

# **Product Brochure & Fitting Guide**





## Getting to Know the Design

One size does not fit all when it comes to soft contact lenses.

Menicon Niji contact lenses are soft monthly lenses that are specially tailored to the eye yet easy to fit. With Menicon Niji, it is possible to have a suitable lens for almost every patient, making lens wear comfortable and enjoyable.

Available in six different radius-diameter combinations, this lens offers more fitting options than standard disposable lenses. The lenses are made of silicone hydrogel material Efrofilcon A (Definitive 74) and therefore allow more oxygen to pass through to the cornea than standard hydrogel materials. The Efrofilcon A material also contains good wetting properties and low modulus (0.35 MPa) to help optimize the comfort and wearing time.<sup>1</sup>

Menicon Niji monthly lenses can be fitted without a topographer. The lens is offered in a wide range of powers from -25.00D to +25.00D and a cylinder up to -5.00D. All powers are available in 0.25D steps which allows for an extremely wide range of lenses.

The older or novice presbyope can also benefit from the different Menicon Niji multifocal designs. Menicon Niji is available as a Centre-Near (CN) and a Centre-Distance (CD) design with several addition power options.

The Menicon Niji lens series consists of six types of monthly lenses:

- Menicon Niji
- Menicon Niji Toric
- Menicon Niji Multifocal CD
- Menicon Niji Multifocal CN
- Menicon Niji Multifocal CD Toric
- Menicon Niji Multifocal CN Toric



### **Lens Parameters**

|                         | Menicon Niji                                                      | Menicon Niji Toric                                            | Menicon Niji Multifocal CD<br>Menicon Niji Multifocal CN      | Menicon Niji Multifocal CD Toric<br>Menicon Niji Multifocal CN Toric |  |  |  |  |
|-------------------------|-------------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------|--|--|--|--|
| Power                   | -25.00D to +25.00D<br>(0.25D steps)                               | -25.00D to +25.00D<br>(0.25D steps)                           | -25.00D to +25.00D<br>(0.25D steps)                           | -25.00D to +25.00D<br>(0.25D steps)                                  |  |  |  |  |
| Radius / Diameter       | 8.00 mm / 14.00 mm<br>8.30mm / 14.40 mm<br>8.60 mm / 14.80 mm     | 8.20 mm / 14.20 mm<br>8.60mm / 14.70 mm<br>9.00 mm / 15.20 mm | 8.00 mm / 14.00 mm<br>8.30mm / 14.40 mm<br>8.60 mm / 14.80 mm | 8.20 mm / 14.20 mm<br>8.60mm / 14.70 mm<br>9.00 mm / 15.20 mm        |  |  |  |  |
| Cylinder                |                                                                   | C -0.75D to -5.00D<br>(0.25 steps)                            |                                                               | C -0.75D to -5.00D<br>(0.25 steps)                                   |  |  |  |  |
| Axis                    |                                                                   | 1° to 180° (1° steps)                                         |                                                               | 1° to 180° (1° steps)                                                |  |  |  |  |
| Front Surface           | Aspheric OZ and aspheric periphery                                |                                                               |                                                               |                                                                      |  |  |  |  |
| Back Surface            | Spheric OZ and aspheric periphery                                 |                                                               |                                                               |                                                                      |  |  |  |  |
| Addition CN             |                                                                   |                                                               | +1.00D / +1.50D /<br>+2.00 D                                  | +1.00D / +1.50D /<br>+2.00 D                                         |  |  |  |  |
| Addition CD             |                                                                   |                                                               | +1.00D / +1.50D /<br>+2.00 D / +2.50D                         | +1.00D / +1.50D /<br>+2.00 D / +2.50D                                |  |  |  |  |
| Wearing Type            | Daily wear                                                        |                                                               |                                                               |                                                                      |  |  |  |  |
| Recommended replacement | 1 month replacement                                               |                                                               |                                                               |                                                                      |  |  |  |  |
| Material                | Efrofilcon A (Definitive 74)                                      |                                                               |                                                               |                                                                      |  |  |  |  |
| Dk (ISO)                | >58 x 10 <sup>-11</sup> (cm²/sec) [mLO <sub>2</sub> /(mL x mmHg)] |                                                               |                                                               |                                                                      |  |  |  |  |
| Water content           | 74% non-ionic                                                     |                                                               |                                                               |                                                                      |  |  |  |  |
| Handling Tint           | Blue                                                              |                                                               |                                                               |                                                                      |  |  |  |  |



### Design

Menicon Niji includes a family of lenses for all refractive errors. All designs include aberration control over the complete optical zone.

#### Spherical Design:

- The geometry of this design features a front surface with aspheric optic zone (OZ) and aspheric periphery to get precise vision.
- The back surface includes a spheric OZ and an aspheric periphery to get a more accurate fit.
- The optic zone is connected by a spline zone to the tangent zone.
- The lens edge is thin and spherical and designed to optimize comfort; it is the same edge design across all lens powers and designs.
- Three different BC & diameter combinations: 8.00/14.00 mm; 8.30/14.40 mm; 8.60/14.80 mm.

#### **Toric Design:**

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- The Menicon Niji Toric lens has a stabilization system that includes dynamic stabilization zones in the periphery and a prism ballast in the centre to provide a very stable fit.
- The lens can be placed on the eye randomly and will orient itself and stabilize automatically after two or three blinks.
- Front surface: aspheric OZ and aspheric periphery
- Back surface: spheric OZ and aspheric periphery
- Front toric (OZ contains cylinder)
- Three different BC & diameter combinations: 8.20/14.20 mm; 8.60/14.70 mm; 9.00/15.20 mm.







#### Multifocal Designs:

- Two types of multifocal designs available: Centre-Near (CN) and Centre-Distance (CD)
- Menicon Niji Centre-Near Design:
  o Addition +1.00/+1.50/+2.00 on the front surface
- Menicon Niji Centre-Distance Design:
  - o Addition +1.00/+1.50 +2.00/+2.50 D on the front surface
- These spherical multifocal designs include the same three BC & diameter combination options as the Menicon Niji lens: 8.00/14.00 mm; 8.30/14.40 mm; 8.60/14.80 mm.

#### **Multifocal Toric Designs**



- The Menicon Niji Multifocal toric has the same geometry as the spherical Menicon Niji Multifocal but includes the stabilisation system.
- The Multifocal toric designs include the same three BC & diameter combination options as the Menicon Niji Toric lens: 8.20/14.20 mm; 8.60/14.70 mm; 9.00/15.20 mm.







## **Fitting Protocols**

#### **1. Initial Visit:**

- Patient History:
  - o General information from your patient including current or past usage of contact lenses.
  - o Any issues that the patient has whether or not they are related to the eyes.
- Slit lamp evaluation
  - A complete slit lamp examination should be performed to understand the patient's baseline ocular and corneal health.
- Subjective Refraction
  - o Refract to maximum visual acuity with the maximum positive power to prevent over-correction.
  - o Remember to check near refraction and eye dominance for Multifocal lens fittings.
  - o Convert spectacle Rx to ocular Rx (adjust for back vertex distance (BVD) as needed).

#### 2. Lens Calculation:

- Determine the mean K value from the flat and steep meridian K values.
  - o Use a keratometer or corneal topographer
- Measure horizontal visible iris diameter (HVID) accurately to help determine the correct lens parameters. o Use slit lamp & reticle, ruler or corneal topographer
- Depending on the Menicon Niji design, use the corresponding table to determine the lens base curve radius (BCR) from the mean K value and HVID.



Table 1. Fitting table for Menicon Niji and Menicon Niji Multifocal



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Table 2. Fitting table for Menicon Niji Toric and Menicon Niji Multifocal toric

- Determine lens diameter associated with BCR.
  - o Each lens BCR is associated with a specific lens diameter for each design per the table below.

| Spherical & Mu | ltifocal Designs   | Toric & Multifocal toric Designs |                    |  |
|----------------|--------------------|----------------------------------|--------------------|--|
| BCR (mm)       | Lens Diameter (mm) | BCR (mm)                         | Lens Diameter (mm) |  |
| 8.00           | 14.0               | 8.20                             | 14.2               |  |
| 8.30           | 14.4               | 8.60                             | 14.7               |  |
| 8.60           | 14.8               | 9.00                             | 15.2               |  |

- Order Menicon Niji Trial Lens
  - Order Menicon Niji Spheric or Toric by specifying the lens BCR, Power and Diameter. E.g.: 8.2 / -5.00 -1.25 x 180° / 14.20
  - Order Menicon Niji Multifocal by specifying the lens BCR, Power, Diameter, Add design (CN vs CD) and Add
    Power
    - E.g.: 8.0 / -5.00 / 14.00 Addition CN +1.50

#### **Menicon Niji Multifocal Lens Calculation**

Step 1. Perform an accurate subjective refraction for near and distance

**Step 2.** Determine ocular dominance via the sensitivity to blur method (by holding up +0.75D to +1.50D in front of each eye; the eye most sensitive to the +0.75D to +1.50D lens is the dominant eye). This information will be used to potentially help refine the lens power later.

**Step 3.** Choose the multifocal design (CN or CD) to use based on the Addition Power needed. We recommend using the same design for both eyes to start with. CN: Centre-Near and periphery distance vision

CD: Centre-Distance and periphery near vision



**Step 4.** Order the trial lenses.

**Step 5.** Place the trial lenses on eye. If the lens fits well and the patient is subjectively happy with the initial trial lenses, VA can be checked binocularly to assess near and distance vision.

- If vision is good, then patients can be sent home to wear the lenses. Review again after 1 or 2 weeks of lens wear and adaptation.
  - If the vision is not good and it's a toric design, assess the stabilization of the lens by looking at the markings.
    - o If the markings are not stable, please recheck all the initial parameters (HVID, K values, BCR choice) and adjust lens parameters as needed.
      - o If markings are stable, to improve vision at all distances, check VA monoculary and binocularly at all distances. Adjust the vision according to the Multifocal design (CN or CD), eye dominance and desired improvement in vision per the table below:

|         |          | Initial Lens Selection          |              | To Improve Distant        | ce vision        | To Improve Near vision |                                                          |
|---------|----------|---------------------------------|--------------|---------------------------|------------------|------------------------|----------------------------------------------------------|
|         |          |                                 |              | Dominant eye              | Non-dominant eye | Dominant eye           | Non-dominant eye                                         |
| Menicon | CN<br>CD | Menicon Niji Near<br>design     | 1º<br>option | CN -0.25D/-0.50D          | CN               | CN                     | CN +0.25/+0.50                                           |
|         |          |                                 | 2º<br>option | CD                        | CN               | CD                     | CN                                                       |
|         |          | Menicon Niji<br>Distance design | 1º<br>option | CD -0.25D/-0.50D          | CD               | CD                     | CD +0.25D/+0.50D                                         |
|         |          |                                 | 2º<br>option | Niji Spheric / Niji Toric | CD               | CD                     | CD max. addition<br>that does not<br>disturb distance VA |
| Niii    |          |                                 |              |                           |                  |                        |                                                          |



#### **3. Fitting Process:**

- Assess lens fit:
  - o Centration: Check that the lens stays relatively centered in primary, nasal, temporal, superior and inferior gazes. The space from the limbus to the edge of the lens should be similar in each of these gaze positions.
  - o Diameter: Lens should be minimum 2mm larger than the corneal diameter
  - o Movement: 0.2-0.5 mm lens movement immediately after the blink
- Assess toric lens orientation and rotational stability:
  - o The objective is to ensure that the drift position is stable and repeatable.
  - o The lens mark at 270° may.... stabilize clockwise or counter-clockwise from the vertical meridian at an angle. Adjust the axis based on the LARS (Left Add Right Subtract) toric lens rules.
    - o If the lens is rotating to the LEFT, then the degree of rotation is Added to the refractive axis.
    - o If the lens is rotating to the RIGHT, then the degree of rotation is Subtracted from the refractive axis.

#### 4. Monitoring and follow up:

- Re-evaluate the trial lens after 1-2 weeks of wear at which time, any initial issues or problems from the patient should be apparent.
- If both the lens fit and vision is good, order an appropriate supply of the final Menicon Niji lenses.
- Remind the patient that the lenses should be replaced every month.
- Remind the patient that the lenses are not intended to be worn continuously and need to be removed each night before going to sleep.
- Thoroughly review the instructions for lens handling, lens care and the importance of proper lens hygiene.
- We recommend that you monitor the patient's progress with the lens after the first month of wear and every six months thereafter.

#### Important considerations

#### Tip 1

#### **HVID** measurement

- Measuring the HVID accurately is crucial because it determines the correct lens diameter to achieve a successful lens fit.
- There are 3 different techniques to measure the HVID: Slit Lamp & Reticle, Ruler or Corneal Topographer.

#### Tip 2

#### **Over-refraction in astigmatic patients**

- ONLY performed when there is a stable lens fitting, good lens centration and the lens mark is a stable position.
- Perform an over-refraction using loose handheld lenses.
- If the lens is centered but the lens mark is not at 270°, evaluate the lens rotation and adjust as described above.

#### Tip 3

#### **Refraction in presbyopic patients**

Before ordering a Menicon Niji Multifocal lens please ensure:

- A subjective refraction with the maximum positive (plus) power was performed to help reduce near power add and the difference in power between far and near. A good subjective refraction for both near and distance helps to ensure optimal binocular vision.
- Choose the appropriate multifocal design for the patient:
  - o When the required addition is low-moderate (between +0.75D to +2.00D), select a Menicon Niji multifocal Centre-Near (CN) design for both eyes as the first trial lens.
  - o When the required addition is high (between +2.00D to +2.50D), select a Menicon Niji multifocal Centre-Distance (CD) design for both eyes as a first trial lens.





#### Tip 4

#### Determine ocular dominance using sensitivity to blur method

Place +0.75D to +1.50D in front of each eye alternatively to check the impact on distance vision. The dominant ٠ eye is the eye where +0.75D to +1.50D will be the most disturbing for distance vision.

#### Tip 5

#### Slit lamp without lenses

As with any contact lens fitting visit, ensuring the cornea is healthy and suitable for lens wear is very important. A simple slit lamp exam utilizing fluorescein will help evaluate corneal health before and after lens wear. If using fluorescein, please remember to rinse the eyes thoroughly before inserting any lenses.

#### **Advantages of Menicon Niji**

The lenses have a high Dk, a low modulus and a water content of 74%. This helps to ensure healthy, safe and comfortable lens wear.

- Customized contact lenses
- Wide range of parameters •
- Good comfort •
- Simple and easy to fit
- Topography not required •
- Easy to order

### Lens care

Soft customized lenses like Menicon Niji need to be cleaned on a daily basis. We strongly recommend multipurpose solutions (MeniCare Soft or SOLOCARE AQUA®) for cleaning, disinfection, storage and rinsing. A rubbing step with multipurpose solutions is highly recommended.

Caution: do not use peroxide or clean with alcohol (risk of deterioration of the material).

We recommend the use of **MeniCare Soft or SOLOCARE AQUA®** solution for daily cleaning and storage of the lenses as well as for rinsing the lens case.



Reference:

1. Tighe BJ. A decade of silicone hydrogel development: surface properties, mechanical properties, and ocular compatibility. Eye Contact Lens. 2013 Jan; 39(1):4-12.





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