



Colours for comfort, contrast and protection



# RANGE:

400 - 585 nanometre

**LENS MATERIAL:** Organic

# **LENS TYPES:**

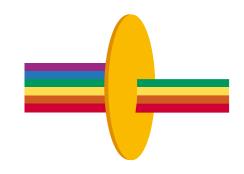
Standard, polarizing and transition

It is important for partially sighted persons that the information reaching the retina is not unnecessarily disturbed. Blue light is often perceived as discomforting and dazzling, so a filter that stops it from reaching the retina can therefore increase quality and comfort. Different filters are available for different problems. Patients should test the various options to find the one that suits them best. For people with macula degeneration, who are more or less dependent upon their peripheral vision, it is important that the light is weak enough not to dazzle them. A filter can be used to achieve this.



### **BLUE BLOCKING**

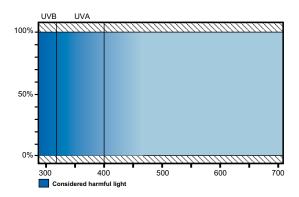
When light passes through the lens of the eye, the blue part of the spectrum scatters causing distortion of the image on the retina. The purpose of a filter lens is to block this light. Many people who have tried filter lenses experience increased comfort, sharpness and contrast. This is particularly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



## **PROTECTION**

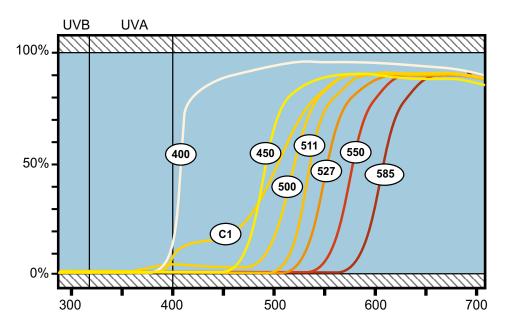
Most clinical studies today show that if UV and blue light are allowed to pass through the lens onto the retina they can damage the retina. The degree of damage depends on the energy of the light, which in turn depends on the wavelength. The shorter the wavelength, the higher the energy and the more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

As the diagram shows, it is primarily UV light that is harmful to the eye. Nowadays, however, blue light up to 460 - 470 nanometres is also considered harmful.



### ) STANDARD FILTERS

- 400 Will block all light below 400 nm and a small part up to 420 nm. Colour: very light orange
- 450 Will block all light below 450 nm. Colour: lemon yellow
- 500 Will block 95% of all light below 500 nm. Colour: yellow
- C1 Will block 80% of all light below 450 nm. Colour: yellow
- 511 Will block all light below 511 nm. Colour: yellow orange
- 527 Will block all light below 527 nm. Colour: orange red
- 550 Will block all light below 550 nm. Colour: red
- 585 Will block all light below 585 nm. Colour: dark red



Available on all type of standard lenses, Single Vision, Bifo, Trifo, Multi focal, Lenticular etc.



### POLARIZING LENSES

For outdoor use a good solution is to combine a filter lens with a polarizing layer.

Two different layers are available:

#### Pol 1 (light) 65 percent Grey

Pol 1 is available as Plano, Single Vision and D28.

#### Pol 3 (dark) 85 percent Grey

Pol 3 is available as Plano, Single Vision and Multi focal.

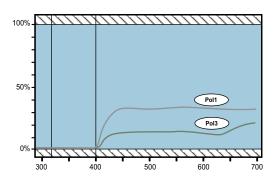
The curves for the two different layers in combination with filters are presented in the diagram.

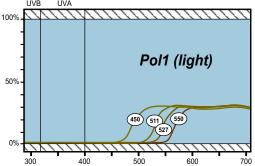
# > TRANSITION LENSES

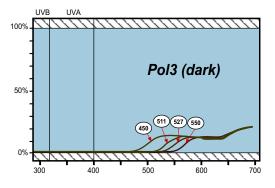
The filters are also available with a Transition V layer. It changes from a light brown shade (10%) to dark (about 75-80%) within one minute. The time depends on the temperature. The filter effect remains the same. ML Dura is standard for transition lenses. ML Prima is not possible if extra colour is included.

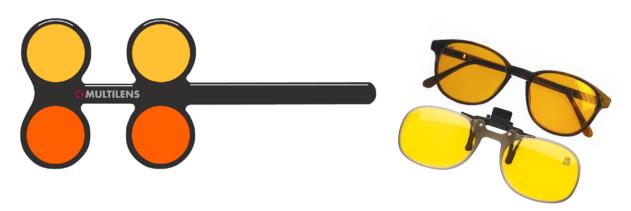
## **DEVICES AND TEST SETS**

Transition lenses are available in a number of variants, for example, plano lenses, flip ups, spectacles and different test sets.









## ) PART OF THE OPTICAL DEVICE

An optical device and a filter often go hand in hand. The purpose of the optical device is to give the patient the requisite magnification and a sharp, large visual field. The filter then filters the light to provide an image that is as comfortable and as rich in contrast as possible. Filters can be combined with the whole range of our optical devices.

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Multilens is a specialist optical company unique in the global marketplace. Our business concept involves the special grinding of unusual glass. 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 and we are pleased to share our knowledge.

