Outdoor Lens Solutions by ZEISS
Color Book

ZEISS

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Very low light intensity. Filter category 0: 0 – 20%

Color	Brown 12%
EDI code	farb 450
Absorption	12%

Color	Grey 12%
EDI code	farb 460
Absorption	12%

Color	Pioneer 12%
EDI code	farb 470
Absorption	12%

Color	Blue 12%
EDI code	farb 480
Absorption	12%

Color	Black 12%
EDI code	farb 490
Absorption	12%

Color	Rosé 10%
EDI code	farb 440
Absorption	10%

ZEISS Urban
Light tints for the city

Low light intensity. Filter category 1: 20 – 57%

Color	Brown 25%
EDI code	farb 451
Absorption	25%

Color	Grey 25%
EDI code	farb 461
Absorption	25%

Color	Pioneer 25%
EDI code	farb 471
Absorption	25%

Color	Blue 25%
EDI code	farb 481
Absorption	25%

Color	Black 25%
EDI code	farb 491
Absorption	25%

ZEISS Urban
Light gradient tints for the city

Low light intensity. Filter category 0: 0 – 20%

Color	Brown 25/0%
EDI code	farb 456
Absorption	25/0%

Color	Grey 25/0%
EDI code	farb 466
Absorption	25/0%

Color	Pioneer 25/0%
EDI code	farb 476
Absorption	25/0%

Color	Blue 25/0%
EDI code	farb 486
Absorption	25/0%

Color	Black 25/0%
EDI code	farb 496
Absorption	25/0%

Color	Greyblue 40/0%
EDI code	farb 437
Absorption	40/0%

ZEISS Urban

Double gradient tints for the city

Low light intensity. Filter category 0: 0 – 20%

Color	Pistachio 25/10%
EDI code	farb 069
Absorption	25/10%

Color	Cinnamon 25/10%
EDI code	farb 070
Absorption	25/10%

Color	Stone 25/10%
EDI code	farb 071
Absorption	25/10%

Color	Jeans 25/10%
EDI code	farb 072
Absorption	25/10%

ZEISS Urban
Fashion tints for a unique style

Low light intensity. Filter category 1: 20 – 57%

Color	Happy Yellow
EDI code	farb 701
Absorption	35%

Color	Magma Orange
EDI code	farb 702
Absorption	50%

Color	Space Blue
EDI code	farb 706
Absorption	50%

Color	Chillout Green
EDI code	farb 707
Absorption	35%

| Color	Pretty Pink
EDI code	farb 708
Absorption	35%

Color trends for spring & summer 2016
Inspiration for sunglasses and sunglass lenses

"Tropicalia"

Tropical islands and bamboo hideaways offer a great escape for those tired of the constraints of society and reflect a desire to connect with the majesty and freedom of nature. Tropical aesthetics are imbued with the feeling of summer and encapsulate the elements of exotic fruits and flowers, brightly colored fabrics and dark opulent flora. Fashion stylists recreate this mood using feathers, exotic birds, butterflies, woods and flora, creating a sophisticated yet playful look and a breezy vibe.

The bright tropical hues such as vibrant greens, oranges and yellows with hints of pink and red will add a touch of fun and color to your day, even in your sunglasses. The special candy colors incorporate the vibes of Tropicalia and make you long for undiscovered islands.
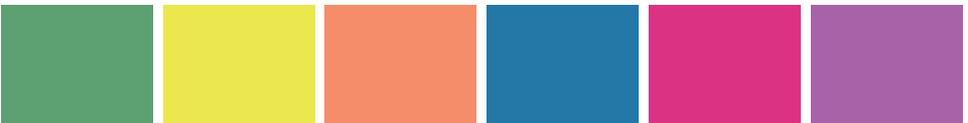
Mood: Opulent floral, luscious jungle, fantasies, tropical taste, saturated mango and papaya hues.

ZEISS Urban

Medium tints – can be combined with mirrors

Medium light intensity. Filter category 2: 57 – 82%

Color	Brown 60%
EDI code	farb 452
Absorption	60%
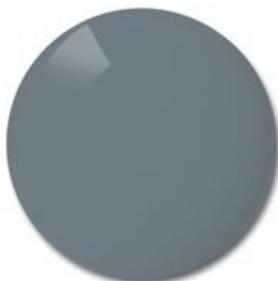
Color	Grey 60%
EDI code	farb 462
Absorption	60%

Color	Pioneer 60%
EDI code	farb 472
Absorption	60%

Color	Black 60%
EDI code	farb 492
Absorption	60%

ZEISS Urban

Sun tints – can be combined with mirrors

Medium light intensity. Filter category 2: 57 – 82%

Color	Brown 75%
EDI code	farb 453
Absorption	75%

Color	Grey 75%
EDI code	farb 463
Absorption	75%

Color	Pioneer 75%
EDI code	farb 473
Absorption	75%

Color	Black 75%
EDI code	farb 493
Absorption	75%

ZEISS Urban
Gradient sun tints – can be combined with mirrors

Medium light intensity. Filter category 2: 57 – 82%

Color	Brown 75/25%
EDI code	farb 458
Absorption	75/25%

Color	Grey 75/25%
EDI code	farb 468
Absorption	75/25%

Color	Pioneer 75/25%
EDI code	farb 478
Absorption	75/25%

Color	Black 75/25%
EDI code	farb 498
Absorption	75/25%

ZEISS Urban

Fashion Mirrors

In order to ensure suitability for driving and a low level of internal reflection, it is recommend that you use DuraVision Mirror on category 2 tints*.

Color	DuraVision Mirror White
EDI code	DW

Color	DuraVision Mirror Bronze
EDI code	DK

Color	DuraVision Mirror Blue**
EDI code	DL

Color	DuraVision Mirror Gold
EDI code	DG

ZEISS Urban

Sun tints for bright light conditions

High light intensity. Filter category 3: 82 – 92%

Color	Brown 85%
EDI code	farb 454
Absorption	85%

Color	Grey 85%
EDI code	farb 464
Absorption	85%

Color	Pioneer 85%
EDI code	farb 474
Absorption	85%

Color	Black 85%
EDI code	farb 494
Absorption	85%

ZEISS Urban
Gradient sun tints for bright light conditions

High light intensity. Filter category 3: 82 – 92%

Color	Brown 90/40%
EDI code	farb 459
Absorption	90/40%

Color	Grey 90/40%
EDI code	farb 469
Absorption	90/40%

Color	Pioneer 90/40%
EDI code	farb 479
Absorption	90/40%

Color	Black 90/40%
EDI code	farb 499
Absorption	90/40%

ZEISS Urban
PhotoFusion® by ZEISS, fast self-tinting lenses

Clear state   Dark state

Color	Brown
Clear state min. absorption	8%
Dark state max. absorption	89%

Clear state   Dark state

Color	Grey
Clear state min. absorption	8%
Dark state max. absorption	89%

Dark fast. Clear fast.

PhotoFusion® lenses respond more efficiently to light energy, clearing when you're back indoors two times faster* than the other ZEISS photochromic solutions. It provides 100 percent UV protection all the time – even untinted.

PhotoFusion® can be applied to all clear ZEISS lens designs. It is also available as a finished single vision lens.

Darken up to 20 %* faster

Time

Time

Fade back up to 2x faster*

■ **PhotoFusion® high-index self-tinting lenses**
■ *ZEISS lenses with other photochromic solutions*

PhotoFusion® high-index self-tinting lenses compared with the conventional photochromatic lenses offered by ZEISS

* Average performance for 1.67, 1.6 and polycarbonate self-tinting lenses. Performance will vary according to material, temperature and light conditions.

ZEISS Drive
Safety and comfort on the road

ZEISS Drive
Polarized lenses with Skylet® Technology

Medium light intensity. Filter category 2: 57 – 82%

Color	Skylet® road 80%
EDI code	farb 102
Absorption	80%

Color	SkyPol® Road

Skylet® Tint Technology

Skylet Road features a special blue attenuator which removes the scattered blue light that overlays all colors. As a result, contrast is enhanced and colors look much brighter and vivid.

The absorption level of 80% provides good light protection and thanks to the "Skylet brightening effect" it is also convenient if the sun goes behind the clouds.

The combination of the contrast-enhancing Skylet Road color – invented by ZEISS – with the polarization feature results in an exceptionally-performing lens for driving.

The polarizing filter removes glare, reducing reflections on surfaces like the road and the windshield.

Road in luminous light
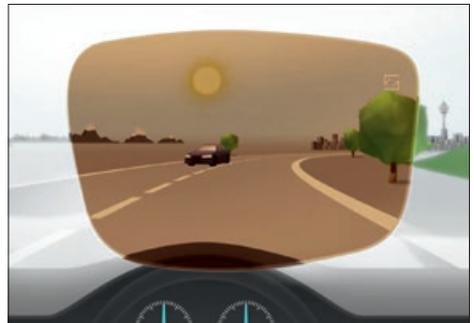
Lens with ZEISS SkyPol Road

ZEISS Drive
Polarized lenses for glare reduction and safety

High light intensity. Filter category 3: 82 – 92%

Color	Brown pol 85%
EDI code	–
Absorption	85%*

Color	Grey pol 85%
EDI code	–
Absorption	85%*

Color	Pioneer pol 85%
EDI code	–
Absorption	85%*

* The absorption level may vary slightly from one lens material to another
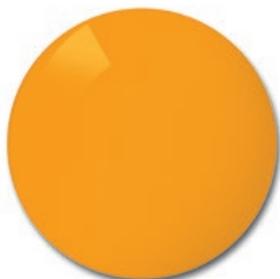
ZEISS Active
High protection and performance

ZEISS Active
Functional tints for sports

Medium light intensity. Filter category 2: 57 – 82%

Color	ProGolf
EDI code	farb 750
Absorption	40%

Color	ProGolf grad 75/25%
EDI code	farb 751
Absorption	75/25%

Color	Spicy Red
EDI code	farb 703
Absorption	60%

Color	Sunset Violet
EDI code	farb 704
Absorption	75%

Color	Sweet Violet 50%
EDI code	farb 705
Absorption	50%

ProGolf & ProGolf gradient: Golf – allows you to see the ball better on the ground.

Sweet Violet: Cycling – enhances image definition and enables the eye to spot potential dangers on the asphalt.

Spicy Red: Snow applications for low light conditions – cuts some blue light, improves contrast on the slopes.

Sunset Violet: Shooting – enables clear vision and dramatic contrast between the greenish background colors and the brown color of the moving target.

All tints available in wrapped versions for Sport lenses.

ZEISS Active

Functional mirrors for active conditions

In order to ensure driving suitability and a low level of internal reflection, it is recommend that you use DuraVision Mirror on category 2 tints*.
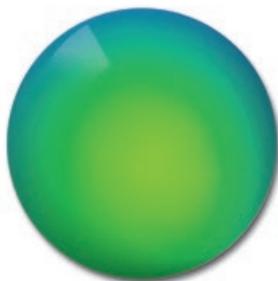
Color	DuraVision Mirror Green
EDI code	DN

Color	DuraVision Mirror Red
EDI code	DT

Color	DuraVision Mirror Silver
EDI code	DM

Color	DuraVision Mirror Strong Blue
EDI code	DE

* See details on driving suitability on page 26

ZEISS Active

Wrapped lenses – can be combined with mirrors

Medium light intensity. Filter category 2: 57 – 82%

Color	Brown 75%
EDI code	farb 453
Absorption	75%

Color	Grey 75%
EDI code	farb 463
Absorption	75%

Color	Pioneer 75%
EDI code	farb 473
Absorption	75%

Color	Black 75%
EDI code	farb 493
Absorption	75%

Color	Skylet® fun 70%
EDI code	farb 101
Absorption	70%

Skylet® fun: Contrast-enhancing tint for moderately luminous light conditions.

SkyPol fun: Polarized version recommended for water environments.

All tints available in wrapped versions for Sport lenses.

ZEISS Active
High protection tints for wrapped frames

High light intensity. Filter category 3: 82 – 92%

Color	Brown 85%
EDI code	farb 454
Absorption	85%

Color	Grey 85%
EDI code	farb 464
Absorption	85%

Color	Pioneer 85%
EDI code	farb 474
Absorption	85%

Color	Black 85%
EDI code	farb 494
Absorption	85%

Color	Skylet® Sport 90%
EDI code	farb 103
Absorption	90%

Skylet® Sport: Contrast-enhancing tint for high light conditions

SkyPol Sport: Polarized version recommended for water environments.

All tints available for wrapped versions.

ZEISS Active

Extra dark tints for extreme conditions (e.g. glaciers)

Extreme light intensity. Filter category 4: 92 – 97%

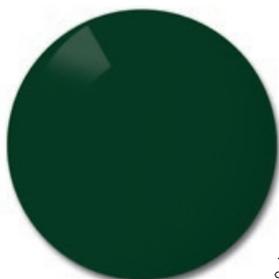| Color	Brown 95%
EDI code	farb 455
Absorption	95%

Color	Grey 95%
EDI code	farb 465
Absorption	95%

Color	Pioneer 95%
EDI code	farb 475
Absorption	95%

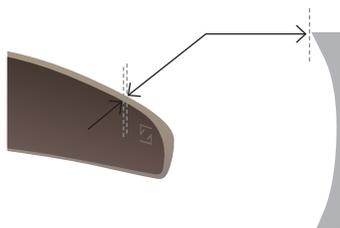| Color	Black 95%
EDI code	farb 495
Absorption	95%

Cosmetic Edge® Technology

For high minus powers, ZEISS Sport lenses can be ordered with Cosmetic Edge® Technology. The edge thickness is decreased up to 30%* by applying a special flattening zone to the temporal part of the lenses.
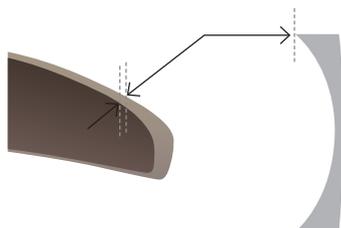
Regular wrapped lens

Wrapped lens with Cosmetic Edge® Technology

* Depending on material, frame size, base curve, fitting data

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Technical information

Tinted lenses are individually produced for each and every consumer. All processes are carefully controlled. Slight color variations compared to the reference sample may occur due to production tolerances. Sunlight (UV radiation) over time will cause the colors to fade. It is the same effect you can see with cloth. Therefore old samples or old customer lenses may not have the original color any more.

The color prints shown should mimic the color as seen through the lens. However when looking at the lenses on a white background, the color perception might be slightly different. Slight deviations of the color may also occur if the lenses are AR or hard coated.

Tint to sample
If individual orders deviate from the official ZEISS color range (tint to sample), Carl Zeiss Vision cannot ensure their suitability for driving. Lenses cannot be produced with absorption of less than 8%. Trend colors cannot be produced with different absorptions.

Suitability for driving
Colors with light absorption above 25% are not suitable for night driving. Colors with light absorption above 92% are not suitable for driving at all. Specific colors may not be suitable due to reduced signal detection (marked in folder).

DuraVision Mirror
Please note that DuraVision Mirror may increase the overall light reduction characteristics of your lenses significantly. This may result in restrictions when using the lenses for driving. Please look up the changes in total light reduction in the table below.

	Solid tints [1,2]						Gradient tints		
Base lens absorption	12%	25%	60%	75%	85%	95%	25/0%	75/25%	90/40%
*Approx. **total light reduction including Mirror** (central)*									
DuraVision Mirror Silver	70%	70%	85%	92%	94%	98%	70%	84%	93%
DuraVision Mirror White	42%	50%	75%	85%	90%	96%	47%	73%	87%
DuraVision Mirror Blue	78%	80%	90%	94%	96%	98%	80%	90%	95%
DuraVision Mirror Strong Blue	63%	68%	85%	90%	94%	97%	66%	82%	90%
DuraVision Mirror Gold [3]	28%	38%	70%	80%	88%	96%	35%	67%	84%
DuraVision Mirror Bronze	56%	62%	80%	88%	93%	97%	60%	80%	90%
DuraVision Mirror Green	30%	40%	70%	80%	88%	96%	35%	67%	83%
DuraVision Mirror Red [3]	13%	25%	60%	75%	85%	95%	20%	60%	80%

	Not suitable for driving at all due to light transmission below 8%
	Grey / Pioneer not suitable for driving due to reduced signal light detection
	Pioneer not suitable for driving due to reduced signal light detection

1 – values for solid tint absorbtions also are valid for polarized lenses with the same absorption. 2 – Skylet fun with Mirror coatings is not suitable for driving due to reduced detection of signal lights. 3 – Grey-blue tints are not suitable for driving with DuraVision Mirror Gold / Red due to reduced detection of signal lights.

The reflection characteristics of Mirror coatings may significantly change the color perception when looking through the lens. The final transmission curve is a result of the overlaid transmission curves of the tinted base lens and the specific Mirror coating. Mirror coatings reflect light to both sides. Although requested for cosmetic tints for fashion reasons, it is recommend that you apply DuraVision Mirror to category 2 tints in order to ensure driving suitability and a low level of internal reflection.

Polarized lenses
Polarized lenses may reduce visibility of display content if the displays work with polarized technology (car, mobile devices,...) and it is polarized 90° to the lens polarization. It is recommended that you check the polarization direction of such displays prior to use.

Color overview & material availability

Available in 1.5, 1.6 and 1.67; 95% not suitable for driving

Solid tints

Light absorption		10%	12%	25%	60%	75%	85%	95%
Brown	EDI code	–	450	451	452	453	454	455
Grey		–	460	461	462	463	464	465
Pioneer		–	470	471	472	473	474	475
Blue		–	480	481	–	–	–	–
Black		–	490	491	492	493	494	495
Rosé		440	–	–	–	–	–	–

Gradient tints

Light absorption		25/0%	40/0%	75/25%	90/40%
Brown	EDI code	456	–	458	459
Grey		466	–	468	469
Pioneer		476	–	478	479
Blue		486	–	–	–
Black		496	–	498	499
Rosé		–	437	–	–

Double gradient tints

Light absorption		25/10%
Pistachio	EDI code	069
Cinnamon		070
Stone		071
Jeans		072

Skylet

Light absorption		70%	80%	90%
Skylet Fun	EDI code	101	–	–
Skylet Road		–	102	–
Skylet Sport		–	–	103

Available in 1.5, 1.6. Spicy Red, Sunset Violet and Space Blue are not suitable for driving.

Functional tints and trendy colors

Light absorption		35%	40%	50%	60%	75%	75/25%
Happy Yellow	EDI code	701	–	–	–	–	–
Magma Orange		–	–	702	–	–	–
Spicy Red		–	–	–	703		–
Sunset Violet		–	–	–	–	704	–
Sweet Violet		–	–	705	–	–	–
Space Blue		–	–	706	–	–	–
Chillout Green		707	–	–	–	–	–
Pretty Pink		708	–	–	–	–	–
ProGolf solid		–	750	–	–	–	–
ProGolf gradient		–	–	–	–	–	751