

4



STEREOMICROSCOPES

Stereo, Stereo-Zoom, Coaxial and Gem Microscopes

4



Side view

Educational Line
Stereo microscope with robust, ergonomic design,
ideal for workshops, schools and training

Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSE-42 has been specially developed for schools and workshops
- The incident and transmitted illumination unit included as standard can be optionally enabled for the very best illumination of your sample. Mobile use is also no problem due to the integrated battery compartment
- Despite its low price it has very good optical characteristics, which enable you to have sharp images over a large field of view
- An turnable objective with predefined magnifications is available to make your working procedures quicker and more efficient

- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- A special feature of this adaptable and yet robust microscope series is the stable mechanism of the microscope stand which can be adjusted precisely. It will also impress you with its functionality and ergonomic design
- A large selection of eyepieces as well as various additional external illumination units are available as accessories

Scope of application

- Training, in vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

Applications/Samples

- Samples with focus on three-dimensional impression (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable
- Tube 45° inclined
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 200×180×300 mm
- Net weight approx. 2 kg

STANDARD

BINO

LED

IL

TL

BATT

230 V

1 DAY

Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective	Stand	Illumination
KERN						
OSE 421	Binocular	WF 10×/ø 20 mm	ø 20	2×/4×	Arm curved	1 W LED (incident); 1 W LED (transmitted)

Eyepiece

Specifications – Objectives

	Magnification	2×	4×
WF 5×	Total magnification	10×	20×
	Field of view mm	∅ 10	∅ 5
WF 10×	Total magnification	20×	40×
	Field of view mm	∅ 10	∅ 5
WF 15×	Total magnification	30×	60×
	Field of view mm	∅ 7,5	∅ 3,7
WF 20×	Total magnification	40×	80×
	Field of view mm	∅ 6,5	∅ 3,2
Working distance		57 mm	57 mm

Model outfit

		Model KERN	Order number
		OSE 42 1	
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	OZB-A4101
	WF 10×/∅ 20 mm	✓ ✓	OZB-A4102
	WF 15×/∅ 15 mm	○ ○	OZB-A4103
	WF 20×/∅ 10 mm	○ ○	OZB-A4104
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	OZB-A4151
Stand	Arm curved, with 1 W LED illumination (transmitted + incident)	✓	
Stage plate	Frosted glass/∅ 59,5 mm	✓	OZB-A4815
	Black-white/∅ 59,5 mm	✓	OZB-A4816
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet		

✓ = Included with delivery

○ = Option

4



Stage plate black



Stage plate white

Educational Line
The practical and robust product for schools,
training centres, the workshop and laboratory

Features

- With its integrated handle as well as its stable arm curved stand, the KERN OSF-43 has been specially developed for schools and workshops
- The LED reflected and transmitted illumination included as standard guarantees the very best, continuously dimmable illumination of your sample
- As well as very good optical characteristics, its ergonomic working surface means that it offers the highest level of convenience in this class
- A turnable objective with three predefined magnifications is available to make your working procedures quicker and more effective
- The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost

- The ergonomic shape and the stable mechanism which can be adjusted extremely accurately offer a high level of functionality and enable you to work quickly and efficiently with very little effort
- A large selection of eyepieces as well as various additional external illumination units 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 model outfit list

Scope of application

- Training, in vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

Applications/Samples

- Samples with focus on three-dimensional impression (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Interpupillary distance 55 - 75 mm
- Diopter adjustment: One-sided
- Overall dimensions WxDxH 230x180x275 mm
- Net weight approx. 2,5 kg

STANDARD

BINO

LED

IL

TL

BATT

230 V

1 DAY

Model	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
			mm			
KERN OSF 438	Binocular	WF 10x/ø 20 mm	ø 20	1x/2x/3x	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)
OSF 439	Binocular	WF 10x/ø 20 mm	ø 20	1x/2x/4x	Arm curved	1 W LED (incident); 0,35 W LED (transmitted)

Eyepiece

Specifications – Objectives

	Magnification	1×	2×	3×	4×
WF 5×	Total magnification	5×	10×	15×	20×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 10×	Total magnification	10×	20×	30×	40×
	Field of view mm	∅ 20	∅ 10	∅ 6,7	∅ 5
WF 15×	Total magnification	15×	30×	45×	60×
	Field of view mm	∅ 15	∅ 7,5	∅ 5	∅ 3,7
WF 20×	Total magnification	20×	40×	60×	80×
	Field of view mm	∅ 10	∅ 6,5	∅ 4,3	∅ 3,2
Working distance		57 mm	57 mm	57 mm	57 mm

Model outfit

		Model KERN		Order number
		OSF 438	OSF 439	
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	○ ○	OZB-A4101
	WF 10×/∅ 20 mm	✓ ✓	✓ ✓	OZB-A4102
	WF 15×/∅ 15 mm	○ ○	○ ○	OZB-A4103
	WF 20×/∅ 10 mm	○ ○	○ ○	OZB-A4104
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	○	OZB-A4151
Stand	Arm curved, incl. handle, with LED illumination (0,35 W transmitted + 1 W incident)	✓	✓	
Stage plate	Frosted glass/∅ 59,5 mm	✓	✓	OZB-A4815
	Black-white/∅ 59,5 mm	✓	✓	OZB-A4816
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet			

✓ = Included with delivery

○ = Option



Lab Line

The affordable and flexible stereo zoom microscope for laboratories, inspection authorities and quality controls

Features

- The products in the KERN OZL-44 series are stereo zoom microscopes, which will impress you with their easy handling, flexibility as well as their stability and economical price
- The LED reflected and transmitted illumination included as standard guarantees the very best illumination of your sample
- As well as excellent optical characteristics and their large working surface, these models offer the highest level of comfort in this class – ideal for training companies, workshops as well as assembly and repair workstations, e.g. in the electronics industry
- As standard this microscope offers you continuous total magnification of 7,5× – 36×

- The OZL-44 series is available as a binocular version. The eyepieces are fixed in the eyepiece tube, to stop them getting damaged or lost
- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- A large selection of eyepieces, external illumination units as well as auxiliary objectives 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 model outfit list

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 4,8:1
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×235×380 mm
- Net weight approx. 5 kg

STANDARD

Model	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
KERN			mm	Zoom		
OZL 445	Binocular	WF 10×/ø 20 mm	ø 26,7 – 5,6	0,75× – 3,6×	Pillar style	1 W LED (incident); 0,35 W LED (transmitted)

OZL 445

Specifications – Objectives

Eyepiece	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,75×	1,5×	2,0×
WF 5×	Total magnification	3,75× – 18×	1,875× – 9×	2,81× – 13,5×	5,625× – 27×	7,5× – 36×
	Field of view mm	∅ 26 – 6	∅ 60 – 13	∅ 32 – 7	∅ 16 – 4	∅ 12,5 – 3
WF 10×	Total magnification	7,5× – 36×	3,75× – 18×	5,625× – 27×	11,25× – 54×	15× – 72×
	Field of view mm	∅ 26,7 – 5,6	∅ 53,3 – 11,1	∅ 35,5 – 7,4	∅ 17,8 – 3,7	∅ 13,3 – 2,8
WF 15×	Total magnification	11,25× – 54×	5,625× – 27×	8,44× – 40,5×	16,875× – 81×	22,5× – 108×
	Field of view mm	∅ 19 – 4,5	∅ 43 – 9,5	∅ 24 – 5,5	∅ 12 – 3	∅ 9,5 – 2
WF 20×	Total magnification	15× – 72×	7,5× – 36×	56,25× – 54×	22,5× – 108×	30× – 144×
	Field of view mm	∅ 12,5 – 3	∅ 28 – 6	∅ 16 – 3,5	∅ 8 – 2	∅ 6 – 1,5
Working distance		86 mm	178 mm	96 mm	42,5 mm	25,5 mm
Maximum sample height		100 mm	10 mm	60 mm	120 mm	135 mm

Model outfit

Model KERN

Order number

OZL 445

Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	OZB-A4101
	WF 10×/∅ 20 mm	✓ ✓	OZB-A4102
	WF 15×/∅ 15 mm	○ ○	OZB-A4103
	WF 20×/∅ 10 mm	○ ○	OZB-A4104
	WF 10×/∅ 20 mm (reticule 0,1 mm)	○	OZB-A4151
Auxiliary objectives	0,5×	○	OZB-A4201
	0,75×	○	OZB-A4202
	1,5×	○	OZB-A4204
	2,0×	○	OZB-A4205
	Soldering protection lens	○	OZB-A4251
Stand	Pillar style, with LED illumination (0,35 W transmitted + 1 W incident)	✓	
Stage plate	Frosted glass/∅ 95 mm	✓	OZB-A4805
	Black-white/∅ 95 mm	✓	OZB-A4806
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet		

✓ = Included with delivery

○ = Option



OZL 464
With standard stand



OZL 465
With ring illumination



OZL 467
With handle

Lab Line

The flexible, affordable all-rounder with zoom function for schools, training companies, inspection authorities and laboratories

Features

- The products in the KERN OZL-46 series are stereo zoom microscopes, which will impress you with their quality, easy handling, flexibility as well as their stability and economical price
- The LED reflected and transmitted illumination included as standard guarantees the very best illumination of your sample
- The highlight of the OZL 465/OZL 466 is the strong, continuously dimmable, integrated LED ring illumination in the objective housing, which ensures uniform, shadow-free illumination. An LED transmitted light variant is also included
- As well as excellent optical characteristics and their large working surface, these models offer the highest level of comfort in this class – ideal for training companies, workshops as well as assembly and repair workstations, e.g. in the electronics industry
- As standard this microscope offers you continuous total magnification of 7×–45×

- The KERN OZL-46 series is available as a binocular or trinocular version
- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- With its integrated handle as well as its stable arm curved stand, the KERN OZL 467/OZL 468 has been specially developed for schools and workshops
- A large selection of eyepieces, external illumination units as well as auxiliary objectives are available as accessories
- 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 model outfit list

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

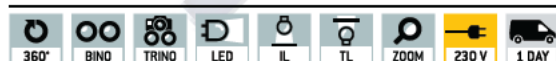
Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution OZL 464/466/468: 100:0
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H
300×240×420 mm
- Net weight approx. 4 kg

STANDARD



Model

Standard configuration

	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination
KERN						
OZL 463	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZL 464	Trinocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZL 465	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZL 466	Trinocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZL 467	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Arm curved	3 W LED (incident); 3 W LED (transmitted)
OZL 468	Trinocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Arm curved	3 W LED (incident); 3 W LED (transmitted)

Eyepiece

Specifications – Objectives

	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,75×	1,5×	2,0×
HSWF 10×	Total magnification	7× – 45×	3,5× – 22,5×	5,3× – 33,8×	10,5× – 67,5×	14× – 90×
	Field of view mm	∅ 28,6 – 4,4	∅ 57,1 – 8,9	∅ 38,1 – 5,9	∅ 19 – 3	∅ 14,3 – 2,2
HWF 15×	Total magnification	10,5× – 67,5×	5,3× – 33,8×	7,9× – 50,6×	15,5× – 101,3×	21× – 135×
	Field of view mm	∅ 21,4 – 3,3	∅ 42,9 – 6,7	∅ 28,5 – 4,4	∅ 14,3 – 2,2	∅ 10,7 – 1,7
HSWF 20×	Total magnification	14× – 90×	7× – 45×	10,5× – 67,5×	21× – 135×	28× – 180×
	Field of view mm	∅ 14,3 – 2,2	∅ 28,6 – 4,4	∅ 19,1 – 2,9	∅ 9,5 – 1,5	∅ 7,1 – 1,1
HWF 25×	Total magnification	17,5× – 112,5×	8,8× – 56,3×	13,1× – 91,9×	26,3× – 168,8×	35× – 225×
	Field of view mm	∅ 12,9 – 2,0	∅ 25,7 – 4,0	∅ 17,2 – 2,7	∅ 8,6 – 1,3	∅ 6,4 – 1,0
Working distance		105 mm	177 mm	120 mm	47 mm	26 mm
Maximum sample height		140 mm	35 mm	80 mm	165 mm	185 mm

Model outfit

Model KERN

Order number

		OZL 463	OZL 464	OZL 465	OZL 466	OZL 467	OZL 468	
Eyepieces (30,0 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	OZB-A4631
	HSWF 15×/∅ 15 mm	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	OZB-A4632
	HWF 20×/∅ 10 mm	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	OZB-A4633
	HSWF 25×/∅ 9 mm	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	OZB-A4634
Auxiliary objectives	0,5×	○	○			○	○	OZB-A4641
	0,75×	○	○			○	○	OZB-A4644
	1,5×	○	○			○	○	OZB-A4642
	2,0×	○	○			○	○	OZB-A4643
	Soldering protection lens	○	○			○	○	OZB-A4645
C-Mount	1× (focus adjustable)		✓		✓		✓	OZB-A4809
	0,3× (focus adjustable)		○		○		○	OZB-A4810
	0,5× (focus adjustable)		○		○		○	OZB-A4811
Eyepiece camera adapter	1,0×; for fitting an eyepiece camera to the trinocular connection of the microscope		○		○		○	OZB-A4863
Stand	Pillar style, with 3 W-LED illumination (transmitted + incident)	✓	✓					
	Pillar style, with 3 W-LED illumination (transmitted)				✓	✓		
	Arm curved, incl. handle, with 3 W-LED illumination (transmitted + incident)						✓	✓
Ring illumination	Integrated into the microscope head as incident illumination				✓	✓		
Stage plate	Frosted glass/∅ 95 mm	✓	✓	✓	✓	✓	✓	OZB-A4670
	Black-white/∅ 95 mm	✓	✓	✓	✓	✓	✓	OZB-A4806
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet							

✓ = Included with delivery

○ = Option



OZL 473

Lab Line

The flexible, affordable all-rounder with flexible incident light for training companies, inspection authorities and laboratories

Features

- The KERN OZL-47 stereo zoom microscope series will impress you with its excellent optical characteristics, easy operation and high level of ergonomic working comfort
- A highlight is the powerful and continuously dimmable integrated LED double gooseneck illumination (incident light), which ensures an individually and quickly adjustable illumination.
- As well as excellent optical characteristics and their large working surface, these models offer the highest level of comfort in this class – ideal for training companies, workshops as well as assembly and repair workstations, e.g. in the electronics industry
- As standard this microscope offers you continuous total magnification of 7×–45×

- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- A large selection of eyepieces, external illumination units as well as auxiliary objectives are available as accessories
- 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 model outfit list

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution OZL 474: 100:0
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 300×240×420 mm
- Net weight approx. 4 kg

STANDARD

Model	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
			mm	Zoom		
KERN						
OZL 473	Binocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident)
OZL 474	Trinocular	HWF 10×/ø 20 mm	ø 28,6 – 4,4	0,7× – 4,5×	Pillar style	3 W LED (incident)

Eyepiece

Specifications – Objectives

	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,75×	1,5×	2×
HSWF 10×	Total magnification	7× – 45×	3,5× – 22,5×	5,3× – 33,8×	10,5× – 67,5×	14× – 90×
	Field of view mm	∅ 28,6 – 4,4	∅ 57,1 – 8,9	∅ 38,1 – 5,9	∅ 19 – 3	∅ 14,3 – 2,2
HWF 15×	Total magnification	10,5× – 67,5×	5,3× – 33,8×	7,9× – 50,6×	15,5× – 101,3×	21× – 135×
	Field of view mm	∅ 21,4 – 3,3	∅ 42,9 – 6,7	∅ 28,5 – 4,4	∅ 14,3 – 2,2	∅ 10,7 – 1,7
HSWF 20×	Total magnification	14× – 90×	7× – 45×	10,5× – 67,5×	21× – 135×	28× – 180×
	Field of view mm	∅ 14,3 – 2,2	∅ 28,6 – 4,4	∅ 19,1 – 2,9	∅ 9,5 – 1,5	∅ 7,1 – 1,1
HWF 25×	Total magnification	17,5× – 122,5×	8,8× – 56,3×	13,1× – 91,9×	26,3× – 168,8×	35× – 225×
	Field of view mm	∅ 12,9 – 2	∅ 25,7 – 4	∅ 17,2 – 2,7	∅ 8,6 – 1,3	∅ 6,4 – 1
Working distance		105 mm	177 mm	120 mm	47 mm	26 mm
Maximum sample height		140 mm	35 mm	80 mm	165 mm	185 mm

Model outfit

Model KERN

Order number

		OZL 473	OZL 474	
Eyepieces (30,0 mm)	HWF 10× / ∅ 20 mm	✓✓	✓✓	OZB-A4631
	HSWF 15× / ∅ 15 mm	○ ○	○ ○	OZB-A4632
	HWF 20× / ∅ 10 mm	○ ○	○ ○	OZB-A4633
	HSWF 25× / ∅ 9 mm	○ ○	○ ○	OZB-A4634
Auxiliary objectives	0,5×	○	○	OZB-A4641
	0,75×	○	○	OZB-A4644
	1,5×	○	○	OZB-A4642
	2,0×	○	○	OZB-A4643
	Soldering protection lens	○	○	OZB-A4645
C-Mount	1× (focus adjustable)		✓	OZB-A4809
	0,3× (focus adjustable)		○	OZB-A4810
	0,5× (focus adjustable)		○	OZB-A4811
Eyepiece camera adapter	1,0×; for fitting an eyepiece camera to the trinocular connection of the microscope	○	○	OZB-A4863
Stand	Pillar style, with 3 W-LED illumination (incident)	✓	✓	
Stage plate	Black-white / ∅ 95 mm	✓	✓	OZB-A4806
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet			

✓ = Included with delivery

○ = Option



Lab Line

Stereo zoom microscope with halogen illumination, for the laboratory, training centres, quality control or agriculture

Features

- The KERN OZL-45 stereo zoom microscope series will impress you with its excellent optical characteristics, easy operation and high level of ergonomic working comfort
- The Halogen incident and transmitted illumination included as standard guarantees the very best illumination of your sample
- The high-quality optics, together with a large working surface offers the highest level of comfort for your applications
- As standard this microscope offers you continuous total magnification of 7,5×–50×
- The KERN OZL-45 series is available as a binocular version

- The pillar stand offers you the highest level of flexibility and the freedom to remove the microscope head and to integrate it into other modular systems, for example into a universal stand
- A large selection of eyepieces, external illumination units as well as auxiliary objectives 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 model outfit list

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable
- Tube 45° inclined
- Magnification ratio: 6,7:1
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×270×460 mm
- Net weight approx. 5 kg

STANDARD

Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination
KERN						
OZL 451	Binocular	HSWF 10×/ø 23 mm	ø 33 – 5	0,75× – 5,0×	Pillar style	10 W Halogen (incident) 10 W Halogen (transmitted)

Eyepiece

Specifications – Objectives

	Magnification	Standard				Auxiliary objectives	
		1,0×	0,5×	0,75×	2,0×		
HWF 5×	Total magnification	3,75× – 25×	1,875× – 12,5×	2,813× – 18,75×	7,5× – 50×		
	Field of view mm	∅ 31 – 4,6	∅ 61,3 – 9,2	∅ 41,3 – 6,1	∅ 16 – 2,5		
HSWF 10×	Total magnification	7,5× – 50×	3,75× – 25×	5,625× – 37,5×	15× – 100×		
	Field of view mm	∅ 33 – 5	∅ 65 – 10	∅ 44 – 6,7	∅ 16 – 2,5		
HWF 15×	Total magnification	11,25× – 75×	5,625× – 37,5×	8,438× – 56,25×	22,5× – 150×		
	Field of view mm	∅ 24 – 4,2	∅ 48 – 8,5	∅ 32 – 5,6	∅ 12 – 2		
HSWF 20×	Total magnification	15× – 100×	7,5× – 50×	11,25× – 75×	30× – 200×		
	Field of view mm	∅ 20 – 3,5	∅ 40 – 7	∅ 26,7 – 4,7	∅ 10 – 1,8		
HWF 25×	Total magnification	18,75× – 125×	9,375× – 62,5×	14,063× – 93,75×	37,5× – 255×		
	Field of view mm	∅ 15,8 – 2,4	∅ 31,5 – 4,8	∅ 24,1 – 3,2	∅ 7,9 – 1,2		
Working distance		113 mm	177 mm	117 mm	35 mm		
Maximum sample height		120 mm	60 mm	90 mm	165 mm		

Model outfit

Model KERN

Order number

OZL 451

Eyepieces (30,0 mm)	HWF 5× / ∅ 23,2 mm	○ ○	OZB-A4112
	HSWF 10× / ∅ 23 mm	✓ ✓	OZB-A4118
	HWF 15× / ∅ 15 mm	○ ○	OZB-A4119
	HSWF 20× / ∅ 14,5 mm	○ ○	OZB-A4120
	HWF 25× / ∅ 11,7 mm	○ ○	OZB-A4121
Auxiliary objectives	0,5×	○	OZB-A4209
	0,75×	○	OZB-A4210
	2,0×	○	OZB-A4206
Stand	Pillar style, with 12 V / 10 W Halogen Illumination (transmitted + incident)	✓	
Stage plate	Frosted glass / ∅ 95 mm	✓	OZB-A4805
	Black-white / ∅ 95 mm	✓	OZB-A4806
Illumination	10 W spare bulb (transmitted + incident)	✓	OZB-A4804
Mechanical stage (Pre-assembling on request)	Stage size W×D 180×155 mm, Travel 75×55 mm, for transmitted and incident illumination	○	OZB-A4605
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet		

✓ = Included with delivery

○ = Option



Dimmable, integrated LED ring illumination

Lab Line

The practical and flexible stereo zoom microscope with integrated LED ring illumination and large zoom range

Features

- The KERN OZL-456 stereo zoom microscope series will impress you with its excellent optical characteristics, easy operation and its integrated LED ring illumination unit
- The highlight of the KERN OZL-456 is the strong, continuously dimmable, integrated LED ring illumination in the objective housing, which ensures uniform, shadow-free illumination. An LED transmitted light variant is also included
- With its built-in, top-quality optics and powerful, integrated LED illumination unit, this model is a special all-rounder for all areas of application
- As standard this microscope offers you continuous total magnification of 7,5× – 50×

- As standard, the KERN OZL-45R series is provided as a binocular version with 10× eyepieces with a field of view with a diameter of 23 mm
- The arm curved stand gives you a large working area as well as a precise adjustment mechanism
- A large selection of eyepieces as well as auxiliary objectives 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 model outfit list

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Incident illumination dimmable
- Tube 45° inclined
- Magnification ratio: 6,7:1
- Interpupillary distance 55 – 75 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 320×275×420 mm
- Net weight approx. 4,5 kg

STANDARD

Model	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
KERN			mm	Zoom		
OZL 456	Binocular	HSWF 10×/ø 23 mm	ø 33 – 5	0,75× – 5,0×	Arm curved	1 W LED (incident); 0,21 W LED (transmitted)

Eyepiece

Specifications – Objectives

	Magnification	Standard 1,0×
HWF 5×	Total magnification	3,75× – 25×
	Field of view mm	∅ 31 – 4,6
HSWF 10×	Total magnification	7,5× – 50×
	Field of view mm	∅ 33 – 5
HWF 15×	Total magnification	11,25× – 75×
	Field of view mm	∅ 24 – 4,2
HSWF 20×	Total magnification	15× – 100×
	Field of view mm	∅ 20 – 3,5
HWF 25×	Total magnification	18,75× – 125×
	Field of view mm	∅ 15,8 – 2,4
Working distance		113 mm
Maximum sample height		45 mm

Model outfit

Model KERN

Order number

OZL 456

Eyepieces (30,0 mm)	HWF 5× / ∅ 23,2 mm	○ ○	OZB-A4112
	HSWF 10× / ∅ 23 mm	✓ ✓	OZB-A4118
	HWF 15× / ∅ 15 mm	○ ○	OZB-A4119
	HSWF 20× / ∅ 14,5 mm	○ ○	OZB-A4120
	HWF 25× / ∅ 11,7 mm	○ ○	OZB-A4121
Stand	Arm curved, with LED illumination (0,21 W transmitted + 1 W incident)	✓	
Stage plate	Frosted glass / ∅ 95 mm	✓	OZB-A4805
	Black-white / ∅ 95 mm	✓	OZB-A4806
Mechanical stage (Pre-assembling on request)	Stage size W×D 180×155 mm, Travel 75×55 mm, for transmitted and incident illumination	○	OZB-A4605
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet		

✓ = Included with delivery

○ = Option



Lab Line

First-class optics and strong illumination combined with a high level of flexibility

Features

- The KERN OZM series is a range of excellent stereo zoom microscopes with above-average optical features
- The ergonomic shape allows a simple, effortless working over a period of several hours
- The extraordinarily strong and continuously dimmable 3 W LED reflected and transmitted illumination ensures a flexible and particularly good level of illumination for your sample
- With its large working distance, an extra large field of view and its brilliant resolution, the KERN OZM provides sharp, high-contrast, colour-true images
- The zoom objective gives you continuous magnification from 7,5× – 45×
- There is a choice of a binocular model as well as a trinocular model for connecting a camera for documentation purposes and for quality reports

- The pillar stand is particularly flexible due to its variable and sturdy adjustment mechanism and therefore enables ergonomic working procedures
- A large selection of eyepieces, (universal) stands, a darkfield kit, external illumination units as well as auxiliary objectives and more are available as accessories
- 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 model outfit list

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control, electronics and semiconductor industry, assembly and repair

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 6,4:1
- Light distribution OZM 543/544: 100:0
- Interpupillary distance 52 – 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×285×440 mm
- Net weight approx. 4,5 kg

STANDARD



OPTION



Model

	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
KERN			mm	Zoom		
OZM 542	Binocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZM 544	Trinocular	HSWF 10×/ø 23 mm	ø 32,8 – 5,1	0,7× – 4,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)

Eyepiece

Specifications – Objectives

	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,7×	1,5×	2×
HSWF 10×	Total magnification	7× – 45×	3,5× – 22,5×	4,9× – 31,5×	10,5× – 67,5×	14× – 90×
	Field of view mm	∅ 32,8 – 5,1	∅ 65,7 – 10,2	∅ 46,9 – 7,3	∅ 21,9 – 3,4	∅ 16,4 – 2,6
SWF 15×	Total magnification	10,5× – 67,5×	5,3× – 33,8×	7,4× – 47,2×	15,8× – 101,3×	21× – 135×
	Field of view mm	∅ 24,3 – 3,8	∅ 48,6 – 7,6	∅ 34,7 – 5,4	∅ 16,2 – 2,5	∅ 12,1 – 1,9
SWF 20×	Total magnification	14× – 90×	7× – 45×	9,8× – 63×	21× – 135×	28× – 180×
	Field of view mm	∅ 20 – 3,1	∅ 40 – 6,2	∅ 28,6 – 4,4	∅ 13,3 – 2,1	∅ 10 – 1,6
SWF 30×	Total magnification	21× – 135×	10,5× – 67,5×	14,7× – 94,5×	31,5× – 202,5×	42× – 270×
	Field of view mm	∅ 12,9 – 2	∅ 25,7 – 4	∅ 18,4 – 2,9	∅ 8,6 – 1,6	∅ 6,4 – 1
Working distance		110 mm	195 mm	145 mm	50 mm	35 mm
Maximum sample height		130 mm	30 mm	65 mm	160 mm	175 mm

Model outfit

Model KERN

Order number

		OZM 542	OZM 544	Order number
Eyepieces (30,0 mm)	HSWF 10×/∅ 23 mm	✓✓	✓✓	OZB-A5503
	SWF 15×/∅ 17 mm	○ ○	○ ○	OZB-A5504
	SWF 20×/∅ 14 mm	○ ○	○ ○	OZB-A5505
	SWF 30×/∅ 9 mm	○ ○	○ ○	OZB-A5506
	HSWF 10×/∅ 23 mm (reticule 0,1 mm)	○	○	OZB-A5512
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	○	OZB-A5513
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	○	OZB-A5514
Achromatic auxiliary objectives	0,5×	○	○	OZB-A5612
	0,7×	○	○	OZB-A5613
	1,5×	○	○	OZB-A5615
	2,0×	○	○	OZB-A5616
	Soldering protection lens	○	○	OZB-A5614
C-Mount	0,3× (focus adjustable)		○	OZB-A5701
	0,5× (focus adjustable)		○	OZB-A5702
	1,0× (focus adjustable)		○	OZB-A5703
	1,0× (with micrometer) only in combination with OZB-A5703		○	OZB-A5704
	For SLR cameras (Nikon)		○	OZB-A5706
	For SLR cameras (Olympus)		○	OZB-A5707
	For SLR cameras (Canon)		○	OZB-A5708
Darkfield unit	Darkfield unit	○	○	OZB-A4601
Object clamp	Object clamp	○	○	OBB-A6205
	Pillar style, without illumination			
Stand	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	✓	
	Please find more stands in the catalogue on page 84 and on the internet			
Stage plate	Frosted glass/∅ 94,5 mm	✓	✓	OZB-A5192
	Black-white/∅ 94,5 mm	✓	✓	OZB-A5191
	Clear glass/∅ 94,5 mm	○	○	OZB-A5190
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for transmitted and incident illumination	○	○	OZB-A5781
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	○	OZB-A5782
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet			

✓ = Included with delivery

○ = Option



Lab Line
Professional and powerful – thanks to its extremely large magnification range, strong illumination and first-class optics

Features

- The KERN OZP stereo zoom microscope stands out through its above-average magnification range and its robust shape which is also ergonomic, it enables effortless, simple working over a period of several hours
- The KERN OZP series is available as a strong, continuously adjustable 3 W LED reflected and transmitted light variant for the very best illumination of your sample
- With its large working distance, an extra large field of view and brilliant resolution, the KERN OZP provides sharp, high-contrast and colour-true images
- As standard this microscope offers you continuous total magnification of 6× - 55×
- There is a choice of a binocular model as well as a trinocular model for connecting a camera for documentation purposes and for quality reports

- The pillar stand is particularly flexible due to its variable and sturdy adjustment mechanism and therefore enables ergonomic working procedures
- A large selection of eyepieces, (universal) stands, a darkfield kit, external illumination units as well as auxiliary objectives and more are available as accessories
- 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 model outfit list

Scope of application

- Zoology and botany, quality control, electronics and semiconductor industry, assembly and repair

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Greenough optics
- Brightness adjustable (separate)
- Tube: 35° inclined
- Magnification ratio: 9,2:1
- Light distribution OZP 557/558: 100:0
- Interpupillary distance 52 – 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 330×285×470 mm
- Net weight approx. 4,5 kg

STANDARD

OPTION

Model	Standard configuration					
	Tube	Eyepiece	Field of view	Objective	Stand	Illumination
KERN			mm	Zoom		
OZP 556	Binocular	HSWF 10×/ø 23 mm	ø 38,3 – 4,2	0,6× – 5,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)
OZP 558	Trinocular	HSWF 10×/ø 23 mm	ø 38,3 – 4,2	0,6× – 5,5×	Pillar style	3 W LED (incident); 3 W LED (transmitted)

Eyepiece

Specifications – Objectives

	Magnification	Standard 1,0×	Auxiliary objectives			
			0,5×	0,7×	1,5×	2×
HSWF 10×	Total magnification	6× – 55×	3× – 27,5×	4,2× – 38,5×	9× – 82,5×	12× – 110×
	Field of view mm	∅ 38,3 – 4,2	∅ 76,7 – 8,4	∅ 54,8 – 6	∅ 25,6 – 2,8	∅ 19,2 – 2,1
SWF 15×	Total magnification	9× – 82,5×	4,5× – 41,25×	6,3× – 57,75×	13,5× – 123,75×	18× – 165×
	Field of view mm	∅ 28,3 – 3,1	∅ 56,7 – 6,2	∅ 40,5 – 4,4	∅ 18,9 – 2,1	∅ 14,2 – 1,5
SWF 20×	Total magnification	12× – 110×	6× – 55×	8,4× – 77×	18× – 165×	24× – 220×
	Field of view mm	∅ 23,3 – 2,5	∅ 46,7 – 5,1	∅ 33,3 – 3,6	∅ 15,6 – 1,7	∅ 11,7 – 1,3
SWF 30×	Total magnification	18× – 165×	9× – 82,5×	12,6× – 115,5×	27× – 247,5×	36× – 330×
	Field of view mm	∅ 15 – 1,6	∅ 30 – 3,3	∅ 21,4 – 2,3	∅ 10 – 1,1	∅ 7,5 – 0,8
Working distance		108 mm	195 mm	145 mm	50 mm	35 mm
Maximum sample height		110 mm	10 mm	45 mm	140 mm	150 mm

Model outfit

Model KERN

Order number

		OZP 556	OZP 558	Order number
Eyepieces (30,0 mm)	HSWF 10×/∅ 23 mm	✓✓	✓✓	OZB-A5503
	SWF 15×/∅ 17 mm	○ ○	○ ○	OZB-A5504
	SWF 20×/∅ 14 mm	○ ○	○ ○	OZB-A5505
	SWF 30×/∅ 9 mm	○ ○	○ ○	OZB-A5506
	HSWF 10×/∅ 23 mm (reticule 0,1 mm)	○	○	OZB-A5512
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	○	OZB-A5513
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	○	OZB-A5514
Achromatic auxiliary objectives	0,5×	○	○	OZB-A5612
	0,7×	○	○	OZB-A5613
	1,5×	○	○	OZB-A5615
	2,0×	○	○	OZB-A5616
	Soldering protection lens	○	○	OZB-A5614
C-Mount	0,3× (focus adjustable)		○	OZB-A5701
	0,5× (focus adjustable)		○	OZB-A5702
	1,0× (focus adjustable)		○	OZB-A5703
	1,0× (with micrometer) only in combination with OZB-A5703		○	OZB-A5704
	For SLR cameras (Nikon)		○	OZB-A5706
	For SLR cameras (Olympus)		○	OZB-A5707
	For SLR cameras (Canon)		○	OZB-A5708
Darkfield unit	Darkfield unit	○	○	OZB-A4601
Object clamp	Object clamp	○	○	OBB-A6205
	Pillar style, without illumination			
Stand	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	✓	
	Please find more stands in the catalogue on page 84 and on the internet			
Stage plate	Frosted glass/∅ 94,5 mm		✓	OZB-A5192
	Black-white/∅ 94,5 mm	✓	✓	OZB-A5191
	Clear glass/∅ 94,5 mm		○	OZB-A5190
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	○	○	OZB-A5781
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	○	OZB-A5782
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet			

✓ = Included with delivery

○ = Option



Professional Line
Professional stereo zoom microscope with parallel optics for excellent images, depth of field, contrast and fatigue-free working

Features

- The KERN OZS series is a special, high-quality stereo zoom microscope with parallel optics for demanding analyses
- The KERN OZS series is available as a strong, continuously adjustable 3 W LED reflected and transmitted light variant for the very best illumination of your sample
- The parallel optical system is a high-quality optical system and provides excellent images with the best contrast, colour and depth of field with fatigue-free working. Refocusing is also only necessary in very few cases when magnifying the zoom
- The continuously adjustable magnification range from 8 to 50 times magnification means that you can work quickly and effectively
- As standard this microscope offers you continuous total magnification of 8× - 80×

- The pillar stand is particularly flexible due to its variable and sturdy adjustment mechanism and therefore enables ergonomic working procedures
- A large selection of eyepieces, (universal) stands, a darkfield kit, external illumination units as well as auxiliary objectives and more are available as accessories
- 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 model outfit list

Scope of application

- In vitro fertilisation, detection of parasites, zoology and botany, tissue preparation, section, quality control, electronics and semiconductor industry, assembly and repair

Applications/Samples

- Samples with focus on three-dimensional impression, zoom with variable magnification (depth, thickness), e.g. insects, seeds, circuit boards, components

Technical data

- Optical system: Parallel optics
- Brightness adjustable (separate)
- Tube 45° inclined
- Magnification ratio: 10:1
- Light distribution 100:0
- Interpupillary distance 52 – 76 mm
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 305×300×540 mm
- Net weight approx. 5,5 kg

STANDARD

360°

TRINO

LED

IL

TL

ZOOM

PARALLEL

230 V

1 DAY

OPTION

SCALE

Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination
KERN						
OZS 574	Trinocular	HWF 10×/ø 22 mm	ø 27,5–2,75	0,8× – 8×	Pillar style	3 W LED (incident); 3 W LED (transmitted)

Eyepiece	Specifications – Objectives				
	Magnification	Standard Plan 1,0×	Achr. objective 0,5×	Achr. objective 0,7×	Achr. objective 1,5× (Auxiliary)
HWF 10×	Total magnification	8× – 80×	4× – 40×	5,6× – 56×	12× – 120×
	Field of view mm	∅ 27,5 – 2,75	∅ 55 – 5,5	∅ 39,3 – 3,93	∅ 18,33 – 1,83
SWF 15×	Total magnification	12× – 120×	6× – 60×	8,4× – 84×	18× – 180×
	Field of view mm	∅ 21,25 – 2,13	∅ 42,5 – 4,25	∅ 30,36 – 3,04	∅ 14,17 – 1,42
SWF 20×	Total magnification	16× – 160×	8× – 80×	11,2× – 112×	24× – 240×
	Field of view mm	∅ 17,5 – 1,75	∅ 35 – 3,5	∅ 25 – 2,5	∅ 11,67 – 1,17
SWF 30×	Total magnification	24× – 240×	12× – 120×	16,8× – 168×	36× – 360×
	Field of view mm	∅ 11,25 – 1,13	∅ 22,5 – 2,25	∅ 16,1 – 1,61	∅ 7,5 – 0,75
Working distance		91 mm	186 mm	135 mm	40 mm
Maximum sample height		100 mm	30 mm	80 mm	125 mm

Model outfit		Model KERN	Order number
		OZS 574	
Eyepieces (30,0 mm)	HWF 10×/∅ 22 mm	✓✓	OZB-A5502
	SWF 15×/∅ 17 mm	○ ○	OZB-A5504
	SWF 20×/∅ 14 mm	○ ○	OZB-A5505
	SWF 30×/∅ 9 mm	○ ○	OZB-A5506
	HWF 10×/∅ 22 mm (reticule 0,1 mm)	○	OZB-A5511
	SWF 15×/∅ 17 mm (reticule 0,05 mm)	○	OZB-A5513
	SWF 20×/∅ 14 mm (reticule 0,05 mm)	○	OZB-A5514
Plan achromatic objective	1,0×	✓	OZB-A5603
Achromatic objectives	0,5×	○	OZB-A5601
	0,7×	○	OZB-A5602
	1,5× Only in combination with OZB-A5603	○	OZB-A5604
Trinocular beamsplitter	Division 100:0	✓	OZB-A5401
	Division 50:50	○	OZB-A5402
C-Mount	0,3× (focus adjustable)	○	OZB-A5701
	0,5× (focus adjustable)	○	OZB-A5702
	1,0× (focus adjustable)	○	OZB-A5703
	1,0× (with micrometer) only in combination with OZB-A5703	○	OZB-A5704
	For SLR cameras (Nikon)	○	OZB-A5706
	For SLR cameras (Olympus)	○	OZB-A5707
	For SLR cameras (Canon)	○	OZB-A5708
Darkfield unit	Darkfield unit	○	OZB-A4601
Object clamp	Object clamp	○	OBB-A6205
Stand	Pillar style, with 3 W LED illumination (transmitted + incident)	✓	
Stage plate	Frosted glass/∅ 94,5 mm	✓	OZB-A5192
	Black-white/∅ 94,5 mm	✓	OZB-A5191
	Clear glass/∅ 94,5 mm	○	OZB-A5190
Mechanical stage (Pre-assembling on request)	Stage size W×D 188×160 mm, Travel 76×65 mm, for incident and transmitted illumination	○	OZB-A5781
	Stage size W×D 180×175 mm, Travel 100×86 mm, for incident illumination only	○	OZB-A5782
External illumination	Please find the information about external illumination units in the catalogue on page 87 and on the internet		

✓ = Included with delivery

○ = Option



Side view

Lab Line
The specialist for jewellers and the gem industry

Features

- The KERN OZG series has been specially developed for jewellers and mineral observations in the gem industry. Precious stones and gems can be checked and handled with this stereo zoom microscope
- You have a choice of a strong halogen transmitted illumination unit as well as halogen reflected and transmitted illumination variants, each with an additional frontal illumination
- As standard this microscope offers you continuous total magnification of 7× - 36×

- As well as very good optical characteristics, this model forms an ideal package with its dark field unit with object clamp which is included in the scope of delivery
- The KERN OZG 493 is fitted with a pole stand which has both integrated bright halogen light units with incident and transmitted illumination, as well as additional front lighting
- 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 model outfit list

Scope of application

- Jewellers and gem industry

Applications/Samples

- Samples with focus on three-dimensional impression (depth, thickness), zoom for variable magnification, special stand for processing workpieces e.g. gems, components, precious stones

Technical data

- Optical system: Greenough optics
- Brightness adjustable
- Tube 45° inclined
- Interpupillary distance 55 - 75 mm
- Diopter adjustment: Both-sided
- Magnification ratio: 5,1:1
- Overall dimensions W×D×H 310×170×350 mm
- Net weight approx. 5 kg

STANDARD

360°

BINO

HAL

IL

TL

ZOOM

230 V

1 DAY

Model	Standard configuration					
	Tube	Eyepiece	Field of view mm	Objective Zoom	Stand	Illumination
KERN						
OZG 493	Binocular	WF 10×/ø 20 mm	ø 26,7 - 5,6	0,7× - 3,6×	Pillar style	10 W Halogen (incident) 10 W Halogen (transmitted) 10 W Fluorescence (front illumination)

OZG 493 Specifications – Objectives		
Eyepiece	Magnification	Standard 1,0×
WF 5×	Total magnification	3,75× – 18×
	Field of view mm	∅ 26 – 6
WF 10×	Total magnification	7,5× – 36×
	Field of view mm	∅ 26,7 – 5,6
WF 15×	Total magnification	11,25× – 54×
	Field of view mm	∅ 19 – 4,5
WF 20×	Total magnification	15× – 72×
	Field of view mm	∅ 12,5 – 3
Working distance		86 mm

Model outfit		Model KERN	Order number
		OZG 493	
Eyepieces (30,5 mm)	WF 5×/∅ 16,2 mm	○ ○	OZB-A4101
	WF 10×/∅ 20 mm	✓ ✓	OZB-A4102
	WF 15×/∅ 15 mm	○ ○	OZB-A4103
	WF 20×/∅ 10 mm	○ ○	OZB-A4104
Darkfield unit	Darkfield unit	✓	OZB-A4601
Object clamp	Object clamp (steel wire)	✓	OZB-A4604
Stand	Pillar style, with 12 V/10 W Halogen (transmitted + incident) and 10 W Fluorescent illumination (front)	✓	
Stage plate	Frosted glass/∅ 95 mm	✓	OZB-A4805
	Black-white/∅ 95 mm	✓	OZB-A4806
Illumination	10 W spare bulb (transmitted + incident)	✓	OZB-A4804

✓ = Included with delivery

○ = Option



IN THE HERE AND NOW



Today the company is in the eighth generation of its story, and is wholly informed and up to speed: with products which can be networked and tailor-made for you, specialised software and a fully-automated high-bay warehouse. The only way in which we will be able to continue to write this success story is with ongoing innovation, further development and sustainable management.

Digital and interconnected

Nowadays it is becoming increasingly common for measuring and weighing data to be transferred directly from the balance or measuring device to the computer for processing. Weighing, counting and measuring results are shown in stock entries and on delivery notes. We are taking this development into account through products which can be integrated into company networks in a simple and straightforward manner. And the accompanying software is also becoming more important, to meet individual customer requirements.

Made to measure

Our range now covers around 5,000 products and a myriad of services. Nevertheless, there are often requests for an individual, tailor-made solution. Our Customized Solution Service (CUSOS) will develop this for you at our premises in Balingen. In our development department at our Balingen site, market feedback and ideas are also fed into our product development which go above and beyond individual customer requests.

Highly automated, quick service for customers

A 25 metre high (3 metres of which are underground) and 22 × 90 metre wide, fully-automated high-bay warehouse ensures a high level of availability and rapid dispatch of products all around the world. It accommodates approx. 80,000 packages and 3,500 pallets. On a daily basis, between 500 and 800 packages and between 30 and 50 pallets leave the warehouse. It was built in 2014, and will soon reach its limits, however.

180 YEARS

since 1844

KERN & SOHN



Martin Sauter, Senior Managing Director



Albert Sauter, Managing Director

Sustainable

We are already heating and cooling our modern industrial buildings in a largely climate-neutral way using geothermal power. The work on the roof of our high-bay warehouse is now complete and our photovoltaic system has been successfully installed. By doing this we have reached a significant milestone in our sustainability strategy.

With an impressive output of 244.36 kWp the system could power 50 to 60 family homes. The solar module's innovative east/west orientation enables the system to make optimum use of the solar energy. This not only saves considerable costs, but also significantly reduces CO₂ emissions. We are proud to have made another step in the direction of creating a greener and more sustainable future.



We focus on using recyclable materials in our packaging. By creating attractive and secure jobs, we are also making an important contribution to strengthening the economic power of the region.

Our story started over 250 years ago and it continues to move forward. Go back to page 4 to find out more about our history and look to the future with us on page 112!