

Stereo zoom microscope KERN OZL-44



LAB LINE

The affordable and flexible stereo zoom microscope for laboratories, inspection authorities and quality controls

Features

- The products in the KERN OZL-44 series are stereo zoom microscopes, which will impress you with their easy handling, flexibility as well as their stability and economical price
- The LED reflected and transmitted illumination included as standard guarantees the very best illumination of your sample
- As well as excellent optical characteristics and their large working surface, these models offer the highest level of comfort in this class – ideal for training companies, workshops as well as assembly and repair workstations, e.g. in the electronics industry
- The zoom objective gives you continuous magnification of 7,5× – 36×
- The OZL-44 series is available as a binocular version. The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- A large selection of eyepieces, external illumination units as well as auxiliary objectives 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

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

Applications/Samples

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

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 4,8:1
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×235×380 mm
- Net weight approx. 5 kg

STANDARD



Model	Standard configuration						
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
KERN							
OZL 445	Binocular	WF 10×/ø 20 mm	ø 26,7 – 5,6	0,75× – 3,6×	Pillar style	1 W LED (incident); 0,35 W LED (transmitted)	

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OZL 445	Specifications - Objectives					
Eyepiece	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,75×	1,5×	2,0×
WF 5×	Total magnification	3,75× - 18×	1,875× - 9×	2,81× - 13,5×	5,625× - 27×	7,5× - 36×
	Field of view mm	∅ 26 - 6	∅ 60 - 13	∅ 32 - 7	∅ 16 - 4	∅ 12,5 - 3
WF 10×	Total magnification	7,5× - 36×	3,75× - 18×	5,625× - 27×	11,25× - 54×	15× - 72×
	Field of view mm	∅ 26,7 - 5,6	∅ 53,3 - 11,1	∅ 35,5 - 7,4	∅ 17,8 - 3,7	∅ 13,3 - 2,8
WF 15×	Total magnification	11,25× - 54×	5,625× - 27×	8,44× - 40,5×	16,875× - 81×	22,5× - 108×
	Field of view mm	∅ 19 - 4,5	∅ 43 - 9,5	∅ 24 - 5,5	∅ 12 - 3	∅ 9,5 - 2
WF 20×	Total magnification	15× - 72×	7,5× - 36×	56,25× - 54×	22,5× - 108×	30× - 144×
	Field of view mm	∅ 12,5 - 3	∅ 28 - 6	∅ 16 - 3,5	∅ 8 - 2	∅ 6 - 1,5
Working distance		86 mm	178 mm	96 mm	42,5 mm	25,5 mm
Maximum sample height		100 mm	10 mm	60 mm	120 mm	135 mm

Model outfit		Model KERN	Order number	
		OZL 445		
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	
Auxiliary objectives	0,5×	○	OZB-A4201	
	0,75×	○	OZB-A4202	
	1,5×	○	OZB-A4204	
	2,0×	○	OZB-A4205	
	Soldering protection lens	○	OZB-A4251	
Stand	Pillar style, with LED illumination (0,35 W transmitted + 1 W incident)	✓		
Stage plate	Frosted glass/∅ 95 mm	✓	OZB-A4805	
	Black-white/∅ 95 mm	✓	OZB-A4806	
External illumination	Please find the information about external illumination units in the catalogue on page 83 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		USB 3.0 digital camera For direct transmitting of the picture to a PC
	Monocular Microscope For the inspection with one eye		Phase contrast unit For a higher contrast		WLAN data interface For transmitting of the picture to a mobile display device
	Binocular Microscope For the inspection with both eyes		Darkfield condenser/unit For a higher contrast due to indirect illumination		HDMI digital camera For direct transmitting of the picture to a display device
	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera		Polarising unit To polarise the light		PC software To transfer the measurements from the device to a PC
	Abbe Condenser With high numerical aperture for the concentration and the focusing of light		Infinity system Infinity corrected optical system		Automatic temperature compensation For measurements between 10 °C and 30 °C
	Halogen illumination For pictures bright and rich in contrast		Zoom magnification For stereomicroscopes		Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013
	LED illumination Cold, energy-saving and especially long-life illumination		Auto-focus For automatic control of the focus level		Battery operation Ready for battery operation. The battery type is specified for each device.
	Incident illumination For non-transparent objects		Parallel optical system For stereomicroscopes, enables fatigue-proof working		Battery operation rechargeable Prepared for a rechargeable battery operation
	Transmitting illumination For transparent objects		Integrated scale In the eyepiece		Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
	Fluorescence illumination For stereomicroscopes		SD card For data storage		Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter		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.

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)

Your KERN specialist dealer:



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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.