



Hand-held retinoscopes for objective refraction. The BETA 200 Retinoscope is used for the exact measurement of the refractive error. Both myopia and hyperopia as well as astigmatism can be measured.

Two versions are available:

The Spot Retinoscope with a round light spot (available only as XHL variant) and the more widely-used Streak Retinoscope with a streak image which simplifies the examination.

***HEINE ParaStop**

The BETA 200 Retinoscope with ParaStop features the latest multi-coated optics for an exceptionally bright fundus reflex and easier detection of the neutralisation point. ParaStop was developed by HEINE for the easy, precise selection of a parallel illumination beam. ParaStop simplifies and speeds up the precise detection of cylinder axis. ParaStop also simplifies the verification of the cylinder correction after refraction.

Ophthalmic instruments

3.1.P. Retinoskopas

3.1.2.P. Retinoskopo tipas plyšinis

HEINE BETA® 200 LED Retinoscope with HEINE ParaStop®

With LED illumination in HEINE Quality – LED^{HQ}



Homogenous LED illumination for precise streak image quality offers an easy and quick observation of the fundus reflex.



LED^{HQ}
LED NOW IN HEINE QUALITY

- ParaStop. Precise, easy selection of a parallel beam.*
- LED in HQ – for a very bright, readily visible fundus reflex. Brilliant, precise streak image with a line width of typically 1.1 mm (ISO 12885 Standard < 1.5mm) and a line length of 35 mm. The new standard in LED lighting delivers a completely homogeneous and bright light for a precise diagnosis.
- Exclusive continuous brightness control between 100% and 3% (patented) with one-finger operation.
- Ergonomic design.
- Metal controls being tested.
- Single control for vergence and rotation. Comfortable operation.
- Maintenance-free. Dustproof. LED working life typically 50,000 hours.
- Integrated polarisation filter. Eliminates stray light and internal reflexes for a brighter fundus reflex.
- Detachable brow rest. Increased comfort and control during examination.
- Holder for fixation cards (optional). For dynamic retinoscopy.
- Full functionality of the BETA 200 LED is guaranteed with HEINE Rechargeable Handles and the EN100/EN200 Wall Transformer.

3.1.4.P. Reguliuojamas intensyvumas 5-100% ribose

3.1.3.P. LED lemputės darbo laikas 50 000 val.

3.1.6.P. Apsauga nuo dulkių

3.1.5.P. Poliarizacinis filtras, mažinantis atspindžius

BETA 200 LED Streak Retinoscope	LED
without handle	C-008.15.353

Fixation cards with holder for dynamic retinoscopy	C-000.15.360
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EXCLUSIVELY AT HEINE

- ParaStop
- Highly visible, bright fundus reflex
- Metal controls

For information on HEINE battery and rechargeable handles, see pages 123 – 128.



HEINE BETA® 4 Rechargeable Handles

Next-generation energy management

EXCLUSIVELY AT HEINE

- Exclusive Automatic Connector
- Li-ion technology
- Charge Status Indicator
- USB – flexible and convenient charging option

- High-quality metal construction for strength and durability.
- Exclusive Automatic Connector with locking design. No metal on metal friction which can wear out over time, for a secure fit for the lifetime of your instruments.
- Deep Battery Discharge Protection: Integrated safety system protects your investment by preventing batteries from completely draining; thus ensuring maximum battery life.
- Familiar brightness control: Rheostat for continuous brightness control with power level indicator.
- Li-ion technology: no "memory effect". Charge your handle how you like without worrying about charge level or battery condition.
- Extended ON time: work typ. 6 weeks between recharging with LED instruments.
- Quick charge.
- Slightly knurled finish of the handle provides a non-slip grip but is easy to clean and disinfect.
- Charge Status Indicator in the bottom insert: the indicator shines orange if the battery needs to be recharged. In the BETA4 USB Handle the indicator blinks green during the charging process and shines permanently green as soon as it is fully charged.

BETA 4 NT rechargeable handle for NT4 table charger



- Ready-to-use Function. Handles switch ON & OFF automatically when placed into charger. Set your desired brightness level once and it stays there every time you use your instrument. Also prevents battery damage and premature bulb burn outs if the instruments are accidentally left on.

	3.5V Li-ion
Rechargeable handle complete with Li-ion rechargeable battery and BETA 4 NT bottom insert	X-007.99.396
BETA 4 NT bottom insert	X-002.99.394
Li-ion rechargeable battery for BETA 4 rechargeable handle	X-007.99.383

3.1.7.P. ir 3.2.7.P Rankena su Ličio-jonų akumuliatoriumi, įkraunama įstatant ją į ant stalo pakrovėją

BETA4 USB Li-ion rechargeable handle



- Maximum safety. You can charge your HEINE BETA 4 USB handle with any USB plug or other USB power source, with absolute peace of mind. The BETA4 USB handle has an integrated, exclusive Galvanic Separation Module that protects the handle, and the user, even if a faulty or inferior plug is used; thus preventing the possibility of the full mains voltage flowing directly to the handle. We do however recommend the use of a medical approved plug-in power supply.

	3.5V Li-ion
Rechargeable handle complete with Li-ion rechargeable battery, BETA 4 USB bottom insert, USB cord with medical approved plug-in power supply and handle rest	X-007.99.388
Rechargeable handle complete with Li-ion rechargeable battery and BETA 4 USB bottom insert (without additional accessories)	X-007.99.387
Li-ion rechargeable battery for BETA4 rechargeable handle	X-007.99.383
BETA 4 USB bottom insert	X-002.99.395
USB Cord [01] with E4-USB plug-in power supply [02]	X-000.99.303
E4-USB Medical approved plug-in power supply [02]	X-000.99.305



For information on HEINE Laryngoscope Handles, see pages 072 – 075.



3.2.5.P. Korpusas -atsparus dulkėms, optiniai elementai sumontuoti ant lengvo metalo rėmo, suteikiančio visai konstrukcijai tikslumo ir atsparumo smūgiams

HEINE BETA® 200 S LED Ophthalmoscope

3.2.P. Oftalmoskopas

Superior aspherical optics with LED^{HQ} illumination

LED^{HQ}
LED NOW IN HEINE QUALITY



3.2.1.P. Šviesos šaltinis: LED

- Exclusive dustproof design protects the precision optical components and ensures maintenance-free operation. The BETA 200/200 S Ophthalmoscopes are the only instruments with an aluminium frame system. Optical components are flush-mounted on a cast aluminum frame, eliminating misalignment and making the instrument shock-resistant. The BETA 200 S LED has virtually unlimited hours of working life (typ. 100,000 hours). No need to ever replace bulbs. Maintenance-free for a lifetime.
- Exclusive aspherical optical system (AOS) for more information see the bottom of page 036.
- **LED in HQ:** The new standard in LED illumination defining optimal light intensity, homogeneity and colour rendering for the most accurate diagnosis. Red is red, blue is blue. Colour temperature: typ. 3,500K, Colour Rendering Index (CRI) > 97, exceptional colour rendering.
- Special optical interface to precisely integrate the LED illumination with the optical system to ensure bright, homogeneous light during examinations.
- The BETA 200 S Ophthalmoscope accommodates higher refractive errors with a 28 single lenses ReKoss Disc and features a 74 single step design on a non-continuous wheel avoiding extreme diopter jumps.
 - + in 1 D steps: +1 through +38D
 - in 1 D steps: -1 through -36D
- Exclusive continuous brightness control between 100% and 3% (patented) with one-finger operation.
- No stray light due to the recessed, multi-coated viewing window – eliminates distractions.
- Precise one-hand control of the instrument. Ergonomic design offers flexibility while examining.
- Suitable for large as well as small or undilated pupils.
- Ergonomic design fits the orbita comfortably, and blocks out ambient light.
- Full functionality of the BETA 200 S LED is guaranteed with BETA Rechargeable Handels and the EN100/EN200 Wall Transformers.

EXCLUSIVELY AT HEINE

- Aspherical optical system
- LED in HQ with continuous brightness control
- Aluminium frame system

3.2.2.P. Asferinė optika, eliminuojanti atspindžius nuo ragenos ir rainelės

BETA200S with 7 apertures



Cobalt blue filter, fixation star with polar coordinates, large spot, small spot, pinhole, slit, hemispot



With red-free filter

BETA 200 S LED Ophthalmoscope	LED
without handle	C-008.30.120

3.2.6.P. Filtrai ir diafragmos: plyšinė, psmėnulio diafragmos, fiksacijos taikynys, mėlynas ir žalias filtras

HEINE BETA® 200 S Ophthalmoscope

Superior aspherical optics with XHL illumination



BETA 200 S Ophthalmoscope with XHL Xenon Halogen illumination instead of LED illumination. Other technical specifications the same as the BETA200S LED Ophthalmoscope.

- XHL Xenon Halogen bulb with bright illumination and authentic colour rendering.

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

For information on HEINE battery and rechargeable handles, see pages 123 – 128.

HEINE BETA® 4 SLIM NT Rechargeable Handle



Dimensions: 135 mm x 19 mm dia. Weight: 180 g.

A compact handle with automatic connector for those who prefer a slim handle. Rechargeable in NT 4 table charger fitted with the small adaptor ring.

BETA 4 SLIM NT rechargeable handle	3.5V Li-ion
Rechargeable handle complete with rechargeable battery M3Z 4 NT Li-ion and BETA 4 SLIM NT bottom insert	X-007.99.474
BETA 4 SLIM NT bottom insert	X-000.99.110
Rechargeable battery M3Z 4 NT Li-ion	X-007.99.380

3.2.8.P. Komplekte su pakrovėju, ant stalo laikomas pakrovėjas, skirtas vienu metu įkrauti 2 prietaisus

HEINE® NT 4 Table Charger



Dimensions: Width 142 mm, Height 61 mm, Depth 66 mm.

With the appropriate adaptor set all BETA 4 NT and BETA 4 SLIM NT rechargeable handles can be charged in the NT 4 table charger. The same applies to all Standard F.O. 4 NT, F.O. 4 SLIM NT and F.O. 4 SHORT NT laryngoscope rechargeable handles.

- ✦ Innovative, compact design. Practical and space-saving.
- ✦ **Two independent charging wells.** Complete functionality for one or two handles at a time.
- ✦ Automatic charging. Independent of the state of charge of the rechargeable battery. Guarantees extended battery life.
- ✦ Cannot be overcharged. Charger switches off automatically when the battery is fully charged.
- ✦ **Charge status indicator.** Light pulses from the charging well to confirm the charging mode. Continuous light indicates that the charging process has been completed.



NT 4 table charger	
without handle, with adaptor. For BETA 4 NT rechargeable handles, Standard F.O. 4 NT and F.O. 4 SHORT NT laryngoscope rechargeable handles. BETA 4 SLIM NT rechargeable handles and F.O. 4 SLIM NT laryngoscope rechargeable handles (Adaptor set required X-000.99.086).	X-002.99.494
Adaptor set (two pieces) for BETA 4 SLIM NT rechargeable handles and F.O. 4 SLIM NT laryngoscope rechargeable handles [01]	X-000.99.086

230V is the standard mains voltage. If a different voltage is required, e. g. 120V, please specify when ordering.