



# ML Filter Filter glasses



## It all started in a garage

Multilens is a world-unique specialist company within the optical sector. We tailor optical solutions for every need. From the beginning, our only goal has been to focus on the eyes, vision and visual function.

Multilens was set up in 1983 by Lars Hellström, who after 35 years in the optical business decided to focus on the most exciting challenge: developing special optic solutions that could solve difficult optical problems. Together with opticians, optometrists, eye care practitioners and eye doctors he created innovative special optics. Within a short space of time the whole Hellström family was committed and Multilens have since become leaders in low vision optics, helping thousands to enjoy a better visual experience.

Filter glasses can also be very beneficial to people with normal vision. They give your eyes the best protection against harmful light and the level of comfort is higher, meaning you never have to squint or suffer from sunlight-induced headaches. Another benefit is improved contrast vision.

We call it 'High Vision'.

## Need more information?

Do you have questions about our products or need more information? Contact us or check out our websites.

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## HIGHLIGHTS

### ML NIGHT Cover



Be more safe while driving at night. Reduce glare and enhance contrast.

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### HangOn



A unique frame designed to fit on top most spectacles.

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### HorizOn



A frame that celebrates functional design. HorizOn is designed to protect and prevent unwanted sidelight and light from above.

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### Filter with Add



Bifocal sunglasses with filter. With a +2,50 addition to someone with the need of a reading part.

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### Biocover



Our top seller of cover frames. Both high quality and comfort makes this frame popular.

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### ML Filter 41



A filter tint to relieve migrain symptoms and reduce visual stress.

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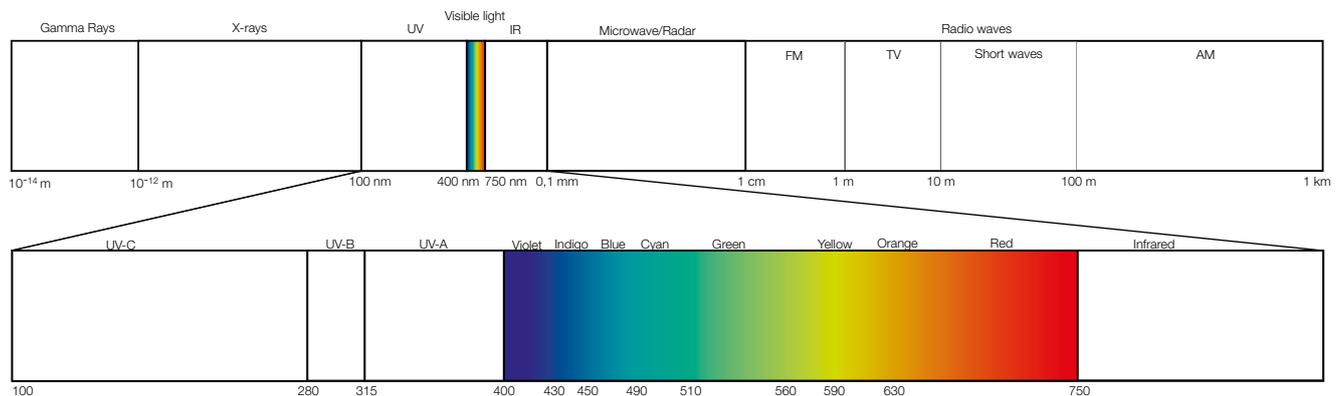
It is important for visually impaired that the information reaching the retina is not unnecessarily disturbed. Blue light is often perceived as discomforting and glaring, so a filter that stops it from reaching the retina can therefore increase visual quality and comfort.

ML Filter is also beneficial for people with normal vision. It can relax eye strain in general, improve visual quality for sport activities, avoid headache due to computer work, improve vision during night driving and much more.

# WHAT IS LIGHT?

## LIGHT IS ELECTROMAGNETIC RADIATION

The visible light is part of the electromagnetic radiation. The wavelength decides the properties of the radiation. Electromagnetic radiation always moves in the speed of light, which means that there is a bound relationship between frequency and wavelength. The shorter the wavelength, the higher frequency and thus higher energy. The part of the spectrum that we call visible light has a wavelength of about 400-750 nm. The image below shows a rough breakdown of what we call the different parts of the electromagnetic spectrum. Please be aware that there are different ways of dividing the wavelengths of the various colors, and this is just one of them.



## WHAT IMPACT DOES ELECTROMAGNETIC RADIATION HAVE ON OUR BODY

Depending on the wavelength, the radiation affects us in different ways. Generally speaking, the shorter the wavelength, the more impact it has on us. Gamma rays can kill living cells at a high intensity and X-rays in high concentrations may cause cancer. Radio waves at the other end of the spectrum hardly affects us at all, they pass through our bodies without much impact.

## WHAT HAPPENS IN THE EYE?

The eye is affected in the same way as the rest of the body when exposed to electromagnetic radiation. The eye has to transmit and detect the visible light. This means that the UV-light also transmits and is allowed to affect the structures in the eye. UV-light speeds up the aging of the eye and may cause both cataract and macular degeneration.

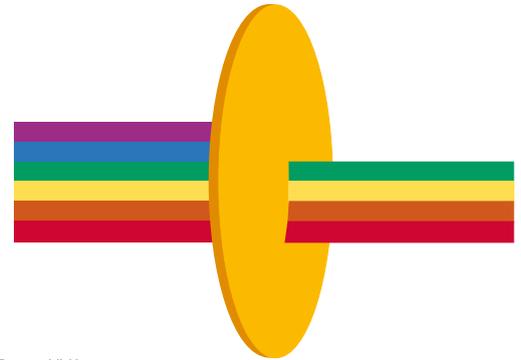
When the visible light passes through the eye's refracting surfaces the different wavelengths are refracted differently due to colour dispersion. The blue part of the spectrum is refracted most and causes a distortion on the retina.

Studies show that short-wave blue light can be harmful in the same way as the UV-light, which means that there is a protective effect of filtering out blue light.

## WHAT IS ML FILTER?

### ABSORBING BLUE LIGHT

When light passes through the lens of the eye, the blue part of the spectrum scatters causing distortion of the image on the retina. The purpose of a filter lens is to block this light. Many people who have tried filter lenses experience increased comfort, sharpness and contrast. This is particularly true for visually impaired for whom it is very important that the information from the retina is as clear and sharp as possible.



### PROTECTION AGAINST BLUE LIGHT

Most clinical studies today show that if UV and blue light are allowed to pass through the lens onto the retina they can damage the retina. The degree of damage depends on the energy of the light which in turn depends on the wavelength. The shorter the wavelength, the higher the energy and the more damage the light causes. Studies suggests that blue light up to around 450 nanometres is also harmful.

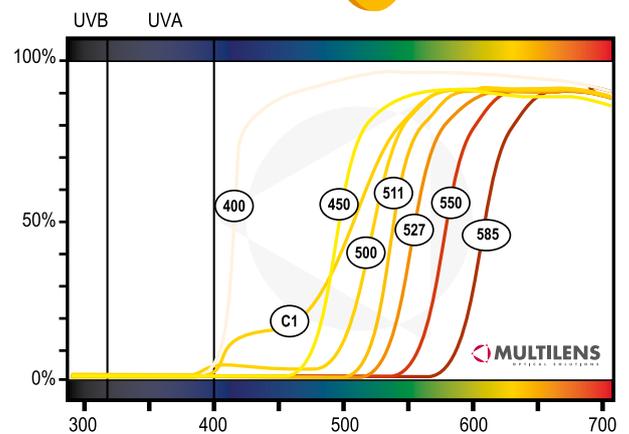


Illustration 1: ML Filter 400, C1, 450, 500, 511, 527, 550 & 585

### ML FILTER WITH PRESCRIPTION

All ML Filters are available as an added feature on any prescription lenses. It is also possible to include ML Filter in our systems and reading glasses.

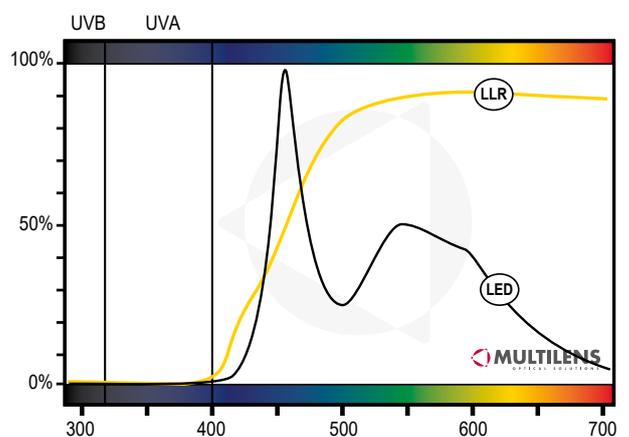


Illustration 2: ML Filter LLR

### OUR STANDARD FILTERS

Multilens has a long experience in manufacturing filter lenses for both partially sighted as well as people with normal sight but with high demands. In illustration 1, 2 and 3 you'll find transmission graphs of our standard ML Filters and on the next page a description of each tint.

### OTHER TINTS

We also tint standard colours such as brown and grey on our lenses. If you want a special tint, you are welcome to send us a colour sample. We can't promise that we will succeed every time, although in most cases the result is great.

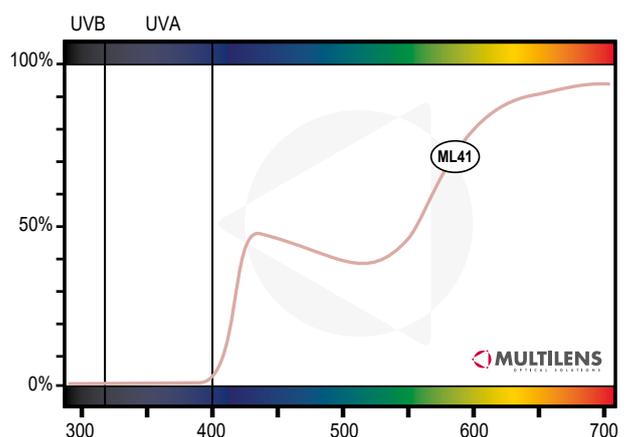


Illustration 3: ML Filter 41

## OUR STANDARD FILTERS

### Recommended for

			Work & leisure	Outdoor & sport	Reduced vision
	ML Filter 400	Lightly tinted lens that is comfortable and relaxing for most people. Absorbs some of the shortwave blue light. Colour: Light beige.	✓		
	ML Filter C1	Allows parts of the blue light transmits to maintain a natural color perception. Absorbs 80 % of the harmful shortwave blue light. Colour: Yellow.	✓	✓	✓
	ML Filter 450	Absorbs all of the harmful shortwave blue light. Colour: Lemon.		✓	✓
	ML Filter 500	Allows a small part of the blue light transmit to have some colour perception. Absorbs 95 % of all blue light. Colour: Yellow.	✓	✓	✓
	ML Filter 511	Orange lens. Absorbs all blue light. Colour: Orange.		✓	✓
	ML Filter 527	Absorbs all blue light and some parts of the green light. Colour: Dark orange.			✓
	ML Filter 550	A clearly red lens that absorbs all blue light and most of the green light as well. Colour: Red.			✓
	ML Filter 585	Dark red lens that only allows parts of yellow light and red light to transmit. Colour: Dark red.			✓
	ML Filter LLR	LED Light Reduction - Absorbs shortwave blue light with focus on eliminating the uncomfortable blue light from modern car head lights. It also increases the comfort for computer work. Colour: Light yellow.	✓	✓	
	ML Filter 41	Has been shown to provide increased comfort. Relieve migraine symptoms. Reduce visual stress, especially after brain traumas with some effect on the visual function. Reduce visual symptoms with blepharitis. Colour: Pink.	✓		✓

## ML FILTER & POLARIZED LENSES

With the combination of filters and polarization, you get really high quality filter sun glasses. The polarization increases comfort thanks to elimination of disturbing reflections.



### Our polarized lenses

The options below are available with prescription and with all types of lenses. The two versions of grey are possible to combine with ML Filter:

**Pol 1 Grey (light)** - 65% absorption

**Pol 3 Grey (dark)** - 85% absorption

**Pol Brown** - 81% absorption

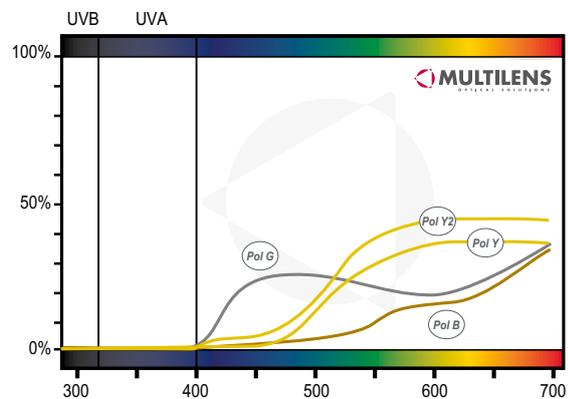
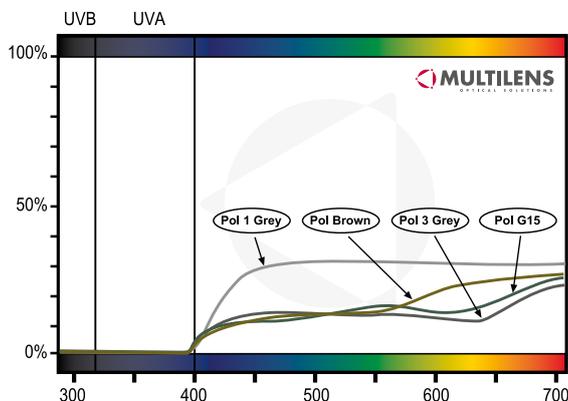
**Pol G15** - 85% absorption

The options below are only available with plano power and in our standard solutions:

**Pol B** - 90% absorption

**Pol G** - 80% absorption

**Pol Y2** - 65% absorption



### Drivewear

Drivewear lenses are capable of sensing and reacting to varying light conditions both outside and behind the windshield of the car. From bright sunlight accompanied by intense, blinding glare, to overcast conditions. Drivewear lenses provide the user with the appropriate visual solution. Drivewear lenses provide glare protection through polarization. The photochromatic effect provide excellent comfort at brightness level. In its faded state, the absorption is around 65 % and fully activated it is around 90 %.

### Transitions

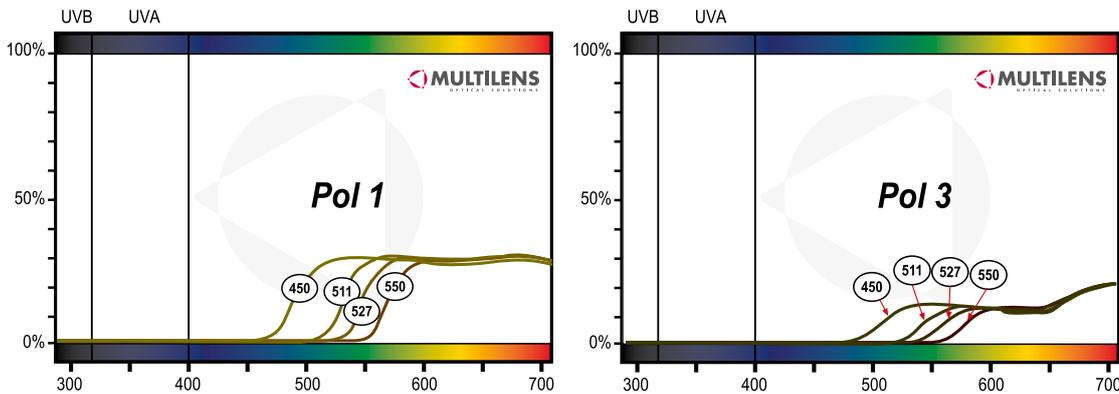
Transitions is a photochromatic lens that varies from full transmission to around 85 % absorption. Transitions XTRActive has a light base tint and varies in from around 20 % to 90 % absorption.

Lenses with transitions always have 100 % UV protection.

- Transitions Signature Brown 3-85 % absorption
- Transitions Signature Grey 3-85 % absorption
- Transitions XTRActive Grey 20-90 % absorption

## ML FILTER IN COMBINATION WITH POLARIZATION

The combination ML Filter and polarization is really powerful to obtaining high quality filter sun glasses for optimal comfort, contrast and protection. See below the transmission curves for some of our combinations.



### ML Filter in combination with photochromatic lenses

We can always add filter to a photochromatic lens. This means that the lens only has the filter colour indoors and gets darker when exposed to UV light.

### ML Filter in combination with Drivewear

All our ML Filters can be combined with Drivewear but we recommend our C1 filter to utilize the best properties from both Drivewear lens and the filter.



## FILTER & FILTERGLASSES

Most people who buy sunglasses primarily decide what to buy based on the look of the frame.

If the reason to buy a pair of sunglasses is to protect one's eyes and increase comfort, then they should start with selecting the lens.

The big difference between filter sunglasses and sunglasses is that filter sunglasses absorbs unwanted light and sunglasses absorbs a part of all light. You can compare it with advanced hearing protection that reduces the noise while letting all useful sound through (filter sunglasses) and a normal hearing protection that reduces all kind of sounds (sunglasses). You can also select different filter lenses in your filter sunglasses and thereby select what light should be considered as noise. This is extremely important because what we perceive as annoying light is individual.

In short, filter sunglasses gives better protection, better contrast and more comfortable vision than normal sunglasses.



### What difference does filter sunglasses mean for you?

The first thing you notice is that you can see better. Filtering out unwanted light only allows a greater amount of useful light to pass through to your eyes. This means that when you wear filter sunglasses, more light reaches your eyes (than when you wear normal sunglasses) and you don't experience any discomfort. As a result you will see better. To give you an illustration – everything doesn't turn as black as night when you drive into a tunnel.

### Even better vision when you need it

You choose filter lenses for your filter sunglasses, depending on when you're going to use them. If contrast is important, for example when you're skiing, a certain part of the light must be allowed to pass through. When you're driving, it's important with a different part of the light.

### Glare reduction

All our filter sunglasses include a standard polarizing layer, which reduces bothersome glare and reflections. However, if you for some reasons don't want to eliminate glare, you can of course choose non-polarized filter lenses. Once again, it's all about choosing which "noise" you want to block out!

### Optics according to requirements

Our 35 years of working with optics, light, filters and eyes have equipped us with an in-depth understanding of how different people have different needs when it comes to optics. That's why all of our filter sunglasses are available in three classes, depending on visual sensitivity and requirements.

## ML FILTER FOR PEOPLE WITH REDUCED VISION

With reduced visual function, it's usually really important with good lighting. However, many people experience intensive light disturbance and this can of course cause frustration. You need high intensity light in order to see, but the light level causes discomfort. One reason is that the feedback loop from cones to rods gets inhibited by the retinal degeneration, which makes the rods active also in bright light. We know that the rods are more sensitive to blue light. If we use glasses that absorbs the blue light we can increase the visual quality tremendously and eliminate the discomfort.



Another reason that blue blocking lenses is a good idea is to improve the protection of the eyes. We know that the short wave blue light is hazardous and can cause damage in our retinal cells. If there already is an ongoing degeneration in the retina, it's even more important to use the protection available.



For most of our products, it's possible to add ML Filter. Feel free to add ML Filter to your pair of ML Vidi, ML Focus, ML Binova etc.

## ML FILTER FOR PEOPLE WITH NORMAL VISION

Even if there are circumstances where there is a need for a plain filter, it's mostly in combination with polarization that filter lenses is useful for people with normal vision. We call this Filter sunglasses and gives you enhanced contrast, increased comfort and better protection compared to normal sunglasses.

### Brighter lenses with reduced glare issues

One of the biggest advantages of using filter lenses is that we can use brighter lenses (transmits more total light) and still obtain the desired effect (reduce glare). As an example, filter sunglasses normally don't feel too dark when driving into a tunnel.

### Better protection

Filter sunglasses looks like normal sunglasses but have the additional feature of blocking the dangerous short wave blue light.

### Filter sunglasses in high curved frames

We can produce lenses for curved frames even if the powers are getting quite high. In general, the thickness and not the diameter is limiting us in what we can do. For more information, see our product documentation for our lens program.

### Customized filter sunglasses

If you don't wish to have polarization in your filter sunglasses, we can easily combine filter effect and a grey tint to desired level of darkness. We can also produce really dark lenses with filter effect for circumstances where extra sun protection is needed.

# FILTER SUNGLASSES



We have a lot of different ready made filter glasses for different needs. On the following pages, there are more information about the available materials and quality levels. You can also find all information about our different frames with plano lenses with ML Filter. Most of the frames are also available with prescription lenses.

## ABOUT OUR LENSES

For many years we have been confirmed again and again that even seemingly small improvements in the visual experience can be important. Therefore, we use the coating SunCoat as standard in our ready-made Filter Glasses.

Read more about SunCoat below.

### MATERIALS IN OUR LENSES

#### Index 1.5, CR39

All ML Filters are available with this lens material. The main advantages are its wide range of powers, high optical quality and stable tinting performance.

#### PC - Polycarbonate

Molded polycarbonate lens with 2.0 mm thickness. Available for most ML Filter and in combination with light or dark polarization. Always includes SunCoat, a backside anti-reflective coating to minimize reflections from behind. The lens main advantages are durability and filter stability. Since the lens is molded, the price is beneficial compared to equivalent CR39 lens. Only available in plano power.

#### TAC - Triacetate

A pressed 1.0 mm plano lens in Triacetate. The main advantage is its competitive price. Only available in plano power and a few basic tints.

### COATINGS

#### SUNCOAT

SunCoat is a surface treatment that reduce reflection from the back side of the lens. This significantly decreases the disturbing reflections of light coming from your cheeks. The darker the lens is, the more destructive the reflective light can be.

#### ML PRIMA+

Our well known basic treatment. A very good multicoat including ML Dura, high transmission and the top layer Aqua-coat that reduces the effect of dust and water.

#### ML PRIMA+ SUN

A treatment designed for sunglasses in CR39. Both front and back surface have the ML Dura treatment for increased scratch resistance. The back side has the ML Prima+ treatment to increase the comfort and to reduce the annoying reflexes on the inside of dark sunglasses.

## FILTER CATEGORIES

All sunglasses are attributed to one of five filter categories after how transparent they are. See the table below for the definition of the different categories.

Filter category	Visible light	Absorption		Description	Usage
	Transmittance (Tv)	Min-value	Max-value		
0	Tv > 80 %	0 %	< 20 %	Light tint sunglasses	Very limited reduction of sunglare
1	43 % < Tv ≤ 80 %	≥ 20 %	< 57 %	Light tint sunglasses	Limited protection against sunglare
2	18 % < Tv ≤ 43 %	≥ 57 %	< 82 %	General purpose sunglasses	Good protection against sunglare
3	8 % < Tv ≤ 18 %	≥ 82 %	< 92 %	General purpose sunglasses	High protection against sunglare
4	3 % < Tv ≤ 8 %	≥ 92 %	< 97 %	Very dark special purpose sunglasses, very high sunglare reduction	Very high protection against extreme sunglare, e.g. at sea, over snowfields, on high mountains, or in desert

## CATEGORIES FOR OUR FILTERS

In the table below, all of our filter lenses are listed with the filter category it belongs to both with and without polarization.

Filter	Category	Transmittance visible light	Night driving Yes/No
LLR	1	79%	Yes
C1	1	79%	Yes
450	1	77%	Yes
500	1	70%	No
511	1	50%	No
527	1	45%	No
550	2	24%	No
585	2	22%	No
450 Pol 1	2	26%	No
C1 Pol 1	2	27%	No
500 Pol 1	2	26%	No
511 Pol 1	2	19%	No
527 Pol 1	3	12%	No
550 Pol 1	3	9%	No
585 Pol 1	4	6%	No
450 Pol 3	3	13%	No
C1 Pol 3	3	14%	No
500 Pol 3	3	13%	No
511 Pol 3	3	8%	No
527 Pol 3	4	7%	No
550 Pol 3	4	4%	No
585 Pol 3	4	3%	No



## ABOUT OUR FRAMES

### MATERIALS IN OUR FRAMES

#### Metal

All our metal frames are made of high quality metal and are nickel free.

#### Acetate

Cellulose acetate, a standard plastic material most plastic frames are made of. Easy to adjust.

#### TR90 Bio

Our premium plastic material. Flexible, durable and light weight. Made from renewable material which makes this a more environmentally friendly choice. Due to the properties of the material, highest comfort can be achieved without too much adjusting.

### SELECTING A FRAME

In general, you should choose a frame that is blocking as much light as possible from the top and from the sides. A wrap-around frame or a frame with sideshields are important to protect yourself from incoming light from the sides. In order to protect from light over and under the frame, it's important that the frame is perfectly aligned with your face or have a protection roof to block unwanted light.

When driving a car, the peripheral vision is highly important so the frame must not block light totally from the sides. If side shields are needed, transparent side shields are preferable.



## ML FILTER SOLUTIONS

### ML Filter Photochromatic

ML Filter 450 that absorbs all light under 450 nm is combined with a photochromatic lens which darkens when exposed to UV light. The result is a product that not only have great filter properties, but can also be flexible for the users different needs depending on varying light conditions.



### Filter with Add

A bifocal product with an absorption up to 450 nm and then 65% absorption of the remaining wavelengths. By combining ML Filter 450 with a polarized layer the requested contrast enhancing effect can be achieved. With a +2,50 addition the product will be an affordable alternative to someone with the need of a reading part. The result is high quality filter glasses that offers good protection and comfort.



### ML Filter 41

ML41 is a filter tint with pink colour that has been shown to provide increased comfort for many patients.

Especially good for:

- Relieve migrain symptoms
- Reduce visual stress, especially for patients with brain traumas with some kind of effect on the visual function.
- Reduce visual symptoms with blepharitis



## ARTICLE NUMBERS

### ML FILTER PHOTOCROMATIC

Material	Coating	Layer	Filter	Biocover Hazelnut			Biocover Black			Biocover Dark Bronze		
				Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
PC	SunCoat	PhotoC	450	-	-	-	311128	312128	313128	-	-	-

### ML FILTER BIFOCALS

Material	Coating	Layer	Filter	Alex		Nelli	
				Brown	Black	Brown	Black
PC	SunCoat	POL 1	450	35282	35482	36282	36382

Material	Coating	Layer	Filter	Sun Lady	Sun Lady 2	Sun V	Sun 6	Sun 7	Sun 2	
									Grey	Brown
PC	SunCoat	POL 1	450	-	314168	-	324066	325066	39174	39074

### ML FILTER 41

Material	Coating	Layer	Filter	HangOn	
CR39	PrimaSun	-	41	310100	

Material	Coating	Layer	Filter	HangOn NP	HorizOn
CR39	PrimaSun	-	41	310130	310200

Material	Coating	Layer	Filter	Cover 2		Cover Kid		
				Hazelnut	Grey	Navy	Red	Black
CR39	PrimaSun	-	41	318421	318420	326099	327099	328099

Material	Coating	Layer	Filter	Biocover Hazelnut			Biocover Black			Biocover Dark Bronze		
				Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
CR39	PrimaSun	-	41	315248	315258	315268	311138	312138	313138	316138	317138	318138

## HorizOn

A frame that celebrates functional design. HorizOn is designed to protect and prevent unwanted sidelight and light from above. The frame is an excellent solution for people who, at home or at work, are disturbed by light from armatures when they are working in front of a screen or staying in an environment illuminated by strip light. For these and similar occasions it is nice to have the ability to prevent the unwanted light.



Model	Specifications
HorizOn	Colour: Grey Size: Hbox: 54 Vbox: 35 Dbl: 19 Base: 6



## HangOn

A unique frame designed to fit on top most spectacles. The titanium frame makes it light & durable and the flexible temples makes it stable & comfortable for most spectacle wearers.

Model	Specifications
HangOn	Colour: Grey Size: Hbox: 43 Vbox: 35 Dbl: 19 Base: 6

## HangOn NP

Similar design as HangOn but with nose pads. Smart and neat frame with a front of titanium and flexible temples in TR90. The combination makes the frame lightweight, hypoallergenic and durable.

Model	Specifications
HangOn NP	Colour: Grey Size: Hbox: 43 Vbox: 35 Dbl: 19 Base: 6



## ARTICLE NUMBERS FOR HorizOn, HangOn AND HangOn NP

Material	Coating	Layer	Filter	HangOn	HangOn NP	HorizOn
PC	SunCoat	-	400	310101	310131	310201
PC	SunCoat	-	C1	310102	310132	310202
PC	SunCoat	-	450	310103	310133	310203
PC	SunCoat	-	500	310104	310134	310204
PC	SunCoat	-	511	310105	310135	310205
PC	SunCoat	-	527	310106	310136	310206
PC	SunCoat	-	550	310107	310137	310207
PC	SunCoat	-	585	310108	310138	310208
PC	SunCoat	POL 1	UV	310110	310140	310210
PC	SunCoat	POL 1	400	310111	310141	310211
PC	SunCoat	POL 1	C1	310112	310142	310212
PC	SunCoat	POL 1	450	310113	310143	310213
PC	SunCoat	POL 1	500	310114	310144	310214
PC	SunCoat	POL 1	511	310115	310145	310215
PC	SunCoat	POL 1	527	310116	310146	310216
PC	SunCoat	POL 1	550	310117	310147	310217
PC	SunCoat	POL 1	585	310118	310148	310218
PC	SunCoat	POL 3	UV	310120	310150	310220
PC	SunCoat	POL 3	400	310121	310151	310221
PC	SunCoat	POL 3	C1	310122	310152	310222
PC	SunCoat	POL 3	450	310123	310153	310223
PC	SunCoat	POL 3	500	310124	310154	310224
PC	SunCoat	POL 3	511	310125	310155	310225
PC	SunCoat	POL 3	527	310126	310156	310226
PC	SunCoat	POL 3	550	310127	310157	310227
CR39	PrimaSun	POL 3	585	310128	310158	310228

Of course, it's possible to get the frames with other lenses (i.e. RX lenses), see our catalogue Optics, Special optics and frames.

## BIOCOVER

Biocover is designed to be used together with a normal pair of glasses. The frame is made of renewable raw material. The side lens has the same tint as the front lenses.

Model	Specifications
<b>Biocover S Hazelnut</b>	<b>Colour:</b> Speckled Brown <b>Size:</b> Hbox: 60 Vbox: 40 Dbl: 12 <b>Front width:</b> ~13 cm <b>Base:</b> 6
<b>Biocover M Hazelnut</b>	<b>Colour:</b> Speckled Brown <b>Size:</b> Hbox: 64 Vbox: 42 Dbl: 13 <b>Front width:</b> ~14,2 cm <b>Base:</b> 6
<b>Biocover L Hazelnut</b>	<b>Colour:</b> Speckled Brown <b>Size:</b> Hbox: 67 Vbox: 46 Dbl: 15 <b>Front width:</b> ~14,8 cm <b>Base:</b> 6
<b>Biocover S Black</b>	<b>Colour:</b> Black <b>Size:</b> Hbox: 60 Vbox: 40 Dbl: 12 <b>Front width:</b> ~13 cm <b>Base:</b> 6
<b>Biocover M Black</b>	<b>Colour:</b> Black <b>Size:</b> Hbox: 64 Vbox: 42 Dbl: 13 <b>Front width:</b> ~14,2 cm <b>Base:</b> 6
<b>Biocover L Black</b>	<b>Colour:</b> Black <b>Size:</b> Hbox: 67 Vbox: 46 Dbl: 15 <b>Front width:</b> ~14,8 cm <b>Base:</b> 6
<b>Biocover S Dark Bronze</b>	<b>Colour:</b> Dark Bronze <b>Size:</b> Hbox: 60 Vbox: 40 Dbl: 12 <b>Front width:</b> ~13 cm <b>Base:</b> 6
<b>Biocover M Dark Bronze</b>	<b>Colour:</b> Dark Bronze <b>Size:</b> Hbox: 64 Vbox: 42 Dbl: 13 <b>Front width:</b> ~14,2 cm <b>Base:</b> 6
<b>Biocover L Dark Bronze</b>	<b>Colour:</b> Dark Bronze <b>Size:</b> Hbox: 67 Vbox: 46 Dbl: 15 <b>Front width:</b> ~14,8 cm <b>Base:</b> 6



## ARTICLE NUMBERS FOR BIOCOVER

Material	Coating	Layer	Filter	Biocover Hazelnut			Biocover Black			Biocover Dark Bronze		
				Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
TAC	-	POL B	UV	315100	315150	315200	311101	312101	313101	316101	317101	318101
TAC	-	POL G	UV	315101	315151	315201	311102	312102	313102	316102	317102	318102
TAC	-	POL Y2	UV	315102	315152	315202	311104	312104	313104	316104	317104	318104
PC	SunCoat	-	400	315240	315250	315260	311130	312130	313130	316130	317130	318130
PC	SunCoat	-	C1	315241	315251	315261	311131	312131	313131	316131	317131	318131
PC	SunCoat	-	450	315242	315252	315262	311132	312132	313132	316132	317132	318132
PC	SunCoat	-	500	315243	315253	315263	311133	312133	313133	316133	317133	318133
PC	SunCoat	-	511	315244	315254	315264	311134	312134	313134	316134	317134	318134
PC	SunCoat	-	527	315245	315255	315265	311135	312135	313135	316135	317135	318135
PC	SunCoat	-	550	315246	315256	315266	311136	312136	313136	316136	317136	318136
PC	SunCoat	-	585	315247	315257	315267	311137	312137	313137	316137	317137	318137
PC	SunCoat	POL 1	UV	315119	315169	315219	311000	312000	313000	316000	317000	318000
PC	SunCoat	POL 1	400	315120	315170	315220	311110	312110	313110	316110	317110	318110
PC	SunCoat	POL 1	C1	315121	315171	315221	311111	312111	313111	316111	317111	318111
PC	SunCoat	POL 1	450	315122	315172	315222	311112	312112	313112	316112	317112	318112
PC	SunCoat	POL 1	500	315123	315173	315223	311113	312113	313113	316113	317113	318113
PC	SunCoat	POL 1	511	315124	315174	315224	311114	312114	313114	316114	317114	318114
PC	SunCoat	POL 1	527	315125	315175	315225	311115	312115	313115	316115	317115	318115
PC	SunCoat	POL 1	550	315126	315176	315226	311116	312116	313116	316116	317116	318116
PC	SunCoat	POL 1	585	315127	315177	315227	311117	312117	313117	316117	317117	318117
PC	SunCoat	POL 3	UV	315128	315178	315228	311200	312200	313200	316200	317200	318200
PC	SunCoat	POL 3	400	315129	315179	315229	311201	312201	313201	316201	317201	318201
PC	SunCoat	POL 3	C1	315130	315180	315230	311202	312202	313202	316202	317202	318202
PC	SunCoat	POL 3	450	315131	315181	315231	311203	312203	313203	316203	317203	318203
PC	SunCoat	POL 3	500	315132	315182	315232	311204	312204	313204	316204	317204	318204
PC	SunCoat	POL 3	511	315133	315183	315233	311205	312205	313205	316205	317205	318205
PC	SunCoat	POL 3	527	315134	315184	315234	311206	312206	313206	316206	317206	318206
PC	SunCoat	POL 3	550	315135	315185	315235	311207	312207	313207	316207	317207	318207
CR39	PrimaSun	POL 3	585	315136	315186	315236	311208	312208	313208	316208	317208	318208

Of course, it's possible to get the frames with other lenses (i.e. RX lenses), see our catalogue Optics, Special optics and frames. Items with blue background are stock items and will normally be delivered within one day.

## COVER 2

Cover 2 is designed to be used over a normal pair of glasses. Compared to Biocover, the frame has a more straight design. The frame is made of renewable material. Side lenses has the same tint as the front lenses.

Model	Specifications
Cover 2 Brown	<b>Colour:</b> Speckled Brown <b>Size:</b> Hbox: 61 Vbox: 42 Dbl: 14 <b>Front width:</b> ~16,5 cm <b>Base:</b> 6
Cover 2 Grey	<b>Colour:</b> Semi transparent Grey <b>Size:</b> Hbox: 61 Vbox: 42 Dbl: 14 <b>Front width:</b> ~16,5 cm <b>Base:</b> 6



## COVER KID

Cover Kid is a smaller cover frame designed to be used together with a normal pair of glasses. The perfect cover frame for children. The frame is made of high quality material.

Model	Specifications
Cover Kid Blue	<b>Colour:</b> Black front, blue temples <b>Size:</b> Hbox: 55 Vbox: 35 Dbl: 12 <b>Base:</b> 6
Cover Kid Red	<b>Colour:</b> Black front, red temples <b>Size:</b> Hbox: 55 Vbox: 35 Dbl: 12 <b>Base:</b> 6
Cover Kid Black	<b>Colour:</b> Black front, black temples <b>Size:</b> Hbox: 55 Vbox: 35 Dbl: 12 <b>Base:</b> 6

## ARTICLE NUMBERS FOR COVER 2 AND COVER KID

Material	Coating	Layer	Filter	Cover 2		Cover Kid		
				Hazelnut	Grey	Navy	Red	Black
TAC	-	POL B	UV	318301	318335	326101	327101	328101
TAC	-	POL G	UV	318302	318336	326102	327102	328102
TAC	-	POL Y2	UV	318303	318337	326104	327104	328104
PC	SunCoat	-	400	318404	318412	326073	327073	328073
PC	SunCoat	-	C1	318405	318413	326074	327074	328074
PC	SunCoat	-	450	318406	318414	326075	327075	328075
PC	SunCoat	-	500	318407	318415	326076	327076	328076
PC	SunCoat	-	511	318408	318416	326077	327077	328077
PC	SunCoat	-	527	318409	318417	326078	327078	328078
PC	SunCoat	-	550	318410	318418	326079	327079	328079
PC	SunCoat	-	585	318411	318419	326080	327080	328080
PC	SunCoat	POL 1	UV	318368	318386	326081	327081	328081
PC	SunCoat	POL 1	400	318369	318387	326082	327082	328082
PC	SunCoat	POL 1	C1	318370	318388	326083	327083	328083
PC	SunCoat	POL 1	450	318371	318389	326084	327084	328084
PC	SunCoat	POL 1	500	318372	318390	326085	327085	328085
PC	SunCoat	POL 1	511	318373	318391	326086	327086	328086
PC	SunCoat	POL 1	527	318374	318392	326087	327087	328087
PC	SunCoat	POL 1	550	318375	318393	326088	327088	328088
PC	SunCoat	POL 1	585	318376	318394	326089	327089	328089
PC	SunCoat	POL 3	UV	318377	318395	326090	327090	328090
PC	SunCoat	POL 3	400	318378	318396	326091	327091	328091
PC	SunCoat	POL 3	C1	318379	318397	326092	327092	328092
PC	SunCoat	POL 3	450	318380	318398	326093	327093	328093
PC	SunCoat	POL 3	500	318381	318399	326094	327094	328094
PC	SunCoat	POL 3	511	318382	318400	326095	327095	328095
PC	SunCoat	POL 3	527	318383	318401	326096	327096	328096
PC	SunCoat	POL 3	550	318384	318402	326097	327097	328097
CR39	PrimaSun	POL 3	585	318385	318403	326098	327098	328098

Of course, it's possible to get the frames with other lenses (i.e. RX lenses), see our catalogue Optics, Special optics and frames. Items with blue background are stock items and will normally be delivered within one day.

## SUN GUARD

Provides excellent protection from light coming from the sides and from above. The Sun Guard frames are made of TR90 material with side lenses corresponding to the filter lens. Side lenses in the same colour as the frame are also available (sold separately).

Rubber temple tips for a good fit.

Model	Specifications
Sun Guard 1 Black	Colour: Black Size: Hbox: 57 Vbox: 38 Dbl: 15 Base: 6
Sun Guard 2 Black	Colour: Black Size: Hbox: 60 Vbox: 42 Dbl: 14 Base: 6
Sun Guard 1 Hazelunt	Colour: Speckled Brown Size: Hbox: 57 Vbox: 38 Dbl: 15 Base: 6
Sun Guard 2 Hazelunt	Colour: Speckled Brown Size: Hbox: 60 Vbox: 42 Dbl: 14 Base: 6



## ARTICLE NUMBERS FOR SUN GUARD

Material	Coat	Layer	Filter	Sun Guard 1		Sun Guard 2	
				Black	Hazelnut	Black	Hazelnut
PC	SunCoat	-	400	325440	325480	325520	325560
PC	SunCoat	-	C1	325441	325481	325521	325561
PC	SunCoat	-	450	325442	325482	325522	325562
PC	SunCoat	-	500	325443	325483	325523	325563
PC	SunCoat	-	511	325444	325484	325524	325564
PC	SunCoat	-	527	325445	325485	325525	325565
PC	SunCoat	-	550	325446	325486	325526	325566
PC	SunCoat	-	585	325447	325487	325527	325567
PC	SunCoat	POL 1	UV	325448	325488	325528	325568
PC	SunCoat	POL 1	400	325449	325489	325529	325569
PC	SunCoat	POL 1	C1	325450	325490	325530	325570
PC	SunCoat	POL 1	450	325451	325491	325531	325571
PC	SunCoat	POL 1	500	325452	325492	325532	325572
PC	SunCoat	POL 1	511	325453	325493	325533	325573
PC	SunCoat	POL 1	527	325454	325494	325534	325574
PC	SunCoat	POL 1	550	325455	325495	325535	325575
PC	SunCoat	POL 1	585	325456	325496	325536	325576
PC	SunCoat	POL 3	UV	325457	325497	325537	325577
PC	SunCoat	POL 3	400	325458	325498	325538	325578
PC	SunCoat	POL 3	C1	325459	325499	325539	325579
PC	SunCoat	POL 3	450	325460	325500	325540	325580
PC	SunCoat	POL 3	500	325461	325501	325541	325581
PC	SunCoat	POL 3	511	325462	325502	325542	325582
PC	SunCoat	POL 3	527	325463	325503	325543	325583
PC	SunCoat	POL 3	550	325464	325504	325544	325584
CR39	PrimaSun	POL 3	585	325465	325505	325545	325585

Of course, it's possible to get the frames with other lenses (i.e. RX lenses), see our catalogue Optics, Special optics and frames. Items with blue background are stock items and will normally be delivered within one day.

## SUN LADY

With large lenses which provides a large field of view. It is designed to have a tight fit on most people.

Model	Specifications
Sun Lady	Colour: Dark Bronze Size: Hbox: 64 Vbox: 38 Dbl: 18 Base: 8



## SUN LADY 2

A smaller version of its popular big sister Sun Lady, with a tight fit on most people.

Model	Specifications
Sun Lady 2	Colour: Speckled Brown Size: Hbox: 56 Vbox: 40 Dbl: 19 Base: 6

## SUN V

A plastic frame that protects well against light from the sides. A frame with a tight and comfortable fit.

Model	Specifications
Sun V	Colour: Maroon (Red-Brown) Size: Hbox: 66 Vbox: 41 Dbl: 16 Base: 8



## SUN 6

A fram with an exclusive look and high quality. Made of acetate and metal free of nickel.

Model	Specifications
Sun 6	Colour: Black Size: Hbox: 57 Vbox: 36 Dbl: 19 Base: 6

## SUN 7

An elegant black frame with good light protection from the sides. It's made of TR90 and the inside of the temples have a rubber layer for a better fit.

Model	Specifications
Sun 7	Colour: Black Size: Hbox: 63 Vbox: 39 Dbl: 16 Base: 6



## SUN 2

A small frame with a really good fit, designed for sports and an active lifestyle. The inside of the temples have rubber temple tips for a better fit.



Model	Specifications
Sun 2 Grey	Colour: Transparent Grey Size: Hbox: 56 Vbox: 37 Dbl: 22 Base: 6
Sun 2 Brown	Colour: Speckled Brown Size: Hbox: 56 Vbox: 37 Dbl: 22 Base: 6

## ARTICLE NUMBERS FOR SUN LADY, SUN LADY 2, SUN V, SUN 6, SUN 7 AND SUN 2

Material	Coating	Layer	Filter	Sun Lady	Sun Lady 2	Sun V	Sun 6	Sun 7	Sun 2	
									Grey	Brown
PC <sup>1</sup>	SunCoat	-	400	314042*	314142	319042*	324038	325038	39138	39038
PC	SunCoat	-	C1	314043	314143	319043	324039	325039	39139	39039
PC	SunCoat	-	450	314044	314144	319044	324040	325040	39140	39040
PC	SunCoat	-	500	314045	314145	319045	324041	325041	39141	39041
PC	SunCoat	-	511	314046	314146	319046	324042	325042	39142	39042
PC	SunCoat	-	527	314047	314147	319047	324043	325043	39143	39043
PC	SunCoat	-	550	314048	314148	319048	324044	325044	39144	39044
PC <sup>1</sup>	SunCoat	-	585	314049*	314149	319049*	324045	325045	39145	39045
PC <sup>1</sup>	SunCoat	POL 1	UV	314056*	314150	319056*	324056	325056	39156	39056
PC <sup>1</sup>	SunCoat	POL 1	400	314057*	314151	319057*	324057	325057	39157	39057
PC	SunCoat	POL 1	C1	314038	314152	319038	324407	325001	39158	39058
PC	SunCoat	POL 1	450	314039	314153	319039	324408	325002	39159	39059
PC	SunCoat	POL 1	500	314040	314154	319040	324409	325003	39160	39060
PC	SunCoat	POL 1	511	314041	314155	319041	324410	325004	39161	39061
PC	SunCoat	POL 1	527	314058	314156	319058	324058	325058	39162	39062
PC <sup>1</sup>	SunCoat	POL 1	550	314059*	314157	319059*	324059	325059	39163	39063
PC <sup>1</sup>	SunCoat	POL 1	585	314060*	314158	319060*	324060	325060	39164	39064
PC <sup>1</sup>	SunCoat	POL 3	UV	314061*	314159	319061*	324061	325061	39165	39065
PC <sup>1</sup>	SunCoat	POL 3	400	314062*	314160	319062*	324062	325062	39166	39066
PC	SunCoat	POL 3	C1	314412	314161	319063	324411	325005	39167	39067
PC	SunCoat	POL 3	450	314413	314162	319064	324412	325006	39168	39068
PC	SunCoat	POL 3	500	314414	314163	319065	324413	325008	39169	39069
PC	SunCoat	POL 3	511	314415	314164	319066	324414	325009	39170	39070
PC	SunCoat	POL 3	527	314063	314165	319067	324063	325063	39171	39071
PC <sup>1</sup>	SunCoat	POL 3	550	314064*	314166	319068*	324064	325064	39172	39072
CR39	PrimaSun	POL 3	585	314065	314167	319069	324065	325065	39173	39073

1=Articles marked with \* has lenses made of CR39, coated with Prima Sun

Of course, it's possible to get the frames with other lenses (i.e. RX lenses), see our catalogue Optics, Special optics and frames. Items with blue background are stock items and will normally be delivered within one day.

## SUN 3

Designed to protect from light coming from the sides and is therefore suitable for sensitive people. A plastic frame with rubber temple tops and a metal core allowing a precise individual adjustment.

Model	Specifications
Sun 3 Brown S	Colour: Speckled Brown Size: Hbox: 47 Vbox: 30 Dbl: 16 Base: 6
Sun 3 Brown M	Colour: Speckled Brown Size: Hbox: 50 Vbox: 34 Dbl: 15 Base: 6
Sun 3 Brown L	Colour: Speckled Brown Size: Hbox: 55 Vbox: 34 Dbl: 15 Base: 6
Sun 3 Black M	Colour: Black Size: Hbox: 50 Vbox: 34 Dbl: 15 Base: 6
Sun 3 Black L	Colour: Black Size: Hbox: 55 Vbox: 34 Dbl: 15 Base: 6
Sun 3 Black XL	Colour: Black Size: Hbox: 59 Vbox: 38 Dbl: 16 Base: 6



## ARTICLE NUMBERS FOR SUN 3

Material	Coating	Layer	Filter	Sun 3 Brown			Sun 3 Black		
				S	M	L	M	L	XL
PC	SunCoat	-	400	39238	39338	39438	39738	39538	39638
PC	SunCoat	-	C1	39239	39339	39439	39739	39539	39639
PC	SunCoat	-	450	39240	39340	39440	39740	39540	39640
PC	SunCoat	-	500	39241	39341	39441	39741	39541	39641
PC	SunCoat	-	511	39242	39342	39442	39742	39542	39642
PC	SunCoat	-	527	39243	39343	39443	39743	39543	39643
PC	SunCoat	-	550	39244	39344	39444	39744	39544	39644
PC	SunCoat	-	585	39245	39345	39445	39745	39545	39645
PC	SunCoat	POL 1	UV	39256	39356	39456	39756	39556	39656
PC	SunCoat	POL 1	400	39257	39357	39457	39757	39557	39657
PC	SunCoat	POL 1	C1	39258	39358	39458	39758	39558	39658
PC	SunCoat	POL 1	450	39259	39359	39459	39759	39559	39659
PC	SunCoat	POL 1	500	39260	39360	39460	39760	39560	39660
PC	SunCoat	POL 1	511	39261	39361	39461	39761	39561	39661
PC	SunCoat	POL 1	527	39262	39362	39462	39762	39562	39662
PC	SunCoat	POL 1	550	39263	39363	39463	39763	39563	39663
PC	SunCoat	POL 1	585	39264	39364	39464	39764	39564	39664
PC	SunCoat	POL 3	UV	39265	39365	39465	39765	39565	39665
PC	SunCoat	POL 3	400	39266	39366	39466	39766	39566	39666
PC	SunCoat	POL 3	C1	39267	39367	39467	39767	39567	39667
PC	SunCoat	POL 3	450	39268	39368	39468	39768	39568	39668
PC	SunCoat	POL 3	500	39269	39369	39469	39769	39569	39669
PC	SunCoat	POL 3	511	39270	39370	39470	39770	39570	39670
PC	SunCoat	POL 3	527	39271	39371	39471	39771	39571	39671
PC	SunCoat	POL 3	550	39272	39372	39472	39772	39572	39672
CR39	PrimaSun	POL 3	585	39273	39373	39473	39773	39573	39673

Of course, it's possible to get the frames with other lenses (i.e. RX lenses), see our catalogue Optics, Special optics and frames.

## FLIP-UP

Clip-on that allows you to quickly switch between optics with filter to optics without filter. The design makes it possible to attach the clip-on to most frames. It can simply be attached to a pair of glasses with a handgrip. Its available with & without rim. The Clip-on mechanism is made of metal and the front of the clip-on with rim is made of acetate.



Model	Specifications
Flip-up with rim Madium	Colour: Beige Size: Hbox: 51 Vbox: 37 Dbl: 19 Base: 6
Flip-up with rim Large	Colour: Beige Size: Hbox: 51 Vbox: 44 Dbl: 19 Base: 6
Flip-up without rim Madium	Colour: - Size: Hbox: 54 Vbox: 43 Dbl: 14 Base: 6
Flip-up without rim Large	Colour: - Size: Hbox: 57 Vbox: 48 Dbl: 14 Base: 6

## ALEX

A frame that Multilens has had in its line-up for a long time. Persistence has now given fruit, and the frame is once again in line with the fashion.

Model	Specifications
Alex Brown	Colour: Transparent Brown Size: Hbox: 49 Vbox: 41 Dbl: 19 Base: 6
Alex Black	Colour: Black Size: Hbox: 49 Vbox: 41 Dbl: 19 Base: 6



## NELLI

A classic Multilens frame that has been around for many generations, especially with our Filter lenses ML450 and ML511. Now the time has given it a boost again, especially for those interested in fashion, but then with filter lenses that also include polarization.

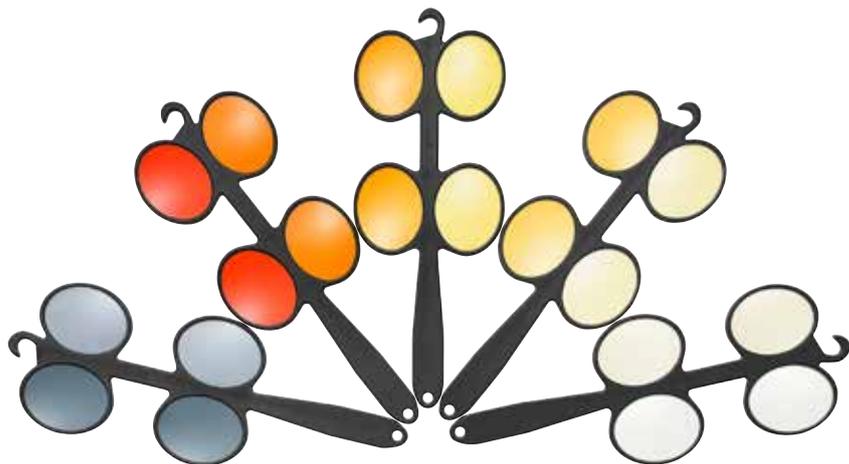
Model	Specifications
Nelli Brown	Colour: Speckled Brown Size: Hbox: 50 Vbox: 41 Dbl: 18 Base: 6
Nelli Black	Colour: Black Size: Hbox: 50 Vbox: 41 Dbl: 18 Base: 6

## ARTICLE NUMBERS FOR FLIP-UP, ALEX AND NELLI

Material	Coating	Layer	Filter	Flip-Up w/o Rim		Flip-Up with Rim		Alex		Nelli		Material	Coating	Layer	Filter	Flip-Up w/o Rim Large
				Medium	Large	Medium	Large	Brown	Black	Brown	Black					
PC	SunCoat	-	400	32256	322256	33256	323256	35256	35456	36256	36356	CR39	UC	-	400	322040
PC	SunCoat	-	C1	32257	322257	33257	323257	35257	35457	36257	36357	CR39	UC	-	C1	322031
PC	SunCoat	-	450	32258	322258	33258	323258	35258	35458	36258	36358	CR39	UC	-	450	322045
PC	SunCoat	-	500	32259	322259	33259	323259	35259	35459	36259	36359	CR39	UC	-	500	322050
PC	SunCoat	-	511	32260	322260	33260	323260	35260	35460	36260	36360	CR39	UC	-	511	322051
PC	SunCoat	-	527	32261	322261	33261	323261	35261	35461	36261	36361	CR39	UC	-	527	322052
PC	SunCoat	-	550	32262	322262	33262	323262	35262	35462	36262	36362	CR39	UC	-	550	322055
PC	SunCoat	-	585	32263	322263	33263	323263	35263	35463	36263	36363	CR39	UC	-	585	322058
PC	SunCoat	POL 1	UV	32264	322264	33264	323264	35264	35464	36264	36364	CR39	UC	POL 1	UV	322100
PC	SunCoat	POL 1	400	32265	322265	33265	323265	35265	35465	36265	36365	CR39	UC	POL 1	400	322140
PC	SunCoat	POL 1	C1	32266	322266	33266	323266	35266	35466	36266	36366	CR39	UC	POL 1	C1	322131
PC	SunCoat	POL 1	450	32267	322267	33267	323267	35267	35467	36267	36367	CR39	UC	POL 1	450	322145
PC	SunCoat	POL 1	500	32268	322268	33268	323268	35268	35468	36268	36368	CR39	UC	POL 1	500	322150
PC	SunCoat	POL 1	511	32269	322269	33269	323269	35269	35469	36269	36369	CR39	UC	POL 1	511	322151
PC	SunCoat	POL 1	527	32270	322270	33270	323270	35270	35470	36270	36370	CR39	UC	POL 1	527	322152
PC	SunCoat	POL 1	550	32271	322271	33271	323271	35271	35471	36271	36371	CR39	UC	POL 1	550	322155
PC	SunCoat	POL 1	585	32272	322272	33272	323272	35272	35472	36272	36372	CR39	UC	POL 1	585	322158
PC	SunCoat	POL 3	UV	32273	322273	33273	323273	35273	35473	36273	36373	CR39	UC	POL 3	UV	322300
PC	SunCoat	POL 3	400	32274	322274	33274	323274	35274	35474	36274	36374	CR39	UC	POL 3	400	322340
PC	SunCoat	POL 3	C1	32275	322275	33275	323275	35275	35475	36275	36375	CR39	UC	POL 3	C1	322331
PC	SunCoat	POL 3	450	32276	322276	33276	323276	35276	35476	36276	36376	CR39	UC	POL 3	450	322345
PC	SunCoat	POL 3	500	32277	322277	33277	323277	35277	35477	36277	36377	CR39	UC	POL 3	500	322350
PC	SunCoat	POL 3	511	32278	322278	33278	323278	35278	35478	36278	36378	CR39	UC	POL 3	511	322351
PC	SunCoat	POL 3	527	32279	322279	33279	323279	35279	35479	36279	36379	CR39	UC	POL 3	527	322352
PC	SunCoat	POL 3	550	32280	322280	33280	323280	35280	35480	36280	36380	CR39	UC	POL 3	550	322355
PC	SunCoat	POL 3	585	32281	322281	33281	323281	35281	35481	36281	36381	CR39	UC	POL 3	585	322358

Of course, it's possible to get the frames with other lenses (i.e. RX lenses), see our catalogue Optics, Special optics and frames. Items with blue background are stock items and will normally be delivered within one day.

# CREATIVE SOLUTIONS



The possibilities with ML Filter are endless. ML Filter could help people see better in daylight and in night time. It can make seeing more comfortable both indoors and outdoors. It can help you sleep better or help you avoid getting tired. It can make you experience the day sunnier or cloudier. And a lot more.

In this chapter we try to inspire you to see all possibilities with ML Filter.

## ML FILTER FOR AN ACTIVE LIFESTYLE

Whether your favourite outdoor activity is extreme skiing, beach volleyball or fly fishing, the ML Filter Sunglasses will enhance your experience through better comfort and contrast. At the same time, they will protect you far beyond what ordinary sunglasses would do.

With ML Filter Sunglasses it's possible to spend many hours in very bright sunlight, without ever squinting or suffering from headaches.

### Sailing/Kayaking

Due to water's reflection, all kinds of watersports mean exposure to extreme levels of brightness – even on cloudy days. For a sunny day at sea, a lens with dark polarization (Pol 3) combined with ML Filter 500 or 511 is recommended. For less extreme exposure to light, ML Filter C1 combined with a lighter polarization (Pol 1) works fine.



### Winter

For all winter sports it's especially important to protect your eyes – since the brightness on a sunny day with fresh snow can be 10 to 15 times more powerful than the level of brightness your eyes can handle. The 450 lens combined with a Pol 3 filter is a suitable combination which provides extensive protection and enhances contrast – very useful when skiing in flat light.

### Fishing

Not only does the filter lens protect the eyes – whether from reflecting sunlight or flying hooks, it can also enhance the visual experience. Many fishing enthusiasts who use filter 527 or 511 combined with Pol 1, enjoy being able to see fish beneath the surface that their fellow anglers next to them can't.

### Golf

A round of golf can easily mean several hours of exposure to sunlight. Besides protecting against UV and blue light, the filter lens gives better contrast vision, which is crucial for measuring distance and reading irregularities on the ground. The bright orange Filter 500 combined with a Pol 1 provides very good contrast. If you're looking for a more natural colour perception, you can choose Filter C1.



### Cycling

Besides providing a solid eye protection the filter lens enhances contrast vision, which allows the cyclist to make quicker decisions. The high level of comfort means fewer problems with squinting and facial tension. For cycling in variable light conditions, both sunlight and shadow, we suggest Filter 500 combined with Pol 1.

## ML FILTER IMPROVES EVERYDAY LIFE AND WORK

### Computers, iPhones, iPads and TV

The intense blue LED light from computer screens is a relatively new source of light that the eyes are exposed to and causes them to age. Headaches, muscle tension and sleep problems are common side effects after several hours in front of a computer screen. We are also exposed to the harmful blue light when we use smartphones, tablets, computer games and TV. With ML Filter Glasses the blue light is substantially reduced. Suitable filter colour is LLR filter.

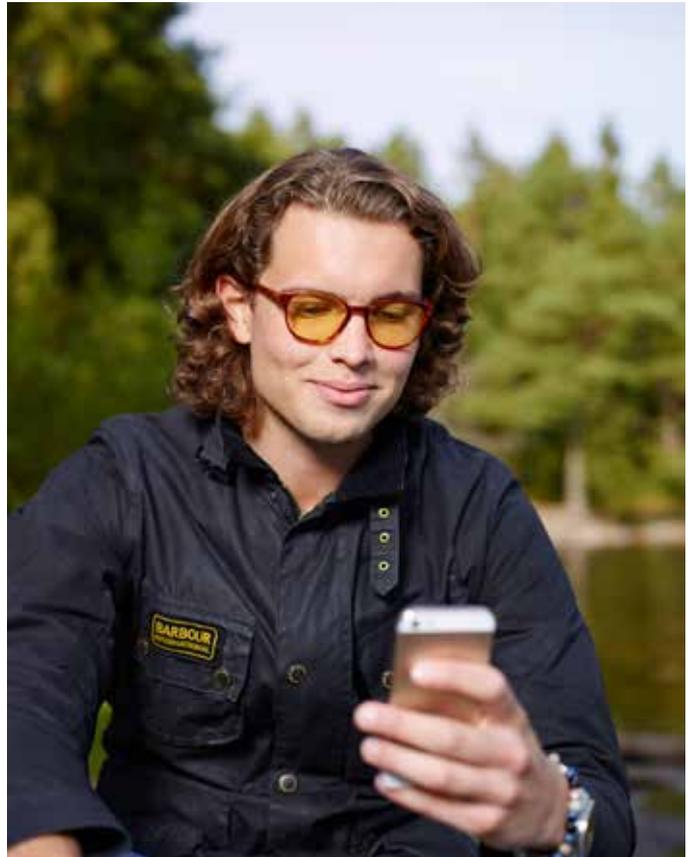
### Driving in daylight

When we drive in sunlight the eyes are exposed to bright light and disturbing glare from wet asphalt and other flat surfaces. When driving in daylight polarization in combination with an ML Filter should be used. A good combination is ML Filter C1, alternatively ML Filter 450, and Pol 1.

### Driving in the dark

If using filter lenses, problems with glare from headlights of oncoming cars can be reduced.

We have developed a special type of filter glasses with unique tint for this problem, called ML Night Cover.



## ML FILTER IMPROVES EVERYDAY LIFE AND WORK

### Working indoors

Many working environments are very bright, with powerful strip lights and LED lights. With a light filter: LLR, 400 or C1, it's possible to relieve the eyes from the tiresome and harmful exposure of blue light.

### Sun protection

It is obviously important to protect the eyes from intensive sunlight when skiing, sunbathing or spending time at the sea. Less obvious is to protect the eyes from sunlight in daily life or when working outdoors. Since people spend more time "in daily life" than in the slope or the beach, it is at least equally important to have correct protection during these activities.

A good choice for these occasions is the ML Filter C1 or 500 combined with Pol 1. If a lot of time is spent in bright light environments, then darker polarization, Pol 3 should be selected. If the contrast vision needs to be improved even more, ML Filter 450 should be used.



## AMD Comfort

People with AMD (Age related Macula Degeneration) very often have difficulties in getting everyday optics that really help them see significantly better. Normally they are offered standard optics which might help a bit, but an eye with AMD needs more than just the power correction. There are more that could be added. AMD Comfort is a special lens that combines a filter tint with a small magnification. This combination can make a huge different in many people's lives.



	Material	Lins	Layer	Cover 2		Biocover Hazelnut			Biocover Black			Biocover Dark Bronze		
				Hazelnut	Grey	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
AMD	CR39	AMD-I	-	708016	708017	708033	708034	708035	708001	708002	708003	708013	708014	708015
	CR39	AMD-II	-	708021	708022	708036	708037	708038	708004	708005	708006	708018	708019	708020
	CR39	AMD-I	Pol1	708026	708027	708039	708040	708041	708007	708008	708009	708023	708024	708025
	CR39	AMD-II	Pol1	708031	708032	708042	708043	708044	708010	708011	708012	708028	708029	708030

*In the table, all standard products with plano power are listed. AMD Comfort can also be ordered as prescription lenses.*

## ML FILTER FOR NIGHT DRIVING

Many people experience problems with glare while driving at night. One reason for this problem is the bluish light commonly used in new modern car headlights, typically LED-lights. Another problem that some people experience is reduced visual acuity because of night myopia.

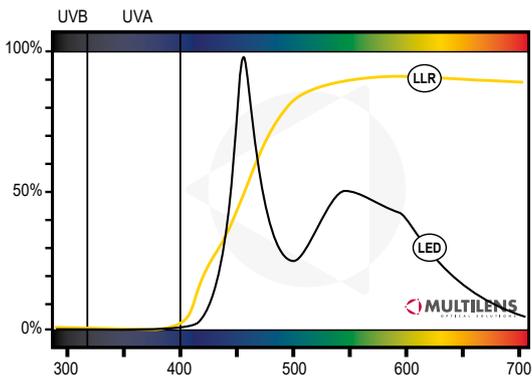
To help these people we have created a solution that addresses these issues. Its main characteristics are:

- It reduces glare created by headlights of oncoming cars. The glare reduction is created by a special filter tint designed to reduce the blue wavelength commonly emitted by LED lights.
- For those that have night myopia, there are versions that includes powers that compensates for this problem. ML Night Cover comes in versions with powers of plano, -0.25 and -0.50
- They include antireflex coating to minimise disturbing reflexes and ghost images.
- ML Night Cover is normally used in a HangOn frame. This makes it possible for the user to keep their normal glasses and only hang on the ML Night Cover during night driving.
- It's also available in our HangOn NP frame, Sun Guard frame, and our flip-ups.

 **MLNIGHT** Cover



# ML FILTER FOR NIGHT DRIVING



The filter reduces the glaring peak in the wavelength spectrum of LED lights, whilst it is designed to reduce the total amount of light as little as possible. We call the filter ML Filter LLR (LLR = LED Light Reduction). The filter is obviously standard in all our ML Night Covers, but is also possible to tint on our lens program in the same way as our other ML Filters.

Due to technical constraints for high intensity LED-headlights, the typical wavelength curve for these lights looks as above. Our LLR-filter cuts off the peak around 450 nm, which results in less glare and better comfort.

Material	Lens	Power	HangOn	
			HangOn	HangOn NP
CR39	NC-I	Plano	329070	329073
CR39	NC-II	-0.25	329071	329074
CR39	NC-III	-0.50	329072	329081

Material	Lens	Power	Sun Guard 1		Sun Guard 2		Flip-up w/o rim		Flip-up with rim	
			Black	Hazelnut	Black	Hazelnut	Medium	Large	Medium	Large
CR39	NC-I	Plano	329035	329038	329041	329044	329047	329050	329053	329056
CR39	NC-II	-0.25	329036	329039	329042	329045	329048	329051	329054	329057
CR39	NC-III	-0.50	329037	329040	329043	329046	329049	329052	329055	329058

## ML BILUX - FOR THE EXTREMELY LIGHT SENSITIVE

For people with high light sensitivity, really dark glasses is not always an ideal solution. Even if they provide comfort, they are sometimes too dark to function in a certain situation! Strong sunlight requires dark glasses, which might be too dark to be able to see, for example, the products in a shopping window. The same applies for filters: For a user, a certain filter might be needed when it is very light and another when it is normal light. Or one filter is more comfortable when looking at a far distance and another filter on short distance. To address this problem, we have invented the ML BILUX Product Family. The idea of ML BILUX products is to use different filters in different parts of the lenses in a pair of glasses. By doing so, the light conditions for certain people can be improved drastically.



### Bilux Iris

ML Bilux Iris is designed with a circular section, directly in front of the eye, that is a lighter shade than the rest of the lens. It is usual for the lens to be 97% dark, except for a 10 mm diameter zone right in front of the pupils, where it is 85% dark. The Biocover frame is standard for ML Bilux Iris, but other frames could be used as well.

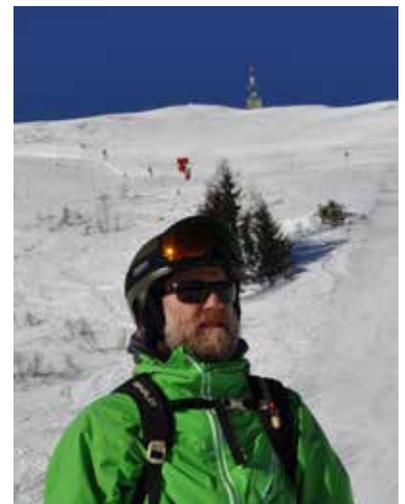


### Bilux Franklin

ML Bilux Franklin is designed so that the upper and lower parts of the lens are different shades. It is typical for the upper section of the lens to be darker (97% dark) than the lower section (85% dark). The line between the two zones is sharp and can be placed at any height.

## EXTRA DARK SUNGLASSES

Sometimes, there is a need for darker sunglasses than those available as standard products. We can use a polarized lens and tint it up to a very high absorption. You can also add a filter tint as a base to increase the comfort and contrast.

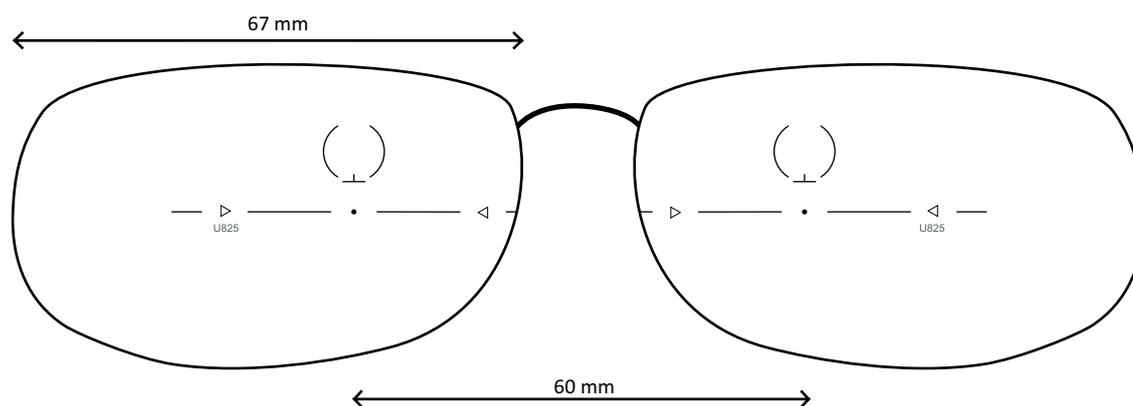


## FILTER LENSES WITH RX FOR LARGE CURVED SPORT FRAMES

When you intend to fit a modern sport frame with RX lenses you face challenges that normally are not present for normal ophthalmic spectacles.

### You need a large lens

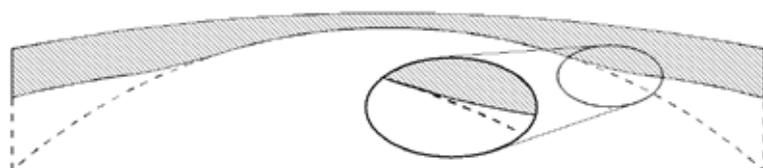
With decentration of the optical centre we can produce ML Filter lenses with diameters up to 105 mm. This is of course true for Single Vision lenses as well as our freeform progressives. What is less known is that we can also do this with our bifocal lens RS28.



*By decentration, we can lenses for large frames, even progressives. The above example would need a diameter of 90 mm when measured traditionally.*

### Curved lens normally means thick lens

A thick lens means added weight and sometimes it needs to be so thick that it can't be produced. Our solution to this is our special grinding technics Hypersoft and Myosoft. With a slow change in curvature on the backside of the lens, we can produce thinner lenses, allowing for higher powers that otherwise would be impossible. See the illustrations below.



*Edge reduction for minus lenses with a soft overlap from optical zone to carrier. The optical zone will be adjusted according to power and frame shape.*



*Edge reduction for plus lenses with a soft overlap from optical zone to carrier. The optical zone will be adjusted according to power and frame shape.*

### The optics need to be adapted to a wrapped frame

Since the sport frames very often are wrapped, the optics needs to be adapted accordingly. If no adaption is made, the wearer will have problems with wrong correction as well as strain due to induced prism effects. Our Perform lenses compensates for these issues (and others) allowing better vision.

### Not normal edging - hooks, holes & challenging shapes

Very often sport frames are not only wrapped, but also requires hooks and holes in the lens to make it stay. Furthermore, they are designed to hold plano lenses and not RX lenses. When glacing it with RX lenses, you need to adapt the edged form to curves, edges and other details that often exist in these frames. This could be a problem, but Multilens has the latest machinery to handle these challenges.

Multilens is a specialist optical company unique in the global marketplace. Our business concept involves the special grinding of unusual lenses. This means that we deliver custom made optical solutions to people with sight issues.

Our core specialities are the eye, vision and visual function. Our attitude is that no problem is too difficult to solve. Our objective is to play a vital role in eye care.

That is why we work with opticians, orthoptists and optometrists, offering the best optical solutions to people with sight problems. We will never stop listening and learning. Last but not least, we are happy to share our knowledge.

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