Gem microscope KERN OZG-4



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 | | | | | | | | | |
|----------|------|-------|-----|----|----|------|-------|-------|---------------------------|
| Q | 00 | | Ð | Ö | Q | Q | -• | | 3 _{YEARS} |
| 360° | BINO | TRINO | HAL | IL | TL | ZOOM | 230 V | 1 DAY | WARRANTY |

| Model | Standard configuration | | | | | | |
|---------|------------------------|-------------------|---------------|-------------|--------------|---|--|
| | Tube | Eyepiece | Field of view | Objective | Stand | Illumination | |
| KERN | | | mm | Zoom | | | |
| 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) | |

Gem microscope KERN OZG-4



| OZG 493 | Specificatio | Specifications - Objectives | | | |
|------------------|---------------------|-----------------------------|--|--|--|
| Eyepiece | Magnification | Standard | | | |
| | | 1,0x | | | |
| WF 5x | Total magnification | 3,75x - 18x | | | |
| WF JX | Field of view mm | Ø 26 – 6 | | | |
| | Total magnification | 7,5x-36x | | | |
| HWF 10x | Field of view mm | Ø 28 – 6 | | | |
| WF 15x | Total magnification | 11,25x - 54x | | | |
| WF ISX | Field of view mm | Ø 19-4,5 | | | |
| WE 20- | Total magnification | 15x-72x | | | |
| WF 20x | 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 | | |
| HSWF IUX | Field of view mm | Ø 33 – 5 | | |
| HWF 15x | Total magnification | 11,25x - 75x | | |
| HWF 15X | Field of view mm | Ø 24 - 4,2 | | |
| HSWF 20x | Total magnification | 15x - 100x | | |
| HSWF 20X | Field of view mm | Ø 20 - 3,5 | | |
| HWF 25x | Total magnification | 18,75x - 125x | | |
| П WYF 23X | Field of view mm | Ø 15,8 - 2,4 | | |
| Working distance | 113 mm | | | |

| Model outfit | | Model KERN | | Order number | |
|----------------------|--|------------|---------|--------------|--|
| | - | OZG 493 | OZG 497 | | |
| | WF 5x / Ø 16,2 mm | 00 | | OZB-A4101 | |
| | HWF 10x / Ø 21,5 mm | •• | | OZB-A4106 | |
| | WF 15x / Ø 15 mm | 00 | | OZB-A4103 | |
| | WF 20x / Ø 10 mm | 00 | | OZB-A4104 | |
| Eyepieces | HWF 5x / Ø 23,2 mm | | 00 | OZB-A4112 | |
| | HSWF 10x / Ø 23 mm | | •• | OZB-A4118 | |
| | HWF 15x / Ø 15 mm | | 00 | OZB-A4119 | |
| | HSWF 20x / Ø 14,5 mm | | 00 | OZB-A4120 | |
| | HWF 25x / Ø 11,7 mm | | 00 | OZB-A4121 | |
| | 1x | | 0 | OZB-A4809 | |
| C-Mount | 0,3x | | 0 | OZB-A4810 | |
| | 0,5x | | 0 | 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

KERN Pictograms:



360° rotatable microscope head



Monocular Microscope For the inspection with one eye



Binocular Microscope For the inspection with both eyes

Trinocular Microscope



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ABBE

the additional option for the connection of a camera Abbe Condenser With high numerical aperture for the

For the inspection with both eyes and



Halogen illumination For pictures bright and rich in contrast

concentration and the focusing of light



LED illumination Cold, energy saving and especially long-life illumination



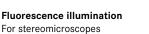
Incident illumination For non-transparent objects



Transmitting illumination For transparent objects



Fluorescence illumination





For direct transmitting of the picture 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 by the pictogram.



Battery operation

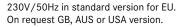
Ready for battery operation. The battery type is specified for each device.



Rechargeable battery pack Rechargeable set.



Mains adapter





Power supply Integrated in balance. 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.



DAYS

Warranty

The warranty period is shown in the pictogram.





Abbreviations

| C-Mount | Adapter for the connection of a camera to a trinocular microscope |
|---------|---|
| H(S)WF | High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses) |
| LWD | Long Working Distance |

Your KERN specialist dealer:

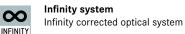
| N.A. | Numerical Aperture | W.D. | Working Distance |
|------|--|------|---|
| | Camera Single-Lens Reflex camera | | Wide Field (Field number up to Ø 22 mm for 10x eyepiece) |
| SWF | Super Wide Field (Field number at least Ø23 mm for 10x eyepiece) | | ,,,,,,,, |



Polarising unit

Phase contrast unit

For a higher contrast



Fluorescence illumination

for compound microscopes

Fluorescence illumination

for compound microscopes

With 100W mercury lamp and filter

With 3W LED illumination and filter



FL-HBO

C

FL-LED

0

PH

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POLAR

Zoom magnification For stereomicroscopes



Parallel optical system For stereomicroscopes, enables fatigue-proof working

Integrated scale Lunn In the eyepiece SCALE





For direct transmitting of the picture to a PC



Integrated USB 3.0 digital camera