

# Stereomicroscope I/b

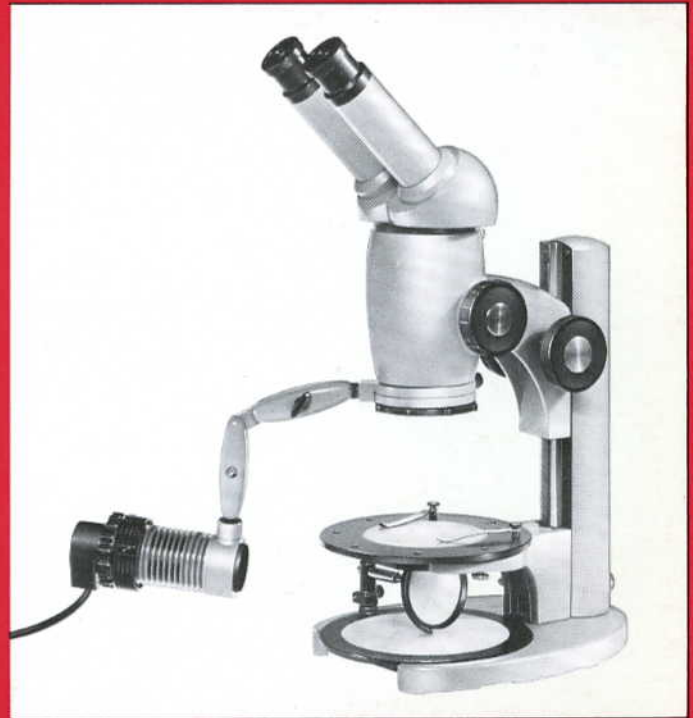
with triple quick changer

# Stereo zoom microscope IV/b



**Stereomicroscope I/b  
with triple quick changer**

The instrument is designed on the Greenough principle and equipped with three objective pairs. Rapid and smooth change between the magnifications 2 $\times$ , 4 $\times$  and 8 $\times$  with a knob. The working distance is always 56 mm, which offers sufficient space for manipulations under the microscope even at highest magnification.



**Stereo zoom microscope IV/b**

The instrument is equipped with a 0.8 ... 5 $\times$  zoom system (zoom ratio 1 : 6). With the wide-angle, high-eyepoint eyepieces 10 $\times$ /25 the magnification can be continuously varied between 5 $\times$  and 80 $\times$ . The free working distance is always 84 mm; it can be changed to 127 mm with the auxiliary lens 0.5 $\times$  and to 17 mm with the auxiliary lens 2 $\times$ .

# Stepwise or continuous magnification

## Stereomicroscope I/b

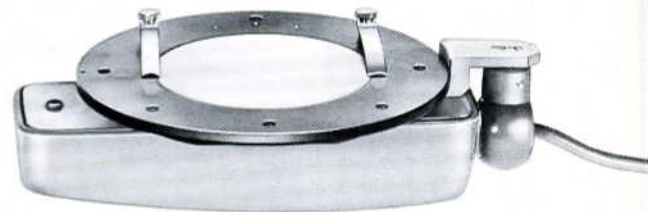
Basic equipment.  
Rotatable binocular tube for any desired viewing direction.  
Higher total magnifications by exchange of eyepieces.



Three pairs of objectives mounted on a drum for easy changeover.



The plain circular stage (47 52 20) for the stand type F can be inserted into the stage carrier for transmitted-light examinations.



Swing-in diffuse illuminator for transmitted light (49 50 57); screwed in below the plain circular stage.



For transmitted-light examinations the light is directed to the specimen by the plano-concave mirror of the transillumination insert (47 52 63 - 9901).

ZEISS stereomicroscopes enjoy world renown, above all because of great optics which ensure large fields of view, high resolution, excellent depth of field and three-dimensional perception, and precision-crafted

mechanics which ensure easy operation and long life.

The applications of ZEISS stereomicroscopes are manifold and include industry - where they are applied for inspection and

control purposes - zoology, botany and medicine, mineralogy, gemmology, criminalistics, numismatics, and philately; they have also proved their worth in the restoration of paintings.



# ation change for easy observatio

## Stereo zoom mic



Diffuse illuminator for reflected and transmitted light (49 50 58).



6 V 15 W low-voltage filament lamp (49 50 53) for reflected and transmitted light.

### Basic equipment.

The binocular viewing tube can be exchanged, e.g. for photographic equipment. For viewing from either side of the microscope, the tube can be mounted in a position rotated through 180°.



With a knob the magnification can be continuously varied between 0.8 $\times$  and 5 $\times$ . The magnification range is subdivided into intervals of 1.25; the corresponding magnifications are engraved on the knob.

The extensive line of ZEISS stereomicroscopes also comprises the type 02 with fixed 2 $\times$  magnification, the type I with seven exchangeable objective pairs, and the zoom type III with a zooming range

from 1 $\times$  to 4 $\times$ .  
(For more details see catalog 41-600).

# tion and exact detail recognition

## microscope IV/b

For photomicrography the binocular viewing tube is exchanged for the photo tube (47 50 81) with adapter ring (47 60 02). There are camera attachments for 35 mm and  $4 \times 5 \frac{7}{9} \times 12$  cm, either with mechanical shutter and electrical exposure meter or with electronic shutter.



The drawing tube (47 46 22) is mounted on the Stereomicroscope IV/b between microscope body and viewing tube. The drawing surface is reflected into the viewing tube and is viewed together with the specimen.



Transilluminator with light path control (49 50 51). Aperture iris diaphragms for brightness adjustment.

The two 6 V 15 W filament lamps can be adjusted to the convergent beam paths in the microscope. Auxiliary lens IV/1b for Stereomicroscope IV/b (47 52 72). Auxiliary lens III for Stereomicroscope I/b (47 52 70).



## Stereomicroscope I/b



The total magnification can be varied in addition by exchanging the eyepieces

Objective magnification/ aperture	Working distance mm		Eyepiece magnification/ field-of-view number				
			4×/30	10×/20	W 10×/25 Br	W 16×/16 Br	25×/10
2/0.05	56	magnification	8×	20×	20×	32×	50×
		object field mm	15	10	12.5	8	5
4/0.08	56	magnification	16×	40×	40×	64×	100×
		object field mm	7.5	5	6.25	4	2.5
8/0.12	56	magnification	32×	80×	80×	128×	200×
		object field mm	3.75	2.5	3.1	2	1.25

W=wide-angle eyepiece

Br=high-eyepoint eyepiece

### Stereomicroscope I/b

Recommended equipment for reflected and transmitted-light examinations (illustration see front cover page)

Stereomicroscope I/b  
with triple quick changer for the objectives  
2/0.05 - 4/0.08 - 8/0.12

Stand type F with focusing drive

Stage carrier\*

Plain circular stage with exchangeable central part, one glass plate and two stage clips

Transillumination insert with plano-concave mirror\*

Wide-angle, high-eyepoint eyepieces W 10×/25 Br (2 pcs.)

Eyecups (2 pcs.)

Dust cover

**Cat.No. 495005**

\* These items are not required for reflected-light examinations.



## Stereo zoom microscope IV/b

Eyepiece magnification/ field-of-view number	Objective combination	Magnification ranges	Object-field dia. (mm)
4×/30	+ auxiliary lens 0.5×	1.6 ... 10×	75 ... 12
	zoom system only	3.2 ... 20×	37.5 ... 6
	+ auxiliary lens 2×	6.4 ... 40×	18.8 ... 3
10×/20	+ auxiliary lens 0.5×	4 ... 25×	50 ... 8
	zoom system only	8 ... 50×	25 ... 4
	+ auxiliary lens 2×	16 ... 100×	12.5 ... 2
W 10×/25 Br	+ auxiliary lens 0.5×	4 ... 25×	62.5 ... 10
	zoom system only	8 ... 50×	31 ... 5
	+ auxiliary lens 2×	16 ... 100×	15.6 ... 2.5
W 16×/16	+ auxiliary lens 0.5×	6.4 ... 40×	40 ... 6.4
	zoom system only	12.4 ... 80×	20 ... 3.2
	+ auxiliary lens 2×	25.6 ... 160×	10 ... 1.6
25×/10	+ auxiliary lens 0.5 ×	10 ... 63×	25 ... 4
	zoom system only	20 ... 125×	12.5 ... 2
	+ auxiliary lens 2×	40 ... 250×	6.2 ... 1
Working distances:	127 mm with auxiliary lens 0.5× 84 mm with zoom system only 17 mm with auxiliary lens 2×		

W=wide-angle eyepiece

Br=high-eyepoint eyepiece

### Stereo zoom microscope IV/b

Recommended equipment for reflected and transmitted-light examinations (illustration see front cover page)

Stereomicroscope IV/b with zoom system 0.8 ... 5×

Binocular viewing tube

Main objective  $f = 100$  mm

Stand type F with focusing drive

Stage carrier\*

Plain circular stage with exchangeable central part, one glass plate and two stage clips

Transillumination insert with plano-concave mirror\*

Wide-angle, high-eyepoint eyepiece W 10×/25 Br (2 pcs.)

Eyecups (2 pcs.)

Dust cover

**Cat. No. 49 50 32**

\* These items are not required for reflected-light examinations.