

Stereo zoom microscope KERN OZP-5



LAB LINE

Professional and powerful – thanks to its extremely large magnification range, strong illumination and first-class optics

Features

- The KERN OZP stereo zoom microscope stands out through its above-average magnification range and its robust shape which is also ergonomic, it enables effortless, simple working over a period of several hours
- The KERN OZP series is available as a strong, continuously adjustable 3 W LED reflected and transmitted light variant for the very best illumination of your sample or as a variant without illumination
- · With its large working distance, an extra large field of view and brilliant resolution, the KERN OZP provides sharp, high-contrast and colour-true images
- The extremely large, continuously adjustable magnification range from 6 to 55 times magnification means that you can work quickly and effectively
- There is a choice of a binocular model as well as a trinocular model for connecting a camera for documentation purposes and for quality reports

- The pillar stand is particularly flexible due to its variable and sturdy adjustment mechanism and therefore enables ergonomic working procedures
- · A large selection of eyepieces, (universal) stands, a darkfield kit, external illumination units as well as auxiliary objectives and more 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 model outfit list

Scope of application

· Zoology and botany, quality control, electronics and semiconductor industry, assembly and repair

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: 35° inclined
- · Magnification ratio: 9,2:1
- Light distribution OZP 557/558: 50:50
- Interpupillary distance 52 76 mm
- · Diopter adjustment: Both-sided
- · Overall dimensions W×D×H 330×285×470 mm
- Net weight approx. 4,5 kg

























Model	Standard configuration						
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination	
KERN			mm	Zoom			
OZP 556	Binocular	HSWF 10×/Ø 23 mm	Ø 38,3 – 4,2	0,6×-5,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	
OZP 558	Trinocular	HSWF 10×/Ø 23 mm	Ø 38,3 – 4,2	0,6×-5,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)	



Stereo zoom microscope KERN OZP-5

Eyepiece	Specifications - Objectives								
	Magnification	Standard	Auxiliary objectives						
		1,0×	0,5×	0,7×	1,5×	2×			
HSWF 10×	Total magnification	6×-55×	3×-27,5×	4,2×-38,5×	9×-82,5×	12× - 110×			
	Field of view mm	Ø 38,3 - 4,2	Ø 76,7 - 8,4	Ø 54,8 - 6	Ø 25,6 – 2,8	Ø 19,2-2,1			
SWF 15×	Total magnification	9×-82,5×	4,5×-41,25×	6,3× - 57,75×	13,5×- 123,75×	18× - 165×			
	Field of view mm	Ø 28,3 - 3,1	Ø 56,7 - 6,2	Ø 40,5 - 4,4	Ø 18,9 – 2,1	Ø 14,2 – 1,5			
	Total magnification	12× - 110×	6×-55×	8,4×-77×	18× - 165×	24× - 220×			
SWF 20×	Field of view mm	Ø 23,3 - 2,5	Ø 46,7 - 5,1	Ø 33,3 - 3,6	Ø 15,6 – 1,7	ø 11,7 - 1,3			
SWF 30×	Total magnification	18× - 165×	9×-82,5×	12,6× - 115,5×	27× - 247,5×	36×-330×			
	Field of view mm	ø 15 – 1,6	Ø 30 - 3,3	Ø 21,4 - 2,3	Ø 10 – 1,1	Ø 7,5 – 0,8			
Working distance		108 mm	195 mm	145 mm	50 mm	35 mm			
Maximum sample height		110 mm	10 mm	45 mm	140 mm	150 mm			

Model outfit		Mode	I KERN	Order number					
		OZP 556	OZP 558	_					
Eyepieces (30,0 mm)	HSWF 10×/ø 23 mm	44	44	OZB-A5503					
	SWF 15×/ø 17 mm	00	00	OZB-A5504					
	SWF 20×/ø 14 mm	00	00	OZB-A5505					
	SWF 30×/ø 9 mm	00	00	OZB-A5506					
	HSWF 10×/ø 23 mm (reticule 0,1 mm)	0	0	OZB-A5512					
	SWF 15×/Ø 17 mm (reticule 0,05 mm)	0	0	OZB-A5513					
	SWF 20×/Ø 14 mm (reticule 0,05 mm)	0	0	OZB-A5514					
	0,5×	0	0	OZB-A5612					
	0,7×	0	0	OZB-A5613					
Achromatic auxiliary objectives	1,5×	0	0	OZB-A5615					
	2,0×	0	0	OZB-A5616					
	Soldering protection lens	0	0	OZB-A5614					
	0,3× (focus adjustable)		0	OZB-A5701					
	0,5× (focus adjustable)		0	OZB-A5702					
	1,0× (focus adjustable)		0	OZB-A5703					
C-Mount	1,0× (with micrometer) only in combination with OZB-A5703		0	OZB-A5704					
	for SLR cameras (Nikon)		0	OZB-A5706					
	for SLR cameras (Olympus)		0	OZB-A5707					
	for SLR cameras (Canon)		0	OZB-A5708					
Darkfield unit	Darkfield unit	0	0	OZB-A4601					
Object clamp	Object clamp	0	0	OBB-A6205					
	Pillar style, without illumination								
Stand	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	✓						
	Please find more stands in the catalogue on page 79 and on the internet								
	Frosted glass/Ø 94,5 mm		✓	OZB-A5192					
Stage plate	Black-white/Ø 94,5 mm	✓	✓	OZB-A5191					
	Clear glass/Ø 94,5 mm		0	OZB-A5190					
Mechanical stage Pre-assembling on	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	0	0	OZB-A5781					
request)	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	0	0	OZB-A5782					
External Ilumination	Please find the information about external illumination units in the catalogue on page 83 and on the internet								



Pictograms



360° rotatable





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



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



FPS

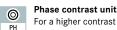
Fluorescence illumination

for compound microscopes With 100W mercury lamp and filter



Fluorescence illumination for compound microscopes

With 3 W LED illumination and filter



Phase contrast unit



Darkfield condenser/unit

For a higher contrast due to indirect illumination



Polarising unit

To polarise the light



Infinity system

Infinity corrected optical system



Zoom magnification For stereomicroscopes

Auto-focus

For automatic control of the focus level



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Integrated scale

In the eyepiece



SD card

For data storage



USB 2.0 digital camera



For direct transmitting of the picture to a PC



USB 3.0 digital camera

For direct transmitting of the picture to a PC



WLAN data interface

For transmitting of the picture to a mobile display device



HDMI digital camera

For direct transmitting of the picture to a display



PC software

To transfer the measurements from the device 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 in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013



Battery operation

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



Battery operation rechargeable

Prepared for a rechargeable battery operation



Plug-in power supply

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



Integrated power supply unit

Integrated in microscope. 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.

Abbreviations

Adapter for the connection of a C-Mount

Frames per second

camera to a trinocular microscope

LWD Long Working Distance SWF Super Wide Field (Field number at least Ø 23 mm for 10× eyepiece)

N.A. Numerical Aperture

Working Distance W.D.

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: