





#### **PROFESSIONAL LINE**

## The high-zoom parallel model for the professional user

### Features

- The KERN OZS-5 models are highly professional, very robust but easy to use stereo microscopes with a zoom function operable from both sides for an aboveaverage enlargement range.
- Their qualities, the flexible pillar stand and the optional integral, powerful and long-life LED incident and transmitted illumination make these models especially flexible.
- All models have diopter adjustment on both tubes and are supplied with an adapter, allowing a camera to be fitted.
- The parallel optical system allows work without tiring the eyes and offers a large depth of field. In addition, only very minor refocussing at the zoom enlargement is necessary.
- Furthermore, it provides precise resolution, an extra large field of view and is absolutely true-to-colour.
- These models are optimally suited to quality control, assembly and repair workstations

- in the electronics and semi-conductor industries as well as in biological laboratories and research establishments.
- These models are also ideal for use at workstations in rough working environments, such as training establishments, workshops and in production.
- These models offer the best possible ease of use thanks to their extra large working distance providing a large working surface.
- The multitude of auxiliary objectives, eyepieces, universal stands and additional accessory parts facilitates use in all common and professional stereo microscopy applications.
- One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

#### Technical data

- Optical system: Parallel
- Brightness adjustable
- Magnification ratio: 10:1
- Tube: 45° inclined
- Interpupillary distance: 52 76 mm
- Diopter adjustment (both-sided)
- Packing dimensions
  WxDxH 370x330x385 mm

#### **OZS 573**

• Net weight approx. 6,1 kg

#### 078 574

• Net weight approx. 7,1 kg

Please find detailed information in the following charts.

#### STANDARD























| Model   | Standard configuration |                 |               |           |              |  |  |
|---------|------------------------|-----------------|---------------|-----------|--------------|--|--|
|         | Tube                   | Eyepiece        | Field of view | Objective | Stand        | Illumination                             |  |
| KERN    |                        |                 | mm            | Zoom      |              |  |  |
| OZS 573 | Trinocular             | HWF 10x Ø 22 mm | Ø 27,5 – 2,75 | 0,8x - 8x | Pillar style | -  |  |
| OZS 574 | Trinocular             | HWF 10x Ø 22 mm | Ø 27,5 – 2,75 | 0,8x - 8x | Pillar style | 3W LED (incident); 3W LED (transmitting) |  |



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

| Model outfit                 |  | Model KERN |                 | Order number |               |  |
|------------------------------|--|------------|-----------------|--------------|---------------|--|
|                              |  | OZS 573    | OZS 574         |              |               |  |
|                              | HWF 10x/Ø 22 mm  | ••         | ••              | OZB-A5502    |               |  |
|                              | SWF 15x/Ø 17 mm  | 00         | 00              | OZB-A5504    |               |  |
|                              | SWF 20x/Ø 14 mm  | 00         | 00              | OZB-A5505    |               |  |
| Eyepieces                    | SWF 30x/Ø 9 mm   | 00         | 00              | OZB-A5506    |               |  |
|                              | HWF 10x / Ø 22 mm (reticule 0,1 mm)  | 0          | 0               | OZB-A5511    |               |  |
|                              | SWF 15x / Ø 17 mm (reticule 0,05 mm)   | 0          | 0               | OZB-A5513    |               |  |
|                              | SWF 20x / Ø 14 mm (reticule 0,05 mm)   | 0          | 0               | OZB-A5514    |               |  |
| Plan achromatic<br>objective | 1,0x   | •          | •               | OZB-A5603    |               |  |
|                              | 0,5x   | 0          | 0               | OZB-A5601    |               |  |
| Achromatic<br>objectives     | 0,7x   | 0          | 0               | OZB-A5602    |               |  |
|                              | 1,5x (Only in combination with OZB-A5603)  | 0          | 0               | OZB-A5604    |               |  |
| Trinocular                   | Division 100:0   | •          | •               | OZB-A5401    |               |  |
| beamsplitter                 | Division 50:50   | 0          | 0               | OZB-A5402    |               |  |
|                              | 0,3x   | 0          | 0               | OZB-A5701    |               |  |
|                              | 0,5x   | 0          | 0               | OZB-A5702    |               |  |
|                              | 1,0x   | 0          | 0               | OZB-A5703    |               |  |
| C-Mount                      | 1,0x (reticule)  | 0          | 0               | OZB-A5704    |               |  |
|                              | for SLR cameras (Nikon)  | 0          | 0               | OZB-A5706    |               |  |
|                              | for SLR cameras (Olympus)  | 0          | 0               | OZB-A5707    |               |  |
|                              | for SLR cameras (Canon)  | 0          | 0               | OZB-A5708    |               |  |
| Darkfield attachment         | Darkfield attachment   | 0          | 0               | OBB-A6201    |               |  |
| Object clamp                 | Object clamp   | 0          | 0               | OBB-A6205    |               |  |
| Stands                       | Pillar style, without illumination   | •          |                 |              |               |  |
| Stallus                      | Pillar style, with 3W LED illumination (transmitting + incident)   |            | •               |              |               |  |
|                              | Frosted glass / Ø 94,5 mm  |            | •               | OZB-A5192    |               |  |
| Stage plate                  | Black-white / Ø 94,5 mm  | •          | •               | OZB-A5191    |               |  |
|                              | Glass / Ø 94,5 mm  |            | 0               | OZB-A5190    |               |  |
| Machanical atoms             | Stage size: WxD 188x160 mm, Travel: 76x65 mm, for incident and transmitting illumination   | 0          | 0               | OZB-A5781    |               |  |
| Mechanical stage             | Stage size: WxD 180x175 mm, Travel: 100x86 mm, for incident illumination only  | 0          | 0               | OZB-A5782    |               |  |
| External<br>illumination     | Please find the information about external illumination units in the catalogue from page 68 and on our website www.kern-sohn.com |            |                 |              |               |  |
|                              |  |            | • = Standard co | nfiguration  | <b>O</b> = Op |  |

KERN Optics Catalogue 2015

## **KERN Pictograms:**





360° rotatable microscope head



Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter



Automatic temperature compesation

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

Ø PH Phase contrast unit For a higher contrast

BATT

**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

ACCU

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

**3**<sub>Y</sub>



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

H(S)WF High (Super) Wide Field

(Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

N.A. Numerical Aperture

**SLR Kamera** Single-Lens Reflex camera

**SWF** Super Wide Field

(Field number at least Ø 23 mm

for 10x eyepiece)

W.D. Working Distance

**WF** Wide Field (Field number up to

Ø 22 mm for 10x eyepiece)

## Your KERN specialist dealer:



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Use the above details to contact us if this literature doesn't answer all your questions.

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The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.





