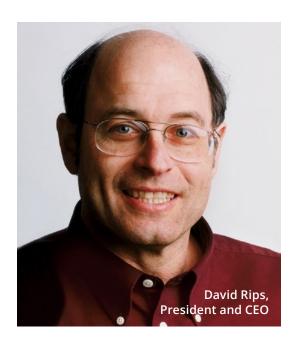


YOUNGER OPTICS

OPTICAL LENS INNOVATORS



The Easiest Company To Do Business With

For close to 70 years, Younger Optics has remained a leader in the optical industry by developing new and innovative lens solutions. As you'll see in this booklet, Younger provides a wide array of lens options, materials and treatments to meet virtually every eyewear need, from the latest in polarized and photochromic, to specialty occupational lenses.

From humble beginnings, Younger has grown into the world's largest independent lens company. What sets us apart is that Younger does not operate at the wholesale laboratory or retail level, because our policy is to never compete with our customers. This is rare in this era of rapid change for our industry. But it means that our success only is possible by making our customers successful. Therefore, our goal is always to be the easiest company to do business with.

Table of Contents

NuPolar®	1-9
Transitions® Drivewear®10-	13
Camber™ Lens Technology14-	-17
Image® Progressive 18-	21
Trilogy [®] 22-	25
Transitions®26-	35
High Index36-	39
Multifocal & Specialty40-	41
Finished Lenses42-	43

Pages highlighted in blue contain product availability tables.



Headquarters: 2925 California Street,

Torrance, CA 90503, USA

Pacific: Unit 6, 9-13 Ridley Street, Hindmarsh, SA 5007, Australia

Europe: Komerčni Zona Pruhonice, Obchodni 110,

Čestlice 25170, Czech Republic

Brazil: Rua Alfredo Achcar, 970D, Prédio 10 Bairro Nova Vinhedo – CEP 13280-000 Vinhedo/SP – CNPJ: 15.069.973/0001-54

www.youngeroptics.com

YOUNGER OPTICS

A TRADITION OF OPTICAL INNOVATION



It all began almost 70 years ago with one man's vision to create a bifocal that wouldn't give away the wearer's age with its telltale lines. This desire led Irving Rips to develop the world's first "seamless bifocal," which was launched in 1955. Younger Optics—so named because the new lenses would make their wearer look younger —was born.

Today, Younger is the world leader in Rx polarized sunwear with NuPolar® brand lenses, and continues to be an innovative force in the optical world.

Since winning the first OLA Award of Excellence ever given (1987) for its specialty lenses, Younger has won a total of 24 OLA Awards—more than any other lens company.

From a company started in a garage to a world-class organization, Younger Optics was a true realization of the American Dream for founder Irving Rips, who was honored with a Lifetime Achievement Award in 1992.

In addition to being the world leader in prescription polarized lens sales, Younger Optics is also a leader in specialty products, and 3rd in the world in Transitions lenses. Younger has become an international company headquartered in the USA, with Sales and Distribution offices serving North America, Europe, Australia/Asia Pacific, Latin America and Brazil.

FOLLOW US ON SOCIAL MEDIA!



in linkedin.com/in/DavidRipsCEO

Connect with and follow David Rips on LinkedIn to build a professional relationship with an influential industry veteran!



facebook.com/**YoungerOptics**

Follow Younger Optics on Facebook for the latest information on lens releases, including events and special offers for eyecare professionals.



facebook.com/**DavidRipsCEO**

Follow our President & CEO, David Rips on Facebook for professional discussion and ideas from a leading independent voice in the optical industry.

NUPOLAR POLARIZED LENSES

Not all polarized lenses are the same. There is a good reason why NuPolar is the world's #1 Rx polarized lens.

As polarized lenses gain in popularity and are being offered by an increasing number of lens manufacturers, it is easy to begin to think that all of these lenses are manufactured the same, and are of equal quality and similar performance. This is certainly not true.

NuPolar® is the world's leading brand of polarized Rx lenses.

When performance factors such as optics, polarizing efficiency, color consistency, heat stability and many other factors are taken into consideration,

NuPolar quality is unequaled. We worry about the small details of our lenses so that you don't have to. With NuPolar lenses you can always be sure of receiving the most advanced and intelligently designed lens available.

NuPolar is Perfect for Digital Surfacing

Excellent digital surfacing capabilities start with having excellent curve control and optics on the front surface of the lens. This curve control can only be achieved through rigorous adherence to manufacturing standards throughout the manufacturing process. The precision of the front curve of a lens is a result of the care given to it by the manufacturer. NuPolar products are designed specifically to be highly compatible with digital surfacing processes. The number of base curves in one-diopter steps is maximized to give as thin and flat a finished lens as possible.

Proprietary Film Technology

Younger is one of the few lens manufacturers that has film manufacturing capabilities. This has allowed us to achieve unrivaled excellence in the areas of film placement, color stability, heat stability, and advanced film adhesion. Creating a great polarized lens starts with great polarizing film technology, and here NuPolar is unrivaled.

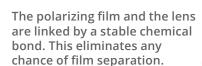
Excellent Color Uniformity

Younger colors are always "true colors". The human eye is a superb "color matching instrument" and NuPolar lenses are the best product on the market to satisfy these demanding requirements.

Excellent Heat Stability

NuPolar's colors remain stable in the elevated temperatures often required for hard coating and AR processing. Other lenses often fade, lose efficiency or change their colors completely when subjected to the temperatures required during these processing steps.

NUPOLAR



All NuPolar lenses have excellent UV blocking properties.



Before NuPolar, delaminations were an everyday occurrence with polarized lenses. With NuPolar technology, the unique chemical composition of the polarizing film facilitates a chemical reaction between the lens material and polarizing film material, which eliminates the possibility for lens/film delaminations.

Wide Availability

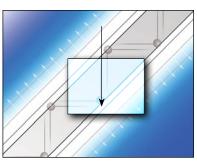
With a wide range of materials, colors, and styles, NuPolar lenses consistently have the availability you need (including extra large blanks), making it easy to recommend the world's #1 Rx polarized lens to practically every patient. NuPolar lenses are made in more progressive styles than any other polarized lens.

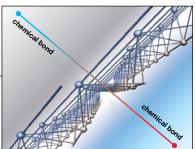
Without NuPolar lenses



With NuPolar lenses







Embrace the Opportunity.

Every corrective lens wearer should have at least two pairs of glasses: one with clear or photochromic lenses for indoor and low light conditions, and one with polarized lenses for bright light conditions.

The benefits of sunwear are undisputed, but your patient relies on you for adequate information to choose the right pair.

When you recommend NuPolar lenses, you are recommending the world's most trusted Rx polarized lenses.

NUPOLAR MIRRORS

NEW MIRRORCOAT OPTIONS

Do your patients want their on-trend mirror-coated polarized lenses faster?

Ask your lab about rapid-turnaround NuPolar® Mirror lenses available in hard resin and polycarbonate, in three popular colors:



Polarized: Blocks blinding glare

UVA/UVB: Blocks 100%

Blue Light: Blocks ≥ 80% high energy blue light (380-500nm).*

NuPolar Quality: high efficiency polarization, color & heat stable

Base Curves: Hard Resin 2, 3, 4, 5, 6, 7, 8 Polycarbonate 2, 4, 6, 8.25

SV Rx range: Hard Resin -7.00 D to +5.00 D Polycarbonate -8.00 D to +6.50 D

Processing: Traditional or Digital

Colors: NuPolar Mirror Silver, NuPolar Mirror Blue, and NuPolar Mirror Gold

NUPOLAR GRADIENTS

Rx Polarized Gradient Lenses WITHOUT Lab Tinting!

Why NuPolar Gradient?

No tinting necessary: consistent matching and faster lab turnaround

New Encapsulated Gradient Technology: won't fade or discolor

NuPolar Quality: high efficiency polarization, color & heat stable

Polycarbonate: excellent impact resistance

Single vision Rx range: -5.00 to +6.00

Processing: Traditional or Digital

Now in 3 Colors: Gray/Gray, Brown/Gray, Brown/Brown

3 Base curves: 4, 6, 8

Polarized: Blocks blinding glare

UVA/UVB: Blocks 100%

Blue Light: Blocks ≥ 80% high energy blue light (380-500nm).*

Ordinary gradient lenses are tinted on the surface using a painstaking process that can sometimes provide undesirable or inconsistent results. NuPolar Gradient lenses are different, because the gradient is encapsulated in the lens with the polarizing film. This patented Encapsulated Gradient Technology prevents fading and discoloration of the lens over time. It also completely removes the need to surface tint the lens, meaning consistent matching every time. And of course, NuPolar Gradient polarized lenses block blinding glare and 100% UVA/UVB. For more information on NuPolar Gradient polarized lenses, please visit **NuPolarGradient.com**.







BROWN/BROWN

Good to know:

NuPolar Gradient "Brown/Gray" lenses are dark brown on top and light gray on bottom.

NuPolar Gradient "Brown/Brown" lenses are dark brown on top and light brown on bottom.

Brown/Brown blocks highest % of high energy blue light.



US Patent 8651660 B2

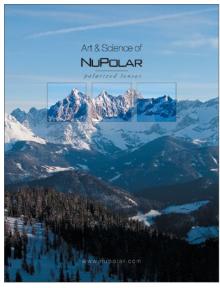
^{*} Measured according to ISO 8980-3: 2013 and ISO 12311:2013 Blue light hazard function calculations.

EDUCATIONAL & MARKETING MATERIALS

Education made simple

Like all value-added features, polarized lenses require a bit of consumer education. Younger Optics is committed to providing the eye-care professional with a wide range of marketing materials that make this task simple.

For additional marketing resources, please visit YoungerOptics.com.



The Art & Science of NuPolar Booklet



NuPolar Patient Brochure



NuPolar Lighted Glare Demonstrator



NuPolar Gradient Dispensing Counter Card



NuPolar *Look* Polarized Glare Card

NUPOLAR®

						▼ NEW ▼		
Lens Style	Hard Resin	Poly	Trilogy®	1.60 Hi-Index ^(MR-8™)	1.67 Hi-Index ^(MR-10™)	1.74 Hi-Index ^(MR-174™)		
	N N N 1 , 2, 3, 4, 5, 6, 7, 8	0.5, 1, 2, 3, 4, 5, 6, 7, 8						
Single Vision	N 2, 4, 6, 8	N N 0.5, 2, 4, 6, 8	N N	_ 1 1 2 1	000	NN		
Colors & Base Curves	N N N 2,3,4,5,6,7,8	N N N 2, 4, 6, 8	2, 4, 6, 8			2, 4, 6, 8		
		NNN 4, 6, 8						
Single Vision Extra Large Blank (80.5mm!) Colors & Base Curves	N N 4, 6, 8	N N 6, 8			N N 4, 6, 8			
Camber™ Lens Blank Colors & Base Curves	N N 0.5, 2, 3, 4, 5, 6, 7, 8	N N 0.5, 2, 3, 4, 5, 6, 7, 8		N N 0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8			
IMAGE® Progressive Colors & Base Curves Add Range	N N 2, 4, 6, 8 1.00 - 3.00	N N 2, 4, 6, 8 1.00 - 3.00	COIOI			Gray/Gray		
IMAGE Wrap® Colors & Base Curve Add Range		8 1.00 - 3.00	N Brow	n (N Gradient N Mirror Sil	nt Brown/Gray nt Brown/Brown Silver		
ADAGE® Progressive Colors & Base Curves Add Range		N N 2, 4, 6, 8 1.00 - 3.00	Copper Sray-1		N Mirror Gold N Mirror Blue			
FT28 Bifocal Colors & Base Curves Add Range	N N 2, 4, 6, 8 0.75 - 4.00	N N 2, 4, 6, 8 1.00 - 3.00			NEW 2, 4, 6, 8 1.50 - 3.00			
FT35 Bifocal Color & Base Curves Add Range	2, 4, 6, 8 0.75 - 4.00			V		1		
7 x 28 Trifocal Color & Base Curves Add Range	N 4, 6, 8 1.50 - 4.00							

TRANSITIONS DRIVEWEAR

Polarized & Adaptive:

The Ultimate Driving Lens

Transitions Drivewear adaptive sun lenses were designed to meet the unique visual challenges of daytime driving.

High-efficiency polarizer blocks
blinding glare both outdoors and
behind the windshield, for a safer
and more comfortable drive.

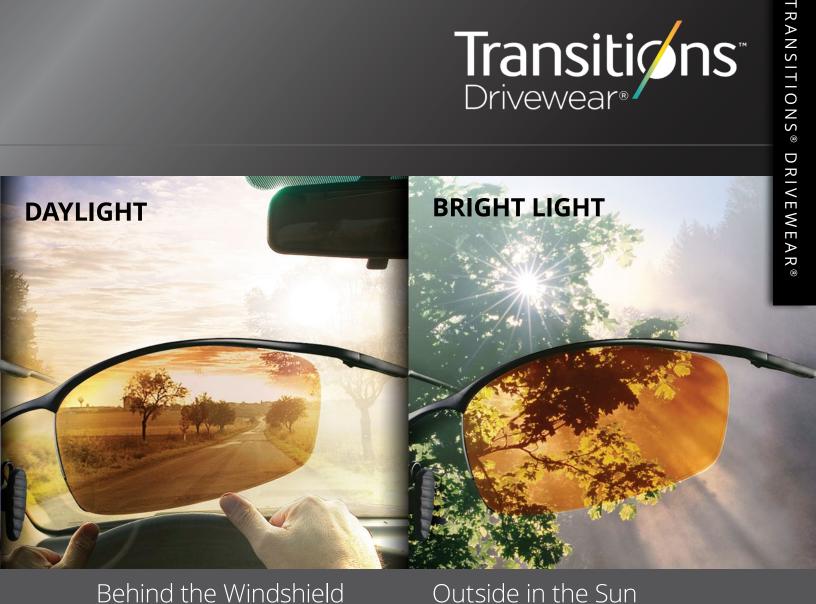
Lens color and darkness
continuously adapts to optimize
color contrast in changing
daylight conditions, even behind
the windshield.

Transitions Drivewear sun lenses block 100% of UVA and UVB, and are the only lenses that combine NuPolar polarizing technology and Transitions photochromic technology.



In low daylight, the lenses allow high transmission of light to maximize the total information to all the eye's visual receptors.

This results in maximum visual acuity at this lower lighting level. The high contrast polarizer removes glare that would otherwise destroy vision in low light conditions. Wearers have said there are no better lenses for driving under overcast and low-daylight conditions.



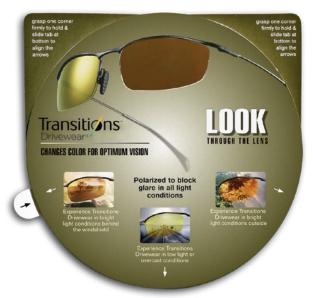
Copper

Behind the windshield of a car, Transitions Drivewear sun lenses darken to copper. In this stage, the lenses reduce light intensity and block blinding glare for optimum visual acuity.

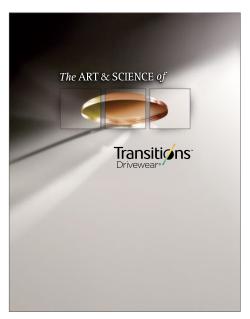
Outside in the Sun **Brown**

Outside in bright sunlight, the eyes' visual receptors, the rods and cones, can easily get "oversaturated" with light. In bright direct sunlight, Transitions Drivewear sun lenses achieve their maximum dark color, which is designed for maximum filtration of uncomfortable bright light. This means Transitions Drivewear sun lenses are great sunwear lenses for any outdoor activity.

EDUCATIONAL & MARKETING MATERIALS



Transitions Drivewear Polarized Demo Wheel



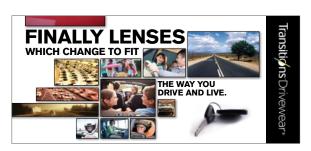
The Art & Science of Transitions *Drivewear* Booklet



Poster, approx. 23" x 33"



Lenticular Display Card, 5" x 7" (image changes when viewed at different angles)



Transitions Drivewear Patient Brochure

TRANSITIONS® DRIVEWEAR®

				▼ INEVV ▼
Lens Style	Hard Resin	Poly	Trilogy®	1.67 Hi-Index ^(MR-10™)
Single Vision Base Curves	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	2, 4, 6, 8	2, 4, 6, 8
Camber™ Lens Blank Base Curves		0.5, 2, 3, 4, 5, 6, 7, 8		
IMAGE® Progressive Base Curves Add Range		2, 4, 6, 8 1.00 - 3.00		
Finished Plano Base Curve			6 hardcoated	

For complete Rx ranges & tech specs, see **youngeroptics.com/EN/TechnicalSpecifications**.



CAMBER LENS TECHNOLOGY

What is Camber Technology?

Camber Technology combines complex curves on both surfaces of the lens to provide excellent vision correction. The unique, continuously changing surface curvature of the specially designed lens blank allows expanded reading zones with improved peripheral vision.

When combined with a sophisticated back surface digital design, both surfaces work together to accommodate an expanded Rx range, offer better cosmetics (flatter) for many prescriptions, and yield user-preferred near vision performance.

Ideal Base Curve

When the power of a lens is paired with its ideal base curve, the wearer enjoys clearer vision, with minimal oblique astigmatism. For a progressive lens, the distance zone power calls for a flatter base curve, while the near zone power calls for a steeper base curve. However, most digitally surfaced progressive lenses are processed from a single vision lens blank. This means the various powers must share a single base curve, one that may not be ideal for the near zone.

Front Surface Innovation

The Camber lens offers an elegant solution that represents the next step in digital progressive lens technology. The Camber lens blank features a variable base curve — a new front surface innovation that provides the optically ideal base curve in all viewing zones.

Each Camber lens blank comes from a section of the "Elephant's Trunk" curve, creating a unique variable base curve front surface that continually increases in diopter from top to bottom. [Figure A]

This improved front surface profile gives each viewing zone a base curve that is well-suited to its function.

Compare Front Surfaces

A digital progressive lens processed from a single vision lens blank has one base curve from top to bottom. The Camber lens blank has a unique, continuously increasing base curve, ideal for the increasing power profile of digital progressive lenses. [Figure B]

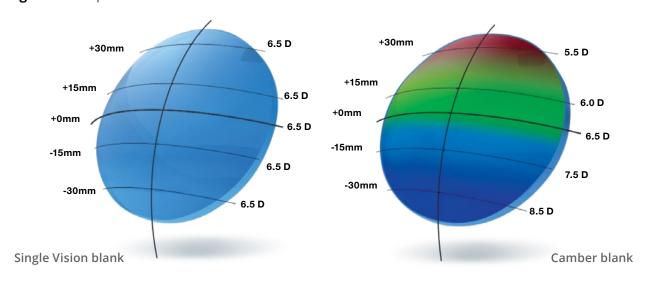
With this innovative design, wearers enjoy noticeably increased acuity in the periphery of the distance zone, as well as a reading area that is more comfortable and easier to find with the eye.



Figure A: Elephant's Trunk Curve

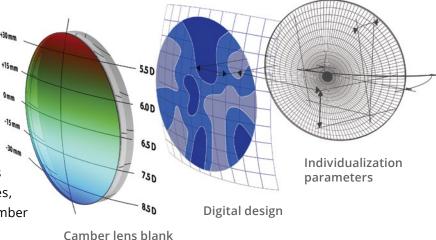






Merging Complex Curves

When the unique front surface is combined with a sophisticated backside digital design, both surfaces work together to become the patented Camber finished lens. The design may be further enhanced by a set of individualization parameters, such as unique attributes of the frame and wearer preferences, to comprehensively customize the Camber lens for each individual wearer.

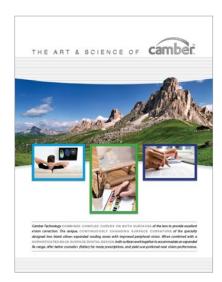


Compensation vs. Personalization

Digital lens design gives optical designers a lot of power to create lenses that are customized to each patient. But when a progressive lens is made from a single vision lens blank, the uniform front curve creates optical problems that lens designers must digitally correct. Rather than focusing every design decision on achieving a fully personalized lens, some of the design power must go toward "compensation correction."

Camber's new variable base curve technology reduces the need for compensation correction, allowing more digital design power to be used to refine and customize the design for each individual eye.

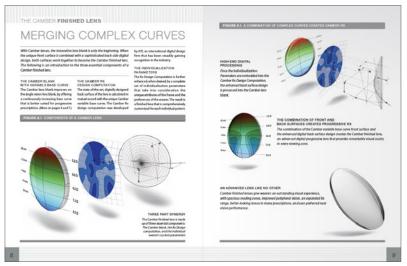
EDUCATIONAL & MARKETING MATERIALS



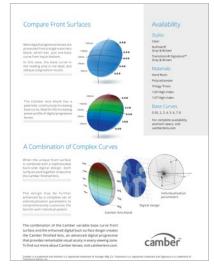
The Art & Science of Camber 8-page Booklet



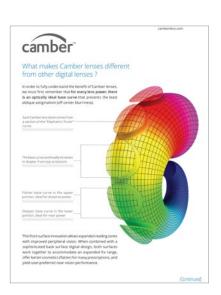
Camber Patient Brochure



Inside



Camber Flyer



For more information about Camber lenses, visit **camberlens.com**. To request materials, contact **marketing@youngeroptics.com**.

$CAMBER^{\mathsf{TM}}$

Lens Style	Hard Resin	Poly	Trilogy®	1.60 Hi-Index ^(MR-8™)	1.67 Hi-Index ^(MR-10™)	1.74 Hi-Index ^(MR-174™)
Camber™ Clear Base Curves	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8
Camber Transitions® Signature® Colors Base Curves	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8
Camber Transitions® XTRActive® New Gen Colors Base Curves		NG NG 1, 2, 3, 4, 5, 6, 7, 8	NG NG 1, 2, 3, 4, 5, 6, 7, 8		NG NG 1, 2, 3, 4, 5, 6, 7, 8	NG NG 1, 2, 3, 4, 5, 6, 7, 8
Camber Transitions® XTRActive® Polarized Colors Base Curves	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8		1, 2, 3, 4, 5, 6, 7	
Camber Transitions® Drivewear® Color Base Curves		0.5, 2, 3, 4, 5, 6, 7, 8				
Camber NuPolar® Colors Base Curves	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8		0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	

Colors:

- C Clear
- U Clear UV420
- Transitions® Signature® Gray
- Transitions® Signature® Brown
- NG Transitions® XTRActive® New Gen™ Gray
- NG Transitions® XTRActive® New Gen™ Brown
- P Transitions® XTRActive® Polarized™ Gray
- **D** Transitions® Drivewear®*
- NuPolar® Gray-3 (Gray)
- NuPolar® Brown

^{*} Transitions Drivewear lens color is dependent on lighting conditions.

IMAGE[®]

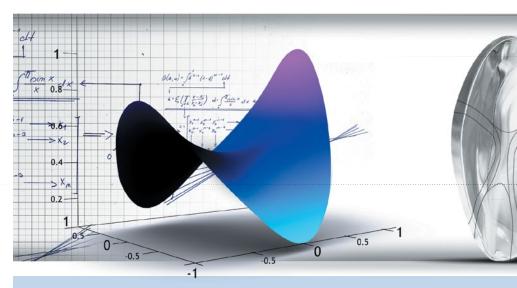
PROGRESSIVE LENSES

From Mathematics to Award-winning Lens Design

Advanced lens design technology and a desire to attain optimum wearer comfort in all viewing zones were the design principles that brought the IMAGE progressive to life. Eyepath tracing technology has been utilized to analyze and understand what the wearer sees in all viewing areas, in all prescriptions, in many different lifestyle activities.

IMAGE provides stabilized viewing zones in all prescriptions, ensuring the reading area is not compromised as the add power increases. IMAGE boasts one of the widest distortion free distance zones in the industry, which is an essential attribute for a quality progressive design.

IMAGE designs are available in a very wide range of lens materials and lens treatments.



State of the art mathematics to world class progressive lens design

IMAGE Wrap® Decentered Progressive Polarized Lens

The IMAGE Wrap lens design is decentered to maximize the usable lens area, and the low level of unwanted astigmatism in the periphery

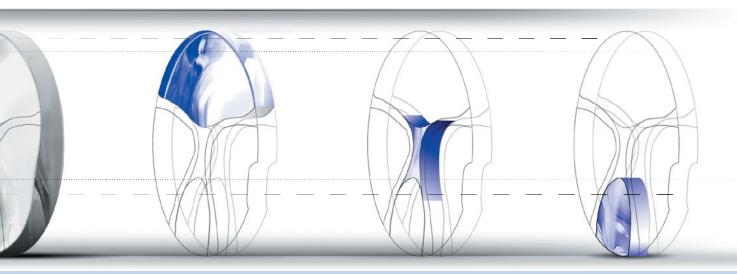
Clear distance, even out to the edge

ample reading area

of the distance zone makes it an ideal choice for high end wrap styles.

Available in polycarbonate in a +8 base curve, the design is decentered 7mm to allow for maximum cut-out opportunity. With an effective blank size of 83mm, no secondary calculations are necessary for use. Great for narrow PD's.

IMAGE®



Distance Zone

IMAGE features a large and clear distance, particularly important for outdoor activities, driving, and sunwear

Intermediate Zone

Both functional and practical to accommodate the widest range of frame sizes

Reading Zone

Stabilized near zone ensures easy adaptation and patient satisfaction when reading

Polarized Sunwear

Fit premium IMAGE® NuPolar® polarized lenses with today's premium sunglass frames. No need to compromise technology and performance on Rx sunglasses due to cut-out issues. With one of the widest distance zones in the industry, the IMAGE progressive design is ideal for sunwear.

Rimless or Drilled Frames

Rimless high fashion frames are elegant, yet these frames present lots of challenges. IMAGE is available in Trilogy®, polycarbonate, and High Index 1.67 MR-10™ materials, giving you flexibility when balancing the factors of material strength, optics, weight, and progressive design.

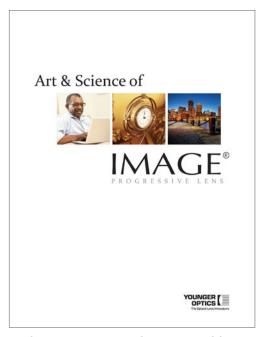
Fashionable Small Frames

Small frames are particularly challenging for progressive lenses. IMAGE balances a clear unobstructed distance area with a short corridor, allowing fitting heights as low as 18mm.

For even shorter fitting heights, try the ADAGE® ultra-short corridor progressive lens with a minimum fitting height of 13mm. Please contact your Younger Optics representative for more information.



EDUCATIONAL & MARKETING MATERIALS



The Art & Science of Image Booklet



Image Reading Card

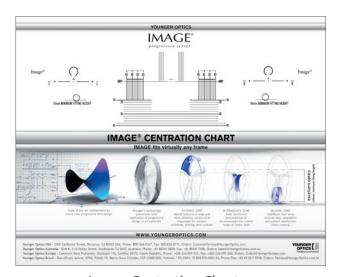


Image Centration Chart



Image Patient Brochure

IMAGE®

Lens Style	Hard Resin	Poly	Trilogy®	1.67 Hi-Index ^(MR-10™)				
IMAGE® Clear Base Curves Add Range	C 2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.00	1, 3, 5, 7 1.00 - 3.50				
IMAGE Transitions Signature® Colors Base Curves Add Range	2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.00	1, 3, 5, 7 1.00 - 3.50				
IMAGE Transitions® XTRActive® Color Base Curves Add Range	2, 4, 6, 8 1.00 - 3.00	NG NG 2, 4, 6, 8 1.00 - 3.00		tions® Signatur	-			
IMAGE Transitions Drivewear® Color Base Curves Add Range		2, 4, 6, 8 1.00 - 3.00	Transitions® Signature® Brown X Transitions® XTRActive® Gray NG Transitions® XTRActive® New Gen™ Gray NG Transitions® XTRActive® New Gen™ Brown D Transitions® Drivewear®* N NuPolar® Gray-3 (Gray) NuPolar® Brown * Transitions Drivewear lens color is dependent on lighting conditions.					
IMAGE NuPolar® Colors Base Curves Add Range	N N 2, 4, 6, 8 1.00 - 3.00	N N 2, 4, 6, 8 1.00 - 3.00						
IMAGE Wrap® NuPolar Color Base Curves Add Range		N 8 1.00 - 3.00						

TRILOGY LENSES

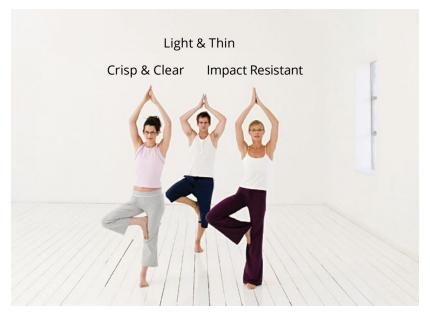
What do patients want in a lens? BALANCE.

Optically Superior

Compared to the other thin and light materials available, Trilogy offers sharper vision. This is because Trilogy lenses, an optically superior material that reduces chromatic aberration, the annoying tendency of some lenses to create colored blur around objects, particularly in the periphery. If your patient's work or hobbies demand clear vision, or if your older patient's visual acuity needs a little extra help, prescribe Trilogy lenses.

Light and Thin

Patients want comfort and good looking lenses. Trilogy lenses, an ultra lightweight material that practically floats on water. They are thin as well as lightweight, so not only are the lenses cosmetically appealing, your patients' glasses won't slide



down or leave nasty marks on the bridge of their noses.

Safety

Trilogy lenses are made with a material that has **exceptionally high impact resistance**. This material was originally developed to be used in military applications.

For impact resistance, many times the FDA requirement, you can recommend Trilogy or you can give polycarbonate, a lens which may compromise visual clarity. Why compromise? With Trilogy, patients can protect their

vision and enjoy superb optics. And for added benefit, Trilogy lenses are 100% UV blocking.

Rimless Eyewear Advantage

Trilogy lenses are the best choice for wearers of **rimless eyewear frames** because this lens material is highly resistant to splintering and breakage at the point where the frame is attached to the lens.

	Trilogy	Polycarbonate	High Index
Clear, Crisp Vision	•	0	0
Lightweight	•	•	0
Safety	•	•	0
Thin	•	•	•

TRILOGY.

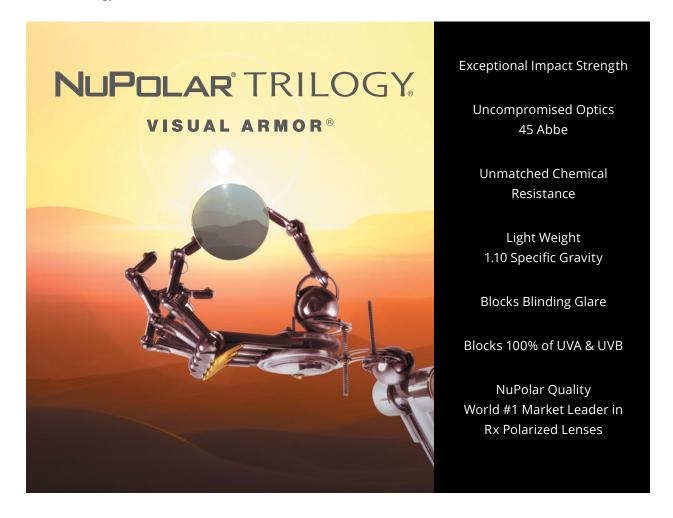
NuPolar® Trilogy®

Over five years in development and covered by multiple patents, Younger Optics presents the ultimate in sunwear optics and protection.

Trilogy® was based on research originally developed for the military as visual armor. That research fueled efforts to bring together impact protection, great optics, light weight and chemical resistance all in one innovative Rx lens: Trilogy.

Now, combine those advanced lens characteristics with NuPolar®, the world's leading Rx polarized technology, to give the eyewear market an incomparable sunwear combination: NuPolar Trilogy lenses.

While you might not use these lenses under the same intense conditions as the military, why give your eyes anything less than the material protection and benefits of Trilogy lenses plus the sunwear protection of NuPolar?

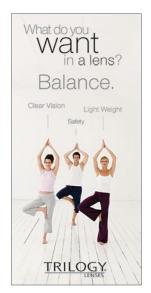


EDUCATIONAL & MARKETING MATERIALS





Trilogy Flyer



Trilogy Patient Brochure



NuPolar Trilogy Patient Brochure

TRILOGY®

	C' I -	C' a a la				▼ NEW ▼
Lens Style	Single Vision Spherical	Single Vision Aspheric	Progres- sive	Camber™ Lens Blank	Bifocal	Trifocal
Clear Base Curves	75mm diameter 0.5, 1, 2, 3, 4, 5, 6, 7, 8	C	IMAGE® 2, 4, 6, 8 1.00 - 3.00	C	FT28 2, 4, 6, 8 1.00 - 3.50	© 7x28
Add Range	65mm diameter 0.5, 1, 2, 3, 4, 5, 6, 7, 8	0.5, 1, 2, 3, 3.5, 4, 5, 6, 7	ADAGE® 2, 4, 6, 8 0.75 - 3.50	0.5, 2, 3, 4, 5, 6, 7, 8	▼ NEW ▼ (C) FT35 2, 4, 6, 8 1.00 - 3.50	4, 6, 8 1.50 - 3.50
Transitions Signature® Colors Base Curves Add Range	1, 2, 3, 4, 5, 6, 7, 8	0.5, 1, 2, 3, 3.5, 4, 5, 6, 7	IMAGE® 2, 4, 6, 8 1.00 - 3.00	0.5, 2, 3, 4, 5, 6, 7, 8	FT28 2, 4, 6, 8 1.00 - 3.50	
Transitions® XTRActive® Colors Base Curves	NG NG 1, 2, 3, 4, 5, 6, 7, 8		_	olors:		
Transitions® XTRActive® Polarized™ Color Base Curves	P 1, 2, 3, 4, 5, 6, 7, 8		C T NG	Clear Transitions® S Transitions® X Transitions® X Transitions® X	ignature® Bro TRActive® Nev	wn <i>v Gen</i> ™ Gray
Transitions Drivewear® Color Base Curves	D 2, 4, 6, 8		P D N	Transitions® X Transitions® X NuPolar® Gra NuPolar® Bro	TRActive® Pol Privewear®* By-3 (Gray)	
NuPolar [®] Colors Base Curves	N N 2, 4, 6, 8			ansitions Drivewear ependent on lightir		

Finished single vision lenses and plano sunwear lenses are listed on page 43.

For complete Rx ranges & tech specs, see **youngeroptics.com/EN/TechnicalSpecifications**.

Transitions Signature GEN8

Best everyday light intelligent lens.

Featuring exclusive *Gen 8*[™] technology, this is our fastest and most responsive lens in all lighting and temperature conditions.



- Extra responsive to darken outdoors in all lighting and temperature conditions
- Extra fast fade back from dark outside to clear indoors
- OUTDOORS IN DAYLIGHT // Dark
- INDOORS & NIGHTTIME // Clear

CLASSIC NEUTRALS:



GRAY



BROWN





Pick your color. Choose your style.

Transitions Signature® Gen 8 lenses are now available in your choice of two vibrant new style colors for you to personalize to any frame and express your style.



Extra responsive to darken outdoors in all lighting and temperature conditions

Extra fast fade back from dark outside to clear indoors

OUTDOORS IN DAYLIGHT // Dark

INDOORS & NIGHTTIME // Clear

NEW FASHION COLORS:



SAPPHIRE



AMETHYST

Transitions XTRACTIVE®

NEW GENERATION

Best for extra protection, indoors and out.

Uniquely designed to protect your eyes from the brightest sun outdoors and harsh artificial light indoors.



- Extra dark outdoors to protect your eyes from bright sun, even in the hottest conditions
- Darken behind the windshield to protect drivers' eyes from sunlight
- OUTDOORS IN DAYLIGHT // Extra Dark
- INDOORS & NIGHTTIME // Clear with a hint of proactive tint



GRAY



BROWN

Transitions XTRACTIVE®

POLARIZED

Best for glare reduction, outdoors.

The world's only light-intelligent lens that automatically polarizes as it darkens outdoors.



- Polarization adjusts according to the level of glare outdoors
- Noticeably crisper, sharper vision outdoors
- OUTDOORS IN DAYLIGHT // Extra Dark with Dynamic Polarization
- INDOORS & NIGHTTIME // Clear with a hint of protective tint

GRAY WITH DYNAMIC POLARIZATION



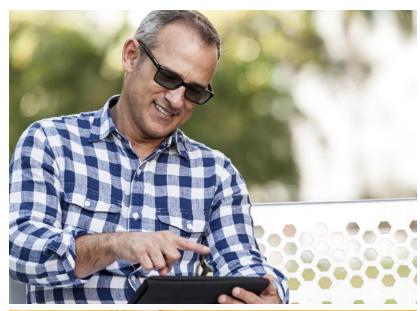
TRANSITIONS®

POLYCARBONATE COMPOSITE MULTIFOCALS

This unique technology gives more multifocal wearers the opportunity to experience unsurpassed *Transitions*® photochromic performance!

Transitions Optical uses a proprietary process to make polycarbonate lenses photochromic. While this process works for a variety of lens geometries, it is not compatible with segmented lenses such as bifocals and trifocals. This has meant that previously, bifocal and trifocal lenses were not available with Transitions® technology in polycarbonate.

However, Younger Optics and Transitions Optical recently developed a polycarbonate composite lens that incorporates a thin photochromic front surface multifocal layer made with Trilogy® — resulting in a lens delivering Transitions performance in a product that is surfaced, polished, edged and dispensed just like a clear polycarbonate lens!





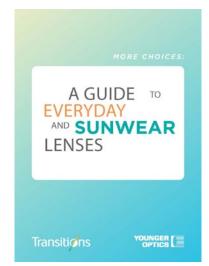


Transitions polycarbonate composite lenses:

- Are available in *Transitions*® *Signature*® *Gen 8* gray and brown: FT28 bifocal, FT35 bifocal, and 7 x 28 trifocal
- Are available in *Transitions® XTRActive®* gray: FT28 bifocal
- Are made with a unique photochromic Trilogy® layer that provides unsurpassed Transitions performance
- Process just like polycarbonate lenses
- Have a 1.59 index, which is the same as polycarbonate lenses
- Have superb segment cosmetics
- Use an integral chemical bond that will not separate
- Have excellent impact resistance



EDUCATIONAL & MARKETING MATERIALS







Inside



More Choices
Patient Brochure



More Choices Pocket Card





Transitions Patient Brochure

EDUCATIONAL & MARKETING MATERIALS



The Art & Science of Transitions® XTRActive® Polarized Booklet



Transitions® XTRActive® Polarized Flyer



Transitions® XTRActive® New Gen Flyer

TRANSITIONS® SIGNATURE® GEN 8™

Lens Style	Hard Resin	Poly	Trilogy®	1.60 Hi-Index ^(MR-8™)	1.67 Hi-Index ^(MR-10™)	1.74 Hi-Index ^(MR-174™)		
Single Vision Colors Base Curves	0.5, 2, 4, 5, 6, 8	0.5, 1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	0.5, 1, 2, 3, 4, 5, 6, 7, 8	1, 1.5, 3, 4, 5, 6, 7	0.5, 1, 1.5, 2.5, 3.5, 5, 6, 7, 8, 9, 10		
Single Vision Digital Colors & Base Curves	0.5, 2, 3.5, 4, 5, 6, 7, 8, 10							
Single Vision, Aspheric Colors & Base Curves			0.5, 1, 2, 3, 3.5, 4, 5, 6, 7					
Camber™ Lens Blank Colors & Base Curves	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8	0.5, 2, 3, 4, 5, 6, 7, 8		
IMAGE® Progressive Colors Base Curves <i>Add Range</i>	2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.00		1.5, 3, 5, 7 1.00 - 3.50			
FT28 Bifocal Colors & Base Curves <i>Add Range</i>	0.5, 2, 4, 6, 8 1.00 - 3.00	1 * 1 * 2, 4, 6, 8 1.00 - 3.50	2, 4, 6, 8 1.00 - 3.50					
FT28 Bifocal Hi-Add Colors & Base Curves <i>Add Range</i>	4, 6, 8 3.25 - 4.00							
FT35 Bifocal Colors & Base Curves Add Range	4, 6, 8 0.75 - 4.00	T * T * 2, 4, 6, 8 1.00 - 3.50		ors:	@ C (DIM C		
7 x 28 Trifocal Colors & Base Curves Add Range	4, 6, 8 1.50 - 4.00	1 * 1 * 4, 6, 8 1.50 - 3.50	 Transitions® Signature® Gen 8™ Gray Transitions® Signature® Gen 8™ Brown Transitions® Signature® Gen 8™ Amethyst Transitions® Signature® Gen 8™ Sapphire 					
8 x 35 Trifocal Color & Base Curves <i>Add Range</i>	4, 6, 8 1.50 - 4.00		U Tro	ansitions [®] Signa	nture® Gen 8™ S	sapphire		

Finished single vision lenses are listed on page 43.

 $For \ complete \ tech \ specs, \ see \ \textbf{\textit{youngeroptics.com/EN/TechnicalSpecifications}}$

^{*}Younger Optics polycarbonate-composite material.

TRANSITIONS® XTRACTIVE®

Lens Style	Hard Resin	Poly	Trilogy®	1.60 Hi-Index ^(MR-8™)	1.67 Hi-Index ^(MR-10™)	1.74 Hi-Index ^(MR-174™)
Single Vision Colors	NG NG 0.5, 2, 4, 5, 6, 8	NG NG 0.5, 1, 2, 3, 4, 5, 6, 7, 8	NG NG 1, 2, 3, 4, 5, 6, 7, 8		NG NG 1, 2, 3, 4, 5, 6, 7, 9, 12	NG NG 0.5, 1, 1.5, 2.5, 3.5, 5, 6, 7, 8, 9, 10
Base Curves	P 0.5, 2, 3, 4, 5, 6, 7, 8	2, 3, 4, 0.5, 1, 2, 3, 1, 2, 3, 4,		P 1, 2, 3, 4, 5, 6, 7		
IMAGE® Progressive Colors Base Curves Add Range	2, 4, 6, 8 1.00 - 3.00	NG NG 2, 4, 6, 8 1.00 - 3.00				
FT28 Bifocal Colors Base Curves Add Range	0.5, 2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.50				
7 x 28 Trifocal Colors Base Curves Add Range	4, 6, 8 1.50 - 4.00					

Colors:

- NG Transitions® XTRActive® New Gen Gray
- NG Transitions® XTRActive® New Gen Brown
- X Transitions® XTRActive® Gray
- X Transitions® XTRActive® Brown
- P Transitions® XTRActive® Polarized™ Gray

Finished single vision lenses are listed on page 43.

For complete tech specs, see **youngeroptics.com/EN/TechnicalSpecifications**

^{*}Younger Optics polycarbonate-composite material.

HIGH INDEX UV 420

"UV420" Semi-finished Clear Lenses: Polycarbonate & High Index 1.60, 1.67 & 1.74



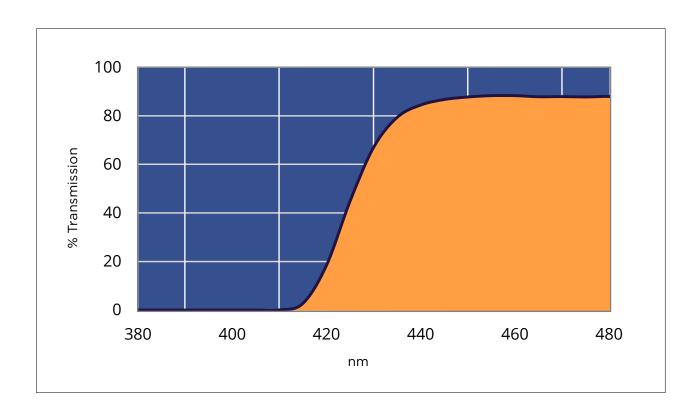
Younger Optics UV420 clear lenses effectively block 100% of UVA and UVB rays, and also attenuate 80% of high-energy visible light (HEV light) at 420 nm.

HEV light may possibly be a contributing factor to digital eye fatigue or Computer Vision Syndrome (CVS).

HEV from the sun can have a cumulative negative effect on the biological structures of the eye.



Transmission Chart



Availability:

SFSV High Index 1.60 Clear, *Uncoated & Hardcoated*

SFSV High Index 1.67 Clear, Uncoated & Hardcoated

SFSV High Index 1.74 Clear, *Uncoated & Hardcoated*

NEW Camber Polycarbonate Clear

Camber High Index 1.60 Clear

Camber High Index 1.67 Clear

Camber High Index 1.74 Clear

Available through select independent laboratories.

HIGH INDEX

High Index Everyday and Sunwear Lenses

Available in Clear, Transitions Signature[®], Transitions[®] XTRActive[®], and NuPolar[®] lenses

High Index lenses are a premium choice for patients with high prescriptions who want minimal lens thickness. These thinner, high index lenses give your patients more cosmetically appealing eyewear, and are especially recommended for drilled rimless eyewear, where thin is always in.

When lens thickness consideration is essential, prescribe High Index lenses.

Younger Optics' High Index 1.74, 1.67, 1.60 lenses are made from MR-174™, MR-10™ and MR-8™ resins from Mitsui Chemicals.





NuPolar[®] High Index 1.60 & 1.67 single vision lenses are available in three colors and eight base curves.

NuPolar[®] High Index 1.74 single vision lenses are available in two colors and four base curves.

HIGH INDEX

Lens Style	1.60 (MR-8™)	1.67 (MR-10™)	1.74 (MR-174™)	
Single Vision Clear Color Base Curves	0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	0.5, 1, 2, 3, 4, 5, 6, 7, 9, 12	0.5, 1, 1.5, 2.5, 3.5, 5, 6, 7, 8, 9, 10	
Single Vision Clear UV 420 Color Base Curves	(U) 1, 2, 3, 4, 5, 6, 7, 8 (73 mm)	(U) 1, 2, 3, 4, 5, 6, 7, 9 (70 mm), 12 (65 mm)	(U) 1, 2, 3, 4, 5, 6, 7, 9 (70 mm), 12 (65 mm)	
Single Vision Transitions [®] Colors Base Curves	0.5, 1, 2, 3, 4, 5, 6, 7, 8	1, 1.5, 3, 4, 5, 6, 7	0.5, 1, 1.5, 2.5, 3.5, 5, 6, 7, 8, 9, 10	
Single Vision NuPolar® Colors Base Curves	N N N 1 , 2, 3, 4, 5, 6, 7, 8	N N N 1 , 2, 3, 4, 5, 6, 7, 8	▼ NEW ▼ NEW 2, 4, 6, 8	
Single Vision NuPolar Extra Large (80.5mm) Colors Base Curves		N N 4, 6, 8	Colors: © Clear © UV 420 Clear	
Transitions Drivewear® Color Base Curves		D 2, 4, 6, 8	Transitions® Signa Transitions® Signa NG Transitions® XTRA NG Transitions® XTRA	ture® Gen 8™ Brown
Camber™ Lens Blank Colors Base Curves	© T T N N O.5, 2, 3, 4, 5, 6, 7, 8	C T NG NG NO	NG NG 0.5, 2, 3, 4, 5, 6, 7, 8	NuPolar® Gray NuPolar Brown NuPolar Green
IMAGE® Progressive Colors Base Curves Add Range		1, 3, 5, 7 1.00 - 3.50	X Transitions® XTRAG X Transitions® XTRAG D Transitions® Drive	tive® Brown
FT28 Bifocal Color Base Curves Add Range		1, 3, 5, 7 1.00 - 3.50 N N 2, 4, 6, 8 1.50 - 3.00	0.75, 2.25, 3.5, 5, 6.25, 7.25 1.00 - 3.50	

For complete tech specs, see **youngeroptics.com/EN/TechnicalSpecifications**

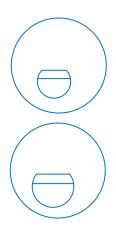
MULTI-FOCAL & SPECIALTY LENSES

With over 60 years of lens innovation, Younger Optics continues to provide many unique specialty and occupational lenses.

Single Vision High Base

With a nominal curve of 12.25, this lens is suitable for prescriptions from +5.25 D to +10.00 D.

Flat Tops 28 & 35



Many patients still prefer a classic flat top bifocal lens. Besides clear hard resin, Younger Optics is proud to offer an exclusive Transitions polycarbonatecomposite material with excellent segment cosmetics. More on this amazing technology on pp 30 & 31.

Flat Tops 28 & 35, High-Add

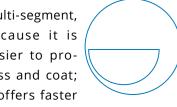
Both styles are available with adds from +4.50 D to +8.00 D for 4 base, and +4.50 D to 6.00 D for 6 base..

Flat Top 35, 80mm Large Diameter

For larger frames. 4, 6, 8 base curves. +0.75 to +4.00 D add range.

Flat Top 45

The FT45 offers a great alternative for the "executive" across-the-lens multi-segment, because it is easier to process and coat; it offers faster



turnaround with less cost in some cases; and the finished lens is more attractive, and fits nicely into more frames.

Double D Flat Top 28

Presbyopic patients may have occupations that require accurate



patients must bend their necks back to an uncomfortable position in order to see in the near zone. Some examples of this are auto mechanics, carpenters, electricians, and painters.

The Double Segment can be ordered with both flat top segments in equal powers, or with the top segment's power at approximately 62% of the power of the bottom segment.

Round Segment 22 & Round Segment 40

Sometimes prescribed as a pediatric or occupational multifocal,

round seg lenses are an alternative for flat top or progressive lenses.

Trifocals: 7x28 & 8x35

Trifocal lenses are best for patients who prefer an alternative to progressive lenses. Trifocals consist of three regions (distance, intermediate, and near) to help restore a broader range of vision. They are most helpful for people with advanced presbyopia who have been prescribed two diopters or more of reading addition. The intermediate addition is normally half the reading addition.

Seamless™ 28

The Younger Seamless lens was the first bifocal to offer the cosmetic benefits of being invisible, while attempting to correct some of the common dysfunctions of a segmented bifocal, such as jump and split images. It is also the easiest invisible product to fit and dispense. There are no monocular measurement requirements and processing is simple and easy.



MULTI-FOCAL & SPECIALTY

Lens Style	Ha Res		Poly	Trilogy [®]	1.67 Hi-Index ^(MR-10™)	1.74 Hi-Index ^(MR-174™)
SV High Base Color & Base Curve	12					
Flat Top 28 Colors & Base Curves Add Range	2, 4, 6, 8 0.75 - 4.00	0.5, 2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.50 N 2, 4, 6, 8 1.00 - 3.00	2, 4, 6, 8 1.00 - 3.50	1, 3, 5, 7 1.00 - 3.50 N 2, 4, 6, 8 1.50 - 3.00	0.75, 2.25, 3.5, 5, 6.25, 7.25 1.00 - 3.50
Flat Top 28, High-Add Colors & Base Curves Add Ranges	4, 6 4.50 - 8.00**	4, 6, 8 3.25 - 4.00				
Flat Top 35 Colors & Base Curves Add Range	2, 4, 0.75 -	6, 8	T * T * 2, 4, 6, 8 1.00 - 3.50			
Flat Top 35, <i>High-Add</i> Color & Base Curves <i>Add Ranges</i>	4 4.50 - 8.00	6 4.50 - 6.00				
Flat Top 45 Color & Base Curves Add Range	4, 6 0.75 -	, 8				
Double D Flat Top 28 Color & Base Curves Add Range	4, 6 1.00 -	, 8				
7 x 28 Trifocal Colors & Base Curves Add Range	4, 6 1.50 -		T * T * 4, 6, 8 1.50 - 3.50			
8 x 35 Trifocal Colors & Base Curves Add Range	4, 6 1.50 -			C Clear	sitions® Signo	ature® Grav
Round Segs 22 & 40 Color & Base Curves Add Range	2, 4, 6, 8 0.75 - 4.00			Trans X Trans	sitions® Signo sitions® XTRA	ature® Brown ctive® Gray
Seamless™ 28 Color & Base Curves <i>Add Range</i>	2, 4, 0.75 -	6, 8		NuPo	blar® Gray-3 blar® Brown	<i>ctive</i> ® Brown (Gray)

^{*}Younger Optics polycarbonate-composite material.

FINISHED SINGLE VISION & PLANO

Finished Everyday and Sunwear Lenses

Younger Optics offers you the variety and convenience of finished lenses in many materials and lens treatments, allowing you to offer patients a product that provides the style and quality they deserve.

Super Hydrophobic AR Coating

Independent tests have shown Younger Optics' Super Hydrophobic AR outperforms many of the standard AR coatings in use today.

Super Hydrophobic AR is durable and will easily resist scratches during the life of the lens.

This coating protects against fingerprints, dust and dirt, making it easy to clean and maintain.

This Super Hydrophobic AR's low reflection property prevents annoying harsh reflections coming off the wearer's lenses, and has a pleasing uniform reflected color.

Super Hydrophobic AR lets more light through the lens, allowing the wearer to see clearer, sharper images.



This AR coating's hydrophobic properties allow water droplets to easily run off the surface of the lens so that no visible marks are left on the lens. The hydrophobic properties also help to remove smudges, dust, dirt and fingerprints easily.

Transitions® Finished Lenses

Transitions photochromic lenses are the best solution for patients' everyday pair. Reducing eyestrain and fatigue caused by changing light, they provide improved visual clarity indoors and outdoors. Transitions lenses provide comfortable vision in low to high lighting conditions and are good for nighttime driving. They are available in scratchresistant hardcoat and easy to clean AR options.

Polarized Finished Lenses

Younger Optics is proud to offer two types of finished polarized lenses: NuPolar® and Transitions® Drivewear®.

NuPolar is the world's leading

brand of polarized Rx lenses. When performance factors such as optics, polarizing efficiency, color consistency, and many other factors are taken into consideration, NuPolar quality is unequaled. These polarized sunwear lenses provide visual comfort, even in bright, blinding glare. They offer fixed, maximum polarization in several color options. With NuPolar lenses you can always be sure of receiving the most advanced and intelligently designed lens available.

Transitions Drivewear adaptive sun lenses are designed to meet the unique visual challenges of daytime driving. The highefficiency polarizer blocks blinding glare both outdoors and behind the windshield, for a safer and more comfortable drive. Lens color and darkness continuously adapt to optimize color contrast in changing daylight conditions, even behind the windshield. Transitions Drivewear sun lenses are the only lenses that combine NuPolar polarizing technology and Transitions photochromic technology, making them the ultimate driving lens.

FINISHED LENSES

Finished Single Vision Lenses

Lens Style	Hard Resin	Poly	Trilogy®	1.67 Hi-Index ^(MR-7™)	1.74 Hi-Index ^(MR-174™)
Finished Single Vision with Super Hydrophobic AR Colors	1 1	00	C	C Aspheric	Double-Sided Aspheric
Finished Single Vision with Hardcoat Colors	NG NG	NG NG	C		

Plano Polarized Sunwear Lenses

Platio Polatizeu Suriwear Lerises				
Lens Style	Hard Resin	Poly	Trilogy®	
Finished Plano Polarized – Uncoated Colors Base Curves	N N N O O O O O O O O O O			
Finished Plano Polarized – Hardcoated Colors Base Curves		NEW NEW 6, 8-decentered	N N 6 D* 6 hardcoated	
Colors:	C Clear Transitions Signature® Gray Transitions Signature® Brown NG XTRActive® New Gen Gray NG XTRActive® New Gen Brown		own Nul	nsitions® Drivewear®* Polar® Gray-3 Polar® Gray-1 Polar® Brown Polar® Green

^{*}Transitions Drivewear plano lenses are hardcoated.



















NuPolar, Trilogy, Visual Armor, Drivewear, Image, Image Wrap, and Adage are registered trademarks, and Camber and Seamless are trademarks of Younger Mfg. Co. Transitions, Transitions Adaptive Lenses, Transitions Signature and XTRActive are registered trademarks and the Transitions logo is a trademark of Transitions Optical, Inc., used under license by Transitions Optical Limited. Gen 8 is a trademark of Transitions Optical Limited. Photochromic performance is influenced by temperature, UV exposure and lens material. MR-7, MR-8, MR-10 and MR-174 are trademarks of Mitsui Chemicals, Inc.