





Trinocular version



Simple polarising attachment

LAB LINE

The high-performance compound microscope for every laboratory with fixed, pre-centred Koehler illumination

Features

- The KERN OBF models are excellent, stable laboratory microscopes for all common routine applications. A central feature of this adaptable, robust microscope series is the stable mechanism which can be adjusted precisely
- · Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen illumination (Philips)
- The fixed, pre-centred and focusable 1,25 Abbe condenser with aperture diaphragm and field diaphragm gives you a simplified Koehler illumination, without having to move the centre
- The large mechanical stage and its specimen holder holds up to two samples at the same time and is quick and easy to focus using a coaxial coarse and fine focusing knob on both sides

- A large selection of eyepieces, objectives and colour filters as well as a darkfield condenser and a simple polarising unit are available to you as accessories
- · A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model
- · Please find detailed information in the following model outfit list

Scope of application

· Haematology, urology, gynaecology, dermatology, pathology, microbiology and parasitology, immunology, oncology, entomology, vets, water analysis and breweries

Applications/Samples

· Translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue)

Technical data

- · Finite optical system (DIN)
- · Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- · Diopter adjustment: One-sided
- · Overall dimensions W×D×H 395×200×380 mm
- · Net weight approx. 6,7 kg

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	win
POLAR	SCALE

Model	Standard configuration					
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OBF 121	Binocular	HWF 10×/Ø 18 mm	Achromatic		6 V/20 W Halogen (transmitted)	•
OBF 122	Binocular	HWF 10×/Ø 18 mm	Plan		6 V/20 W Halogen (transmitted)	0
OBF 123	Binocular	HWF 10×/Ø 18 mm	Plan	4×/10×/40×/100×	3 W LED (transmitted)	0
OBF 131	Trinocular	HWF 10×/Ø 18 mm	Achromatic	4^/10^/40^/100^	6 V/20 W Halogen (transmitted)	0
OBF 132	Trinocular	HWF 10×/Ø 18 mm	Plan		6 V/20 W Halogen (transmitted)	•
OBF 133	Trinocular	HWF 10×/Ø 18 mm	Plan		3 W LED (transmitted)	•

Price reduction



Model outfit				Model	KERN	l	Order number		
	OBF 121	_	OBF 122	OBF 132	OBF 123	OBF 133			
	HWF 10×/Ø 18 mm	√√	√√	√√	√√	√√	√√	OBB-A1403	
Eyepieces	WF 16×/Ø 13 mm	00	00	00	00	00	00	OBB-A1354	
(23,2 mm)	HWF 10×/Ø 18 mm (with Pointer)	0	0	0	0	0	0	OBB-A1348	
	HWF 10×/Ø 18 mm (reticule 0,1 mm) (non-adjustable)	0	0	0	0	0	0	OBB-A1349	
	4×/0,10 W.D. 18,6 mm	1	✓					OBB-A1111	
	10×/0,25 W.D. 6,5 mm	1	√					OBB-A1108	
Achromatic	40×/0,65 (spring) W.D. 0,47 mm	1	1					OBB-A1112	
objectives	100×/1,25 (oil) (spring) W.D. 0,07 mm	1	1					OBB-A1109	
	20×/0,40 (spring) W.D. 1,75 mm	0	0					OBB-A1110	
	60×/0,85 (spring) W.D. 0,1 mm	0	0					OBB-A1113	
	4×/0,10 W.D. 14,5 mm			1	1	✓	1	OBB-A1255	
	10×/0,25 W.D. 5,65 mm			1	1	✓	1	OBB-A1238	
	40×/0,65 (spring) W.D. 0,85 mm			1	1	✓	1	OBB-A1256	
Plan objectives	100×/1,25 (oil) (spring) W.D. 0,07 mm			1	1	1	1	OBB-A1239	
	20×/0,40 (spring) W.D. 1,5 mm			0	0	0	0	OBB-A1249	
	60×/0,85 (spring) W.D. 0,07 mm			0	0	0	0	OBB-A1269	
	100×/1,0 (water) (spring) W.D. 0,18 mm	0	0	0	0	0	0	OBB-A1441	
Binocular tube	Siedentopf 30° inclined/360° rotatable Interpupillary distance 50 – 75 mm (for non-infinity system) Diopter adjustment: One-sided	~	0	~	0	~	0	OBB-A1129	
Trinocular tube	Siedentopf 30° inclined/360° rotatable Interpupillary distance 50 – 75 mm Light distribution 20:80 (for non-infinity system) Diopter adjustment: One-sided	0	~	0	✓	0	~	OBB-A1345	
Mechanical stage	Stage size W×D 145×130 mm Travel 76×52 mm Coaxial coarse and fine focusing knobs, scale: 2 μm Two slide holder	~	✓	~	✓	✓	~		
Condenser	Abbe N.A. 1,25 precentered (aperture diaphragm)	1	✓	√	1	✓	1	OBB-A1103	
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	0	0	0	0	0	0	OBB-A1422	
	6 V/20 W Halogen spare bulb (transmitted)	1	✓	1	1			OBB-A1370	
Illumination	3 W LED illumination system (transmitted) (non-rechargeable)					~	✓		
Polarising unit	Analyser/Polariser	0	0	0	0	0	0	OBB-A1277	
Colour filters for transmitted illumination	Blue (built-in)	1	✓	✓	1	✓	1		
	Green	0	0	0	0	0	0	OBB-A1188	
	Yellow	0	0	0	0	0	0	OBB-A1165	
	Gray	0	0	0	0	0	0	OBB-A1183	
C-Mount	0,47× (focus adjustable)		0		0		0	OBB-A1135	
	1×		0		0		0	OBB-A1142	

✓ = Included with delivery

O = Option

KERN Pictograms:





360° rotatable microscope head



Fluorescence illumination for compound microscopes With 3W LED illumination and filter



WLAN data interface:

For transmitting of the picture to a mobile display device



Monocular Microscope

For the inspection with one eye



Phase contrast unit For a higher contrast



HDMI digital camera

For direct transmitting of the picture to a display device



Binocular Microscope

For the inspection with both eyes



Darkfield condenser/unit

For a higher contrast due to indirect illumination



PC software

To transfer the measurements from the device to a PC.



Trinocular Microscope

For the inspection with both eyes and the additional option for the connection of a camera



Polarising unit

To polarise the light



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Abbe Condenser

With high numerical aperture for the concentration and the focusing of light



Infinity system

Infinity corrected optical system



Protection against dust and water

splashes IPxx The type of protection is shown by the



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



pictogram. **Battery operation**

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



LED illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Battery operation rechargable

Prepared for a rechargable battery operation



Incident illumination

For non-transparent objects



Integrated scale In the eyepiece

230 V

Mains adapter

230V/50Hz in standard version for EU. On request GB, AUS or USA version.



Transmitting illumination

For transparent objects



SD card



Power supply

Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

Fluorescence illumination

For stereomicroscopes



USB 2.0 digital camera

For direct transmitting of the picture to a PC



WF

Package shipment

The time required to manufacture the product internally is shown in days in the pictogram.

FL-HB0

Fluorescence illumination for compound microscopes

With 100W mercury lamp and filter

USB 3.0

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

FPS Frames per second

H(S)WF High (Super) Wide Field

(Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

SLR Kamera Single-Lens Reflex camera

N.A. **Numerical Aperture** **SWF** Super Wide Field

(Field number at least Ø 23 mm

for 10× eyepiece)

Working Distance W.D.

> Wide Field (Field number up to Ø 22 mm for 10× eyepiece)

Your KERN specialist dealer: