



## Measuring Microscope

MM-S5-M  
MM-S5-M-U

### Description

These measuring microscopes are designed mainly to measure particles on filter membranes of oil samples.

The microscopes are stable and robust in design.

In accordance with the requirements of oil analysis, the optical equipment has maximum luminous intensity and consistent definition over the whole image range.

The body has the facility for coarse and fine adjustment, and there is a slide table with X and Y movements as standard which enables easy adjustment of the focus and subject position.

The integrated LED lighting with power supply provides sufficient image brightness even at high magnification.

The microscope case protects the microscope from knocks and dust.

The microscope MM-S5-M-U can be used with or without the CCD camera.

With the aid of the software supplied, it is possible to process the image on a PC or laptop. The camera images can be embedded in many Windows® applications as files.

The measuring scale in the camera lens has a scale division of 1 mm in 100 parts.

### Applications

- Laboratory

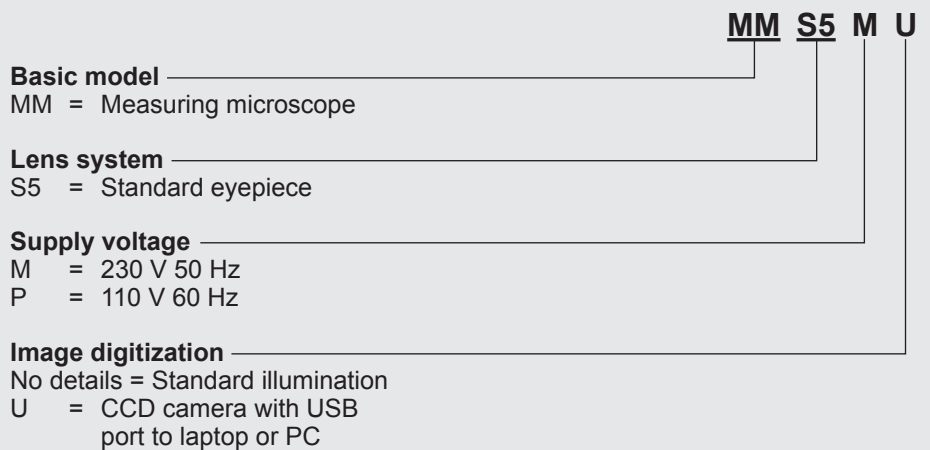
### Advantages

- Simple analysis of membranes (also on site)

### Technical specifications

|                      | MM-S5-M             | MM-S5-M-U  |
|----------------------|---------------------|--|
| DIN Huygens eyepiece | 10 x M              |  |
| Achromatic lenses    | 4x, 10x, 20x        |  |
| Magnifications       | 40x, 100x, and 200x |  |
| Supply voltage       | 230 V 50 Hz         |  |
| Body length          | 160 mm              |  |
| Total height         | 330 mm              |  |
| Image digitization   |                     | CCD camera   |
| Video system         |                     | PAL colour system  |
| Resolution           |                     | Horizontal 460 lines / vertical 400 lines  |
| PC interface         |                     | USB port   |
| System requirements  |                     | min. Pentium 233 MHz, Windows 98 / ME / 2000 / XP, USB port, CD-ROM drive, 32 MB RAM |

### Model code



### Note

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

### **HYDAC** FILTER SYSTEMS GMBH

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## Measuring Microscope MM-KKE-M-C-U

### Description

This measuring microscope is designed mainly to measure particles on filter membranes of oil samples. The microscope is stable and robust in design and is convenient to use. The body is adjusted by an easily operated tangent screw for coarse adjustment and a fine adjustment tangent screw, thus ensuring optimum focus at maximum magnification. The integrated lighting with power supply provides sufficient image brightness even at a magnification of 200x. The stand is fitted with a 3-part knurled revolving unit and a slide table with X and Y movements.

The optical equipment consists of the achromatic lenses: 4:1, 10:1, 20:1. These lenses are used in combination with a micrometer eyepiece with 10x magnification. The measuring scale in the eyepiece has a scale division of 1 mm in 100 parts. By using the micrometer eyepiece and the enclosed measuring card, it is possible to determine the size of the subject directly with all three lenses. The microscope case protects the microscope from knocks and dust.

### Applications

- Laboratories

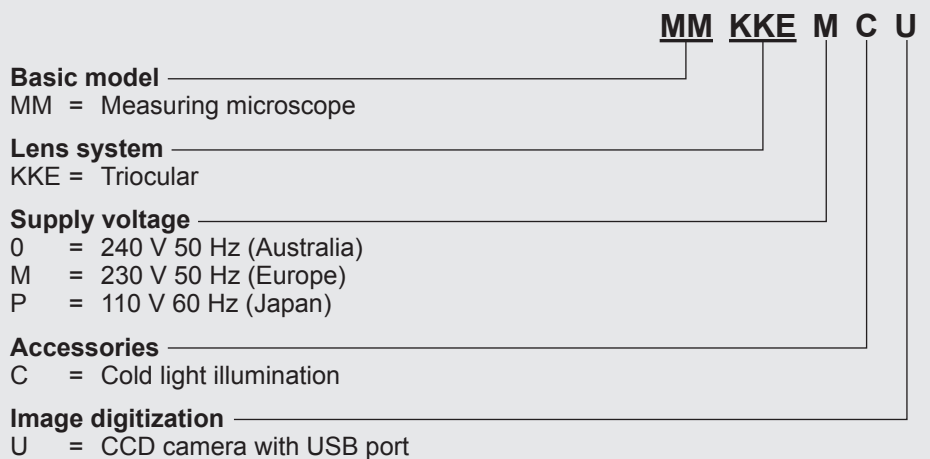
### Advantages

- Simple analysis of membranes (also on site)

### Technical specifications

|                     |  |
|---------------------|--|
| Huygens eyepiece    | 10 x M   |
| Achromatic lenses   | 4x, 10x, 20x   |
| Magnifications      | 40x, 100x, and 200x  |
| Body length         | 160 mm   |
| Total height        | 330 mm   |
| Paint colour        | Light grey   |
| PC interface        | USB port   |
| System requirements | min. Pentium 233 MHz, Windows 98 / ME / 2000 / XP, USB port, CD-ROM drive, 32 MB RAM |

### Model code



### Note

The information in this brochure relates to the operating conditions and applications described.

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