AirFlex
Next generation silicone hybrid lenses

- great comfort thanks to the Silicone Hydrogel soft skirt
- the visual acuity of a rigid lens
- the control of spherical aberration thanks to a high-definition aspheric design
- a high level of oxygen permeability (Dk 100)
- simple fitting protocol even on difficult corneas
- a flexible wear schedule enabling both daily and occasional wear
AirFlex hybrid lenses fitting guide

AirFlex hybrid lenses are next generation hybrid contact lenses that consist of:
- a central zone made of a high Dk RGP material, for excellent vision
- a soft peripheral skirt made of a Silicone Hydrogel material, for easy fitting and comfort

The skirt is modifiable. It is important to note that the fitting of the skirt is totally independent of the central zone and does not have any influence on the vision. The skirt should be perfectly aligned with the conjunctiva.

Fitting protocol

The fitting protocol depends on whether you fit regular or irregular corneas.

Please note:
- the standard lens diameter (ØT) is always 14.90 mm for both, regular and irregular corneas
- the standard skirt (J-index) is always J 0.0 for both, regular and irregular corneas
- the standard diameter of the RGP part (ØRGP) with irregular corneas (eg. keratoconus) is 8.50 mm.
- the standard diameter of the RGP part (ØRGP) with regular corneas is 10.00 mm.
- for corneal astigmatism > 4.00 dpt or internal astigmatism > 0.75 dpt a toric design will be recommended

1. Determine Base curve (R₀) and lens power

For regular corneas

- BC (R₀) = K.flat (radius of flattest K reading)
- if back Toric: r₀steep = K.steep +0.20 mm
- ØT = 14.90 mm (standard)
- J = 0.0 (standard skirt)
- Lens power = eyeglasses sphere (Vertex power = 0)

For irregular corneas

For the most irregular corneas we recommend to use a “trial RGP” with ØT ≤ 9.50 mm in order to determine the Base curve:
- Early stages: BC (R₀) = K.flat
- Advanced stages: BC (R₀) = Base Curve of “trial RGP”
- BC (R₀) = K.flat (radius of flattest K reading)
- J = 0.0 (standard skirt)
- Lens power: = eyeglasses sphere (Vertex power = 0) - (K.flat - R₀) * 5

Examples for irregular corneas:

### early stage keratocone

Patient parameters:
7.80 (100°) / 7.35 mm
-3.00 / -3.00 105°

First trial lens:
J 0.0 / 14.90 / 7.80 / -3.00

### advanced stage keratocone

Patient parameters:
6.30 (25°) / 5.50 mm
-7.00 / -5.25 30°

Optimal “trial RGP”:
8.7 / 6.2 / -8.25

First trial lens:
J 0.0 / 14.90 / 6.20 / -8.25
2. Assess the fit

- Control visual acuity:
  If visual acuity is insufficient, perform a spherical over-refraction and compensate for Vertex distance to determine final lens power.
- Evaluate the fit during a slit lamp exam:
  As in soft contact lens fitting, the evaluation is based on
  1. Centration
  2. Mobility
  3. Fluorescein at lens removal
- Verify the alignment of the lens using large molecule fluorescein. Never use fluorescein for RGP lenses as this may damage the hybrid lenses.

Example of a good fit:

- **Centration is good:**
  The lens covers the entire corneal surface

- **Mobility is good:**
  The lens moves easily about 0.25 mm with each blink

**Too steep fit**

- Increase BC by 0.10 mm
- Add +0.50 dpt to lens power

**Good fit**

- The Base Curve is optimal. There is little or no fluorescein in the central zone and an arc of 1 to 2 mm of fluorescein at the junction.

**Too flat fit**

- Decrease BC by 0.10 mm
- Add -0.50 dpt to lens power

What if either centration or mobility is non-satisfactory?

Steepen or flatten the skirt. 4 skirts are available:

- Very flat skirt: J + 1.0
- Flat skirt: J + 0.5
- Standard skirt: J 0.0
- Steep skirt: J - 0.5

3. Final lens

In case of satisfactory observations, check the fit of the lens after 1 month of wear and at the end of the day.

Lens power = $F'$ of RGP + over-refraction + Vertex distance
For whom?

Indications of AirFlex hybrid lenses are:

- Wearers of RGP lenses having problems relating to comfort, centration or stability
- Keratoconus and other corneal irregularities, including highly complex irregular corneas
- All astigmatisms that can potentially be fitted with RGPs
- All high ametropias
- Wearers of Piggyback lenses
- Unilateral or occasional wear

Lens care

- Peroxide solution or multipurpose solution for soft contact lenses
- Cleaning solution for soft lenses after removal

Technical data

AirFlex

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<tr>
<th>Feature</th>
<th>Specification</th>
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<tr>
<td>Diameter Øₜ</td>
<td>14,90 mm (also available: 15,50 mm)</td>
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<tr>
<td>Diameter Ø_RGP</td>
<td>8,50 mm (also available: 10,00 mm)</td>
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<tr>
<td>Base Curve BC (r₀)</td>
<td>From 5,50 to 10,00 mm in 0,05 mm steps</td>
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<tr>
<td></td>
<td>Back toricity from 0,30 to 1,80 mm in 0,05 mm steps</td>
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<tr>
<td>Soft skirt (J-index)</td>
<td>J 0.0 (standard skirt)</td>
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<td></td>
<td>From - 0.5 to + 1.0 in 0.5 steps</td>
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<tr>
<td>Eccentricity</td>
<td>0.00 to 1.20 in 0.05 steps</td>
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<tr>
<td></td>
<td>(standard with Ø_RGP 8.5 is 0.55, with Ø_RGP 10.00 is 0.65)</td>
</tr>
<tr>
<td>Edge lift</td>
<td>0.00 (standard) to -0.40 in 0.10 steps</td>
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<td>Sphere</td>
<td>- 40,00 to + 40,00 dpt in 0,25 steps</td>
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<tr>
<td>Cylinder</td>
<td>- 0,50 to - 6,00 dpt in 0,25 dpt steps, All axis</td>
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<tr>
<td>Addition</td>
<td>+ 0,75 to + 4,00 dpt in 0,25 dpt steps</td>
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<tr>
<td>Material</td>
<td>ESIH + UV filter</td>
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<tr>
<td></td>
<td>Soft skirt: Silicone Hydrogel Filcon V3 (colorless)</td>
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<tr>
<td></td>
<td>RGP central zone: Optimum Extra Roflufocon D (blue)</td>
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<tr>
<td>Water Content</td>
<td>Silikon Hydrogel 50%</td>
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<tr>
<td>Dk</td>
<td>RGP central zone: 100 x 10-11 (ISO FATT)</td>
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<tr>
<td></td>
<td>Soft skirt: 50 x 10-11 (ISO FATT)</td>
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<td>0,20 mm</td>
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<td>Daily wear, occasional wear possible</td>
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<td>Replacement</td>
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