

# schlötz



CE 0124



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 **Riester**

Umrechnungstabelle 1955

| Zeiger-<br>Ausschlag<br>Scala Reading | Augendruck - Pressure, mmHg<br>Tonometerstiftgewicht - Plunger Load |       |        |        |
|---------------------------------------|---|-------|--------|--------|
|                                       | 5,5 g   | 7,5 g | 10,0 g | 15,0 g |
| 0,0                                   | 41,5  | 59,1  | 81,7   | 127,5  |
| 0,5                                   | 37,8  | 54,2  | 75,1   | 117,9  |
| 1,0                                   | 34,5  | 49,8  | 69,3   | 109,3  |
| 1,5                                   | 31,6  | 45,8  | 64,0   | 101,4  |
| 2,0                                   | 29,0  | 42,5  | 59,1   | 94,3   |
| 2,5                                   | 26,6  | 38,3  | 54,7   | 88,0   |
| 3,0                                   | 24,4  | 35,8  | 50,6   | 81,8   |
| 3,4                                   | 22,4  | 33,0  | 46,9   | 76,2   |
| 4,0                                   | 20,6  | 30,4  | 43,4   | 71,0   |
| 4,5                                   | 18,9  | 28,0  | 40,2   | 66,2   |
| 5,0                                   | 17,3  | 25,8  | 37,2   | 61,8   |
| 5,5                                   | 15,9  | 23,8  | 34,4   | 57,6   |
| 6,0                                   | 14,6  | 21,9  | 31,8   | 53,6   |
| 6,5                                   | 13,4  | 20,1  | 29,4   | 49,9   |
| 7,0                                   | 12,2  | 18,5  | 27,2   | 46,5   |
| 7,5                                   | 11,2  | 17,0  | 25,1   | 43,2   |
| 8,0                                   | 10,2  | 15,6  | 23,1   | 40,2   |
| 8,5                                   | 9,4   | 14,3  | 21,3   | 38,1   |
| 9,0                                   | 8,5   | 13,1  | 19,6   | 34,6   |
| 9,5                                   | 7,8   | 12,0  | 18,0   | 32,0   |
| 10,0                                  | 7,1   | 10,9  | 16,5   | 29,6   |
| 10,5                                  | 6,5   | 10,0  | 15,1   | 27,4   |
| 11,0                                  | 5,9   | 9,0   | 13,8   | 25,3   |
| 11,5                                  | 5,3   | 8,3   | 12,6   | 23,3   |
| 12,0                                  | 4,9   | 7,5   | 11,5   | 21,4   |
| 12,5                                  | 4,4   | 6,8   | 10,5   | 19,7   |
| 13,0                                  | 4,0   | 6,2   | 9,5    | 18,1   |
| 13,5                                  |   | 5,6   | 8,6    | 16,5   |
| 14,0                                  |   | 5,0   | 7,8    | 15,1   |
| 14,5                                  |   | 4,5   | 7,1    | 13,7   |
| 15,0                                  |   | 4,0   | 6,4    | 12,6   |
| 15,5                                  |   |       | 5,8    | 11,4   |
| 16,0                                  |   |       | 5,2    | 10,4   |
| 16,5                                  |   |       | 4,7    | 9,4    |
| 17,0                                  |   |       | 4,2    | 8,5    |
| 17,5                                  |   |       |        | 7,7    |
| 18,0                                  |   |       |        | 6,9    |
| 18,5                                  |   |       |        | 6,2    |
| 19,0                                  |   |       |        | 5,6    |
| 19,5                                  |   |       |        | 4,9    |
| 20,0                                  |   |       |        | 4,5    |

### Directions for use of the schiötz Tonometer

You have purchased a high quality **schiötz** eye tonometer manufactured in accordance with the specifications of Directive 93/42EEC and the Medical Device Directive.

#### 1. Intended purpose

The eye tonometer is designed for measuring the intraocular 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 on 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 (po,interdeflection 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 mmHg 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 mmHg value is lower with the 10 g weight than the 5.5 g weight, the rigidity is too low; in such cases, the actual intraocular

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 mmHg, 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 horizontal position for the intraocular pressure measurement. After anaesthesia of the cornea with a standard 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

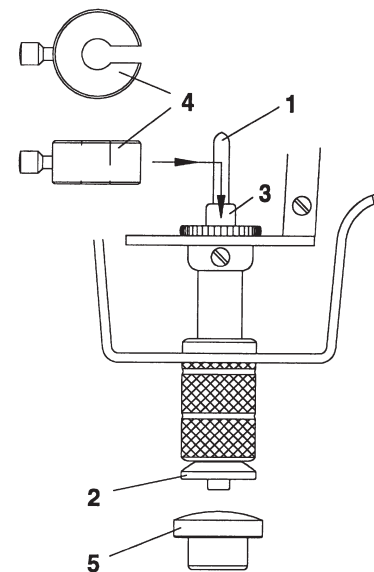
The metrological inspection can only be performed by the manufacturer or an authorized body. According to the Medical Product Operators ordinance of 29 June 1998, metrological inspections should be carried out at intervals of 2 years.

#### 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

After use, remove the 5.5 g weight by unscrewing it from the plunger thread and withdraw the plunger from the tube. Place the plunger, the 5.5 g weight and the other weights (if using) in a non-alkaline cleaning solution (see manufacturer's directions for preparation of solution and soaking time). Rinse out the footplate cavity thoroughly with warm distilled water in order to dissolve any salt crystals from the tear fluid. After cleaning, rinse off any residues of the cleaning solution thoroughly with demineralised or distilled water.

#### 8. Disinfection

The tonometer can be disinfected with 70 % alcohol.

#### 9. Care and inspection

Always inspect, the plunger and footplate for nicks or scratches prior to sterilisation and eliminate these without delay before reusing.

#### 10. Sterilisation

Place the tonometer in transparent aseptic packaging or a suitable aseptic container. Sterilise for 3 min. in a steam autoclave under forepressure at 134° C. The effectiveness of this process has been validated for the tonometer.