



2.4. Zeiss GT2 1.59 Polycarbonate

Product Specifications

Material Data

- Polycarbonate
- Index 1.586 n_d
- Abbe 30
- Specific Gravity 1.20
- 100% UVA and 100% UVB Protection

Lens Processing

- Zeiss GT2 1.59 lenses can be processed like any other quality polycarbonate progressive lens.
- After blocking, wait 30 minutes before generating to allow the blocked lenses to cool.
- Zeiss recommends de-blocking by cold knock-off or block ejector, but not by hot water.
- In order to tint Zeiss GT2 1.59 polycarbonate lenses, a tintable back-side coating must be applied.

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	1.50 mm Center
-1.75 D to +2.00 D	1.5 mm Center and 1.5 mm Edge*
+2.25 D to +4.00 D	1.0 mm Edge
+4.25 D to +6.00 D	0.5 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

Zeiss GT2 1.59 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 Zeiss GT2 1.59 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	1.75	302.9	-5.75	7.6	12.8
2.60	75/80	2.5	2.56	207.0	-5.75	7.6	12.8
3.50	75/80	2.5	3.48	152.3	-5.75	8.1	12.3
4.50	75/80	2.5	4.45	119.1	-5.75	8.0	10.6
5.60	75/80	2.5	5.47	96.9	-5.75	13.1	13.2
6.80	75/80	2.5	6.86	77.3	-8.00	10.7	12.3



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

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

Nasal Engraving	Temporal Engraving
 A59	 10-30



Base Curve Selection

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

