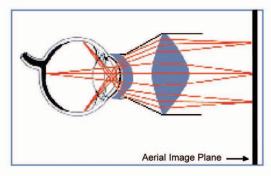
technical specifications



Volk Patented Double Aspheric Lens Design

All Volk lenses are optically engineered using proprietary computer ray tracing and design criteria. The laser contact lens ray tracing at left shows light rays originating at the illuminated fundus and proceeding through the pupil and cornea to the first contact element. The diverging light bundles are converged and redirected towards the double aspheric imaging lens which further refracts and focuses the rays as a conjugate fundus image in the aerial image plane. From the beginning on the drawing board to final production and sale, each Volk lens is designed and produced to the quality standards that your practice demands.

Volk Laser / Anti-reflective Coatings and Filters

Most Volk lenses come standard with high efficiency laser / anti-reflective (AR) coatings to optimize laser throughput and to assist in diagnosis by reducing glare in the visible spectrum. Please check specific product descriptions for additional information on coating styles or non-coated diagnostic lenses

Standard Flange and No-Flange (NF) Designs

Volk uses both standard flange and no flange designs in our contact lenses. In general, the standard flange is designed to stabilize the lens on the eye by creating suction between the contact element and the cornea. The standard flange usually requires a viscous solution such as methylcellulose to fill in the "air gaps" and allow for easier removal of the lens from the cornea. The added stability that the wider flange provides can be especially helpful during laser treatment or when a view of a particular anatomy is required for a more extensive period of time. The fluid also may increase patient comfort for longer procedures.

Volk also has no-flange (NF) versions available for many of our contact lenses. The smaller contact area of the no-flange design allows more mobility on the cornea and may facilitate diagnosis of pediatric or small adult patients. No-flange designs may or may not require the use of a viscous solution. The no flange versions of the Volk G-Series, for instance, are designed so they do not require the use of a methylcellulose style lubricant. Fluid can be used, but artificial tears or a similar lubricant should be sufficient. These designs may be more beneficial during diagnoses where patient sensitivity to the solution and exam time are greater considerations.

In addition to the standard flange and no-flange designs, some lenses may have specially designed contact elements such as the ANF+ that provide added benefits or have unique usage characteristics. Please refer to the specific product listings or contact Volk for additional information.

Advanced No Fluid (ANF+) Contact Lenses

Volk's new ANF+ Contact Lenses are specially designed to be used with the normal tear film as the fluid interface. Methylcellulose or other viscous solutions need not be used. Each ANF+ corneal contacting surface incorporates a special bi-aspheric contour that completely eliminates captive air bubbles. Its surface fits the cornea in a manner similar to that of a small endpoint gonioscopy lens, yet offers complete eyelid control and lens stability by virtue of its full-size flange. Application and removal of the lens is greatly facilitated (minimal corneal suction) and repeat applications are accomplished easily. The cornea remains clear so that fundus photography or further diagnostic/therapeutic procedures may be performed immediately. When ordering, specify Standard or ANF+ contact design.

•U.S. PATENT # 5,347,326 & # 5,046,836

Glass not plastic

Volk Lenses feature glass imaging elements, not plastic, to ensure the brightest, crispest views of ocular structures without the haze and optical distortion associated with plastic lenses. This results in excellent light transmission, edge-to-edge image clarity and unmatched depth perception. When purchasing your next lens, ask what materials are used in its manufacture. Insist on Double Aspheric design. Insist on glass...insist on Volk!

