



OSE 416



With white stage plate



With black stage plate

EDUCATIONAL LINE

The small robust model for school, training establishment or workshops

Features

- The KERN OSE-4 is an extremely robust, stable stereo microscope which is easy to use, it is ideal for all conventional applications in schools, workshops and training companies.
- Depending on the model, optional LED reflected illumination as well as transmitted and reflected illumination ensure the very best illumination of your sample.
- Despite its low price it has very good optical characteristics, which enable you to have sharp images over a large field of view.
- A turnable objective with 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.
- A special feature of this adaptable and yet robust microscope series is the stable mechanism of the microscope stand which can be adjusted precisely. It will also impress you with its functionality and ergonomic design.
- 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 WxDxH 230x130x330 mm
- Net weight approx. 2 kg

STANDARD



































Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination
KERN						
OSE 410	Binocular	WF 10x/ø 20 mm	ø 20	1x/3x	Pillar style	-
OSE 411	Binocular	WF 10x/ø 20 mm	ø 20	2x/4x	Pillar style	-
OSE 413	Binocular	WF 10x/ø 20 mm	ø 20	1x/3x	Pillar style	0,21 W LED (incident)
OSE 414	Binocular	WF 10x/ø 20 mm	ø 20	2x/4x	Pillar style	0,21 W LED (incident)
OSE 416	Binocular	WF 10x/ø 20 mm	ø 20	1x/3x	Pillar style	0,21 W LED (incident); 0,21 W LED (transmitted)
OSE 417	Binocular	WF 10x/ø 20 mm	ø 20	2x/4x	Pillar style	0,21 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		57 mm	57 mm	57 mm	57 mm

Model outfit		Model KERN						Order number	
		OSE 410	OSE 411	OSE 413	OSE 414	OSE 416	OSE 417		
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	
Stand	Pillar style, without illumination	✓	✓						
	Pillar style, with 0,21 W LED illumination (incident)			✓	✓				
	Pillar style, with 0,21 W LED illumination (transmission + incident)					✓	✓		
Stage plate	Black-white/∅ 59,5 mm	✓	✓	✓	✓			OZB-A4816	
	Frosted glass/∅ 95 mm					✓	✓	OZB-A4805	
	Black-white/∅ 95 mm					✓	✓	OZB-A4806	
External illumination	Please find the information about external illumination units in the catalogue from page 81 and on our website www.kern-sohn.com								

✓ = Included with delivery

○ = Option

 360°	360° rotatable microscope head	 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 SD	SD card For data storage
 MONO	Monocular Microscope For the inspection with one eye	 PH	Phase contrast unit For a higher contrast	 SOFTWARE	PC software To transfer the measurements from the device to a PC.
 BINO	Binocular Microscope For the inspection with both eyes	 DF	Darkfield condenser/unit For a higher contrast due to indirect illumination	 AUTO ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 TRINO	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	Polarising unit To polarise the light	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 RECHARGE	Battery operation rechargeable Prepared for a rechargeable battery operation
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 TL	Transmitting illumination For transparent objects	 USB 2.0	Integrated USB 2.0 digital camera For direct transmitting of the picture to a PC	 1 DAY	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 FL	Fluorescence illumination For stereomicroscopes	 USB 3.0	Integrated USB 3.0 digital camera For direct transmitting of the picture to a PC	 3 YEARS WARRANTY	Warranty The warranty period is shown in the pictogram.
 FL-HBO	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 HDMI	HDMI digital camera For direct transmitting of the picture to a display device		

Abbreviations

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

Your KERN specialist dealer: