

# GAS PERM BIFOCALS

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## Bifocal Contacts That Really Work!

We now are able to offer a family of several successful bifocal gas permeable contact lenses. These lenses actually work! You will be able to see distance, mid-range and near. There have been and are many bifocal contact lenses on the market, but these are the most successful lenses we have ever designed. You will be pleasantly surprised. To be frank, however, there is no bifocal contact lens that has vision as clear as a good pair of bifocal glasses; but we are getting very close!



Figure 1. Keratometer

The success of these lenses depends on several factors. The sophisticated designs of these lenses requires measuring the various corneal parameters with either a keratometer or a corneal topographer. The keratometer (Figure 1) measures the central three millimeters of the cornea. Eighty percent of our bifocal gas permeable patients are successfully fit using the central three millimeter measurements.



If additional measurements are required, we use a corneal topographer to achieve

Figure 2. Corneal Topographer

peripheral readings. Our corneal topographer (Figure 2) allows us to measure the complete shape of the corneal surface in several dimensions. These measurements provide information about the general curvature of the cornea, the effective power at every position in the cornea and a three-dimensional model of the curvature changes from the center to the periphery of the cornea.

These measurements allow us to use a computer driven lathe to create a contact lens that carefully matches the actual corneal shape. The lathe generates a special configuration on the contact that creates one of several effects. We actually have a family of gas permeable bi- and tri-focal lenses.

One of your major benefits in our fitting from a family of multifocal lenses is the unusual warranty. Depending on your individual requirements, we will design a lens that is best suited for you from this family of lenses. If your vision or comfort is not satisfactory after adjusting to the initial lens, we will convert you to another member of the family of lenses until your needs are satisfied at no additional cost.

The first of these lenses is the progressive bifocal (Figure 3.). You can truly see distance, mid-range and near with the progressive increase in power from the center of the lens to the periphery.

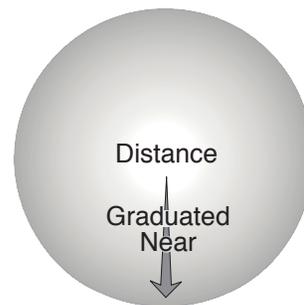


Figure 3. Progressive bifocal gas permeable contact lens

The second lens is the Solitaire bifocal. This lens is actually a flattop bifocal with a transition band between distance and near. There is no actual intermediate portion and that is why the distance and near portions are very clear. The flattened

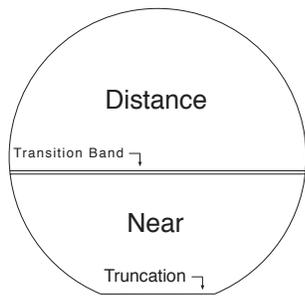


Figure 4.  
Solitaire  
bifocal  
lens.

bottom portion of the lens, called truncation, is what prevents the lens from rotating out of position. You really do not feel the truncated portion of the lens.

The next step in lens design is the Llevation lens. It truly has three zones in the design and allows for intermediate focussing such as with computer work. The height of the trifocal can be altered up or down if the position of the line interferes with distance vision.

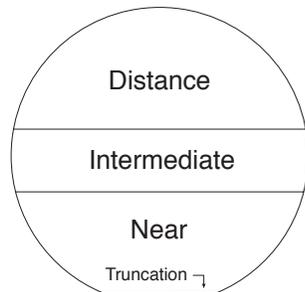


Figure 5.  
Llevation  
trifocal lens.

The fourth member of this family is the modified Llevation bifocal. The intermediate portion of this lens has an aspheric design for better transitions from distance to near viewing.

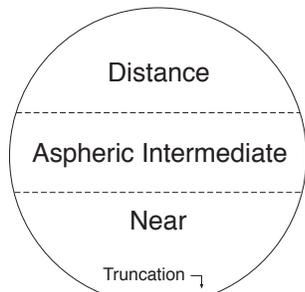


Figure 6.  
Modified  
Llevation  
bifocal

The Triune lens (Figure 7) is one more version of the trifocal lens in which the upper and lower portions of the lens are specially thinned (slab off) to reduce the thickness of the lens and to allow for a better fit for certain corneal shapes.

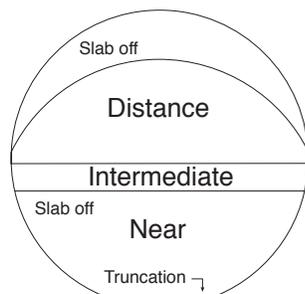


Figure 7.  
Triune bifocal lens.

These lenses are comfortable even if you have never worn a rigid contact lens before. The back surface of the contact lens is made in a combined spherical/aspherical design. This design allows the contact lens to more closely match the front surface of the cornea.

The lens comfort comes from this close match. The red and tearing eye from previous generation rigid contacts is no longer the case.

These lenses can be made from several materials, all of which allow for high oxygen transmission and good wettability. If you are currently wearing gas permeable lenses, there will be no break-in time. If you are not wearing a rigid contact lens, the wearing time starts at one-half to one hour the first day and you increase your wearing time by 30 to 60 minutes each day. By three weeks, you are up to a full wearing time. These lenses can be worn all day long.

This really is the time to solve your need for bifocal glasses or having to wear reading glasses over your contacts. Convert to our family of gas permeable bifocal contacts.

Please call our office at **(972) 596-3328** if you are interested in solving the nuisance of wearing bifocal glasses or reading glasses.



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