

Compound microscopes KERN OBL-12 · 13



Trinocular version



Simple polarising attachment

LAB LINE

The flexible laboratory assistant with infinity optical system and fixed, pre-centred Koehler illumination

Features

- The OBL series stands out through its infinity optical unit and is therefore ideally suited for all demanding transmitted illumination applications. The robust and ergonomic stand base guarantees safe and comfortable working
- 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, a simple polarising unit, different phase contrast kits through to HBO and LED fluorescence units 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)

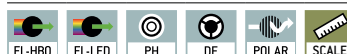
Technical data

- Infinity optical system
- 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



OPTION



Model

Standard configuration

KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination
OBL 125*	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	20 W Halogen (transmitted)
OBL 127	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan		3 W LED (transmitted)
OBL 137	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan		3 W LED (transmitted)

■ *ONLY WHILE STOCKS LAST

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Model outfit		Model KERN			Order number
		OBL 125	OBL 127	OBL 137	
Eyepieces (23,2 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	✓✓	OB-B-A1404
	WF 16×/∅ 13 mm	○ ○	○ ○	○ ○	OB-B-A1354
	HWF 10×/∅ 20 mm (with Pointer)	○	○	○	OB-B-A1448
Infinity E-Plan objectives	4×/0,10 W.D. 12,1 mm	✓	✓	✓	OB-B-A1161
	10×/0,25 W.D. 2,1 mm	✓	✓	✓	OB-B-A1159
	40×/0,65 (spring-loaded) W.D. 0,58 mm	✓	✓	✓	OB-B-A1160
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	✓	OB-B-A1158
	Plan 20×/0,40 (spring-loaded) W.D. 2,41 mm	○	○	○	OB-B-A1250
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○	OB-B-A1270
	Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	OB-B-A1437
Binocular tube	<ul style="list-style-type: none"> • Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm (for infinity system) • Diopter adjustment: One-sided 	✓	✓	○	OB-B-A1578
Trinocular tube	<ul style="list-style-type: none"> • Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 20:80 (for infinity system) • Diopter adjustment: One-sided 	○	○	✓	OB-B-A1580
Mechanical stage	<ul style="list-style-type: none"> • 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)	✓	✓	✓	OB-B-A1103
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	OB-B-A1422
Illumination	20 W Halogen spare bulb (transmitted)	✓			OB-B-A1643
	3 W LED illumination system (transmitted) (non-rechargeable)		✓	✓	
Polarising unit	Analyser/Polariser	○	○	○	OB-B-A1277
Phase contrast units (including PH-condenser and PH-slides)	Single unit with ∞ PH-Plan objective 10×	○	○	○	OB-B-A1215
	Single unit with ∞ PH-Plan objective 20×	○	○	○	OB-B-A1217
	Single unit with ∞ PH-Plan objective 40×	○	○	○	OB-B-A1219
	Single unit with ∞ PH-Plan objective 100×	○	○	○	OB-B-A1213
	When several magnification levels are required, please contact us				
Fluorescence unit	100 W HBO Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○	OB-B-A1153
	3 W LED Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○	OB-B-A1157
Colour filters for transmitted illumination	Blue (built-in)	✓	✓	✓	
	Green	○	○	○	OB-B-A1188
	Yellow	○	○	○	OB-B-A1165
	Grey	○	○	○	OB-B-A1183
C-Mount	0,5× (focus adjustable)			○	OB-B-A1515
	1×			○	OB-B-A1514

✓ = Included with delivery

○ = Option



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



Auto-focus
For automatic control of the focus level



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



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



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



PC software
To transfer the measurements from the device to a PC.



Automatic temperature compensation
For measurements between 10 °C and 30 °C



Protection against dust and water splashes IPxx:
The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013



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



Battery operation rechargeable
Prepared for a rechargeable battery operation



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



Integrated power supply unit
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
FPS	Frames per second
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 camera	Single-Lens Reflex camera
SWF	Super Wide Field (Field number at least \varnothing 23 mm for 10 \times eyepiece)
W.D.	Working Distance
WF	Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)