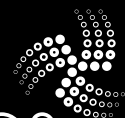




MINIFLEX[®]

Aspheric Microincision Intraocular Lens

NEW NATURAL YELLOW[®] CHROMOPHORE



MEDIPHACOS
OPHTHALMIC PROFESSIONALS

VISION IN EVOLUTION

MINIFLEX®

Aspheric Microincision Intraocular Lens

MINIFLEX is result of Mediphacos' 25 years of expertise in intraocular lens research, development, design and manufacturing.

This innovative intraocular lens was developed following extensive discussions with world-renowned cataract surgeons, incorporating new and unique concepts in its material, optics, design and clinical performance.

FLEXACRYL HYBRID ACRYLIC

UV BLOCKER AND NEW NATURAL YELLOW® CHROMOPHORE

ASPHERIC OPTICS

Aberration-free optic design.

SELF-CENTERING HAPTICS

Adjusts to capsular bags of all sizes.

HAPTIC STRESS ABSORPTION CAVITY

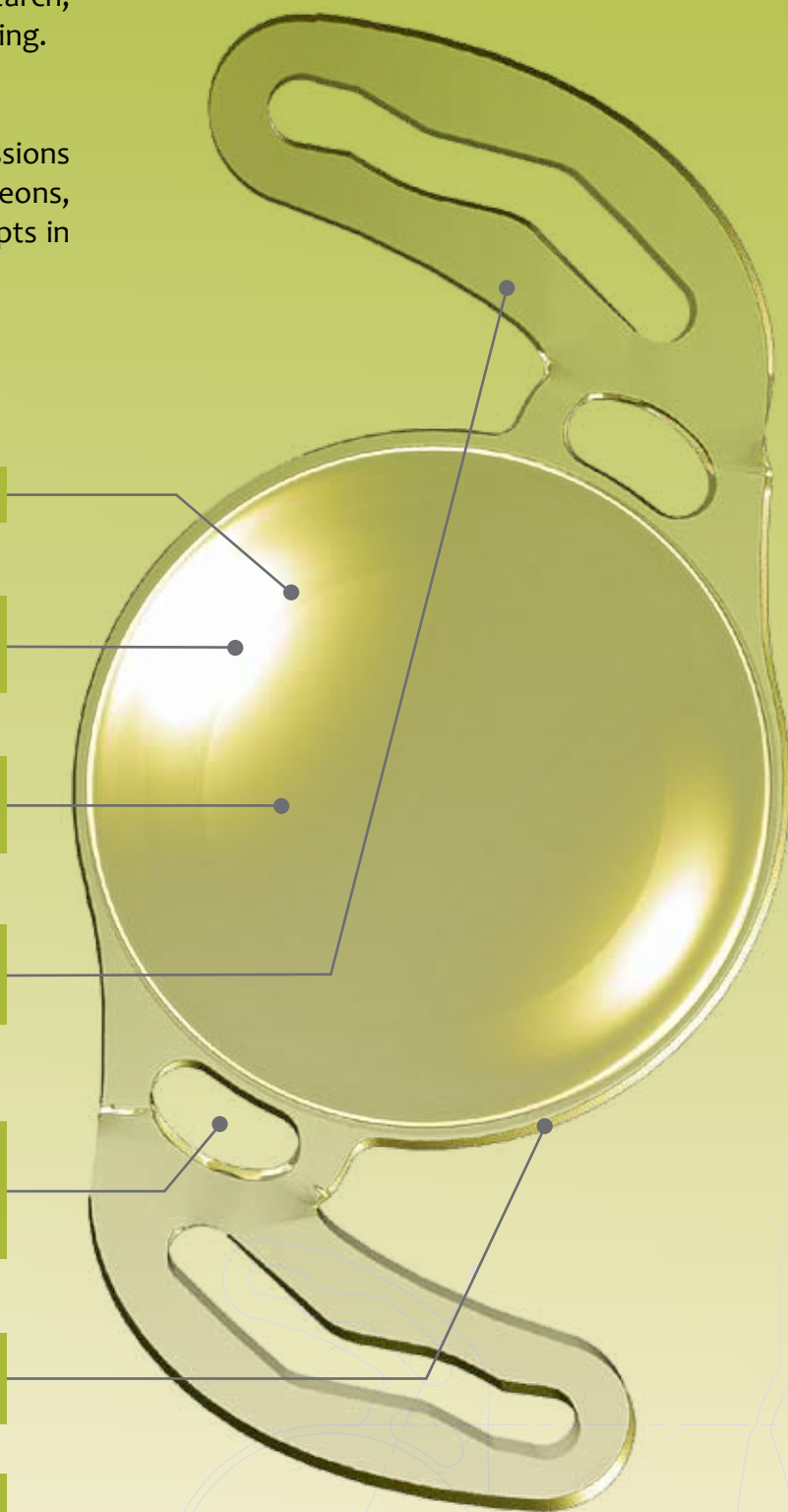
Ensures long-term implant stability.

DOUBLE SQUARE EDGE 360°

Superior PCO protection.

DESIGNED FOR MICS

Implantation trough 1.8mm to 2.2mm .



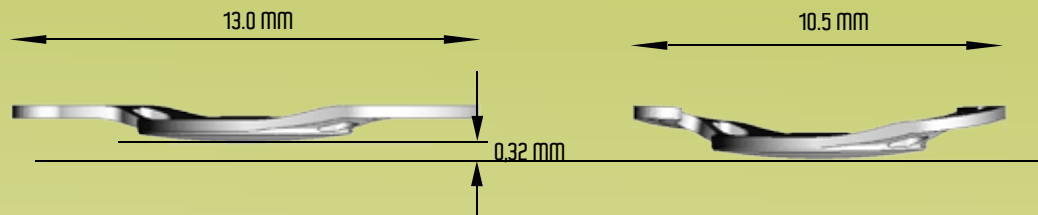
SUPERIOR PROTECTION AGAINST PCO

“The ideal IOL must reduce PCO rates.”

Double Square Edge 360°

MINIFLEX is the first one-piece foldable IOL to incorporate two posterior square edges of 360°, creating a double barrier against LEC proliferation, even on the haptic-optic junction areas.

The haptic compression generates a posterior movement of the optic, increasing the contact between the IOL and the posterior capsule and improving the protection efficiency of the square edges.



EASY AND PRACTICAL

“The ideal IOL must be easy to use and be compatible with the surgeon’s preferred technique.”

Disposable Injection System Included

MINIFLEX is supplied with a safe and convenient disposable injection set. This advanced system avoids direct contact between the IOL and the injection plunger, eliminating problems such as haptic trapping and tearing.

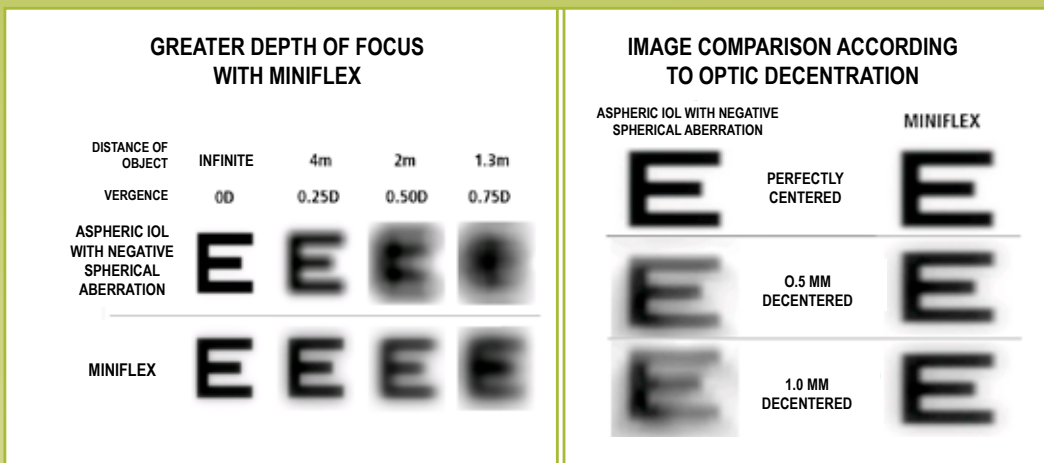


OPTIC DESIGN

“Ideal optics should not introduce positive or negative spherical aberrations.”

Aberration-Free Aspheric Optics

MINIFLEX features a unique aspheric optic design optimized by state-of-the-art ray tracing software. Unlike other aspheric intraocular lenses in which negative spherical aberration is induced, MINIFLEX optics is free from spherical aberrations, allowing for greater depth of focus and maintaining both visual acuity and contrast sensitivity intact in case of decentration.



DESIGNED FOR MICS

“The incision size must be as small as possible.”

1.8mm Injection System

MINIFLEX inaugurates a new era for microincision cataract surgery. The material's high pseudoplasticity and the visco-injection system allow for smaller incisions compared to other IOLs, without compromising the implant's optical diameter or its stability. MINIFLEX can be implanted through a 1.8mm incision using a docking injection technique, or 2.2mm with the cartridge introduced in the anterior chamber.



MINIFLEX IS THE IDEAL IOL FOR MICS.

LONG TERM STABILITY

“The ideal design must ensure implant stability in the long run.”

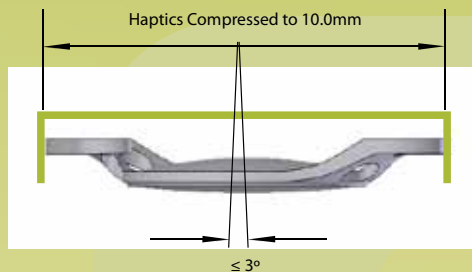
Self-Centering Double Haptics

MINIFLEX haptic design provides equalized compression force as the capsular bag contracts, with optimal fit to bags of all sizes.



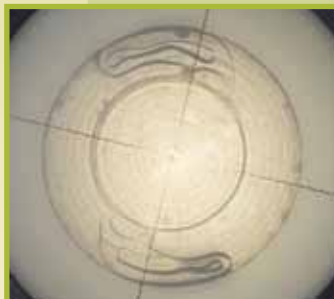
Step-Vaulted Haptic Angulation

- Keeps the haptics in parallel alignment with the optic at all times.
- Prevents optical torsion and tilting.
- Concept validated in conformity to ISO-11979 optic torsion testing (<math><5^\circ</math>).



Haptic Stress Absorption Cavity

- Absorbs the mechanical stress generated by haptic compression.
- Isolates the optics from the haptic compression forces even in the presence of capsular contraction, thus avoiding decentration.
- Concept validated through advanced finite element analysis software.



Large Capsular Contact Arc

MINIFLEX haptic design provides a wide area of contact between the haptics and the equatorial fornix of the capsular bag, improving IOL stability.

MATERIAL

“The ideal IOL material must provide retinal protection and combine positive features of hydrophobic and hydrophilic acrylics.”

Flexacryl Hybrid Acrylic®

Flexacryl is a unique copolymer that combines hydrophobic and hydrophilic monomers with long and successful track record of intraocular biocompatibility:

Composition: EOEMA-HEMA copolymer



Ethoxyethylmethacrylate (EOEMA)

- Hydrophobic Acrylic
- Improves resistance and stability
- Avoids rapid dehydration
- Avoids IOL tearing and marks
- High Index of Refraction



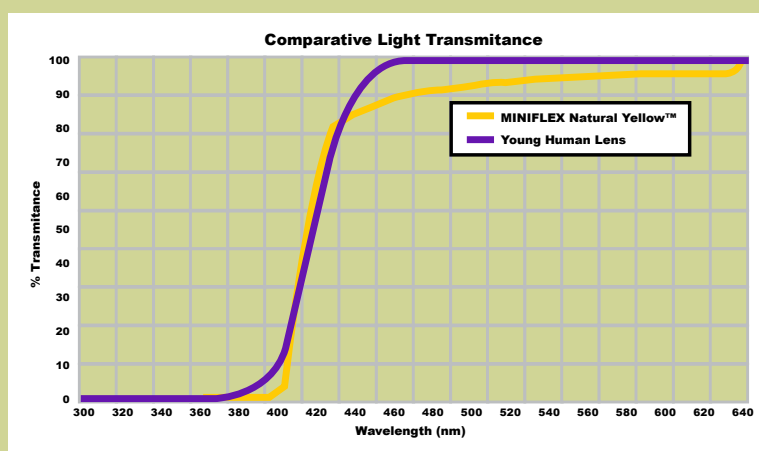
Hydroxyethylmethacrylate (HEMA)

- Hydrophilic Acrylic
- Excellent biocompatibility
- Minimizes postoperative inflammation
- Unfolds promptly and gently at any temperature
- Great pseudoplasticity

UV BLOCKER AND NEW NATURAL YELLOW® CHROMOPHORE

The use of blue-blocking chromophores in some IOL materials may lead to undesirable side-effects such as loss of contrast sensitivity and impact the circadian physiology which regulates biorythms. Strong scientific evidence documents that the progressive yellowing of the aging human lens is related to the high incidence of sleep disorders and depression in the elderly.

Miniflex's new Natural Yellow® chromophore is a hydroxykynurenine compound, the very same yellow chromophore that occurs naturally in the human lens. Using the same chromophore selected by nature through hundreds of thousands of years of evolution of the human species is the most physiologic solution to filter out potentially harmful wavelengths while still allowing healthy blue spectrum light in, thus protecting the retina, enhancing contrast sensitivity and not interfering with the patient's biologic cycles.⁽¹⁻⁶⁾





Mediphacos is a world-class company with over 37 years of experience in ophthalmology and international presence in more than 48 countries in 5 continents.

Mediphacos has earned global presence and recognition through strong R&D investments, state-of-the-art manufacturing technology and sharp focus on the evolving needs of eye care professionals. In our modern manufacturing plant we employ exclusively the very best materials and technologies available worldwide, yielding innovative products of the highest quality, safety and efficacy.

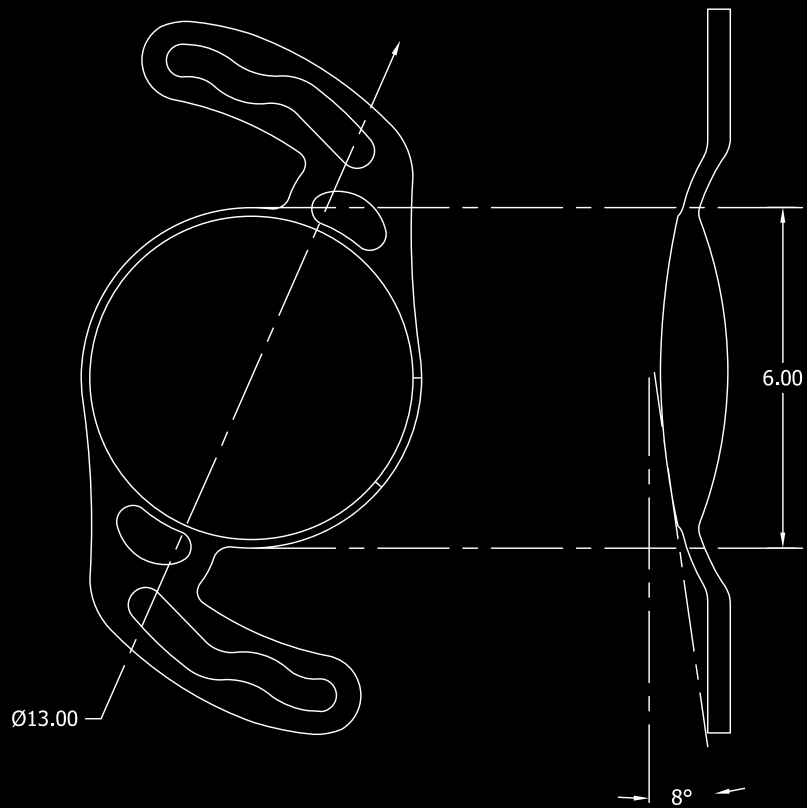
All Mediphacos products are designed and manufactured under a comprehensive quality assurance system implemented in all areas of the enterprise and certified in conformity to ISO 9001-2000, ISO 13485, European Medical Devices Directive and GMP.




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Diopter Range:
From 5.0 D to 30.0 D in 0.5 D steps.

A Constant:
119.0* (SRK)

*Constant should be customized by the surgeon.

References:

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2. Mainster MA, Violet and blue light blocking intraocular lenses: photoprotection versus photoreception. Br J Ophthalmol. 2006; 90:784-792.
3. Mainster MA, Turner PL. Intraocular Lens Spectral filtering. In: Steinert RF, ed. Cataract Surgery, 3rd ed, in press. London: Elsevier Ltd.; 2008.
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5. J.van de Kraats and D.van Norren, "Optical density of the young ocular media in the visible and the UV". Journal of the Optical Society of America. (publishes online 7 Feb 07).
6. J. Pokorney, V.C. Smith and M. Lutz, "Aging of the human lens". Appl. Optics, April 1987, Vol. 26, No. 8.



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