

EYECRYL PHAKIC

IOLs Range



EYECRYL PHAKIC TORIC IOL



EYECRYL PHAKIC IOL

The word "Phakic" describes the state of the eye that still has its natural (crystalline) IOL intact.

EYECRYL PHAKIC range of IOLs are posterior chamber phakic IOLs, manufactured from hydrophilic material having aspheric optic with Zero Spherical Aberration. EYECRYL PHAKIC range of IOLs are indicated in Phakic adults for the correction or reduction of Refractive error (Myopia / Hyperopia) with or without astigmatism. The eye's natural IOL is not removed, so patient can retain their pre-existing ability to focus objects at various distances.

EYECRYL PHAKIC range of IOLs provide clearer & sharper vision by making your patient's life more joyful. Patients can experience great enhancement in vision immediately after the implantation of EYECRYL PHAKIC range of IOLs. The ease of implantation and the post-operative stability makes it stand out in the segment of Phakic IOLs.

Indications

• Patients having stable Myopic / Hyperopic refractive error

• LASIK / PRK rejects, high Myopia / Hyperopia, thin Cornea, dry eye etc.

• Stabilized central Keratoconus

Post Radial Keratotomy

 EYECRYL PHAKIC TORIC IOLs are indicated in Phakic adults for the correction or reduction of Refractive error (Myopia / Hyperopia) with astigmatism.

Contra-indications

- ACD < 2.8 mm (from Endothelium)
- Progressive refractive error
- Corneal / Endothelial pathology
- Retinal pathology
- Glaucoma
- · Narrow AC angle

- Uveitis
- Cataract or capsular opacification
- Progressive Keratoconus
- Other ocular pathologies
- Previous ocular surgeries
- · Age < 21 years

Advantages of EYECRYL PHAKIC IOL

- 64% of the eyes gain one or more lines in CDVA
- 94.7% patient satisfaction ratio
- Predictable, safe & effective outcomes
- Significant improvement in visual acuity
- Aspheric optic

Advantages of EYECRYL PHAKIC TORIC IOL

- 92% of eyes within ±0.50 D of refractive astigmatism
- · Excellent rotational stability
- Effective reduction in subjective manifest astigmatism
- Predictable, safe & effective outcomes
- Aspheric optic
- 100% SE predictability within ±1.00 D



Features of EYECRYL PHAKIC IOL Range

- Proven Eyecryl Platform
- Central hole of 360 micron
- Precise Calculator, ensures predictability
- Holes at 6 & 12 O'clock positions, helps in aqueous fluid passage



Increased patient comfort

As a part of innovative design, there is a hole in the center part of EYECRYL PHAKIC range of IOLs. The hole facilitates natural passage for Aqueous Humor. So, there is no increase in Intra-ocular pressure, which eliminates the requirement of YAG/Surgical Peripheral Iridectomy (PI). The optimized hole size does not affect the visual performance of IOL and smooth edges of hole reduce chances of occurrence of glare and halos. Thus, patient's comfort level is increased with reduction in surgery time.

Thin corneas, not a problem

EYECRYL PHAKIC range of IOLs can be implanted in patients with thin corneas and dry eyes - which are contra-indications for LASER based procedures

Reversible Procedure

Implantation of the EYECRYL PHAKIC range of IOLs is done without altering the shape of Cornea, keeping the structural integrity of the eye intact. EYECRYL PHAKIC range of IOLs can also be removed easily, if/when required.

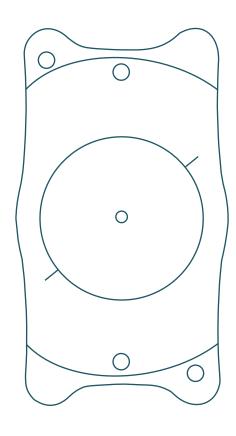
Excellent Positional Stability

EYECRYL PHAKIC range of IOLs with orientation marks helps to implant the IOL behind the Iris in the right orientation. The distance of natural Crystalline Lens and Endothelium from IOL is optimum with precise white-to-white measurements & phakic calculator results.

EYECRYL PHAKIC TORIC

Phakic Toric Hydrophilic Foldable Intraocular Lens

SPECIFICATIONS			
MATERIAL	Hydrophilic Acrylic CQ UV		
OPTIC TYPE	Toric Aspheric		
OPTIC SIZE	6.50 mm		
EFFECTIVE OPTIC SIZE	4.65 mm to 5.50 mm		
OVERALL SIZE	11.0 mm to 14.0 mm		
REFRACTIVE INDEX	1.462		
DIOPTER RANGE	+8.0 D to -25.0 D (with 0.5D step)		
CYLINDER POWER RANGE	0.5D to 5.0D (in 0.5D step)		
TORIC AXIS ON IOL OPTIC	0°, 30°, 60°, 90°, 120° & 150°		
IMPLANTATION SITE	Posterior Chamber		
STERILIZATION	Steam		



Model	PC110T	PC115T	PC120T	PC125T	PC130T	PC135T	PC140T
Size (mm)	11.00 mm	11.50 mm	12.00 mm	12.50 mm	13.00 mm	13.50 mm	14.00 mm

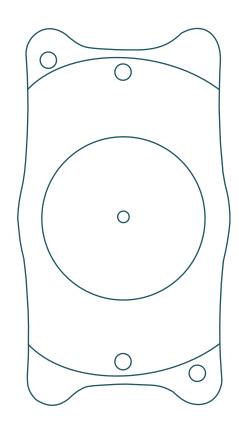


^{*}PC110T, PC115T & PC140T for myopic correction and all models for hyperopic correction are available as customized lenses against confirmed order.

EYECRYL PHAKIC

Phakic Aspheric Hydrophilic Foldable Intraocular lens

SPECIFICATIONS			
MATERIAL	Hydrophilic Acrylic CQ UV		
OPTIC TYPE	Aspheric		
OPTIC SIZE	6.50 mm		
EFFECTIVE OPTIC SIZE	4.65 mm to 5.50 mm		
OVERALL SIZE	11.0 mm to 14.0 mm		
REFRACTIVE INDEX	1.462		
DIOPTER RANGE	+10.0 D to -25.0 D (with 0.5D step)		
IMPLANTATION SITE	Posterior Chamber		
STERILIZATION	Steam		



Model	PKC110NH	PKC115NH	PKC120NH	PKC125NH	PKC130NH	PKC135NH	PKC140NH
Size (mm)	11.00 mm	11.50 mm	12.00 mm	12.50 mm	13.00 mm	13.50 mm	14.00 mm



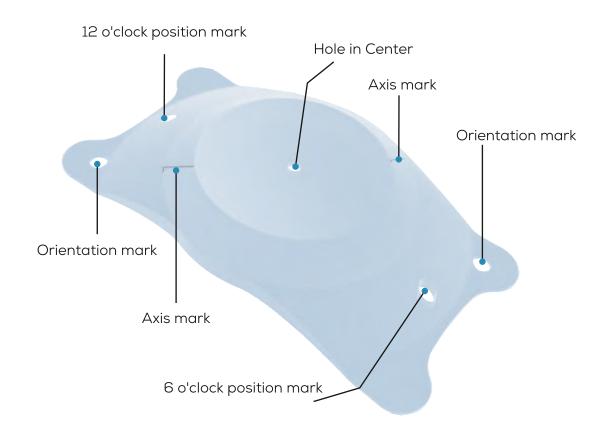
^{*}PKC110NH, PKC115NH & PKC140NH for myopic correction and all models for hyperopic correction are available as customized lenses against confirmed order.

Central & Peripheral Holes

- Eliminates need of PI
- Maintains normal aqueous flow
- Eliminates chance of Glaucoma
- Facilitates easy OVD removal

Orientation Marks

- Two orientation marks are given on leading left & trailing right corners
- These marks clearly indicate unfolding of IOL in right manner inside the eye

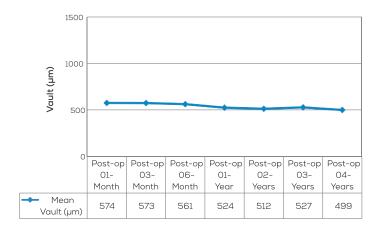




Clinical Results for treatment of Myopia¹ (n=36)

VAULT

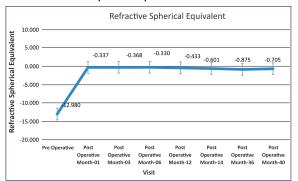
 Study report shows stable vault during the follow up and at the end of 4 years.



Mean of Refractive Spherical Equivalent

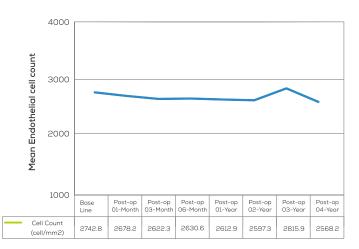
- Mean refractive spherical equivalent after 4 years of implantation shows excellent predictability and stability of the IOL in the eye along with the efficacy to treat wide range of Myopia.
- All patients are found within -0.25 D at post 4 years examination.

Mean of Refractive Spherical Equivalent



Endothelial cell count

- The graph shows the stable Endothelial cell count for 4 years of clinical study.
- The Results show the implantation of the EYECRYL PHAKIC range of IOLs doesn't have remarkable impact on endothelial cell loss over the period of time.



Uncorrected Visual Acuity

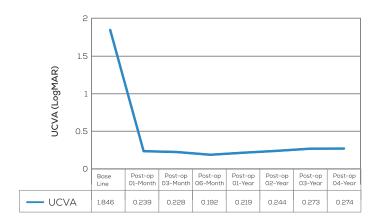
- The results show good improvement in the uncorrected visual acuity after implantation of EYECRYL PHAKIC Range of IOLs.
- The graph also shows the stability of the uncorrected visual acuity over the period of time.
- All patients are found with uncorrected visual acuity within 0.275 LogMAR value at 4 years follow up.

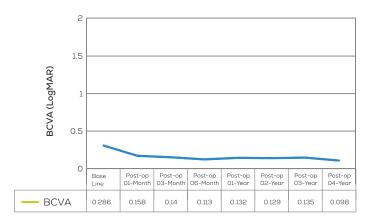
Corrected Visual Acuity

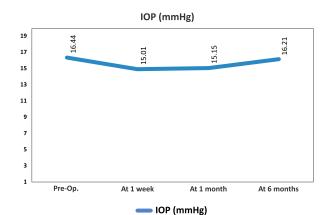
- The results show clear improvement in the corrected visual acuity after implantation of EYECRYL PHAKIC range of IOLs.
- The corrected visual acuity is improved with time period of 4 years in the study.
- All patients are found with corrected visual acuity within 0.098 LogMAR value at 4 years examination.

IOP²

Post-operative IOP remains stable within normal range







Clinical Results for treatment of Myopia with Astigmatism ³(n=43) Rotational Stability

• EYECRYL PHAKIC TORIC IOL exhibits excellent rotational stability

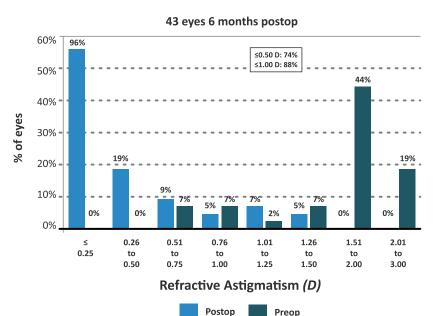
Absolute change in axis orientation between visits.

	Absolute Rotation	Lens Rotation ≤5°	Lens Rotation ≤10°
Visit Range	(mean ± SD)	n (%)	n (%)
1 Day to 3 Months	2.33 ± 3.80	40 (93.0)	40* (93.0)
3 to 6 Months	1.35 ± 1.67	41 (95.3)	43 (100.0)
1 Day to 6 Months	2.95 ± 3.75	40 (93.0)	40* (93.0)

n: number of eyes; SD: standard deviation. *In three eyes, there was > 10° lens rotation between 1-day and 1-month visits. In these eyes, the pIOLs rotated ≤ 5 during the rest of the follow-up.

Refractive Astigmatism

With EYECRYL PHAKIC TORIC version, postoperative astigmatism was 0.50 D or less in 74% eyes and Ñ.00 D or less in 88 eyes





Selection of Suitable Model & Diopter

- Simple & easy online calculator is available www.biotechcalculators.com
 Also available in form of mobile application on Android & IOS platform
- · Steps to follow:
 - 1. Register yourself for the first time
 - 2. Enter required pre-operative data of patient
 - 3. Select one suitable option from suggested 5 options depending upon requirement.

EYECRYL PHAKIC CALCULATOR

Online EYECRYL PHAKIC Calculator gives recommendations for EYECRYL PHAKIC IOL model with diopteric power options, according to the pre-operative data. It also provides EYECRYL PHAKIC TORIC model recommendation, cylindrical power and intended axis of IOL placement in the eye.

www.biotechcalculators.com



Steps for using EYECRYL PHAKIC Calculator

- Registration
- Confirmation for login detail (User ID and Password) will be mailed to registered mail ID
- · Login with your ID, Password
- Selection of EYECRYC PHAKIC
- Enter patient's pre-operative data
- Choose appropriate EYECRYC PHAKIC IOL diopter / EYECRYC PHAKIC TORIC IOL diopter and cylinder
- Print the final output page
- User can check selected lens stock availability & place orders online

Required data for Calculator

- Patient's Name
- Patient's Birthdate
- Patient ID number
- Surgery date
- Left Eye/Right Eye
- Flat K & Axis of Flat K

- Steep K & Axis of Steep K
- White to White Distance (mm)
- Anterior Chamber Depth (mm) from Endothelium
- Corneal Thickness (mm)
- Pre-operative Sphere (D)
- Pre-operative Cylinder (D) with Axis

Calculation Result

- Recommended IOL Model with size
- Selected IOL Power options (Sphere and Cylinder)
- Expected Post-operative Refraction (Sphere and Cylinder)
- Instructions for rotational positioning of IOL (in case of PHAKIC TORIC version)

Note: EYECRYL PHAKIC calculator is neither intended to be used for final diagnosis nor as a substitute for surgeon expertise.

Calculation result page





Phakic Aspheric Hydrophilic Foldable Intraocular lens

Calculation ID: 202240311

Patient Details		Doctor Details		
Patient's Name:	Mr XYZ	Doctor's Name:	Dr. ABC	
Patient's ID:	001	Doctor's ID:	koshang	
Eye:	OD (Right)	Date:	2022-06-27	
Calculation Details				
IOL Model Recommended:	PKC120NH	IOL Model Size (in mm):	12.0	
IOL Power Selected(in D):				
Sphere: -15.5	Cylinder: 0	Axis: 90 Spherical Equ	uivalent: -0.17	
Expected PostOperative Sphere	e:			
Sphere: -0.17	Cylinder: 0.00	Axis: 90 Material Cod	e: 12FLD00391N15.50	
Pre-Operative Data				
K1:	44 @ 85	Corneal Thickness (in mm):	0.500	
K2:	44 @ 175	Back Vertex Distance (in mm):	12	
Pre-Operative Sphere (in D):	-15.0	White to White Distance (in mm) (IOL Master 700):	11.35	
Pre-Operative Cylinder (in D):	0 @ 0	Anterior Chamber Depth (in mm):	3.35	
Any Previous Intervention:	No	Endothelium Cell Count:	2350	



Calculation result page



EYECRYL PHAKIC TORIC

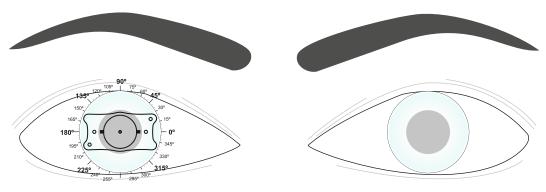
Phakic Toric Hydrophilic Foldable Intraocular Lens

Calculation ID: 202240311

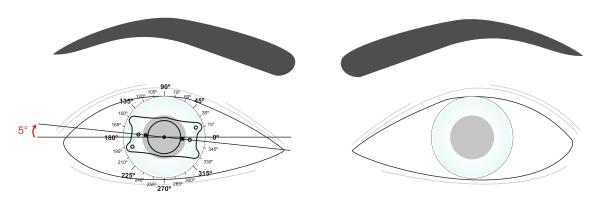
Patient Details		Doctor Details	
Patient's Name:	Mr XYZ	Doctor's Name:	Dr. ABC
Patient's ID:	001	Doctor's ID:	koshang
Eye:	OD (Right)	Date:	2022-06-27
Calculation Details			
IOL Model Recommended:	PC120T	IOL Model Size (in mm):	12.0
IOL Power Selected(in D):			
Sphere: -17	Cylinder: 1.5	Axis: 0 Spherical Equ	ivalent: -0.24
Expected PostOperative Sphere	2:		
Sphere: -0.31	Cylinder: 0.14	Axis: 175 Material Cod	e: 11K20N17.0C0150A00
Pre-Operative Data			
K1:	44 @ 85	Corneal Thickness (in mm):	0.500
K2:	46 @ 175	Back Vertex Distance (in mm):	12
		White to White Distance	
Pre-Operative Sphere (in D):	-15.0	(in mm) (IOL Master 700):	11.35
Pre-Operative Cylinder (in D):	-1.75 @ 85	Anterior Chamber Depth (in mm):	3.35
Any Previous Intervention:	No	Endothelium Cell Count:	2350

Instructions for Rotational Positioning of Lens

Step I: Implant Lens Horizontally. At this time, the axis marks on lens optic are at 90°



Step II: Now align toric axis marks on the lens optic with 175° pre-marked axis on the cornea.



Patient	Mr XYZ				
Eye	OD (Right)	OD (Right)			
Lens Model	PC120T (12.0)	PC120T (12.0)			
	Sphere	Cylinder	Axis		
Lens Label Data	-17 D	1.5 D	0°		
Lens Selected Data	-17 D	1.5 D	175°		
Expected Post-Operative Residual	-0.31 D	0.14 D	175°		
Rotation	5° Clockwise	5° Clockwise			



Reference:

- 1. Dr. Alper Agca, Dr.; "Clinical Study Report- "THE RETROSPECTIVE STUDY TO EVALUATE THE LONG TERM EFFICACY, SAFETY AND REFRACTIVE OUTCOME OF PATIENT SUFFERING FROM MYOPIA AND IMPLANTED WITH PHAKIC IOL"-2020.
- 2. The Outcomes of Posterior-Chamber Phakic Intraocular Lens Implantation in Patients with High Myopia Dr. Fikret UÇARa, Dr. Servet ÇETINKAYA Turkiye Klinikleri Journal of Ophthalmology I 25 Feb 2020
- 3. Rotational Stability of a New Posterior Chamber Toric Phakic Intraocular Lens Dr. Dilek Yasa, Dr. Bu"lent Ko"se, Dr. Alper Agca I Journal of Ophthalmology

Pre-operative measurements

- Subjective refraction
- Endothelial Cell Density (ECD) measurement should be performed pre-operatively
- Sizing of the EYECRYL PHAKIC range of 10Ls depends on measurement of white-to-white and Anterior Chamber Depth (ACD). So, these measurements must be precise to achieve predictable surgical outcomes
- Intra-ocular pressure (10P) should be checked

Loading Technique

- Very easy & similar to hydrophilic / hydrophobic cataract IOL loading technique
- Great time saving
- Follow steps mentioned in "Instructions for Use" (given in IOL box), for loading & Implantation of EYECRYL PHAKIC IOL RANGE
- In addition to "Instructions for Use", please follow calculation result page, for axis placement of EYECRYL PHAKIC TORIC IOL

Correct Position of Orientation Marks













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