

VivineX iSert® Model XC1
Model XY1

Preloaded System
as low as 2.0 mm incision

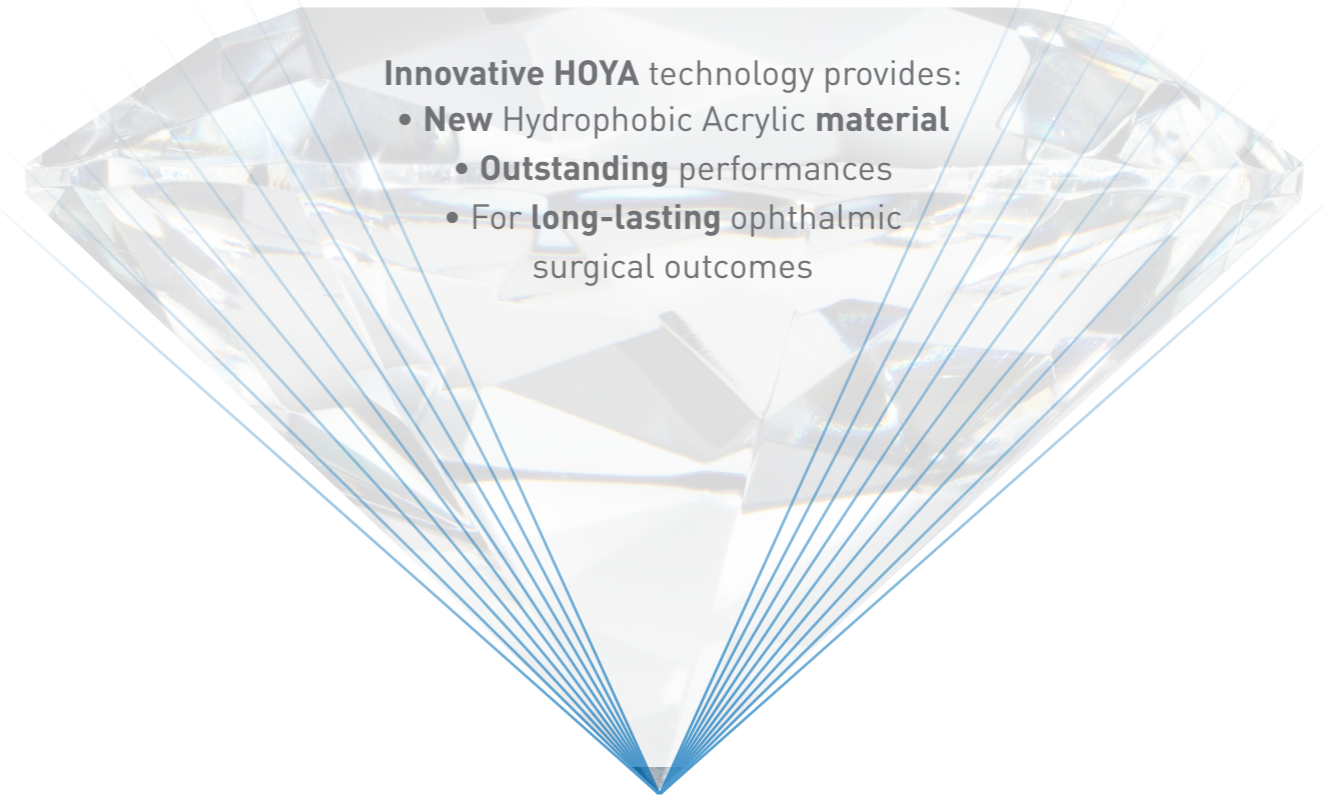


Long-term quality of
vision is what every
patient expects

- Innovative HOYA technology provides:
- **New Hydrophobic Acrylic material**
 - **Outstanding** performances
 - For **long-lasting** ophthalmic surgical outcomes

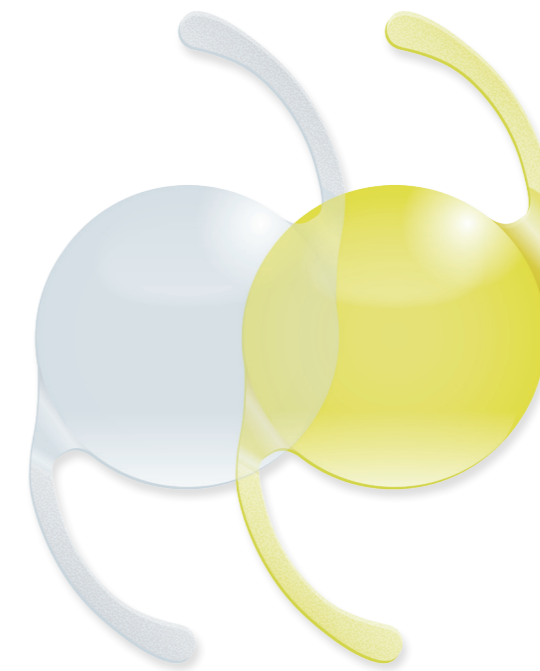
VivineX iSert®

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Model XC1

Model XY1

Singularly Focused. Globally Powered.™

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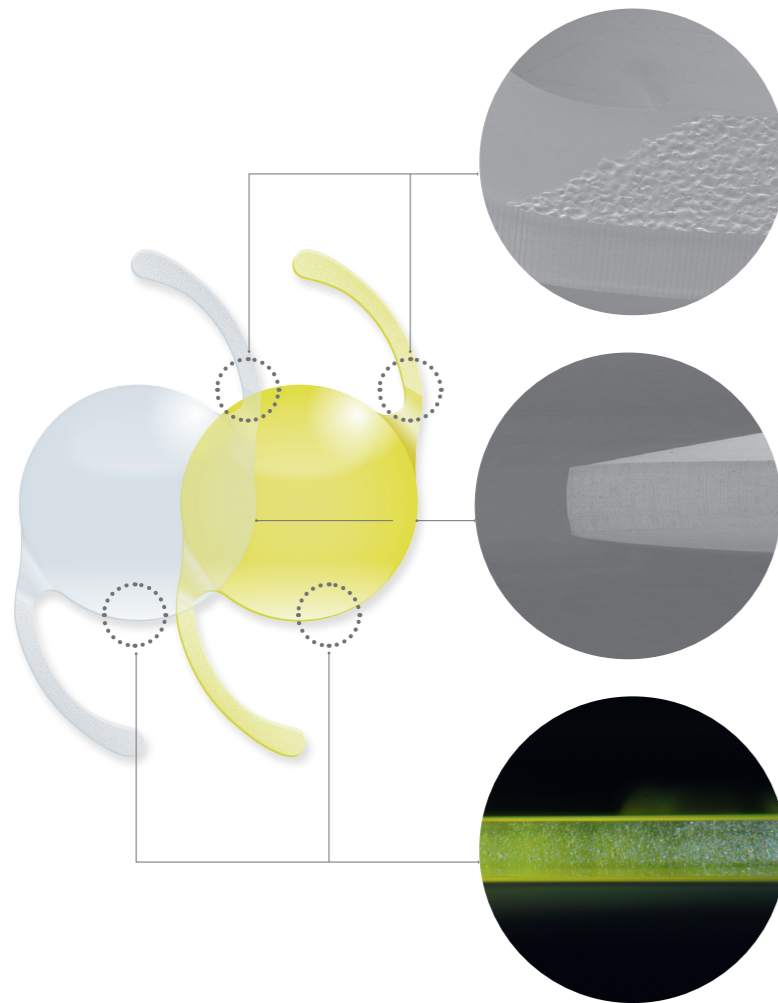
Quality for Long-term Vision

Cutting-edge IOL* technology provides research-driven benefits to protect your patients' "long-term vision quality"



Long-term Transparency

According to *in vitro* tests, the new acrylic polymer properties of **Vivinex™** drastically reduce glistening



Textured-rough Haptic

- Better grip onto capsular surface is expected
- To avoid the haptic-tip sticks to the optic when it's folded

Improved Square Edge

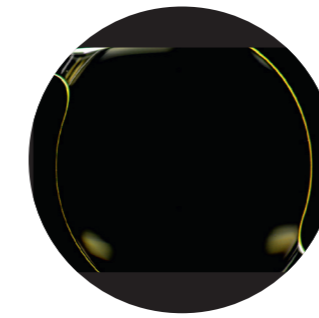
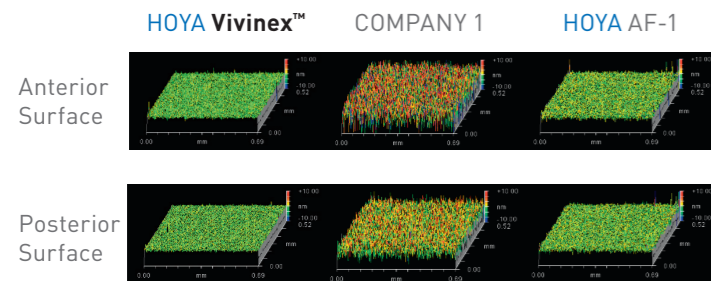
- Very sharp edges
- Helps to prevent PCO¹

Optic Edge Texturing Finish

- To reduce Dysphotopsia²

Optical Surface Quality³

- High-quality, precise smooth surface
- **Vivinex™** has the similar surface smoothness and optical quality as every marketed HOYA IOL

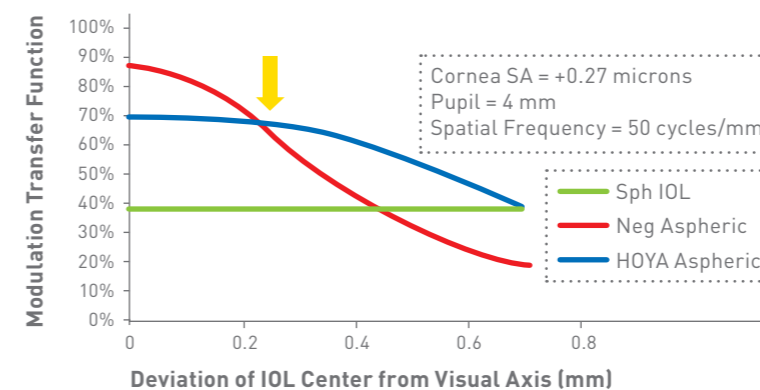


- No glistening was seen based on *in vitro* testing (35°C to 23°C)⁴
- The innovative hydrophobic material **Vivinex™** is associated with a significant decrease in glistening

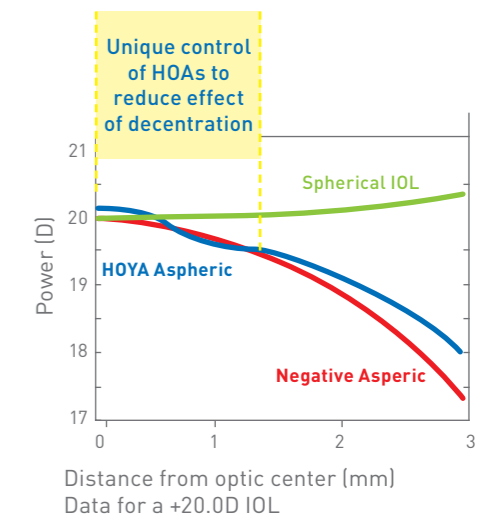
Long term visual quality with "ABC Design"

The "ABC Design" of this Aspheric optic maintains high image quality even if the lens is not centrally aligned with the visual axis.⁵

Theoretical Eye Model



SA = Spherical aberration



HOA = Higher-order aberrations

1. Nishi O, Nishi K, Akura J. Speed of capsular bend formation at the optic edge of acrylic, silicone, and poly(methyl methacrylate) lenses. *J Cataract Refract Surg* 2002; 28(3):431-437.
 2. Meacock W, et al. The Effect of Texturing the Intraocular Lens Edge on Postoperative Glare Symptoms. *Archives of Ophthalmology* 2002; Vol 120: 1294-1298.
 3. Data on file
 * IOL = Intra-Ocular Lens

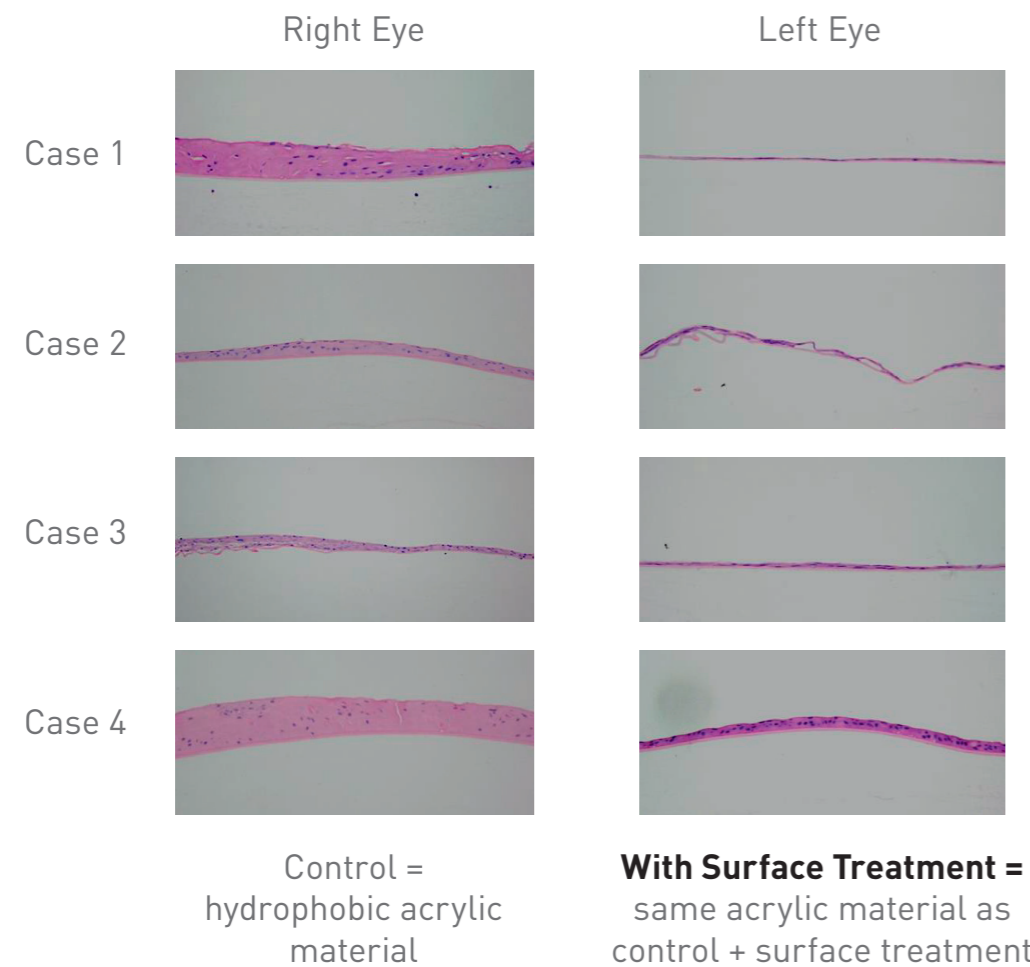
4. Data on file: *in vitro* test achieved according to published method: Marrie van der Mooren *et al.* "Effects of glistening in intraocular lens", *BIOMEDICAL OPTICS EXPRESS*, vol 4, No.8, P1294-1304(2013).
 5. Data on file

PCO** reduction proven in *in vivo* tests

in vivo test on rabbit eyes shows that proprietary surface treatment offers strong PCO reduction⁶



- Strong capsular adhesion reduced the risk of PCO
- Rabbits receiving lenses with proprietary surface treatment showed a low level of PCO

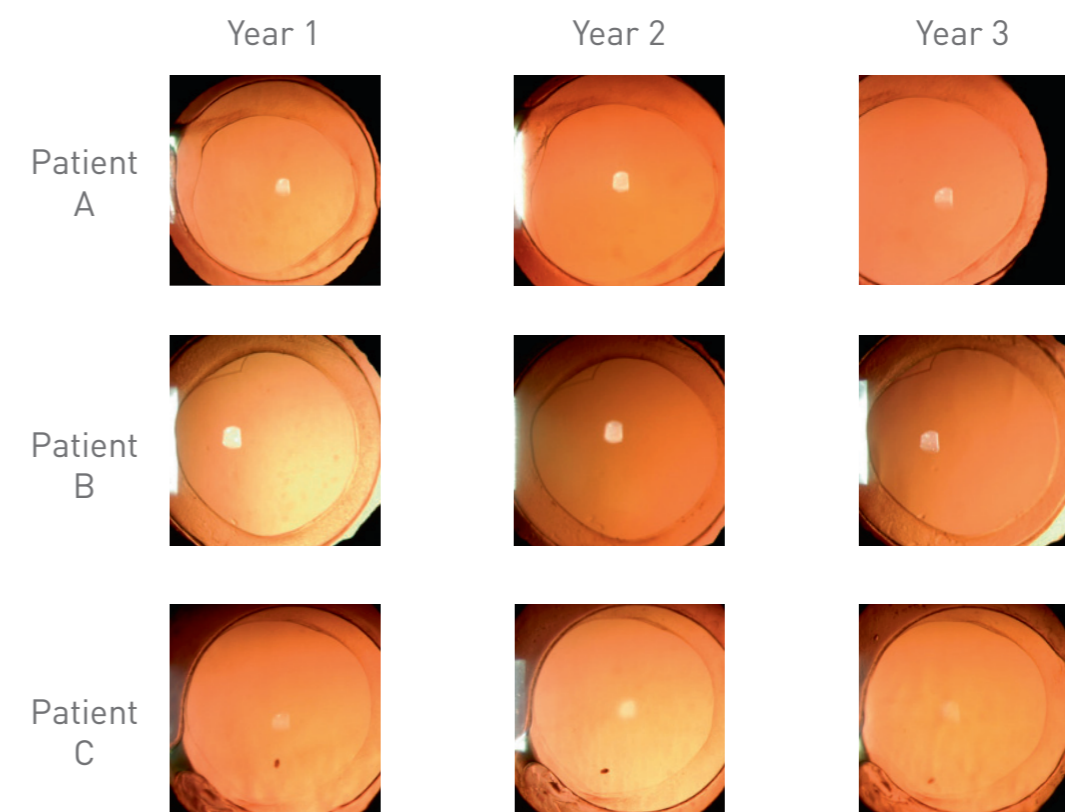


PCO reduction proven in human eyes

Clinical outcome shows very low PCO rate in post-operative time⁷



- Effective long-term PCO inhibition
- 30 eyes were enrolled and YAG rate was 3.3% at 3 years post-operative time⁸



Images courtesy of Hiroyuki Matsushima, MD, PhD, Department of Ophthalmology, Dokkyo Medical University, Japan

6. Hiroyuki Matsushima, et al. Active oxygen processing for acrylic intraocular lenses to prevent posterior capsule opacification. J Cataract Refract Surg. 2006; 32:1035-1040.

** PCO = Posterior Capsule Opacification

7. Japanese clinical study carried out in 2010 : internal report

8. Hiroyuki Matsushima, Dokkyo Medical University. Presented at 68th Annual Congress of Japan Clinical Ophthalmology; November 13, 2014 Kobe Japan

Easy to insert through an incision as low as 2.0 mm

The ergonomically-designed iSert® system provides highly predictable, reproducible IOL delivery through a very small incision

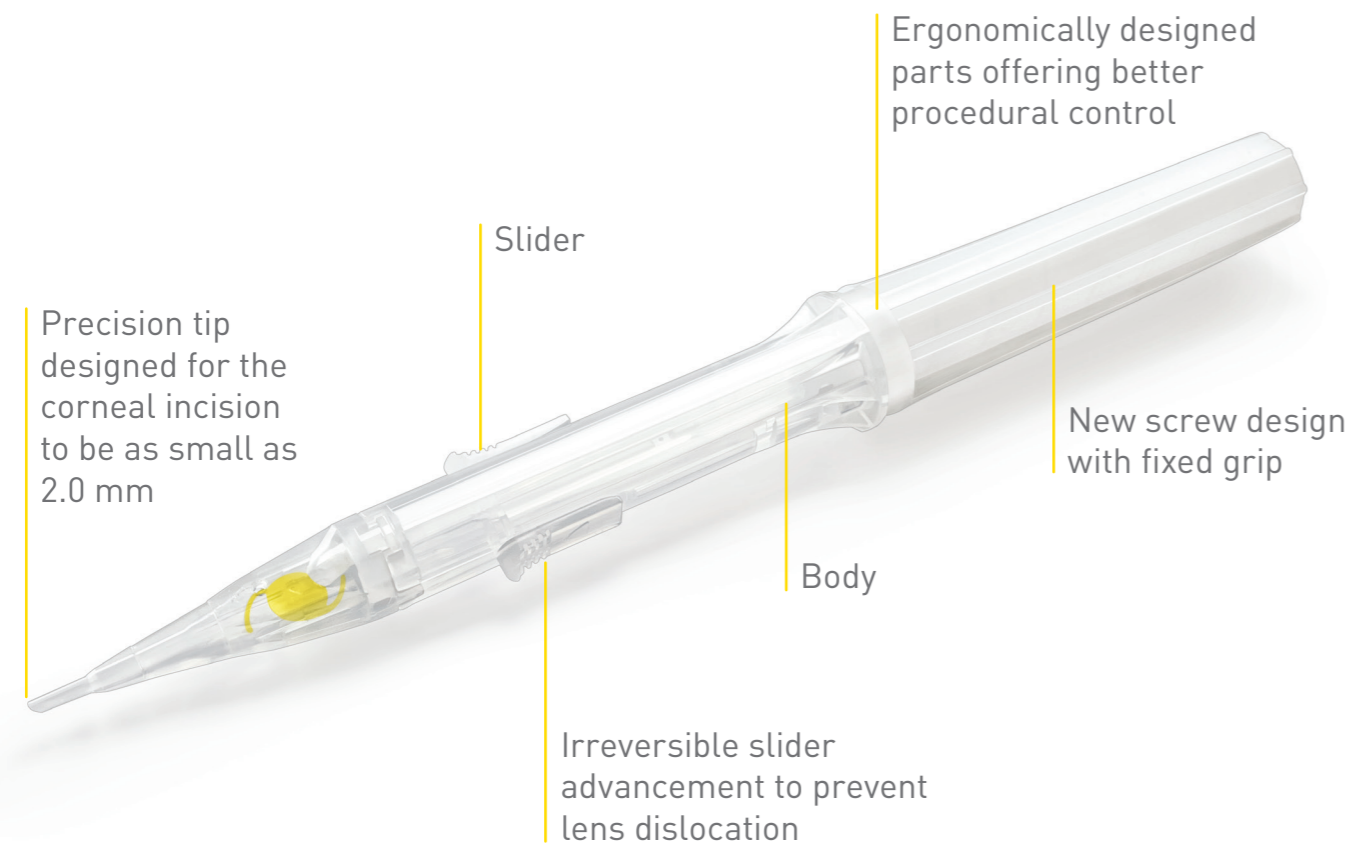


Vivinex™ iSert®: The innovative 1-piece acrylic lens for long term patient satisfaction

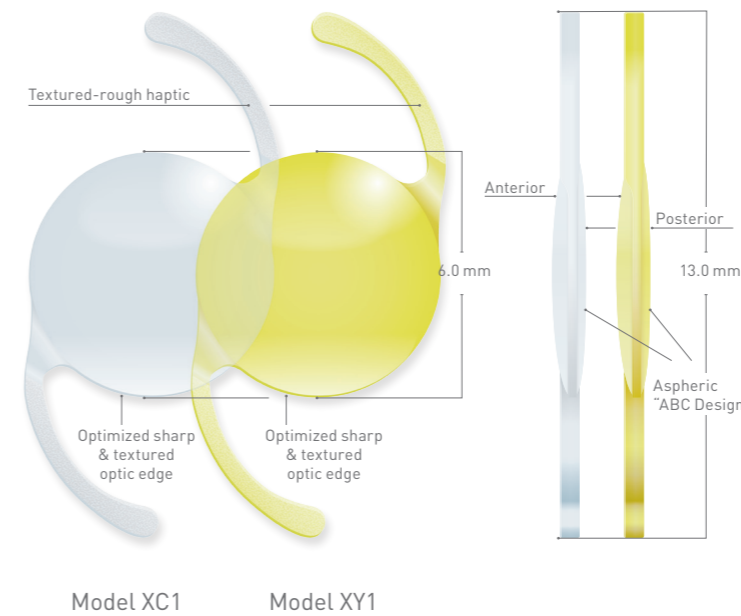
The HOYA surface treatment on the posterior surface and the new feature of the Vivinex™ iSert® design provides outstanding performances



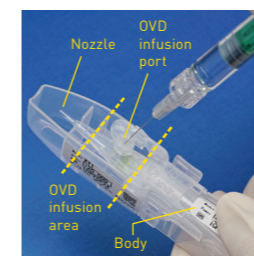
Easy to insert through an incision as low as 2.0 mm



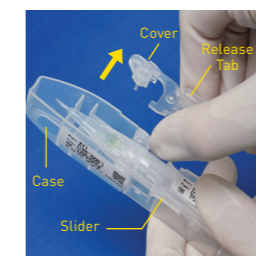
- New iSert® offers easy handling and a better surgical comfort
- Very small incision size reduces the risk of surgically-induced astigmatism



Model	Vivinex™ iSert® XC1 Vivinex™ iSert® XY1
Optic Design	Aspheric "ABC Design" with sharp textured optic edge
Optic & Haptic Materials	Hydrophobic acrylic (Vivinex™) with UV filtering (Model XC1) with blue light filtering (Model XY1)
Haptic Design	Textured-rough haptic surface
Dimension (Optic/OAL)	6.0 mm/13.0 mm
Power	+6.0 to +30.0 D (in 0.5 D increments)
Incision size	as low as 2.0 mm



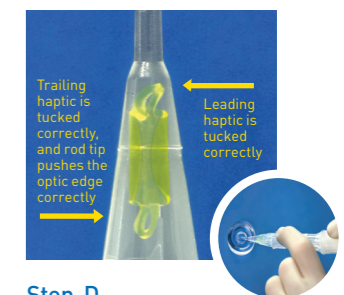
Step A
Infuse the OVD into the injector through the infusion port with the cannula pointed in a direction perpendicular to the body. Fill up the area indicated by dotted lines with the OVD and confirm that the OVD has covered the entire intraocular lens.



Step B
Press the release tabs, lift up and remove the cover from the case.



Step C
Push the slider slowly until it stops, holding the body with your thumb. Remove the injector from the case.



Step D
Carefully insert the nozzle into the eye through the incision, keeping bevel down. Slowly rotate the screw plunger to inject the lens into the capsular bag.