

Stereo Microscope Lighting
EasyLED / VisiLED / KL Series



Illuminating Insights

Revealing the most subtle and unique features of a sample is the key to insightful analysis. Channeling the power of light, Evident presents a wide range of illumination solutions to enhance the contrast of any sample, with any illumination technique – to produce sharp and clear images. Each illumination module is carefully integrated into the complete stereomicroscope system, guaranteeing expert results every time in every application.

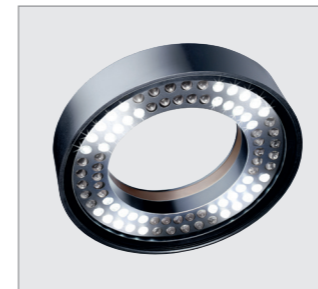
Utilizing the latest high-intensity, low energy LED technology, the optimum illumination presents samples in their best light, with maximum convenience. Visible color temperature is retained during stepless dimming, to deliver balanced images at the ideal illumination intensity, without the need for extra filter adjustments. For situations where highest color accuracy is desired, Evident also offers halogen illumination.

For every application, choosing the best illumination setup is essential for image quality – and Evident provides a solution for every need.



A Compact Solution with EasyLED

Ergonomics meets easy operation with the EasyLED series. Merging illumination and control functionalities into a single compact unit saves valuable workbench space, and with the lighting now controlled directly on the microscope, setting the perfect light level has never been so simple.



Taking control with VisiLED

Answering the needs of the most specialized of tasks, the modular VisiLED series is built on flexibility and quality. Molding the lighting setup to each application, a number of high-performance ring lights and light stages enable high-intensity illumination or even a combination of techniques. This range includes an extra-slim ring light, for example, that not only allows the use of two objectives simultaneously, but can also be used for both brightfield and darkfield illumination. Moving beyond the possibilities of conventional illumination, the perfect contrast method is realized through excellent electronic control of light segmentation.



Maximized flexibility with the KL Series

Delivering intense yet uniform illumination, with the diverse KL Series there is a perfect combination to suit every application – from compact to high-end solutions, and halogen as well as LED light sources. The modular setup provides ultimate flexibility, and the wide variety of available light guides include different spot illumination, ring lights, light stages and light lines. Light can also be coupled into the stereomicroscope setup for tasks requiring transmitted or coaxial illumination.

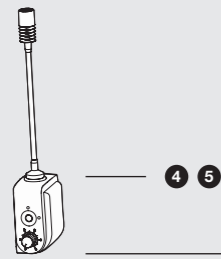


Accessorizing for a perfect fit

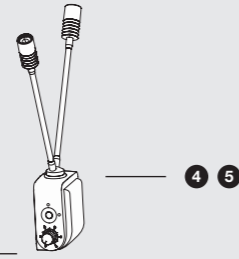
With a variety of mounting units and adapters, the perfect combination of lighting equipment can be achieved on any Evident stereomicroscope configuration. For unique, individual applications, Evident also supplies an assortment of different color, conversion and polarization filters.

System Diagram: EasyLED

Spot Light



EL-SL-S
EasyLED single spot LED light with integrated controller, including bracket to mount on SZ2-ST or SZ2-ILST

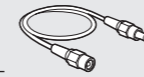


EL-SL-D
EasyLED double spot LED light with integrated controller, including bracket to mount on SZ2-ST or SZ2-ILST

Ring Light

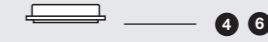


EL-RL*1
EasyLED ring light with integrated controller
W.D. 55-135 mm



EL-CBL300-EXT
Extension cable, cable length 3m

Transmitted Light Stage



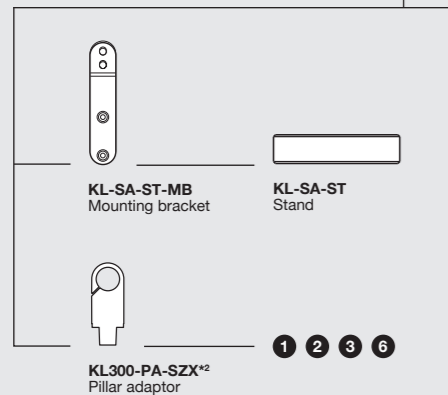
EL-TL*1
EasyLED transmitted light stage with integrated controller



VL-TL-PO
Rotatable polarizer



SZX2-AN
Analyzer for SZX2 objective lenses except SDFPLAPO1.6XPFC and SDFPLAPO2XPFC
SZ-POL-2
Set of polarizer and analyzer for SZ51/61 (here, only analyzer is needed)

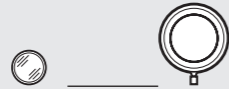


KL-SA-ST-MB
Mounting bracket

KL-SA-ST
Stand

KL300-PA-SZX*2
Pillar adaptor

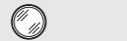
1 2 3 6



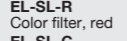
EL-SL-PO
Polarization filter



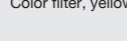
SZX2-AN
Analyzer for SZX2 objective lenses except SDFPLAPO1.6XPFC and SDFPLAPO2XPFC
SZ-POL-2
Set of polarizer and analyzer for SZ51/61 (here, only analyzer is needed)



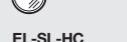
EL-SL-B
Color filter, blue



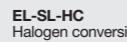
EL-SL-R
Color filter, red



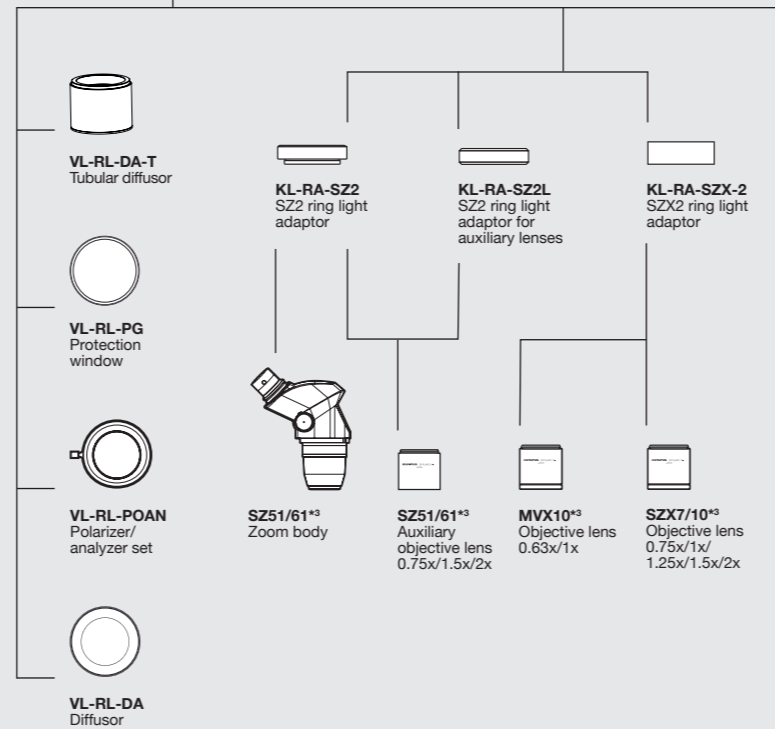
EL-SL-G
Color filter, green



EL-SL-Y
Color filter, yellow



EL-SL-HC
Halogen conversion filter



VL-RL-DA-T
Tubular diffusor



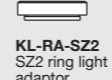
VL-RL-PG
Protection window



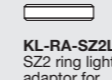
VL-RL-POAN
Polarizer/analyzer set



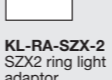
VL-RL-DA
Diffusor



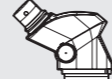
KL-RA-SZ2
SZ2 ring light adaptor



KL-RA-SZ2L
SZ2 ring light adaptor for auxiliary lenses



KL-RA-SZX-2
SZX2 ring light adaptor



SZ51/61*3
Zoom body



SZ51/61*3
Auxiliary objective lens
0.75x/1.5x/2x



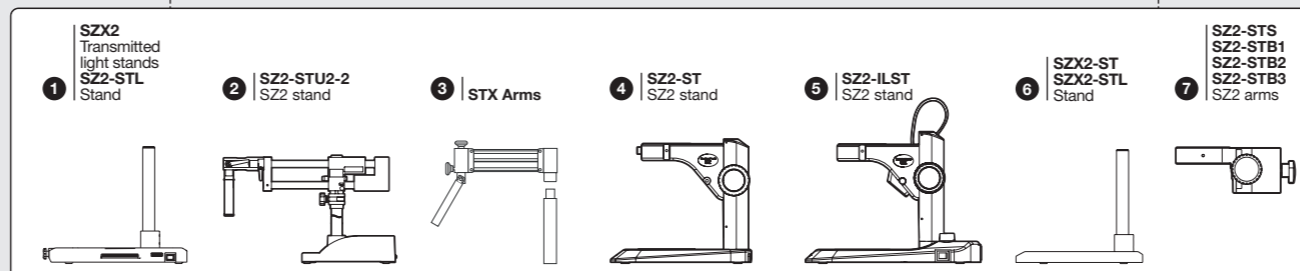
MVX10*3
Objective lens
0.63x/1x



SZX7/10*3
Objective lens
0.75x/1x/
1.25x/1.5x/2x



SZX16*3
Objective lens
0.3x/0.5x/0.8x/1x



1 SZX2 Transmitted light stands
SZ2-STL Stand

2 SZ2-STU2-2 SZ2 stand

3 STX Arms

4 SZ2-ST SZ2 stand

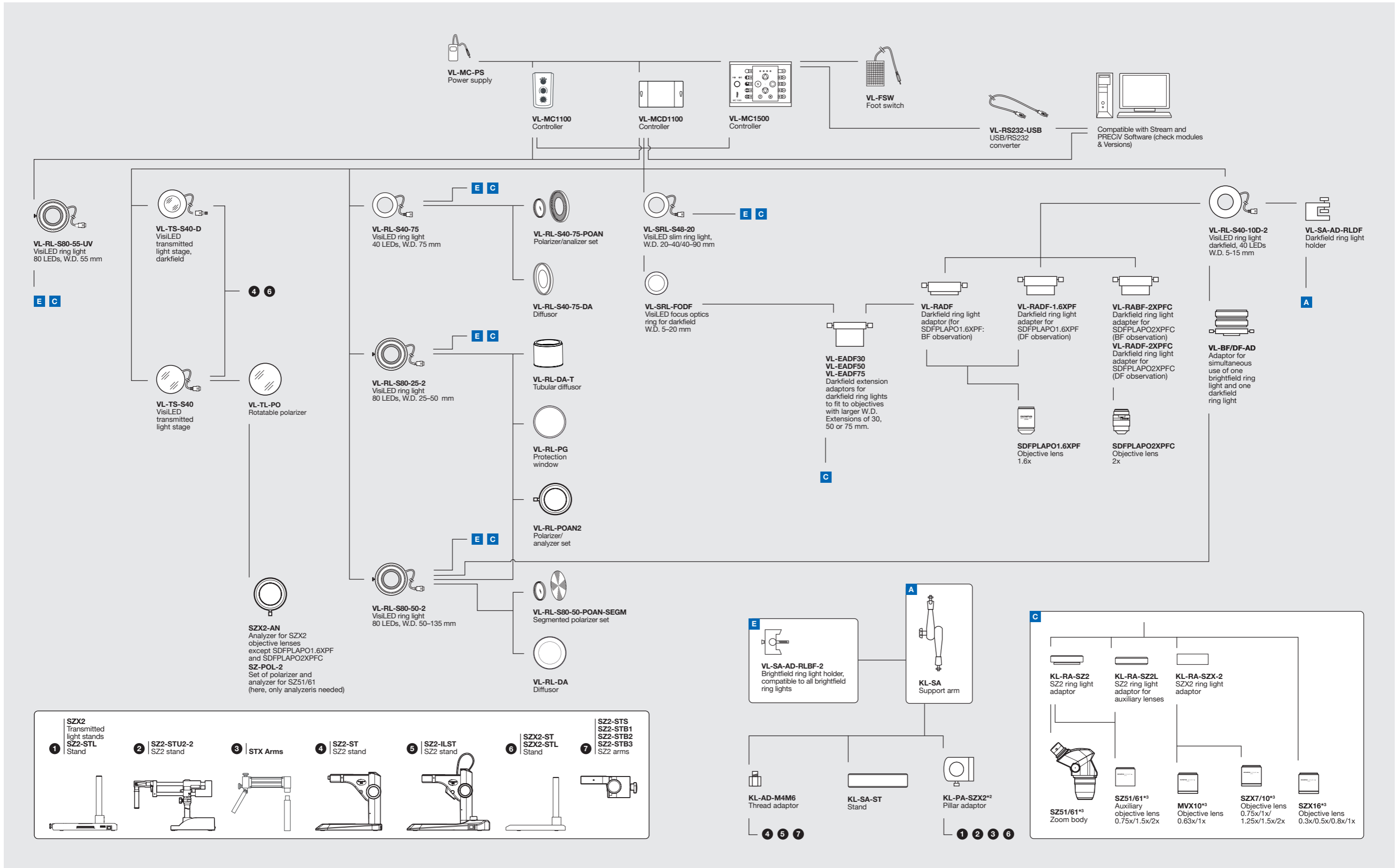
5 SZ2-ILST SZ2 stand

6 SZX2-ST SZX2-STL Stand

7 SZ2-ST3 SZ2-STB1 SZ2-STB2 SZ2-STB3 SZ2 arms

*1 If used together with SZX2 microscopes, light intensity might not be sufficient for all types of application. *2 Certain focussing units (SZX2-FO, SZX2-FOF, SZX2-FOF-M and SZX2-FOFH) cannot be mounted, if this item is used together with SZ2-STU2-2, and can be only mounted with reduced focus range/tilting angle, if used together with STX arms. *3 W.D. (working distance) needs to match ring light W.D./combined W.D. of ring light and extension adaptor

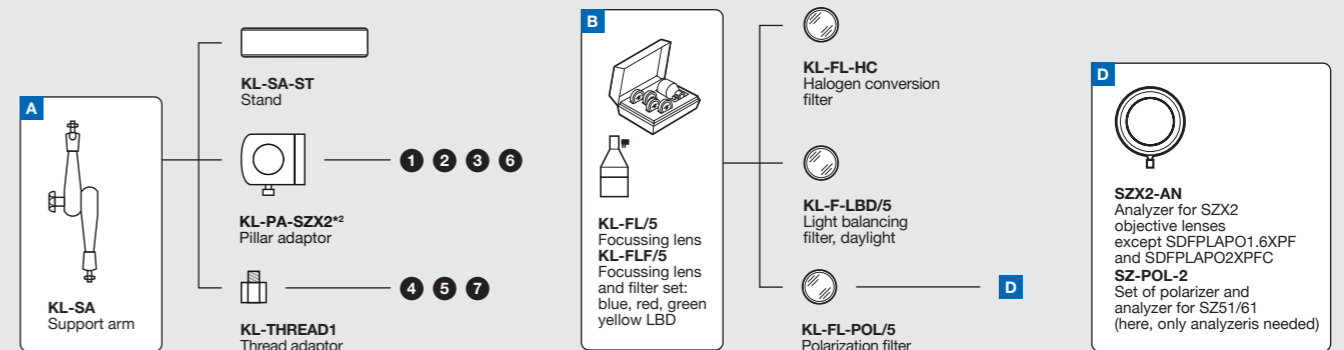
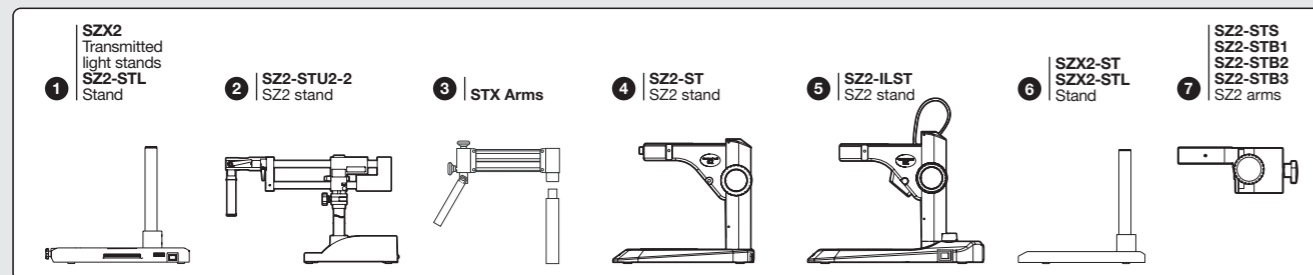
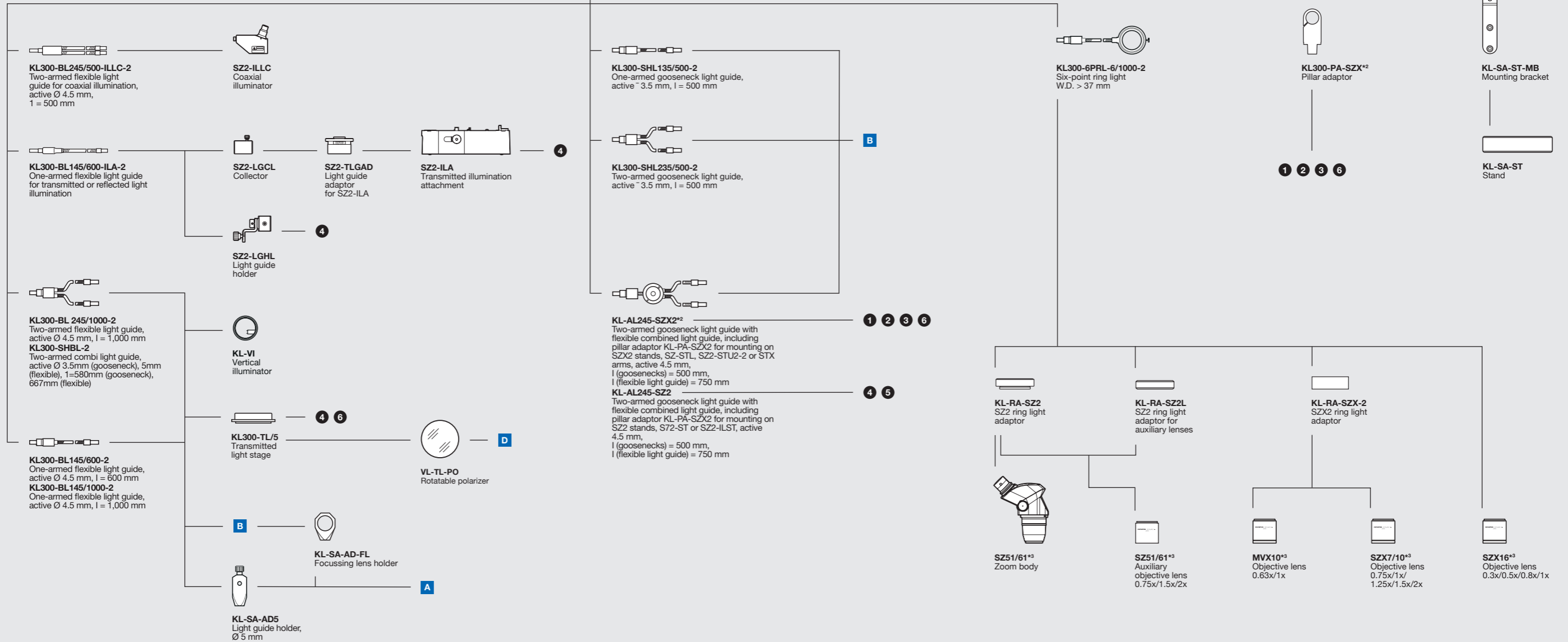
System Diagram: VisiLED



*1 If used together with SZX2 microscopes, light intensity might not be sufficient for all types of application needs to match ring light W.D./combined W.D. of ring light and extension adaptor
 *2 Certain focussing units (SZX2-FO, SZX2-FOF, SZX2-FOF-M and SZX2-FOFH) cannot be mounted, if this item is used together with SZ2-STU2-2, and can be only mounted with reduced focus range/tilting angle, if used together with STX arms.
 *3 W.D. (working distance)

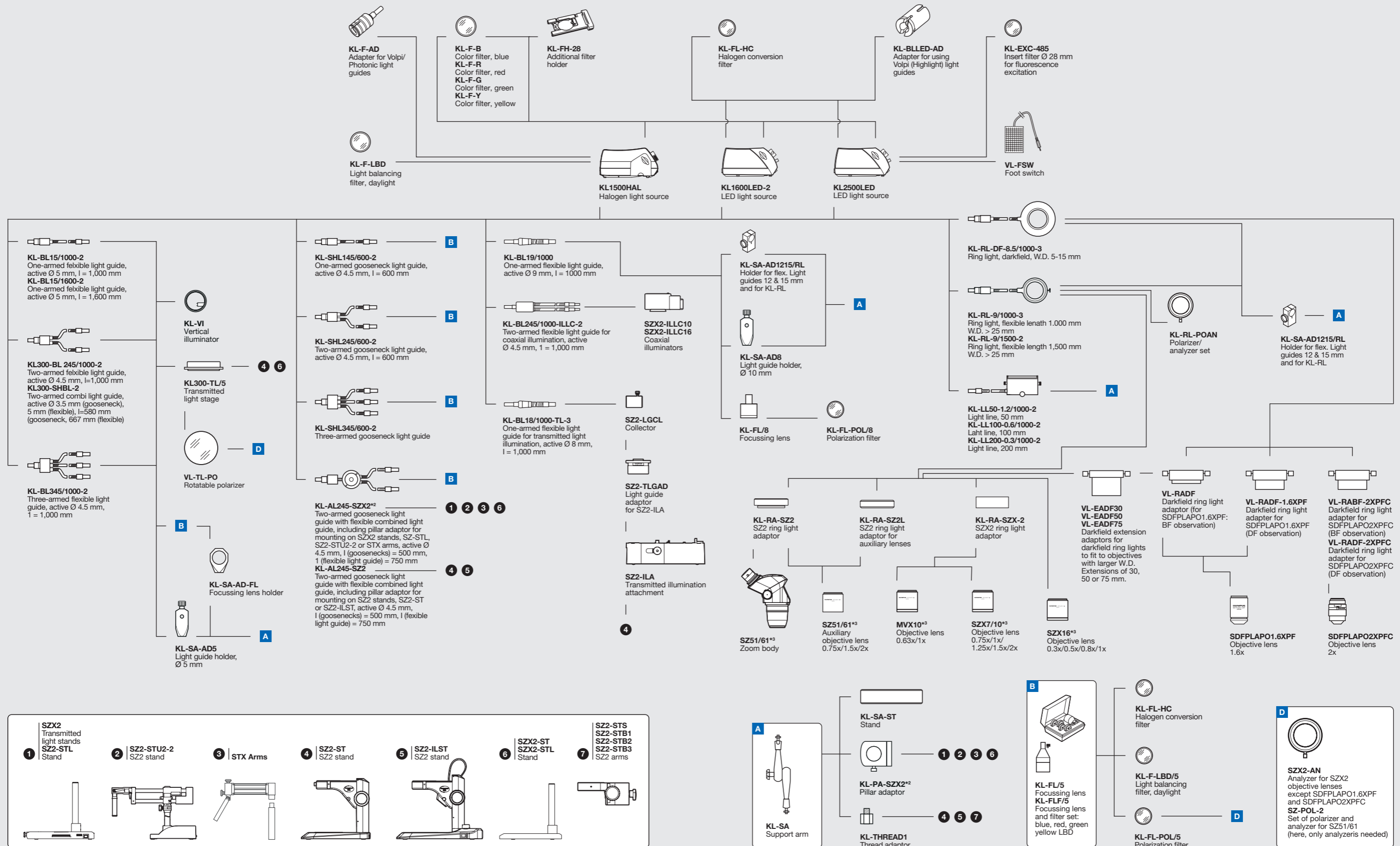
System Diagram: KL 300

KL300LED*1
LED light source, including bracket to mount on SZ2-ST or SZ2-ILST



*1 If used together with SZX2 microscopes, light intensity might not be sufficient for all types of application needs to match ring light W.D./combined W.D. of ring light and extension adaptor. *2 Certain focussing units (SZX2-FO, SZX2-FOF, SZX2-FOF-M and SZX2-FOFH) cannot be mounted, if this item is used together with SZ2-STU2-2, and can be only mounted with reduced focus range/tilting angle, if used together with STX arms. *3 W.D. (working distance)

System Diagram: KL 1500, 1600, 2500



*1 If used together with SZX2 microscopes, light intensity might not be sufficient for all types of application *2 Certain focussing units (SZX2-FO, SZX2-FOF, SZX2-FOF-M and SZX2-FOFH) cannot be mounted, if this item is used together with SZ2-STU2-2, and can be only mounted with reduced focus range/tilting angle, if used together with STX arms. *3 W.D. (working distance) needs to match ring light W.D./combined W.D. of ring light and extension adaptor

		KL Series				EasyLED					VisiLED								
		Light Source				Spot Light		Ring Light		Light Stage	Ring Light						Light Stage		
		KL1500HAL	KL2500LED	KL1600LED-2	KL300LED	EL-SL-S	EL-SL-D	EL-RL	EL-RL-P	EL-TL	VL-RL-S80-25-2	VL-RL-S80-50-2	VL-SRL-S48-20	VL-RL-S40-10D-2	VL-RL-S40-75	VL-RL-S80-50-UV	VL-TS-S40	VL-TS-S40-D	
Observation Methods	Brightfield (BF)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	Directional BF, segmented LEDs								•		•	•	•	•	•		•		
	Darkfield (DF)	•	•	•									•	•				•	
	Directional DF, segmented LEDs												•	•				•	
	UV															•			
	Diffuse							•	•		•	•			•				
	Polarisation	•	•	•	•	•	•	•	•	•	•	•			•		•		
	Oblique line illumination	•	•	•															
	Flexible spot illumination	•	•	•	•	•	•												
Lamp Data	Type	HAL				LED													
	Color temperature, approx. (K)	2000–3400				5600													
	Average life time, approx. (h)*1	1500*2				50000													
	Max. Power consumption (W)	180	80	37	5	2.75	5.5	5.5	6	4.8	6.2	6.2	5.6	3.1	3.1	6.2	3.1	3.1	
	Operating voltage, AC (V)	120-230																	
	Light intensity adjustment	continuous																	
Light Intensity*3	Light flux (lm)*4	600	1100	680	80	130	260												
	Ringlight illuminance*5 (kLux) (at defined W.D.)	109 (50)	202 (50)	144 (50)	49 (50)			90 (75)	140 (65)		360 (30)	200 (75)	65 (50)	130 (10)	110 (85)	100 (75)			
	Light Stage luminance (Cd/m²)*6									12000							20000	70	
	UV illuminance (at 375 nm)															160 W/m²			
Free Working Distance		30-300	30-300	30-300	35-300			55-135	50-130		25-50	50-135	20-90	5-15 (DF), 20-90 (BF)	55-145	50-135			
General Specifications	Dimensions	W (mm)	200	200	114	107	107	107	Ø114	Ø114	Ø100	Ø114	Ø114	Ø82	Ø118	Ø92	Ø114	Ø100	Ø140
		D (mm)	286	265	231	114	114	114											
		H (mm)	147	170	137	61	61	61	28.5	28.5	16.5	25	25	30	14	25	25	16.5	22.5
	Weight, approx. (kg)	4.2	6	2.45	0.35	0.67	0.795	0.58	0.58	0.59	0.38	0.38	0.31	0.2	0.24	0.38	0.31	0.83	
	Cooling	fan				convection													
Ambient temperature (°C)	+5 – +40																		

*1 Max. decline of light output to 70% of origin level

*2 Using the ECO level

*3 Different illumination methods require different methods in order to measure the perceived light intensity. Values can only be compared, if the same measurement method and the same observation method have been used. All given values are maximum values.

*4 Values refer to spot illumination. For KL series this is measured at the output of a one-armed flexible light guide with maximum active diameter and a length of 600 mm (for KL300LED) or 1000 mm (for other KL light sources).

*5 Values refer to brightfield illumination except for VL-RL-S40-10D-2, which is especially designed for darkfield illumination.

*6 Values refer to brightfield illumination except for VL-TS-S40-D, which is especially designed for darkfield illumination.

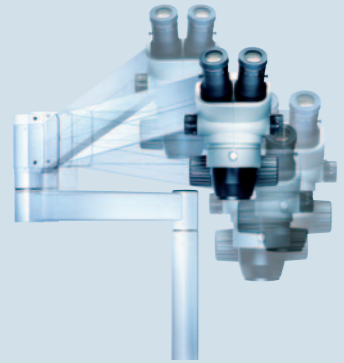
- EVIDENT CORPORATION is ISO9001/ISO14001 certified.
- Illumination devices for microscope have suggested lifetimes. Periodic inspection is required. Please visit our website for details.
- All company and product names are registered trademarks and/or trademarks of their respective owners.
- Images on the PC monitors are simulated.
- Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.



A Easy to move
Height adjustment at your fingertips



B STX suspension arms
Wide movement range



C Tilt adjustment
Quick lock for easy tilt adjustment



THE ARM SYSTEM

The STX arm system makes inspecting even large and heavy objects simple. Ergonomically designed to be comfortable for all users, the STX arms allow movement over a wide range in the X, Y and Z planes.

High technology, simple operation

The STX suspension arms are equipped with a special gas spring which acts as a counterweight to the microscope. A precise adjustment mechanism ensures easy movement of the microscope in the Z direction. When the height is constantly being changed, the STX 'Easy-Move' system enables the user to move the microscope to the desired height quickly and precisely, without the need to tighten locking screws.

Seamless height adjustment range up to 430 mm

Standard STX suspension arms are available in 360 mm and 580 mm lengths. The 360 mm arm covers a Z range of up to 225 mm, while the 580 mm arm allows seamless adjustment up to 430 mm.

Greater X/Y travel range

The STX-300 horizontal suspension arm provides a 1,700 mm range in the X/Y planes. This extended reach allows the set-up of multi-user workbenches for up to four people using one microscope.

Special arms for heavier loads and complex microscope configurations

The STX series offers special arms for heavy loads up to 10 kg. This means that even complex microscope configurations with special illuminators can be combined with the outstanding advantages of the STX stands.

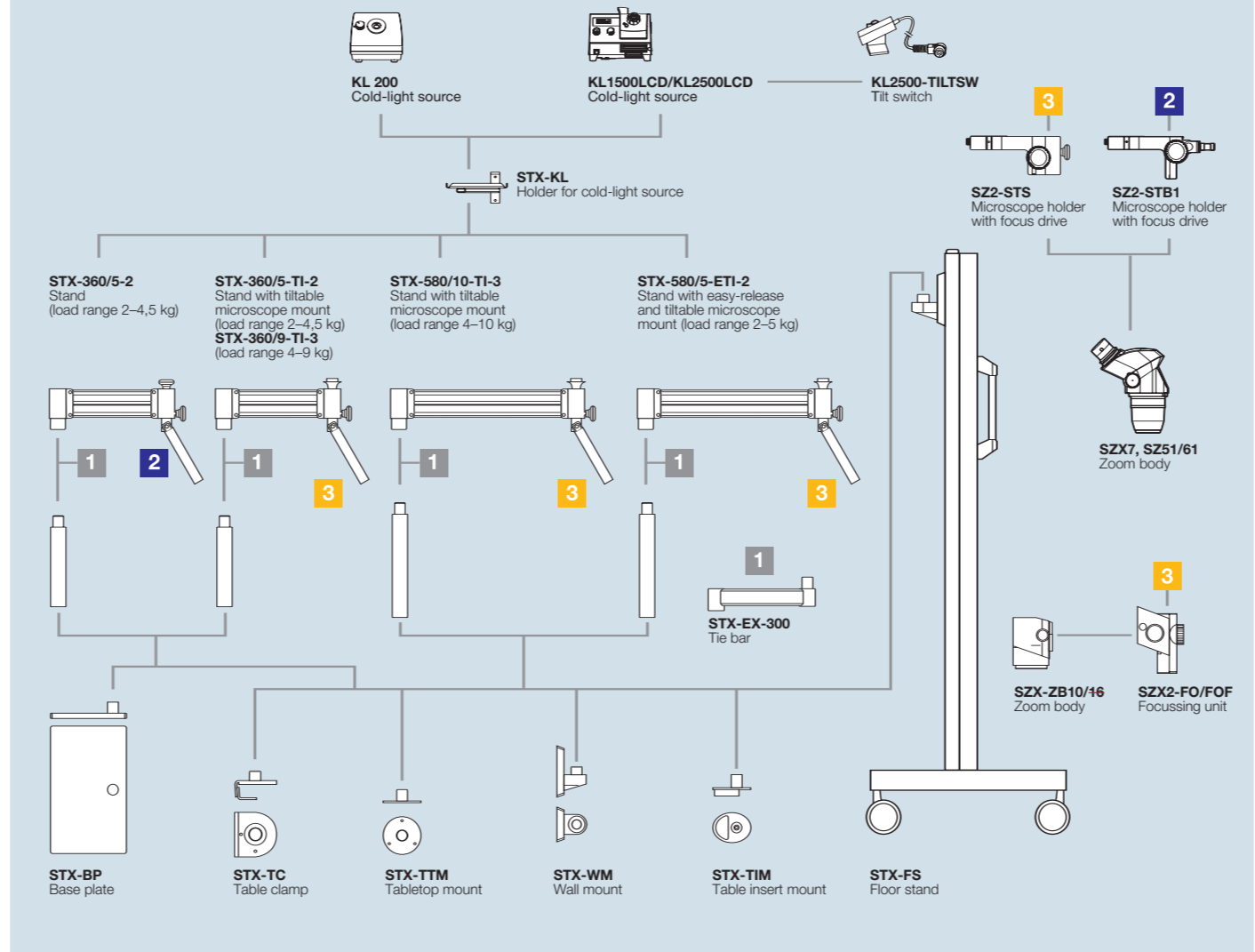
Sharper images

The STX suspension arms are available with an integrated tilt mechanism that allows the microscope to be adjusted according to the inspected surface. This allows you to get the most out of your microscope in terms of sharpness and depth of field, leading to better images.

Specifications

	STX-360/5-2	STX-360/5-ETI	STX-360/9-ETI	STX-580/10-ETI	STX-580/5-ETI
Tiltable microscope mount	-	•	•	•	•
Vertical adjustment with 'Easy-Move'	-	•	•	•	•
Length of the arm	360 mm	360 mm	360 mm	580 mm	580 mm
Length of the pillar	195 mm	250 mm	250 mm	330 mm	330 mm
Load range	2-4.5 kg	2-4.5 kg	4-9 kg	4-10 kg	2-5 kg
Vertical travel					
Wall mount	225 mm	225 mm	225 mm	430 mm	430 mm
Table mount (1x objective/no auxiliary lens)	160 mm	160 mm	160 mm	220 mm	220 mm
Horizontal travel with tie bar					
Inner Ø	120 mm	120 mm	120 mm	560 mm	560 mm
Outer Ø	1,320 mm	1,320 mm	1,320 mm	1,760 mm	1,760 mm

STX system diagram



The manufacturer reserves the right to make technical changes without prior notice.

www.olympus-europa.com

OLYMPUS

OLYMPUS LIFE AND MATERIAL SCIENCE EUROPA GMBH
Postfach 10 49 08, 20034 Hamburg, Germany
Wendenstrasse 14-18, 20097 Hamburg, Germany
Phone: +49 40 23 77 30, Fax: +49 40 23 77 36 47
E-mail: microscopy@olympus-europa.com

Art. code: ED430239 - Printed in Germany 09/2006

OLYMPUS

Your Vision, Our Future

Stereomicroscope Stands

STX

SZ2 Series

The Olympus STX Suspension Arm System



STX STANDS

The best choice for large samples, multi-user workbenches and easy height adjustment.

The outstanding STX suspension arm system for stereomicroscopes lets you move your microscope to the right position using a single fingertip. The various arm types and mounting possibilities give you the flexibility to configure the stand system to your specific needs and environment.



E STX-TC
Table clamp



F STX-TTM
Tabletop mount



THE BASE SYSTEM

The STX range offers six different base options to suit individual workspaces and mounting possibilities.

Baseplate

D The baseplate can be combined with all 360 mm STX arms, providing a stable, classic microscope stand suitable for most applications.

Table clamp

E The table clamp allows the stand to be mounted on the edge of stable workbenches, leaving the table free for other work when the microscope is not in use.

Tabletop mount

F The tabletop mount can either be mounted on a stable workbench or on a tailored baseplate.

Table insert mount

G Designed to be countersunk into the table surface, the table insert mount has a cable port for the light source and other peripheral equipment, ensuring that these do not get in the way.

Wall mount

H Where possible and practical, the STX arm system should ideally be wall-mounted. This frees up workbench space and provides the greatest stability as no pillar is required.

Floor stand

I Whenever the sample is too heavy or large to be brought to the microscope, the floor stand lets you move the microscope to the sample. It is also useful for placing the microscope beside the workbench when other stand mounting options are not suitable. The STX arm height can be adjusted between 30 cm and 160 cm.

G STX-TIM
Table insert mount



H STX-WM
Wall mount



ACCESSORIES

All workplaces are different. That's why Olympus provides a range of accessories and bespoke systems to perfectly match your requirements.

Light source holder

The light source holder frees up workbench space and protects fibre guides from being damaged. The light source is conveniently located and follows every movement of the microscope. The STX-KL light source holder is compatible with the Olympus KL200 (20 W), up to the KL2500 (250 W) and filter wheel.

Light assistant

The tilt switch automatically switches the light source on/off if the suspension arm reaches a certain height – useful for workstations where frequent changes from microscopic view to sample manipulation without the microscope are required. When the microscope is moved out of the working area, the light source is automatically switched off, and it is automatically switched on again when the microscope is returned to the working position. This extends the bulb's life and enables concentrated work without the noise of the light source fan.

Bespoke systems

Depending on your individual needs, Olympus offers suspension arms in special lengths and other weight classes, as well as tailored mounting systems like ceiling mounts upon request.