

Vision
Technology
Products

2016/2017



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 480 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.

MADE IN GERMANY

From the initial concept right through to the finished product - Eschenbach Optik carries out all of this work at its site in Nuremberg and this is how we are able to guarantee exceptional brand quality "MADE IN GERMANY".



SALES SUPPORT

On pages 66-77, 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 "2015 Individual Lens Range" catalogue.

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HAND-HELD MAGNIFIERS AND READING MAGNIFIERS

OPTIMUM VISION COMFORT –
ALWAYS READY TO HAND.



HAND-HELD MAGNIFIERS & READING MAGNIFIERS



15113
15114



15112
151141
15115
15116



15117
151110
151112



ILLUMINATED POCKET MAGNIFIERS

mobilux® LED

- 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 and light intensity can be selected by attaching one of the three 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 battery life is up to 10 x longer in comparison to a conventional light.
- 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.

mobilux® DIGITAL Touch HD can be found on page 28.

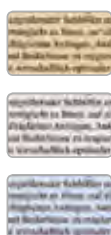
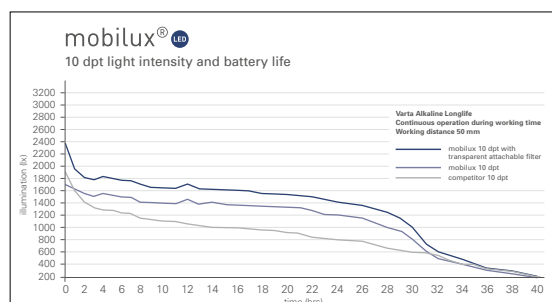
CUSTOMER BENEFITS

- ✚ 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.
- ✚ The batteries are easy to change.
- ✚ A step-up converter controls the voltage for constant bright illumination over the whole lifetime of the battery.
- ✚ Incl. protective case for lens.

Item	Dimensions	Magnification	dpt
15112	Ø 60 mm	3.0 x	12.0
15113	75 x 50 mm	3.5 x *	10.0
15114	75 x 50 mm	4.0 x **	16.0
151141	Ø 60 mm	4.0 x	16.0
15115	Ø 58 mm	5.0 x	20.0
15116	Ø 58 mm	6.0 x	24.0
15117	Ø 35 mm	7.0 x	28.0
151110	Ø 35 mm	10.0 x	38.0
151112	Ø 35 mm	12.5 x	50.0

* Commercial magnification

** Diffractive aspheric lens without cera-tec® coating



Accessories:

See page 6 for mobase Order Nos. 1511001, -2, -3, -4
Lanyard Order No. 15981



The appropriate display is available as an option on page 76.

1511001 + 15113
upright position



1511001 + 15113
flat position



mobase **NEW**

- 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.

Four different mobase designs available for all nine mobilux® LED models:

1511001



1511002



1511003



1511004



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

CUSTOMER BENEFITS

- ✚ Tremble-free image when reading and working with the mobilux® LED.
- ✚ Leaves both hands free for reading and working with the mobilux® LED.
- ✚ Easy to use due to practical means of attachment.
- ✚ Ensures that the correct distance of use can be maintained.
- ✚ Can be attached to a swan neck stand to allow flexible adjustment of the mobilux® LED (only mobase 1511003).

Item	For mobilux® LED	Magnification
1511001	15112, 15113, 15114, 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

Special feature of mobase 1511003:

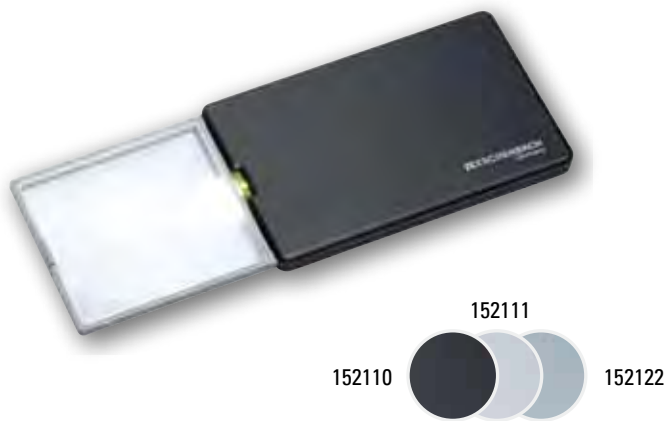
Stand with additional 1/4" thread. This enables it to be screwed onto a standard flexible tripod. The stand enables you to freely adjust the distance of use and it can be used with all mobilux® LED magnifiers.



1511003



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



easyPOCKET

- The tiny lens with powerful magnification.
- Diffractive aspheric lens.
- Illumination: ultra-flat SMD LED.
- Product dimensions: 86 x 54 x 6 mm.
- **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.

Item	Colour	Dimensions	Magnification	dpt
152110	black	50 x 45 mm	3.0 x	8.0
152111	silver	50 x 45 mm	3.0 x	8.0
152122	blue	50 x 45 mm	4.0 x	16.0



The appropriate display is available as an option on page 75.



Can also be used as a stand magnifier.

easyPOCKET XL NEW

- Compact hand magnifier with stand.
- Diffractive aspheric, ultra-flat lens.
- A flip-out stand enables it to be used as a stand magnifier.
- Large homogenously illuminated field of view.
- Illumination: bright, super-flat SMD-LED.
- Magnification 2,5 x.
- Product dimensions: 113.5 x 63 x 8.8 mm.
- **Replacement battery:** Order No. 15473, requires 2 batteries.

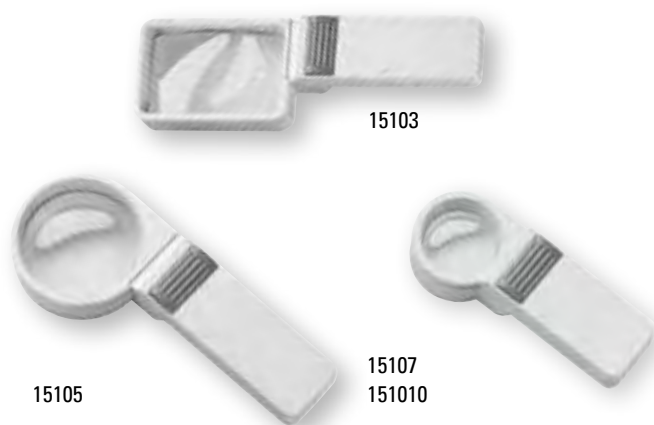
CUSTOMER BENEFITS

- ✚ 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.

Item	Colour	Dimensions	Magnification	dpt
152210	black	78 x 50 mm	2.5 x	6.0
152211	silver	78 x 50 mm	2.5 x	6.0



The appropriate display is available as an option on page 75.



CUSTOMER BENEFITS

- ✚ Great value illuminated pocket magnifier with NF filament bulb.
- ✚ Ideal for reading small print at home and on the move, e.g. when searching for telephone numbers or looking at prices in the supermarket.

Item	Dimensions	Magnification	dpt
15103	75 x 50 mm	3.5 x	10.0
15105	Ø 58 mm	5.0 x	20.0
15107	Ø 35 mm	7.0 x	28.0
151010	Ø 35 mm	10.0 x	38.0

Accessories:

- Microfibre drawstring pouch for safely storing the pocket lens.
- The pouch can also be used for cleaning the lens.



Item	Illuminated magnifier
151002	15103, 15105
15711	15107, 151010

mobilux® ECONOMY

- Batteries are very handy to change – when the battery compartment is opened, the upper and lower sections of the housing remain connected via a hinge and can be easily closed again.
 - Bulb: NF lens bulb 2.5 V, 250 mA, E10.
- Replacement bulb:** Order No. 1544 (see page 64).
- 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.



The appropriate display is available as an option on page 77.

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.

Item	Dimensions	Magnification	dpt
266850	Ø 50 mm	4.5 x	14.0
266860	Ø 60 mm	3.8 x	11.3
266875	Ø 75 mm	2.9 x	7.4
266885	Ø 85 mm	2.4 x	5.6
2668950	90 x 50 mm	2.7 x	7.0



APLANATIC READING MAGNIFIERS

medioplan ERGO

- Edge-to-edge aberration-free image.



265550



265560



265570



2655750



2655150



2655175

ASPHERIC READING MAGNIFIERS

aspheric II

- Particularly suitable for reading and looking at pictures with adequate ambient lighting (suitable lights can be found on page 30).
- Round-the-neck cord supplied.

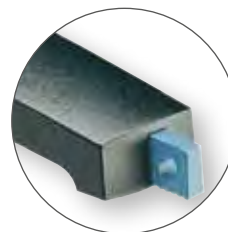
Accessories:

- Black real leather case. The item numbers for the corresponding cases are given in the table.
- Lanyard Order No. 15981

285550
285560
285570



2855750
2855150
2855175

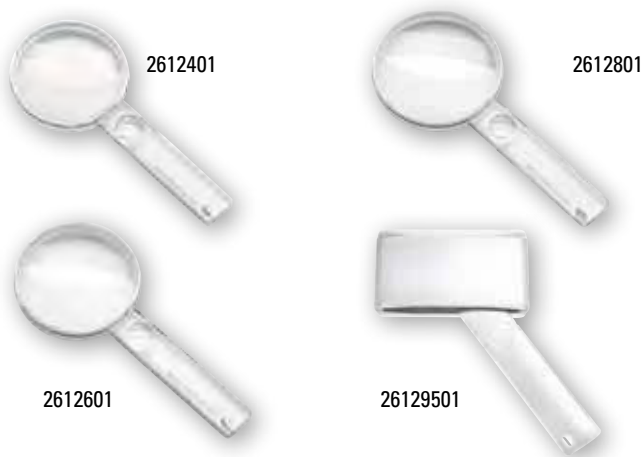


CUSTOMER BENEFITS

- ✚ High magnification with a large visual field.
- ✚ Concealed eyelet in the end of the handle for round-the-neck cord.

Item	Dimensions	Magnification	dpt	Order No. for case
265550	Ø 50 mm	6.0 x	24.0	285550
265560	Ø 58 mm	5.0 x	20.0	285560
265570	Ø 70 mm	4.0 x	16.0	285570
2655750	75 x 50 mm	3.5 x	10.0	2855750
2655150	100 x 50 mm	3.0 x	7.6	2855150
2655175	100 x 75 mm	2.8 x	7.0	2855175





- Plano-convex additional lens with 5 x magnification integrated in the handle.

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.

Item	Dimensions	Magnification	dpt	Packaging unit
2612401	Ø 45 mm	3.25 x	9.0	contains 6
2612601	Ø 60 mm	2.7 x	6.7	contains 6
2612801	Ø 80 mm	2.3 x	5.3	contains 6
26129501	90 x 50 mm	2.0 x	4.0	contains 3



BICONVEX MAGNIFIERS & READING MAGNIFIERS

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



economic

- Plano-convex additional lens with 5 x magnification in handle.

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.

Item	Dimensions	Magnification	dpt
264265	Ø 65 mm	3.0 x	7.7
264280	Ø 80 mm	2.3 x	5.4
2642100	Ø 100 mm	2.0 x	4.1
2642120	Ø 120 mm	1.9 x	3.4
2642840	80 x 40 mm	2.4 x	5.7
2642150	100 x 50 mm	2.0 x	4.0
26421255	120 x 55 mm	1.85 x	3.3





CUSTOMER BENEFITS

- ✚ Transparent plastic frames ensure excellent orientation on the reading material.

Item	Dimensions	Magnification	dpt
261465	Ø 65 mm	3.0 x	7.4
261480	Ø 80 mm	2.25 x	5.3
2614840	80 x 40 mm	2.25 x	5.3
2614150	100 x 50 mm	2.0 x	3.9



visomed

- Transparent lens frame.

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	Dimensions	Magnification	dpt
2677	Ø 100 mm	2.0 x	3.2
2678	100 x 140/Ø 35 mm	2.0 x/4.0 x	2.6/11.2



ROUND-THE-NECK MAGNIFIERS

maxiPLUS/economy

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

Additional product feature of maxiPLUS (2678):

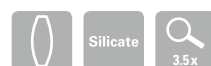
- Large rectangular lens with 2 x magnification and separate additional lens with 4 x magnification for particularly detailed work.



CUSTOMER BENEFITS

- ✚ 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	Colour	Dimensions	Magnification	dpt
21361	gold-plated	Ø 40 mm	3.5 x	10.0
21362	chrome-plated	Ø 40 mm	3.5 x	10.0



PENDANT MAGNIFIERS

- The light metal frame has an elegant finish.
- Available in a gold-plated or chrome-plated finish.
- Chain with a length of approx. 80 cm is included in delivery.



CUSTOMER BENEFITS

- ✚ Very small, slimline and handy.
- ✚ Ideal when you want to magnify small print quickly and comfortably.
- ✚ In protective sliding case, ideal for carrying in the trouser pocket or handbag.

Item	Dimensions	Magnification	dpt
1711	Ø 30 mm	5.0 x	20.0



SLIDE-OUT MAGNIFIERS

designo

- The sliding case provides optimum lens protection.



CUSTOMER BENEFITS

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

Item	Colour	Dimensions	Magnification	dpt
171014	red	Ø 35 mm	4.0 x	16.0
171067	anthracite	Ø 35 mm	7.0 x	28.0
1710910	white	Ø 35 mm	10.0 x	38.0



mobilent

- High magnification folding magnifiers.
- The plastic case encloses the lens and is dust-tight.
- With round-the-neck cord.



classic

- Folding magnifier in timeless, classic design.
- Available in the following lens diameters: 30 mm, 50 mm and 60 mm (see table).
- The table also shows the colours 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.

1740130 1740150 1740160
1740250 1740260
1740450 1740460
1740530 1740550 1740560



1752150 1752160
1752550 1752560
1752850 1752860



Item No.	Item No.			Colour	Material
	Ø 30 mm 24.0 dpt 6.0 x	Ø 50 mm 10.0 dpt 3.5 x	Ø 60 mm 10.0 dpt 3.5 x		
17401-	-30	-50	-60	burgundy red	leather
17402-		-50	-60	pine green	leather
17404-		-50	-60	nutria brown	leather
17405-	-30	-50	-60	black	leather
17521-		-50	-60	crimson	leather
17525-		-50	-60	royal black	leather
17528-		-50	-60	bronzite brown	leather



CUSTOMER BENEFITS

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



173033 173023
173013 173053



economy

- Folding magnifier in a trouser pocket format.
- Supplied in a pack of 3.
- The available colours are outlined in the table.

Item	Dimensions	Magn.	dpt	Colour	Material
173033	Ø 45 mm	3.5 x	10.0	blue	leather
173023	Ø 45 mm	3.5 x	10.0	silver	leather
173013	Ø 45 mm	3.5 x	10.0	vermillion	leather
173053	Ø 45 mm	3.5 x	10.0	black	leather





combiPLUS

- The practical all-rounder for multi-use.
- Supplied with a fine grain black leather case with soft inner lining to protect the lens.

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.

Item	Dimensions	Magnification	dpt	Order No. for spare case
2031	100 x 50 mm	2.6 x	6.3	20211
2032	100 x 75 mm	2.8 x	7.0	20221
2034	75 x 50 mm	3.5 x	10.0	20201
2036	100 x 50 mm	2.6 x	6.3	20211



CUSTOMER BENEFITS

- ✚ Extremely versatile and can be used for many different tasks – simply unfold the ends of the handle.
- ✚ Can be used as a pocket magnifier, a stand magnifier with an inclined view e.g. for manicures, or as a stand magnifier with a straight view for hobby activities (e.g. stamp collecting).
- ✚ Small, handy format.

Item	Dimensions	Magnification	dpt
20501	Ø 60 mm	2.5 x	10.0



HAND/STAND MAGNIFIER

visoflex

- The flexible solution for every occasion.
- A stand magnifier with an inclined view is created by opening out the handle ends; a stand magnifier with a straight view can be created by rotating and then folding the handle ends towards each other.

STAND MAGNIFIERS & READING MAGNIFIERS



STAND MAGNIFIERS
AND
READING MAGNIFIERS

STABLE SOLUTIONS
FOR BRIGHT MAGNIFICATION.



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.

Item	Dimensions	Magnification	Details
2605	200 x 25 mm	1:1.8	• With grip bar • Incl. red guide line
2606	122 x 26 mm	1:2.0	• Incl. red guide line • Higher magnification due to aspheric surface • Scratch-resistant underside • Can also be used with visolux large field magnifiers (Item Number 263611, page 19)
2608	250 x 35 mm	1:1.8	• Incl. red guide line



MAGNIFYING RULERS

- Magnifying rulers only magnify in one direction, the height of the letters is therefore increased but the width remains the same.

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.
- ✚ Bright field magnifiers are also ideal as combination magnifiers (in combination with high addition or systems with reading caps).

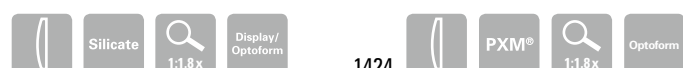
Example:

High addition 6 dpt = 1.5 x
 + Bright field magnifier = 1.8 x
 Total magnification = 2.7 x

With a bright field magnifier the reading distance of 18 cm (6 dpt) remains the same with double the magnification!

Item	Dimensions	Magnification	Details
1420	Ø 65 mm	1:1.8	-
1421	Ø 65 mm	1:1.8	Incl. red guide line (removable)
1424	Ø 45 mm	1:1.8	Extremely light

The combination of a bright-field magnifier and reading glasses doubles the magnification at the same reading distance.



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.

1424



SEGMENT BRIGHT FIELD MAGNIFIERS

makroPLUS Aspheric

- 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.

Item	Dimensions	Magnification
1426	65 x 36 x 46 mm	1:1.8
1436	90 x 35 x 70 mm	1:2.2



makrolux

- NEW: Push-button switch for easy on/off operation.
- NEW: Automatic light-off function after 30 minutes to avoid unnecessary power consumption.
- Includes bright LED light.
- Object and image position virtually on the same level.

CUSTOMER BENEFITS

- ✚ Tremble-free, bright image.
- ✚ Comfortable, tilted view allows relaxed reading position.
- ✚ Item Nos. 143611 and 143621 enable to read full newspaper columns.
- ✚ With excellent LED illumination right up to the edges of the magnifier.



Item	Dimensions	Magn.	SMD-LED	Batteries
143611	90 x 55 x 82 mm	1:2.2	•	3 x AA
143621	90 x 63 x 90 mm	1:3.6	•	3 x AA



The appropriate display is available as an option on page 75.



14388

BRIGHT FIELD MAGNIFIERS

menas ZOOM

- Infinitely adjustable magnification.
- Object and image position virtually on the same level.

CUSTOMER BENEFITS

- ✚ Ultra-flat design with a large visual field.
- ✚ Large, variable distance of use (eye-lens).
- ✚ Suitable for different sizes of print with infinitely adjustable magnification.



Item	Dimensions	Magnification
14388	Ø 65 mm	2.2 x-3.4 x



143830

menas LUX

- Illuminated stand magnifier with fixed magnification.
- 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.
- ✚ A step-up converter controls the voltage for constant bright illumination over the whole lifetime of the battery.



Item	Dimensions	Magnification	SMD-LED	Batteries
143830	Ø 63 mm	3.0 x	•	1 x AA





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.
- ✚ Ideal for people with visual impairment who appreciate award-winning design.
- ✚ Suitable for both left and right handers.



158614
158620
158628

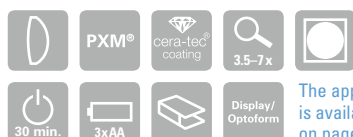


1586141
1586201
1586281



powerlux

- The new generation of illuminated magnifier.
- 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.



The appropriate display is available as an option on page 75.

Item	Dimensions	Colour temperature	Magnification	dpt
158614	Ø 58 mm	8.000 K	3.5 x	14.0
1586141	Ø 58 mm	3.000 K	3.5 x	14.0
158620	Ø 58 mm	8.000 K	5.0 x	20.0
1586201	Ø 58 mm	3.000 K	5.0 x	20.0
158628	Ø 58 mm	8.000 K	7.0 x	28.0
1586281	Ø 58 mm	3.000 K	7.0 x	28.0



visomax

- With attachable additional lens for an even larger visual field.
- Can be used with magnifying ruler 2606 (see page 16).
Total magnification with magnifying bar 5.6 x.

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.

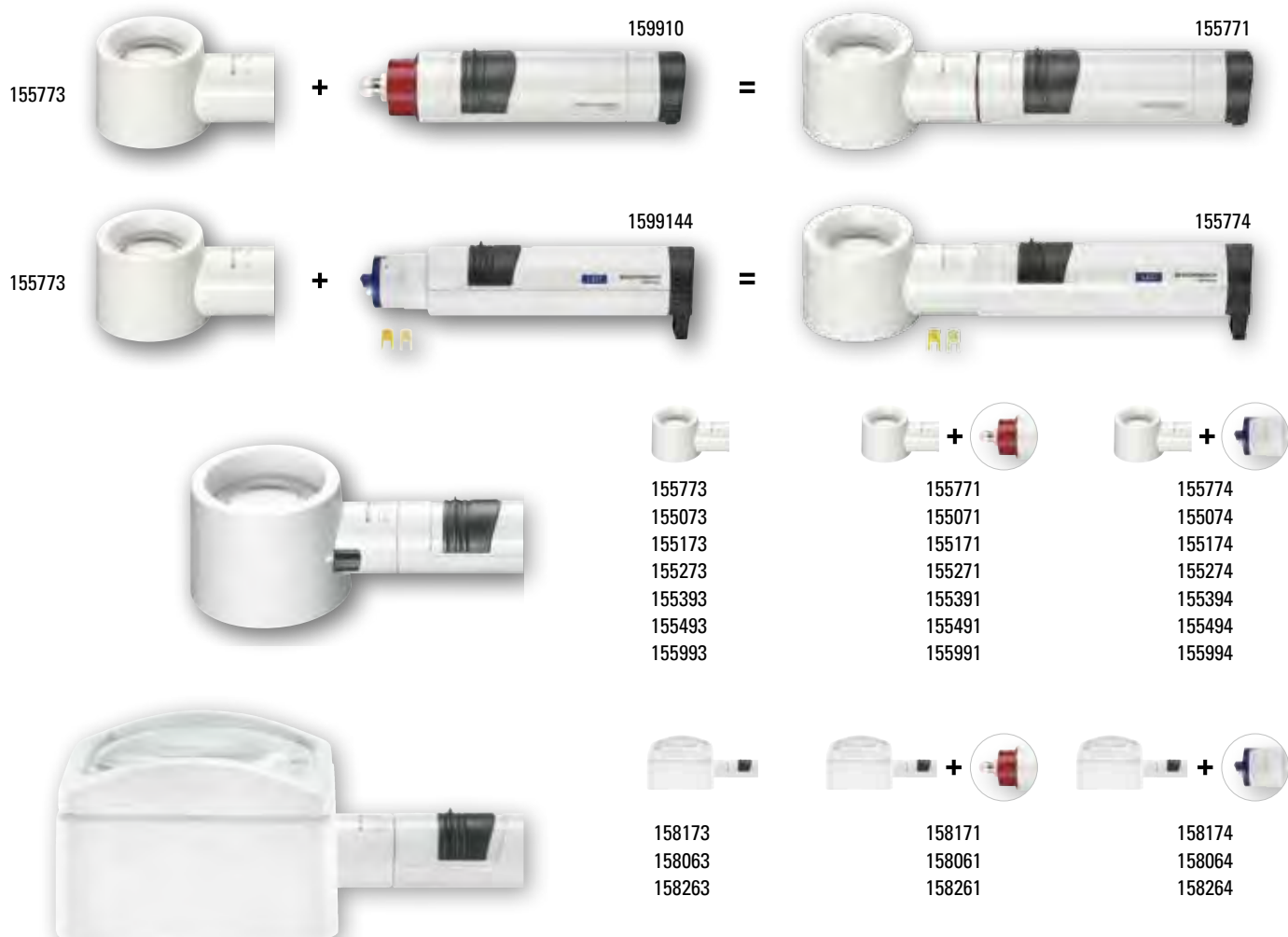


263611



Item	Dimensions	Magnification	dpt	Magn. without additional lens
263611	100 x 75 mm	3.8 x	11.0	7.0 dpt 2.8 x

Example of item number formation



ILLUMINATED STAND MAGNIFIERS

system varioPLUS

- Details relating to magnification/dioptre value/recommended eye-lens distance are stated on all magnifier heads.
- Bright, even illumination of the reading text provided by enclosed magnifier heads made from a light material.
- To achieve a uniform reading distance, Eschenbach Optik recommends using the system varioPLUS in combination with a reading stand (Item No. 1605, see page 64).

For technical information please refer to page 78.

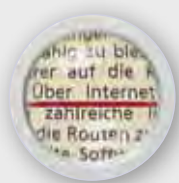
CUSTOMER BENEFITS

- ✚ 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 (15539-, 15549-, 15599-) are fitted with a retractable red reading line for easier line orientation and increased reading speed.
- ✚ The rectangular magnifier heads (15806-, 15826-) are equipped with a supplementary swivel lens for additional magnification.
- ✚ Choice of 3 different colour temperatures via filters.



Reading line

Additional lens





159910



1599144

Battery handle:

- Battery handle with filament bulb.
- **Replacement bulb:** Order No. 1545 (see page 64).



Battery handle, LED:

- LED illumination.
- LEDs have an unlimited service life and do not require changing, extremely economical to use.
- Easy to change, attachable filters provide a choice of three different colour temperatures.
- Step-up converter for even, consistently bright illumination.



Accessories:

- Case.



15601
15602
15603

Item	Dimensions	Magnification	dpt	Additional features	Case
155773* 155771** 155774***	Ø 35 mm	12.5 x	50.0	—	15601
155073* 155071** 155074***	Ø 35 mm	10.0 x	38.0	Incl. attachable measurement scale, graduation 0.5 mm and 1/64 inch	15601
155173* 155171** 155174***	Ø 35 mm	7.0 x	28.0	—	15601
155273* 155271** 155274***	Ø 50 mm	6.0 x	24.0	—	15601
155393* 155391** 155394***	Ø 58 mm	5.0 x	20.0	With retractable red reading line	15602
155493* 155491** 155494***	Ø 70 mm	4.0 x	16.0	With retractable red reading line	15602
155993* 155991** 155994***	Ø 80 mm	3.0 x	12.0	With retractable red reading line	15602
158173* 158171** 158174***	100 x 50 mm	3.9 x	11.4	Aplanatic	15603
158063* 158061** 158064***	100 x 50 mm	3.0 x	7.6	With additional swivel lens, 4 dpt. 45 nm cut-off filter, ergonomic, tiltable magnifier head	15603
158263* 158261** 158264***	100 x 75 mm	2.8 x	7.0	With retractable red reading line, 4 dpt. 45 nm-cut-off filter, ergonomic, tiltable magnifier head	15603

* Magnifier head, without handle ** with battery handle 159910 *** with battery handle 1599144



156512

scribolux

- NEW: Push-button switch for easy on/off operation.
- NEW: Automatic light-off function after 30 minutes to avoid unnecessary power consumption.
- High level of image brightness and large visual field.
- Distance lens – supporting surface: 7.5 cm (apex of lens).
- 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.

CUSTOMER BENEFITS

- ✚ 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.



Item	Dimensions	Magnification	dpt
156512	100 x 75 mm	2.8 x	7.0


2.8 x


30 min. 3x AA Display/Optoform

The appropriate display is available as an option on page 75.



1566

visolux+

- A plus in visual comfort.
- Even, bright and glare-free illumination provided by two SMD LEDs.
- Integrated, preselectable orange filter for second warm colour temperature.
- Hard foam case included.

CUSTOMER BENEFITS

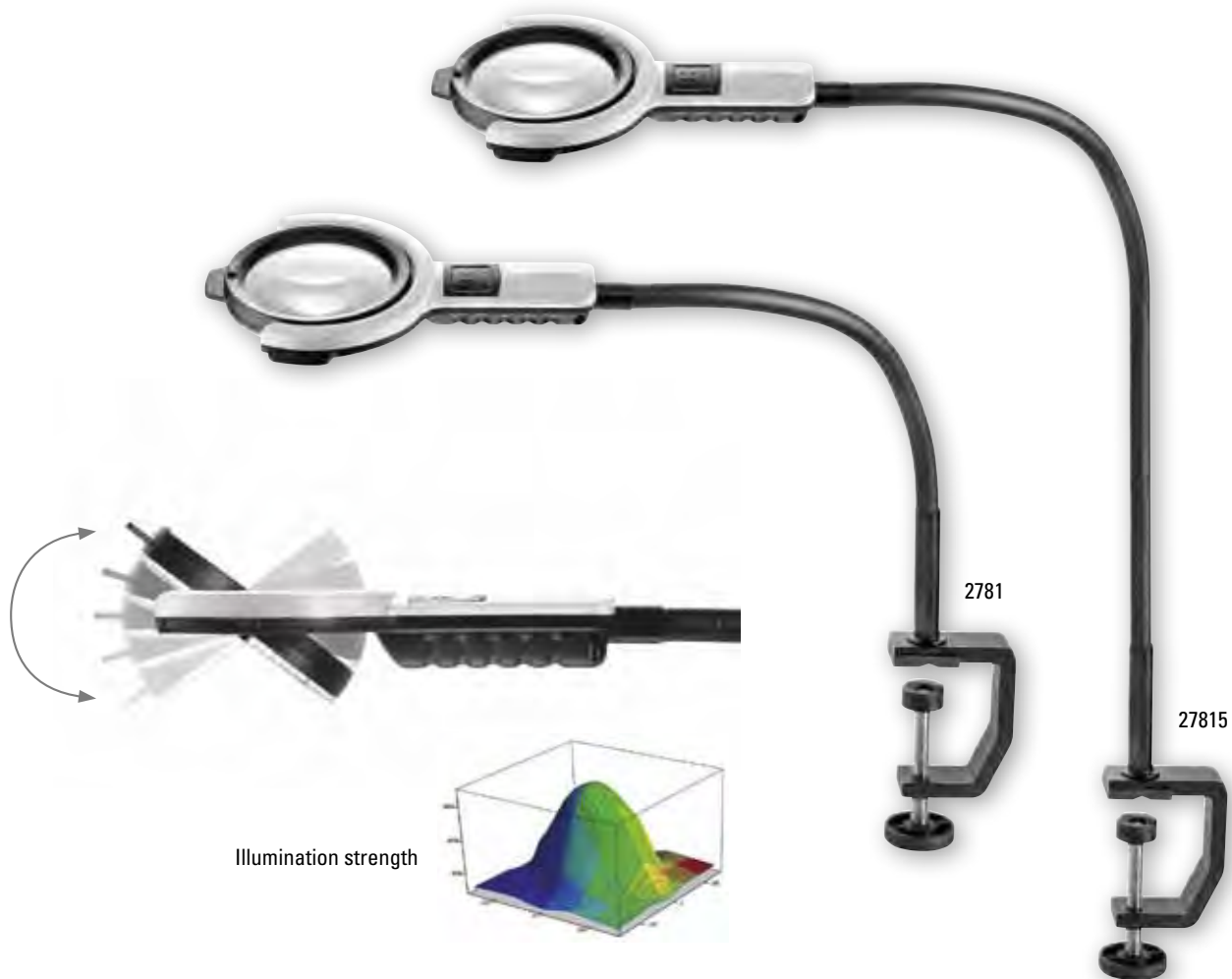
- ✚ Comfortable to use due to ergonomic tilted lens and compact design.
- ✚ Incredibly large field of view with 3 x magnification.
- ✚ 2 different colour temperatures for even, glare-free illumination of the reading material.
- ✚ Light automatically switches off after 30 minutes to prevent unnecessary power consumption.

Item	Dimensions	Magnification	dpt
1566	100 x 75 mm	3.0 x	12.0


3x 2x


30 min. 3x AA Display/Optoform

The appropriate display is available as an option on page 75.



varioLED flex

- Ø 76 mm/6 dpt/2.5 x magnification.
- 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 design with protective cover for improved hygiene.
- Secured via table clamp.
- Supplied with power adapter for EU, GB, US.
- Cable length: 3 m.

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.
- ✚ 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	Stand length	Magnification	dpt
2781	Ø 76 mm	350 mm	2.5 x	6.0
27815	Ø 76 mm	600 mm	2.5 x	6.0



Accessories:

27819 Table base

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





varioMAXI

- Optimum illumination of the viewing area is provided by the PL lamp which is tilted downwards.

- Macropsia effect* due to „infinite optics“.
- Illumination: compact fluorescent tube, 11 W/900 lm/G23/ colour shade 21. **Replacement tube:** Order No. 16032.
- Arm extends to max. 900 mm.
- Swivel range of magnifier head: vertical $\pm 90^\circ$, radial $\pm 90^\circ$.
- Cable length: 3 m.
- Supplied with light, table clamp for table top thicknesses of 18-74 mm and protective dust cover.

CUSTOMER BENEFITS

- ✚ The field of vision can comfortably accommodate an entire DIN A4 page.
- ✚ The magnifier head can be variably positioned by adjusting the sturdy, jointed arm.
- ✚ The magnifier can be used with near or distance glasses.
- ✚ Angled view ensures comfortable reading position.

Item	Dimensions	Magnification	dpt
27711	Ø 220 mm	1,75 x	3,0



vario

- 2 magnification levels due to additional swivel lens.
- The magnifier head can be variably positioned by adjusting the sturdy, jointed arm.
- Optimum illumination of the viewing area is provided by the PL lamp which is tilted downwards.
- Macropsia effect* due to „infinite optics“.

- Illumination: compact fluorescent tube 9 W/600 lm/G23/ Colour shade 21. **Replacement tube:** Order No. 27728.
- Arm extends to max. 900 mm.
- Swivel range of magnifier head: horizontal $\pm 45^\circ$, vertical $\pm 90^\circ$, radial $\pm 90^\circ$.
- Cable length: 3 m.
- Removable protective lens cover.
- Supplied with light and table clamp for table top thicknesses of 18-74 mm.

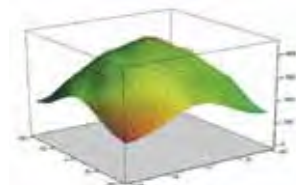
* Macropsia: physiological magnification caused by disaccommodation and suppressed convergence of the eyes.

CUSTOMER BENEFITS

- ✚ Equally suitable for both hobby and professional use.
- ✚ The magnifier can be used with distance or near vision glasses.
- ✚ The lens is protected by a hinged dust cover.
- ✚ Relaxed reading position due to comfortable angled view.

Item	Dimensions	Magnification	dpt
27722	Ø 132 mm	1.9 x/2.8 x	3.55/7.1





Illumination strength

Accessories:**277701 Interchangeable lens**

- Compatible with 27770 and 27771.

Item	Dimensions	Magnification	dpt
277701	Ø 132 mm	2.5 x	6.0

READING MAGNIFIERS

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. 5,000 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.
- ✚ 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	Dimensions	Magnification	dpt
27770	Ø 132 mm	1.9 x	3.55
27771	Ø 132 mm	2.5 x	6.0



27729

27729 Table base

- Cast iron, 260 mm Ø, weight 6 kg.
- Suitable for stand magnifiers 27722, 27770 and 27771.



27718

27718 Screw attachment

- Permanent attachment of the stand magnifier onto a work surface. For use in the office or workshop.
- For assembly, the work surface needs to be drilled (hole Ø 12 mm). Suitable for table top thicknesses of 25 to 30 mm.
- Suitable for stand magnifiers 27711, 27722, 27770 and 27771.



ELECTRONIC VISION AIDS AND LIGHT

HIGH QUALITY TECHNOLOGY
FOR BRILLIANT VISION.



ELECTRONIC VISION AIDS & LIGHT



165011

ELECTRONIC VISION AIDS

smartlux® DIGITAL

- The elegant magnifier for brilliant vision.
- Display: non-reflective 5" LCD.
- LCD brightness can be dimmed in the case of a high level of glare sensitivity.
- 5 viewing modes: True colour as well as contrast-enhanced black/white, white/black, black/yellow, yellow/black.
- Generous depth of focus for variable viewing distances.
- Incremental magnification from 1.7 to 12 x, depending on use.
- Freeze-frame and image capture function: images can be quickly captured. If required, up to 20 of these images can be permanently stored and managed.
- Integrated stand which can be adjusted for 3 different uses:
 - stand fully retracted for hand-held use
 - stand fully extended for placing on reading material
 - stand partially extended for writing or working hands-free under the display
- LEDs can be switched off, for use on gloss surfaces.
- Automatic shut-off if the device has not been used for approx. 3 minutes to ensure low power consumption.
- Dimensions: 174 mm x 90.3 mm x 40.1 mm.
- Weight: 220 g.
- Large RESET button, in a protected position under the folding stand.
- Battery run time: approx. 2.5 hours, charging time: approx. 2 hours.
- Lithium ion rechargeable battery.
- Mains voltage requirement for battery charger: 110 V-240 V, 50-60 Hz.
- Supplied with adapter for EU, GB, US, AUS.
- Comes supplied with a lanyard for wearing the smartlux DIGITAL around the neck and a protective rigid foam case.



CUSTOMER BENEFITS

- ✚ Extra large field of view due to non-reflective 5" LCD and high magnification range.
- ✚ Makes reading simple as camera is centrally positioned under the display.
- ✚ Extra writing position for writing or working under the display.
- ✚ Easy to use due to large operating buttons which are easy to see and tactile.



The appropriate display is available as an option on page 75.



16511

mobilux® DIGITAL Touch HD

- Non-reflective 4.3" display.
- Intuitive operation via touchscreen.
- HD camera for maximum definition and optimum contrast.
- Generous depth of focus for variable viewing distances.
- Stable support surfaces for different uses:
 - placed on the reading material for tremble-free image when reading lengthier texts
 - hand-held for orientation on the reading material and for headings
 - can be tilted for comfortable viewing angle
- 4 to 12 x magnification (hand-held at a distance of 5 cm approx. 1.9 to 4.5 x).
- 5 viewing modes: true colour, contrast-enhanced black/white, white/black, black/yellow and yellow/black.
- Line orientation (reading line) for improved continuity of reading.
- LCD brightness can be dimmed in the case of a high level of glare sensitivity.
- Image capture function for storing images on preinstalled SD card.
- The possibility of transferring images onto the computer via USB.
- Screen-reading function via computer monitor.
- LED light can be switched off for use on shiny surfaces.
- Automatic shut-off if the device has not been used for approx. 3 minutes to ensure low power consumption.
- Weight: 230 g.
- Battery run time: 2.5 to 3 hours, charging time: approx. 2 hours.
- Lithium ion rechargeable battery.
- Mains voltage requirement for battery charger: 110 V-240 V, 50-60 Hz.
- Supplied with adapter for EU, GB, US, AUS.
- Supplied with protective hard foam case, lanyard and cleaning cloth.

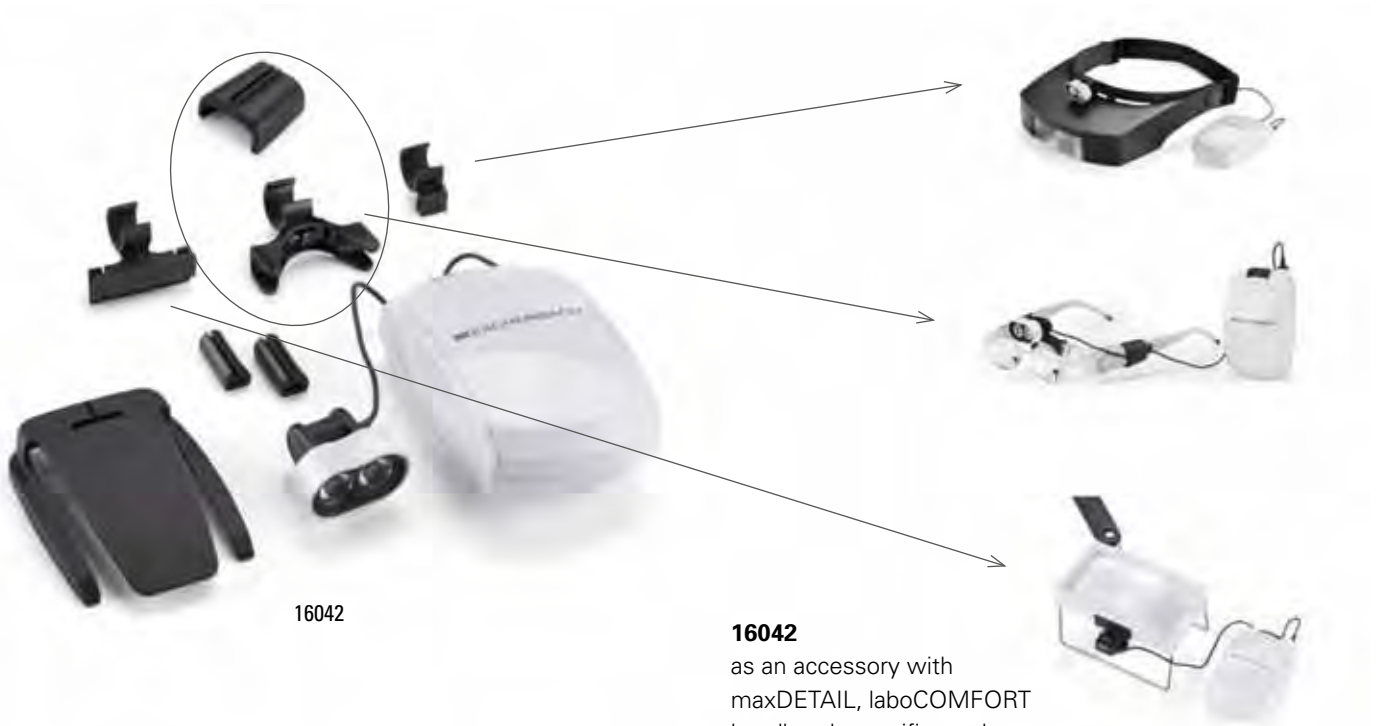
CUSTOMER BENEFITS

- ✚ Relaxed reading due to non-reflective, high contrast display.
- ✚ 2 in 1: handy reading device for when you're on the move plus simple screen-reading device for use at home.
- ✚ Easy orientation and reading as the HD camera is positioned centrally under the display.
- ✚ Simple, intuitive operation via touchscreen with clearly recognisable symbols.
- ✚ You can write under the reading device when it is in the tilted position.

Item	Dimensions	Magnification
16511	4.3" display	4.0 x to 12.0 x



The appropriate display is available as an option on page 75.



16042

16042

as an accessory with
maxDETAIL, laboCOMFORT
headband magnifier and
combi-plus magnifying
reader

headlight LED

- Small, lightweight and compact LED light.
- Light can be 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
Weight: 11g.
- Battery housing:
Dimensions: 90 x 55 x 29 mm (without clip). 1m cable length.
Weight: 60 g (without batteries).

160421

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

**160422**

with clip for spectacle
wearers

**162452**

with maxDETAIL



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.



CPC

PXM®

2

8,000 K

3 x AA

8,000 K

3 x AA



- Highly adjustable arm – can tilt from vertical to almost horizontal.
- Highly adjustable shade – can be tilted horizontally by 180°, vertically and axially by 45° in each case.
- Height min. 32 cm up to max. 52 cm.
- Length of mains cable: 1.6 m.
- Lamp base is disassembled for delivery; screw assembly.
- Colour silver/anthracite.

CUSTOMER BENEFITS

- ✚ The magnifier head has a very large swivel range which makes alignment to the reading material extremely easy.
- ✚ Extremely bright, glare-free illumination of the reading area.

Desk lamp

- Electronic ballast for flicker-free illumination.
- Metal reflector in lamp shade for optimum, even illumination.
- Illumination: approx. 1500 lx (at a distance of 35 cm).



Floor lamp

- As 16031, but in the design of a floor lamp.
- Height min. 117 cm up to max. 151 cm.
- Lamp is dismantled for delivery.
- Colour: silver.

Replacement tubes for lamps 16031 and 16033:

1603127 Replacement tube 24 W/2,700 K/GY10q

1603145 Replacement tube 24 W/4,500 K/GY10q

CUSTOMER BENEFITS

- ✚ Can be perfectly adapted to sitting habits as alignment to the reading material is extremely easy.
- ✚ Extremely bright, glare-free illumination.
- ✚ Easy to use and adjust.





16035

comfort visionLED

- Multi-layer diffuser technology for:
 - glare and hard shadow-free illumination,
 - 100 % UVA/UVB light blocking and
 - up to 90 % blue light damping.
- High colour reproduction index (CRI) at 90.
- LED lifespan: 50,000 hours.
- Energy consumption only 10 Watt.
- Timer function for automatic switch off after 2 hours.
- Night light function with reduced brightness.



Individual illumination

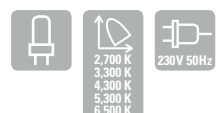
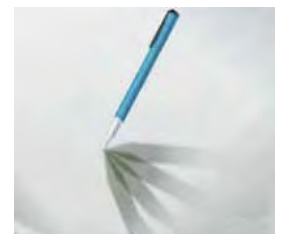
With the aid of 5 colour shades and 5 brightness levels, the illumination can be individually adjusted and modified to any purpose.

- 2,700°K warm, yellowish light, brightness levels: approx. 870 lx to approx. 180 lx
- 3,300°K warm, yellowish-white light, brightness levels: approx. 1,530 lx to approx. 270 lx
- 4,300°K warm white light, brightness levels: approx. 2,900 lx to approx. 560 lx
- 5,300°K white light, brightness levels: approx. 2,350 lx to approx. 430 lx
- 6,500°K cold white light, brightness levels: approx. 2,000 lx to approx. 400 lx



CUSTOMER BENEFITS

- ✚ Even and glare-free illumination with hard shadows.
- ✚ High black-white contrast.
- ✚ Very good colour reproduction.
- ✚ 5 different colour tones (2,700°K, 3,300°K, 4,300°K, 5,300°K, 6,500°K) adjustable in 5 brightness steps for individual lighting requirements.
- ✚ Individually adjustable light head that can be turned axially and horizontally by up to 355 degrees.



FILTERS

LESS GLARE.
MORE CONTRAST.



FILTERS



wellnessPROTECT® wellnessPROTECT® XL

- Improved contrast vision and minimisation of glare by blocking short-wave, energy-rich light components.
- Available in the active photochromic options, in the following tints: 15 %, 65 %, 85 %, polarised 75 % and graded 50-15 % for inside and out.
- The phototropic lenses of wellnessPROTECT® active protect the eyes in all light conditions.
- Available in different frame sizes or as clip-ons, each including case.
- Frames are darkened on the inside and the upper edge of the frame extended to reduce the amount of light entering from the top.
- Transparent side shields protect against glare and allow orientation to the side.
- Side Ventilation slot between temple and middle section prevents fogging of the lenses.
- 100 % UV protection and up to 99 % blue absorption.

CUSTOMER BENEFITS

- ✚ All-round protection for the eyes against the harmful rays of the sun and against unpleasant glare.
- ✚ Improved contrast vision.
- ✚ Attractive design that makes wellnessPROTECT® look like sunglasses.
- ✚ Improved colour recognition in comparison to conventional cut-off filter eyewear.
- ✚ Ideal for spending long periods outdoors, winter sports, for eyes that are sensitive to glare, for retinal disease and following cataract operations.

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



with wellnessPROTECT®



without wellnessPROTECT®

wellnessPROTECT® filter lenses have an additional cut-off filter. In addition to UV light, they also absorb shortwave, energy-rich light components. Contrast vision is therefore improved and unpleasant glare is reduced.

wellnessPROTECT® 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.

Eyewear and clip-ons

- Glazed with wellnessPROTECT® plano lenses 15 %, 65 %, polarizing 75 %, 85 % and graded 50 -15 %.
- The description relates to the absorption of the additional tint overlay on the base filter. It does not relate to the light transmission level of the entire filter.
- material CR39
 - eyewear supplied in hard foam case
 - clip-ons supplied in soft case with belt clip



1663885*



1663975P*



1663115



1663215



166345015



1663565



1663365



1663315
16635015
1663385

* wellnessPROTECT XL® glasses are meant to be put on over normal prescription glasses and because of the lens size are not intended for individual glazing.

	Frame colour	15 %	65 %	85 %	50-15 % (graded)	75 % (polarized)	active (photochromic)
Filter category		1	2	3	2	2	1/2
Luminous transmittance		approx. 50 %	approx. 35 %	approx. 15 %	approx. 30 %	approx. 30 %	approx. 55 %/15 %
Blue light absorption		approx. 98 %	approx. 97 %	approx. 99 %	approx. 98 %	approx. 94 %	approx. 97 % approx. 99 %
Small frame size 54-16-135	havana gloss	1663115	1663165	1663185	166315015	1663175P	-
Large frame size 57-16-135	havana gloss	1663215	1663265	1663285	166325015	1663275P	-
Ladies' frame size 56-15-130	black gloss	1663415	1663465	1663485	166345015	1663475P	166341580
Men's frame size 58-16-130	black gloss	1663515	1663565	1663585	166355015	1663575P	166351580
Clip-ons size 60-11		1663315	1663365	1663385	166335015	-	-
XL small frame size 61-12-145	havana matt	1663815	1663865	1663885	166385015	1663875P	166381580
XL large frame size 65-12-145	havana matt	1663915	1663965	1663985	166395015	1663975P	166391580

Note: wellnessPROTECT® are also available with individual lens strengths.

Lenses

wellnessPROTECT® wP15

- Cut-off filter with 15 % tint overlay.

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.

wellnessPROTECT® wP65

- Cut-off filter with 65 % tint overlay.

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.

wellnessPROTECT® wP75P

- Cut-off filter with polarized 75% 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.

wellnessPROTECT® wP85

- Cut-off filter with 85 % tint overlay.

Recommended use:

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

wellnessPROTECT® wP50-15

- Cut-off filter with graded 50-15 % 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.

wellnessPROTECT® wP 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.



Frames

The frames are also available unglazed, to accommodate individual prescriptions.

16635416 small frame, unglazed

- temples can be shortened

16635716 large frame, unglazed

- temples can be shortened

16635615 Ladies' frame, unglazed

- temples can be shortened
- temples with adjustable pad arms

16635816 Men's frame, unglazed

- temples can be shortened
- temples with adjustable pad arms
- spring hinges



The catalogue containing the individual lens range and the „wellnessPROTECT® Order form“ can be obtained from our in-house sales department.



Subject to changes in color design

Cut-off filter eyewear

- Suitable above all for wearing outdoors.
- Troublesome shortwave components are filtered out in particular and at the same time a high degree of light transmission is also achieved. This means that the cutoff filters are suitable above all for those with visual impairment.
- The darkened upper edge of the glasses fits closely to the face and therefore provides effective protection against troublesome diffused light which can shine on the eyes from above. Additional protection is provided by the broad temples with integrated filters.
- Suitable for eye diseases such as cataracts, retinitis pigmentosa, macular degeneration, albinism, glaucoma, optic atrophy.
- 100 % UVA/UVB protection.
- Optical efficiency: ± 0 dpt.
- Flexible temple ends with excellent fit.
- Two different frame sizes.

It is always necessary to test out cut-off filters individually, preferably under the normal conditions of use, e.g. in the user's own home or outdoors.

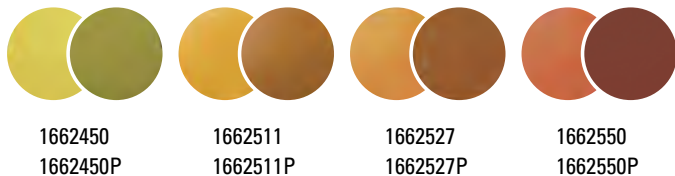
CUSTOMER BENEFITS

- ✚ For reducing glare in the case of increased glare sensitivity.
- ✚ Enhances contrast vision.
- ✚ For wearing over a corrective eyewear frame.

Item	Size	Cut-off/filter category	Area of use
16603801 16603802	60-16 67-13	380 nm/3	Outdoors, reflection reduction, Transmission approx. 15 % Polarising grey filter, no cut-off filter
16604501 16604502	60-16 67-13	450 nm/1	Contrast enhancement, macular degeneration, optic atrophy, albinism, pseudophakia, Transmission approx. 66 %
16605111 16605112	60-16 67-13	511 nm/3	Cataracts, retinitis pigmentosa, macular degeneration, glaucoma, recommended for PUVA treatment, Transmission approx. 10 %
16605271 16605272	60-16 67-13	527 nm/2	Cataracts, diabetic retinopathy, photophobia, glaucoma, Transmission approx. 32 %

The information outlined in the table above relating to the areas of use is a recommendation only and is not of universal validity.




 1662450
1662450P

 1662511
1662511P

 1662527
1662527P

 1662550
1662550P

- The lenses have screw attachment, they are not riveted.
- Supplied with soft case.

CUSTOMER BENEFITS

- ✚ For reducing glare in the case of increased glare sensitivity.
- ✚ For contrast enhancement.

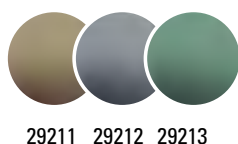
Item	Cut-off	Trans- mission	Filter Cat.	Suitable for wearing whilst driving
1662450	450 nm	85 %	0	yes
1662450P	450 nm, polarised	34 %	2	yes
1662511	511 nm	60 %	1	no
1662511P	511 nm, polarised	15 %	3	no
1662527	527 nm	43 %	2	no
1662527P	527 nm, polarised	12 %	3	no
1662550	550 nm	28 %	2	no
1662550P	550 nm, polarised	11 %	3	no

CR 39

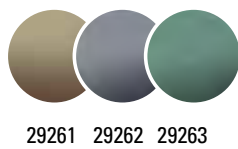

 Display/
Optoform

Cut-off filter clip-ons

- 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.
- Optical efficiency: ± 0 dpt.



29211 29212 29213



29261 29262 29263

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.

Item	Colour	Transmission	Filter Cat.	Clip-On
29211	brown	approx. 15 %	3	Clip-on
29212	grey	approx. 15 %	3	Clip-on
29213	green	approx. 15 %	3	Clip-on
29261	brown	approx. 15 %	3	Flip-Up-System
29262	grey	approx. 15 %	3	Flip-Up-System
29263	green	approx. 15 %	3	Flip-Up-System

Tri-Acetate



Polarised clip-on sunglasses

- UV 400 – 100 % UV protection.
- Polarised.
- High quality design.
- Supplied with soft case.
- Suitable.

READING AIDS



READING AIDS

READING ACCESSORIES
FOR MAXIMUM VISION COMFORT.



29181-
29182-
29183-
29184-
29185-

ready2read

- A practical reading accessory for when you're on the move.
- Equipped with a comfortable spring mechanism to unfold the lens. If not in use the lens is folded back into the protective case.
- In different colours or in an ornamental design.

CUSTOMER BENEFITS

- ✚ Small, handy reading accessory for holding in front of the eyes. Fits in any pocket or larger purse.
- ✚ Includes a stretch band for attaching the ready2read to a key ring, ensuring it's always at hand and ready to use.
- ✚ Can be used with just one hand.

Item	dpt	Item	dpt	Colour
29181-15	1.50	29181-25	2.50	black
29182-15	1.50	29182-25	2.50	black with ornamental design
29183-15	1.50	29183-25	2.50	orange with ornamental design
29184-15	1.50	29184-25	2.50	green with ornamental design
29185-15	1.50	29185-25	2.50	blue with ornamental design

PXM®



29161-
29162-



clip&read

- Mini readers with anti-slip pads to ensure they sit securely at the temples.
- Available in 1.5 dpt and 2.5 dpt.
- Colours: ice grey and dark red.
- With case, incl. mobile connector and adhesive Velcro dots for attaching the case to a camera or bike.

CUSTOMER BENEFITS

- ✚ Ideal for reading mobile phone and camera displays.
- ✚ Ultra-small, ultra-light, handy, great value for money, discreet and always ready at hand.
- ✚ Can be attached to a mobile phone, digital camera or clipped on to a pocket.



Item	dpt	Colour	Item	dpt	Colour
29161-15	1.50	dark red	29161-25	2.50	dark red
29162-15	1.50	ice grey	29162-25	2.50	ice grey

PXM®



The reading aids on pages 39-40 are only for emergency use, as a spare or additional pair of spectacles for near vision. They are only intended for short term use and are not suitable for driving.



Ready readers

- Rimless readers.
- Available in 2 different colours.
- Strengths from 1.0 dpt to 4.0 dpt in 0.5 dpt increments.
- Plastic temples.

CUSTOMER BENEFITS

- ✚ Inc. high quality case in frame colours, with zip.
- ✚ Discreet, contemporary design.
- ✚ Adjustable pad arms with soft pads.

	Item-No.	Frame	Colour	Strengths
Women	29131-	plastic	purple	-10/-15/-20/-25/ -30/-35/-40
Men	29132-	plastic	anthracite	-10/-15/-20/-25/ -30/-35/-40



The appropriate display is available as an option on page 77.



Readers

- Rimless readers.
- Available in a variety of designs.
- Strengths from 1.0 dpt to 3.5 dpt in 0.5 dpt increments.
- Metal frame.

CUSTOMER BENEFITS

- ✚ Discreet design.
- ✚ Exceptionally comfortable to wear due to very low weight.
- ✚ Adjustable sides with soft pads.
- ✚ Incl. case.

	Item	Frame	Colour	Strength
Ladies	291211-	Metal	silver gloss	-10/-15/-20/-25/ -30/-35
Men	291212-	Metal	gun gloss	-10/-15/-20/-25/ -30/-35



The appropriate display is available as an option on page 77.



miniframe

- Rimless readers.
- Discreet, classically elegant design.
- Strengths from 1.0 dpt to 4.0 dpt in 0.5 dpt increments.
- Metal temple, chromium-plated, length: 130 mm.

CUSTOMER BENEFITS

- ✚ Discreet and practical design.
- ✚ Includes handy case.

Item	dpt	Item	dpt	Item	dpt
2910-10	1.00	2910-25	2.50	2910-40	4.00
2910-15	1.50	2910-30	3.00		
2910-20	2.00	2910-35	3.50		



The appropriate display is available as an option on page 77.

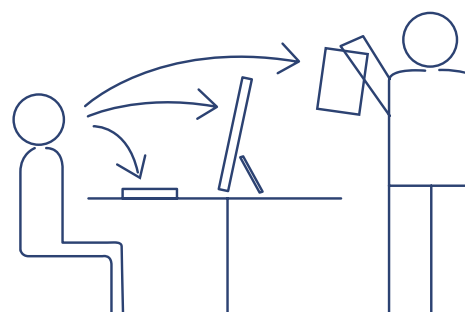


29050- 29051-
29052- 29053-

Item	Colour	dpt	Item	Colour	dpt
29050-10	gun matt	1.00	29052-10	blue matt	1.00
29050-15		1.50	29052-15		1.50
29050-20		2.00	29052-20		2.00
29050-25		2.50	29052-25		2.50
29050-30		3.00	29052-30		3.00
29051-10	gold gloss	1.00	29053-10	red matt	1.00
29051-15		1.50	29053-15		1.50
29051-20		2.00	29053-20		2.00
29051-25		2.50	29053-25		2.50
29051-30		3.00	29053-30		3.00

miniframe2

- Ready-to-wear readers in 5 different optical base values.
- A strength which decreases upwards by 1 dioptre from the lower edge to the upper edge of the lens.
- Sophisticated, classically elegant design.
- Ideal as an entry-level model or as a spare or additional pair of glasses.
- Temple colour: gun, gold, blue, red.



CUSTOMER BENEFITS

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



29080-

Item	Colour	dpt
29080-10	gun matt	1.00
29080-15		1.50
29080-20		2.00
29080-25		2.50
29080-30		3.00

miniframe2 SUN

- Optical characteristics the same as miniframe2, but in addition:
 - 85% grey tint,
 - Filter Category 3,
 - 100% UV protection.



CUSTOMER BENEFITS

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





29060-
29061-
29062-
29063-

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.
- Sophisticated, classically elegant design.
- Temple colour: gun, gold, blue, red.

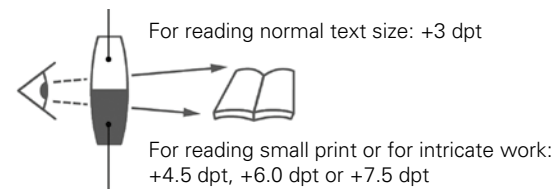
PXM®

Display

The appropriate display is available as an option on page 77.

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.



Item	Colour	dpt	Item	Colour	dpt
29060-34	gun matt	+3,00/+4,50	29062-34	blue matt	+3,00/+4,50
29060-36		+3,00/+6,00	29062-36		+3,00/+6,00
29060-37		+3,00/+7,50	29062-37		+3,00/+7,50
29061-36	gold gloss	+3,00/+6,00	29063-34	red matt	+3,00/+4,50
29061-37		+3,00/+7,50	29063-36		+3,00/+6,00
			29063-37		+3,00/+7,50

noves MONO

- Maximum protection of lenses against mechanical influences and dust is provided by high-precision, diffractive nanostructures on the insides of the lenses.
- Lens thickness only 4.5 mm.
- Weight only 20 g.
- Opposite lens is frosted.
- The spring-hinged frame has adjustable temples, soft pads and easily adjustable pad arms.
- Supplied in a robust hard shell case.

Note: The option of ordering individual components enables you to optimise stock holding and also to carry out binocular correction, e.g. in the case of aphakia.

Item	Description	Magn.	Working distance approx.
1681-0	frosted lens*	flat	–
1681-3	lens*: 3 x, 12 dpt	3.0 x	83 mm
1681-413	frame, magnification 3 x: colour choice: gold matt		
1681-4	lens*: 4 x, 16 dpt	4.0 x	65 mm
1681-414	frame, magnification 4 x: colour choice gold matt or gun gloss		
1681-0414			
1681-5	lens*: 5 x, 20 dpt	5.0 x	50 mm
1681-415	frame, magnification 5 x: colour choice gold matt or gun gloss		
1681-0415			
1681-6	lens*: 6 x, 24 dpt	6.0 x	42 mm
1681-416	frame, magnification 6 x: colour choice gold matt		

* Depending on the requirements, one magnifying lens and one frosted lens, or two magnifying lenses should be ordered in correspondence with the respective level of magnification.



1681-

Frames only



168104122
16814122

- The spring-hinged frame has adjustable temples, soft pads and an easily adjustable pad arms.

16814122: Colour gold matt
168104122: Colour gun gloss

CUSTOMER BENEFITS

- ✚ Monocular reading glasses with magnifying lenses and visually appealing, discreet design. The thickness of the lens is only 4.5 mm and this means that the lens strength is inconspicuous.
- ✚ This ensures a high level of acceptability when wearing in public e.g. for reading the menu in a restaurant.
- ✚ The half-eye design facilitates orientation above the eyewear.



168014 168015 168016
168018 1680110

HIGHER ADDITIONS

prismatic BINO comfort

- Binocular readers with a higher addition and prismatic convergence support.
- Eschenbach Optik prismatic bino is available in five different strengths with convergence-supporting prisms corresponding to the respective strength.
- Not only achieves outstanding results but also looks good – stylish design means high level of acceptability.
- The spring-hinged frame has adjustable temples, soft pads and easily adjustable pad arms.
- Supplied in a robust hard shell case.

Note: The distance values should lie within a range of ± 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 the Eschenbach Optik System Individual).

CUSTOMER BENEFITS

✚ Relaxed binocular vision with high magnification.

Item	Magnification	dpt	Working distance approx.
168014	1.00 x	4.0	250 mm
168015	1.25 x	5.0	200 mm
168016	1.50 x	6.0	165 mm
168018	2.00 x	8.0	125 mm
1680110	2.50 x	10.0	100 mm



16824 16825 16826 16828 168210



168204 168205 168206 168208 1682010

noves BINO

- Magnifying readers with prismatic convergence support for magnification requirements of up to 2.50 x.
- 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.

Item	Colour	Magnification	dpt/ Prism	Working distance approx.
16824	gold matt	1.00 x	4.0/5 Δ	250 mm
168204	gun gloss	1.00 x	4.0/5 Δ	250 mm
16825	gold matt	1.25 x	5.0/6 Δ	200 mm
168205	gun gloss	1.25 x	5.0/6 Δ	200 mm
16826	gold matt	1.50 x	6.0/7 Δ	165 mm
168206	gun gloss	1.50 x	6.0/7 Δ	165 mm
16828	gold matt	2.00 x	8.0/9 Δ	125 mm
168208	gun gloss	2.00 x	8.0/9 Δ	125 mm
168210	gold matt	2.50 x	10.0/11 Δ	100 mm
1682010	gun gloss	2.50 x	10.0/11 Δ	100 mm





Accessories:



16431



164321



1643107

The UniVision® Hyperocular system

- Easy application – the adhesive tape ring enables easy correction of the lens position before the lens is attached permanently to the spectacle lens.
- Cost-efficient – more favourably priced than other hyperocular systems offering comparable magnification.
- Easy to change – if there is a change in the refraction or addition requirements, the lens can be quickly and easily attached to a new lens or replaced by a stronger lens.
- Anti-scratch coating – the front of the lens has antiscratch coating for protection during everyday use.

CUSTOMER BENEFITS

- ✚ Discreet appearance – with a diameter of only 22 mm and the transparent tape ring, the UniVision® lens is barely noticeable.
- ✚ Ultra-light – the lens weighs only 1 gram.
- ✚ Can be used immediately – the lens is fitted onto the spectacle lens on-site, the customer therefore does not need to wait for the delivery of special lenses.

Item	dpt	Item	dpt	Item	dpt
16431-6	6.00	16431-8	8.00	16431-10	10.00
16431-12	12.00	16431-16	16.00	16431-20	20.00
16431-24	24.00	16431-28	28.00	16431-32	32.00
16431-36	36.00				

16431 UniVision® Hyperocular Applicator Kit

Contents:

- 10 UniVision® lenses in the following strengths: +6.0 dpt, +8.0 dpt, +10.0 dpt, +12.0 dpt, +16.0 dpt, +20.0 dpt, +24.0 dpt, +28.0 dpt, +32.0 dpt, +36.0 dpt
- 1 UniVision®-applicator kit
- 6 trial lenses in the following strengths: +12.0 dpt, +16.0 dpt, +20.0 dpt, +24.0 dpt, +28.0 dpt, +32.0 dpt

164321 UniVision® Replacement Applicator Kit

Contents:

- 3 tape rings
- 1 tape applicator
- 1 lens suction cup

164322 UniVision® Replacement Tape Rings

Contents:

- 5 tape rings

1643107 Empty case for UniVision®-System

- Empty case for individually putting together the UniVision® System.
- The trial lenses are only available with the UniVision® Hyperocular Application System 16431



TELESCOPES



TELESCOPES

MAGNIFICATION SYSTEMS
FOR EVERY OCCASION.



1634
16344



16362
16363
16364

teleMED/ridoMED

- Coated lens system.
- 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.

teleMED

Item	Magnification	Working distance	Visual field
1634	3.0x/binocular	70 cm up to ∞	160 m/1,000 m
16344	4.0x/binocular	78 cm up to ∞	130 m/1,000 m

ridoMED

With convergence angles to suit the respective working distances.

Item	Magnification	Working distance	Visual field
16362	2.5x/binocular	approx. 350 mm	75/350 mm
16363	3.0x/binocular	approx. 200 mm	54/200 mm
16364	4.0x/binocular	approx. 250 mm	35/250 mm

 Silicate

 2.5–4x

 PD 54–74 mm

 70 g

 Optoform



162431

maxEVENT

- Special vision aid for using at public events such as the theatre, musicals, concerts, the cinema and also in stadiums.
- 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: -2.25 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

 18°=1,000m

 PD 60–68 mm

 49 g





162411

maxTV®

- Extremely comfortable to wear.
- Easy adjustment of dioptre compensation: ± 3.0 dpt, right/left can be separately adjusted, cylinder correction not possible.
- Temples can be adjusted without having to be warmed.
- PD range: 60-68 mm.
- Main distance of use: 3 m.
- Supplied in hard foam case.



PXM®



2.1x



18"=1/3m

PD

60-68 mm



49g

Display/
Optoform

16244



Example of use

maxTV® Clip

- Galilean clip-on system with flip-up lenses.
- For clipping onto the existing prescription eyewear.
- PD range: 60-68 mm.
- Main distance of use: 3 m.
- Supplied in 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

PD

60-68 mm



23g

Display/
Optoform



162451

maxDETAIL

- For demanding detailed work.
- Easy adjustment of dioptre compensation: ± 3 dpt, right/left can be separately adjusted, cylinder correction not possible.
- Easily adjustable temples (can be adjusted without warming).
- Large PD range 60-68 mm.
- Working distance approx. 40 cm.
- Supplied in hard foam case.

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.



16246

maxDETAIL Clip

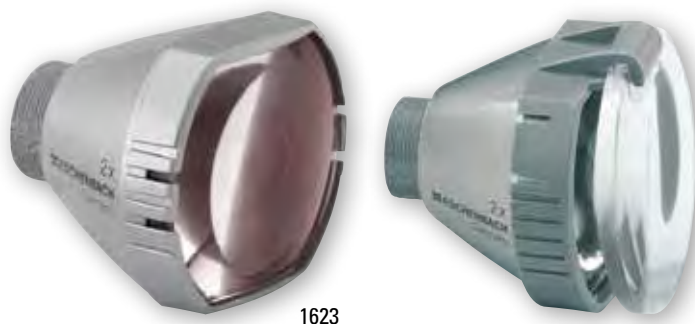
- For demanding detailed work.
- Galilean clip-on system with flip-up lenses.
- Working distance of approx. 35 cm.
- PD range: 60-68 mm.
- Adjustable lens height.
- 5 height settings possible.
- Supplied in hard foam case.



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.





1623

GALILEAN SYSTEMS

- The Galilean systems Galilei 2.0 GF, Galilei 2.2 x and Galilei 2.5 x are mounted on the system carrier frame for use.
- The Galilei systems are installed using the 1625 adapter system (see page 52).

Galilei 2,0 GF

- 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.
- Field of view 22°.

CUSTOMER BENEFITS

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

Item	Magnification	Working distance	Visual field*
1623	2.0x	∞	380 m/1,000 m
1623 + 16233	1.5x	approx. 330 mm	130 mm
1623 + 16234	2.0x	250 mm	100 mm
1623 + 16235	2.5x	200 mm	80 mm
1623 + 16236	3.0x	167 mm	66 mm
1623 + 16238	4.0x	120 mm	48 mm
1623 + 162310	5.0x	100 mm	40 mm
1623 + 162312	6.0x	83 mm	34 mm

* The figures stated for visual field are average values. They will vary depending on the distance from the eye to the eyepiece. Further information can be found on page 78.

Example of use



Accessories: 162301

16230 16233 16234
16235 16236 16238
162310 162312



1630

Item	Reading cap
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.



1630 Fitting case

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

162510 Fitting instructions





1621

Galilei 2,2 x

- 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, silicate lenses, MgF₂ coated.
- Field of view 14°.

CUSTOMER BENEFITS

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

Item	Magnification	Visual field*	Working distance
1621	2,2x	250 m/1,000 m	∞
16225	2,5x	230 m/1,000 m	∞



16225

Galilei 2,5 x

- Easy to adjust.
- 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.
- Field of view 13°.

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.



Reading caps:



- Reading caps for Galilei 2.2 x and Galilei 2.5 x

162101 Reading cap ring for fitting lens with an individual power (x 2)

16210 Frosted lens

16213 Reading cap 3.0 dpt

16215 Reading cap 5.0 dpt

16218 Reading cap 8.0 dpt

162112 Reading cap 12.0 dpt

16214 Reading cap 4.0 dpt

16216 Reading cap 6.0 dpt

162110 Reading cap 10.0 dpt

162116 Reading cap 16.0 dpt

- The reading caps +3 dpt/+4 dpt/+5 dpt are also suitable for binocular use (close-up).

Item	Magnification		Visual field*		Working distance
1621/16225	2.2 x	2.5 x	250 m/ 1,000 m	230 m/ 1,000 m	∞
+ 16213	1.65 x	1.9 x	67 mm	64 mm	330 mm
+ 16214	2.2 x	2.5 x	54 mm	48 mm	250 mm
+ 16215	2.75 x	3.15 x	44 mm	38 mm	200 mm
+ 16216	3.3 x	3.75 x	35 mm	32 mm	167 mm
+ 16218	4.4 x	5.0 x	25 mm	24 mm	125 mm
+ 162110	5.5 x	6.25 x	22 mm	19 mm	100 mm
+ 162112	6.6 x	7.5 x	18 mm	16 mm	83 mm
+ 162116	8.8 x	10.0 x	14 mm	12 mm	63 mm



1632

The 1632 and 16321 fitting cases are available for these systems. These can be found on page 52.

* The figures stated for visual field are average values. They will vary depending on the distance from the eye to the eyepiece. Further information can be found on page 78.



Accessories:

167302 Reading cap adapter

- With this intermediate adapter ring, the monoculars 16731 and 16732 can be used with the reading caps 16210-162116 (see page 50).

167303 Reading cap adapter

- With this intermediate adapter ring, the monoculars 16733 and 16734 can be used with the reading caps 16210-162116 (see page 50).



16711 viso-quick finger ring

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

System carrier frame:

- Special frame for holding optical systems.
- Very light and sturdy titanium frame.
- Soft, adjustable, silicon saddle bridge.
- Spring-hinged, rubberised „golf club“ temple ends.
- Demo lenses with grid for simple centering of the lenses.
- Temples 150 mm, can be shortened.

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



Focusable Keplerian Systems

- Can be used as a hand-held monocular in combination with finger ring (Order 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 16210-162116 (see page 50).
- Roof prism system with multicoating.
- Supplied with: carrying cord, case.
- Compatible with adapter system 1625 (see page 52).

CUSTOMER BENEFITS

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

Item	Magnification Distance/Near	Visual field Distance/Near	Visual angle Distance/Near
16731 2.8 x 9	2.8x/3.4x	220 m/1,000 m 26 mm/150 mm	12.5°/10°
16732 4.2 x 10	4.2x/5.5x	175 m/1,000 m 25 mm/200 mm	10°/7.2°
16733 4.2 x 12	4.2x/5.0x	220 m/1,000 m 32 mm/200 mm	12.5°/9.2°
16734 6.0 x 16	6.0x/7.6x	175 m/1,000 m 26 mm/250 mm	10°/6°

Further technical information can be found on page 78.



1631

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.



1691

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



1632



Fitting Case

16321 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
162510	Fitting instructions		

1632 Galilean and Keplerian fitting case

Contents as per 16321, but also including:

1619	Trial frame adapters (two)
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.



1625



Mounting Kit

- The 1625 Mounting Kit enables all Eschenbach Optik 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:

Quantity Item

- | | |
|---|--|
| 1 | Fitting brochure |
| 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 |

Order No. for reordering:

Order No. Quantity/Description

- | | | |
|----------------|---|---|
| 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 replacement adhesive rings |
| 1625101 | 1 | Fitting brochure |
| 16261 | 2 | Carrier lenses, adapters for infinite distance use, centering inserts |
| 16262 | 2 | Carrier lenses, convergence adapters for 200 mm, centering inserts |
| 16263 | 2 | Carrier lenses, convergence adapters for 250 mm, centering inserts |
| 16264 | 2 | Carrier lenses, convergence adapters for 330 mm, centering inserts |
| 16265 | 6 | Carrier lenses |
| 16266 | 6 | Adapters for infinite distance use |

1627 Small mounting components, consisting of:

- | | | |
|--------------|--|-----------------------|
| 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 |



- A handheld monocular, stand microscope and stand magnifier.
- Keplerian roof prism system, multi-coated.
- High level of light transmission and image brightness.
- 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.

HANDHELD MONOCULARS

varioPLUS



Item	Magnification	Visual field	Visual angle	Working dist.
1674820	8 x 20	125 m/1,000 m	7°	300 mm to ∞
1674832	8 x 32	140 m/1,000 m	8°	700 mm to ∞

club® M



- Ideal for both leisure activities and visual impairment.
- One-handed, easy to operate slide focus.
- Keplerian roof prism system, multi-coated.
- High level of light transmission and image brightness.
- Rubberised housing.
- Supplied with black leather case.

Item	Magnification	Visual field	Visual angle	Working dist.
4293616	6 x 16	140 x 108 m/ 1,000 m	8° x 6.2°	1,000 mm to ∞
4293816	8 x 16	122 x 94 m/ 1,000 m	7° x 5.4°	1,000 mm to ∞

MONOCULARS

start® Monofold 8x21



- Ideal for both leisure activities and visual impairment.
- Extremely small and compact when folded together.
- High level of light transmission and image brightness.
- Keplerian system with porro prisms, multi-coated.
- Dimensions, when folded: 7 x 4.5 x 2 cm.
- Foldable, shockproof plastic housing.
- Supplied with belt case.

Item	Magnification	Visual field	Visual angle	Working dist.
42928212	8 x 21	113 m/1,000 m	6.5°	1,500 mm to ∞



- For leisure activities and visual impairment.
- 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.

microlux



Item	Magn.	Near point	Focus	Dimensions
4294413	4 x	4 m	fixed focus	48 x 25 x 38 mm
4294618	6 x	2 m	slide focus	79 x 27 x 45 mm

Further technical information on the individual monoculars can be found on page 78.

HEADBAND & CLIP-ON MAGNIFIERS



HEADBAND AND CLIP-ON MAGNIFIERS

PRACTICAL VISION AIDS
FOR HOBBIES AND WORK.



- Lenses easily interchangeable.
- Lens size: binocular 74.5 x 28 mm.
- Lens clamp made from glass fibre reinforced plastic.

laboMED

- Not suitable for spectacle wearers.
- Discret metal frame, black matt finish.
- Supplied with protective box.
- Can also be used with monocular lens components.

Item	Lens	Magnification	Working dist. approx.
164450	binocular	1.7 x/2.5 dpt	400 mm
164451	binocular	2.0 x/2.5 dpt	250 mm*
164452	binocular	2.5 x/5.0 dpt	180 mm
164453	binocular	3.0 x/7.75 dpt	130 mm



CUSTOMER BENEFITS

- ✚ laboMED and laboCOMFORT leave 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.

* Shorter working distance due to integrated convergence supporting prisms.



164817
164820
164825
164830

laboCOMFORT

- 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.

Item	Lens	Magnification	Working dist. approx.
164817	binocular	1.7 x/2.5 dpt	400 mm
164820	binocular	2.0 x/2.5 dpt	250 mm*
164825	binocular	2.5 x/5.0 dpt	180 mm
164830	binocular	3.0 x/7.75 dpt	130 mm



Accessories: 1647 laboCLIP and laboMED case

Contents: 1 each of
164450, 164620, 16451,
16452, 16453, 16454, 16457.
(Contents and specification
subject to change.)



164617
164620
164625
164630



laboCLIP

- Used with distance spectacles to achieve optimum image quality.
- Lenses easily interchangeable.
- Lens sizes: monocular Ø 40 mm, binocular 74.5 x 28 mm.
- Lightweight.
- Lens clamp made from glass fibre reinforced plastic.
- Supplied with protective box.

Item	Lens	Magnification	Working dist. approx.
164617	binocular	1.7 x/2.5 dpt	400 mm
164620	binocular	2.0 x/2.5 dpt	250 mm*
164625	binocular	2.5 x/5.0 dpt	180 mm
164630	binocular	3.0 x/7.75 dpt	130 mm
164640	monocular	4.0 x/16 dpt	55 mm
164670	monocular	7.0 x/28 dpt	32 mm

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 dpt	55 mm
16457	monocular	7.0 x/28 dpt	32 mm

* Shorter working distance due to integrated convergence supporting prisms.

164640
164670



Example of use

Accessories:

16451 16452 16454
16453 16455 16457



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.



164617 164620
164625 164630
164640 164670



TECHNICAL MAGNIFIERS

PRECISION OPTICS.
COMPACT DESIGN.



TECHNICAL MAGNIFIERS


 1103
1104


110910

Slide-out & folding magnifiers

Slide-out 1103/1104

- Slide-out magnifier with durable, plastic case.
- Small, compact and handy.
- 1103 has two lenses, each individual lens has two magnification levels.

Folding magnifiers 110910

- Folding magnifier in durable, plastic case.
- Small, compact and handy.

Item	Magnification	Lens size
1103	3.0 x and 4.5 x or 6.0 x and 9.0 x	–
1104	3.0 x or 6.0 x	–
110910	10.0 x	Ø 23 mm



1163

Handheld magnifier in light metal frame

- Black plastic handle.
- Black, anodised metal frame.

Item	Magnification	Lens size
1163	5.0 x 20 dpt	Ø 50 mm



2626



2628



1153

Stand magnifiers

- High magnification, e.g. for retouching work in photography.
- 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
2626	Aspheric	Ø 50 mm	23.0 dpt/6.0 x
2628	Aspheric	Ø 35 mm	38.0 dpt/10.0 x
1153	Aplanatic	Ø 25 mm	28.7 dpt/8.0 x



Watchmaker's magnifiers

- With air hole to prevent condensation.
- Made from flame-retardant plastic, colour: anthracite.



11243 11245
11247 1124110

Item	Lens	Size	Magnification
11243	Plano-convex	Ø 25 mm	3.0 x/12.0 dpt
11245	Plano-convex	Ø 25 mm	5.0 x/20.0 dpt
11247	Plano-convex	Ø 25 mm	7.0 x/27.7 dpt
1124110	Aspheric	Ø 25 mm	10.0 x/40.0 dpt



Stone magnifier

- With air hole to prevent condensation.
- Made from flame-retardant plastic, colour: anthracite.



1130

Item	Lens	Size	Magnification
1130	dual lens	Ø 13 mm	15 x



PRECISION FOLDING MAGNIFIERS

Plastic precision folding magnifiers

- Glass fibre reinforced, non-breakable polyamide body.
- The body is dustproof when closed.
- Glass lenses, size: 23 mm Ø.



11869

118210

Item	Lens	Magnification	Feature
11869	Achromatic, coated	3 x + 6 x = 9 x	Distortion-free image
118210	Aplanatic	10 x	Distortion-free image



Metal precision folding magnifiers

- Matt chromium-plated brass body with eyelet.
- Black painted metal lens frame.



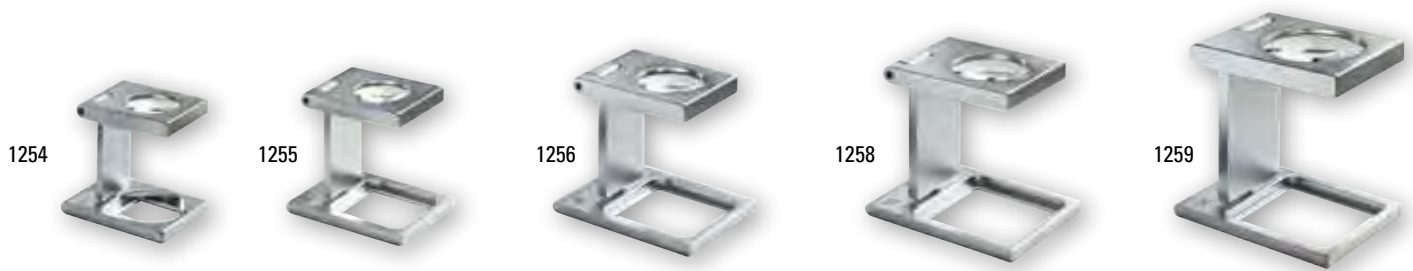
118410
118420

1187

11766 11768 117610 117612

Item	Size	Lens	Magn.	Feature
118410	Ø 15 mm	Achromatic	10 x	Distortion-free image
118420	Ø 17 mm	Achromatic	20 x	
11766	Ø 21 mm	Aplanatic	6 x	Distortion-free image
11768	Ø 21 mm	Aplanatic	8 x	
117610	Ø 21 mm	Aplanatic	10 x	
117612	Ø 15 mm	Aplanatic	12 x	
1187	Ø 27 mm	Biconvex	4 x + 6 x = 10 x	





LINEN TESTERS

Developed to meet the requirements of technical applications.

Metal precision linen testers

- Precision linen tester.
- Brass frame, chrome-plated, silk matt finish.

Item	Size	Magnification	Cut-out	Height
1254	Ø 11 mm	48 dpt/12 x	10 x 10 mm	23 mm
1255	Ø 12 mm	40 dpt/10 x	15 x 15 mm	27 mm
1256	Ø 15 mm	32 dpt/8 x	20 x 20 mm	33 mm
1258	Ø 20 mm	24 dpt/6 x	25 x 25 mm	42 mm
1259	Ø 28 mm	20 dpt/5 x	30 x 30 mm	53 mm



LINEN TESTERS

- Measuring scale: graduation 1/10 mm.

Item	Size	Magnification	Cut-out	Height
126692	Ø 14 mm	32 dpt/8 x	18 x 18 mm	33 mm



1270
1271
1272

Plastic precision linen testers

- Linen tester with lateral scale.
- Scale with mm graduation.
- Black plastic housing.

Item	Size	Magnification	Cut-out	Height
1271	Ø 12 mm	40 dpt/10 x	15 x 15 mm	28 mm
1272	Ø 16 mm	30 dpt/8 x	20 x 20 mm	35 mm
1270	Ø 28 mm	19 dpt/5 x	30 x 30 mm	53 mm



12002
12003
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
1256/126692/1272	12003
1258/1259/1270	12005





- For technical professions, the printing industry, dermatology.
- With measuring scale.

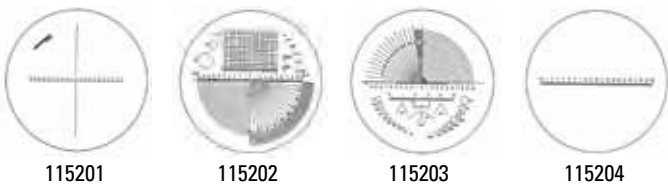
Item	Specification	Magnification	dpt
155071	Battery handle	10 x	38.0
155074	Battery handle, LED	10 x	38.0



Measuring magnifier



Accessories:



Precision scale magnifiers

- For technical professions, the printing industry, dermatology.
- 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.

Precision measuring scales for a variety of applications.

Order No. 115201, 115202, 115203, 115204

Silicate



11514 LED lighting unit

- For precision scale magnifiers 11547 and 115410.
- Handle holds 2 batteries.



Item	Magnification	dpt
11547	7 x	28.0
115410	10 x	40.0



- The wide focusing range enables raised or depressed features (e.g. holes) to be examined in detail.
- The wide adjustment range is even able to compensate for a high level of visual impairment.
- A high level of brightness is achieved as a result of the large lens aperture. Additional illumination is not usually required in daylight conditions.
- Precise focusing with adjustable wheel.
- The light can be used when required.
- Magnification 30 x, glass lenses.

Tube microscopes

- Micromagnifier with illumination.
- Suitable for inspecting a wide variety of surfaces such as metals, textiles, minerals, varnishes, etc.



ACCESSORIES AND RESOURCE MATERIALS

COMPACT DESIGN.
ENORMOUS BENEFITS.





1605

- 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 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.

1605 +
16051

Accessory for 1605:

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: maple wood.



1600

Duo-clip table clamp

- Table clamp for attaching a reading magnifier or additional lighting (e.g. super-lite 2090 light set) to a table top or directly onto the reading material.
- The flexible, black gooseneck metal arm allows reading magnifiers to be placed in almost any position.
- Length of metal arm: 330 mm.
- The plastic clamps on each end have rubber inserts.
- Suitable for tables top with a thickness of up to approx. 4.5 cm.



1542



1544



1545

1542 Special halogen bulb

- For illuminated magnifier 1585 with illuminated.
- Reading line, 6 V, 2.4 Watt, supplied in a 2-pack.

1544 NF lens bulb

- For illuminated magnifiers 15103, 15105, 15107, 151010.
- 2.5 V, 250 mA, E10 supplied in a 2-pack.

1545 Spherical filament bulb

- For battery handle 159910.
- 2.5 V, 250 mA, supplied in a 5-pack.

Replacement bulbs

RESOURCE MATERIALS

Easy Vision Reading test



1060203

- Assists in the selection of the correct product use.
- Provides supporting sales arguments for Easy Vision products.
- For a test distance of 40 cm.
- With a reading test for visual acuity of 0.1 to 1.0 on the reverse side.
- With test texts from everyday life on the inside pages: small print on the move and at home.
- Material: white, washable plastic, DIN A4.



1625101

1625101 Fitting brochure for magnifying vision aids

This brochure gives a clear explanation of how to adjust the Eschenbach Optik Galilean and Keplerian system.

The brochure can be obtained from our sales department.



OPTIMUM PRESENTATION.
VISUALLY IMPRESSIVE.

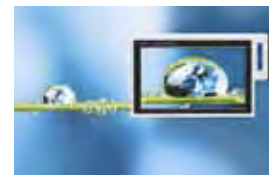
SALES
SUPPORT



1895



Exchangeable motif
189502



Exchangeable motif
189503

PRESENTATION SYSTEM

Optoform IV

- High quality presentation and storage system for magnifiers, vision aids and other products from Eschenbach Optik.
- The impressive specification makes this system the ideal solution for creating an eye-catching display of product highlights to promote sales and provides a practical merchandising tool for successful sales discussions with customers.
- Elegant glass shelves immediately draw attention to the product highlights on open display.
- In the illuminated display case an entire product tray can be clearly presented behind the protective glass panel.
- NEW: A glazed section above the door now means that the top shelf can be easily viewed from the front.
- The sophisticated design ensures high quality product presentation.
- Enclosed main display unit with door ensures dust-free and safe storage of the trays.
- Flexible tray system presents the product range in a clear and professional manner, ideal for demonstrating products to your customers.
- Illuminated panel with interchangeable advertising image draws the attention of the customer to the product highlights.
- Display unit is equipped with casters - rear casters can be locked to guarantee stability.

Material:

Wood effect, white, high gloss

Lighting:

LED strip incl. cable route, transformer with 230 V/50 Hz Europlug CEE 7/16)

Dimensions:

Total:
W 556 x D 450 x H 1820 mm
Main display unit:
W 556 x D 450 x H 860 mm
Upper display unit:
W 556 x D 98 x H 960 mm

Weight without product: approx. 60 kg

Number of trays supplied: 5

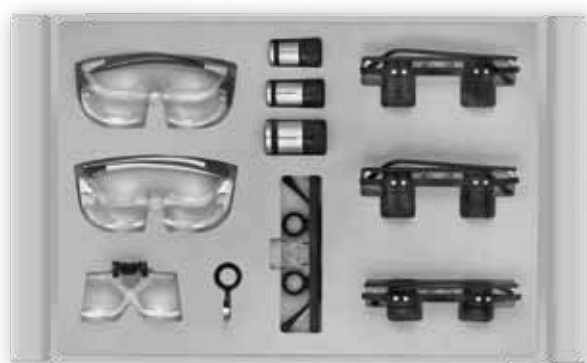
Accessories:

189501 Individual tray



Example of use only:
supplied without insert
and without products.





16951

Tray of telescopes

Contents: 1 each of: 162411, 162451, 16246, 1631, 1634, 16344, 16363, 16711, 16731, 16732, 16733

Also available: 169513 Tray insert



18232

Tray of illuminated magnifiers

Contents: 1 each of: 14361, 14362, 15113, 15114, 152110, 152122, 158620, 16246, 156511

Also available: 182323 Tray insert



18376

mobilux®-LED tray

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

Also available: 183763 Tray insert



166392

wellnessPROTECT® tray

Contents: 1 each of: 1663115, 1663165, 1663185, 166315015, 1663215, 1663265, 1663285, 166325015, 1663315, 1663365, 1663385, 166335015

Also available: 1663923 Tray insert



18522

visolux+, bright field magnifiers

Contents: 1 each of: 1420, 1421, 14361, 14362, 1566, 2031, 2032, 2034

Also available: 185223 Tray insert



18582

Tray of magnifiers

Contents: 1 each of: 14361, 15113, 15115, 152110, 152111, 156511, 162411, 162451, 2031, 2034

Also available: 185823 Tray insert



18802

Electronic Half-size display tray

Contents: 1 each of: 16501, 16511
Also available: 188023 Tray insert



18810

mobilux® LED Half-size display tray

Contents: 1 each of: 15112, 151141, 15115, 15116
Also available: 188103 Tray insert



18811

mobilux® LED Half-size display tray

Contents: 1 each of: 15115, 15116, 15117, 151110, 151112
Also available: 188113 Tray insert



18812

mobilux® LED Half-size display tray

Contents: 2 each of: 15113, 15114
Also available: 188123 Tray insert



18813

mobilux® LED easyPOCKET Half-size display tray

Contents: 1 each of: 15113, 15114, 152110, 152111, 152122
Also available: 188133 Tray insert



18814

mobilux® LED/ mobase Half-size display tray

Contents: 1 each of: 15113, 15115, 15117, 151110, 1511001, 1511002, 1511003, 1511004
Also available: 188143 Tray insert



18820

Stand Magnifiers

Half-size display tray

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

Also available: 188203 Tray insert



18823

system varioPLUS

Half-size display tray

Contents: 1 each of 1599144, 155773, 155073, 155173, 155273, 155373, 155493, 155993

Also available: 188233 Tray insert



18824

system varioPLUS

Half-size display tray

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

Also available: 188243 Tray insert



18825

Bright Field Mag- nifier/Magnifying Rulers

Half-size display tray

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

Also available: 188253 Tray insert



18826

powerlux

Half-size display tray

Contents: 1 each of: 158614, 158620, 1586281

Also available: 188263 Tray insert



18830

laboMED/ laboclip

Half-size display tray

Contents: 1 each of: 16246, 164450, 164620, 16451, 16452, 16453, 16454, 16457

Also available: 188303 Tray insert



18831

maxTV®/ maxDETAIL

Half-size display tray

Contents: 1 each of: 162411, 16244, 162451, 16246

Also available: 188313 Tray insert



18833

easyPOCKET/ easyPOCKET XL

Half-size display tray

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

Also available: 188333 Tray insert



18834

Folding magnifiers

Half-size display tray

Contents: 1 each of: 1103, 1104, 152110, 152111, 152122, 171014, 171067, 1710910, 1711, 20501

Also available: 188343 Tray insert



18835

Folding Magni- fiers Classic

Half-size display tray

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

Also available: 188353 Tray insert



18836

Folding Magni- fiers Classic

Half-size display tray

Contents: 1 each of: 1740130, 1740150, 1740160, 1740250, 1740260, 1740450, 1740460, 1740530, 1740550, 1740560

Also available: 188363 Tray insert



18840

wellness PROTECT®- clip-ons

Half-size display tray

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

Also available: 188403 Tray insert



188401

System INDIVIDUAL- clip-ons Half-size display tray

Contents: 1 each of: 1662450, 1662511, 1662527, 1662550
Also available: 188403 Tray insert



188402

System INDIVIDUAL- clip-ons Half-size display tray

Contents: 1 each of: 1662450P, 1662511P, 1662527P, 1662550P
Also available: 188403 Tray insert



18841

wellness PROTECT® XL Half-size display tray

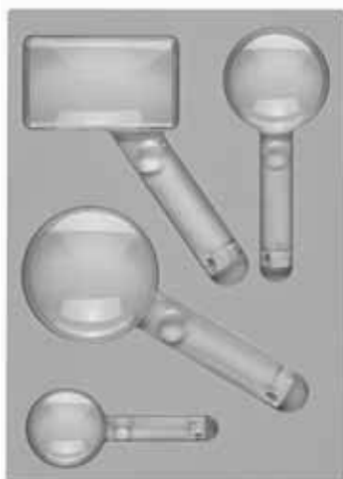
Contents: 1 each of: 1663865, 1663885, 1663915, 1663975P
Also available: 188413 Tray insert



18842

wellness PROTECT® Half-size display tray

Contents: 1 each of: 1663165, 1663275P, 166345015, 166351580
Also available: 188423 Tray insert



28800

Biconvex Magnifiers Half-size display tray

Contents: 1 each of: 2612401, 2612601, 2612801, 26129501
Also available: 288003 Tray insert



28801

visomed Half-size display tray

Contents: 1 each of: 261465, 261480, 2614150, 2614840
Also available: 288013 Tray insert



28805

economic, angular

Half-size display tray

Contents: 1 each of: 26421255, 2642150, 2642840

Also available: 288053 Tray insert



28806

economic, round

Half-size display tray

Contents: 1 each of: 264265, 264280, 2642100

Also available: 288063 Tray insert



28810

aspheric II

Half-size display tray

Contents: 1 each of: 265550, 265570, 2655150, 2655750

Also available: 288103 Tray insert



28815

mediplan ergo

Half-size display tray

Contents: 1 each of: 266850, 266875, 266885, 2668950

Also available: 288153 Tray insert



28820

combiPLUS

Half-size display tray

Contents: 1 each of: 2031, 2032, 2 each of 2034

Also available: 288203 Tray insert

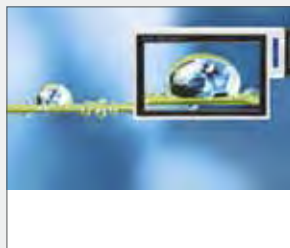
Shop window display

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.

Further information can be obtained from your representative.



Exchangeable motif
189602



Exchangeable motif
189603



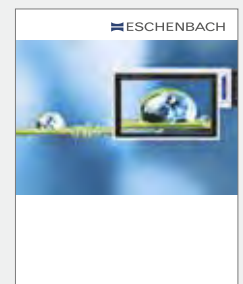
1896
Example of use



87280



Exchangeable motif
87294



Exchangeable motif
87299

Standard display

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



143629



152129

Display makrolux

Contents: 1 each of: 143611, 143621

14362907 Empty display

As 143629, but without contents.

Display easyPOCKET

Contents: 2 each of: 152110, 152111, 152122

15212907 Empty display

As 152129, but without contents



1565119



15669



1586209

Display scribolux

Contents: 2 x 156512

156511907 Empty display

As 1565119, but without contents

Display visolux+

Contents: 2 x 1566

1566907 Empty display

As 15669, but without contents

Display powerlux

Contents: 1 each of: 158620, 158628

158620907 Empty display

As 1586209, but without contents



165019



165119

Display smartlux® DIGITAL

Contents: 1 x 165011

16501907 Empty display

As 165019, but without contents

Display mobilux® DIGITAL Touch HD

Contents: 1 x 16511

16511907 Empty display

As 165119, but without contents

Display wellnessPROTECT®

Contents: 1 each of: 166315015, 1663165, 1663215, 1663285
With redesigned support surfaces

16639407 Empty display
As 166394, but without contents



166394



Product display unit mobilux® LED

Contents:
3 x 15113
1 x 15114
1 x 151141
2 x 15115
2 x 15117
1 x mobilux®-flyer (set of 5 pcs.)

Item No.	Display incl. Flyer	Flyer
1511910-1	Languages: German	87238
1511910-2	Languages: Italian	8723807
1511910-3	Languages: English/Spanish	8723803
1511910-4	Languages: French	8723805
1511910-5	Languages: Spanish	8723806

15119107 Empty display
As 1511910-1, -2, -3, -4, -5, but without contents

Display mobilux® ECONOMY

Contents: 2 each of: 15103, 15105, 15107

15101907 Empty display

As 151019, but without contents



151019

Display for reading magnifiers

Contents: 4 x 90 x 50 mm, 3 x Ø 80 mm,
3 x Ø 60 mm, 2 x Ø 45 mm

2612107 Empty display

As 26121, but without contents



26121

Universal display for readers

2900907

Example of use



On Galilean and Keplerian Monoculars

Item No.	Magnification	Visual field values	Visual angle	Working distance in mm	Lens Ø in mm	Weight in g	Exit pupil in mm Ø/position at ∞ or 200 mm	Dioptric Compensation Dioptre
1621	2.20 x Distance	*250 m / 1,000 m	14.0°	∞	23.0	16.0		
1621 + 16213	1.65 x Near	*67 mm	12.0°	approx. 330	25.5	22.0		
1621 + 16214	2.20 x Near	*54 mm	12.0°	250	25.5	22.0		
1621 + 16215	2.75 x Near	*44 mm	12.0°	200	25.5	22.0		
1621 + 16216	3.60 x Near	*35 mm	12.0°	167	25.5	22.0		
1621 + 16218	4.40 x Near	*25 mm	12.0°	125	25.5	22.0		
1621 + 162110	5.50 x Near	*22 mm	12.0°	100	25.5	22.0		
1621 + 162112	6.60 x Near	*18 mm	12.0°	83	25.5	22.0		
1621 + 162116	8.80 x Near	*14 mm	12.0°	63	25.5	22.0		
16225	2.50 x Distance	*230 m / 1,000 m	13.0°	∞	25.0	11.0		
16225 + 16213	1.90 x Near	*64 mm	11.0°	approx. 330	25.5	17.0		
16225 + 16214	2.50 x Near	*48 mm	11.0°	250	25.5	17.0		
16225 + 16215	3.15 x Near	*38 mm	11.0°	200	25.5	17.0		
16225 + 16216	3.75 x Near	*32 mm	11.0°	167	25.5	17.0		
16225 + 16218	5.00 x Near	*24 mm	11.0°	125	25.5	17.0		
16225 + 162110	6.25 x Near	*19 mm	11.0°	100	25.5	17.0		
16225 + 162112	7.50 x Near	*16 mm	11.0°	83	25.5	17.0		
16225 + 162116	10.0 x Near	*12 mm	11.0°	63	25.5	17.0		
1623	2.00 x Distance	*380 m / 1,000 m	22.0°	X	37.0	18.0		
1623 + 16233	1.50 x Near	*110 mm	18.5°	330	42.0	24.0		
1623 + 16234	2.00 x Near	*84 mm	18.5°	250	42.0	24.0		
1623 + 16235	2.50 x Near	*72 mm	18.5°	200	42.0	24.5		
1623 + 16236	3.00 x Near	*57 mm	18.5°	167	42.0	25.0		
1623 + 16238	4.00 x Near	*45 mm	18.5°	125	42.0	25.5		
1623 + 162310	5.00 x Near	*32 mm	18.5°	100	42.0	26.0		
1623 + 162312	6.00 x Near	*30 mm	18.5°	83	42.0	26.5		
1634	3.00 x Distance	*160 m / 1,000 m	9.5°	700 to ∞	23.0	70.0		approx. ± 5
16344	4.00 x Distance	*130 m / 1,000 m	7.5°	780 to ∞	23.0	70.0		approx. ± 5
16362	2.50 x Near	*75 m / 350 m	15.0°	approx. 350	23.0	70.0		approx. ± 5
16363	3.00 x Near	*54 m / 200 m	12.5°	approx. 200	23.0	70.0		approx. ± 5
16364	4.00 x Near	*35 m / 250 m	8.0°	approx. 250	23.0	70.0		approx. ± 5
16731	2.80 x Distance 3.40 x Near	220 m / 1,000 m 26 mm / 150 mm	12.5° 10.0°	150 to ∞	9.0	28.0	3.2/13 2.8/10.5	± 9
16732	4.20 x Distance 5.50 x Near	175 m / 1,000 m 25 mm / 200 mm	10.0° 7.2°	200 to ∞	10.0	29.0	2.4/13.5 2.2/9.5	± 40/-30
16733	4.20 x Distance 5.00 x Near	220 m / 1,000 m 32 mm / 200 mm	12.5° 9.2°	200 to ∞	12.0	47.0	2.9/11.5 2.1/9.5	± 12
16734	6.00 x Distance 7.60 x Near	162 m / 1,000 m 26 mm / 250 mm	9.3° 6.0°	250 to ∞	16.0	57.0	2.7/7 2.0/6	± 18
1674820	8.00 x Distance	122 m / 1,000 m	7°	300 to ∞	20.0	75.0	2.5	± 24
1674832	8.00 x Distance	136 m / 1,000 m	7.8°	700 to ∞	32.0	180.0	4.0	± 18
42928212	8.00 x	113 m / 1,000 m	6.5°	1,500 to ∞	21.0	90.0	2.63	
4293616	6.00 x	140 x 180 m / 1,000 m	8° x 6.2°	1,000 to ∞	16.0	65.0	2.7	
4293816	8.00 x	122 x 94 m / 1,000 m	7° x 5.4°	1,000 to ∞	16.0	65.0	2.0	
4294413	4.00 x Distance	225 m / 1,000 m	12.7°	∞	13.0	46.0	3.25	
4294618	6.00 x Distance	142 m / 1,000 m	8.1°	200 to ∞	18.0	78.0	3.1	

* In the case of Galilean systems, the effective visual field is dependent on the distance of the eye/eyepiece. The values stated for visual field are therefore average values. Technical specification is subject to change without prior notice. (The visual angle is measured at HSA 10 mm).

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On illuminated magnifiers, system varioPLUS and powerlux.

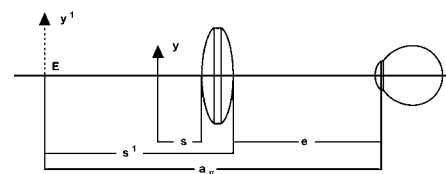
Technical information for fitting Eschenbach Optik system varioPLUS illuminated magnifiers and powerlux.

Product No.	Magnific.	Dioptre [D]=1/f	Lens size Ø/mm	Lens type	a_E	s mm	s' mm	e mm
system varioPLUS								
15577-	12.5 x	50.0	Ø 35	as	400	15.2	360	40
15507-	10.0 x	38.0	Ø 35	as	400	19.5	360	40
15517-	7.0 x	28.0	Ø 35	as	400	29.3	340	60
15527-	6.0 x	24.0	Ø 50	as	400	31.5	300	100
15539-	5.0 x	20.0	Ø 58	as	400	36.0	260	140
15549-	4.0 x	16.0	Ø 70	as	400	45.0	250	150
15599-	3.0 x	12.0	Ø 80	as	400	48.6	150	250
15806-	3.0 x	7.6	100/50	as	400	59.3	150	250
15817-	3.9 x	11.4	100/50	as	400	46.0	200	200
15826-	2.8 x	7.0	100/75	as	400	61.5	150	250
powerlux								
1586-14, -141	3.5 x	14.0	Ø 58	as	400	39.7	156	250
1586-20, -201	5.0 x	20.0	Ø 58	as	400	36.0	260	140
1586-28, -281	7.0 x	28.0	Ø 58	as	400	24.8	320	100

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.

Lens size	Magnification (ISO/CEN)	Dpt.	mm	mm
35	12.5 x	50.0	15	40
35	10.0 x	38.0	20	40
35	7.0 x	28.0	29	60
50	6.0 x	24.0	31	100
58	6.0 x	24.0	31	100
58	5.0 x	20.0	36	140
58	4.0 x	16.0	44	150
70	4.0 x	16.0	45	150
60	4.0 x	16.0	44	150
60	3.0 x	12.0	49	250
75/50	4.0 x	16.0	44	180
75/50	3.5 x	10.0	50	250
100/50	3.9 x	11.4	46	200
100/50	3.0 x	7.4	59	250
100/75	2.8 x	7.0	61	250



a_E = Eye-to-image distance
 y = Object
 y_1 = 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 | Dioptre | e

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.



Eschenbach Optik products have been awarded EN ISO 9001 and DIN ISO 14001:2004 certification (environmental management) and this is your guarantee of a high standard of quality.

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.

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.

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 cc 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 blind when their better eye has a visual acuity cc 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).

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.

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.

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.

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.



Normal vision



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.



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.



Reduced visual acuity due to cataracts

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



Cataract

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



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.

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 aE (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.



A **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 optics.

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.



Silicate 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.



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 of the lenses prevents fogging of the lenses.



Super DUPLEX coating: Duplex with additional hard coating.

Illumination



LEDs are extremely economical to use in comparison to conventional filament light bulbs and have a virtually unlimited service life.



SMD-LED (SMD: Surface Mounted Device; LED: Light Emitting Diode) – special, miniature LED with a higher luminous power than conventional LEDs.



Intelligent automatic shut-off to guard against unnecessary power consumption.



Filament bulb



Fluorescent tube

Batteries



Round cell



Batteries
Included with the product.



Batteries
Not included with the product.

Other icons



Mains plug



Magnification



Weight



Case
Included with the product.



Case
Not included with the product.



Screen size



Touchscreen



Colour temperature



Visual field



Frame size: Lens size/bridge width.



Filter caps: enclosed for changing the colour temperature and light intensity.



Step-up converter: 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.



Pupillary distance



Display and/or Optoform tray available.



Optoform tray





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