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-4G 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 charts.

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 KERN	Standard configuration						
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination	
OSF 438	Binocular	WF 10×/⌀ 20 mm	⌀ 20	1×/2×/3×	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)	
OSF 439	Binocular	WF 10×/⌀ 20 mm	⌀ 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
Working distance		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	
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 from page 87 and on our website www.kern-sohn.com				

✓ = Included with delivery ○ = Option

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KERN Pictograms:

360° rotatable microscope head

Monocular Microscope
For the inspection with one eye

Binocular Microscope
For the inspection with both eyes

Trinocular Microscope
For the inspection with both eyes and the additional option for the connection of a camera

Abbe Condenser
With high numerical aperture for the concentration and the focusing of light

Halogen illumination
For pictures bright and rich in contrast

LED illumination
Cold, energy saving and especially long-life illumination

Incident illumination
For non-transparent objects

Transmitting illumination
For transparent objects

Fluorescence illumination
For stereomicroscopes

Fluorescence illumination for compound microscopes
With 100 W mercury lamp and filter

Fluorescence illumination for compound microscopes
With 3 W LED illumination and filter

Phase contrast unit
For a higher contrast

Darkfield condenser/unit
For a higher contrast due to indirect illumination

Polarising unit
To polarise the light

Infinity system
Infinity corrected optical system

Zoom magnification
For stereomicroscopes

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

USB 2.0 digital camera
For direct transmitting of the picture to a PC

USB 3.0 digital camera
For direct transmitting of the picture to a PC

HDMI digital camera
For direct transmitting of the picture to a display device

SD card
For data storage

PC software
To transfer the measurements from the device to a PC.

Automatic temperature compesation
For measurements between 10 °C and 30 °C

Protection against dust and water splashes IPxx
The type of protection is shown by the pictogram.

Battery operation
Ready for battery operation. The battery type is specified for each device.

Battery operation rechargable
Prepared for a rechargable battery operation

Mains adapter
230V/50Hz in standard version for EU. On request GB, AUS or USA version.

Power supply
Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

Package shipment
The time required to manufacture the product internally is shown in days in the pictogram.

Warranty
The warranty period is shown in the pictogram.

Abbreviations

C-Mount Adapter for the connection of a camera to a trinocular microscope

FPS Frames per second

H(S)WF High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

N.A. Numerical Aperture

SLR Kamera Single-Lens Reflex camera

SWF Super Wide Field (Field number at least ⌀ 23 mm for 10× eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to ⌀ 22 mm for 10× eyepiece)

Your KERN specialist dealer: