

A wide-angle photograph of a desert landscape. In the foreground and middle ground, there are numerous sand dunes and rocky formations. The sand is a mix of light beige and darker, shadowed areas. In the background, a large, rounded rock formation stands prominently against a clear, bright blue sky. The overall scene is arid and open.

DUE

The Double Side
Progressive Lens

Innovation in Free Form technology

Innovazione nella tecnologia Free Form



DUE

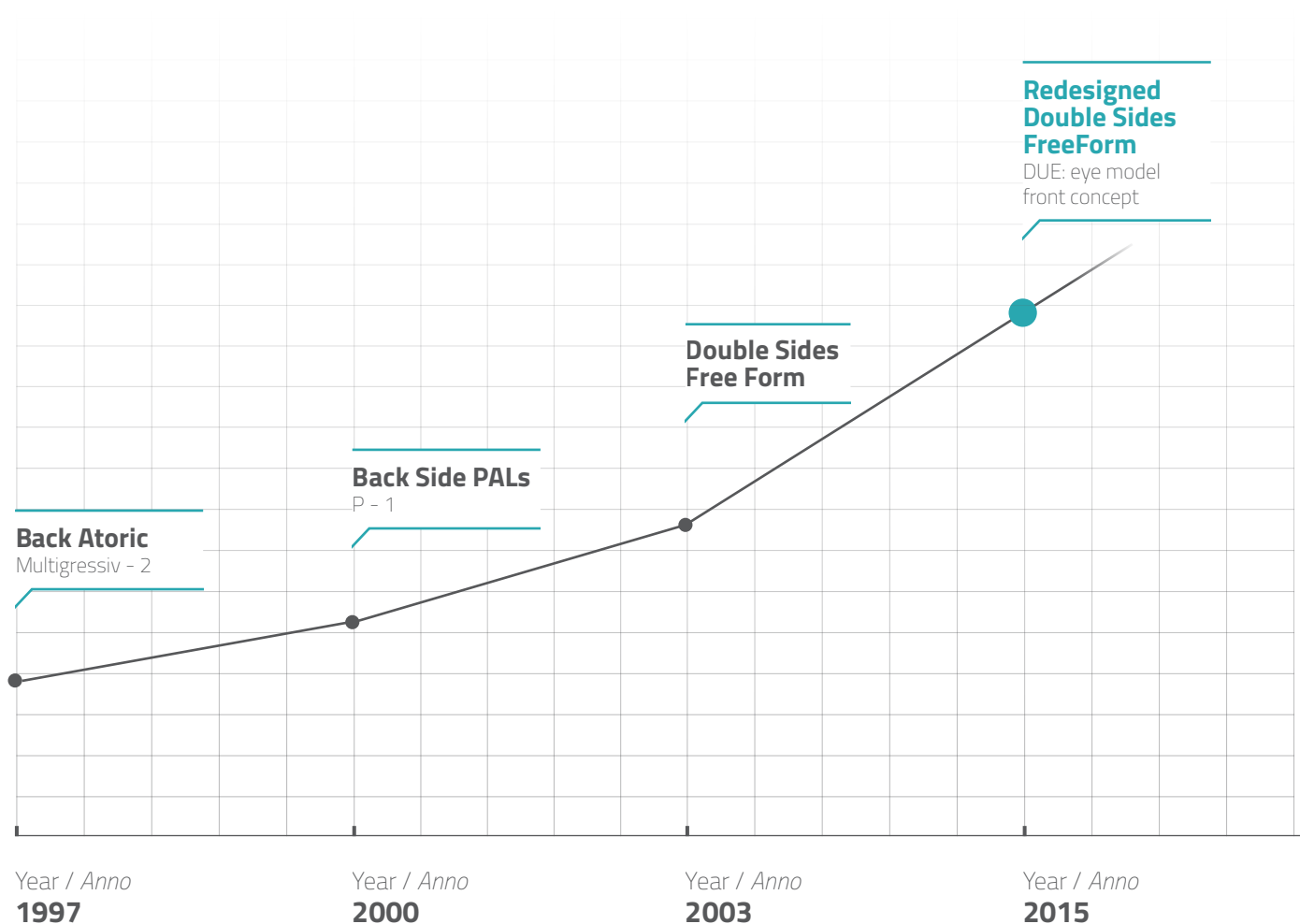
The Double Side
Progressive Lens

Innovation in Free Form technology

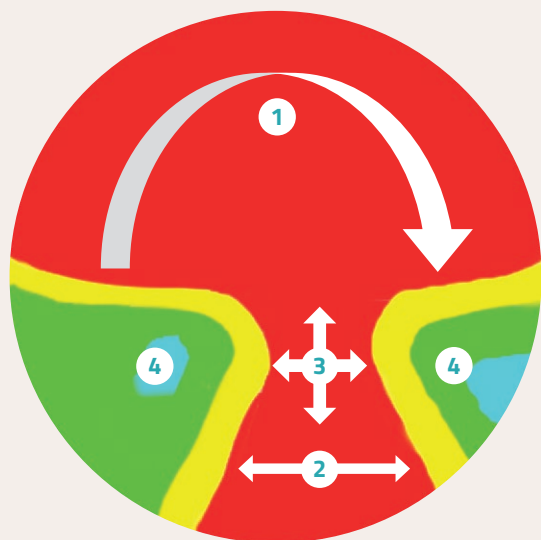
The new double side Free Form technology, creates a new optimization by increasing the width distance, the near and intermediate areas simultaneously reducing side distortion.

Innovazione nella tecnologia Free Form

La nuova tecnologia Free Form double side crea una nuova ottimizzazione incrementando la larghezza della zona del lontano, del vicino e della zona intermedia diminuendo contemporaneamente le distorsioni laterali.



Redesign New optimization

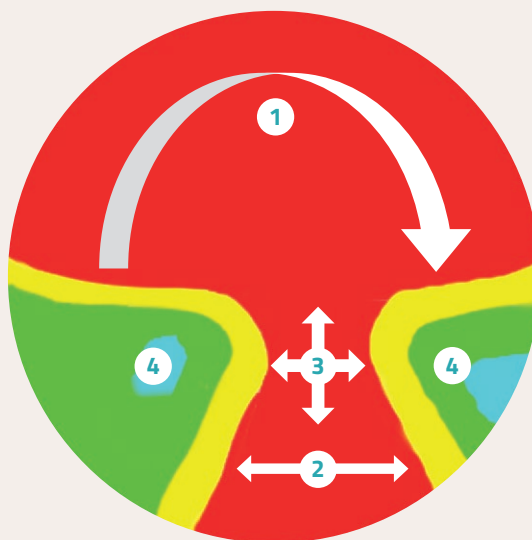


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- 1 Width of far zone
 - 2 Width of near zone
 - 3 Width of intermediate zone
 - 4 Width Degree of side distortions
-

New Front Free Form surface creates new optimization where as:

- **increasing area 1:** by 30%
- **increasing area 2:** by 30%
- **increasing area 3:** (x-axis) 30%
- **decreasing area 4:** 30%

Nuovo design Nuova ottimizzazione



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- 1 *Larghezza della zona lontana*
 - 2 *Larghezza della zona vicina*
 - 3 *Larghezza della zona intermedia*
 - 4 *Larghezza delle distorsioni laterali*
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La nuova superficie Front Free Form crea una nuova ottimizzazione:

- **incremento zona 1:** del 30%
- **incremento zona 2:** del 30%
- **incremento zona 3:** (asse x) del 30%
- **incremento zona 4:** del 30%

DUE

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DUE redesign concept

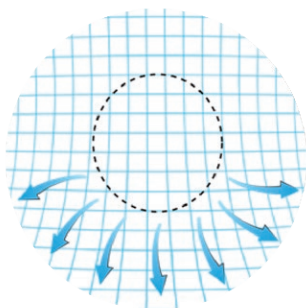
The new progressive DUE has a front power variation to reduce the back power variation obtaining a width distortions reduction in the vision area.

Increasing the front surface power, from the inner to the outer edge of the lens in a specific area of the same surface.

Concetto del nuovo design di DUE

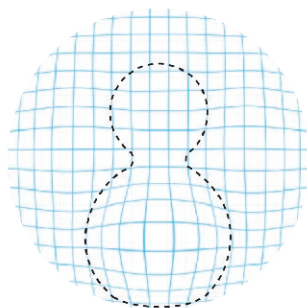
La nuova progressiva DUE ha una variazione di potere frontale tale da ridurre la variazione di potere posteriore ed ottenere una riduzione delle distorsioni, aumentando l'ampiezza dell'area dedicata alla visione.

La superficie di potere frontale aumenta, dall'interno all'esterno della lente, in una determinata area della superficie stessa.



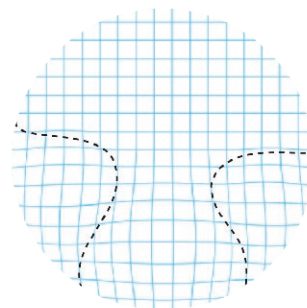
**Front surface:
Atoric Progressive**
*Superficie Frontale:
Progressive atorica*

+

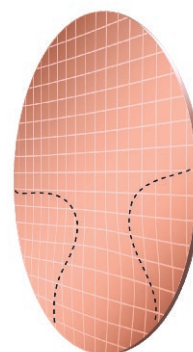
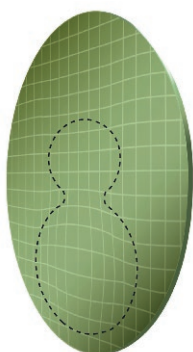
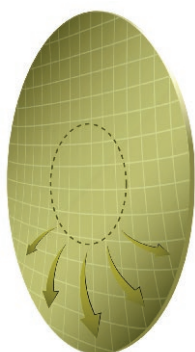


**Back surface:
Soft Progressive**
*Superficie Interna:
Progressiva Soft*

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**RESULT
RISULTATO**



Plan of the eye vision in the space

Eye size

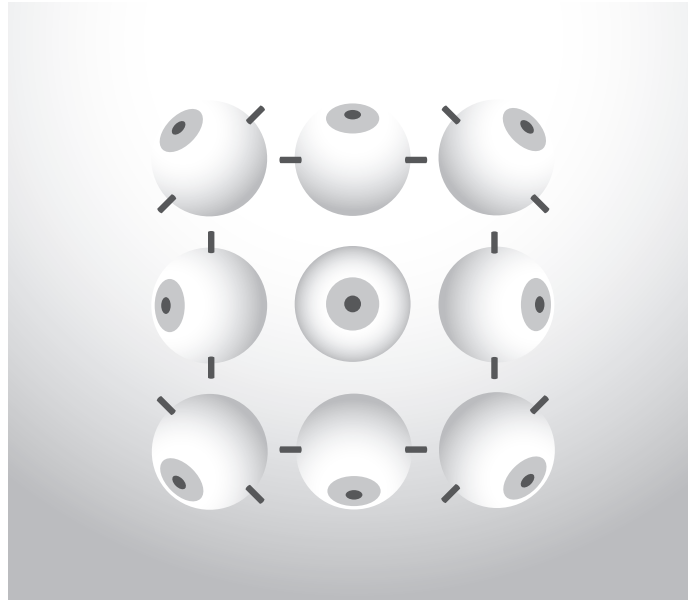
Dimensione occhio

	26,20	AP axis	<i>AP axis</i>
	24,00	lateral dimens.	<i>lateral dimens.</i>
	1,000	eccentricity	<i>eccentricity</i>
	6,63	cornea radius	<i>cornea radius</i>
	12,00	limbus diam.	<i>limbus diam.</i>
	7,57	lens center	<i>lens center</i>
	10,80	lens diam.	<i>lens diam.</i>
	5,01	lens width	<i>lens width</i>
	21,90	disc angle	<i>disc angle</i>
	4,103	chord (mm)	<i>chord (mm)</i>

Schema della visione oculare nello spazio

Listing's Plane

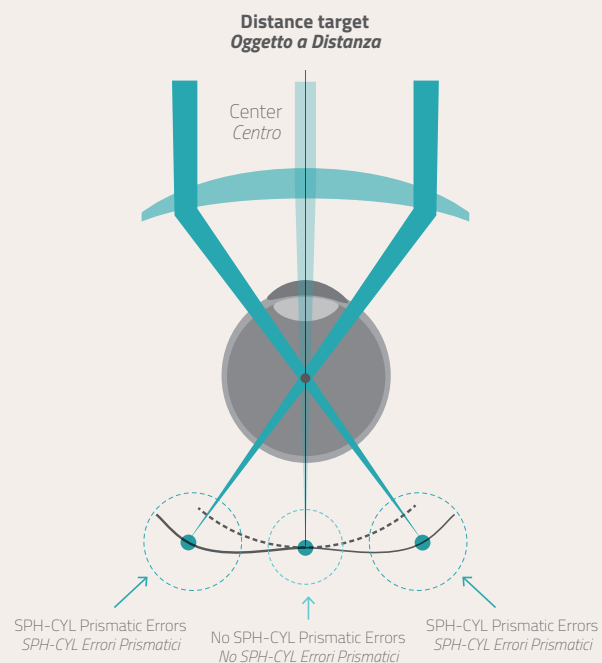
Piano di Listing



Vision with Pal Free Form lenses

Top view

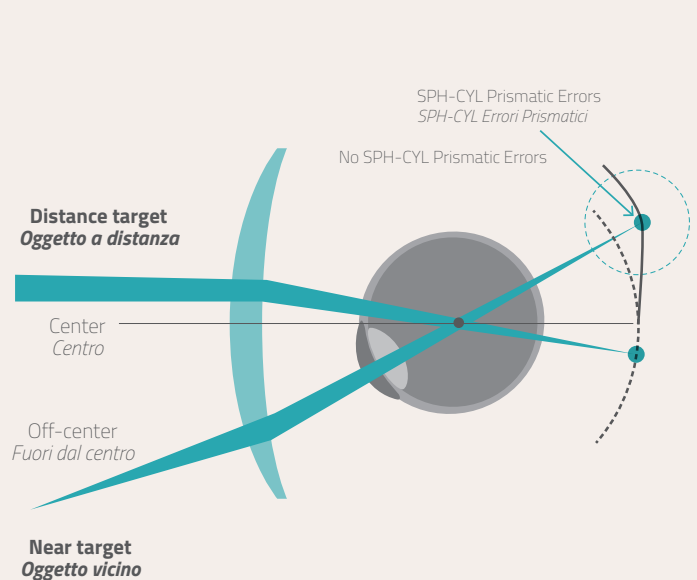
Visione dall'alto



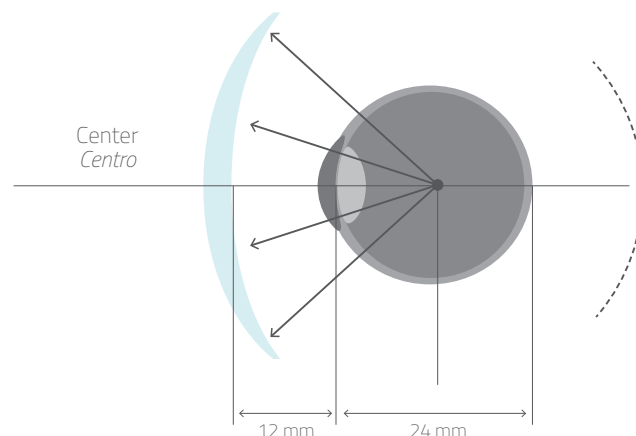
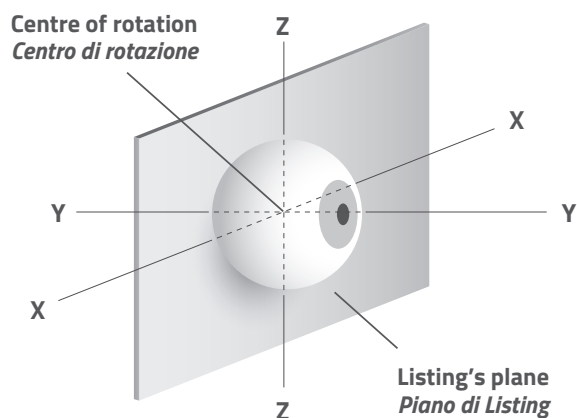
Visione con lenti Pal Free Form

Side view

Visione laterale



Eye model *Modello dell'occhio*



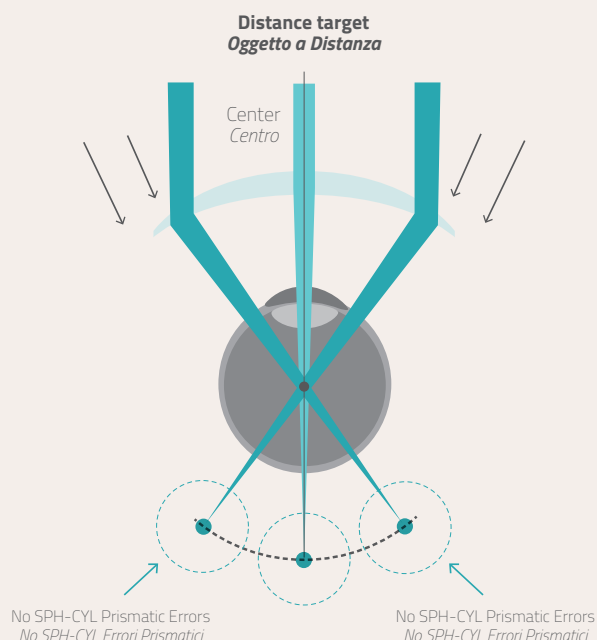
Vision with DUE lenses

DUE is the answer to the oblique aberrations and the way to reduce them

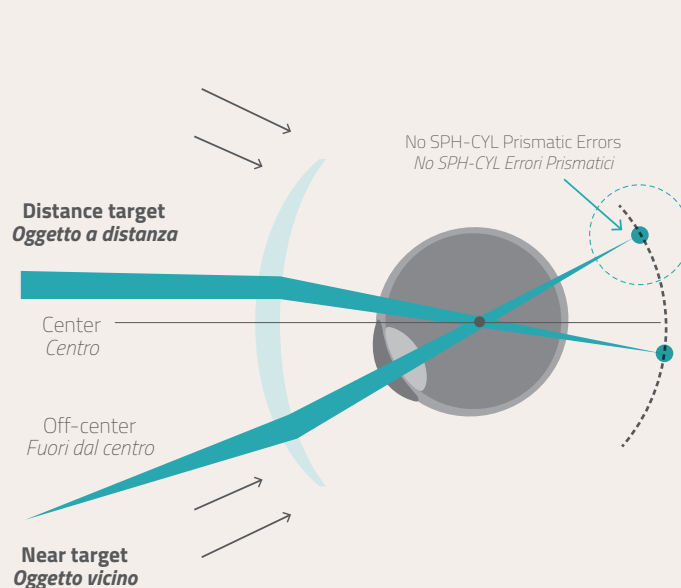
Visione con lenti DUE

DUE è la risposta alle aberrazioni oblique e il modo di ridurle

Top view *Visione dall'alto*



Side view *Visione laterale*



DUE

The Double Side
Progressive Lens

Improve the quality of your vision
Migliora la qualità della tua visione

Result from the test wear

Risultato dei test nell'uso

Near Vision Zone
Zona da vicino

Mid Vision Zone
Zona da media distanza

Far Vision Zone
Zona da lontano

Conventional back side



DUE





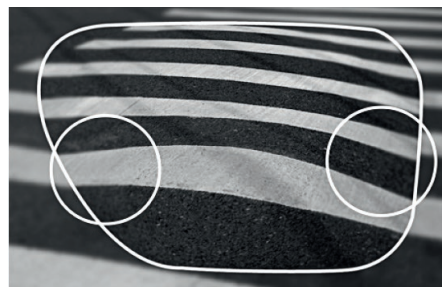
Improvement
of side distortions

*Miglioramento delle
distorsioni laterali*

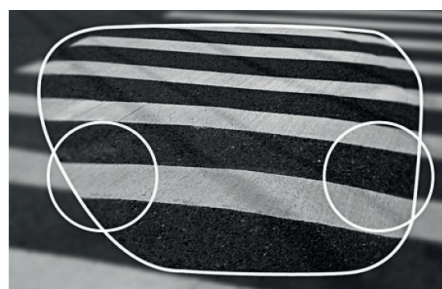
Near Vision Zone
Zona da vicino

Far Vision Zone
Zona da lontano

Conventional back side



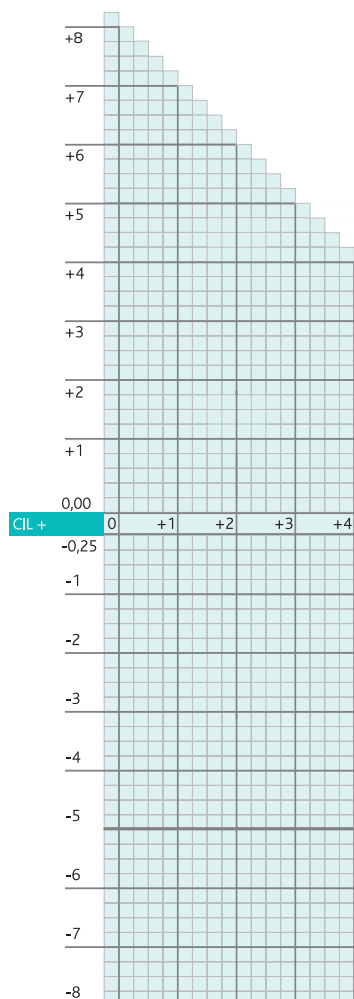
DUE



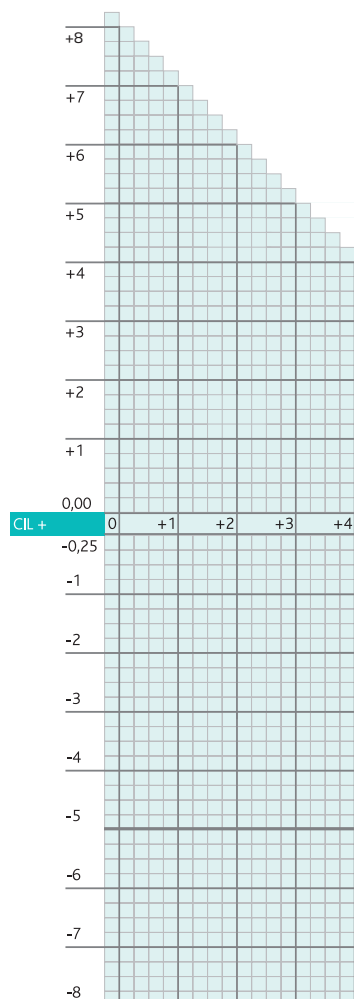
Material and ranges

Materiale e gamme

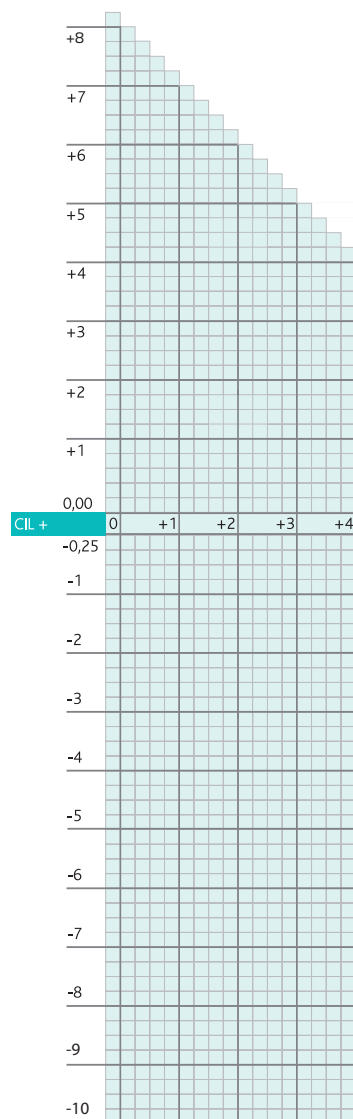
Org. 1,5 DUE



Org. 1,6 DUE



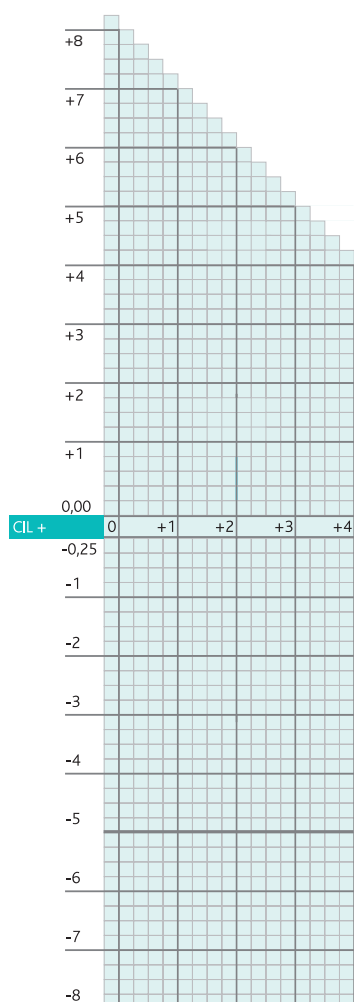
Org. 1,67 DUE



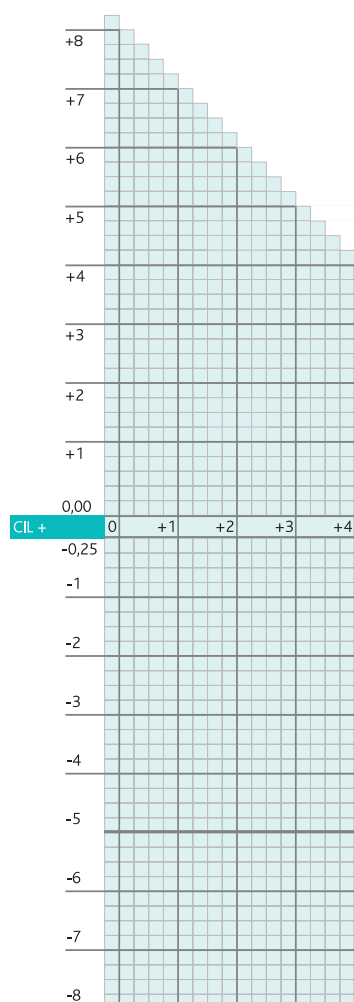
Material	Dia	Ranges (Sph. + Cyl.)		Max Cyl.
		Min	Max	
ORG. 1.50 HC	75	-8.00	+8.00	4.00
ORG. 1.60 HC	75	-8.00	+8.00	5.00
ORG. 1.67 HC	75	-10.00	+8.00	5.75

Max. cyl. 4.00 / 5.75 – Add 0,50 – 4.00

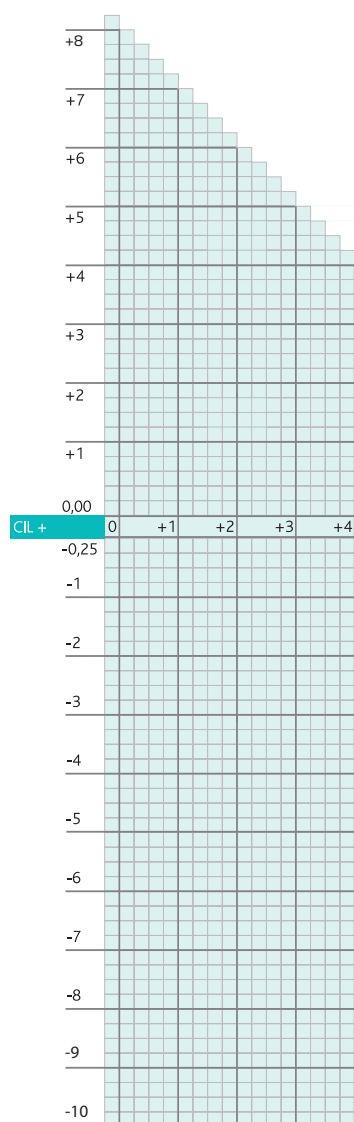
Org. 1,5 DUE Transitions



Org. 1,6 DUE Transitions

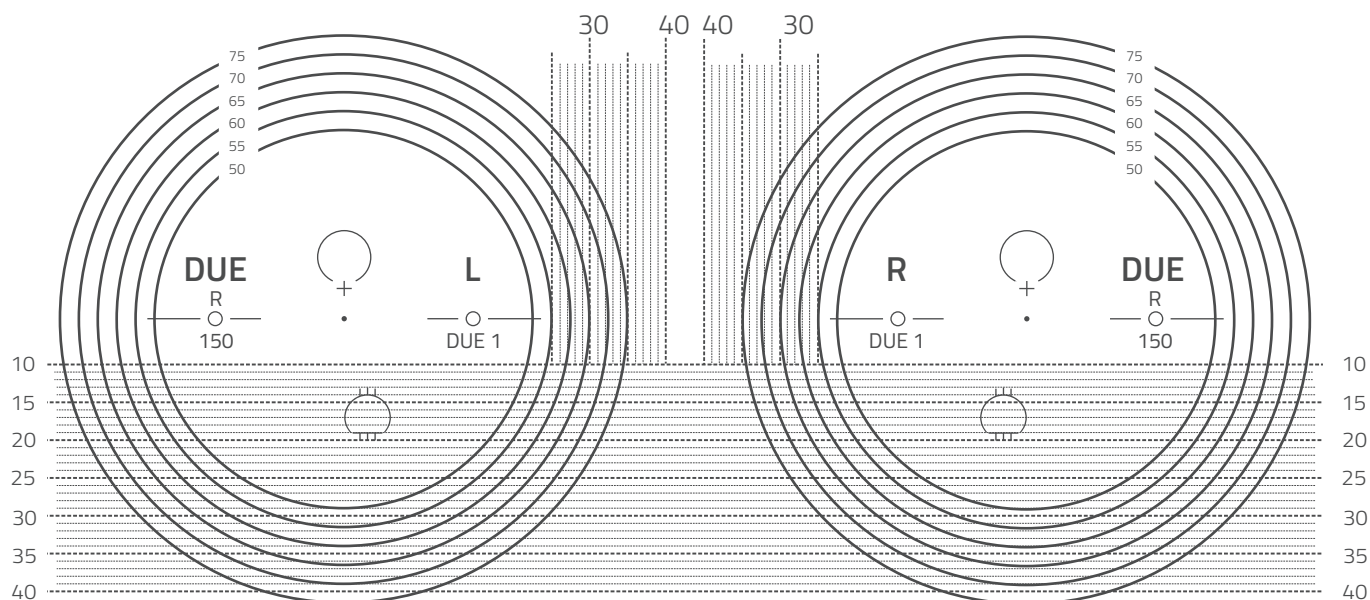


Org. 1,67 DUE Transitions



Material	Dia	Ranges (Sph. + Cyl.)		Max Cyl.
		Min	Max	
TRANSITIONS 1.50 HC	75	-8.00	+8.00	4.00
TRANSITIONS 1.60 HC	75	-8.00	+8.00	5.00
TRANSITIONS 1.67 HC	75	-10.00	+8.00	5.75

Max. cyl. 4.00 / 5.75 – Add 0,50 – 4.00



Marking of LTL progressive lenses - Free Form technology DUE

Marking delle lenti progressive LTL- tecnologia Free Form DUE

DUE 1,5 / DUE 1,5 Transitions

Corridor	Nasal upper engraving	Nasal lower engraving	Axis Engraving	Temporal lower engraving	Temporal upper engraving
Regular		DUE 1	0 0	addition	R
Short		DUE 1	0 0	addition	S
Extra Short		DUE 1	0 0	addition	E

DUE 1,6 / DUE 1,6 Transitions

Corridor	Nasal upper engraving	Nasal lower engraving	Axis Engraving	Temporal lower engraving	Temporal upper engraving
Regular		DUE 2	0 0	addition	R
Short		DUE 2	0 0	addition	S
Extra Short		DUE 2	0 0	addition	E

DUE 1,67 / DUE 1,67 Transitions

Corridor	Nasal upper engraving	Nasal lower engraving	Axis Engraving	Temporal lower engraving	Temporal upper engraving
Regular		DUE 3	0 0	addition	R
Short		DUE 3	0 0	addition	S
Extra Short		DUE 3	0 0	addition	E

Classic solid color ranges
Gamma colori classici tinta unita

85%	50%	25%
 Grey 85% S85	 Grey 50% S50	 Grey 25% S25
 Brown 85% B85	 Brown 50% B50	 Brown 25% B25
 Green 85% G85	 Green 50% G50	 Green 25% G25
 Gradient Grey 85% GS85	 Gradient Grey 50% GS50	 Gradient Grey 25% GS25
 Gradient Brown 85% GB85	 Gradient Brown 50% GB50	 Gradient Brown 25% GB25
 Gradient Green 85% GG85	 Gradient Green 50% GG50	 Gradient Green 25% GG25
 Gradient Blue 85% GM85	 Gradient Blue 50% GM50	 Gradient Blue 25% GM25

Fashion colors
Colori moda

 Sky 25% SK
 Violet 15% VI
 Lilia 25% LI
 Orange 50% OR
 Sport Golf 65% SGO
 Tennis 25% TE
 Rose 25% RO

Organic colors

Colorazioni organiche

						Driving / Guida	
						Day Giorno	Night Notte
Solid Tinta Unita	Brown	Gray	Green	Blu	Transmittance % Trasmittanza %	Filter category Categoria filtro	
					15	3	 
					50	1	 
Gradient Sfumati					75	1	 
					15	3	 
					50	1	 
						75	1
							 
						Driving / Guida	
						Day Giorno	Night Notte
Fashion Colors Colori moda		Sky			75	1	 
		Violet			85	0	 
		Lilia			75	1	 
		Orange			50	1	 
		Sport Golf			35	1	 
		Tennis			75	1	 
		Rose			75	1	 

The colors reported are approximate and they do not represent the exactly tone on the lens. The coloration can change depends on the material and the treatment.

I colori riportati sono indicativi e non rappresentano l'esatta tonalità del colore sulla lente. Le colorazioni possono variare in base al materiale ed al trattamento.

DUE

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