

Younger Optics Multifocal Lenses

NEW:

Trilogy® FT35 Bifocal Lenses
See page 4

Trilogy® 7 x 28 Trifocal Lenses
See page 6

Includes:
Clear

Transitions™
Signature®

XTRACTIVE®
NEW GENERATION

NUPOLAR®
polarized lenses

TRILOGY®
LENSES

YOUNGER
OPTICS 
The Optical Lens Innovators



Semi-Finished Multifocal Lenses Are Extremely Challenging to Manufacture

Most people in our industry understand the high level of technology found in today's sophisticated lenses such as digital progressives, but few understand the manufacturing challenges faced in the fabrication of multifocal lenses. Here are but a few of these challenges:

Hard Resin, High Index and Trilogry Molds

Every cast multifocal starts with a unique mold, usually made from glass. These glass molds are high precision optical components, and it is exceedingly difficult to make and polish the multifocal "line". Made by either fusing two pieces of glass with different melt temperatures or direct grinding, think of the challenges of trying to get a perfect polish on a thin line! It is an expensive and time consuming process to make a multifocal mold, and they have a finite life expectancy.

Hard Resin Casting

Once you have a glass mold made this is used as the casting surface for the Hard Resin which is put through a long heat cycle. The biggest problem here is that while the Hard Resin undergoes this heat cycle, the material is not stable...it shrinks, putting enormous pressures on the glass mold...especially at the location of multifocal lines. After the casting process the lens is separated from the mold and the line can easily be damaged in this separation process.

Polycarbonate Injection Molding

Here high optical mold inserts are used in the injection molding machines either glass or highly polished steel. The enormous stresses of the hot polycarbonate injected into the inserts under high pressures are not very conducive to protecting a thin optical line.

Scratch Coating Challenges

Most coatings are dip or spun on the surface of a lens, usually in liquid form. Trying to get a uniform coating on a spherical or continuous progressive surface is difficult enough...but now try to imagine have a multifocal line be perfectly and uniformly coated across the entire line without any build up or run off along the edges. Countless years of effort since the beginning of plastic lenses have been devoted to this challenge, and continue to spent even today to perfect this process!

Photochromic Multifocals

Often, lined Multifocals cannot be made photochromic in traditional ways, especially as photochromic technology advances and new materials are added. Younger developed a composite system where the bulk of the lens is made from the desired material (such as polycarbonate), with a thin layer (typically Trilogry), that contains the multifocal. It is a multistep process that involves casting, injection molding, coatings... and much more...all to bring the industry a good photochromic multifocal without either coatings or photochromic buildup around the segment line.

Polarized Multifocals

These have their own unique problems also dependent of what type of multifocal and what material are being used, along with the characteristics of the polarized film being used.

In the interest of brevity, I will stop here...but I could have continued for many more pages. Every type of multifocal matched with every type of material, matched with every type of bifocal or trifocal size or power has unique challenges. While many think of lined bifocals and trifocals as an older technology, their manufacturing is nothing of the sort. I would prefer to manufacture a spherical or continuous surface semi-finished lens blank any time!

Why Multifocals?

Younger Optics has a long history of manufacturing and supplying specialty lenses so that eye care practices can serve the unique needs of all types of patients. In that spirit, Younger Optics is proud to re-introduce two important specialty flat-tops to the optical market: Trilogry® FT35 bifocals and Trilogry® 7x28 trifocals. These two products have been unavailable for several years, but now they are back! Offering alternative products like these helps to set your practice apart from the competition.

Dave Rips
President & CEO
Younger Optics

Younger Optics Multifocal Lenses

FT28

The **FT28 bifocal** is a great lens choice for presbyopic patients who prefer a segmented multifocal over progressive lenses.

A flat-top style bifocal with a 28 mm segment diameter.

Recommended for:

- + Presbyopes who prefer bifocals over progressives
- + Patients who want the option of Transitions bifocals and/or polarized bifocal sunglasses as a 2nd pair

As a specialty Rx:

- + For children who need help with focusing from far to near
- + Can help with accommodative esotropia

FT28 Bifocal, Clear

Material: Hard Resin
Rx Range: -8.00 D to +6.00 D
Add Powers: 0.75 D to 4.00 D

Material: Hard Resin, HIGH ADD
Rx Range: -5.00 D to +2.00 D
Add Powers:
4.50 D to 8.00 D in .50 D steps
Add Range varies by base curve

Material: Trilogy®
Rx Range: -9.00 D to +7.00 D
Add Powers: 1.00 D to 3.50 D

Material: High Index 1.67
Rx Range: -10.00 D to +7.00 D
Add Powers: 1.00 D to 3.50 D

Material: High Index 1.74
Rx Range: -16.00 D to +8.00 D
Add Powers: 1.00 D to 3.50 D

FT28 Bifocal, Transitions® Signature®

Material: Hard Resin
Rx Range: -11.00 D to +6.00 D
Add Powers: 1.00 D to 4.00 D
Colors: Transitions Gray & Brown

Material: Poly Composite
Rx Range: -9.00 D to +7.00 D
Add Powers: 1.00 D to 3.50 D
Colors: Transitions Gray & Brown

Material: Trilogy®
Rx Range: -9.00 D to +7.00 D
Add Powers: 1.00 D to 3.50 D
Colors: Transitions Gray & Brown

FT28 Bifocal, Transitions® XTRActive®

Material: Hard Resin
Rx Range: -11.00 D to +6.00 D
Add Powers: 1.00 D to 4.00 D
Color: XTRActive® Gray & Brown

Material: Poly Composite
Rx Range: -9.00 D to +7.00 D
Add Powers: 1.00 D to 3.50 D
Color: XTRActive® Gray



FT28 Bifocal, NuPolar® polarized sunwear

Material: Hard Resin
Rx Range: -8.00 D to +6.00 D
Add Powers: 0.75 D to 4.00 D
Color: Polarized Gray & Brown

Material: Polycarbonate
Rx Range: -8.00 D to +6.25 D
Add Powers: 1.00 D to 3.00 D
Colors: Polarized Gray & Brown

Material: High Index 1.67
Rx Range: -11.00 D to +8.00 D
Add Powers: 1.50 D to 3.00 D
Colors: Polarized Gray & Brown

Younger Optics Multifocal Lenses

FT35

The **FT35 bifocal** is a great lens choice for presbyopic patients who prefer a segmented multifocal with a larger near zone segment.

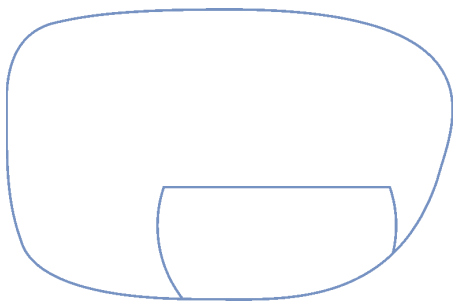
A flat-top style bifocal with a 35 mm segment diameter. This larger segment gives the wearer an add segment that is 50% larger than the segment on a FT28 bifocal.

Recommended for:

- + Presbyopes who prefer bifocals over progressives
- + Patients who want a big reading segment

As a specialty Rx:

- + For children who need help with focusing from far to near
- + Can help with accommodative esotropia



FT35 Bifocal, Clear

Material: Hard Resin

Rx Range: -8.00 D to +6.00 D

Add Powers: 0.75 D to 4.00 D

Material: Hard Resin, *HIGH ADD*

Rx Range: -5.00 D to +2.00 D

Add Powers:

4.50 D to 8.00 D in .50 D steps

Add Range varies by base curve

NEW

Material: Trilogy®

Rx Range: -8.00 D to +6.50 D

Add Powers: 1.00 D to 3.50 D

FT35 Bifocal, Transitions® Signature

Material: Hard Resin

Rx Range: -5.00 D to +6.00 D

Add Powers: 0.75 D to 4.00 D

Color: Transitions® Gray & Brown

Material: Poly Composite

Rx Range: -9.00 D to +7.00 D

Add Powers: 1.00 D to 3.50 D

Color: Transitions® Gray & Brown



FT35 Bifocal, NuPolar® polarized sunwear

Material: Hard Resin

Rx Range: -8.00 D to +6.00 D

Add Powers: 0.75 D to 4.00 D

Color: Polarized Gray

What is Trilogy®?

Lenses made from Younger Optics' Trilogy® material offer distinct advantages. Many optical professionals prefer Trilogy® as an optically superior alternative when seeking a thin, light lens with excellent impact resistance and chemical resistance. Trilogy® is also a great choice for kids who are prescribed bifocal lenses.

youngeroptics.com/EN/TrilogyOverview

Younger Optics Multifocal Lenses

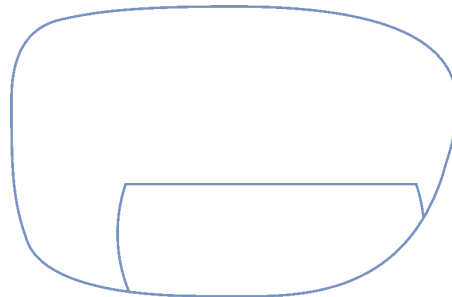
FT45

The **FT45 bifocal** is a great lens choice if your patient prefers a **bifocal with an extra-wide reading area** and a thinner, more attractive lens.

The FT45 bifocal lens 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.

Recommended for:

- + Presbyopes who prefer bifocals and want an extra-large reading zone
- + Great for reading printed material and handheld electronics like smartphones and tablets
- + Great for occupations & hobbies with detail work such as fine arts, electronics, sewing, knitting, woodworking, drawing, crafts



As an everyday Rx

- + Dramatic cosmetic improvement*
- + Up to 50% thinner*
- + Priced to compete with conventional oversize bifocals

As a specialty Rx

- + A great occupational bifocal
- + Use as a prism segment
- + Use as a child's bifocal
- + For patients with strabismus

FT45 WIDE-SEGMENT

Thinner edges fit nicely in more frames*



FT45 Bifocal, Clear

Material: 1.50 Hard Resin
Diameter: 80 mm
Base curves: 4.25, 6.25, 8.25
Rx Range: -5.00 D to +6.00 D
Add Powers: +0.75 D to +3.00 D

* compared to Executive/Franklin across-the-lens style segments.



Trifocals are a great lens choice if your patient with advanced presbyopia strongly prefers multifocals to progressives but has trouble seeing in the intermediate distance while wearing bifocals.

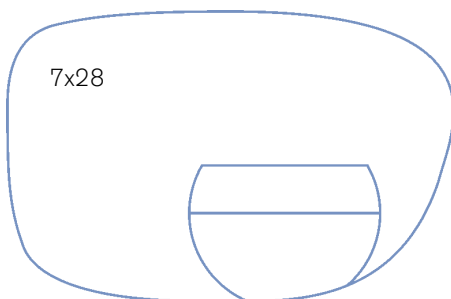
Trifocal lenses are best for patients who prefer an alternative to progressive lenses. Trifocals consist of three regions (distance, intermediate, and near) to help restore a broader range of vision. They are most helpful for people with advanced presbyopia who have been prescribed two diopters or more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

Recommended for:

- + Advanced presbyopes with a prescribed add power of +2.00 D or greater who want an alternative to progressive lenses.
- + Bifocal-wearing patients who say it is getting hard to see clearly in the intermediate distance.

7x28 Trifocal

- + 28 mm segment diameter
- + 7 mm intermediate segment height
- + intermediate add power is half of reading add power



Trifocal 7x28, Clear

Material: 1.50 Hard Resin
Diameter: 80 mm
Rx Range: -5.00 D to +6.00 D
Add Powers: +1.50 D to +4.00 D

Material: Trilogy® **NEW**
Diameter: 76 mm
Rx Range: -7.00 D to +6.50 D
Add Powers: +1.50 D to +3.50 D

Trifocal 7x28, Transitions® Signature

Material: Hard Resin
Diameter: 78 mm
Rx Range: -5.00 D to +6.00 D
Add Powers: 1.50 D to 4.00 D
Colors: Transitions® Gray & Brown

Material: Poly Composite
Rx Range: -7.00D to +7.00D
Add Powers: 1.50 D - 3.50 D
Colors: Transitions® Gray & Brown

Trifocal 7x28, Transitions® XTRActive®

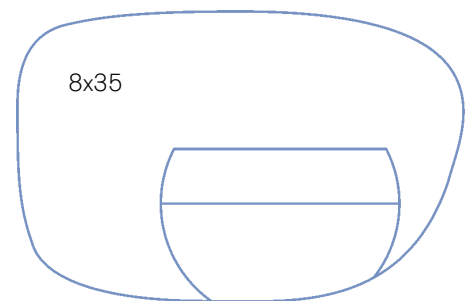
Material: Hard Resin
Diameter: 78 mm
Rx Range: -5.00 D to +6.00 D
Add Powers: 1.50 D to 4.00 D
Color: XTRActive® Gray

Trifocal 7x28, NuPolar® polarized sunwear

Material: Hard Resin
Rx Range: -5.00D to +6.00D
Add Powers: 1.50 D to 4.00 D
Color: Polarized Gray

8x35 Trifocal

- + 35 mm segment diameter
- + 8 mm intermediate segment height
- + intermediate add power is half of reading add power
- + for users who want bigger reading & intermediate zones



Trifocal 8x35, clear

Material: 1.50 Hard Resin
Diameter: 80 mm
Rx Range: -5.00 D to +6.00 D
Add Powers: +1.50 D to +4.00 D

Trifocal 8x35, Transitions® Signature

Material: 1.50 Hard Resin
Diameter: 78 mm
Rx Range: -5.00 D to +6.00 D
Add Powers: +1.50 D to +4.00 D
Color: Transitions® Gray

Younger Optics Multifocal Lenses

DOUBLE-D

Double-D FT28 bifocals are a great lens choice if your patient needs a reading zone above as well as below eye level.

This is a specialty lens for presbyopic patients that have occupations that require accurate near vision above, as well as below, the eye level. Some examples of this are auto mechanics, carpenters, electricians, and painters.

In these occupations, a lot of the focused detail work is performed while looking upward. If regular bifocals are prescribed, these patients must bend their necks back to an uncomfortable position in order to see through the near zone segment. The Double-D bifocal is a supplemental pair that can be worn during these types of tasks.

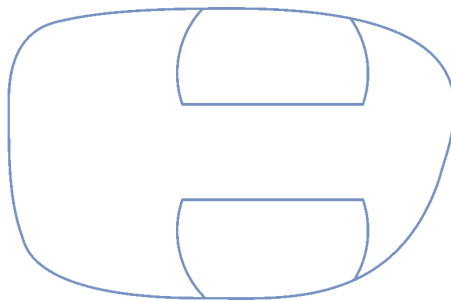
The Double-D segment can be ordered as a "100%" or "60%". This means you can choose to have the upper D segment power to be the same as the add power on the lower D segment (This option is called 100%). Or if you prefer, you can order top segment's power at approximately 62% of the power of the bottom segment (This option is known as 60%). The 60% option should be chosen when the wearer wants the focal point of the upper D segment to be at arms length rather than at the near reading distance.

Recommended for:

- + Presbyopic patients that require accurate near vision above, as well as below, the eye level.
- + Auto mechanics, carpenters, electricians, plumbers, painters

Double-D Segment

- + 28 mm segment diameter on both top and bottom
- + The lower D segment is the patient's normal add power
- + The upper D segment can be equal to the lower D segment, or 62% strength



Double-D Bifocal, Clear

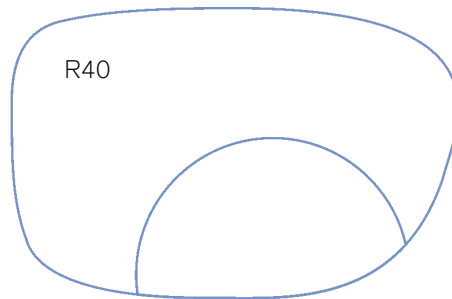
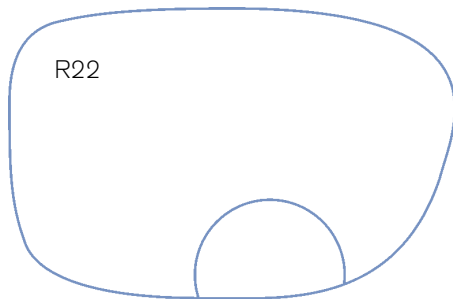
- Material:** 1.50 Hard Resin
- Diameter:** 80 mm on center
- Base curves:** 4.25, 6.25, 8.25
- Rx Range:** -5.00 D to +6.00 D
- Double D 100% Add Powers:** +1.50 D to +3.00 D
- Double D 60% Add Powers:** +1.75 D to +3.00 D



Round Segment bifocals are a specialty alternative to the more popular flat top bifocals.

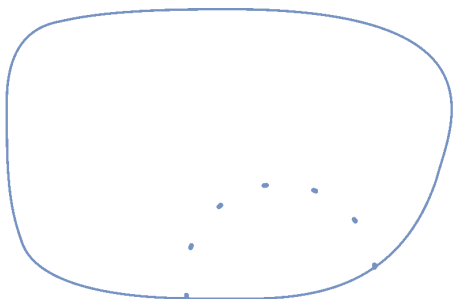
Round Segment 22 & Round Segment 40

Sometimes prescribed as a pediatric or occupational multifocal, round segment bifocal lenses have a circular, hard-line segment that is either 22 or 40 mm in diameter.



Younger Seamless™ 28

The Younger Seamless lens was the first bifocal to offer the cosmetic benefits of being invisible, because there is no hard line differentiating the add segment. It is also the easiest invisible product to fit and dispense. There are no monocular measurement requirements and processing is simple and easy.



Round Seg 22, Clear

Material: Hard Resin

Rx Range: -8.00 D to +6.00 D

Add Powers: 0.75 D to 4.00 D

Round Seg 40, Clear

Material: Hard Resin

Rx Range: -8.00 D to +6.00 D

Add Powers: 0.75 D to 4.00 D

Younger Seamless, Clear

Material: Hard Resin

Rx Range: -8.00 D to +6.00 D

Add Powers: 0.75 D to 3.00 D

**YOUNGER
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The Optical Lens Innovators

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