



Nikon MM-200 Compact Measuring Microscope

New Compact MM-200 for production:

- Easy Setup and Operation
- High-Quality and Compact
- Modular Nikon System
- Low Price





Nikon MM-200 Compact Measuring Microscope

MM-200 with Monocular Eyepiece Tube
 with optional Ryf NKL18 illuminator



Precise and Easy to Use

- Quick and Accurate Non-Contact Optical Measurement

Compact and Lightweight Design

- Smaller Footprint Ideal for Machine Tooling Shops / Inspection Rooms

Digital Readout and Data Processing

- Geometric Dimensioning & Tolerancing

Digital Video Camera Head

- Automated Edge Detection with E-MAX System

White LED Lighting Sources

- Long Life & Environmental Friendly

Digital Templates

- Threads/Gears/Concentric Circle Templates for Video Inspection





Nikon MM-200 Compact Measuring Microscope



The new Nikon Measuring Microscope

MM-200: Uniquely designed for all machining engineers, Watchmakers, Toolmakers and Quality inspectors, who require precision.

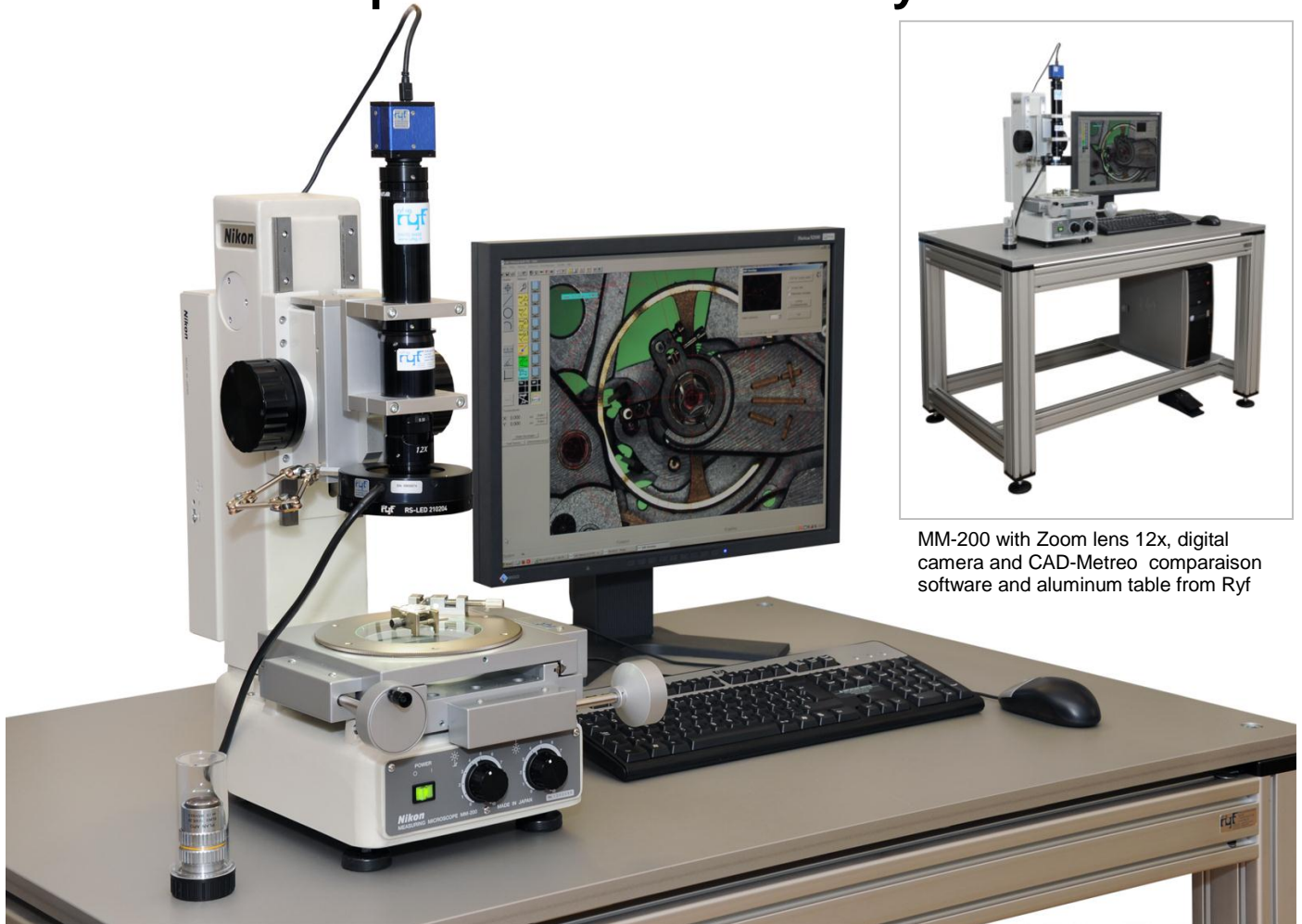
- Small Size Die & Mold
- Drill Bits
- Inserts
- Fine Pitch Connector
- Medical Devices
- Watch Parts
- Gears. and so on...





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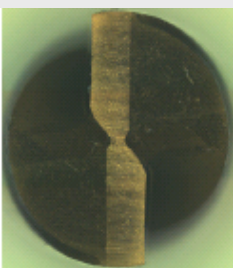
Digital Image Processing with the digital camera, E-Max / Ryf CAD Metreo or QC5000 Software for more precision and accuracy



MM-200 with Zoom lens 12x, digital camera and CAD-Metreo comparison software and aluminum table from Ryf

The new Nikon Measuring Microscope

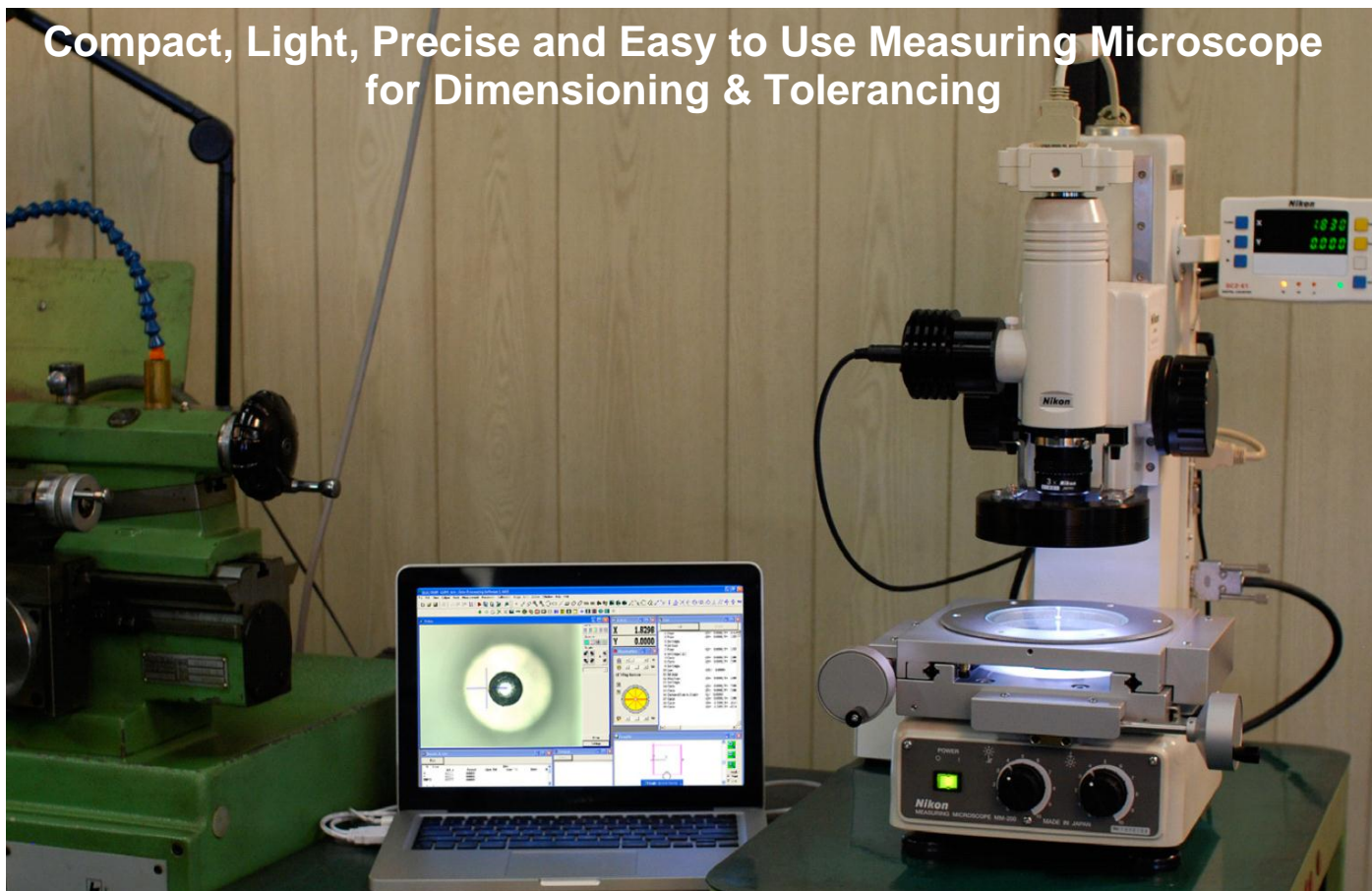
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Nikon MM-200 Compact Measuring Microscope

Compact, Light, Precise and Easy to Use Measuring Microscope for Dimensioning & Tolerancing



Compact, space-saving body weighing 40kg

The MM-200 features a space-saving design with a footprint of just A3 Paper size, namely 420 x 297 mm (main body with monocular eyepiece tube). The affordable Measuring Microscope is now available from Nikon

Monocular Eyepiece Head / C-Mount Video Head

For those who prefer to measure with their own eye, the monocular eyepiece tube model is available, while the C-Mount Video Head model provides easy video monitoring.

MM Controller Backpack Interface for Digital Readout and Data Processing

The MM-200 has the backpack control interface unit for XY Stage Scale readout, Illumination Control, Communication Ports to external devices such as PC, Digital Readout and so on. Simply apply the Data Processing Unit, the DP-E1 to complicated GD&T measurements. The E-MAX DS-V system allows easy to use advanced Video Edge Detection Technologies. The Popular digital readouts such as Metronics Quadra-Chek 200, 300 or 5000 is also available.

The built-in Episcopic and Diascopic Light sources are all long life white LED. The optional Ryf FL Ring Illuminator NKL12b or LED ring lights will give you the enhanced edge observation by oblique illumination angle.



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Your selections of Digital Readout/Data Processing System & Optional Accessories expand the measurement ability:

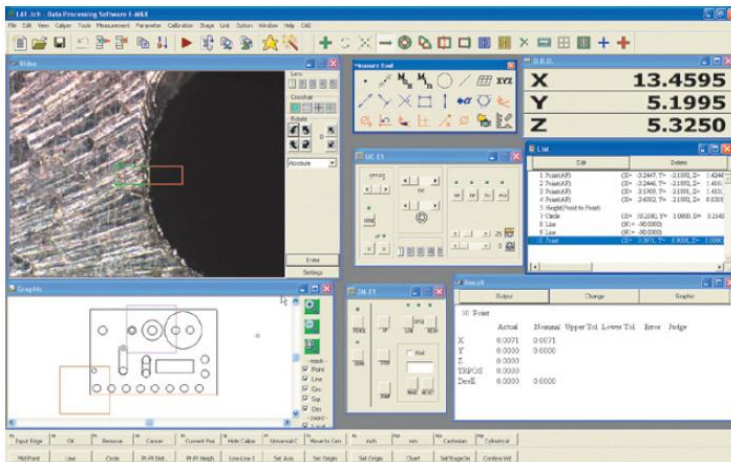
Digital Readouts:

The MM-200 can be used with Heidenhain ND12000 (old =QC200 , ND1300 , (old=QC300) and QC5000 digital readouts for Geometric Dimensions & Tolerances. Quadra-Chek is a trademark of Heidenhain.



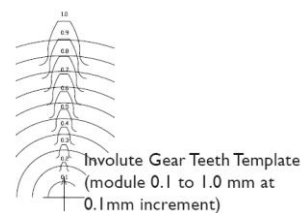
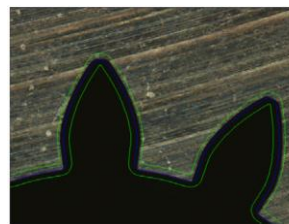
Data Processing Software E-MAX:

In combination with Nikon's digital still camera, the DS-2Mv, the new E-MAX series software provides state-of-the-art image processing technology. Automated edge detection with sub-pixel processing enables more precise and repeatable measurement. Effectively used in conjunction with the MM-200, the new E-MAX series software provides the user with various advanced measurements and processing functions, ranging from two-dimensional data processing and image measurements, to data storage.



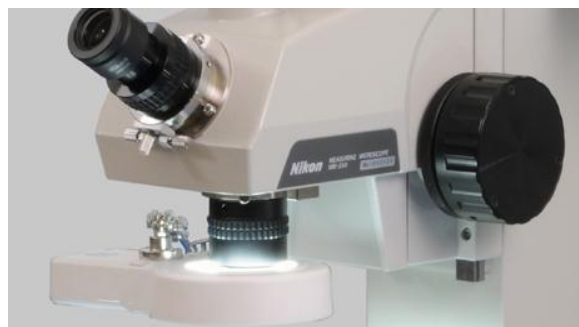
Digital Templates (for E-MAX DS-V System)

A Tradition of Tool Maker's Microscope has been revived. The newly prepared digital templates for Concentric Patterns, Threads, and Involute Gear Teeth with different modules made from 2D CAD data enable you to make quick Go/No-Go comparison inspection as well as digital image archiving.

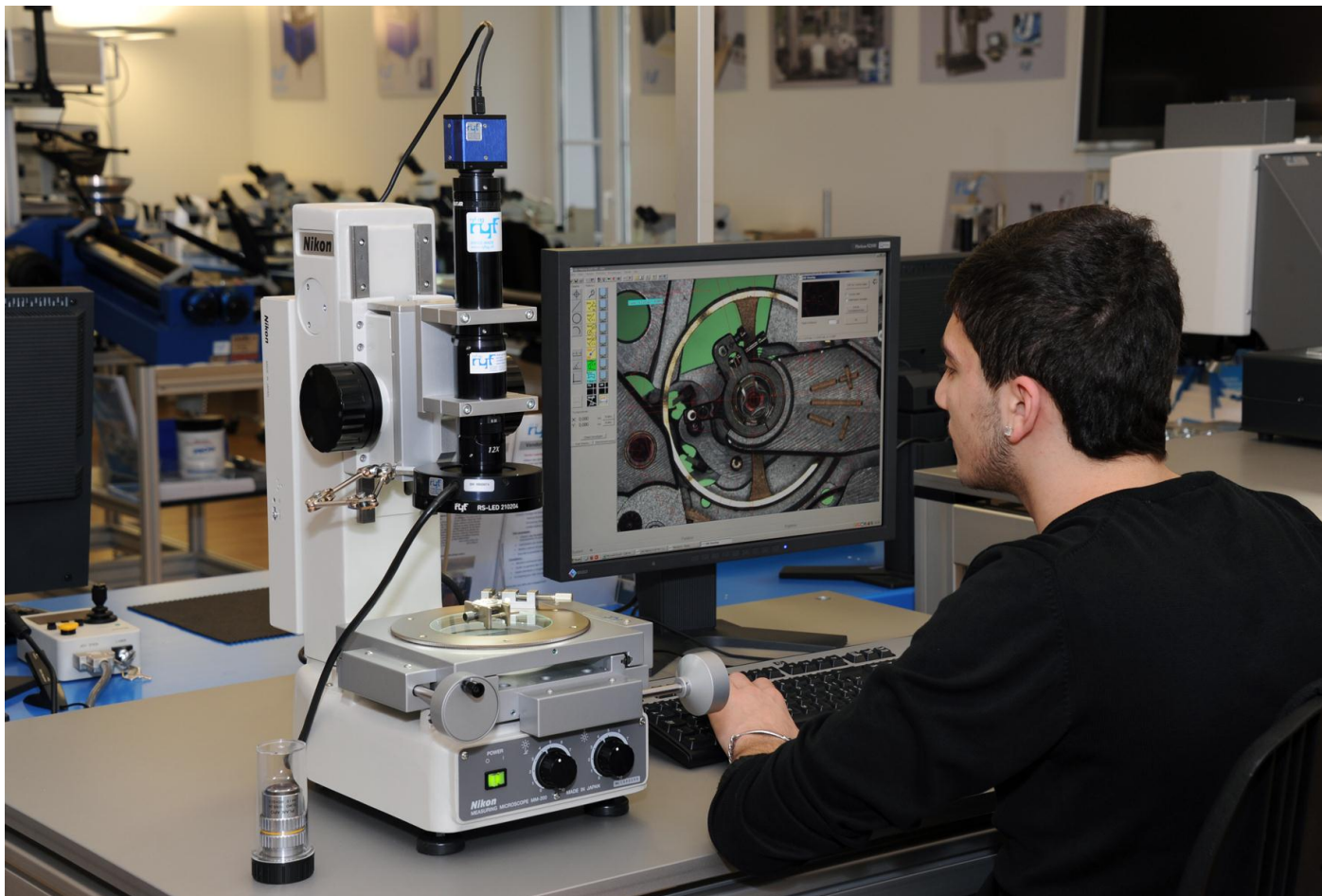


Optional 8 Segment LED Lighting or Ryf NKL18/NKL12 Ring-FL Lighting Sources:

The built-in Episcopic and Diascopic Light sources are all long life white LED. The optional LED or NKL-FL ring lights will give you the enhanced edge observation by oblique illumination



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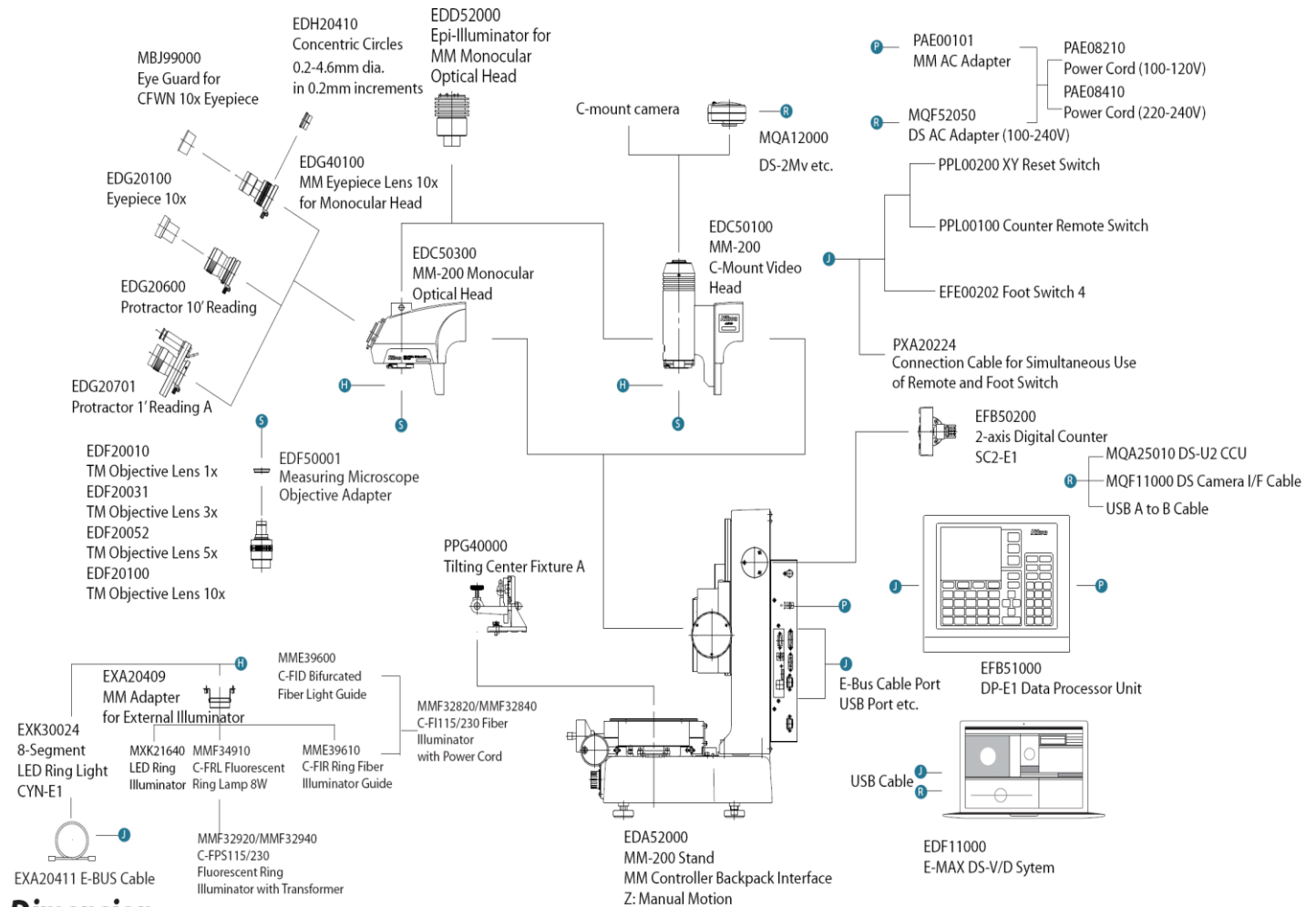
Measurement devices and microscopes must be checked, calibrated and cleaned at regular intervals. A maintenance and service agreement with Ryf AG protects you from unpleasant surprises, because on the agreed date (after 6, 12, 18 or 24 months) we automatically contact you and perform the maintenance professionally and competently. Of course you can also have these services performed by us without a maintenance agreement:

Main Specifications	Monoculaire Eyepiece Tube Type:	12x zoom lens or C-Mount Video Head Type:
Optical Head:	MM-200 Monocular Optical Head	12x zoom lens, see picture above / C-Mount Video Head for MM-200 see picture on page 5
X-Y-Z Stroke	50mm X 50mm X 110mm	
Stage Accuracy	2.5 + L/50 µm (with LEC), 3 + L/50 µm (L=Measurement Length in mm)	
Scale Resolution	0.01/0.1(default)/1/10 µm	
Max. Loading Weight	2 kg for Guaranteed Accuracy / 5 kg for Operation	
Magnification Accuracy	0.1%	
Objective Lenses (W.D.)	Standard: 3x (75.5mm) Optional 1x (79mm), 5X (64mm), 10X (48mm)	
Light Sources	Standard: Diascopic / Episcopic (White LED), Optional: 8-Segmented Ring Light (White LED)	
Dimension & Weight	316 x 455 x 533 (W x D x H), 40 kg	

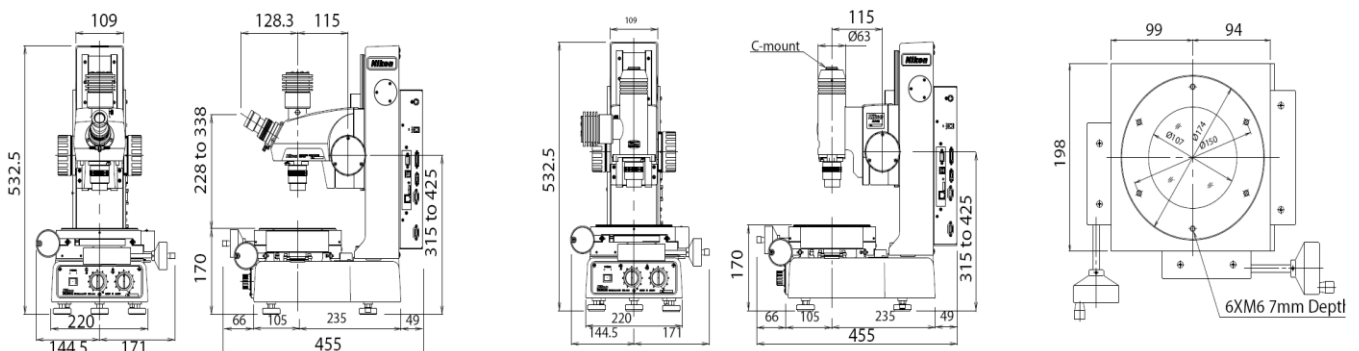


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System Diagram



Dimension



Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. January 2009 ©2009 NIKON CORPORATION

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



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