HEINE BETA® 200 / BETA® 200 S LED Ophthalmoscopes

BETA 200: -35 / +40
27 diopter steps
BETA 200 S: -36 / +38
74 single diopter steps

Patented, unique, stepless dimming from 3 % to 100 % with practical one-finger operation.

Reduction of reflections thanks to the “Aspherical Optical System” (AOS) *exclusively from HEINE.

Optical components are mounted on a cast aluminum frame.

LED HQ
LED NOW IN HEINE QUALITY.

DATA		
Description	HEINE BETA 200 / 200S LED Ophthalmoscope	
Catalogue Number	C-008.30.100, C-008.30.120	
Version / Date	V03 / 16.10.2018	

GENERAL		
Product variants	BETA 200 LED Ophthalmoscope	BETA 200S LED Ophthalmoscope
Material	synthetics, metal, glas	
REACH/RoHS	compliant	
Phthalate	product is phthalate free	
Latex	product is latex free	
Biocompatibility	compliant	
Surface	synthetics, metal, glas	
Environmental conditions operation	temperature: +10 °C to +35 °C, relative humidity: 30 % to 75 %, air pressure: 700 hPa to 1060 hPa	
Environmental conditions storage	temperature: +5 °C to +45 °C, relative humidity: 45 % to 80 %, air pressure: 500 hPa to 1060 hPa	
Environmental conditions transport	temperature: -20 °C to +50 °C, relative humidity: 45 % to 80 %,air pressure: 500 hPa to 1060 hPa	
Guarantee	5 years	
Instructions for use	Deutsch, English, Français, Español, Italiano, Svenska, Nederlands, Português, Dansk, Suomi *	
Operating elements	lens wheel, aperture wheel, filter switch	
Display	indirect illuminated index of refraction	
Power Supply	HEINE rechargeable handles (3.5 V), HEINE EN200 wall transformer, HEINE EN200-1 wall transformer	
Accessories	n/a	
Patents	n/a	

MECHANICAL		
Weight	73 g / 114 g (incl. packaging)	75 g / 116 g (incl. packaging)
Dimensions product	98 x 48 x 28 mm (height x width x depth)	
Dimensions packaging	108 x 42 x 68 mm (length x height x depth)	
Connections	AV for rechargeable handle	
Aufdrucke	examiner-sided: BETA 200 LED, HEINE Logo, CE	examiner-sided: BETA 200S LED, HEINE Logo, CE
	patient-sided: Symbole, HEINE made in Germany	
	AV connector: data matrix code, SN, www.heine.com	

ELECTRICAL	
Input voltage	3.0-3.7 V DC
Current consumption	max. 350 mA
Operation time	ca. 7 h using fully loaded Li-ion L rechargeable battery (X-007.99.383)
Safety class	internal power supply
Fuse	n/a

OPTICAL		
Type	LED illumination (HQ) 3.5V fixed in the instrument	
Luminous flux**	typ. 0.4 lm	
Illuminance (in 200 mm distance)**	typ. 600 lx +/- 150 lx	
Color temperature	3500 K +/- 500 K	
Color rendering index	typ. CRI ≥ 90, high R9	
Lifetime	typ. 42,000 h	
Classification according to ISO 10942	group B	
Classification according to ISO 15004-2	group 2	
Apertures	6 luminous field apertures with separate red-free filter: Slit, fixation star with polar coordinates, cobalt blue filter, large spot, small spot, hemispot	7 luminous field apertures with separate red-free filter: Cobalt blue filter, fixation star with polar coordinates, large spot, small spot, pinhole, slit, hemispot
Lens / Diopter	27 lens / 27 diopter steps (-35 D to +40 D)	28 lens / 74 single-diopter steps (-36 D to +38 D)

* further languages on request
** at 3.7 V supply voltage

CLEANING, DISINFECTION	
Procedure	Wipe cleaning and wipe disinfection with agents recommended in the instructions for use. Please consider the detailed information in the accompanying documents!

CODES		
Customs Code	90185090	90185090
EAN/GTIN	4053755182534	4053755182541
HIBC	+E229C0083010000017	+E229C0083012000019

Regulatory	
Product classification (EU)	Class I
Product classification (USA)	Class 2
Product classification (Canada)	Class I
UMDNS code	12-817
GMDNS code	12817
Regulation number (FDA)	886.1570
Product code (FDA)	HLJ

Fulfills the requirements of Directives & Standards	
ISO 13485	Medical devices - Quality management systems - Requirements for regulatory purposes
Directive 93/42/EEC	Concerning medical devices
IEC 60601-1	Medical electrical equipment: General requirements for basic safety and essential performance
IEC 60601-1-2	Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance -Collateral standard: Electromagnetic disturbances - Requirements and tests
ISO 14971	Medical devices - Application of risk management to medical devices
IEC 60601-1-6	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
IEC 62366-1	Medical devices - Part 1: Application of usability engineering to medical devices
DIN EN 15004-1	Ophthalmic instruments – Fundamental requirements and test methods – Part 1: General requirements applicable to all ophthalmic instruments
DIN EN 15004-2	Ophthalmic instruments – Fundamental requirements and test methods – Part 2: Light hazard protection
IEC 60601-1-9	Medical electrical equipment - Part 1-9: General requirements for basic safety and essential performance - Collateral Standard: Requirements for environmentally conscious design
ISO 17664	Processing of health care products - Information to be provided by the medical device manufacturer for the processing of medical devices
ISO 2248	Packaging; complete, filled transport packages; vertical impact test by dropping
Directive (2011/65/EU) ROHS	On the restriction of the use of certain hazardous substances in electrical and electronic equipment
Directive (2012/19/EU) WEEE	On Waste Electrical and Electronic Equipment
Regulation (1907/2006) REACH	Registration, Evaluation, Authorization and Restriction of Chemicals