Esclera SG

A NEW GENERATION OF SCLERAL CONTACT LENSES

A NEW GENERATION OF LENSES WITHOUT CORNEAL CONTACT, ONLY SCLERAL CONTACT

Mediphacos Esclera SG is a revolutionary scleral contact lens designed for fitting patients with irregular corneas. When properly fitted, Medicon Esclera SG provides a high optical quality aspheric anterior surface that, together with the fluid meniscus, eliminates all optical irregularities of the corneal surface and allows for the correction of myopia, hyperopia and astigmatism with excellent visual acuity and comfort for the patient.

Mediphacos Esclera SG establish a new era of safety and efficacy, with significant advances compared to traditional scleral lenses:

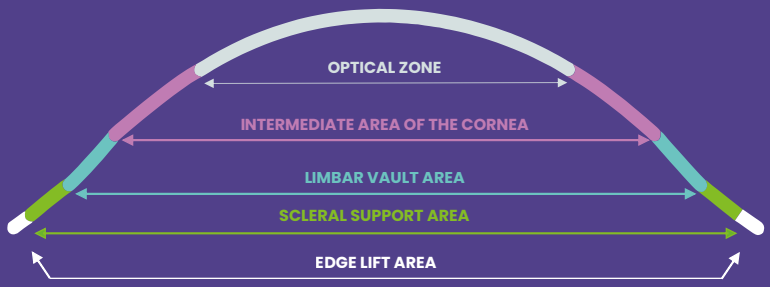
MATERIAL (DK 180) Contamac OPTIMUM INFINITE

New fluor silicone acrylate polymer with extreme oxygen permeability. Combined with the new design of the Esclera SG, much thinner than traditional scleral lenses, it provides up to 80% more corneal oxygenation compared to other scleral lenses, avoiding corneal hypoxia and maximizing user safety and comfort.

SMART DESIGN:

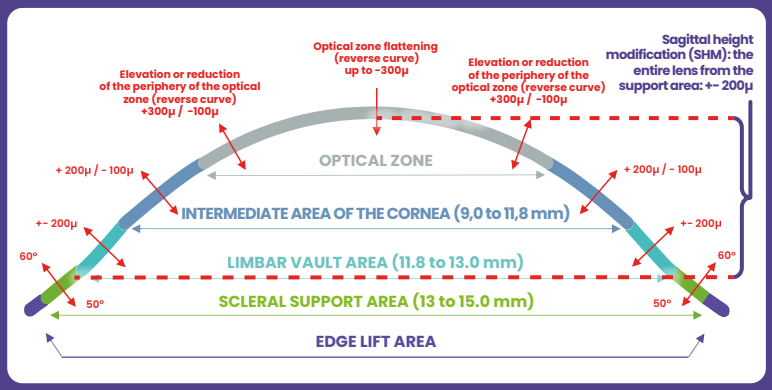
Esclera SG introduces a new concept in design. Its aspherical optics with spherical aberration correction provide excellent quality of vision.

The Esclera SG profile is substantially thinner than other scleral lenses available so far, improving comfort and minimizing the impact on ocular physiology.



The lens has four independent adjustment zones (central, peripheral, limbal and scleral landing). Each of the zones can be adjusted independently, without changing the other zones. When a parameter is changed, formulas introduced in the lens design compensate the design so that the lens-corneal relationship remains unchanged.

- **Sagittal height can be adjusted independently from base curve and diameter;**
- **For fitting refinement, the vault at cornea periphery and limbal clearance can be adjusted to avoid excessive compression or unnecessary vault;**
- **The periphery can also be adjusted to conform to the scleral geometry by changing the sclera landing zone angle.**
- **Axial edge lift can be modified from standard to up to three levels of flattening or steepening**



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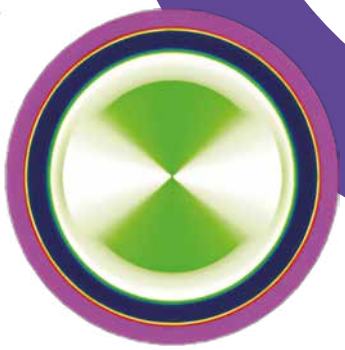

TORIC PERIPHERY

Recent studies confirm that most scleras are not rotationally symmetric. Esclera SG conforms better to scleral geometry toric through the toric periphery option, lessening localized pressure areas (reducing conjuncti- val whitening), reducing bubble formation under the lens, tear exchange, preventing debris acumu- lation and lens fogging during extended use.

FRONT TORIC OPTICS

The Esclera SG offers front toric optics, available for the correction of lenticular astigmatism or residual cylinder detected in over refraction.

An advanced rotational stabilization system ensures cylinder alignment for astigmatism correction.

REVERSE GEOMETRY

Esclera SG can be manufactured with optic zone reverse geometry to improve fitting in cases of flattened corneas by previous surgeries (Lasik, PRK, RK, transplantation and intracorneal ring).

QUADRANT CONTROL

In cases of high asymmetry of the sclera profile, the fitter can select among many levels of lifting or flatte- ning of each quadrant of the lens periphery, allowing an excellent fit to the irregularities of the scleral surface.

ELEVACIÓN SECTORIAL

In the presence of high localized scleral asymmetry or pinguecula, the lens fitter may request peripheral lifting of the lens located at the affec- ted region to relieve scleral pressure at the site.

SIMPLIFIED FITTING SYSTEM

ESCLERA SG CAN BE EASILY FITTED BY FOLLOWING FIVE SIMPLE STEPS DESCRIBED ON THE FITTING MANUAL.

ALL THE DESIGN FEATURES DESCRIBED CAN BE COMBINED TO SOLVE THE MOST COMPLEX AND CHALLENGING SITUATIONS.

PLASMA AND HYDRA-PEG® TREATMENT

tangible™ HYDRA-PEG

Esclera SG has special surface treatments, that provides a hydrophilic layer that surrounds the entire lens. These treatments ensure excellent user comfort, allowing for longer period of use, avoiding fogging and deposit buildup on the surface of the lens.

MODEL	Mediphacos Esclera SG
MATERIAL	Fluorosilicone Acrylate DK 180
BASE CURVE	6,00 to 8,90 in steps of 0,05 mm
SPHERICAL GRADUATION	-35,0 to +35,0 in steps of 0,25 D
CYLINDRICAL GRADUATION	-0,50 to -6,00 in steps of 0,25D
TORIC PERIPHERY	Level 1, 2 or 3
DIAMETER	15,5 mm to 16,5 mm (Default= 15,7 mm) in steps of 0,1mm
OPTICS	Aspherical with aberration correction
TREATMENT	O2 Plasma (default) and Hydra-PEG (optional)
REPLACEMENT	Annual