



OSF 430



OSF 435

## EDUCATIONAL LINE

Stereo microscope with robust, ergonomic design, ideal for workshops, schools and training

### Features

- The KERN OSF-4 stands out through its ergonomic construction and its superb arm curved stand. This ensures precise adjustment and focusing of your sample.
- The LED reflected and transmitted illumination included as standard guarantees the very best illumination of your sample.
- As well as very good optical characteristics, its flat working surface means that it offers the highest level of convenience in this class.
- A turnable objective with up to three predefined magnifications is available to make your working procedures quicker and more efficient.
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost.
- Depending on the model, the arm curved stand has a coarse focusing knob (OSF 430, OSF 431) or a coarse and fine focusing knob (OSF 434, OSF 435). The ergonomic shape and the stable mechanism which can be adjusted extremely accurately offer a high level of functionality and enable you to work quickly and efficiently with very little effort.
- A large selection of eyepieces as well as various additional external illumination units are available as accessories.
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery.
- Please find detailed information in the following charts.

### Scope of application

- Training, in vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

### Applications/Samples

- Samples with focus on three-dimensional impression (depth, thickness), e.g. insects, seeds, circuit boards, components

### Technical data

- Optical system: Greenough optics
- Tube 45° inclined
- Interpupillary distance: 55 – 75 mm
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 230×140×340 mm
- Net weight approx. 2,5 kg

#### STANDARD



































Model	Standard configuration						
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination	
<b>KERN</b>							
<b>OSF 430</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/3×	Arm curved	1 W LED (incident); 0,21 W LED (transmitted)	
<b>OSF 431</b>	Binocular	WF 10×/ø 20 mm	ø 20	2×/4×	Arm curved	1 W LED (incident); 0,21 W LED (transmitted)	
<b>OSF 434</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/3×	Arm curved, fine focus	1 W LED (incident); 0,21 W LED (transmitted)	
<b>OSF 435</b>	Binocular	WF 10×/ø 20 mm	ø 20	1×/2×/4×	Arm curved, fine focus	1 W LED (incident); 0,21 W LED (transmitted)	

Eyepiece	Specifications – Objectives				
	Magnification	1×	2×	3×	4×
WF 5×	Total magnification	5×	10×	15×	20×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 10×	Total magnification	10×	20×	30×	40×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 15×	Total magnification	15×	30×	45×	60×
	Field of view mm	∅ 15	∅ 7,5	∅ 5	∅ 3,7
WF 20×	Total magnification	20×	40×	60×	80×
	Field of view mm	∅ 10	∅ 6,5	∅ 4,3	∅ 3,2
Working distance		100 mm	100 mm	100 mm	100 mm

Model outfit		Model KERN				Order number	
		OSF 430	OSF 431	OSF 434	OSF 435		
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○○	○○	○○	○○	OZB-A4101	
	WF 10×/∅ 20 mm	✓✓	✓✓	✓✓	✓✓	OZB-A4102	
	WF 15×/∅ 15 mm	○○	○○	○○	○○	OZB-A4103	
	WF 20×/∅ 10 mm	○○	○○	○○	○○	OZB-A4104	
Auxiliary objective	Soldering protection lens	✓	✓	✓	✓	OZB-A4250	
Stand	Arm curved, with LED illumination (0,21 W transmitted + 1 W incident)	✓	✓				
	Arm curved, incl. fine adjustment, with LED illumination (0,21 W transmitted + 1 W incident)			✓	✓		
Stage plate	Frosted glass/∅ 74,5 mm	✓	✓	✓	✓	OZB-A4813	
	Black-white/∅ 74,5 mm	✓	✓	✓	✓	OZB-A4814	
External illumination	Please find the information about external illumination units in the catalogue from page 81 and on our website <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>						

✓ = Included with delivery

○ = Option

 360°	<b>360° rotatable microscope head</b>	 FL-LED	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	 SD	<b>SD card</b> For data storage
 MONO	<b>Monocular Microscope</b> For the inspection with one eye	 PH	<b>Phase contrast unit</b> For a higher contrast	 SOFTWARE	<b>PC software</b> To transfer the measurements from the device to a PC.
 BINO	<b>Binocular Microscope</b> For the inspection with both eyes	 DF	<b>Darkfield condenser/unit</b> For a higher contrast due to indirect illumination	 ATC	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
 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	 IP	<b>Protection against dust and water splashes IPxx</b> The type of protection is shown by the pictogram.
 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	 BATT	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
 HAL	<b>Halogen illumination</b> For pictures bright and rich in contrast	 ZOOM	<b>Zoom magnification</b> For stereomicroscopes	 RECHARGE	<b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
 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	 230 V	<b>Mains adapter</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 IL	<b>Incident illumination</b> For non-transparent objects	 SCALE	<b>Integrated scale</b> In the eyepiece	 230 V	<b>Power supply</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 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	 1 DAY	<b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
 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	 3 YEARS WARRANTY	<b>Warranty</b> The warranty period is shown in the pictogram.
 FL-HBO	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	 HDMI	<b>HDMI digital camera</b> For direct transmitting of the picture to a display device		

## Abbreviations

<b>C-Mount</b>	Adapter for the connection of a camera to a trinocular microscope	<b>LWD</b>	Long Working Distance	<b>SWF</b>	Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)
<b>FPS</b>	Frames per second	<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)

## Your KERN specialist dealer: