

## 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

STANDARI	)						
Q	00	Ð	Ö	0	0	-	
360°	BINO	LED		TI	700M	230 V	1 DAY

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

Magnification	Standard	Auxiliary objectives				
	1,0×	0,5×	0,75×	1,5×	2,0×	
Total magnification	3,75× - 18×	1,875× - 9×	2,81× - 13,5×	5,625× - 27×	7,5×-36×	
Field of view mm	Ø 26 - 6	Ø 60 – 13	Ø 32-7	Ø 16-4	Ø 12,5 - 3	
Total magnification	7,5× - 36×	3,75× - 18×	5,625× - 27×	11,25× – 54×	15×-72×	
Field of view mm	Ø 26,7 – 5,6	Ø 53,3 – 11,1	Ø 35,5 – 7,4	Ø 17,8 – 3,7	Ø13,3 - 2,8	
Total magnification	11,25× - 54×	5,625× – 27×	8,44× - 40,5×	16,875×-81×	22,5× - 108×	
Field of view mm	Ø 19 - 4,5	Ø 43 – 9,5	Ø 24 – 5,5	Ø 12-3	Ø 9,5 - 2	
Total magnification	15× - 72×	7,5×-36×	56,25× - 54×	22,5× - 108×	30× - 144×	
Field of view mm	Ø 12,5 - 3	Ø 28 – 6	Ø 16-3,5	Ø 8 – 2	Ø 6 – 1,5	
Working distance		178 mm	96 mm	42,5 mm	25,5 mm	
height	100 mm	10 mm	60 mm	120 mm	135 mm	
	Total magnification Field of view mm	1,0×Total magnification $3,75 \times -18 \times$ Field of view mm $\emptyset \ 26 - 6$ Total magnification $7,5 \times -36 \times$ Field of view mm $\emptyset \ 26,7 - 5,6$ Total magnification $11,25 \times -54 \times$ Field of view mm $\emptyset \ 19 - 4,5$ Total magnification $15 \times -72 \times$ Field of view mm $\emptyset \ 12,5 - 3$ 86 mm	1,0×         0,5×           Total magnification         3,75×-18×         1,875×-9×           Field of view mm         Ø 26-6         Ø 60-13           Total magnification         7,5×-36×         3,75×-18×           Field of view mm         Ø 26,7-5,6         Ø 53,3-11,1           Total magnification         11,25×-54×         5,625×-27×           Field of view mm         Ø 19-4,5         Ø 43-9,5           Total magnification         15×-72×         7,5×-36×           Field of view mm         Ø 12,5-3         Ø 28-6           86 mm         178 mm	1,0×         0,5×         0,75×           Total magnification $3,75 \times - 18 \times$ $1,875 \times - 9 \times$ $2,81 \times - 13,5 \times$ Field of view mm $\emptyset$ 26 - 6 $\emptyset$ 60 - 13 $\emptyset$ 32 - 7           Total magnification $7,5 \times - 36 \times$ $3,75 \times - 18 \times$ $5,625 \times - 27 \times$ Field of view mm $\emptyset$ 26,7 - 5,6 $\emptyset$ 53,3 - 11,1 $\emptyset$ 35,5 - 7,4           Total magnification $11,25 \times - 54 \times$ $5,625 \times - 27 \times$ $8,44 \times - 40,5 \times$ Field of view mm $\emptyset$ 19 - 4,5 $\emptyset$ 43 - 9,5 $\emptyset$ 24 - 5,5           Total magnification $15 \times - 72 \times$ $7,5 \times - 36 \times$ $56,25 \times - 54 \times$ Field of view mm $\emptyset$ 12,5 - 3 $\emptyset$ 28 - 6 $\emptyset$ 16 - 3,5           Field of view mm $\emptyset$ 12,5 - 3 $\emptyset$ 28 - 6 $\emptyset$ 16 - 3,5	1,0×         0,5×         0,75×         1,5×           Total magnification         3,75×-18×         1,875×-9×         2,81×-13,5×         5,625×-27×           Field of view mm         Ø 26-6         Ø 60-13         Ø 32-7         Ø 16-4           Total magnification         7,5×-36×         3,75×-18×         5,625×-27×         11,25×-54×           Field of view mm         Ø 26,7-5,6         Ø 53,3-11,1         Ø 35,5-7,4         Ø 17,8-3,7           Total magnification         11,25×-54×         5,625×-27×         8,44×-40,5×         16,875×-81×           Field of view mm         Ø 19-4,5         Ø 43-9,5         Ø 24-5,5         Ø 12-3           Total magnification         15×-72×         7,5×-36×         56,25×-54×         22,5×-108×           Field of view mm         Ø 12,5-3         Ø 28-6         Ø 16-3,5         Ø 8-2           86 mm         178 mm         96 mm         42,5 mm	

Model outfit		Model KERN	Order number
		OZL 445	
	WF 5×/ø 16,2 mm	00	OZB-A4101
	WF 10×/Ø 20 mm	<b>√</b> √	OZB-A4102
Eyepieces (30,5 mm)	WF 15×/Ø 15 mm	00	OZB-A4103
,	WF 20×/Ø 10 mm	00	OZB-A4104
	WF 10×/Ø 20 mm (reticule 0,1 mm)	0	OZB-A4151
	0,5×	0	OZB-A4201
	0,75×	0	OZB-A4202
Auxiliary objectives	1,5×	0	OZB-A4204
	2,0×	0	OZB-A4205
	Soldering protection lens	0	OZB-A4251
Stand	Pillar style, with LED illumination (0,35 W transmitted + 1 W incident)	<b>√</b>	
Stage plate	Frosted glass/Ø 95 mm	✓	OZB-A4805
Stage plate	Black-white/Ø 95 mm	✓	OZB-A4806

✓ = Included with delivery

O = Option