



ROSE K2 NC™
Keratoconus lens

Nipple Cones

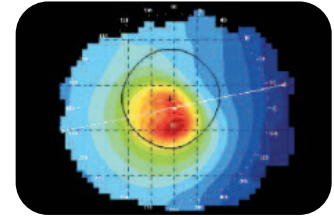




ROSE K2 NC lens

Applications

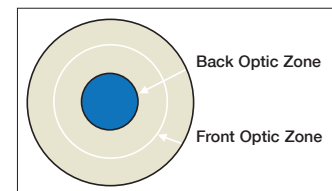
- Primary indication for advanced and moderate Nipple Cones.
- Normally for moderate to severe cases of Nipple Cones, it can be used for any defined Nipple Cone. Not ideal for significantly decentered cones.
- Not indicated for larger oval shaped cones, pellucid marginal degeneration or Keratoglobus.



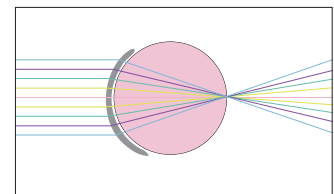
Typical Nipple Cone map

Design

- Very small aspheric Back Optic Zone which decreases as B.C. steepens.
- Front Optic Zone larger than Back Optic Zone.
- Front surface aberration control.
- Very rapid peripheral flattening from Back Optic Zone.
- Precise Edge Lift control: standard, standard flat and standard steep. See peripheral fit section for Edge Lift availability.



Front surface
aberration control design



Parameter range

- BC range: 4.30 to 7.60 mm
- Diameter range: 7.60 to 9.00 mm standard: 8.30 mm
- Power: any

Fitting Set

- The ROSE K2 NC Lens is available in a fitting set up to 25 lenses.
- Base Curve range 4.6 mm to 7.4 mm.
The diameter of the trial lenses progressively increases from 8.1 mm on the steepest trial lens to 8.9 mm on the flattest trial lens.
- The power of the trial set lenses increases proportionately as the base curve steepens.



ROSE K2 NC Fitting Procedure

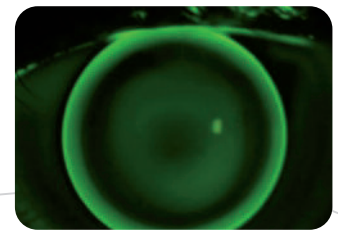
- Pre Fitting Examination – diagnose the type of cone and assess the patient's history and suitability. If not a Nipple Cone, then use a standard Rose K2 keratoconus diagnostic fitting set
- Topical Anaesthetic – topical corneal anaesthetic is recommended for new fits to reduce tearing for more accurate fluorescein assessment.

Initial Base Curve Selection

- For mild to moderate cases (where mean K reading is flatter than 6.0 mm), select a first trial lens 0.2 mm steeper than mean K.
- For advanced cases (where mean K measures between 5.1-6.0 mm), select a first trial lens equivalent to the mean K reading.
- For severe cases (where the mean K reading is steeper than 5.0 mm), select a first trial lens 0.3 mm flatter than the mean K reading.
- If using a corneal topographer, select the first trial lens based on the mean 3.0mm sim Ks and apply the same rules as above.

Central Fit Evaluation

Allow sufficient time for the lens to settle down on the cornea and install a small quantity of fluorescein. Allow any fluorescein to dissipate from the front surface of the lens. Evaluate the lens immediately after the blink and when the lens is centralised. Ensure the patient is looking straight ahead before assessment. Ideally, look for light apical touch over the cone apex. Try steeper or flatter trial lenses until this is achieved. A blue filter will allow better fluorescein assessment.



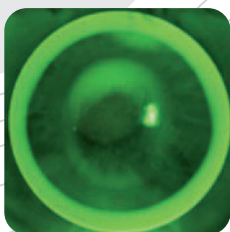
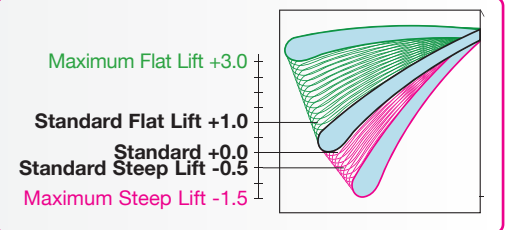
Nipple Cone, optimum fit

Fitting Tips

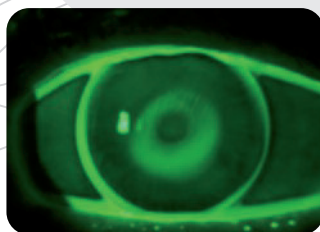
1. Get patient to look straight ahead
2. Lens must be centralised
3. Assess fluorescein after the blink
4. Blue filter allows accurate assessment
5. Look for light apical touch

Peripheral Fit

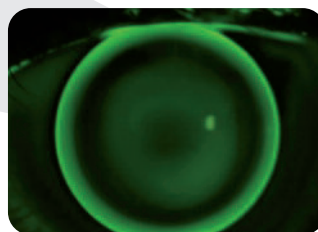
The peripheral fit is assessed along the horizontal meridian when the lens is centralised. The peripheral fluorescein band should be 0.5 to 0.7 mm wide, indicating optimum edge clearance. Use the Edge Lift scale to achieve the optimum edge clearance. The design is available in three standard edge lift options. These include standard, standard flat and standard steep. The full range of edge lift options extends from -1.5 steep lift to +3.0 flat lift in any 0.1 increments.



Excessive Edge Lift



Tight Edge Lift.



Optimum Edge Lift

Fitting Tips

1. Assess Edge Lift along horizontal meridian
2. Lens must be centralised
3. Assess fluorescein after the blink
4. Optimum Edge Lift 0.5-0.7mm wide.

Diameter

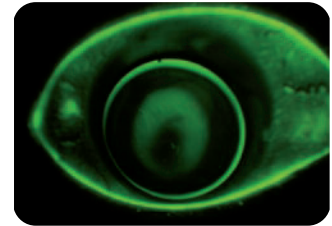
- The optimal total diameter will achieve an interpalpebral fit with capillary lid attachment. The lens should slightly hang off the upper eyelid.
- The standard diameter is 8.3mm. Typically for steeper Nipple Cones a smaller diameter is required and for flatter Nipple Cones, a larger diameter is required.

Fitting Tips

1. Increasing diameter improves lens stability.
2. Consider larger diameters for flatter nipple cones
3. Consider smaller diameter for steeper cones
4. Aim to hang the lens off upper eyelid.

Location

- Lens location should provide good pupil coverage.
- Low locating lenses can be encouraged to ride up by flattening the BOZR, increasing the Edge Lift and/or increasing total lens diameter.
- To correct high locating lenses, the BOZR can be steepened, the Edge Lift decreased, and/or the total lens diameter decreased.



Low locating lens
on Nipple Cone

Fitting Tips

If lens is locating low:

1. Flatten base curve
2. Increase Edge Lift
3. Increase diameter
4. Or combination of all three.

Movement

- Optimal movement should be 1.0 to 1.5 mm on the blink to ensure good tear exchange beneath the lens.
Lens movement is affected by changes in the Edge Lift.
Increased Edge Lift gives more lens movement,
decreased Edge Lift less movement.

Fitting Tips

1. Optimum movement 1-1.5mm on the blink
2. Increase Edge Lift to increase movement
3. Decrease Edge Lift to decrease movement.