

INTRODUCING THE...
**APPLANATION
TONOMETER**
RANGE



A900

F900



Z800

INTRODUCING THE...

A900, F900, Z800

APPLANATION TONOMETERS

The F900 and A900

The F900 and A900 applanation tonometers are accessories for the SL990 slit lamp to measure ocular pressure. Due to its versatile design, they can also be combined with other manufacturers equipment. The tonometers operate using the Goldmann method, meaning that it measures the pressure required for maintaining uniform applanation of the corneal surface. Precise measurement of the small flattened surface is completed using a slit lamp at 10x magnification.

Advantages

- Measurement of the patients endocular pressure is made using a slit lamp, along with other routine microscopic measurements
- High measurement accuracy, the standard deviation amongst single measurements is approx +- 0,5mmHg
- The value is displayed in mmHg directly on the instrument

- Scleral rigidity consideration is not required as the small volume moved ($0,56 \text{ mm}^3$) increases intra-ocular pressure by only 2,5% (approx)
- Measurement repetition does not reduce ocular pressure as there is no 'massage effect' to report
- Simple calibration and standardization

The **F900** must be placed on the guide plate in one of two possible position, right or left eye. These positions are related to the microscope, and observation can be made through either eyepiece. The doubling prism, which is held in a ring at the end of the pressure arm is automatically in the path of the microscope and illumination beam. To obtain as clear an image as possible, the angle between illumination and microscope should be about 60 degrees and the slit diaphragm should be completely open.

The **A900** is for those who require a permanently attached tonometer to their slit lamp. It is mounted on a pivot, on the microscope, and swung forward for examinations. A notch position ensures exact centering of the prism with the left objective. Observation of the flattened area of the corneal is made through the left eyepiece.



INTRODUCING THE...

A900, F900, Z800

APPLANATION TONOMETERS

The Z800

The Z800 applanation tonometer must be mounted above the microscope of the slit lamp.

The feeler arm protrudes from above the beam path of the microscope and the illumination unit. The tonometer is ready for use with single swinging movement of the feeler arm.

The Z800 applanation tonometer is an accessory for the SL980 range of slit lamps to measure endocular pressure.

Due to its versatile design, it can also be mounted and combined with other equipment and slit lamps from other manufacturers.

Standard accessories

- Measurement head (pressure cone) code 10.20.01.10
- Control and calibration lever
- 2mm alum key
- Assembly plate

Specifications

- Measuring force:
generated by spring force
- Installation:
 - A900 & F900: It can be assembled using a plate on the slit lamp microscope (SL 990 model only)
 - Z800: It can be assembled using a plate on the slit lamp microscope (SL 980 model only)
- Measurement range:
 $0 \div 80 \text{ mmHg}$ ($0 \div 10,64 \text{ kPa}$)
- Operating temperature:
from 15 to 30 degrees Celsius
- Measurement uncertainty:
 - A900 & F900: less than 0,49 mN
 - Z800: less than 0,25 mN
- Standard deviation:
Z800 - 0,49 mN 3s 1,5% of rated value

The diagnostic functionalities of the applanation tonometers are constantly developed thanks to the collaboration of surgical and microsurgical divisions of the greatest hospitals, medical institutions, clinics and eye centres.



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