



# PRECIZON™

Transitional Conic  
Toric IOL



- ✓ **PROVEN STABILITY**
- ✓ **2.2 mm MICRO INCISION**
- ✓ **TRANSITIONAL CONIC TORIC SURFACE** (*patent pending*); **MORE TOLERANT OF MISALIGNMENT**
- ✓ **PREMIUM TORIC SET**



The **#1** problem  
with Toric Lenses is

# Rotation

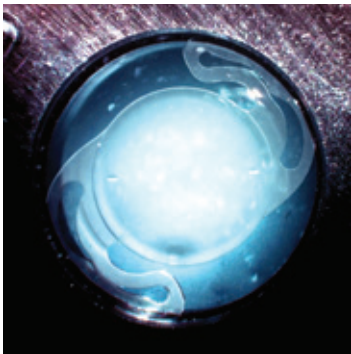
**Precizon™ Toric**  
solves rotation  
*Mechanically & Optically*

Average of 3.1° rotation at 4-6 months\*;  
1.9° rotation reported by 'best practice'.

Transitional Conic Toric Surface  
designed to **tolerate misalignment**.

\* data on file

## // PRECIZON™ FEATURES

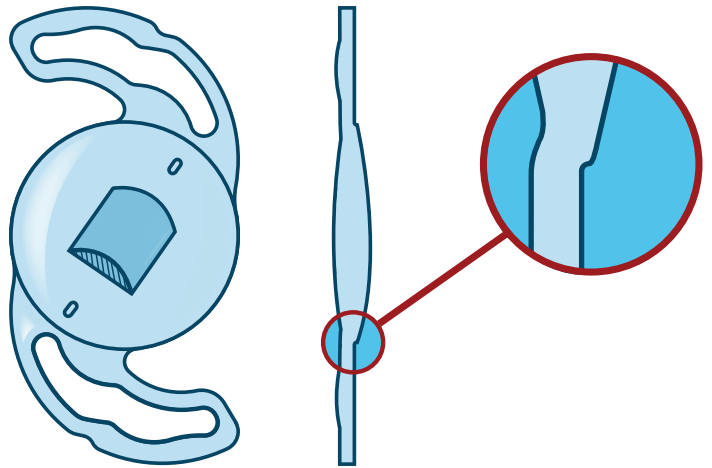


### Precizon™ Family Mechanical Haptic Feature

The space between the inner haptic stays open with compression down to 9 mm. This opening is designed to allow a “fibrosis anchor”. This will enhance the stability and reduce late post-op rotation of the lens.

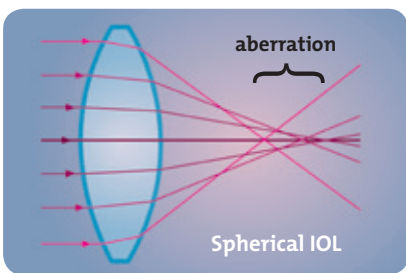
### Precizon™ Family Offset haptics reduce PCO

The Precizon family IOLs have offset shaped haptics. This shape enables the lens to adhere to the posterior capsule, to prevent early postoperative rotation and to reduce PCO.

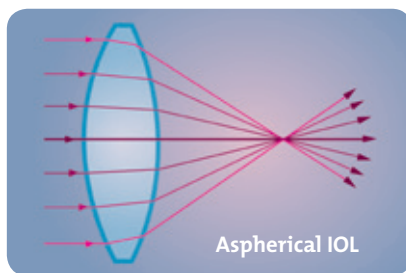


### Precizon™ Family Aberration Neutral

In a conventional spheric lens design, spherical aberration occurs because the dioptric power in the periphery of the lens is different from the dioptric power in the centre of the lens (optical axis). These aberrations influence Contrast Sensitivity and Depth of Focus. The Precizon family IOLs have an aspherical anterior side, resulting in aberration neutral IOLs.

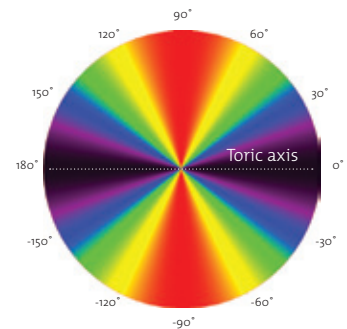


Spherical IOL

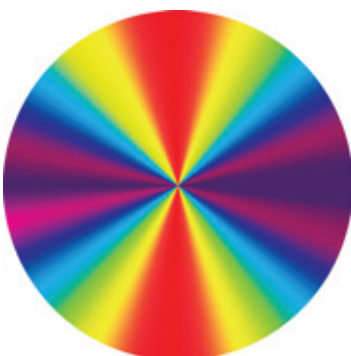


Aspherical IOL

Aberration free aspherical surface



Aberration neutral Transitional Conic Surface of the Precizon™ Toric



### Precizon™ TORIC Allows more tolerance when misaligned

The ‘Transitional Conic Toric Surface’ blends into the aspheric surface of all meridians leading to a broader toric surface. This will extend the depth of vision (EDOV) and will keep the toric surface in alignment with the patient’s astigmatism even when slightly misaligned.

## // PRECIZON™ SPECIFICATIONS



### PRECIZON™ Toric Model 565

<b>Lens type:</b>	One piece IOL, In the bag fixation
<b>Body:</b>	6.0 mm   Transitional Conic Toric   Biconvex
<b>Material:</b>	Hydrophilic Acrylic
<b>Overall <math>\phi</math>:</b>	12.5 mm
<b>Angulation:</b>	0°
<b>A-Constant*:</b>	118.0 (A Scan) 118.6 (IOL Master; SRK T)   118.7 (IOL Master; SRK II) 0.567 (IOL Master; Haigis a0)   0.123 (IOL Master; Haigis a1) 0.159 (IOL Master; Haigis a2) 5.27 (IOL Master; Hoffer-Q pACD) 1.53 (IOL Master; Holladay 1 sf)
<b>Available Powers:</b>	+1.0 D to +34.0 D (0.5 increments) Cylinder 1.0 D to 10.0 D (0.5 increments)
<b>Refractive index:</b>	1.46
<b>IOL Spherical Aberration:</b>	360°   0 $\mu$ m

\* Check [www.ophtec.com](http://www.ophtec.com) for actual A-constants

- ✓ Transitional Conic Toric Surface (patent pending).
- ✓ Average of 1.9° rotation reported by 'best practice'.
- ✓ 360° square edge optic results in optimized PCO barrier.



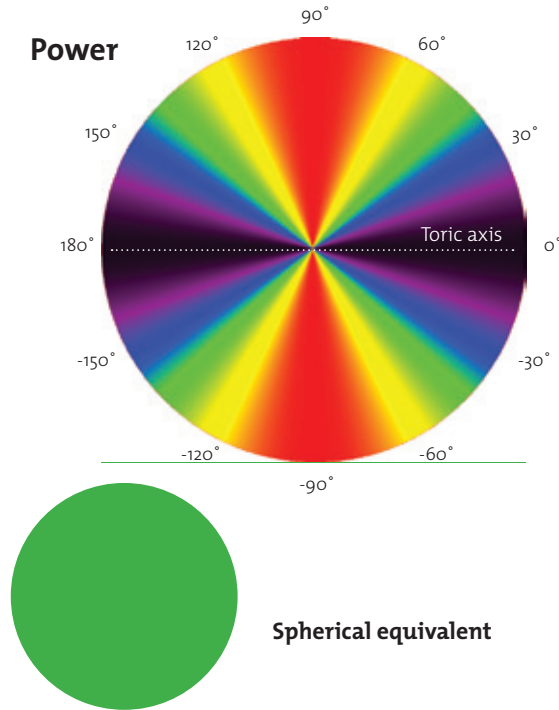
### PRECIZON™ Monofocal Model 560

<b>Lens type:</b>	One piece IOL, In the bag fixation
<b>Body:</b>	6.0 mm
<b>Material:</b>	Hydrophilic Acrylic
<b>Overall <math>\phi</math>:</b>	12.5 mm
<b>Angulation:</b>	0°
<b>A-Constant:</b>	Convex Concave: 103.8 Estimated Biconvex: same as Precizon Toric
<b>Available Powers:</b>	-10.0 D to 0.0 D (Convex concave, 0.5 increments) +1.0 D to +35.0 D (Biconvex, 0.5 increments)
<b>Refractive index:</b>	1.46
<b>IOL Spherical Aberration:</b>	360°   0 $\mu$ m



# // DESCRIBING PRECIZON™ TORIC TRANSITIONAL CONIC SURFACE

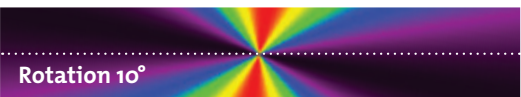
## Precizon™ Toric (Transitional Conic Surface)



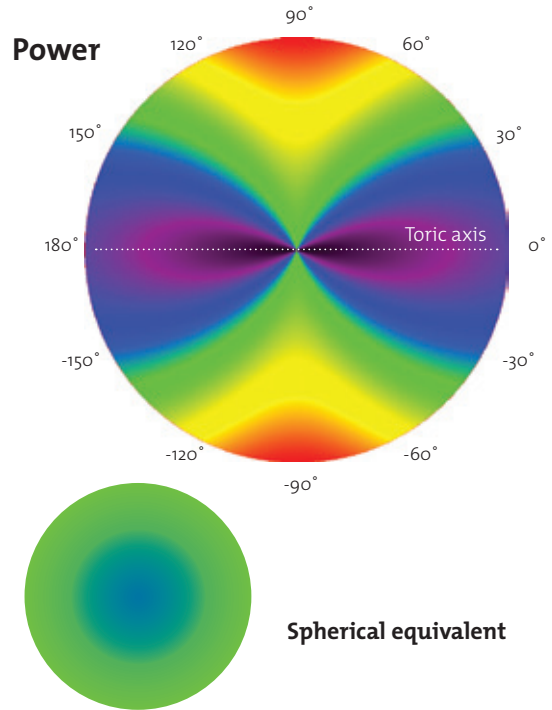
The dioptric power is calculated per meridian resulting in a constant dioptric power from the center of the lens to the edge:



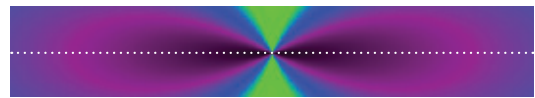
Broader Toric meridian designed to be more tolerant of misalignment, tilt and decentration:



## Standard Toric



The dioptric power for a standard toric IOL is calculated as the opposite of the corneal astigmatism including the natural spherical aberrations:



When a standard toric lens is rotated 10 degrees it is out of alignment with corneal astigmatism:



# // PRECIZON™ TORIC ADVANTAGES

- ✓ **Broader Toric meridian** designed to be more **tolerant of misalignment**
- ✓ **Constant power over each meridian**, resulting in a constant Spherical Equivalent (SE) power, designed to provide optimal visual acuity
- ✓ **Aperture independent Spherical Equivalent power** and aberration neutral, designed to provide optimal visual acuity
- ✓ **Aperture independent cylinder power**, designed to provide optimal visual acuity.





## // PREMIUM TORIC SET All-in-one




### PRECIZON™ TORIC

Proven stable and optically tolerant of slight misalignment.

**+ DUALTEC™ KIT**  
Disposable Injector & cartridge system with “twist or push” option - 2.2mm incision.



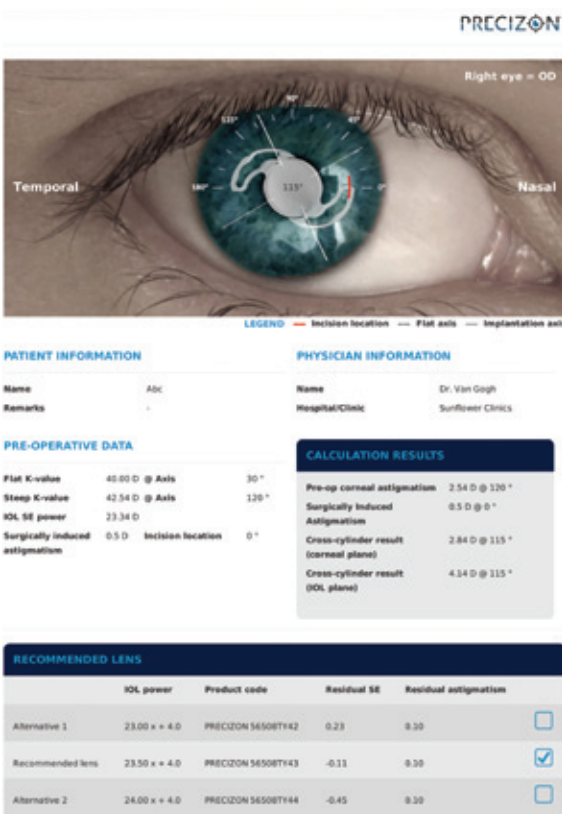
**+ RINGJECT™**  
Pre loaded CTR - data\* shows that CTR improves IOL predictability and stability over time.



\*SOURCE: Invest Ophthalmol Vis Sci. 2013 Aug 5;54(8):5196-203. doi: 10.1167/iovs.13-11991. J Cataract Refract Surg 2008; 34:1468-1475 Q 2008 ASCRS and ESCRS

## // PRECIZON™ ONLINE CALCULATOR

>> <http://calculator.ophtec.com>



**PATIENT INFORMATION**

Name	Abc
Remarks	-

**PHYSICIAN INFORMATION**

Name	Dr. Van Gogh
Hospital/Clinic	Sunflower Clinics

**PRE-OPERATIVE DATA**

Flat K-value	40.00 D @ Axis	30°
Steep K-value	42.04 D @ Axis	120°
IOL SE power	23.34 D	
Surgically induced astigmatism	0.5 D	Incision location 0°

**CALCULATION RESULTS**

Pre-op corneal astigmatism	2.54 D @ 120°
Surgically Induced Astigmatism	0.5 D @ 0°
Cross-cylinder result (corneal plane)	2.84 D @ 115°
Cross-cylinder result (IOL plane)	4.14 D @ 115°

**RECOMMENDED LENS**

	IOL power	Product code	Residual SE	Residual astigmatism	
Alternative 1	23.00 x + 4.0	PRECIZON 5650BTY42	0.23	0.30	<input type="checkbox"/>
Recommended lens	23.50 x + 4.0	PRECIZON 5650BTY43	-0.11	0.30	<input checked="" type="checkbox"/>
Alternative 2	24.00 x + 4.0	PRECIZON 5650BTY44	-0.45	0.30	<input type="checkbox"/>

The Precizon Ophtec Calculator is available online and is intended for use by certified ophthalmologists to aid in proper IOL cylinder power selection for cataract patients with corneal astigmatism. The website calculates and displays the nearest suitable IOL power and the implantation axis recommended to minimize postoperative astigmatism. The calculation result and lens power recommendation can be downloaded or emailed as a pdf file.

The calculation result page displays the patient information, physician information and pre-operative data as entered by the user. Under 'Results calculation' the calculation results are displayed:

- ✓ **Preoperative corneal astigmatism**  
Preoperative astigmatism and axis based on keratometry data entered by user.
- ✓ **Surgically induced astigmatism:**  
Astigmatism and axis induced by the incision based on SIA and IL data entered by user.
- ✓ **Cross-cylinder result (corneal plane)**  
Combined astigmatism and axis of preoperative corneal astigmatism and SIA on corneal plane.
- ✓ **Cross-cylinder result (IOL plane)**  
Combined astigmatism and axis of preoperative corneal astigmatism and SIA on IOL plane.

This data is visualized in an image that displays a recommended axis of implantation equal to the calculated cross-cylinder result on IOL plane. At the bottom of the page a recommended nearest available toric IOL model is displayed with two alternative models if available. For each option the anticipated residual SE and residual astigmatism are listed. The desired lens may be check marked for the printout.



Accurate alignment is a function of several factors;

## // MEASURING & MARKING PEARLS\*

- ✓ K reading: Use multiple measurements when defining the K value. At least one of the devices you use should be a topographer. Look at the average topographer measurements over the central 3 or 4 mm.
- ✓ Consider what the refraction shows. If it is a proper measurement and the patient has acceptable vision, it often gives some clues about the against-the-rule astigmatism that may be present on the posterior corneal surface.
- ✓ Base the cylinder correction on the corneal astigmatism, not the refractive astigmatism. When the patient has cataract surgery, any amount of lenticular astigmatism that was there will be removed.
- ✓ Know your specific surgically induced astigmatism factor. The Precizon™ online calculator takes this factor into account when calculating the implantation axis.
- ✓ Be wary of leaving the patient with against-the-rule astigmatism. Patients generally tolerate with-the-rule astigmatism better than against-the-rule astigmatism. Overcorrecting it could create some against-the-rule astigmatism, which the patient will not tolerate.

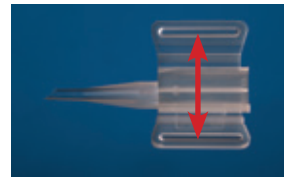
## // PEARLS FOR THE OR\*

- ✓ Bring the toric axis printout into the OR for reference.
- ✓ Consider creating a smaller capsulorhexis. Overlap of the capsulorhexis all around the optic helps with stability.
- ✓ Make sure that all viscoelastic material is removed. Expect the lens to rotate a little clockwise when you remove the viscoelastic. When rotating the lens, stop about 10 to 30 degrees short of the intended axis. After removal the IOL should be positioned in the proper axis.
- ✓ To maintain IOP most surgeons inject saline in the AC. Compared to regular aphakic lens implantation, in toric lens implantation the AC should be filled less than normal. When overinflating the anterior chamber with balanced salt solution the tendency for the IOL to rotate can increase.

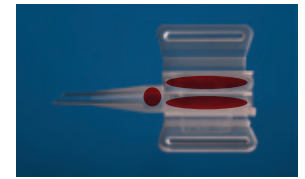
\* Source: adapted from: Review of Ophthalmology 1/22/13 - Toric IOLs: Nailing The Alignment

## // LOADING INSTRUCTIONS

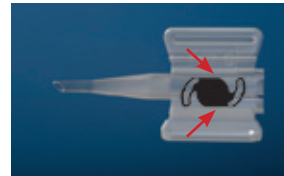
### // Load



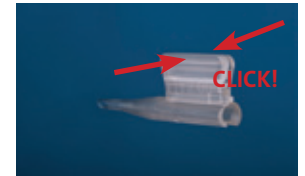
1. Open cartridge.



2. Fill cartridge with viscoelastic solution.

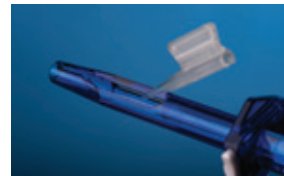


3. Push the lens with the haptics under the rim.



4. Close cartridge until a "click" is heard.

### // Place



5. Place cartridge into DualTec injector.

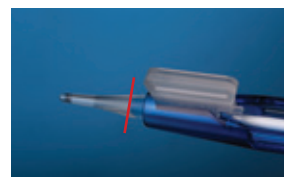


6. Move cartridge forward until a "click" is heard.

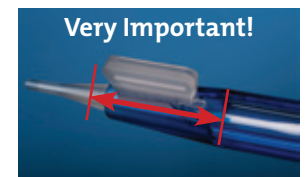


7. Select 'PUSH' using the white button.

### // Insert



8. Move plunger forward into compression section.



9. Retract plunger and move forward again into compression section.



10. Bring cartridge tip, bevel down, into the incision and move plunger forward until the lens is out of the cartridge.

## OPHTEC BV

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