

NEW VARILUX E SERIES. EASY VISION FOR AN EASY LIFE.





## THE REVOLUTION EXPANDS

Stemming from the most advanced technologies in the optical field, Varilux S series lenses revolutionised varifocal lenses and the experience of presbyopes. The unique lens geometry, exclusive technologies and the patented manufacturing process have enabled Essilor to redefine the conception and manufacture of varifocal lenses. For the wearers this means ultimate vision.

AND NOW VARILUX E SERIES LENSES ENLARGE THE VARILUX RANGE PORTFOLIO, PROMISING EASY ADAPTATION TO EVEN MORE WEARERS. EASY VISION FOR ALL PRESBYOPES.



88%

OF PRESBYOPES\* AGREE IT CAN TAKE QUITE A LONG TIME TO GET USED TO VARIFOCAL LENSES AND VARILUX RESEARCHERS HAVE CONFIRMED THAT THE SWIM EFFECT IS THE MAIN REASON FOR SLOW ADAPTATION.

An interesting experiment shows that swim effect plays a key role in presbyope's ability to adapt to varifocal lenses. Subjects were presented in an immersive virtual environment with visual stimuli which were developed to simulate dynamic distortions. We found that head and body movements compensate the perceived dynamic image deformation.

The visual input has a strong influence and when it is distorted, in conflict with other signals, IT LEADS TO COMPENSATORY MOVEMENTS WHICH INCREASE THE ADAPTATION EFFORT.

Now, with Varilux E series lenses, there is no reason your presbyopic patients should not enjoy easy vision: Fast adaptation and less distortion for enhanced visual comfort, true images and great value for money.

\*Ipsos quantitative study - UK - 2012 - Presbyopes still not equipped with varifocal lenses.

Source: Faubert J., Allard R. (2004): Effect of visual distortion on postural balance in a full immersion stereoscopic environment. In Stereoscopic Displays and Virtual Reality Systems XI, edited by Andrew J. Woods, John O. Merrit, Stephen A. Benton, Mark T. Bolas. Proceedings of SPIEIS&T Electronic Imaging, SPIE Vol. 5291, pp. 491-500.
Hanssens J.-M., Allard R., Faubert J. (2007). "Progressive lenses distortions effect on postural stability in virtual reality environment". Journal of Vision, 7(9): 1026.

### INTRODUCING SWIM CONTROL



The secret behind Varilux E series is Swim Control™, an exclusive technology. Inspired from Nanoptix, this new technology reduces the swim effect in order to make adaptation easy.

#### AT THE HEART OF SWIM CONTROL

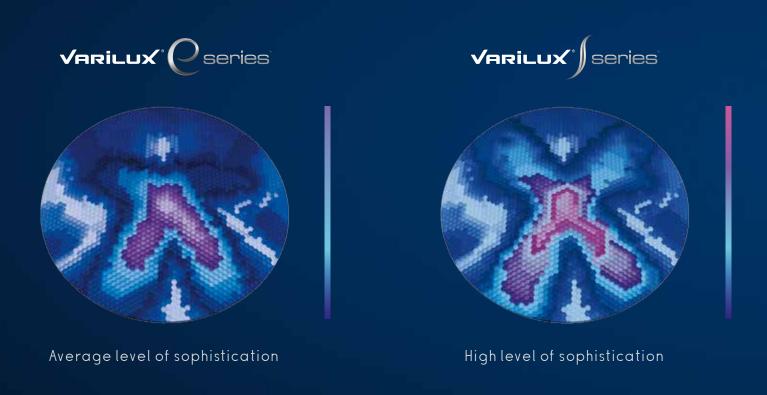
Like Nanoptix, Swim Control is derived from a multi-patented calculation based on micro-elements. Those micro-elements are used to manage the lens addition independently from the lens curvature.

As a result, the lens geometry is better controlled to reduce the swim effect.

As it is in the peripheral vision that the wearer is the most impacted by the swim effect, the sides of Varilux E series lenses are calculated with the same level of sophistication as Nanoptix. However, the rest of the lens is calculated with a lesser level of sophistication, meaning the calculation is easier

### DIFFERENTIATED LEVELS OF SOPHISTICATION

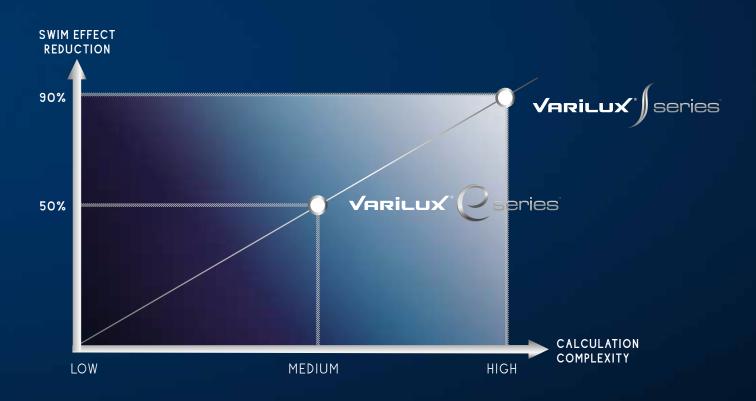
Illustrations below show how micro elements are managed on Varilux E and S series lenses. Both lenses have similar properties in the periphery. However central areas show differenciated levels of sophistication. The high contrast and brightest colours represent the highest level of sophistication.



### THE RESULT OF SWIM CONTROL™

The efficiency of the lens against the swim effect depends on the level of sophistication applied to the lens. The more sophisticated the calculation, the greater the reduction in swim effect.

Nanoptix reduces the swim effect up to 90% Swim Control reduces the swim effect up to 50%



## DEEPER INTO THE TECHNOLOGY

Swim Control™ requires the same manufacturing precision as Nanoptix, ensuring the exact alignment of both the front and back surfaces of the lens during the digital surfacing process. S Digital Surfacing is unique and essential to all Varilux S and E series lenses.

# digital surfacing

S digital surfacing is designed to reach an unmatched level of precision and is protected by no less than 5 patents. Beyond a unique manufacturing process it includes exclusive equipment installed throughout our laboratory network.

It is with the unique engineering in S Digital Surfacing that Varilux S and E series lenses can control the Swim Effect like no other lens on the market.



## THE VARILUX E SERIES RANGE



Varilux E series performance optimised using the frame fitting parameters

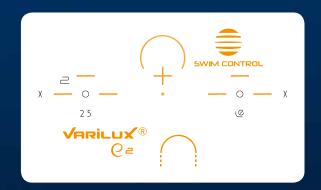


Varilux E series lenses for standard frames

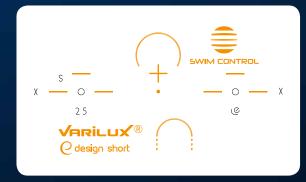


For wearers choosing a shallow frame, recommend Varilux E design short

### **ENGRAVINGS / FACINGS**

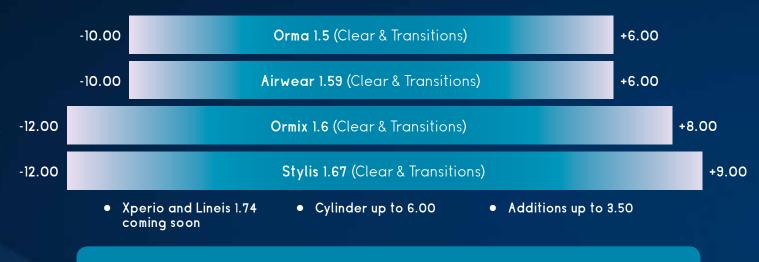






### TECHNICAL INFORMATION

### RANGE AVAILABILITY



#### **WEARER POWER**

Varilux E series lenses are manufactured using the 'as worn' position. When measured on a focimeter, the values will be different from the ordered prescription.

Example		Far vision			Addition	]
G/L	DD	Sph	Cyl	Axis	Add	Ordered prescription  Checking values to be measured with focimeter
<u>\$</u>	65/70	-0.50 -0.46	+0.75 +0.74	010 010	+1.75 +1.67	
						with focimeter

#### MINIMUM FITTING HEIGHTS

- Varilux E 2: 14 mm
- Varilux E design: 17mm
- Varilux E design short: 14mm

#### **COATINGS**

- Available with the best Crizal coatings
  - Crizal Prevencia
  - Crizal Forte UV
  - Optifog UV

## THE VARILUX RANGE





#### Varilux Physio® 2.0



Wide Angle Vision

**Easy Adaptation** 

**Easy Adaptation** 

**Total Comfort** in any task

> Digital Precision at any distance

Varilux Comfort® **New Edition** 



**Total Comfort** in any task

**Digital Precision** 

at any distance

Digital Precision at any distance

**Total Comfort** in any task

Digital Precision at any distance

Varilux Liberty® **New Edition** 



Digital Precision at any distance

**Total Comfort** in any task

**Easy Adaptation** 

Varilux ® E series





Seeing the world better

www.varilux.co.uk

Essilor International is the world leader in the design, manufacture and customisation of ophthalmic lenses. Active on five continents, Essilor offers a wide range of lenses under the flagship Varilux, Crizal, Optifog, Xperio and Essilor brands to correct myopia, hyperopia, presbyopia and astigmatism.