

New Made in Japan products

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TOKAI

The Launch of the new Made in Japan Products

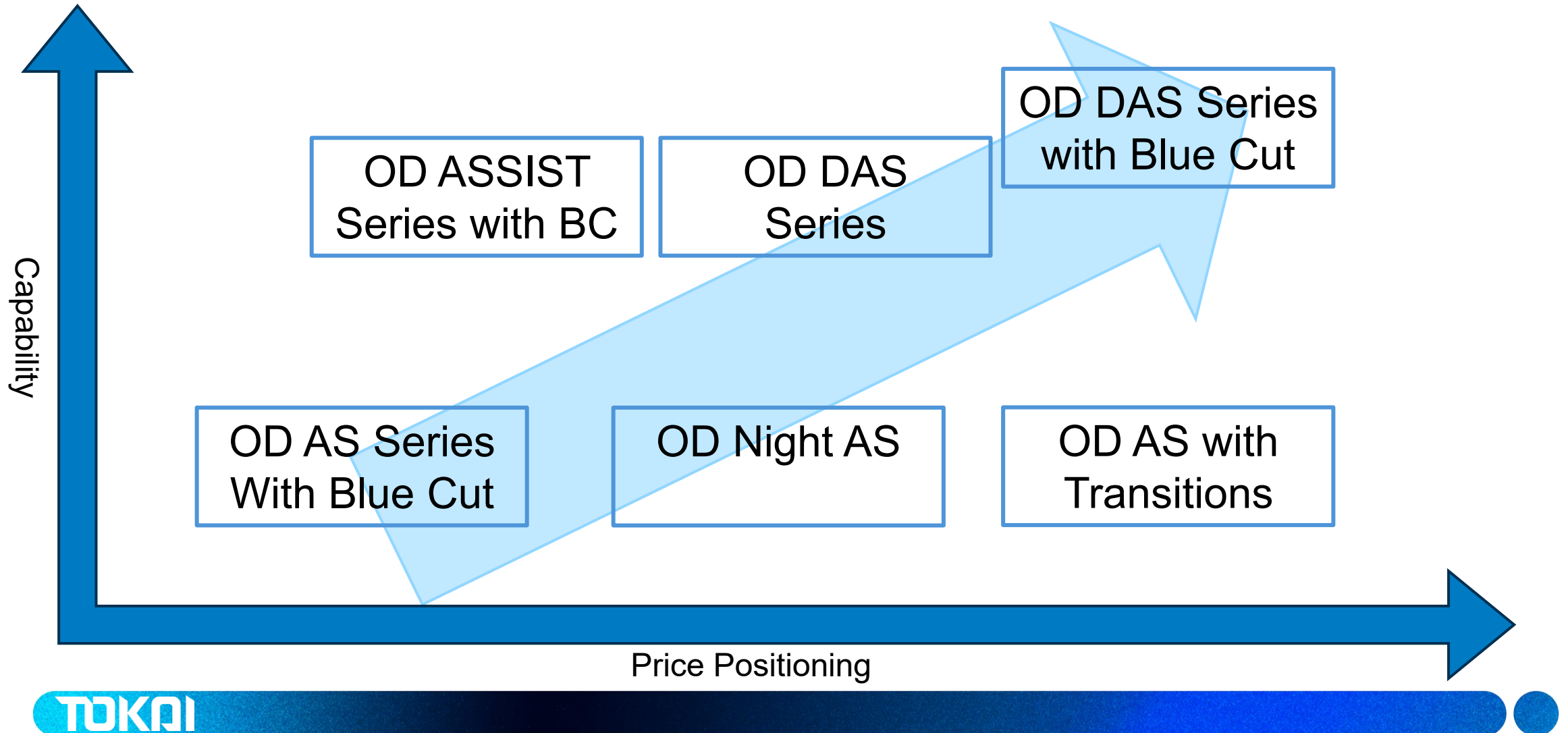
Specially prepared original Made in JAPAN products for OWNDAYS SINGAPORE PTE. LTD.



A new series of Made in Japan products are now available made just for OWNDAYS. Designs include state of the art double surface designs and designing technologies. Reaching wide ranges of requirements with the multiple categories of products.

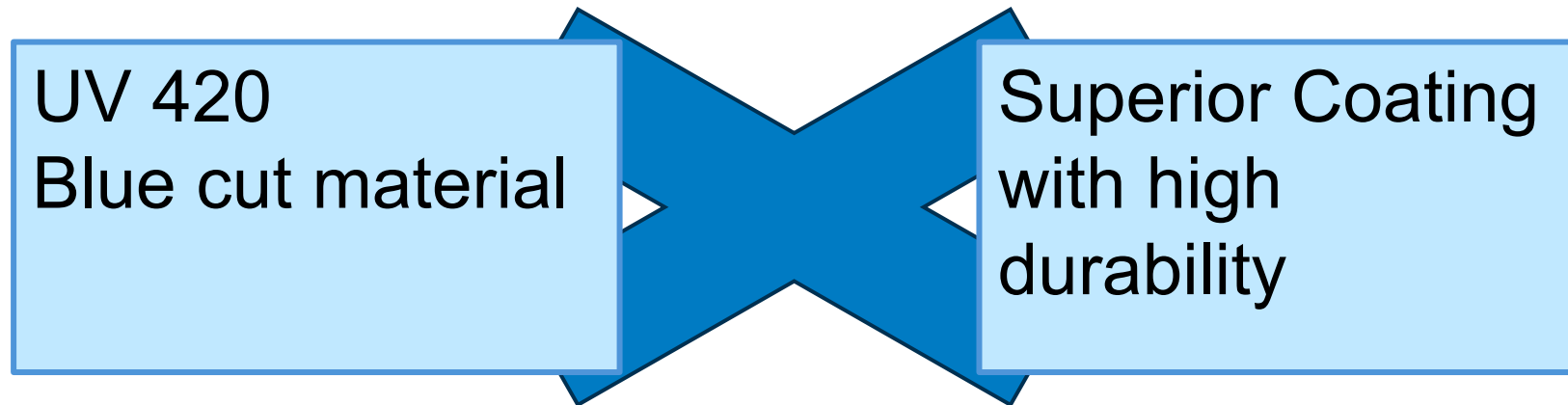
Overview of the product portfolio (Single Vision)

6 new series of products launched for a further reach



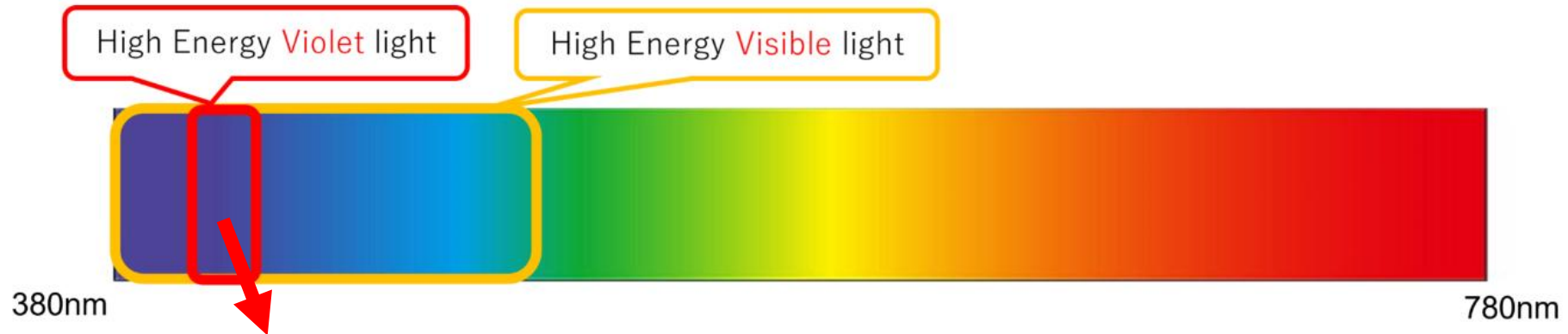
OD AS Series with Blue Cut

The combination of special material and coating provide superior vision support



The combination of UV 420 blue cut material and superior coating with high durability provides a first-choice product to recommend to customers wanting premium lenses

Harmful light for the eyes other than UV



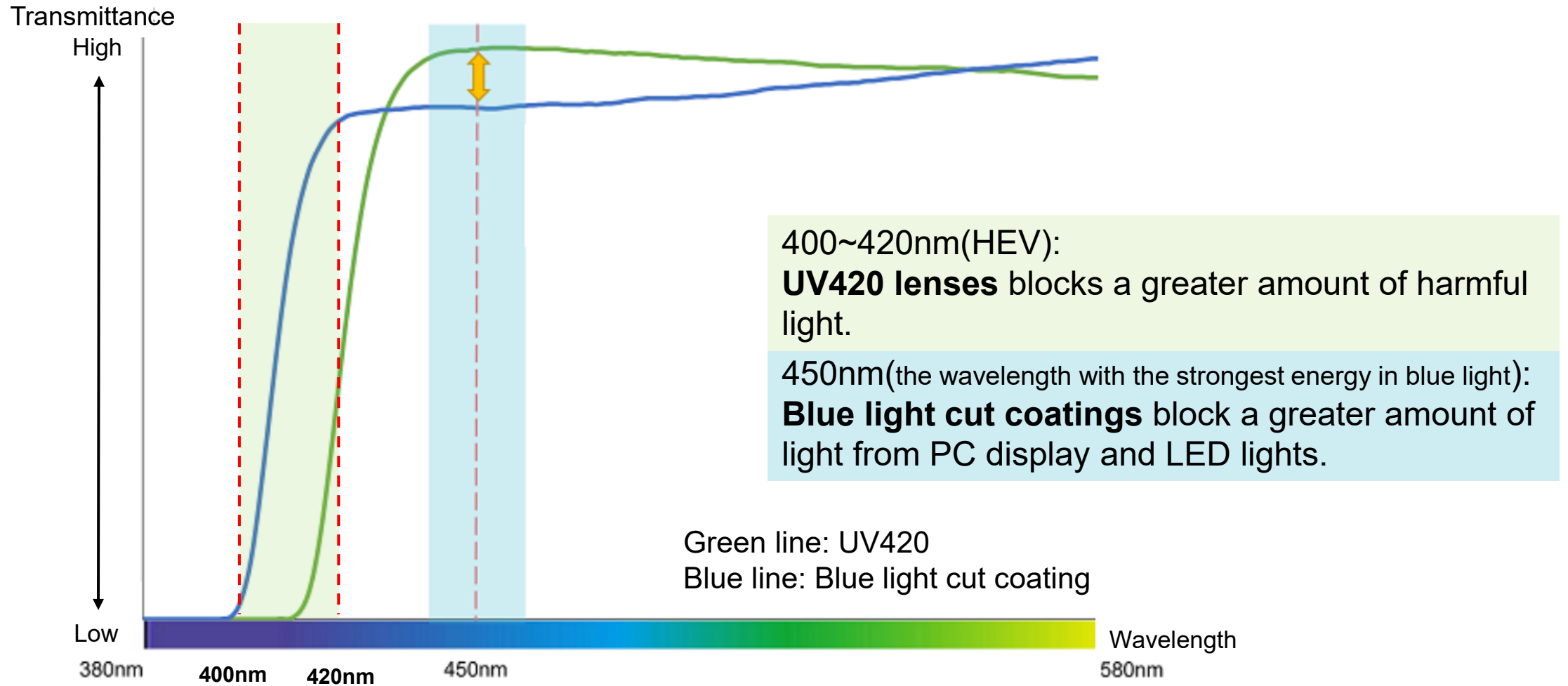
Out of the blue light in the visible color spectrum lights in the 400–420 nm is known to cause damage to the eyes resulting in increasing of risk to develop eye disorders.



Blocking only UV light is not enough.



What does each type of blue cut lens do?



DSC, the superior coating only for OD AS

Special coating only for OD AS makes a perfect first pair lens for customers

STRONG

The durability of the coating is higher than never before.

CLEAN

Super easy to clean with superior super hydrophobic capabilities.

CLEAR

Anti static capabilities makes the clear vision field last longer.

CRACK

The increased density of coating improves durability against cracks.

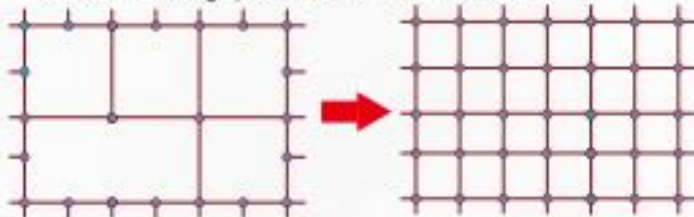
How does DSC work?

The newly designed hard coating and multi coating layers make the lenses strong and durable

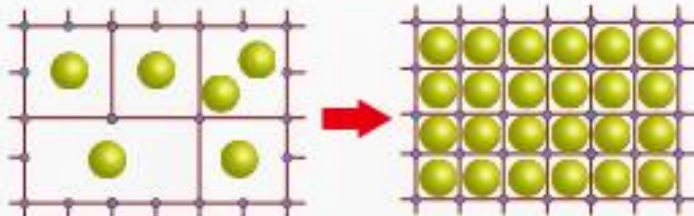
① Newly designed hard coating

The ultimate resistance to scratches is realized by the new hard coat designed by densifying the molecules and hybridizing the molecules and corpuscle.

Hardened by hybridizing the molecules and corpuscle to reduce the gaps between the molecules.

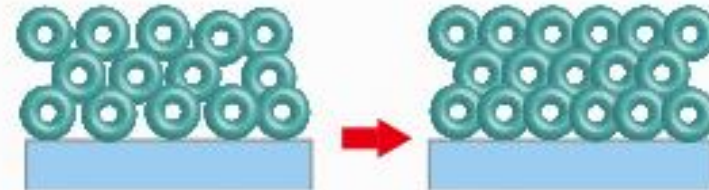


Hardened by increasing the density of the molecules.



② Newly designed multi coating

Strengthened by increasing the density of the layers and hardening the coating.



Less effect of water, sweat because there is less gap between the layers.

③ Special fluorine layer

The lens becomes strong to scratches by reducing the friction of the surface layer with a special fluorine layer on the top surface.

How good is the DSC?

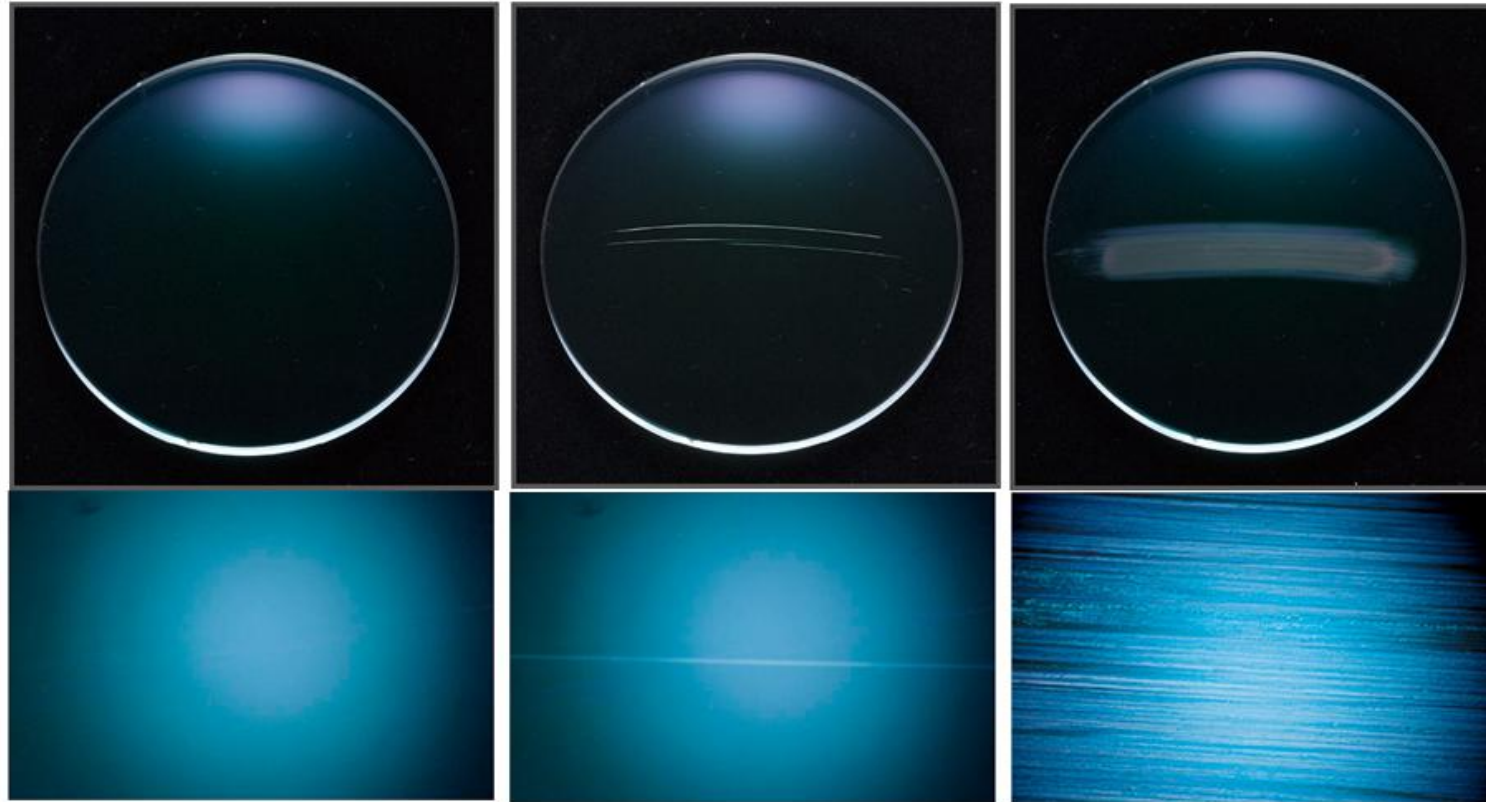
Scratch tests proves that the strength of the DSC is stronger then previous coatings

Scratch resistance test: 150 round trips of scratching with 2kg weight on steel wool

DSC

Other Scratch resistant coatings

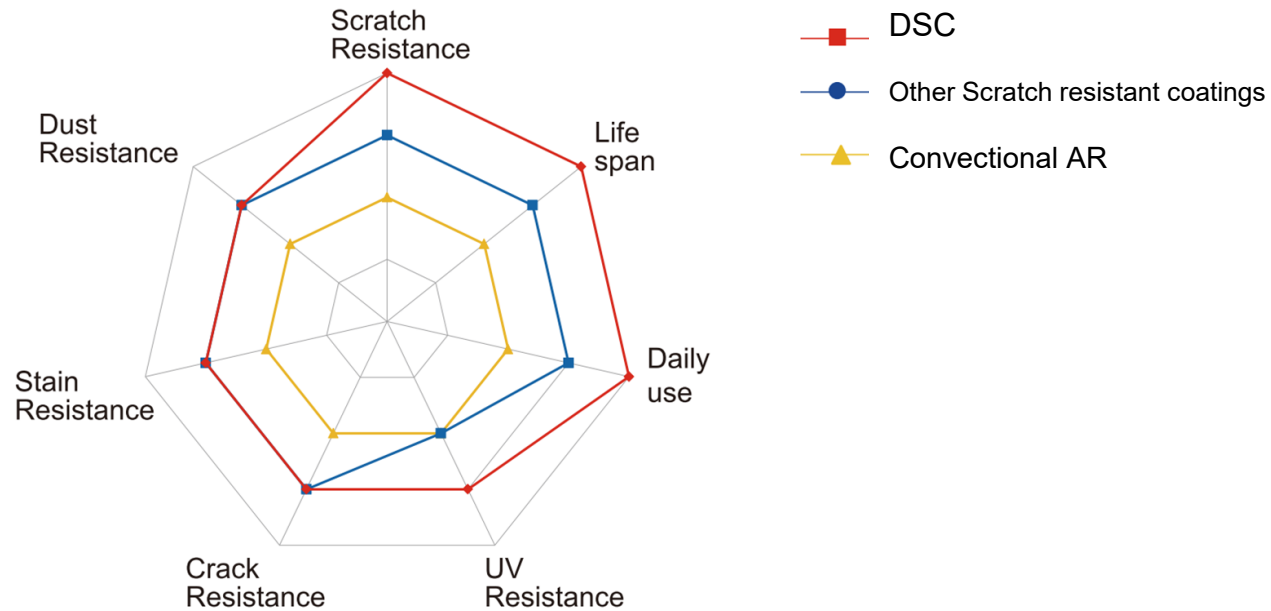
Conventional AR coating



1.60 Index Suppliers internal comparison

Tested and defined

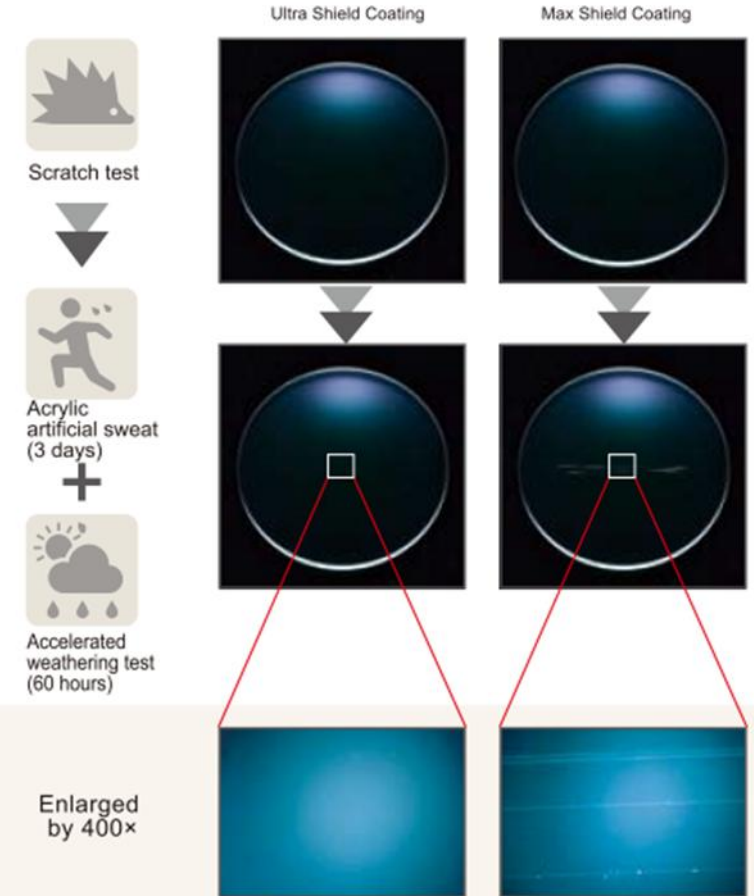
More than 2 times stronger
compared with previous scratch
resistant coatings



(The graph is a image of the capability)

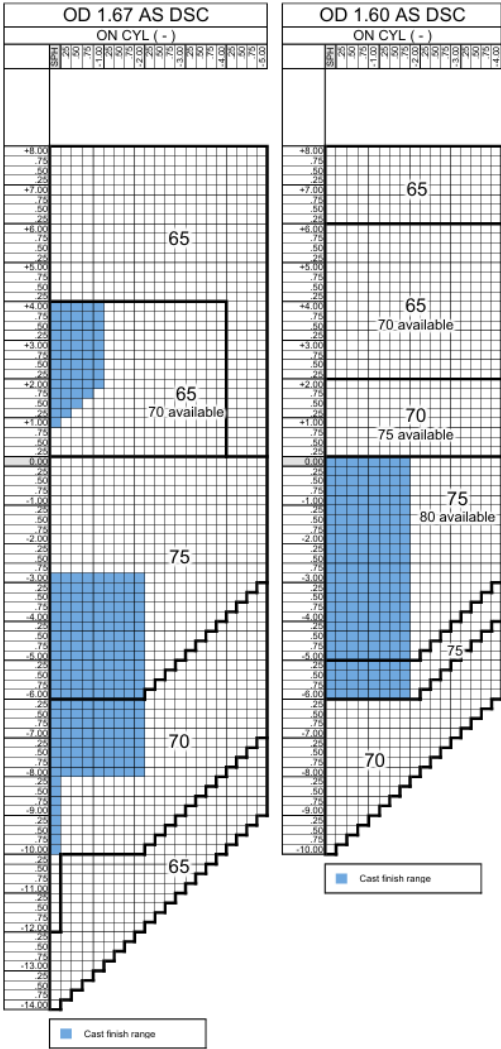
Strong and durable

Tested and proven that there is less microscopic scratches that can become visible when used with the scratch manifestation test.



Scratch Manifestation Test: 150 round trips of scratching with a 2kg weight on steel wool + Dipped in Acrylic Artificial Sweat (3days) + Accelerated weathering test

Available range and specification

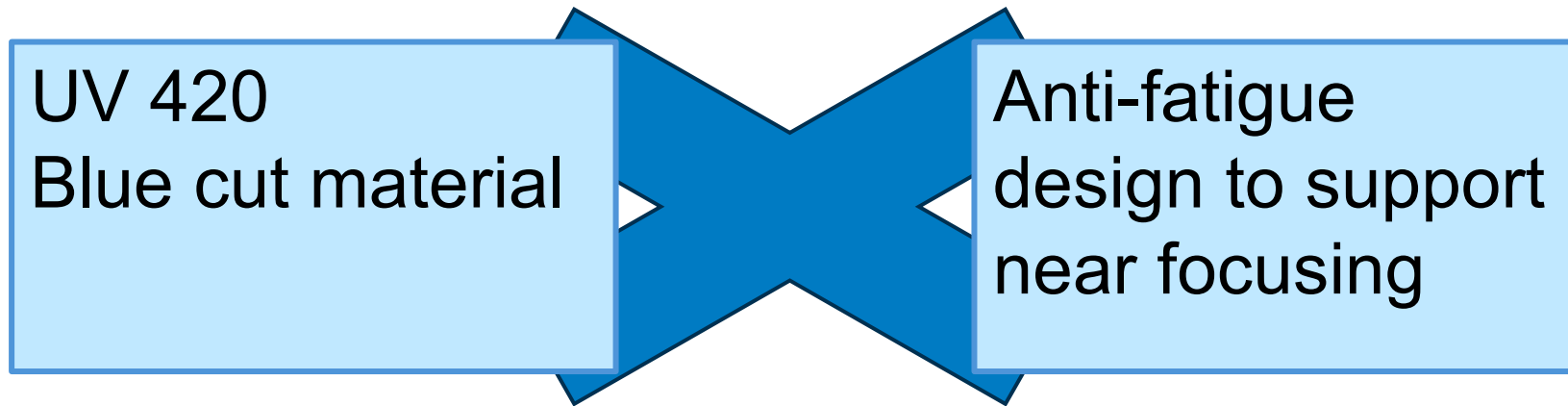


Specifications		Specifiable range / Availability
Prescription	Size reduction	only (+), 1mm step
	Prism	Tested and defined
	Decentration	Not available
	Base curve selection	Not available
Frame data	Size (Frame shape required)	Available for plus & mixed power lenses
	Remote edging	Available
	Fine edge processing Only 1.76AS available	Only available more than -3.00D.

Product	Lead time
OD 1.76AS DSC	5 days
OD 1.67AS DSC	4 days
OD 1.60AS DSC	4 days

OD ASSIST with Blue Cut

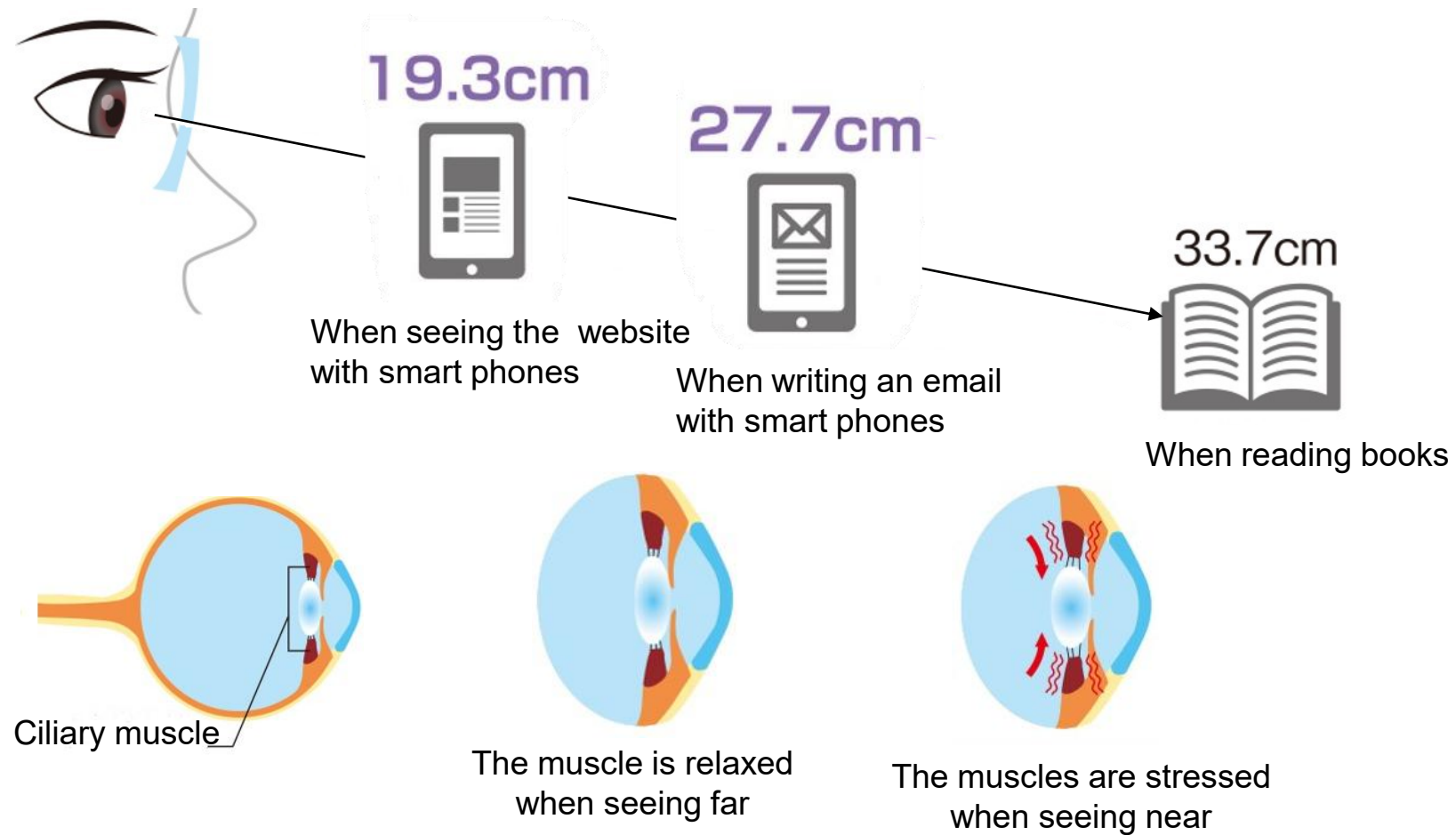
The perfect lens for the working generation



Perfect for the working environment with the combination of UV420 and Anti-fatigue design. Helps users from harmful blue light and helps reduce stress from using the ciliary muscle for a long time. Recommend to young elite Singaporean office workers.

The ASSIST design

Focusing on near object uses the ciliary muscles. Long time use can lead to eye strain.



The ASSIST design

The ASSIST design has an assisting area on the lens to help support the focusing and to reduce the Usage of the ciliary muscle.

Looking at near distance

For a long time causes eye strains.

When we see near, Ciliary muscle works to bring the eyes focus by adjusting the thickness of crystalline lens.

The eye strain occurs due to the continuous strain of ciliary muscle after seeing near for a long time.

■ The image of the assist

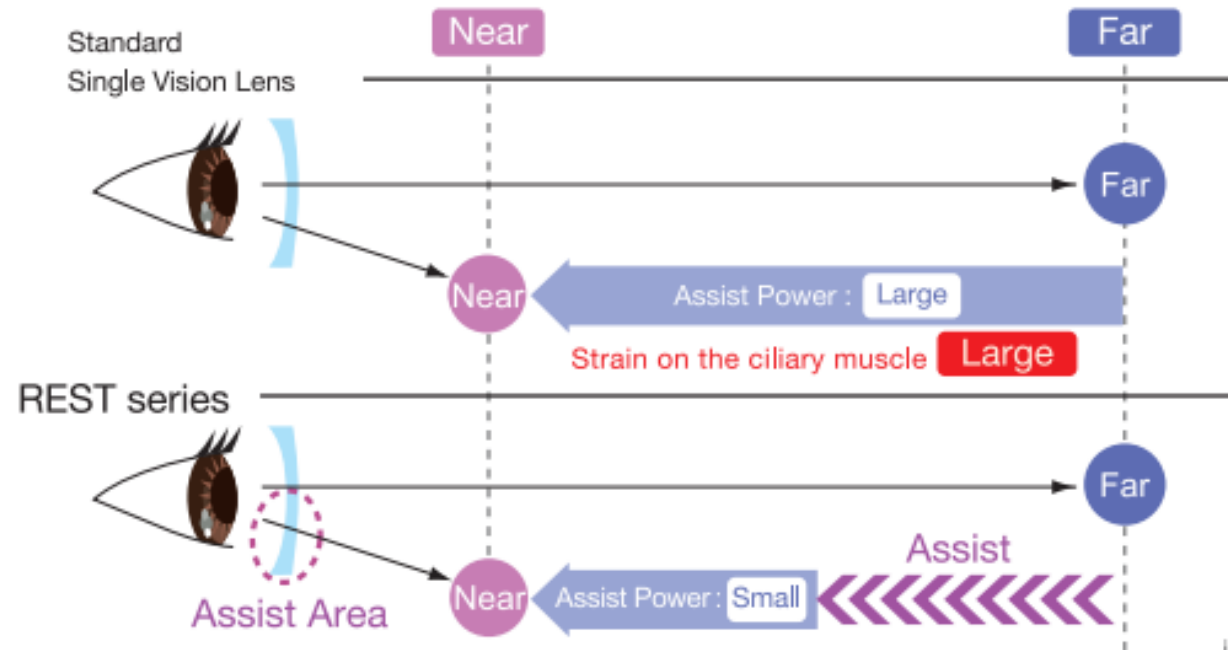
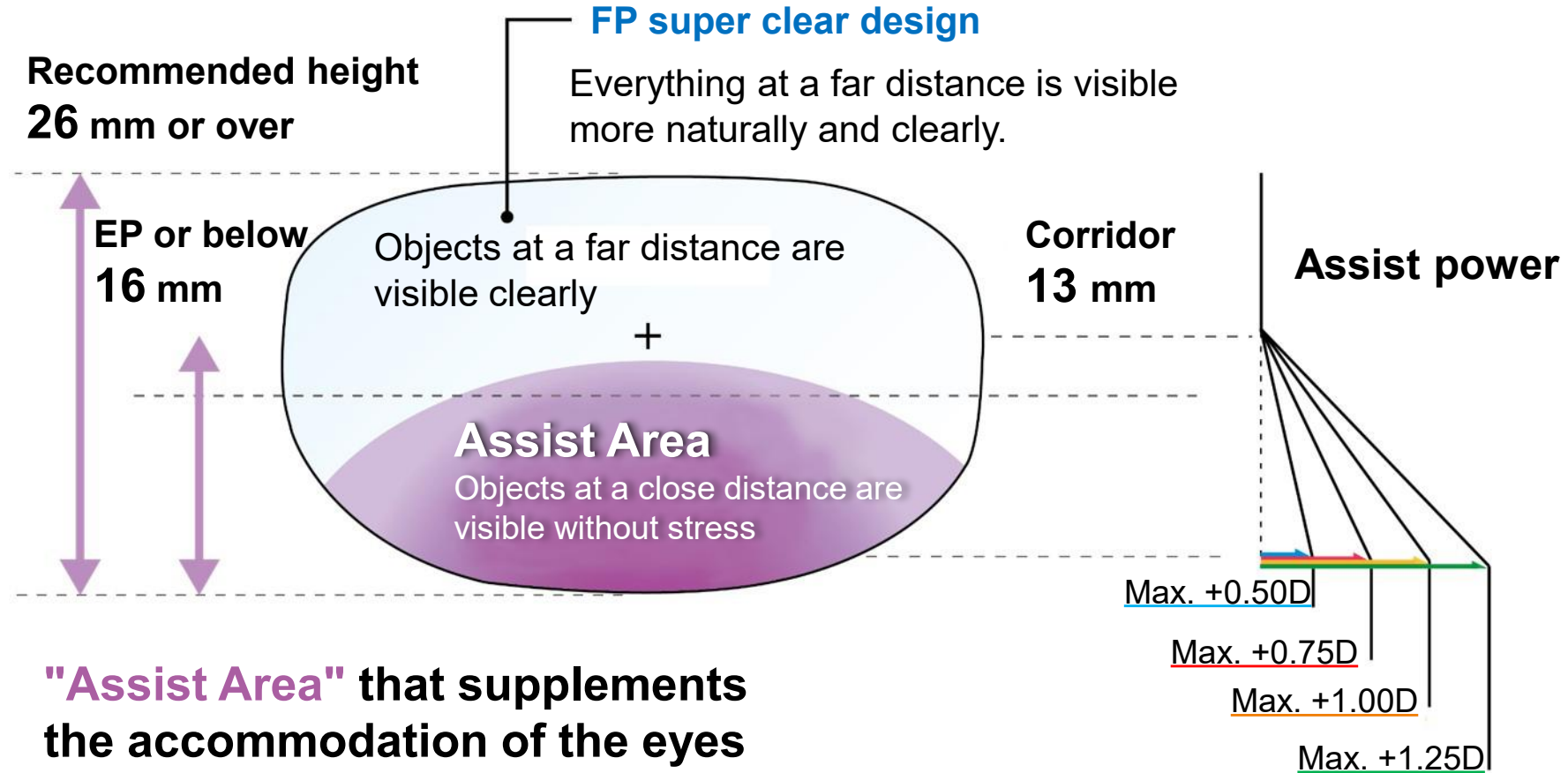


image for reference

How the ASSIST design works

On top of specially designed aspheric surface the ASSIST design has an assisting power. The power shifts like as a progressive lens to make adaptation to PAL easier.



The ASSIST design

The Assist design provides 4 different level of assisting power to reduce the amount of power used by the ciliary muscle.

Type A

Natural assist type considering a more natural field of vision to make the lens available in all scenes of daily living



Max. +0.50D



Type C

Secure assist type most favorable for those who use a personal computer, smartphone, or tablet at all times



Max. +1.00D



Type B

Assist type most favorable for those who intensively view the display of a personal computer or read documents in office work etc.



Max. +0.75D

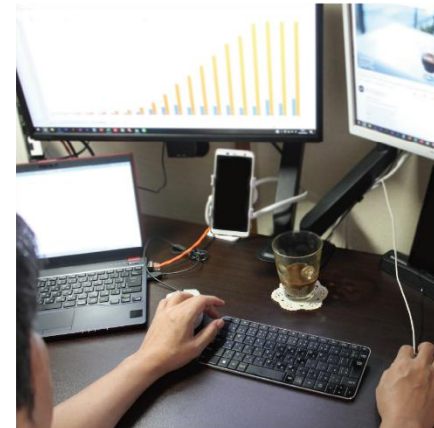


Type D

Supper assist type that supports those who constantly view screens on a multi-display for e-sports or work

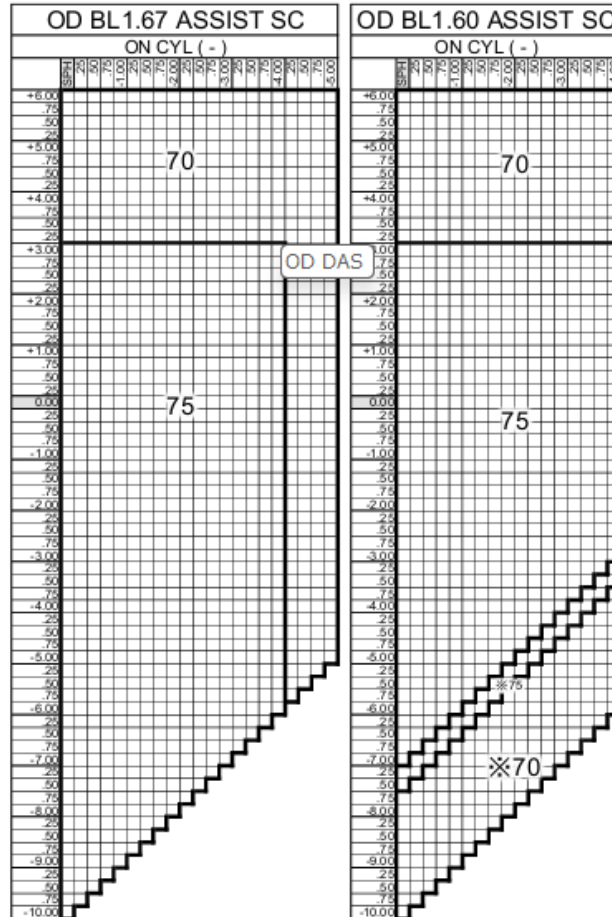


Max. +1.25D



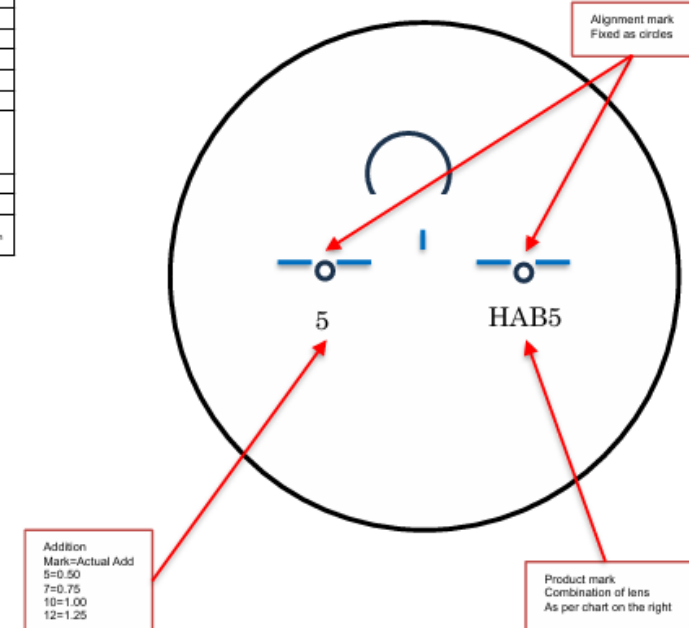
Available range and specification

※In case of with prism, the lens may be a cataract lens depending on the power



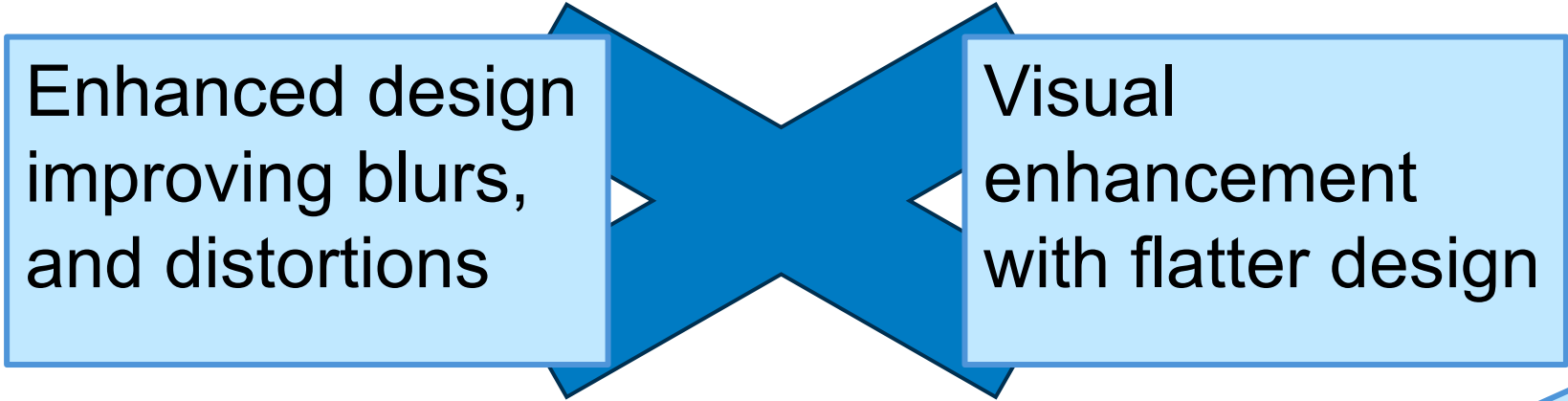
Specifications		Specifiable range / Availability
Prescription	Size reduction	by 50mm Min : only (+), 1mm step
	Prism	Up to 3 prism
	Decentration	Not available
	Base curve selection	Available
Type	Color	Available (Please refer "available color list")
	Eye assist	Type A: MAX +0.50D under fitting point Type B: MAX +0.75D under fitting point Type C: MAX +1.00D under fitting point Type D: MAX +1.25D under fitting point
	Slice (Frame shape required)	Available for plus & mixed power lenses
	Remote edging	Available
Frame data	Fine edge processing	Only available more than -3.00D. Some powers over -3.00D may not be applicable depending on the axis and addition power.

Product	Lead time	Design	Index & Material	Corridor
OD BL1.78 ASSIST SC (TypeA)	4 days	H	AB	5
OD BL1.78 ASSIST SC (TypeB)				7
OD BL1.78 ASSIST SC (TypeC)				10
OD BL1.78 ASSIST SC (TypeD)				12
OD BL1.67 ASSIST SC (TypeA)	3 days		CB	5
OD BL1.67 ASSIST SC (TypeB)				7
OD BL1.67 ASSIST SC (TypeC)				10
OD BL1.67 ASSIST SC (TypeD)				12
OD BL1.60 ASSIST SC (TypeA)	3 days		DB	5
OD BL1.60 ASSIST SC (TypeB)				7
OD BL1.60 ASSIST SC (TypeC)				10
OD BL1.60 ASSIST SC (TypeD)				12



OD DAS

Premium design to provide good view and good look



Enhanced design
improving blurs,
and distortions

The diagram features a central blue 'X' shape. On the left arm of the 'X' is a light blue rectangular box containing the text 'Enhanced design improving blurs, and distortions'. On the right arm is another light blue rectangular box containing the text 'Visual enhancement with flatter design'. To the right of these boxes, a light blue parallelogram box is tilted and contains the text 'Available with blue cut (UV420)'.

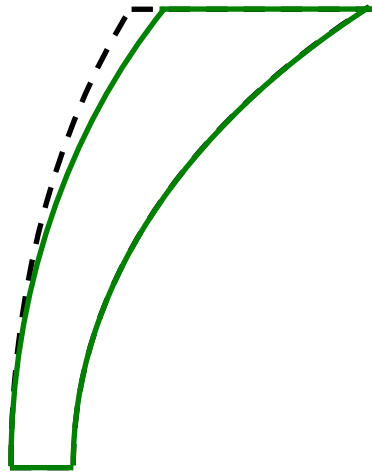
Visual
enhancement
with flatter design

Available with blue
cut (UV420)

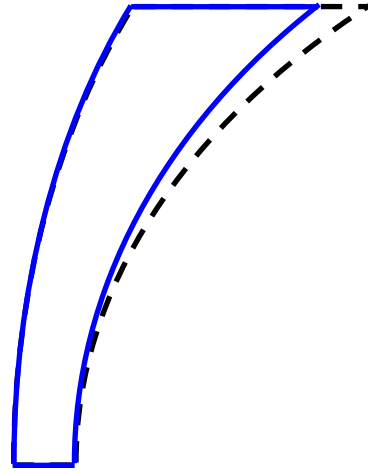
Perfect for customers wanting premium lenses. The enhanced design improves blurs and distortions. At the same time the flatter base curves used in the design provide as thinner outcome. Best balanced lenses for customers wanting a good view and good look.

The double surface design of OD DAS

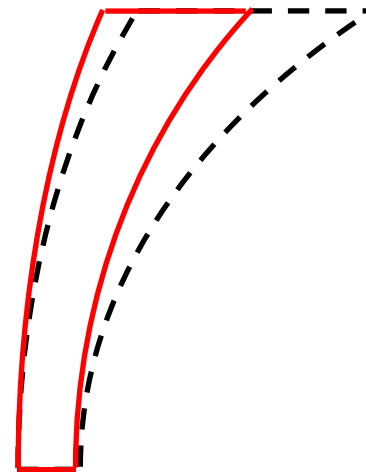
Blurs and distortions can be reduced with the double surface design of the OD DAS. A more accurate aspheric can be set to compensate power errors and distortions compared to previous aspheric designs.



Ordinary Aspheric
Lens



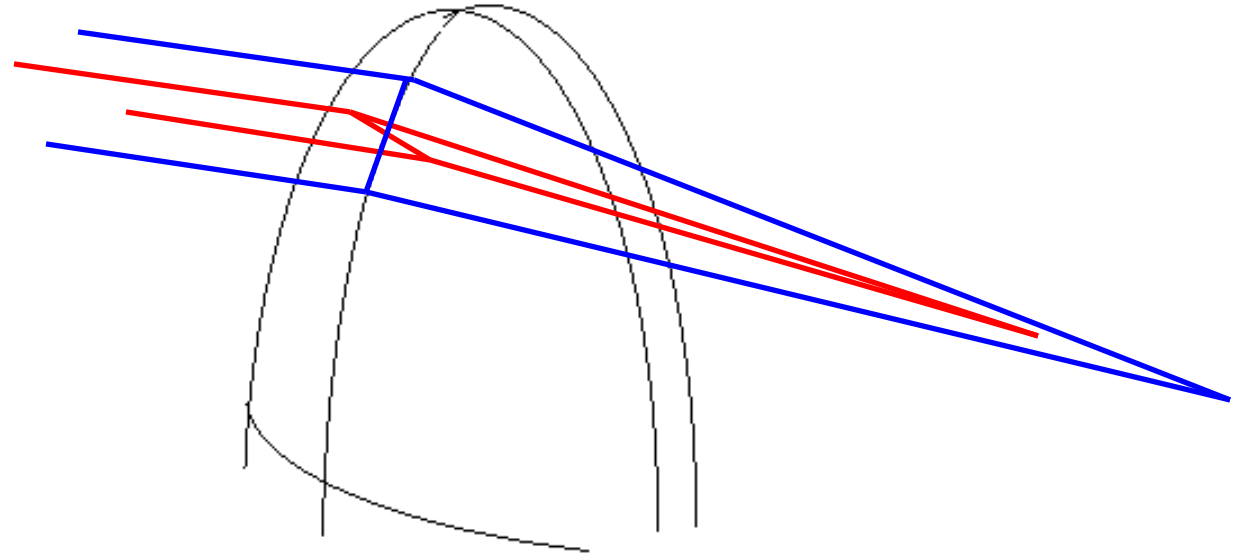
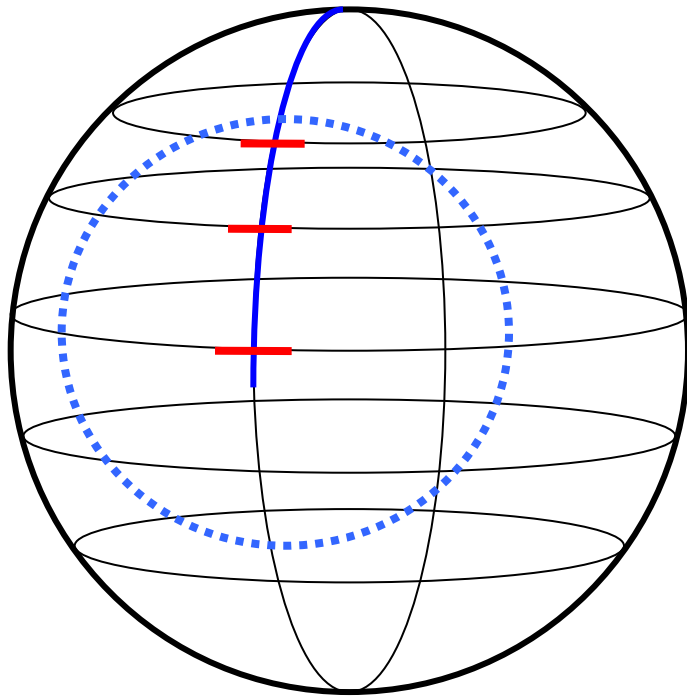
Freeform Aspheric
Lens



Double surface Aspheric
Lens

What does aspheric designs do?

Due to the sagittal radius being bigger than the meridional radius power errors and distortions occur. As seen below the difference becomes stronger as it goes closer to the peripheral area of the lens.

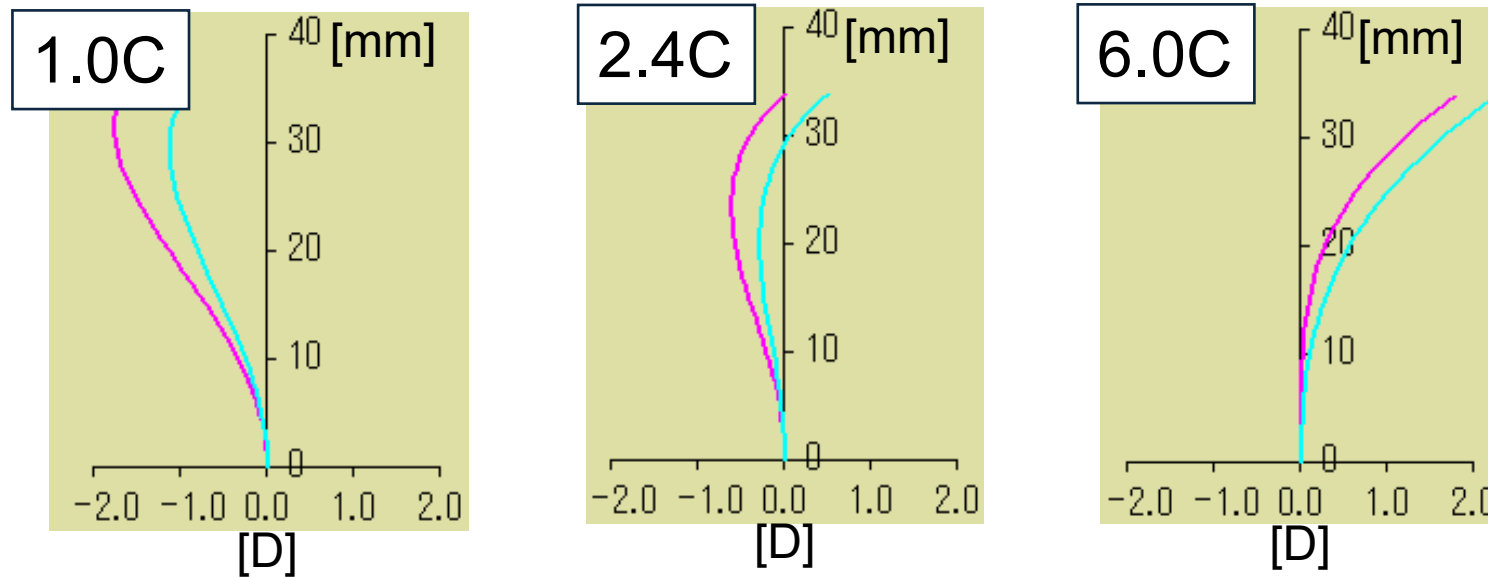


Red: Sagittal

Blue: Meridional

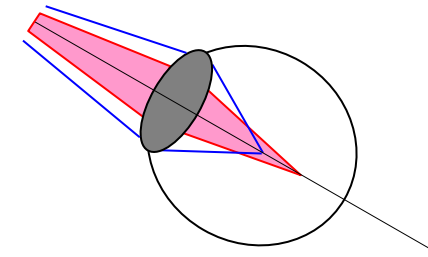
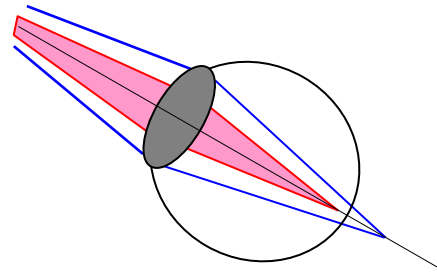
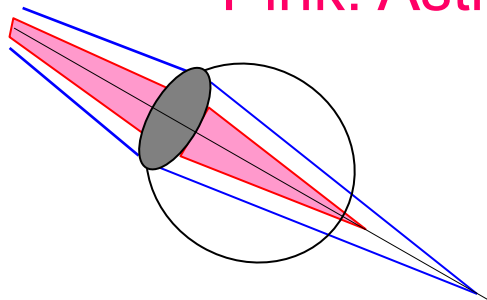
What do aspheric designs do?

The graphs show the distance from the center of the lens and the amount of power error and astigmatism. Aspheric designs are used to compensate this error and astigmatism.



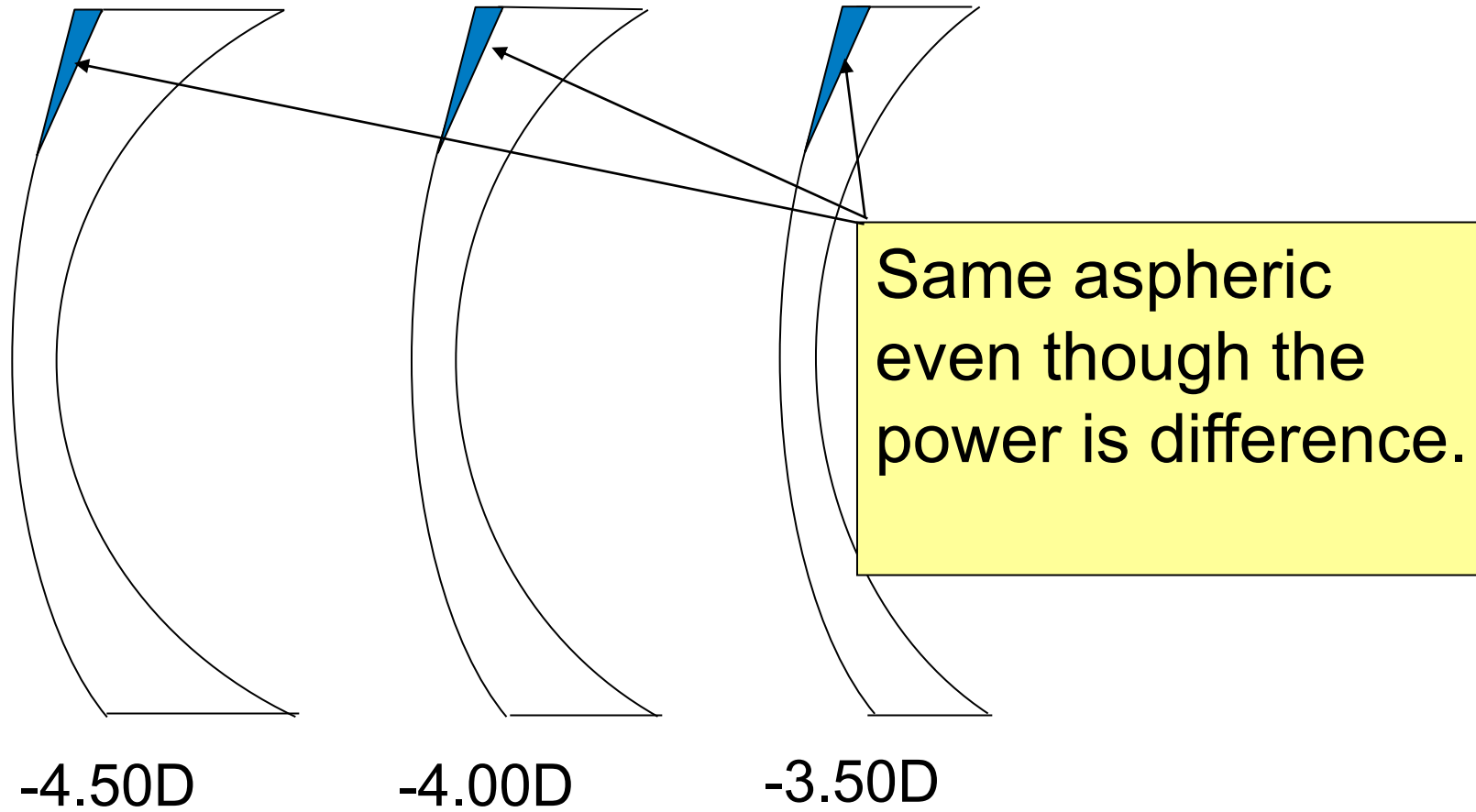
Pink: Astigmatism

Blue: Power error



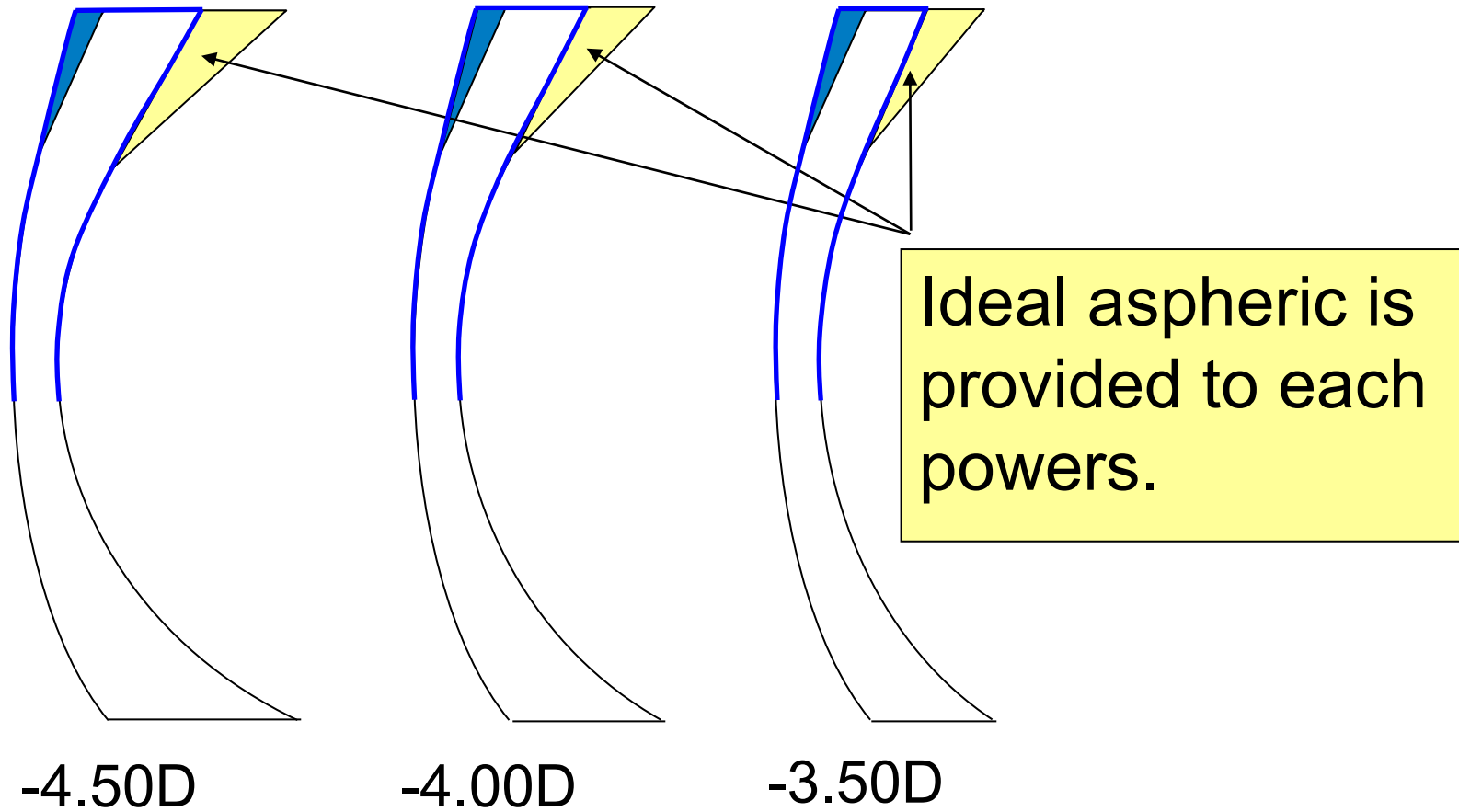
Ordinary aspheric lenses

The amount of aspheric applied is fixed on an ordinary aspheric lens. (the aspheric design is on the front surface)



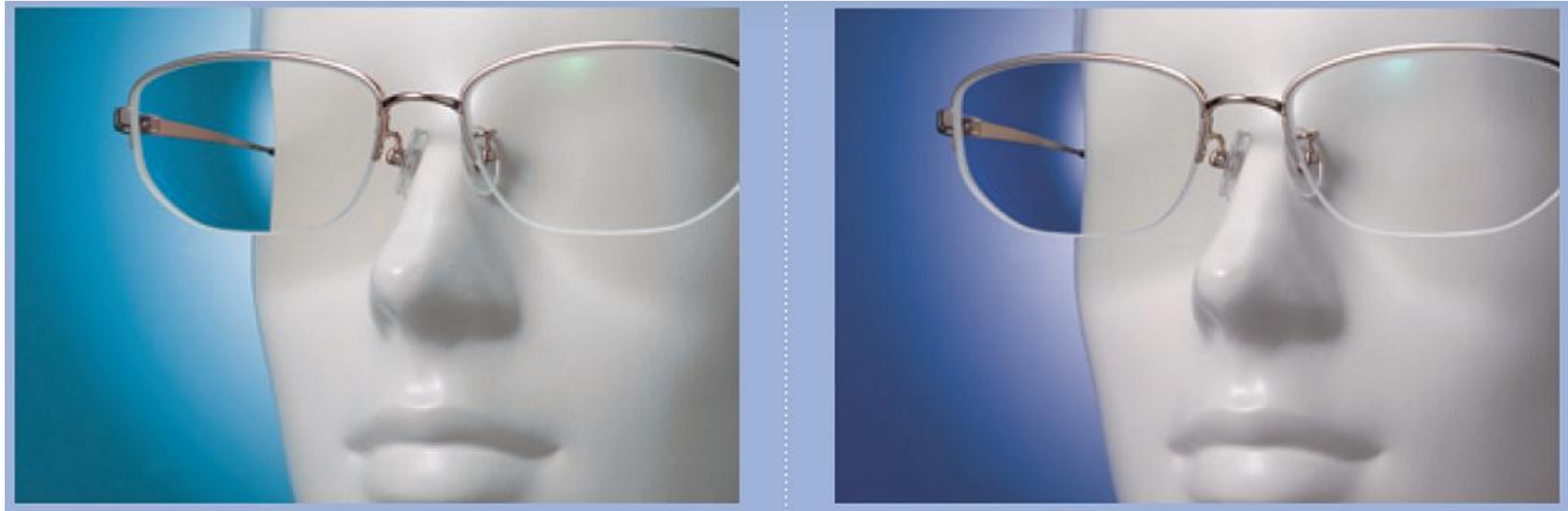
Double surface aspheric lenses

A more accurate aspheric can be provided as well as a more well balanced aspheric.



Flatter and thinner lens

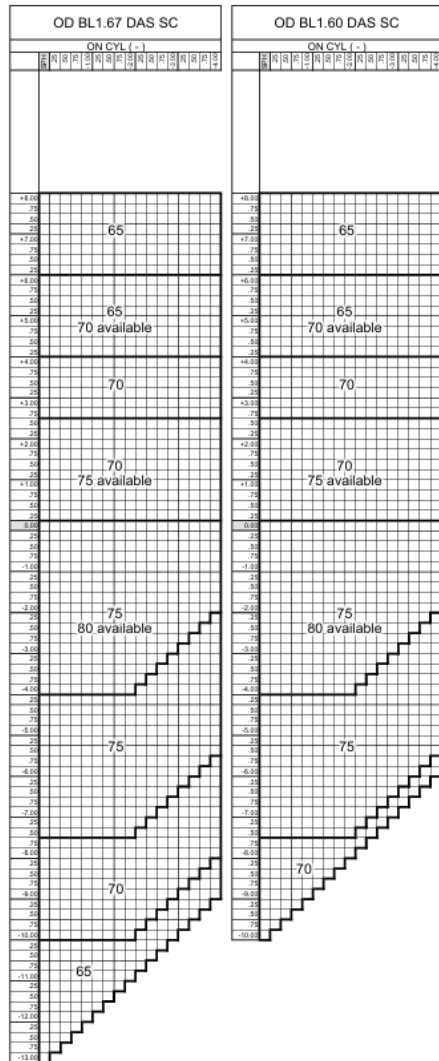
Availing the lens to use a flatter base curve, the distortions when seen is also reduced.



Ordinary Aspheric
Lens

DAS

Available range and specification

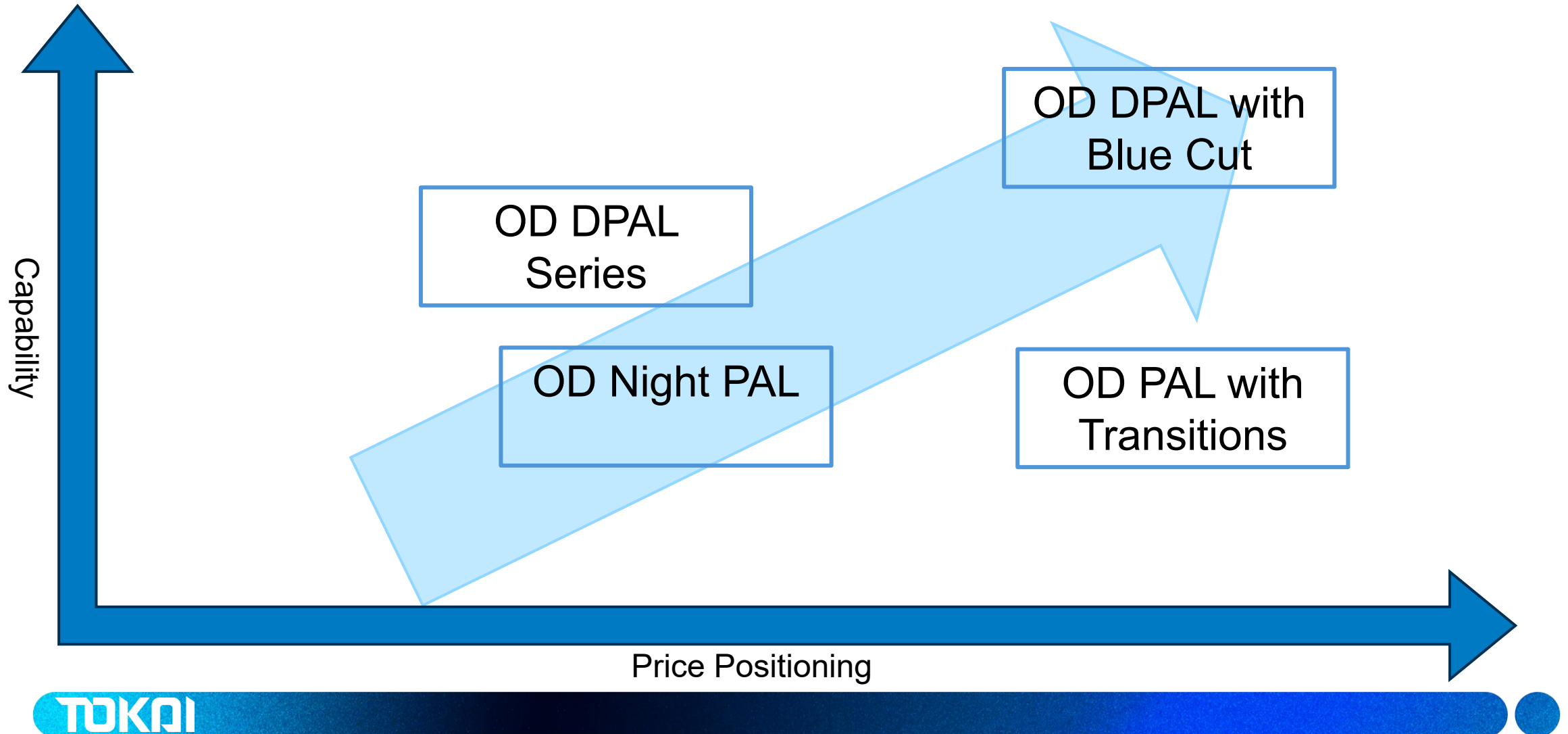


Specifications		Specifiable range / Availability
Prescription	Size reduction	by 50mm Min : only (+), 1mm step
	Prism	Up to 3 prism
	Decentration	Not available
	Base curve selection	Not available
	Color	Available (Please refer "available color list")
Frame data	Slice (Frame shape required)	Available for plus & mixed power lenses
	Remote edging	Available
	Fine edge processing	Only available more than -3.00D.
Type		
BLAS (S) = Shapely, BLAS (C) = Clearly		

Product	Lead time
OD BL1.70 DAS SC	4 days
OD BL1.67 DAS SC	
OD BL1.60 DAS SC	

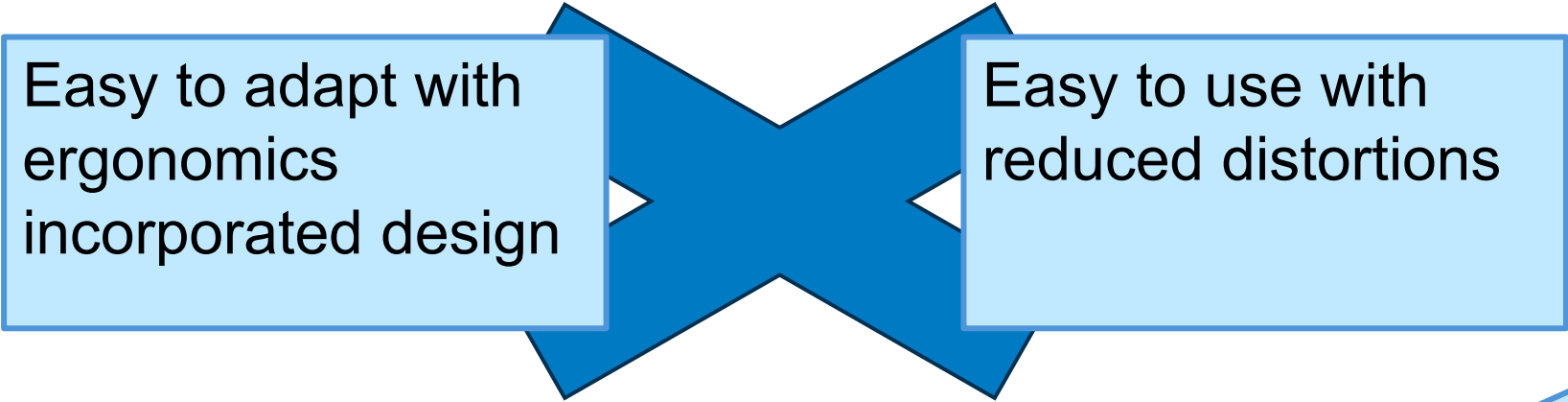
Overview of the product portfolio (Progressive Lenses)

4 new series of products launched for a further reach



OD DPAL

Perfect pair of progressive lens easy to adapt and easy to use



Easy to adapt with ergonomics incorporated design

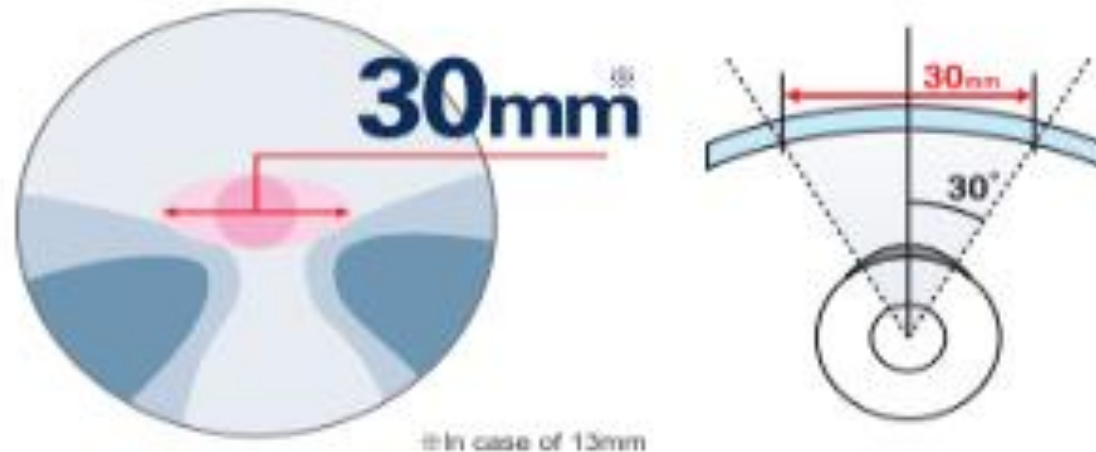
Easy to use with reduced distortions

Available with blue cut (UV420)

Perfect for customers wanting a premium first pair progressive lens. The enhanced design allows easy adaptation with designing methods incorporating ergonomics and at the same time easy to use with reduced distortions that only a double surface progressive lens can provide. Best premium progressive lens for to use as a first pair.

Why is OD DPAL easy to adapt?

The OD DPAL is easy to adapt because the design is made with using design ideas considered from the natural movement of the eyes.



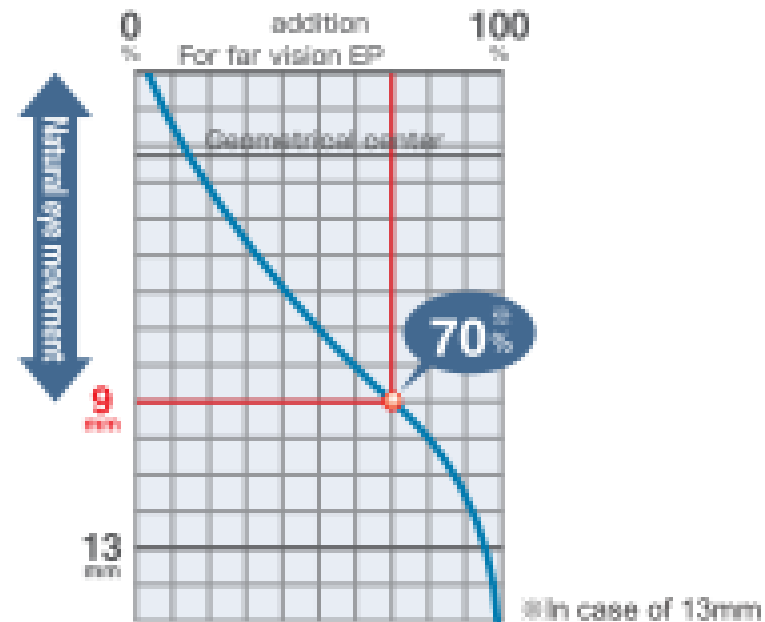
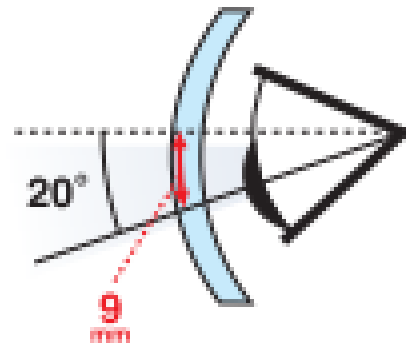
A comfortable & wide far vision field is the result of ergonomic human eye analysis; the limit of the static field angle is 15° , which brings out an area of 30mm around the eye point of a lens. This represents the effective viewing area for natural far vision. Optimal vision is ensured by this particular design, reducing astigmatism to a minimum.

Why is OD DPAL easy to adapt?

The OD DPAL is easy to adapt because the design is made with using design ideas considered from the natural movement of the eyes.

9/70 Addition

Natural eye movement

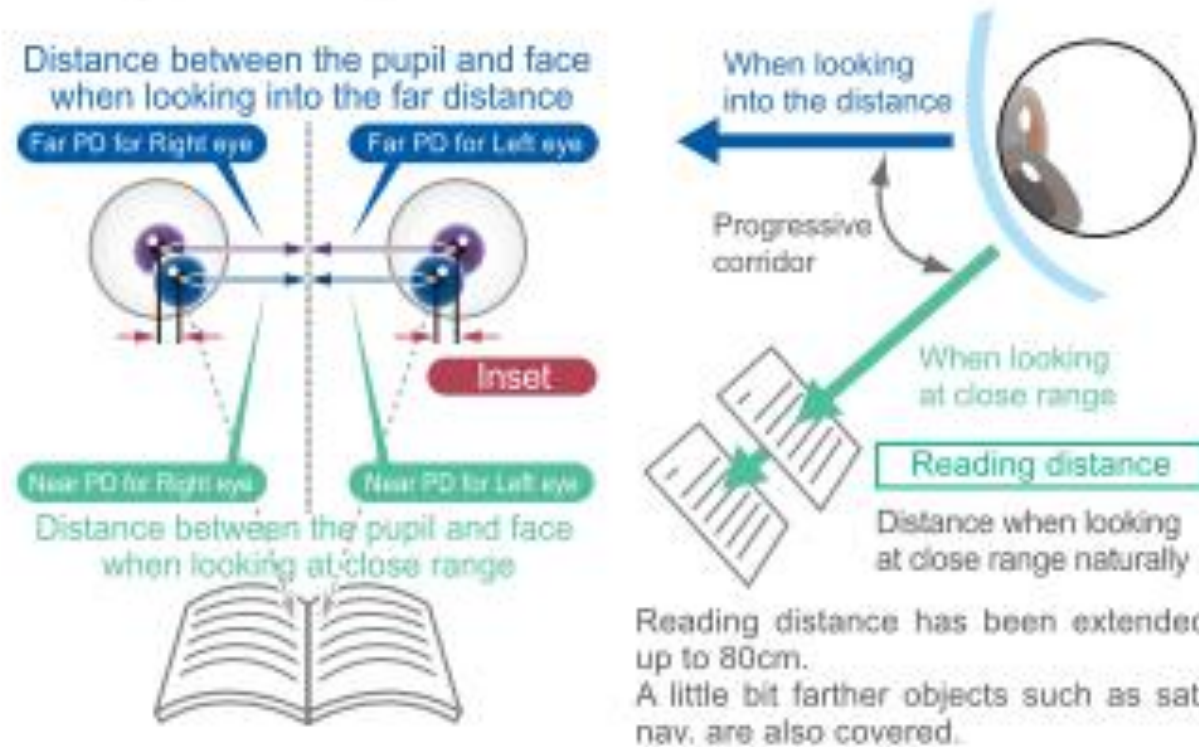


70% of the addition power has been reserved for the lower area at 9mm in the head, enabling a smooth and constant degree of adaptation of vision in the intermediate zone. This ergonomic design considerably lessens eye stress.

Why is OD DPAL easy to adapt?

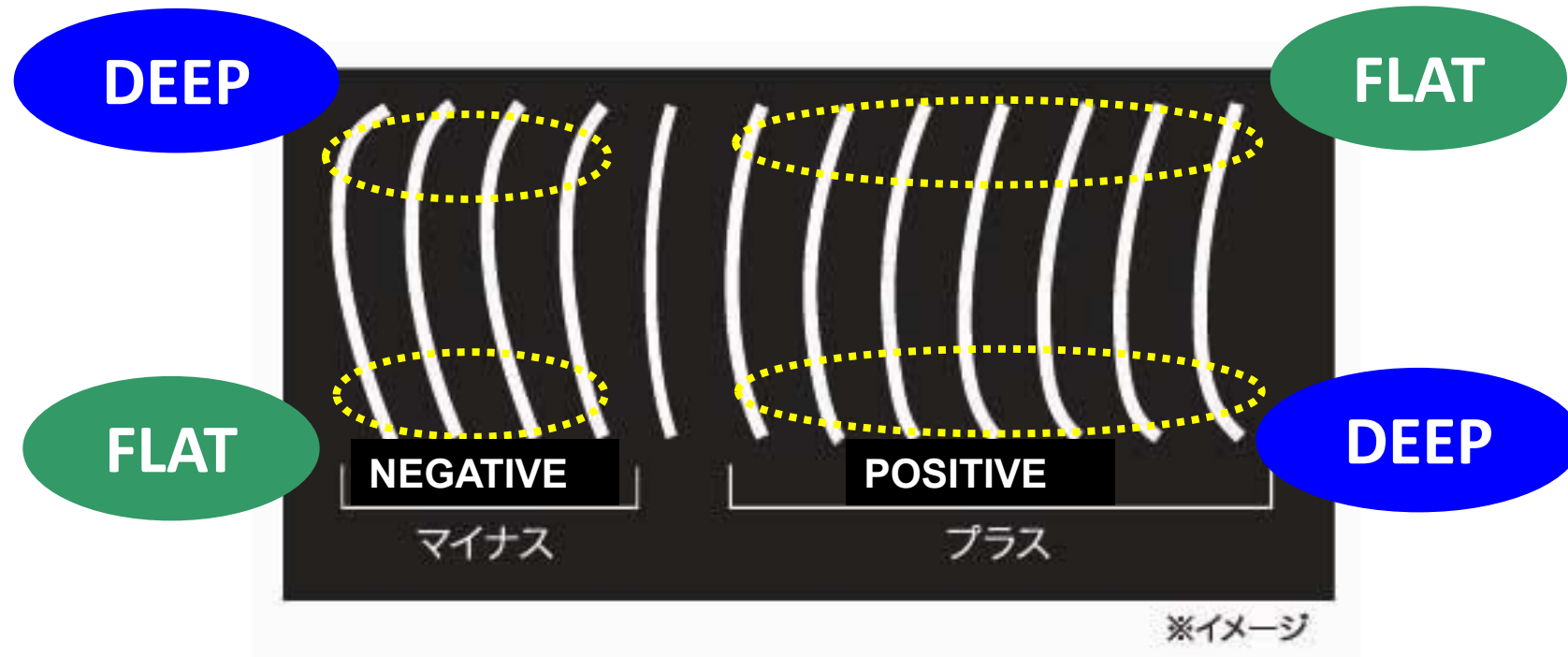
The OD DPAL is easy to adapt because the design is made with using design ideas considered from the natural movement of the eyes.

linset can be specified from 0.0mm to 5.0mm at 0.1mm steps
reading distance up to 80cm.



Distortions are minimized with special double surface designs

The OD DPAL is a double surface aspheric progressive design which reduces distortions to Provide an easy-to-use sensation.



Distortions caused by dioptric power

Depending on where the higher power is on the lens is, the required compensations differ to minimize distortions.

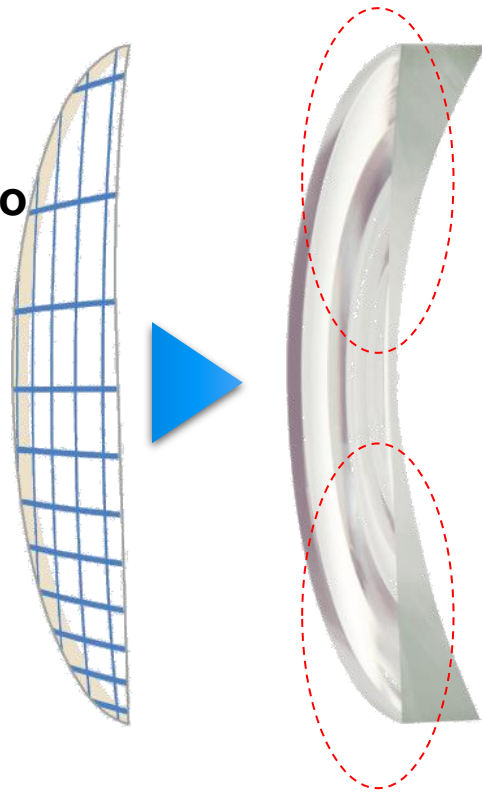


In the case of minus power progressive lens

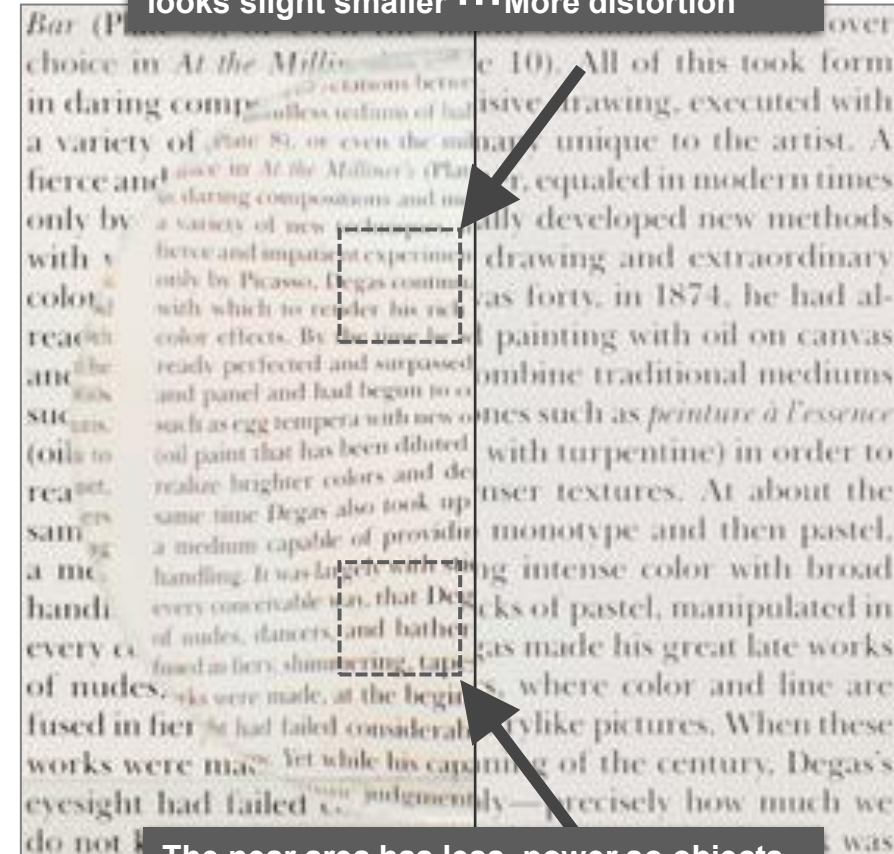
The far vision side of the lens will have a stronger negative power thus minimizing images more than the near vision side of the lens.

Far Area:
Deep curve to
compensate

Near Area:
Shallow
curve to
balance



The far area has more power so objects look slight smaller ... More distortion



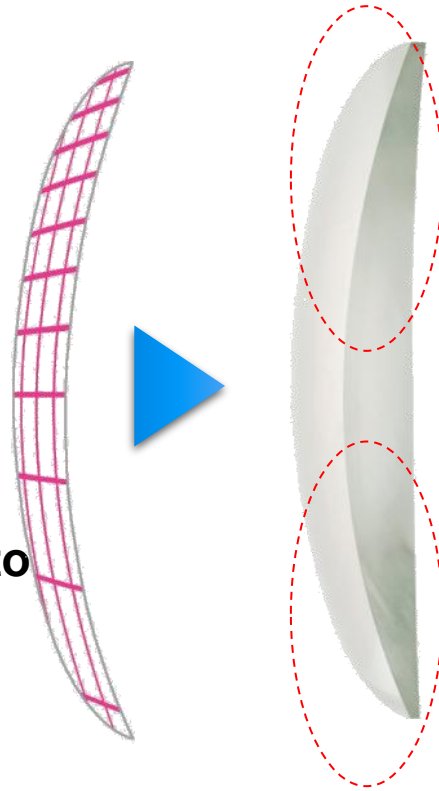
The near area has less power so objects look slight bigger ... Less distortion

In the case of plus power progressive lens

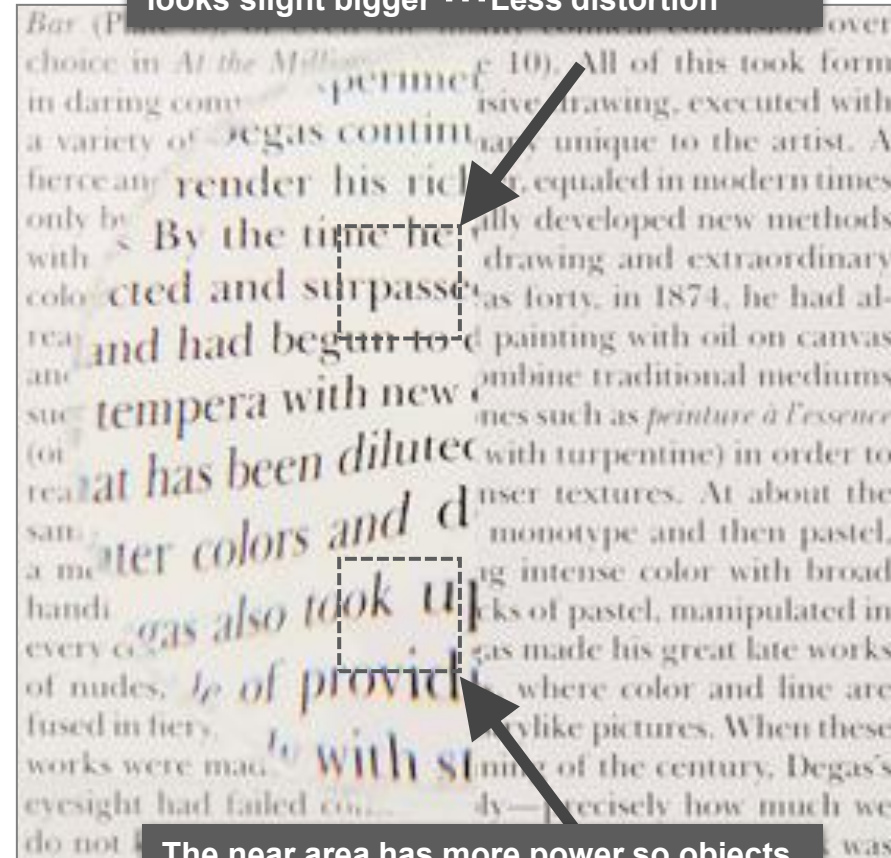
The near vision side of the lens will have a stronger positive power thus enlarging images more than the far vision side of the lens.

Far Area:
Shallow
curve to
balance

Near Area:
Deep Curve to
compensate



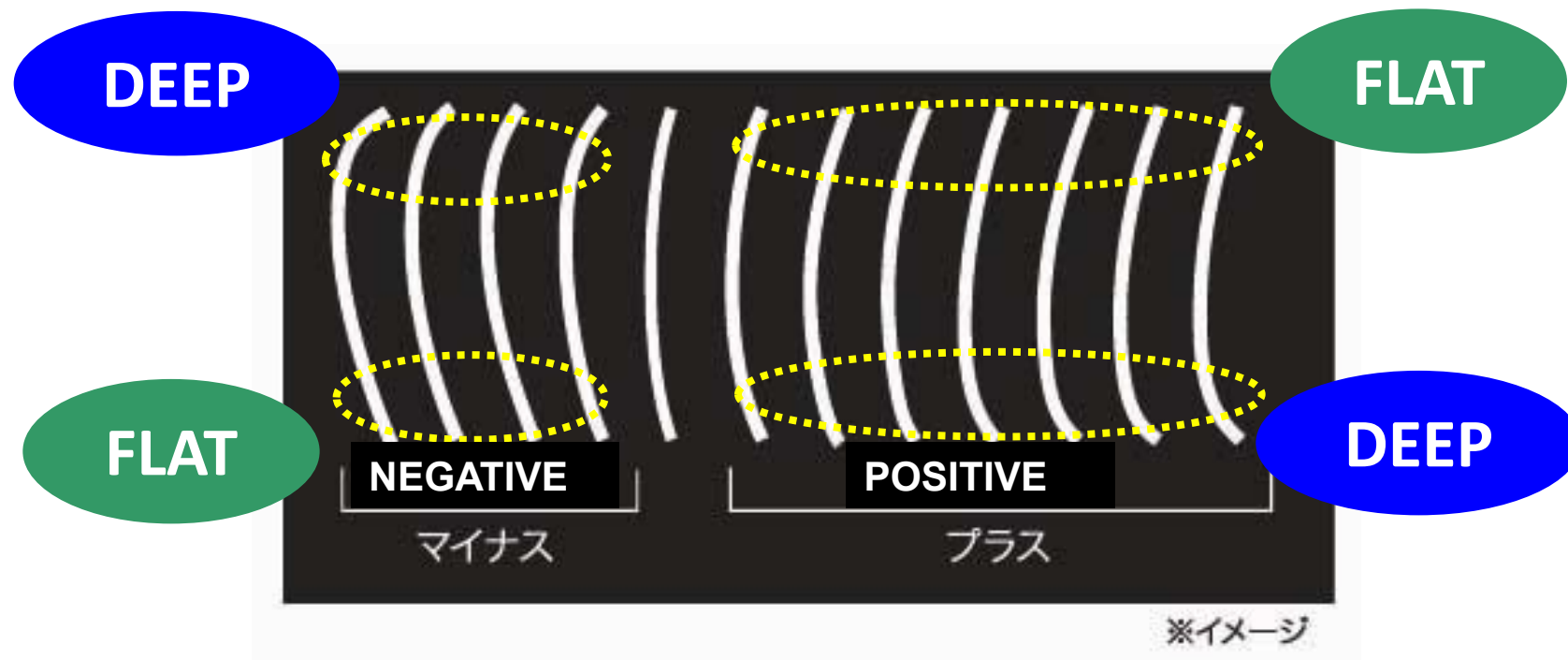
The far area has less power so objects
looks slight bigger ... Less distortion



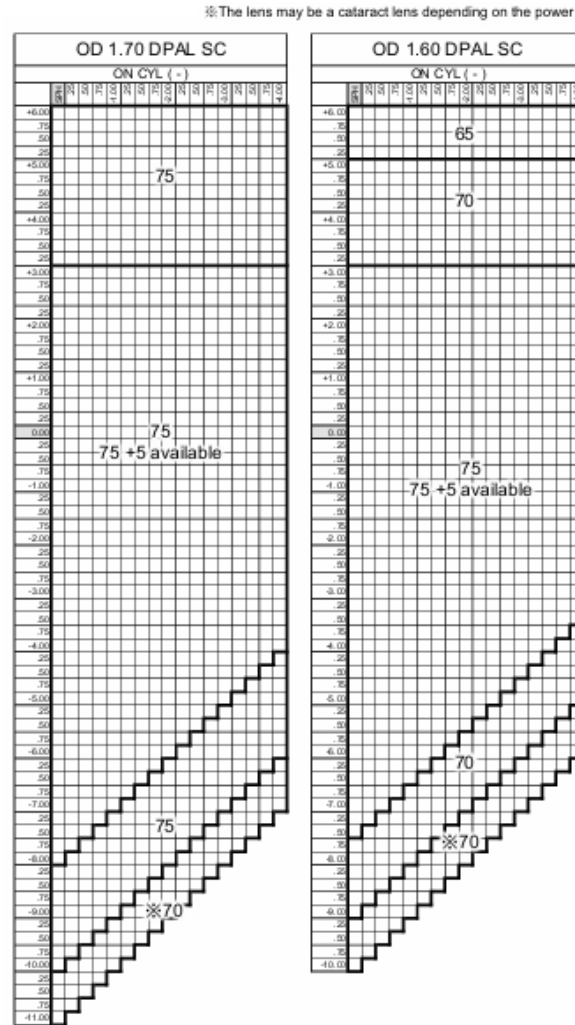
The near area has more power so objects
looks slight smaller ... More distortion

Distortions are minimized with special double surface designs

The side with the stronger power is brought closer to the eyes with a deeper curve, thus balances the minimizing or enlarging effect of dioptric power between far vision and near vision

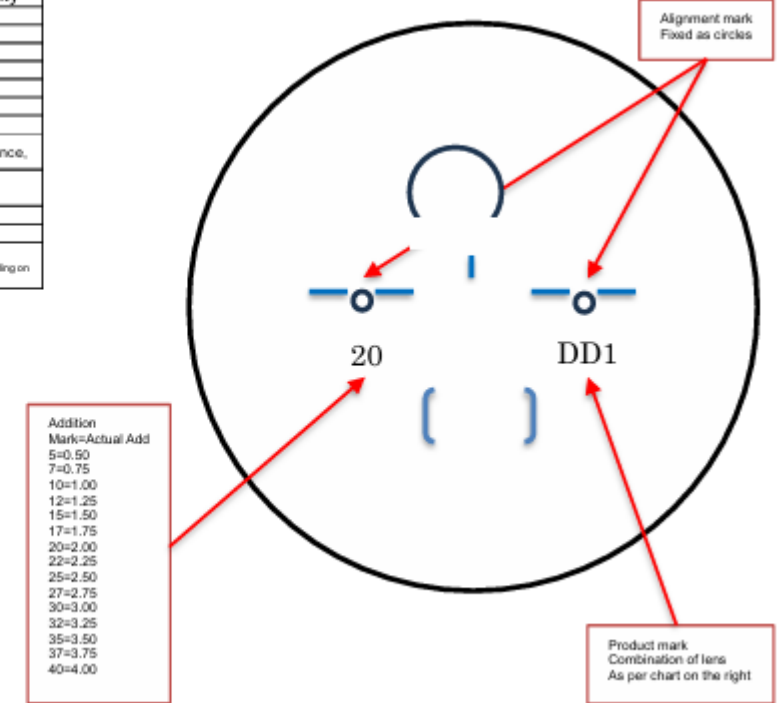


Available range and specification



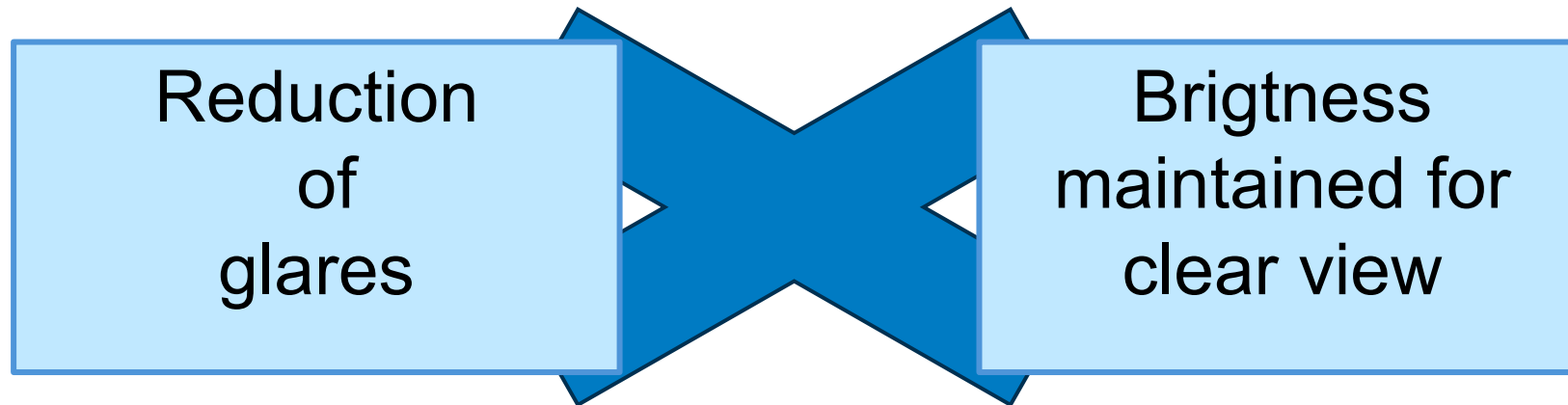
Specifications		Specifiable range / Availability
Prescription	Size reduction	by 50mm Min - only (+), 1mm step
	Prism	Up to 3 prism
	Decentration	Not available
	Base curve selection	Not available
Progressive	Corridor	11, 12, 13, 14, 15mm
	Addition	0.50D to 4.00D at 0.25 steps
	Inset	0.0 to 5.0 mm at 0.1 mm steps
	Inset design from other elements	Designed by far PD, power, reading distance.
Frame data	Reading distance can be prescribed	25cm to 80cm at 1cm steps
	Size (Frame shape required)	Available for plus & mixed power lenses
	Mytune design	Available
	Fine edge processing	Only available more than -3.00D. 5 one powers over -3.00D may not be applicable depending on the sale and addition power.

Product	Lead time	Design	Index & Material	Corridor
OD 1.70 DPAL SC (11mm)	4 days	D	A	1
OD 1.70 DPAL SC (12mm)				2
OD 1.70 DPAL SC (13mm)				3
OD 1.70 DPAL SC (14mm)				4
OD 1.70 DPAL SC (15mm)				5
OD 1.60 DPAL SC (11mm)	3 days		B	1
OD 1.60 DPAL SC (12mm)				2
OD 1.60 DPAL SC (13mm)				3
OD 1.60 DPAL SC (14mm)				4
OD 1.60 DPAL SC (15mm)				5
OD 1.60 DPAL SC (11mm)	3 days		D	1
OD 1.60 DPAL SC (12mm)				2
OD 1.60 DPAL SC (13mm)				3
OD 1.60 DPAL SC (14mm)				4
OD 1.60 DPAL SC (15mm)		5		



OD Night AS and Night PAL

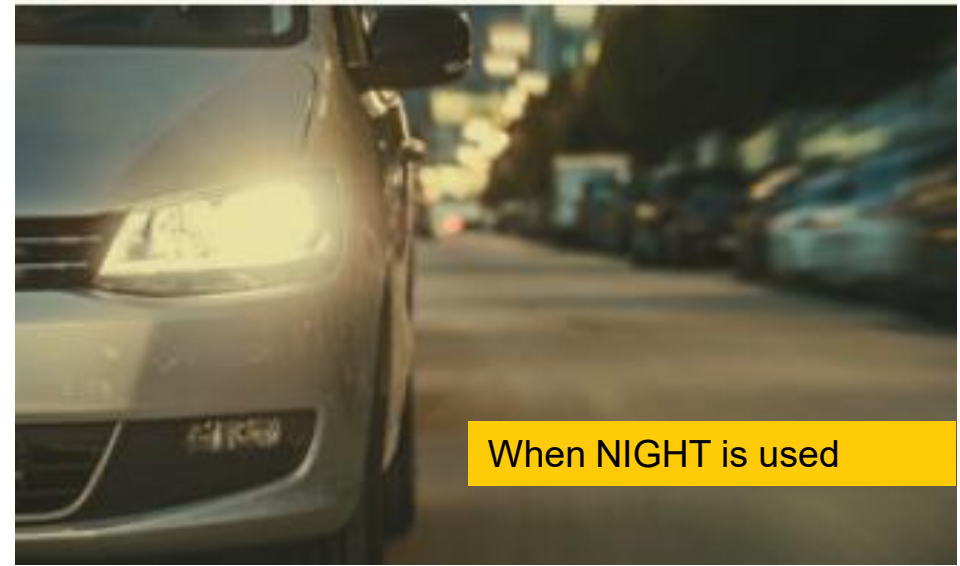
Perfect lens to enhance nighttime vision



Perfect for driving at night, and anything involving seeing at night. The OD Night AS and OD Night PAL are products design to reduce glares from LED light sources and but maintain a clear view at night by maitaing the brightness. With power, with plano these can be a perfect lens for customers enjoying there night life.

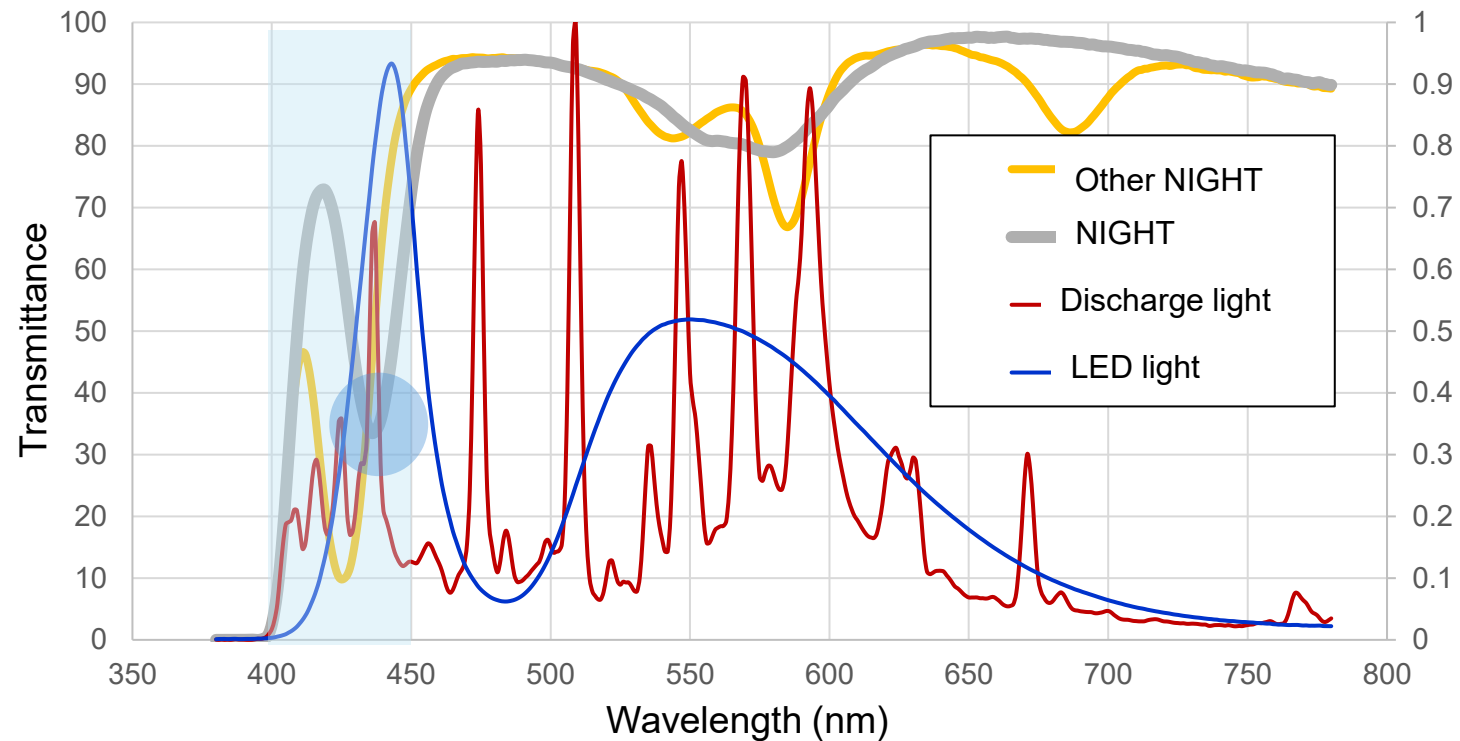
Specifically made to reduce light from LED light sources

The NIGHT AS and NIGHT PAL support seeing at night but targeting particular light wave and reducing the transmittance of the light.



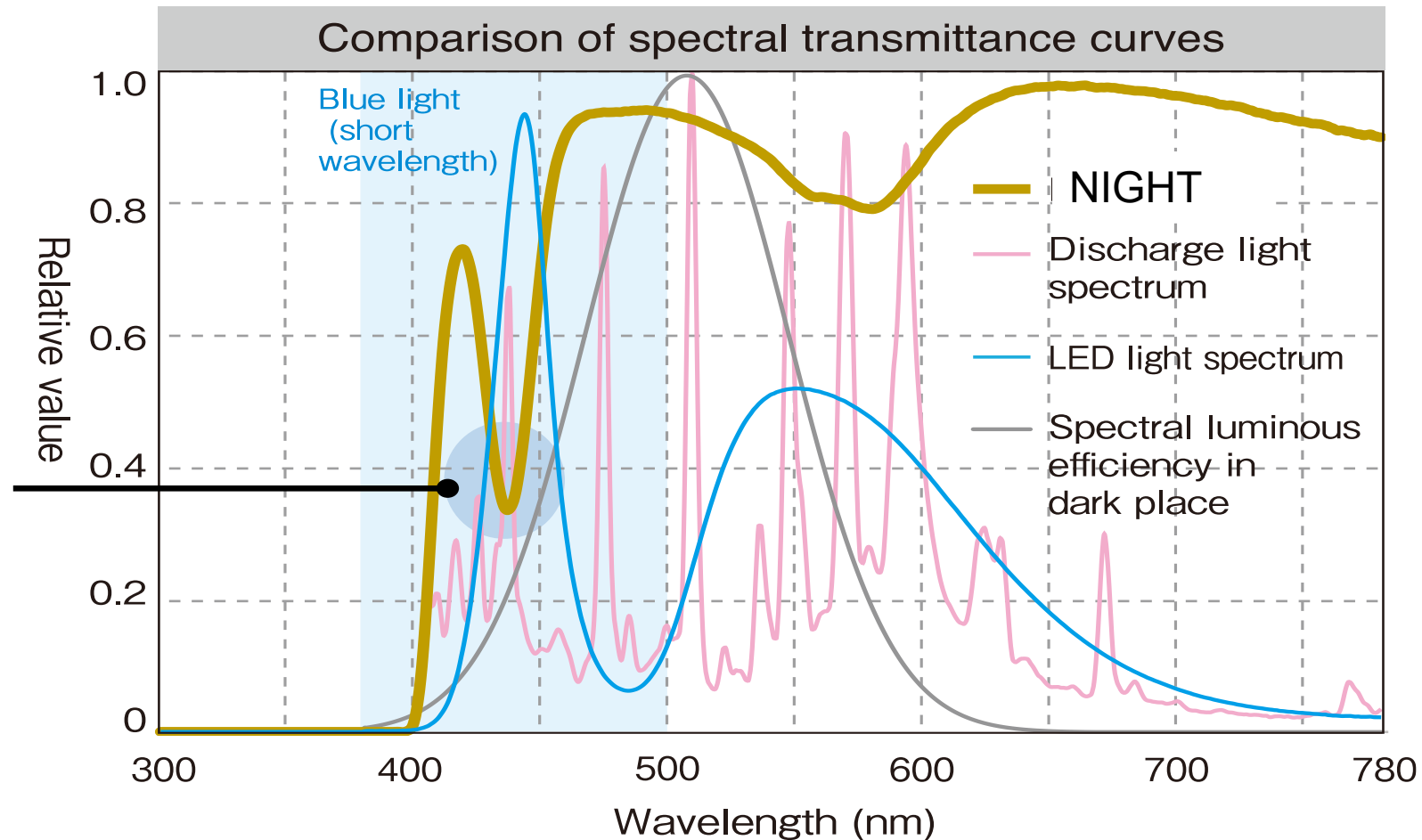
Controlling light waves to transmit

The absorption peak of NIGHT AS and NIGHT PAL is set to 440nm to 450nm which is the blue light component peak of LENDs.



Maintaining the brightness

The peak of the spectral luminous efficiency in dark places is around 510nm. NIGHT maintains a high transmittance of these light waves to maintain a clear bright view.

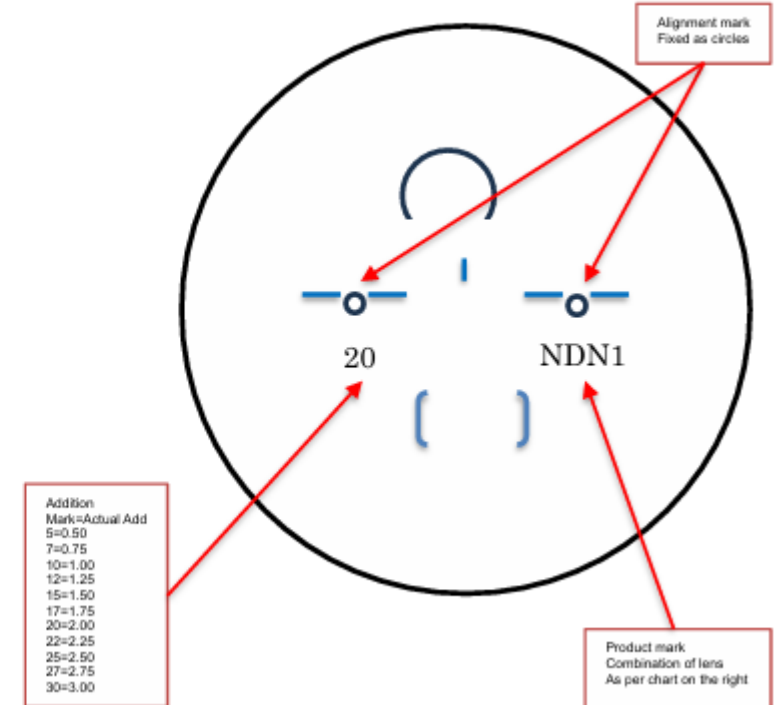


Available range and specification

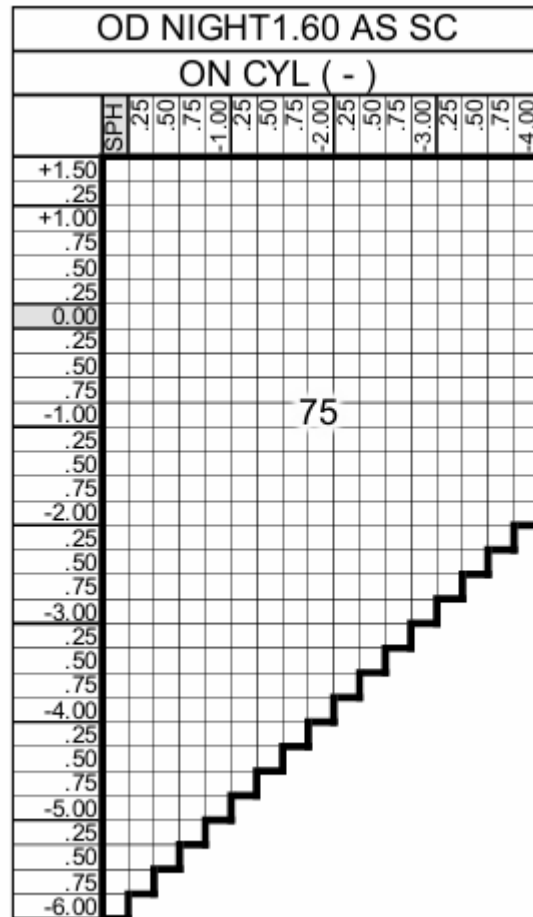
OD NIGHT1.60 PAL SC												
ON CYL (-)												
	SPH	.25	.50	.75	-1.00	.25	.50	.75	-2.00	.25	.50	.75
0.00												
.25												
.50												
.75												
-1.00												
.25												
.50												
.75												
-2.00												
.25												
.50												
.75												
-3.00												
.25												
.50												
.75												
-4.00												
.25												
.50												
.75												
-5.00												

Specifications		Specifiable range / Availability
Prescription	Size reduction	by 50mm Min : only (+), 1mm steps
	Prism	Not available
	Decentration	Not available
	Base curve selection	Not available
	Color	Not available
Progressive	Corridor	11, 13mm
	Addition	0.50D to 3.00D at 0.25 steps
	Inset variable	0.0mm to 5.0mm at 0.1mm steps
	Alternatively to inset	Reading distance and far PD can be ordered
	Reading distance can be prescribed	25cm to 80cm at 1cm steps
Frame data	Size (Frame shape required)	Not available
	Remote edging	Available
	Fine edge processing	Not available

Product	Lead time	Design	Index & Material	Corridor
OD NIGHT1.60 PAL SC (11mm corridor)	4 days	N	DN	1
OD NIGHT1.60 PAL SC (13mm corridor)				3



Available range and specification



Specifications		Specifiable range / Availability
Prescription	Size reduction	by 50mm Min : only (+), 1mm steps
	Prism	Not available
	Decentration	Not available
	Base curve selection	Not available
Frame data	Color	Not available
	Slice (Frame shape required)	Available
	Remote edging	Available
	Fine edge processing	Not available

Product	Lead time
OD NIGHT1.60 AS SC	3 days

The Launch of the new Made in Japan Products

Understand the general naming rules of the product to understand what each product is.

Naming rule: “Brand” + “Material” + “Design” + “Coating” + “Tint”

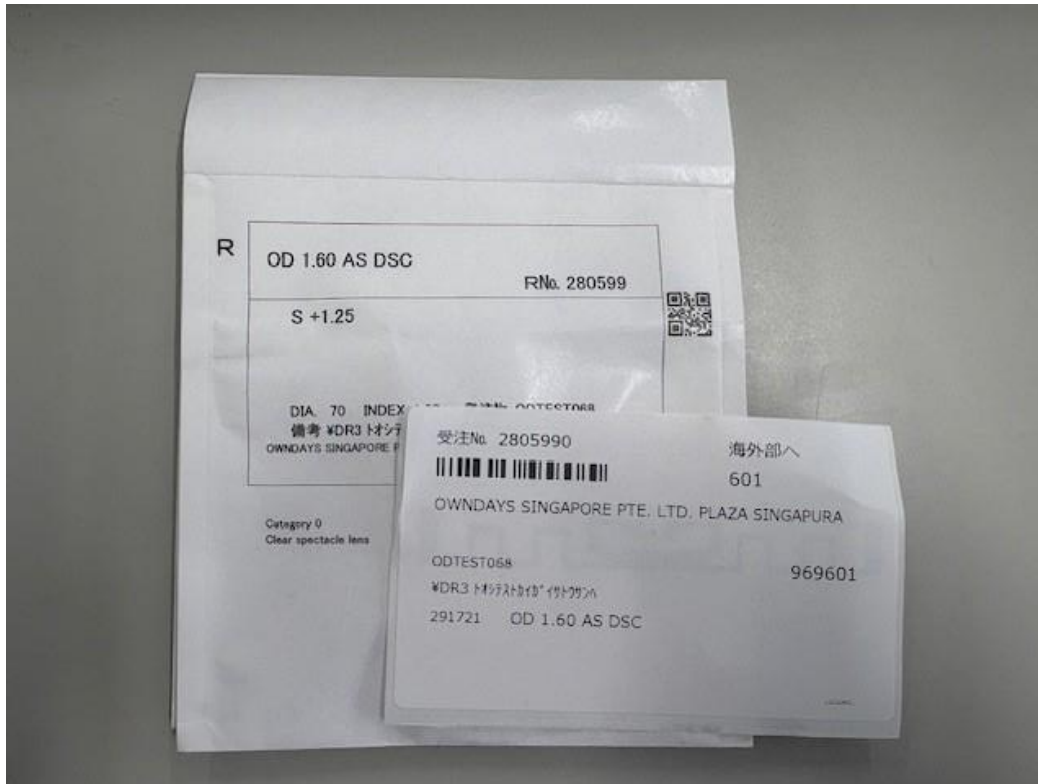
Brand	Material	Design
OD=Owndays	BL=Bluecut (UV420)	DPAL=Double surface pal
	TRGS=Transitions Gen S	PAL=Backsurface pal
	NIGHT=Night Vision	ASSIST = Anti-Fatigue
	PHOTO = Photochromic (UV420+Photo)	DAS =Double surface aspheric

Coating
SC =SuperHydrophobic HMC (PGC pr SPS)
DSC=Super scratch resitant + Super Hydrophobic (USC)

EX. OD BL1.60 DPAL SC
Owndays Bluecut 1.60 index Double
surface pal with Superhydrophobic HMC

Packaging of the product

Order will be delivered with a TOKAI ref# and order number, product name, prescription, diameter and index, shop name printed on the package.



Thank you for your listening

TOKAI