



**VIVINEX™ TORIC  
MULTISERT™**  
THE SECURE CHOICE  
FOR ASTIGMATISM  
CORRECTION

Our toric IOL – designed to advance  
patients' vision

# For clarity of vision and outstanding rotational stability choose Vivinex™ Toric

Designed for outstanding optical quality, Vivinex™ Toric multiSert™ has proven rotational stability for precise astigmatism correction and provides patients with an astigmatic cornea with clarity of vision. Product quality, dedication and attention to detail are deeply rooted in our Japanese heritage, and with 4 million lenses implanted worldwide, surgeons' trust in Vivinex™ is proven.

Glistening-free hydrophobic acrylic IOL material <sup>1,2</sup>

Proprietary aspheric optic design for improved image quality<sup>3</sup>

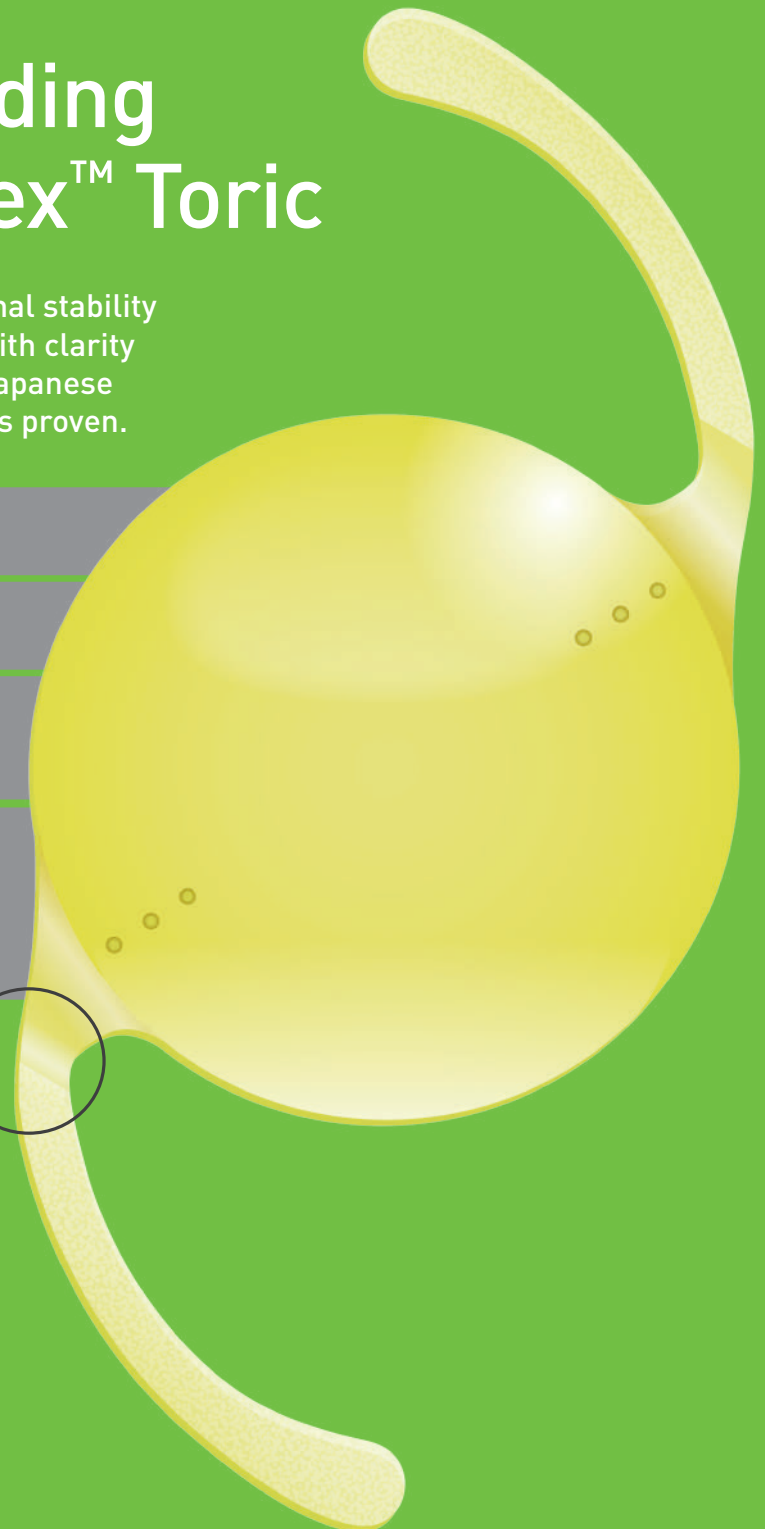
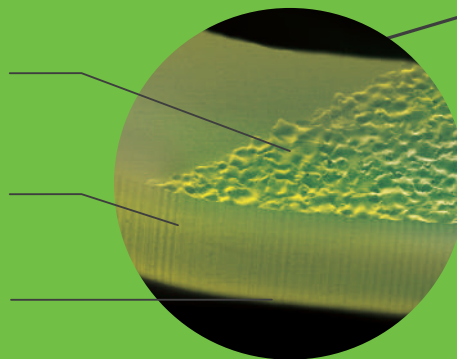
Active oxygen processing treatment, a smooth surface and square optic edge to reduce PCO <sup>1,4,5,6,7,8,9,10</sup>

Median rotation 1.1° (range 0.0° – 5.0°)  
100% of lenses (n=103) had ≤ 5° of rotation from their initial axis at end of surgery through all follow up visits at 1 hour, 1 week, 1 month and 6 months <sup>11</sup>

Rough  
haptic surface

Textured  
haptic edge

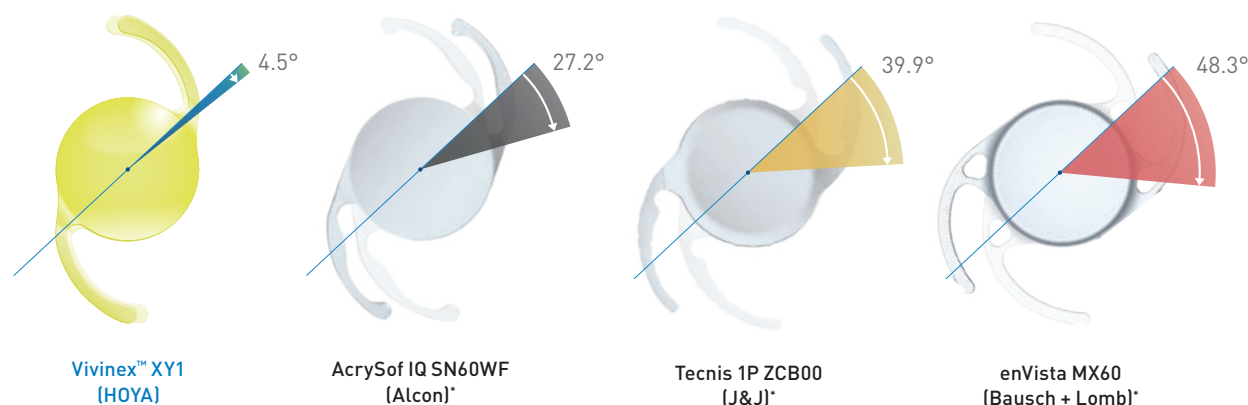
Rough  
haptic surface



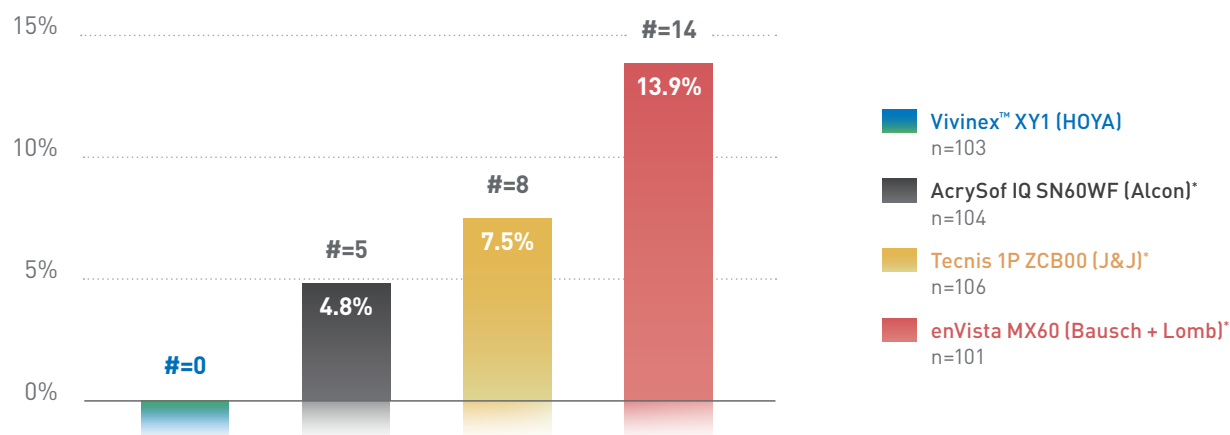
# Reliable outcomes through outstanding rotational stability

The Vivinex™ IOL platform shows outstanding rotational stability between surgery and one week post op, without outliers, when compared to AcrySof\*, Tecnis\* and enVista\*. <sup>11,12</sup>

Maximum rotation values observed in the first week following surgery <sup>11,12</sup>



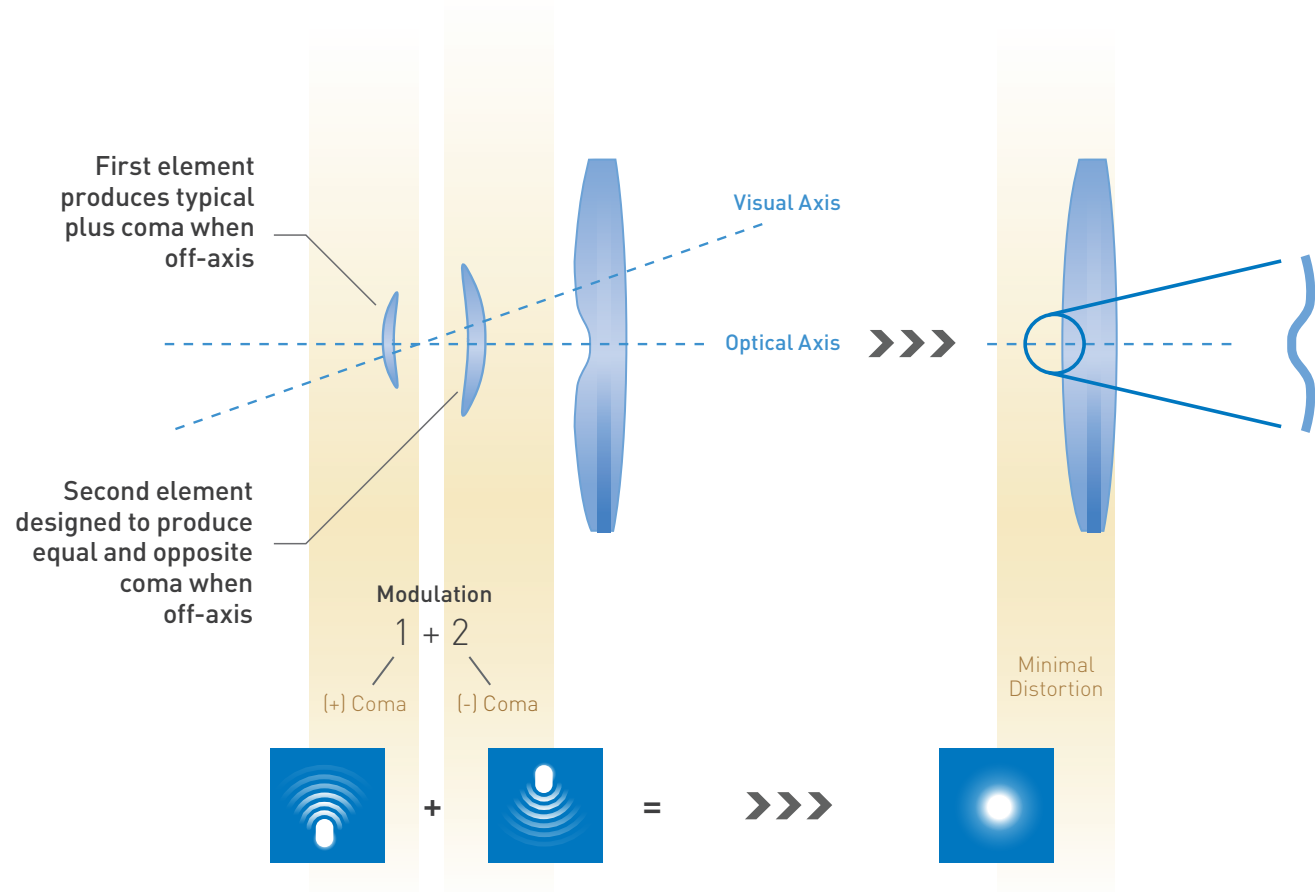
In the timeframe of up to 6 months post-op, no implanted Vivinex™ IOL rotated more than 5° from initial axis, in comparison to 4.8% of the AcrySof\* IOL, 7.5% of the Tecnis\* IOL and 13.9% of the enVista\* IOL <sup>11,12</sup>



Percentage and total number of IOLs that rotated more than 5° between end of surgery and 6 months postoperatively <sup>11,12</sup>

# Proprietary aspheric optic designed to advance vision

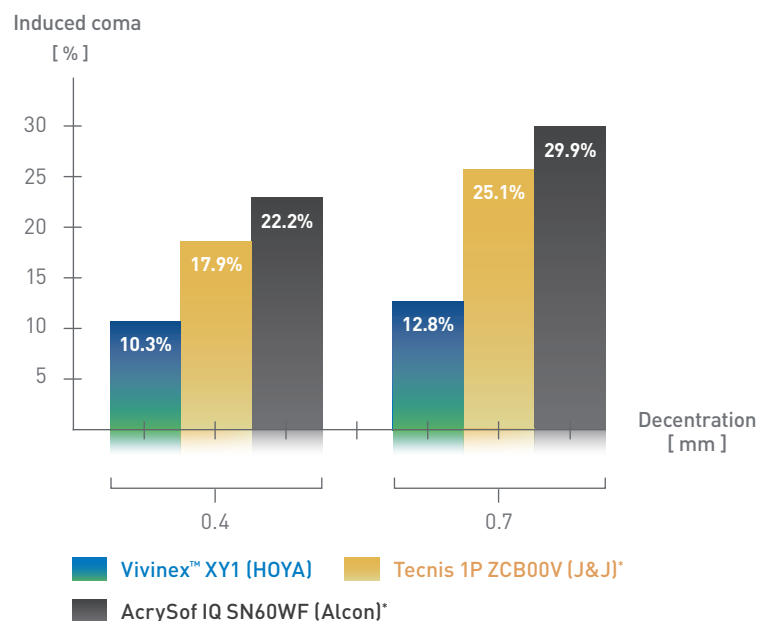
HOYA's optic contains two distinct aspheric elements that are tuned to avoid typical induction of coma associated with traditional aspheric optics. These optical zones in the Vivinex™ IOL induce positive and negative coma to compensate for the loss of image quality caused by the natural misalignment between visual and optical axes in the eye. The optic as a whole is designed to cancel out coma, providing patients with improved off-axis image quality versus traditional negative aspheric IOL designs.<sup>3</sup>



This image is for illustrative purposes only and is not an exact representation of the product.

**The proprietary aspheric optics of Vivinex™ reduce spherical aberration without incurring significant susceptibility to decentration-associated coma.<sup>3</sup>**

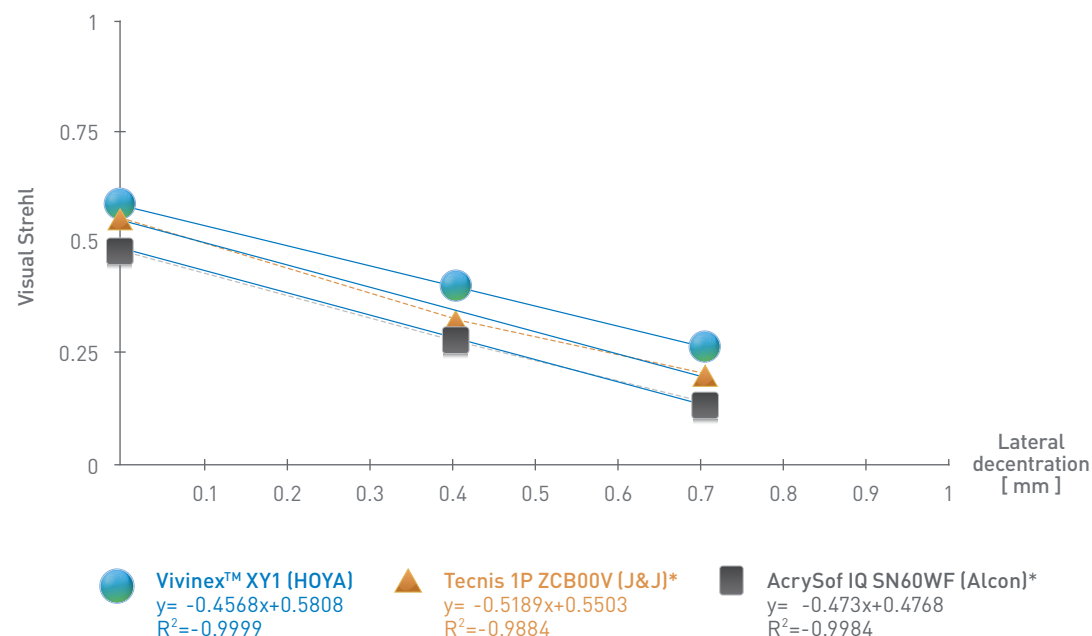
## Reduced coma caused by off-axis alignment



In the presence of decentration, Vivonex™ minimises coma when compared with other aspheric IOLs at 4.0 mm pupil diameter.<sup>3</sup>

Studies have shown that the mean decentration of an IOL following cataract surgery is  $0.4 \pm 0.2$  mm with a range up to 1.7 mm.<sup>13</sup>

## Reduced impact on optical quality caused by off-axis alignment



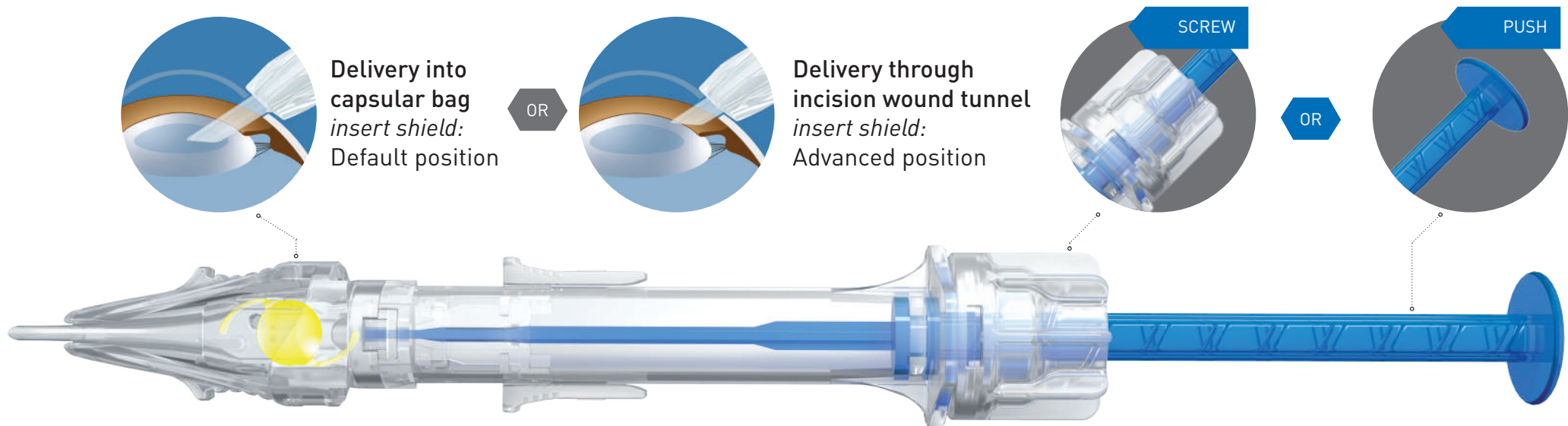
The visual Strehl ratio (including astigmatism and high order aberrations) with lateral decentration of 0.7 mm decreased 2.23 times for Vivonex™, 2.80 times for J&J Tecnis 1P\* and 3.20 times for Alcon AcrySof IQ\*.<sup>3</sup>



# Delivered in the preloaded multiSert™ injector

## Push and screw modes and the ability to control insertion depth

Vivinex™ multiSert™ is a 4-in-1 delivery system that allows you to achieve outstanding delivery consistency with your choice of injection and insertion style<sup>14</sup>



### Preloaded injectors are:

#### Easier to prepare, increasing safety by:<sup>15,16,17,18,19,20</sup>

- Reducing risk of contamination and infection
- Reducing risk of IOL damage

#### More efficient in the OR:<sup>17,19</sup>

- Minimising time spent preparing the IOL delivery system
- Creating fewer instruments to reprocess

#### More predictable:<sup>19</sup>

- Increasing predictability and consistency of IOL delivery

## CLEARlog – Power in the palm of your hand



CLEARlog is an intuitive Record-Analyze-Optimize app for cataract and refractive lens exchange.

### CLEARlog allows you to:

- ✓ Capture data quickly across all devices
- ✓ Conduct complex analyses easily
- ✓ Generate reports with just one click



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[www.CLEARlogportal.com](http://www.CLEARlogportal.com)

## HOYA Toric Calculator

- ✓ The HOYA Toric Calculator can take account of posterior corneal astigmatism in the calculation by giving the option to apply the Abulafia-Koch Regression formula.
- ✓ The Abulafia-Koch Regression, applied to a clinical patient cohort, has been shown to improve predictability of TIOL refractive outcomes.<sup>21</sup>



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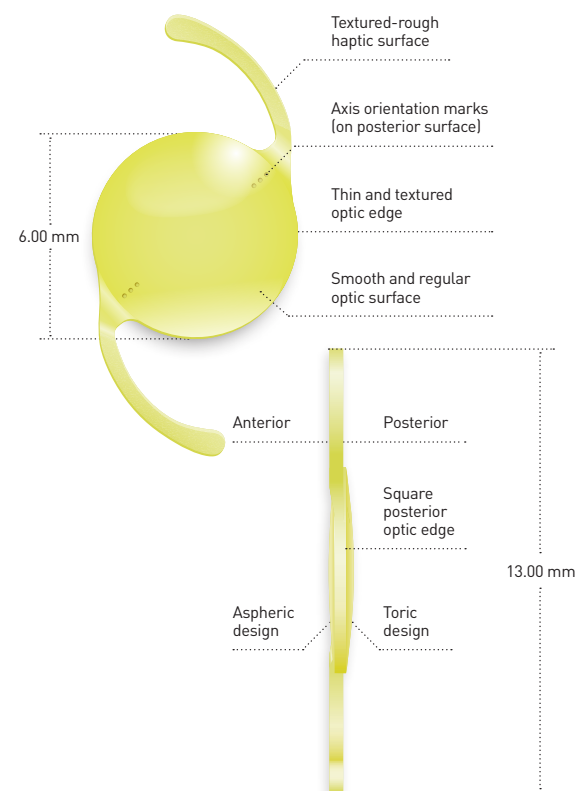
# Specifications

Vivonex™ Toric multiSert™	
<b>Model name</b>	XY1A-SP
<b>Optic design</b>	Biconvex with square, thin and textured optic edge Anterior: Aspheric design Posterior: Toric design
<b>Optic &amp; haptic materials</b>	Hydrophobic acrylic Vivonex™ with UV- and blue light filter
<b>Haptic design</b>	Textured-rough haptic surface
<b>Diameter (optic/OAL)</b>	6.00 mm / 13.00 mm
<b>IOL power (Spherical equivalent)</b>	+10.00 to +30.00 D (in increments of 0.50 D)
<b>Cylinder power at IOL plane</b>	1.00 to 6.00 D (T2 to T9) T2 to T3 in increments of 0.50 D T3 to T9 in increments of 0.75 D
<b>Nominal A-constant**</b>	118.9
<b>Injector</b>	multiSert™ preloaded
<b>Front injector tip outer diameter</b>	1.70 mm
<b>Recommended incision size</b>	2.20 mm

Model XY1A-SP	Cylinder power at IOL plane	Cylinder power at corneal plane <sup>22</sup>
<b>T2</b>	1.00 D	0.69 D
<b>T3</b>	1.50 D	1.04 D
<b>T4</b>	2.25 D	1.56 D
<b>T5</b>	3.00 D	2.08 D
<b>T6</b>	3.75 D	2.60 D
<b>T7</b>	4.50 D	3.12 D
<b>T8</b>	5.25 D	3.64 D
<b>T9</b>	6.00 D	4.17 D

> Please refer to the datasheet for full specifications.

\*\* The A-constant is presented as a starting point for the lens power calculation. When calculating the exact lens power, it is recommended that calculations be performed individually, based on the equipment used and operating surgeon's own experience.



Delivered by the multiSert™ preloaded injector

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**HOYA**  
SURGICAL OPTICS

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