

Vision  
Technology  
Products

# A GLOBAL BRAND WITH TRADITION

Since its establishment in 1913, Eschenbach Optik has been combining traditional business values with modern innovative flair. Within a century Eschenbach Optik has become one of the leading suppliers of optical products - both in Germany and abroad. The product range extends from eyewear frames and sunglasses, to binoculars and right through to magnifiers, reading glasses and special vision aids.

With subsidiaries in twelve countries, more than 30 international trade partners and over 530 employees throughout the world, today Eschenbach Optik has a global presence.



## VISION TECHNOLOGY PRODUCTS

In this catalogue you will find our extensive range of magnifying vision aids. The term "Vision Technology Products" stands for innovative research and development, modern technologies, as well as precision production methods - and a level of quality which meets the very highest demands in terms of optimum optical performance, reliability and intuitive operation. The diversity of our range of magnifying vision aids allows you to provide your customers with the optimum solution for meeting all their everyday vision requirements.

### LOW VISION

In our catalogue you will therefore find a wide range of products to meet the highly diverse needs of those suffering from visual impairment, making their daily life so much easier and therefore enabling them to regain maximum independence and maximum quality of life.

### EASY VISION

As we get older, our vision deteriorates and this is something that happens to everyone. From the age of 60, this change becomes increasingly noticeable and sometimes even the best corrective eyewear is not enough.

With the "Easy Vision" concept from Eschenbach Optik, additional, innovative optical products are able to compensate for the visual impairment and relaxed vision is once again possible.

### SALES SUPPORT

On pages 119 to 133, you can find our range of sales support products - including versatile displays and attractive presentation systems. Ask your representative about further advertising opportunities.

### DETAILED INFORMATION

The "Technical Information" section contains a summary of technical specifications and you can find information on visual impairment in the "Information" section.

### INDIVIDUAL LENS RANGE

Single vision or multifocal spectacle lenses with corrections to suit specific individual requirements, cut-off filters with individual strengths and reading glasses with individually adapted high additions can be found in the separate "Individual Lens Range" catalogue.

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# ELECTRONIC VISION AIDS

HIGH QUALITY TECHNOLOGY  
FOR BRILLIANT VISION.



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ELECTRONIC VISION AIDS

# WHEN SPECTACLES ALONE ARE NO LONGER SUFFICIENT

Electronic low vision aids from Eschenbach Optik offer you cleverly conceived solutions to maintain your usual visual comfort. In addition to a brilliant image display, these devices are lightweight, have an ergonomic design and high functionality to ensure intuitive operation.

## vario DIGITAL FHD

### VISION AT ITS BEST

The vario DIGITAL FHD and vario DIGITAL FHD Advanced portable desktop video magnifiers combine exceptional, true colour image quality with innovative design, a userfriendly specification, intuitive operation and excellent value for money.



## visolux DIGITAL

### SPLENDID – DOWN TO THE FINEST DETAIL

With 2x to 22x magnification and a non-reflective 7- or 12-inch display, visolux DIGITAL offers optimum comfort. Depending on the model, it accommodates up to two newspaper columns without having to be moved across the reading material, and when connected to a television offers the functionality of a screen-reading device.



## optaro®

### VISUAL COMFORT, SMARTLY CONCEIVED

optaro® turns the iPhone into a fully functional reading aid for at home or when on the move. For upgrading purposes, the optaro® camera module and iPhone are simply inserted into the corresponding protective case or used with the universal stand. The optaro® app is used for camera module control and customising all functions according to your personal requirements.



## smartlux® DIGITAL

### THE ELEGANT MAGNIFIER FOR BRILLIANT VISION

Handy and mobile: With its non-reflective 5 inch display, this electronic magnifier provides the optimum image. The adjustable stand enables the magnifier to be hand-held, fully extended or half extended for writing.







16533

## optaro®

optaro® turns the iPhone into a fully functional reading aid for at home or when on the move. For upgrading purposes, the optaro® camera module and iPhone are simply inserted into the corresponding protective case or used with the universal stand. The optaro® app is used for camera module control and customising all functions according to your personal requirements.

- Full HD camera:
  - 3 to 15 times magnification (the exact magnification depends on the display of the iPhone used)
  - Exceptional imaging performance with maximum sharpness and optimum contrast
  - Fixed focus with a high depth of field range for variable operating distances and a razor-sharp image
  - Central camera position for intuitive, easy positioning
- Integrated stand:
  - Folds out for relaxed, wobble-free reading
  - Ideal tilt angle for an ergonomic posture
  - When folded out, the camera automatically swivels into a reading position
- Illumination:
  - Special LED lighting for a high-contrast and glare-free image
  - Homogeneous illumination of the reading material
- optaro® App:
  - Customised magnification infinitely adjustable with maximum sharpness and optimum contrast
  - 14 different false colour modes can be selected
  - Reading line or reading mask can be switched on for easier orientation
  - Tell Me function reads out loud a group of words
  - The optaro® app can be downloaded from the Apple App Store
- Lanyard loop for practical wearing around the neck
- Easy charging via USB-C cable
- Operating time: 2 hours
- Charging time: 1.5 hours
- Weight: 120 g

### CUSTOMER BENEFITS

- ✚ 2 in 1: Mobile low vision aid and smartphone in one
- ✚ Central camera position enables easy orientation
- ✚ Optimised image processing for a sharp image at all times
- ✚ An ergonomic stand guarantees relaxed, wobble-free reading
- ✚ High-contrast, homogeneous illumination without glare
- ✚ Customisable additional functions for even more visual comfort
- ✚ Simple and intuitive operation with clearly recognisable symbol via the optaro® app
- ✚ Hand-held and surface-mounted use possible
- ✚ Perfect for visual tasks at home and on the move





## optaro® Case iPhone

- All-round protection for the iPhone and optaro® camera module
- Integrated, tactile markings for optimum positioning and easy orientation on the reading material

Item	Name
16533812E	optaro Case iPhone 12
16533812P	optaro Case iPhone 12 Pro
16533812M	optaro Case iPhone 12 Pro Max
16533813M	optaro Case iPhone 13 Pro Max
16533813E	optaro Case iPhone 13
16533813P	optaro Case iPhone 13 Pro
16533814E	optaro Case iPhone 14
16533814L	optaro Case iPhone 14 Plus
16533814P	optaro Case iPhone 14 Pro
16533814M	optaro Case iPhone 14 Pro Max
16533815E	optaro Case iPhone 15
16533815L	optaro Case iPhone 15 Plus
16533815M	optaro Case iPhone 15 Pro Max
16533815P	optaro Case iPhone 15 Pro
16533816E	optaro Case iPhone 16
16533816L	optaro Case iPhone 16 Plus
16533816M	optaro Case iPhone 16 Pro Max
16533816P	optaro Case iPhone 16 Pro



165338

## optaro® Universal stand

- Universal stand for almost any iPhone\*
- Practical magnetic mechanism\*\*
- Fold-out support for a secure hold

\* iPhone must support at least iOS 16, with iPhones from iPhone 12 onwards recommended

\*\* For iPhone models featuring MagSafe



16591

## vario DIGITAL 16 FHD

- High-definition camera with optical digital zoom
- Large magnification range from 1.3x to 45x
- Non-reflective LCD TFT screen in 15.6" format
- Pin sharp, true colour image in full HD resolution
- Fast autofocus ensures perfect reading comfort at all times
- The autofocus can be switched off to make it even easier to write under the camera
- Large field of view of 265 mm
- Powerful LED lights
- Optional orientation guides with a reading line or mask
- Speedy orientation thanks to an overview mode
- User-friendly menu with adjustment options to suit your individual needs
- Clear voice output for all menu stages (can be switched off)
- 14 contrast-enhanced false colour modes
- Photo function with option of saving photos on inserted SD card (can be switched off)
- Stable, robust and ergonomic
- The tilting camera makes it easier to carry out handicraft work and enables you to read the upper area of the reading material more easily
- The camera has a cover to protect against dust and dirt
- Users can carry out software updates and resets themselves
- USB Type C port for data transmission
- Weight: 6.3 kg
- Included in delivery: USB Type C cable, 8 GB SD card, universal charging device for worldwide use, microfibre case

### CUSTOMER BENEFITS

- ✚ Best image quality
- ✚ Very large field of view and true colour image reproduction
- ✚ Portable use thanks to the user-friendly folding mechanism and ergonomic handle
- ✚ Simple to use
- ✚ Intuitively positioned operating buttons and rotary knobs
- ✚ Simple menu navigation
- ✚ Smooth zoom in even steps
- ✚ Homogeneous and shadow-free illumination is provided by LEDs in the base arm and on the underside of the monitor.
- ✚ High level of mechanical stability to protect against vibrations







165916, 1659162



1659161, 1659163

## vario DIGITAL 16 FHD Advanced

**vario DIGITAL FHD Advanced has additional functions to provide even better reading comfort:**

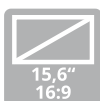
- Dynamic Line Scrolling: the reading area can be moved horizontally and vertically in the display
- Incl. remote control for even greater operating comfort
- Additional HDMI input for connection to an external camera with live image transmission
- Thanks to the flexible construction, can also be used as a mirror
- Included in delivery: remote control, HDMI cable, USB Type C cable, 8 GB SD card, universal charging device for worldwide use, microfibre case

**Also available with the following options:**  
**XY-Tisch**

- Movable cross table for even greater comfort when reading
- Stable and ergonomic
- Individual adjustment thanks to horizontal and vertical brakes

### Rechargeable battery

- Even more versatile to use thanks to battery operation
- Operating time: 5 hours
- Charging time: 4,5 hours



## Variants

Item number	Name	Dimensions, approx.	Weight	Version
16591	vario DIGITAL 16 FHD	46 x 37.8 x 13.2 cm	6.3 kg	without rechargeable battery, without XY table
165916	vario DIGITAL 16 FHD Advanced	46 x 37.8 x 13.2 cm	6.3 kg	without rechargeable battery, without XY table
1659161	vario DIGITAL 16 FHD Advanced TB	50 x 43.5 x 16 cm	9 kg	with rechargeable battery, with XY table
1659162	vario DIGITAL 16 FHD Advanced B	46 x 37.8 x 13.2 cm	6.6 kg	with rechargeable battery, without X/Y table
1659163	vario DIGITAL 16 FHD Advanced T	50 x 43.5 x 16 cm	8.7 kg	without rechargeable battery, with X/Y table



16592

## vario DIGITAL 22 FHD

- Reflection-free 22" LCD TFT display
- Pin sharp, true colour image in full HD resolution
- 1.6x – 100x magnification with a smooth zoom response
- Full HD camera with 12x optical zoom
- Fast autofocus ensures perfect reading comfort at all times
- The autofocus can be switched off to make it even easier to write under the device
- Very large horizontal field of view of 546 mm
- 14 contrast-enhancing false colour modes and switchable blue light filter
- Operation via intuitively positioned operating buttons and an easily navigable menu
- Homogeneous, shadow-free LED lighting
- Optional orientation guides with a reading line or mask
- Easy orientation thanks to an overview display
- The menu has a clear voice output in five languages (may be switched off)
- Photo function with option of saving photos on inserted SD card (can be switched off)
- USB Type C port for data transmission
- The camera has a cover to protect against dust and dirt
- Users can carry out software updates and resets themselves
- User-friendly folding mechanism
- Handy, ergonomic carrying handle
- Weight: 8.9 kg
- Supplied with operating instructions, AC adapter, mains cable for EU, US, GB, AU, USB cable (Type C), microfibre cloth

### CUSTOMER BENEFITS

- ✦ The proven vario DIGITAL concept now also available in the 22-inch class
- ✦ Best imaging quality and easy operation
- ✦ Extra-large display and field of view with up to 100x magnification
- ✦ Intuitively positioned operating buttons and dials
- ✦ Simple menu navigation
- ✦ Smooth zoom in even steps
- ✦ Homogeneous and shadow-free illumination is provided by LEDs in the base arm and on the underside of the monitor
- ✦ Safe and ergonomic installation with user-friendly folding mechanism





165922, 1659222



1659221, 1659223

## vario DIGITAL 22 FHD Advanced

**vario DIGITAL FHD Advanced has additional functions to provide even better reading comfort:**

- Dynamic Line Scrolling: the reading area can be moved horizontally and vertically in the display
- Incl. remote control for even greater operating comfort
- Additional HDMI input for connection to an external camera with live image transmission
- Included in delivery: remote control, HDMI cable, USB Type C cable, 8 GB SD card, universal charging device for worldwide use, microfibre case

**Also available with the following options:**

### X/Y table

- Movable cross table for even greater comfort when reading
- Stable and ergonomic
- Individual adjustment thanks to horizontal and vertical brakes

### Rechargeable battery

- Even more versatile to use thanks to battery operation
- Operating time: 2,5 Stunden
- Charging time: 4 Stunden

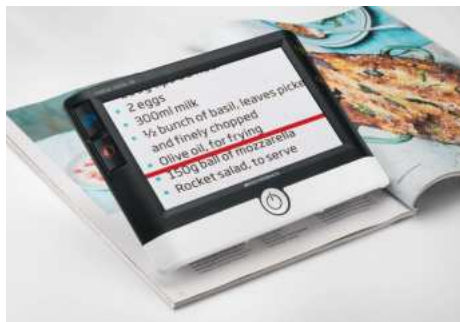


## Variants

Item number	Name	Dimensions, approx.	Weight	Version
16592	vario DIGITAL 22 FHD	50 x 52 x 15 cm	8.9 kg	without rechargeable battery, without XY table
165922	vario DIGITAL 22 FHD Advanced	50 x 52 x 15 cm	8.9 kg	without rechargeable battery, without XY table
1659221	vario DIGITAL 22 FHD Advanced TB	53 x 52 x 18 cm	11.9 kg	with rechargeable battery, with XY table
1659222	vario DIGITAL 22 FHD Advanced B	50 x 52 x 15 cm	9.2 kg	with rechargeable battery, without X/Y table
1659223	vario DIGITAL 22 FHD Advanced T	53 x 52 x 18 cm	11.6 kg	without rechargeable battery, with X/Y table



16521



## visolux DIGITAL HD

- HD camera for high contrast, detailed photos
- Large magnification range from 2x to 22x (connected to HD TV, e.g. 40", magnification 12x to 125x)
- Generous depth of field for variable viewing distances
- Stand with ergonomic tilted angle
- Non-reflective 7" display, 16:9
- Large field of view of 70 mm
- Dynamic Line Scrolling (DLS), the line area on the display is moved by the touch of a button
- Optional orientation markers (reading line or "blind")
- Additional tactile positioning and orientation markers on the housing
- Viewing modes in true colour and up to 14 contrast-enhanced false colour modes
- Photo function with option of saving photos on inserted SD card
- HDMI port for transmitting live images onto televisions
- USB port, Type C port for transmitting images onto a computer (PC and Mac)
- Operating time: 3.5 h
- Weight: 460 g
- Included in delivery: HDMI cable, USB Type C cable, 4 GB SD card, universal charging device for worldwide use, lanyard, hard foam case

### CUSTOMER BENEFITS

- ✚ Comfortable reading position due to ergonomic tilted angle
- ✚ Improved orientation on the reading material due to several tactile markers on the housing and a centrally positioned camera, as well as an optional reading line
- ✚ Accommodates an entire newspaper column
- ✚ Dynamic Line Scrolling (DLS) means that even with high magnification levels orientation is not impaired and there is no need to move the reading device across the reading material
- ✚ Weighing in at just 460g, visolux DIGITAL is the ideal solution for when you're on the move or at home
- ✚ Photo function with option of saving photos on inserted SD card
- ✚ Large range of false colour combinations
- ✚ Can also be used on the TV screen as screen-reading device via HDMI



## Accessories vario DIGITAL and visolux DIGITAL HD



### vario DIGITAL Bag

**Item no. 1659109**

Padded carry bag (suitable for all versions)

With carrying handle and carrying strap

Space for charging cable, remote control and other accessories



### visolux DIGITAL HD Bumper

**Item no. 1652108**

Perfect all-round protection

More secure grip



### visolux DIGITAL HD Base

**Item no. 1652105**

Stand for visolux DIGITAL HD

Expands the maximum field of view by around 7 cm

Increases the distance of the electronic aid to the grapes

Enables writing and handwork under the display





16551



## visolux DIGITAL XL FHD

- High-contrast and true-to-detail, high resolution digital camera with a specially calculated lens
- Generous depth of field for variable viewing distances
- High magnification range from 2 x to 22 x (magnification on a 40-inch TV, for instance, approx. 12 x to 125 x)
- Almost 30 cm screen diagonal but weighing only one kilo
- Non-reflective active matrix TFT LCD screen
- 16:9 widescreen format
- Operation via direct keys or the touchscreen (defeatable)
- HDMI port for simultaneous display of the live image on an external display (TV, monitor or projector)
- Additional HDMI input for connecting an external camera with live image feed
- Easily understood speech output of all menu steps (defeatable)
- 14 contrast-enhanced false colour modes can be selected
- Dynamic Line Scrolling (DLS)
- Powerful automatic exposure to compensate for ambient light
- Optical orientation aid with reading line or mask that can be activated
- Clearly arranged, easy to sense direct keys
- Graphical menu for advanced functions
- Stand with ergonomic tilt angle
- Camera mounted centrally under housing and positioning aid perceptible on housing
- Writing under the device is possible
- Photo function with storage facility on inserted SD card (defeatable)
- USB type-C port for image feed to the computer (PC and Mac)
- Lithium-polymer battery for up to 2.5 hours of operation
- Weight: 1050 g
- Delivery includes HDMI cable, USB type-C cable, 8 GB SD card, lanyard, microfibre cloth and hard foam case

### CUSTOMER BENEFITS

- ✚ Best imaging quality and operability
- ✚ Pleasant reading position
- ✚ Secure placement und guidance
- ✚ Wide field of view and true-to-life colour reproduction
- ✚ Accommodates an entire newspaper column
- ✚ Numerous false colour combinations can be selected
- ✚ Intuitive operation
- ✚ Ideal solution when on the go or at home
- ✚ Light-weight, compact, robust and sustained mobile use
- ✚ Can also be used as a screen reader



## Accessories visolux DIGITAL XL FHD



### visolux DIGITAL XL FHD Bumper

**Item no. 1655108**

Perfect all-round protection  
More secure grip



### visolux DIGITAL XL FHD Base

**Item no. 1655105**

Foldable stand  
Increases the distance away and thus extends the image region and reduces the magnification  
Allows manual work under the display



### visolux DIGITAL Bag

**Item no. 1655109**

Room for up to 12-inch low vision aids incl. accessories  
Everything always secure, orderly and close at hand  
High quality design  
With comfort handle and practical shoulder strap  
Thanks to insets with hook-and-loop fasteners the parts of the bag can be divided in multiple ways



16502

## smartlux® DIGITAL

- A new design provides better grip and clearly visible buttons
- Integrated stand which can be adjusted for 3 areas of application:
  - Stand fully retracted for hand-held use
  - Stand fully extended for placing on parallel above reading material
  - Stand partially extended for writing or working right below display
- Improved optics with high image sharpness even at high magnifications and while in motion
- Reflection-free, true-colour 5-inch LC display
- Better orientation with 3x initial magnification
- Up to 15x final magnification
- Extended field-of-view (35mm)
- Continuous or stepped magnification with 2 haptic buttons
- Individual function selection in the menu
  - Height-adjustable reading line or reading mask
  - 14 false colour modes can be selected
  - Adjust brightness of display or LED, switch LEDs on/off individually
  - Blue light filter
- Photo function with extended internal device memory
- Use as desktop video magnifier while connected to external screen (HDMI-Out)
- USB connection for transferring photos to a computer
- Weight: 240 Gramm
- Operation time with internal accumulator: ~ 3 hours
- Charging time internal accumulator: ~ 3.5 hours (using included USB-C power adapter)
- Power adapter included for use at EU, GB, US, AUS standard
- Package also includes premium protective pouch, lanyard

### CUSTOMER BENEFITS

- + Easy operation and best image quality
- + Optimum grip in the hand due to its ergonomic design
- + Extended field of view
- + Up to 15x magnification
- + Customizable additional functions
- + Continuous and stepped magnification levels controlled by haptic and central buttons
- + Variety of uses: hand-held for mobile use, positioned for reading or standing up for writing
- + Photo function
- + Can also be used as desktop video magnifier (with external screen)



## Accessories smartlux®



### smartlux® DIGITAL Bumper

**Item no. 1650208**

Protective cover for the new smartlux® DIGITAL  
Perfect everyday protection for your product  
Improved grip



### smartlux® DIGITAL Handle

**Item no. 1650204**

Handle as an accessory for the smartlux® DIGITAL (Art. No. 16502)  
Supported grip for two-handed guiding  
Easy to carry in product pouch  
Optimal stability and light weighted



### smartlux® DIGITAL HDMI Cable

**Item no. 1650203**

HDMI connection cable for smartlux® DIGITAL to an HDMI-capable monitor  
(Type-A connection)  
Simultaneous display of the camera image on smartlux® DIGITAL and an  
external screen  
Enables even higher magnifications on the connected screen  
Total Length: approx. 1.9m / 75inch

# HAND-HELD MAGNIFIERS AND READING MAGNIFIERS

OPTIMUM VISION COMFORT –  
ALWAYS READY TO HAND.



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HAND-HELD MAGNIFIERS & READING MAGNIFIERS





152110



152110, 152111, 152122, 152133

## easyPOCKET

- The tiny lens with powerful magnification.
- Diffractive aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Illumination: ultra-flat SMD LED.
- Product dimensions: 86 x 54 x 6 mm.
- Replacement battery: Order No. 15471, requires 2 batteries.
- Display and Optoform equipment available.

### Accessories:

Replacement battery: Order No. 15471, requires 2 batteries.

### CUSTOMER BENEFITS

- ✚ Magnification and illumination in a credit card format; the ideal size for any pocket.
- ✚ Provides a brilliant image with optional illumination when you slide the lens out of its case.
- ✚ Ultra-flat and lightweight design; compact case ensures safe storage.
- ✚ Very economical: The light is only switched on when you slide the lens fully out of its case.
- ✚ The LED light does not require changing. The tiny, extremely bright LED light used by Eschenbach Optik has a service life which is virtually unlimited.



PXM®



LED



2 x 2025



3x - 6x

Display/  
Opto-  
form

Item	Colour	Lens size	Magnification	Dioptré
152110	black	45 x 50 mm	3.0 x *	8.0 D
152111	silver	45 x 50 mm	3.0 x *	8.0 D
152122	blue	45 x 50 mm	4.0 x	16.0 D
152133	white	45 x 50 mm	6.0 x	24.0 D

\* Trade enlargement



152211



152210

# easyPOCKET XL

- Diffractive, aspherical lens
- 2.5.0x / 6 dpt magnification
- Illumination: bright, super-flat SMD-LED
- Product dimensions: 113.5 x 63 x 8.8 mm
- Lens dimensions: 78 x 50 mm

**Accessories:**

Replacement battery: 2 x button batteries 2032 (order no. 15473).



**CUSTOMER BENEFITS**

- ✚ Enlargement and light in a compact format.
- ✚ Brilliant depiction with integrated illumination when pulling out the lens.
- ✚ Magnifier can also be used as a stand with the integrated strap.
- ✚ Large viewing area with super-flat lens.
- ✚ Fits in any pocket thanks to the flat design and very low weight.
- ✚ Case for safe storage.
- ✚ Very economical: light only comes on when the lens is fully extended.
- ✚ Bulb does not require changing: The LED optics used by Eschenbach has a virtually unlimited lifespan.

PXM®2x 20322,5 x

Item	Colour	Lens size	Magnification	Dioptre
152210	black	50 x 75 mm	2.5 x *	6.0 D
152211	silver	50 x 75 mm	2.5 x *	6.0 D

\* Trade enlargement



15122



15113, 15114



15112, 151141, 15115, 5116



15117, 151110, 151112

## mobilux® LED

- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Batteries are easy to change as the battery cover is easy to open and contact springs clearly indicate the battery position.
- Improved comfort due to eyelet for lanyard.
- The most suitable colour temperature can be preselected via the 2 attachable filters supplied.
- The LED light does not require changing.
- The LED light used by Eschenbach Optik has a service life of approx. 50,000 hours.
- The voltage is controlled via a step-up converter, which produces consistent illumination even if the voltage drops due to low batteries.
- Bright, even illumination provided by SMD LED and collimation optics.
- Defined focusing distance: in the case of all aspheric magnifiers and reading magnifiers from Eschenbach Optik the focusing distance (aE: distance from the eye to the virtual image) is precisely 400 mm. The image can therefore be seen clearly with readers which have an addition of 2.5 dpt.
- Display and Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ Suitable for reading small print, e.g. in a telephone directory or on price tags.
- ✚ Simple to use – large, easy to operate light switch and eyelet for lanyard.
- ✚ Choice of 3 different lights colours via filters.
- ✚ Particularly scratch-proof lens with high visual (and wearing) comfort.
- ✚ The batteries are easy to change.
- ✚ With handy eyelet on the end of the handle for round-the-neck cord.
- ✚ Incl. protective case for lens.



3 - 12,5 x



### Accessories:

- "mobase" - Stand for mobilux® LED, (order nos. 1511001, 1511002, 1511003, 1511004)
- Lanyard (order no. 15981)

Item	Lens size	Magnification	Dioptr
15122	90 x 54 mm	3.0 x *	8.0 D
15112	Ø 60 mm	3.0 x	12.0 D
15113	75 x 50 mm	3.5 x *	10.0 D
15114	75 x 50 mm	4.0 x **	16.0 D
151141	Ø 60 mm	4.0 x	16.0 D
15115	Ø 58 mm	5.0 x	20.0 D
15116	Ø 58 mm	6.0 x	24.0 D
15117	Ø 35 mm	7.0 x	28.0 D
151110	Ø 35 mm	10.0 x	38.0 D
151112	Ø 35 mm	12.5 x	50.0 D

\* Trade enlargement

\*\* Diffractive aspheric lens without cera-tec® coating



## Accessories

### mobase

High quality stand for mobilux® LED

Can be used in two positions: laid flat for reading or standing for working

Individual design for every mobilux® LED ensures the exact viewing distance

Practical plug-in function for easy conversion to handheld use



1511001, 15113  
upright position



1511001, 15113 flat  
position

Item	mobilux® LED	Magnification
1511001	15112, 15113, 15114, 15122, 151141	3,0 x/ 3,5 x/ 4,0 x
1511002	15115, 15116	5,0 x/ 6,0 x
1511003 *	15117	7,0 x
1511004	151110, 151112	10,0 x/ 12,5 x

\* see special feature

### Four different mobase designs available for all ten mobilux® LED models.

The magnifications are printed on each mobase model for which the specific stand is designed.

### \* Special feature of mobase 1511003:

Stand with additional 1/4" thread. This enables it to be screwed onto a standard flexible tripod. The stand enables you to freely adjust the distance of use and it can be used with all mobilux® LED magnifiers.



1511001



1511002



1511003, with thread



1511003



1511004



1511003

Example image of a conventional stand. Only available as an optional extra.  
This is not an Eschenbach accessory.

## APLANATIC READING MAGNIFIERS

## mediplan ERGO

- Aplanatic PXM® lightweight lens, duplex coated for an aberration-free image with edge-to-edge sharpness.
- Display and Optoform equipment available.

**Accessories:**

Artificial leather case. Please refer to the table for the article numbers of the matching cases.

**CUSTOMER BENEFITS**

- ✚ Edge-to-edge distortion-free image.
- ✚ Ideal for reading and looking at pictures for long periods of time.
- ✚ Comfortable to use due to the ergonomically shaped handle.
- ✚ Aplanatic reading magnifiers provide an edge-to-edge distortion-free image which makes them especially suitable for those suffering from a loss of central vision.



PXM®

DUPLEX

Opto-  
form

2,4 - 4,5 x



266850



266860



266875



266885



2668950

Item	Lens size	Magnification	Dioptré	Matching case
266850	Ø 50 mm	4.5 x *	14.0 D	28511
266860	Ø 60 mm	3.8 x *	11.3 D	28511
266885	Ø 85 mm	2.4 x *	5.6 D	28512
2668950	90 x 50 mm	2.7 x *	7.0 D	28513

\* Trade enlargement

## Case for handmagnifiers

- Imitation leather case available in three different sizes
- suitable for many hand-held magnifiers - please refer to the table of the respective magnifier series for the appropriate size

**CUSTOMER BENEFITS**

- ✚ protects the lens from dirt and scratches



28511  
28512  
28513



APLANATIC READING MAGNIFIERS

aspheric II

- Particularly suitable for reading and looking at pictures with adequate ambient lighting.
- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Round-the-neck cord supplied.
- Display and Optoform equipment available.

Accessories:

- Artificial leather case. Please refer to the table for the article numbers of the matching cases.
- Lanyard order no. 15981

CUSTOMER BENEFITS

- ✚ High magnification with a large visual field.
- ✚ Particularly scratch-proof lens with high visual comfort.
- ✚ Concealed eyelet in the end of the handle for round-the-neck cord.



Item	Lens size	Magnification	Dioptre	Matching case
265550	Ø 50 mm	6.0 x	24.0 D	28511
265560	Ø 58 mm	5.0 x	20.0 D	28511
265570	Ø 70 mm	4.0 x	16.0 D	28512
2655750	75 x 50 mm	3.5 x *	10.0 D	28511
2655150	100 x 50 mm	3.0 x *	7.6 D	28512
2655175	100 x 75 mm	2.8 x *	7.0 D	28513

\* Trade enlargement

## BICONVEX MAGNIFIERS &amp; READING MAGNIFIERS

## economic

- Biconvex PXM® lightweight lens, duplex coated for an aberration-free image with edge-to-edge sharpness.
- Plano-convex additional lens with 5x magnification in handle.
- Display and Optoform equipment available.

## CUSTOMER BENEFITS

- ✦ Suitable for tasks which require a low or medium level of magnification.
- ✦ An additional high-magnification lens enables small details to be read.
- ✦ Transparent plastic frame ensures easy orientation on the reading material.
- ✦ With eyelet in the end of the handle for round-the-neck cord which is supplied.
- ✦ The biconvex reading magnifiers offer a large visual field in a medium magnification range.



PXM®

DUPLEX

Opto-  
form

264265



264280



2642100



2642120



2642840



2642150



26421255

Item	Colour	Lens size	Magnification	Dioptré	Additional lense magnification
264265	black	Ø 65 mm	3.0 x *	7.4 D	5.0 x
264280	black	Ø 80 mm	2.25 x *	5.1 D	5.0 x
2642100	black	Ø 100 mm	2.0 x *	3.9 D	5.0 x
2642120	black	Ø 120 mm	1.9 x *	3.2 D	5.0 x
2642840	black	80 x 40 mm	2.4 x *	5.7 D	5.0 x
2642150	black	100 x 50 mm	2.0 x *	4.0 D	5.0 x
26421255	black	120 x 55 mm	1.85 x *	3.3 D	5.0 x

\* Trade enlargement



# visomed

- Biconvex PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Transparent lens frame.
- Optoform equipment available.

## CUSTOMER BENEFITS

Transparent plastic frames ensure excellent orientation on the reading material.

PXM®

2,0-2,9x

Opto-form

Item	Lens size	Magnification	Dioptr	Matching case
261480	Ø 80 mm	2.3 x *	5.1 D	28512
2614840	80 x 40 mm	2.25 x *	5.0 D	28512
2614150	100 x 50 mm	2.0 x *	3.9 D	28513

\* Trade enlargement



2612401



2612601



2612801



26129501

## Great value, high-quality magnifiers with additional lens in the handle

- Biconvex PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Plano-convex additional lens with 5x magnification integrated in the handle.
- Display and Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ Excellent orientation on reading material due to transparent frame.
- ✚ Eyelet in the handle for round-the-neck cord.
- ✚ With additional high magnification lens in the handle for recognising details.
- ✚ Suitable for large visual fields with a medium level of magnification.



PXM®

Display/  
Opto-  
form

Item	Lens size	Magnification	Dioptré	Packaging unit
2612401	Ø 45 mm	3.25 x *	9.0 D	6 pieces
2612601	Ø 60 mm	2.7 x *	6.7 D	6 pieces
2612801	Ø 80 mm	2.3 x *	5.3 D	6 pieces
26129501	90 x 50 mm	2.0 x *	4.0 D	3 pieces

\* Trade enlargement

ROUND-THE-NECK MAGNIFIERS

maxiPLUS/ECONOMY

- Transparent frame for shadow-free magnification
- Non-slip foam rubber pads on the feet ensure a secure position
- Individually packaged and includes round-the-neck cord

Additional product feature of maxiPLUS (2678):

- Large rectangular lens with 2 x magnification and separate additional lens with 4 x magnification for particularly detailed work

CUSTOMER BENEFITS

- ✚ Ideal for those fine motor tasks that require two hands such as knitting or handicrafts
- ✚ The round-the-neck cord can be adapted to suit individual requirements

Only for maxiPLUS (2678):

- ✚ The additional lens enables the user to see extremely small details











Item	Lens size	Magnification	Dioptre
2677	Ø 100 mm	2 x *	3.2 D
2678	100 x 140 mm	2 x *	2.6 D

\* Trade enlargement

PENDANT MAGNIFIERS

Pendant magnifier

- Biconvex lens made of high quality silicate.
- The light metal frame has an elegant finish.
- Available in a gold-plated or chrome-plated finish.
- Chain with a length of approx. 70 cm is included in delivery.

CUSTOMER BENEFITS

Can be worn as a pendant necklace and is always ready to use whenever you need it, providing you with quick and discreet magnification.



Item	Lens size	Magnification	Dioptre
21362	Ø 40 mm	3.5 x *	10.0 D
21361	Ø 40 mm	3.5 x *	10.0 D

\* Trade enlargement





1740130, 1740150, 1740160



1740250, 1740260



1740450, 1740460



1740530, 1740550, 1740560



1752150, 1752160



1752550, 1752560



1752850, 1752860

## SLIDE-OUT MAGNIFIERS

### classic

- Folding magnifier in timeless, classic design.
- Biconvex PXM® lightweight lens, duplex coated with extra hard-coating for an aberration-free image with edge-to-edge sharpness.
- Available in the following lens diameters: 30 mm, 50 mm and 60 mm (see table).
- The table also shows the colours available.
- Optoform equipment available.

#### CUSTOMER BENEFITS

- ✚ Small, handy and compact.
- ✚ Fits easily into any handbag or trouser pocket.
- ✚ Leather case protects the lens from being scratched.
- ✚ Available in many different colours and sizes.



PXM®

DUPLEX

Opto-  
form

Item	Colour	Lens size	Magnification	Dioptre	Material
1740130	burgundy red	Ø 30 mm	6.0 x	24.0 D	leather
1740150	burgundy red	Ø 50 mm	3.5 x *	10.0 D	leather
1740160	burgundy red	Ø 60 mm	3.5 x *	10.0 D	leather
1740250	pine green	Ø 50 mm	3.5 x *	10.0 D	leather
1740260	pine green	Ø 60 mm	3.5 x *	10.0 D	leather
1740450	nutria brown	Ø 50 mm	3.5 x *	10.0 D	leather
1740460	nutria brown	Ø 60 mm	3.5 x *	10.0 D	leather
1740530	black	Ø 30 mm	6.0 x	24.0 D	leather
1740550	black	Ø 50 mm	3.5 x *	10.0 D	leather
1740560	black	Ø 60 mm	3.5 x *	10.0 D	leather
1752150	carmine red	Ø 50 mm	3.5 x *	10.0 D	leather
1752160	carmine red	Ø 60 mm	3.5 x *	10.0 D	leather
1752550	royal black	Ø 50 mm	3.5 x *	10.0 D	leather
1752560	royal black	Ø 60 mm	3.5 x *	10.0 D	leather
1752850	bronze brown	Ø 50 mm	3.5 x *	10.0 D	leather
1752860	bronze brown	Ø 60 mm	3.5 x *	10.0 D	leather

\* Trade enlargement

economy

- Folding magnifier in a trouser pocket format.
- Biconvex PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Supplied in a pack of 3.
- The available colours are outlined in the table.

CUSTOMER BENEFITS

- ✚ Great value for money, practical and sturdy.
- ✚ A variety of cases is available in plastic and leather.



Item	Colour	Lens size	Magnification	Dioptre	Material
173013	vermillion	Ø 45 mm	3.5 x *	10.0 D	leather
173023	silver	Ø 45 mm	3.5 x *	10.0 D	leather
173033	blue	Ø 45 mm	3.5 x *	10.0 D	leather
173053	black	Ø 45 mm	3.5 x *	10.0 D	leather

\* Trade enlargement



visoPOCKET

- Diffractive aspheric lens
- Modern and exquisite design
- High quality leather
- Available in three colours

CUSTOMER BENEFITS

- ✚ Wide field of view with ultra-slim lens
- ✚ Handy credit card format
- ✚ Leather case protects lens from being scratched
- ✚ Ideal for on-the-go use when small print needs magnifying swiftly and easily



Item	Colour	Lens size	Magnification	Dioptre	Material
172116	red	74 x 48 mm	2.5 x *	6.0 D	leather
172146	brown	74 x 48 mm	2.5 x *	6.0 D	leather
172156	black	74 x 48 mm	2.5 x *	6.0 D	leather

\* Trade enlargement



172146, 172116, 172156



172116

## mobilent

- High magnification folding magnifiers.
- Aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- The plastic case encloses the lens and is dust-tight.
- With round-the-neck cord.
- Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ The ideal magnifier for handbag and trouser pocket or for wearing around the neck.
- ✚ Ideal for magnifying small print discreetly.



PXM®



Opto-form



1710910



171094



171097

Item	Colour	Lens size	Magnification	Dioptre
171094	white	Ø 35 mm	4.0 x	16.0 D
171097	white	Ø 35 mm	7.0 x	28.0 D
1710910	white	Ø 35 mm	10.0 x	38.0 D

## mobilent LED

- Extremely compact, high-magnification folding magnifier
- Economical LED light integrated in housing
- Colour temperature: approx. 6000 K
- Colour rendering index: CRI 88
- Illumination level: approx. 300 lx
- Battery: 1x CR 2032, battery service life up to 10 hours
- The plastic housing securely encloses the lens
- Incl. lanyard for wearing around the neck

### CUSTOMER BENEFITS

- ✚ The ideal illuminated magnifier for when you're on the move: high-magnification, small and handy; suitable for wearing around the neck, for use as a hand-held magnifier and fits in a trouser pocket
- ✚ The lanyard is threaded through the battery cover so that the battery cover cannot be lost when the lanyard is used



PXM®



Opto-form



152097



152094

Item	Colour	Lens size	Magnification	Dioptre
152094	white	Ø 35 mm	4.0 x	16.0 D
152097	white	Ø 35 mm	7.0 x	28.0 D
1520910	white	Ø 35 mm	10.0 x	38.0 D

# combi PLUS

- The practical all-rounder for multi-use.
- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Supplied with a fine grain black leather case with soft inner lining to protect the lens.
- Display and Optoform equipment available.

## CUSTOMER BENEFITS

- ✚ Can be used as a hand-held magnifier with fold-out handle.
- ✚ Can be used as a stand magnifier: fold-out metal feet enable the lens to be tilted for a comfortable viewing angle.
- ✚ Suitable for reading, writing and handicrafts.
- ✚ Includes protective case.



PXM®



Opto-form

Item	Lens size	Magnification	Dioptre
2031	100 x 50 mm	2.6 x *	6.3 D
2032	100 x 75 mm	2.8 x *	7.0 D
2034	75 x 50 mm	3.5 x *	10.0 D

\* Trade enlargement



2031



2032



2034

STAND MAGNIFIERS & READING MAGNIFIERS



STAND MAGNIFIERS

STABLE SOLUTIONS  
FOR BRIGHT MAGNIFICATION.

AND  
READING MAGNIFIERS



1566



1566

visolux+







- A plus in visual comfort.
- Even, bright and glare-free illumination provided by two SMD LEDs.
- Combination of meniscus and aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Integrated, preselectable orange filter for second warm colour temperature.
- Ergonomic lens angle for comfortable viewing.
- LED light automatically switches off after 30 minutes.
- Hard foam case included.
- Display and Optoform equipment available.



Item	Lens size	Magnification	Dioptr e
1566	100 x 75 mm	3.0 x	12.0 D

CUSTOMER BENEFITS




- ✚ Comfortable to use due to ergonomic tilted lens and compact design.
- ✚ Incredibly large field of view with 3x magnification.
- ✚ 2 different colour temperatures for even, glare-free illumination of the reading material.
- ✚ Particularly scratch-proof lens with high visual comfort.
- ✚ Light automatically switches off to prevent unnecessary power consumption.



PXM®

cera-tec® coating

3 x AA



Display/  
Opto-  
form

30 min.

3x



## scribolux



156512

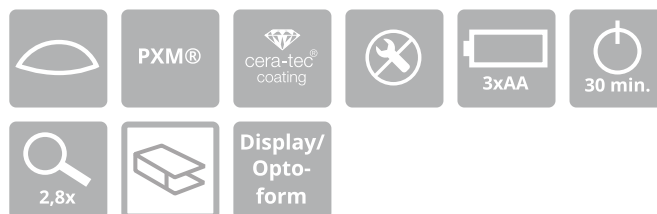
Item	Lens size	Magnification	Dioptre
156512	100 x 75 mm	2.8 x *	7.0 D

\* Trade enlargement

- High level of image brightness and large visual field.
- Distance lens – supporting surface: 7.5 cm (apex of lens).
- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- In the case of all aspheric magnifiers and reading magnifiers from Eschenbach Optik the focusing distance ( $a_E$ : distance from the eye to the virtual image) is precisely 400 mm. The image can therefore be seen clearly with readers which have an addition of 2.5 dpt.
- Supplied with microfibre pouch to protect the lens. The pouch can also be used for cleaning the lens.
- Display and Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ Makes crosswords even more fun!
- ✚ Plenty of space for writing under the lens as the lens is positioned at a spacious distance from the supporting surface and the magnifier base has an open design.
- ✚ Easy to move across the reading material.
- ✚ With comfortable tilted lens.
- ✚ Bright, even and glare-free illumination.
- ✚ Leaves both hands free for carrying out tasks under the scratch-resistant lens without shadowing.



15651209

Accessories:  
**Hard foam case for  
 safe transport**

# system varioPLUS

- Illuminated magnifier system, consisting of an LED battery handle and interchangeable magnifying heads of various magnifications
- Bright, homogeneous illumination of the object to be read thanks to bright material and all-round closed magnifying pots.
- Aspherical PXM® light lens with cera-tec® anti-scratch coating for a sharp, distortion-free image.
- For a more comfortable reading position, use in conjunction with the reading stand (item no. 1605) is recommended.



## CUSTOMER BENEFITS

- ✚ Particularly suitable for reading over long periods of time and for users who cannot hold magnifiers freely (e.g. age-related shaking or Parkinson's disease).
- ✚ Magnifier heads with a diameter greater than 58 mm (Item No. 15539-, 15549-, 15599-) are fitted with a retractable red reading line for easier line orientation and increased reading speed.
- ✚ The rectangular magnifier heads (Item No. 15806-, 15826-) are equipped with a supplementary swivel lens for additional magnification.
- ✚ Particularly scratch-proof lens with high visual comfort.
- ✚ Choice of 3 different colour temperatures via filters.

## Battery handle, LED

- LED battery handle for use with system varioPLUS magnifying heads
- 3 different color temperatures possible via easily replaceable clip-on filters
- Step-up converter for consistently bright illumination over the entire battery life

## CUSTOMER BENEFITS

- ✚ LED: no lamp replacement required, very economical in consumption
- ✚ bright, uniform illumination even with large magnifying heads



1599144



# system varioPLUS - Magnifying heads

- Magnifying heads for use with the LED battery handle (item no. 1599144)
- Rectangular magnifying heads with ergonomic tilting lens
- Square magnifying pots (item no. 158063, 158263) with swivel-in 4 dpt segment lens for additional magnification (version as 450 nm contrast-enhancing edge filter)
- Round magnifying heads (art. no. 155393, 155493, 155993) with swivel-in red reading line for better line guidance
- Magnifier head (item no. 155073) with insertable measuring scale, graduation 0.5 mm and 1/64 inch

LED battery handle not included in the scope of delivery



158063, 158263



Additional lens



155393, 155493, 155993



Reading line

## CUSTOMER BENEFITS

- ✚ Particularly suitable for reading over long periods of time and for users who cannot hold magnifiers freely (e.g. age-related shaking or Parkinson's disease).
- ✚ Magnifier heads with a diameter greater than 58 mm (Item No. 15539-, 15549-, 15599-) are fitted with a retractable red reading line for easier line orientation and increased reading speed.
- ✚ The rectangular magnifier heads (Item No. 15806-, 15826-) are equipped with a supplementary swivel lens for additional magnification.
- ✚ Particularly scratch-proof lens with high visual comfort.



155073



Scale to 155073

Item	Lens size	Magnification	Dioptre	Further properties	Matching case
155773	Ø 35 mm	12.5 x	50 D	magnifier head, separate	15601
155073	Ø 35 mm	10 x	38 D	magnifier head, separate	15601
155173	Ø 35 mm	7 x	28 D	magnifier head, separate	15601
155273	Ø 50 mm	6 x	24 D	magnifier head, separate	15601
155393	Ø 58 mm	5 x	20 D	magnifier head, separate	15602
155493	Ø 70 mm	4 x	16 D	magnifier head, separate	15602
155993	Ø 80 mm	3 x	12 D	magnifier head, separate	15602
158063	100 x 50 mm	3 x *	7.6 D	magnifier head, separate	15603
158173	100 x 50 mm	3.9 x	11.4 D	Aplanat/ Lupentopf, lose	15603
158263	100 x 75 mm	2.8 x *	7 D	magnifier head, separate	15603

\* Trade enlargement

# system varioPLUS - Illuminated magnifiers

- Illuminated magnifier, consisting of LED battery handle (item no. 1599144) and interchangeable magnifying head
- Illuminated magnifiers with square magnifying heads with ergonomically tiltable lens
- Illuminated magnifiers (item no. 158064, 158264) with swivel-in 4 dpt segment lens for additional magnification (version as 450 nm contrast-enhancing edge filter)
- Illuminated magnifiers (art. no. 155394, 155494, 155994) with swivel-in red reading line for better line guidance
- Illuminated magnifier (item no. 155074) with insertable measuring scale, graduation 0.5 mm and 1/64 inch



158064, 158264



Segment lens



155394, 155494, 155994



Reading line



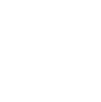
1599144



15601, 15602, 15603

## CUSTOMER BENEFITS

- ✦ Particularly suitable for reading over long periods of time and for users who cannot hold magnifiers freely (e.g. age-related shaking or Parkinson's disease).
- ✦ Magnifier heads with a diameter greater than 58 mm (Item No. 15539-, 15549-, 15599-) are fitted with a retractable red reading line for easier line orientation and increased reading speed.
- ✦ The rectangular magnifier heads (Item No. 15806-, 15826-) are equipped with a supplementary swivel lens for additional magnification.
- ✦ Particularly scratch-proof lens with high visual comfort.
- ✦ Choice of 3 different colour temperatures via filters.
- ✦ Case included in the scope of delivery.



155074



Scale to 155073

Item	Lens size	Magnification	Dioptr	Further properties	Accessories included
155774	Ø 35 mm	12.5 x	50 D	magnifier head incl. LED battery handle	case, filter
155074	Ø 35 mm	10 x	38 D	magnifier head incl. LED battery handle	filter, case
155174	Ø 35 mm	7 x	28 D	magnifier head incl. LED battery handle	case, filter
155274	Ø 50 mm	6 x	24 D	magnifier head incl. LED battery handle	case, filter
155394	Ø 58 mm	5 x	20 D	magnifier head incl. LED battery handle	case, filter
155494	Ø 70 mm	4 x	16 D	magnifier head incl. LED battery handle	case, filter
155994	Ø 80 mm	3 x	12 D	magnifier head incl. LED battery handle	case, filter
158064	100 x 50 mm	3 x *	7.6 D	magnifier head incl. LED battery handle	case, filter
158174	100 x 50 mm	3.9 x	11.4 D	magnifier head incl. LED battery handle	case, filter
158264	100 x 50 mm	2.8 x *	7 D	magnifier head incl. LED battery handle	case, filter

\* Trade enlargement



263611

# visomax

- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- With attachable additional lens for an even larger visual field.
- Can be used with magnifying ruler (Order No. 2606).
- Total magnification with magnifying bar 5.6 x).
- Optoform equipement available.

## CUSTOMER BENEFITS

- ✚ Enables you to write under the lens.
- ✚ Comfortable working position at a pleasant viewing distance.
- ✚ Comfortable, infinitely variable angled viewing.
- ✚ Large, rectangular visual field.
- ✚ Particularly scratch-proof lens with high visual comfort.



PXM®



cera-tec®  
coating



3,8x

Item	Lens size	Magnification	Dioptre	Further properties
263611	100 x 75 mm	3.8 x *	11.0 D	Magnification without additional lens: 7.0 dpt/ 2.8 x *







\* Trade enlargement




# powerlux

- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Available in warm and cold white colour temperature.
- 2 SMD LEDs are positioned opposite each other to provide shadow-free illumination.
- Supplied with protective hard foam case.
- Economical power consumption due to automatic switch-off function which turns the powerlux off after 30 minutes.
- Display and Optoform equipment available.

## CUSTOMER BENEFITS

- ✚ Very simple to use, the ergonomic design promotes intuitive movement on the reading material.
- ✚ Automatic switch-off function, preserves battery life.
- ✚ Very comfortable to hold in the hand.
- ✚ Consistently bright and glare-free illumination.
- ✚ Particularly scratch-proof lens with high visual comfort.
- ✚ Ideal for people with visual impairment who appreciate award-winning design.
- ✚ Suitable for both left and right handers.





Item	Lens size	Magnification	Dioptre	Colour temperature
158614	Ø 58 mm	3.5 x	14.0 D	8000 K
1586141	Ø 58 mm	3.5 x	14.0 D	3000 K
158620	Ø 58 mm	5.0 x	20.0 D	8000 K
1586201	Ø 58 mm	5.0 x	20.0 D	3000 K
158628	Ø 58 mm	7.0 x	28.0 D	8000 K
1586281	Ø 58 mm	7.0 x	28.0 D	3000 K



1586141, 1586201, 1586281, 158614, 158620, 158628



1586141, 1586201, 1586281 | 158614, 158620, 158628











143830

# menas LUX

- Illuminated stand magnifier with fixed magnification.
- Combination of meniscus and aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Object and image position virtually on the same level.
- Height 45 mm.

## CUSTOMER BENEFITS

- ✚ Ultra-flat design with a large visual field.
- ✚ Large, variable distance of use (eye-lens).
- ✚ The integrated light makes it ideal even in very poor light conditions.

PXM®1 x AA3xStep UpOpto-form

Item	Lens size	Magnification
143830	Ø 63 mm	3.0 x





1436



1426

Item	Dimensions	Magnification
1426	65 mm / 36 mm / 46 mm	1:1,8
1436	90 mm / 35 mm / 70 mm	1:2,2

SEGMENT BRIGHT FIELD MAGNIFIERS

makro PLUS Aspheric

- Aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Object- and image position virtually on the same level.

CUSTOMER BENEFITS

- ✚ Tremble-free, bright image.
- ✚ Comfortable, tilted view allows relaxed reading position.
- ✚ Item Number 1436 allows entire newspaper columns to be read.



makrolux

- Object and image position in almost one plane
- Bright LED lighting included
- No unnecessary power consumption thanks to automatic light switch-off after 30 minutes
- Push-button switch for easy switching on and off
- Display and Optoform range available

CUSTOMER BENEFITS

- ✚ Tremble-free, bright image.
- ✚ Comfortable, tilted view allows relaxed reading position.
- ✚ Item Nos. 14361 and 14362 enable to read full newspaper columns.
- ✚ With excellent LED illumination right up to the edges of the magnifier.



143611



143621

Item	Dimensions	Magnification
143611	90 mm / 55 mm / 82 mm	1:2,2
143621	90 mm / 63 mm / 90 mm	1:3,6





1420



1421



1424

## BRIGHT FIELD MAGNIFIERS

- A high level of image brightness
- The image has double the surface brightness in comparison to ambient light conditions
- By approaching the object, a magnification level of up to 6 x can be achieved by means of the accommodative power
- All Eschenbach Optik bright-field magnifiers are supplied in a microfibre pouch which can also be used to clean the magnifiers
- Magnification 1:1.8
- Object and image position are virtually on the same level

### CUSTOMER BENEFITS

- ✚ „Tremble-free“ image as the bright field magnifiers are placed directly on the reading material
- ✚ Very handy and compact
- ✚ Due to their high accommodation capacity, these bright field magnifiers are particularly suitable for children to support the remaining visual acuity



Silikat



1:1,8x

Opto-  
form

1420 und 1421



PXM®



1:2,0x

Opto-  
form

1424

Item	Diameter	Magnification	Details
1420	65 mm	1:1,8	-
1421	65 mm	1:1,8	Incl. red orientation line (removable)
1424	45 mm	1:1,8	Particularly lightweight, PXM® lens



## Magnifying rulers

- Magnifying rulers only magnify in one direction, the height of the letters is therefore increased but the width remains the same.
- PXM® lightweight lens for a distortion-free image.
- Display and Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ The generous width and the red guide line make it easier to read tables.
- ✚ As they only magnify in one direction, they allow strainfree reading over long periods of time.

PXM®

1:1,8x

2605, 2608

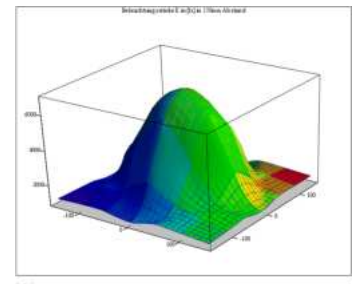
PXM®

1:2,0x

Opto-form

2606

Item	Dimensions	Magnification	Details
2605	200 mm / 25 mm /-	1:1,8	With handle - Incl. red guide line
2606	122 mm / 26 mm /-	1:2,0	Incl. red guide line, higher magnification due to aspherical surface - can be used in conjunction with visomax large field reading glass
2608	250 mm / 35 mm /-	1:1,8	Incl. red guide line



Beleuchtungsstärke

## varioLED flex

- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Switch between ring illumination and segment illumination for examining surfaces.
- Illumination near point for shadow-free illumination: 3.5 cm.
- Illumination level: approx. 6000 lx (at a working distance of 150 mm) - provides full illumination power immediately.
- Gooseneck tripod with protective cover for improved hygiene.
- Secured via table clamp.
- Tripod length 350 mm.
- Cable length: 3 m.
- Supplied with power adapter for EU, GB, US, AUS.

### Accessories:

Table base (art.-no.: 27819)

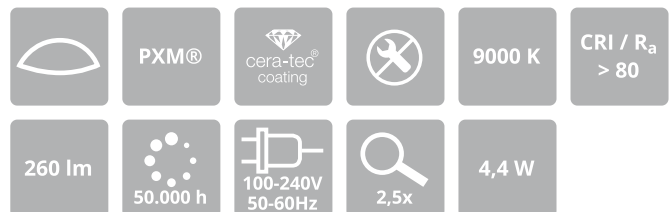
- Steel, black finish, weight 2 kg, diameter 130 mm.
- Only suitable for item 2781.



27819

### CUSTOMER BENEFITS

- ✚ Segment switching = provides a choice between ring illumination and segment illumination for closer inspection of different surface structures.
- ✚ As it is lightweight, compact and highly flexible this stand magnifier is extremely versatile.
- ✚ Particularly scratch-proof lens with high visual comfort.
- ✚ Optimum swivel range of magnifier head due to gooseneck stand in combination with biaxial lens mounting.
- ✚ Comfortable positioning due to ergonomic "magnifier grip".
- ✚ Economical due to low power consumption as power requirement is only 5W, service life of LED approx. 50,000 hours.



Item	Dimensions	Tripod length	Lens size	Magnification	Dioptré	Colour temperature
2781	350 mm x - x -	350 mm	Ø 80 mm	2.5 x *	6.0 D	9000 K
27815	565 mm x - x -	565 mm	Ø 80 mm	2.5 x *	6.0 D	9000 K

\* Trade enlargement



27773



# varioLED+

- Ring lighting provided by 36 long-life high performance LEDs with primary lens system for optimal concentration of light and shadow and flicker-free working.
- Approx. 5000 lx (at a 20 cm working distance) – provides full illumination power immediately.
- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Hinged and removable lens cover.
- Magnifier head has 6 joints to ensure optimum positioning.
- Tilting range of magnifier head: 180°.
- Can be operated using one hand.
- Cable length 3 m.
- Supplied with table clamp for table top thicknesses of 18-74 mm.

## CUSTOMER BENEFITS

- + Shadow-free and flicker-free illumination.
- + Brightness can be adjusted to suit individual requirements.
- + Particularly scratch-proof lens with high visual comfort.
- + Can be used with distance and near vision glasses.
- + Minimum power consumption due to low power requirement of the LED which is only 15 W.

Item	Lens size	Magnification	Dioptre
27773	Ø 132 mm	1.9 x *	3.55 D
27776	Ø 132 mm	2.5 x *	6.0 D

\* Trade enlargement



27729

### Accessories: 27729 Table base

- Cast iron, 260 mm Ø, weight 6 kg
- Suitable for stand magnifiers 27773, 27776

# LIGHT

INDIVIDUAL ILLUMINATION.  
RADIANT DIVERSITY.



LIGHT



16040

## elumentis LED, Mains version with option for battery operation

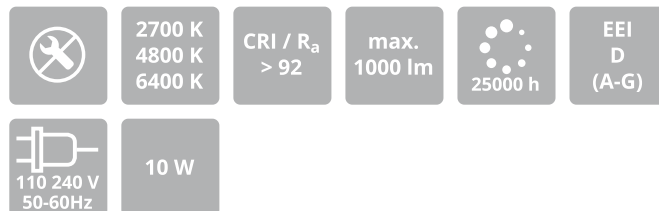
- Mains version with battery option
- With battery compartment in the lamp base for optional conversion to rechargeable battery operation (rechargeable battery, item no. 160404, not included)
- Height of lamp: max. 54 cm
- Weight: 1.94 kg
- power consumption: 10 W



Data sheet

### CUSTOMER BENEFITS

- ✚ Pure and natural colour reproduction
- ✚ High-contrast, homogeneous, glare-free illumination without hard-edged cast shadows
- ✚ Simple, intuitive operation
- ✚ Plenty of space under the lamp
- ✚ Suitable for any work station due to long connecting cable



### Accessories

#### Rechargeable battery for elumentis LED

##### Item no. 160404

Rechargeable battery for retrofitting the mains version (item no. 16040) to battery operation





160401



## elumentis LED, for mains and battery operation

- Version for mains and battery operation
- Separate rechargeable battery that can be inserted into the battery compartment in the lamp base included in the scope of delivery
- Battery life depends on the selected lighting setting (minimum runtime: 4 hours)
- Height of the light: max. 54 cm
- Weight: 2.11 kg (1.94 kg without battery inserted)
- power consumption: 10 W (incl. battery charging: 24 W)

### CUSTOMER BENEFITS

- ✚ Pure and natural colour reproduction
- ✚ High-contrast, homogeneous, glare-free illumination without hard-edged cast shadows
- ✚ Simple, intuitive operation
- ✚ Plenty of space under the lamp
- ✚ Mobile use in places where no mains connection is available
- ✚ The conveniently long mains cable remains permanently installed at the main place of use



Data sheet

	2700 K 4800 K 6400 K	CRI / R <sub>a</sub> > 92	max. 1000 lm	 25000 h	EEI D (A-G)
	110-240V 50-60Hz	10 W			



16030



Data sheet

## pure visionLED XL

- Tactile on/off switch in the upper part of the stand
- Stable stand with flexible, freely movable lampshade
- Color: silver/ anthracite
- Height of the lamp: min. 117 cm to max. 151 cm

### CUSTOMER BENEFITS

- ✚ The ideal lighting for the reading chair
- ✚ Lampshade to the reading comfortably and glare-free adjustable
- ✚ Homogeneous illumination without harsh shadows

	4000 K	CRI / R <sub>a</sub> > 84	550 lm	30.000 h	EEI G (A-G)
230V 50Hz	8 W				



16034



Data sheet

## pure visionLED

- Tactile on/off switch in the stand
- Stable arm with flexible, freely movable lampshade
- Color: silver/ anthracite
- Height of the lamp: min. 32 cm to max. 50 cm

### CUSTOMER BENEFITS

- ✚ Just one on/off button, easy operation
- ✚ Plenty of space under the lamp
- ✚ Homogeneous illumination without hard shadows

	4000 K	CRI / R <sub>a</sub> > 84	550 lm	30.000 h	EEI G (A-G)
230V 50Hz	8 W				



16036



Data sheet

## economy vision LED

- 3 color temperatures adjustable
- 5 illuminance levels adjustable
- Operation via a touch zone in the base of the luminaire
- Folds flat, easy to store, compact, portable
- Color: white
- Height of the lamp: max. 33 cm

### CUSTOMER BENEFITS

- ✚ Color temperature and brightness levels can be independently adjusted according to individual preferences
- ✚ Mobile use via 5V power bank (not included)

	3000 K 4000 K 5000 K	CRI / R <sub>a</sub> > 80	max. 430 lm		EEI G (A-G)
	230V 50Hz	4 W			



16038



Data sheet

## basic vision LED

- Tactile on/off switch in the base of the luminaire
- Stable arm with flexible, freely adjustable gooseneck areas at base and head
- Color: white
- Height of the lamp: max. 40 cm

### CUSTOMER BENEFITS

- ✚ Just one pushbutton to switch on and off, easy operation
- ✚ Homogeneous illumination without hard shadows

	5000 K	CRI / R <sub>a</sub> > 84	380 lm		EEI G (A-G)
	230V 50Hz	5 W			



16042, as an accessory with maxDETAIL, laboCOMFORT headband magnifier and combi PLUS magnifying reader

## headlight LED

- Small, lightweight and compact LED light
- Light is concentrated at a specific working distance by means of CPC optics (Compound Parabolic Concentrator)
- Light is focused in a precise and glare-free manner
- Power supply via handy, compact battery housing and cable
- Flexible cable with additional adapter for attaching to eyewear temple
- Virtually constant illumination throughout the entire lighting period
- Illumination strength: approx. 3,200 lx in 250 mm, 1,200 lx in 400 mm
- Illumination period: approx. 8 hours in normal mode, approx. 14 hours in eco mode
- Hard foam case included
- Lamp housing: Dimensions: 32 x 20 x 34 mm, Tilting range: vertical
- Battery housing: Dimensions: 90 x 55 x 29 mm (without clip), 1m cable length

### CUSTOMER BENEFITS

- ✚ The light can be tilted vertically into the required position
- ✚ Shadow-free and flicker-free illumination
- ✚ Battery housing can be comfortably carried on the belt or in the shirt pocket
- ✚ Low energy consumption as the light is optimised for use with rechargeable batteries



### Variants



160421, with a carrier system for those who don't wear glasses



160422, as an accessory with maxDETAIL, laboCOMFORT headband magnifier and combi PLUS magnifying reader



1624521, with a carrier system for those who don't wear glasses

# FILTER<sup>®</sup>

LESS GLARE.  
MORE CONTRAST.



---

FILTERS





## ambelis®

- 100% UV protection and up to 99% blue light absorption.
- Improved contrast vision and minimisation of glare by blocking UV light and short-wave, high-energy light components.
- Available in the self-tinting active version, in 15%, 65%, 85%, polarised 75% and gradient 50-15% tints, suitable for indoor and outdoor use.
- The self-tinting ambelis active lenses protect the eye in any light.
- Lenses made from CR 39.
- Special anti-glare frames with an extra deep frame edge at the top and wide temples with side windows.
- Available in a variety of frame models or as a front clip.
- XL frames to put on over your own prescription frame.
- Ventilation slits between temples and centre section to prevent fogging.
- Supplied with matching case.
- Display and Optoform range available.

### CUSTOMER BENEFITS

- ✚ All-round protection for the eyes against harmful sun rays and annoying glare.
- ✚ Improve contrast vision.
- ✚ Good appearance and improved colour perception compared to pure edge filter glasses.



Ideal for spectacle wearers: ambelis XL is intended for wearing over the correction frame.

# ambelis® lenses

## ambelis® am 15 Classic / am 15 Drive

- Cut-off filter with 15% brown tint

### *Recommended use:*

- Indoors in the case of a high level of glare sensitivity
- Outdoors when the sky is cloudy
- Outdoors in the case of a low level of glare sensitivity

## ambelis® am 65 Classic / am 65 Drive

- Cut-off filter with 65% brown tint

### *Recommended use:*

- Indoors in the case of a high level of glare sensitivity
- Outdoors in cloudy to clear weather
- Outdoors in the case of a medium level of glare sensitivity

## ambelis® am 75P Classic / am 75P Drive

- Cut-off filter with polarized 75% brown tint overlay
  - Strong reduction in reflection and additional contrast enhancement through polarisation

### *Recommended use:*

- Indoors in the case of a high level of glare sensitivity
- Outdoors in the case of a high level of glare sensitivity
- Outdoors in bright weather, sunshine
- Outdoors on the water, in snow

**ambelis®** filter lenses have an additional cut-off filter. Besides UV light, they absorb short-wave, high energy components of visible blue light. Contrast vision is therefore improved and unpleasant glare is reduced.

**ambelis®** is available with a variety of tints to suit any light conditions. The details relating to the filter lenses refer to the tint which is applied to the base filter

## ambelis® am 85 Classic / am 85 Drive

- Cut-off filter with 85% brown tint

### *Recommended use:*

- Outdoors in sunshine
- Outdoors in the case of a very high level of glare sensitivity

## ambelis® am 50-15 Classic / am 50-15 Drive

- Cut-off filter with graded 50-15 % brown tint overlay

### *Recommended use:*

- Indoors in the case of a medium to high level of glare sensitivity
- Outdoors in cloudy to clear weather
- Outdoors in the case of a low to medium level of glare sensitivity
- Ideal for reading indoors and outdoors

## ambelis® am active

- Photochromic lenses with additional cut-off filter
- Darkening according to the level of sunlight

### *Recommended use:*

- Owing to the self-tinting property are ideal for indoor or outdoor use
- For moderate to high sensitivity to glare



without ambelis



with ambelis



# Lenses

## ambelis® Classic

Filter type	15%	65%	85%	50-15%	polarized 75%	active (self-tinting)
Filter Category	1	2	3	2	2	1/3 *
Level of light transmission/Luminous transmittance	50 %	35 %	15 %	35 %	20 %	55 % / 15 % *
Blue light absorption	98 %	96 %	99 %	98 %	96 %	97 % / 99 % *
Suitable for wearing whilst driving	not suitable for driving	not suitable for driving	not suitable for driving	not suitable for driving	not suitable for driving	not suitable for driving

\* lightened / darkened



am 15, am 65, am 85, am 50-15, am 75P, am active

## ambelis® Drive

Filter type	15%	65%	85%	50-15%	polarized 75%
Filter Category	1	2	3	2	2
Level of light transmission/Luminous transmittance	50 %	35 %	15 %	30 %	25 %
Blue light absorption	95 %	96 %	98 %	97 %	96 %
Suitable for wearing whilst driving	not suitable for driving at night	not suitable for driving at night	not suitable for driving at night	not suitable for driving at night	not suitable for driving at night



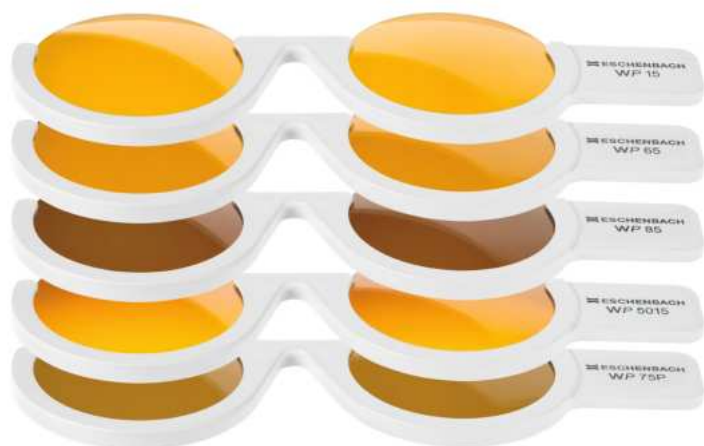
am 15 Drive, am 65 Drive, am 85 Drive, am 50-15 Drive, am 75P Drive

**Important for motorists:** The am Drive filter variant meets the requirements for driving according to DIN EN ISO 12312-1.

# ambelis® trial lens test kits

## ambelis® Classic

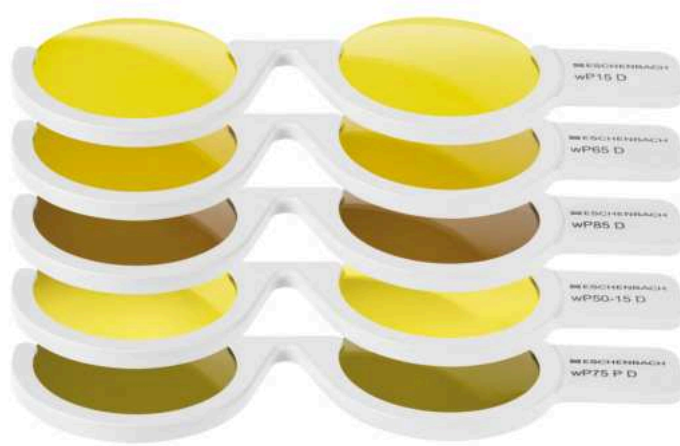
Set consisting of five ambelis panels  
Item no. 1663951



am 15, am 65 am 85, am 50-15, am 75P

## ambelis® Drive

Set consisting of five ambelis panels  
Item no. 1664951



am 15 D, am 65 D, am 85 D, am 50-15 D, am 75P D

# ambelis® Ladie's frame

Features:

- Frame material: TR 90
- Frame colour:  
    ambelis Classic: black, glossy  
    ambelis Drive: dark brown, glossy
- Size ambelis Classic: 56-15-130, temples can be shortened
- Size: ambelis Drive: 54-15-130, temples an be shortened
- Lens height: 40 mm
- Colour side window:  
    ambelis Classic: orange-yellow  
    ambelis Drive: green-yellow



ambelis® Classic

## ambelis® Classic

Filters	Item
unglazed	16635615
am 15	1663415
am 65	1663465
am 85	1663485
am 50-15	166345015
am 75P	1663475P
am active	166341580

## ambelis® Drive

Filters	Item
unglazed	16645415
am 15	1664415
am 65	1664465
am 85	1664485
am 50-15	166445015
am 75P	1664475P

## ambelis® Classic frame, small

### Features:

- Frame material: TR 90
- Frame colour: havana, shiny
- Size: 54-16-135, temples can be shortened
- Lens height: 34 mm
- Colour side window:  
ambelis Classic: orange-yellow  
ambelis Drive: green-yellow



ambelis® Classic

### ambelis® Classic

Filters	Item
unglazed	16635416
am 15	1663115
am 65	1663165
am 85	1663185
am 50-15	166315015
am 75P	1663175P

### ambelis® Drive

Filters	Item
unglazed	16645416
am 15	1664115
am 65	1664165
am 85	1664185
am 50-15	166415015
am 75P	1664175P

## ambelis® Classic frame, large

### Features:

- Frame material: TR 90
- Frame colour: havana, shiny
- Size: 57-16-135, temples can be shortened
- Lens height: 35 mm
- Colour side window:  
ambelis Classic: orange-yellow  
ambelis Drive: green-yellow



### ambelis® Classic

Filters	Item
unglazed	16635716
am 15	1663215
am 65	1663265
am 85	1663285
am 50-15	166325015
am 75P	1663275P

### ambelis® Drive

Filters	Item
unglazed	16645716
am 15	1664215
am 65	1664265
am 85	1664285
am 50-15	166425015
am 75P	1664275P

# ambelis® Men's frame

Features:

- Frame material: TR 90
- Frame colour: havana, shiny
- Size: 58-16-130, temples can be shortened
- Lens height: 37 mm
- Colour side window:  
    ambelis Classic: orange-yellow  
    ambelis Drive: green-yellow



ambelis® Classic

## ambelis® Classic

Filters	Item
unglazed	16635816
am 15	1663515
am 65	1663565
am 85	1663585
am 50-15	166355015
am 75P	1663575P
am active	166351580

## ambelis® Drive

Filters	Item
unglazed	16645816
am 15	1664515
am 65	1664565
am 85	1664585
am 50-15	166455015
am 75P	1664575P

# ambelis® Metal frame, small

Features:

- Frame material: Stainless steel
- Frame colour: brown, matt
- Size: 56-17-140
- Disc height: 38 mm
- Colour side window: green-yellow



## ambelis® Drive

Filters	Item
unglazed	16665617
am 15	1666115
am 65	1666165
am 85	1666185
am 50-15	166615015
am 75P	1666175P

# ambelis® Metal frame, large

Features:

- Frame material: stainless steel
- Frame colour: anthracite, matt
- Size: 59-16-140
- Pane height: 41 mm
- Colour side window: green-yellow



## ambelis® Drive

Filters	Item
unglazed	16665916
am 15	1666215
am 65	1666265
am 85	1666285
am 50-15	166625015
am 75P	1666275P

# ambelis® XL frame, small

Features:

- to put over your own glasses
- Frame material: TR 90
- Frame colour: havana, matt
- Size: 61-12-145 mm
- Lens height: 42mm
- Side window colour:  
    ambelis Classic: orange-yellow  
    ambelis Drive: green-yellow



## ambelis® Classic

Filters	Item
am 15	1663815
am 65	1663865
am 85	1663885
am 50-15	166385015
am 75P	1663875P
am active	166381580

## ambelis® Drive

Filters	Item
am 15	1664815
am 65	1664865
am 85	1664885
am 50-15	166485015
am 75P	1664875P

# ambelis® XL frame, large

Features:

- to put over your own glasses
- Frame material: TR 90
- Frame colour: havana, matt
- Size: 65-12-145 mm
- Lens height: 44 mm
- Side window colour:  
    ambelis Classic: orange-yellow  
    ambelis Drive: green-yellow



## ambelis® Classic

Filters	Item
am 15	1663915
am 65	1663965
am 85	1663985
am 50-15	166395015
am 75P	1663975P

## ambelis® Drive

Filters	Item
am 15	1664915
am 65	1664965
am 85	1664985
am 50-15	166495015
am 75P	1664975P



# ambelis® Sport, shiny

Features:

- Frame: unisex
- Frame material: TR 90
- Frame colour: black, shiny
- Size: 60-17-135
- Lens height: 44 mm
- Filter: ambelis 75P
- Scope of delivery: Case with snap hook and cleaning cloth



1666375P

## ambelis® Sport, shiny

Filters	Item
am 75P	1666375P

# ambelis® Sport, matt

Features:

- Frame: unisex
- Frame material: TR 90
- Frame colour: black, matt
- Size: 60-18-133
- Lens height: 40.5 mm
- Filter: ambelis 75P
- Scope of delivery: Case with snap hook and cleaning cloth



1666575P

## ambelis® Sport, matt

Filters	Item
am 75P	1666575P

# ambelis® Clip-ons

Features:

- Size: 60-11
- Lens material: CR39
- Lenses screwed together
- Removable for reworking
- Clip colour: black, matt



## ambelis® Classic

Filters	Item
am 15	1663315
am 65	1663365
am 85	1663385
am 50-15	166335015

## ambelis® Drive

Filters	Item
am 15	1664315
am 65	1664365
am 85	1664385
am 50-15	166435015



# Testbox ambelis® Classic

**Item no. 166399**  
For testing the right filter  
in familiar surroundings at home.  
Contents 1x each:

- Clip-on am 15
- Clip-on am 50-15
- Clip-on am 65
- Clip-on am 85

# Test box ambelis® Drive

**Item no. 166499**  
For testing the right filter  
in familiar surroundings at home.  
Contents 1x each

- Clip-on am 15D
- Clip-on am 50-15D
- Clip-on am 65D
- Clip-on am 85D



16618527



16619527

## CUT-OFF FILTER EYEWEAR

### asensys® XL

- Improved contrast vision and minimisation of glare by blocking UV light and short-wave, high-energy light components.
- Edge filters 450 nm, 511 nm, 527 nm, 550 nm, also available polarised
- CR 39 lenses
- Special anti-glare frames with an extra deep frame edge at the top and wide temples with side windows.
- Available in a variety of frame models or as a front clip.
- XL frames to put on over your own prescription frame.
- Depending on the model, ventilation slits between temple and centre section to prevent fogging.
- Supplied with matching case.
- Display and Optoform range available.

#### CUSTOMER BENEFITS

- ✚ All-round protection for the eyes against harmful sun rays and annoying glare
- ✚ Improve contrast vision
- ✚ Also available in your individual prescription for any frame



Ideal for spectacle wearers: ambelis XL is intended for wearing over the correction frame.

# asensys® XL

## non polarising

Cut off	asensys® 450	asensys® 511	asensys® 527	asensys® 550	asensys® 511 SM
Filter Category	0	1	2	2	2
Level of light transmission/Luminous transmittance	85 %	60 %	43 %	28 %	22 %
Blue light absorption	91 %	98 %	100 %	100 %	100 %
Suitable for wearing whilst driving	suitable for driving *	not suitable for driving **	not suitable for driving **	not suitable for driving **	not suitable for driving **
Small frame (61-12-140)	16618450	16618511	16618527	16618550	166178511
Large frame (65*12*140)	16619450	16619511	16619527	16619550	166158511

\* unconditionally suitable for driving according to DIN EN ISO 12312-1  
\*\* not suitable for driving in accordance DIN EN ISO 12312-1

## polarising

Cut off	asensys® 450P	asensys® 511P	asensys® 527P	asensys® 550P
Filter Category	2	3	3	4
Level of light transmission/Luminous transmittance	19 %	13 %	9 %	8 %
Blue light absorption	99 %	100 %	100 %	100 %
Suitable for wearing whilst driving	not suitable for driving at night *	not suitable for driving **	not suitable for driving **	not suitable for driving **
Small frame (61-12-140)	16618450P	16618511P	16618527P	16618550P
Large frame (65*12*140)	16619450P	16619511P	16619527P	16619550P

\* suitable for driving, not suitable for driving at night in accordance with DIN EN ISO 12312-1  
\*\* not suitable for driving in accordance DIN EN ISO 12312-1

# asensys® Vorhalter

## non polarising

Set consisting of four ambelis panels  
Item No. 1615951



as 450, as 511, as 527, as 550 nm

## polarising

Set consisting of four ambelis panels  
Item No. 1615952



as 450P, as 511P, as 527P, as 550P

# asensys® Sport, shiny

Features:

- Frame: unisex
- Frame material: TR 90
- Frame colour: black, shiny
- Size: 60-17-135
- Lens height: 44 mm
- Filter: asensys 511 nm, silver mirrored



166178511

# asensys® Sport, shiny

Filters	Item
as 511 nm	166178511

# asensys® Sport, matt

Features:

- Frame: unisex
- Frame material: TR 90
- Frame colour: black, matt
- Size: 60-18-133
- Lens height: 40.5 mm
- Filter: asensys 511 nm, silver mirrored



166158511

# asensys® Sport, matt

Filters	Item
as 511 nm	166158511



1662450

CLIP-ONS

asensys®

- Contrast enhanced vision and reduction in glare through absorption of the short-wave, energy-rich ultraviolet and blue components of the spectrum.
- The use of cut-off filters is recommended in particular for conditions such as retinitis pigmentosa, macular degeneration, albinism, optic atrophy, aphakia.
- The contrast-enhancing cut-off filter clip-ons are attached to the correction frame and can simply be flipped up where necessary.
- Glasses made of particularly lightweight cr 39-plastic for a distortion-free image.
- Optical efficiency:  $\pm 0$  dpt.
- The lenses have screw attachment, they are not riveted.
- An ophthalmologic prescription is required before health insurance will meet the costs.
- Supplied with soft case.
- Display and Optoform equipment available.

CUSTOMER BENEFITS

CR 39

Display/  
Opto-  
form

Item	Cut off	Transmittance F	Filter Category	Suitable for wearing whilst driving
1662450	450 nm	85 %	0	suitable for driving
1662450P	450 nm, polarizing	19 %	2	not suitable for driving at night
1662511	511 nm	60 %	1	not suitable for driving
1662511P	511 nm, polarizing	13 %	3	not suitable for driving
1662527	527 nm	43 %	2	not suitable for driving
1662527P	527 nm, polarizing	9 %	3	not suitable for driving
1662550	550 nm	28 %	2	not suitable for driving
1662550P	550 nm, polarizing	8 %	4	not suitable for driving

# asensys® Testbox



## Test box asensys®

**Item no. 166299**

For testing the right filter  
in familiar surroundings at home.

Contents 1x each

- Clip-on as 450
- Clip-on as 511
- Clip-on as 527
- Clip-on as 550

## Test box asensys® POL

**Item no. 166199**

For testing the right filter  
in familiar surroundings at home.

Contents 1x each

- Clip-on as 450P
- Clip-on as 511P
- Clip-on as 527P
- Clip-on as 550P





29261



29262



29263

# Polarised clip-on sunglasses

- UV 400 – 100% UV protection.
- Polarising by tri-acetat rigid films.
- High quality design.
- Supplied with soft case.
- Suitable for wearing whilst driving, but not for driving at night.

## CUSTOMER BENEFITS

- ✚ Polarisation makes them particularly suitable for watersports (sailing, fishing).
- ✚ The quick solution for clipping onto eyewear frame.
- ✚ Ideal when you don't want to wear a separate pair of sunglasses.

Tri-Acetat

Item	Transmittance F	Filter Category	Suitable for wearing whilst driving	Colour
29261	15 %	3	not suitable for driving at night	brown
29262	15 %	3	not suitable for driving at night	grey
29263	15 %	3	not suitable for driving at night	green

Clip-On: Flip-Up-System



acunis®

## COMFORT LENSES FOR MIGRAINE-RELATED SENSITIVITY TO LIGHT

The retinal ganglion cells (ipRGC) are held responsible for photophobia, which is often associated with migraine, among other things<sup>1</sup>. They are the main conductors of the eye's (non-imageforming) light regulation to the brain<sup>1</sup> and have their sensitivity maximum at approx. 484 nm<sup>2</sup>.

This is where the pink-coloured acunis comfort lenses come in: they have been specially developed for use in cases of hypersensitivity to light stimuli and reduce in particular the transmission of the blue-green wavelength range (480 nm to 520 nm): namely the range to which migraine patients also react particularly sensitively or which is perceived as particularly unpleasant in migraine-related photophobia. By concentrating on the wavelength range around 484 nm, it is also possible to prevent the eyes from adapting to the ambient conditions.

1. McAdams H, Kaiser EA, Igdalova A, Haggerty EB, Cucchiara B, Brainard DH, Aguirre GK. Selective amplification of ipRGC signals accounts for interictal photophobia in migraine. *Proc Natl Acad Sci U S A*; 117(29):17320-17329.

2. Digre, Kathleen B. (2010): Photophobia and the melanopsin retinal ganglion cell: a connection?, Präsentation: North American Neuro-Ophthalmology Society Annual Meeting. Available online at: [https://collections.lib.utah.edu/ark:/87278/ \(18.03.2021\)](https://collections.lib.utah.edu/ark:/87278/ (18.03.2021))

## acunis®

- Protecting against unpleasant glare
- Reducing in particular the transmission of the wavelength range around 484 nm, which is perceived as particularly unpleasant in cases of migraine-induced light sensitivity
- In contrast to conventional sunglasses, your eyes adjust less to “seeing in the dark” with acunis lenses and are less dazzled when you take your glasses off
- Available in three tint levels – 25%, 50% and 75% – depending on the intended use and the intensity of glare experienced
- Protect against UV radiation and can be used when driving according to DIN EN ISO 12312-1.
- Available in various frame models and sizes or as a clip-on.
- Also available as an XL frame to put over your own prescription frame. Special anti-glare frames with an extra deep rim at the top and wide temples with side windows.
- Supplied with matching case.
- The metal frames small and large are also available unglazed for glazing with individual strengths.

### CUSTOMER BENEFITS

- ✚ Comfort lenses for migraine-related sensitivity to light
- ✚ Migraine is often accompanied by an acute sensitivity to light
- ✚ acunis lenses filter out that component of light that is perceived as unpleasant



Filter type	25%	50%	75%	75% SM
Filter Category	1	1	2	3
Level of light transmission/Luminous transmittance	75 %	50 %	25 %	15 %
Blue light absorption	28 %	47 %	81 %	86 %
Suitable for wearing whilst driving	not suitable for driving at night	not suitable for driving at night	not suitable for driving at night	not suitable for driving at night

## acunis® trial lens test kits

Set consisting of three acunis panels  
Item no. 1615961



ac 25, ac 50, ac 75

# acunis® Plastic frame, square

Features:

- Frame material: plastic
- Frame colour: black, matt
- Size: 54-18-140
- Disc height: 44 mm
- Filter: acunis 25, acunis 50, acunis 75



## acunis® Plastic frame, square

Filters	Item
ac 25	16156425
ac 50	16156450
ac 75	16156475

## acunis® Metal frame, small

### Features:

- Frame material: metal
- Frame colour: brown, matt
- Size: 56-17-140
- Disc height: 40 mm
- Filter: acunis 25, acunis 50, acunis 75



## acunis® Metal frame, small

Filters	Item
unglazed	16155617
ac 25	1615325
ac 50	1615350
ac 75	1615375

## acunis® Metal frame, large

### Features:

- Frame material: metal
- Frame colour: anthracite, matt
- Size: 59-16-140
- Disc height: 42 mm
- Filter: acunis 25, acunis 50, acunis 75



## acunis® Metal frame, large

Filters	Item
unglazed	16155916
ac 25	1615425
ac 50	1615450
ac 75	1615475

# acunis® XL frame, small

Features:

- Frame material: TR90
- Frame colour: havana, matt
- Size: 61-12-145
- Disc height: 42 mm



## acunis® XL, small

Filters	Item
ac 25	16618125
ac 50	16618150
ac 75	16618175

# acunis® XL frame, large

Features:

- Frame material: TR90
- Frame colour: havana, matt
- Size: 65-12-145
- Disc height: 44 mm



## acunis® XL, large

Filters	Item
ac 25	16619125
ac 50	16619150
ac 75	16619175

# acunis® Sport, shiny

Features:

- Frame: unisex
- Frame material: TR 90
- Frame colour: black, shiny
- Size: 60-17-135
- Lens height: 44 mm
- Filter: acunis 75, silver mirrored



16156875

# acunis® Sport, shiny

Filters	Item
ac 75	16156875

# acunis® Sport, matt

Features:

- Frame: unisex
- Frame material: TR 90
- Frame colour: black, matt
- Size: 60-18-133
- Lens height: 40.5 mm
- Filter: acunis 75, silver mirrored



16155875

# acunis® Sport, matt

Filters	Item
ac 75	16155875



# acunis® Clip-on

Features:

- Glass material: CR39
- Size: 60-11
- Lenses screwed together
- Can be removed for reworking
- Clip colour: black, matt



## acunis® Clip-On

Filters	Item
ac 25	16156125
ac 50	16156150
ac 75	16156175



## Test box acunis®

Item no. 161599

For testing the right filter in your usual home environment. Contents: 1x each

- Clip-on, ac 25
- Clip-on, ac 50
- Clip-on, ac 75

READING AIDS



# READING AIDS

READING ACCESSORIES  
FOR MAXIMUM VISION COMFORT.



29131-



29132-

## Reading aids

- Rimless reading glasses with PXM® light lens for a sharp, distortion-free image.
- Various designs including practical case.
- Powers from 1.0 dpt to 4.0 dpt in 0.5 dpt steps.
- Plastic temples.
- Display available.

### CUSTOMER BENEFITS

- ✚ Incl. high-quality case in frame colors, with zipper
- ✚ Discreet, fashionable design
- ✚ Adjustable bridge with soft pads

PXM®

PD  
62 mm

Display

Item	Colour	Dioptre	Frame dimension
<b>Ladies</b>			
2913110	purple	1.0 D	49-17
2913115	purple	1.5 D	49-17
2913120	purple	2.0 D	49-17
2913125	purple	2.5 D	49-17
2913130	purple	3.0 D	49-17
2913135	purple	3.5 D	49-17
2913140	purple	4.0 D	49-17
<b>Gents</b>			
2913210	anthrazit	1.0 D	53-16
2913215	anthrazit	1.5 D	53-16
2913220	anthrazit	2.0 D	53-16
2913225	anthrazit	2.5 D	53-16
2913230	anthrazit	3.0 D	53-16
2913235	anthrazit	3.5 D	53-16
2913240	anthrazit	4.0 D	53-16



29050

# miniframe2

- Ready-to-wear readers in 5 different optical base values: 1.0 dpt, 1.5 dpt, 2.0 dpt, 2.5 dpt, 3.0 dpt.
- A strength which decreases upwards by 1 dioptre from the lower edge to the upper edge of the lens.
- PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Sophisticated, classically elegant design including case.
- Ideal as an entry-level model or as a spare or additional pair of glasses.
- Temple colour: gun, gold, blue, red.
- Display available.

These reading aids are for emergency use, as a spare pair or an additional pair of glasses for near vision requirements. They are only suitable for short-term use and are not suitable for wearing whilst driving.

Item	Colour	Dioptre
2905010	gun matt	1.0 D
2905015	gun matt	1.5 D
2905020	gun matt	2.0 D
2905025	gun matt	2.5 D
2905030	gun matt	3.0 D

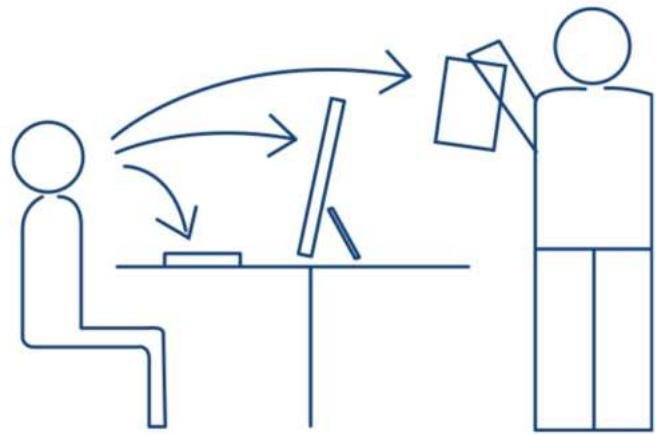
## CUSTOMER BENEFITS

- ✚ An extended field of vision in comparison to conventional single vision readers.

PXM®

PD  
63 mm

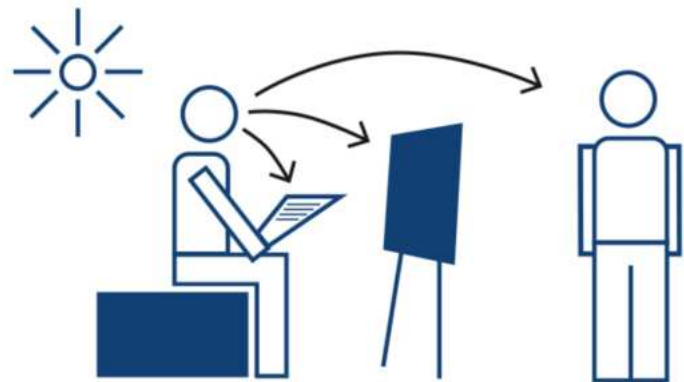
Display





# miniframe2 SUN

- Ready-to-wear readers in 5 different optical base values: 1.0 dpt, 1.5 dpt, 2.0 dpt, 2.5 dpt, 3.0 dpt.
- A strength which decreases upwards by 1 dioptre from the lower edge to the upper edge of the lens.
- PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- 75% grey tint.
- Filter Category 3.
- 100% UV protection.
- Including case.
- Display available.



## CUSTOMER BENEFITS

- ✚ Extended field of vision in comparison to conventional single vision reading glasses.
- ✚ No glare in sunlight due to tinted lenses.

PXM®

PD  
63 mm

Display

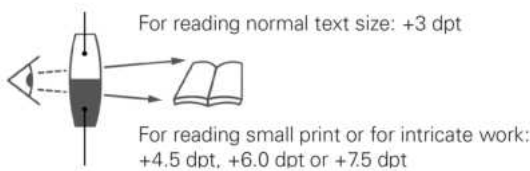
Item	Colour	Dioptre
2908010	gun matt	1.0 D
2908015	gun matt	1.5 D
2908020	gun matt	2.0 D
2908025	gun matt	2.5 D
2908030	gun matt	3.0 D



29060

# miniframe BIFO

- Ready-to-wear readers with 3.0 dpt and additional close-up segment.
- Additional close-up segment: 4.5, 6.0 or 7.5 dpt.
- PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Sophisticated, classically elegant design, including case.
- Temple colour: gun, gold, blue, red.
- Display available.



## CUSTOMER BENEFITS

- ✚ Easy Vision: readers with an additional close-up segment for small print or for reading details during hobby work.
- ✚ Low Vision: readers for orientation on the reading material and for reading using the additional close-up segment.
- ✚ Relaxed vision in both lens segments even at a short distance of use.

PXM®

Display

Item	Colour	Dioptre
2906034	gun matt	+3,00 D / +4,50 D
2906036	gun matt	+3,00 D / +6,00 D
2906037	gun matt	+3,00 D / +7,50 D



1682-



16823-

## noves BINO

- Magnifying readers with prismatic convergence support for magnification requirements of up to 2.50 x.
- Aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- The lenses have a very subtle appearance. They have a uniform thickness of 4 mm, regardless of the optical power.
- Maximum protection of lenses against mechanical influences and dust is provided by high-precision, diffractive nanostructures on the insides of the lenses.
- The half-eye design facilitates orientation above the eyewear.
- Weight only 18 g.
- The spring-hinged frame has adjustable temples, soft pads and easily adjustable pad arms.
- Supplied in a robust hard shell case.

### CUSTOMER BENEFITS

- ✚ Relaxed binocular vision with high magnification.
- ✚ These exceptionally discreet and thin lenses are particularly suitable for high optical powers.
- ✚ Particularly scratch-proof lenses with high visual and wearing comfort.



Item	Colour	Magnification	Dioptr	Prism	Working distance	Frame dimension
16824	gold, matt	1.0 x	4.0 D	5	250 mm	41-22
16825	gold, matt	1.25 x	5.0 D	6	200 mm	41-22
16828	gold, matt	2.0 x	8.0 D	9	125 mm	41-22
168210	gold, matt	2.5 x	10.0 D	11	100 mm	41-22
168238	gun, matt	2.0 x	8.0 D	9	125 mm	41-22
1682310	gun, matt	2.5 x	10.0 D	11	100 mm	41-22





168014, 168015, 168016,168018, 1680110



16805

# prismatic BINO Comfort

- Binocular readers with a higher addition and prismatic convergence support.
- Eschenbach Optik prismatic BINO Comfort is available in five different strengths with convergence-supporting prisms corresponding to the respective strength.
- Glasses made of particularly lightweight CR39-plastic for a distortion-free image.
- Not only achieves outstanding results but also looks good – stylish design means high level of acceptability.
- Supplied in a robust hard shell case.

## CUSTOMER BENEFITS

✚ Relaxed binocular vision with high magnification.

CR 39

  
1-2,5x



**Note:** The distance values should lie within a range of  $\pm 1$  dpt (sphere, cylinder). (In the case of greater variances in distance values, we recommend that the prismatic half-eye glasses are individually fitted using aensys.

Item	Colour	Magnification	Dioptre	Prism	Working distance
168014	gold matt	1.0 x	4.0 D	4	250 mm
168015	gold matt	1.25 x	5.0 D	5	200 mm
168016	gold matt	1.5 x	6.0 D	6	165 mm
168018	gold matt	2.0 x	8.0 D	8	125 mm
1680110	gold matt	2.5 x	10.0 D	10	100 mm
168054	light grey	1.0 x	4.0 D	4	250 mm
168055	light grey	1.25 x	5.0 D	5	200 mm
168056	light grey	1.5 x	6.0 D	6	165 mm
168058	light grey	2.0 x	8.0 D	8	125 mm
1680510	light grey	2.5 x	10.0 D	10	100 mm



16814122

## Half-eye frame gold matt

- Frame material front/ temples: monel/ acetate
- Frame color front/ temples: gold matt/ havana
- Pad arms easily adjustable
- Shortenable temples with spring hinges
- Frame dimensions: 41-22/ 150



16834122

## Half-eye frame gun matt

- Frame material front/ temples: monel/ acetate
- Frame color front/ temples: gun matt/ black
- Pad arms easily adjustable
- Shortenable temples with spring hinges
- Frame dimensions: 41-22/ 150



168054122

## Half-eye frame, light grey

- Frame material front/ temples: acetate
- Frame color front/ temples: light grey
- Frame dimensions: 41-22/ 150

TELESCOPES



TELESCOPES

MAGNIFICATION SYSTEMS  
FOR EVERY OCCASION.



162411

## maxTV®

- Aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Extremely comfortable to wear.
- Large visual field (18°).
- With improved adjustment of dioptrre compensation.
- Temples can be adjusted without having to be warmed.
- PD range 60-68 mm.
- Dioptrre compensation:  $\pm 3.0$  dpt, right/left can be separately adjusted, cylinder correction not possible.
- Main distance of use: 3 m.
- Supplied in hard foam case.
- Display and Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ Enables you to see the TV in double the size – particularly important when viewing small screens.
- ✚ Relaxed viewing at any distance through individual focusing.
- ✚ Comfortable to wear and will not slip down during use due to easily adjustable temples.
- ✚ Ideal for reading subtitles and all text on the screen.



PXM®



2,1x



49 g

PD  
60-68  
mmDisplay/  
Opto-  
form



162431

## maxEVENT

- Special vision aid for using at public events such as the theatre, musicals, concerts, the cinema and also in stadiums.
- Aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Large visual field (18°).
- Extremely comfortable to wear.
- Temples can be adjusted without having to be warmed.
- Very high PD tolerance range of 60-68 mm. Easy adjustment of dioptre compensation: -2.75 to 3.75 dpt, right/left can be separately adjusted, cylinder correction is not possible.
- Reflective objective lenses.
- Supplied in hard foam case.

### CUSTOMER BENEFITS

- ✚ Allows the user to get closer to the action on the stage at concerts, the theatre, the opera, musicals and many other events.
- ✚ This vision aid will ensure you don't miss out on any detail or any movement on-stage.



PXM®



2,1x



49 g

PD  
60-68  
mm



1624511

## maxDETAIL

- For demanding detailed work.
- Aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- With improved adjustment of dioptré.
- Easily adjustable temples (can be adjusted without warming).
- 2x magnification
- Weight: 49 g
- Large PD range 60-68 mm
- Working distance approx. 40 cm
- Dioptré compensation:  $\pm 3$  dpt, right/left can be separately adjusted, cylinder correction not possible.
- Supplied in hard foam case.
- Display and Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ Both hands are kept free for carrying out intricate work, handicrafts or reading.
- ✚ Comfortable working distance and large visual field; lightweight, contemporary design.
- ✚ Modern, practical design.



PXM®



2x



49 g

PD  
60-68  
mmOpto-  
form



Example of use

162421

## maxTV® Clip

- Aspherical PXM® light lens with sharp-edged, distortion-free image enables details in the distance to be seen magnified 2x.
- Galilean-style spectacle attachment with swivelling optics.
- For clipping onto the existing prescription eyewear.
- Main application distance: 3m
- PD range: 60-68 mm
- Height-adjustable optics
- 5 height settings possible
- Weight: 23 g
- Delivery incl. hard foam case

### CUSTOMER BENEFITS

- ✚ Specially designed for spectacle wearers.
- ✚ Enables you to see the TV in double the size – particularly
- ✚ important when viewing small screens.
- ✚ Ideal for reading subtitles and all text on the screen.



PXM®



2x



23 g

PD  
60-68  
mmDisplay/  
Opto-  
form





162461



Example of use

## maxDETAIL Clip

- For demanding detailed work.
- Galilean clip-on system with flip-up lenses.
- Aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Working distance of approx. 35 cm.
- PD range 62-70 cm.
- Adjustable lens height (5 height settings possible).
- Supplied in hard foam case.
- Display and Optoform equipment available.

### CUSTOMER BENEFITS

- ✚ Specially designed for spectacle wearers.
- ✚ Both hands are kept free for carrying out intricate work, handicrafts or reading.
- ✚ Large visual field and comfortable working distance.



PXM®



2x



23 g

PD  
60-68  
mmOpto-  
form



1634, 16344



16362, 16363, 16364

# teleMED/ridoMED

- Coated lens system.
- Achromatic lens made of high quality silicate.
- Adjustment of pupillary distance of 54–74 mm.
- Lens diameter 23 mm.
- Focusing /dioptre compensation adjusted individually for each eyepiece.
- Ocular-side additional correction is possible, e.g. cylinder correction.
- Sturdy carrier frame made from glass fibre reinforced, black plastic.
- Comfortable, easily adjustable saddle bridge.
- Supplied in black zippered case.

 Silikat

 2,5-4x

 70



 PD 54-74 mm

## ridoMED

Item	Magnification	Working distance	Field of view
16362	2.5 x	350 mm	75 mm
16363	3.0 x	200 mm	54 mm
16364	4.0 x	250 mm	35 mm

## teleMED

Item	Magnification	Working distance	Field of view
1634	3.0 x	700 mm – ∞	160 m
16344	4.0 x	780 mm – ∞	130 m

## UNIVERSAL CARRIER SYSTEM

# uniADAPT

- Enables Keplerian systems to be quickly and easily mounted onto the carrier frame.
- Carrier system made from black, glass fibre reinforced plastic.
- Height adjustable, soft bridge.
- Easily adjustable pupillary distance of 54 to 74 mm
- Supplied with 2 fixed monocular mounts, rubber blind cap, attachable rubber temple ends and zippered case.
- The monocular mounts are set at infinity in relation to each other.



1631, Supplied without monocular

 35 g





16731



16732



16733



16734

## Focusable Keplerian Systems

- Achromatic lens made of high quality silicate.
- Can be used as a hand-held monocular in combination with finger ring (Item No. 16711).
- Can be used as a spectacle mounted telescope.
- High level of light transmission and image brightness.
- Small, lightweight and inconspicuous.
- High quality, dust-proof metal housing.
- Very short near point.
- With an intermediate adapter can be used with reading caps Item No. 16210-162116.
- Roof prism system with multicoating.
- Supplied with: carrying cord, case.
- Compatible with adapter system Item No. 1625

### Accessories:

#### Reading cap adapter (Item No. 167302)

- With this intermediate adapter ring, the monoculars 16731 and 16732 can be used with the reading caps 16210 - 162116

#### Reading cap adapter (Item No. 167303)

- With this intermediate adapter ring, the monoculars 16733 and 16734 can be used with the reading caps 16210 - 162116

#### Viso-quick finger ring (Item No. 16711)

- The finger ring ensures inconspicuous use and provides stability when used as a handheld monocular.

### CUSTOMER BENEFITS

- ✚ Ideal for use when you're on the move (with finger ring).
- ✚ Can also be used in a system carrier frame.



Silikat

2,8-6 x  
3,4-7,6x

Item	Magnification far / near	Field of vision far / near	Weight	Viewing angle far / near
16731	2.8 x / 3.4 x	220 m / 26 mm	28 g	12.5 ° / 10 °
16732	4.2 x / 5.5 x	175 m / 25 mm	29 g	10 ° / 7.2 °
16733	4.2 x / 5 x	220 m / 32 mm	47 g	12.5 ° / 9.2 °
16734	6 x / 7.6 x	175 m / 26 mm	57 g	10 ° / 6 °



167302



167303



16711



Example of use



1623

GALILEAN SYSTEMS

Galilei 2,0 GF

- The Galilean systems Galilei 2.0 GF, Galilei 2.2x and Galilei 2.5x are mounted on the system carrier frame for use.
- The Galilei systems are installed using the adapter system Item No. 1625
- The Galilean system is set at infinity, reading caps are used for reading (see table).
- Ocular and objective lenses have a high-quality, anti-reflection hard coating.
- Diffractive aspheric PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.

CUSTOMER BENEFITS

- ✚ Large visual field, ideal for fluent reading.
- ✚ Also suitable for watching television.
- ✚ Lightweight therefore very comfortable to use!
- ✚ Particularly scratch-proof lens with high visual comfort.
- ✚ Not affected by age-related shaking due to low system magnification and large visual field.



Item	Magnification far / near	Working distance	Field of view	Viewing angle far / near
1623	2 x / -	∞	380m/ 1000m	22 ° / -
1623+16233	- / 1.5 x	330 mm	107 mm	- / 18.5 °
1623+16234	- / 2 x	250 mm	81 mm	- / 18.5 °
1623+16235	- / 2.5 x	200 mm	65 mm	- / 18.5 °
1623+16236	- / 3 x	167 mm	54 mm	- / 18.5 °
1623+16238	- / 4 x	120 mm	41 mm	- / 18.5 °
1623+162310	- / 5 x	100 mm	33 mm	- / 18.5 °
1623+162312	- / 6 x	83 mm	27 mm	- / 18.5 °

The figures stated for visual field are average values. They will vary depending on the distance from the eye to the eyepiece.



Example of use



## Accessories Galilei 2,0 GF

### Accessories:

#### Reading caps:

- 162301 Reading cap ring for fitting lens with an individual power (not shown).
- 16230 Frosted lens
- 16233 Reading cap 3.0 dpt
- 16234 Reading cap 4.0 dpt
- 16235 Reading cap 5.0 dpt
- 16236 Reading cap 6.0 dpt
- 16238 Reading cap 8.0 dpt
- 162310 Reading cap 10.0 dpt
- 162312 Reading cap 12.0 dpt
- Reading caps are easy to use: they can simply be flipped up out of the way without being removed.
- The reading caps 3 dpt/ 4 dpt/ 5 dpt are also suitable for binocular use when used with the corresponding convergence adapter.

#### Fitting case

- Item No. 1630
- The contents of the fitting case will enable you to test most of the adjustments for close range and distance which this system allows.
- Contents: 2 x 1623 with trial frame adapters, 1 each of: 16230, 16233, 16234, 16235, 16236, 16238, 162310, 162312



1621

# Galilei 2,2x

- Excellent optical imaging quality.
- The Galilean system is set at infinity, reading caps are used for reading (see table).
- Weight 16 g, with reading cap 22 g.
- High quality, achromatic silicate lenses, MgF2 coated.

## CUSTOMER BENEFITS

- ✚ Ideal for watching television.
- ✚ For reading printed text (newspapers, bank statements, TV guides, telephone directories, etc.).
- ✚ Lightweight therefore very comfortable to use.



Silikat



2,2x-  
(-8,8x)x



16g

Item	Magnification far / near	Working distance	Field of view	Objective lens diameter / magnification
1621	2.2 x / -	∞	250m/ 1000m	23.0 mm
1621+16213	- / 1.7 x	ca. 330 mm	67 mm	26.0 mm
1621+16214	- / 2.2 x	250 mm	54 mm	26.0 mm
1621+16215	- / 2.8 x	200 mm	44 mm	26.0 mm
1621+16216	- / 3.3 x	167 mm	35 mm	26.0 mm
1621+16218	- / 4.4 x	125 mm	25 mm	26.0 mm
1621+162110	- / 5.5 x	100 mm	22 mm	26.0 mm
1621+162112	- / 6.6 x	83 mm	18 mm	26.0 mm
1621+162116	- / 8.8 x	63 mm	14 mm	26.0 mm



16225

## Galilei 2,5x

- Easy to adjust.
- Diffractive aspheric and achromatic PXM® lightweight lens made of high quality silicate, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- The Galilean system is set at infinity, reading caps are used for reading (see table).
- Large 13° visual field.
- Ocular and objective lenses have a high-quality, anti-reflection hard coating.

### CUSTOMER BENEFITS

- ✚ Ideal for watching television and reading (in combination with reading caps).
- ✚ Simple to use due to large visual field.
- ✚ Ultralight, only 11 g – therefore extremely comfortable to use.
- ✚ Particularly scratch-proof lens with high visual comfort.



Item	Magnification far / near	Working distance	Field of view	Objective lens diameter / magnification
16225	2.5 x / -	∞	230m/ 1000m	25.0 mm
16225+16213	- / 1.9 x	ca. 330 mm	64 mm	26.0 mm
16225+16214	- / 2.5 x	250 mm	48 mm	26.0 mm
16225+16215	- / 3.2 x	20 mm	38 mm	26.0 mm
16225+16216	- / 3.8 x	167 mm	32 mm	26.0 mm
16225+16218	- / 5 x	125 mm	24 mm	26.0 mm
16225+162110	- / 6.3 x	100 mm	19 mm	26.0 mm
16225+162112	- / 7.5 x	83 mm	16 mm	26.0 mm
16225+162116	- / 10 x	63 mm	12 mm	26.0 mm





162101



16210, 16213, 16214, 16215



16216, 16218, 162110, 162112, 162116

## Reading caps

- Excellent optical imaging quality.
- The Galilean system is set at infinity, reading caps are used for reading (see table).
- Weight 16 g, with reading cap 22 g.
- High quality, achromatic silicate lenses, MgF2 coated.

### CUSTOMER BENEFITS

- ✚ Ideal for watching television.
- ✚ For reading printed text (newspapers, bank statements, TV guides, telephone directories, etc.).
- ✚ Lightweight therefore very comfortable to use.



Silikat

cera-tec<sup>®</sup>  
coating

6g

Item	Magnification far / near	Working distance	Field of view	Field of vision far / near	Objective lens diameter / magnification
1621	2.2 x / -	∞	250m/ 1000m	250 m / -	23.0 mm
16225	2.5 x / -	∞	230m/ 1000m	230 m / -	25.0 mm
16225+162116	- / 10 x	63 mm	12 mm	- / 12 mm	26.0 mm
16225+162112	- / 7.5 x	83 mm	16 mm	- / 16 mm	26.0 mm
16225+162110	- / 6.3 x	100 mm	19 mm	- / 19 mm	26.0 mm
16225+16218	- / 5 x	125 mm	24 mm	- / 24 mm	26.0 mm
16225+16216	- / 3.8 x	167 mm	32 mm	- / 32 mm	26.0 mm
16225+16215	- / 3.2 x	20 mm	38 mm	- / 38 mm	26.0 mm
16225+16214	- / 2.5 x	250 mm	48 mm	- / 48 mm	26.0 mm
16225+16213	- / 1.9 x	ca. 330 mm	64 mm	- / 64 mm	26.0 mm

Reading caps for Galilei 2.2 x and Galilei 2.5 x



16934916  
16935116  
16935218

## system carrier frame

- Special frame for holding optical systems
- Very light and stable titanium frame
- Soft, adjustable silicone saddle bridge
- Spring hinges, rubberized golf temple ends
- Demo discs with centering scales for easy centering of the optics
- Temple length 150 mm, can be shortened



Silikat



2,8+6 x  
3,4-7,6x



Item	Size	Weight
16934916	49 mm / 16 mm / 150 mm	11 g
16935116	51 mm / 16 mm / 150 mm	11 g
16935218	52 mm / 18 mm / 150 mm	11 g



16911

## Case for special vision aids

- For storing Galilean and Keplerian systems which have been mounted onto the carrier frame
- Artificial leather case with zipper fastening
- A foam rubber insert ensures that the mounted systems can be safely stored and protects them from impacts



16321

## FITTING CASES

# Galilean Fitting Case

### Contents:

- 1619 Trial frame adapters (3 assembled)
- 1621 Galilei 2.2 x (2 pieces)
- 16225 Galilei 2.5 x
- 16210 Frosted lens
- 16213 Reading cap 3 dpt
- 16214 Reading cap 4 dpt
- 16215 Reading cap 5 dpt
- 16216 Reading cap 6 dpt
- 16218 Reading cap 8 dpt
- 162110 Reading cap 10 dpt
- 162112 Reading cap 12 dpt
- 162116 Reading cap 16 dpt

The contents of the fitting cases will enable you to carry out adjustments for distance and near vision with the Galilean systems 1621 and 16225.



1632

# Galilean and Keplerian fitting case

### Contents (as 16321, but in addition includes):

- 1619 Trial frame adapters (2 pcs.)
- 16731 Keplerian monocular 2.8 x 9
- 16732 Keplerian monocular 4.2 x 10
- 16733 Keplerian monocular 4.2 x 12
- 16734 Keplerian monocular 6.0 x 16
- 16711 viso-quick finger ring
- 167302 Adapter for reading caps for 16731 and 16732
- 167303 Adapter for reading caps for 16733 and 16734

The contents of the fitting cases will enable you to carry out adjustments for distance and near vision with the Galilean systems 1621 and 16225, as well as the Keplerian systems 16731, 16732, 16733 and 16734.

The fitting brochure is available for download as a PDF file in the Mediapool.

- |                        |                        |
|------------------------|------------------------|
| • English: 1625_bal_en | • Spanish: 1625_bal_es |
| • German: 1625_bal_de  | • Danish: 1625_bal_dk  |
| • French: 1625_bal_fr  | • Dutch: 1625_bal_nl   |
| • Italian: 1625_bal_it | • Czech: 1625_bal_cz   |



1625

## Mounting Kit

- The 1625 Mounting Kit enables Galilean and Keplerian systems to be easily mounted into any system carrier frame.
- The 1625 Mounting Kit enables all ESCHENBACH telescopic systems, both Galilean and Keplerian, to be mounted into any special frame.
- The main features of the 1625 Mounting Kit are the carrier lenses made from CR 39, together with the corresponding convergence adapters for working distances of 200 mm, 250 mm, 330 mm and an adapter for distance tasks.
- The convergence adapters allow binocular use in the distance range, as well as in a variety of close-up ranges.
- The mounting kit is suitable for monocular and binocular use in both the distance and close-up ranges.
- If an adjustment error occurs (incorrectly determined visual centre) minimal expense is incurred as only the carrier disks need to be reground.

### Contents:

- 6 Carrier disks
- 2 Centering inserts for grinding the carrier disks
- 2 Adapters for infinite distance use
- 2 Convergence adapters for 200 mm (binocular)
- 2 Convergence adapters for 250 mm (binocular)
- 2 Convergence adapters for 330 mm (binocular)

### Small mounting components

- 6 x Spacer washers (0.5 mm, 1.0 mm, 2.0 mm)
- 6 Lock rings for securing the monoculars
- 2 Holding rings with adhesive ring for the use of correction lenses
- 1 Lens former for correction lens
- 1 Socket
- 2 Adapters for trial frame

The fitting brochure is available for download as a PDF file in the Mediapool.

- |                        |                        |
|------------------------|------------------------|
| • English: 1625_bal_en | • Spanish: 1625_bal_es |
| • German: 1625_bal_de  | • Danish: 1625_bal_dk  |
| • French: 1625_bal_fr  | • Dutch: 1625_bal_nl   |
| • Italian: 1625_bal_it | • Czech: 1625_bal_cz   |



1625

# Mounting Kit

Accessories:

Order No. for reordering:

Order-No.	Quantity	Item
1619	2	Adapters for the trial frames
1622	2	Holding rings for the use of correction lenses
16221	1	Lens former for correction lens and
	4	replacement adhesive rings
162510	1	Fitting brochure
16261	2	Carrier lenses, 2 adapters for infinite distance use
	2	centering inserts
16262	2	Carrier lenses
	2	convergence adapters for 200 mm
	2	centering inserts
16263	2	Carrier lenses
	2	convergence adapters for 250 mm
	2	centering inserts
16264	2	Carrier lenses
	2	convergence adapters for 330 mm

Small mounting components, consisting of:

Order No.	Quantity	Item
1627	6 each of	spacer washes (0.5 mm, 1.0 mm, 2.0 mm)
	6	lock rings
	2	Holding rings with adhesive ring for correction lens
1628	1	Mounting tool: socket
16715	6	Lock rings



1674832



1674820



## vario PLUS

- A handheld monocular, stand microscope and stand magnifier.
- Keplerian roof prism system, multi-coated.
- High level of light transmission and image brightness.
- Achromatic lens made of high quality silicate.
- Eyepiece cup can be inverted for protection.
- Dustproof, light metal housing.
- Magnification with mounted stand magnifier: 24 x.
- Magnification stand magnifier alone: 3 x.
- Supplied with carrying cord and case.

### CUSTOMER BENEFITS



Silikat



Item	Magnification	Field of view	Visual angle	Working distance
1674820	8 x 20 mm	125m/ 1000m	7 °	300 mm – ∞
1674832	8 x 32 mm	140m/ 1000m	8 °	700 mm – ∞



4293616, 4293816

## club® M

- Intuitive slide focus enables easy operation – troublefree with just one hand.
- The rectangular panoramic field of view is a real treat.
- Excellent image quality from top-notch optics with full magenta coating.
- A short near point allows observations from a distance of 1.5 m and 2 m respectively.
- Elegant, discreet look thanks to the black rubber casing that also makes the club® M easy to grip.



Silikat



Item	Magnification	Field of view	Visual angle	Working distance
4293616	6 x 16 mm	140m/ 1000m	8 °	1,5 m – ∞
4293816	8 x 16 mm	122m/ 1000m	7 °	2,0 m – ∞



4294618



4294413

# microlux

- Small, lightweight and inconspicuous.
- The lens unit is stored safely in its own plastic housing and by pressing gently with the finger moves out into the viewing position.
- Keplerian roof prism system, blue multi-coated lenses.
- With carrying cord and case.

Silikat

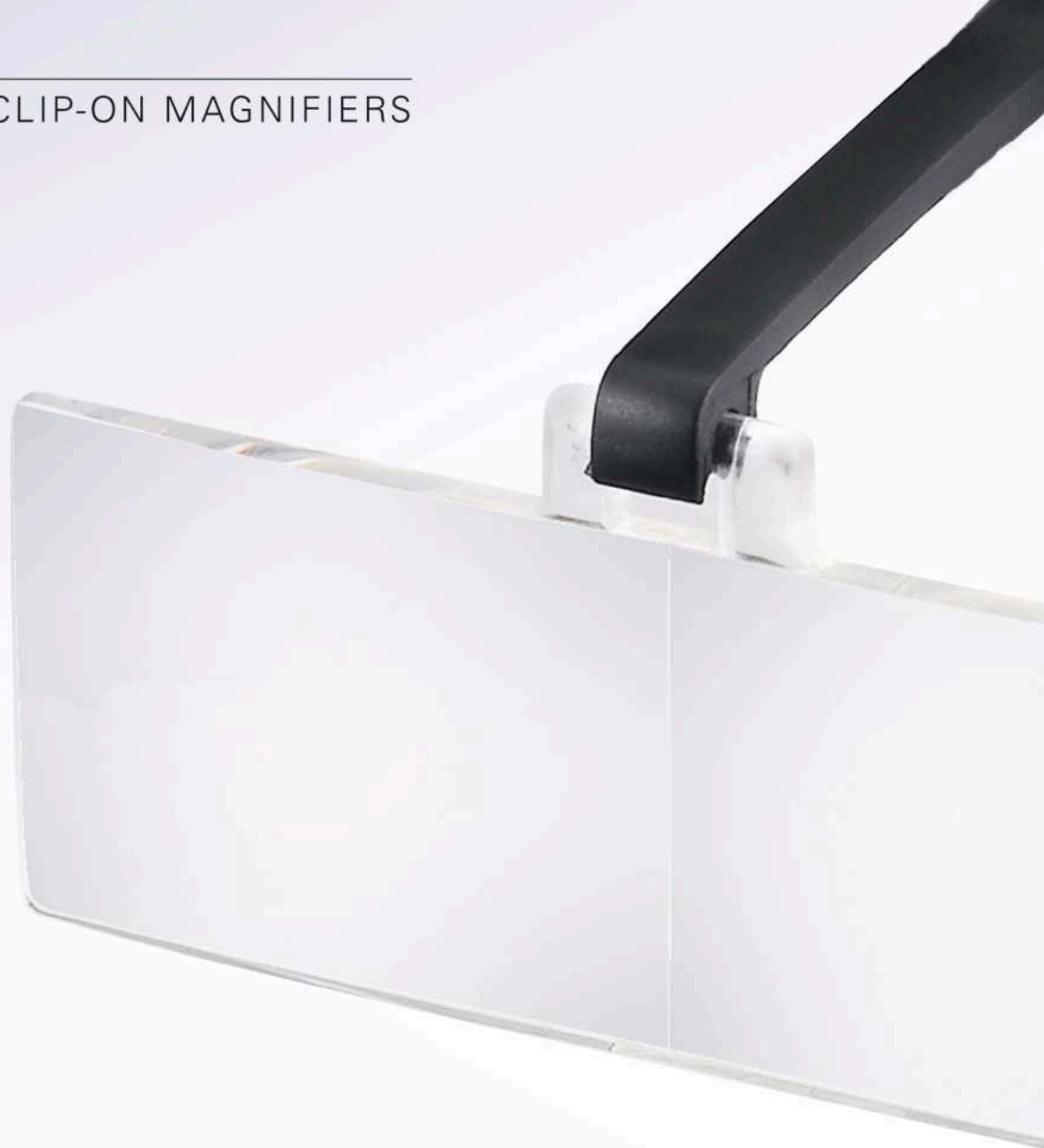
4-6x



Item	Magnification	Near point	Focus	Dimensions
4294413	4 x 13 mm	4 m	fixed focus	27 x 41 x 49 mm
4294418	6 x 18 mm	2 m	Gliding focus	79 x 27 x 45 mm



HEADBAND & CLIP-ON MAGNIFIERS



# HEADBAND AND CLIP-ON MAGNIFIERS

PRACTICAL VISION AIDS  
FOR HOBBIES AND WORK.



164450, 164451, 164452, 164453

## laboMED

- Planoconvex PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Lenses easily interchangeable.
- Lens sizes: monocular Ø 40 mm, binocular 74.5 x 28 mm
- Lens clamp made from glass fibre reinforced plastic.
- Discreet metal frame, black matt finish.
- The laboMED clip-on magnifiers are only suitable for non-spectacle wearers.
- Supplied with protective box.
- laboMED can also be used with monocular lenses which are available as an accessory.
- Optoform equipement available.

### CUSTOMER BENEFITS

- ✚ laboMED leaves both hands free for working.
- ✚ Comfortable working distance even with a high level of magnification
- ✚ Ideal not just for work tasks but also for leisure and craft activities.



PXM®



Display/  
Opto-  
form

Item	Lens	Magnification	Working distance
164450	binocular	1.7 x / 2.5 D *	400 mm
164451	binocular	2.0 x / 2.5 D *	250 mm **
164452	binocular	2.5 x / 5.0 D *	180 mm
164453	binocular	3.0 x / 7.75 D *	130 mm

\* Trade enlargement

\*\* Shorter working distance due to integrated convergence supporting prisms.



164817, 164820, 164825, 164830

# laboCOMFORT

- Lenses easily interchangeable.
- Planoconvex PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Lens clamp made from glass fibre reinforced plastic.
- When not in use the shield can be simply lifted up out of the way.
- Headband has an adjustable strap for individual height adjustment.
- The headband magnifier can also be used by spectacle wearers.
- Dark grey, enclosed plastic shield against diffused light and with an integrated lens bracket.
- The headband magnifier can only be used with binocular lenses.

## CUSTOMER BENEFITS

- ✚ laboCOMFORT leaves both hands free for working.
- ✚ Comfortable working distance even with a high level of magnification.
- ✚ Ideal not just for work tasks but also for leisure and craft activities.



Item	Lens	Magnification	Working distance
164817	binocular	1.7 x / 2.5 D *	400 mm
164820	binocular	2.0 x / 2.5 D *	250 mm **
164825	binocular	2.5 x / 5.0 D *	180 mm
164830	binocular	3.0 x / 7.75 D *	130 mm

\* Trade enlargement

\*\* Shorter working distance due to integrated convergence supporting prisms.



164617, 164620, 164625, 164630



164640, 164670  
Example of use

## laboCLIP

- Used with distance spectacles to achieve optimum image quality.
- Lenses easily interchangeable.
- Planoconvex or aspheric PXM® lightweight lens for a distortion-free image with edge-to-edge sharpness.
- Lens sizes: monocular Ø 40 mm, binocular 74.5 x 22.5 mm.
- Lightweight.
- Lens clamp made from glass fibre reinforced plastic.
- Supplied with protective box.
- Optoform equipment available.

### Accessories:

#### Lenses, available separately

These lenses are also available separately under the following item numbers:

Item	Lens	Magnification	Working dist. approx.
16455	binocular	1.7 x* / 2.5 dpt	400 mm
16451	binocular	2.0 x* / 2.5 dpt	250 mm**
16452	binocular	2.5 x* / 5.0 dpt	180 mm
16453	binocular	3.0 x* / 7.75 dpt	130 mm
16454	monocular	4.0 x* / 16.0 dpt	55 mm
16457	monocular	7.0 x* / 28.0 dpt	32 mm

### CUSTOMER BENEFITS

- ✚ The laboCLIP system can be easily attached to the spectacle frame.
- ✚ The laboCLIP leaves both hands free for working.
- ✚ Comfortable working distance even with a high level of magnification.
- ✚ Ideal not just for work tasks but also for leisure and craft activities.



Optoform: 164617, 164625,  
164640, 164620, 164630,  
164670

Item	Lens	Magnification	Working distance
164617	binocular	1.7 x / 2.5 D *	400 mm
164620	binocular	2.0 x / 2.5 D *	250 mm **
164625	binocular	2.5 x / 5.0 D *	180 mm
164630	binocular	3.0 x / 7.75 D *	130 mm
164640	monocular	4.0 x / 16.0 D	55 mm
164670	monocular	7.0 x / 28.0 D	32 mm

\* Trade enlargement

\*\* Shorter working distance due to integrated convergence supporting prisms.



16451, 16452, 16453, 16455



16454, 16457

# TECHNICAL MAGNIFIERS

PRECISION OPTICS.  
COMPACT DESIGN.



---

TECHNICAL MAGNIFIERS



11547



115410

# Precision scale magnifier

- Achromatic lens made of high quality silicate for a distortion-free image with pinpoint clarity.
- Fine focusing via easy-grip focusing ring.
- Supplied with standard scale no. 115201, measuring range 20 mm, 1/10 mm graduation, size: 23 mm Ø.
- Housing made from glass fibre reinforced polyamide.
- Supplied in a solid plastic box with space for other scales.



Item	Lens	Magnification	Dioptr	Lens size
11547	achromatic	7.0 x	28.0 D	Ø 23 mm
115410	achromatic	10.0 x	40.0 D	Ø 23 mm



115201



115202



115203



115204

## Accessories:

### Precision measuring scales for a variety of applications

- Item No. 115201, 115202, 115203, 115204, 11514

## 1154 LED lighting unit

- LED battery handle for use with the 11547 and 115410 precision scale magnifiers
- Step-up converter for uniformly bright illumination over the entire battery life
- 3 different color temperatures (3500 K, 6500 K, 8000 K) enabled via easily exchangeable clip-on filters
- Batteries (2x type Baby) not included in the contents of delivery
- Matching case (item no.: 15601) optionally available



1154



1154 + 11547



1154 + 115410



155074

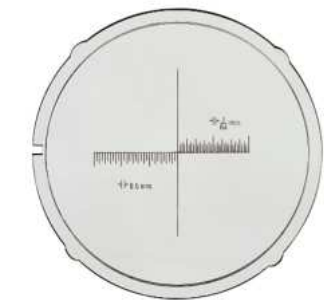
# Illuminated scale magnifier

- Illuminated magnifier, consisting of LED battery handle and magnifying head with 10x magnification
- Insertable measuring scale: Graduation 0.5 mm and 1/64 inch

## CUSTOMER BENEFITS

- + Highly scratch-resistant lens thanks to cera-tec® coating.
- + Case (item no. 15601) included in the scope of delivery.

Item	Lens	Magnification	Dioptre	Lens size
155074	aspheric	10.0 x	38.0 D	Ø 35 mm



Scale





1270  
1271  
1272

## LINEN TESTERS

### Metal precision linen testers

- Precision linen tester.
- Biconvex lens made of high quality silicate.
- Developed to meet the requirements of technical applications.
- Brass frame, chrome-plated, silk matt finish.



### Plastic linen testers with scale

- Linen tester with lateral scale.
- Scale: lateral scale with mm graduation.
- Planoconvex PXM® lightweight lens, duplex coated for an aberration-free image with edge-to-edge sharpness.
- Black plastic housing.



Item	Lens size	Magnification	Dioptre	Cutout	Height	Matching case
1254	Ø 11 mm	12,0 x	40.0 D	10 mmx10 mm	23 mm	12002
1255	Ø 12 mm	10,0 x	40.0 D	15 mmx15 mm	27 mm	12002
1256	Ø 15 mm	8,0 x	32.0 D	20 mmx20 mm	33 mm	12003
1258	Ø 20 mm	6,0 x	24.0 D	25 mmx25 mm	42 mm	12005
1259	Ø 28 mm	5,0 x	20.0 D	30 mmx30 mm	53 mm	12005
1271	Ø 12 mm	10,0 x	40.0 D	15 mmx15 mm	28 mm	12002
1272	Ø 16 mm	8,0 x	30.0 D	20 mmx20 mm	35 mm	12003
1270	Ø 28 mm	5,0 x	19.0 D	30 mmx30 mm	53 mm	12005

#### Accessories:

Cases are available as an optional accessory for the metal and plastic linen testers. The table below matches the item number of each linen tester with the item number of the matching case:

Order No. Linen Tester	Order No. Case
1254/ 1255/ 1271	12002
1256/ 1272	12003
1258/ 1259/ 1270	12005



12002  
12003  
12005

PRECISION FOLDING MAGNIFIERS

Plastic folding magnifiers

- Achromatic or aplanatic lenses made of high quality silicate.
- Glass fibre reinforced, non-breakable polyamide body.
- The body is dustproof when closed.
- Glass lenses, size: 23 mm Ø.



11869



118210

Item	Lens	Magnification	Lens size	Properties
11869	achromatic, remunerated	3.0 x	Ø 23 mm	color error-free imaging
118210	aplanatic	10.0 x	Ø 23 mm	distortion-free illustration



110910

Folding Magnifier

- Folding magnifier in durable, plastic case.
- Small, compact and handy.
- Aplanatic lens for an image with edge-to-edge sharpness.



Item	Magnification	Lens size
110910	10.0 x	Ø 23 mm



118410



1187



11768

## Metal folding magnifiers

- Achromatic, aplanatic or biconvex lenses made of high quality silicate.
- Matt chromium-plated brass body with eyelet.
- Black painted metal lens frame.



Item	Lens	Magnification	Lens size	Properties
118410	achromatic	10.0 x	Ø 15 mm	color error-free imaging
118420	achromatic	20.0 x	Ø 17 mm	-
11766	aplanatic	6.0 x	Ø 21 mm	distortion-free illustration
11768	aplanatic	8.0 x	Ø 21 mm	-
117610	aplanatic	10.0 x	Ø 21 mm	-
117612	aplanatic	12.0 x	Ø 15 mm	-
1187	biconvex	4.0 x	Ø 27 mm	-



2626



2628



1153

## Stand magnifiers

- High magnification, e.g. for retouching work in photography.
- Aspheric or aplanatic PXM® lightweight lens, cera-tec® coated for a distortion-free image with edge-to-edge sharpness.
- Can also be used as a high magnification vision aid.
- Open base for working under the lens (with the exception of 1153, which has a closed base).
- The transparent stand allows excellent illumination from all sides.



Item	Lens size	Magnification	Dioptr
2626	Ø 50 mm	6.0 x	23.0 D
2628	Ø 35 mm	10.0 x	38.0 D
1153	Ø 25 mm	8.0 x	28.7 D



1130

# Stone magnifier

- PXM® lightweight lens, duplex coated for an aberration-free image with edge-to-edge sharpness.
- With air hole to prevent condensation.
- Made from flame-retardant plastic, colour: anthracite.

PXM®

DUPLEX

  
15x

Item	Lens	Magnification	Lens size
1130	2-lens	15.0 x	Ø 13 mm



11243, 11245, 11247,  
1124110

# Watchmaker's magnifiers

- Planoconvex or aspheric PXM® lightweight lens, duplex coated for an aberration-free image with edge-to-edge sharpness.
- With air hole to prevent condensation.
- Made from flame-retardant plastic, colour: anthracite.





PXM®

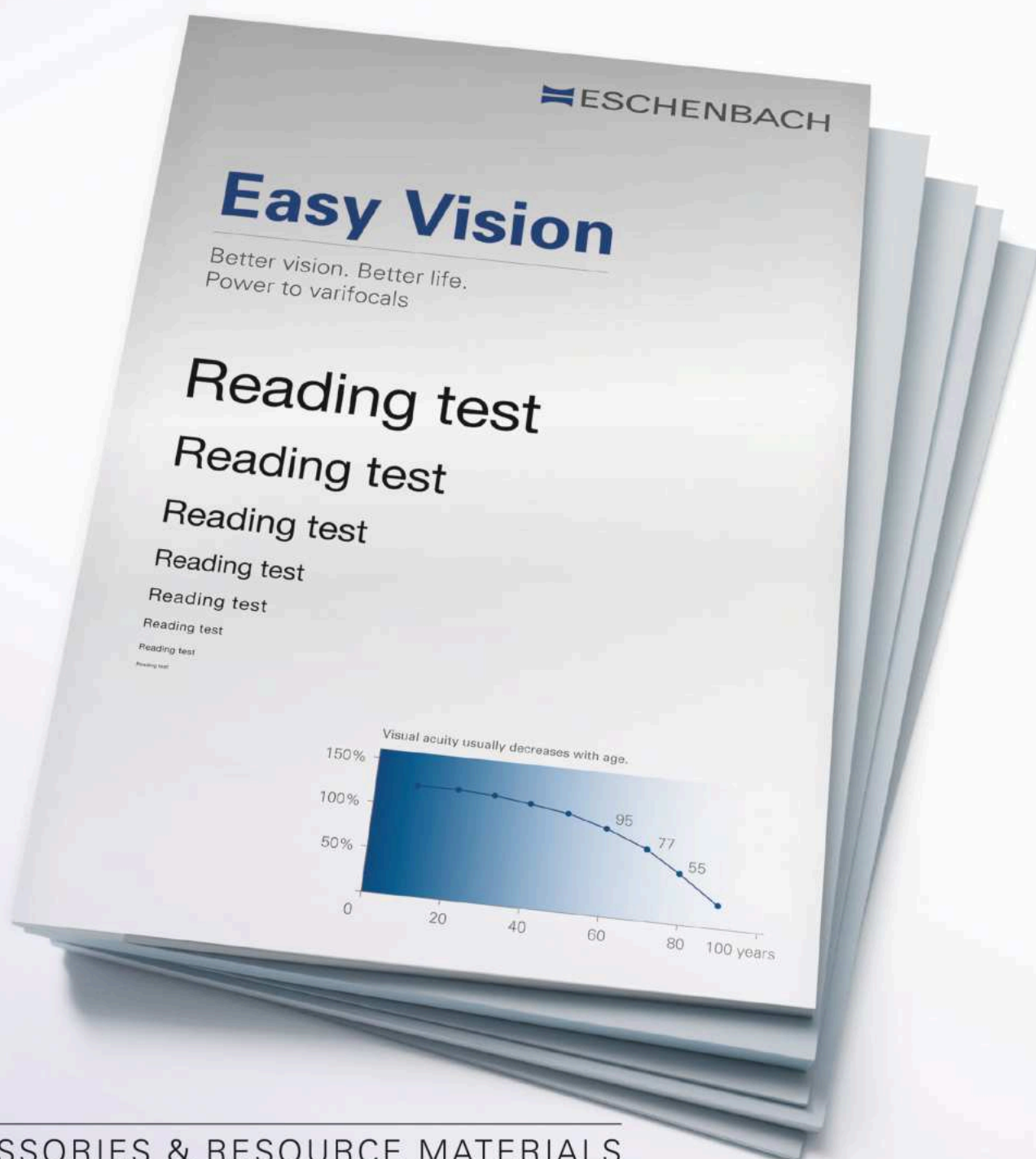
DUPLEX

  
3-10x

Item	Lens	Magnification	Dioptre	Lens size
11243	planoconvex	3.0 x	12.0 D	Ø 25 mm
11245	planoconvex	5.0 x	20.0 D	Ø 25 mm
11247	planoconvex	7.0 x	27.7 D	Ø 25 mm
1124110	aspheric	10.0 x	40.0 D	Ø 25 mm

# ACCESSORIES AND RESOURCE MATERIALS

COMPACT DESIGN.  
ENORMOUS BENEFITS.



ACCESSORIES & RESOURCE MATERIALS



1605

## ACCESSORIES FOR SPECIALIST VISION AIDS

# Reading Stand

- The reading stand encourages an upright, orthopaedically correct posture and therefore prevents back pain.
- When the reading stand is used in conjunction with a magnifying vision aid (e.g. system varioPLUS), an optimum angle of view and a uniform distance to the reading material are always achieved, as well as bright illumination of the field of view.
- Guarantees stability and a tremble-free image.
- Supporting surface area: 40 x 35 cm.
- Material: maple wood.
- 5 different angles of adjustment.
- Edge stopper prevents slipping.
- Supplied with clamp attachment for large papers.

### Accessories:

#### 16051 Guide rail

- Elderly people in particular often have problems guiding magnifiers across the reading material. The guide rail facilitates line orientation
- The guide rail can be secured at any height by means of a fixing screw
- Material: birch wood



1605 + 16051

## RESOURCE MATERIALS

# Easy Vision reading test

- Helps you choose the right product application.
- Serves as a sales argument for Easy Vision products
- For test distance: 40 cm
- With reading sample from visual acuity 0.1 to visual acuity 1.0 on the back
- With text samples from everyday life on the inside pages:  
Small print on the go and at home
- Material: white, washable plastic, DIN A4



1060203



OPTIMUM PRESENTATION.  
VISUALLY IMPRESSIVE.

SALES  
SUPPORT





1894, Example of use

## PRESENTATION SYSTEM

---

# Optoform small

- Compact, flexible and mobile: the high-quality table-top display stand effectively displays your magnifying glasses and visual aids.
- The removable rear panel with interchangeable back panel draws attention to the presentation area with featured items.
- Two transparent inserts allow additional products to be seen.
- Flexible in use and easy to transport, Optoform small is therefore particularly suitable for promotional stands, trade fair stands and mobile sales stands.

# Optoform IV

- High-quality presentation and storage system for magnifying glasses, visual aids and other Eschenbach products.
- Its impressive features make it the ideal solution for an eye-catching, sales-promoting presentation of product highlights and a practical aid for a successful sales pitch.
- Elegant glass shelves showcase product highlights in an open and sales-promoting way.
- In the illuminated display case, an entire product shelf can be presented in the protected glass view.
- The elegant design ensures a high-quality presentation environment.
- Secure and dust-protected storage of products in the closed cabinet with door.
- Flexible shelf system impresses in sales talks with a professional, clearly arranged presentation of the product range.
- Illuminated surface for flexible product advertising draws customers' attention to current product highlights.
- Lockable castors guarantee a stable stand without sacrificing ease of movement.



## Material:

White wood decor, high-gloss mirror

## Light source:

LED strip incl. cable guide,  
Transformer with 230V/50Hz,  
Euro plug (CEE 7/16)

## Dimensions:

Total: W 556 x D 450 x H 1820 mm

Body: W 556 x D 450 x H 860 mm

Top unit: W 556 x D 98 x H 960 mm

## Weight without goods:

approx. 60 kg

Number of shelves supplied: 5

## Accessories:

**Individual tray** Item No. 189501



1895



## Elektronic III

### Assortment

**Contents:** 1 x 16551

Also available: 188043 Tray insert



18804

## Elektronic VI

Tray insert 188053 suitable for  
1x 16502 and 16533 each

Note: Products not available as an  
assortment as they are taxed differently.  
Please order the products individually.



18805

## Elektronic V

Tray insert 188083 suitable for for 1x  
16521 and 16502 each

Note: Products not available as an  
assortment as they are taxed differently.  
Please order the products individually.



18808

## mobilux® LED

### Assortment

**Contents:** 1 each of: 15112, 15113,  
15114, 151141, 15115, 15116, 15117,  
151110, 151112

Also available: 183763 Tray insert



18376

## mobilux® LED

### Assortment

**Contents:** 1 each of: 15112, 151141,  
15115, 15116

Also available: 188103 Tray insert



18810

## mobilux® LED

### Assortment

**Contents:** 1 each of: 15115, 15116,  
15117, 151110, 151112

Also available: 188113 Tray insert



18811

## mobilux® LED

### Assortment

**Contents:** 2 each of: 15113, 15114

Also available: 188123 Tray insert



18812

## mobilux® LED easyPOCKET

### Assortment

**Contents:** 1 each of: 15113, 15114, 152110, 152111, 152122

Also available: 188133 Tray insert



18813

## mobilux® LED/ mobase

### Assortment

**Contents:** 1 each of: 15113, 15115, 15117, 151110, 1511001, 1511002, 1511003, 1511004

Also available: 188143 Tray insert



18814

## mobilux® LED

### Assortment

**Contents:** 1 each of: 15122, 15114, 2 x 15113

Also available: 188153 Tray insert



18815

## mobilux® LED

### Assortment

**Contents:** 1 each of: 15112, 15113, 15114, 15122

Also available: 188163 Tray insert



18816

## Stand magnifiers

### Assortment

**Contents:** 1 each of: 143611, 143621, 156512, 1566

Also available: 188203 Tray insert



18820

## system varioPLUS

### Assortment

**Contents:** 1 each of: 1599144, 155773, 155073, 155173, 155273, 155393, 155493, 155993

Also available: 188233 Tray insert



18823

## system varioPLUS

### Assortment

**Contents:** 1 each of: 1599144, 158063, 158263, 158173

Also available: 188243 Tray insert



18824

## Bright Field Magnifier/ Magnifying Rulers

### Assortment

**Contents:** 1 each of: 1420, 1421, 1424, 143830, 2606, 2608

Also available: 188253 Tray insert



18825

## powerlux

### Assortment

**Contents:** 1 each of: 158614, 158620, 1586281

Also available: 188263 Tray insert



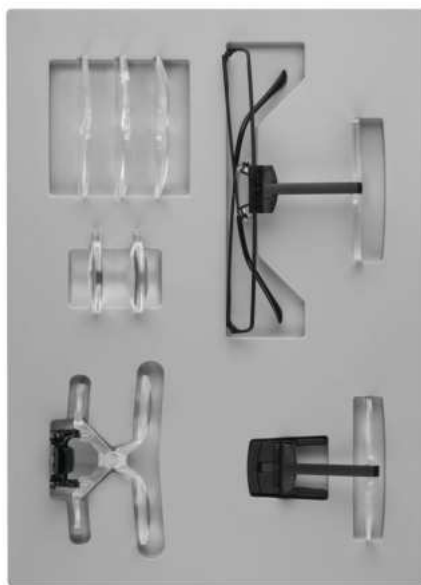
18826

## laboMED/ laboCLIP

### Assortment

**Contents:** 1 each of: 162461, 164450, 164620, 16451, 16452, 16453, 16454, 16457

Also available: 188303 Tray insert



18830

## maxTV/ maxDETAIL

### Assortment

**Contents:** 1 each of: 162411, 162421, 162451, 162461

Also available: 188313 Tray insert



18831



## easyPOCKET/ easyPOCKET XL

### Assortment

**Contents:** 1 each of: 152110, 152111, 152122, 152210, 152211

Also available: 188333 Tray insert



18833

## Folding Magnifiers Classic

### Assortment

**Contents:** 1 each of: 1752150, 1752160, 1752550, 1752560, 1752850, 1752860

Also available: 188353 Tray insert



18835

## Folding Magnifiers Classic

### Assortment

**Contents:** 1 each of: 174130, 1740150, 1740160, 1740250, 1740260, 1740450, 1740460, 1740130, 1740150, 1740160

Also available: 188363 Tray insert



18836

## Folding Magnifiers

### Assortment

**Contents:** 1 each of: 152094, 152097, 1520910, 152110, 152111, 152122, 172116, 172146, 172156

Also available: 188373 Tray insert



18837

## Folding Magnifiers

### Assortment

**Contents:** 1 each of: 152094, 152097, 1520910, 1740260, 1740530, 1752160

Also available: 18838 Tray insert



18838

## ambelis- Clip-ons

### Assortment

**Contents:** 1 each of: 1663315, 1663365, 166335015, 1663385

Also available: 188403 Tray insert



18840

## asensys- Clip-ons

### Assortment

**Contents:** 1 each of: 1662450, 1662511, 1662527, 1662550

Also available: 188403 Tray insert



188401

## asensys- Clip-ons

### Assortment

**Contents:** 1 each of: 1662450P, 1662511P, 1662527P, 1662550P

Also available: 188403 Tray insert



188402

## ambelis XL

### Assortment

**Contents:** 1 each of: 1663865, 1663885, 1663915, 1663975P

Also available: 188413 Tray insert  
The insert 188413 is suitable for all ambelis frames.



18841

## ambelis

### Assortment

**Contents:** 1 each of: 1663165, 1663275P, 166345015, 166351580

Also available: 188423 Tray insert



18842

## Telescopes

### Assortment

**Contents:** 1 each of: 1634, 16344, 16363, 4293616, 4293816, 4294413, 4294618

Also available: 188503 Tray insert



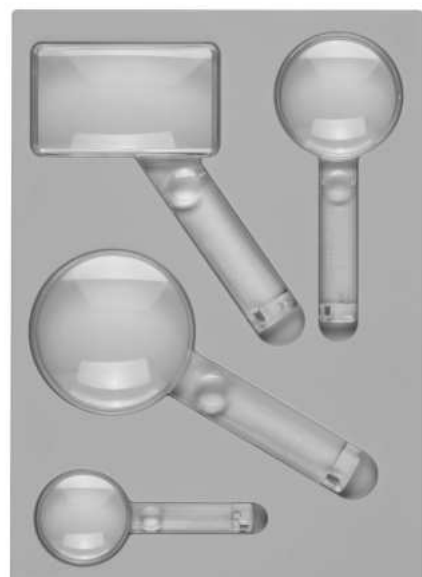
18850

## Reading glasses

### Assortment

**Contents:** 1 each of: 2612401, 2612601, 2612801, 26129501

Also available: 288003 Tray insert



28800

## economic, square

### Assortment

**Contents:** 1 each of: 26421255, 2642150, 2642840  
Also available: 288053 Tray insert

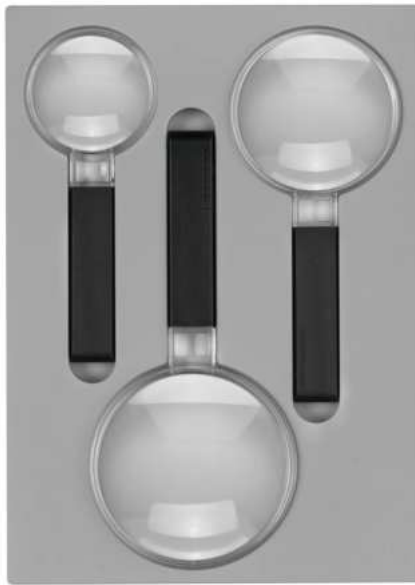


28805

## economic, round

### Assortment

**Contents:** 1 each of: 264265, 264280, 2642100  
Also available: 288063 Tray insert



28806

## aspheric II

### Assortment

**Contents:** 1 each of: 265550, 265570, 2655150, 2655750  
Also available: 288103 Tray insert



28810

## mediplan ergo

### Assortment

**Contents:** 1 each of: 266850, 266875, 266885, 2668950  
Also available: 288153 Tray insert



28815

## combiPLUS

### Assortment

**Contents:** 1 each of: 2031, 2032, 2 x 2034  
Also available: 288203 Tray insert



28820

## Pendant magnifiers

### Assortment

**Contents:** 1 each of: 2677, 1 x 2678  
Also available: 288263 Tray insert



28826



# Shop window display

Attractive, practical and variable - this high quality shop window display offers flexible product advertising and enables you to focus the customers' attention on current product highlights.

## Accessories:

Exchangeable motif 189602



189502, Exchangeable motif



1895, Example of use

# Standard display

Includes a variety of show cards. Further information can be obtained from your representative.



# Display optaro®

87325701 Empty display



87325701

## Display smartlux DIGITAL

**Contents:** 1 x 16502  
**16501907 Empty display**  
 As 165019, but without contents



165019

## Display visolux DIGITAL HD

**Contents:** 1 x 16521  
**16521907 Empty display**  
 As 165219, but without contents



165219

## Display visolux DIGITAL XL FHD

**Contents:** 1 x 16551  
**16551907 Empty display**  
 As 165519, but without contents



165519

## Display powerlux

**Contents:** 1 each of: 158620, 158628  
**158620907 Empty display**  
 As 1586209, but without contents



1586209

## Display makrolux

**Contents:** 1 each of: 143611, 143621  
**14362907 Empty display**  
 As 143629, but without contents



143629

## Display maxTV®

**Contents:** 2 of 162411  
**162411907 Empty display**  
 As 1624119, but without contents



1624119

## Display easyPOCKET

**Contents:** 2 each of: 152110, 152111, 152122  
**15212907 Empty display**  
 As 152129, but without contents



152129

## Display visolux+

**Contents:** 2 of 1566  
**1566907 Empty display**  
 As 15669, but without contents



15669

## Display scribolux

**Contents:** 2 of 156512  
**156511907 Empty display**  
 As 1565119, but without contents



1565119

# Display mobilux® LED

## Contents Model I:

3 x 15113 1 x 15114  
 1 x 151141 2 x 15115  
 2 x 15117 1 x mobilux® LED-Flyer (1 VE = 5 St.)

Item	Display incl. Flyer	Flyer
1511910-1	Language: German	87269
1511910-2	Language: Italian	8726907
1511910-3	<b>Language: English</b>	8726903
1511910-4	Language: French	8726905
1511910-5	Language: Spanish	8726906



## Contents Model II:

1 x 15112 2 x 15113 1 x 15114  
 1 x 151141 1 x 15115 1 x 15116  
 2 x 15122 1 x mobilux® LED-Flyer (1 VE = 5 St.)

Item	Display incl. Flyer	Flyer
1511920-1	Language: German	87269
1511920-2	Language: Italien	8726907
1511920-3	<b>Language: English</b>	8726903
1511920-4	Language: French	8726905
1511920-5	Language: Spanish	8726906



## 15119107 Empty display

As 1511910-1, -2, -3, -4, -5, but without contents

# Display ambelis

## 16639503 Empty display

incl. 2 x ambelis-Flyer (1 set = 10 pcs.)  
without products



16639503

# Display ambelis small

## 16639603 Empty display

incl. 2 x ambelis-Flyer  
(1 set = 10 pcs.)  
without products



16639603

# Display acunis

## 16150902

**Inhalt:** 1615375,  
1615450, 16156550, 16156425,  
incl. 1 x acunis-Flyer  
(1 set = 10 pcs.)

## 16150907 Empty display

As 16150902 but without contents



16150902



## Display visoPOCKET



**Contents:** 4 x 172156, 3 x 172146, 3 x 172116

### **1721907 Empty display**

As 17219, but without contents

17219

## Universal display for readers



2900907, Example of use

## Display for reading magnifiers



### **2612207 Empty display, without magnifiers**

incl. 4x 26129507, 4x 2612807, 3x 2612607, 3x 2612407



26122

## On desktop video magnifier

	vario DIGITAL 16 FHD	vario DIGITAL 16 FHD Advanced	vario DIGITAL 16 FHD Advanced TB
<b>Display</b>			
Size	15.6 " / 39.6 cm	15.6 " / 39.6 cm	15.6 " / 39.6 cm
Format	16:9 widescreen	16:9 widescreen	16:9 widescreen
Type	TFT-LCD, non-reflective	TFT-LCD, non-reflective	TFT-LCD, non-reflective
Anti-reflection	o (matt)	o (matt)	o (matt)
Brightness dimmable	o	o	o
<b>Features</b>			
Magnification	1.3 – 45.0 x	1.3 – 45.0 x	1.3 – 45.0 x
System resolution	1920 x 1080px	1920 x 1080px	1920 x 1080px
Operating keys	9	9	9
Graphical menu	o	o	o
Display modes			
Dynamic Line Scrolling (DLS)	-	o	o
Reading line/Reading blinds	o	o	o
Lighting can be switched off	o	o	o
Live Cam function	-	o	o
Photo store function	o (defeatable)	o (defeatable)	o (defeatable)
Tilting camera	o	o	o
Autofocus	o (defeatable)	o (defeatable)	o (defeatable)
Writing under the display	o	o	o
Foldable and transportable	o	o	o
<b>Interfaces</b>			
USB port	o	o	o
HDMI input	-	o	o
Power port	o	o	o
<b>Miscellaneous</b>			
Mirror function	-	o	o
Software update	o	o	o
Reset key	o	o	o
Automatic shut-off	o	o	o
Integrated battery	-	-	Lithium-ion
Operating hours battery, approx.	-	-	5 h
Dimensions, approx.	37.8 cm x 46 cm x 13.2 cm	37.8 cm x 46 cm x 13.2 cm	43.5 cm x 50 cm x 16 cm
Weight, approx.	6.3 kg	6.3 kg	9 kg
<b>Delivery contents</b>			
XY-table	-	-	o
Remote control	-	o	o
HDMI cable	-	o	o
USB cable	o	o	o
SD card	8 GB	8 GB	8 GB
Universal charger	o (100-240 V, 50-60 Hz)	o (100-240 V, 50-60 Hz)	o (100-240 V, 50-60 Hz)
Travel mains adapter	o (EU, GB, US, AU)	o (EU, GB, US, AU)	o (EU, GB, US, AU)

o yes, available or possible / - no, not available or not possible

## On desktop video magnifier

	vario DIGITAL 16 FHD Advanced B	vario DIGITAL 16 FHD Advanced T
<b>Display</b>		
Size	15.6 " / 39.6 cm	15.6 " / 39.6 cm
Format	16:9 widescreen	16:9 widescreen
Type	TFT-LCD, non-reflective	TFT-LCD, non-reflective
Anti-reflection	o (matt)	o (matt)
Brightness dimmable	o	o
<b>Features</b>		
Magnification	1.3 – 45.0 x	1.3 – 45.0 x
System resolution	1920 x 1080px	1920 x 1080px
Operating keys	9	9
Graphical menu	o	o
Display modes		
Dynamic Line Scrolling (DLS)	o	o
Reading line/Reading blinds	o	o
Lighting can be switched off	o	o
Live Cam function	o	o
Photo store function	o (defeatable)	o (defeatable)
Tilting camera	o	o
Autofocus	o (defeatable)	o (defeatable)
Writing under the display	o	o
Foldable and transportable	o	o
<b>Interfaces</b>		
USB port	o	o
HDMI input	o	o
Power port	o	o
<b>Miscellaneous</b>		
Mirror function	o	o
Software update	o	o
Reset key	o	o
Automatic shut-off	o	o
Integrated battery	Lithium-ion	-
Operating hours battery, approx.	5 h	-
Dimensions, approx.	37.8 cm x 46 cm x 13.2 cm	43.5 cm x 50 cm x 16 cm
Weight, approx.	6.6 kg	8.7 kg
<b>Delivery contents</b>		
XY-table	-	o
Remote control	o	o
HDMI cable	o	o
USB cable	o	o
SD card	8 GB	8 GB
Universal charger	o (100-240 V, 50-60 Hz)	o (100-240 V, 50-60 Hz)
Travel mains adapter	o (EU, GB, US, AU)	o (EU, GB, US, AU)

o yes, available or possible / - no, not available or not possible



## On desktop video magnifier



	vario DIGITAL 22 FHD	vario DIGITAL 22 FHD Advanced	vario DIGITAL 22 FHD Advanced TB
<b>Display</b>			
Size	21.5 " / 54.6 cm	21.5 " / 54.6 cm	21.5 " / 54.6 cm
Format	16:9 widescreen	16:9 widescreen	16:9 widescreen
Type	TFT-LCD, non-reflective	TFT-LCD, non-reflective	TFT-LCD, non-reflective
Anti-reflection	o (matt)	o (matt)	o (matt)
Brightness dimmable	o	o	o
<b>Features</b>			
Magnification	1.6 – 100.0 x	1.6 – 100.0 x	1.6 – 100.0 x
System resolution	1920 x 1080px	1920 x 1080px	1920 x 1080px
Operating keys	9	9	9
Graphical menu	o	o	o
Display modes			
Dynamic Line Scrolling (DLS)	-	o	o
Reading line/Reading blinds	o	o	o
Lighting can be switched off	o	o	o
Live Cam function	-	o	o
Photo store function	o (defeatable)	o (defeatable)	o (defeatable)
Tilting camera	o	o	o
Autofocus	o (defeatable)	o (defeatable)	o (defeatable)
Writing under the display	o	o	o
Foldable and transportable	o	o	o
<b>Interfaces</b>			
USB port	o	o	o
HDMI input	-	o	o
Power port	o	o	o
<b>Miscellaneous</b>			
Mirror function	-	-	-
Software update	o	o	o
Reset key	o	o	o
Automatic shut-off	o	o	o
Integrated battery	-	-	Lithium-ion
Operating hours battery, approx.	-	-	2.5 h
Dimensions, approx.	52 cm x 50 cm x 15 cm	52 cm x 50 cm x 15 cm	52 cm x 53 cm x 18 cm
Weight, approx.	8.9 kg	8.9 kg	11.9 kg
<b>Delivery contents</b>			
XY-table	-	-	o
Remote control	-	o	o
HDMI cable	-	o	o
USB cable	o	o	o
SD card	8 GB	8 GB	8 GB
Universal charger	o (100-240 V, 50-60 Hz)	o (100-240 V, 50-60 Hz)	o (100-240 V, 50-60 Hz)
Travel mains adapter	o (EU, GB, US, AU)	o (EU, GB, US, AU)	o (EU, GB, US, AU)

o yes, available or possible / - no, not available or not possible

## On desktop video magnifier

vario DIGITAL 22 FHD Advanced B

vario DIGITAL 22 FHD Advanced T

Display		
Size	21.5 " / 54.6 cm	21.5 " / 54.6 cm
Format	16:9 widescreen	16:9 widescreen
Type	TFT-LCD, non-reflective	TFT-LCD, non-reflective
Anti-reflection	o (matt)	o (matt)
Brightness dimmable	o	o
Features		
Magnification	1.6 – 100.0 x	1.6 – 100.0 x
System resolution	1920 x 1080px	1920 x 1080px
Operating keys	9	9
Graphical menu	o	o
Display modes		
Dynamic Line Scrolling (DLS)	o	o
Reading line/Reading blinds	o	o
Lighting can be switched off	o	o
Live Cam function	o	o
Photo store function	o (defeatable)	o (defeatable)
Tilting camera	o	o
Autofocus	o (defeatable)	o (defeatable)
Writing under the display	o	o
Foldable and transportable	o	o
Interfaces		
USB port	o	o
HDMI input	o	o
Power port	o	o
Miscellaneous		
Mirror function	-	-
Software update	o	o
Reset key	o	o
Automatic shut-off	o	o
Integrated battery	Lithium-ion	-
Operating hours battery, approx.	2.5 h	-
Dimensions, approx.	52 cm x 50 cm x 15 cm	52 cm x 53 cm x 18 cm
Weight, approx.	9.2 kg	11.6 kg
Delivery contents		
XY-table	-	o
Remote control	o	o
HDMI cable	o	o
USB cable	o	o
SD card	8 GB	8 GB
Universal charger	o (100-240 V, 50-60 Hz)	o (100-240 V, 50-60 Hz)
Travel mains adapter	o (EU, GB, US, AU)	o (EU, GB, US, AU)

o yes, available or possible / - no, not available or not possible

## On Electronic low vision aids

	visolux DIGITAL XL FHD	visolux DIGITAL HD	smartlux® DIGITAL	optaro®
<b>Display</b>				
Size	11.6 " / 29.5 cm	7 " / 17.9 cm	5 " / 12.7 cm	iPhone
Format	16:9 widescreen	16:9 widescreen	16:9 widescreen	iPhone
Type	Active Matrix LCD TFT with LED backlight	Active Matrix LCD TFT with LED backlight	Active Matrix LCD TFT with LED backlight	iPhone
Anti-reflection	o (matt)	o (matt)	o (matt)	-
Brightness dimmable	o	o	o	o
<b>Features</b>				
Magnification	2.0 – 22.0 x	2.0 – 22.0 x	3.0 – 15.0 x	3.0 – 15.0 x
System resolution	1920 x 1800px	1024 x 600px	800 x 480px	iPhone-dependent
Operating keys	10	8	3	-
Graphical menu	o	o	o	o
Touchscreen	o (defeatable)	-	-	o
Display modes				
Dynamic Line Scrolling (DLS)	o (horizontal + vertical)	o (horizontal)	-	-
Reading line/Reading blinds	o	o	o	o
Lighting can be switched off	o	o	o	o
Live dual-screen function	o	o	o	-
Photo store function	o (defeatable)	o (defeatable)	o (defeatable)	o
Camera centrally mounted	o	o	o	o
Orientation aid on housing	o	o	-	o
Writing under the display	o	-	o	-
<b>Interfaces</b>				
USB port	o (Type C)	o (Type C)	o (Type C)	o (Type C)
HDMI output	o	o	o	-
HDMI input	o	-	-	-
Power port	USB-C	DC 9 V	USB-C	USB-C
<b>Miscellaneous</b>				
Software update	o	o	o	o
Reset key	o	o	o	o
Automatic shut-off	o	o	o	-
Integrated battery	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-ion
Operating hours battery, approx.	3 h	3.5 h	3 h	2 h
Dimensions, approx.	20 cm x 29 cm x 4 cm	13.8 cm x 20.1 cm x 2.9 cm	8.8 cm x 18.5 cm x 4.3 cm	iPhone
Weight, approx.	1,050 g	460 g	240 g	120 g
<b>Delivery contents</b>				
HDMI cable	o	o	-	-
USB cable	o	o	o	o
SD card	o	o	o	-
Travel mains adapter	o (EU, GB, US, AU)	o (EU, GB, US, AU)	o (EU, GB, US, AU)	-

o yes, available or possible / - no, not available or not possible

# On Electronic low vision aids

	visolux DIGITAL XL FHD	visolux DIGITAL HD	smartlux® DIGITAL	optaro®
Optional accessories				
Base (stand)	o	o	-	o
Bumper (protective envelope)	o	o	o	o
Bag (for carrying)	o	o	o	-
Handle	-	-	o	-

o yes, available or possible / - no, not available or not possible

## On Galilean and Keplerian Monoculars

Item	Magnification far / near	Visual field values	Viewing angle far / near	Working distance	Lens Ø	Weight in g	Exit pupil in mm Ø/position at ∞ or 200 mm	Dioptré Compensation
1621	2.2 x / -	250m/1000m	14 °/-	∞	23 mm	16 g	-	-
1621+16213	- / 1.7 x	67 mm	-/12 °	ca. 330 mm	26 mm	22 g	-	-
1621+16214	- / 2.2 x	54 mm	-/12 °	250 mm	26 mm	22 g	-	-
1621+16215	- / 2.8 x	44 mm	-/12 °	200 mm	26 mm	22 g	-	-
1621+16216	- / 3.3 x	35 mm	-/12 °	167 mm	26 mm	22 g	-	-
1621+16218	- / 4.4 x	25 mm	-/12 °	125 mm	26 mm	22 g	-	-
1621+162110	- / 5.5 x	22 mm	-/12 °	100 mm	26 mm	22 g	-	-
1621+162112	- / 6.6 x	18 mm	-/12 °	83 mm	26 mm	22 g	-	-
1621+162116	- / 8.8 x	14 mm	-/12 °	63 mm	26 mm	22 g	-	-
16225	2.5 x / -	230m/1000m	13 °/-	∞	25 mm	11 g	-	-
16225+16213	- / 1.9 x	64 mm	-/11 °	ca. 330 mm	26 mm	17 g	-	-
16225+16214	- / 2.5 x	48 mm	-/11 °	250 mm	26 mm	17 g	-	-
16225+16215	- / 3.2 x	38 mm	-/11 °	20 mm	26 mm	17 g	-	-
16225+16216	- / 3.8 x	32 mm	-/11 °	167 mm	26 mm	17 g	-	-
16225+16218	- / 5 x	24 mm	-/11 °	125 mm	26 mm	17 g	-	-
16225+162110	- / 6.3 x	19 mm	-/11 °	100 mm	26 mm	17 g	-	-
16225+162112	- / 7.5 x	16 mm	-/11 °	83 mm	26 mm	17 g	-	-
16225+162116	- / 10 x	12 mm	-/11 °	63 mm	26 mm	17 g	-	-
1623	2 x / -	3800m/1000m	22 °/-	∞	37 mm	18 g	-	-
1623+16233	- / 1.5 x	107 mm	-/18.5 °	330 mm	-	24 g	-	-
1623+16234	- / 2 x	81 mm	-/18.5 °	250 mm	-	24 g	-	-
1623+16235	- / 2.5 x	65 mm	-/18.5 °	200 mm	-	24.5 g	-	-
1623+16236	- / 3 x	54 mm	-/18.5 °	167 mm	-	25 g	-	-
1623+16238	- / 4 x	41 mm	-/18.5 °	120 mm	-	25.5 g	-	-
1623+162310	- / 5 x	33 mm	-/18.5 °	100 mm	-	26 g	-	-
1623+162312	- / 6 x	27 mm	-/18.5 °	83 mm	-	26.5 g	-	-
1634	3 x / -	160m/1000m	9.5 °/-	700 mm - ∞	23 mm	70 g	-	± 5
16344	4 x / -	130m/1000m	7.5 °/-	780 mm - ∞	23 mm	70 g	-	± 5
16362	- / 2.5 x	75 mm	-/15 °	350 mm	23 mm	70 g	-	± 5
16363	- / 3 x	54 mm	-/12.5 °	200 mm	23 mm	70 g	-	± 5
16364	- / 4 x	35 mm	-/8 °	250 mm	23 mm	70 g	-	± 5
16731	2.8 x / 3.4 x	-	12.5 °/10 °	150 mm	9 mm	28 g	3,2/13 2,8/10,5	± 9
16732	4.2 x / 5.5 x	-	10 °/7.2 °	200 mm	10 mm	29 g	2,4/13,5 2,2/9,5	+ 40/ - 30
16733	4.2 x / 5 x	-	12.5 °/9.2 °	200 mm	12 mm	47 g	2,9/11,5 2,1/9,5	± 12
16734	6 x / 7.6 x	-	10 °/6 °	250 mm	16 mm	57 g	2,7/7 2,0/6	± 18
1674820	8 x / -	125m/1000m	7 °/-	300 mm - ∞	20 mm	75 g	2.5	± 24
1674832	8 x / -	140m/1000m	8 °/-	700 mm - ∞	32 mm	180 g	4	± 18
4293616	6 x / -	140m/1000m	8 °/-	1,5 m - ∞	16 mm	65 g	2.7	-
4293816	8 x / -	122m/1000m	7 °/-	2,0 m - ∞	16 mm	65 g	2	-
4294413	4 x / -	225m/1000m	12.7 °/-	∞	13 mm	46 g	3.3	-
4294418	6 x / -	142m/1000m	8.1 °/-	2,0 m - ∞	18 mm	78 g	3	-

## On system varioPLUS and powerlux

Technical information for fitting Eschenbach Optik system varioPLUS illuminated magnifiers and powerlux.

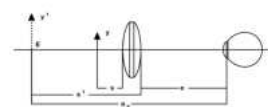
Item	Magnification	Dioptrie [D]=1/f	Lens size	Lens type	aE	s in mm	s1 in mm	e in mm
<b>powerlux</b>								
158614	3.5 x	14 D	Ø 58 mm	aspheric	400 mm	39.7 mm	156 mm	250 mm
1586141	3.5 x	14 D	Ø 58 mm	aspheric	400 mm	39.7 mm	156 mm	250 mm
158620	5.0 x	20 D	Ø 58 mm	aspheric	400 mm	36 mm	260 mm	140 mm
1586201	5.0 x	20 D	Ø 58 mm	aspheric	400 mm	36 mm	260 mm	140 mm
158628	7.0 x	28 D	Ø 58 mm	aspheric	400 mm	24.8 mm	320 mm	100 mm
1586281	7.0 x	28 D	Ø 58 mm	aspheric	400 mm	24.8 mm	320 mm	100 mm
<b>system varioPLUS</b>								
155074	10,0 x	38 D	Ø 35 mm	aspheric	400 mm	19.5 mm	360 mm	40 mm
155174	7,0 x	28 D	Ø 35 mm	aspheric	400 mm	29.3 mm	340 mm	60 mm
155274	6,0 x	24 D	Ø 50 mm	aspheric	400 mm	31.5 mm	300 mm	100 mm
155394	5,0 x	20 D	Ø 58 mm	aspheric	400 mm	36 mm	260 mm	140 mm
155494	4,0 x	16 D	Ø 70 mm	aspheric	400 mm	45 mm	250 mm	150 mm
155774	12,5 x	50 D	Ø 35 mm	aspheric	400 mm	15.2 mm	360 mm	40 mm
155994	3,0 x	12 D	Ø 80 mm	aspheric	400 mm	48.6 mm	150 mm	250 mm
158064	3,0 x*	7.6 D	100 x 50 mm	aspheric	400 mm	59.3 mm	150 mm	250 mm
158174	3,9 x	11.4 D	100 x 50 mm	aplanatic	400 mm	46 mm	200 mm	200 mm
158264	2,8 x*	7 D	100 x 50 mm	aspheric	400 mm	61.5 mm	150 mm	250 mm

\* Trade enlargement

## To the handheld magnifiers

### Optimal conditions of use

The optimum image quality of an aspheric lens is achieved by maintaining the recommended distances between the eye and the lens and the lens and the object viewed.



$a_E$  = Eye-to-image distance  
 $Y$  = Object  
 $Y'$  = Image  
 $e$  = Eye-to-lens distance  
 $s$  = Lens-to-object distance  
 $s^1$  = Lens-to-image distance

Description of technical information on Eschenbach Optik illuminated magnifiers:

**ESCHENBACH**  
**3x 7,6 D 250**  
 Magnification | Dioptré | e

Lens size	Magnification (ISO/CEN)	Dioptré	Object cutting width (s)	Distance Eye - Lens (e)
Ø 35 mm	12,5 x	50.00 D	15.00 mm	40 mm
Ø 35 mm	10,0 x	38.00 D	20.00 mm	40 mm
Ø 35 mm	7,0 x	28.00 D	29.00 mm	60 mm
Ø 50 mm	6,0 x	24.00 D	31.00 mm	100 mm
Ø 58 mm	6,0 x	24.00 D	31.00 mm	100 mm
Ø 58 mm	5,0 x	20.00 D	36.00 mm	140 mm
Ø 35 mm	4,0 x	16.00 D	46.00 mm	80 mm
Ø 60 mm	4,0 x	16.00 D	44.00 mm	150 mm
Ø 70 mm	4,0 x	16.00 D	45.00 mm	150 mm
Ø 60 mm	3,0 x	12.00 D	49.00 mm	250 mm
75 x 50 mm	4,0 x	16.00 D	44.00 mm	180 mm
75 x 50 mm	3,5 x *	10.00 D	50.00 mm	250 mm
90 x 54 mm	3,0 x *	8.00 D	45.00 mm	250 mm
100 x 50 mm	3,0 x *	7.60 D	59.00 mm	250 mm
100 x 75 mm	2,8 x *	7.00 D	61.00 mm	250 mm

\* Trade enlargement

### General Technical Information:

All Vision Technology products from Eschenbach Optik comply with the applicable standards and directives of the European Union (EU) and the Federal Republic of Germany and therefore bear, where stipulated by law, the CE-symbol which is valid throughout Europe. This ensures that your customers receive a quality product which complies with the very latest quality standards.

### Care instructions:

If the lens of your reading magnifier/illuminated magnifier requires cleaning, please pay attention to the following instructions: a soft cotton or linen cloth should be used for cleaning. The surface of the lens must only be gently wiped over. If the magnifier is very dirty then the cloth should be dampened with lukewarm water. **Never use alcohol-based solvents** or organic solvents for cleaning the lenses as these can damage the lenses.





# Eye disease

## Frequently asked questions concerning visual impairment

### What is visual impairment?

A visual impairment exists when, despite applying the best corrective eyewear or contact lenses, vision is still impaired. Magnifying vision aids help the user to see better, despite visual impairment.



**Normal vision**

### What are magnifying low vision aids?

Magnifying vision aids are defined as being all optical and electronic aids which compensate for the loss of vision by providing magnification of the images on the retina. Magnifying vision aids improve the quality of life of those suffering from visual impairment so that they are able to carry out their daily tasks more easily and without assistance.



**Central scotoma due to macular degeneration**

only the peripheral part of the retina can be used for vision, whilst the macula, the area in the retina that is responsible for central vision, is destroyed.

### What are the different levels of visual impairment?

According to this method, a person is considered to have a visual impairment when the visual acuity of the better eye is no more than 0.3 (30 % residual visual acuity). Severe visual impairment exists when the visual acuity is 0.05 (5 % residual visual acuity) or less. According to this categorisation, a person is considered to be blind when their better eye has a visual acuity of no more than 0.02 (2 % residual visual acuity). An eye is considered to be blind if the visual field is reduced to an angle of below 5° (e.g. retinitis pigmentosa).



**Tunnel vision due to retinitis pigmentosa**

As the rods in the retina die off, the field of view progressively narrows causing "tunnel vision". Retinitis pigmentosa can lead to blindness.

### How does this become noticeable in everyday life?

For example, a visual acuity of 0.6 to 0.7 is sufficient for reading a telephone directory. A visual acuity of 0.4 to 0.5 is sufficient for reading a newspaper. A visual acuity of 0.1 is generally sufficient for a person to be able to orientate themselves outdoors in good light conditions.

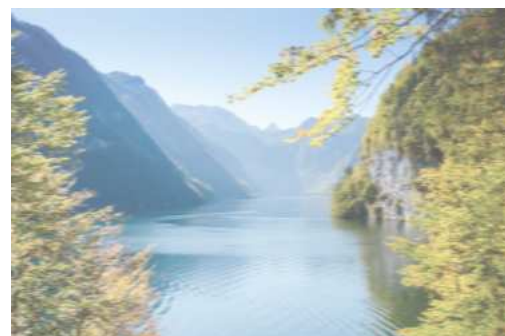


### Reduced visual acuity due to diabetic retinopathy

Small sections of the retina do not function properly. In the advanced stage, these small sections grow together and form larger areas.

### What are the most common causes of visual impairment?

Visual impairment can affect anyone, although it mainly occurs amongst the elderly. The causes are also diverse and can differ from country to country. The most common causes in our part of the world are age-related macular degeneration (AMD), diabetic retinopathy which is becoming more prevalent, and other diseases such as detachment of the retina, cataracts and glaucoma.



### Cataract

Clouding of the lens leads to impaired vision and also to increased light sensitivity.

### What should be considered when advising those with visual impairment?

Even though many people with impaired vision are mainly interested in receiving help with reading, distance vision must also be tested. In the case of visual impairment, by determining the refraction, we can determine the required optical correction which will provide the best possible visual acuity (visual acuity cc). This is always the starting point for fitting magnifying vision aids. Please also note the information relating to this in brochure 162510.



### Glaucoma

Increased pressure in the eye leads to irreversible damage of the optic nerve. In chronic glaucoma, central vision can remain for a long time.

### How is the required magnification determined?

The magnification required for a vision aid is determined by the ratio between the desired visual acuity to the existing visual acuity using the best corrective eyewear.

## Lens geometry



**Aspheric lenses:** Allow a large lens diameter even with a high level of magnification and therefore a wide visual field. All aspheric reading magnifiers from Eschenbach Optik have a focusing distance  $a_E$  (distance of the eye to the virtual image) of 400 mm. This provides a sharp image with reading glasses which have an addition of +2.5 dpt.



**Diffractive aspheric lens:** has an additional diffractive structure for correcting chromatic aberrations.



**Aplanatic lenses:** Provide an image which is free from spherical aberration and has edge-to-edge sharpness.



**Achromatic:** the combination of two lenses of different diffractive strength for correcting chromatic aberration.



**Meniscus/aspheric Lenses:** A combination of meniscus lens and aspheric lens. Allows larger distances than comparable magnifications using other types of lenses and an image which has edge-to-edge sharpness.



**Biconvex lens:** simple lens with two convex (bulging outwards) spherical lens surfaces.



**Planoconvex lens:** A special type of convergent lens with only one convex surface, the second surface is flat.



**Compound Parabolic Concentrator:** a special lens which collects and concentrates light/illumination

## Lens material



**PXM®:** this extremely lightweight and shatter-proof plastic used by Eschenbach Optik has special characteristics which provide maximum optical image quality. In combination with the cera-tec® hard coating, PXM® lenses have a level of scratch resistance which is similar to that of glass.



**Silikat:** offers outstanding optical performance, as well as a high resistance to chemical and mechanical influences. Lenses manufactured from silicate are heavier than plastic lenses.



**CR 39:** is a very lightweight plastic that has been specially developed for spectacle lenses and offers excellent optical performance.



**MR 8:** a very light-weight plastic with a higher refractive index specially developed for spectacle lenses.



**Tri-Acetate:** rigid films not only offer a high level of elasticity and resistance to breakage, but also excellent optical performance and are therefore often used as the base films for polarised filter lenses, e.g. for polarised clip-ons.



**Polycarbonat (PC):** is extremely strong and hard, with a high level of resilience and due to its outstanding optical clarity and lightweight nature is used in particular for protective lenses in the optics field.

## Lens coating



**cera-tec® hard coating:** The extremely resilient coating was specially developed in collaboration with the Fraunhofer Institute for Silicate Research (ICS) for our PXM® lenses.



**DUPLEX coating:** The antistatic coating prevents fogging of the lenses.

## Lighting

	<b>LEDs (Light Emitting Diode):</b> are permanently installed in the product and cannot be replaced. LEDs are extremely economical to use in comparison to conventional filament light bulbs and have a lifespan that is many times longer.
xxx	<b>Colour temperature (K)</b>
CRI / R <sub>a</sub> > xx	<b>General colour rendering index</b>
	<b>Filter caps:</b> Enclosed for changing the colour temperature and light intensity.
xxx	<b>Light flux (lm)</b>
25,000 h	<b>Lifespan of lamp</b>
EEI xxx (A-G)	<b>Energy efficiency index:</b> The illuminants enclosed correspond to the stated energy efficiency class or the lighting fixture is suitable for illuminants of the stated energy efficiency class. The scale classification ranges from A to G.

	<b>Screen size</b>
	<b>Visual field</b>
Step Up	<b>Step-up converter:</b> an electronic control system, which boosts the supply voltage required by the LED and keeps it constant even when the battery voltage decreases. The illumination strength of the LED therefore.
PD xx mm	<b>Pupillary distance</b>
Display	<b>Display</b> available
Opto-form	<b>Optoform tray</b> available.
Display/ Opto-form	<b>Display and Optoform tray</b> available.
x W	<b>Power consumption in watts</b>

## Battery

	<b>Round cell</b>
	<b>Batteries</b> Included with the product.
	<b>Batteries</b> Not included with the product.

## Miscellaneous

	<b>Intelligent automatic shut-off</b> to guard against unnecessary power consumption.
	<b>Mains plug</b>
	<b>Magnification</b>
	<b>Weight</b>
	<b>Case</b> Included with the product.
	<b>Case</b> Not included with the product.



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