Stereo zoom microscope KERN OZL-45







LAB LINE

The smart model for laboratory, training establishment, quality control and agriculture

Features

- The KERN OZL 451 and OZL 453 models are very robust and easy to use stereo microscopes with a large zoom range.
- Their qualities, the flexible pillar stand and the optional integral, bright halogen incident and transmitted illumination make these models especially flexible.
- These models are optimally suited to workstations in very rough working environments, training establishments, workshops, as well as assembly and repair workstations in the electronics industry.
- These models are also ideal for use in both production and quality control.

- In addition to their very good optical properties, these models offer the best possible ease of use in this class thanks to their large working surface.
- The multitude of auxiliary objectives, eyepieces and additional accessory parts facilitates use in all common stereo microscopy applications.
- One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

Technical data

- · Optical system: Greenough
- Brightness adjustable
- Magnification ratio: 6,7:1
- Tube: 45° inclined
- Interpupillary distance: 55 75 mm
- Diopter adjustment (both-sided)
- Packing dimensions
 WxDxH 345x320x470 mm

OZL 451

• Net weight approx. 3,5 kg

OZL 453

Net weight approx. 5 kg

Please find detailed information in the following charts.

STANDARD								
Q	00	Φ	<u>8</u>	Q	Q			3 YEARS
360°	BINO	HAL	IL	TL	ZOOM	230 V	1 DAY	WARRANTY

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Model	Standard configuration						
	Tube Eyepiece		Field of view	Objective	Stand	Illumination	
KERN			mm	Zoom			
OZL 451	Binocular	HSWF 10x Ø 23 mm	Ø 33 – 5	0,75x-5,0x	Pillar style	12V / 10W Halogen (incident) 12V / 10W Halogen (transmitting)	
OZL 453	Binocular	HSWF 10x Ø 23 mm	Ø 33 – 5	0,75x-5,0x	Pillar style	-	

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Eyepiece	Specifications - Objectives								
	Magnification	Standard	Auxiliary objectives						
		1,0x	0,5x	1,5x	2,0x				
HWF 5x	Total magnification	3,75x - 25x	1,875x - 12,5x	5,625x - 37,5x	7,5x - 50x				
HWF 5X	Field of view mm	Ø 31 - 4,6	Ø 61,3 - 9,2	Ø 22 - 3,3	Ø 16 - 2,5				
HSWF 10x	Total magnification	7,5x - 50x	3,75x - 25x	11,25x - 75x	15x - 100x				
nowr Iux	Field of view mm	Ø 33 – 5	Ø 65 – 10	Ø 22 - 3,3	Ø 16 – 2,5				
HWF 15x	Total magnification	11,25x - 75x	5,625x - 37,5x	16,875x - 112,5x	22,5x - 150x				
HWF 15X	Field of view mm	Ø 24 - 4,2	Ø 48 - 8,5	Ø 16 - 2,8	Ø 12 – 2				
HSWF 20x	Total magnification	15x - 100x	7,5x - 50x	22,5x - 150x	30x - 200x				
nowr 20x	Field of view mm	Ø 20 – 3,5	Ø 40 – 7	Ø 13,3 - 2,3	Ø 10 – 1,8				
HWF 25x	Total magnification	18,75x - 125x	9,375x - 62,5x	28,125x - 187,5x	37,5x - 255x				
TIVE ZJX	Field of view mm	Ø 15,8 - 2,4	Ø 31,5 - 4,8	Ø 10,5 – 1,6	Ø 7,9 - 1,2				
Working distance		113 mm	220 mm	50 mm	35 mm				

Model outfit		Model KERN		Order number	
		OZL 451	OZL 453		
	HWF 5x / Ø 23,2 mm	00	00	OZB-A4112	
	HSWF 10x / Ø 23 mm	••	••	OZB-A4118	
Eyepieces	HWF 15x / Ø 15 mm	00	00	OZB-A4119	
	HSWF 20x / Ø 14,5 mm	00	00	OZB-A4120	
	HWF 25x / Ø 11,7 mm	00	00	OZB-A4121	
	0,5x	0	0	OZB-A4201	
Auxiliary objectives	1,5x	0	0	OZB-A4204	
	2,0x	0	0	OZB-A4205	
Stands	Pillar style, with 12V / 10W Halogen Illumination (transmitting + incident)	•			
	Pillar style, without illumination		•		
	Frosted glass / Ø 95 mm	•		OZB-A4805	
Stage plate	Black-white / Ø 95 mm	•	•	OZB-A4806	
Mechanical stage Stage size: WxD 180x155 mm, Travel: 75x55 mm, for transmitting and incident illumination		0	0	OZB-A4605	
External illumination	Please find the information about external illumination units in the catalogue from page 68 and on our website www.kern-sohn				

• = Standard configuration

o = Option

KERN Pictograms:



360° rotatable microscope head



Monocular Microscope For the inspection with one eye



Binocular Microscope For the inspection with both eyes

Trinocular Microscope



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ABBE

the additional option for the connection of a camera Abbe Condenser With high numerical aperture for the

For the inspection with both eyes and



Halogen illumination For pictures bright and rich in contrast

concentration and the focusing of light



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



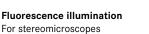
Incident illumination For non-transparent objects



Transmitting illumination For transparent objects



Fluorescence illumination





For direct transmitting of the picture 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

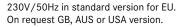
Ready for battery operation. The battery type is specified for each device.



Rechargeable battery pack Rechargeable set.



Mains adapter





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.



DAYS

Warranty

The warranty period is shown in the pictogram.





Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)
LWD	Long Working Distance

Your KERN specialist dealer:

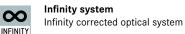
N.A.	Numerical Aperture	W.D.	Working Distance	
	Single-Lens Reflex camera	WF	Wide Field (Field number up to Ø 22 mm for 10x eyepiece)	
SWF	Super Wide Field (Field number at least Ø23 mm for 10x eyepiece)		,,,,,,,,	



Polarising unit

Phase contrast unit

For a higher contrast



Fluorescence illumination

for compound microscopes

Fluorescence illumination

for compound microscopes

With 100W mercury lamp and filter

With 3W LED illumination and filter



FL-HBO

C

FL-LED

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POLAR

Zoom magnification For stereomicroscopes



Parallel optical system For stereomicroscopes, enables fatigue-proof working

Integrated scale Lunn In the eyepiece SCALE





For direct transmitting of the picture to a PC



Integrated USB 3.0 digital camera