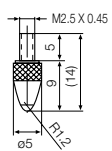


MH-15M

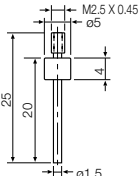


Measurement attachments

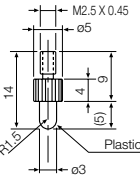
Standard



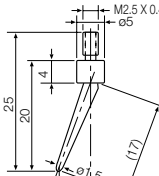
Pin



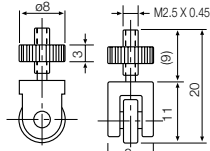
Plastic



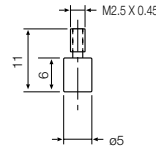
Off-center



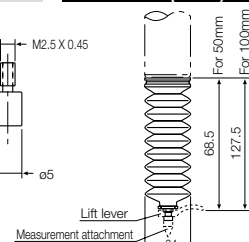
Roller



Flat

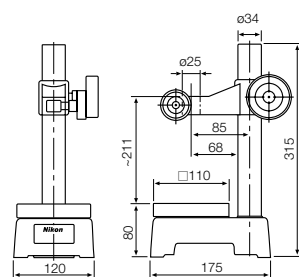


Dust bellows (50mm, 100mm)

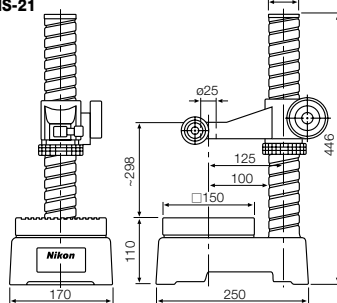


Measurement stands

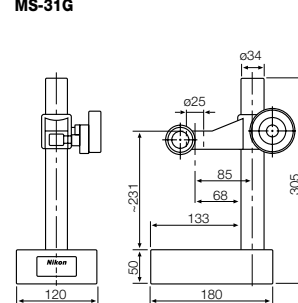
MS-11C



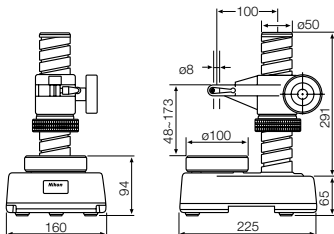
MS-21



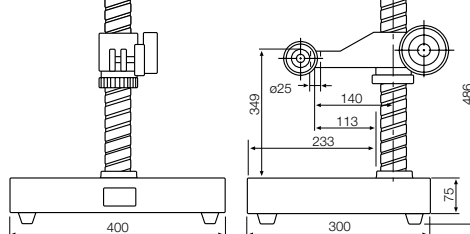
MS-31G



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.

©1998-2019 NIKON CORPORATION

N.B. Export of the products* in this brochure is controlled under the Japanese Foreign Exchange and Foreign Trade Law. Appropriate export procedure shall be required in case of export from Japan.

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



NIKON CORPORATION

Shinagawa Intercity Tower C, 2-15-3, Konan, Minato-ku, Tokyo 108-6290, Japan
phone: +81-3-6433-3703 fax: +81-3-6433-3784
<https://www.nikon.com/products/industrial-metrology/>

ISO 14001 Certified
for NIKON CORPORATION

ISO 9001 Certified
for NIKON CORPORATION
Industrial Metrology Business Unit

NIKON METROLOGY EUROPE NV

Geldenaaksebaan 329, 3001 Leuven, Belgium
phone: +32-16-74-01-00 fax: +32-16-74-01-03
Email: Sales.Europe.NM@nikon.com
<http://www.nikonmetrology.com/en-gb>

NIKON METROLOGY UK LTD.

UNITED KINGDOM phone: +44-1332-811-349 fax: +44-1332-639-881
E-mail: Sales.UK.NM@nikon.com

NIKON METROLOGY SARL

FRANCE phone: +33-1-60-86-09-76 fax: +33-1-60-86-57-35
E-mail: Sales.France.NM@nikon.com

NIKON METROLOGY GMBH

GERMANY phone: +49-6023-91733-0 fax: +49-6023-91733-229
E-mail: Sales.Germany.NM@nikon.com

NIKON INSTRUMENTS S.p.A.

ITALY phone: +39-055-300-96-01 fax: +39-055-30-09-93

NIKON METROLOGY, INC.

12701 Grand River Avenue, Brighton, MI 48116 U.S.A.
phone: +1-810-220-4360 fax: +1-810-220-4300
E-mail: Sales.NM-US@nikon.com
<http://www.nikonmetrology.com/en-us>

NIKON CANADA INC.

CANADA phone: +1-905-602-9676 fax: +1-905-602-9953

NIKON MEXICO-Metrology Showroom

MEXICO phone: +52 (442) 688 5067
E-mail: Sales.NM-MX@nikon.com

NIKON INSTRUMENTS (SHANGHAI) CO., LTD.

CHINA (Shanghai branch) phone: +86-21-6841-2050 fax: +86-21-6841-2060
(Beijing branch) phone: +86-10-5831-2028 fax: +86-10-5831-2026
(Guangzhou branch) phone: +86-20-3882-0551 fax: +86-20-3882-0580

NIKON INSTRUMENTS KOREA CO., LTD.

KOREA phone: +82-2-2186-8400 fax: +82-2-555-4415

NIKON SINGAPORE PTE LTD.

SINGAPORE phone: +65-6559-3651 fax: +65-6559-3668
NSG.Industrial-sales@nikon.com

NIKON MALAYSIA SDN. BHD.

MALAYSIA phone: +60-3-7809-3688 fax: +60-3-7809-3633

PT. NIKON INDONESIA

INDONESIA phone: +62-267-864-3949 fax: +62-267-864-3950
PTN.Instruments@nikon.com

NIKON SALES (THAILAND) CO., LTD.

THAILAND phone: +66-2633-5100 fax: +66-2633-5191

NIKON INDIA PRIVATE LIMITED

INDIA phone: +91-124-4688500 fax: +91-124-4688527