Direction for use

Schioetz – Tonometer

Manufactured by :

Gerhard Biro
Medizinische Apparate
Engeleswies 1
72393 Burladingen-Hausen
Germany

In case of danger call:

Safety inspector
Mr. Gerhard Biro

Phone : + 49 7475 7134
Fax: + 49 7475 211
Gerhard.Biro@t-online.de
www.biro-medizintechnik.de

Directions for use of the Schioetz Tonometer

You have purchased a high quality Schioetz eye tonometer manu-factured in accordance with the specifications of Directive 93/42 EEC of 14.06.1993 and the Medical Products Act.

1. Intended purpose

The eye tonometer is designed for measuring the intra-ocular pressure.

2. Assembly and start-up (Fig.)

Insert the plunger (1) in the footplate (2). Screw the 5.5 g weight (3) onto the plunger. If necessary, insert the 7.5 g or 10 g weight (4) in the direction of the arrow.

3. Information an the use of the device

The supplied conversion table 1955 is the product of research by Friedenwald, Kronfeld, Ballantine and Trotter. The pressure of a healthy eye is approx. 16 mm Hg (average value). A tension of 22 (pointer deflection 3.5 with 5.5 g weight) is very probably too high, while a tension *of* 24,5 mmHg (pointer deflection 2 to 3,5 with 5.5 weight) is definitely too high. The values from the tonometer table 1955 for measurements with the 5.5 g and 10 g weights should not differ from each other by more than 3 mmHg for the same eye. If such comparative measurements produce significant variations repeatedly, the rigidity *of* the cornea is abnormal. If values more than 3 mm Hg higher are obtained using the 10 g weight table than with the 5.5 g weight table, the rigidity is too high, and the actual intraocular pressure is lower than that indicated by the tonometer.

Conversely, if the mm Hg value is lower with the 10 g weight than the 5.5 g weight, the rigidity is too low; in such cases. the actual intra-ocular pressure is higher than that measured with the tonometer. In patients with abnormal rigidity, the pressure measured with the 5.5 g tonometer weight comes closest to the actual pressure value, as the calibration values for the 5.5 g tonometer weight are less influenced by abnormal corneal rigidity. In the critical pressure ranges from 20 to 30 mm Hg. we recommend measurement with the 5.5 g tonometer weight.

4. Preparations for pressure measurement

After each pressure measurement, remove the plunger and clean it with alcohol ether. Immediately before the pressure measurement, reassemble and clean the tonometer, then place it on the test block (5). The pointer must be set to zero; deviations of max. 0.2 of a scale division are permissible. The patient should be in a recumbent position for the intra-ocular pressure measurement. After anaesthetising the cornea with an ordinary anaesthetic, place the tonometer in a vertical position at the centre of the cornea. Do not exert any pressure on the eyeball when moving back the lids. Reliable pressure values can only be read off when the pointer shows a pulse.

5. Metrological inspection

The metrological inspection can only be performed by the manufacturer or an authorised body. According to the Medical Product Operators ordinance of 29 June 1998, metrological inspections should be carried out at intervals of 2 years.

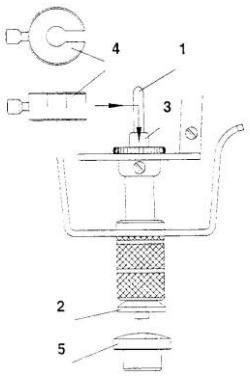
6. Technical data

Scale: 0 to 20 scale divisions
0 to -1 scale division

1 scale division corresponds to a stroke of 0.05 mm.

The tonometer should be stored in a closed container (case).

Please note that the product described in the operating instructions is intended exclusively for use by suitably trained personnel.



7. Cleaning and Disinfection

After use, remove the 5,5 g weight by unscrewing it from the plunger thread and withdraw the plunger from the tube. Clean the plunger by wiping it with a gauze sponge soaked in 70% alcohol. Rinse out the footplate cavity thoroughly with warm distilled water in order to dissolve any salt crystals from the tear fluid. The tonometer can be disinfected with 70% alcohol. Also rinse out the cavity with 70 % alcohol and then leave the tonometer to dry thoroughly.

8. Inspection

Frequent checking of the footplate and plunger is urgently recommended. Any nicks or scratches due to incorrect handling must be eliminated by the manufacturer.

9. Sterilisation

Although a sterilisation in a steam autoclave with forepressure at 134° Cels. for 3 minutes is possible for all models, we recommend autoclaving only for the stainless steel model. The other models have parts of aluminium, which may corrode by repeated steam autoclaving.

For autoclaving put the tonometer in a sterilisation bag or container. Please observe the instructions of the manufacturer of the autoclave.

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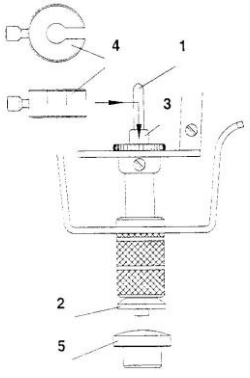

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