



OZG 493



OZG 497



Backside of OZG 497

**LAB LINE**

The flexible model for the jeweller and the jewellery industry

**Features**

- The KERN OZG 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
<b>KERN</b>						
<b>OZG 493</b>	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
<b>OZG 497</b>	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°	<b>360° rotatable microscope head</b>	 FL-HB0	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	 AUTO ATC	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
 MONO	<b>Monocular Microscope</b> For the inspection with one eye	 FL-LED	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	 IP	<b>Protection against dust and water splashes IPxx</b> The type of protection is shown by the pictogram.
 BINO	<b>Binocular Microscope</b> For the inspection with both eyes	 PH	<b>Phase contrast unit</b> For a higher contrast	 BATT	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
 TRINO	<b>Trinocular Microscope</b> For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	<b>Polarising unit</b> To polarise the light	 ACCU	<b>Rechargeable battery pack</b> Rechargeable set.
 ABBE	<b>Abbe Condenser</b> With high numerical aperture for the concentration and the focusing of light	 INFINITY	<b>Infinity system</b> Infinity corrected optical system	 230 V	<b>Mains adapter</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 HAL	<b>Halogen illumination</b> For pictures bright and rich in contrast	 ZOOM	<b>Zoom magnification</b> For stereomicroscopes	 230 V	<b>Power supply</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 LED	<b>LED illumination</b> Cold, energy saving and especially long-life illumination	 PARALLEL	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	 DAYS	<b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
 IL	<b>Incident illumination</b> For non-transparent objects	 SCALE	<b>Integrated scale</b> In the eyepiece	 3 YEARS WARRANTY	<b>Warranty</b> The warranty period is shown in the pictogram.
 TL	<b>Transmitting illumination</b> For transparent objects	 USB 2.0	<b>Integrated USB 2.0 digital camera</b> For direct transmitting of the picture to a PC		
 FL	<b>Fluorescence illumination</b> For stereomicroscopes	 USB 3.0	<b>Integrated USB 3.0 digital camera</b> For direct transmitting of the picture to a PC		

## Abbreviations

<b>C-Mount</b>	Adapter for the connection of a camera to a trinocular microscope	<b>N.A.</b>	Numerical Aperture	<b>W.D.</b>	Working Distance
<b>H(S)WF</b>	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	<b>SLR Kamera</b>	Single-Lens Reflex camera	<b>WF</b>	Wide Field (Field number up to Ø 22 mm for 10x eyepiece)
<b>LWD</b>	Long Working Distance	<b>SWF</b>	Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)		

## Your KERN specialist dealer: