

Phase contrast microscopes KERN OBL-14 · 15



Mounted phase contrast condenser



Simple PH condenser with 40× PH slide

LAB LINE

High-quality phase contrast microscope – specially pre-configured with a series of options for flexible expansion

Features

- We have developed this series specially for general applications with phase contrast method. In addition, the stable, modular construction system of the OBL series offers many more options
- Depending on the application, there is a choice of models with strong, infinitely dimmable 3W LED or 20W halogen illumination (Philips)
- A special fixed, pre-centred phase contrast condenser as well as field diaphragm give you a simplified Koehler illumination and thereby a powerful phase-contrast display of your sample
- 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, a simple polarising unit as well as further phase contrast 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, Sewage treatment plants, Oncology, entomology, vets, water analysis and breweries

Applications/Samples

- Specially for extremely translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue) with phase contrast

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 146	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan/Plan		3 W LED (transmitted)
OBL 155	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan/Plan	4×/PH10×/PH40×/100×	20 W Halogen (transmitted)
OBL 156	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan/Plan		3 W LED (transmitted)































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Model outfit	Model KERN			Order number	
	OBL 155	OBL 146	OBL 156		
Eyepieces (23,2 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	✓✓	OBB-A1404
	WF 16×/∅ 13 mm	○○	○○	○○	OBB-A1354
	HWF 10×/∅ 20 mm (with Pointer)	○	○	○	OBB-A1448
Infinity E-Plan objectives	4×/0,10 W.D. 12,1 mm	✓	✓	✓	OBB-A1161
	10×/0,25 W.D. 2,1 mm	○	○	○	OBB-A1159
	40×/0,65 (spring-loaded) W.D. 0,58 mm	○	○	○	OBB-A1160
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	✓	OBB-A1158
	Plan 20×/0,40 (spring-loaded) W.D. 2,41 mm	○	○	○	OBB-A1250
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○	OBB-A1270
	Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	OBB-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 	○	✓	○	OBB-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 	✓	○	✓	OBB-A1582
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 	✓	✓	✓	
PH condenser	Abbe N.A. 1,25 precentered, for bright field and phase contrast	✓	✓	✓	OBB-A1398
Phase contrast units	Infinity PH-Plan objective 10×	✓	✓	✓	OBB-A1390
	Infinity PH-Plan objective 20×	○	○	○	OBB-A1391
	Infinity PH-Plan objective 40×	✓	✓	✓	OBB-A1392
	Infinity PH-Plan objective 100×	○	○	○	OBB-A1393
	PH slide 10×	✓	✓	✓	OBB-A1399
	PH slide 20×	○	○	○	OBB-A1400
	PH slide 40×	✓	✓	✓	OBB-A1401
	PH slide 100×	○	○	○	OBB-A1402
	Centering eyepiece	✓	✓	✓	
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	OBB-A1422
Illumination	20 W Halogen spare bulb (transmitted)	✓			OBB-A1643
	3 W LED illumination system (transmitted) (non-rechargeable)		✓	✓	
Colour filters for transmitted illumination	Blue (built-in)	✓	✓	✓	
	Green	✓	✓	✓	OBB-A1188
	Yellow	○	○	○	OBB-A1165
	Grey	○	○	○	OBB-A1183
C-Mount	0,5× (focus adjustable)	○		○	OBB-A1515
	1×	○		○	OBB-A1514

For further optional accessories, please see the list of items for the OBL-12 and OBL-13 series from page 17

✓ = 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)



WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.