

OPHTALMO

THIS IS WHAT THE FUTURE LOOKS LIKE



INTRAOCULAR LENS MANUFACTURER

CATARACT & REFRACTIVE SURGERY

—
Made in France

 CRISTALENS



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WHO ARE WE?

Founded in 1994, CRISTALENS initially distributed medical devices for cataract surgery. In 2006, 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 developed a new hydrophobic raw material that allows for micro-incisions under 2.0 mm.

By choosing CRISTALENS

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

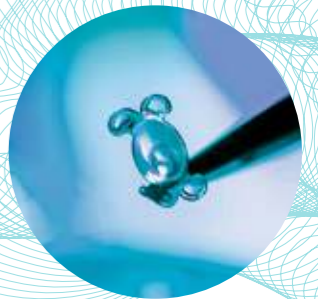
AVAILABILITY

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 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 is at the cutting edge of technological innovation.



Cristalens and QUALITY



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

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

CRISTALENS 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 has complete control over its manufacturing:

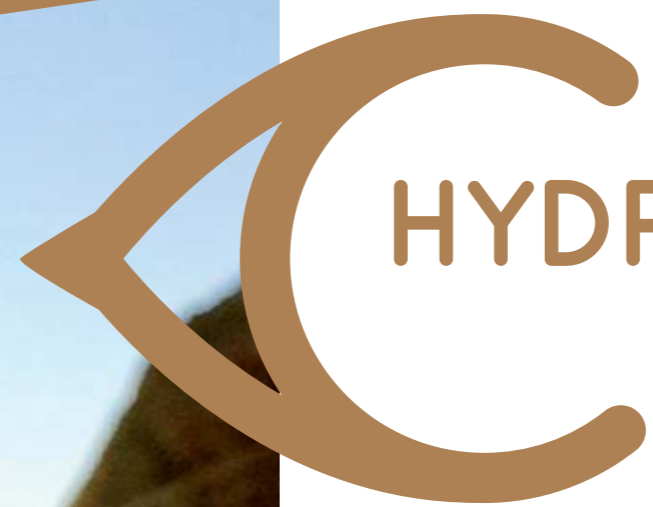
- raw material production
- design
- cryo-machining
- 100% optical and cosmetic control
- logistics

Cristalens and DISTRIBUTION



CRISTALENS's products are distributed on all continents, in more than 40 countries.

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 9

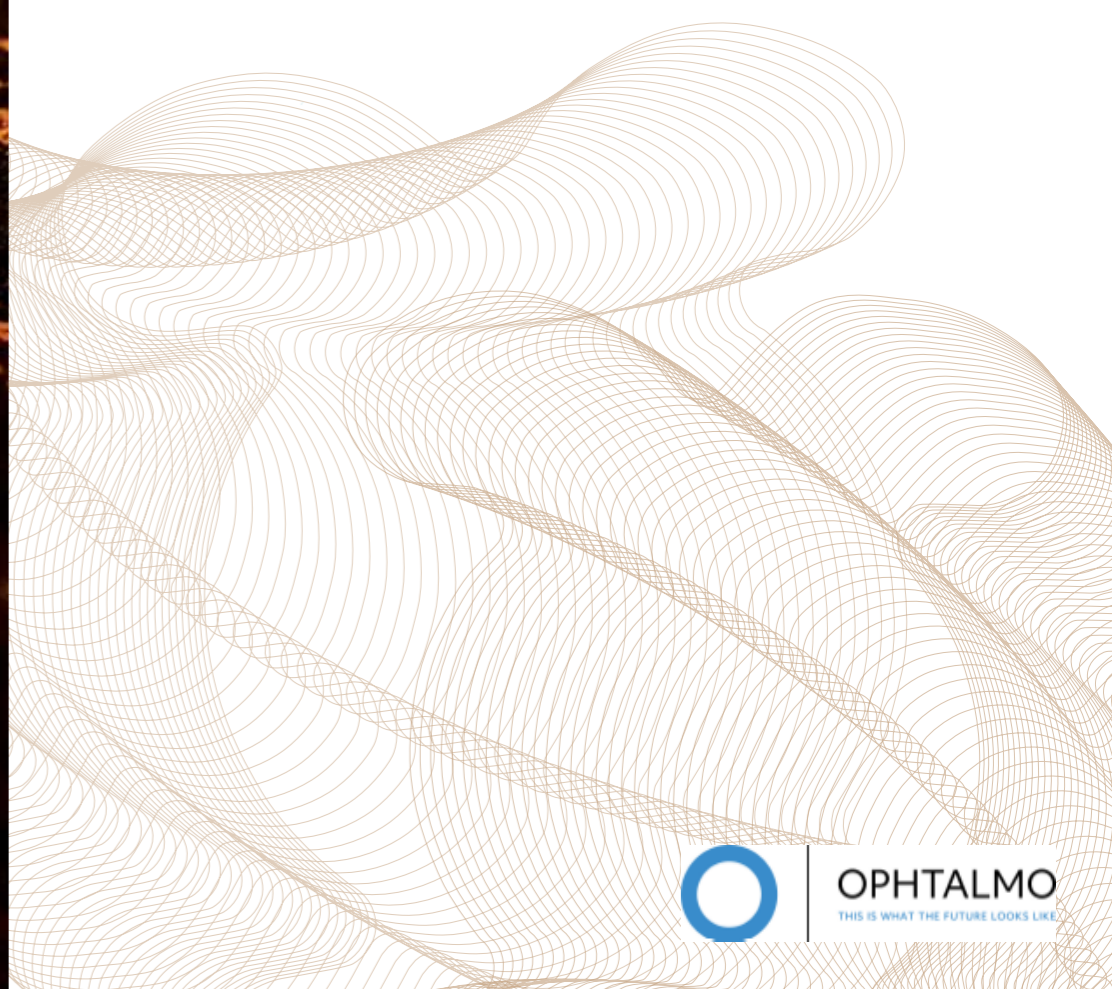
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ARTIS[®] MONOFOCAL

TECHNICAL SPECIFICATIONS



► Monofocal

Natural yellow filter

Reference: ARTIS[®] Y PL

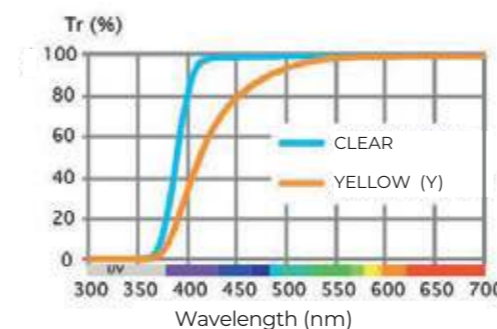


Reference: ARTIS[®] PL E

PRELOADED

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

Transmission spectrum



EAZ-Y®

TECHNICAL SPECIFICATIONS

PRELOADED



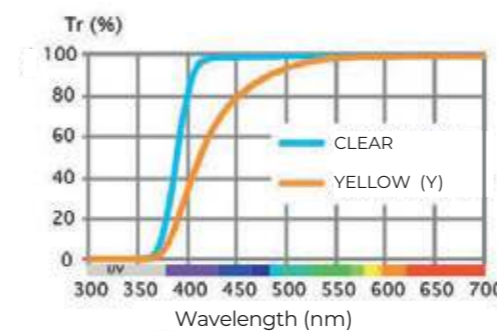
► Monofocal

Natural yellow filter
Reference: EAZ-Y®



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

Transmission spectrum



ARTIS[®] BIFOCAL

TECHNICAL SPECIFICATIONS



PRELOADED

► **Bifocal**

Reference: ARTIS[®] PL M



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

ARTIS[®] TORIC

TECHNICAL SPECIFICATIONS

PRELOADED




- Monofocal
- Toric

Reference: ARTIS[®] T PL E



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

 Toric calculator available on our website www.cristalens.fr

ARTIS[®] MULTIFOCAL

TECHNICAL SPECIFICATIONS

Two complementary profiles:

PRELOADED



MID

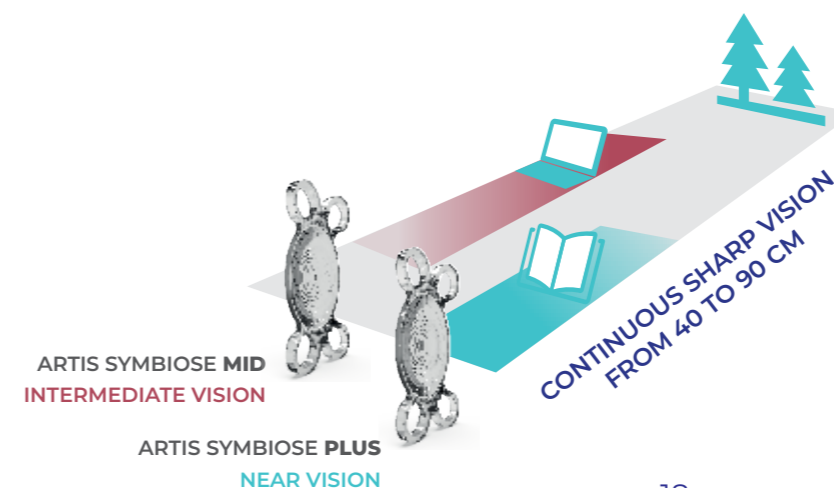
PLUS

- Multifocal
- Binocular phase continuity

Reference: ARTIS SYMBIOSE[®]



Lens type	For implantation in the capsular bag
Optic diameter	6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
Overall diameter	10.79 mm (from +10.0D to +25.0D) 10.50 mm (from +25.5D to +35.0D)
Design	One-piece square edge on 360°
Optic design	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
Angulation	5°
Material	Hydrophobic CBK 1.8 from Cristalens
Dioptric powers	From +10.0D to +35.0D by 0.5D
Additions (at IOL plane)	MID: Superior intermediate vision - PLUS: Superior near vision
Estimated A-Constant (SRK-T)	119.3 Ultrasound biometry 119.7 Interference laser biometry
Suggested anterior chamber depth (ACD)	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
Refractive index	1.54
Sterilization	Ethylene oxide
Injection system	Preloaded system
Recommended incision size	2.0 mm



ARTIS[®] MULTIFOCAL TORIC

TECHNICAL SPECIFICATIONS

Two complementary profiles:

PRELOADED



MID

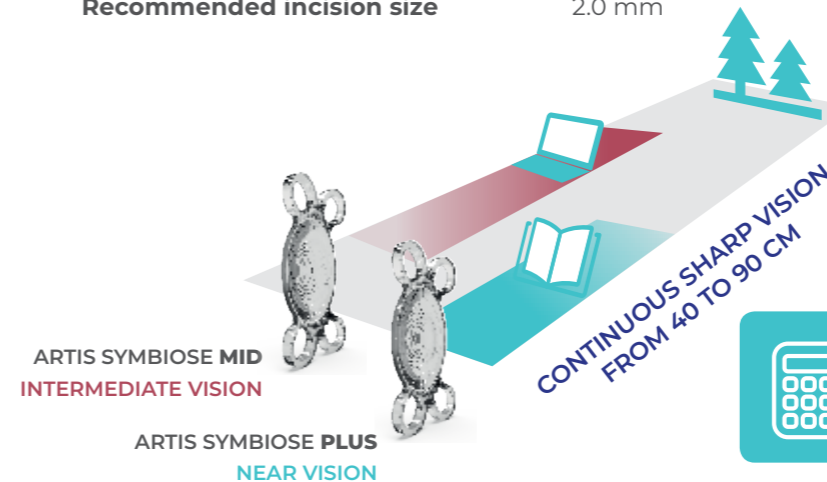
PLUS

- Multifocal
- Toric
- Binocular phase continuity

Reference: ARTIS SYMBIOSE[®]



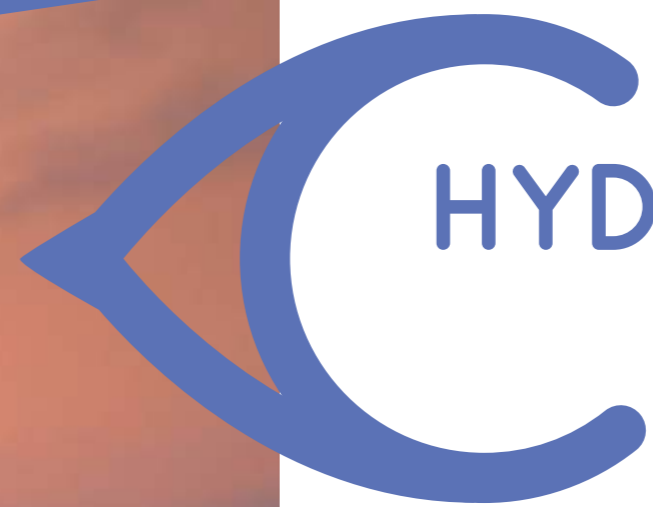
Lens type	For implantation in the capsular bag
Optic diameter	6.00 mm (from +10.0D to +25.0D) 5.80 mm (from +25.5D to +35.0D)
Overall diameter	10.79 mm (de +10.0D à +25.0D) 10.50 mm (de +25.5D à +35.0D)
Design	One-piece square edge on 360°
Optic design	Diffractive multifocal extended depth of focus with binocular complementarity Aspherical with negative spherical aberration to partly correct corneal spherical aberration Diffractive pattern on the anterior face, toricity and marks on the posterior face, biconvex
Angulation	5°
Material	Hydrophobic CBK 1.8 from Cristalens
Dioptric powers (spherical equivalent)	From +10.0D to +35.0D by 0.5D
Additions (at IOL plane)	MID: Superior intermediate vision - PLUS: Superior near vision
Cylinder powers	+0.75D / +1.50D (+2.25D / +3.00D / +3.75D available upon request)
Estimated A-Constant (SRK-T)	119.3 Ultrasound biometry 119.7 Interference laser biometry
Suggested anterior chamber depth (ACD)	5.77 mm Ultrasound biometry 6.03 mm Interference laser biometry
Refractive index	1.54
Sterilization	Ethylene oxide
Injection system	Preloaded system
Recommended incision size	2.0 mm



MADE IN FRANCE

CE 0459

Toric calculator available on our website www.cristalens.fr



HYDROPHILIC RANGE

CLARÉ 23

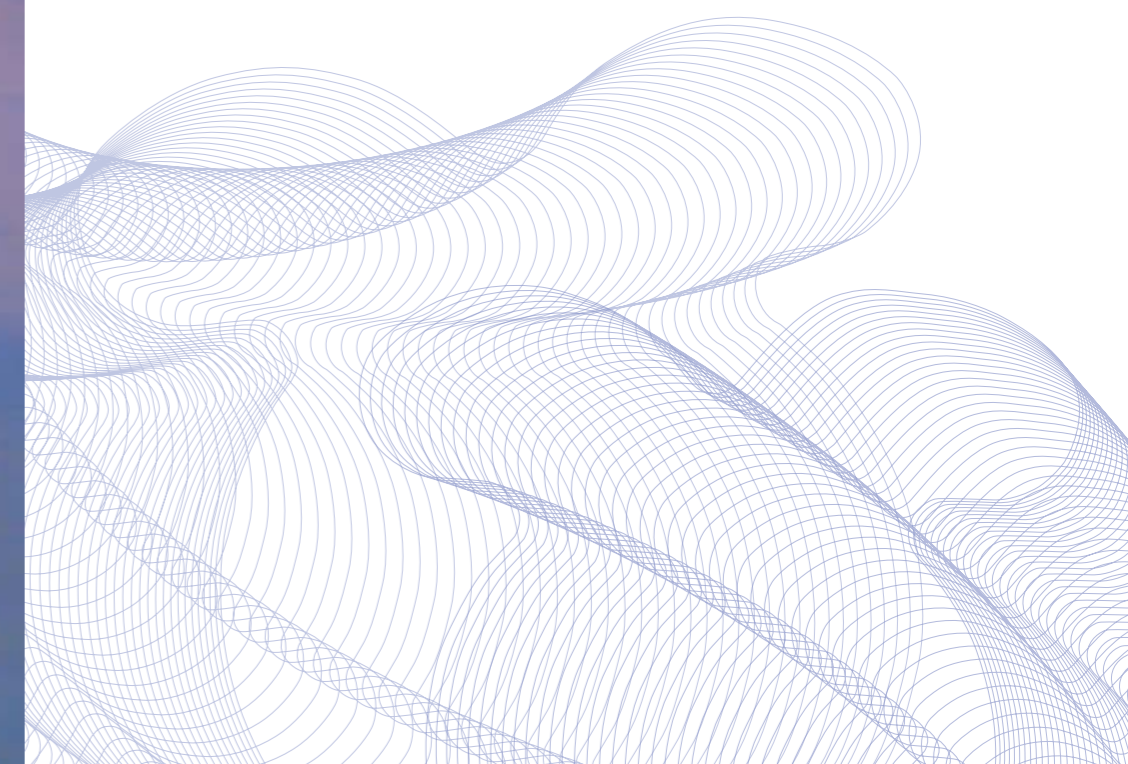
LUCIS 25

CRISTAL 27

HYDROPHILIC PIGGY-BACK RANGE

REVERSO MONOFOCAL 29

REVERSO MULTIFOCAL 31



CLARÉ®

TECHNICAL SPECIFICATIONS



► Monofocal

Reference: CLARÉ®

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

LUCIS®

TECHNICAL SPECIFICATIONS



► **Monofocal**

Reference: LUCIS®

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

CRISTAL®

TECHNICAL SPECIFICATIONS



► **Monofocal**

Reference: CRISTAL®

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

REVERSO[®] MONOFOCAL

TECHNICAL SPECIFICATIONS



- ▶ Piggy-back
- ▶ Monofocal

Reference: REVERSO[®]

Correct potential refractive errors in pseudophakic patients

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



Reverso calculator available on our website www.cristalens.fr

REVERSO® MULTIFOCAL

TECHNICAL SPECIFICATIONS



- Piggy-back
- Multifocal

Reference: REVERSO®

Presbyopia correction in pseudophakic patients

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

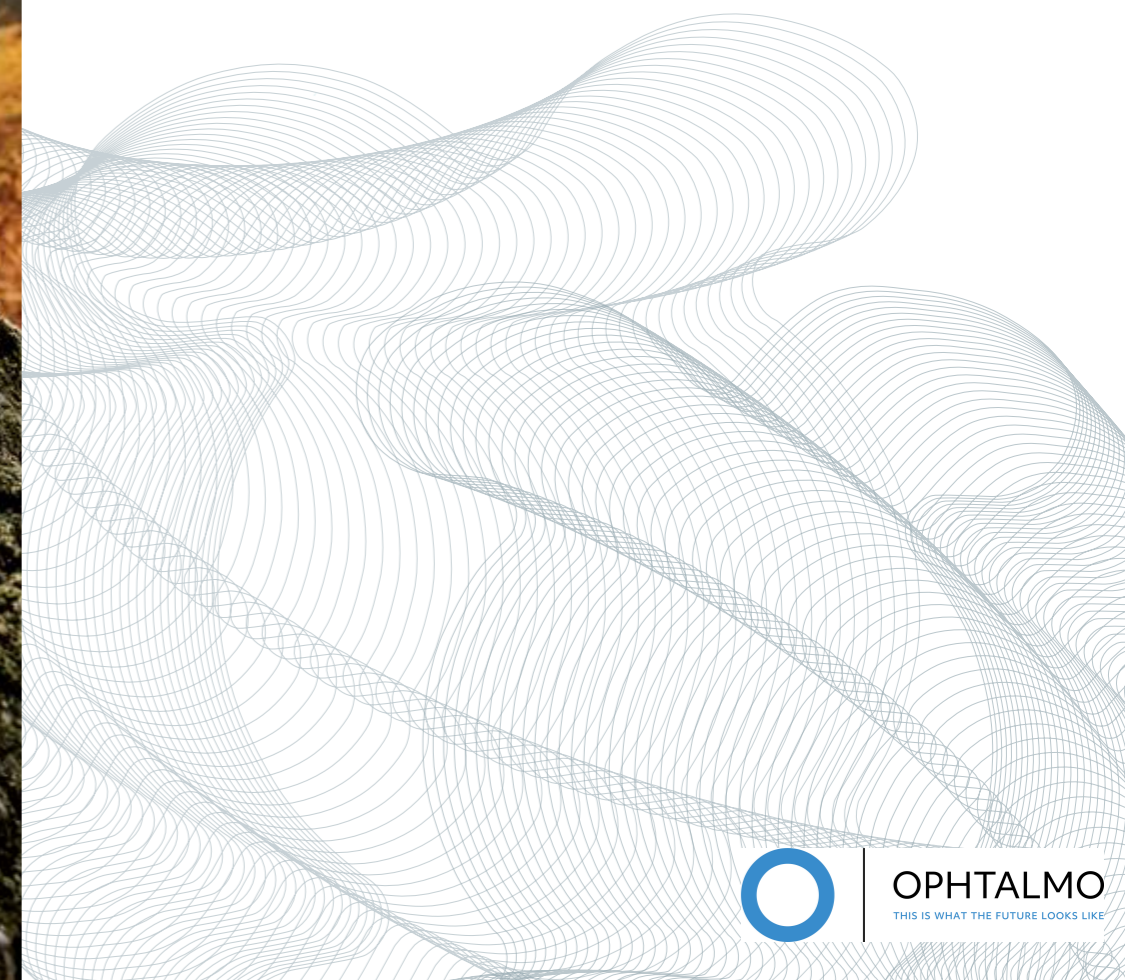


Reverso calculator available on our website www.cristalens.fr



VISCOELASTIC

CRISTAVISC c[®] 35



OPHTALMO
THIS IS WHAT THE FUTURE LOOKS LIKE

CRISTAVISC c[®]

TECHNICAL SPECIFICATIONS



Distributed by Cristalens Industrie



- Coheso-dispersive product with mannitol
- With an average viscosity of 170 Pa.s
- Manufactured by the Vivacy Laboratories

Reference: CRISTAVISC c[®]

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

INDICATIONS

Anterior segment surgery

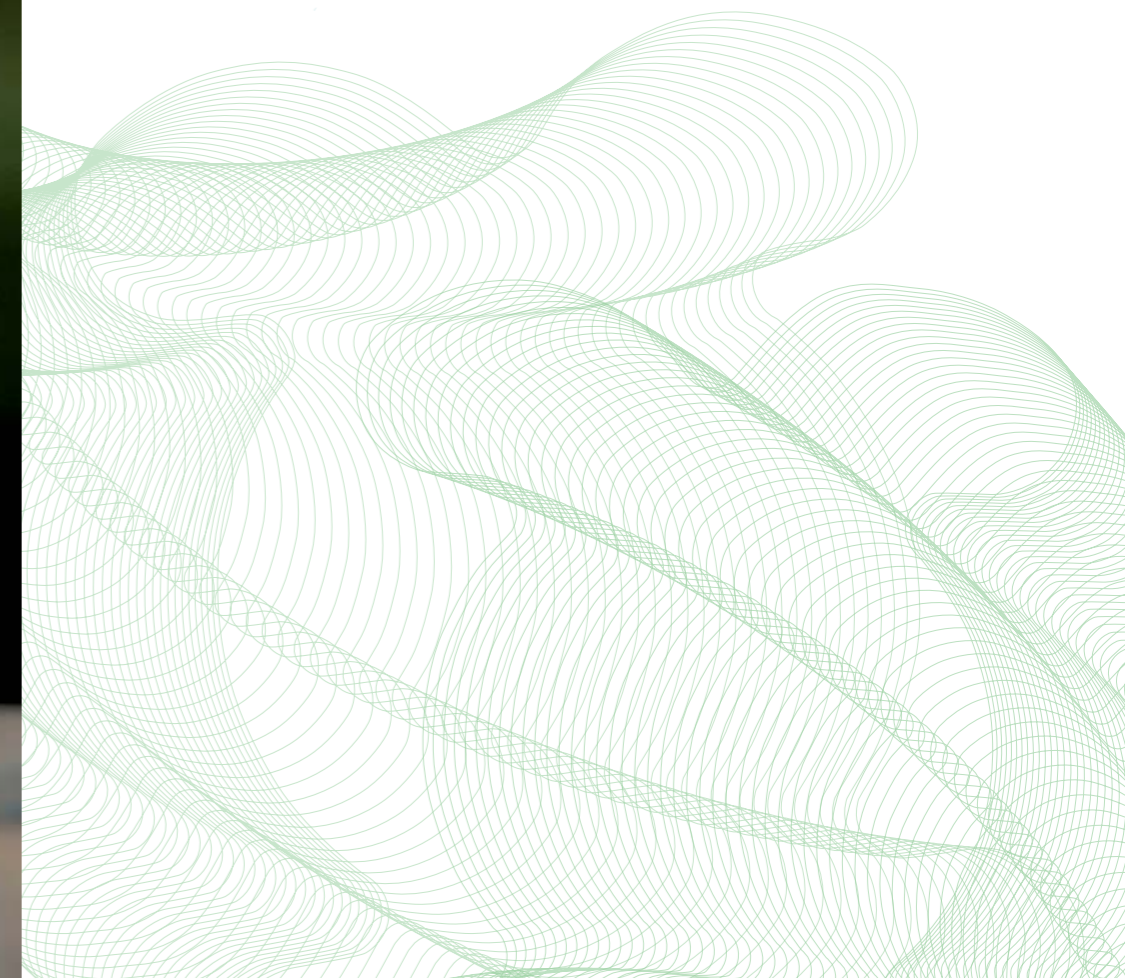
Protection of the corneal endothelium and maintenance of the intraocular space

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



VETERINARY RANGE

LOKI 39



LOKI[®]

TECHNICAL SPECIFICATIONS



PRELOADED

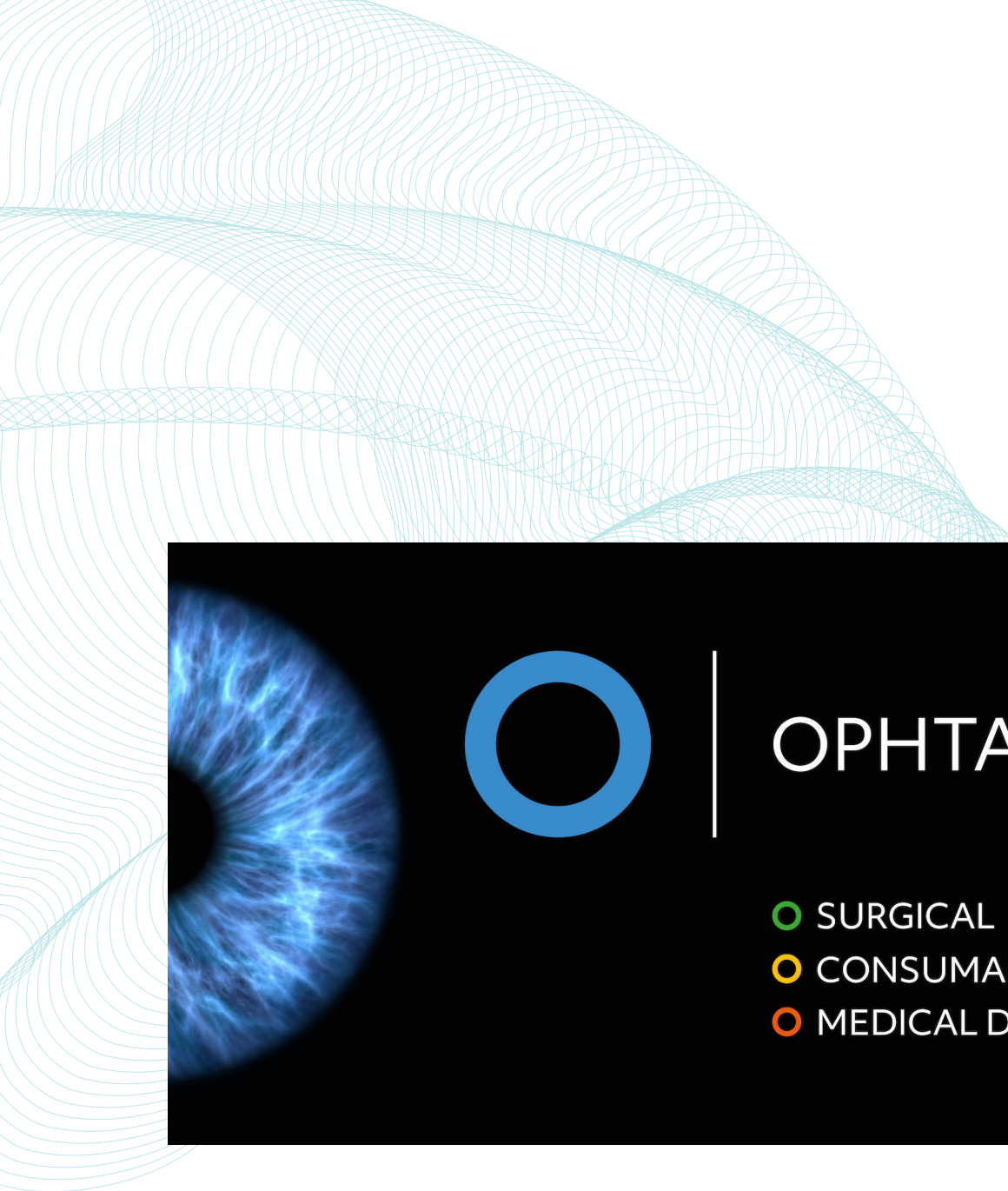
- Hydrophobic
- Monofocal
- For veterinary use

Reference: LOKI[®] PL

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



MADE IN FRANCE



OPHTALMO

-  SURGICAL
-  CONSUMABLES
-  MEDICAL DEVICE

 CRISTALENS

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