



ZEISS Magnifying Solutions for Technical Tasks

Precision makes all the difference





Intricate work demands advanced technology

Precise vision plays a key role in many professions and occupations. Professional users therefore make very special demands on their specialized visual devices. The ZEISS line of magnifying devices is the perfect solution to the personal needs of professional users.

ZEISS magnifiers and head-worn loupes ensure fatigue-free work and excellent visualization of details. The optimum matching of magnification and working distance ensures a relaxed, almost upright posture – regardless of body size and work situation. And especially the head-worn loupes ensure that the user's hands are free to do the work on hand – for greater flexibility and mobility at the site where the magnification is required.

Particularly users who demand the utmost precision in their work benefit from the support given by an optimally fitted visual device, allowing them to optimize the quality and efficiency of their work and enabling a reduction in the time required to perform the respective task.

The result: your work is ideally supported and considerably facilitated.

ZEISS Magnifying Solutions for Technical Tasks

Overview

The following diagram shows an overview of the products available and provides a short description of each.

Pocket Magnifiers / Head-worn Loupes L / LC

- No distortion or chromatic aberration
- Available as single pocket magnifier with 6x or 10x magnification
- Available as double pocket magnifier with 9x magnification (combination of 6x and 3x)
- Comes standard with antireflective coating



- Head-worn loupes with binocular magnifying component
- Available with 1.25x or 1.4x magnification
- Hands remain free to perform the task at hand

Magnifiers

Head-worn Loupes KF titan / Head-worn Loupes KS

- Binocular Kepler-type teleloupes systems for users requiring higher magnifications
- Magnifications: 3.2x to 8x
- Working distances: 190 – 500 mm
- Adjustable by the user him/herself
- Immediately ready for use



Head-worn loupes / flip-up systems

K bino TTL



- Kepler-type teleloupes system with magnifications from 4.2x to 10x and assigned working distances (180 – 450 mm)
- The optical systems are mounted on the carrier lenses

G 2.5 TTL



- Galilean teleloupes system with 2.5x near magnification
- Working distances: 350 / 400 / 450 mm
- The optical systems are mounted in the carrier lenses
- Large field of view

GTX



- Galilean teleloupes system with 2x or 2.5x near magnification and assigned working distances (300 – 500 mm)
- The optical systems are mounted on the carrier lenses
- Compact design, low weight
- Attractively-priced entry model

Teleloupes spectacles / customized Systems

Exact fitting and production taking into account the wearer's personal centration data and prescription if needed

Saphiro²

- Mobile high-performance LED illumination
- Attachable to all shown ZEISS teleloupes spectacles and head-worn loupes



Illumination

ZEISS Aplanatic-achromatic Pocket Magnifiers

Small devices - major effect

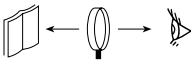
In many visual tasks where precise imaging is a must, particularly in industry, research and the handicrafts, aplanatic-achromatic magnifiers are indispensable aids.

These magnifiers provide images without distortion and chromatic aberration across the entire field of view. They come standard with antireflective coating.

The aplanatic-achromatic pocket magnifiers are marked with a dioptric power (D) which makes it possible to determine the respective magnification depending on the conditions of use.



Technical data

Refractive power (D)	Magnification for reference distance of 0.25 m (D/4)	Optically effective diameter	Optimal conditions of use		
			Using distance 		Field of view
24 D	6x	22 mm	35 mm	10 mm	52 mm
40 D	10x	13 mm	20 mm	10 mm	22 mm
36 D = 24 D + 12 D	9x = 6x + 3x	22 mm	25/35/80 mm	10 mm	32/52/127 mm

ZEISS Head-worn Loupe L / ZEISS Head-worn Loupe LC

The fascination of detail

The head-worn loupes are used in particular when low magnification suffices to perform the task at hand. The user's hands remain free.

The ZEISS Head-worn Loupe L consists of a vertically adjustable visor, closed at the sides, that prevents the entry of irritating light and can be swung out of the field of view if required.

To increase wearing comfort, the headband is fitted with an exchangeable textile pad.

The ZEISS Head-worn Loupe LC is a magnifier clip that can be attached to most prescription eyewear. The height and inclination of the magnifying component can be adjusted individually.



Technical data

Refractive power (D)	Optically effective diameter	Conditions of use			
		Using distance		Magnification	Field of view, binocular
4 D	40 x 30 mm	200 mm	60 mm	1.25x	83 x 100 mm
6 D	40 x 30 mm	140 mm	60 mm	1.4x	72 x 75 mm

Weight of Head-worn Loupe LC: approx. 20 g

Weight of Head-worn Loupe L: approx. 110 g

ZEISS Head-worn Loupes KS / ZEISS Head-worn Loupes KF titan

Advanced visualization for professional applications

Experienced users with higher magnification needs will appreciate the advanced visualization capabilities of the ZEISS Head-worn Loupes KF and KS. Available in various magnification levels (3.2x – 8x), the ZEISS loupe systems provide high-contrast stereoscopic images with an extended field of view, even at higher magnification levels. When magnification is not needed, the

loupe can simply be flipped up for direct eye contact with the object.

Fitted in either a lightweight titanium spectacle frame (ZEISS Head-worn Loupes KF) or in a headband system (ZEISS Head-worn Loupes KS), the loupe offers declination settings for a wide range of tilt and angles while supporting a comfortable, ergonomic working

position. System settings are quick and easy to make and remain stable at all times.

If required, the frame of ZEISS Head-worn Loupes KF can be glazed with lenses of any prescription. ZEISS Head-worn Loupes KS can be worn in combination with normal spectacles.

ZEISS Head-worn Loupes KS



ZEISS Head-worn Loupes KF titan



ZEISS Teleloupe Spectacles K bino TTL professional

Precise definition down to the last detail

Wearers requiring optical quality that allows precise visual presentation down to the tiniest details are well served with the ZEISS K bino TTL professional teleloupe spectacles.

This through-the-lens system features Kepler optics and a magnification range

from 4.2x to 10x, providing a clearly defined and brightly illuminated field of view. Its excellent definition enables the ideal working distance required for a natural body posture – even at higher magnification. The benefits are a distortion-free, high-contrast image and fatigue-free vision. Work becomes

substantially more ergonomic, and neckstrain is finally a thing of the past.

The ZEISS K bino TTL professional is custom-fitted for each individual user. It is available in the two frame designs: the lightweight titanium spectacle frame or the sports frame.

ZEISS K bino TTL professional

with sports frame



ZEISS K bino TTL professional

with spectacle frame



ZEISS Teleloupe Spectacles G 2.5 TTL

Tailored to what you need to see

Featuring 2.5x magnification and Galilean optics, ZEISS G 2.5 TTL teleloupe spectacles provide a large field of view with good detail resolution and depth of field over the whole area of application. They are ideal for users with lower magnification needs who want a customized through-the-lens system.

Light and durable, the G 2.5 TTL can be mounted on a titanium or a sports frame. You almost do not even feel that you are wearing loupes. Each system is a tailored solution, produced from the personal centration data and prescription of the wearer, if needed.

ZEISS G 2.5 TTL is available in two light-weight and easy-to-wear carrier systems to choose from – a titanium spectacle or a sports frame design. A strap keeps the teleloupe spectacles securely in place.

ZEISS G 2.5 TTL

with sports frame



ZEISS G 2.5 TTL

with spectacle frame



ZEISS Teleloupe Spectacles GTX

Easy focusing in personal spectacles

The ZEISS GTX is the lightest teleloupe spectacles of all the ZEISS loupes. The loupes are precisely customized based on the personal centering data and prescription of the wearer and provide clear visualization of minute details and structures.

The carrier lenses can be inserted in any stable frame with good fitting properties. The small size of the systems provides the user with good orientation in his or her immediate surroundings.

The ZEISS GTX is an excellent system for wearers with no previous loupe experience, and who prefer a model that is particularly light in weight.



ZEISS Saphiro²

When lightness meets brightness

ZEISS offers a high-performance LED illumination system for its head-worn loupe systems – the ZEISS Saphiro². With a lighting spectrum very similar to natural daylight, it provides a uniformly

illuminated field of view and overall brightness needed for precise detail recognition. In addition to offering high wearing comfort in an easy-to-use light-weight design, the illumination level can

be continuously adjusted at any time. Its rechargeable battery allows mobile, line-independent operation for up to four hours.

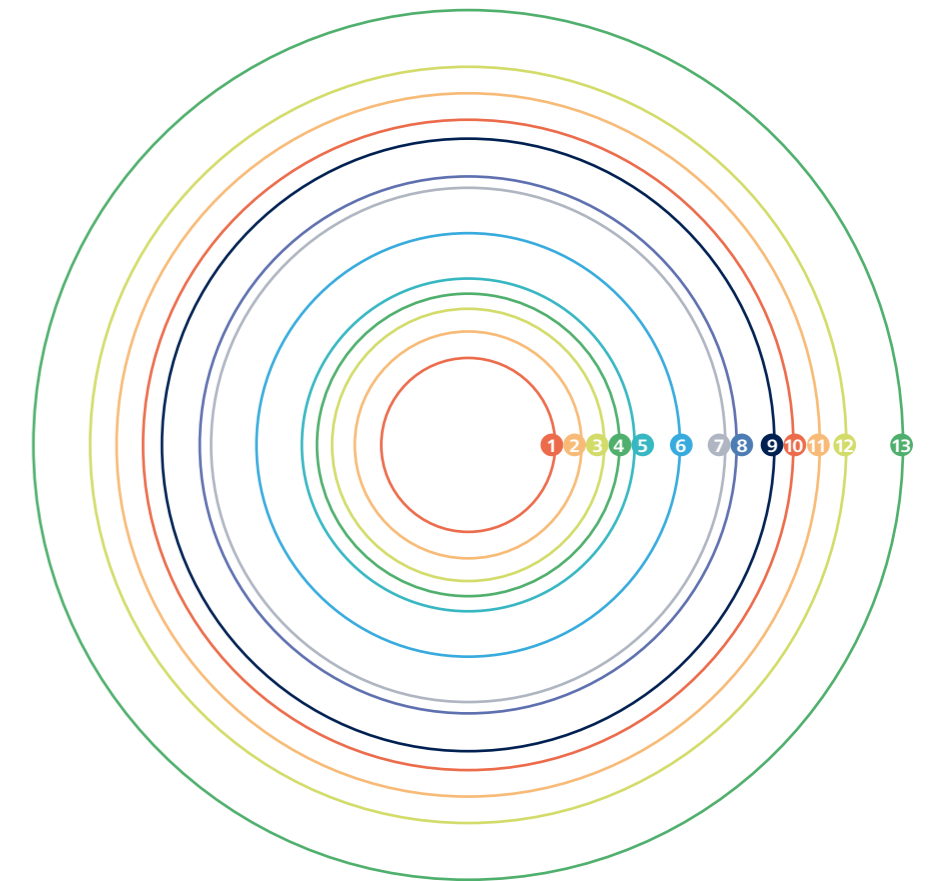


Field of view

Loupes for every visual task

Choosing the preferred working distance and magnification level is crucial. ZEISS offers loupes for a wide range of working distances and magnification levels.

To help you find loupes that are ideal for your needs, the following diagrams provide an overview of the individual fields of view (actual size) for each loupe type.



ZEISS Head-worn Loupes KS/ KF titan



Optical systems

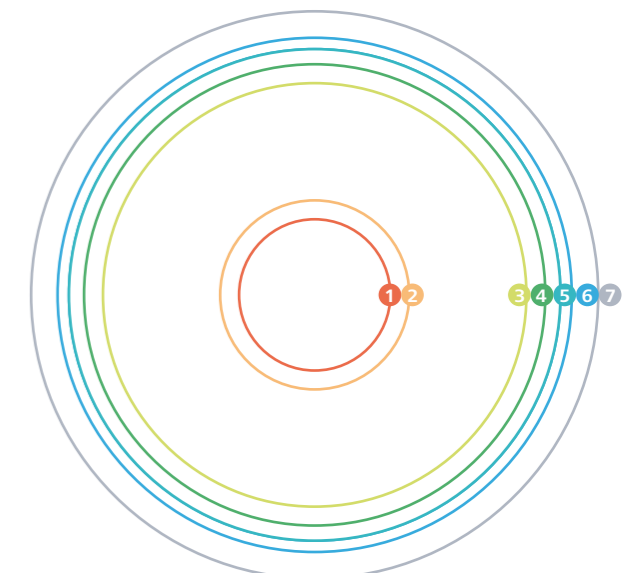
Working distance (mm)	190	215	235	250	300	350	400	450	500					
Magnification	8x	6x	5x	4.5x	5x	4x	4.5x	3.6x	4.3x	3.5x	4x	3.3x	4x	3.2x
Field of view (mm)	23	30	36	40	44	56	56	71	68	86	81	100	93	115
	1	2	3	4	5	6	6	8	7	10	9	12	11	13

ZEISS K bino TTL professional



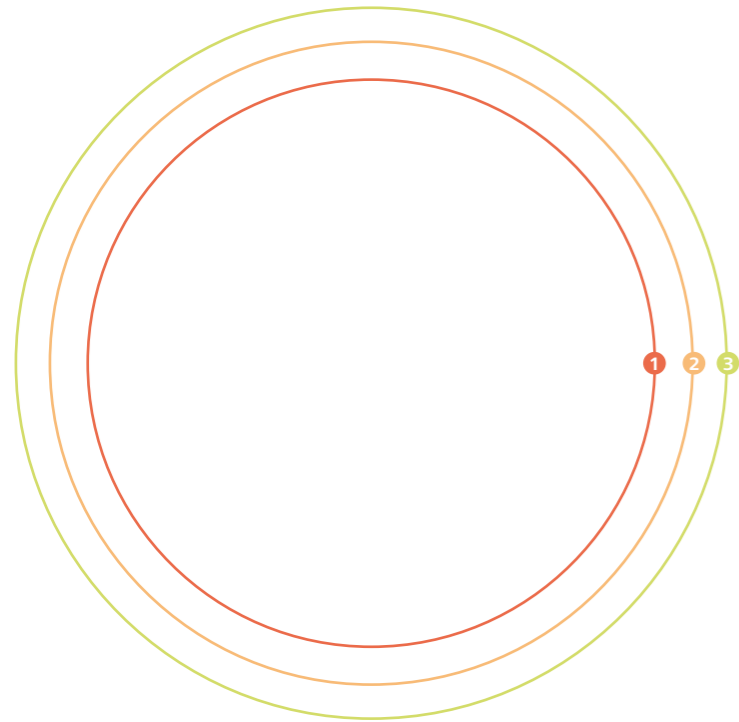
Optical systems

Working distance (mm)	180	200	350	400	450		
Magnification	10x	8x	6x	4.4x	5.6x	4.2x	5x
Field of view (mm)	20	25	56	68	61	75	65
	1	2	3	6	4	7	5



Field of view

Loupes for every visual task

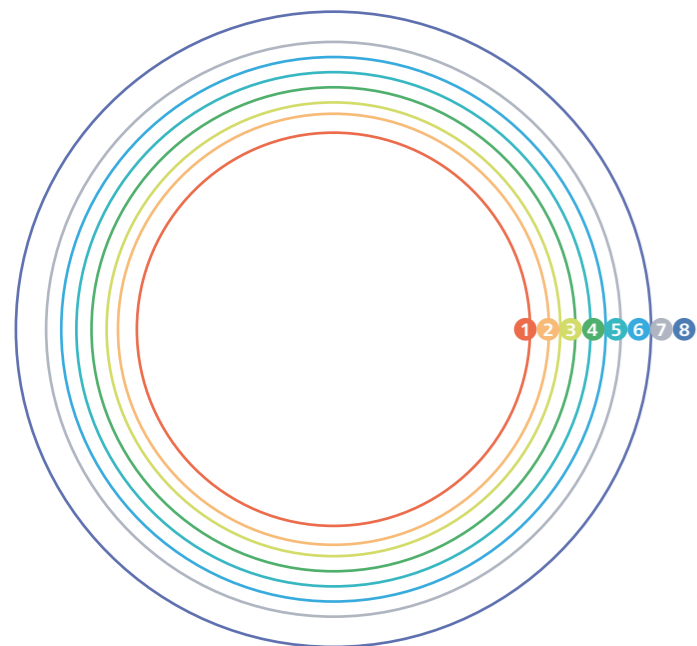


ZEISS G 2.5 TTL



Optical systems

Working distance (mm)	350	400	450
Magnification	2.5x	2.5x	2.5x
Field of view (mm)	75	85	94
	1	2	3



ZEISS GTX



Optical systems

Working distance (mm)	300	350	400	450	500
Magnification	2x	2x 2.5x	2x 2.5x	2x 2.5x	2x
Field of view (mm)	52	60 57	68 64	76 72	84
	1	3 2	5 4	7 6	8

Technical data

Loupe types and design

ZEISS Head-worn Loupes KS

ZEISS Head-worn Loupes KF



Key properties

Optical system	Kepler design
Weight	Head-worn Loupes KF: approx. 135 g Head-worn Loupes KS: approx. 330 g
System carrier	Titanium spectacle frame (Head-worn Loupes KF) Headband system (Head-worn Loupes KS) that can be adapted to each wearer's head shape.
Personal prescription	The carrier lenses of the titanium spectacle frame can be with or without prescription. Head-worn Loupes KS can be worn in combination with normal spectacles.

ZEISS K bino TTL



Key properties

Optical system	Kepler design
Weight	approx. 64 g (per optical system)
System carrier	Titanium spectacle frame or sports frame
Personal prescription	ZEISS K bino TTL can be provided with personal prescription.

ZEISS G 2.5 TTL



Key properties

Optical system	Galilean design
Weight	approx. 22g (per individual system)
System carrier	Titanium spectacle frame or sports frame
Personal prescription	ZEISS G 2.5 TTL can be provided with personal prescription

ZEISS GTX



Key properties

Optical system	Galilean design
Weight	approx. 7g (per system with holding ring)
System carrier	Any stable, easy-to-fit spectacle frame is suitable
Carrier lenses	The holding rings of the ZEISS Telescope Systems can be mounted onto glass or plastic lenses with personal prescription

ZEISS Saphiro²



Key properties

Illumination unit	Powerful LED light source
Control unit	Stepless dimmer for setting of light intensity, function diode for operating state, belt clip
SV2 battery pack	Rechargeable lithium-cobalt battery
BCV2 battery charger	Loading diode (yellow) and operating diode (green) indicating when the charging process is completed, with world plug adapter set
Adapter for ZEISS loupes	Optionally available to attach Saphiro ² to GTX, G 2.5 TTL, K bino TTL, Head-worn Loupes KF and KS
Light intensity	Approx. 35,000 Lux (at a distance of 250 mm)
Color temperature	Approx. 5,500 Kelvin (resembles daylight)
Weight of illumination head	11 g
Weight of control unit	82 g (without battery)
Battery run time	5-6 hours at medium load, 3-4 hours at full load
Battery charging time	3-4 hours



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