TH 100   **IMAGE 1 H3-Z SPIES Three-Chip FULL HD Camera Head, SPIES-compatible,** max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length f = 15-31 mm (2x), 2 freely programmable camera head buttons

TH 100 IMAGE 1 H3-Z SPIES triju lustu FULL HD kameros galva, suderinama su SPIES, maks. raiska 1920 x 1080 tasku, progresyvus skenavimas, sterilizuojama dujomis arba plazma, su integruotais parfokaliniais lesiais, fokalinis gylis f = 15-31 mm (2x), 2 laisvai programuojami kameros galvos mygtukai
p. 2.1., p. 2.2., p. 2.6.

TH 103   **IMAGE 1 H3-P SPIES Three-Chip FULL HD Pendulum Camera Head, SPIES-compatible,** with pendulum system and fixed focus, max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, focal length f = 16 mm, 2 freely programmable camera head buttons

TH 101   **IMAGE 1 H3-ZI SPIES Three-Chip FULL HD Inline Camera Head, SPIES-compatible,** 0° cable exit (inline), max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length f = 15-31 mm (2x), 2 freely programmable camera head buttons

TH 104   **IMAGE 1 H3-ZA SPIES Three-Chip FULL HD Camera Head, SPIES-compatible, autoclavable,** max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length f = 15-31 mm (2x), 2 freely programmable camera head buttons

IMAGE1 FULL HD Camera Heads ^NEW

for Endoscopy

STORZ
KARL STORZ — ENDOSKOPE

IMAGE1 HD

For use with IMAGE 1 HUB™ HD Camera Control Unit SCB 22 2010 11U1xx and IMAGE1 HD Camera Control Unit SCB 22 2020 11U1xx

22 2200 56-3

22 2200 56-3	**50 Hz** **60 Hz**	**IMAGE1 H3-P** **Three-Chip FULL HD Pendulum Camera Head**

with pendulum system and fixed focus, max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, focal length f = 16 mm, 2 freely programmable camera head buttons, for use with color systems **PAL/NTSC**

22 2200 53-3

22 2200 53-3	**50 Hz** **60 Hz**	**IMAGE1 H3-ZI** **Three-Chip FULL HD Inline Camera Head**

0° cable exit (inline), max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length f = 15 – 31 mm (2x), 2 freely programmable camera head buttons, for use with color systems **PAL/NTSC**

Minimalus jautrumas:
1.17 Lux
p. 2.3.

Specifications:

IMAGE1 FULL HD Camera Heads	H3-P	H3-ZI
50/60 Hz	**22** 2200 56-3 (PAL/NTSC)	**22** 2200 53-3 (PAL/NTSC)
Image sensor	3x ⅓" CCD chip	3x ⅓" CCD chip
Pixel output signal H x V	1920 x 1080	1920 x 1080
Dimensions (w x h x d)	35 x 47 x 88 mm	37 x 48 x 100 mm
Weight incl. cable	226 g	270 g
Optical interface	pendulum system, fixed focus f = 16 mm	integrated Parfocal Zoom Lens, f = 15-31 mm
Min. sensitivity	F 1.4/1.17 Lux	F 1.4/1.17 Lux
Grip mechanism	standard eyepiece adaptor	standard eyepiece adaptor
Cable	non-detachable	non-detachable
Cable length	300 cm	300 cm

Further accessories for IMAGE1 FULL HD see pages TP 21-22

Kabelio ilgis: 300 cm
p. 2.5.

18

12-11

5.2.4 Bedientasten verwenden

④ Scrollen nach unten: Nach unten scrollen durch Menüs, Optionen etc. Kann außerdem einer/ einem programmierbaren Funktion/Feature zugewiesen werden.

⑤ Scrollen nach oben: Nach oben scrollen durch Menüs, Optionen etc. Kann außerdem einer/ einem programmierbaren Funktion/Feature zugewiesen werden.

⑥ Menü/Auswahl: Menü aufrufen. Wenn das Menü bereits angezeigt wird, kann mit dieser Taste die

Weitere Informationen zur Programmierung und Bedienung der Kamerakopftasten sind in der Gebrauchsanweisung für KARL STORZ IMAGE 1 SPIES™ (Art.-Nr.: 96206286DER) und KARL STORZ IMAGE 1 (Art.-Nr.: 96206114DER) zu finden.

5.2.4 Operating the user control buttons

④ Scrolling downwards: Scroll downwards through menus, options, etc. Can also be assigned a programmable function/ feature.

⑤ Scrolling upwards: Scroll upwards through menus, options, etc. Can also be assigned a programmable function/ feature.

⑥ Menu/select: Access the menu. Once the menu is displayed, this button can be used to select the highlighted option (identical to Enter on a computer keyboard). Hold this button down for seven seconds to call up the "Options" menu.

For detailed instructions on the programming and use of the camera head buttons, please refer to the KARL STORZ IMAGE 1 SPIES™ (Art. No.: 96206286DER) and KARL STORZ IMAGE 1 (Art. No.: 96206114DER) instruction manuals.

5.2.4 Использование кнопок управления

④ Прокрутка вниз: Прокрутка вниз в меню, опциях и т.п. Кроме того, может быть назначена программируемая функция.

⑤ Прокрутка вверх: Прокрутка вверх в меню, опциях и т.п. Кроме того, может быть назначена программируемая функция.

⑥ Меню/выбор: Вызов меню. Если меню уже отображается, при помощи этой кнопки можно выбрать отмеченную опцию (как при помощи кнопки «Ввод» на клавиатуре компьютера). Для вызова меню «Опции» удерживайте эту кнопку нажатой в течение 7 секунд.

Подробную информацию о программировании и управлении кнопками видеоголовки можно найти в инструкции по эксплуатации прибора KARL STORZ IMAGE 1 SPIES™ (№ изд.: 96206286DER) и KARL STORZ IMAGE 1 (№ изд.: 96206114DER).

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4 - meniu pasirinkimas i virsu, gali buti uzprogramuota funkcija
5 - meniu pasirinkimas i apacia, gali buti uzprogramuotga funkcija
6 - Meniu/mpasirinkimo mygtukas
p. 2.4., p. 3.3.

11 Technische Beschreibung

11.1 Technische Daten

IMAGE 1 CONNECT	TC 200
Technische Daten in Verbindung mit IMAGE 1 LINK-Module	TC 300 H3-LINK TC 301 X-LINK
HD-Video-Ausgänge	2 x DVI-D 1 x 3G-SDI
Format Signalausgänge	1920 x 1080p, 50/60 Hz
LINK-Eingänge	3 x
Service-Schnittstelle	RJ45
USB-Schnittstelle	4 x USB (2 x vorne, 2 x hinten)
Bildformat	JPEG
Videoformat	MPEG 4
SCB Schnittstelle	2 x 6 pin Mini DIN
Lagerung/Transport/Temperatur	-10 °C...+60 °C, +14 °F...+140 °F
Feuchtigkeit	Betrieb: 20 %...85 % (nicht kondensierend) Lagerung/Transport: 20 %...95 % (nicht kondensierend)
Luftdruck	Betrieb: 70 kPa...106 kPa Lagerung/Transport: 50 kPa…106 kPa
Zugelassene Betriebshöhe NN	2000 m
Betriebstemperatur	0 °C...+40 °C, +32 °F...+104 °F
Netzspannung und Netzfrequenz	100 – 120 VAC, 50/60 Hz 200 – 240 VAC, 50/60 Hz
Abmessungen	30,5 cm x 5,4 cm x 32,0 cm (B x H x T)

11 Technical description

11.1 Technical data

IMAGE 1 CONNECT	TC 200
Technical data in connection with the IMAGE 1 LINK modules	TC 300 H3-LINK TC 301 X-LINK
HD video ouputs	2 x DVI-D 1 x 3G-SDI
Signal output format	1920 x 1080p, 50/60 Hz
LINK input ports	3 x
Service interface	RJ45
USB port	4 x USB (2 x front, 2 x rear)
Image format	JPEG
Video format	MPEG 4
SCB interface	2 x 6 pin Mini DIN
Storage/transport/temperature	-10 °C...+60 °C, +14 °F...+140 °F
Humidity	Operation: 20 %...85 % (non-condensing) Storage/Transport: 20 %...95 % (non-condensing)
Atmospheric pressure	Operation: 70 kPa...106 kPa Storage/Transport: 50 kPa…106 kPa
Operating rated altitude NN	2000 m
Operating temperature	0 °C...+40 °C, +32 °F...+104 °F
Power supply and frequency requirements	100 – 120 VAC, 50/60 Hz 200 – 240 VAC, 50/60 Hz
Dimensions	30.5 cm x 5.4 cm x 32.0 cm (w x h x d)

11 Descripciones técnicas

11.1 Datos técnicos

IMAGE 1 CONNECT	TC 200
Datos técnicos en combinación con los módulos IMAGE 1 LINK	TC 300 H3-LINK TC 301 X-LINK
Singnalo isejimai 1920 x 1080p, 50/60 Hz p. 3.1., p. 3.4.	
Entradas LINK	3
Interfaz para Servicio Técnico	RJ45
Formato de imagen	JPEG
Formato de vídeo	MPEG 4
Interfaz SCB	2 Mini DIN con 6 patillas
Almacenamiento/transporte/temperatura	-10 °C...+60 °C, +14 °F...+140 °F
Humedad	En funcionamiento: 20 %...85 % (sin condensación) Almacenamiento/transporte: 20 %...95 % (sin condensación)
Presión del aire	En funcionamiento: 70 kPa...106 kPa Almacenamiento/transporte: 50 kPa…106 kPa
Altitud de servicio admisible sobre el nivel del mar	2.000 m
Temperatura de funcionamiento	0 °C...+40 °C, +32 °F...+104 °F
Tensión y frecuencia de red	100 – 120 VCA, 50/60 Hz 200 – 240 VCA, 50/60 Hz
Dimensiones	30,5 cm x 5,4 cm x 32,0 cm (an x al x pr)

5

Bedienhinweise	Operating instructions	Указания по эксплуатации
CLARA	CLARA With this mode, a specially optimized algorithm reduces disruptive shadows and ensures more even brightness perception of the endoscopic image.	CLARA Специальный оптимизированный алгоритм позволяет в этом режиме уменьшить мешающие работе тени и обеспечить более равномерное восприятие яркости эндоскопического изображения.
CHROMA	CHROMA This mode improves the perception of fine structures via contrast enhancements, particularly in the red area. The original colors are retained, the color intensity is changed.	CHROMA В этом режиме улучшается восприятие тонких структур благодаря усилению контраста, особенно в красном диапазоне. Исходные цвета сохраняются, усиливается их интенсивность.
	SPECTRA A/B* These modes enhance the contrast by way of color transformation. The result is a false color image with enhanced contrast.	SPECTRA A/B* Эти режимы усиливают контраст путем цветовой трансформации. Создается спектрозональное изображение с увеличенной контрастностью.
...Grid-Filter ist in zwei Stufen schaltbar (A, B). Diese Filter können bisher auftretende, störende Artefakte wie z. B. den Moiré-Effekt oder die Darstellung des Fiberskop-Rasters eliminieren. Sind die wabenartigen Rasterstrukturen im Bild relativ klein, so empfiehlt sich die Verwendung von Filter A. Filter B ist vor Allem bei größeren Wabenstrukturen, z. B. durch die Verwendung eines optischen Zooms zu empfehlen.	Fiber Filter The digital fiberscope filter (anti-moiré/anti-grid filter) can be set to two levels (A, B). With this new electronic filter once interfering artifacts, such as the moiré effect and display of the fiberscope grid, are eliminated. This new electronic filter eliminates previously interfering artifacts, such as the moiré effect and display of the fiberscope grid. If the honeycombed grid structures are relatively small in the image, Filter A is recommended. Filter B is particularly recommended in the case of larger honeycomb structures, for example, through the use of an optical zoom.	Фиброфильтр Цифровой фильтр для фиброскопа (антимуарный фильтр/фильтр удаления сетки) с возможностью выбора одной из двух ступеней интенсивности (A, B). Эти фильтры могут устранить возникающие артефакты, такие как эффект муара или отображение сетки фиброскопа. Если сотообразные структуры на изображении имеют относительно небольшой размер, рекомендуется использовать фильтр A. Фильтр B следует использовать при наличии крупных сотообразных структур, возникших, например, при использовании оптического масштабирования.

Blue Lithuanian annotations:
- CLARA: Rezimas mazinanatis seselius ir padidinantis operacinio lauko sviesuma
- CHROMA: Šioje veiksenoje dl didesnio kontrasto pagerja smulki struktr suvokimas, ypa raudonos spalvos diapazone. Originalios spalvos išsaugomos nepakitusios, padidja j intensyvumas.
- SPECTRA A arba B: Šioje veiksenoje kontrastas padidja dl spalv transformacijos. Sukuriamas didesnio kontrasto spektrozoninis vaizdas.

* SPIES SPECTRA A/B ist nicht verfügbar in USA.   * SPIES SPECTRA A/B is not available in the USA.   * SPIES SPECTRA A/B не предлагается в США.   2

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Kopftasten Einstellungen: Legt die Programmierung fest für beide Kopftasten ▼ und ▲ gleichzeitig, abhängig von bestimmten Anwendungen und/oder vom Kamerakopf (z. B. Zwei-Weißabgleich bei Stroboskopie)

(*Hinweis: Weitere Optionen zur Standardeinstellung der Tasten finden Sie unter der Funktion: „Kopftasten programmieren").*

Button Settings: Determines the programming for both the ▼ and ▲ camera head buttons simultaneously depending on a specific procedure and/or camera head (i.e. dual white balance for stroboscopy).

(*Note: Additional options for standard button programming are available under "Program Head Buttons" feature).*

Настройка клавиш: программирует обе клавиши видеоголовки ▼ и ▲ одновременно в зависимости от определенных задач и/или видеоголовки (например, двойной баланс белого при стробоскопии)

(*Примечание: прочие опции к стандартной настройке клавиш содержатся в описании функции «Программирование клавиш видеоголовки»).*

Testbild: Ein- bzw. Ausschalten des SMPTE-Testbildes.

Zeit und Datum einstellen: Eingabe von Zeit und Datum und Auswahl der Anzeige.

Monitortyp: Erlaubt die Auswahl zwischen Universal oder PVM 20M2MDU (Sony Modellnummer) Monitortypen zur Bildoptimierung.

Color bars: Turns the SMPTE color bar test pattern On or Off.

Date and Time Setup: Allows entry of date and time and selects display.

Display Type: Allows selection of either Universal or PVM 20M2MDU (Sony model number) monitor types to optimize the image.

Тест-изображение: включение и выключение тест-изображения SMPTE.

Установка времени и даты: ввод времени и даты и выбор монитора.

Тип монитора: позволяет выбирать между типами монитора Universal или PVM 20M2MDU (номер модели Sony) с целью получения оптимального изображения.

Zwei-Weißabgleich: Führt für zwei Lichtquellen, die während einer Operation bei Stroboskopien gleichzeitig verwendet werden, einen Weißabgleich durch.

Kontrastanhebung: Steuert elektronisch den Kontrast über die Einstellungen aus, niedrig, hoch, Fiberskop Filter. Das digitale Fiberskop-Filter (Anti-Moiré/Anti-Grid-Filter ist in zwei Stufen schaltbar (A, B). Durch diesen neuen elektronischen Filter können bisher störende Artefakte, wie der Moiré-Effekt oder die Darstellung des Fiberskop-Rasters, eliminiert werden. Das Fiberskop-Filter wird über dasselbe Menü wie die „Kontrastanhebung" ausgewählt.

Dual White Balance: Performs white balance two light sources when used intraoperatively stroboscopy procedures.

Enhancement: Electronically controls the level of contrast, including Off, Low, High and Fiberscope Filter settings. The digital fiberscope filter (anti-moiré/anti-grid filter is switchable in two stages (A, B)). **This new electronic filter interfering artefacts,** such as the moiré effect or display of the fiberscope grid, to be eliminated. The fiberscope filter is selected via the same menu as "Enhancement".

Stiprinimas: Elektroniskai kontroliuoja kontrasto lygi p. 3.5.

...ланс ...емых ...м стробоскопии.

Насыщенность изображения: электронное управление контрастностью через настройки выкл., низкая, высокая, фильтр фиброскопа. Цифровой фильтр фиброскопа (антимуаровый фильтр/anti-grid-filter имеет две ступени переключения: A, B). Этот новый электронный фильтр подавляет такие ...е растра ...тся ...сть

Sis naujas elektroninis filtras blokuoja artefaktus p. 3.5.

Lichtmodus: Wechselt bei Stroboskopien zwischen Lichtquelle 1 und Lichtquelle 2.

Kopftasten programmieren: Erlaubt die Auswahl von Merkmalen/Optionen, die über die Kopftasten ▼ oder ▲ aktiviert werden.

(*Hinweis: Weitere Optionen zur Voreinstellung der Tasten finden Sie unter der Funktion: „Einstellung Tasten").*

Light Mode: Toggles between Light Source 1 and Light Source 2 for stroboscopy procedures.

Program Head Buttons: Allows select features/options to be activated by the camera head buttons ▼ or ▲.

(*Note: Additional options for button programming are available under "Button Settings" feature).*

Световой режим: переключает между источником света 1 и источником света 2 во время стробоскопии.

Программирование клавиш видеоголовки: позволяет выбирать между параметрами/опциями, активируемыми клавишами видеоголовки ▼ или ▲.

(*Примечание: прочие опции к стандартной настройке клавиш содержатся в описании функции «Настройка клавиш»).*

Belichtungszeit: Auswahl der Belichtungszeit der Kamera, bietet neben einer automatischen siebzehn verschiedene Belichtungszeiten zwischen 1/60–1/17.000 Sekunden.

Shutter (exposure control): Selects the camera exposure control, including automatic and seventeen manual shutter speeds ranging from 1/60 – 1/17,000 second.

Выдержка: выбор выдержки камеры, помимо автоматической экспозиции позволяет устанавливать семнадцать различных значений выдержки от 1/60 до 1/17000 секунды.

[X] Exit	Hier wird das Live-Menü beendet. Alternativ kann auch die das Menü auch durch die „ESC" Taste geschlossen werden.	You can exit the Live Menu here. Or you can exit via the menu by clicking the "ESC" button.	Aquí puede usted finalizar el menú Live. Como alternativa, también puede cerrar el menú pulsando la tecla "ESC".
White Balance	Hier wird der Weißabgleich ausgelöst.	Here you can activate White Balance. Cia galite aktyvuoti baltos sviesos balansa p. 3.6.	Aquí puede usted activar el balance de blancos.
Light	Hier werden die Einstellungen der Lichtquelle angezeigt. Es können im Menü sowohl der Modus als auch die Intensität verändert werden. (i) **HINWEIS:** *Im Auto-Modus kann die maximale Licht-Intensität festgelegt werden.* (i) **HINWEIS:** *Das Steuern der Lichtquelle wird deaktiviert, sobald mehr als eine Lichtquelle bzw. mehr als ein Kamerakopf/ Videoendoskop gleichzeitig mit der IMAGE 1 SPIES verbunden ist.*	The light source settings are displayed here. The mode and intensity can be modified in the menu. (i) **NOTE:** *The maximum light intensity can be limited in auto mode.* (i) **NOTE:** *Control of the light source is deactivated if one or more light sources and/or camera heads/video endoscopes are simultaneously connected to the IMAGE 1 SPIES.*	Aquí se muestran los ajustes de la fuente de luz. El menú permite cambiar tanto el modo como la intensidad. (i) **NOTA:** *En el modo automático se puede determinar la intensidad lumínica máxima.* (i) **NOTA:** *El control de la fuente de luz se desactiva en cuanto más de una fuente de luz o más de un cabezal de cámara/videoendoscopio se conectan simultáneamente al IMAGE 1 SPIES.*
OFF 10 Insufflator	Hier werden die Einstellungen des Insufflators angezeigt. Es können im Menü die Einstellungen Gas, Fluss und Druck verändert werden.	The insufflator settings are displayed here. The gas, flow und pressure settings can be adjusted in the menu.	Aquí se muestran los ajustes del insuflador. El menú permite cambiar la configuración de gas, flujo y presión.

12.4 Empfohlenes Zubehör
12.4 Recommended accessories
12.4 Accesorios recomendados

Bestell-Nr. Order no. Nº de pedido	Artikel	Article	Artículo
TC 001	Videoendoskop-Adapter, Farbsysteme PAL/NTSC, Länge 60 cm, zur Verwendung mit IMAGE 1 X-LINK TC301	Video Endoscope Adaptor, color systems PAL/NTSC, length 60 cm, for use with IMAGE 1 X-LINK TC301	Adaptador para videoendoscopio, normas de color PAL/NTSC, longitud 60 cm, para utilizar con el IMAGE 1 X-LINK TC 301
22 2200 72	IMAGE 1 FULL HD-Verlängerungskabel, Länge 520 cm, zur Verwendung mit allen IMAGE 1 HD-Kameraköpfen – außer H3-M	IMAGE 1 FULL HD extension cable, length 520 cm, for use with all IMAGE 1 HD camera heads – except H3-M	Cable de prolongación IMAGE 1 FULL HD, longitud 520 cm, para utilizar con todos los cabezales de la cámara IMAGE 1 HD, excepto el H3-M
TC 009	USB zu ACC-Adapter	USB to ACC adaptor	USB para adaptador ACC
20 2210 70	ACC Verbindungskabel, zur Ansteuerung von Peripheriegeräten, Länge 180 cm	ACC connecting cable, to control peripherals, length 180 cm	Cable de conexión ACC, para control de aparatos periféricos, longitud 180 cm
400A	Netzkabel (Schuko)	Power cable (grounded)	Cable de red (con puesta a tierra)
400B	Netzkabel "Hospital Grade" (USA)	'Hospital Grade' power cable (USA)	Cable de red "Hospital Grade" (EE.UU.)
TC010	Zweipedal Fußschalter	Dual-pedal footswitch	Interruptor de dos pedales
20 0402 40xx	Tastatur mit Touchpad	Keyboard with touchpad	Teclado con tableta táctil
20 0402 82	USB-Stick 32 GB	USB Stick 32 GB	Memoria USB 32 GB
20 0400 86	DVI-Verbindungskabel, Länge 200 cm	DVI connecting cable, length 200 cm	Cable de conexión DVI, longitud 200 cm
20 0400 89	Desgleichen, Länge 300 cm	Same, length 300 cm	Ídem, longitud 300 cm
TC 005	3G-SDI Kabel, 10 m	3G-SDI Cable, 10 m	Cable SDI 3G, 10 m
TC 007	3G-SDI Kabel, 3 m	3G-SDI Cable, 3 m	Cable SDI 3G, 3 m
TC 011	LINK-Kabel, 20 cm	LINK cable, 20 cm	Cable LINK, 20 cm
96206286D	Gebrauchsanweisung	Instruction manual	Manual de instrucciones

4 Symbolerläuterungen
4.1 Symbole zur Bedienung

4 Symbols employed
4.1 Symbols for operation

4 Explicación de los símbolos
4.1 Símbolos referentes al manejo

	Symbolerläuterungen	Symbols employed	Explicación de los símbolos
	Gerät Typ CF/Defib. resistent	Type CF device/Defib. resistant	Aparato tipo CF/resistente a la desfibrilación
	Standby/Ein/Aus	Standby/On/Off	
	USB 2.0	USB 2.0	
	Vor Gebrauch Begleitpapiere beachten	Read accompanying documents before use	Observar la documentación adjunta antes de usar el producto
	Weissabgleich	White balance	Balance de blancos
	Potentialausgleich	Potential equalization	Conexión equipotencial

CF tipo iranga/ atspari defibriliacijai p. 3.8.

4.2 Symbole auf Label und Verpackung

4.2 Label and packaging symbols

4.2 Símbolos utilizados en el etiquetado y el embalaje

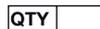|	Symbole auf Label und Verpackung	Label and packaging symbols	Símbolos utilizados en el etiquetado y el embalaje
	Zerbrechliches Gut	Fragile	Frágil
	Vor Nässe schützen	Protect from moisture	Proteger de la humedad
	Lagertemperatur -10 °C...+60 °C	Storage temperature -10 °C...+60 °C	Temperatura de almacenamiento -10 °C...+60 °C
SN	Seriennummer	Serial number	Número de serie
QTY	Menge	Quantity	Cantidad
CE	CE-Kennzeichnung	CE marking	Símbolo CE
	oben	This side up	Hacia arriba
Rx ONLY	In den USA darf dieses Gerät laut Bundesgesetz nur von einem Arzt oder auf Anordnung eines Arztes verkauft oder benutzt werden.	In the USA, Federal law restricts this device to sale or use by or on the order of a physician.	De acuerdo con la ley federal de los EE.UU., este aparato sólo puede ser vendido o utilizado por un médico o por encargo de un médico.
	Vor Gebrauch Begleitpapiere beachten	Read accompanying documents before use	Observar la documentación adjunta antes de usar el producto
	Hersteller	Manufacturer	Fabricante

Cold Light Fountain
Power LED 175 SCB

NEW

KARL STORZ — ENDOSKOPE

Special Features:

- Low noise level
- Powerful LED light source similar to Xenon technology
- Lamp life of approx. 30,000 hours
- Energy-saving due to adjustable brightness control

- High serviceability
- SCB – light source control possible via KARL STORZ Communication Bus

20 1614 01-1   Cold Light Fountain Power LED 175 SCB

power supply 110 – 240 VAC, 50/60 Hz

including:

Mains Cord
SCB Connecting Cable

LIGHT SOURCES

Specifications:

Lamp type	high-perfomance LED
Color temperature	approximately 6400 K
Light adjustment	in 20 steps
Light outlets	1
Dimensions w x h x d	305 x 110 x 233 mm

Weight	4 kg
Certified to	IEC 601-1, protection class 1/CF
miscellaneous	two SCB ports

Component Parts see COMPONENTS, SPARE PARTS

12-11

Equipment Cart

Vezimelis, ant 4 dvigubu antistatiniu ratuku, 2 is ju su stabdziais, 2 fiksuotos lentynos, 1 stacius su uzraktu, integruotos vertikalios ertmes laidams, 1 kameros laikiklis p. 1.

29003 LC   **Equipment Cart**

Dimensions:
Equipment cart: 730 x 1450 x 660 mm (w x h x d),
Shelf: 630 x 480 mm (w x d),
Caster diameter: 125 mm

including:

Equipment Cart, rides on 4 antistatic dual wheels, 2 equipped with locking brakes (front), 2 fixed shelves, 1 drawer unit with lock, integrated cable conduits in both vertical beams, mains switch in vertical beam, 1 set of non-sliding stands, 1 camera holder

Power Box, socket board with 12 sockets and 12 potential earth connectors

Accessories:

29003 FH   **Bottle Holder,** for CO_2 bottles with bottom diameter of max. 155 mm

29003 FT   **Fiberscope Carrier Set,** for mounting to equipment rail, including holding device for 2 fiberscopes, 2 acrylic tubes and 2 Equipment Rails 29003 GS

29003 S   **Irrigator Rod,** with 4 bottle hooks, for mounting to equipment cart series 29005, incl. two multifunctional holders, length 130 cm

29003 LC

20 0200 23   **Mobile Stand**

height adjustable, rides on 5 antistatic casters, 2 equipped with locking brakes, tray made of plastic-coated V2A, for use with cold light fountains, laparoflators, pump and motor systems

Dimensions:
Tray: 330 x 330 mm (w x d),
Working height: 900 – 1500 mm

Accessories:

20 0200 31   **Tray,** made of V2A, plastic-coated, for use with Mobile Stand **20** 0200 23, dimensions: 260 x 170 x 55 mm (w x h x d)

20 0200 32   **Holder for Irrigation Liquid Bottle,** with 4 hooks for bottles, for use with Mobile Stand **20** 0200 23

20 0200 23

EQUIPMENT CARTS

7-99₃

Our range of monitors at a glance:

9619 NB:

- High-quality, enclosed aluminium housing in the KARL STORZ design
- Excellent hygiene properties
- High level of flexibility due to diverse connection possibilities
- Excellent price/performance ratio
- Color rendition optimally matched to KARL STORZ products

9627 NB:

- High-quality, enclosed aluminium housing in the KARL STORZ design
- Excellent hygiene properties
- Easy integration into the KARL STORZ OR1™ system
- High level of flexibility due to diverse connection possibilities
- LED backlight technology for low energy consumption and longer service life
- 1920 x 1080 pixels, 50/60 Hz in progressive mode, 16:9 format
- Further inputs available (optional)

LED technologija mazesnems energijos sanaudoms ir ilgersniam tarnavim o laikotarpiui 1920 x 1080 tasku, 50/60 Hz progresyvus rezimas, 16:9 formatas
p. 7.1., p. 7.3.

9826 NB:

- Brillant colors and excellent image brightness
- LED backlight technology for low energy consumption and longer service life
- Color rendition optimally matched to KARL STORZ products
- 1920 x 1080 pixels, 50/60 Hz in progressive mode, 16:9 format
- Easy integration into the KARL STORZ OR1™ system
- Picture-in-Picture function
- 3G-SDI

9826 NB-3D:

- 2D and 3D enabled
- Color rendition optimally matched to KARL STORZ products
- 1920 x 1080 pixels, 50/60 Hz in progressive mode, 16:9 format

9832 NB-3D:

- 2D and 3D enabled
- Color rendition optimally matched to KARL STORZ products
- 1920 x 1080 pixels, 50/60 Hz in progressive mode, 16:9 format

PRODUCT INFO

DOK

Confidential – for internal use only!

Specifications:

Model:	9619 NB 19"	9627 NB 27"	9826 NB 26"
Resolution:	1280 x 1024	1920 x 1080	1920 x 1080
Number of Colors:	16.8 million	16.8 million	16.8 million
Contrast Ratio:	700:1	3000:1	1400:1
Luminance:	280 cd/m²	300 cd/m²	500 cd/m²
Max. Viewing Angle:	178°	178°	178°
Reaction Time:	12 ms	12 ms	
Inputs:			
DVI-D	•	•	•
RGBS/VGA	•	•	•
S-Video	•	•	•
Composite/FBAS	•	•	•
Fibre Optic	optional	optional	-
HD/SD-SDI	-	-	•
3G-SDI	-	-	•
Outputs:			
DVI-D	•	•	•
S-Video	•	•	•
Composite/FBAS	•	•	•
HD/SD-SDI	-	-	•
3G-SDI	-	-	•
Dimensions (w x h x d):	469.5 x 416 x 75.5 mm	699 x 445.6 x 55 mm	643 x 396 x 87 mm
Weight:	10 kg	9.6 kg	7.7 kg

Model:	9826 NB-3D 26"	9832 NB-3D 32"
Resolution:	1920 x 1080	1920 x 1080
Number of Colors:	16.8 million	16.8 million
Contrast Ratio:	1000:1	1000:1
Luminance:	350 cd/m²	340 cd/m²
Max. Viewing Angle:	178°	178°
Reaction Time:	6-8 ms	6-8 ms
Inputs:		
DVI-D	2x	2x
RGBS/VGA	•	•
S-Video	•	•
Composite/FBAS	•	•
Fiber Optic	-	-
HD/SD-SDI	2x	2x
3G-SDI	-	-
Outputs:		
DVI-D	•	•
S-Video	•	•
Composite/FBAS	•	•
HD/SD-SDI	•	•
3G-SDI	-	-
Dimensions (w x h x d):	643 x 396 x 87 mm	776 x 443 x 114 mm
Weight:	7.1 kg	15.5 kg

PRODUCT INFO

DOK

Confidential – for internal use only!

STORZ
KARL STORZ—ENDOSKOPE

9619 NB / 9626 NB(-2) /
9627 NB(-2) – HD Monitor

9619 NB / 9626 NB(-2) /
9627 NB(-2) – HD Monitor

9619 NB / 9626 NB(-2) /
9627 NB(-2) – HD монитор

Reinigung und Pflege des HD Monitors

⚠️ **Warnung:** *Vor dem Reinigen den HD Monitor vom Netz trennen.*

- Befeuchten Sie ein Einmaltuch mit einer milden Reinigungslösung (bei überschüssiger Flüssigkeit wringen Sie es gut aus). Dann den Bildschirm damit leicht abreiben.
- Vermeiden Sie starken Druck auf den LCD-Monitor, um einem bleibenden Schaden am Display vorzubeugen.
- Setzen Sie den LCD-Monitor nicht direkt Regen, Wasser, Feuchtigkeit oder Sonnenlicht aus.

Wischdesinfektion

Die Außenflächen des Medizinproduktes müssen mit einem mit Desinfektionsmittel befeuchteten Einmaltuch oder einem gebrauchsfertigen getränkten Desinfektionstuch wischend gereinigt werden. Alkoholbasierte Mittel dürfen aufgrund proteinfixierender Wirkung und Materialunverträglichkeiten nicht verwendet werden.

Flächen und Gegenstände bis zur völligen Benetzung abwischen. Nach Ablauf der Einwirkzeit ggf. mit einem Einmaltuch nachwischen.

Cleaning and care of the HD monitor

⚠️ **Warning:** *Always disconnect the power cord before cleaning the HD monitor.*

- Wet a disposable cloth with a mild cleaning solution (wring out excess well) before wiping the screen.
- Avoid applying heavy pressure to the LCD monitor to prevent permanent damage to the display.
- Do not expose the LCD monitor directly to rain, water, moisture or sunlight.

Wipe-down disinfection

The exterior surfaces of the medical device must be wiped clean with a disposable cloth moistened with disinfectant or a ready to use soaked disinfectant cloth. Due to their protein-fixating effect and material incompatibility, alcohol-based agents must not be used.

Surfaces and objects should be wiped until fully coated. Leave for the specified exposure time and then wipe with a disposable cloth if necessary.

Очистка и уход за HD монитором

⚠️ **Предупреждение:** *Перед очисткой отключите HD монитор от электросети.*

- Смочите одноразовую салфетку раствором мягкого моющего средства (хорошо отжать от лишней жидкости). Без нажима протрите экран салфеткой.
- Следует избегать сильного нажима на по-

Valymas sluoste
Isoriniai medicinio irenginio pavirsiai turi buti nuvalyti sluoste, ismirkyta dezinfektante p. 7.5.

Дезинфекция путем протирания

Внешние поверхности медицинского изделия необходимо очищать, протирая их одноразовой салфеткой, увлажненной дезинфицирующим средством, или готовой к применению пропитанной дезинфицирующей салфеткой. Средства на основе спирта запрещается использовать вследствие фиксирующего белки действия и несовместимости с материалами.

Протрите поверхности и корпус до полного увлажнения. Если потребуется, по истечении времени воздействия повторно протрите одноразовой салфеткой.

UNIDRIVE® S III ARTHRO SCB *NEW*

The aim of all arthroscopic procedures is the same: to complete the procedure quickly and with minimal trauma, thereby reducing patient time under anesthesia.

With UNIDRIVE® S III ARTHRO, KARL STORZ has developed a motor system that is customized to meet these requirements.

- Easy to use
- Automatic handpiece recognition
- Control of rotation speed similar to the multifunctional handpiece
- Up to 15,000 rpm
- Comprehensive portfolio of single-use and reusable blades
- Communication with ARTHROPUMP® Power

MOTOR SYSTEMS

Recommended Set Configuration

KARL STORZ — ENDOSKOPE

Special Features:

- Arthroscopic motor system for all joints
- Stable torque throughout entire speed range
- Motors with speed ranging from 6000 rpm to max. 15,000 rpm
- Multifunctional handpiece with accessories:
  - Jacobs chucks
  - Pin drivers
  - Sagittal saws
  - Synthes-style drivers

- Various control options possible
  - Hand controls
  - Footswitch
  - Touch Screen
- Fast and easy change of blade via quick coupling
- Single-use and reusable blades available

MOTOR SYSTEMS

28 7230 01-1   **UNIDRIVE® S III ARTHRO SCB,** with color display, touch screen operation, two motor outputs, integrated SCB module, power supply 100 – 120/230 – 240 VAC, 50/60 Hz

including:

SCB Connecting Cable, length 100 cm
Mains Cord
Manual

Unidrive S III Arthro SCB, su spalvotu, lietimui jautriu ekranu, dviem jungtimis motorams
p. 10.2.

Specifications:

Operating mode	- counter-clockwise - clockwise - oscillating
Connections	- small joint handpiece - hybrid handpiece - standard handpiece - high-speed handpiece - multifunction handpiece - footswitch - KARL STORZ-SCB

Power supply	100 – 120/230 – 240 VAC, 50/60 Hz
Dimensions w x h x d	305 x 165 x 280 mm
Weight	5.2 kg
Certified to	IEC 601-1, CE acc. to MDD

System requirements:
SCB control NEO System with installed SCB control NEO Software Release **20** 0900 01-44 or higher

Components/Spare Parts see chapter 14

6-12

Atitikimas standartams
Pagal IEC 60601-1:
Apsauga pries elektros soka tipas BF
p. 10.5.

11.6 Normenkonformität
(für 28723020-1)

Nach IEC 60601-1, UL 60601-1, CAN/CSA C22.2 No. 601.1-M90:

- Art des Schutzes gegen elektr. Schlag: Schutzklasse I
- Grad des Schutzes gegen elektr. Schlag: Anwendungsteil des Typs BF
- Art des Feuchtigkeitsschutzes: Tropfwassergeschützt nach IPX 1

Nach IEC 60601-1-2:

Beachten Sie die Hinweise zur Elektromagnetischen Verträglichkeit im Anhang (S. 86-98).

11.6 Standard conformity
(for 28723020-1)

According to IEC 60601-1, UL 60601-1, CAN/CSA C22.2 No. 601.1-M90:

- Type of protection against electrical shock: Protection class I
- Degree of protection against electric shocks: Applied part type BF
- Type of moisture protection: drip-water protection as per IPX 1

Conforms with IEC 60601-1-2:

Please read the Electromagnetic Compatibility Information in the appendix (p. 86-98).

11.6 Conformidad con las normas
(para 28723020-1)

Según CEI 60601-1, UL 60601-1, CAN/CSA C22.2 N.º 601.1-M90:

- Tipo de protección contra descarga eléctrica: Clase de protección I
- Grado de protección contra descarga eléctrica: Pieza de aplicación del tipo BF
- Tipo de protección contra humedad: A prueba de goteo de agua según IPX 1

Según CEI 60601-1-2:

Observe las indicaciones sobre compatibilidad electromagnética en el Anexo (págs. 86-98).

11.7 Richtlinienkonformität
Medizinprodukt der Klasse IIa

Dieses Medizinprodukt ist nach der Medical Device Directive (MDD) 93/42/EEC mit CE-Kennzeichen versehen.

(i) **HINWEIS:** *Die dem CE-Kennzeichen nachgestellte Kennnummer weist die zuständige Benannte Stelle aus.*

11.7 Directive compliance
Medical product of class IIa

This medical product bears the CE mark in accordance with the Medical Device Directive (MDD) 93/42/EEC.

(i) **NOTE:** *The code number after the CE mark indicates the responsible notified body.*

11.7 Conformidad con la directiva
Producto médico de la clase IIa

Este producto médico está provisto del símbolo CE según la Medical Device Directive (MDD) 93/42/CEE.

(i) **NOTA:** *El número de identificación pospuesto al símbolo CE designa el organismo notificado competente.*

CE 0123

STORZ

KARL STORZ — ENDOSKOPE

28 7210 40

28 7210 40   **Small Joint Shaver Handpiece,** up to 6000 rpm, for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL SCB

28 7210 50

NEW   **28 7210 50**   **Hybrid Shaver Handpiece,** up to 7000 rpm, for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL SCB

28 7210 35

28 7210 35   **Standard Shaver Handpiece,** up to 8000 rpm, for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL SCB

28 7210 45

28 7210 45   **Standard Shaver Handpiece,** up to 8000 rpm, **without handpiece buttons,** for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL SCB

28 7210 30

28 7210 30   **High-Speed Shaver Handpiece,** up to 15000 rpm, for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL SCB

28 7210 36

28 7210 36   **Multifunction Handpiece,** for use with UNIDRIVE® S II ARTHRO SCB and POWERSHAVER SL SCB

Optional accessories for UNIDRIVE® S III ARTHRO SCB see pages U 15 und U 17

UNIDRIVE® S III ARTHRO SCB *NEW*

Handpieces

Specifications:

Callout annotations:
- Rotacija (rpm) 1000 iki 7000 p. 11.1.
- Osciliacija (rpm) 5000 iki 3000 p. 11.2.
- Jungiamasis laidas 3,5 m p. 11.3.
- Hybrid seiverio rankena

Handpiece	KARL STORZ Quick Coupling	for use with Reusable Blades	Rotation (rpm)	Oscillation (rpm)	Connecting Cable	Weight
28 7210 40 **Small Joint Shaver Handpiece**	●	●	1000 to 6000	500 to 3000	3.5 m	0.27 kg
28 7210 50 **Hybrid Shaver Handpiece**	●	●	1000 to 7000	500 to 3000	3.5 m	0.43 kg
28 7210 35 **Standard Shaver Handpiece**	●	●	1000 to 8000	500 to 3000	3.5 m	0.47 kg
28 7210 45 **Standard Shaver Handpiece**	●	●	1000 to 8000	500 to 3000	3.5 m	0.44 kg
28 7210 30 **High-Speed Shaver Handpiece**	●	●	1000 to 15000	500 to 3000	3.5 m	0.58 kg
28 7210 36 **Multifunction Handpiece**	●	–	0 to 1700	–	3.5 m	0.65 kg

Optional accessories for UNIDRIVE® S III ARTHRO SCB shaver handpieces and blades

28205 SA	**Irrigation Adaptor,** for validated cleaning of shaver handpieces
28205 SAA	**Irrigation Adaptor,** for validated cleaning of outer blades
28205 SAI	**Irrigation Adaptor,** for validated cleaning of inner blades

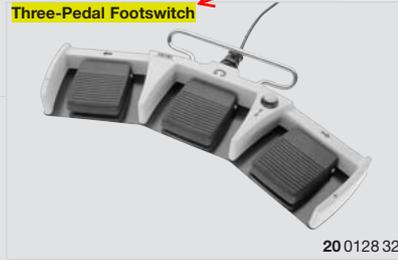**Optional accessories for Multifunctional Handpiece 28 7210 36:**

28 7210 31	**Jacobs Chuck,** up to diameter 4.5 mm
28 7210 37	**Jacobs Chuck,** up to diameter 6.5 mm
28 7210 38	**Jacobs Chuck,** keyless, up to diameter 7.4 mm, for use with Multifunction Handpiece **28 7210 36**
28 7210 39	**Sagittal Saw Attachment,** keyless, with tilt lever, for use with Multifunction Handpiece **28 7210 36** and Saw Blades 28207 only
28 7210 33	**Pin Driver,** for drilling wires diameter 1.5 – 3 mm
28 7210 34	**Pin Driver,** for Synthes attachments
28 7210 71	**Connecting Cable,** for FMS pump

MOTOR SYSTEMS

UNIDRIVE® S III ARTHRO SCB *NEW*

System Components

Two-Pedal Footswitch

20 0168 31

Three-Pedal Footswitch

20 0128 32

unidrive S III ARTHRO **28** 7230 20   SCB®

U N I T   S I D E

P A T I E N T   S I D E

MOTOR SYSTEMS

28 7210 40
Small Joint Shaver Handpiece,
6000 rpm

NEW

28 7210 50
Hybrid Shaver Handpiece,
7000 rpm

28 7210 35
Standard Shaver Handpiece,
8000 rpm

28 7210 45
Standard Shaver Handpiece,
8000 rpm

28 7210 30
High-Speed Shaver Handpiece,
15000 rpm

28 7210 36
Multifunction Handpiece,
with Cable **28** 7210 70

28 7210 31
Jacobs Chuck
up to dia. 4.5 mm

28 7210 37
Jacobs Chuck
up to dia. 6.5 mm

28 7210 38
Jacobs Chuck
up to dia. 7.4 mm

28 7210 39
Sagittal Saw Attachment

28 7210 33
Pin Driver for drilling wires diameter 1.5-3 mm

28 7210 34
Synthes-Style Driver

6-12

Optional Accessories

for Multifunction Handpiece 28721036

	28 7210 31	**Jacobs Chuck,** up to diameter 4.5 mm
	28 7210 37	**Jacobs Chuck,** up to diameter 6.5 mm
	28 7210 33	**Pin Driver,** for drilling wires diameter 1.5 – 3 mm
	28 7210 38	**Jacobs Chuck,** keyless, up to diameter 7.4 mm, for use with Multifunction Handpiece **28** 7210 36
	28 7210 39	**Sagittal Saw Attachment,** keyless, with tilt lever, for use with Multifunction Handpiece **28** 7210 36 and Saw Blades 28207 only
	28 7210 34	**Pin Driver,** for Synthes attachments
	28 7210 71	**Connecting Cable,** for FMS pump

for UNIDRIVE® S III ARTHRO SCB shaver handpieces and blades

	28205 SA	**Irrigation Adaptor,** for validated cleaning of shaver handpieces
	28205 SAA	**Irrigation Adaptor,** for validated cleaning of outer blades
	28205 SAI	**Irrigation Adaptor,** for validated cleaning of inner blades

MOTOR SYSTEMS

6-12

Shaver Blades

for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL,
for cutting and grinding

Working length 120 mm

| Type		Use	Order No.	Diameter	Color Code	Application
	Aggressive Cutter	reusable	28205 AB	3.5 mm	green	soft tissue
			28205 AC	4.2 mm		
			28205 AD	5.5 mm		
		for single use	28205 ABS	3.5 mm light gray		
			28205 ACS	4.2 mm medium gray		
			28205 ADS	5.5 mm dark gray		
	Aggressive Cutter	reusable	28205 AK	4.5 mm	green	soft tissue
		for single use	28205 AKS	4.5 mm mauve		
			*28208 AKS	4.5 mm dark gray		
	End Cutter	reusable	28205 BB	3.5 mm	red	soft tissue
			28205 BC	4.2 mm		
			28205 BD	5.5 mm		
		for single use	28205 BCS	4.2 mm medium gray		
			28205 BDS	5.5 mm dark gray		
	Full Radius Resector	reusable	28205 CB	3.5 mm	yellow	soft tissue
			28205 CC	4.2 mm		
			28205 CD	5.5 mm		
		for single use	28205 CBS	3.5 mm light gray		
			28205 CCS	4.2 mm medium gray		
			28205 CDS	5.5 mm dark gray		
	Full Radius Resector	reusable	28205 CK	4.5 mm	yellow	soft tissue
		for single use	28205 CKS	4.5 mm mauve		
			*28208 CKS	4.5 mm dark gray		

*28208 blades are available with distal drill guide

MOTOR SYSTEMS

6-12

Shaver Blades

**for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL,
for cutting and grinding**

STORZ

KARL STORZ — ENDOSKOPE

Working length 120 mm
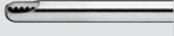
Type		Use	Order No.	Diameter	Color Code	Application
	Aggressive Full Radius Resector	reusable	28205 DB	3.5 mm	blue	soft tissue
			28205 DC	4.2 mm		
			28205 DD	5.5 mm		
		for single use	28205 DBS	3.5 mm light gray		
			28205 DCS	4.2 mm medium gray	p. 12.6.	
			28205 DDS	5.5 mm dark gray		
	Aggressive Full Radius Resector	reusable	28205 DK	4.5 mm	blue	soft tissue
		for single use	28205 DKS	4.5 mm mauve		
	Curved Full Radius Resector	reusable	28205 EG	4.2 mm	light blue	soft tissue
		for single use	28205 EGS	4.2 mm medium gray	p.12.8.	
	Curved Aggressive Full Radius Resector	reusable	28205 EH	4.2 mm	light green	soft tissue
		for single use	28205 EHS	4.2 mm medium gray		
	Round Burr	reusable	28205 FC	4.2 mm	orange	bone
			28205 FD	5.5 mm		
		for single use	28205 FCS	4.2 mm medium gray	p. 12.9.	
			28205 FDS	5.5 mm dark gray		
			28205 FES	6.5 mm black		

Shaver Blades

**for use with UNIDRIVE® S III ARTHRO SCB and POWERSHAVER SL,
for cutting and grinding**

Working length 120 mm

	Type	Use	Order No.	Diameter	Color Code	Application
	Finish Barrel Burr	reusable	28205 GD	4.2 mm		bone
			28205 GE	5.5 mm		
			28205 GF	6.5 mm		
		for single use	28205 GDS	4.2 mm medium gray	purple	
			28205 GES	5.5 mm dark gray		
			28205 GFS	6.5 mm black		
	Aggressive Barrel Burr	reusable	28205 HC	4.2 mm		bone
			28205 HD	5.5 mm		
			28205 HE	6.5 mm		
		for single use	28205 HCS	4.2 mm medium gray	pink	
			28205 HDS	5.5 mm dark gray		
			28205 HES	6.5 mm black		
	Auger®	for single use	28205 KDS	5.5 mm medium gray	light purple	bone
	Pro Line Shaver Blades	reusable	28205 MK	4.5 mm	pink	bone, soft tissue
			28205 MD	5.5 mm		
		for single use	28205 MKS	4.5 mm mauve		
			28205 MDS	5.5 mm dark gray		
	Aggressive Pro Line Shaver Blades	reusable	28205 NK	4.5 mm	light blue	bone, soft tissue
			28205 ND	5.5 mm		
		for single use	28205 NKS	4.5 mm mauve		
			28205 NDS	5.5 mm dark gray		

MOTOR SYSTEMS

Accessories

**Saw Blades for use with Multifunction Handpiece 28 7210 36
of UNIDRIVE® S III ARTHRO SCB and Saw Handpiece 28 7200 38,
for use with Power Unit S1 and S2**

28207 SLA

28207 SLB

28207 SLC

28207 SLD

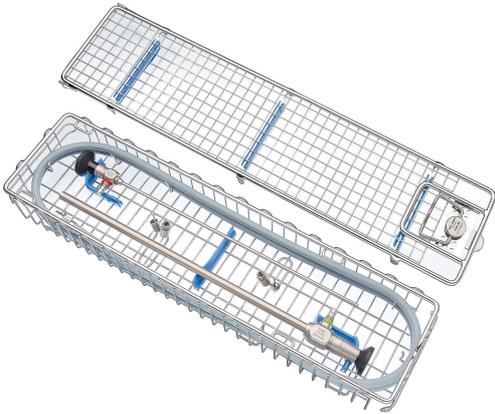28207 SLE

28207 SLF

28207 SLG

28207 SLH

28207 SLA	**Saw Blade,** blade width 10 mm, blade thickness 0.4 mm, cutting thickness 0.6 mm, working length 50 mm
28207 SLB	**Same,** blade width 14 mm

28207 SLC	**Saw Blade,** blade width 10 mm, blade thickness 0.4 mm, cutting thickness 0.6 mm, with stopper at 15 mm, working length 25 mm
28207 SLD	**Same,** blade width 6 mm
28207 SLE	**Same,** blade width 8 mm

28207 SLF	**Saw Blade,** blade width 12 mm, blade thickness 0.4 mm, cutting thickness 0.6 mm, working length 22 mm

28207 SLG	**Saw Blade,** blade width 6 mm, blade thickness 0.4 mm, cutting thickness 0.6 mm, working length 31 mm
28207 SLH	**Same,** blade width 10 mm

**MOTOR SYSTEMS**

Please note: For an overview of available drills and burrs see pages 78-79

8-05₁

Product Number	Quantity	Description
39501 B2	1	**Wire Tray for Cleaning, Sterilization and Storage**, of two rigid endoscopes and one light cable, including holder for light post adaptors, silicone telescope holders and lid, external dimensions (w x d x h): 487 x 125 x 54 mm, for rigid endoscopes up to diameter 10 mm diameter and working length 34 cm

Product Number	Quantity	Description
39301 Z3TS	1	**Plastic Container for Sterilization and Storage**, of camera heads IMAGE 1 H3-Z SPIES™, H3-ZA SPIES™ and H3-Z FI SPIES™ as well as IMAGE 1 H3-Z, H3-ZA, H3-FA and H3-Z FI, autoclavable, suitable for use with steam, gas and hydrogen peroxide sterilization, Sterrad® compatible, external dimensions (w x d x h): 385 x 255 x 75 mm Please note: The instrument displayed is not included in the plastic container. Only camera heads marked "autoclave" can be placed in the tray for steam sterilization.

Product Number	Quantity	Description
28731 BWA	2	**HOPKINS® Wide Angle Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, autoclavable,

Product Number	Quantity	Description
28731 CWA	1	**HOPKINS® Wide Angle Lateral Telescope 70°**, enlarged view, diameter 4 mm, length 18 cm, autoclavable,
28131 CR	1	**High-Flow Arthroscope Sheath**, with snap-in coupling mechanism, diameter 5.5 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28130 BC/BT, 28140 O, color code: blue

KARL STORZ—ENDOSKOPE

Product Number	Quantity	Description
28130 BC	1	**Obturator**, blunt, for use with Arthroscope Sheaths 28131 CR/R, 28130 CR/R, color code: green-red-yellow

Obturatorius, bukas, naudojimui su mova 28131CR
p. 17.

| 28719 BA | 1 | **HOPKINS® Forward-Oblique Telescope 30°**, diameter 2.7 mm, length 18 cm, autoclavable, fiber optic light |

30 laipsniu optika, skersmuo 2,7 mm, ilgis 18 cm, autoklacuojama
p. 18.

| 28132 CR | 1 | **Arthroscope Sheath**, with standard coupling mechanism, diameter 4 mm, working length 12.5 cm, two stopcocks, rotating, for use with HOPKINS® telescope 30° and Obturators 28132 BC/BT, |

Atroskopine mova, uzrakinimo mechanizmu, skersmuo 4 mm, darbinis ilgis 12,5 cm, su dviem kraneliais, rotuojama, naudojimui su 30 laipsniu optikomis ir obturatoriai 28132BC/BT
p. 19.

| 28132 BT | 1 | **Obturator**, semisharp, for use with Arthroscope Sheath 28132 CR |

Obturatorius, pusiau astrus
p. 19.

| 28140 T | 1 | **Probe**, graduated, length of hook 3 mm, diameter 1.5 mm, working length 18 cm |

Probe, sugraduota, 3 mm, skersmuo 1,5 mm, ilgis 18 cm
p. 20.

| 28171 EB | 1 | **SilCut® Punch**, through-cutting, cutting width 3.4 mm, curved jaws, 90° left, sheath diameter 3 mm, straight, working length 13 cm |

Kandiklis, 3,4 mm skersmuo, lenktas 90 laipsniu kampu i kaire, ilgis 13 cm
p. 21.

| 28171 FB | 1 | **SilCut® Punch**, through-cutting, cutting width 3.4 mm, curved jaws, 90° right, sheath diameter 3 mm, straight, working length 13 cm |

Kandiklis, 3,4 mm skersmuo, lenktas 90 laipsniu kampu i desine, ilgis 13 cm
p. 22.

Product Number	Quantity	Description
28171 AB	1	**SilCut® Punch**, through-cutting, cutting width 3.4 mm, straight jaws, sheath diameter 3 mm, straight, working length 13 cm
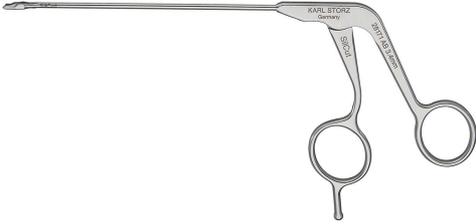
Kandiklis, 3,4 mm skersmuo, tiesus, ilgis 13 cm
p. 23.

Product Number	Quantity	Description
28171 BB	1	**SilCut® Punch**, through-cutting, cutting width 3.4 mm, curved jaws, 15° upwards, sheath diameter 3 mm, straight, working length 13 cm
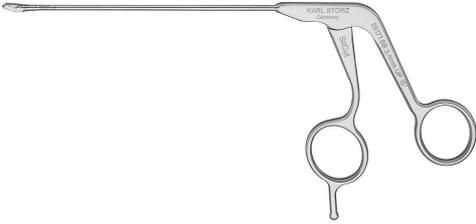
Kandiklis, 3,4 mm skersmuo, 15 laipsniu lenktas i virsu, ilgis 13 cm
p. 24.

Product Number	Quantity	Description
28171 BC	1	**SilCut® Punch**, through-cutting, cutting width 2.7 mm, curved jaws, 15° upwards, sheath diameter 3 mm, straight, working length 13 cm
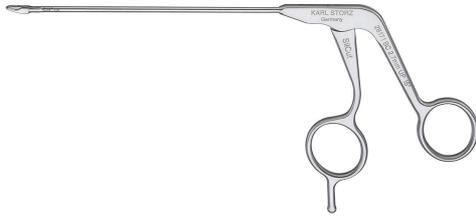
Kandiklis, 2,7 mm skersmuo, 15 laipsniu lenktas i virsu, ilgis 13 cm
p. 25.

Product Number	Quantity	Description
28171 AC	1	**SilCut® Punch**, through-cutting, cutting width 2.7 mm, straight jaws, sheath diameter 3 mm, straight, working length 13 cm
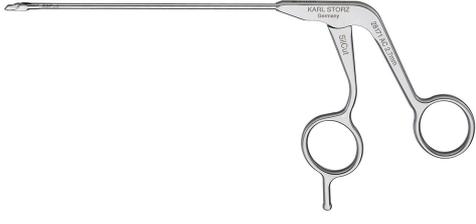
Kandiklis, kiauriai kandantis, skersmuo 2,7 mm, tiesus, darbinis ilgis 13 cm
p. 26.

Product Number	Quantity	Description
28146 UH	1	**SCHLESINGER Meniscus Grasping Forceps**, with teeth and ratchet, straight jaws, straight sheath, working length 13 cm

Schlesinger menisko sugirbejas, darbinis ilgis 13 cm
p. 27.

Nukreipejas, rinkinys, klubo sanario artroskopijai, naudojimui su Karl Storz atroskopinemis movomis, kuriu ilgis 13,5 cm
Komplekte:
Nukreipejas su laikikliu kaniulems
Kaniule, trumpa, darbinis ilgis 10,5 cm
kaniule, ilga, darbinis ilgis 14,5 cm
p. 28.

Product Number	Quantity	Description
28140 Z	1	**Aimer, complete**, for portal placement in hip arthroscopy, for use with KARL STORZ arthroscope sheaths with a working length of 13.5 cm, consisting of: 28140 ZA Aimer, with attachment for bullets 28140 ZB Bullet, short, working length 10.5 cm 28140 ZC Bullet, long, working length 14.5 cm

Plastikinis konteineris sterilizavimui bei laikymui
p. 28.7.

39301 G	1	**Plastic Container for Sterilization and Storage**, perforated, with transparent lid, with silicone mat, external dimensions (w x d x h): 515 x 114 x 65 mm

Lateraline 70 laipsniu optika, padidinto matymo vaizdo, skersmuo 4 mm, ilgis 18 cm, autoklavuojama
p. 29.

28731 CWA	1	**HOPKINS® Wide Angle Lateral Telescope 70°**, enlarged view, diameter 4 mm, length 18 cm, autoclavable,
28131 CR	1	**High-Flow Arthroscope Sheath**, with snap-in coupling mechanism, diameter 5.5 mm, working length 13.5 cm, two stopcocks, rotatable, for use with HOPKINS® telescopes 0°, 30°, 70° and Obturators 28130 BC/BT, 28140 O,

Aukstos tekmes artroskopine mova, su greito uzrakinimo mechanizmu, skersmuo 5,5 mm, darbinis ilgis 13,5 cm, su dviem kraneliais, rotuojama, naudojimui su 0, 30, 70 laipsniu optikomis ir 28130BC/BT, 28140O obturatoriais

28140 O	1	**Obturator**, cannulated, with handle, diameter 4.8 mm, for use with Arthroscope Sheaths 28130 CR/R and 28131 CR/R as well as Guide Wire 28140 GW

Obturatorius, kaniuluotas
p. 31.

28140 D	1	**Gasket Attachment**, with cone, including Gasket 28140 GU, for use with all Arthroscope Sheaths

Product Number	Quantity	Description
28140 GU	1	**Gasket**, for single use, unsterile, single-packaged, for use with Gasket Attachment 28140 D
28140 S	1	**Evacuation Cannula**, with LUER-Lock and one stopcock, working length 18 cm, for use with Arthroscope Sheaths 28130 CR/R and 28131 CR/R
28140 T	1	**Probe**, graduated, length of hook 3 mm, diameter 1.5 mm, working length 18 cm
28140 WK	1	**Changing Rod**, cannulated, diameter 4.8 mm, working length 31 cm, for use with Arthroscope Sheaths 28130 CR/R and 28131 CR/R as well as Guide Wire 28140 GW
28140 CD	1	**Microfracture Chisel**, curved 30°, working length 18 cm
28140 CE	1	**Microfracture Chisel**, curved 70°, working length 18 cm
28140 KE	1	**Curette**, oval, small, both sides cutting, curved, 20° upwards, working length 18 cm
2870356 KP	1	**Knot Pusher and Suture Cutter**, for cutting sutures up to size USP 2, consisting of: 2870356 I Insert and Blade 2870356 HG Handle
28179 CB	1	**Glenoid Rasp**, width 5.5 mm, curved upwards 30°, working length 15 cm
28179 KP	1	**Knot Pusher**, working length 18 cm
28180 GA	1	**SNAPPER® SHOULDER PRO® Suture Forceps**, for punching soft tissue and suture management in shoulder arthroscopy, curved upwards, working length 15 cm, color code: black

Annotations (handwritten in red):

- Eakuacine (lovelete) kaniule, su Luer-lock jungtimi ir kraneliu, darbinis ilgis 18 cm — p. 32.
- Zondas, 3 mm, darbinis ilgis180 mm — p. 34.
- Strypas, kaniuliuotas, skersmuo 4,8 mm, ilgis 31 cm — p. 35.
- Mikrochondrine smeige, lenkta 30 laipsniu, ilgis 18 cm — p. 40., p. 41.
- Mikrochondrine smeige, lenkta 70 laipsniu, ilgis 18 cm — p. 42.
- Kiurete, 20 laipsniu lenkta i virsu, darbinis ilgis 18 cm — p. 44.
- Mazgo nustumejas ir siulo nukirpejas — p. 45.
- Raspatorius, plotis 5,5 mm, lenktas i virsu 30 laips. darbinis ilgis 15 cm — p. 46.
- Mazgo nustumejas — p. 47.
- Siuvimo znyples, minksto audinio pradurimui. — p. 48., p. 49.

Product Number	Quantity	Description
28140 HD	1	**Half Pipe®,** for use in hip arthroscopy, handle rotated 90°, handle axis 120°, working length 95 mm

Puslankiai, naudojimui klubo artroskopijose, rankena rotuojama 90 laipsniu kampu, 120 laipsniu kampo, darbinis ilgis 95 mm.p
p. 50.

28140 HC	1	**Half Pipe®,** for use in hip arthroscopy, handle rotated 90°, handle axis 120°, distal end flat, atraumatic tip, working length 120 mm

p. 50.

28140 GH	1	**Half Pipe®,** for use in hip arthroscopy, handle axis 90°, with extra slim distal design, working length 95 mm

p. 50.

Plastikinis konteineris ivairiu insturmentu rinkiniu sterilizavimui bei laikymui
p. 51.

39360 AK	1	**Plastic Container for Sterilization and Storage of Variable Instrument Sets**, perforated, with transparent lid, with silicone mat, two-level storage, (1 additional insert), external dimensions (w x d x h): 545 x 260 x 115 mm, consisting of: 2x 39360 AP Snap-in Clip, package of 12 2x 39360 AS Silicone Tie-Downs, package of 12 39360 AR Tool

Product Number	Quantity	Description
39910 SC	1	**Stainless Steel Tray for Sterilization, Storage and Transport**, of up to 12 SilCut® or RHINOFORCE® forceps, with lid, latches and handles, removable rack with double silicone holders for max. 12 instruments, external dimensions (w x d x h): 340 x 250 x 145 mm

Punkcine adata
p. 52.

28140 DB	1	**Puncture Needle**, diameter 2.1 mm, working length 21.3 cm, for use with Guide Wire 28140 GW and Obturator 28140 DO

Pravedejas
p. 52.

28140 GW	1	**Guide Wire**, diameter 1.5 mm, working length 40 cm

Obturatorius
p. 52.

28140 DO	1	**Obturator**, for use with Puncture Needle 28140 DB

28208 CCS	1	**Full Radius Resector**, for single use, sterile, diameter 4.5 mm, working length 180 mm, package of 6, for use with POWERSHAVER SL SCB and UNIDRIVE® S III ARTHRO SCB, color code: yellow

Seiverio antgalis, skersmuo 4,5 mm, darbinis ilgis 180 cm
p. 53., p. 54.

28208 IDS	1	**Semi Hooded Barrel Burr**, for single use, sterile, diameter 5.5 mm, working length 180 mm, package of 6, for use with POWERSHAVER SL SCB and UNIDRIVE® S III ARTHRO SCB, color code: pink

Elevatorius, skersmuo 4 mm, lenktas 15 laipsniu i virsu, darbinis ilgis 15 cm
p. 56.

28180 CB	1	**Elevator**, width 4 mm, curved downwards 15°, also curved downwards in sheath, working length 15 cm, for use with cannulas inner diameter 8.25 mm

28146 E	1	**Pointed Knife**, straight, working length 11.5 cm

Smailas peilis, dvieju galu, darbinis ilgis 18 cm
p. 57.

28140 MG	1	**Pointed Knife**, curved, double-edged, working length 18 cm

Product Number	Quantity	Description
495 ND	1	**Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 300 cm

> Fibrooptinis sviesolaidis, su tiesia jungtimi, skersmuo 3,5 mm, ilgis 300 cm
> p. 6.

> Kandiklis, 3,4 mm, 15 laipsniu lenktas lenktas i virsu, tiesus, ilgis 20 cm
> p. 36.

Product Number	Quantity	Description
28171 KP	1	**SilCut® Punch**, through-cutting, cutting width 3.4 mm, curved jaws, 15° upwards, sheath diameter 3 mm, straight, working length 20 cm

> Zirkles, skersmuo 3 mm, ilgis 13 cm
> p. 37.

Product Number	Quantity	Description
28171 SP	1	**SilCut® Scissor Punch**, cutting width 0.5 mm, straight jaws, sheath diameter 3 mm, straight, working length 13 cm

> Griebiancios znyples, tiesios, darbinis ilgis 13 cm
> p. 38.

Product Number	Quantity	Description
28171 HB	1	**SilGrasp® Grasping Forceps**, spoon-shaped jaws, jaw width 3.4 mm, straight jaws, sheath diameter 3 mm, straight, working length 13 cm

> Griebiancios znyples, dantytos, darbinis ilgis 13 cm
> p. 39.

Product Number	Quantity	Description
28171 KB	1	**SilGrasp® Grasping Forceps**, spoon-shaped jaws, serrated, straight jaws, sheath diameter 3 mm, straight, working length 13 cm

> Kiurete, maza, darbinis ilgis 13 cm
> p. 43.

Product Number	Quantity	Description
28728 KE	1	**Curette**, oval, small, curved, 10° upwards, working length 13 cm