



EDUCATIONAL LINE MET

The robust inverted metallurgical model for your training establishment or workshops

Features

- The KERN OLE and OLF are very easy to use, stable, inverted metallurgical microscopes.
- They are suitable for all common routine applications in training establishments or workshops and produce impressive images.
- Available as mono- or binocular models with a variety of eyepieces.
- These microscopes are equipped with plan achromatic objectives as standard.
- A nosepiece for up to 4 objectives and a large stage are also provided as standard.

- The following optional accessories are available: LWD-objectives for a long working distance as well as various stage inlays and more.
- A powerful 3W LED is available as illumination source.
- One of the central features of this 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: WF 10x18 mm
- Objectives: 10x / 20x / 40x
- Overall dimensions
WxDxH 240x170x311 mm
- Net weight basic configuration approx. 7 kg

Please find detailed information in the following charts.

STANDARD

MONO
 BINO
 LED
 230 V
 1 DAY
 3 YEARS WARRANTY

OPTION





























SCALE

Model	Standard configuration		
	Optical system	Tube	Illumination
KERN			
OLE 161	Achromatic	Monocular	3W LED (reflecting)
OLF 162	Achromatic	Binocular	3W LED (reflecting)

Model outfit		Model KERN		Order number	
		OLE 161	OLF 162		
Eyepieces	WF 10x / Ø 18 mm	●	●●	OBB-A1347	
	WF 12,5x / Ø14 mm	○	○○	OBB-A1353	
	WF 16x / Ø 13 mm	○	○○	OBB-A1354	
	WF 5x / Ø 20 mm	○	○○	OBB-A1355	
	WF 10x / Ø 18 mm (reticule 0,1 mm) (non-adjustable)	○	○○	OBB-A1349	
Plan achromatic objectives	Plan 10x / 0,25	●	●	OBB-A1246	
	Plan 20x / 0,35 (spring)	●	●	OBB-A1253	
	Plan 40x / 0,65 (spring)	●	●	OBB-A1261	
	Plan 100x / 1,25 (spring) (oil)	○	○	OBB-A1242	
	Plan 4x / 0,10	○	○	OBB-A1265	
Infinity Plan achromatic objectives for LWD	PL L 40x / 0,60 W.D. 3,64 mm	○	○	OBB-A1262	
	PL L 50x / 0,70 W.D. 3,01 mm	○	○	OBB-A1267	
	PL L 80x / 0,80 (spring) W.D. 1,08 mm	○	○	OBB-A1272	
Monocular tube	45° inclined	●		OBB-A1228	
Binocular tube	· 45° inclined · With diopter adjustment (one-sided)		●	OBB-A1128	
Nosepiece	Quadplex	●	●		
Mechanical stage	· Stage size: WxD 180x180 mm · Travel: 50x40 mm	●	●		
Extra stage plate	1 (opening Ø 10 mm)	●	●	OBB-A1322	
	2 (opening Ø 20 mm)	●	●	OBB-A1323	
	3 (opening Ø 40 mm)	○	○	OBB-A1324	
Illumination	3W LED illumination system (reflecting)	●	●		
Filter	Blue	●	●	OBB-A1174	
	Green	●	●	OBB-A1190	
	Grey	●	●	OBB-A1184	
Stage micrometer	Specimen slide with scale 0,01 mm	○	○	OBB-A1224	

● = 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: