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.
- Depending on the model, the zoom objective gives you either continuous magnification of 10× - 40× (OZL 441) or continuous magnification of 7,5× - 36× (OZL 445).
- The OZL-44 series is available as a binocular or trinocular 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.
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model outfit list.
- Please find detailed information in the following charts.

Scope of application

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

Applications/Samples

 Samples with focus on three-dimesnional 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 OZL 441: 4:1
- Magnification ratio OZL 445: 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

360° BINO TRINO LED IL TL ZOOM 230 V 1 DAY WARRANTY	Ü	00		Ð	Ö	Q	Q	-#		3 _{YEARS}
	360°	BINO	TRINO	LED	IL		ZOOM	230 V	1 DAY	WARRANTY

Model		Standard configuration						
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination		
KERN			mm	Zoom				
OZL 441 *	Trinocular	WF 10×/Ø 22 mm	Ø 23-5,5	1×-4×	Pillar style	1 W LED (incident); 0,35 W LED (transmitted)		
OZL 445	Binocular	HWF 10×/Ø 21,5 mm	Ø 28-6	0,75×-3,6×	Pillar style	1 W LED (incident); 0,35 W LED (transmitted)		

* ONLY WHILE STOCKS LAST

STANDARD

Stereo zoom microscope KERN OZL-44



OZL 441		Specifications – Objectives							
Eyepiece	Magnification	Standard	Auxiliary objectives						
		1,0×	0,5×	0,75×	1,5×	2,0×			
WF 5×	Total magnification	5×-20×	2,5×-10×	3,75× – 15×	7,5×-30×	10×-40×			
WF 5^	Field of view mm	Ø 20 – 5	Ø 40 – 11	Ø 25 – 6,5	Ø 13-3,5	Ø 10-2,5			
N/F 40.	Total magnification	10×-40×	5×-20×	7,5×-30×	15×-60×	20×-80×			
WF 10×	Field of view mm	Ø 23 – 5,5	Ø 52 – 12	Ø 30 – 7	Ø 15-4,8	Ø 11,5-3			
WF 15×	Total magnification	15×-60×	7,5×-30×	11,25×-45×	22,5×-90×	30×-120×			
WF 13^	Field of view mm	Ø 15,5-4	Ø 36-8,5	Ø 21-5	Ø 10,5 – 2,5	Ø 8 – 2			
WF 20×	Total magnification	20×-80×	10×-40×	15×-60×	30× – 120×	40×-160×			
	Field of view mm	Ø 10,5-3	Ø 25-5,8	Ø 14-3,5	Ø 7 – 1,8	Ø 5,5 – 1,5			
Working distance		91 mm	170 mm	100 mm	42 mm	28 mm			

OZL 445	Specifications – Objectives							
Eyepiece	Magnification Standard Auxiliary objectives							
		1,0×	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×		
WF 5^	Field of view mm	Ø 26 – 6	Ø 60 – 13	Ø 32 – 7	Ø 16-4	Ø 12,5-3		
	Total magnification	7,5×-36×	3,75×-18×	5,625×-27×	11,25×-54×	15×-72×		
HWF 10×	Field of view mm	Ø 28 – 6	Ø 63 – 14	Ø 35 – 8	Ø 18-4	Ø14-3		
	Total magnification	11,25×-54×	5,625×-27×	8,44×-40,5×	16,875×-81×	22,5× - 108×		
WF 15×	Field of view mm	ø 19-4,5	Ø 43-9,5	Ø 24 – 5,5	Ø 12-3	Ø 9,5 – 2		
N/F 00.	Total magnification	15×-72×	7,5×-36×	56,25×-54×	22,5× - 108×	30×-144×		
WF 20×	Field of view mm	ø 12,5 – 3	Ø 28-6	Ø 16-3,5	Ø 8 – 2	Ø 6 – 1,5		
Working distance		86 mm	178 mm	96 mm	42,5 mm	25,5 mm		

Model outfit		Mode	Model KERN		
		OZL 441	OZL 445		
	WF 5×/Ø 16,2 mm	00	00	OZB-A4101	
	WF 10×/Ø 22 mm	44		OZB-A4105	
Eyepieces (30,5 mm)	HWF 10×/Ø 21,5 mm		44	OZB-A4106	
(00)0)	WF 15×/Ø 15 mm	00	00	OZB-A4103	
	WF 20×/Ø 10 mm	00	00	OZB-A4104	
Auxiliary objectives	0,5×	0	0	OZB-A4201	
	0,75×	0	0	OZB-A4202	
	1,5×	0	0	OZB-A4204	
	2,0×	0	0	OZB-A4205	
	Soldering protection lens	0	0	OZB-A4250	
	1× (focus adjustable)	0		OZB-A4809	
C-Mount	0,3× (focus adjustable)	0		OZB-A4810	
	0,5× (focus adjustable)	0		OZB-A4811	
Stand	Pillar style, with LED illumination (0,35 W transmitted + 1 W incident)	×	*		
Stage plate	Frosted glass/Ø 95 mm	✓	✓	OZB-A4805	
	Black-white / Ø 95 mm	✓	1	OZB-A4806	

O = Option

 \checkmark = Included with delivery

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



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HAL

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 100W mercury lamp and filter

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)



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



Phase contrast unit For a higher contrast

Darkfield condenser/unit

For a higher contrast due to indirect





Polarising unit To polarise the light

Infinity system

illumination





Zoom magnification For stereomicroscopes



Parallel optical system For stereomicroscopes, enables fatigue-proof working

Infinity corrected optical system



Integrated scale In the eyepiece

HDMI digital camera

SLR Kamera Single-Lens Reflex camera

display device



USB 2.0

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HDMI

LWD

N.A.

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

For direct transmitting of the picture to a



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



SD card For data storage

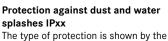


PC software To transfer the measurements from the device to a PC.



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





pictogram. **Battery operation**



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



Battery operation rechargable Prepared for a rechargable battery



Mains adapter 230V/50Hz in standard version for EU.



Power supply

pictogram.

operation

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

On request GB, AUS or USA version.

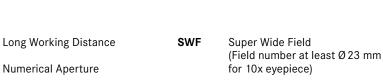


Package shipment The time required to manufacture the

product internally is shown in days in the pictogram. Warrantv

The warranty period is shown in the

3YEARS WARRANTY



WF

W.D. Working Distance	е
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Wide Field (Field number up to Ø22 mm for 10x eyepiece)

Your KERN specialist dealer:

