Everything You Always

Wanted to Know About... **EYEWEAR**

(But Were Afraid to Ask)



BOOK 1 NOMENCLATURE

EYEWEAR MANUAL



01 •	INTRO	p. 4
02 •	THE ANATOMY OF EYEWEAR	p. 5
03•	TECHNICAL ELEMENTS	p. 7
	A • BRIDGES	p. 8
	B • NOSE PIECES AND PADS	р. 9
	C • TEMPLES	р. 10
	D • HINGES	p. 11
04 •	AESTHETICS	p. 12
	A • RIM TYPES	p. 13
	B • FRAME SHAPES	р. 14

NOMENCLATURE



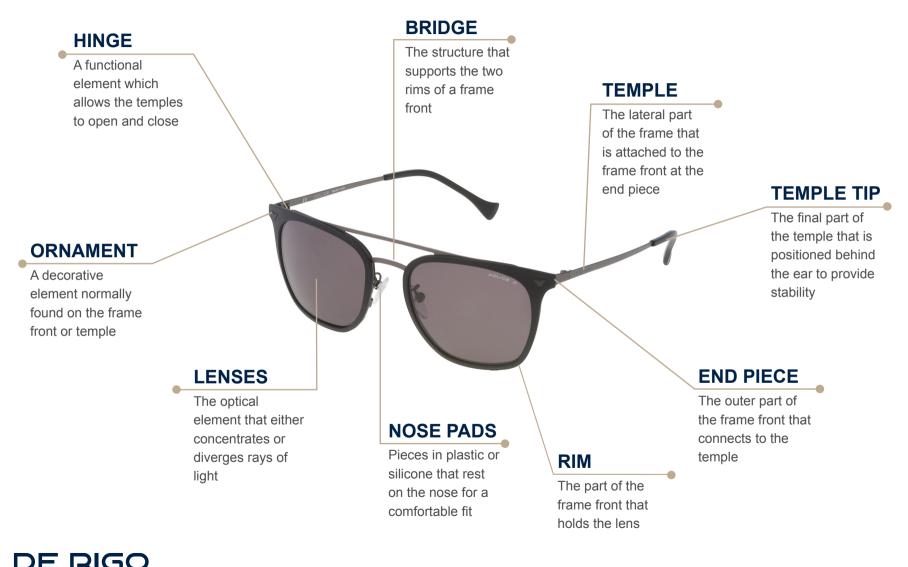


NOMENCLATURE INTRO

Eyewear has a specific, technical language to define the individual parts glasses are made of.

This includes elements which are further divided into variations and sub-categories.







NOMENCLATURE TECHNICAL ELEMENTS

Depending on the design of the eyeglasses, different elements can have different aesthetic connotations.

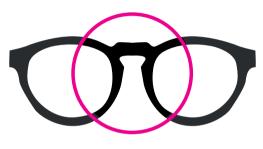
In particular, there are different types of bridges, nose pieces, temples and functionally different hinges.

A • BRIDGES



SINGLE:

The most common bridge, formed by an arch that connects the two rims



KEYHOLE:

A bridge design resembling old door locks



DOUBLE BRIDGE:

A bridge featuring a double structure, generally made of metal or a combination of metal and plastic



B • NOSE PIECES AND NOSE PADS



FIXED:

generally this is the nose piece found on plastic frames, included as part of the mould or shaped afterwards, in materials such as acetate or injected plastic



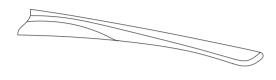
ARM MOUNT:

adjustable, usually composed of metal arms with or without screws, and pads in silicone or plastic



C • TEMPLES



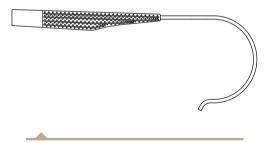


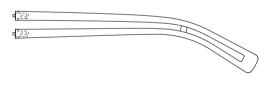
SKULL:

the temple is straight nearest the frame front and shaped at the ear.

LIBRARY:

generally, an injection molded temple that is slightly curved or straight





CURLICUE:

temple characterised by an almost circular earpiece

FORK:

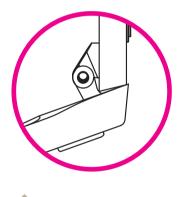
the temple is split into two pieces at the frame front and becomes a single piece at the ear



D • HINGES

Hinges are a continually evolving eyewear element.

There are many types with different designs or technical solutions. They can often be personalised.



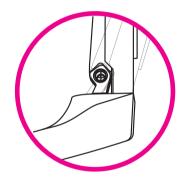
CLASSIC:

visible hinges, attached to the frame front on one end and to the temple on the other



INTEGRATED:

hidden in the temple, these hinges are nested directly in the frame front and allow for a cleaner temple design



FLEX (OR SPRING):

classic or integrated, the flex (or spring) hinge can bend beyond the perpendicular angle with the frame front for a more comfortable fit





NOMENCLATURE AESTHETICS

Eyewear design is constantly evolving.

There are however, some well-defined types that permit us to categorise the accessories' nomenclature.

A • TYPES OF RIMS

FULL RIM:

eyeglasses have a full rim when it completely surrounds the lens



HALF RIM/NYLOR:

nylor or half rim frame fronts have only the upper part of the frame structure, while the lower part of the lens is attached with a special nylon thread



RIMLESS:

in eyeglasses without rims, the lenses are attached directly to the hinges and the bridge, which connects them to each other. Many shapes are possible and depend on the modelling of the lenses.

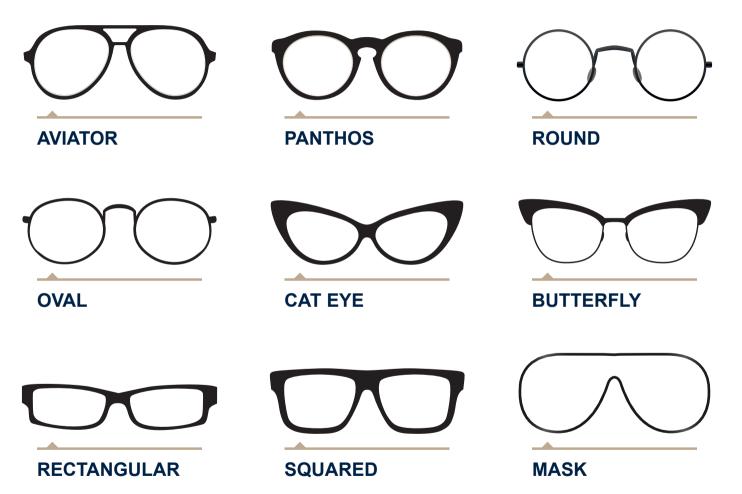


B • FRAME FRONT SHAPES

The design of the frame front characterises the eyewear and often determines its name.

Teardrop-shaped rims, for example, are called "aviator" eyeglasses.

Even though constantly evolving, frame fronts are often based on wellestablished types, each with a different nomenclature.





BOOK 4 LENSES AND SUN





01 • DEFINITIONp. 17
02 • LENSES AND MATERIALSp. 18
2.1 • TYPES OF MATERIALS USEDp. 19
A • THERMOSETTING POLYMERS p. 20
B • THERMOPLASTIC POLYMERSp. 20
C • GLASSp. 20
2.2 • HOW ARE PLASTIC LENSES
MADE? p. 21
A • THERMOSETTINGp. 21
B • THERMOPLASTICSp. 22
2.3 • ADVANTAGES, LIMITATIONS,
AND COMPATIBILITY OF THE
MATERIALS USEDp. 23
2.4 • PHYSICAL CHARACTERISTICS
OF DIFFERENT MATERIALSp. 25
03 • MOUNTINGS
A • POST-MOUNTING STRESSp. 28

LENSES AND SUN

04 •	VISION PROTECTIONp. 29
	4.1 • THE ELECTROMAGNETIC SPECTRUMp. 30
	4.2 • PROTECTION p. 31
05•	COLOURS
06 •	TREATMENTS
	6.1 • ANTI-SCRATCHp. 37
	6.2 • ANTI-FOGp. 37
	6.3 • MIRROR TREATMENTp. 38
	6.4 • ANTI-REFLECTIVEp. 38
	6.5 • WATER REPELLENT
	6.6 • OLEOPHOBICp. 39
07•	POLARISED LENSESp. 40
	7.1 • INTROp. 41
	7.2 • PROTECT YOUR EYESp. 42
	7.3 • ADVANTAGESp. 42
	7.4 • WHEN BEST NOT TO USE THEMp. 43
	7.5 • HOW TO RECOGNISE POLARISED LENSES



EYEWEAR MANUAL 16



LENSES AND SUN DEFINITION

The European Union has classified sunglasses as "personal protective equipment" (PPE) worn to protect from the risks associated with solar radiation.

The European Directive of reference for this definition is 89/686/CEE and is connected to the harmonised standard EN ISO 12312-1:2013: "Eye and face protection - Sunglasses and related eyewear - Part 1: Sunglasses for general use".





LENSES AND SUN LENSES AND MATERIALS

Sunglass lenses can be made of different plastic materials besides glass, including thermoplastics and thermosetting polymers.



THERMOSETTING MATERIALS

FOR MAKING LENSES:

- > CR39 ®
- > POLYURETHANE

THERMOPLASTIC MATERIALS

FOR MAKING LENSES:

- > PA (POLYAMIDE)
- > PC (POLYCARBONATE)
- > PMMA (POLYMETHYL METHACRYLATE)

GLASS



A • THERMOSETTING POLYMERS

Thermosetting polymers cross-linked structure when heated to high temperatures and for this reason cannot be recycled. Generally they are highly resistant to impact, solvents and extreme temperatures, but are difficult to work. Thermoset lenses are made by casting.

B • THERMOPLASTIC POLYMERS

A thermoplastic is a plastic material that becomes pliable or moldable at a fairly high temperature. It softens when heated and hardens to a glass transition state when sufficiently cooled. The nature of thermoplastic polymers makes them recyclable.







C • GLASS

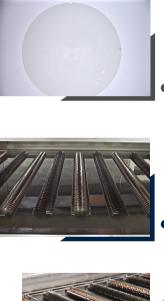
Glass is a homogenous, transparent solid obtained from the fusion, at a temperature between 1300° and 1700°C, of silica (silicon dioxide SiO2), alkaline carbonates, and lime generally in the form of pure calcium carbonate. If these substances are pure, the glass is colourless.





HOW ARE PLASTIC LENSES MADE?

A • THERMOSETTING





Lenses in thermosetting materials are made by a casting process:

- Monomers are mixed by special machines (MONOMER MIXING)
- The monomers are then pushed into molds (FILLING)
- The lenses are polymerised in special kilns. (KILN POLYMERIZATION)
- > Transparent lenses are created
- which can be coloured by deeping with special colourants and then treated

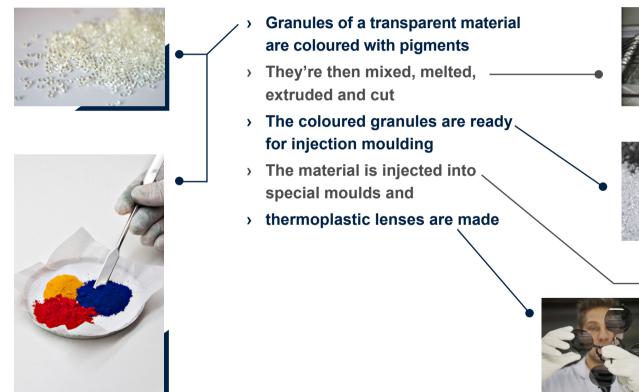








B • THERMOPLASTICS









2.3

ADVANTAGES, LIMITATIONS AND COMPATABILITY OF THE MATERIALS USED

MATERIAL	ADVANTAGES	LIMITATIONS
GLASS	Exceptional resistance to scratches, thin, transparent, dimensional stability, aesthetic quality	Fragility, weight
CR39	Good impact resistance, extremely lightweight, optimal chemical resistance (can be cleaned with alcohol)	Poor mechanical resistance and elasticity (not suitable for use in rimless mountings if the thickness is less than 4-5 mm). Poor resistance to scratches (must be treated with a special coating)
PC	Very resistant to impact (50 times that of CR39 and 250 times more than untempered glass and for this reason often used for children's lenses), lightweight	The mechanical resistance is reduced when there are holes or cuts (not suitable for rimless and acetate frames), mediocre optical quality
PA (NYLON)	Lightweight, compatable with all mounting materials, can have holes drilled in it	



NOT ALL LENSES ARE COMPATIBLE WITH ALL MATERIALS FROM WHICH EYEGLASSES CAN BE MADE

FRAME FRONT MATERIALS	CR39	CR39 POLAR	PC	PC POLAR	PA	PA POLAR
ACETATE	\checkmark	\checkmark	Х	Х	\checkmark	\checkmark
METAL	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
INJECTION MOULDED	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
HORN, WOOD	\checkmark	Х	\checkmark	X	\checkmark	X
SPECIAL FORMS (RIMLESS, NYLOR, NEGATIVE BEVEL)	Х	Х	Х	Х	\checkmark	\checkmark



PHYSICAL CHARACTERISTICS OF THE MATERIALS

According to the materials from which they are made, lenses can have different physical qualities.

The important attributes for lenses are:

- DENSITY (weight of the material), ABBE NUMBER (chromatic aberration)^{1,} REFRACTIVE INDEX (number that quantifies the refractive effect of a lens)²
- > IMPACT RESISTANCE
- > SCRATCH RESISTANCE
- > DESIGN FREEDOM

The characteristics of each material make each type of lens more or less suitable for different uses.

	GLASS	CR39	PC	PA
DENSITY (weight of the material)	1	3	4	5
ABBE NUMBER (chromatic aberration)	4	5	2	4
REFRACTIVE INDEX	4	5	2	4
IMPACT RESISTANCE	1	3	5	4
SCRATCH RESISTANCE with hard coating	5	4	3,5	3,5
DESIGN FREEDOM	2	2	4	5

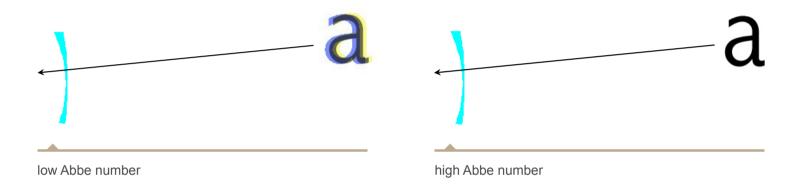
VALUE SCALE: 1 = POOR, 5 = EXCELLENT



2.4

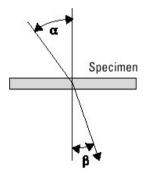
¹ABBE NUMBER

This value indicates the amount of chromatic aberration caused by the lens material. The higher the Abbe number, the lower the chromatic dispersion.



² **REFRACTIVE INDEX**

The refractive index is the ratio between the velocity of light in a vacuum and the velocity of light passing through a material. The lower this number is, the less refraction there will be.







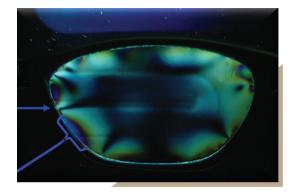
LENSES AND SUN MOUNTING

If the lenses are not shaped or mounted perfectly, their structure can become deformed, causing optical and mechanical problems. The tension it creates can even cause breakage or chipping of the lens.

A • POST-MOUNTING STRESS

If the lenses are not cut or mounted correctly, the structure can become deformed, causing optical and mechanical problems.

The tension can even cause breakage or chipping of the lens.









LENSES AND SUN VISION PROTECTION

Not only is direct light harmful, but even reflected light can cause damage.

So, staying in the shade is not always enough.

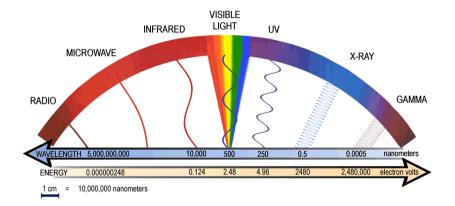
Which is why sunglasses are necessary to protect your vision!

THE ELECTROMAGNETIC SPECTRUM

UV rays are the most dangerous part of the electromagnetic spectrum because they have sufficient energy to cause irreversible damage to the eyes.

The principal problems caused by UVA, UVB and UVC rays concern the cornea, the lens and the retina. The most common vision problem caused by UV rays is a cataract.

About 80% of lifetime exposure to UVA and UVB rays occurs before 18 years of age, so it is important for children to wear sunglasses also.





4.1

PROTECTION

4.2

There are different categories of transmission provided by sunglass lenses.

Protection is indicated by numbers that range from 0 to 4, independent of filter colour.

The protection category (stamped on the inside of the left temple) depends on the quantity of light that passes through the lens:

- 4 Very dark lenses, not suitable for driving. For use only on snow or glaciers.
- 3 Dark lenses, for general use, suitable for protection from bright light.
- 2 Medium protection lens, allows a fair amount of light to pass, for general use.
- 1 Slightly coloured lens, poor filtering capacity, mainly for fashion.
 - Suitable only for fashion.



Caution: the indication of the filter catgory of a lens is not an indication of protection from UVA and UVB rays.



0

05

LENSES AND SUN COLOURS

The perception of colour, which also relates to lens colour, depends on many factors:

- > the observer
- > lighting conditions
- > the amount of light
- > the background
- > the direction of viewing
- > the distance between the two lenses

For this reason, objective methods for measuring colour have been invented, providing an unambiguous definition of the tint.

According to its colour, the lens has different characteristics relative to the eyes.

GREY:

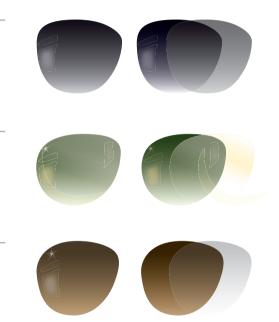
Optimal in extreme light conditions or for prolonged use

GREEN:

With this colour, light is attenuated and normal depth perception is maintained.

BROWN:

Improves contrast and depth perception but can tire eyes if worn for lengthy periods.





PINK:

.

.

This lens colour also ensures good visibility in poor light and increases depth perception.

YELLOW:

Assures the transmission of a large part of light and is the prefect colour for use on cloudy days.

BLUE:

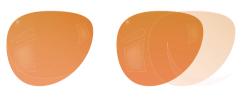
Helps distinguish between objects with soft colours and white details.

ORANGE:

A filter that increases contrast, ideal for low light situations.











LENSES AND SUN TREATMENTS

There are many types of treatments produced with various methods

Types of treatment:



(applied by immersion, spray, spinning, or flow technology)

- > ANTI-SCRATCH
- > ANTI-FOG



(applied in a highvacuum)

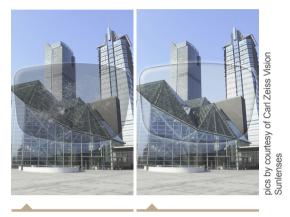
- > MIRROR TREATMENT
- > ANTI-REFLECTIVE
- > WATER REPELLENT
- > OLEOPHOBIC



ANTI-SCRATCH

An anti-scratch coating is a film or coating that can be applied without interfering with lens function or disturbing the wearer's vision.

Even if not 100% resistant to scratches, this coating helps prevent minor scratches that could damage the surface and cause vision problems.



without anti-scratch with anti-scratch

6.2

6.1

ANTI-FOG

Anti-fog treatments are made from a special resin that disperses the condensation which forms on lens surfaces when going from cold to warm temperatures.







MIRROR TREATMENT

Applied to sunglasses, a mirror coating creates a brilliant and highly reflective outer surface on the lens. Some mirrorings coatings completely hide the eyes of the person wearing them.

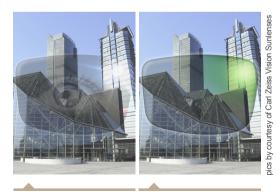
Some like mirrored glasses just for aesthetic reasons, but mirrored lenses are also very functional.



6.4

ANTI-REFLECTIVE

An anti-reflective coating deposits a very thin layer of special metallic or dielectric on the lens surface by highvacuum. They diminish the parasitic light reflections that reduce an image's sharpness as it is processed through the optical system.



without anti-reflective with anti-reflective





WATER REPELLENT

The water repellent coating allows water drops to slide easily from the lenses.



by courtesy of pics by cou Sunlenses

repellent

with water repellent

6.6

OLEOPHOBIC

The application of a clean coat provides excellent anti-static properties that keep lenses cleaner longer, allowing dust, dirty and water to slide from the lenses.



without self-cleaning with self-cleaning





LENSES AND SUN POLARISING LENSES

Light, especially if intense and reflected, is not only annoying but also is a potential danger for the eyes, which do not develop a tolerance for UVA and UVB rays and become more sensible with each exposure. To reduce glare we can use polarizing lenses.

INTRO

7.1

Clouds are not a protective barrier against solar radiation because almost 80% of the rays are transmitted even on a cloudy day (the effect increases when near water, snow, concrete, and sand - all surfaces that reflect UVA and UVB rays).

The intensity of the sun's rays increases significantly as altitude increases, reaching 12% every 1,000 meters at higher elevations.



Without polarised lenses

With polarised lenses



EYE PROTECTION

Non-polarising lenses let all light, both horizontal and vertical rays, pass through.

Polarised lenses, on the other hand, let only the vertical component of light through, which is preferable for clearer vision.



7.3

7.2

POLARISING LENSES - ADVANTAGES

The use of polarised lenses has various advantages:

- > Improves visual comfort by absorbing reflected light
- > Improves contrast and clarity with higher definition for images
- > Reduces eye strain
- > Allows better colour perception
- > Reduces/eliminates glare and reflections



POLARISING LENSES - WHEN NOT TO USE THEM

For some activities, polarising lenses are not the best choice. For example:

- When skiing in icy conditions. To the naked eye, icy areas are easily identifiable because they reflect more light than snow. However, using polarised lenses makes it more difficult to distinguish ice from snow.
- When there is oil or ice on the road. Again, in this case reducing reflections created by the contrast between oil or ice and the rest of the street makes it difficult to distinguish between these two hazards.
- When looking at some liquid crystal screens (LCD). Polarised lenses can make some liquid crystal displays (LCD) difficult to read.



7.4

HOW TO RECOGNISE POLARISING LENSES

Polarising lenses can be identified by overlapping the two lenses and rotating the closer one 90°. If the view through the two lenses becomes obscured, then the lenses are polarised.

There are also gadgets or mirrors with "hidden" backgrounds that become visible only when seen through polarising lenses.



7.5

BOOK 6 HOW DO I LOOK?



EYEWEAR MANUAL



01 • INTRO
02 • FIT p. 49
03 • THE EYES
A • EYEBROWSp. 53
B • EYE SHAPEp. 54
C • DISTANCE BETWEEN THE EYESp. 55
04 • FACE SHAPE p. 56
A • OBLONGp. 58
B • OVALp. 59
C • ROUND p. 60
D • SQUAREp. 61
E • RECTANGULARp. 62
F • TRIANGULARp. 63
G • INVERTED TRIANGLEp. 64
H • HEART-SHAPEDp. 65
• DIAMOND

05•	COLOURS	. 67
	A • SKIN COLOURSp	. 69
	B • EYESp	. 71
	C • HAIRp	. 74

MACROCATEGORIES

WINTER
AUTUMNp. 77
SPRING
SUMMERp. 79





HOW DO I LOOK? INTRO

The choice of eyewear should always take aesthetics into consideration.

Eyewear fashion (for sunglasses or spectacles) is one of the key purchase motivators, along with price, brand, and technical solutions. There are many factors that determine a correct match between person and eyewear:









NOTE: To correctly choose a frame, there are 2 main rules to follow:

- > Eyewear shape should always contrast with the shape of the face
- Frame front dimensions should always be proportional to the face of the wearer.





HOW DO I LOOK? FIT

Like clothing, eyewear comes in different sizes and must fit perfectly. This also guarantees quality vision and comfort.

Wearing correctly sized sunglasses, for example, helps properly filter UV rays.

CHOOSING "THE SIZE"

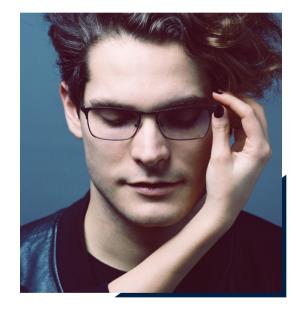
But how to determine if the eyewear is the correct size?

FRAME FRONT , Must not extend beyond

- the temples (too large)
- > Sides of face should not be visible (too small)



- > Ear pieces should not show beyond the curve of the ear (too long)
- > Ear pieces should not begin to curve much before the ear (too short)







HOW DO I LOOK? The eyes

The choice of eyewear greatly influences the image a person projects, and the area around the eyes will therefore greatly be affected by or benefit from it.



When choosing a frame, there are three factors to consider:





C DISTANCE BETWEEN THE EYES



A • EYEBROWS

Whatever the shape of the eyebrows (balanced, rounded, angled or straight), eyewear should always follow their shape to create harmony with the face.

Especially for spectacles, half the eyebrow should be visible above the frame front.





B • EYE SHAPE

With spectacles in particular, different eye shapes can be associated with different frame shapes.



EYE SHAPE almond

WHAT TO CHOOSE Shapes that call attention to the eyebrows

0	

EYE SHAPE Round

WHAT TO CHOOSE Cat eye

WHAT TO AVOID Square shapes

	/
9	~



EYE SHAPE Average

WHAT TO CHOOSE Any



EYE SHAPE Narrow

WHAT TO CHOOSE Soft shapes

WHAT TO AVOID Rectangular





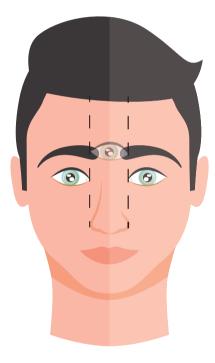






C • DISTANCE BETWEEN THE EYES

Imagine there is a third eye between the two. The distance between the eyes can be defined as:



Normal

a hypothetical third eye fits perfectly between the two real eyes

Wide set

there is more space between the two real eyes than that occupied by the imaginary third eye

Close set

there is less space between the two eyes than that of a hypothetical third eye

DISTANCE Normal

WHAT TO CHOOSE Any

WHAT TO AVOID

DISTANCE Wide set

WHAT TO CHOOSE Wide and keyhole bridges

WHAT TO AVOID Small bridges

DISTANCE Close set

WHAT TO CHOOSE Small bridges and bright colours.

WHAT TO AVOID Wide and keyhole bridges

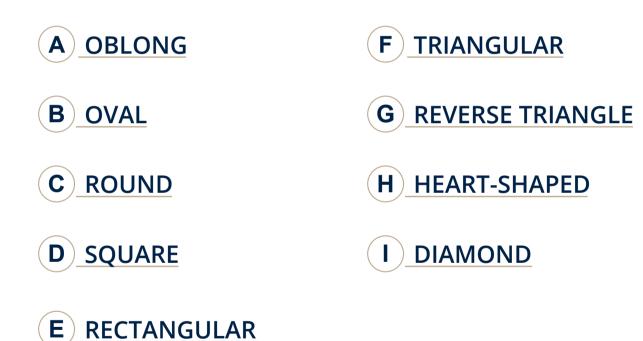




HOW DO I LOOK? FACE SHAPE

The main parameter when identifying the eyewear shape most suitable for a person is the harmony it creates with his/her face.

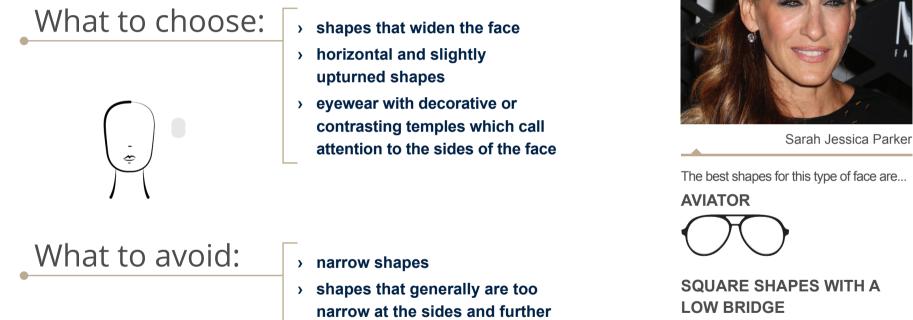
The face can be defined by precise geometric shapes. The most common shapes are:





A • OBLONG FACE

A face can be called oblong when the distance between chin and forehead is significant. Features are soft and the cheeks are not very pronounced. Sometimes an oblong face is associated with a long nose.



lengthen the face

(to shorten the appearance of the nose)



B • OVAL FACE

The oval face is defined by soft, well-balanced features, and the chin is narrower than the forehead. Cheekbones are typically high.

What to choose:

> practically any shape



The best shapes for this type of face are... **PRACTICALLY ANY**, if proportional to the dimensions of the face.

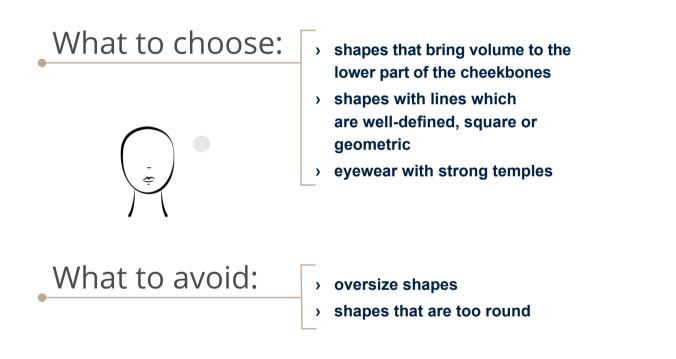


Lucy Liu



C • ROUND FACE

The round face features a circular shape, without angles or squared lines. The distance between the temples is well-balanced.





Miranda Kerr

The best shapes for this type of face are...

RECTANGULAR



STRONGLY GEOMETRIC EYEWEAR



D • SQUARE FACE

This type of face is known for its decisive, square shape both vertically and horizontally. The length and width of the face are perfectly equal.

What to choose: > softly curved shapes > lower frame fronts > upward-angled shapes Salma Hayek Ś The best shapes for this type of face are... ROUND PANTHOS What to avoid: > evewear that is flat on bottom, squared, or with strong **CAT EYE AVIATOR** geometrical shapes.



E • RECTANGULAR FACE

This face is long with squared angles; the cheekbones and jaw are usually pronounced.



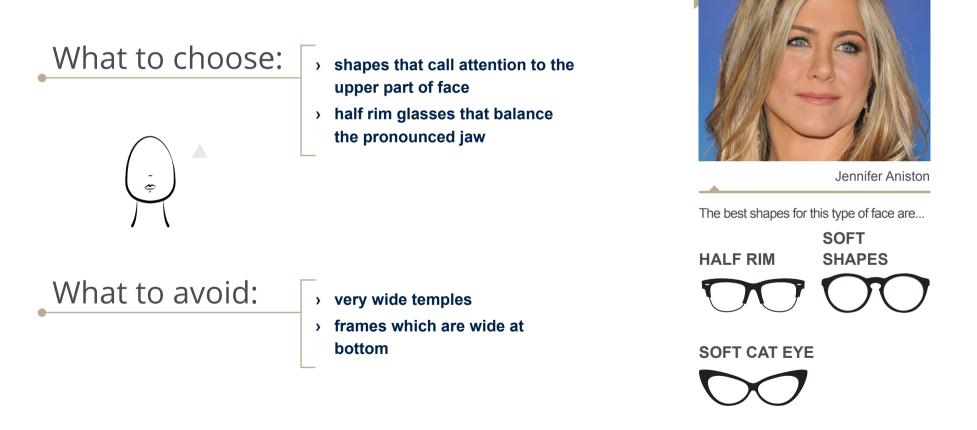
WITH SOFT SHAPES

AVIATOR



F • TRIANGULAR FACE

A face is considered triangular when the chin and jaw are wide and the forehead is very narrow.





G • INVERTED TRIANGLE FACE

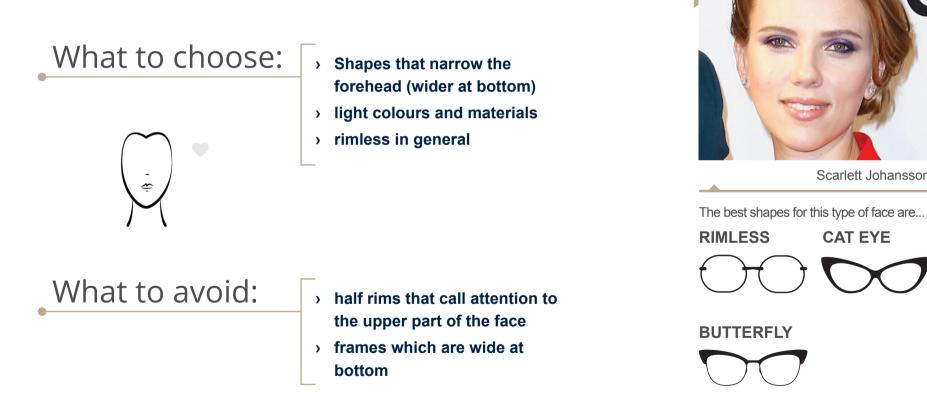
This face is characterised by a wide forehead, narrow cheekbones and, usually, a pointed chin.





H • HEART-SHAPED FACE

The heart-shaped face features a wide forehead, accentuated cheekbones and narrow chin





Scarlett Johansson

CAT EYE

• DIAMOND FACE

Cheekbones are very pronounced, the diamond shaped face is narrow at the extremes (between the forehead and chin; and between the temples)







HOW DO I LOOK? COLOURS

Each person has "their colour". There are people characterised by warm colours and others by cool colours. But how are these distinctions made? Principally based on three elements:

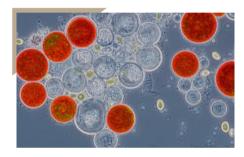








A • SKIN COLOUR



CAROTENE yellowish pigment







MELANIN a combination of black, brown and red pigments

These three factors together determine a person's complexion.



In 1975, Harvard dermatologist Thomas B. Fitzpatrick created the Fitzpatrick Scale to estimate the reaction of various types of skin to UV rays.





However, the undertone of the skin determines if a person's colouring is warm or cool.

Colouring falls into two categories: tending toward yellow if warm, or bluish if cool.



B • THE EYES

Even the eyes are a factor in determining a person's colour characteristics.

Eye colour is a polygenic trait determined mainly by the quantity of melanin and type of pigment in the iris. Eye colour can vary within a wide range from very dark brown to the lightest shades of blue.

It can be classified as:







DARK EYES

Dark eyes are the most common throughout the world. Brown is the dominant colour in humans, and in many areas of the world it is the only eye colour found.

Dark eyes include:









DARK BROWN EYES

The absolute darkest. They tend to become lighter brown with age; can be found with phototypes 3 and higher.

BROWN EYES

Contain a large quantity of melanin.

Can be medium brown or darker, similar to dark chocolate.

LIGHT BROWN EYES

They have less melanin with respect to medium and dark brown eyes.

Found with phototypes 3 and higher.

HAZEL EYES

Give the impression of various shades of light brown to dark greenish-gold. They derive from a combination of brown and green and the dominant colour can be either green, light brown, or gold.



LIGHT EYES

Light eyes (those that are amber, green, grey and blue) are the rarest eye colours in the world.

Individuals with light eyes are more exposed to damage caused by ultraviolet rays with respect to those with dark eyes.









AMBER EYES

At times considered yellow, these are characterised by intense colour and a yellow/ gold or reddish/copper shade.

GREEN EYES

Product of a lower quantity of melanin and more common in women than men.

GREY EYES Have more melanin compared to blue eyes.

BLUE EYES

Are due to a reduced quantity of melanin and are linked to the density of proteins in the stroma.

In Greek mythology, the goddess Athena was famous for her blue or rather, glaukos eyes - that is blue/green, the colour of the sea (in Greek: $\gamma\lambda\alpha\nu\kappa\omega\pi$ i) – glaukopis).



C • HAIR



BLACK HAIR The most common hair colour in the world. Also found in Europe.



RED HAIR

Linked to a recessive gene, red hair is also associated with other physical characteristics, in particular white skin with freckles.



BROWN HAIR Colours ranging from brown to dirty blonde, similar to a chestnut colour. Typical of European populations.



BLONDE HAIR This hair colour tends toward yellow (with various possible shades and gradations). Even hair colour is determined by melanin.

There are two types: eumelanin, **dark** (black hair); and pheomelanin, **light** (red or blond hair).



GREY HAIR

With the passage of time, hair tends to turn grey.

The average age for its appearance is between 30 and 40 years old for both men and women. The principal factors that influence the growth of grey hair in an individual may be genetic, metabolic, nutritional, and psychological.



MACROCATEGORIES

The combinations of skin, eye and hair colours create 4 macro characterisations for complexions into which every person can be placed.

These categories are based on the 4 seasons which they are named after:

1WINTER2AUTUMN3SPRING





WINTER

Snow White perfectly represents this phototype, known for its characteristic contrasting colours.

The "winter" person typically has dark hair, from intense chestnut to jet black.

Eye colour can be dark brown, hazel, grey-green or, rarely, emerald or blue topaz.

Complexion varies greatly from ivory to ebony, but the undertone of the skin is always a cool pinkish.



Dolcenera

What to choose:	 decisive, strong colours like burgundy, electric blue, bright green and yellow. OK: fluorescent colours and contrasting colours 	
What to avoid:	> warm or earth tones	



AUTUMN

Fall types are more variable and are characterised by red in all shades.

Hair colour varies from chestnut with mahogany highlights to copper red. These blondes tend have warm, golden shades.

Eye colour is usually green with gold flecks but it is also possible to find bright blue, olive and golden brown.

Skin is always light and the undertone is always warm.



Isla Fisher

What to choose:

 earth colours like khaki, brick red, beige, gold, sand, brown, green



What to avoid:

 colours that are too contrasting; dark tones of black or blue; or pastel colours like lilac, light blue and pink.



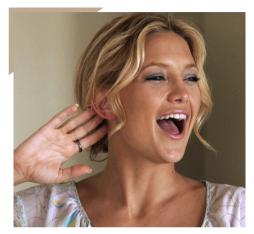
SPRING

Spring types are characterised by harmony and a lack of contrast.

Hair tends to be light, from blonde to red with warm highlights.

Eye colour is light blue, green or hazel.

Skin is peach-coloured with warm undertones.



Kate Hudson





SUMMER

This is the that is most delicate and cold complexion type.

Hair is often ash blonde, at times dark chestnut.

Eyes are iridescent because they interact with the weather and the principal colours are sky blue, petroleum green and hazel-grey.

Skin colour is light with a cool pinkish undertone.



Gwyneth Paltrow



