

Metallurgical inverted microscope KERN OLM-1



Specimen stage and illumination unit



Analyser/Polariser

LAB LINE MET

The inverted metallurgical microscope for professional applications

Features

- The KERN OLM range is part of the range of inverted microscopes and stands out through its design which is ergonomic, robust and extremely stable. This range, with its large working distance is, for example, particularly suitable for surface quality testing of raw materials and finished products in industry
- Strong and continuously adjustable 50W halogen illumination unit ensures the optimum illumination of the materials to be tested
- As standard, the OLM range is fitted with a trinocular eyepiece tube
- A simple polarising unit (analyser and polariser) is included with delivery
- A large mechanical stage is included with delivery as standard. The coarse and fine focusing knob on both sides guarantees optimal adjustment and focusing
- Further options such as, for example, a large selection of objectives can be integrated as accessories
- A dust cover as well as user instructions are included with the delivery
- Please find detailed information in the following model outfit list

Scope of application

- Metallurgy, material testing, quality assurance

Applications/Samples

- Opaque and thick samples, workpieces (surfaces, fold lines, coatings)

Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 271×379×747 mm
- Net weight approx. 12,5 kg

STANDARD



Model	Standard configuration				
	Tube	Eyepiece	Objective quality	Objectives	Illumination
KERN					
OLM 171	Trinocular	HWF 10×/ø 22 mm	Infinity Plan	LWD5×/LWD10×/ LWD20×/LWD50×	50 W Halogen (incident)

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Model outfit		Model KERN	Order number	
		OLM 171		
Eyepieces (30 mm)	HWF 10×/∅ 22 mm (adjustable)	✓	OBB-A 1491	
	HWF 10×/∅ 22 mm (reticule 0,1 mm) (adjustable)	✓	OBB-A 1523	
Infinity Plan achromatic objectives for long working distance	5×/0,13 W.D. 16,04 mm	✓	OBB-A 1525	
	10×/0,25 W.D. 18,48 mm	✓	OBB-A 1526	
	20×/0,40 W.D. 8,35 mm	✓	OBB-A 1527	
	50×/0,70 (spring-loaded) W.D. 1,95 mm	✓	OBB-A 1528	
	80×/0,80 (spring-loaded) W.D. 0,85 mm	○	OBB-A 1530	
	100×/0,85 (dry) W.D. 3,00 mm	○	OBB-A 1531	
Trinocular tube	<ul style="list-style-type: none"> • 30° inclined • Interpupillary distance 48-76 mm • Light distribution 100:0 • Diopter adjustment: Both-sided 	✓		
Mechanical stage	<ul style="list-style-type: none"> • Stage size W×D 210×180 mm • Travel 50×50 mm • Coaxial coarse and fine focusing knobs 	✓		
Illumination	50 W Halogen spare bulb (incident)	✓	OBB-A 1207	
Reflected illumination unit	Polarising unit (Incl. analyser, polariser and colour filter slide)	✓		
Colour filters for transmitted illumination	Blue	✓	OBB-A 1510	
	Green	○	OBB-A 1511	
	Yellow	○	OBB-A 1512	
	Grey	○	OBB-A 1513	
C-Mount	0,5×	○	OBB-A 1515	
	1×	○	OBB-A 1514	

✓ = Included with delivery

○ = Option

Pictograms

360° rotatable microscope head	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	USB 3.0 digital camera For direct transmitting of the picture to a PC
Monocular Microscope For the inspection with one eye	Phase contrast unit For a higher contrast	WLAN data interface For transmitting of the picture to a mobile display device
Binocular Microscope For the inspection with both eyes	Darkfield condenser/unit For a higher contrast due to indirect illumination	HDMI digital camera For direct transmitting of the picture to a display device
Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	Polarising unit To polarise the light	PC software To transfer the measurements from the device to a PC
Abbe Condenser With high numerical aperture for the concentration and the focusing of light	Infinity system Infinity corrected optical system	Automatic temperature compensation For measurements between 10 °C and 30 °C
Halogen illumination For pictures bright and rich in contrast	Zoom magnification For stereomicroscopes	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
LED illumination Cold, energy-saving and especially long-life illumination	Auto-focus For automatic control of the focus level	Battery operation Ready for battery operation. The battery type is specified for each device.
Incident illumination For non-transparent objects	Parallel optical system For stereomicroscopes, enables fatigue-proof working	Battery operation rechargeable Prepared for a rechargeable battery operation
Transmitting illumination For transparent objects	Integrated scale In the eyepiece	Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
Fluorescence illumination for stereomicroscopes	SD card For data storage	Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	USB 2.0 digital camera For direct transmitting of the picture to a PC	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	LWD Long Working Distance	SWF Super Wide Field (Field number at least \varnothing 23 mm for 10 \times eyepiece)
FPS Frames per second	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 camera Single-Lens Reflex camera	WF Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)

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