

Stereo Zoom Microscope KERN OZS-5



Professional Line

Professional stereo zoom microscope with parallel optics for excellent images, depth of field, contrast and fatigue-free working

Features

- The KERN OZS series is a special, high-quality stereo zoom microscope with parallel optics for demanding analyses
- The KERN OZS series is available as a strong, continuously adjustable 3 W LED reflected and transmitted light variant for the very best illumination of your sample
- The parallel optical system is a high-quality optical system and provides excellent images with the best contrast, colour and depth of field with fatigue-free working. Refocusing is also only necessary in very few cases when magnifying the zoom
- The continuously adjustable magnification range from 8 to 50 times magnification means that you can work quickly and effectively
- As standard this microscope offers you continuous total magnification of 8× - 80×

- 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

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control, electronics and semiconductor industry, assembly and repair

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: Parallel optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 10:1
- Light distribution 100:0
- Interpupillary distance 52 - 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 305×300×540 mm
- Net weight approx. 5,5 kg

STANDARD



OPTION



Model

Standard configuration

	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination
KERN						
OZS 574	Trinocular	HWF 10×/ø 22 mm	ø 27,5 - 2,75	0,8× - 8×	Pillar style	3 W LED (incident); 3 W LED (transmitted)

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Eyepiece	Specifications – Objectives				
	Magnification	Standard Plan 1,0×	Achr. objective 0,5×	Achr. objective 0,7×	Achr. objective 1,5× (Auxiliary)
HWF 10×	Total magnification	8× – 80×	4× – 40×	5,6× – 56×	12× – 120×
	Field of view mm	∅ 27,5 – 2,75	∅ 55 – 5,5	∅ 39,3 – 3,93	∅ 18,33 – 1,83
SWF 15×	Total magnification	12× – 120×	6× – 60×	8,4× – 84×	18× – 180×
	Field of view mm	∅ 21,25 – 2,13	∅ 42,5 – 4,25	∅ 30,36 – 3,04	∅ 14,17 – 1,42
SWF 20×	Total magnification	16× – 160×	8× – 80×	11,2× – 112×	24× – 240×
	Field of view mm	∅ 17,5 – 1,75	∅ 35 – 3,5	∅ 25 – 2,5	∅ 11,67 – 1,17
SWF 30×	Total magnification	24× – 240×	12× – 120×	16,8× – 168×	36× – 360×
	Field of view mm	∅ 11,25 – 1,13	∅ 22,5 – 2,25	∅ 16,1 – 1,61	∅ 7,5 – 0,75
Working distance		91 mm	186 mm	135 mm	40 mm
Maximum sample height		100 mm	30 mm	80 mm	125 mm

Model outfit		Model KERN	Order number
		OZS 574	
Eyepieces (30,0 mm)	HWF 10×/∅ 22 mm	✓✓	OZB-A5502
	SWF 15×/∅ 17 mm	○ ○	OZB-A5504
	SWF 20×/∅ 14 mm	○ ○	OZB-A5505
	SWF 30×/∅ 9 mm	○ ○	OZB-A5506
	HWF 10×/∅ 22 mm (reticule 0,1 mm)	○	OZB-A5511
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	OZB-A5513
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	OZB-A5514
Plan achromatic objective	1,0×	✓	OZB-A5603
	0,5×	○	OZB-A5601
Achromatic objectives	0,7×	○	OZB-A5602
	1,5× Only in combination with OZB-A5603	○	OZB-A5604
Trinocular beamsplitter	Division 100:0	✓	OZB-A5401
	Division 50:50	○	OZB-A5402
C-Mount	0,3× (focus adjustable)	○	OZB-A5701
	0,5× (focus adjustable)	○	OZB-A5702
	1,0× (focus adjustable)	○	OZB-A5703
	1,0× (with micrometer) only in combination with OZB-A5703	○	OZB-A5704
	For SLR cameras (Nikon)	○	OZB-A5706
	For SLR cameras (Olympus)	○	OZB-A5707
	For SLR cameras (Canon)	○	OZB-A5708
Darkfield unit	Darkfield unit	○	OZB-A4601
Object clamp	Object clamp	○	OBB-A6205
Stand	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	
	Frosted glass/∅ 94,5 mm	✓	OZB-A5192
Stage plate	Black-white/∅ 94,5 mm	✓	OZB-A5191
	Clear glass/∅ 94,5 mm	○	OZB-A5190
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	○	OZB-A5781
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	OZB-A5782
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet		

360° rotatable microscope head	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	Integrated scale In the eyepiece	Battery operation Ready for battery operation. The battery type is specified for each device.
Monocular Microscope For the inspection with one eye	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	SD card For data storage	Battery operation rechargeable Prepared for a rechargeable battery operation
Binocular Microscope For the inspection with both eyes	Phase contrast unit For a higher contrast	USB 2.0 interface For data transmission	Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	Darkfield condenser/unit For a higher contrast due to indirect illumination	USB 3.0 interface For data transmission	Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
Abbe Condenser With high numerical aperture for the concentration and the focusing of light	Polarising unit To polarise the light	WIFI data interface: For transmitting of the picture to a mobile display device	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
Halogen illumination For pictures bright and rich in contrast	Infinity system Infinity corrected optical system	HDMI digital camera For direct transmitting of the picture to a display device	Pallet shipment The time required to manufacture the product internally is shown in days in the pictogram.
LED illumination Cold, energy-saving and especially long-life illumination	Zoom magnification For stereomicroscopes	PC software To transfer the measurements from the device to a PC.	Automatic temperature compensation For measurements between 10 °C and 30 °C
Incident illumination For non-transparent objects	Auto-focus For automatic control of the focus level	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	
Transmitting illumination For transparent objects	Parallel optical system For stereomicroscopes, enables fatigue-proof working		
Fluorescence illumination For stereomicroscopes			

Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope	SLR camera	Single-Lens Reflex camera
FPS	Frames per second	SWF	Super Wide Field (Field number at least \varnothing 23 mm for 10 \times eyepiece)
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	W.D.	Working Distance
LWD	Long Working Distance	WF	Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)
N.A.	Numerical Aperture		