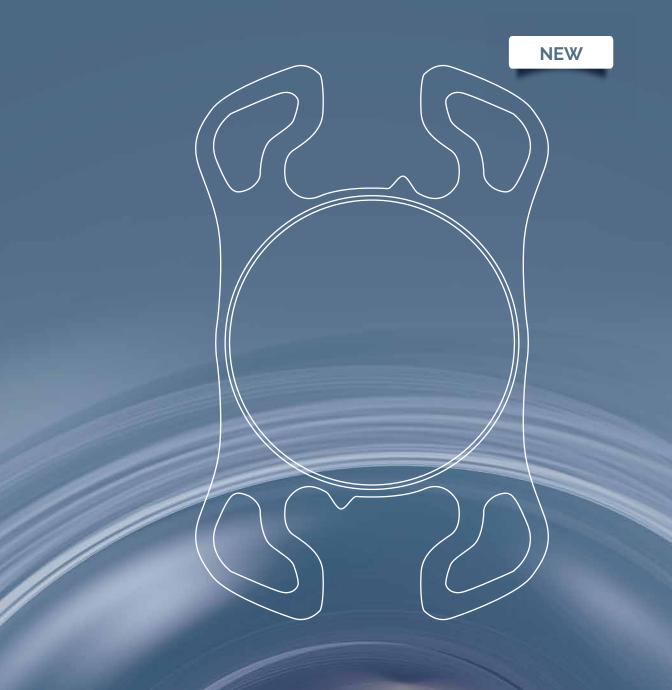




Synthesis® Acrylic Monofocal



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CUTTING-EDGE TECHNOLOGY IOL

Synthesis° is a new acrylic monofocal intraocular lens, developed and manufactured by CUTTING EDGE, expert in IOLs design.

Cutting Edge builds experienced and dedicated teams to design, prototype and manufacture high-quality Intraocular Lenses. Our state-of-the-art facility honours the quality and process sophistication of the medical device industry.

The proximity of our Research & Development team to our manufacturing operations is truly significant for building close links and in using a results-orientated approach.

Cutting Edge masters all manufacturing stages in house, from machining to optical and mechanical tests, through to packaging and international logistics.

Synthesis was engineered by a team who fully believe that the human eye is both fragile and precious and requires the utmost in precision, "savoir-faire" and faultless industrial quality.







THE LATEST ALL-IN-ONE INNOVATIONS PLATFORM



From -10.0 D to +40.0 D

- 1 D increment between -10.0 D to +10.0 D & +31.0 D to +40.0 D
- 0.5 D increment between +10.0 D to 30.0 D

SAFETY

Material

Clear or blue-light-filtering option

- Design
 - 4 point fixation haptics
 - 360° C-Edge+ square edges
 - Orientation notch on optic edge
- Truly MICS enhanced characteristics

REPRODUCIBILITY

- Optic
 - 6 mm diameter optic
 - Anatomically friendly with 3 overall diameter
 - Aberration neutral Aspheric lens
 - Posterior shift features
- Injection
 - Latest injection system options

OPTICAL QUALITY

- MTF curves exceed ISO 13485 norm
- UV and blue-light-filtering option





MATERIAL

- Acrylic copolymer successfully used for more than 17 years in ophthalmology
- Ultraviolet absorption
- Blue-light-filtering option (yellow)

DESIGN

- 4 point fixation haptics
- 3 overall diameters to fit the capsular bag:
 - 11 mm from -10.0 D to +15.0 D
 - 10.7 mm from +15.5 D to 22.0 D
 - 10.5 mm from +22.5 D to +40.0 D
- Enhanced C-Edge+ ≤ 5microns 360° square edge





Overall diameter

- 11 mm
- 10,7 mm
- 10.5 mm

C-EDGE+ SCANNING ELECTRON MICROSCOPY IMAGES

MAGNIFICATION 50X

MAGNIFICATION 200X

____ 00 µm

MAGNIFICATION 500X

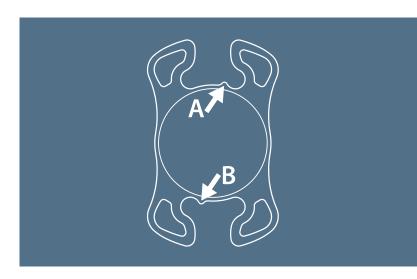
≤ 5 μm

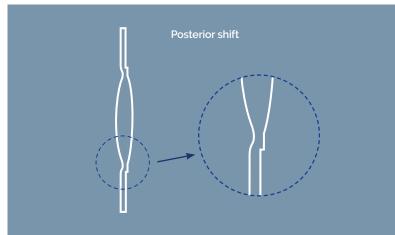


REPRODUCIBILITY

OPTIC

- 6 mm optic across the power range
- Orientation notch at the optic edge
- Posterior shift: vaulted design for excellent capsular bag adhesion
- Aberration neutral Aspheric profile
- Homogeneous surface across the power range for consistent injection forces regardless of IOL diopter.





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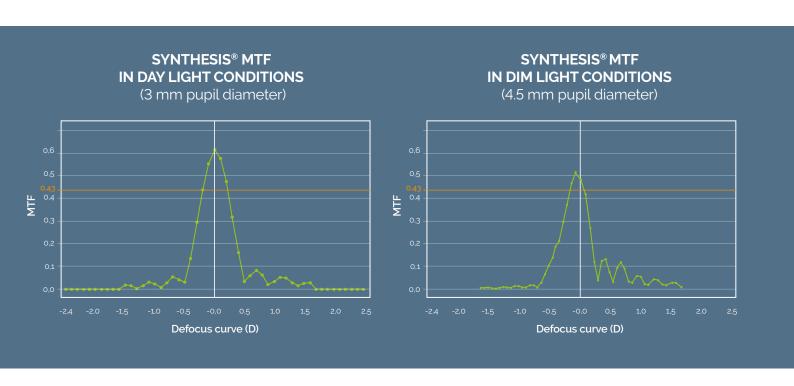




OPTICAL QUALITY

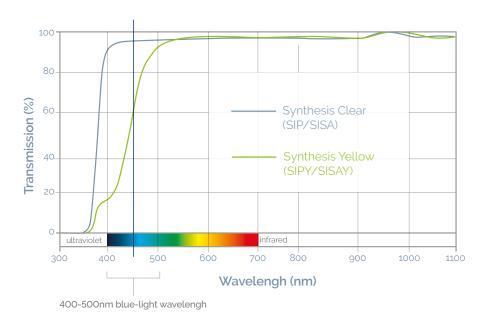
MTF (MODULATION TRANSFER FUNCTION)

Synthesis exceeds ISO 11979-2 standard requirement for optical properties and test methods (0.43 at 100 cycle/mm) at all light conditions and pupil diameter.



SPECTRAL TRANSMISSION

Synthesis Yellow filters 40% of blue light at 450nm wavelengh



TECHNICAL SHEET

DESIGNATION	SPECIFICATIONS			
Optic diameter	6 mm across the power range (0.0 D to 30.0 D)			
Diopter Range	1 D increment between -10.0 D to +10.0 D & +31.0 D to +40.0 D 0.5 D increment between +10.0 D to +30.0 D			
Ordering information	Stock items between 0.0 D to 35.0 D On-order (4 weeks lead-time) between -10.0 D to -1.0 D & 36.0 D to 40.0 D			
Total diameter	From -10.0 D to 15.0 D: 11.0 mm From 15.5 D to 22.0 D: 10.7 mm From 22.5 D to 30.0 D: 10.5 mm			
Design	4 point-fixation, C-Edge+ ≤ 5 microns			
Angulation	0°, posterior-shift feature			
Optic	Aspheric aberration-neutral			
Biometry	SRK/T: A = 118.851 Haigis: aO = 1.2228 (with a1 = 0.4 & a2 = 0.1) Hoffer-Q: pACD = 5.4595 Holladay 1: SF = 1.7064			
References	Synthesis CLEAR Preloaded: SIP Synthesis YELLOW Preloaded: SIPY Synthesis CLEAR IOL: SISA Synthesis YELLOW IOL: SISAY			

MUJECTION SYSTEMS

		Brands	References	Wound- assisted recommended incision	In-the wound recommended incision	In-the-bag recommended incision
-	Preloaded	Medicel Accujet™ PRO 1.6	LP604550P (box of 10)	1.6 mm	1.8 mm	2.0 mm
	Cartridge loading	Medicel Viscojet™ BIO 1.8	LP604350C (box of 10)	1.8 mm	2.0 mm	2.2 mm



SENSE OF EXCELLENCE SENSE OF INNOVATION SENSE OF PARTNERSHIP SENSE OF ETHICS

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