

**Superior Quality**  
**Longevity** **Usability** **Safety** **Flexibility**  
Laser Excellence Comfortable

**Glaucoma Probes**  
**for Merilas 810 shortpulse®**


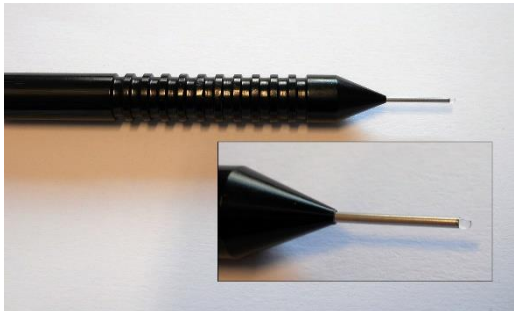
your laser specialist



## Superior Quality & Longevity

The high quality polished fiber surfaces result in homogenous laser spots with evenly distributed power across the entire area, eliminating the potential risk for the formation of “hot spots” in the treatment area.

## Usability

Type	Features and Advantages
<b>TRANSSCLERAL CYCLOPHOTOCOAGULATION PROBE</b> 	<ul style="list-style-type: none"><li>For use with 810nm ophthalmic laser in CW mode</li><li>No timeout</li><li>This probe is always in contact, as penetration of the laser light into the sclera occurs with the help of water displacement.</li></ul>
<b>SUBTHRESHOLD TRANSSCLERAL CYCLOPHOTOCOAGULATION PROBE</b> 	<ul style="list-style-type: none"><li>For use with 810nm ophthalmic laser in short pulse mode</li><li>No timeout</li><li>This probe is always in contact, as penetration of the laser light into the sclera occurs with the help of water displacement.</li></ul>

## Treatment guidelines

The following are only recommendations and not absolute guidelines. It is recommended that users search medical literature and/or develop their own protocol.

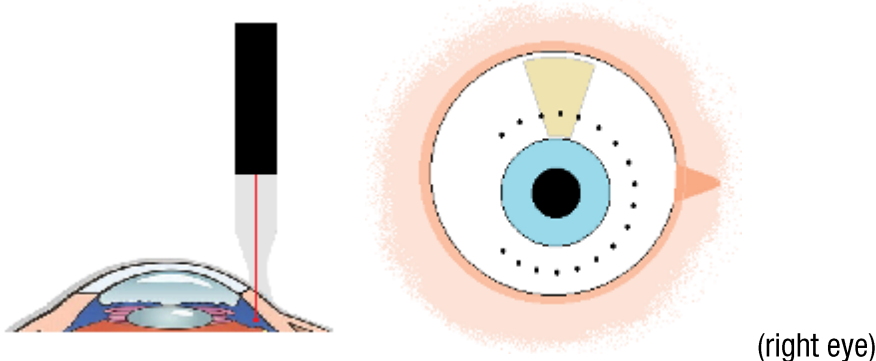
### **TRANSSCLERAL CYCLOPHOTOCOAGULATION PROBE (CW MODE)**

The transscleral cyclophotocoagulation laser probes are designed for accurate placement around the circumference of the limbus and spacing of the treatment points.

The probes have a protruding hemispheric tip that should be gently pressed onto the sclera.

Transscleral cyclophotocoagulation is indicated for :

- Patients having failed prior filtration surgery, and expected to fail again
- Patients with secondary glaucoma expected to fail filtration surgery
- Patients without ambulatory vision, treated for comfort and to prevent further loss
- Patients not a candidate for filtration surgery



Position the handpiece parallel to the visual axis, with the curved surface of the probe in good contact with the sclera and smaller edge of the probe tip in close proximity to the limbus. The protruding rounded fiber tip should indent the sclera and good contact should be maintained throughout the entire laser shot.

Without dragging or rotating the probe tip on the conjunctiva, select the next point half the width of the probe tip away, by aligning the edge of the probe tip on the center of the previous treatment lesion. Deliver laser energy to 18-20 point over 3/4 of a circle as shown in figure above. Skip areas of scar or excessive pigmentation.

For both eyes, the most temporal 1/4 of the circle should be left untreated, as shown in the figure above, to prevent low intraocular pressure complications.

Suggested power levels (CW mode) :

Dark pigmented : start at 1000 mW and increase by 250 mW if necessary

Light pigmented : start at 1250 mW and increase by 250 mW if necessary

Suggested duration : 2000 msec

These are suggestions only. It is the surgeon's responsibility to determine appropriate treatment parameters for each case.

If a "pop" or "snap" is heard during treatment, reduce power by 250 mW.

Excessive power could lead to scleral burning and hemorrhage of the ciliary processes. Hence it is recommended to start the treatment from low power levels.

Peripheral lens damage may be caused by excessive energy.

Laser energy absorption depends on pigmentation, hence dark pigmented eyes should be treated with lower power.

Areas of intense perilimbal conjunctival pigmentation should be avoided as they can result in local burns.

Areas of significant scleral scarring should also be avoided. Areas of previous trabeculectomies should be avoided.

In the region of a pigmented intraocular lens haptic located in the ciliary sulcus, the treatment should be approached cautiously.

The tip of the probe should be kept clean and the conjunctive conjunctiva well irrigated. A contaminated tip could cause serious burns and scleral damage. Replace the probe if needed.

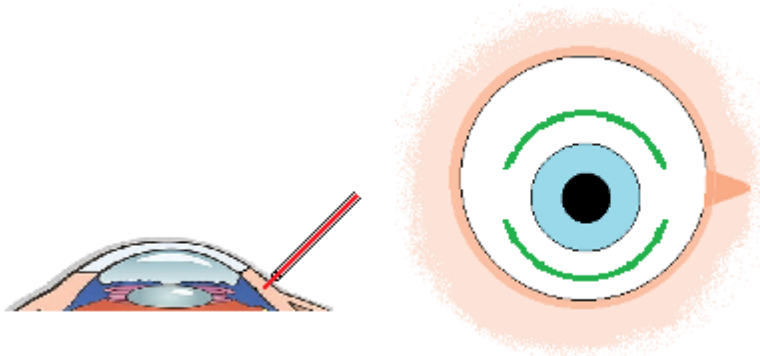
Check the tip regularly for any sign of damage and replace the probe if necessary.

Only slight conjunctival burns are acceptable. If more important burns are observed, the probe should be replaced.

The tip of the probe should not be dragged or rotated on the conjunctiva.

## SUBTHRESHOLD TRANSSCLERAL CYCLOPHOTOCOAGULATION PROBE (SP MODE)

An anesthesia block is typically used during this procedure. The probe tip and eye surface should be kept moist.



Position the probe perpendicularly as indicated above.

For treatment of the superior quadrant, firm pressure should be applied while move the probe in a continuous sliding arc from the 9:30 to 2:30 o'clock positions. The laser should be applied continuously, for 4-7 passes between the clock positions, for a total of 50 seconds. Suggested treatment parameters are subthreshold pulses with 31.3% duty cycle (0.5 ms on 1.1 ms off) with 2000 mW power setting. It is however the surgeon's responsibility to determine appropriate treatment parameters for each case.

In case the probe gets caught in the conjunctive, treatment should be momentarily stopped and restarted from the same position.

The inferior quadrant should then be treated similarly for a total of 50 seconds from the 3:30 to 8:30 o'clock positions.

In the case of obstructions like trabeculectomy, shunt, tube, as well as thin scleral areas, treatment should avoid these areas, but nevertheless deliver energy for the full 50 seconds onto the remaining treatment areas.

Excessive power could lead to scleral burning and hemorrhage of the ciliary processes, as well as equatorial burns. Hence it is recommended to start the treatment conservatively.

The fiber tip should remain clean throughout the treatment. Accumulation of debris could lead to charring during the procedure. In such cases, clean the tip with an alcohol swab. If the tip cannot be cleaned, this could lead to scleral burns, and hence the probe should be replaced.

Peripheral lens damage may be caused by excessive energy.

Laser energy absorption depends on pigmentation, hence the treatment should avoid areas of heavy perilimbal conjunctival pigmentation.

Areas of intense perilimbal conjunctival pigmentation should be avoided as they can result in local burns.

Check the tip regularly for any sign of damage and replace the probe if necessary.

Only slight conjunctival burns are acceptable. If more important burns are observed, the probe should be replaced.

Transscleral cyclophotocoagulation laser probe is generally used for the treatment of the ciliary processes in order to reduce intraocular pressure in the treatment of uncontrolled glaucoma.

Subthreshold transscleral cyclophotocoagulation is indicated for the treatment of :

- Primary-angle glaucoma
- Closed-angle glaucoma
- Refractory glaucoma

Photocoagulation is counter indicated in non-pigmented (albino) eyes, other than this, there is no restriction for the patient population.

It is the Ophthalmic Surgeons responsibility to decide for the patient population.

Only 810 nm ophthalmic diode lasers should be used with Fiberion transscleral cyclophotocoagulation probes. Other laser wavelength may not go through or damage the sclera, and could have potentially hazardous effects on the ciliary processes and other parts of the eye.

## Safety

The glaucoma probes enjoy unique features such as individual serial numbers assuring the highest possible traceability. All probes are CE-marked and for single use.

## Flexibility & Comfort

Elements of ergonomics have been incorporated into the design of the probes to provide you with proprietary advantages of a comfortable grip. Ergonomic hand piece, well balanced for precise and safe fiber guidance resulting in unsurpassed treatment precision.

The connection to the laser device is made via a standard SMA connector.



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PRODUCT AVAILABILITY IS  
COUNTRY-DEPENDENT