

Stereomicroscope KERN OSE-42



OSE 421/422



Side view



The successor of the well-known series OSF-4

EDUCATIONAL LINE

Stereo microscope with robust, ergonomic design, ideal for workshops, schools and training

Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSE OSE-42 has been specially developed for schools and workshops
- The incident and transmitted illumination unit included as standard can be optionally enabled for the very best illumination of your sample. Mobile use of the OSE 422 is also no problem through the use of rechargeable batteries
- Despite its low price it has very good optical characteristics, which enable you to have sharp images over a large field of view
- An turnable objective with predefined magnifications is available to make your working procedures quicker and more efficient
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- A special feature of this adaptable and yet robust microscope series is the stable mechanism of the microscope stand which can be adjusted precisely. It will also impress you with its functionality and ergonomic design
- A large selection of eyepieces as well as various additional external illumination units are available as accessories

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
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 200×180×300 mm
- Net weight approx. 2 kg

STANDARD



Model	Standard configuration						
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination	
KERN							
OSE 421	Binocular	WF 10×/ø 20 mm	ø 20	2×/4×	Arm curved	1 W LED (incident); 1 W LED (transmitted)	
OSE 422	Binocular	WF 10×/ø 20 mm	ø 20	2×/4×	Arm curved	1 W LED (incident); 1 W LED (transmitted) (Rechargeable batteries included)	

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Eyepiece	Specifications - Objectives		
	Magnification	2×	4×
WF 5×	Total magnification	10×	20×
	Field of view mm	∅ 10	∅ 5
WF 10×	Total magnification	20×	40×
	Field of view mm	∅ 10	∅ 5
WF 15×	Total magnification	30×	60×
	Field of view mm	∅ 7,5	∅ 3,7
WF 20×	Total magnification	40×	80×
	Field of view mm	∅ 6,5	∅ 3,2
Working distance		57 mm	57 mm

Model outfit		Model KERN		Order number	
		OSF 421	OSF 422		
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, with 1 W LED illumination (transmitted + 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 88 and on the internet				

✓ = Included with delivery

○ = Option

Pictograms

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

Abbreviations

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

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