

# **POLARISING MICROSCOPES**





Bertrand lens, λ Slip, 360° rotatable analyser (removable)



Center-adjustable and turnable polarisation stage



"Swing-Out" condenser

## Professional Line POL

## The flexible and powerful polarising microscope for all professional applications with reflected and transmitted light

#### **Features**

- This device is a professional, fully-equipped polarising microscope, which uses the polarisation of light to analyse minerals, crystals and isotropic materials
- The KERN OKO 185 is a combi variant of LED incident illumination and LED transmitted illumination. A height-adjustable 0.9/0.13 Swing-out Abbe condenser which can be centred for complete Köhler illumination are part of the standard version
- · A 360° revolving stage with 1° division, 6' fine division and locking function is integrated into all series as standard

- · As standard all series are fitted with a complete polarising unit with scale, a Bertrand lens, a  $\lambda + \frac{1}{4}\lambda$  Slip as well as a quartz wedge
- · A large selection of accessories such as, for example, a mechanical stage attachment as well as further objectives for a long working distance and filter units are also available
- · 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. You can select this adapter from the following model outfit list
- · Please find detailed information in the following model outfit list

#### Scope of application

· Mineralogy, texture observations, material testing, observation of crystals

#### Applications/Samples

· More complex samples with polarising properties

### Technical data

- · Infinity optical system
- · Quintuple nosepiece
- Siedentopf 30° inclined
- · Diopter adjustment: Both-sided
- · Overall dimensions W×D×H 500×200×500 mm
- · Net weight approx. 14,5 kg

#### STANDARD



















# Model

KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination
OPO 185	Trinocular	HWF 10×/Ø 20 mm	Infinity Plan	Non-stress 4×/10×/20×/40×/50×	5W LED (incident + transmitted)

Standard configuration

	OPO 185		
HWF 10×/20 mm	✓	OBB-A1591	
HWF 10×/20 mm (reticule 0,1 mm) (adjustable)	✓	OBB-A1592	
4×/0,10 W.D. 12,1 mm	✓	OBB-A1294	
10×/0,25 W.D. 4,64 mm	✓	OBB-A1289	
20×/0,40 (spring-loaded) W.D. 2,41 mm	✓	OBB-A1290	
40×/0,66 (spring-loaded) W.D. 0,65 mm	✓	OBB-A1292	
5×/0,13 W.D. 16,04 mm	0	OBB-A1593	
10×/0,25 W.D. 18,48 mm	0	OBB-A1594	
20×/0,40 W.D. 8,35 mm	0	OBB-A1291	
Semi apochromatic 50×/0,75 W.D. 4,25 mm	✓	OBB-A1642	
100×/0,85 (dry) (spring-loaded) W.D. 3,00 mm	0	OBB-A1595	
<ul> <li>Siedentopf 30° inclined</li> <li>Interpupillary distance 48 – 76 mm</li> <li>Light distribution 100:0</li> </ul>	<b>√</b>		
360° rotatable, lockable	<b>✓</b>		
Insertable, center-adjustable	✓	OBB-A1121	
λ Slip and ¼ λ Slip (combination)	✓	OBB-A1316	
I - IV Class	✓	OBB-A1321	
360° rotatable, center-adjustable, division 1°, Vernier division 6'	1		
Polarising attached mechanical stage	0	OBB-A1337	
N.A. 0,9/0,13 swing-out achromatic condenser (aperture diaphragm)	<b>✓</b>	OBB-A1107	
360° rotatable, lockable	<b>√</b>		
5 W LED spare bulb (transmitted)			
5 W LED spare bulb (incident)	✓	OBB-A1589	
Blue	✓	OBB-A1170	
Green	0	OBB-A1188	
Yellow	0	OBB-A1165	
Grey	0	OBB-A1183	
1×	0	OBB-A1514	
0,75×	0	OBB-A1590	
0,5× (focus adjustable)	0	OBB-A1515	
	HWF 10×/20 mm (reticule 0,1 mm) (adjustable)  4×/0,10 W.D. 12,1 mm  10×/0,25 W.D. 4,64 mm  20×/0,40 (spring-loaded) W.D. 2,41 mm  40×/0,66 (spring-loaded) W.D. 0,65 mm  5×/0,13 W.D. 16,04 mm  10×/0,25 W.D. 18,48 mm  20×/0,40 W.D. 8,35 mm  Semi apochromatic 50×/0,75 W.D. 4,25 mm  100×/0,85 (dry) (spring-loaded) W.D. 3,00 mm  Siedentopf 30° inclined Interpupillary distance 48 – 76 mm Light distribution 100:0  360° rotatable, lockable  Insertable, center-adjustable  A Slip and ¼ A Slip (combination)  I – IV Class  360° rotatable, center-adjustable, division 1°, Vernier division 6'  Polarising attached mechanical stage  N.A. 0,9/0,13 swing-out achromatic condenser (aperture diaphragm)  360° rotatable, lockable  5 W LED spare bulb (transmitted)  5 W LED spare bulb (incident)  Blue  Green  Yellow  Grey  1×  0,75×	HWF 10×/20 mm (reticule 0,1 mm) (adjustable)  4×/0,10 W.D. 12,1 mm  7  10×/0,25 W.D. 4,64 mm  7  20×/0,40 (spring-loaded) W.D. 2,41 mm  7  40×/0,66 (spring-loaded) W.D. 0,65 mm  7  5×/0,13 W.D. 16,04 mm  9  20×/0,40 W.D. 8,35 mm  9  Semi apochromatic 50×/0,75 W.D. 4,25 mm  100×/0,85 (dry) (spring-loaded) W.D. 3,00 mm  9  Siedentopf 30° inclined 10retupipillary distance 48 - 76 mm 10retupipillary distance 48 - 76 mm 1. Light distribution 100·0  1. Siedentopf 30° inclined 1. Interpupillary distance 48 - 76 mm 1. Light distribution 100·0  4. Slip and ¼ A Slip (combination) 7  1 - IV Class 7  360° rotatable, center-adjustable, division 1°, vernier division 6'  Polarising attached mechanical stage 9  N.A. 0,9/0,13 swing-out achromatic condenser (aperture diaphragm)  5 W LED spare bulb (transmitted)  5 W LED spare bulb (transmitted)  5 W LED spare bulb (incident)  Blue  7  7  8  9  9  9  1×  9  9  9  9  1×  9  9  9  9  9  1×  9  9  9  9  9  9  9  9  9  9  1×  9  9  9  9  9  9  9  9  9  9  9  9  9	HWF 10×/20 mm (reticule 0,1 mm) (adjustable)  4×/0,10 W.D. 12,1 mm  ✓ 08B-A1294  10×/0,25 W.D. 4,64 mm  ✓ 08B-A1289  20×/0,40 (spring-loaded) W.D. 2,41 mm  ✓ 08B-A1290  40×/0,66 (spring-loaded) W.D. 0,65 mm  ✓ 08B-A1292  5×/0,13 W.D. 16,04 mm  ○ 08B-A1292  5×/0,13 W.D. 16,04 mm  ○ 08B-A1593  10×/0,25 W.D. 18,48 mm ○ 08B-A1593  10×/0,25 W.D. 18,48 mm ○ 08B-A1594  20×/0,40 W.D. 8,35 mm ○ 08B-A1594  20×/0,40 W.D. 8,35 mm ○ 08B-A1594  20×/0,40 W.D. 8,35 mm ○ 08B-A1594  100×/0,85 (dry) (spring-loaded) W.D. 3,00 mm ○ 08B-A1595  · Siedentopf 30° inclined · Interpullary distance 48 − 76 mm · Light distribution 100:0  360° rotatable, lockable  ✓ 08B-A1121  A Slip and ¼ A Slip (combination)  ✓ 08B-A1316  I - IV Class  ✓ 08B-A1321  360° rotatable, center-adjustable, division 1°, ✓ Vernier division 6°  Polarising attached mechanical stage ○ 08B-A1337  ANA. 0,9/0,13 swing-out achromatic condenser (aperture diaphragm)  360° rotatable, lockable  ✓ 08B-A1107  SBU LED spare bulb (transmitted)  5 W LED spare bulb (incident)  Blue  ✓ 08B-A1188  Yellow ○ 08B-A1188  Yellow ○ 08B-A1181  1× 0 08B-A1183  1× 0 08B-A1183  1× 0 08B-A1181  1× 0 08B-A1181