



4.4. Gradal® Brevity 1.67

Product Specifications

Material

- MR7, Super Hi-Index plastic
- $n_d=1.660$
- Abbe 32
- Specific Gravity 1.36 g_{ccm}
- 100% UV-A and UV-B Protection

Technical Processing Notes

- Gradal® Brevity 1.67 lenses can be processed like any other quality super Hi-Index progressive lenses made of MR7 material. Zeiss recommends a minimum center thickness of 1.3 mm. Gradal® Brevity 1.67 lenses of this minimum center thickness fulfill the FDA standards of impact resistance.
- After blocking wait 30 minutes to allow lenses to cool before generating. After generating, with powers above $-12.00D$, a slight miss curve at the outer circumference of the back surface may be found.
- Gradal® Brevity 1.67 lenses emit a specific odor when surfacing or edging. This odor is proven to be non-toxic and non-irritating.
- Zeiss recommends de-blocking by cold knock-off or block ejector, but not by hot water.
- To tint Gradal® Brevity 1.67 lenses, a tintable back side hard coating must be applied.

Hard Coating

Zeiss Gradal® Brevity 1.67 semi-finished lens feature a factory applied, scratch-resistant double hard coating. This hard coating is non-tintable.

Delivery Range

- Sph $+6.00D$ to $-16.00D$
- Cyl up to $-4.00D$ (total power not to exceed $-16.00D$)
- Adds $1.00D$ to $3.00D$
- Prism up to $3.00D$ in addition to equithin
- Minimum Fitting Height 16 mm



Lens Data Chart

Base Curve	Actual/Useable Diameter [mm]	Decentr. [mm]	True Curve [1.53]	CX Radius [mm]	Back Curve [1.53]	Center Thickness [mm]	Edge Thickness [mm]
1.50	70/75 round	2.5	1.25	424.00	9.30	16.0	26.5
2.50	75/80 round	2.5	2.07	256.18	9.30	9.0	20.3
3.80	75/80 round	2.5	3.11	170.42	8.49	4.0	12.4
4.80	75/80 round	2.5	4.14	128.88	7.98	5.7	11.7
6.40	75/80 round	2.5	5.22	101.49	5.81	8.3	8.9
8.00	75/80 round	2.5	6.67	79.45	5.81	10.7	8.9

Zeiss Gradal® lenses are designed to work perfectly with a thickness reducing prism. To achieve the thinnest and lightest lenses possible, Zeiss recommends a base down (270°) prism in the following graduation depending on the power of the addition.

Addition [D]	1.00	1.25	1.50 1.75	2.00	2.25 2.50	2.75	3.00
Prism [D]	0.50	0.75	1.00	1.25	1.50	1.75	2.00

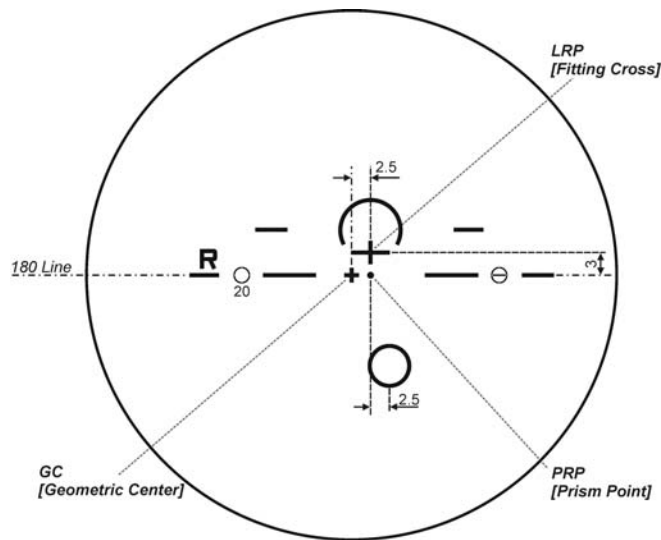
Permanent Engravings

Gradal® Brevity 1.67 lenses are engraved with two circles, the nasal engraving with a horizontal line through the center. These engravings may be used to reconstruct all major reference points of the lenses. The two-digit code number under the temple circle specifies the add power.

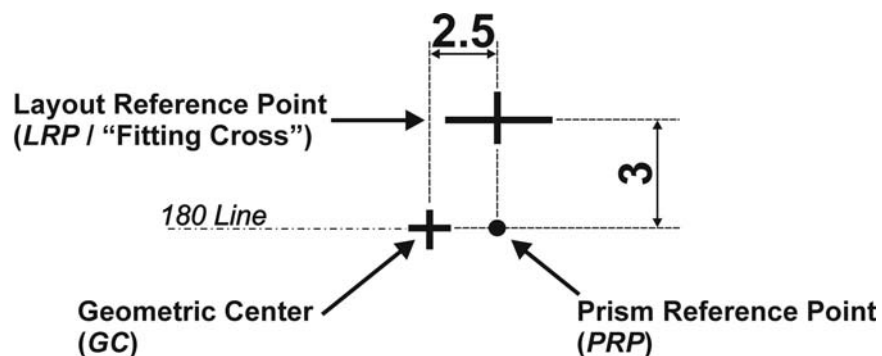
	Nasal Engraving	Temple Engraving
Gradal® Brevity 1.67		

Markings and Dimensions of the Semi-Finished Lens

Gradal® Brevity 1.67 lenses feature a round lens blank. For processing purposes the blank is marked with a cross at the geometric center. Please note that Gradal® Brevity 1.67 lenses, if they are not to be cribbed at the generator, should be blocked on the geometric center to avoid producing unwanted prism during the fining operation.



To exactly block, process, edge and mount Gradal® Brevity 1.67 progressive lenses, the locations of the lens reference points need to be noted as they are different from Gradal® Top. Although these reference points are imprinted on each semi-finished Gradal® Brevity 1.67 lens as shown above, the following enlarged illustration may help.





Base Curve Chart
Gradal® Brevity 1.67

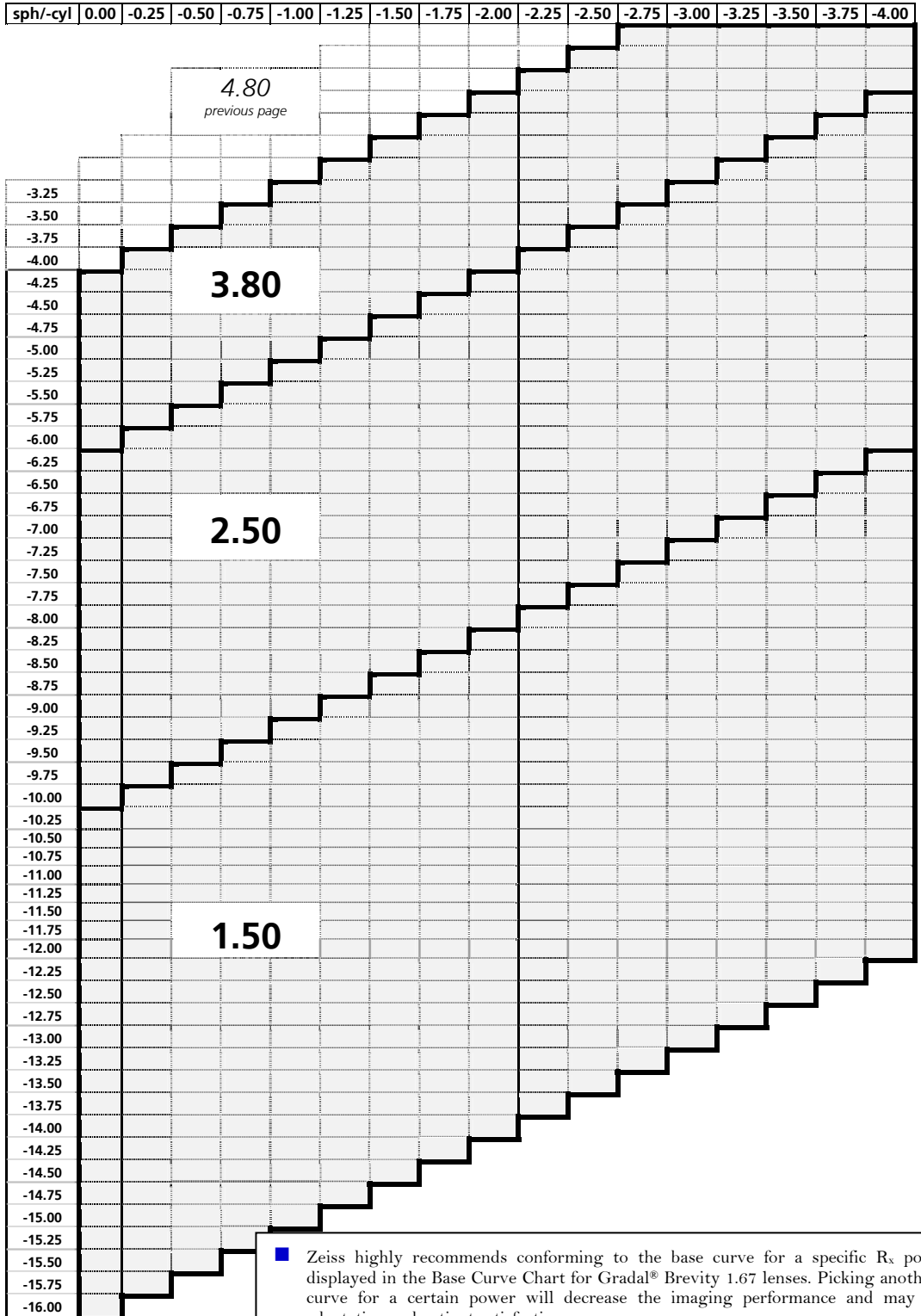
sph/-cyl	0.00	-0.25	-0.50	-0.75	-1.00	-1.25	-1.50	-1.75	-2.00	-2.25	-2.50	-2.75	-3.00	-3.25	-3.50	-3.75	-4.00
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The Base Curve Chart continues on next page.

- Zeiss highly recommends conforming to the base curve for a specific R_x power as displayed in the Base Curve Chart for Gradal® Brevity 1.67 lenses. Picking another base curve for a certain power will decrease the imaging performance and may impact adaptation and patient satisfaction.
- Please be also aware that the base curve and the add power determine the nasal inset of the near portion. A base curve other than recommended restricts the usability of the intermediate zone and near portion due to a mismatch of distance power, add and required inset.



Base Curve Chart (cont'd) Gradal® Brevity 1.67



■ Zeiss highly recommends conforming to the base curve for a specific R_s power as displayed in the Base Curve Chart for Gradal® Brevity 1.67 lenses. Picking another base curve for a certain power will decrease the imaging performance and may impact adaptation and patient satisfaction.

■ Please be also aware that the base curve and the add power determine the nasal inset of the near portion. A base curve other than recommended restricts the usability of the intermediate zone and near portion due to a mismatch of distance power, add and required inset.