MICROSCOPES & REFRACTOMETERS 2023

MICROSCOPES

Working distance



105 mm

Fittings and accessories for the heads for the OSF-5 microscope range (OSF 512, OSF 516)

Eyepiece	Specifications - Objectives					
	Magnification	1×	2×	3×	4×	
HSWF 10×	Total magnification	10×	20×	30×	40×	
	Field of view mm	Ø 23	Ø 11,5	ø 7,67	Ø 5,75	
SWF 15×	Total magnification	15×	30×	45×	60×	
	Field of view mm	Ø 17	Ø 8,5	ø 5,67	Ø 4,25	
SWF 20×	Total magnification	20×	40×	60×	80×	
	Field of view mm	Ø 14	Ø 7	ø 4,67	Ø 3,5	
SWF 30×	Total magnification	30×	60×	90×	120×	
	Field of view mm	ø 9	Ø 4,5	ø 3	Ø 2,25	

105 mm

105 mm

Model outfit		Model KERN		Order number
		OSF 512	OSF 516	_
	HSWF 10×/Ø 23 mm	44	√√	OZB-A5503
	SWF 15×/ø 17 mm	00	00	OZB-A5504
	SWF 20×/Ø 14 mm	00	00	OZB-A5505
Eyepieces (30,0 mm)	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

 \checkmark = Included with delivery

105 mm

O = Option

Fittings and accessories for the heads for the OZL-46 microscope range (OZL 461, OZL 462)

Eyepiece	Specifications - Objectives						
	Magnification	Standard	Auxiliary objectives				
		1,0×	0,5×	0,75×	1,5×	2,0×	
HSWF 10×	Total magnification	7× - 45×	3,5×-22,5×	5,3×-33,8×	10,5×-67,5×	14× - 90×	
	Field of view mm	Ø 28,6 - 4,4	Ø 57,1-8,9	Ø 38,1 – 5,9	Ø 19 – 3	Ø 14,3-2,2	
HWF 15×	Total magnification	10,5× - 67,5×	5,3× - 33,8×	7,9×-50,6×	15,5× - 101,3×	21× - 135×	
	Field of view mm	Ø 21,4 - 3,3	Ø 42,9 - 6,7	Ø 28,5 - 4,4	Ø 14,3 - 2,2	Ø 10,7 – 1,7	
HSWF 20×	Total magnification	14×-90×	7×-45×	10,5×-67,5×	21× - 135×	28× - 180×	
	Field of view mm	Ø 14,3 - 2,2	Ø 28,6 - 4,4	Ø 19,1-2,9	Ø 9,5 – 1,5	Ø 7,1 – 1,1	
HWF 25×	Total magnification	17,5× - 122,5×	8,8×-56,3×	13,1×-91,9×	26,3× - 168,8×	35× - 225×	
	Field of view mm	Ø 12,9 - 2,0	Ø 25,7 – 4,0	Ø 17,2 - 2,7	Ø 8,6 – 1,3	Ø 6,4 – 1,0	
Working distance	•	105 mm	177 mm	120 mm	47 mm	26 mm	

Model outfit		Model	Model KERN	
		OZL 461	OZL 462	_
	HWF 10×/Ø 20 mm	√ √	44	OZB-A4631
Eyepieces	HSWF 15×/Ø 15 mm	00	00	OZB-A4632
(30,0 mm)	HWF 20×/Ø 10 mm	00	00	OZB-A4633
	HSWF 25×/Ø 9 mm	00	00	OZB-A4634
	0,5×	0	0	OZB-A4641
A	0,75×	0	0	OZB-A4644
Auxiliary objectives	1,5×	0	0	OZB-A4642
	2,0×	0	0	OZB-A4643
	1× (focus adjustable)		✓	OZB-A4809
C-Mount	0,3× (focus adjustable)		0	OZB-A4810
	0,5× (focus adjustable)		0	OZB-A4811

✓ = Included with delivery

O = Option

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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



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 100 W mercury lamp and filter



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



Phase contrast unit

For a higher contrast



Darkfield condenser/unit

For a higher contrast due to indirect illumination



Polarising unit

To polarise the light

00

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



WIFI data interface:

For transmitting of the picture to a mobile display device



HDMI digital camera

For direct transmitting of the picture to a display device



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

ABBREVIATIONS

C-Mount Adapter for the connection of a camera to a trinocular microscope

FPS Frames per second

High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses) H(S)WF

LWD Long Working Distance N.A. **Numerical Aperture** SLR camera Single-Lens Reflex camera

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

W.D. Working Distance

WF Wide Field (Field number up to Ø 22 mm for 10× eyepiece) Battery operation rechargeable Prepared for a rechargeable battery



■→)

RECHARGE

BATT

operation

Battery operation

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

Ready for battery operation. The battery

type is specified for each device.



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.