Compound microscope KERN OBF-1

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 outfit list
- 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

STANDARD: 360° | BINO | TRINO | ABBE | HAL | LED | 230 V | 1 DAY

OPTION: DF | POLAR | SCALE

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

! ONLY WHILE STOCKS LAST

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Model outfit		Model KERN						Order number	
		OBF 121	OBF 131	OBF 122	OBF 132	OBF 123	OBF 133		
Eyepieces (23,2 mm)	HWF 10×/ø 18 mm	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	OBB-A1403	
	WF 16×/ø 13 mm	○○	○○	○○	○○	○○	○○	OBB-A1354	
	HWF 10×/ø 18 mm (with Pointer)	○	○	○	○	○	○	OBB-A1348	
	HWF 10×/ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	○	○	OBB-A1349	
Achromatic objectives	4×/0,10 W.D. 18,6 mm	✓	✓					OBB-A1111	
	10×/0,25 W.D. 6,5 mm	✓	✓					OBB-A1108	
	40×/0,65 (spring-loaded) W.D. 0,47 mm	✓	✓					OBB-A1112	
	100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm	✓	✓					OBB-A1109	
	20×/0,40 (spring-loaded) W.D. 1,75 mm	○	○					OBB-A1110	
	60×/0,85 (spring-loaded) W.D. 0,1 mm	○	○					OBB-A1113	
Plan objectives	4×/0,10 W.D. 14,5 mm			✓	✓	✓	✓	OBB-A1255	
	10×/0,25 W.D. 5,65 mm			✓	✓	✓	✓	OBB-A1238	
	40×/0,65 (spring-loaded) W.D. 0,85 mm			✓	✓	✓	✓	OBB-A1256	
	100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm			✓	✓	✓	✓	OBB-A1239	
	20×/0,40 (spring-loaded) W.D. 1,5 mm			○	○	○	○	OBB-A1249	
	60×/0,85 (spring-loaded) W.D. 0,07 mm			○	○	○	○	OBB-A1269	
	100×/1,0 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	○	○	OBB-A1441	
Binocular tube	· Siedentopf 30° inclined/360° rotatable · Interpupillary distance 50 – 75 mm (for non-infinity system) · Diopter adjustment: One-sided	✓	○	✓	○	✓	○	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	○	✓	○	✓	○	✓	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)	✓	✓	✓	✓	✓	✓	OBB-A1103	
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	○	○	○	OBB-A1422	
Illumination	20 W Halogen spare bulb (transmitted)	✓	✓	✓	✓			OBB-A1370	
	3 W LED illumination system (transmitted) (non-rechargeable)					✓	✓		
Polarising unit	Analyser/Polariser	○	○	○	○	○	○	OBB-A1277	
Colour filters for transmitted illumination	Blue (built-in)	✓	✓	✓	✓	✓	✓		
	Green	○	○	○	○	○	○	OBB-A1188	
	Yellow	○	○	○	○	○	○	OBB-A1165	
	Grey	○	○	○	○	○	○	OBB-A1183	
C-Mount	0,47× (focus adjustable)				○		○	OBB-A1135	
	0,5× (focus adjustable)		○					OBB-A1515	
	1×				○		○	OBB-A1142	
			○					OBB-A1514	

✓ = Included with delivery ○ = Option

Pictograms

360° rotatable microscope head

Monocular Microscope
For the inspection with one eye

Binocular Microscope
For the inspection with both eyes

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

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

Halogen illumination
For pictures bright and rich in contrast

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

Incident illumination
For non-transparent objects

Transmitting illumination
For transparent objects

Fluorescence illumination
For stereomicroscopes

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

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

Phase contrast unit
For a higher contrast

Darkfield condenser/unit
For a higher contrast due to indirect illumination

Polarising unit
To polarise the light

Infinity system
Infinity corrected optical system

Zoom magnification
For stereomicroscopes

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

SD card
For data storage

USB 2.0 digital camera
For direct transmitting of the picture to a PC

USB 3.0 digital camera
For direct transmitting of the picture to a PC

WLAN data interface
For transmitting of the picture to a mobile display device

HDMI digital camera
For direct transmitting of the picture to a display devic

PC software
To transfer the measurements from the device 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

Battery operation rechargeable
Prepared for a rechargeable battery operation

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

Power supply
Integrated in microscope. 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

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 ⌀ 23 mm for 10× 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 camera**	Single-Lens Reflex camera	**WF**	Wide Field (Field number up to ⌀ 22 mm for 10× eyepiece)

Your KERN specialist dealer: