



# INTRAOCULAR LENS MANUFACTURER

CATARACT & REFRACTIVE SURGERY

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Made in France

 CRISTALENS



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# WHO ARE WE?

Founded in 1994, CRISTALENS SA initially distributed medical devices for cataract surgery. In 2005, the company created its own production unit in Lannion for hydrophilic and hydrophobic intraocular lenses for cataract and refractive surgery, becoming the **first manufacturer of intraocular lenses in France**. In 2008, CRISTALENS INDUSTRIE developed a new hydrophobic raw material that allows for micro-incisions under 2.0 mm.

## By choosing CRISTALENS INDUSTRIE

you are collaborating with a French manufacturer that has **complete control of the manufacturing process**: from raw material production to final product packaging, with three key words and core values:

PATIENT SAFETY

INNOVATION

AVAILABILITY

## Cristalens and INNOVATION



**CRISTALENS INDUSTRIE received the Research and Innovation Prize in 2013 for creating its new hydrophobic material for its preloaded micro-incision monofocal and toric lenses.**

CRISTALENS INDUSTRIE strives to provide its clients with the best and most advanced products in the industry. Thanks to close collaboration with the best French universities and highly qualified employees, CRISTALENS INDUSTRIE is at the cutting edge of technological innovation.



## Cristalens and QUALITY



**CRISTALENS INDUSTRIE is NF EN ISO 13485 certified.  
Its intraocular lenses are CE 0459.**

CRISTALENS INDUSTRIE makes every effort to ensure optimum protection for the patient.

CRISTALENS INDUSTRIE only works with ISO-certified suppliers that are respected in the ophthalmic industry. Its automated and robotized manufacturing process optimizes the quality of its intraocular lenses.

## Cristalens and PRODUCTION



**Always striving to stay autonomous and responsive, CRISTALENS INDUSTRIE has complete control over its manufacturing:**

- raw material production
- design
- cryo-machining
- 100% optical and cosmetic control
- logistics

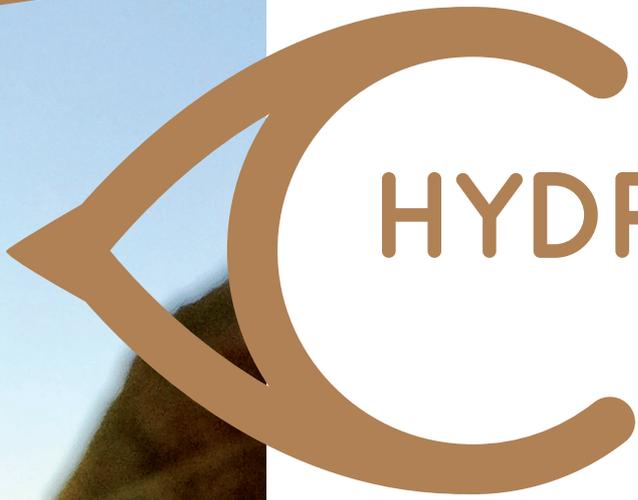
## Cristalens and DISTRIBUTION



**CRISTALENS's products are distributed on all continents, in more than 50 countries. In 2020, CRISTALENS created its first subsidiary: CRISTALENS SL in Spain.**

Its «Regulatory Affairs» and «Export» departments fully master the challenges a distributor may face in terms of logistics and marketing support.





# HYDROPHOBIC RANGE

ARTIS MONOFOCAL

8

EAZ-Y

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ARTIS BIFOCAL

12

ARTIS TORIC

14

ARTIS MULTIFOCAL

16

ARTIS MULTIFOCAL TORIC

18



# ARTIS<sup>®</sup> MONOFOCAL

PRELOADED



► Monofocal

Natural yellow filter

Reference: ARTIS<sup>®</sup> Y PL



Reference: ARTIS<sup>®</sup> PL E

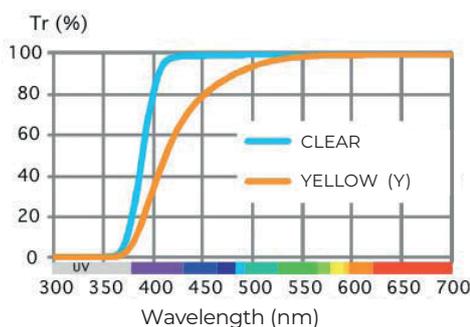


# • PRELOADED HYDROPHOBIC LENSES

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.15 mm (from 0.0D to +9.5D) 6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
<b>Overall diameter</b>	11.00 mm (from 0.0D to +9.5D) 10.79 mm (from +10.0D to +25.0D) 10.50 mm (from +25.5D to +35.0D)
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration
<b>Angulation</b>	5°
<b>Material</b>	Hydrophobic CBK 1.8 / CBJ 1.8 from Cristalens
<b>Dioptric powers</b>	From 0.0D to +35.0D by 0.5D
<b>Estimated A-Constant (SRK-T)</b>	119.3 Ultrasound biometry 119.7 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
<b>Refractive index</b>	1.54
<b>Sterilization</b>	Ethylene oxide
<b>Injection system</b>	Preloaded system
<b>Recommended incision size</b>	2.0 mm

Transmission spectrum



MADE IN FRANCE

CE 0459

# EAZ-Y<sup>®</sup>

PRELOADED



► Monofocal

Natural yellow filter  
Reference: EAZ-Y<sup>®</sup>

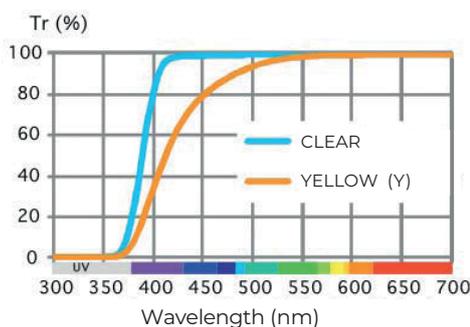


# • PRELOADED HYDROPHOBIC LENSES

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.15 mm (from 0.0D to +9.5D) 6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
<b>Overall diameter</b>	11.78 mm (from 0.0D to +9.5D) 11.50 mm (from +10.0D to +35.0D)
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration
<b>Angulation</b>	5°
<b>Material</b>	Hydrophobic CBJ 1.8 from Cristalens
<b>Dioptric powers</b>	From 0.0D to +35.0D by 0.5D
<b>Estimated A-Constant (SRK-T)</b>	119.3 Ultrasound biometry 119.7 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
<b>Refractive index</b>	1.54
<b>Sterilization</b>	Ethylene oxide
<b>Injection system</b>	Preloaded system
<b>Recommended incision size</b>	2.0 mm

**Transmission spectrum**



MADE  
IN **FRANCE**

CE 0459

# ARTIS<sup>®</sup> BIFOCAL

**PRELOADED**



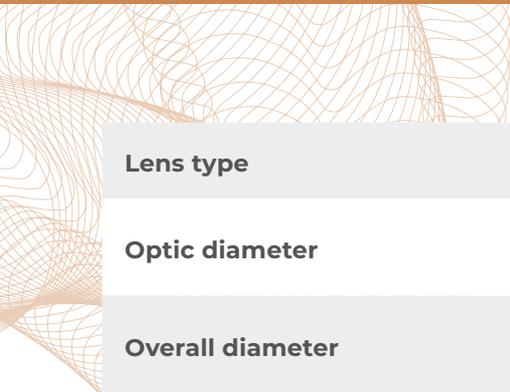
► **Bifocal**

**Reference: ARTIS<sup>®</sup> PL M**



# • PRELOADED HYDROPHOBIC LENSES

## TECHNICAL SPECIFICATIONS



<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
<b>Overall diameter</b>	10.79 mm (from +10.0D to +25.0D) 10.50 mm (from +25.5D to +35.0D)
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Bifocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration Diffractive pattern on the anterior face, biconvex
<b>Angulation</b>	5°
<b>Material</b>	Hydrophobic CBK 1.8 from Cristalens
<b>Dioptric powers</b>	From +10.0D to +35.0D by 0.5D
<b>Additions (at IOL plane)</b>	+2.50D / + 3.00D
<b>Estimated A-Constant (SRK-T)</b>	119.3 Ultrasound biometry 119.7 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
<b>Refractive index</b>	1.54
<b>Sterilization</b>	Ethylene oxide
<b>Injection system</b>	Preloaded system
<b>Recommended incision size</b>	2.0 mm

# ARTIS<sup>®</sup> TORIC

**PRELOADED**



- Monofocal
- Toric

**Reference:** ARTIS<sup>®</sup> T PL E



# • PRELOADED HYDROPHOBIC LENSES

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
<b>Overall diameter</b>	10.79 mm (from +10.0D to +25.0D) 10.50 mm (from +25.5D to +35.0D)
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration Toricity and marks on the posterior face, biconvex
<b>Angulation</b>	5°
<b>Material</b>	Hydrophobic CBK 1.8 from Cristalens
<b>Dioptric powers (spherical equivalent)</b>	From +10.0D to +35.0D by 0.5D
<b>Cylinder powers</b>	+0.75D / +1.50D / +2.25D / +3.00D +3.75D / +4.50D / +5.25D / +6.00D
<b>Estimated A-Constant (SRK-T)</b>	119.3 Ultrasound biometry 119.7 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
<b>Refractive index</b>	1.54
<b>Sterilization</b>	Ethylene oxide
<b>Injection system</b>	Preloaded system
<b>Recommended incision size</b>	2.0 mm



Toric calculator available on  
our website [www.cristalens.fr](http://www.cristalens.fr)

# ARTIS<sup>®</sup> MULTIFOCAL

Two complementary profiles:

PRELOADED



MID



PLUS

- Multifocal
- Binocular phase continuity

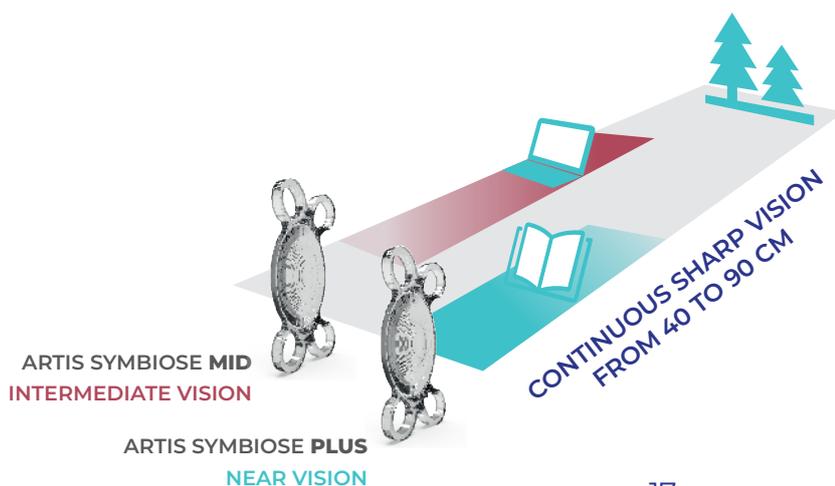
Reference: ARTIS SYMBOSE<sup>®</sup>



# • PRELOADED HYDROPHOBIC LENSES

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.00 mm
<b>Overall diameter</b>	10.79 mm
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Diffractive multifocal extended depth of focus with binocular complementarity Aspherical with negative spherical aberration to partly correct corneal spherical aberration Diffractive pattern on the anterior face, biconvex
<b>Angulation</b>	5°
<b>Material</b>	Hydrophobic CBK 1.8 from Cristalens
<b>Dioptric powers</b>	From +10.0D to +35.0D by 0.5D
<b>Additions (at IOL plane)</b>	MID: Superior intermediate vision - PLUS: Superior near vision
<b>Estimated A-Constant (SRK-T)</b>	119.3 Ultrasound biometry 119.7 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
<b>Refractive index</b>	1.54
<b>Sterilization</b>	Ethylene oxide
<b>Injection system</b>	Preloaded system
<b>Recommended incision size</b>	2.0 mm



MADE IN FRANCE

CE 0459

# ARTIS<sup>®</sup> MULTIFOCAL TORIC

Two complementary profiles:

PRELOADED



MID



PLUS

- Multifocal
- Toric
- Binocular phase continuity

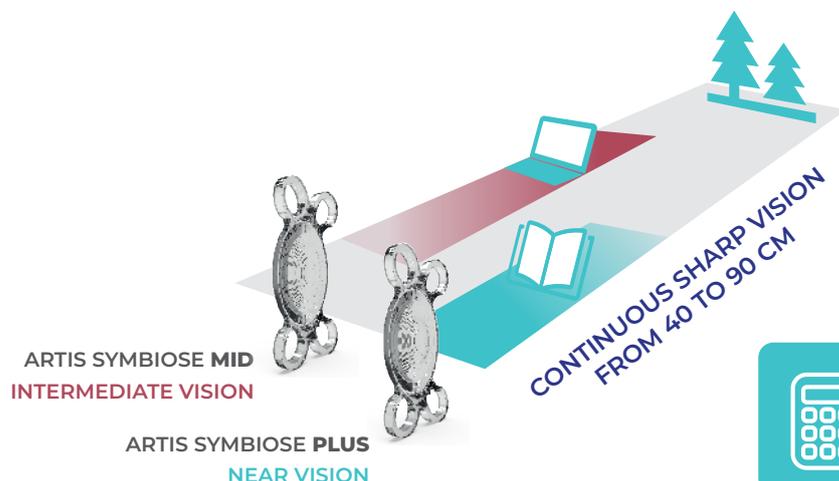
Reference: ARTIS SYMBIOSE<sup>®</sup>



# • PRELOADED HYDROPHOBIC LENSES

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.00 mm
<b>Overall diameter</b>	10.79 mm
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Diffractive multifocal extended depth of focus with binocular complementarity and variable toricity Aspherical with negative spherical aberration to partly correct corneal spherical aberration Diffractive pattern on the anterior face, toricity and marks on the posterior face, biconvex
<b>Angulation</b>	5°
<b>Material</b>	Hydrophobic CBK 1.8 from Cristalens
<b>Dioptric powers (spherical equivalent)</b>	From +10.0D to +35.0D by 0.5D
<b>Additions (at IOL plane)</b>	MID: Superior intermediate vision - PLUS: Superior near vision
<b>Cylinder powers</b>	+0.75D / +1.50D (+2.25D / +3.00D / +3.75D available upon request)
<b>Estimated A-Constant (SRK-T)</b>	119.3 Ultrasound biometry 119.7 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
<b>Refractive index</b>	1.54
<b>Sterilization</b>	Ethylene oxide
<b>Injection system</b>	Preloaded system
<b>Recommended incision size</b>	2.0 mm



MADE IN FRANCE

CE 0459



Toric calculator available on our website [www.cristalens.fr](http://www.cristalens.fr)





# HYDROPHILIC RANGE

CLARÉ 22

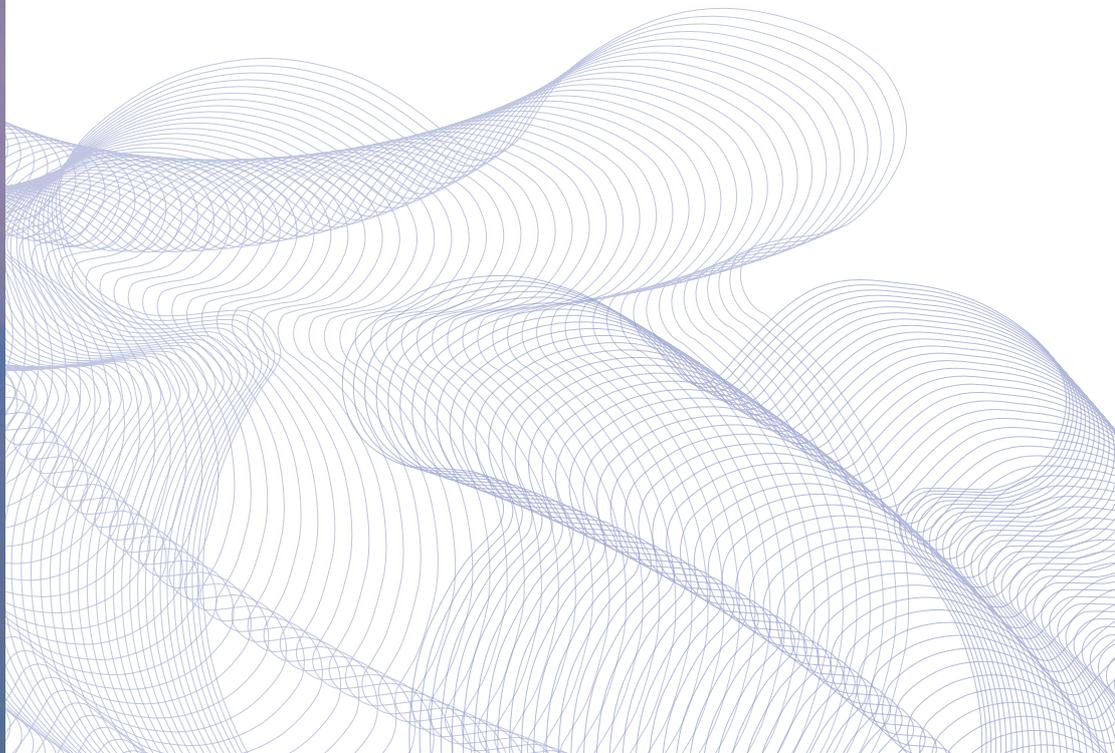
LUCIS 24

CRISTAL 26

# HYDROPHILIC PIGGY-BACK RANGE

REVERSO MONOFOCAL 28

REVERSO MULTIFOCAL 30



# CLARÉ<sup>®</sup>



► **Monofocal**

**Reference:** CLARÉ<sup>®</sup>

# TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.00 mm (from +10.0D to +24.5D) 5.70 mm (from +25.0D to +30.0D)
<b>Overall diameter</b>	11.00 mm (from +10.0D to +14.5D) 10.75 mm (from +15.0D to +24.5D) 10.50 mm (from +25.0D to +30.0D)
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration Biconvex
<b>Angulation</b>	8°
<b>Material</b>	Hydrophilic Benz 25 made of hydrophilic and hydrophobic copolymers
<b>Dioptric powers</b>	From +10.0D to +30.0D by 0.5D
<b>Estimated A-Constant (SRK-T)</b>	118.0 Ultrasound biometry 118.5 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	4.96 mm Ultrasound biometry 5.25 mm Interference laser biometry
<b>Refractive index</b>	1.46
<b>Sterilization</b>	Steam
<b>Recommended injection system</b>	Single-use injector
<b>Recommended incision size</b>	1.8 to 2.2 mm

# LUCIS<sup>®</sup>



► **Monofocal**

Reference: LUCIS<sup>®</sup>

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.00 mm
<b>Overall diameter</b>	11.00 mm (from - 9.0D to +9.5D) 10.50 mm (from +10.0D to +30.0D)
<b>Design</b>	One-piece
<b>Optic design</b>	Monofocal Spherical
<b>Angulation</b>	10°
<b>Material</b>	Hydrophilic Benz 25 made of hydrophilic and hydrophobic copolymers
<b>Dioptric powers</b>	<b>From -9.0D to +30.0D by 0.5D</b>
<b>Estimated A-Constant (SRK-T)</b>	118.0 Ultrasound biometry 118.5 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	4.96 mm Ultrasound biometry 5.25 mm Interference laser biometry
<b>Refractive index</b>	1.46
<b>Sterilization</b>	Steam
<b>Recommended injection system</b>	Single-use injector
<b>Recommended incision size</b>	2.2 mm

# CRISTAL<sup>®</sup>



► **Monofocal**

**Reference:** CRISTAL<sup>®</sup>

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the capsular bag
<b>Optic diameter</b>	6.00 mm
<b>Overall diameter</b>	13.00 mm
<b>Design</b>	One-piece square edge on 360°
<b>Optic design</b>	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration Biconvex
<b>Angulation</b>	10°
<b>Material</b>	Hydrophilic Benz 25 made of hydrophilic and hydrophobic copolymers
<b>Dioptric powers</b>	From +10.0D to +30.0D by 0.5D
<b>Estimated A-Constant (SRK-T)</b>	118.0 Ultrasound biometry 118.5 Interference laser biometry
<b>Suggested anterior chamber depth (ACD)</b>	4.96 mm Ultrasound biometry 5.25 mm Interference laser biometry
<b>Refractive index</b>	1.46
<b>Sterilization</b>	Steam
<b>Recommended injection system</b>	Single-use injector
<b>Recommended incision size</b>	2.2 mm

# REVERSO<sup>®</sup> MONOFOCAL



- ▶ Piggy-back
- ▶ Monofocal

Reference: REVERSO<sup>®</sup>

Correct potential  
refractive errors in  
pseudophakic patients

# • HYDROPHILIC PIGGY-BACK LENSES

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the ciliary sulcus, in pseudophakic patients
<b>Implantation location</b>	Ciliary sulcus
<b>Body diameter</b>	6.50 mm
<b>Overall diameter</b>	13.80 mm
<b>Design</b>	One-piece round edge on 360°
<b>Optic design</b>	Monofocal Spherical Convex anterior face, concave posterior face
<b>Angulation</b>	10°
<b>Material</b>	Hydrophilic Benz 25 made of hydrophilic and hydrophobic copolymers
<b>Dioptric powers</b>	From -6.0D to +6.0 D by 0.5D
<b>Estimated A-Constant</b>	Non-applicable
<b>Refractive index</b>	1.46
<b>Sterilization</b>	Steam
<b>Recommended injection system</b>	Single-use injector
<b>Recommended incision size</b>	1.8 to 2.2 mm



Reverso calculator available on  
our website [www.cristalens.fr](http://www.cristalens.fr)

# REVERSO<sup>®</sup> MULTIFOCAL



- Piggy-back
- Multifocal

Reference: REVERSO<sup>®</sup>

Presbyopia correction in  
pseudophakic patients

# • HYDROPHILIC PIGGY-BACK LENSES

## TECHNICAL SPECIFICATIONS

<b>Lens type</b>	For implantation in the ciliary sulcus, in pseudophakic patients
<b>Implantation location</b>	Ciliary sulcus
<b>Body diameter</b>	6.50 mm
<b>Overall diameter</b>	13.80 mm
<b>Design</b>	One-piece round edge on 360°
<b>Optic design</b>	Multifocal Spherical Convex anterior face, diffractive pattern on the concave posterior face
<b>Angulation</b>	10°
<b>Material</b>	Hydrophilic Benz 25 made of hydrophilic and hydrophobic copolymers
<b>Multifocal specifications</b>	Light distribution: 65% far to 35% near Step apodization: from Ø 3.0 mm to Ø 4.5 mm
<b>Dioptric powers</b>	From -3.0D to +3.0D by 0.5D
<b>Additions (at IOL plane)</b>	+1.50D / +2.00D / +2.50D / +3.00D / +3.50D
<b>Estimated A-Constant</b>	Non-applicable
<b>Refractive index</b>	1.46
<b>Sterilization</b>	Steam
<b>Recommended injection system</b>	Single-use injector
<b>Recommended incision size</b>	1.8 to 2.2 mm



Reverso calculator available on  
our website [www.cristalens.fr](http://www.cristalens.fr)

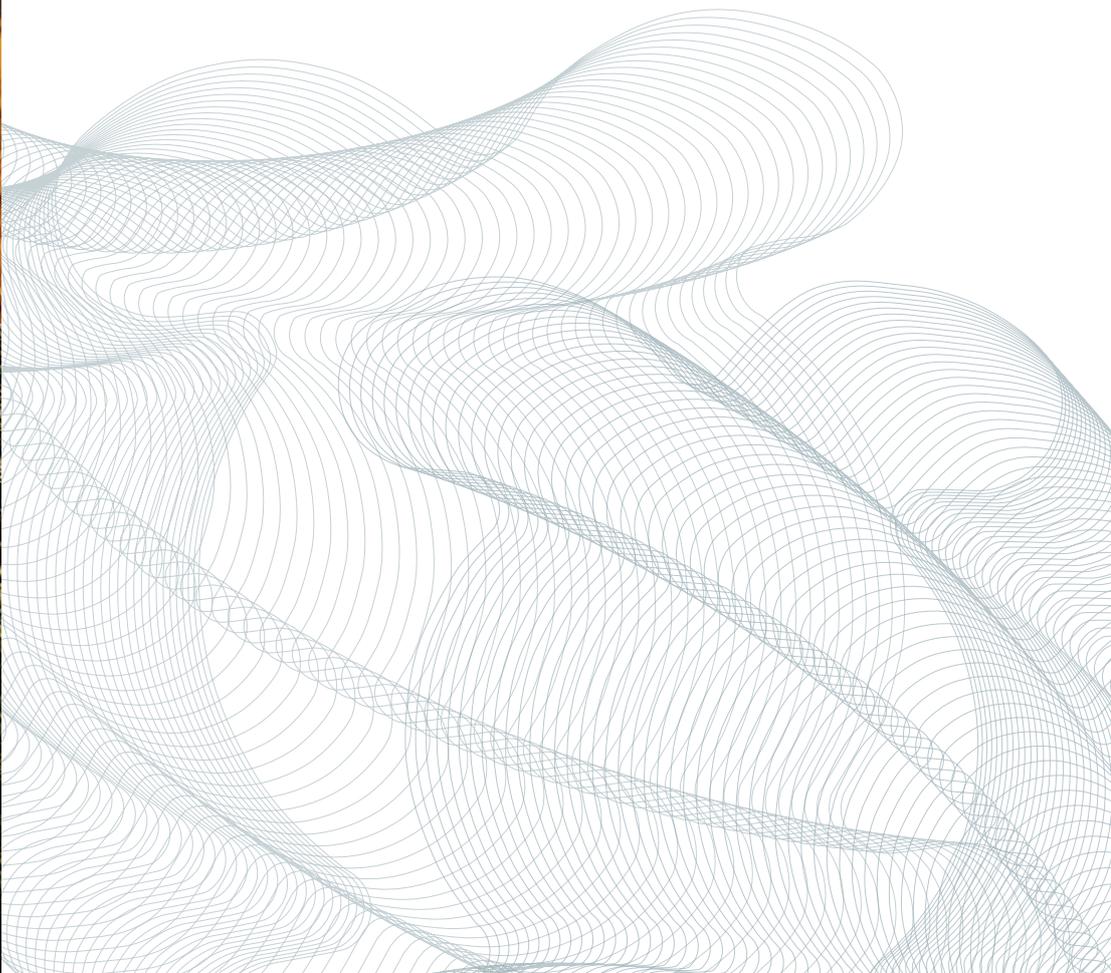




# VISCOELASTIC

CRISTAVISC c<sup>®</sup>

34



# CRISTAVISC c<sup>®</sup>

 **VIVACY**  
PARIS

Distributed by Cristalens Industrie



- ▶ Cohesive with mannitol
- ▶ Average viscosity of 170Pa.s
- ▶ Manufactured by the Vivacy Laboratories

Reference: CRISTAVISC c<sup>®</sup>

## TECHNICAL SPECIFICATIONS

<b>Eur. Ph. compliant, quality hyaluronic acid for intraocular use that is injectable and biofermentation in origin</b>	—
<b>Each box contains</b>	1 syringe - 1 x 27G 7/8" canula - 1 leaflet - 10 traceability labels
<b>Glass syringe, Pharmaceutical grade, Class I, latex free, prefilled</b>	At 1 ml
<b>NaHa concentration</b>	15.5 mg/g
<b>Molecular weight of the hyaluronic acid in the final sterile product</b>	2.2 MDa (mean value)
<b>Phosphate Buffer pH 7.2</b>	q.s. 1g
<b>With natural antioxidant</b>	Hyaluronic acid with mannitol
<b>Isoosmolarity</b>	310 mOsm (mean value)
<b>pH</b>	6.8 – 7.6
<b>Viscosity at 0,01s<sup>-1</sup> shear rate</b>	170 Pa.s (170 000 cPoise) (mean value)
<b>Apyrogen (no endotoxins)</b>	< 0.5 EU/g
<b>Sterile (gel by autoclave – second packaging with blister, sterilization with ethylene oxide)</b>	SAL 10 <sup>-6</sup> (Sterility Assurance Level)
<b>Proteins</b>	< 20 ppm
<b>Storage</b>	2°C to 25°C for up to 36 months
<b>Medical Device</b>	Class IIb
<b>Biocompatible according to</b>	ISO 10993 and ISO 15798
<b>Quality Management System certified</b>	ISO 13485

## INDICATIONS

Anterior segment surgery

Protection of the corneal endothelium and maintenance of the intraocular space

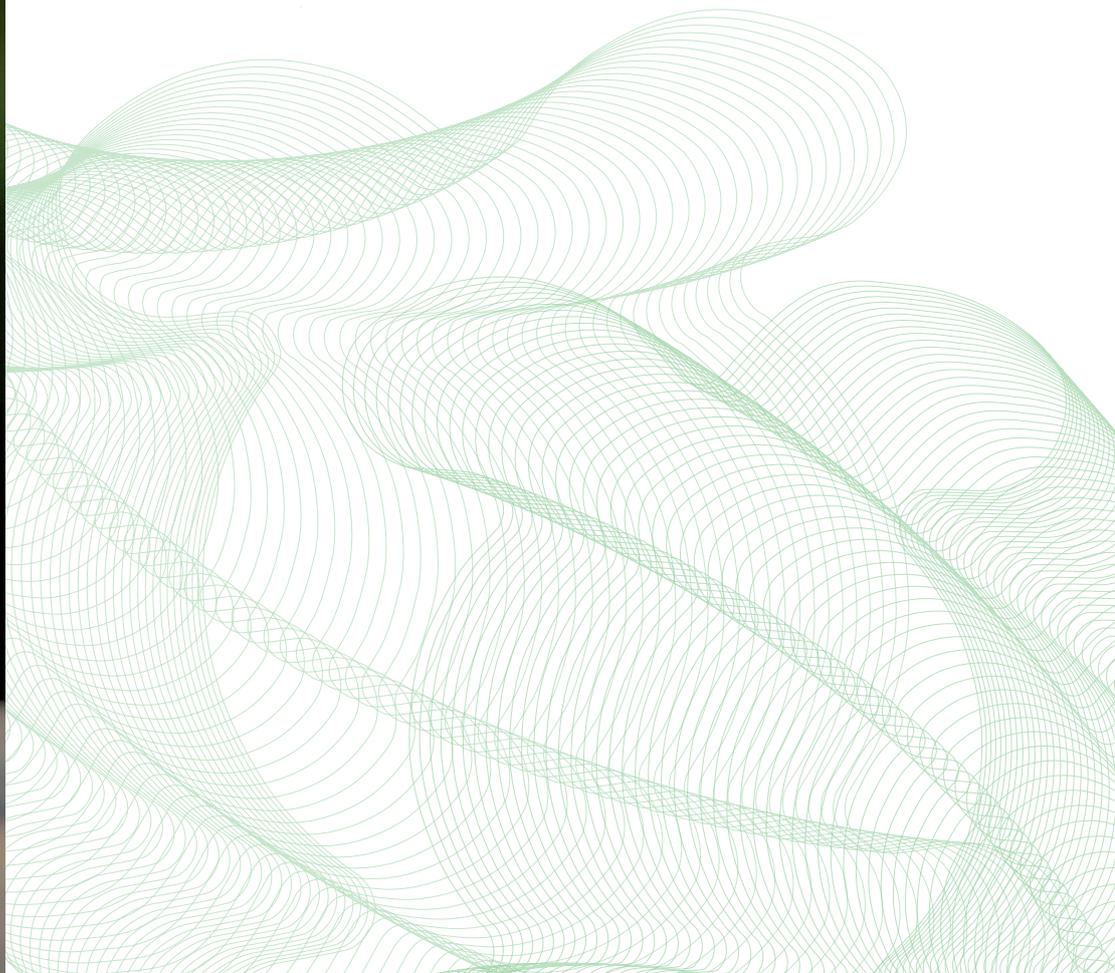
See «Description» in the CRISTAVISC c® instructions for use for more information





# VETERINARY RANGE

LOKI 38



# LOKI<sup>®</sup>

**PRELOADED**

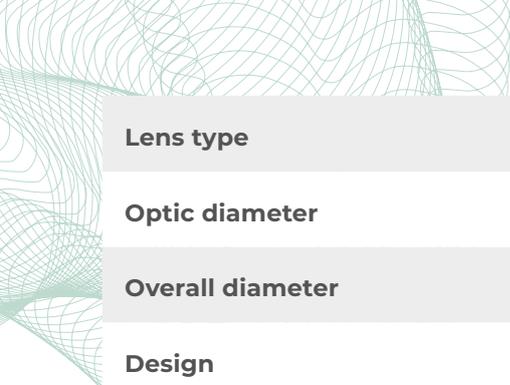


- ▶ **Hydrophobic**
- ▶ **Monofocal**
- ▶ **For veterinary use**

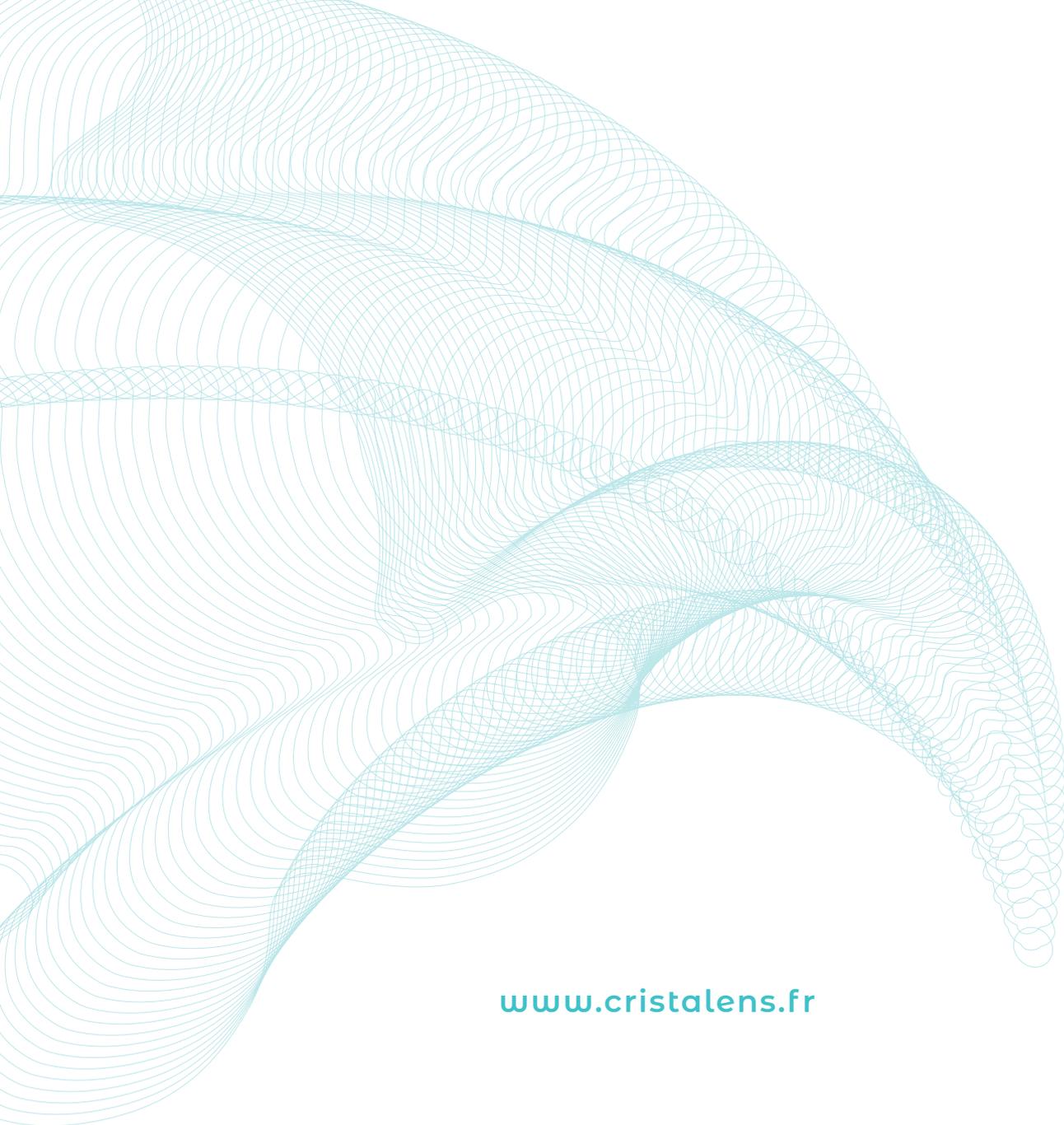
**Reference:** LOKI<sup>®</sup> PL



## TECHNICAL SPECIFICATIONS



<b>Lens type</b>	For implantation in the canine capsular bag
<b>Optic diameter</b>	6.50 mm
<b>Overall diameter</b>	12.00 mm - 13.00 mm - 14.00 mm
<b>Design</b>	One-piece
<b>Optic design</b>	Monofocal Aspherical with negative spherical aberration to partly correct corneal spherical aberration Biconvex
<b>Angulation</b>	5°
<b>Material</b>	Hydrophobic CBK 1.8 from Cristalens
<b>Dioptric power</b>	+41.0D
<b>Refractive index</b>	1.54
<b>Sterilization</b>	Ethylene oxide
<b>Injection system</b>	Preloaded system
<b>Recommended incision size</b>	3.0 mm



[www.cristalens.fr](http://www.cristalens.fr)

 **CRISTALENS**

 **CRISTALENS INDUSTRIE**

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