



OBN-15: Mounted phase contrast condenser

Infinity PH-Plan objectives (complete set,

for OBN-15 included)



# **Professional Line**

# Professionalism and versatility united in one microscope with Koehler illumination for demanding applications

#### **Features**

- The OBN series stands out because of its unbeatable and consistently high quality and its ergonomic design. The range of modular components means that the OBN series can be individually customised for the professional user
- · Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen transmitted illumination (Philips)
- · In addition the microscope is available as a pre-configured phase contrast microscope, which, through the combination of a professional quintuple condenser wheel, phase contrast condenser and Infinity Plan phase contrast objectives makes it a high-quality, fully-equipped microscope for all applications related to contrast procedures
- · This series has a professional Koehler illumination unit with an adjustable field diaphragm as well as a height-adjustable 1,25 Abbe condenser which can be centred and which has an adjustable aperture diaphragm

- The extremely large mechanical stage with ergonomic, coaxial coarse and fine focusing knob on both sides enables you to adjust and focus your sample rapidly and accurately
- · A wide variety of modular systems, such as, for example, a swing-out condenser, various eyepieces, objectives, colour filters, phase contrast units, a darkfield condenser, a simple polarising unit, Butterfly tube, through to complete fluorescence units are available to you as accessories
- The centring eyepiece for adjusting the phase contrast (OBN-15), a protective dust cover, eye cups as well as multi-lingual user instructions are included with the delivery
- A C-mount adapter is required to connect a camera. 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

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

#### Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined/360° rotatable
- · Diopter adjustment: Both-sided
- · Overall dimensions W×D×H 390×200×400 mm
- · Net weight approx. 9 kg

STANDARD

































#### Model

OBN OBN 132/158 135/159

Standard configuration

KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination
OBN 132	Trinocular	HWF 10×/Ø 20 mm	Infinity Plan	4×/10×/20×/	20 W Halogen (transmitted)
OBN 135	Trinocular	HWF 10×/Ø 20 mm	Infinity Plan	40×/100×	3 W LED (transmitted)
OBN 158	Trinocular	HWF 10×/Ø 20 mm	Infinity Plan	4×/PH10×/PH20×/	20 W Halogen (transmitted)
OBN 159	Trinocular	HWF 10×/Ø 20 mm	Infinity Plan	PH40×/PH100×	3 W LED (transmitted)

		Model KERN		Order number	
	OBN 132	OBN 135	OBN 158	OBN 159	-
HWF 10×/ø 20 mm	44	44	44	<b>4</b> 4	OBB-A1404
WF 16×/ø 13 mm	00	00	00	00	OBB-A1354
4×/0,11 W.D. 12,1 mm	✓	✓	✓	✓	OBB-A1263
10×/0,25 W.D. 4,64 mm	✓	✓	0	0	OBB-A1243
20×/0,40 (spring-loaded) W.D. 2,41 mm	✓	✓	0	0	OBB-A1250
40×/0,66 (spring-loaded) W.D. 0,65 mm	✓	✓	0	0	OBB-A1257
100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm		✓	0	0	OBB-A1240
Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm		0	0	0	OBB-A1270
Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm	0	0	0	0	OBB-A1437
Butterfly 30° inclined/360° rotatable     Interpupillary distance 50 – 75 mm     Light distribution 100:0     Diopter adjustment: Both-sided	✓	✓	✓	✓	
<ul> <li>Stage size W×D 175×145 mm</li> <li>Travel 78×55 mm</li> <li>Coaxial coarse and fine focusing knobs</li> <li>Two slide holder</li> </ul>	✓	✓	✓	✓	
Abbe N.A. 1,25 center-adjustable (aperture diaphragm)	✓	✓	0	0	OBB-A1102
Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)	0	0	0	0	OBB-A1104
N.A. 0,85 – 0,91 (dry, paraboloid)	0	0	0	0	OBB-A1421
N.A. 1,3 (oil, cardioid)	0	0	0	0	OBB-A1538
20 W Halogen spare bulb (transmitted)	✓		✓		OBB-A1643
3 W LED illumination system (transmitted) (non-rechargeable)		✓		✓	
Analyser/Polariser	0	0	0	0	OBB-A1283
Quintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)	0	0	✓	✓	OBB-A1237
Single unit with ∞ PH-Plan objective 10×	0	0		,	OBB-A1214
Single unit with ∞ PH-Plan objective 20×	0	0			OBB-A1216
Single unit with ∞ PH-Plan objective 40×	0	0			OBB-A1218
Single unit with ∞ PH-Plan objective 100×	0	0			OBB-A1212
Centering eyepiece	0	0	✓	✓	
If required, there are several magnification levels, please conta	ct our OPT	ICS-Team			
1×	0	0	0	0	OBB-A1140
0,57× (focus adjustable)	0	0	0	0	OBB-A1136
100 W HBO Epi Fluorescence unit 6-filter disc (UV/V/B/G) including centering objective	0	0	0	0	OBB-A1155
100 W HBO Epi Fluorescence unit, two-hole slide (B/G) including centering objective	0	0	0	0	OBB-A1153
5 W LED Epi Fluorescence unit (B/G) including centering objective	0	0	0	0	OBB-A1156
Blue	✓		✓	✓	
Green	0	0	✓	✓	OBB-A1188
	_				
Yellow	0	0	0	0	OBB-A1165
	WF 16×/Ø 13 mm  4×/0,11 W.D. 12,1 mm  10×/0,25 W.D. 4,64 mm  20×/0,40 (spring-loaded) W.D. 0,65 mm  100×/1,25 (oil) (spring-loaded) W.D. 0,65 mm  100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm  Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm  Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm  Butterfly 30° inclined/360° rotatable	HWF 10×/Ø 20 mm  WF 16×/Ø 13 mm  OO  4×/0,11 W.D. 12,1 mm  10×/0,25 W.D. 4,64 mm  √ 20×/0,40 (spring-loaded) W.D. 0,65 mm  √ 100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm  √ 100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm  ✓ Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm  OP Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm  ○ Butterfly 30° inclined/360° rotatable Interpupillary distance 50 - 75 mm Light distribution 100:0 Diopter adjustment: Both-sided  Stage size W×D 175×145 mm Travel 78×55 mm Coaxial coarse and fine focusing knobs Two slide holder  Abbe N.A. 1,25 center-adjustable (aperture diaphragm)  N.A. 0,85 - 0,91 (dry, paraboloid)  N.A. 1,3 (oil, cardioid)  20 W Halogen spare bulb (transmitted)  Analyser/Polariser  Ouintuple hole turret with 10×/20×/40×/100× Infinity-PH-Plan objectives (complete set)  Single unit with ∞ PH-Plan objective 40×  Single unit with ∞ PH-Plan objective 40×  Single unit with ∞ PH-Plan objective 40×  Osingle unit with ∞ PH-Plan	HWF 10×/Ø 20 mm         V         V           WF 16×/Ø 13 mm         ○         ○           4×/Q,11 W.D. 12,1 mm         ✓         ✓           10×/0,25 W.D. 4,64 mm         ✓         ✓           20×/0,40 (spring-loaded) W.D. 0,65 mm         ✓         ✓           40×/0,66 (spring-loaded) W.D. 0,65 mm         ✓         ✓           100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm         ✓         ✓           Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm         ○         ○           Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm         ○         ○           Interpupillary distance 50 ~ 75 mm         Light distribution 100:0         ○           Butterfly 30° inclined/360° rotatable Interpupillary distance 50 ~ 75 mm         Light distribution 100:0         ○           Butterfly 30° inclined/360° rotatable Interpupillary distance 50 ~ 75 mm         Light distribution 100:0         ○           Stage size W×D 175×145 mm         Travel 78×55 mm         ✓         ✓           Stage size W×D 175×145 mm         Travel 78×55 mm         ✓         ✓           Swing-out condenser N.A. 0,9/0,13 center-adjustable (aperture diaphragm)         ✓         ✓           N.A. 1,25 center-adjustable (laperture diaphragm)         ✓         ✓           N.A. 1,3 (oil, cardioid)         ○	Name	MWF 10×/Ø 20 mm