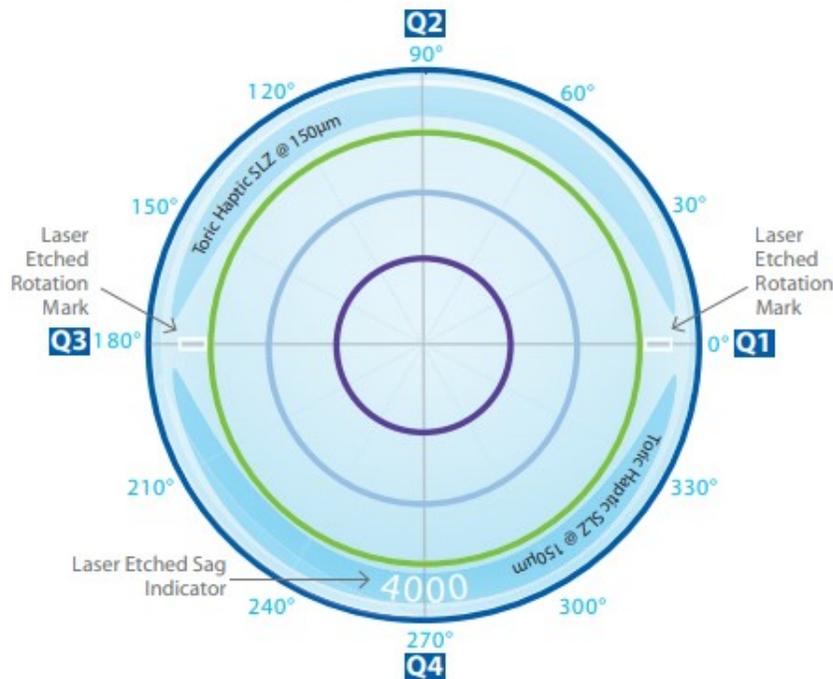


Ampleye with Front Surface Cylinder



Because Ampleye is not meant to sit on any specific axis, it is important to document the location of the diagnostic markings during the trial fit and at any follow-up visit. The rotation indicating hash marks on diagnostic lenses denote the flat axis of the lens while the SAG indicator denotes the steep axis of the lens. Upon insertion, Ampleye will automatically find the flattest and steepest meridian of the sclera and remain rotationally stable. The majority of the time, the scleral flat meridian will not line up with the flat K or refractive axis, so it is important to note the axis where the lens finds its rotational stability. Noting the axis of the flat and/or steep meridian insures that the correct axis is compensated for when front surface cylinder is required. The lens SAG indicator is laser etched at 6 o'clock and can serve as a reference to help locate the laser etched rotation marks engraved at 3 and 9 o'clock. Please note that Ampleye lenses that are custom ordered for the patient will use "0"s identifying the flat axis rather than hash marks. The laser etched SAG indicator is replaced by an "R" for right lenses and "L" for left lenses. They can be used in the same method as the diagnostic markings to reference rotation.

Compensating Cylinder Axis for Lens Rotation

If the SAG indicator/R/L is at 6:00 or 12:00 o'clock and the hash marks/0's are at 3:00 and 9:00 o'clock, no compensation for axis rotation is required. The front cylinder can be ordered at the exact same subjective axis noted in the phoropter. However, when front cylinder is required and the lens demonstrates rotation, the axis must be compensated. This is again why it is important to always note

the axis position of the SAG indicator/R/L and/or the axis position of the hash marks/0's. Either diagnostic marking can be used as a reference to calculate rotation but it is crucial to understand what meridian the diagnostic markings denote so that the adjustment can be made from the proper meridian.

When the toric haptic flat meridian is not situated at the 0/180 degree position

If you have documented rotation of the **hash marks or "0"s**, then the cylinder axis needs to be compensated for **rotation off the 0/180 degree meridian**, not off 6:00. Refer to the below examples to help determine the final front cylinder axis the ordered lens should be placed at.

Example

4200 SAG, Diameter 16.5, Power -2.00: *Over-refraction PLANO -1.50 x180*

1. The hash mark/0's position at 3:00 and 9:00 o'clock (0°/180°). No axis adjustment is needed. Order final power as -2.00-1.50X180.
2. The hash mark/0's position at 2:00 and 8:00 o'clock (30°/210°). This indicates 30 degrees of counter-clockwise rotation off 0°/180°. Order final power as -2.00-1.50X150.
3. The hash mark/0's position at 4:00 and 10:00 o'clock (150°/330°). This is 30 degrees of clockwise rotation off 0°/180°. Order the final power as -2.00-1.50X030.
4. The hash mark/0's position at 6:00 and 12:00 o'clock (90°/270°). This indicates the lens is rotating 90 degrees off the normal with-the-rule position. Order final power as -2.00-1.50X090.
5. The hash mark/0's position at 5:00 and 11:00 o'clock (120°/300°). The lens is rotating 60 degrees clockwise off the 0°/180° meridian. Order the final power as -2.00-1.50X060.
6. The hash mark/0's position at 1:00 and 7:00 o'clock (60°/240°). This indicates 60 degrees of counter-clockwise rotation off the 0°/180° meridian. Order the final power as -2.00-1.50X120.

When the toric haptic steep meridian is not situated at the 270 degree position

If you have documented rotation of the **SAG indicator or R/L**, then the cylinder axis needs to be compensated for **rotation off 6:00**. Refer to the below examples to help determine the final front cylinder axis the ordered lens should be placed at.

Example

4200 SAG, Diameter 16.5, Power -2.00: *Over-refraction PLANO -1.50 x180*

1. The SAG indicator/R/L is located at 6:00 o'clock (270°). No axis adjustment is needed. Order final power as -2.00-1.50X180.

2. The SAG indicator/R/L is located at 5:00 o'clock (300°). This indicates 30 degrees of counter-clockwise rotation off 6:00 (270°). Order final power as -2.00-1.50X150.
3. The SAG indicator/R/L is located at 7:00 o'clock (240°). This is 30 degrees of clockwise rotation off 6:00 (270°). Order the final power as -2.00-1.50X030.
4. The SAG indicator/R/L is located at 3:00 o'clock. This indicates the lens is rotating 90 degrees off the normal with-the-rule axis position. Order final power as -2.00-1.50X090. (This would be the same final axis if the SAG indicator/R/L is located at 9:00 o'clock as shown below.)
5. The SAG indicator/R/L is located at 9:00 o'clock. This indicates the lens is rotating 90 degrees off the normal with-the-rule axis position. Order final power as -2.00-1.50X090. (This would be the same final axis if the SAG marker is located at 3:00 o'clock as shown above.)
6. The SAG indicator/R/L is located at 2:00 o'clock (30°). This is 120 degrees of counter-clockwise rotation off 6:00 (270°). Order the final power as -2.00-1.50X060
7. The SAG indicator/R/L is located at 10:00 o'clock (150°). The lens is rotating 120 degrees clockwise off 6:00 (270°). Order the final power as -2.00-1.50X120

Use a 360 degree guide, similar to the below sample, to assist in compensating for rotation. Every clock hour (ie 7:00, 5:00) is equal to 30 degrees of rotation and every half hour (ie 6:30, 5:30) is equal to 15 degrees of rotation.

