

HEINE QUALITY
MADE IN GERMANY



∴ HEINE Hand-held Ophthalmic Instruments





➤ **HEINE HSL 150® Hand-held Slit Lamp**

Uncompromisingly compact.

[HEINE HSL 150® HAND-HELD SLIT LAMP]

|| ORDER NO. [HEAD ONLY] : 3.5V | [C-002.14.602]

2.5V | [C-001.14.602]

The ideal portable addition to a static full-size slit lamp.

HSL 150 features bright, white XHL Xenon Halogen illumination comparable in intensity with the best static slit lamps for examination of the anterior segment. The compact, ergonomic design provides instant loupe alignment of the slit image for comfortable operation.

HSL 150 provides a 10mm x 0,2mm up to 14mm x 4mm slit image for direct focal illumination with an optical section.

The ideal alternative for examinations where a static slit lamp is not available or practical to use. This hand-held slit lamp is invaluable for screening, in accident and emergency rooms, and for bed-ridden patients or small children.

- ∴ **Magnified view with 20-Diopter loupe.**
- ∴ Instant selection of **interference cobalt blue filter (FITC)** for corneal examination.
- ∴ **Instant selection of loupe position for optimal alignment with slit.**
- ∴ **Advanced multi-coated optics** maximize light transmission and reduce reflexes.
- ∴ **Full metal construction** assures perfect optical alignment and will provide a lifetime of reliable performance.
- ∴ **HEINE 2.5V or 3.5V XHL® Xenon Halogen Technology** provides a bright, white light for true full-size slit lamp brightness.
- ∴ **Continuously adjustable brightness control.**
- ∴ **Compact design for complete portability and ease of use.**
- ∴ **100% dustproof construction,** for a lifetime of maintenance-free performance.
- ∴ **The HSL 150 instrument head weighs only 70 g,** the lightest portable Slit lamp available.
- ∴ **6x magnification.**



HEINE HSL 150®
Hand-held Slit Lamp
with HEINE BETA SLIM®
handle

Typical applications include:

- ∴ Corneal examination for foreign bodies or ocular trauma.
- ∴ Corneal examination with fluorescein using the precision interference cobalt blue filter (FITC).
- ∴ General examination of the anterior segment, iris and crystalline lens.
- ∴ Primary diagnosis of patients with eye infections.
- ∴ Examination of elderly and bed-ridden patients.
- ∴ Contact lens work.
- ∴ Industrial medicine.

[HEINE HSL 10x® LOUPE ATTACHMENT]

|| ORDER NO. [LOUPE ATTACHMENT] : | [C-000.14.606]

Loupe attachment with 10x magnification for HSL 150.

With precision magnification optics for crisp, clear images.

- ∴ **10x magnification when combined with HSL 150 Loupe.**
- ∴ **Increased working distance from examiner to patient.**
- ∴ **Large field of view.**
- ∴ **With an additional detachable TP-elastomer Eyepiece** to steady the instrument on the brow and avoid stray light. Can be replaced with a soft TP-elastomer cap, suitable for spectacle-wearers.



HEINE HSL 10x®
Loupe Attachment

HEINE LAMBDA 100® Retinometer
Unique design.



[HEINE LAMBDA 100® RETINOMETER]

|| ORDER NO. [HEAD ONLY] : 3.5V | [C-002.35.015]*

The first compact instrument for assessing potential visual acuity of patients with cataracts and other opacities.
LAMBDA 100 – clinically tested with excellent results.

2.5V | [C-001.35.015]*

3.5V | [C-002.35.010]**

2.5V | [C-001.35.010]**

* with acuity scale 20/300 to 20/25 (scale 2)
 ** with acuity scale 0.06 to 0.8 (decimal scale 1)

- ∴ **Simple, easy-to-use controls.**
Reliable diagnosis, easy to operate.
- ∴ **The instrument fits onto battery- or rechargeable handles.**
Complete mobility – no dependence on the slit lamp.

- ∴ **Compact, lightweight (100 g).**
Can be used anywhere – even bedside.
- ∴ **HEINE XHL® Xenon Halogen Technology and brightness control.**
Avoids patient discomfort from dazzle.
- ∴ **Includes explanatory card for patient instruction.**



HEINE LAMBDA 100®
Retinometer with
HEINE BETA® handle

Examples of various acuity grating patterns (visual angle 1°)



0°
Visus = 0,5 $\left(\frac{20}{40} \right)$



45°
Visus = 0,32 $\left(\frac{20}{60} \right)$



90°
Visus = 0,06 $\left(\frac{20}{300} \right)$

Three simple steps to potential acuity assessment with LAMBDA 100.

- [01] Switch on instrument, select acuity, select grating angle, reduce ambient lighting.
- [02] Rest Retinometer against the patient's forehead. Scan the pupil with the red light spot to find a "window" through which the patient can recognize the grating pattern and identify its angle.
- [03] Select progressively-finer grating patterns with different angles until the patient can no longer recognize the angle. The value of the last recognizable angle indicates potential acuity.





∴ **HEINE BETA 200S® Ophthalmoscope**
Perfection in detail.

[HEINE BETA 200S® OPHTHALMOSCOPE]

|| ORDER NO. [HEAD ONLY] : 3.5V | [C-002.30.120]

2.5V | [C-001.30.120]

Superior aspherical optics.

The BETA 200S is the first hand-held direct ophthalmoscope with a combination of aspherical optics and single-step diopter selection from -36D to +38D for precise lens selection and a crisp, focused fundus image in all diagnostic situations.

HEINE's unique Aspherical Optical System uses the Gullstrand principle to separate the illumination and observation beams. Corneal and iris reflexes are avoided and a complete section of the retina is visible even with a small pupil.

7 apertures for diagnostic flexibility in both large and small pupils.








- ∴ **Aspherical optics**
avoid corneal and iris reflex.
- ∴ **74 single-diopter steps**
(from -36 to +38 dpt) for perfect focus even with high refractive error.
- ∴ **The optics are mounted on a metal frame**
to ensure a lifetime of optical precision.
- ∴ **7 different apertures**
for retinal examination with both large and small pupils.
- ∴ **Separate interference red-free filter**
for improved contrast when viewing retinal blood-vessels.
- ∴ **A powerful HEINE XHL® Xenon Halogen bulb** for full illumination with bright, white light.
- ∴ **Dustproof and maintenance-free**
for the life of the instrument.
- ∴ **The ergonomic rounded shape**
fits the orbita comfortably. Ergonomic, one-handed operation.
- ∴ **The multi-coated, recessed eyepiece**
avoids stray light during the examination.
- ∴ **The soft brow rest**
steadies the instrument and protects the examiners glasses.



HEINE BETA200S®
Ophthalmoscope
with HEINE BETA®
handle

Apertures

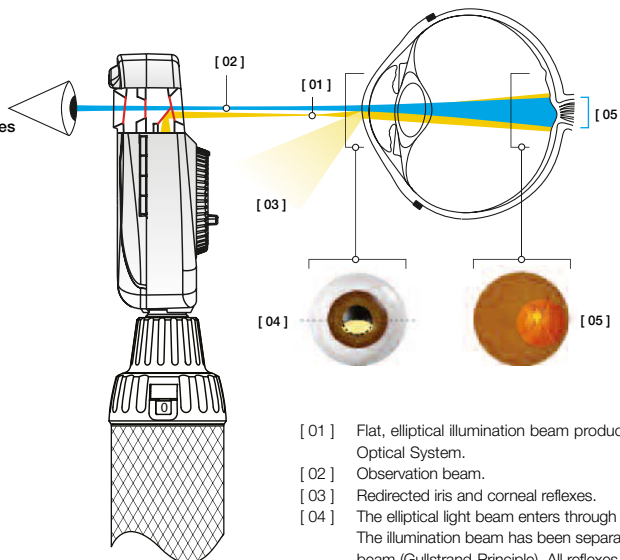
[A] [B]

-  [01]
Cobalt blue filter
-  [02]
Fixation star with polar co-ordinates
-  [03]
Large aperture
-  [04]
Medium aperture
-  [05]
Macula aperture / MicroSpot
-  [06]
Slit aperture
-  [07]
Hemispot

[A] without red-free filter
[B] with red-free filter

Unique "Aspherical Optical System" (AOS) from HEINE

reduces corneal and iris reflexes to provide large, crisp and glare-free fundus images.



- [01] Flat, elliptical illumination beam produced by HEINE's Aspherical Optical System.
- [02] Observation beam.
- [03] Redirected iris and corneal reflexes.
- [04] The elliptical light beam enters through the lower half of the cornea. The illumination beam has been separated from the observation beam (Gullstrand-Principle). All reflexes are diverted away from the observation beam due to the curvature of the reflective cornea. Due to the flat, compressed form of the light beam, a maximum amount of light enters through the pupil.
- [05] Once past the anterior chamber, the light beam opens up dramatically to illuminate a large area of the retina.

HEINE BETA 200® Retinoscope
A new benchmark.



HEINE QUALITY
MADE IN GERMANY

[HEINE BETA 200® RETINOSCOPE]

|| ORDER NO. [HEAD ONLY] : 3.5V | [C-002.15.353]*

2.5V [C-001.15.353]*

HEINE ParaStop® for total precision in selecting a parallel beam.

* Streak Retinoscope

The retinoscope is used to measure the refractive error of the eye. Conditions such as long- and shortsightedness and astigmatism can be detected and measured.

The BETA 200 Retinoscope with ParaStop and the latest in multi-coated optics provides an exceptionally-bright fundus reflex for improved accuracy of diagnosis.

ParaStop was designed and developed to simplify precise selection of a parallel illumination beam. ParaStop helps to determine the cylinder axis more precisely and speeds up subsequent testing after refraction.

The internal polarisation filter in the BETA 200 eliminates stray light and internal reflexes without reducing brightness.

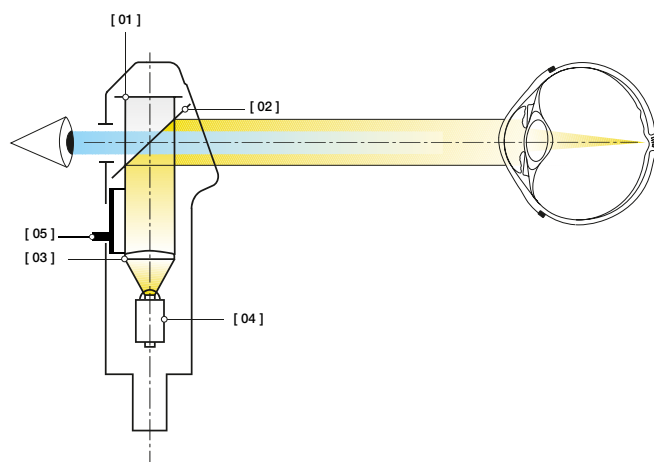
- ∴ **ParaStop** simplifies precise selection of a parallel beam.
- ∴ **Multi-coated optics** ensure bright, clear images.
- ∴ **The internal polarisation filter** eliminates stray light and internal reflexes.
- ∴ **A single control sleeve** adjusts vergence of the beam and provides streak rotation.
- ∴ **The powerful, bright HEINE XHL® Xenon Halogen bulb** ensures easy recognition of neutralisation.
- ∴ **Can be changed from a streak to a spot retinoscope** by simply changing the bulb.
- ∴ **Instrument controls** are made of metal to guarantee lifelong precision and quality of operation.
- ∴ **Improved ergonomic shape** effectively shields the examiner's orbit from stray light.
- ∴ **Totally-dustproof, maintenance-free.**
- ∴ **Optional attachable orange filter** for light-sensitive patients.
- ∴ **Optional holder** for fixation cards available.
- ∴ **Includes detachable brow-rest** for spectacle wearers.

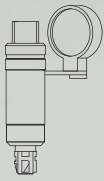


HEINE BETA 200®
Retinoscope
with HEINE BETA®
handle

ParaStop and polarisation filter

- [01] Polarisation filter, eliminates internal reflexes and stray light.
- [02] Semi-reflector mirror: Simultaneous illumination and observation. Reflected light from the retina enters the examiner's eye.
- [03] Condensor lens adjustable by a single control sleeve: Produces a divergent, convergent or parallel beam of light.
- [04] A special retinoscope bulb rotates for diagnosis of the cylinder axis.
- [05] ParaStop simplifies and speeds up the precise detection of cylinder axis.





HSL 150 Hand-held Slit Lamp

	2.5V	3.5V
for BETA or BETA SLIM handles		
HSL 150, without handle	C-001.14.602	C-002.14.602
XHL Xenon Halogen spare bulb	X-001.88.098	X-002.88.099



Replacement filter attachment for HSL 150		C-000.14.605
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HSL 10x Loupe Attachment for HSL 150		C-000.14.606
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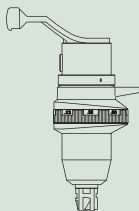
Set complete with HSL 150 and BETA SLIM handle

(slim, compact), with:	2.5V	3.5V
BETA SLIM battery handle, in soft pouch, without spare bulb	C-252.10.105	
same, with HSL 10x Loupe Attachment, spare bulb, in hard case	C-268.10.105	
BETA SLIM rechargeable handle and NT 300 charger, spare bulb, in hard case		C-266.20.470
same, with HSL 10x Loupe Attachment, in hard case		C-268.20.470

Set complete with HSL 150, BETA handle

(standard size) and spare bulb in hard case, with:	2.5V	3.5V
BETA battery handle	C-265.10.118	
same, with HSL 10x Loupe Attachment	C-267.10.118	
BETA R rechargeable handle		C-265.20.376
same, with Lithium-Ion battery		C-265.27.376*
BETA R rechargeable handle with HSL 10x Loupe Attachment		C-267.20.376
same, with Lithium-Ion battery		C-267.27.376
BETA TR rechargeable handle and transformer		C-265.20.384
same, with Lithium-Ion battery		C-265.27.384*
BETA TR rechargeable handle and transformer with HSL 10x Loupe Attachment		C-267.20.384
same, with Lithium-Ion battery		C-267.27.384
BETA NT rechargeable handle (NiMH) and NT 300 charger		C-265.20.420
same, with  BETA L rechargeable handle with Lithium-Ion battery		C-265.29.420*
BETA NT rechargeable handle (NiMH) and NT300 charger with HSL 10x Loupe Attachment		C-267.20.420
same, with  BETA L rechargeable handle with Lithium-Ion battery		C-267.29.420*

*Price on request.




LAMBDA 100 Retinometer


	2.5V	3.5V
LAMBDA 100 Retinometer head with acuity scale 20/300 to 20/25 (scale 2), without handle	C-001.35.015	C-002.35.015
LAMBDA 100 Retinometer head with acuity scale 0.06 to 0.8 (decimal scale 1), without handle	C-001.35.010	C-002.35.010
XHL Xenon Halogen spare bulb	X-001.88.077	X-002.88.078


Patient card (for patient instruction prior to examination)		C-000.35.005
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Set complete with LAMBDA 100 Retinometer, acuity scale 0.06 to 0.8 (decimal scale 1), patient card and spare bulb in hard case, with:

	2.5V	3.5V
BETA battery handle	C-187.10.118	
BETA R rechargeable handle		C-187.20.376
same, with Lithium-Ion battery		C-187.27.376
BETA TR rechargeable handle and transformer		C-187.20.384
same, with Lithium-Ion battery		C-187.27.384
BETA NT rechargeable handle (NiMH) and NT 300 charger		C-187.20.420
same, with  BETA L rechargeable handle with Lithium-Ion battery		C-187.29.420

Set complete with LAMBDA 100 Retinometer, acuity scale 20/300 to 20/25 (scale 2), patient card and spare bulb for each instrument in hard case, with:


	2.5V	3.5V
BETA battery handle	C-189.10.118	
BETA R rechargeable handle		C-189.20.376
same, with Lithium-Ion battery		C-189.27.376
BETA TR rechargeable handle and transformer		C-189.20.384
same, with Lithium-Ion battery		C-189.27.384
BETA NT rechargeable handle (NiMH) and NT 300 charger		C-189.20.420
same, with  BETA L rechargeable handle with Lithium-Ion battery		C-189.29.420

 : Rechargeable handle with charge status display in the bottom insert.

**BETA 200S Ophthalmoscope**

	2.5V	3.5V
BETA 200S Ophthalmoscope, without handle	C-001.30.120	C-002.30.120
XHL Xenon Halogen spare bulb	X-001.88.069	X-002.88.070

Set complete with BETA 200S Ophthalmoscope, 1 spare bulb in hard case, with:

	2.5V	3.5V
BETA battery handle	C-261.10.118	
BETA R rechargeable handle		C-261.20.376
same, with Lithium-Ion battery		C-261.27.376
BETA TR rechargeable handle and transformer		C-261.20.384
same, with Lithium-Ion battery		C-261.27.384
BETA NT rechargeable handle (NiMH) and NT 300 charger		C-261.20.420
same, with  BETA L rechargeable handle with Lithium-Ion battery		C-261.29.420


**BETA 200 Streak Retinoscope**

	2.5V	3.5V
BETA 200 Streak Retinoscope with XHL Xenon Halogen bulb, detachable brow rest, without handle	C-001.15.353	C-002.15.353
XHL Xenon Halogen spare bulb for Streak Retinoscope	X-001.88.087	X-002.88.089
XHL Xenon Halogen spare bulb to convert to Spot Retinoscope	X-001.88.088	X-002.88.090

Bulb holder		C-000.15.355
Bulb-cover		C-000.15.356
Detachable brow rest for spectacle-wearers		C-000.15.357
Orange filter for light-sensitive patients		C-000.15.359
Fixation cards with holder for dynamic retinoscopy		C-000.15.360


Set complete with BETA 200 Streak Retinoscope,


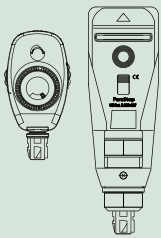
1 spare bulb in hard case, detachable brow rest, with:

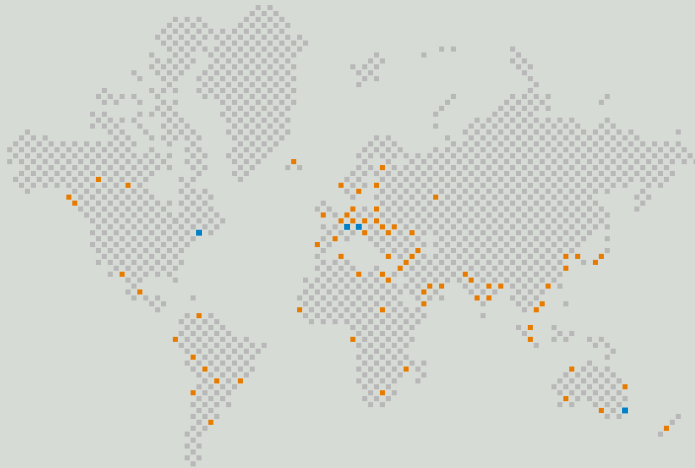
	2.5V	3.5V
BETA battery handle	C-034.10.118*	
BETA R rechargeable handle		C-034.20.376
same, with Lithium-Ion battery		C-034.27.376
BETA TR rechargeable handle and transformer		C-034.20.384
same, with Lithium-Ion battery		C-034.27.384
BETA NT rechargeable handle (NiMH) and NT 300 charger		C-034.20.420
same, with  BETA L rechargeable handle with Lithium-Ion battery		C-034.29.420

* Available with large battery handle **X-001.99.120** (doesn't fit into hard cases). Please specify with your order.**Set complete with BETA 200S Ophthalmoscope, BETA 200 Streak Retinoscope,**

detachable brow rest, 1 spare bulb each in hard case, with:

	2.5V	3.5V
BETA battery handle	C-262.10.118	
BETA R rechargeable handle		C-262.20.376
same, with Lithium-Ion battery		C-262.27.376
BETA TR rechargeable handle and transformer		C-262.20.384
same, with Lithium-Ion battery		C-262.27.384
BETA NT rechargeable handle (NiMH) and NT 300 charger		C-262.20.420
same, with  BETA L rechargeable handle with Lithium-Ion battery		C-262.29.420

: Rechargeable handle with charge status display in the bottom insert.



■ HEINE SUBSIDIARY COMPANIES
■ HEINE REPRESENTATIVES

A company makes history and gives a name to outstanding product quality: HEINE.

Founded in 1946, family owned, rich in tradition and today international market leader in a complete range of diagnostic instruments. HEINE products meet international standards (ISO/CE) and represent the leading edge in precision and ergonomic design. Ongoing dedication to research and development has created a solid and diverse technology base for continued quality and product leadership. Over 500 employees worldwide contribute to this success.

www.heine.com

GERMANY

HEINE Optotechnik GmbH & Co. KG
82211 Herrsching
Kientalstr. 7
Tel. +49 (0) 81 52-38 0
Fax +49 (0) 81 52-3 82 02
E-Mail: info@heine.com

NORTH AMERICA

HEINE USA LTD.
10 Innovation Way
Dover, NH 03820
Tel. (603) 742-71 03
Fax (603) 742-72 17
Toll Free (800) 367-4872
E-Mail: service@heine-na.com

AUSTRALIA

HEINE AUSTRALIA PTY. LTD.
Unit 9, 98 Old Pittwater Road
P.O. Box 717 Brookvale 2100
New South Wales
Tel. +61 (0) 2-99 38 95 00
Fax +61 (0) 2-99 39 23 05
E-Mail: info@heine.com.au

SWITZERLAND

HEINE (Schweiz) AG
Tobeläckerstr. 9
CH-8212 Neuhausen am Rheinfall
Tel. +41 (0) 52-6 72 22 66
Fax +41 (0) 52-6 72 63 77
E-Mail: heine-schweiz@schaffhausen.ch

We reserve the right to change specification without notice.

Your distributor

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