MINIFLEX
CATARACT PRODUCTS

PREMIUM INTRAOCULAR LENSES

mediphacos.com

MEDIPHACOS
VISION IN EVOLUTION

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INNOVATION, QUALITY AND EVOLUTION ARE PART OF OUR VISION

Founded in 1971 by ophthalmologist Emyr Soares M.D. PhD., Mediphacos is today a world-class international company with presence in over 60 countries across 5 continents. We are dedicated to restoring, preserving and improving human eyesight in cooperation with ophthalmologists through creation, production and distribution of high quality products and services.

Mediphacos has achieved a prominent position in the global market by investing heavily in research, development and innovation, constant technological progress and focusing on the evolving needs of ophthalmologists. In our modern production plant, we use only the best materials and technologies available worldwide, developing innovative products of the highest quality, safety and efficacy.

Mediphacos boasts a comprehensive quality assurance system in all levels of the enterprise and certified in compliance with ISO 9001, ISO 13485, GMP and other relevant standards.

MINIFLEX
CATARACT PRODUCTS

Over 40 years of experience at MEDIPHACOS in research, development and production of intraocular lenses, combined with extensive discussions with renowned experts in cataract surgery, led to the launching of the MINIFLEX® intraocular lens series.

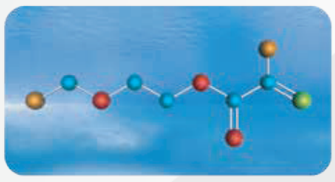
MINIFLEX® incorporates new and revolutionary concepts of material, optics, design and performance.

MATERIAL

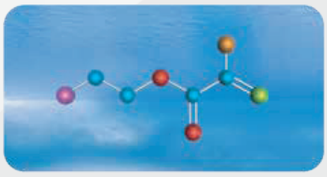
"The ideal IOL material must provide retinal protection and combine positive features of hydrophobic and hydrophilic acrylics."

FLEXACRYL HYBRID ACRYLIC®

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



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

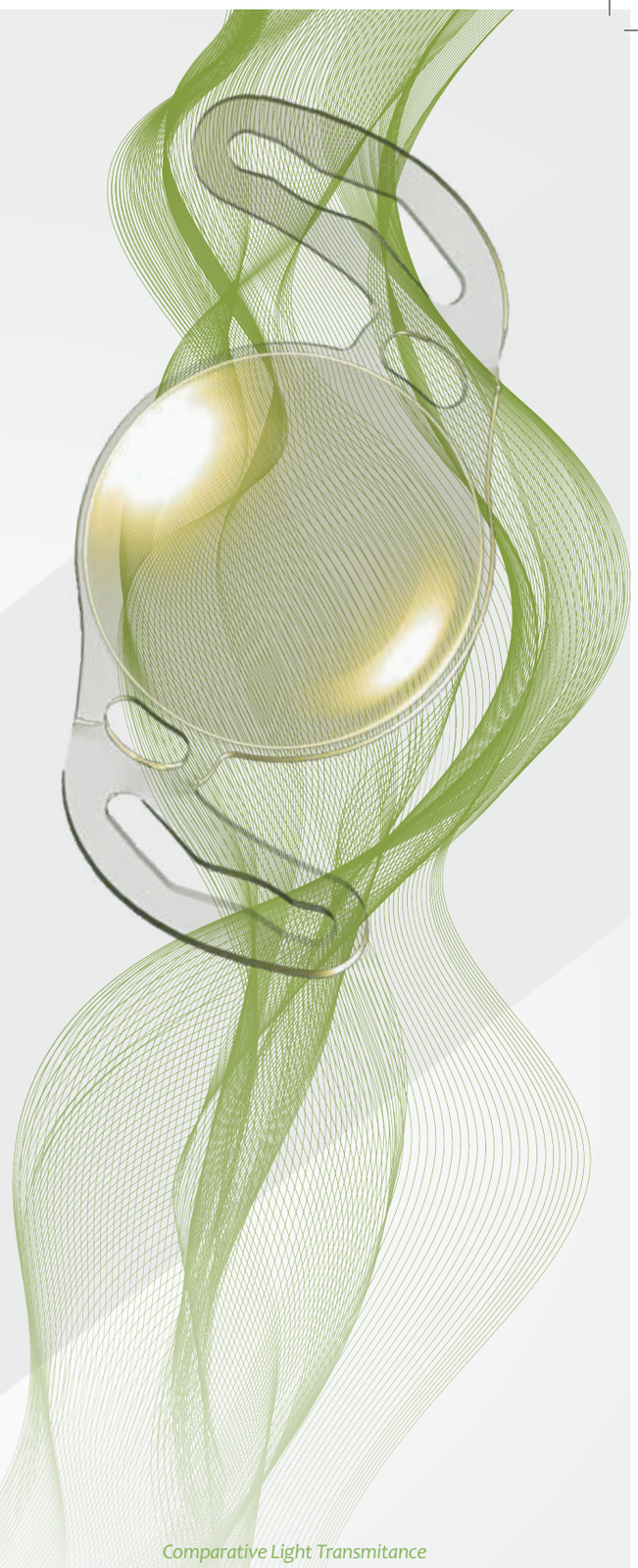


Hydroxyethylmethacrylate (HEMA)
- Hydrophilic Acrylic
- Excellent biocompatibility
- Minimizes postoperative inflammation
- Unfolds promptly and gently at any temperature
- Great pseudoplasticity

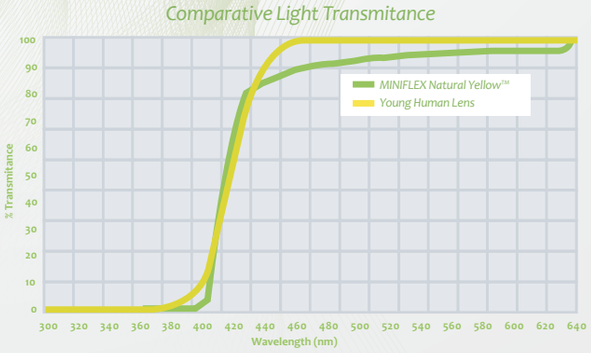
UV BLOCKER AND NATURAL YELLOW CHROMOPHORE

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 cicardian 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)



Comparative Light Transmitance



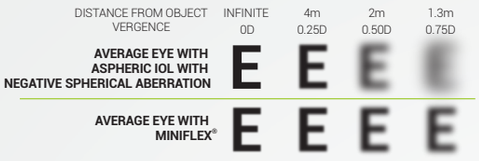
OPTIC DESIGN

"The Ideal optics should not introduce positive or negative spherical aberrations."

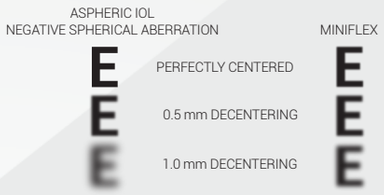
ABERRATION-FREE ASPHERIC OPTICS

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.

ENHANCED DEPTH OF FOCUS



COMPARISON OF IMAGES ACCORDING TO LENS DECENTRATION

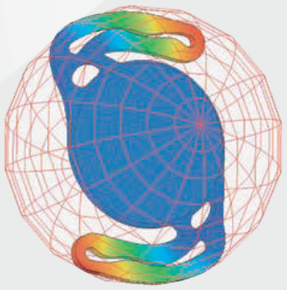


LONG TERM STABILITY

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

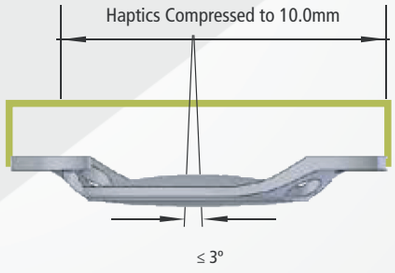
SELF-CENTERING DOUBLE HAPTICS

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 (<5º).



HAPTIC STRESS ABSORBTION 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.

MINIFLEX TORIC
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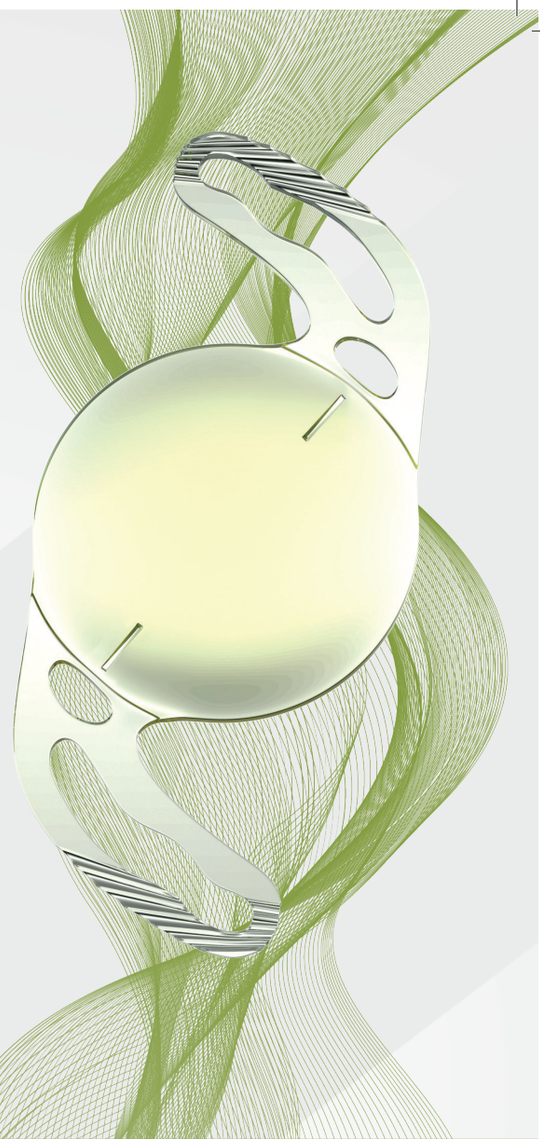
ASTIGMATISM CORRECTION WITHIN YOUR REACH

MINIFLEX® TORIC allows treatment of astigmatism and cataracts in a single procedure



EXCEPTIONAL ROTATIONAL STABILITY

MINIFLEX® TORIC haptics boast a patented anti-rotation design feature that increases adherence of the implant to the capsular equator, reducing IOL rotation and ensuring stable and predictable astigmatism correction.

WIDE RANGE OF CYLINDER CORRECTION

IOL MODEL:	MT3	MT4	MT5	MT6	MT7	MT8	MT9
CYLINDER POWER IN THE IOL PLANE:	1.5 D	2.25 D	3.00 D	4.00 D	5.00 D	6.00 D	7.00 D
CYLINDER POWER IN THE CORNEAL PLANE*:	0.91 D	1.36 D	1.82 D	2.43 D	3.04 D	3.65 D	4.27 D

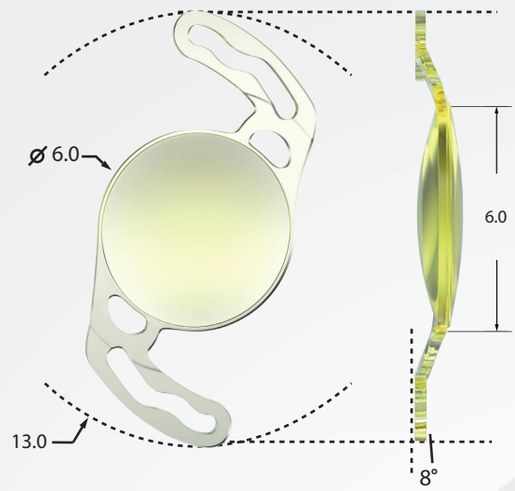
CALCULATOR
www.miniflextoriccalculator.com

The MINIFLEX® TORIC calculator provides optimized toric IOL power calculation.

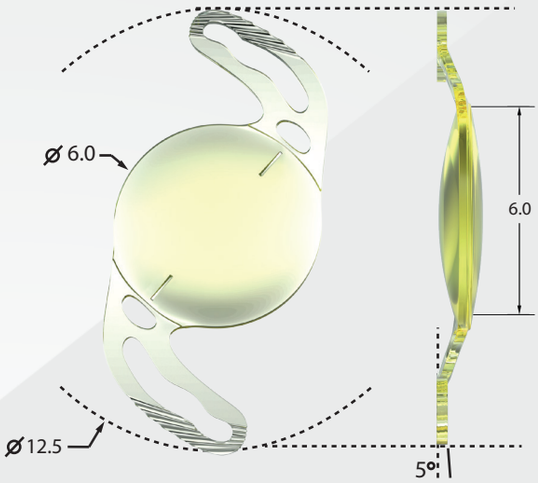
Access through
www.miniflextoriccalculator.com
or scan the QR code.

SPECIFICATIONS

MONOFOCAL



TORIC



SPHERICAL ABERRATION	Neutral
HAPTIC ANGULATION	8° Monofocal | 5° Toric
HAPTIC DESIGN	Double "C" with stress cavity
SQUARE EDGE	360°
REFRACTION INDEX	1.462
MATERIAL	Flexacryl Hybrid Acrylic
OPTIC ZONE DIAMETER	6.0 mm
TOTAL LENGTH TOTAL	13.0 mm Monofocal | 12.5 mm Toric
POSITIONING	Capsular Bag
LENS TYPE	Biconvex, Aspheric Anterior

FILTERS	Natural yellow
UV BLOCK	Yes
INCISION SIZE	≥ 1.8 mm
INJECTION SYSTEM	Disposable injector included
SPHERICAL POWER	+5.0D to +30.0D At 0.50D intervals
SPECIAL RANGE SPHERICAL POWER	+30.0 D to +35.0 D
Constant A*	119.0
Constant ACD*	5.55
Constant SF*	1.79

* The A, ACD and SF constants are estimated and suggested values for the ultrasonic biometrics. It is recommendable that surgeons customize these values through their own surgical technique and background of results.

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