

ROSE K2 XL™ Special Options

The Rose K2 XL design is available in several toric and asymmetric options, giving you an array of tools to fit even the most challenging corneas:

- Front Surface Toric (FST) for the correction of residual astigmatism.
- **Toric Periphery (TP)** for adjusting the fit on the peripheral cornea and sclera.
- Quadrant Specific Edge Lift (QSEL) when different edge lifts are required in one or more quadrants.
- Asymmetric Corneal Technology (ACT) for large changes to the edge lift in one or two quadrants.
- Segment Specific ACT (SSACT) for large changes to the edge lift over a small arc.
- Bifocal for presbyopia or when an addition is required for near work.

Front Surface Toric (FST)

Application

For the correction of residual astigmatism.

Design

Toricity is applied to the front surface of the lens only and prism ballast (extending over the optic zone) is used to ensure correct orientation of the lens.

Range

Diameter: 13.6 to 16.6 mm in 0.1mm steps

Sphere: All powers Cylinder: -0.25 to -12.00D in 0.125D steps

Axis: 0 to 180 in 1 degree steps

Prism: 0.4D to 2.0D in 0.05D steps. Standard prism = 1.25D

Marker: Dot at base of prism (270)

Filling

Inclusion of an FST will not affect the fit or location of the lens.

Toric Periphery (TP)

Application

For toric corneas/scleras where there is reasonable symmetry in the two major meridians, most commonly flatter in the horizontal meridian and steeper in the vertical meridian (with the rule astigmatism). Use when the fit on the peripheral cornea and sclera requires adjustment.

Design

The BOZR remains spherical but all curves outside the back optic zone are toric, affecting both the fit on the peripheral cornea and sclera. Unless otherwise ordered, the toricity is split equally in both meridians, being steepened in one meridian and flattened in the other.

Note: The toricity can be split unequally in each meridian if required.

ACT (see below) may be added in up to 2 meridians, and/or a front surface toric.

Rance

Diameter: 13.6 to 16.6 mm in 0.1mm steps

Sphere: All powers Cylinder: -0.25 to -12.00D in 0.125D steps

Prism: Optional

Markers: 2 lines on the flat meridian - Axis (A) and A +180°

Dot at base of prism (270) if included

Toricity: 0.4mm to 2.0mm in 0.2 steps. Standard = 1.2. (0.6 flatter in one meridian and 0.6 steeper in the

other)

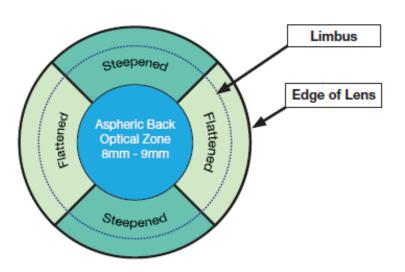
Toric Periphery (TP) Cont.

Filling

With a spherical Rose K2 XL trial lens, the fluorescein pattern will show insufficient lift in one major meridian, and excessive lift in the other meridian over the peripheral cornea and extending out to the edge of the lens. Topography can be used to estimate the amount of toricity required, but the standard 1.2 toricity will fit over 50% of cases where a TP is required. If the fit requires more change in one meridian than the other, an asymmetric split can be used. On insertion, the lens should orientate to the correct position within a few seconds and remain stable, without the inclusion of prism ballast. Prism can be added to improve orientation and stability of the TP if required.

Ordering

The axis of the toric periphery does not need to be specified unless prism, front toric or ACT is included.



Quadrant Specific Edge Lift (QSEL)

Application

Where different edge lifts are required in one or more quadrants. Each quadrant is 90 degrees apart but these may be oblique with the maximum (positive "+" lift/edge out) or minimum (negative "-" lift/edge in) occurring at the centre of each quadrant. For use where the fit outside the limbus requires changing.

Design

Different lifts are applied to the last 2mm of the lens, thereby only changing the fit from the limbus out to the edge of the lens. The fit over the cornea remains unaffected.

Although optional, 1D of base down prism at 270 is standard, to assist with the correct orientation of the lens.

ACT (see below) may be added in up to 2 quadrants, and/or a front surface toric.

Range

Diameter: 13.6 to 16.6mm in 0.1mm steps

Sphere: All powers Cylinder: -0.25 to -8.00D in 0.125D steps Prism: 0.4D to 2.0D in 0.05D steps. Standard prism = 1.00D Marker: Dot at base of prism (270), Lines at 0 and 180 degrees

Lifts: -3.00 (edge in) to +4.00 (edge out) in 0.5 steps

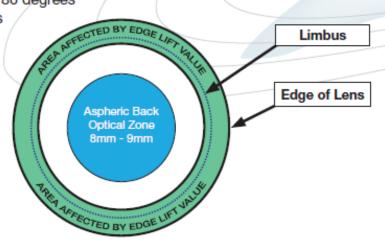
Ordering

State the lift value required in each quadrant. e.g.:

0: standard

90: increased +1.00 180: decreased -0.50

270: standard.



Asymmetric Corneal Technology (ACT)

Application

Where large changes to the edge lift are required in one or two quadrants, e.g. PMD. For use where the fit over the cornea and the sclera requires changing in one meridian.

Design

The BOZR is not affected but all curves outside the BOZD are changed in one hemisphere (180 degrees). Fit over the peripheral cornea and sclera will be affected, with the maximum change occurring at the centre of the hemisphere at the edge of the lens.

Range

Diameter: 13.6 to 16.6mm in 0.1mm steps

Bi-directional ACT: -2.00 (edge in) to +4.00 (edge out) in 0.10 steps. Standard ACT = 1.2

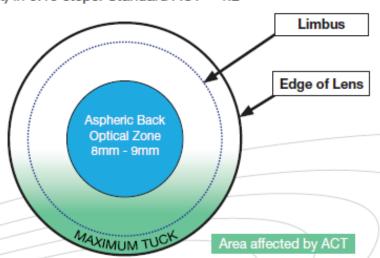
Prism: 0.0 to 2.5D in 0.1 steps. Standard = 1.25D Axis: 0 to 359 degrees in 1.0 degree steps

Ordering

Specify axis of ACT.

 1.25D of base down prism will be included automatically at 270 to assist in stabilization unless otherwise requested. Inclusion of prism will not affect the fit of the lens.

Specify required amount of ACT.
Standard ACT = 1.2



Segment Specific Asymmetric Corneal Technology (SSACT)

Application

Where large changes in edge lift are required over a small arc, e.g. pterygium.

Design

ACT is applied to a specific arc/segment rather than the 180 degree segment used in standard ACT. Fit over the peripheral cornea and sclera will be affected, with the maximum change occurring at the centre of the segment at the edge of the lens.

Range

Diameter: 13.6 to 16.6mm in 0.1mm steps

Bi-directional ACT: -2.00 to +4.00

Segment width: 50 to 180 degrees in 1.0 degree steps

Axis: 0 to 359 degrees in 1.0 degree steps Prism: 0.0 to 2.5D in 0.1 steps. Standard = 1.0D

Ordering

Specify axis of ACT

- Specify width in degrees of the arc/segment
- Specify required amount of ACT. Standard ACT = 1.2
- Prism: 1.25D of base down prism will be included automatically at 270 to assist stabilization unless otherwise requested.

Note: This design has cutting limitations. The following conditions may make the lens difficult to manufacture, especially in combination. Your lab will inform you if your order cannot be cut:

- Steep base curves
- Larger diameters
- A high degree of ACT
- A narrow segment

Bifocal

Application

Presbyopia or when an addition is required for near work.

Design

Centre near simultaneous vision design whereby an addition is added to the front surface on the centre of the lens. The back surface is unaffected.

Range

BC: 5.6 to 9.0 in 0.01 steps

Diameter: 13.6 to 16.6mm in 0.1mm steps

Power: All powers

Front optic addition diameter (FOAD): 0.5 to 5.0mm

Standard recommended FOAD: Dominant eye 1.8mm, Non-dominant eye 2.2mm

Filting

- 1. Establish the dominant eye. In most cases this will be set for the distance vision.
- 2. Use an intermediate add for the dominant eye and keep the FOAD smaller than for the non-dominant eye by approximately 0.4mm.
- 3. Use the full required addition add power for the non-dominant (close vision) eye.

Note: Dependant on the visual results, the FOAD can be varied to enhance either the distance or near vision. ACT, toric, quadrant specific edge lifts and front surface torics can be combined with this design.

