

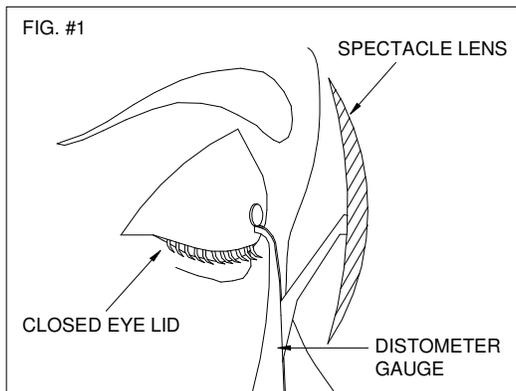
Distometer and Conversion Disc Instructions

The Distometer or Vertex Distance gauge is designed to accurately measure the vertex distance between the apex of the cornea and rear surface of a trial lens, cornea, and or the rear surface of the spectacle Rx lens.

Instructions for use with Trial Frame: Normally a trial lens is placed 5mm to 20mm from the cornea. Spectacle Rx, when fitted correctly is usually different between 8mm and 12mm from the cornea. Any difference in the vertex distance between the trial lenses and the resultant spectacle Rx produces an error in the effective power of the correction. Example: a +12.00D trial lens at 19mm from the cornea must be increased to a +13.00D if placed 11mm from the cornea. Example 2: a -15.00D lens at 15mm vertex distance must be decreased to a -13.00D if placed at 6mm. Note: If the patient's previous spectacles fit well, it is good practice to adjust the trial frame to give the same vertex distance before retinoscopy or further exam.

Instructions:

1. Check the best visual acuity in the primary position.
2. Instruct the patient to keep their head still and close both eyes.
3. Position the gauge as shown below in Fig 1 so that the rear anvil lightly touches the closed eye lid at the center of the cornea.



4. Read and record the distance between the two gauge indicators. Note: Deduct 0.5mm to 1.0mm to compensate for the lid thickness.

Instructions for Conversion Disc: The Conversion Disc is used to convert any combination of lens power and vertex distance into an equivalent lens power for a different distance. Note: The outer ring shows the lens power (D) and the inner scale shows the + and - lens power, as indicated on each side.

For spherical lenses, select trial lens to cornea distance on the appropriate scale (+ of -) and rotate the inner disc to align this value with the power of the trial lens on the outer scale. The power in alignment with any other distance on the inner scale represents the effective power of the necessary lens at the distance.

Example: +15.00 at 12mm = +16.50D at 6mm. For cylindrical lenses, the power corrections should be calculated separately for each meridian.

Cleaning Instructions for Distometer: Do not autoclave. The Distometer can be cleaned with glutaraldehyde. It is available as a mix at about 2% concentration. You can obtain from any hospital supply.

Cleaning Instructions for Plastic Distometer Dial Disc: Do not autoclave. The Distometer Dial Disc can be cleaned a mild soap and water.