

Outdoor Lens Solutions by ZEISS Colour book 2019





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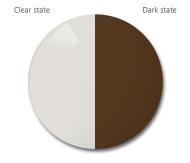
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ZEISS Urban ZEISS Photofusion, fast self-tinting lenses

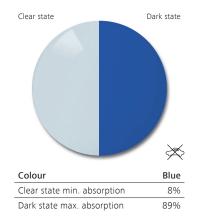
ZEISS Urban

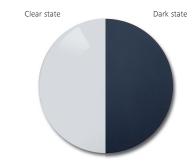
ZEISS PhotoFusion, fast self-tinting lenses

Clear state lenses which darken up to category 4: 92%.



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

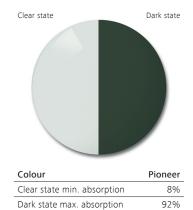




 Colour
 Grey

 Clear state min. absorption
 8%

 Dark state max. absorption
 89%





ZEISS DuraVision Mirror to make a fashion statement and as a protective finish for sunglasses.



ZEISS Urban ZEISS DuraVision Mirror



ZEISS DuraVision Mirror coatings allow you to choose a fashionable, intense colour reflex for your sunglasses with hard coat protection.





DuraVision Mirror White
DW

Colour DuraVision Mirror Strong Blue







* See details on suitability for driving on page 33

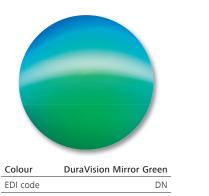
ZEISS DuraVision Mirror



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*.

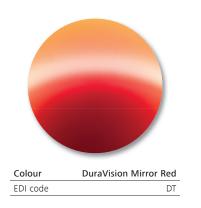
ZEISS Urban

Everyday protection, style and convenience with ZEISS tinted Rx lenses.





EDI code DK







 * See details on suitability for driving on page 33



Cosmetic solid tints for indoors

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



 Colour
 Brown 12%

 EDI code
 450

 Absorption
 12%



ColourPioneer 12%EDI code470Absorption12%



Colour	Black 12%
EDI code	490
Absorption	12%



ColourGrey 12%EDI code460Absorption12%



ColourBlue 12%EDI code480Absorption12%



Colour	Rose 10%
EDI code	440
Absorption	10%

ZEISS Urban

Light tints for the city

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



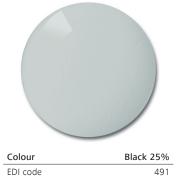
Colour	Brown 25%
EDI code	451
Absorption	25%



Colour	Grey 25%
EDI code	461
Absorption	25%



Colour	Pioneer 25%
EDI code	471
Absorption	25%



EDI code	491
Absorption	25%



Colour	Blue 25%
EDI code	481
Absorption	25%

Light gradient tints for the city

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



 Colour
 Brown 25/0%

 EDI code
 456

 Absorption
 25/0%







Colour	Black 25/0%
EDI code	496
Absorption	25/0%



 Colour
 Grey 25/0%

 EDI code
 466

 Absorption
 25/0%



ColourBlue 25/0%EDI code486Absorption25/0%



ZEISS Urban

Double gradient tints for the city

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



Colour	Pistachio 25/10%
EDI code	069
Absorption	25/10%



 Colour
 Cinnamon 25/10%

 EDI code
 070

 Absorption
 25/10%



Colour	Stone 25/10%
EDI code	071
Absorption	25/10%





Fashion trend 2019





Back to the '90s

Generation Z is bringing back the '90s! The aesthetic of this era will be revisited in a whole new context.

Bright colours and clashing patterns are making a comeback and it will pop up everywhere in fashion.

This fun style will remind you of the pop stars, TV shows, cool clothes and accessories of the '90s.



Mood

In terms of the fashion mood, old favourites will be revisited and combined in a fresh new way to create a spontaneous feel.

Colours

Expect bright, glossy tones with an acid luminescence.

ZEISS Urban

Fashion tints for a unique style

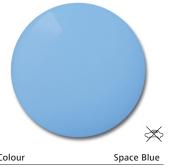
Low light intensity. Filter category 1: 20 – 57%



Colour	Happy Yellow	
EDI code	701	
Absorption	35%	



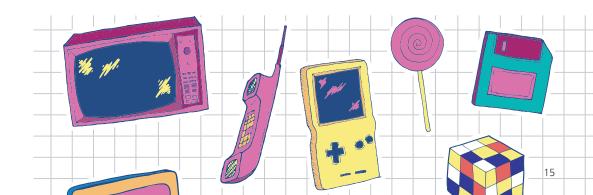
ColourMagma OrangeEDI code702Absorption50%



Colour	Space Blue
EDI code	706
Absorption	50%



Colour	Chillout Green
EDI code	707
Absorption	35%

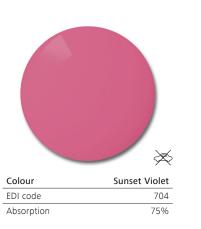


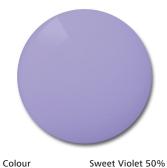
Fashion tints for a unique style

Low light intensity. Filter category 1 to 2: 20-82%



ColourSpicy RedEDI code703Absorption60%





ColourSweet Violet 50%EDI code705Absorption50%



ColourPretty PinkEDI code708Absorption35%



ZEISS Urban

Medium tints – great with ZEISS DuraVision Mirror

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



Colour	Brown 60%
EDI code	452
Absorption	60%



Colour	Grey 60%	
EDI code	462	
Absorption	60%	



Colour	Pioneer 60%	
EDI code	472	
Absorption	60%	



Colour	Black 60%	
EDI code	492	
Absorption	60%	



Sun tints – great with ZEISS DuraVision Mirror

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





Grey 75%

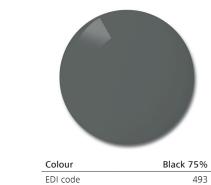
463

75%

75%

ColourBrown 75%EDI code453Absorption75%





Absorption

Colour	Pioneer 75%
EDI code	473
Absorption	75%



ZEISS Urban

Gradient sun tints – great with ZEISS DuraVision Mirror

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



Colour	Brown 75/25%	
EDI code	458	
Absorption	75/25%	



 Colour
 Grey 75/25%

 EDI code
 468

 Absorption
 75/25%



Colour	Pioneer 75/25%
EDI code	478
Absorption	75/25%



Colour	Black 75/25%	
EDI code	498	
Absorption	75/25%	



Sun tints for bright light conditions

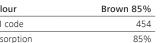
High light intensity. Filter category 3: 82 - 92%



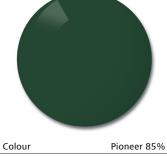


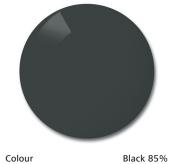
*

Colour 454 EDI code 85% Absorption



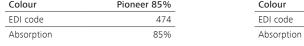






494

85%





ZEISS Urban

Gradient sun tints for bright light conditions

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



Colour	Brown 90/40%
EDI code	459
Absorption	90/40%



Colour	Grey 90/40%
EDI code	469
Absorption	90/40%



Colour	Pioneer 90/40%
EDI code	479
Absorption	90/40%



Colour	Black 90/40%
EDI code	499
Absorption	90/40%

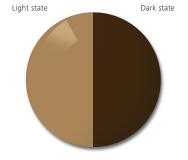


ZEISS AdaptiveSun – smart sunglass lenses that adapt to changing light conditions

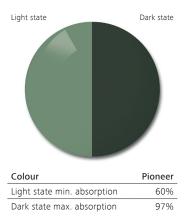
ZEISS Urban

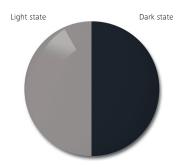
ZEISS AdaptiveSun solid tints-smart sunglasses*

Medium to high light intensity. Filter category 2 to 4: 57%-97%



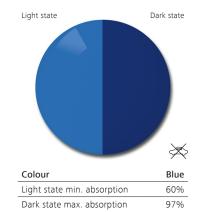






New

Colour	Grey
Light state min. absorption	60%
Dark state max. absorption	97%





* As with all photochromic lenses, ZEISS AdaptiveSun sunlenses will become much darker in cold, sunny environments, and may limit visibility in extremely cold weather. They are not suitable for operating open air vehicles such as convertibles, motocycles, all-terrain vehicles, snow-mobiles or engaging in activities such as skiing. Can be combined with DuraVision® Mirror. See technical details on page 33.

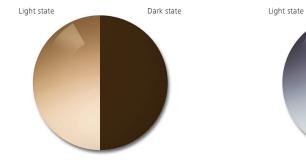
ZEISS AdaptiveSun gradient tints - smart sunglasses*



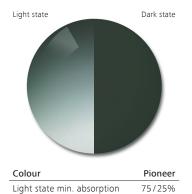
Dark state

97%

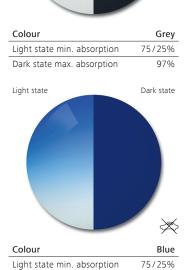
Medium to high light intensity. Filter category 2 to 4: 57% – 97%



Colour	Brown
Light state min. absorption	75/25%
Dark state max. absorption	97%



Dark state max. absorption



Dark state max. absorption

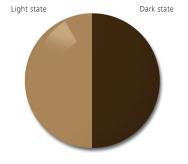
97%

* As with all photochromic lenses, ZEISS AdaptiveSun sunlenses will become much darker in cold, sunny environments, and may limit visibility in extremely cold weather. They are not suitable for operating open air vehicles such as convertibles, motocycles, all-terrain vehicles, snow-mobiles or engaging in activities such as skiing. Can be combined with DuraVision® Mirror. See technical details on page 33.

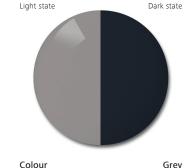
ZEISS Urban and Active

ZEISS AdaptiveSun Polarised solid tints-smart sunglasses*

Medium to extreme light intensity. Filter category 2 to 4: 57 – 97%

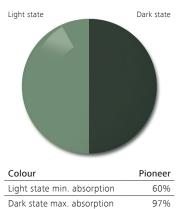


Colour	Brown		
Light state min. absorption	60%		
Dark state max. absorption	97%		



New

Colour	Grey
Light state min. absorption	60%
Dark state max. absorption	97%









Non-polarised sunlens

ZEISS AdaptiveSun Polarised

* As with all photochromic lenses, ZEISS AdaptiveSun sunlenses will become much darker in cold, sunny environments, and may limit visibility in extremely cold weather. They are not suitable for operating open air vehicles such as convertibles, motocycles, all-terrain vehicles, snow-mobiles or engaging in activities such as skiing. Can be combined with DuraVision® Mirror. See technical details on page 33.



ZEISS Drive Safety and comfort on the road



ZEISS Drive

Polarised lenses with Skylet® Technology

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



80%

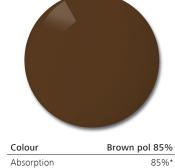


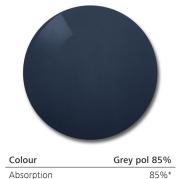
Polarised lenses for glare reduction and safety

Absorption

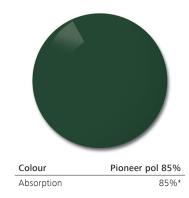
High light intensity. Filter category 3: 82 – 92%. Can be combined with ZEISS DuraVision Mirror.





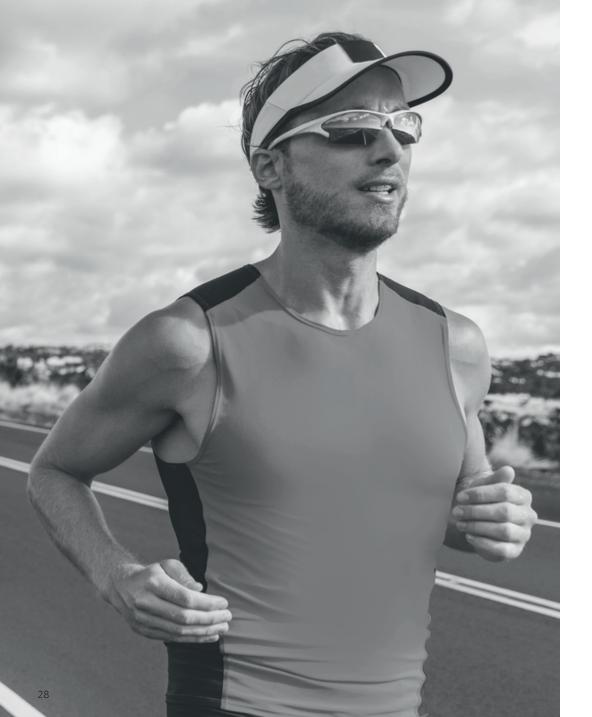


Absorption



ZEISS Active

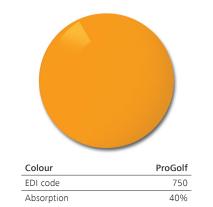
High protection and performance

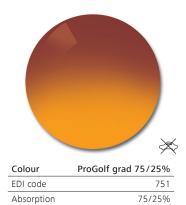


ZEISS Active

Functional tints for sports

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







ProGolf and ProGolf gradient: Allows you to see the ball better on the ground.

ZEISS Active

Wrapped lenses

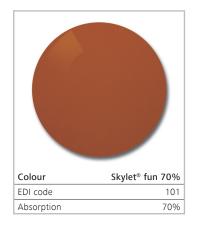
Medium light intensity. Filter category 2: 57 – 82%



ColourBrown 75%EDI code453Absorption75%

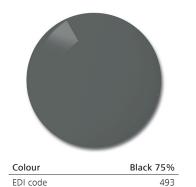


ColourPioneer 75%EDI code473Absorption75%





ColourGrey 75%EDI code463Absorption75%



75%

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

SkyPol fun: Polarised version recommended for water environments.

Absorption

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%



Colour	Brown 85%
EDI code	454
Absorption	85%



Colour	Grey 85%
EDI code	464
Absorption	85%



ColourPioneer 85%EDI code474Absorption85%





Colour	Black 85%
EDI code	494
Absorption	85%

 $\mathbf{Skylet}^{\otimes}$ $\mathbf{Sport:}$ Contrast-enhancing tint for high light conditions

SkyPol Sport: Polarised version recommended for water environments.

All tints available in wrapped versions for Sport lenses.

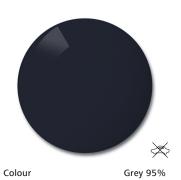


7FISS Active

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

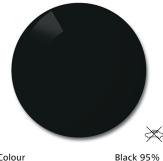
Extreme light intensity. Filter category 4: 92 - 97%





Colour Brown 95% EDI code 455 Absorption 95%

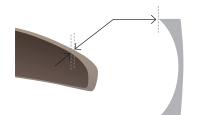


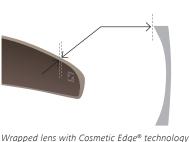


Pioneer 95% Colour EDI code 475 Absorption 95%

Cosmetic Edge® technology

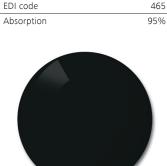
For high minus powers, ZEISS Sport lenses can be ordered with Cosmetic Edge® technology. The edge thickness is decreased up to 30%* by applying a special flattening zone to the temporal part of the lenses.





Regular wrapped lens

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



Colour EDI code 495 Absorption 95%

Technical information

Tinted lenses are individually produced for each and every patient. All processes are carefully controlled. Slight colour variations compared to the reference sample may occur due to production tolerances. Sunlight (UV radiation) over time will cause the colours to fade similar to fabric that fades in the sun. Therefore old samples or old customer lenses may not have the original colour anymore. The colour prints shown should mimic the colour as seen through the lens. However when looking at the lenses on a white background, the colour perception might be slightly different. Slight deviations of the colour may also occur if the lenses are AR or hard coated.

Tint to sample

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

Suitability for driving

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

ZEISS AdaptiveSun

As with all photochromic lenses, ZEISS AdaptiveSun sunlenses will become much darker in cold, sunny environments, and may limit visibility in extremely cold weather. They are not suitable for operating open air vehicles such as convertibles, motocycles, all-terrain vehicles, snowmobiles or engaging activties such as skiing.

ZEISS DuraVision Mirror

Please note that ZEISS 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.

Suitability for driving with DuraVision® Mirror and Flash coatings

Solid tints ^{1,2}								Gradient tints				
Absorption Base lens	12%	25%	60%	Skylet Fun 70%	75%	Skylet Road 80%	85%	Skylet Sport 90%	95%	25/ 0%	75/ 25%	90/ 40%
DuraVision Mirror Silver	33%	42%	70%	77%	81%	85%	89%	92%	96%	44%	82%	93%
DuraVision Mirror White	20%	30%	64%	73%	78%	82%	87%	91%	96%	33%	78%	91%
DuraVision Mirror Blue	35%	44%	71%	77%	82%	85%	89%	92%	96%	46%	82%	93%
DuraVision Mirror Strong Blue	63%	68%	85%	91%	90%	94%	94%	98%	97%	70%	90%	96%
DuraVision Mirror Gold ^{3,4}	25%	35%	67%	76%	80%	84%	88%	92%	96%	37%	80%	92%
DuraVision Mirror Bronze	20%	30%	64%	73%	78%	82%	87%	91%	96%	33%	78%	91%
DuraVision Mirror Green	30%	40%	70%	85%	80%	90%	88%	96%	96%	42%	81%	92%
DuraVision Mirror Red ³	13%	25%	60%	83%	75%	88%	85%	96%	95%	27%	76%	91%

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

1 - Values for solid tint absorptions also are valid for polarised lenses with the same absorption. 2 - Skypol with Mirror coatings is not suitable for driving due to reduced signal light detection. 3 - Grey-blue tints are not suitable for driving with DuraVision Mirror Gold/Red due to reduced detection of signal lights. 4 - Black, Pioneer, Grey, Blue tints are not suitable for driving with DuraVision Mirror Gold due to reduced signal light detection

The reflection characteristics of DuraVision® Mirror coatings may significantly change the colour 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.

Polarised lenses

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

Colour overview and 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	482**	-	-	-
Black		-	490	491	492	493	494	495
Rose		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	-	488**	-
Black		496	-	498	499
Rose		-	437	-	-

* Also valid for ZEISS AdaptiveSun Solutions.

** Only available with ZEISS AdaptiveSun Solutions.

Double gradient tints

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

Skylet

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

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

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

Carl Zeiss Vision UK Ltd ZEISS Vision Care 22 Gas Street Birmingham B1 2JT

www.zeiss.co.uk/vision

Fax: +44 (0)121 356 7678/9 Phone: +44 (0)845 300 77 88