



Nissel Sixteen-50 & Nissel Eighteen-20 Fitting Guide

Fitting of these lenses is best carried out using a fitting set. Each fitting set contains the following.

FITTING PROCEDURE

- Full refraction and eye examination.
- Keratometry/Topography (if possible).
- Select initial lens from fitting set. K readings can offer a guideline to initial selection. The trial lenses are marked with a lens number, and the sag depth for each lens noted in the fitting set.
- It is advisable to cover the floor with some paper towels as some spillage of fluorescein/saline is inevitable. The patient should also be covered, an apron is ideal.
- The patient can be either standing or sitting for lens insertion, but it is important that their head is parallel to the floor.
- The lens should be rinsed and balanced on a tripod formed by the thumb, index and middle finger, alternatively use a rubber suction holder with the end cut off to prevent suction. The lens should then be filled to the brim with non-preserved saline along with fluorescein. Aerosol saline should NOT be used.
- The patient is asked to look straight down and keep their head parallel to the floor. It is advisable to ask the patient to direct their focus to something on the floor. Ask the patient to hold down their lower lid. The upper lid should then be held wide open, and the practitioner can also use this hand to help keep the patient still. The filled lens should be inserted quickly into the eye so that it remains filled with the fluorescein solution.
- A UV torch can be used to check the initial fit. A Burton lamp can also be used; however, the magnification is not necessarily required. If any bubbles are present, the lens should be removed and re-inserted.
- If the initial appearance looks steep or flat, the lens should be removed and another trial lens inserted.

Nissel Sixteen-50 or Nissel Eighteen-20 12 lens fitting set												
Diameter					16.50mm or 18.20mm							
Power					Plano							
Lens	1	2	3	4	5	6	7	8	9	10	11	12
Code	F3	F2	F1	A	S1	S2	S3	K1	K2	K3	K4	K5
SAG mm	3.35	3.45	3.55	3.65	3.80	3.95	4.10	4.20	4.30	4.40	4.55	4.70
K reading	8.60	8.35	8.10	7.85	7.60	7.35	7.10	6.85	6.60	6.35	6.10	5.85

For the full range of parameters available, see the Nissel Sixteen-50 & Nissel Eighteen-20 product guide.

Ideal Fit

- No bubbles present.
- There should be a lot of apical clearance, the pupil should only just be visible through the fluorescein when viewed with the cobalt filter.
- There should not be any touch.
- If there are bubbles or central touch, then the lens should be removed and another trial lens inserted.
- If the fit looks ideal, then it should be assessed with a slit lamp.

Apical Clearance

- The apical clearance should be assessed using a cross-section. The tear reservoir should be approximately 300 microns.
- The trial lens thickness is 300 microns and can therefore be used to assess the thickness of the tear reservoir.

Limbal Zone

- The lens should vault over the limbal area. There should be an even fluorescein pattern.

Scleral Zone

- There should be an even band of fluorescein under the scleral zone.
- There should be no blanching/impingement.
- There should be no hyperaemia.

Once happy with the initial fit, the lens should be allowed to settle for approximately 60 minutes. After this time an over refraction should be carried out and the fit rechecked.

Adjustments

The apical, limbal, and scleral zones can all be adjusted independently of each other. If it is necessary to move between diameters, no other parameters need to be adjusted. The following adjustments can be made.

- Apical Clearance – Increase maximum 5 steps/Decrease maximum 5 steps (1 step = 50 microns)
- Limbal Clearance – Increase maximum 3 steps/Decrease maximum 3 steps (1 step=50 microns)
- Scleral Landing Zone – Increase maximum 5 steps/Decrease maximum 3 steps (1 step = 50 microns)

Removal

The lens should be removed using the lids or a plunger. If using a plunger, it must be attached to the edge of the lens and the lens pulled away with a twisted motion.

Modality

These daily wear lenses are designed to last for up to 12 months. The lenses may need to be replaced more frequently due to the patient's wear and care, this is at the discretion of the practitioner.

Care

Any solutions suitable for RGP materials can be used on these lenses.

