# STEREO ZOOM LENSES FOR MICROSCOPES.

RESOLUTION OF THE FINEST DETAILS.





# STEREO ZOOM LENSES.

The Berliner Glas Group develops and manufactures stereo zoom lenses for surgical and dental microscopes.

Our product line runs from 6x zoom lenses all the way to high-end 8x zoom parfocal lenses, also available with apochromatic color correction upon request. Minimized tolerance deviations between the left and right tubes ensure the optimal stereo enhancement.

#### **COMPLETE IN-HOUSE PROCESS CHAIN**

Thanks to our many years of experience in the area of photonics, we are experts in optical and mechanical design, including trajectories. We can realize all processing steps of the optical value creation chain in-house.

## **COMPATIBLE WITH CUSTOMER INTERFACES**

We place great value on compatibility with the customer's interface when developing opto-mechanics and motors including electronic control systems. The stereo zoom lenses from Berliner Glas can be tailored to the customer's needs and also integrated into the existing housing.

## **APPLICATIONS/AREA OF USE**

- ► Dental microscopes
- ➤ Surgical microscopes
- ► Stereo microscopes

#### **PROPERTIES**

lmage quality	Diffraction-limited in the image center at 480–640 nm
Typical work distance	200–500 mm
Zoom factor	Up to 8x
Color correction	Apochromatic upon request
Optinal position measuring	Hall sensor
Defocusing and image size difference between the tubes	Imperceivable
Lifetime	At least 10 years or approx. 40,000 movements
Operating conditions	Temperature +10 °C to +40 °C rel. humidity 10–85 %
Storage/transportation	Temperature -20 °C to +60 °C rel munidity 10–90 %

Note: The optics are protected against fungus.

## **ADDITIONAL STRENGTHS**

Berliner Glas is ISO 9001, ISO 14001 and ISO 13485-certified.