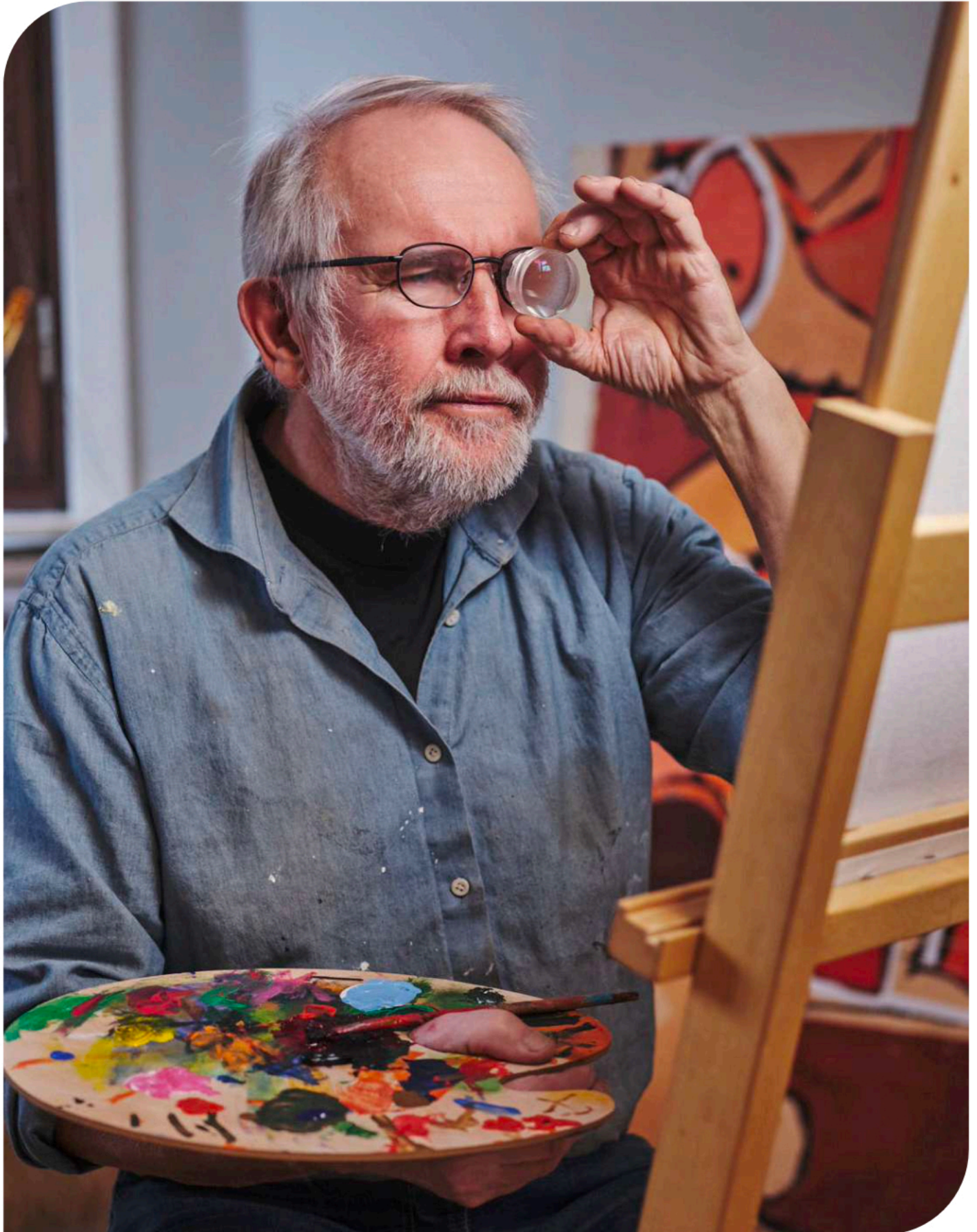


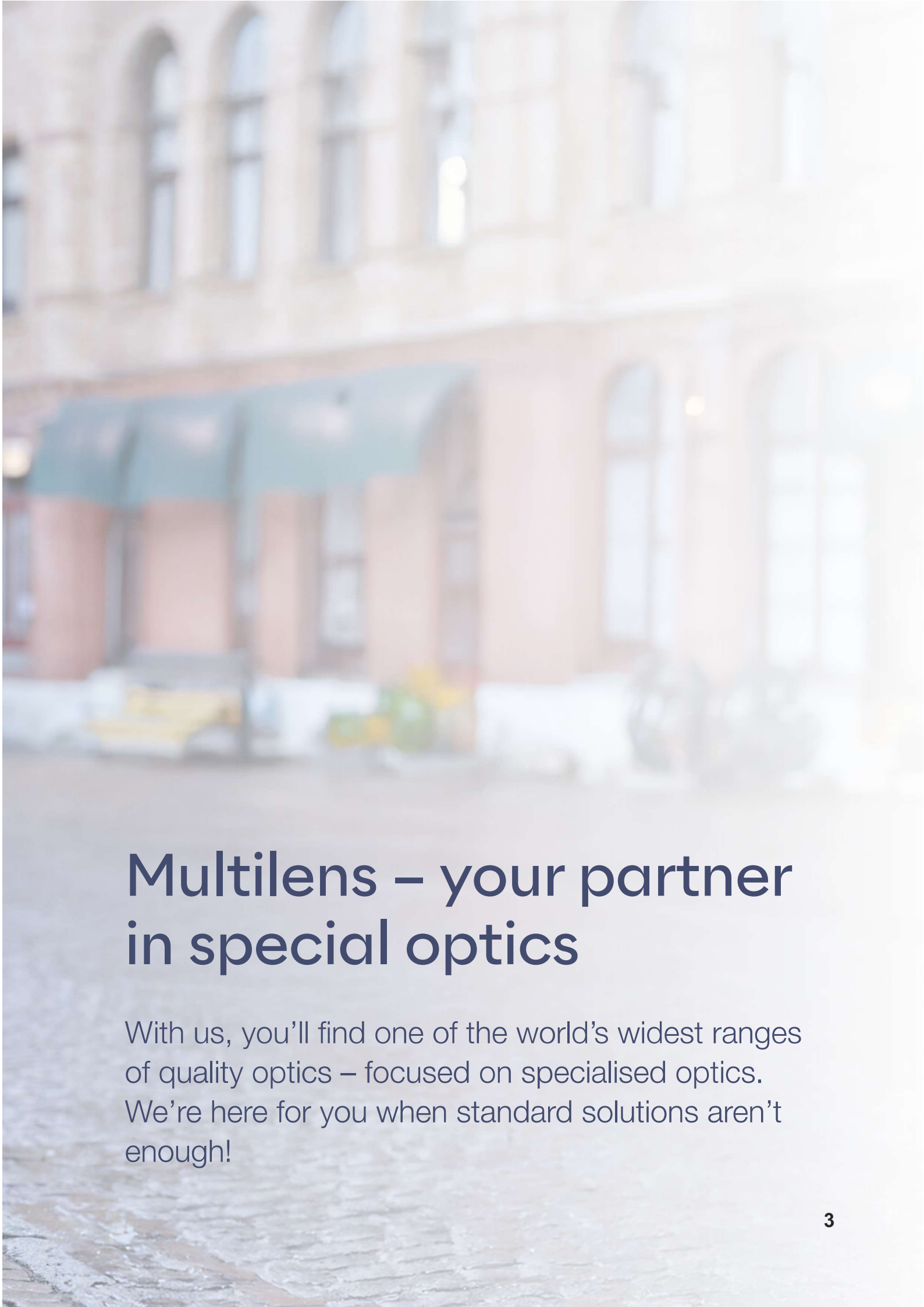
ML LOW VISION



On Sight Vision 

 **MULTILENS**
OPTICAL SOLUTIONS





Multilens – your partner in special optics

With us, you'll find one of the world's widest ranges of quality optics – focused on specialised optics. We're here for you when standard solutions aren't enough!



When a person with visual impairment wants to carry out everyday tasks such as reading, cooking, doing crafts, or navigating outdoors, it can be helpful to have their hands free. Our optical systems offer flexible magnification for all needs.

ML Low Vision Aids



Near Distance	8
ML Aplanat	10
ML A2	12
Intermediate distance	14
ML Combi	16
ML Vidi	18
ML Focus	20
Distance	22
ML RP	24
ML Bi2	26
Fitting	28

Introduction

You might feel uncertain when fitting optical systems that you rarely prescribe – but we are here for you! In this brochure, we explain more about magnification and which visual aids are suitable for different situations.

WHAT IS RETINAL MAGNIFICATION?

Retinal magnification refers to the image size on the retina. It can be achieved by:

- Using a magnifying optical aid
- Reducing the distance to the object
- Increasing the size of the object – for example, by zooming in on a screen.

KEY CONSIDERATIONS WHEN USING MAGNIFICATION

High magnification results in a reduced field of view. Always ensure that the refractive correction is accurate and up-to-date to avoid unnecessary magnification.

WHAT IS AN OPTICAL SYSTEM?

An optical system is a lens solution that uses two or more lenses to divide the optical power between them. Such a system is often used monocularly.

WHEN SHOULD I CHOOSE AN OPTICAL SYSTEM?

A person who does not achieve full vision despite optimal correction may require magnifying aids.

Handheld magnifiers and telescopes can be useful, but having free hands is often an advantage. Our magnifying systems are mounted in spectacle frames.



WHAT DIFFERS BETWEEN NEAR AND DISTANCE SYSTEMS?

Near systems consist of two plus lenses to achieve very high positive power. Magnification is created by moving the object close – sometimes as close as 2 cm.

Distance systems combine a plus lens and a minus lens, with the magnification created within the optics.

Near systems are aplanatic, while distance systems are Galilean.

WHY SHOULD I CHOOSE A MULTILENS SYSTEM?

Multilens optical systems are designed with a focus on a wide field of view and good spatial orientation, which reduces the risk of falling and promotes independence and freedom for individuals with visual impairment.

Our optical systems are also built with high-quality optics that provide a very sharp and clear image.

All systems can also be ordered with filters.

PEOPLE HAVE BIG TV SCREENS AND ZOOM ON PHONES – WHY CHOOSE A MAGNIFYING SYSTEM?

Many people with visual impairment need to sit closer to the TV than their family members. With a magnifying system, they can sit together.

A system doesn't just magnify the content on a phone, tablet, or TV – it magnifies everything in the room.

With digital zoom on a phone or tablet, context can be lost – in some cases, only a few letters are visible at a time.

The quality optics in our magnifying systems preserve image quality. With digital magnification, the image often becomes pixelated and blurry.

Often, a combination of optical and digital magnification provides the best result.

A magnifying system can also be used at the cinema, concerts, and other events.



NEAR DISTANCE

For those who need maximum magnification

There are several ways to achieve better vision at short distances. In this section, you'll find our head-mounted systems designed for reading and other close-range activities.



NEAR DISTANCE

ML Aplanat

People with visual impairment often need both high magnification and a wide field of view, which can be a challenge. ML Aplanat is an aplanatic system that addresses this by distributing the power across two equally sized lenses, preserving as much of the visual field as possible.

High powers — wide field of view

ML Aplanat is a monocular lens system offering high image quality and a wide field of view at close range.

The lenses are combined in a way that minimises distortion, even though the system magnifies up to eight times.

The frame height must be at least 40 mm. The system is used monocularly.



MAGNIFICATION

3-8×

VISUAL FIELD

46°

SYSTEM POWER

+12 to +32

(Equivalent Power)

CORRECTION

RANGE

Cyl -6

INTENDED USE

12-3 cm

WEIGHT

20 g





NEAR DISTANCE

ML A2

ML A2 is an aplanatic system for near vision that provides magnification of up to 13 times. Despite the high level of magnification, the system is designed to preserve as much of the field of view as possible.

When maximum powers are needed

ML A2 is available in powers of up to +52 D!

The user's own correction can be incorporated into the back of the optical system. We will help you calculate the best solution for your customer.

The system is used monocularly.



Differences between ML Aplanat and ML A2

- Both are aplanatic systems, but in ML Aplanat, both lenses have the same large diameter, which benefits the field of view.
- The larger lenses limit the choice of frame (minimum height 40 mm).
- ML Aplanat has a smaller power range than ML A2.
- In ML A2, the system's rear lens has a smaller diameter, making it easier to fit into almost any frame.
- The smaller diameter also allows for higher powers.
- ML A2 permits a higher cylinder correction than ML Aplanat.

MAGNIFICATION

3-13×

VISUAL FIELD

44°

SYSTEM POWER

+12 to +52
(Equivalent Power)

CORRECTION RANGE

Cyl -10

INTENDED USE

10-2 cm

WEIGHT

20 g





INTERMEDIATE DISTANCE

For TV and room orientation

The term “intermediate distance” is relative, but here we refer to the distance to a TV or similar. In this section, you will find our range of magnifying systems for intermediate distances.



INTERMEDIATE DISTANCE

ML Combi

ML Combi is a Galilean system with lower magnification than traditional telescope systems. This allows the field of view to be maintained, making ML Combi particularly useful for activities such as watching TV.

The system also supports orientation and daily tasks such as handicrafts, cooking, and mealtimes.

Low magnification — big difference in daily life

With ML Combi, the user gains an overview without needing to move their head.

The design minimises obstruction in the peripheral field, improving comfort and making orientation easier for the user.

The customer's own correction can be incorporated, and the system can be mounted in almost any frame. It is most often used monocularly.



MAGNIFICATION

1.2x or 1.4x

VISUAL FIELD

1.2x: 58°

1.4x: 48°

CORRECTION RANGE

±8 cyl -3

INTENDED USE

Intermediate distance

WEIGHT

10 g





INTERMEDIATE DISTANCE

ML Vidi

ML Vidi is a Galilean system that provides nearly 2 times magnification. As the magnification is combined with a wide field of view, it is possible to see the entire object even at close range. Thanks to its compact size, the system is easy to fit.

Easy switching between different distances

With front lenses that can easily be changed for different working distances, ML Vidi is suitable for various activities – such as watching TV, using a computer, or reading on a mobile phone. The base system is adapted to the distance used most frequently.

Both the system and the front lens are available with filters. ML Vidi is most often used monocularly.

Example:

A person wants to be able to watch TV and alternate between that and looking at their phone. The system is primarily adapted to the TV distance, and the flip-down front lens is set for the reading distance.



MAGNIFICATION

1.6× or 1.8×

VISUAL FIELD

1.6×: 36°

1.8×: 25°

CORRECTION

RANGE

± 20 cyl -10

INTENDED USE

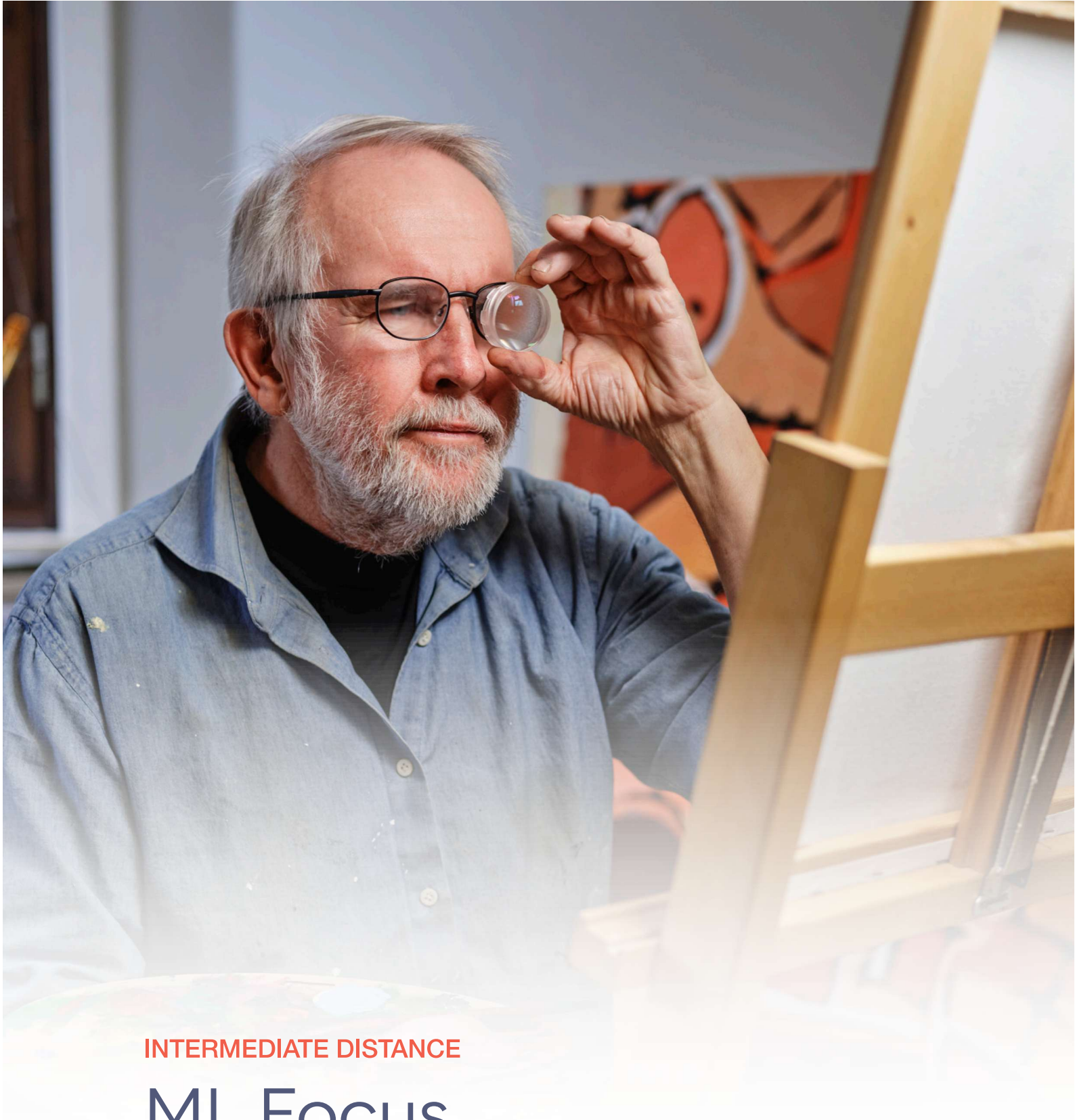
35 cm - ∞

(Standard 2 m)

WEIGHT

14 g





INTERMEDIATE DISTANCE

ML Focus

ML Focus is a magnifying Galilean system with great flexibility. With a simple twist, the focus can be adjusted for different distances. ML Focus provides magnification of up to 2.4x.

Full flexibility with variable focus

The wide field of view makes it possible to get close to the object while still seeing it in full.

The customer's own correction can be incorporated, and the system can be mounted in almost any frame. The system is most often used monocularly.



MAGNIFICATION

1.7× (1.6× - 2.0×)

1.9× (1.7× - 2.4×)

VISUAL FIELD

1.7× 38° (40° - 28°)

1.9× 25° (28° - 18°)

CORRECTION

RANGE

±10 cyl -10

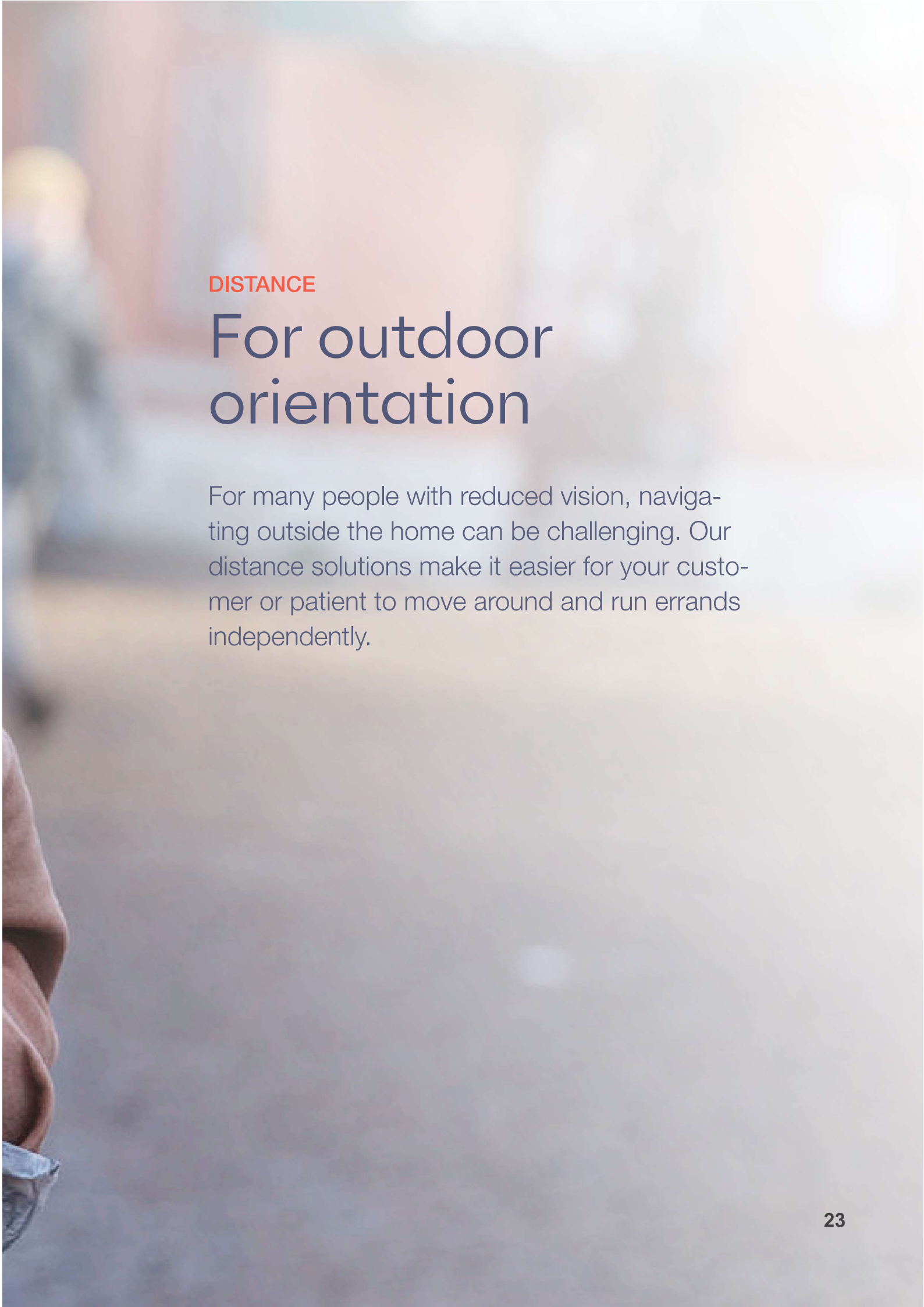
INTENDED USE

35 cm - ∞

WEIGHT

19 g





DISTANCE

For outdoor orientation

For many people with reduced vision, navigating outside the home can be challenging. Our distance solutions make it easier for your customer or patient to move around and run errands independently.



DISTANCE

ML RP

ML RP is a reverse Galilean system that reduces the image size to fit more information within the field of view. This solution can be useful for individuals with significant damage to their peripheral vision.

Reduces the image size for better overview

The system expands the field of view in the same way as a door viewer and is used for tunnel vision, often caused by retinitis pigmentosa or advanced

glaucoma. The system is used binocularly, and the user's own correction can be incorporated.



REDUCATION
0.5x

VISUAL FIELD
54°

CORRECTION RANGE
 ± 8 cyl -4

WEIGHT
4 g





DISTANCE

ML Bi2

ML Bi2 is a small telescope system placed in the upper part of the frame for temporary magnification, for example, to see a house number at a distance.

Head-mounted telescope — when needed

The customer's correction can be incorporated into both the glasses and the system. ML Bi2 is used binocularly.

In some countries, it is permitted to drive with this system. Please check what applies in your country.



MAGNIFICATION

2.0x or 2.5x

INTENDED USE

∞ - 2 m

VISUAL FIELD

2.0x 20°

2.5x 15°

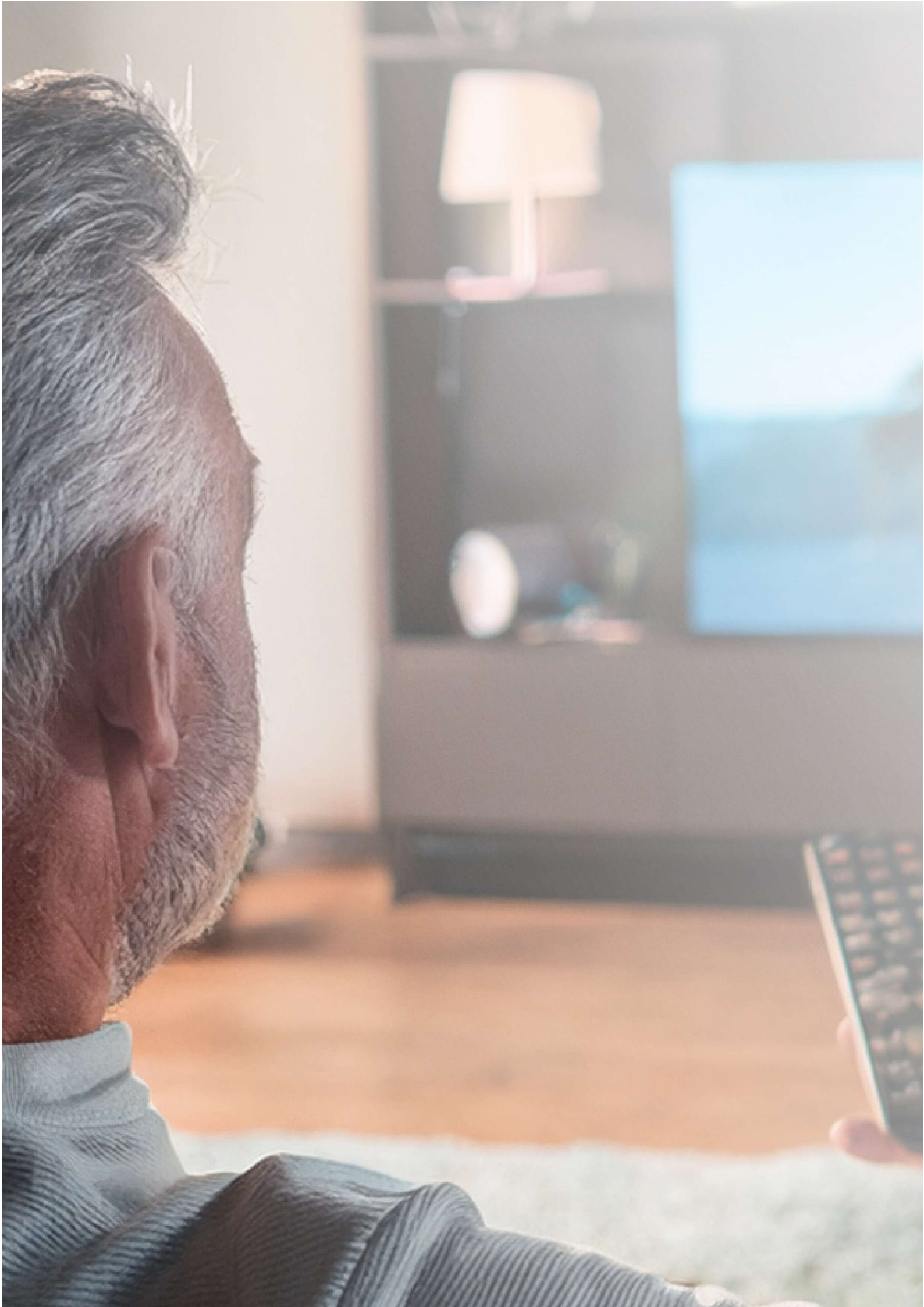
WEIGHT

38 g

CORRECTION RANGE

± 10 cyl -6







FITTING

How to fit systems for TV

Watching TV should be simple and comfortable – even with reduced vision. By considering both the distance and the TV size, it becomes easier to find a visual aid that works in practice. The table in this section provides a clear guide to help you choose the right system for your patient.

Your guide to choosing TV system

1. BEFORE THE VISIT

Ask the patients about their home environment:

- How large is your TV?
- At what distance do you sit when watching TV?

The choice of magnification system depends not only on visual acuity but also on the size of the TV and the viewing distance. Therefore, ask for this information before the appointment.

Distance	40"	45"	50"	55"
1,0 m	ML Combi 1.2 2.4 X	ML Combi 1.2 2.7 X	ML Combi 1.2 3.1 X	
1,5 m	ML Vidi 1.6 2.2 X	ML Vidi 1.6 2.4 X	ML Combi 1.4 2.4 X	ML Combi 1.4 2.6 X
2,0 m		ML Vidi 1.6 1.8 X	ML Vidi 1.6 2.0 X	ML Vidi 1.6 2.2 X
2,5 m		ML Vidi 1.8 1.6 X	ML Vidi 1.8 1.8 X	ML Vidi 1.6 1.8 X
3,0 m				ML Vidi 1.8 1.7 X
4,0 m				

2. DURING THE VISIT

Always start by checking the refraction to ensure optimal correction. Also test whether the magnifying system should be used binocularly or monocularly.

3. ORDER WITH DISTANCE CORRECTION

Please, provide the distance vision prescription and the distance to the TV, and we will adjust the customer's system accordingly.

60"

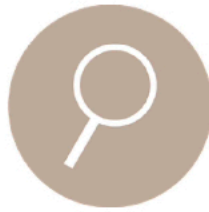
65"

70"

75"

80"

ML Combi 1.4 2.9 X	ML Combi 1.2 2.6 X	ML Combi 1.2 2.9 X	ML Combi 1.2 3.1 X	
ML Combi 1.4 2.1 X	ML Combi 1.4 2.3 X	ML Combi 1.4 2.5 X	ML Combi 1.4 2.7 X	ML Combi 1.4 2.9 X
ML Vidi 1.6 2.0 X	ML Vidi 1.6 2.1 X	ML Vidi 1.6 2.3 X	ML Combi 1.4 2.1 X	ML Combi 1.4 2.3 X
ML Vidi 1.8 1.8 X	ML Vidi 1.6 1.8 X	ML Vidi 1.6 1.9 X	ML Vidi 1.6 2.0 X	ML Vidi 1.6 2.2 X
	ML Vidi 1.8 1.5 X	ML Vidi 1.8 1.6 X	ML Vidi 1.8 1.7 X	ML Vidi 1.8 1.8 X



Welcome to our wide range of magnifying systems!

When someone wants to perform every-day tasks such as reading, cooking, doing crafts, or orienting themselves outdoors, it can be helpful to have their hands free. Our head-mounted systems offer flexible magnification for all needs.

99087EN ver1 | 2025