Three easy steps to select your HEINE binocular loupe:

1. Simply select the lowest magnification that will meet your needs. The lower the magnification, the larger the field of view, and the easier the loupe will be to use.

2. Then determine your working distance, which will also automatically determine your field of view. To determine your working distance assume a comfortable, posture-correct position for the intended loupe application and determine the distance between your eyes and your working area. Using the chart below, match this distance with the nearest nominal working distance option shown beside the magnification you chose. Note: The closer the loupes are to the eyes, the larger the field-of-view.

3. Finally, select your preferred mounting option, Spectacle Frame or Headband. All options offer the user flexibility and adaptability for precise optical position, alignment and performance.

HEINE Binocular Loupes: Specifications

<table>
<thead>
<tr>
<th>Magnification</th>
<th>Nominal Working distance</th>
<th>Field of view**</th>
<th>Depth of field*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR: Recommended for general medicine, minor surgery and hygienists.</td>
<td>2x</td>
<td>250mm</td>
<td>90mm</td>
</tr>
<tr>
<td></td>
<td>2x</td>
<td>340mm</td>
<td>130mm</td>
</tr>
<tr>
<td></td>
<td>2x</td>
<td>420mm</td>
<td>190mm</td>
</tr>
<tr>
<td></td>
<td>2x</td>
<td>520mm</td>
<td>250mm</td>
</tr>
<tr>
<td>HR: Recommended for surgical and dental use.</td>
<td>2.5x</td>
<td>250mm</td>
<td>60mm</td>
</tr>
<tr>
<td></td>
<td>2.5x</td>
<td>340mm</td>
<td>90mm</td>
</tr>
<tr>
<td></td>
<td>2.5x</td>
<td>420mm</td>
<td>130mm</td>
</tr>
<tr>
<td></td>
<td>2.5x</td>
<td>520mm</td>
<td>180mm</td>
</tr>
<tr>
<td>HRP: Recommended for micro-surgery for experienced loupe-users.</td>
<td>3.5x</td>
<td>420mm</td>
<td>65mm</td>
</tr>
<tr>
<td></td>
<td>4x</td>
<td>340mm</td>
<td>50mm</td>
</tr>
<tr>
<td></td>
<td>6x</td>
<td>340mm</td>
<td>40mm</td>
</tr>
<tr>
<td>HR-C: An ultra-compact alternative to the HR 2.5x Binocular Loupe for general use in surgical and dental applications.</td>
<td>2.5x</td>
<td>340mm</td>
<td>60mm</td>
</tr>
<tr>
<td></td>
<td>2.5x</td>
<td>420mm</td>
<td>70mm</td>
</tr>
<tr>
<td>C 2.3: Recommended for dental laboratories.</td>
<td>2.3x</td>
<td>340mm</td>
<td>110mm</td>
</tr>
<tr>
<td></td>
<td>2.3x</td>
<td>450mm</td>
<td>130mm</td>
</tr>
</tbody>
</table>

*Depth of field or “working distance range” for normal-sighted or corrected eyes with normal ability to accommodate, well-lit object.

**At nominal working distance.
HEINE S-Frame® spectacle frame / S-Guard® splash protection
Perfect for HR, HRP, HR-C Binocular Loupes

The HEINE S-Frame® is a truly exceptional spectacle frame: virtually all of its parameters can be customized – making it the perfect fit for any head or face shape. It is ultra-light, pleasant to wear and can be combined with all new HR, HRP and HR-C Binocular Loupes. In the S-Guard version with splash protection goggles the S-Frame can be used with Professional L and Lightweight headbands.

- Maximum comfort thanks to a modern, ergonomic design. Pleasant spectacles that fit any shape of head or face perfectly for maximum wearer comfort. No pressure points, pinching or slipping of the frame
- Customizable. Mouldable in all directions, the adjustable temples made from KYNETIUM™ come with an anti-slip surface. Flexible mouldable and fixable nose piece with silicone overlay for maximum comfort and superlative stability. The nose pads are made from skin-friendly silicone and fit all nose and face shapes. They also prevent the spectacles from slipping.
- Low weight (24g). Thanks to the use of high-tech materials.
- State-of-the-art technologies and innovative materials. The carbon frame, S-Frame temples made from aluminium alloy (KYNETIUM™) and magnesium result in a light weight while silicone ensures superb elasticity and titanium gives greater resilience.
- Durable polycarbonate safety glass. The protective lenses offer superlative splash protection, even when combined with a headband. The exchangeable lenses are available in two different sizes. They are scratch-resistant and deliver excellent visual sharpness.
- Allows the use of prescription lenses. Optional correction frames are also available for prescription lenses. Simple “ClipOn” attachment.
- Flip-up control for optics. The optics can be easily flipped up and down into the visual axis. The binocular Loupe Bracket is compatible with all HR/HRP and HR-C Binocular Loupes.
- Extensive accessories. Lenses, cleaning fluid, nose pads, spare parts kit.

- Exceptionally light
- Fits any shape of head or face
- Flip-up control for optics

Rapid and simple adjustment of binocular loupes on the headband with the S-Guard splash protection. Once set, the binocular loupes always stays in the ideal position. The fixed position of the binocular loupes on the S-Guard splash protection and the rigid connection between the headband and the nose pads ensure that the binocular loupes do not slip once their position has been set. The ergonomic nose pads also ensures a comfortable and secure position for the binocular loupes.

S-Frame® for HR-, HRP-, HR-C Binocular Loupes incl. retaining cord and cleaning fluid C-000.32.301
S-Frame® for SIGMA 150 and 150M2 Indirect Ophthalmoscope incl. retaining cord and cleaning fluid C-000.33.036

S-Guard® for Professional L headband with cleaning fluid C-000.32.403
S-Guard® for Lightweight headband with cleaning fluid C-000.32.401
S-Guard® for 3S LED HeadLight connection with cleaning fluid J-000.31.351
S-Guard® for MD1000 F.O. connection with cleaning fluid J-000.31.241

* with spectacle lenses, large (lg).
HEINE HRP® Binocular Loupes

HRP Technology for highly-magnified crisp images

HRP Binocular Loupes of 3.5x magnification or higher are recommended for fine surgical procedures where high magnification is necessary, for example in endodontal, vascular, neuro, and intricate orthopedic surgery and for experienced users. HRP loupes have been designed to provide the largest field of view and best depth of field possible for each magnification. Please note that the field of view and depth of field will decrease as magnification increases making higher-magnification loupes more difficult to get accustomed to.

- Prismatic Optics. Only top-quality, precision glass prisms are used to provide the highest resolution and clearest, crispest images over the entire field of view “edge-to-edge”.
- The Brightest Image in Perfect Colour. Our exclusive coating technology reduces light reflection to 0.3% allowing for optimum light transmission, and ensuring perfect colour reproduction for brilliant, 3-dimensional images.
- Compact Design. Although the higher magnification requires a more complex design, the weight of the HRP loupes has been minimized. The 3.5x and 4x optics weigh only 78g, the 6x weighs only 89 g. The headband mounting option is an ideal way to eliminate any weight concerns for those users not accustomed to wearing any type of glasses or spectacles.
- Dust- and Water-Resistant. All HRP loupes are dust- and water-resistant to IP65/IEC 60529 (2000) to ensure ease of cleaning/disinfection, and years of trouble-free use.
- Flexibility for Precise Adjustment. HRP loupes have independently-adjustable optics for selecting the exact inter-pupillary distance (PD). HRP loupes can be adjusted precisely for each user for optimum optical performance by means of 4 different mounting positions on either frame or headband (with angled adaptor).
- Field of View at High Magnification. Advanced optical design ensures a wide field of view and a great depth of field even at high magnification, avoiding eye strain over extended periods of use.

- 3.5 x Magnification: 3.5x magnification makes the HRP 3.5x loupes ideal for intricate surgical procedures, while still giving an excellent field of view and good depth of focus. The 420 mm working distance is best suited for applications where the user is standing up.
- 4.0 x Magnification: 4.0x loupes provide magnification for most advanced micro-surgical and dental applications yet still offer a large 50 mm field of view. The 340 mm working distance is ideal for applications where the user is in a sitting position.
- 6.0 x Magnification: Here the focus is on maximum magnification, with a 40 mm field of view. The 340 mm working distance is ideal for applications where the user is in a stable, sitting position.

Specifications

<table>
<thead>
<tr>
<th>Magnification</th>
<th>3.5x</th>
<th>4x</th>
<th>6x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal working distance</td>
<td>420 mm</td>
<td>340 mm</td>
<td>340 mm</td>
</tr>
<tr>
<td>Field of view dia.</td>
<td>&gt;65 mm</td>
<td>&gt;50 mm</td>
<td>&gt;40 mm</td>
</tr>
</tbody>
</table>

Wearing modes:

- HEINE S-Frame®
  Innovative spectacle frame for HR, HRP, HR-C Binocular Loupes. Appealing and functional design. Can be customized to fit any shape of head and face.

- HEINE Professional L® or Lightweight® headband with HEINE S-Guard®
  Rapid and simple adjustment of binocular loupes on the headband with the S-Guard splash protection. Once set, the binocular loupes always stays in the ideal position. The fixed position of the binocular loupes on the S-Guard splash protection and the rigid connection between the headband and the nose pads ensure that the binocular loupes do not slip once their position has been set. The ergonomic nose pads also ensure a comfortable and secure position for the binocular loupes.
HEINE HRP® Binocular Loupe Sets

Set A Contents: Optics, S-Frame*, detachable protective lenses, 2 sterilisable swivel levers, retaining cord, cleaning fluid, carrying case.

Set B Contents: Optics, Professional L Headband, S-Guard splash protection*, detachable protective lenses, 2 sterilisable swivel levers, cleaning fluid.

Set C Contents: Optics, Lightweight Headband, S-Guard splash protection*, detachable protective lenses, 2 sterilisable swivel levers, cleaning fluid, carrying case.

* with spectacle lenses, large (lg).

Sets, Binocular Loupes with 3.5x magnification.

<table>
<thead>
<tr>
<th>Set Configuration</th>
<th>Working distance</th>
<th>340mm</th>
<th>420mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>—</td>
<td>C-000.32.423</td>
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<tr>
<td>B</td>
<td>—</td>
<td>C-000.32.413</td>
<td></td>
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<tr>
<td>C</td>
<td>—</td>
<td>C-000.32.492</td>
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<tr>
<td>Optics only</td>
<td>—</td>
<td>C-000.32.703</td>
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Sets, Binocular Loupes with 4x magnification.

<table>
<thead>
<tr>
<th>Set Configuration</th>
<th>Working distance</th>
<th>340mm</th>
<th>420mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>C-000.32.425</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>C-000.32.415</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>C-000.32.494</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Optics only</td>
<td>C-000.32.705</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

Sets, Binocular Loupes with 6x magnification.

<table>
<thead>
<tr>
<th>Set Configuration</th>
<th>Working distance</th>
<th>340mm</th>
<th>420mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>C-000.32.426</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>C-000.32.416</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>C-000.32.497</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Optics only</td>
<td>C-000.32.706</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>
SECTION BINOCULAR LOUPE ACCESSORIES

Accessories for HEINE S-Frame®/HEINE S-Guard®

- **S-Frame retaining cord**  C-000.32.305
- **S-Frame replacement part set**
  - with side rubbers, nosepads (2 pairs) and screw  C-000.32.308
- **Correction frame**
  - for corrective lenses  C-000.32.309
- **Spectacle lenses, large (lg), 1 pair**  C-000.32.306
- **Spectacle lenses, small (sm), 1 pair**  C-000.32.307
- **Cleaning fluid for lenses, 2 packs**  C-000.32.542

Headbands for HEINE HR®, HRP®, and HR-C® Binocular Loupes

- **Professional L Headband**
  - Highly-recommended for HRP prismatic loupes. Adjustable for height and width so that a comfortable fit is always assured. In this way the headband can be customized to fit one or more users perfectly.
  - **Optics** can be swung out of the line of sight and returned to the original position in one easy movement.
  - **Lets you combine the magnification optics** with your own glasses if preferred.
  - **Comfortable head cushions front and back.** Fits any head shape.
  - **Elongated optics mount for increased downward viewing angle (as far as 30°).** Ergonomic, upright posture for the examiner.

  - Professional Headband L (without optics / without S-Guard splash protection)  C-000.32.549
  - Professional Headband L with S-Guard splash protection (without optics)  C-000.32.406

- **Lightweight Headband**
  - HEINE Lightweight Headband suitable for HR and HR-C loupes. Weighs only 160 g.
  - **Adjustable optics** can be swivelled out of the line of sight.
  - **Optics can be combined with your own glasses if preferred.**
  - **Adjustable for width.**
  - **Soft rubber headband for maximum comfort.**

  - Lightweight Headband (without optics / without S-Guard splash protection)  C-000.32.516
  - Lightweight Headband with S-Guard splash protection (without optics)  C-000.32.405

Accessories for HEINE HR®, HRP®, and HR-C® Binocular Loupes

- **Universal Clip** for HR and HR-C Binocular Loupes
  - Fits any spectacles.
  - Can be used by various examiners.  C-000.32.518

- **Close-up Lenses for HR Binocular Loupes**
  - These give a working distance of 250 mm with the HR 2x/340mm and the 2.5x/340mm. A simple push – fit to the standard optics.

  - **Close-up Lenses in case** for HR 2x/340mm  C-000.32.521
    - for HR 2.5x/340mm  C-000.32.523
SECTION
BINOCULAR LOUPE ACCESSORIES

Accessories for HEINE HR®, HRP® and HR-C Loupes

Detachable Protective Lenses
to protect the optics of the HR Binocular Loupes (5 pair).
C-000.32.537

Detachable Protective Lenses
to protect the optics of the HRP Binocular Loupes.
C-000.32.027

Sterilisable Swivel Levers
The examiner can adjust the angle of the optics without touching them. (2 pieces)
For HR/HRP Binocular Loupes
C-000.32.524
For HR-C Binocular Loupes (not shown)
C-000.32.299

Case
For Binocular Loupes-Sets A and HR-C
C-000.32.530

HEINE Dental Adaptor for a viewing direction from 0 to 35°

Only for HR and HRP Binocular Loupes.
The angle at which your loupe optics are mounted to the frame is variable. The preferred viewing angle, or angle of declination is extremely important in preventing neck and back strain due to poor posture.

> The standard mounting system offers a maximum angle of declination of 20 degrees to reduce back and neck strain in most applications.
> With the optional Dental Adaptor the maximum angle of declination is increased to 35 degrees.

Dental Adaptor
C-000.32.528
HEINE LED LoupeLight®
Compact LED LoupeLight, ideal for surgical and dental applications

- **Advanced LED Technology.** White, homogenous light, ideal for all surgical and dental applications.
- **Coaxial Illumination.** For shadowless illumination of small cavities.
- **Super-Light.** Weighing only 12 g for greatest user-comfort over extended periods.
- **Powered by 2.5 V or 3.5 V HEINE battery or rechargeable handle.** Fully portable.
- **Adjustable for a Variety of Working Angles.** Optimal positioning of light.
- **Reduced UV Component.** Ideal for dental applications. Brightness can also be controlled/reduced when working with UV-sensitive materials.
- **Long life LED Technology.** Virtually service-free.
- **Water-Resistant.** Water-resistant to ensure ease of cleaning/disinfection.
- **Compatibility.** Compatible with all BETA battery handles, rechargeable handles and HR, HRP, HR-C and C 2.3 K Binocular Loupes.
- **Operating Time:** 1.5 hours with 3.5 V NiMH rechargeable handle.
  3.5 hours with 3.5 V Li-ion rechargeable handle.
- **Classification 1M per EN60825-1.**

LED LoupeLight

for C 2.3 K Binocular Loupes, 2.5 V/3.5 V  C-008.32.235
for HR, HRP and HR-C Binocular Loupes, 2.5 V/3.5 V  C-008.32.541

<table>
<thead>
<tr>
<th>Power Sources</th>
<th>2.5 V</th>
<th>3.5 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETA battery handle</td>
<td>X-001.99.118</td>
<td></td>
</tr>
<tr>
<td>BETA R rechargeable handle</td>
<td>X-002.99.376</td>
<td></td>
</tr>
<tr>
<td>BETA TR rechargeable handle incl. transformer</td>
<td>X-002.99.384</td>
<td></td>
</tr>
<tr>
<td>BETA NT rechargeable handle and NT 200 charger</td>
<td>X-002.99.420</td>
<td></td>
</tr>
<tr>
<td>BETA SLIM rechargeable handle</td>
<td>X-002.99.471</td>
<td></td>
</tr>
<tr>
<td>BETA SLIM rechargeable handle and NT 200 charger</td>
<td>X-002.99.470</td>
<td></td>
</tr>
<tr>
<td>BETA Belt Clip</td>
<td></td>
<td>X-000.99.008</td>
</tr>
</tbody>
</table>

Please note: BETA 3.5 V rechargeable handles can be supplied with a Lithium battery (X-007.99.381) with increased capacity and no memory effect at extra cost. Please specify when ordering.

LED LoupeLight mounted on HR-C Binocular Loupe with S-Frame spectacle frame

For information on HEINE battery and rechargeable handles, see pages 115–119.