Metallurgical microscope KERN OKM-1

Illumination unit with filter disc

Stage and objectives

LAB LINE MET

The metallurgical model for the experienced user

Features

- The KERN OKM-1 is an excellent and stable metallurgical reflecting light microscope.
- It is suitable for all common routine applications, producing excellent images thanks to its strong 30 W halogen illumination.
- These microscopes are equipped with infinity corrected, plan achromatic objectives as standard.
- A trinocular head is optionally available, allowing a camera to be fitted.
- A nosepiece for up to four objectives and a large stage are provided as standard.
- The following optional accessories are available: A variety of lenses, LWD objectives for long working distances, plus a complete polarisation kit and more.
- One of the central features of this variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism.

Technical data

- Eyepieces: WF 10x18 mm
- Objectives: 5x / 10x and LWD 20x / 40x
- Overall dimensions WxDxH 240x170x400 mm
- Net weight basic configuration approx. 8 kg

Please find detailed information in the following charts.

STANDARD

360° | BINO | HAL | INFINITY | SCALE | 230 V | 1 DAY | 3 YEARS WARRANTY

OPTION

TRINO | POLAR

Model	Standard configuration			
KERN	Optical system	Tube	Illumination	
OKM 172	Infinity	Binocular	6V / 30W Halogen (reflecting)	

KERN & SOHN GmbH • Ziegelei 1 • 72336 Balingen • Germany • Tel. + 49-[0]7433-9933-0 • Fax + 49-[0]7433-9933-149 • www.kern-sohn.com • info@kern-sohn.com

Metallurgical microscope KERN OKM-1

Model outfit		Model KERN	Order number	
		OKM 172		
Eyepieces	WF 10x / Ø 18 mm	●	OBB-A1347	
	WF 10x / Ø 18 mm (reticule 0,1 mm) (non-adjustable)	●	OBB-A1349	
	WF 5x / Ø 20 mm	○	OBB-A1355	
	WF 12,5x / Ø 14 mm	○	OBB-A1353	
	WF 16x / Ø 13 mm	○	OBB-A1354	
Infinity Plan achromatic objectives (no cover glass)	5x / 0,11 W.D. 12,10 mm	●	OBB-A1268	
	10x / 0,25 W.D. 4,75 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	
Infinity Plan achromatic 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	· Siedentopf, 30° inclined, 360° rotatable · Interpupillary distance: 50 – 75 mm · With diopter adjustment (one-sided)	●	OBB-A1130	
Trinocular tube	· Siedentopf, 30° inclined, 360° rotatable · Interpupillary distance: 50 – 75 mm · Light distribution: 80:20 · With diopter adjustment (one-sided)	○	OBB-A1346	
Nosepiece	Quadplex	●		
Mechanical stage	· Stage size: WxD 200x140 mm · Travel: 76x52 mm · Coaxial coarse and fine focusing knobs	●		
Illumination	6V / 30W Halogen (reflecting)	●	OBB-A1205	
Filter unit	5-filter unit (Blue, Green, Amber, Grey, Empty)	●		
Polarising unit	Analyser / Polariser	○	OBB-A1287	
C-Mount	1x	○	OBB-A1142	
	0,47x (focus adjustable)	○	OBB-A1135	

● = Standard configuration ○ = Option

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KERN Pictograms:

360° rotatable microscope head

Monocular Microscope
For the inspection with one eye

Binocular Microscope
For the inspection with both eyes

Trinocular Microscope
For the inspection with both eyes and the additional option for the connection of a camera

Abbe Condenser
With high numerical aperture for the concentration and the focusing of light

Halogen illumination
For pictures bright and rich in contrast

LED illumination
Cold, energy saving and especially long-life illumination

Incident illumination
For non-transparent objects

Transmitting illumination
For transparent objects

Fluorescence illumination
For stereomicroscopes

Fluorescence illumination for compound microscopes
With 100 W mercury lamp and filter

Fluorescence illumination for compound microscopes
With 3 W LED illumination and filter

Phase contrast unit
For a higher contrast

Polarising unit
To polarise the light

Infinity system
Infinity corrected optical system

Zoom magnification
For stereomicroscopes

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

Integrated USB 2.0 digital camera
For direct transmitting of the picture to a PC

Integrated USB 3.0 digital camera
For direct transmitting of the picture to a PC

Automatic temperature compesation
For measurements between 10 °C and 30 °C

Protection against dust and water splashes IPxx
The type of protection is shown by the pictogram.

Battery operation
Ready for battery operation. The battery type is specified for each device.

Rechargeable battery pack
Rechargeable set.

Mains adapter
230V/50Hz in standard version for EU. On request GB, AUS or USA version.

Power supply
Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

Package shipment
The time required to manufacture the product internally is shown in days in the pictogram.

Warranty
The warranty period is shown in the pictogram.

Abbreviations

C-Mount Adapter for the connection of a camera to a trinocular microscope

H(S)WF High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

N.A. Numerical Aperture

SLR Kamera Single-Lens Reflex camera

SWF Super Wide Field (Field number at least Ø 23 mm for 10x eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to Ø 22 mm for 10x eyepiece)

Your KERN specialist dealer: