

Stemi DV4

Stereomicroscopes



The Essentials in Focus



We make it visible.

For Education and Routine in Science and Industry



The fruit of the cocklebur “uses” hooks to attach itself to animals’ furs, which then disperse its seeds.



Brilliant images and easy to use microscope functions make microscopy lessons a genuine pleasure for students and teachers alike.

Stemi DV4 in the classroom



On a circuit board, residues of fluxing agents can be clearly identified between the contacts.



High-quality optics and a variable LED illumination in a compact unit are important criteria when it comes to tasks in industrial quality control.

Stemi DV4 with tilting mechanism being used in quality control



Chicken embryos in transmitted-light darkfield



Thanks to true-color images, combined with the possibility of switching between and mixing reflected and transmitted light, rapid and precise diagnoses can be achieved in biological laboratories.

Stemi DV4 in a developmental biology laboratory



Applying protective lacquer to a plaster model in a dental laboratory



A fiberoptic reflected light spot illuminator integrated into the body of the Stemi DV4 SPOT ensures that specimens are always well illuminated – whatever the position and direction of observation.

Stemi DV4 SPOT on stand U in a dental laboratory

The Essentials in Focus

The innovative nature of this stereomicroscope can be seen not only in the color and unique, compact design of the instrument, but also in its attractive price – a result of state-of-the-art production and assembly technologies.

Sturdy, hard-wearing technology, very easy operation of all microscope functions and no compromises whatsoever in the definition and brilliance of the microscopic images – that is the best way to describe the Stemi DV4 stereomicroscopes from Carl Zeiss.



The pancratic system, as the heart of the stereomicroscope, has a decisive influence on the optical performance of the overall system.

The Stemi DV4 is the first instrument in its class with a mechanically corrected zoom system, a feature that was previously only incorporated into stereomicroscopes in higher price categories. The result: needle-sharp images across the entire zoom range.





***Stemi DV4 stereomicroscope
with sample carousel 16***

A range of well-chosen accessories make the Stemi DV4 an even more attractive option for a whole range of applications. Thanks to the sample carousel 16, up to sixteen different specimens can be positioned under the microscope safely, quickly and extremely easily.





Stemi DV4 SPOT stereomicroscope

The fiberoptic cold-light illuminator additionally integrated into the microscope body of the Stemi DV4 ensures that the object field is fully illuminated at all times. The SPOT reflected light irradiating almost vertically on the specimen, provides a shadow-free, high contrast illumination.

Stemi DV4 stereomicroscope

The patented zoom system of the Stemi DV4 (Double Lens Vario, zoom factor 4) delivers images that are needle-sharp and, thanks to rigorous stray-light minimization, brilliant and rich in contrast. Across the entire magnification range, from 8x to 32x and across the whole field of view.



Stand C LED: Combine Illumination Modes for Outstanding Results

As good results in microscopy depend on efficient illumination, we have equipped the stand with a modern LED illuminator.

You have a choice between the following standard features:

- reflected-light brightfield
- transmitted-light brightfield
- mixed light

In addition, there is an option for:

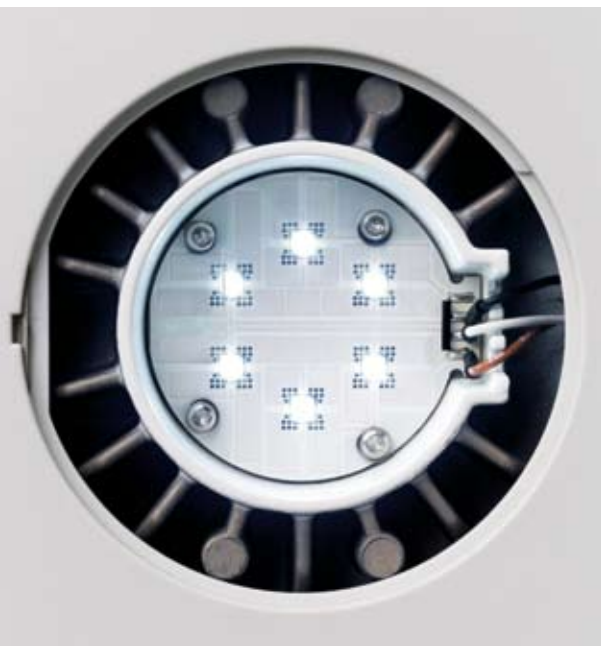
- transmitted-light darkfield
- polarization contrast in reflected and transmitted light

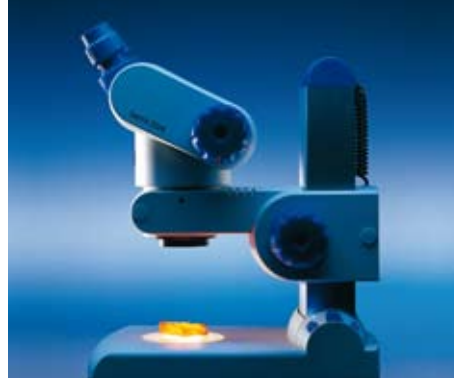
This means that you have the common illumination modes in stereomicroscopy at your fingertips.

You can decide which ones to use and how to combine them practically during observation – it can all be done rapidly at the touch of a button.

Stand C LED features an integrated LED illuminator for applications in reflected and transmitted light. This powerful daylight-quality illuminator shows specimens with high contrast in their natural colors. In transmitted light, six LEDs ensure bright, homogeneous illumination at any magnification, from overview to detail.

*At the touch of a button:
rapid switching between illumination modes.*





The ready-for-use design of the Stemi DV4 stereomicroscope with full range of illumination options as standard

*Using the example of a lacewing (*Chrysopa carnea*, dead specimen), the different illumination options that stand C LED offers can be clearly illustrated.*



Reflected-light brightfield

A standard illumination mode on a stereomicroscope, used to illuminate the surface of opaque specimens.



If a certain amount of transmitted light is added, the disruptive shadows beneath the specimen fade.



Transmitted-light brightfield

Also a standard mode. For observing transparent specimens and contours.



If a certain amount of reflected light is added, structures on the insect's body also become visible.

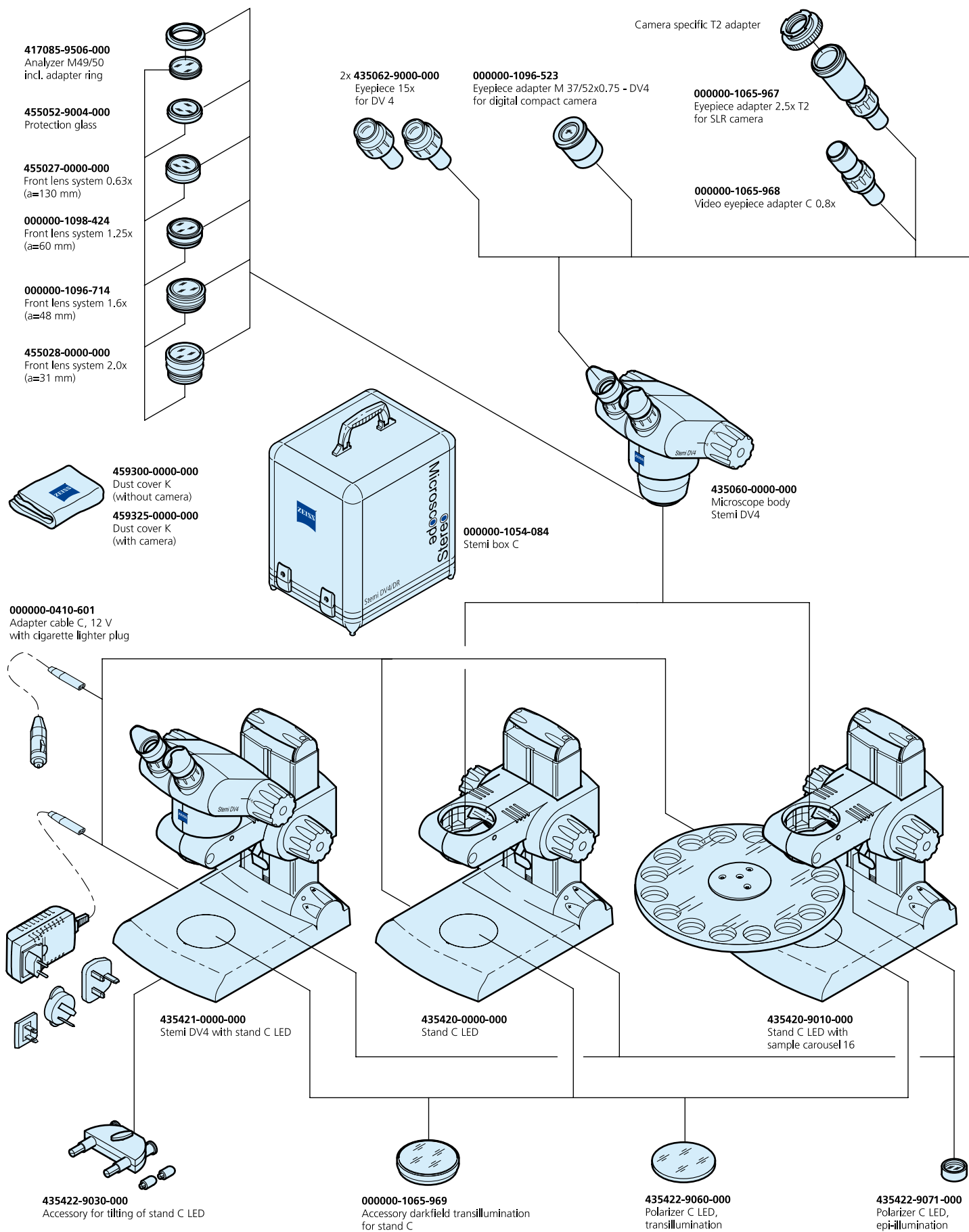


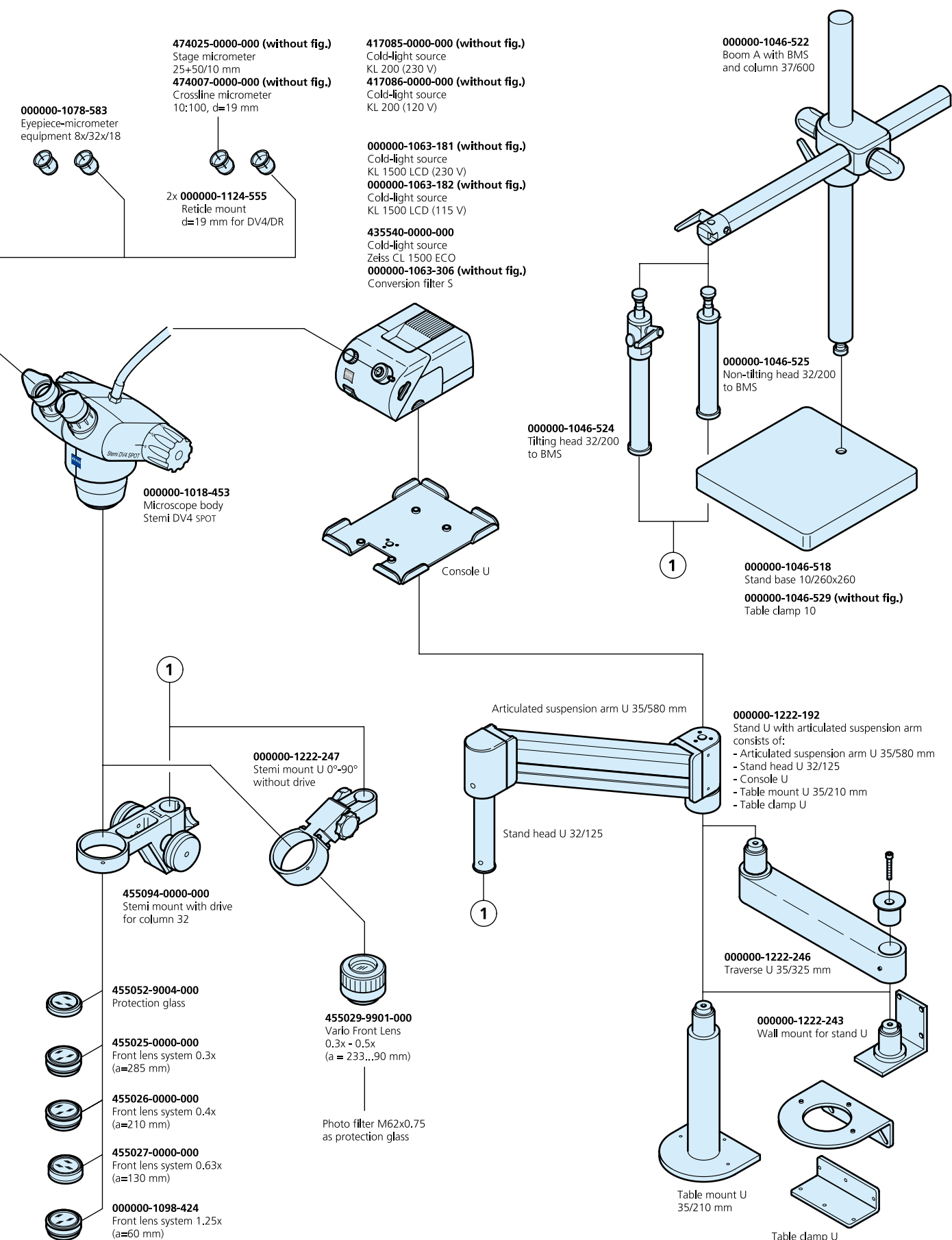
Transmitted-light dark field (optional)

Extremely fine structures are illuminated in their natural colors against a dark background.



If a certain amount of reflected light is added, structures on the insect's body also become visible.





The Basis of Your Modular System

Exact positioning

Quick, simple and with no risk.

Sample carousel 16, which can be retrofitted to stand C LED, allows you to position up to 16 different specimens with precision under the stereomicroscope.

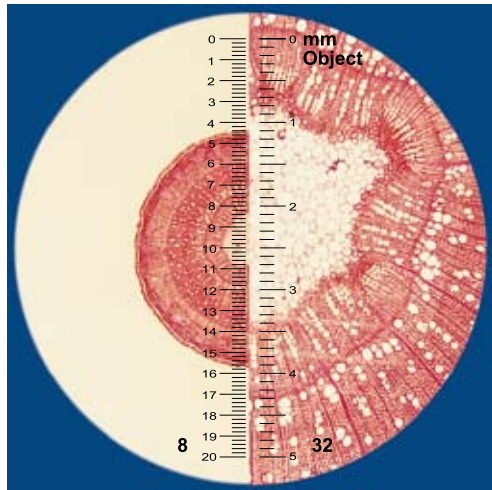
A click-stop mechanism ensures precise positioning under the microscope, whilst a low-reflection glass plate protects the specimens.



Measurement at a glance

Using the eyepiece micrometer you can read measurement values directly from the scale, either at the 8x overview or 32x detail magnification.

The 8x/32x/18 eyepiece micrometer is retrofitted in the 10x standard eyepiece.



Digital documentation

For the documentation of microscopic images you can attach the camera to one of the two eyepiece tubes in place of the eyepiece.

Digital compact cameras, SLR- or video cameras can be connected to the microscope quickly and easily using the appropriate eyepiece adapters.



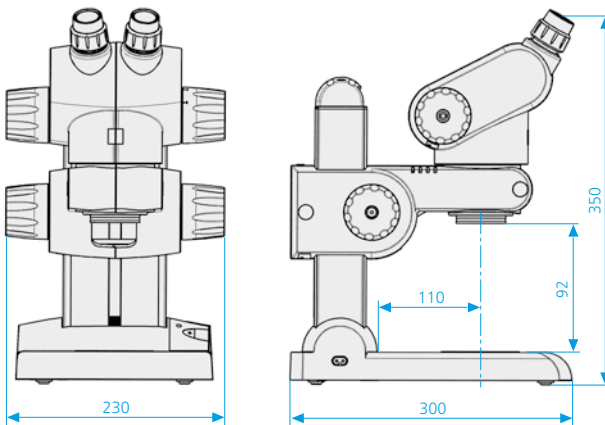
Specifications

Front lens system		Eyepiece 10x/20 Br. foc.	
Factor	FWD* (mm)	Magnification	Object field (mm)
0,3x	287	2,4x ... 9,6x	83,3 ... 20,8
0,4x	211	3,2x ... 12,8x	62,5 ... 15,6
0,3x ... 0,5x	233 ... 90	2,4x ... 16,0x	39,7 ... 12,5
0,63x	130	5,0x ... 20,2x	40,0 ... 9,9
w/o	92	8,0x ... 32,0x	25,0 ... 6,3
1,25x	60	10,0x ... 40,0x	20,0 ... 5,0
1,6x	48	12,8x ... 51,2x	15,6 ... 3,9
2x	31	16,0x ... 64,0x	12,5 ... 3,1

Front lens system		Eyepiece 15x/13 Br. foc.	
Factor	FWD* (mm)	Magnification	Object field** (mm)
0,3x	287	3,6x ... 14,4x	55,4 ... 13,9
0,4x	211	7,6x ... 30,2x	41,6 ... 10,4
0,3x ... 0,5x	233 ... 90	3,6x ... 24,0x	55,4 ... 8,3
0,63x	130	7,5x ... 30,3x	26,4 ... 6,6
w/o	92	12,0x ... 48,0x	16,6 ... 4,2
1,25x	60	15,0x ... 60,0x	13,3 ... 3,3
1,6x	48	19,2x ... 76,8x	10,4 ... 2,6
2x	31	24,0x ... 96,0x	8,3 ... 2,1

*FWD = Free Working Distance

** values based on real field number 13,3



Mass 5 kg



“A fundamental key to success was therefore the fact that Carl Zeiß, right from the outset, made every effort to introduce extremely precise technology in his small workshop to ensure that the uncertain dexterity of the human hand was subjected to rigorous methods of testing at every point in the process.”

Ernst Abbe

(from his commemorative speech at the
Optical Workshop's 50th anniversary celebration,
given on December 12, 1896 in Jena)

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