# SEIKO Surmount & Surmount Ws

Advanced, Dual Patented 100% Internal Free-Form Technology


SEIKO

www.seikovision.com

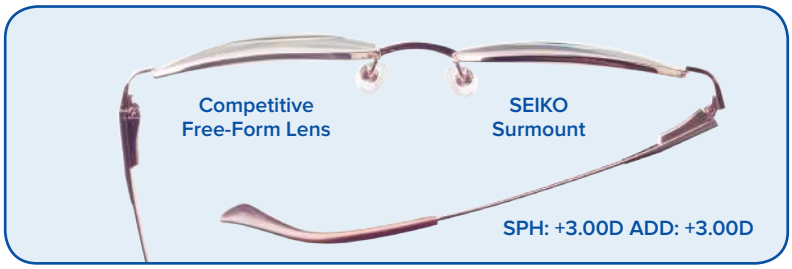
# **SEIKO** Surmount & Surmount Ws

## Dual Patented 100% Internal Free-Form Technology

*Pat. No. 6,091,470 & 7,341,344

### Creates the Widest, Most Natural and Comfortable Visual Experience Possible

SEIKO Surmount and SEIKO Surmount Ws 100% internal free-form progressive lenses are our most technologically advanced lenses. Their dual patented* design processes complex convex curves onto the concave back surface of the lens, permitting the use of flatter base curves on plus power prescriptions. The result is lenses that are up to 25% flatter in profile, even when compared to our other internal free-form designs. Wearers will enjoy the superior optical performance of 100% internal free-form technology, along with slimmer, lighter, more attractive eyewear.



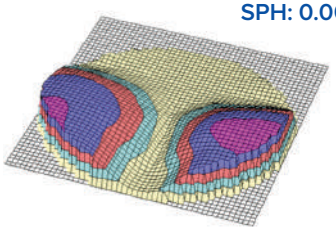

Patented Convex Curve on Concave Side

### Two Advanced Designs, Hard & Soft

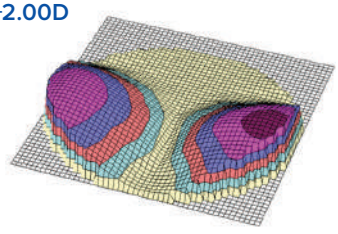
Surmount lenses are recommended for active lifestyle wearers. Their soft design effectively reduces swim and sway distortion. They offer clear distance (40% wider) to the periphery, a smooth natural intermediate, and a wide, full power reading area.

Surmount Ws (Wide & Short) lenses are preferred by those with sedentary lifestyles, who use their eyewear mostly for near vision. Its hard design provides a 42% wider reading area with clear distance vision to the periphery.

SPH: 0.00D, ADD: +2.00D



Surmount - Soft design for minimal swim and sway



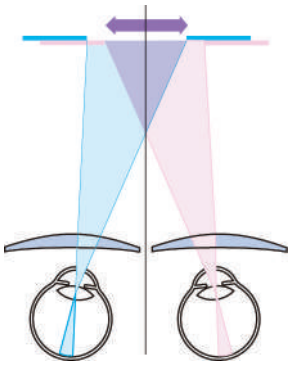
Surmount Ws - Hard design for expanded near and distance

- SEIKO Surmount - Soft design with wide stable vision for active lifestyle wearers
- SEIKO Surmount WS - Hard design for wider viewing zones
- Convex curve on concave lens surface for slimmer plus prescription lens profiles
- Ideal for difficult prescriptions with high sphere, cylinder, adds, and or prism
- Variable inset based on distance Rx, PD, and customized near reading distance
- As-Worn technology allows for fully compensated measured power throughout

## Variable Inset & Customized Optimization

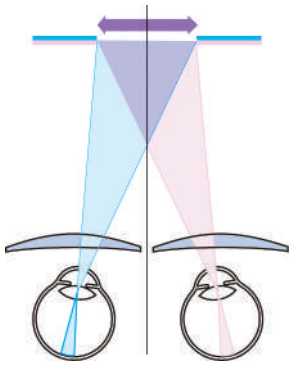
Surmount calculates the precise inset placement needed to achieve point focus and optimum clarity at a standard 35cm reading distance. The ECP may further optimize the inset placement by specifying the wearer's preferred reading distance.

**Fixed Inset**

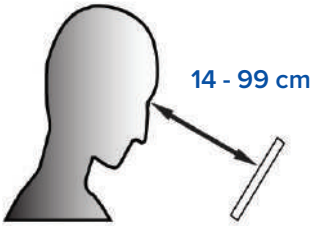


Standard inset can result in restricted reading areas

**Optimized Variable Inset**



Surmount calculates optimal inset from distance Rx & PD



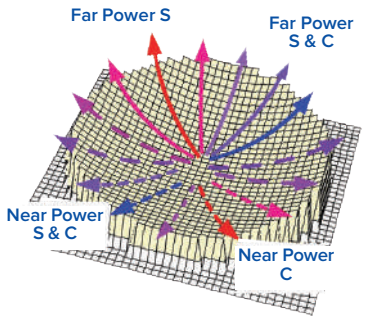

Inset can be individually optimized by specifying the wearer's preferred reading distance (default is 35cm).

## Advanced Aspheric Compensation

Surmount modifies the Rx to achieve an optically precise correction in the as-worn position. This compensation factors in eye rotation, vertex distance and frame tilt. The benefit to the wearer is improved clarity and visual comfort throughout the entire lens, with expanded peripheral vision, even in high-cylinder, high-add Rx's.

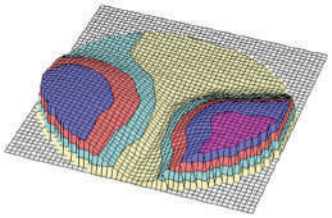
## Multi-Polar Astigmatic Correction

Multi-polar astigmatic correction manages unwanted cylinder in all meridians, creating a balanced progressive design that increases wearer comfort. It takes into account the three-dimensional orientation of the eye and its axis of rotation and provides proper eye to lens alignment in all directions. This significantly improves panoramic vision and image stability.

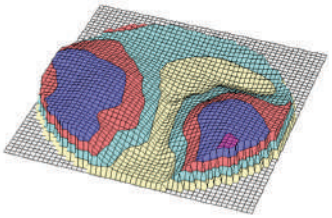



Multi-polar astigmatic correction controls unwanted cylinder in all meridians, increasing wearer comfort, especially when viewing off axis.

**SPH: 0.00D, CYL: -2.00D**
**AXIS: 45, ADD: 2.00D**



Surmount Lens



Other Internal Free-Form Lens

## Advanced Materials & Coatings For A Custom Fit

Surmount lenses are available in 1.50 and polycarbonate as well as in Trivex® and 1.60, 1.67 & 1.74 high index plastic in clear, polarized and Transitions® lenses.

# SEIKO Surmount & Surmount Ws

## Application Chart

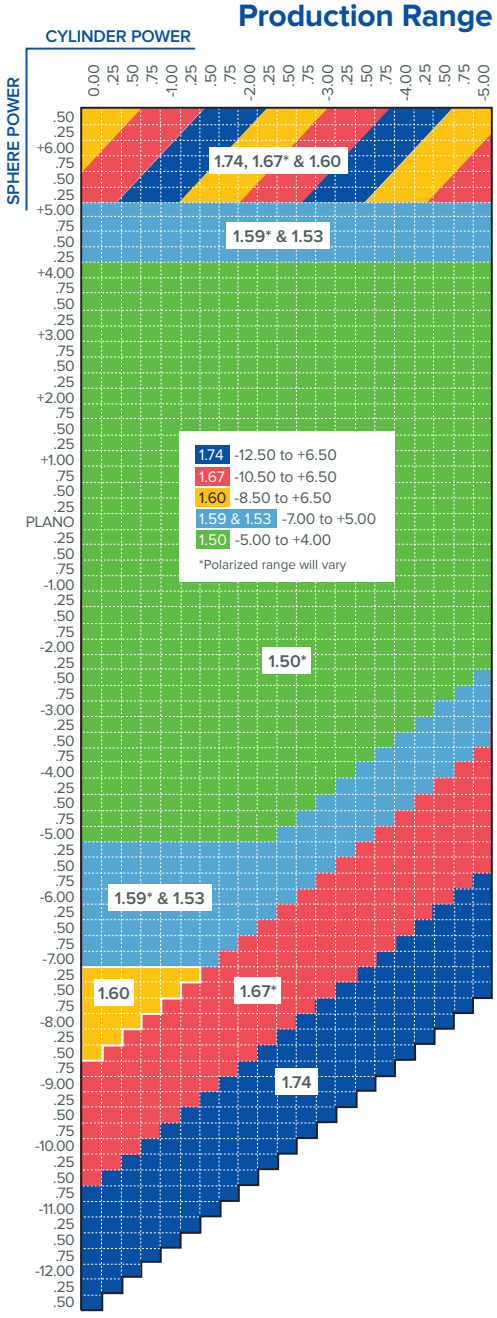
| Surmount – Soft Design | Surmount Ws – Hard Design |
|---|---|
| Three corridor lengths available to fit all frame styles. Minimum fitting height 14mm | |
| Ideal for all add powers and difficult prescriptions | |
| Recommended for active lifestyles & emerging presbyopes | Recommended for sedentary lifestyles & seasoned wearers |
| Minimized “swim & sway” | Clear & wide viewing area |
| Wider intermediate | Confined intermediate |
| Lower levels of distortion | Higher levels of distortion |
| Smoother power transition | Accelerated power transition |

## Specifications

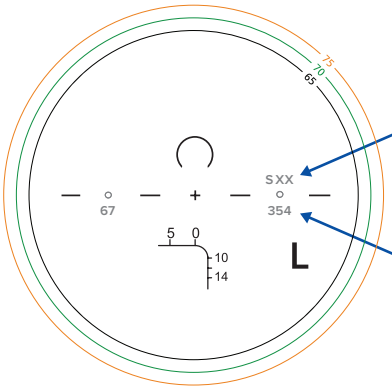
| Index | Clear | Polarized | Sensity | Transitions® | Transitions® XTRActive™ | Transitions® Vantage™ |
|---|---|---|---|---|---|---|
| 1.50 | ● | ● | ● | ● | | ● |
| 1.53 (Trivex) | ● | | ● | ● | ● | ● |
| 1.59 (Poly) | ● | ● | ● | ● | ● | ● |
| 1.60 | ● | | | ● | | |
| 1.67 | ● | ● | ● | ● | ● | |
| 1.74 | ● | | | ● | | |

**Corridor Length (Min. Fit Ht.):** 10mm (14mm), 12mm (16mm), 14mm (18mm)
**Add Powers:** +0.50 to +3.50D in 0.25 diopter steps
**Range:** Extended Cylinder range to -5.00D (Total power -12.50D)
**Prism:** 0.25 to 3.00D
**Inset:** Automatic inset placement (0.0 - 5.0mm) based on distance prescription and PD. Customized placement requires specification of preferred reading distance (cm).

## Production Range




## Lens Markings & Engravings




**Trademark:**
S - Surmount
W - Surmount Ws
**Inset Value:**
XX

**Add Power:**
35 = 3.50D
**Corridor Length:**
4 = 14mm

HOYA

Eyecare Professionals: **800.423.2361** or visit **seikovision.com**

Distributors: **800.367.4692** or visit **seikoeyewear.com**