Stemi DV4

Stereomicroscopes

The Essentials in Focus

ZEISS

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 it's 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 funktions 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.

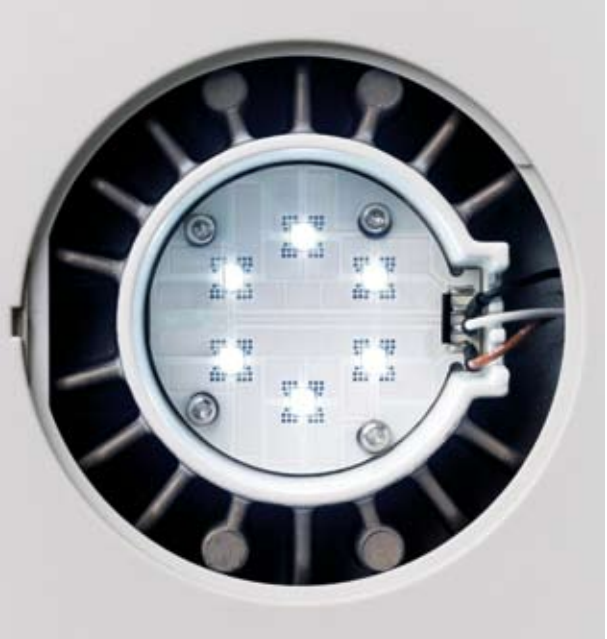
You have a choice between the following standard features:
- reflected-light brightfield
- transmitted-light brightfield
- mixed light

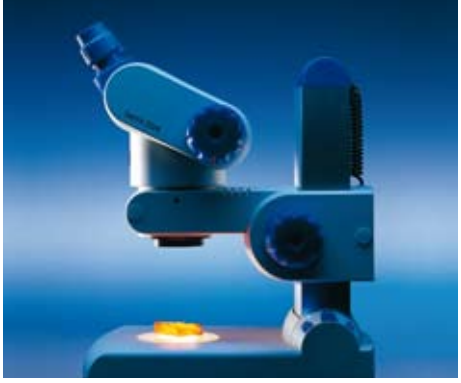
In addition, there is an option for:
- transmitted-light darkfield
- polarization contrast in reflected and transmitted light

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.

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

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.





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.

417085-9506-000
Analyzer M49/50
incl. adapter ring

455052-9004-000
Protection glass

455027-0000-000
Front lens system 0.63x
(a=130 mm)

000000-1098-424
Front lens system 1.25x
(a=60 mm)

000000-1096-714
Front lens system 1.6x
(a=48 mm)

455028-0000-000
Front lens system 2.0x
(a=31 mm)

2x **435062-9000-000**
Eyepiece 15x
for DV 4

000000-1096-523
Eyepiece adapter M 37/52x0.75 - DV4
for digital compact camera

Camera specific T2 adapter

000000-1065-967
Eyepiece adapter 2.5x T2
for SLR camera

000000-1065-968
Video eyepiece adapter C 0.8x

459300-0000-000
Dust cover K
(without camera)

459325-0000-000
Dust cover K
(with camera)

000000-1054-084
Stemi box C

435060-0000-000
Microscope body
Stemi DV4

000000-0410-601
Adapter cable C, 12 V
with cigarette lighter plug

435421-0000-000
Stemi DV4 with stand C LED

435420-0000-000
Stand C LED

435420-9010-000
Stand C LED with
sample carousel 16

435422-9030-000
Accessory for tilting of stand C LED

000000-1065-969
Accessory darkfield transillumination
for stand C

435422-9060-000
Polarizer C LED,
transillumination

435422-9071-000
Polarizer C LED,
epi-illumination

000000-1078-583
Eyepiece-micrometer
equipment 8x/32x/18

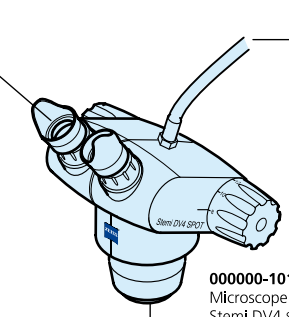
474025-0000-000 (without fig.)
Stage micrometer
25+50/10 mm
474007-0000-000 (without fig.)
Crossline micrometer
10:100, d=19 mm

2x **000000-1124-555**
Reticle mount
d=19 mm for DV4/DR

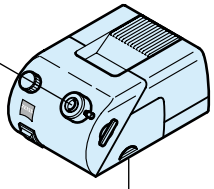
417085-0000-000 (without fig.)
Cold-light source
KL 200 (230 V)
417086-0000-000 (without fig.)
Cold-light source
KL 200 (120 V)

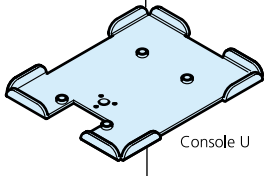
000000-1063-181 (without fig.)
Cold-light source
KL 1500 LCD (230 V)
000000-1063-182 (without fig.)
Cold-light source
KL 1500 LCD (115 V)

435540-0000-000
Cold-light source
Zeiss CL 1500 ECO
000000-1063-306 (without fig.)
Conversion filter S

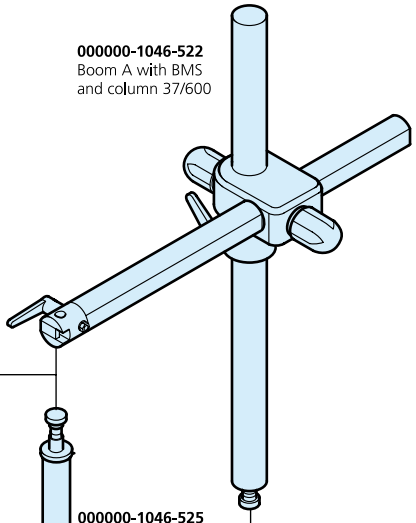


000000-1018-453
Microscope body
Stemi DV4 SPOT





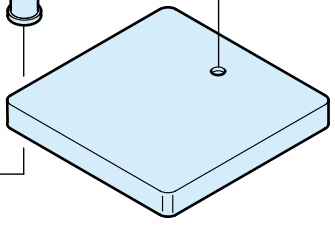
Console U



000000-1046-522
Boom A with BMS
and column 37/600

000000-1046-525
Non-tilting head 32/200
to BMS

000000-1046-524
Tilting head 32/200
to BMS

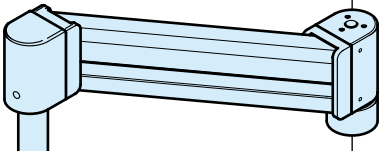


000000-1046-518
Stand base 10/260x260

000000-1046-529 (without fig.)
Table clamp 10

1

1

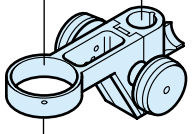


Articulated suspension arm U 35/580 mm

000000-1222-192
Stand U with articulated suspension arm
consists of:
- Articulated suspension arm U 35/580 mm
- Stand head U 32/125
- Console U
- Table mount U 35/210 mm
- Table clamp U

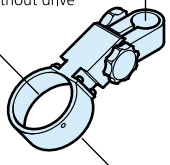
Stand head U 32/125

1



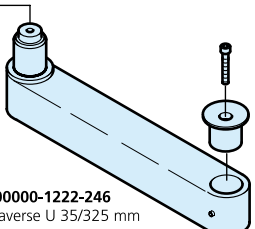
455094-0000-000
Stemi mount with drive
for column 32

000000-1222-247
Stemi mount U 0°-90°
without drive

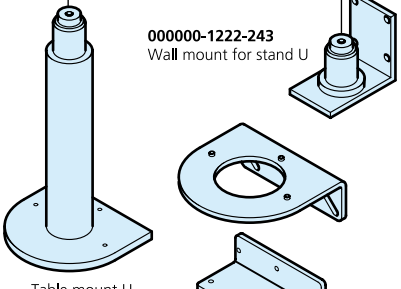


455029-9901-000
Vario Front Lens
0.3x - 0.5x
(a = 233...90 mm)

Photo filter M62x0.75
as protection glass



000000-1222-246
Traverse U 35/325 mm



000000-1222-243
Wall mount for stand U

Table mount U
35/210 mm

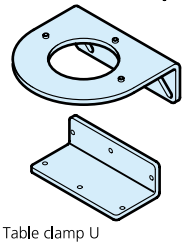


Table clamp U

455052-9004-000
Protection glass

455025-0000-000
Front lens system 0.3x
(a=285 mm)

455026-0000-000
Front lens system 0.4x
(a=210 mm)

455027-0000-000
Front lens system 0.63x
(a=130 mm)

000000-1098-424
Front lens system 1.25x
(a=60 mm)

The Basis of Your Modular System

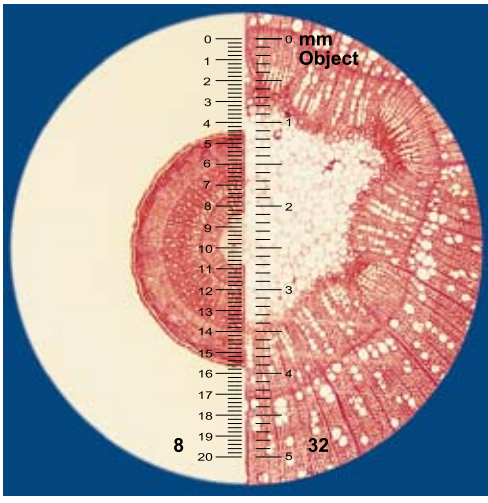
Exact positioning

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.

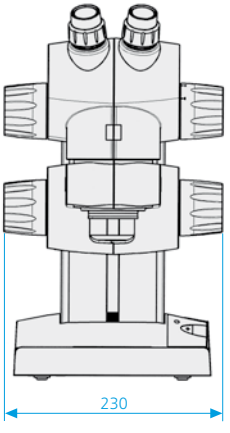
Digital compact cameras, SLR- or video cameras can be connected to the microscope quickly and easily using the appropriate eyepiece adapters.

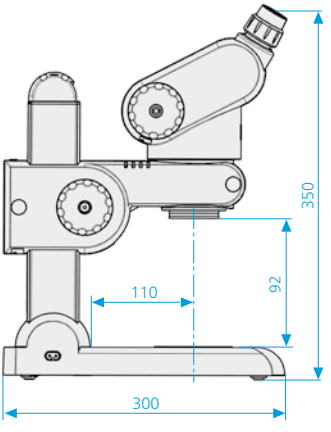
Specifications

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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