

Stereomicroscope KERN OSF-43



Stage plate black



Stage plate white

### Educational Line

The practical and robust product for schools, training centres, the workshop and laboratory

#### Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSF-43 has been specially developed for schools and workshops
- The LED reflected and transmitted illumination included as standard guarantees the very best, continuously dimmable illumination of your sample
- As well as very good optical characteristics, its ergonomic working surface means that it offers the highest level of convenience in this class
- A turnable objective with three predefined magnifications is available to make your working procedures quicker and more effective
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost

- The ergonomic shape and the stable mechanism which can be adjusted extremely accurately offer a high level of functionality and enable you to work quickly and efficiently with very little effort
- A large selection of eyepieces as well as various additional external illumination units are available as accessories
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery
- Please find detailed information in the following model outfit list

#### Scope of application

- Training, in vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

#### Applications/Samples

- Samples with focus on three-dimensional impression (depth, thickness), e.g. insects, seeds, circuit boards, components

#### Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: One-sided
- Overall dimensions W×D×H  
230×180×275 mm
- Net weight approx. 2,5 kg

STANDARD



Model

Standard configuration

	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
<b>KERN</b>			mm			
<b>OSF 438</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/3×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)
<b>OSF 439</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/4×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)

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Eyepiece	Specifications – Objectives				
	Magnification	1×	2×	3×	4×
WF 5×	Total magnification	5×	10×	15×	20×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 10×	Total magnification	10×	20×	30×	40×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 15×	Total magnification	15×	30×	45×	60×
	Field of view mm	∅ 15	∅ 7,5	∅ 5	∅ 3,7
WF 20×	Total magnification	20×	40×	60×	80×
	Field of view mm	∅ 10	∅ 6,5	∅ 4,3	∅ 3,2
<b>Working distance</b>		57 mm	57 mm	57 mm	57 mm

Model outfit	Model KERN		Order number	
	OSF 438	OSF 439		
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	○ ○	OZB-A4101
	WF 10×/∅ 20 mm	✓ ✓	✓ ✓	OZB-A4102
	WF 15×/∅ 15 mm	○ ○	○ ○	OZB-A4103
	WF 20×/∅ 10 mm	○ ○	○ ○	OZB-A4104
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	○	OZB-A4151
Stand	Arm curved, incl. handle, with LED illumination (0,35 W transmitted + 1 W incident)	✓	✓	
Stage plate	Frosted glass/∅ 59,5 mm	✓	✓	OZB-A4815
	Black-white/∅ 59,5 mm	✓	✓	OZB-A4816
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet			

✓ = Included with delivery

○ = Option

<b>360° rotatable microscope head</b>	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	<b>Integrated scale</b> In the eyepiece	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
<b>Monocular Microscope</b> For the inspection with one eye	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	<b>SD card</b> For data storage	<b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
<b>Binocular Microscope</b> For the inspection with both eyes	<b>Phase contrast unit</b> For a higher contrast	<b>USB 2.0 interface</b> For data transmission	<b>Plug-in power supply</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
<b>Trinocular Microscope</b> For the inspection with both eyes and the additional option for the connection of a camera	<b>Darkfield condenser/unit</b> For a higher contrast due to indirect illumination	<b>USB 3.0 interface</b> For data transmission	<b>Integrated power supply unit</b> Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
<b>Abbe Condenser</b> With high numerical aperture for the concentration and the focusing of light	<b>Polarising unit</b> To polarise the light	<b>WIFI data interface:</b> For transmitting of the picture to a mobile display device	<b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
<b>Halogen illumination</b> For pictures bright and rich in contrast	<b>Infinity system</b> Infinity corrected optical system	<b>HDMI digital camera</b> For direct transmitting of the picture to a display device	<b>Pallet shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
<b>LED illumination</b> Cold, energy-saving and especially long-life illumination	<b>Zoom magnification</b> For stereomicroscopes	<b>PC software</b> To transfer the measurements from the device to a PC.	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
<b>Incident illumination</b> For non-transparent objects	<b>Auto-focus</b> For automatic control of the focus level	<b>Protection against dust and water splashes IPxx:</b> The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013	
<b>Transmitting illumination</b> For transparent objects	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working		
<b>Fluorescence illumination</b> For stereomicroscopes			

## Abbreviations

<b>C-Mount</b>	Adapter for the connection of a camera to a trinocular microscope	<b>SLR camera</b>	Single-Lens Reflex camera
<b>FPS</b>	Frames per second	<b>SWF</b>	Super Wide Field (Field number at least $\varnothing$ 23 mm for 10 $\times$ eyepiece)
<b>H(S)WF</b>	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	<b>W.D.</b>	Working Distance
<b>LWD</b>	Long Working Distance	<b>WF</b>	Wide Field (Field number up to $\varnothing$ 22 mm for 10 $\times$ eyepiece)
<b>N.A.</b>	Numerical Aperture		