



GT2™ by ZEISS 1.59 Polycarbonate Polarized Gray/ Brown

Product Specifications

Material Data

- Polycarbonate Gray or Brown with NuPolar® technology by Younger Optics
- Index 1.586 n_d
- Abbe 30
- Specific Gravity 1.20
- 100% UVA and 100% UVB Protection

Lens Processing

- GT2™ 1.59 Poly Polarized lenses can be processed like any other quality polycarbonate progressive lens. ZEISS recommends a minimum center thickness of 1.8 mm to avoid damage to the embedded polarized film. GT2 1.59 Poly Polarized lenses of this minimum thickness fulfill the FDA standards of impact resistance.
- After blocking wait 30 minutes to allow lenses to cool before generating.
- ZEISS recommends de-blocking by cold knock-off or block ejector, but not by hot water.

Thickness Guidelines

Progressive lenses of this type that satisfy the thickness guidelines provided below have demonstrated the minimum level of impact resistance during performance testing. However, the ultimate impact strength of a lens depends upon several factors, including the particular combination of coatings and treatments applied to it, and conformance to the FDA regulation is the responsibility of subsequent processors.

Power Range	Minimum Recommended Thickness
-10.00 D to -2.00 D	1.80 mm Center
-1.75 D to +2.00 D	1.8 mm Center and 1.8 mm Edge*
+2.25 D to +4.00 D	1.8 mm Edge
+4.25 D to +6.00 D	1.8 mm Edge

* Whichever is the limiting factor

Delivery Range

- Spheres -10.00 D to +6.00 D
- Cylinders out to -4.00 D (total power not to exceed -10.00 D)
- Additions +1.00 D to +3.00 D
- Prism up to 3.00 Δ in addition to prism-thinning



Hard Coating

GT2 1.59 polycarbonate Polarized semi-finished lens blanks feature a factory-applied, non-tintable scratch resistant coating.

Lens Specification Data

The following table provides the average blank geometry of GT2 1.59 polycarbonate Polarized lenses. Note that, since the GT2 lens blank is decentered, the effective diameter for cut-out is larger than the actual diameter.

Nominal Base Curve	Act/Effec Diameter [mm]	Blank Decent. [mm]	True Curve [1.53 D]	Front Radius [mm]	Back Curve [1.53 D]	Center Thickness [mm]	Edge Thickness [mm]
1.70	75/80	2.5	1.72	308.14	4.24	10.0	13.3
2.60	75/80	2.5	2.57	206.23	5.75	9.0	12.8
3.50	75/80	2.5	3.48	152.30	5.75	10.4	12.8
4.50	75/80	2.5	4.47	118.57	5.75	9.1	10.2
5.60	75/80	2.5	5.46	97.07	6.15	13.3	13.3
6.80	75/80	2.5	6.85	77.37	7.60	10.6	11.6



Prism-Thinning

ZEISS progressive lenses are designed to work perfectly with thickness reducing prism (i.e., *prism-thinning*). This will ensure the thinnest and lightest lenses possible. If surfacing software that calculates prism-thinning automatically is not available, ZEISS recommends the use of the following base down (270°) prism:

Addition [D]	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
Prism [Δ]	0.50	1.75	1.75	1.00	1.25	1.50	1.50	1.75	2.00

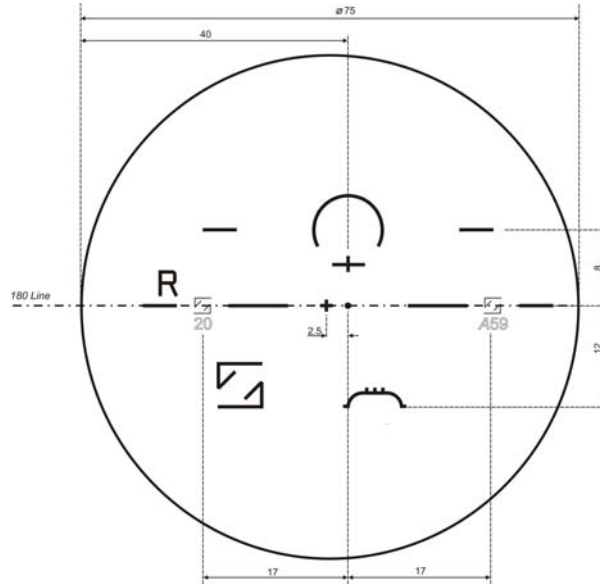
Permanent Engravings

GT2 1.59 polycarbonate Polarized lenses are marked with the following permanent, semi-visible engravings that indicate the lens design type (GT2 = A), lens material type ($n = 1.59$), and addition power (+1.00 to +3.00):

Nasal Engraving	Temporal Engraving
 A59	 10-30

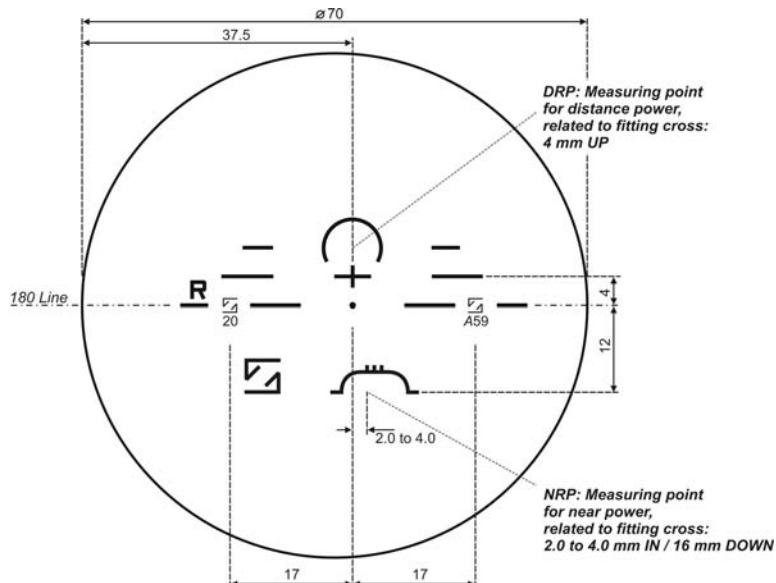
Semi-Finished Ink Markings

For processing purposes, the blank is marked with a small cross at the geometric center. Since the GT2 lens blank is decentered, ZEISS recommends blocking the lens at the geometric center in order to avoid unwanted prism during the fining operation, unless the blank is first cribbed at the generator.



Finished Verification Markings

Please note that the verification markings of finished GT2 lenses differ slightly from the semi-finished ink markings in that the finished lenses are delivered to the eyecare professional without the geometric center cross. Static-type verification masks are available from Carl Zeiss Vision (Item #008-0139-00110).





Base Curve Selection

Always use the recommended base curve; failure to do so may compromise optical performance:

