

# Distometer and Conversion Disk Guide both Metal and Lightweight (plastic) units

Part Number: 518300, 675500

**Distometer Gauge Purpose:** 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, or cornea and rear surface of the spectacle Rx lens.

**Use with Trial Frame:** Normally a trial lens is placed 5mm to 20mm from the cornea. Spectacle Rx, when fitted correctly, is usually different, perhaps between 8mm and 12mm from the cornea. Any difference, however, in vertex distance between the trial lenses and the resultant spectacle Rx produces an error in the effective power of the correction. For example, a +12.00D trial lens at 19mm from the cornea must be increased to a +13.00D if placed 11mm from the cornea. As a second example, a -15.00D lens at 15mm vertex distance must be decreased to a -13.00D if placed at 6mm.

Vertex distance is generally considered to have negligible effect below +/- 4.00D.

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.

## Guide for Distometer:

1. Check the best visual acuity in the primary position.
2. Order the patient to keep head still and close both eyes.
3. Position the gauge as shown in Fig 2 so that the rear anvil lightly touches the closed eye lid at the center of the cornea.
4. Read and record the vertex distance (distance between the two gauge indicators).

Note: Deduct 0.5 to 1.0 mm to compensate for the lid thickness.

Figure 2 shows the Distometer gauge in use on the right eye. To use the gauge on the left eye, turn it over and use in the opposite direction.

**Conversion Disc Purpose:** The Conversion Disc is used to convert any combination of lens power and vertex distance into an equivalent lens power for a different distance. For example, the disc supports conversion from a particular combination employed with a trial lens set-up to an equivalent combination in a spectacle Rx.

Note: The outer ring shows the lens power (D) and the inner scale shows the + and - lens power, as indicated on each side respectively.

**Guide for Conversion Disc:** For spherical lenses, select trial lens to cornea distance on the appropriate scale (+ or -) 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 that distance.

Example:

+15.00D at 12mm = +16.50 D at 6 mm

For cylindrical lenses, the power corrections should be calculated separately for each meridian.

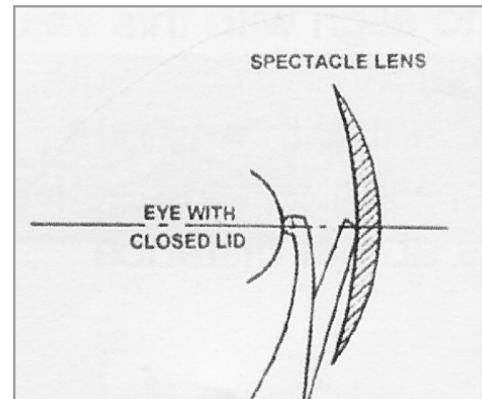


Figure 2 - Distometer gauge measures distance from rear lens to eye lid.



Lightweight Distometer



Metal Distometer and Dial

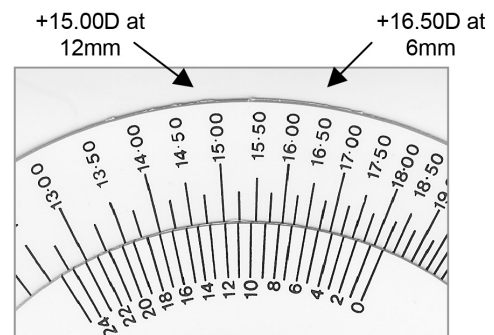


Fig 3. Illustrates the example shown above on the conversion disc

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## Cleaning Guide for Metal Distometer:

Do not autoclave. The recommended solution for many instruments for sterilization is glutaraldehyde. It is available as a mix at about 2% concentration. You can obtain from any hospital supply but here are two sources:

### Price Club Dental Supplies

Email: [sales@priceclubdentalsupplies.com](mailto:sales@priceclubdentalsupplies.com)

Telephone: 1 -203-448-6007

24 Hour Fax: 1-203-841-1399

Mail: Price Club Dental Supplies, LLC

151 North Street

Ridgefield, CT 06877

U.S.A.

MetriCide® 28 High-Level Disinfectant / Sterilant. 2.5% buffered glutaraldehyde. Recommended for immersible heat-sensitive equipment/instruments. FDA-registered.

Made by Kerr/Metrex.

- Bactericidal, Virucidal, Fungicidal, Tuberculocidal, Sporacidal
- Convenient: no dilution necessary, just pour and use
- Noncorrosive: Compatible with all non-lensed immersible & heat-sensitive instruments/equipment - Time-tested: Glutaraldehyde-based, 20+ year history, tried-and-true formula
- Contains surfactant: increase penetration of sterilant into instruments & equipment
- Long life: use & reuse up to 28 days

### Eye Care and Cure

4646 S Overland Drive

Tucson, AZ 85714

567-278-5014

## Cleaning Guide for Lightweight (Plastic) Distometer and Dial:

Do not autoclave. In a strict sense, plastic (styrene) cannot be sterilized, however, these items can be cleaned using with the following:

Soap and water (use a few drops per quart of dishwashing liquid) Magic Eraser sponger

[www.mrclean.com/en\\_US/magic-eraser-bath-scrubber.do](http://www.mrclean.com/en_US/magic-eraser-bath-scrubber.do)

Static B Gone Plastic Cleaner (Caution - keep away from heat and open flame)

Manufactured by Accessory Research

7129 20th Ave N

Centerville, MN 55038

651-429-7215

Email: [CS@AccessoryResearch.com](mailto:CS@AccessoryResearch.com)