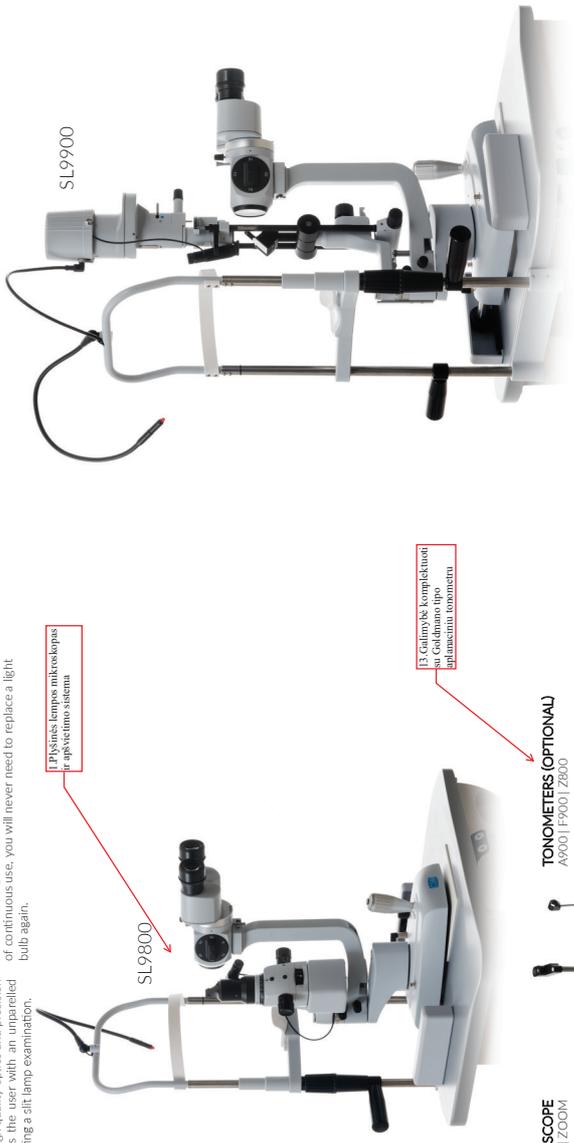


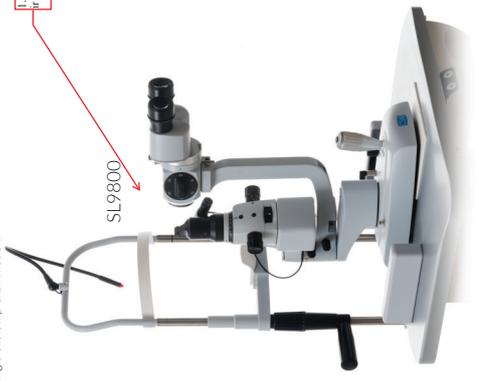
**SLIT LAMPS**  
**SL9800 | SL9900 | SL9900 ELITE**  
 CSO slit lamps are engineered to the highest European quality standards and come equipped with LED illumination. Ergonomic design, high quality optics and precision mechanical parts provides the user with an unparalleled experience while conducting a slit lamp examination.

**LED LIGHT SOURCE**  
 LED illumination provides comfort to the patient during the examination due to the lack of heat. Image colour temperature is maintained at all illumination levels. Our LED technology has an estimated life of 50000 hours of continuous use, you will never need to replace a light bulb again.

**PIVOTING LAMP SYSTEM**  
 per agevolato sistema

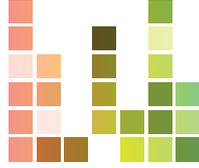


SL9900



SL9800

**ES Goleviki AS Kompaktiniai su Galvavimo lampa ir apšvietimo sistema**



**MICROSCOPE**  
 3X | 15X | ZOOM  
 Converging microscope optics provides comfort to the user when using the slit lamp. All the microscopes have a yellow filter to improve the image quality during fluorescein tests.



**TONOMETERS (OPTIONAL)**  
 A9000 | F9000 | Z800  
 All CSO slit lamps are compatible with applanation tonometers.



**POLARIS (OPTIONAL)**  
 Advanced analysis of the tear film  
 Polaris enables the user to evaluate the stability and quality of the tear film through the measurement of the non-invasive break up time. Polaris integrates with the Phoenix software system so the patient data can be recorded for later review.



**MICROSCOPE 2X**  
 A converging microscope with 10x and 16x magnifications is also available for the SL9800 and SL9900.

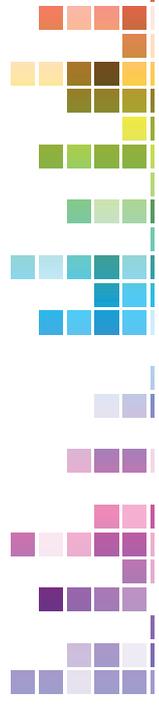


**DIGITAL VIDEO CAMERA\* (OPTIONAL)**  
 All CSO slit lamps can be equipped with the digital video camera. The high resolution camera can capture and record the smallest details, while conducting a slit lamp examination. When connected to the Phoenix patient management software, it is possible to store high quality images or video for further review.

\* (not compatible with 2X microscope)

**DRY EYE REPORT**  
 Based on the Ocular Surface Disease Index questionnaire (OSDI), Lateral and conjunctival hyperemia, Meibomian gland dysfunction (MGD) and tear osmolarity, the report provides an overall evaluation of the clinical condition of the patient for a comprehensive diagnosis of the dry eye disease.

**FEATURES OF THE SOFTWARE PHOENIX**  
 Slit Lamp uses the Phoenix software application allowing for patient data storage for future review and analysis, shared by all CSO devices.



# Slit lamps

SL9800 | SL9900 | SL9900 ELITE

## TECHNICAL DATA

	SL9800	SL9900	SL9900 ELITE
Slit projection	1.3X	0.6 - 15 mm	0 - 12 mm
Slit width (setting continuous)	0.6 - 15 mm	1 - 12 mm	1 - 12 mm
Slit height (setting continuous)	15 mm	12.9	12.9
Slit height (fixed)	15.9	5.3, 10.2 mm	5.3, 10.2 mm
Apertures	15.9, 5.3, 0.3 mm	12.9, 5.3, 10.2 mm	12.9, 5.3, 10.2 mm
Filters	Blue, Red, Green (Red free)	Blue, Red, ND50%, Green (Red free)	Blue, Red, ND50%, Green (Red free)
Light Diffuser	only with Digital Vision HR	only with Digital Vision HR	only with Digital Vision HR
Background light	only with Digital Vision HR	only with Digital Vision HR	only with Digital Vision HR
Slit rotation	0° horizontal	variable 0°   15°   10°   15°   20°	variable 0°   15°   10°   15°   20°
Rotation interval of the slit projection	±90°	±90°	±90°
Working distance	67.5 mm	only with Digital Vision HR	only with Digital Vision HR
Working distance range	67.5 mm	only with Digital Vision HR	only with Digital Vision HR
Light detection	only with Digital Vision HR	only with Digital Vision HR	only with Digital Vision HR
Voltage	15V DC 1A	White LED	White LED
Light source	White LED	White LED	White LED
Brightness	284000 LUX continuous adjustment	3300 K	3300 K
Color temperature	3300 K	675 x 313 x 335 mm	675 x 313 x 335 mm
Dimensions (HxWxD)	440 x 313 x 335 mm	7 kg	7.8 kg
Weight	7 kg		

## SL9800 | SL9900 | SL9900 ELITE

MICROSCOPE	2X	3X	5X	Zoom
Type	Convergent	Galilein convergent with magnification change system	Galilein convergent with variable magnification	Galilein convergent with variable magnification
Eyepiece convergence angle	19°	12.5X	12.5X	12.5X
Eyepiece	10X	12.5X	12.5X	12.5X
Eyepiece adjustment	10X   16X	12.5X	12.5X	12.5X
Corresponding real magnifications	10X   16X	12.5X	12.5X	12.5X
Field of view	18.5mm   12mm	26mm to 8.5mm	41mm to 5.2mm	30mm to 7.4mm
Interocular distance	51.5mm to 93mm	50mm to 80mm	50mm to 80mm	50mm to 80mm
Barrier filter		Blue	Blue	Blue

## DIGITAL CAMERA SL9900 | SL9800

Camera type of sensor	CCD
Camera resolution	16384x1232
A/D conversion	14 bit per pixel
Max FPS at full resolution	15fps
Max frame rate	99MB/s
Camera interface	USB 3.0
Video mode	RGB 24bit, YUV 4:2:2
Shutter	Control 100 µs to 0.4s, 100 µs per step
Gain	Control 0 to 24dB
Controls	shutter (auto, manual), gain, white balance (auto, manual)

\* The specifics and the images are not contractually binding and can be modified without notice. Windows® is a Microsoft Corporation trade mark.

CO124 | Rev. 02 del 15/05/2021



# Slit Lamps

SL9800 | SL9900 | SL9900 ELITE



YOUR PROFESSIONAL PARTNER SINCE 1967



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# TABLES

11. Komplekte su plyšine lempa pateikiamas staliukas, skirtas plyšinės lempos sumontavimui



**MT02**

## Motorized Instrument table MT02

### Technical information

Height	Min 65 cm Max 105 cm Elevating – 40 cm
Elevating speed	25 mm/s
Lifting capacity	100 kg
Weight	38 kg
Height adjustment mechanism	Electrical
Height adjustment control	UP/DOWN switch
Power supply	~115/230V 50/60Hz



**MT01**

## Motorized Instrument table MT01

### Technical information

Height	Min 63 cm Max 103 cm Elevating – 40 cm
Elevating speed	30 mm/s
Lifting capacity	50 kg
Weight	18 kg
Height adjustment mechanism	Electrical
Height adjustment control	UP/DOWN switch
Power supply	~115/230V 50/60Hz



## IŠTRAUKA IŠ INSTRUKCIJOS

INSTRUCTIONS FOR USE



SL9800-SL9900 | IFU305EN00

### 4.11.6 HOW TO INSTALL THE CAMERA CONNECTOR



Before installing the accessory, install the separator.

- 1 Remove the lid (C) installed on the separator (B).
- 2 Install the camera connector (A) on its seat on the separator. Align the plug (D) of the camera connector with the socket (E) on seat of the separator.
- 3 12.1.Vaizdo šakotuvais the camera connector to block the accessory of

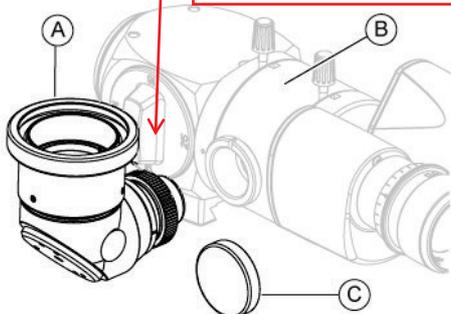


Fig 79 - How to install the camera connector

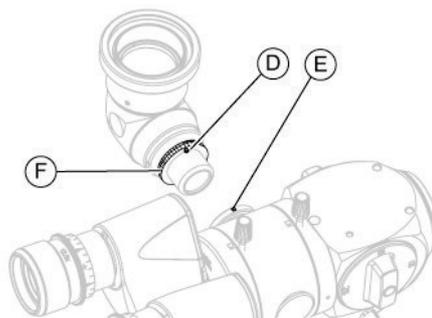


Fig 80 - Camera connector blockage

### 4.11.7 HOW TO INSTALL THE OCULAR FOR THE SECOND OPERATOR



Before installing the accessory, install the separator.

- 1 Remove the lid (D) installed on the separator (B).
- 2 Lift the locking/unlocking knob on the microscope (C) on the ocular for the second operator (A).
- 3 Install the ocular for the second operator on its seat on the separator. Align the plug (F) of the ocular for the second operator with the socket (G) on seat of the separator.
- 4 Turn the ferrule (E) of the ocular for the second operator to block the accessory of the separator.

# IŠTRAUKA IŠ INSTRUKCIJOS



INSTRUCTIONS FOR USE

SL9800-SL9900 | IFU305EN00

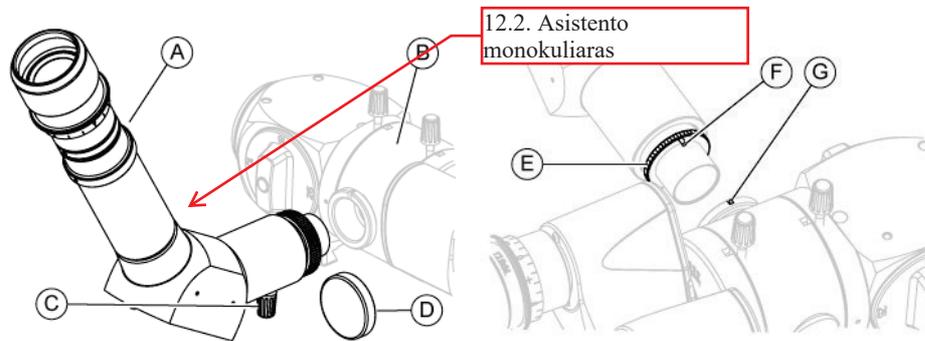


Fig 81 - Ocular for the second operator

Fig 82 - Ocular for the second operator blockage

#### 4.11.8 HOW TO INSTALL THE OCULARS FOR THE BINOCULAR

- 1 Remove the oculars installed on the binocular.
- 2 Install the new oculars.

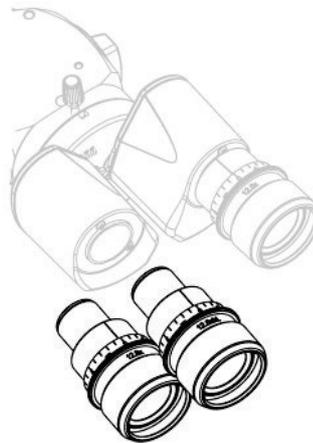


Fig 83 - Oculars

# IŠTRAUKA IŠ INSTRUKCIJOS

SL9800-SL9900-SL9900 ELITE  
IFU305EN02.07 - 10/2023



INSTRUCTIONS FOR USE

## 3.2 TECHNICAL DATA

### 3.2.1 SL9800 DEVICE

14. Maitinimo šaltinis

Technical data	Value
Supply voltage	120-230 V $\pm$ 10% 50/60 Hz 1 A
Size (HxWxD)	440 x 313 x 335 mm
Device weight	7.4 kg
Base movement (x, y, z)	105 x 110 x 30 mm
Fine movement (x, y)	14 $\pm$ 0,5 mm
Main unit package size	525 x 770 x 380 mm
Table top package size	680 x 530 x 195 mm
Accessories package size	355 x 245 x 240 mm
Consumables	Package of chin cup papers

#### Illumination

Technical data	With prism-holder head	With split head
Slit projection index	1,33X	1,33X
Slit width (continuous setting)	0 - 15 mm	0 - 15 mm
Slit length (continuous setting)	1 - 15 mm	1 - 15 mm
Maximal length of the slit	15 mm	15 mm
Aperture diaphragms	15, 9, 5.5, 0.3 mm	15, 9, 5.5, 0.3 mm
Filters	Blue, red, green (red free)	Blue, red, green (red free)
Illuminator	White LED	White LED
Slit rotation	$\pm$ 90° continuous on Tabo system	$\pm$ 90° continuous on Tabo system
Incidence angle	0° horizontal	Total angle 10.2°
Rotation interval of the slit projector	+/-90°, angular scale, reference on 0°	+/-90°, angular scale, reference on 0°
Working distance (prism outlet/patient's eye distance)	69.5 mm	80 mm
Device operating voltage	15V DC 1A	15V DC 1A
Light source type	White LED	White LED
Luminosity adjustment	Continuous adjustment	Continuous adjustment
Light intensity	284000 Lux	284000 Lux
Colour temperature	3100K	3100K

