



Stage OKN



Stage OKO



Illumination unit

PROFESSIONAL LINE MET

The metallurgical model for the flexible and professional user

Features

- The KERN OKN and OKO microscope series are metallurgical microscopes for professional applications.
- They are available with two illumination systems: Standard halogen illumination (50 W) and premium illumination (100 W). They are both suitable for all common routine applications and produce impressive images.
- Additional transmitted light halogen illumination is available for some models.
- These microscope models are equipped with infinity corrected, plan achromatic objectives as standard.
- A nosepiece for up to 5 objectives, a large stage and a complete polarisation kit are standard on the OKN and OKO models.
- The transmitted light models equipped with Koehler illumination have an additional centerable and height adjustable Abbe condenser and an adjustable aperture diaphragm.
- These binocular microscopes are equipped with diopter adjustment and are available with a variety of eyepieces.
- A trinocular head is optionally available, allowing a camera to be fitted.
- The following optional accessories are available: A variety of eyepieces, LWD objectives for long working distances and more.
- One of the central features of this highly variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

Technical data

- Eyepieces: 3x WF 10x18 mm
- Objectives: 5x / 10x / (100x) and LWD 20x / 40x
- Overall dimensions WxDxH 306x200x448 mm
- Net weight basic configuration approx. 12 kg

Please find detailed information in the following charts.

STANDARD



OPTION

Model	Standard configuration		
	Optical system	Tube	Illumination
KERN OKN 175	Infinity	Binocular	12V / 50W Halogen (reflecting)
OKO 176	Infinity	Binocular	12V / 50W Halogen (reflecting) + 6V / 20W (transmitting)
OKN 177	Infinity	Binocular	12V / 100W Halogen (reflecting)
OKO 178	Infinity	Binocular	12V / 100W Halogen (reflecting) + 6V / 20W (transmitting)

Model outfit		Model KERN				Order number	
		OKN 175	OKO 176	OKN 177	OKO 178		
Eyepieces	WF 10x / Ø 18 mm	●●	●●	●●	●●	OBB-A1347	
	WF 10x / Ø 18 mm (reticule 0,1 mm) (adjustable)	●	●	●	●	OBB-A1350	
	WF 5x / Ø 20 mm	○○	○○	○○	○○	OBB-A1355	
	WF12,5x / Ø 14 mm	○○	○○	○○	○○	OBB-A1353	
Infinity Plan objectives (no cover glass)	5x / 0,11 W.D. 6,73 mm	●	●	●	●	OBB-A1268	
	10x / 0,25 W.D. 4,19 mm	●	●	●	●	OBB-A1244	
	20x / 0,40 (spring) W.D. 2,14 mm	○	○	○	○	OBB-A1251	
	40x / 0,65 (spring) W.D. 0,45 mm	○	○	○	○	OBB-A1258	
	100x / 1,25 (oil) (spring) W.D. 0,12 mm	○	●	○	●	OBB-A1241	
Infinity Plan objectives (no cover glass) for long working distance	20x / 0,40 (spring) W.D. 8,35 mm	●	●	●	●	OBB-A1252	
	40x / 0,65 (spring) W.D. 3,90 mm	●	●	●	●	OBB-A1259	
	50x / 0,70 (spring) W.D. 1,95 mm	○	○	○	○	OBB-A1266	
	80x / 0,80 (spring) W.D. 0,85 mm	○	○	○	○	OBB-A1271	
Binocular tube	<ul style="list-style-type: none"> • Siedentopf, 30° inclined, 360° rotatable • Interpupillary distance: 50 – 75 mm • With diopter adjustment (both-sided) 	●	●	●	●	OBB-A1125	
Trinocular tube	<ul style="list-style-type: none"> • Siedentopf, 30° inclined, 360° rotatable • Interpupillary distance: 50 – 75mm • Light distribution: 100:0 • With diopter adjustment (both-sided) 	○	○	○	○	OBB-A1344	
Nosepiece	Quintuple	●	●	●	●		
Mechanical stage for reflection	<ul style="list-style-type: none"> • Stage size: WxD 200x140 mm • Travel: 78x55 mm • Stage fast lowering unit • Stage Up-Down moving range: max. 50 mm 	●		●			
Mechanical stage for transmission	<ul style="list-style-type: none"> • Stage size: WxD 190x140 mm • Travel: 78x55 mm • Coaxial coarse and fine focusing knobs 		●		●		
Stage plate	Plate for sample placement	●	●	●	●		
Glass plate	Glass plate		○		○	OBB-A1378	
Clip	Clip		●		●	OBB-A1134	
Stage micrometer	Specimen slide with scale reticule 0,01 mm	○	○	○	○	OBB-A1224	
Polarising unit	Polarising / Analyser slide	●	●	●	●	OBB-A1287	
Condenser	Abbe N.A. 1,25 (aperture diaphragm)		●		●	OBB-A1380	
Illumination	6V / 20W Halogen (transmitting)		●		●	OBB-A1204	
	12V / 50W Halogen (reflecting)	●	●			OBB-A1207	
	12V / 100W Halogen (reflecting)			●	●	OBB-A1376	
Field diaphragm	Field diaphragm		●		●		
Filter	Blue	○	●	○	●	OBB-A1176	
	Green	○	○	○	○	OBB-A1192	
	Yellow	○	○	○	○	OBB-A1202	
C-Mount	1x	○	○	○	○	OBB-A1361	
	0,57x (focus adjustable)	○	○	○	○	OBB-A1136	

● = Standard configuration

○ = Option

 360°	360° rotatable microscope head	 FL-HB0	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 AUTO ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 MONO	Monocular Microscope For the inspection with one eye	 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 BINO	Binocular Microscope For the inspection with both eyes	 PH	Phase contrast unit For a higher contrast	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 TRINO	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	Polarising unit To polarise the light	 ACCU	Rechargeable battery pack Rechargeable set.
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 DAYS	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 3 YEARS WARRANTY	Warranty The warranty period is shown in the pictogram.
 TL	Transmitting illumination For transparent objects	 USB 2.0	Integrated USB 2.0 digital camera For direct transmitting of the picture to a PC		
 FL	Fluorescence illumination For stereomicroscopes	 USB 3.0	Integrated USB 3.0 digital camera For direct transmitting of the picture to a PC		

Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope	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 Kamera	Single-Lens Reflex camera	WF	Wide Field (Field number up to Ø 22 mm for 10x eyepiece)
LWD	Long Working Distance	SWF	Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)		

Your KERN specialist dealer: