





Millions feel unsafe while driving because of visual challenges on the road.

Most drivers are exposed to difficult driving conditions that impact their vision, including driving in rain, snow or fog, and of course driving at night. For most, this can be a major source of stress — in fact, **over two thirds** of adults report difficulty driving in these challenging visual conditions.

While some of today's eyeglass lenses and coatings offer limited relief, none provide an all-day vision solution that addresses the specific challenges of driving.

Now there's ZEISS DriveSafe Individual, an all-day lens and coating solution designed for patients who need the most help with vision while driving. **ZEISS DriveSafe Individual's unique technology addresses the most stressful visual challenges drivers face today.**



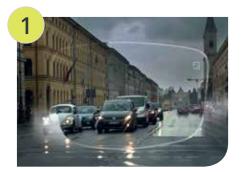
In addition, ZEISS DriveSafe Individual lenses offer full UV protection built into the lens, up to 400 nm.



ZEISS DriveSafe Individual meets the challenges.

Driving presents multiple challenges to the eyes.

In recent studies, patients identified the three most acute vision challenges they face when driving. ZEISS took on these challenges and developed a unique solution, ZEISS DriveSafe Individual.



Problem: Challenges with depth perception in low light conditions

Solution: Luminance Design® technology enables better vision in low light conditions



Problem: Challenges with glare from oncoming headlights or streetlights

Solution: DuraVision® DriveSafe coating offers dramatically reduced glare



Problem: Challenges refocusing when switching vision between the road, dashboard, and mirrors

Solution: The special **ZEISS DriveSafe Individual design** optimizes for dynamic switching and the clearest fields of view where drivers need them most

Wearer trials demonstrate VERY HIGH patient SATISFACTION for both **driving** and **all-day use**:



97% WHEN DRIVING

doing everyday tasks, e.g. work in the office

ZEISS DriveSafe
Individual offers your
patients a unique all-day
lens with advanced design
features fine-tuned for
driving. Available for both
progressive and single
vision wearers.

1 Better vision in low-light conditions. Luminance Design Technology by ZEISS.

The challenge

For many drivers, the greatest visual problems come in low light situations (mesopic conditions like cloudy/rainy days and twilight). Eyeglasses have never been designed to account for the size of the pupil in these conditions. As a result, space perception and distance calculation can be especially difficult when driving.



ZEISS conducted intensive research into mesopic vision and lens design. Standard designs are calculated using single-ray tracing, with a single ray of light passing through the pupil centre only; an infinitely small area. However, our eyes actually perceive images using bundles of light rays that pass across the entire pupil surface, which is several millimeters in diameter.

The ZEISS solution

To address this problem, ZEISS vision scientists determined the optimal pupil size in mesopic conditions, and developed Luminance Design Technology to calculate the ideal lens design. Wearer trials verified that our design delivers better performance. As a result, **wearers have better vision all day**, especially in low light conditions.

Pupils change in different light conditions.



Bright light = photopic vision with small pupil.

Large depth of focus, relaxed space perception



No light (darkness) = scotopic vision with large pupil.

Small depth of focus, little to no peripheral vision



Low light = mesopic vision with varying pupil size.

Challenging conditions due to variation in depth of focus and dimly lit peripheral vision

Reduced glare at night. ZEISS DuraVision DriveSafe Coating.

The challenge

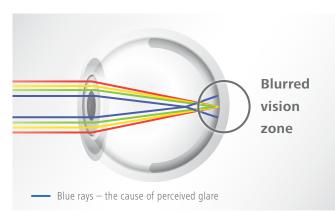
Glare is a major risk while driving, reducing visibility and contrast sensitivity. This is especially true in low light or at night, particularly with today's powerful Xenon and LED headlights. Up to now, anti-reflective coatings have not been designed specifically for this challenge.

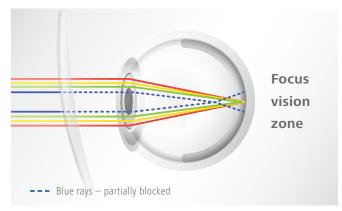


ZEISS vision scientists worked closely with HELLA, a leading headlight manufacturer, on research to determine the best coating to reduce glare from modern headlights.

The ZEISS solution

DuraVision DriveSafe coating reduces glare by reflecting the most harmful wavelengths from Xenon and LED headlights. ZEISS DriveSafe Individual is preferred by patients for headlight glare reduction by more than **2 to 1**.





Without DuraVision DriveSafe

With DuraVision DriveSafe





Dramatically reduced glare and reflection

Accurate vision of road, dashboard and mirrors. ZEISS DriveSafe Individual Lens Design.

The challenge

Driving demands a high level of attention. Drivers need a wide, clear view of the road in order to evaluate traffic conditions, but they also need to shift rapidly from the road to the dashboard and mirrors. This can be especially challenging for progressive lens wearers.



ZEISS conducted an eye-tracking study with automotive research institute FKFS* at Germany's University of Stuttgart. This study precisely mapped the actual visual behaviour of drivers to determine what areas of vision were needed the most.



- * FKFS Research Institute of Automotive Engineering and Vehicle Engines Stuttgart is an independent foundation associated with the University of Stuttgart. Founded in 1930, FKFS is one of the largest and leading research institutes in the field of automotive engineering.
- ** Compared to ZEISS premium progressive lenses

The ZEISS solution

Using this data, ZEISS designed the DriveSafe Individual Progressive with optimized distance and intermediate viewing zones, reducing the need for horizontal head movement.

- Dynamic vision for fast refocusing between the road, dashboard and mirrors
- Near vision suitable for all day wear
- Up to 43% larger midrange viewing area for easier focus switching between dashboard and mirrors. And up to 14% larger distance viewing area for a wider view of the road.**





ZEISS DriveSafe Individual Progressive and Single Vision Lenses offer dynamic and comfortable all-day vision both on and off the road.

For best performance, order ZEISS DriveSafe Individual with FaceFit[™] position of wear customization for wider fields of view.

Driving requires fast changes of vision and clarity in the periphery. The improved fields of view with FaceFit are more than just an added feature, they further enhance DriveSafe's proven technologies for optimal vision on the road.









Lens design on wearer whose face and frame do not follow "standard" measurements.

Lens design on wearer with customized FaceFit™ measurements.

Recommend DriveSafe Individual to your patients who need it most.

And here's what it will do for your practice:

Benefits for your patients

- More comfortable vision and reduced stress while driving
- Better depth perception in low light
- Reduced glare specific to driving conditions
- Improved fast focus between road, dashboard, and mirrors
- Comfortable for all-day use in virtually any choice of frame

Benefits for your practice

- Increased patient satisfaction
- Increased premium lens and coating sales
- Available to wide range of patients progressive and single vision
- Wide material & Rx range
- Variable corridor (progressive) allows sales of any frame

Available with i.Scription® by ZEISS

For any patient, **Single Vision or Progressive**, who has challenges with vision while driving, ZEISS has the solution – **ZEISS DriveSafe Individual**. **With full UV protection**, **up to 400 nm**.

Ask your ZEISS representative for more information today.



ZEISS DriveSafe Individual Portfolio Availability:

ZEISS DriveSafe Individual PAL For fitting heights 13 to 35mm

Material	Colour	Rx Range*	Cyl	Add Power		
1.50 Hard Resin	Clear	-7.00 to +5.00D	-4.00D	0.75 to 3.50D		
1.53 Trivex ®	Clear	-7.00 to +5.00D	-4.00D	0.75 to 3.50D		
1.59 Polycarbonate	Clear	-10.00 to +6.00D	-6.00D	0.75 to 4.00D		
1.60 High Index	Clear	-10.00 to +6.00D	-6.00D	0.75 to 4.00D		
1.67 High Index	Clear	-12.00 to +8.00D	-6.00D	0.75 to 3.50D		
1.74 Super High Index	Clear	-20.00 to +16.00D	-6.00D	0.75 to 3.50D		
PhotoFusion® Self-Tinting Lenses						
1.50 PhotoFusion	Grey, Brown, Pioneer, Blue & Extra Grey	-7.00 to +5.00D	-4.00D	0.75 to 3.50D		
1.59 PhotoFusion	Grey, Brown, Pioneer, Blue & Extra Grey	-10.00 to +6.00D	-6.00D	0.75 to 4.00D		
1.60 PhotoFusion	Grey, Brown, Pioneer, Blue & Extra Grey	-10.00 to +6.00D	-6.00D	0.75 to 4.00D		
1.67 PhotoFusion	Grey, Brown, Pioneer & Extra Grey	-12.00 to +8.00D	-6.00D	0.75 to 3.50D		
Transitions®						
1.50 Transitions	Grey, Brown	-7.00 to +5.00D	-4.00D	0.75 to 3.50D		
1.53 Transitions	Grey, Brown	-7.00 to +5.00D	-4.00D	0.75 to 3.50D		
1.59 Transitions	Grey, Brown	-10.00 to +6.00D	-4.00D	0.75 to 4.00D		
1.60 Transitions	Grey, Brown	-10.00 to +6.00D	-4.00D	0.75 to 4.00D		
1.67 Transitions	Grey, Brown	-12.00 to +8.00D	-4.00D	0.75 to 3.50D		
Polarized**						
1.50 Polarized	Grey, Brown	-6.00 to +5.00D	-4.00D	0.75 to 3.50D		
1.53 Trivex NXT® Polarized	Grey, Brown	-5.00 to +5.00D	-4.00D	0.75 to 3.50D		
1.60 Polarized	Grey, Brown, G-15	-11.00 to +6.00D	-6.00D	0.75 to 3.50D		
1.67 Polarized	Grey, Brown	-10.00 to +6.00D	-4.00D	0.75 to 3.50D		

ZEISS DriveSafe Individual SV OC Height Required

		<u> </u>	
Material	Colour	Rx Range*	Cyl
1.50 Hard Resin	Clear	-6.00 to +6.00D	-4.00D
1.53 Trivex ®	Clear	-7.00 to +7.00D	-4.00D
1.59 Polycarbonate	Clear	-10.00 to +8.00D	-6.00D
1.60 High Index	Clear	-10.00 to +8.00D	-6.00D
1.67 High Index	Clear	-12.00 to +8.00D	-6.00D
1.74 Super High Index	Clear	-20.00 to +16.00D	-6.00D
PhotoFusion® Self-Ti	nting Lenses		
1.50 PhotoFusion	Grey, Brown, Pioneer, Blue & Extra Grey	-6.00 to +6.00D	-4.00D
1.59 PhotoFusion	Grey, Brown, Pioneer, Blue & Extra Grey	-10.00 to +8.00D	-6.00D
1.60 PhotoFusion	Grey, Brown, Pioneer, Blue & Extra Grey	-10.00 to +8.00D	-6.00D
1.67 PhotoFusion	Grey, Brown, Pioneer & Extra Grey	-12.00 to +8.00D	-6.00D
Transitions®			
1.50 Transitions	Grey, Brown	-6.00 to +6.00D	-4.00D
1.53 Transitions	Grey, Brown	-7.00 to +7.00D	-4.00D
1.59 Transitions	Grey, Brown	-10.00 to +8.00D	-4.00D
1.60 Transitions	Grey, Brown	-10.00 to +8.00D	-4.00D
1.67 Transitions	Grey, Brown	-12.00 to +8.00D	-4.00D
Polarized**			
1.50 Polarized	Grey, Brown	-6.00 to +6.00D	-4.00D
1.53 Trivex NXT® Polarized	Grey, Brown	-5.00 to +7.00D	-4.00D
1.60 Polarized	Grey, Brown, G-15	-11.00 to +10.00D	-6.00D
1.67 Polarized	Grey, Brown	-10.00 to +10.00D	-4.00D

ZEISS makes great lenses and is also trusted by...



Space Exploration

ZEISS camera lenses were trusted to capture man's first steps on the moon.



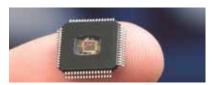
Researchers

ZEISS microscopes have been used in the research of 35 Nobel prize winners (e.g. Insulin discovery in Canada).



Hollywood

ZEISS cine lenses have won several Academy Awards for movies such as The Lord of the Rings, Slumdog Millionaire and Birdman.



Engineers

Around the world, 80% of digital devices like smartphones and tablets use ZEISS technology.



Surgeons

ZEISS Medical Technologies are used in 2/3 of all cataract surgeries worldwide.



Google Earth

Google Earth uses ZEISS precision camera lenses to obtain spectacular images of the earth.

ZEISS DriveSafe Individual.

Contact your ZEISS representative or visit **www.zeiss.ca/DriveSafe** to learn more.



Carl Zeiss Vision Inc.

1-800-268-6489 www.zeiss.ca

Follow ZEISS Vision Care on social media! Find us at:

Twitter: @ZEISSvisionCA



Facebook: ZEISSVisionCare.Canada



Instagram: ZEISSVisionCare_Canada





^{*}Prescribed prism up to 3.00 ΔD per eye or 6.00 ΔD in a pair of spectacles.

^{**}Carl Zeiss Vision is the provider of many leading sunglass brands including NuPolar.