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# Ophthalmic Instruments

# HIGHEST OPTICAL QUALITY AND THE MOST ACCURATE DIAGNOSIS

HEINE ophthalmic instruments set the industry standard for optical quality and diagnostic accuracy. The HEINE range includes a wide variety of high quality ophthalmic instruments for all aspects of general and specialized examination of the eye: Direct and Indirect ophthalmoscopes, specialty ophthalmic instruments including retinoscopes, retinometers, hand-held slit lamps and ophthalmic examination lamps.

The innovative HEINE Ophthalmoscopes benefit from numerous patents and registered trade marks. The main features: The aspherical optical system (AOS) in HEINE BETA® Direct Ophthalmoscopes, the ParaStop® feature in the HEINE Retinoscope and the simultaneous adjustment of convergence and parallax in HEINE OMEGA® Indirect Ophthalmoscopes.

### 02 OPHTHALMIC INSTRUMENTS DIRECT OPHTHALMOSCOPES



	HEI	NE Direct Opht	halmoscopes		
		8	R.		
	4		- Y	9	0
	BETA 200 S	BETA 200	K180	mini 3000	mini 3000 LED
			Optical System		
Aspherical					
Conventional			□ Illumination		
LED Illumination			indifinitedion		
XHL Illumination					
			Apertures		
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			Corrective lenses		
Diopter Range	- 36 to +38	- 35 to +40	- 35 to +40	- 20 to +20	- 20 to +20
Number of Lenses	74	28	28	18	18
Single Diopter Steps					
			Dust protection		
Dustproof					
Dust Resistant					
Metal chassis					
			Instrument size		
Professional					
Compact					
Battery 2.5V			ailable Power Sour		
Battery 2.5 V Rechargeable battery 2.5 V					
Rechargeable battery 3.5V				U	
Page	043	044	047	049	051

\*Red free filter for all apertures except blue





Superior aspherical optics and 74 single diopter steps



Ideal for small pupils
74 single diopter steps

: Dustproof

# Unique optical system. HEINE optimizes the Gullstrand principle with aspherical optics (separation of illumination and observation beam). Corneal and iris reflexes are eliminated. A full view is guaranteed even with small pupils. XHL Xenon Halogen Technology. Bright, white light. Recessed, multi-coated viewing window. Avoids stray light. Dustproof housing. Maintenance free. Optics mounted on precision metal chassis. Durable, precise. Ergonomic shape. Instrument fits the orbita comfortably in any position. Soft orbital support. Protects the user's glasses and steadies the instrument. 7 apertures with separate red-free filter. Suitable for large or small pupils. Incorporates slit aperture, fixation star, cobalt blue filter and red-free filter for improved contrast.

: Lens range: Perfect focus even with high refractive errors.

74 single diopter steps

- + in 1 D steps: 1 through +38 D
- in 1 D steps: -1 through -36 D

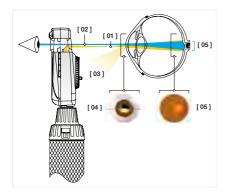
BETA 200S Ophthalmoscope	AV	TL
without handle	C-002.30.120	C-002.30.120 TL
XHL Xenon Halogen spare bulb	X-002.88.070	X-002.88.072
BETA 200S apertures:		





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

With red-free filter: Cobalt blue filter, fixation star with polar coordinates, large spot, small spot, pinhole, slit, hemispot



### "Aspherical Optical System" (AOS) exclusively from HEINE

eliminates corneal and iris relexes to provide large, crisp and glare-free fundus images.

**[01]** Flat, elliptical illumination beam produced by HEINE's patented Aspherical Optical System.

[02] Observation path.

[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.

[ 043 ]

### OPHTHALMIC INSTRUMENTS DIRECT OPHTHALMOSCOPES

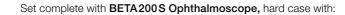


	HEINE BETA 200 <sup>®</sup> Ophthalmoscope		
	The ophthalmoscope with superior aspher	ical optics	
	This ophthalmoscope offers all the features of the BE Aspherical Optical System. The exceptions are that t aperture and the following range of lenses: 27 lense     + in 1 D steps: 1 - 10   15   20   40   D     - in 1 D steps: 1 - 10   15   20   25   35 D     BETA200 Ophthalmoscope     without handle     XHL Xenon Halogen spare bulb	here is no macula	a \ pinhole
Eliminates corneal reflex Ideal for small pupils Dustproof	BETA 200 apertures Slit, fixation star with polar coordinates, cobalt blue filter, large spot, small spot, hemispot		

For more information on diagnostic combined sets, please see pages 159 -162.

### HEINE BETA 200<sup>®</sup>/200S<sup>®</sup> Ophthalmological Diagnostic Sets

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BETA200S Ophthalmoscope Sets	3.5V (NiMH)	3.5V 💶 ION)
BETA R rechargeable handle for		
mains socket	C-261.20.376	C-261.27.376
BETA NT rechargeable handle		
and NT 300 charger	C-261.20.420	
BETA L rechargeable handle		
and NT 300 charger		C-261.29.420

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

: To order your kit with the TL "Twist Lock" connection style, simply add the suffix "TL" to the end of the item number. e.g. B-141.20.376 TL for the set with Twist Lock.







Set complete with BETA200 Ophthalmoscope, hard case with:

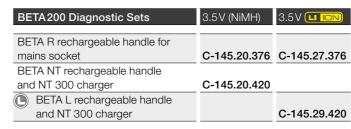
BETA 200 S Ophthalmoscope Sets	3.5V (NiMH)	3.5V 💶 ION)
BETA R rechargeable handle for		
mains socket	C-144.20.376	C-144.27.376
BETA NT rechargeable handle		
and NT 300 charger	C-144.20.420	
BETA L rechargeable handle		
and NT 300 charger		C-144.29.420



Set complete with **BETA200S Ophthalmoscope**, **BETA200 Streak Retinoscope**, hard case with:

BETA200 Diagnostic Sets	3.5V (NiMH)	3.5V 💶 📖
BETA R rechargeable handle for		
mains socket	C-262.20.376	C-262.27.376
BETA NT rechargeable handle		
and NT 300 charger	C-262.20.420	
BETA L rechargeable handle		
and NT 300 charger		C-262.29.420

Set complete with **BETA200 Ophthalmoscope**, **BETA200 Streak Retinoscope**, hard case with:





(E): Rechargeable handle with LED charge status display in the bottom insert.

To order your kit with the TL "Twist Lock" connection style, simply add the suffix "TL" to the end of the item number. e.g. B-141.20.376 TL for the set with Twist Lock.



### **HEINE** Diagnostic Sets



Set complete: BETA 200 Ophthalmoscope, BETA 200 F.O. Otoscope,

1 set (4 ea.) of reusable tips (B-000.11.111)

5 of both AllSpec disposable tips 2.5 and 4 mm dia. (B-000.11.119) hard case

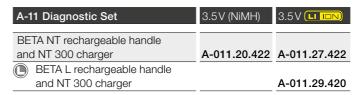
Diagnostic Sets	3.5V (NiMH)	3.5V LI ION
BETA R rechargeable handle for		
mains socket	A-132.20.376	A-132.27.376
BETA NT rechargeable handle		
and NT 300 charger	A-132.20.420	
BETA L rechargeable handle		
and NT 300 charger		A-132.29.420

Set complete: **BETA 200 Ophthalmoscope, BETA 100 Diagnostic Otoscope,** 1 set (4 ea.) of reusable specula (B-000.11.221)

10 UniSpec disposable tips  $4\,\text{mm}$  dia. (B-000.11.237) hard case

Diagnostic Sets	3.5V (NiMH)	3.5V LI ION
BETA R rechargeable handle for		
mains socket	A-234.20.376	A-234.27.376
BETA NT rechargeable handle		
and NT 300 charger	A-234.20.420	
BETA L rechargeable handle		
and NT 300 charger		A-234.29.420





(D): Rechargeable handle with LED charge status display in the bottom insert.

To order your kit with the TL "Twist Lock" connection style, simply add the suffix "TL" to the end of the item number. e.g. B-141.20.376 TL for the set with Twist Lock.



### HEINE K 180<sup>®</sup> Ophthalmoscope

### Standard direct ophthalmoscope

Reduces corneal reflex

### A full featured instrument at an economical price.

- : Precision spherical HEINE optics. Corneal and iris reflexes are reduced.
- : XHL Xenon Halogen Technology. Bright, white light. Clear retinal image.
- : Ergonomical shape. The instrument fits the orbita comfortably.
- : Soft orbital rest. Steadies the instrument and protects your glasses.
- : Choice of 5 apertures. For both large and small pupils.
- : Dust resistant housing. Maintenance free.
- : High impact polycarbonate housing for durability.
- : 28 lenses from 35 D to + 40 D. Brilliant image even at high corrections.

+ in 1 D steps: 1 – 10 15 20 40 D

– in 1 D steps: 1 – 10	15   20   2	25   35 D
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K180 Ophthalmoscope	AV	TL
without handle	C-002.30.207	C-002.30.207 TL
XHL Xenon Halogen spare bulb	X-002.88.086	X-002.88.085

### K180 apertures



### HEINE K180<sup>®</sup> Ophthalmic Diagnostic Sets



### Set complete: K 180 Ophthalmoscope, K 180 F.O. Otoscope

A-10 Diagnostic Set	3.5V (NiMH)	3.5V <b>LI ION</b>
BETA NT rechargeable handle and NT 300 charger	A-010.20.422	A-010.27.422
BETA L rechargeable handle and NT 300 charger		A-010.29.420

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

: To order your kit with the TL "Twist Lock" connection style, simply add the suffix "TL" to the end of the item number. e.g. B-141.20.376 TL for the set with Twist Lock. 

## HEINE K 180<sup>®</sup> Diagnostic Sets

# Set complete with: K180 Ophthalmoscope, K180 Otoscope

1 set (4 ea.) of reusable tips (B-000.11.111) hard case

K180 Diagnostic Sets	2.5V	3.5V (NiMH)	3.5V LI ION
BETA R rechargeable handle for			
mains socket		A-279.20.376	A-279.27.376
BETA NT rechargeable handle			
and NT 300 charger		A-279.20.420	
BETA L rechargeable handle			
and NT 300 charger			A-279.29.420

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

To order your kit with the TL "Twist Lock" connection style, simply add the suffix "TL" to the end of the item number. e.g. B-141.20.376 TL for the set with Twist Lock.







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: Modern pocket instrument
: Dust resistant
: Switches off automatically
: Optional rechargeable handle

### HEINE mini 3000<sup>®</sup> Ophthalmoscope

### **Compact Pocket Ophthalmoscope**

Top quality ophthalmoscope with fixation star aperture in pocket format. Quality optics in mini format. Ideal for rounds and house calls. Can only be used with the mini 3000 handle system. Available in black or blue.

- : Enhanced XHL Xenon Halogen Technology. Concentrated white light for perfect illumination and a brilliant image.
- : 2 piece handle and head. Easy to maintain, flexible.
- : Reduced Illumination filter for light sensitive patients.
- : 5 different apertures. A full-function instrument incl. fixation star (Reduced Illumination Filter).
- : Range of lenses: 20 D to + 20 D.

	5								
									20 D
-	1	2	3	4	6	8	10	15	20 D

- : High quality handle: Chrome finish upper section/refined plastic. Shockproof, sturdy, non-slip.
- : Attachment clip with integrated on/off switch. Secure. Switches off automatically when placed in the pocket. 20,000 switch cycles guaranteed.
- : Replaceable batteries. Size AA, or optional rechargeable battery with mini NT charger\*.

mini 3000 Ophthalmoscope	2.5V
with mini 3000 Battery Handle, with batteries	D-001.71.120
without handle	D-001.71.105

XHL Xenon Halogen spare bulb X-001.88.106

mini 3000 apertures



Large spot, small spot, fixation star / reduced illumination filter, hemispot, red-free filter

### HEINE mini 3000® Diagnostic Sets





Set complete with:  $\min 3000 \ Ophthalmoscope$  in hard case

mini 3000 Diagnostic Sets	2.5V
mini 3000 battery handle with batteries	D-852.10.021



For information on HEINE battery and rechargeable handles and combined sets, see pages 151–156 and 169–171.



### HEINE mini 3000® Diagnostic Sets

All handles are fitted with batteries (AA size, or optional rechargeable battery with mini NT charger\*.). Please order spare bulbs separately.



Set complete with: **mini 3000 Ophthalmoscope, mini 3000 F.O. Otoscope** 1 set = 4 reusable tips (B-000.11.111) 5 of both 2.5 and 4 mm dia. AllSpec disposable tips (B-000.11.119) hard case

mini 3000 Diagnostic Sets	2.5 V
with <b>2</b> mini 3000 battery handles with batteries	D-873.11.021
as D-873 but with <b>mini 3000 Otoscope</b>	D-873.21.021



\*To upgrade to a rechargeable instrument, with miniNT charger, please see page 156.

HEINE mini 3000<sup>®</sup> pocket instruments – a complete range of quality diagnostic instruments for your pocket. Available in black or blue. Please specify the color you prefer when ordering. If not otherwise specified, we will supply black instruments.



: Up to 10 hours operation time

	Modern ophthalmoscope with maintenance free LED illumination. Its brightness and			
	color rendering are comparable with a HEINE XHL Xenon Halogen Ophthalmoscope	•		
	All of the features of the mini 3000 Ophthalmoscope, with the addition of:			
-	: Maintenance free, no need to ever replace the LED.			
	: LED Thermal management for a consistent light output throughout the whole working life.			
	: High-performance LED: bright and absolutely homogeneous illumination with an			
18	excellent color rendering – color temperature 4000 K, color rendering index >95,	and		
	>90 rendering index of the color red.			
1 A	Exclusive Battery Performance Indicator: When the instrument is switched on, the maximum light intensity is shown, then the light intensity is regulated down to			
	level that corresponds to the current charge status of the battery so you know wh			
	your batteries need changing.			
	: Exclusive fade-out function reduces illumination intensity with battery level			
	to let you know when to replace.			
	: Operation time up to 10 hours. The batteries need to be changed less often and	ł		
	the rechargeable batteries last longer.			

with mini 3000 Battery Handle, with batteries D-008.71.120 D-008.71.105 without handle

mini 3000 apertures



Large spot, small spot, fixation star, hemispot, red-free filter



<u> </u>	HEINE mini 3000 <sup>®</sup> LED Diagnostic Sets	
	All handles are fitted with batteries (AA size, or optional rechargeable battery with miniNT charger*).	
	Set complete with: mini3000 LED Ophthalmoscope hard case mini3000 LED Ophthalmoscope Set mini3000 battery handle with batteries	2.5V D-885.21.021
	Set complete with: <b>mini 3000 LED Ophthalmoscope, mini 3000 LED</b> 1 set = 4 reusable tips (B-000.11.111) 5 of both 2.5 and 4 mm dia. AllSpec disposable tips (B-000.11.119) hard case	F.O. Otoscope

mini 3000 LED Ophthalmoscope, mini 3000 F.O. Otoscope Set	2.5V
with <b>2</b> mini 3000 battery handles with batteries	D-886.11.021

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\*To upgrade to a rechargeable instrument, with miniNT charger, please see page 156.

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For information on HEINE battery and rechargeable handles and combined sets, see pages 151-156 and 169-171.