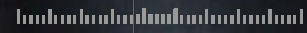


# METALLURGICAL MICROSCOPES

# 2017



PROFESSIONAL MEASURING



# 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 100W mercury lamp and filter



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



**Phase contrast unit**  
For a higher contrast



**Darkfield condenser/unit**  
For a higher contrast due to indirect illumination



**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



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



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



**HDMI digital camera**  
For direct transmitting of the picture to a display device



**SD card**  
For data storage



**PC software**  
To transfer the measurements from the device to a PC.



**Automatic temperature compensation**  
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.



**Battery operation rechargeable**  
Prepared for a rechargeable battery operation



**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

<b>C-Mount</b>	Adapter for the connection of a camera to a trinocular microscope
<b>FPS</b>	Frames per second
<b>H(S)WF</b>	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)
<b>LWD</b>	Long Working Distance
<b>N.A.</b>	Numerical Aperture

<b>SLR camera</b>	Single-Lens Reflex camera
<b>SWF</b>	Super Wide Field (Field number at least $\varnothing$ 23 mm for 10 $\times$ eyepiece)
<b>W.D.</b>	Working Distance
<b>WF</b>	Wide Field (Field number up to $\varnothing$ 22 mm for 10 $\times$ eyepiece)

# Why you should choose a KERN microscope now!

For over 170 years, KERN & SOHN has been synonymous with high precision weighing and measuring technology. This claim is the driving force for the development of our microscope and refractometer ranges.

By working closely with you and our production partners, within 3 years we have developed a complete product range of high-quality microscopes and refractometers.

Thanks to consistent customer focus paired with smart ideas and the latest available technology we are proud to be suppliers of high-quality, durable top microscopes and refractometers, which help you to be as efficient as possible in your daily work.

When developing our microscopes we have concentrated on the very best optical quality and have used only high-quality glass and the latest technologies to achieve this. The high-quality Philips halogen and modern LED illumination produce razor-sharp images with high contrast and which will impress you with their brilliant true-colour display – you must have noticed this yourself.

## Your advantages:

- all mechanical parts have been designed for a long service life
- special attention has been given to the ergonomics of our microscopes, as this allows the user to work for several hours in a comfortable position which does not cause fatigue
- our microscopes are fully-equipped and can be used immediately
- Highlight for 2017: KERN camera software – you will be amazed at how user-friendly and intuitive it is
- and much more...

Use our practical “Check list for microscopes and refractometers”, which may help you to quickly determine specifications for the future instrument. Together with our KERN product specialist you can choose the right product for you.

If there is no suitable product in the standard range, for example, then we will of course configure an individual microscope for you.

Our aim is to develop a market-driven product solution, so with our microscope and refractometer range, the saying holds true: good quality at a competitive price! This is what we stand for and work towards, every day!

With our current 2017 product range you can benefit from improved quality and a clear reduction in price, which we have been able to achieve through more efficient production methods and increased global sales of our microscopes and refractometers and of course we pass this straight on to you

Do you have any questions about our range of microscopes and refractometers?








Your KERN customer consultants are available at any time to help you further.

I hope that you enjoy working efficiently with our KERN Optics products.



Albert Sauter, Managing Director

## Your advantages

<b>fast</b>	<b>reliable</b>	<b>versatile</b>
<ul style="list-style-type: none"><li>• 24 hours delivery service – order today, on its way tomorrow</li><li>• Sales &amp; service hotline from 8:00 am to 5:00 pm</li></ul>	<ul style="list-style-type: none"><li>• 3 years warranty for instruments over € 400,-</li><li>• Certified QM system DIN EN ISO 9001:2008</li></ul>	<ul style="list-style-type: none"><li>• One-stop shopping: from microscope through to refractometer – everything from one supplier</li><li>• Quick as a flash, find the product you want with the “Quick-Finder” at <a href="http://www.kern-sohn.com">www.kern-sohn.com</a></li></ul>
 <b>Order hotline</b> +49 [0] 7433 9933-0	 <b>E-mail order</b> <a href="mailto:info@kern-sohn.com">info@kern-sohn.com</a>	 <b><a href="http://www.kern-sohn.com">www.kern-sohn.com</a></b> Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a clever test weight and balance search engine.
 <b>Service hotline</b> +49 [0] 7433 9933-199	 <b>Fax Order</b> +49 [0] 7433 9933-146	
 <b>Online shop</b> <a href="http://www.kern-sohn.com">www.kern-sohn.com</a>	 <b>Our team of consultants will assist you</b> from Monday to Friday from 8:00 am to 5:00 pm	

## 2 Metallurgical microscopes





Illumination unit with filter disc



Stage and objectives

2

**LAB LINE MET**

The metallurgical reflected light microscope for material testing and surface testing, as well as quality assurance in industry

**Features**

- The KERN OKM is an excellent metallurgical reflected light microscope, e.g. for surface quality testing of raw materials and finished products in industry.
- The strong, continuously dimmable 30 W halogen reflected illumination unit (Philips) ensures excellent, high-contrast images.
- The illumination unit with an integrated 5-slot filter wheel for blue, green, yellow, grey and blank means that you can quickly change the colour filter for different contrast views.
- A large mechanical stage for reflected illumination applications is configured as standard. The coarse and fine focusing knob on both sides guarantees optimal adjustment and focusing of your sample.
- A simple polarising unit (analyser and polariser) is included with delivery.
- A large selection of different eyepieces, objectives and a polarising unit 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 to the trinocular version. You can select this adapter from the following model outfit list.
- Please find detailed information in the following charts.

**Scope of application**

- Metallurgy, material testing, quality assurance

**Applications/Samples**

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

**Technical data**

- Infinity optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 440×200×460 mm
- Net weight basic configuration approx. 8 kg

STANDARD



Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN OKM 172</b>	Binocular	WF 10×/ø 18 mm	Infinity Plan	5×/10×/ LWD 20×/	6 V/30 W Halogen (incident)	<b>1850,-</b>
<b>KERN OKM 173</b> <small>NEW</small>	Trinocular	WF 10×/ø 18 mm	Infinity Plan	LWD40×	6 V/30 W Halogen (incident)	<b>1940,-</b>

NEW New model

Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OKM 172	OKM 173		
<b>Eyepieces</b> (23,2 mm)	WF 10×/∅ 18 mm	✓	✓	OBB-A1347	40,-
	WF 10×/∅ 18 mm (reticule 0,1 mm) (non-adjustable)	✓	✓	OBB-A1349	60,-
	WF 5×/∅ 20 mm	○	○	OBB-A1355	55,-
	WF 12,5×/∅ 14 mm	○	○	OBB-A1353	75,-
	WF 16×/∅ 13 mm	○	○	OBB-A1354	45,-
<b>Infinity Plan achromatic objectives</b> (no cover glass)	5×/0,11 W.D. 12,10 mm	✓	✓	OBB-A1268	105,-
	10×/0,25 W.D. 4,75 mm	✓	✓	OBB-A1244	195,-
	20×/0,40 (spring) W.D. 2,14 mm	○	○	OBB-A1251	265,-
	40×/0,65 (spring) W.D. 0,45 mm	○	○	OBB-A1258	290,-
<b>Infinity Plan achromatic objectives</b> (no cover glass) for long working distance	20×/0,40 W.D. 8,35 mm	✓	✓	OBB-A1252	290,-
	40×/0,65 W.D. 3,90 mm	✓	✓	OBB-A1259	405,-
	50×/0,70 (spring) W.D. 1,95 mm	○	○	OBB-A1266	450,-
	80×/0,80 (spring) W.D. 0,85 mm	○	○	OBB-A1271	500,-
<b>Binocular tube</b>	<ul style="list-style-type: none"> <li>• Siedentopf 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50–75 mm</li> <li>• Diopter adjustment: One-sided</li> </ul>	✓	○	OBB-A1130	
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• Siedentopf 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50–75 mm</li> <li>• Light distribution 80:20</li> <li>• Diopter adjustment: One-sided</li> </ul>	○	✓	OBB-A1346	
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>• Stage size W×D 200×140 mm</li> <li>• Travel 76×52 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> </ul>	✓	✓		
<b>Illumination</b>	6 V/30 W Halogen spare bulb (incident)	✓	✓	OBB-A1372	35,-
<b>Reflected illumination unit</b>	5-filter unit (Blue, Green, Yellow, Gray, Empty)	✓	✓		
	Polarising unit (Incl. analyser and polariser slide)	✓	✓		
<b>C-Mount</b>	1×	○	○	OBB-A1142	100,-
	0,47× (focus adjustable)	○	○	OBB-A1135	160,-

✓ = Included with delivery

○ = Option



Stage OKN



Stage OKO



Illumination unit

**PROFESSIONAL LINE MET**

The fully-equipped reflected and transmitted light microscope for numerous applications in metallurgy

**Features**

- The KERN OKN and OKO series are professional, versatile, metallurgical microscopes, which are used in testing metals and analysing surfaces.
- You can choose between two reflected illumination units: A 50 W halogen reflected illumination unit or a premium illumination unit with stunning 100 W reflected illumination for powerful performance.
- A height-adjustable 1,25 Abbe condenser which can be centred as well as a field diaphragm are available for the transmitted light variants (KERN OKO series), for complete professional Koehler illumination.
- The KERN OKO transmitted illumination variant is fitted with an open, mechanical stage, as standard. On the other hand, the KERN OKN reflected illumination variant has a closed, mechanical stage, as standard.
- A simple polarising unit (analyser and polariser) is included with delivery.
- A large selection of accessories, such as, for example, a Butterfly Tube, eyepieces and further objectives are available for longer working distances.
- 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 charts.

**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/360° rotatable
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 550×200×460 mm
- Net weight basic configuration approx. 14,5 kg

STANDARD



Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>OKN 175</b>	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×	12 V/50 W Halogen (incident)	<b>2470,-</b>
<b>OKO 176</b>	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×/100×	12 V/50 W Halogen (incident) + 6 V/20 W (transmitted)	<b>3040,-</b>
<b>OKN 177 *</b>	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×	12 V/100 W Halogen (incident)	<b>2700,-</b>
<b>OKO 178 *</b>	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×/100×	12 V/100 W Halogen (incident) + 6 V/20 W (transmitted)	<b>3260,-</b>

■ \*ONLY WHILE STOCKS LAST

Model outfit		Model KERN				Order number	Price/piece excl. of VAT ex works €
		OKN 175	OKO 176	OKN 177	OKO 178		
Eyepieces (23,2 mm)	WF 10×/∅ 18 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1347	40,-
	WF 10×/∅ 18 mm (reticule 0,1 mm) (adjustable)	✓	✓	✓	✓	OBB-A1350	90,-
	WF 5×/∅ 20 mm	○	○	○	○	OBB-A1355	55,-
	WF 12,5×/∅ 14 mm	○	○	○	○	OBB-A1353	75,-
	WF 16×/∅ 13 mm	○	○	○	○	OBB-A1354	45,-
Infinity Plan objectives (no cover glass)	5×/0,11 W.D. 6,73 mm	✓	✓	✓	✓	OBB-A1268	105,-
	10×/0,25 W.D. 4,19 mm	✓	✓	✓	✓	OBB-A1244	195,-
	20×/0,40 (spring) W.D. 2,14 mm	○	○	○	○	OBB-A1251	265,-
	40×/0,65 (spring) W.D. 0,45 mm	○	○	○	○	OBB-A1258	290,-
	100×/1,25 (oil) (spring) W.D. 0,12 mm		✓		✓	OBB-A1241	315,-
Infinity Plan objectives (no cover glass) for long working distance	20×/0,40 W.D. 8,35 mm	✓	✓	✓	✓	OBB-A1252	290,-
	40×/0,65 W.D. 3,90 mm	✓	✓	✓	✓	OBB-A1259	405,-
	50×/0,70 (spring) W.D. 1,95 mm	○	○	○	○	OBB-A1266	450,-
	80×/0,80 (spring) W.D. 0,85 mm	○	○	○	○	OBB-A1271	500,-
Trinocular tube	<ul style="list-style-type: none"> <li>• Siedentopf 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50–75mm</li> <li>• Light distribution 100:0</li> <li>• Diopter adjustment: Both-sided</li> </ul>	✓	✓	✓	✓		
	<ul style="list-style-type: none"> <li>• Butterfly 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50–75 mm</li> <li>• Light distribution 100:0</li> <li>• Diopter adjustment: Both-sided</li> </ul>	○	○	○	○	OBB-A1382	520,-
Mechanical stage for reflection	<ul style="list-style-type: none"> <li>• Stage size W×D 200×140 mm</li> <li>• Travel 78×55 mm</li> <li>• Stage fast lowering unit</li> <li>• Stage Up-Down moving range: max. 50 mm</li> </ul>	✓		✓			
Mechanical stage for transmitted illumination	<ul style="list-style-type: none"> <li>• Stage size W×D 175×145 mm</li> <li>• Travel 78×55 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> </ul>		✓		✓		
Stage plate	Plate for sample placement	✓	✓	✓	✓		
Glass plate	Glass plate		○		○	OBB-A1378	40,-
Reflected illumination unit	Polarising unit (Incl. analyser, polariser and blue filter slide)	✓	✓	✓	✓		
Condenser	Abbe N.A. 1,25 (aperture diaphragm)		✓		✓	OBB-A1380	90,-
Illumination	6 V/20 W Halogen spare bulb (transmitted)		✓		✓	OBB-A1370	25,-
	12 V/50 W Halogen spare bulb (incident)	✓	✓			OBB-A1207	19,-
	12 V/100 W Halogen spare bulb (incident)			✓	✓	OBB-A1377	35,-
Polarising unit	for transmitted illumination		✓		✓	OBB-A1470	135,-
Colour filters for transmitted illumination	Blue (fitted to the condenser)		✓		✓		
	Green		○		○	OBB-A1188	19,-
	Yellow		○		○	OBB-A1165	19,-
	Gray		○		○	OBB-A1183	19,-
C-Mount	1×	○	○	○	○	OBB-A1140	100,-
	0,57× (focus adjustable)	○	○	○	○	OBB-A1136	160,-

✓ = Included with delivery

○ = Option



OLE 161



OLF 162

**EDUCATIONAL LINE MET**

The compact inverted metallurgical microscope for details with large workpieces

**Features**

- The inverted series – KERN OLE and KERN OLF – stand out through their design which is compact, stable and ergonomic.
- The strong, continuously dimmable 3 W LED reflected illumination guarantees a permanent optimum illumination of the materials being tested.
- A mechanical stage with additional plate (opening  $\varnothing$  10 mm and  $\varnothing$  20 mm) is included with delivery as standard. The coarse and fine focusing knob on both sides guarantees optimal adjustment and focusing.
- Colour filters (blue, green and grey) are included with delivery.

- A large selection of eyepieces, stage inserts and objectives for a larger working distance are available as accessories.
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery.
- Please find detailed information in the following charts.

**Scope of application**

- Training, metallurgy, material testing, quality assurance

**Applications/Samples**

- Inverted opaque or translucent samples, workpieces (surfaces, fold lines, coatings), inverted viewing

**Technical data**

- Finite optical system (DIN)
- Quadplex nosepiece
- Tube 45° inclined
- Diopter adjustment: One-sided (for binocular models)
- Overall dimensions W×D×H 340×190×330 mm
- Net weight basic configuration approx. 7 kg

STANDARD					OPTION	
MONO	BINO	LED			3 YEARS WARRANTY	KERN

Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN</b>						
<b>OLE 161</b>	Monocular	WF 10×/ϕ 18 mm	Plan	10×/20×/40×	3 W LED (incident)	<b>1310,-</b>
<b>OLF 162</b>	Binocular	WF 10×/ϕ 18 mm	Plan		3 W LED (incident)	<b>1390,-</b>

Model outfit		Model KERN		Order number	Price/piece excl. of VAT ex works €
		OLE 161	OLF 162		
<b>Eyepieces</b> (23,2 mm)	WF 10×/∅ 18 mm	✓	✓✓	OBB-A1347	40,-
	WF 12,5×/∅ 14 mm	○	○○	OBB-A1353	75,-
	WF 16×/∅ 13 mm	○	○○	OBB-A1354	45,-
	WF 5×/∅ 20 mm	○	○○	OBB-A1355	55,-
	WF 10×/∅ 18 mm (reticule 0,1 mm) (non-adjustable)	○	○○	OBB-A1349	60,-
<b>Plan achromatic objectives</b>	10×/0,25 W.D. 8,87 mm	✓	✓	OBB-A1246	140,-
	20×/0,35 (spring) W.D. 1,6 mm	✓	✓	OBB-A1253	220,-
	40×/0,65 W.D. 0,72 mm	✓	✓	OBB-A1261	220,-
	100×/1,25 (spring) (oil) W.D. 0,69 mm	○	○	OBB-A1242	245,-
	5×/0,10 W.D. 14,5 mm	○	○	OBB-A1265	115,-
<b>Plan achromatic objectives for long working distance</b>	40×/0,60 W.D. 3,64 mm	○	○	OBB-A1262	420,-
	50×/0,70 W.D. 3,01 mm	○	○	OBB-A1267	420,-
	80×/0,80 (spring) W.D. 1,08 mm	○	○	OBB-A1272	460,-
<b>Monocular tube</b>	45° inclined	✓		OBB-A1228	
<b>Binocular tube</b>	· Siedentopf 45° inclined · Diopter adjustment: One-sided		✓	OBB-A1128	
<b>Mechanical stage</b>	· Stage size W×D 180×180 mm · Travel 50×40 mm	✓	✓		
<b>Extra stage plate</b>	1 (opening ∅ 10 mm)	✓	✓	OBB-A1322	40,-
	2 (opening ∅ 20 mm)	✓	✓	OBB-A1323	40,-
	3 (opening ∅ 40 mm)	○	○	OBB-A1324	40,-
<b>Illumination</b>	3 W LED illumination system (incident)	✓	✓		
<b>Colour filters for transmitted illumination</b>	Blue	✓	✓	OBB-A1174	19,-
	Green	✓	✓	OBB-A1190	19,-
	Gray	✓	✓	OBB-A1184	19,-

✓ = Included with delivery

○ = Option



Specimen stage and illumination unit



Analyser/Polariser

2

**LAB LINE**

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 charts.

**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					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN</b>						
<b>OLM 171</b>	Trinocular	WF 10×/ø 22 mm	Infinity Plan	LWD5×/LWD10×/ LWD20×/LWD50×	12 V/50 W Halogen (incident)	<b>3250,-</b>

## Metallurgical inverted microscope KERN OLM-1

Model outfit		Model KERN	Order number	Price/piece excl. of VAT ex works €
		OLM 171		
<b>Eyepieces</b> (30 mm)	HWF 10×/∅ 22 mm (adjustable)	✓	OBB-A1491	90,-
	HWF 10×/∅ 22 mm (reticule 0,1 mm) (adjustable)	✓	OBB-A1523	140,-
<b>Infinity Plan achromatic objectives</b> for long working distance	5×/0,13 W.D. 24,23 mm	✓	OBB-A1525	125,-
	10×/0,25 W.D. 18,48 mm	✓	OBB-A1526	185,-
	20×/0,40 W.D. 8,35 mm	✓	OBB-A1527	245,-
	50×/0,70 (spring) W.D. 1,95 mm	✓	OBB-A1528	320,-
	40×/0,65 W.D. 3,90 mm	○	OBB-A1529	280,-
	80×/0,80 (spring) W.D. 0,85 mm	○	OBB-A1530	480,-
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• 30° inclined</li> <li>• Interpupillary distance 48-76 mm</li> <li>• Light distribution 100:0</li> <li>• Diopter adjustment: Both-sided</li> </ul>	✓		
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>• Stage size W×D 210×180 mm</li> <li>• Travel 50x50 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> </ul>	✓		
<b>Illumination</b>	12 V/50 W Halogen spare bulb (incident)	✓	OBB-A1207	19,-
<b>Reflected illumination unit</b>	Polarising unit (Incl. analyser, polariser and colour filter slide)	✓		
<b>Colour filters</b> for transmitted illumination	Blue	✓	OBB-A1510	19,-
	Green	○	OBB-A1511	19,-
	Yellow	○	OBB-A1512	19,-
	Gray	○	OBB-A1513	19,-
<b>C-Mount</b>	0,5×	○	OBB-A1515	185,-
	1×	○	OBB-A1514	120,-

✓ = Included with delivery

○ = Option

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