



OZG 493



OZG 497



Backside of OZG 497



Tilt positions



Tilt positions

LAB LINE

The flexible model for the jeweller and the jewellery industry

Features

- The KERN OZG-4 models are stereo microscopes with zoom function specially developed for the jewellery industry and jewellers.
- The KERN OZG 493 is equipped with a pillar stand and bright integral halogen incident and transmitted illumination units.
- The KERN OZG 497 is provided with a mechanical stand and is extremely flexible thanks to its tip and rotate function. Together with its powerful illumination including a fiber illumination, this is an ideal solution for jewellers and the jewellery industry.
- In addition to their very good optical properties, these models offer an optimal package thanks to their dark field unit with stage clamp, provided with the microscope.
- One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism.

Technical data

- Optical system: Greenough
- Brightness adjustable
- Tube: 45° inclined
- Interpupillary distance: 55 – 75 mm
- Diopter adjustment (both-sided)

OZG 493

- Magnification ratio: 5,1:1
- Packing dimensions WxDxH 365x292x470 mm
- Net weight approx. 5 kg

OZG 497

- Magnification ratio: 6,7:1
- Packing dimensions WxDxH 370x355x480 mm
- Net weight approx. 11 kg

Please find detailed information in the following charts.

STANDARD



Model	Standard configuration						
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination	
KERN							
OZG 493	Binocular	HWF 10x Ø 21,5 mm	Ø 28 – 5,6	0,7x – 3,6x	Pillar style	12V / 10W Halogen (incident) 12V / 10W Halogen (transmitting) 10W Fluorescence (front illumination)	
OZG 497	Trinocular	HSWF 10x Ø 23 mm	Ø 33 – 5,1	0,75x – 5,0x	Arm curved	12V / 10W Halogen (transmitting) 10W Fluorescence (front illumination including single fiber)	

OZG 493	Specifications – Objectives	
Eyepiece	Magnification	Standard 1,0x
WF 5x	Total magnification	3,75x – 18x
	Field of view mm	Ø 26 – 6
HWF 10x	Total magnification	7,5x – 36x
	Field of view mm	Ø 28 – 6
WF 15x	Total magnification	11,25x – 54x
	Field of view mm	Ø 19 – 4,5
WF 20x	Total magnification	15x – 72x
	Field of view mm	Ø 12,5 – 3
Working distance		86 mm

OZG 497	Specifications – Objectives	
Eyepiece	Magnification	Standard 1,0x
HWF 5x	Total magnification	3,75x – 25x
	Field of view mm	Ø 31 – 4,6
HSWF 10x	Total magnification	7,5x – 50x
	Field of view mm	Ø 33 – 5
HWF 15x	Total magnification	11,25x – 75x
	Field of view mm	Ø 24 – 4,2
HSWF 20x	Total magnification	15x – 100x
	Field of view mm	Ø 20 – 3,5
HWF 25x	Total magnification	18,75x – 125x
	Field of view mm	Ø 15,8 – 2,4
Working distance		113 mm

Model outfit		Model KERN		Order number	
		OZG 493	OZG 497		
Eyepieces	WF 5x / Ø 16,2 mm	oo		OZB-A4101	
	HWF 10x / Ø 21,5 mm	●●		OZB-A4106	
	WF 15x / Ø 15 mm	oo		OZB-A4103	
	WF 20x / Ø 10 mm	oo		OZB-A4104	
	HWF 5x / Ø 23,2 mm		oo	OZB-A4112	
	HSWF 10x / Ø 23 mm		●●	OZB-A4118	
	HWF 15x / Ø 15 mm		oo	OZB-A4119	
	HSWF 20x / Ø 14,5 mm		oo	OZB-A4120	
	HWF 25x / Ø 11,7 mm		oo	OZB-A4121	
C-Mount	1x		o	OZB-A4809	
	0,3x		o	OZB-A4810	
	0,5x		o	OZB-A4811	
Darkfield attachment	Darkfield attachment	●	●	OZB-A4601	
Object clamp	Object clamp (steel wire)	●	●	OZB-A4604	
Stands	Pillar style, with 12V / 10W Halogen (transmitting + incident) and 10W Fluorescent illumination (front)	●			
	Arm curved, with 12V / 10W Halogen (transmitting) and 10W Fluorescent illumination (front) + Single fiber illumination		●		

● = Standard configuration

o = Option

	360° rotatable microscope head		Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter		Automatic temperature compensation 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	N.A.	Numerical Aperture	W.D.	Working Distance
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	SLR Kamera	Single-Lens Reflex camera	WF	Wide Field (Field number up to Ø 22 mm for 10x eyepiece)
LWD	Long Working Distance	SWF	Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)		

Your KERN specialist dealer: