





LAB LINE

The practical model for your laboratory, training establishment, quality control and agriculture

Features

- The KERN OZL 456 models are very robust and easy to use stereo microscopes with a large zoom range.
- Its mechanical stand makes it particularly
- · 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 as well as an integrated, dimmable LED-illumination ring. This is underlined by the functional and ergonomic design.

Technical data

- · Optical system: Greenough
- · LED ring illumination dimmable
- Magnification ratio: 6,7:1
- Tube: 45° inclined
- Interpupillary distance: 55 75 mm
- Diopter adjustment (both-sided)
- · Packing dimensions WxDxH 345x320x470 mm
- · Net weight approx. 5 kg

Please find detailed information in the following charts.

STANDARD



















Model	Standard configuration						
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination	
KERN			mm	Zoom			
OZL 456	Binocular	HSWF 10x Ø 23 mm	Ø 33 - 5	0,75x - 5,0x	Arm curved	1W LED (incident); 0,21W LED (transmitting)	

Stereo zoom microscope KERN OZL-45R



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		
IIWI JX	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		
nswr 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 13X	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		
HSWF ZUX	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		
HWF 29X	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 456		
Eyepieces	HWF 5x / Ø 23,2 mm	00	OZB-A4112	
	HSWF 10x / Ø 23 mm	••	OZB-A4118	
	HWF 15x / Ø 15 mm	00	OZB-A4119	
	HSWF 20x / Ø 14,5 mm	00	OZB-A4120	
	HWF 25x / Ø 11,7 mm	00	OZB-A4121	
	0,5x	0	OZB-A4201	
Auxiliary objectives	1,5x	0	OZB-A4204	
	2,0x	0	OZB-A4205	
Stands	Arm curved, with LED illumination (0,21W transmitting + 1W incident)	•		
Stage plate	Frosted glass / Ø 95 mm	•	OZB-A4805	
	Black-white / Ø 95 mm	•	OZB-A4806	
Mechanical stage	Stage size: WxD 180x155 mm, Travel: 75x55 mm, for transmitting and incident illumination	٥	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.com			

• = Standard configuration

o = Option

KERN Pictograms:





360° rotatable microscope head



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



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Monocular Microscope

For the inspection with one eye



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



Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram.



Binocular Microscope

For the inspection with both eyes



Phase contrast unit

For a higher contrast



Battery operation

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



Rechargeable battery pack

Rechargeable set.



Abbe Condenser

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



Infinity system

Infinity corrected optical system



Mains adapter

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



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



Power supply

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



LED illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Package shipment

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



Incident illumination

For non-transparent objects



Integrated scale

In the eyepiece



Warranty

The warranty period is shown in the pictogram.



Transmitting illumination

For transparent objects



Integrated USB 2.0 digital camera

For direct transmitting of the picture to a PC



Fluorescence illumination

For stereomicroscopes



Integrated 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

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 Ø 23 mm

for 10x eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to

Ø 22 mm for 10x eyepiece)

Your KERN specialist dealer: