



THE QUEEN'S AWARDS
FOR ENTERPRISE:
INNOVATION
2006

ULTRAISION  N

KERASOFTTM 2

Contact Lens for Keratoconus and Post-Graft Fitting

Product Guide

KeraSoft™2 Fitting System

The KeraSoft™2 fitting system is straight forward, and similar to conventional soft lens techniques. The back curves are expressed in Series form (Series A,B,C,D) due to the aspheric nature of the curves. Series A has the steepest base curve and a greater rate of flattening than the successive series.

Cone Advancement	Diagnostic Lens Series Recommended	Approximate Keratometer Readings Guide
Advanced	A	Steeper than 6.20
Moderate - Advanced	B	6.20 to 6.60
Moderate	C	6.60 to 7.00
Early	D	7.00 to 7.40

Fitting Principle

KeraSoft™2 fitting is based on a principle of assessment, trial and adjustment. In the case of Keratoconus, the progression of the condition should be assessed through the change in the astigmatic spectacle correction and the advancement of the cone. Keratometer readings can also be taken, although in cases of severe distortion, these can be of limited value when deciding which lens to select for initial trial.

KeraSoft™2 is fitted using diagnostic lenses. The same trial set combination is suitable for fitting Keratoconus cases and Post-Graft cases.

The trial lenses are provided in spherical form and should be used for all toric and spherical fittings. The practitioner follows the fitting steps outlined in this document, in which an assessment is made of the fit, and an over-refraction is obtained. The practitioner then simply places an order, stating the Series required, the overall diameter required, the power (BVP) of the diagnostic lens used, the over-refraction results and the back vertex distance (BVD) of the over refraction lenses. The Technical Services team will then calculate the required parameters.

KeraSoft™2 lens technical specifications

Material	Hioxifilcon B11, 49% Water (non-ionic) with U.V. inhibitor
Base Curve	Series A, B, C, D
Diameter	14.00mm, 14.50mm, 15.00mm
Lens Design	Wavefront Aberration Control with balanced, optimum, overall thickness and a proprietary back-curve configuration
Power Range	Sphere: +30.00DS to -30.00DS* Cylinder: -0.50 to -11.00DC (in 0.25 steps) Axis: 0° to 180° (in 1° steps) Prism up to 2ΔD in any axis Add: up to +3.00DS (in 0.25 steps)
Handling Tint	Light Blue
DK	$15.00 \times 10^{-11}(\text{cm}^2/\text{sec})$ [$\text{mlO}_2/(\text{ml} \times \text{mmHg})$]
Wear Modality	Durable lens for daily wear use
Pack Size	Single Vial

*Note: Extended range of powers available to order.

Lens Care

These lenses are compatible with all current chemical and oxidative systems. Care should be taken in the application of the manufacturer's recommended exposure time, to chemicals, of lenses that have been tinted. The lens should not be exposed to a combined mixture of enzymes and hydrogen peroxide. The combination can have an adverse effect on the UV filter.

KeraSoft™2 Fitting Procedure

Trial Set

The KeraSoft™2 trial set comprises 8 lenses of the following specification:

Series	Diameter	BVP Range	
Series A	14.50	Plano	2 lenses
Series B	14.50	Plano	2 lenses
Series C	14.50	Plano	2 lenses
Series D	14.50	Plano	2 lenses

The trial set lenses are provided in the same material as the final lenses, namely Hioxifilcon B11, 49% Water (non-ionic) with U.V. inhibitor and a blue handling tint.

Fitting Procedure for Keratoconic Eyes

1. Select the diagnostic lens that most suits the advancement of the cone. If in doubt, the “Approximate Keratometer Readings Guide” in the earlier table may be useful.
2. Insert the lens and allow it to settle for 5 minutes.
3. Assess the fit by considering the centration over the limbal area, the movement on blink and on lateral and upward gaze. The lens movement should be sufficient to support the tear-pump mechanism, but not exceed 1mm of vertical movement on blinking.
4. If the lens does not appear to fit well, try a lens in the next series. (see table below).
5. When a reasonable fit is achieved, allow the lens to settle for 30-45 minutes.
6. Note: If small adjustments to fit are needed, a different overall diameter may be considered for the final lens when ordered. (see table below).
7. Carry out an over-refraction for both best vision sphere (BVS) and, if appropriate, a sphero-cylindrical refraction. Note: The normalising effect of the KeraSoft™2 lens often produces a final Rx that does not relate to the original pre-fit refraction.
8. Order the lens stating the Series required, the overall diameter required, the power (BVP) of diagnostic lens used, the over-refraction results and the back vertex distance (BVD).
9. **Note: the presence of KeraSoft™2 can have a positive effect on the corneal profile to give further improvements in vision over a period of 2-3 weeks of regular wear, even with an advanced cone.** This may require a change of lens parameters that will improve the vision further.

Useful fitting adjustments

Trial Lens used		Suggested adjustments to fit
Series A	14.50	To steepen the fit , increase diameter to 15.00mm. To flatten the fit , decrease diameter to 14.00mm* or go to Series B (14.50mm diameter).
Series B	14.50	To steepen the fit , increase diameter to 15.00mm, or go to Series A (14.50mm diameter). To flatten the fit , decrease diameter to 14.00mm* or go to Series C (14.50mm diameter).
Series C	14.50	To steepen the fit , increase diameter to 15.00mm, or go to Series B (14.50mm diameter). To flatten the fit , decrease diameter to 14.00mm* or go to Series D (14.50mm diameter).
Series D	14.50	To steepen the fit , increase diameter to 15.00mm, or go to Series C (14.50mm diameter). To flatten the fit , decrease diameter to 14.00mm*.

*Note: It is recommended that diameters of 14.50mm minimum should be used for cylindrical powers in excess of 3.00DC.

Fitting Procedure for Post-Graft Eyes

The fitting routine is similar to that used for normal KeraSoft™2 Keratoconus fittings as outlined above. The most commonly used lens for Post-Graft eyes, is the Series ‘B’ with an overall diameter of 14.50mm.

The KeraSoft™2 fitting system is an easy to fit, soft lens for Keratoconus and Post-Graft fittings, providing vision comparable with that of rigid lenses, but with the comfort of soft lenses. Using patented aberration controls based on wavefront technology studies, this lens design delivers the following benefits:

Simple Fitting System

- 1 KeraSoft™2 has a simple 4 lens fitting system, making it accessible to all contact lens practitioners.

Improved Comfort

- 1 Greater comfort than RGP lenses.
- 1 Positional stability sound and comfort levels high as the lenses fit well under the lid margins.
- 1 Non-ionic water retentive material with U.V inhibitor.
- 1 Material resists protein deposition.
- 1 Good oxygen transmission, even in dry conditions.

Clearer Vision

- 1 Stable on-eye parameters, providing consistent stable vision.
- 1 Patented optics design provides clearer vision in all conditions.
- 1 Enhanced contrast sensitivity, providing better vision in low-light situations.
- 1 Reduced “drape” effect providing clearer vision for distorted cornea, in both Keratoconus and Post-Graft cases.
- 1 Design provides a stable base for fitting and over-refraction, even with cylindrical powers as high as 11.00DC.

Wide range of fittings and prescriptions

- 1 Available in +30.00DS to -30.00DS.
- 1 Cylinder power -0.50 to -11.00DC at any axis
- 1 Add up to +3.00.



ULTRAVISION  N