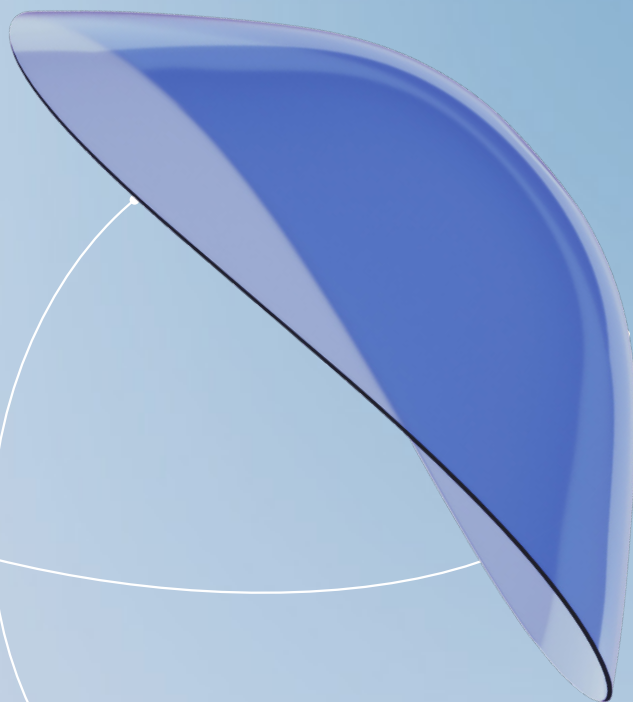




The only lens you'll ever need.



FitGuide[®] Basics

FOR 14.5mm-19.0mm SCLERAL LENSES

Achieve a smart, efficient, and predictable fit that provides optimal vision, comfort, and long-term ocular health for your patients.

This guide is intended to help you immediately start fitting BostonSight SCLERAL with basic fitting principles. For guidance on advanced features including Quad-Elevation™, Quad-Limbal™, SmartChannels®, SmartSight® FSE, SmartSight HOA®, and SmartFocus™ multifocal, please see the FitGuide Advanced.

Ways to Fit

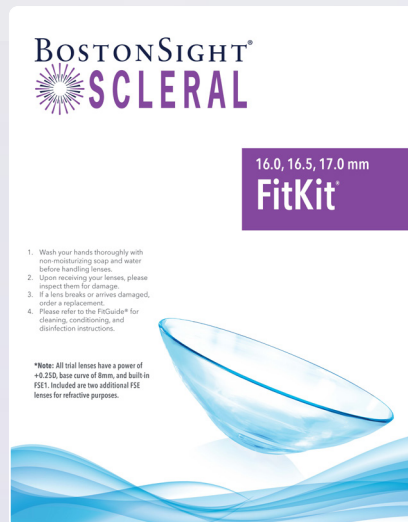
TRIAL LENS SET

The BostonSight SCLERAL FitKit® is designed to simplify the fitting process. Our fitting system is based on quadrant-specific scleral anatomy and driven by clinical data. Trial lenses are provided for the left and right eye. FitKits have three diameters each.

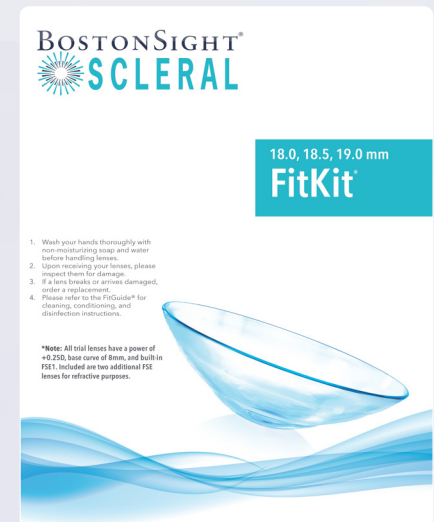
14.5, 15.0, AND 15.5mm



16.0, 16.5, AND 17.0mm



18.0, 18.5, AND 19.0mm



3 out of 4 patients are successfully fit with the
Standard lens from the FitKit

FREE-FORM FITTING WITH SMART360®

Design a custom lens for your patient without the need for trial lenses. BostonSight's Smart360 feature integrates your profilometer with FitConnect® to transfer scan data to BostonSight's manufacturing lab.

Details on fitting with Smart360 can be found in the Smart360 Mini-Guide.

Lens Handling and Conditioning

Trial lenses in the FitKit are shipped wet to ensure proper wetting. The conditioning solution must be replaced with fresh, sterile, unexpired solution (e.g. Boston Simplus) upon FitKit receipt and must be replaced every 30 days. Proper cleaning, rinsing, and disinfection is required before each use.

- ① Wash hands thoroughly with a mild soap, rinse completely, and dry with a lint-free towel before handling lenses.
- ② Place one lens in the palm of your hand. Place one or two drops of daily cleaning solution on the outside surface of the lens and rub gently for 15 seconds. Flip the lens over and do the same on the inside surface of the lens.
- ③ Rinse the lens thoroughly with fresh, unexpired, preservative-free saline. Your BostonSight SCLERAL trial lens is now ready for patient application.

Follow the Disinfection Protocol for Multi-Patient Trial Lenses after each use.

Lens Identification

TRIAL LENS

E-R 80-1 e1

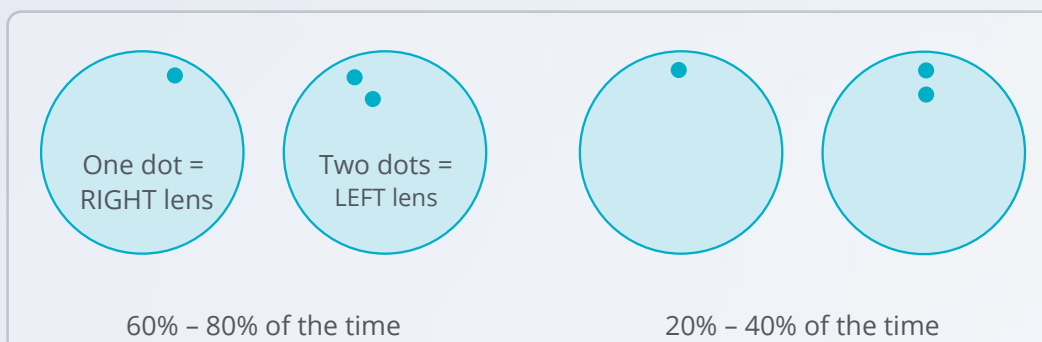
LENS SET SERIES EYE R VS. L DIAMETER LENS NUMBER 1-12 FRONT SURFACE ECCENTRICITY FSEO, FSE1 OR FSE2

Example Shown:
Lens Set Series: E
Right Lens
18.0mm diameter
Lens #1
FSE1

Laser engraved model number location

Easy ID number to identify each quadrant (also referred to as a meridian).
Trial lens model number. On patient's lens, order number + lens number + first 3 letters of patient's last name are engraved.

Apply trial lenses with the dot at the 12 o'clock position. It is okay for the lens to rotate on the eye as shown below.



FitKit Layout



Right

All trial lenses have a power of +0.25D, base curve of 8mm, built-in FSE1, built-in oval optic zone, and quadrant-specific haptics.

Each FitKit includes 14 trial lenses for each eye:

- 9 core lenses
- 3 lenses for additional sag—one per diameter
- 2 SmartSight® FSE lenses for residual higher aberration control to achieve best corrected visual acuity without the need for an aberrometer



Diameter Recommendations

14.5mm – 15.5mm

- Micro Corneas
- Small HVID's ($\leq 11.00\text{mm}$)
- Small Apertures
- Tight Lids
- Difficulty Handling Lenses
- Pediatric Patients
- SJS Limited by Symblepharon

16.0mm

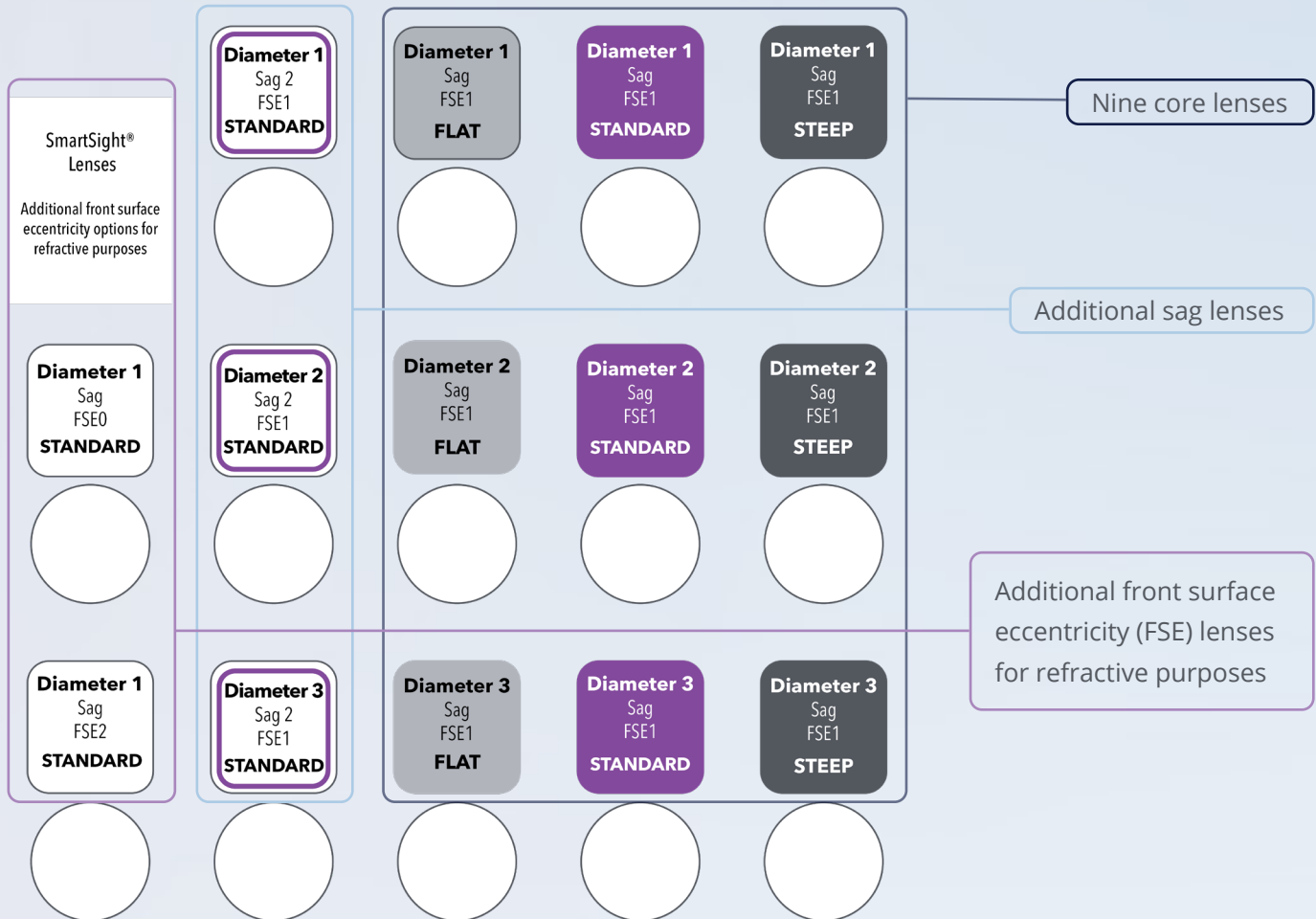
- Pediatric Patients
- Tight Lids
- Small Apertures
- SJS Limited by Symblepharon
- Small HVID's ($\leq 11.00\text{mm}$)

16.5mm

- Regular Corneas
- Average Sag
- HVID 11.00–11.50mm



Left



17.0mm

- Higher Elevation Corneas
- Post Surgical with Mild Ectasia
- Limbal to Limbal Astigmatism
- Mild Keratoconus
- HVID 11.50-12.00mm

18.0mm – 19.0mm

- Highly Ectatic Corneas
- Large HVIDs ($\geq 11.50\text{mm}$)
- Compromised Ocular Surface
- Chronic Exposure
- Compromised/Fragile Grafts
- Severe Dry Eye

Fitting Principles

Trial lens assessment

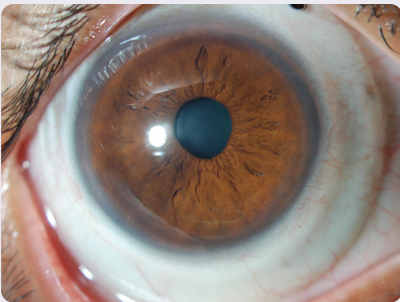
- ① Choose diameter and identify the trial lens having the best initial fit using the fitting algorithm shown in figure 1.
 - Apply the Standard scleral shape trial lens in the selected diameter with the dot at the 12 o'clock position.
 - If the Standard scleral shape trial lens fits loose, choose the **Steep** scleral shape trial lens.
 - If the Standard scleral shape trial lens fits tight, choose the **Flat** scleral shape trial lens.

Fig. 1

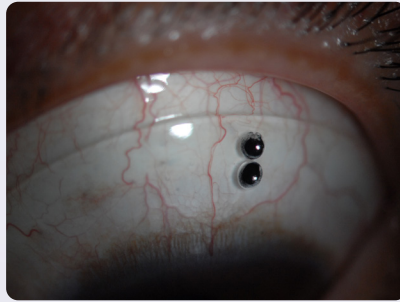


- ② Evaluate the fit after the trial lens has settled for at least 20 minutes. Fitting goals are illustrated below.
- ③ When indicated, change the trial lens diameter.
- ④ Repeat until the best fitting trial lens is identified.

Fitting goals

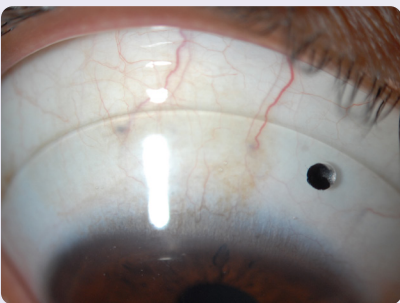


The lens centers well, is rotationally stable, and has between 0.5–1mm movement. No air bubbles.

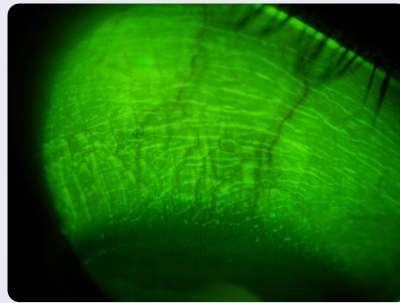


Episcleral blood vessels underlying the haptic are not compressed for adequate haptic scleral alignment.

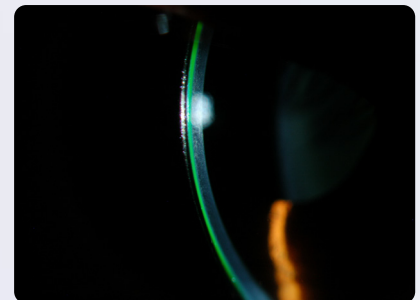
Allow lens to settle at least 20 minutes.



The edge of the lens does not impinge on the bulbar conjunctiva.



There should be minimal-to-no imprint of the edge of the lens on the bulbar conjunctiva upon lens removal.

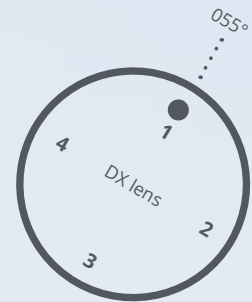


Corneal clearance: The thickness of the fluid compartment over the corneal apex is approximately 200–300µm. In comparison, the center thickness of the lens is 300µm. Vaulting should occur at the limbal area.

Optics and Astigmatic Correction

- ① Identify the best fitting trial lens. We recommend applying astigmatic corrections to a rotationally stable fitting lens.
- ② Perform sphero-cylindrical over-refraction and note the dot location as shown in figure 2.
The dot location in degrees is crucial to obtain accurate results.
- ③ Measurements that exceed +/-4.00 diopters must be vertexed.
- ④ If the patient is reporting ghosting, halos, or fuzzy visual symptoms, vision may be optimized using a trial lens with different FSE values.

Fig. 2: Example of sphero-cylindrical over refraction
-1.00 -1.25 x 075



To learn more about FSE, refer to the FitGuide Advanced.

Fit Modifications

Sagittal depth

Ideal sagittal depth should have 200–300µm corneal clearance, post-settling.

- For lenses ≤18.0mm in diameter, lens settling is ~130µm after 4 hours of wear.
- For lenses >18.0mm, lens settling is ~85µm after 4 hours of wear.
- For reference, refer to the center thickness of the lens, which is 300µm.

Sagittal depth may be adjusted by 50µm increments. If you note corneal touch as in figure 3, increase sag value by 300µm for 200-300µm corneal clearance.

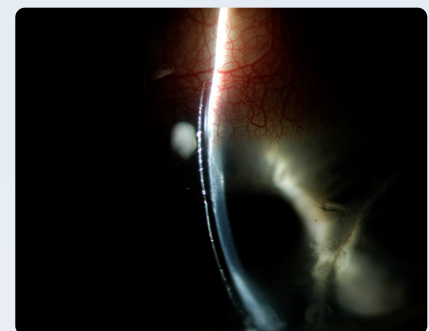


Fig. 3: Example of corneal touch

Quadrant-specific haptics

Lens haptics should properly align to the conjunctival-scleral surface to achieve a centered and rotationally stable fit and obtain an ideal physiological endpoint. Lens haptics can be modified in a quadrant-specific manner in 50µm increments. See recommended quadrant-specific haptic changes based on diameter and presentation in table 1.

Table 1

Issue	14.5mm-15.5mm	16.0mm-17.0mm	18.0mm-19.0mm
Edge awareness (<i>often dissipates without change after lens adaptation</i>)	↓Decrease 50µm	↓Decrease 50-100µm	↓Decrease 100-150µm
Mild edge lift	↓Decrease 100µm	↓Decrease 100µm	↓Decrease 150µm
Significant edge lift	↓Decrease 150µm	↓Decrease 150-200µm or more as needed	↓Decrease 200-250µm or more as needed
Mild edge impingement	↑Increase 100µm	↑Increase 100µm	↑Increase 150µm
Significant edge impingement	↑Increase 150µm	↑Increase 150-200µm or more as needed	↑Increase 200-250µm or more as needed

Order

Order lens(es) with any Optical or Fit Modifications as needed in FitConnect®, BostonSight's lens design and order management platform. Refer to the FitConnect Guide for more information. **Fitting Consultation is available by contacting 888-SCLERAL or emailing fitting-consultation@bostonsight.org.**

LENS PARAMETERS

DIAMETERS	14.5mm–19.0mm in 0.5mm increments; 17.5mm available only with Smart360®	
SPHERE POWER	-25.00 to +35.00 diopters in 0.25D steps	
BASE CURVE	6.0mm to 10.0mm in 0.1mm steps	
CYLINDER	Up to -8.00 diopters in 0.25D steps	
MULTIFOCAL	+1.00 to +3.00 diopters in 0.25D steps	
OPTIONS	SmartSight Technology: SmartSight® FSE SmartSight HOA® SmartFocus™ Multifocal	SmartChannel® Technology: Reduce suction Vault anatomical obstacles Front surface toric Rx

LENS MATERIALS

PRODUCT	MATERIAL	DK
Contamac	Optimum Extra	100
Contamac	Optimum Extreme in clear or light blue	125
Contamac	Optimum Infinite	180
Bausch + Lomb	Boston® EQII	85
Bausch + Lomb	Boston® XO2 in clear or ice blue	141
Acuity Polymers	Acuity 200™ in clear or ice blue	200

COATINGS

PRODUCT	AVAILABILITY
Tangible® Hydra-PEG	On all materials except Boston® EQII



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