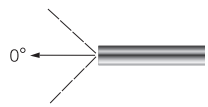
HOPKINS® Telescopes

Fiber optic light transmission incorporated

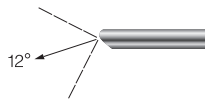
27005BA

1.1 Matymo kampas 12˚
Skersmuo 4 mm
Ilgis 30 cm
Autoklavuojama



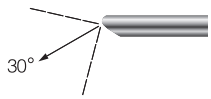
27005AA

HOPKINS® Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: green



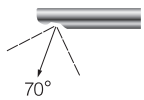
27005FA

HOPKINS® Telescope 12°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: black



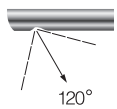
27005BA

HOPKINS® Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: red



27005CA

HOPKINS® Lateral Telescope 70°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: yellow



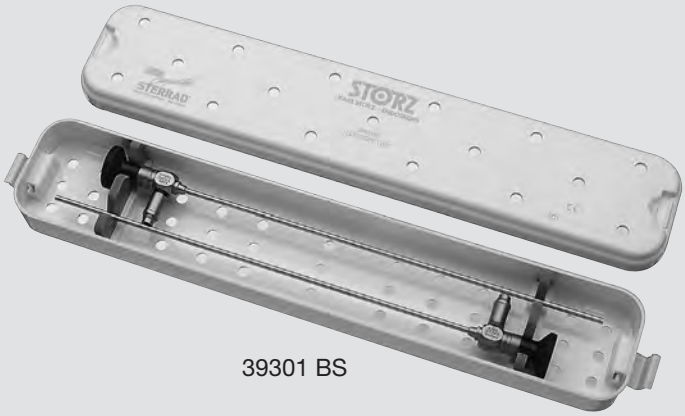
27005EA

HOPKINS® Retrospective Telescope 120°, enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: white

07-22

Plastic Containers for Sterilization and Storage

of endoscopes



39301 BS

1.1.5 Su konteineriu sterilizavimui bei laikymui

39301 AS	**Plastic Container for Sterilization,** suitable for steam, gas, and hydrogen peroxide (Sterrad®) sterilization and storage, perforated, with lid, for use with two rigid endoscopes up to max. 20 cm working length, external dimensions (w x d x h): 321 x 90 x 45 mm
39301 BS	**Plastic Container for Sterilization,** especially suited for hydrogen peroxide (Sterrad®) sterilization and storage, perforated, with lid, for use with two rigid endoscopes up to max. 32 cm working length, external dimensions (w x d x h): 446 x 90 x 45 mm
39301 CS	**Plastic Container for Sterilization,** suitable for steam, gas, and hydrogen peroxide (Sterrad®) sterilization and storage, perforated, with lid, for use with two rigid endoscopes with a working length of over 34 cm, external dimensions (w x d x h): 520 x 90 x 45 mm
39301 D	**Plastic Container for Sterilization and Storage of Endoscopes,** perforated, with transparent lid, with silicone telescope holder, external dimensions: (w x d x h): 670 x 116 x 80 mm

7-11

Please note: The instruments displayed are not included in the plastic containers.
Components and Spare Parts see pages 57 ff.

Fiber Optic Light Cables and Antifog Solution

KARL STORZ — ENDOSKOPE

Fiber Optic Light Cables with Straight Connector

Light Cable and Endoscope Combination

Please note: Symbol coding on the light cable and endoscope allows easier identification and light cable/endoscope combination.

1.2 Fibrooptinis
Skersmuo 3,5 mm
Ilgis 230 cm
Su tiesia jungtimi.

	Light Cable Diameter	Endoscope Diameter		
	2 – 2.5 mm	0.8 – 2.9 mm	495 NT	**Fiber Optic Light Cable,** diameter 2.5 mm, length 180 cm
			495 NTA	**Fiber Optic Light Cable,** diameter 2.5 mm, length 230 cm
	3 – 3.5 mm	3 – 6.5 mm	495 NL	**Fiber Optic Light Cable,** diameter 3.5 mm, length 180 cm
			495 NA	**Fiber Optic Light Cable,** diameter 3.5 mm, length 230 cm
			495 NAC	**Fiber Optic Light Cable,** extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm
			495 ND	**Fiber Optic Light Cable,** diameter 3.5 mm, length 300 cm
	4.8 – 5 mm	10 – 11 mm	495 NB	**Fiber Optic Light Cable,** diameter 4.8 mm, length 180 cm
			495 NCS	**Fiber Optic Light Cable,** extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 250 cm
			495 NCSC	**Fiber Optic Light Cable,** extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
			495 NE	**Fiber Optic Light Cable,** diameter 4.8 mm, length 300 cm

Antifog Solution

15006 B 15006 C 15006 D

15006 B	"ULTRA STOP" **Antifog Solution,** 25 ml, pipette bottle
15006 C	**Same,** 30 ml, sterile pierce bottle
15006 D	**Same,** 15 ml, atomizer bottle

7-11₂

Working Element, bipolar

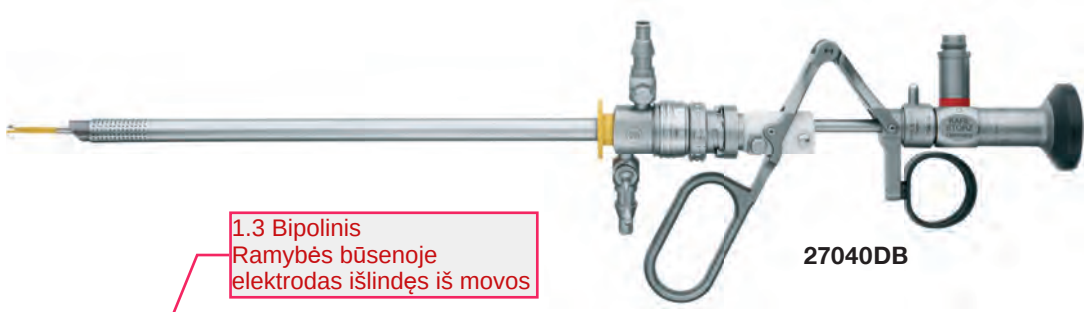
for two-stem electrodes with stabilizers

For use with HOPKINS® Forward-Oblique Telescopes
27005BA, 27005BIA, 27005FA, 27005FIA and AUTOCON® III 400 SCB

bipolar
NaCl

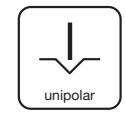
Cutting by means of a finger grip. Movable thumb ring

- In rest position the electrode is outside the sheath.



27040DB	**Working Element**
39040RA	**Cleaning Adaptor,** for use with working element, bipolar

Unipolar High Frequency Cords, for use with Working Elements 27050C, 27050D, 27050E, 27050EP, 27050DP, 27054E, 27053E and 27033E



KARL STORZ Instrument	High Frequency Surgical Unit		
		**277**	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type, older models
		**277A**	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, compatible with Martin HF units
		**277KE**	**Unipolar High Frequency Cord,** with 5 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe ICC units
		**277KB**	**Unipolar High Frequency Cord,** with 8 mm plug, for use with AUTOCON® III and AUTOCON® II, compatible with Valleylab units

Bipolar High Frequency Cords, for use with Working Elements 27040DB, 27040EB, 27040DO, 27040EO and 27054EB

1.3.3 Komplektuojamas su aukšto dažnio bipoliniu laidu

KARL STORZ Instrument	High Frequency Surgical Unit		
		**UH801**	**Bipolar High Frequency Cord,** for KARL STORZ AUTOCON® III 400, length 400 cm, with RFID coding system, reusable 20 times, for use with KARL STORZ bipolar resectoscopes
		**27176LEB**	**Bipolar High Frequency Cord,** for AUTOCON®II 400 SCB (high-end), length 400 cm, for use with KARL STORZ bipolar resectoscopes

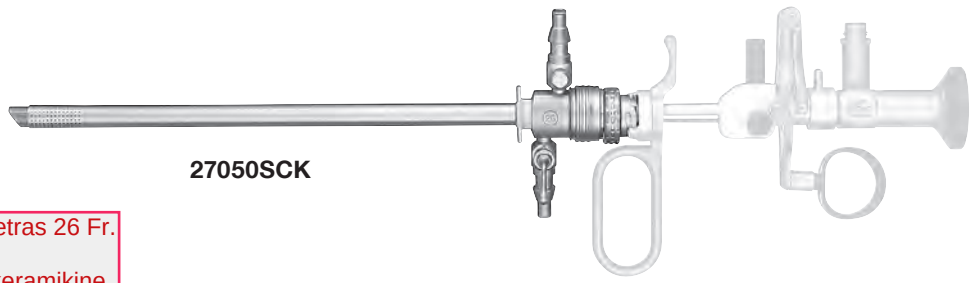
Please note: All high frequency cords are delivered with a length of 300 cm. If a length of 500 cm is required, please add the letter L to the part number, e.g., 277KEL.

Resectoscope Sheaths with Rotating Inner Sheaths and Click Mechanism

for continuous irrigation and suction

Special Features:

- Sheath can be connected in any position
- Rotating inner sheath
- For better service: Exchangeable inner sheath
- Sheaths can be combined with Working Elements 27040 and 27050



27050SCK

1.4 Išorinis diametras 26 Fr.
Rotuojama
Vidinė mova su keramikine izoliacija
žarnelių rinkinys skysčių padavimui ir išleidimui

27050SCK	**Resectoscope Sheath,** including tube for in- and outflow, 26 Fr., oblique beak, rotating inner sheath with ceramic insulation, quick-release lock color code: yellow
27050CA	**Inner Sheath,** rotating, with ceramic insulation, for use with resectoscope outer sheath of 27050SC
27050SDK	**Resectoscope Sheath,** including tube for in- and outflow, 28 Fr., oblique beak, rotating inner sheath with ceramic insulation, quick-release lock color code: black
27050CB	**Inner Sheath,** rotating, with ceramic insulation, for use with resectoscope outer sheath of 27050SD

The resectoscope sheaths can be used with unipolar and bipolar working elements.

07-22

Obturators

For use with 24 – 28 Fr. resectoscope sheaths

27040OA

27040OA	**Standard Obturator,** for 27/28 Fr. Sheaths 27040AO, 27241AO, 27240AO, 27040SM, 27050SM, 27050SD, color code: black
27040OB	**Standard Obturator,** for 27 Fr. Sheaths, 27040AK, 27241AK, color code: black
27040OC	**Standard Obturator,** for 24/26 Fr. Sheaths 27040BO, 27241BO, 27240BO, 27040SD, 27040SL, 27050SL, 27050SC, color code: yellow
27040OD	**Standard Obturator,** for 24 Fr. Sheaths 27040BK, 27241BK, color code: yellow

1.4.4.2 standartinis obturatorius

27048CO	**Deflecting Obturator,** for 27/28 Fr. Sheaths 27040AO, 27241AO, 27240AO, 27040SE, 27040SM, 27050SM, 27050SD, color code: black
27048BK	**Deflecting Obturator,** for 24 Fr. Sheaths, 27040BK, 27241BK, color code: yellow
27048CK	**Deflecting Obturator,** for 24/26 Fr. Sheaths 27040BO, 27241BO, 27240BO, 27040SD, 27040SL, 27050SL, 27050SC, color code: yellow

27049BO	LEUSCH **Atraumatic Distending Obturator,** for 24/26 Fr. Sheaths 27040BO, 27241BO, 27240BO, 27040SD, 27040SL, 27050SL, 27050SC, color code: yellow

07-22

Visual Obturators

For use with 24 – 28 Fr.

When HOPKINS® Telescopes 27005AA, 27005AIA, 27005BA, 27005BIA, 27005FA and 27005FIA are used in conjunction with visual obturators, sheaths can be introduced under visual control.

27050AK

27050AK	SCHMIEDT **Visual Obturator,** for 27/28 Fr. sheaths
27050BK	SCHMIEDT **Visual Obturator,** for 24/26 Fr. sheaths

27051A

27051A	SCHMIEDT **Visual Obturator,** with channel for flexible instruments, for 27/28 Fr. sheaths, with 9 Fr. working channel, including 2 additional seals
27051B	SCHMIEDT **Visual Obturator,** with channel for flexible instruments, for 24/26 Fr. sheaths, with 6 Fr. working channel, including 2 additional seals
PV27051B	SCHMIEDT **Visual Obturator,** with channel for flexible instruments, for use with 24/26 Fr. Resectoscope Sheaths 27040BP, 27051PL

27050AE

27050AE	ESHGI **Visual Obturator,** for 27/28 Fr. sheaths
27050BE	ESHGI **Visual Obturator,** for 24/26 Fr. sheaths

1.4.4.2 optinis obturatorius

07-22

Electrodes, bipolar

Two-stem electrodes with stabilizers, for Working Elements 27040DB, 27040EB and 4 mm HOPKINS® Telescope 12° 27005 FA

KARL STORZ — ENDOSKOPE

For use with 24 – 28 Fr. resectoscope sheaths

The cutting loops are delivered with a wire diameter of 0.35 mm.
Loops with 30 as the last digit of the order number and orange insulation indicate a wire diameter of 0.30 mm.

bipolar
NaCl

27040GP1

1.5 Bipolinė;
Tinkama siūlomoms movoms (1.4 poz.)
Tinkama darbui su siūlomomis optikomis (1.1 poz.)
Tinkama siūlomiems rezektoskopo darbiniams elementams (1.3 poz.).

Working end	24/26 Fr. color code: yellow	27/28 Fr. color code: brown	Instrument description
	**27040GP1**	**27040GPB1**	**Cutting Loop,** bipolar
	**27040GP140**	–	**Cutting Loop,** bipolar
	**27040GD1**	–	**Cutting Loop,** bipolar, small
	**27040BL1**	–	**Coagulation Electrode,** bipolar, pointed
	**27040GP130**	–	**Cutting Loop,** bipolar, diameter 0.30 mm
	**27040JB130**	–	**Cutting Loop,** bipolar, longitudinal, diameter 0.30 mm
	**27040JBE130**	–	**Cutting Loop,** bipolar, rectangular, longitudinal, diameter 0.30 mm
	**27040NB**	–	**Vaporization Electrode HALF MOON®,** bipolar, ball-shaped
	**27040VE**	–	**VapoEnucleation Electrode,** hemispherical

1.6 Rutuliuko formos
Bipolinis
Tinkamas siūlomoms movoms (1.4 poz.)

280 **Protection Tube,** for sterilization and storage of electrodes, loops, curettes and knives

07-22

Electrodes are delivered in packages of 6.

Note: Electrodes, in sterile packaging, are also available for single use.

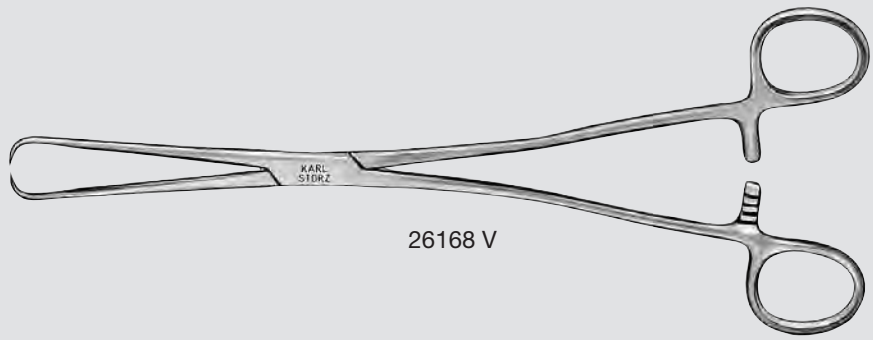
Uterine Cannula,
Uterine Grasping Forceps

for laparoscopy and pertubation

26168 UN

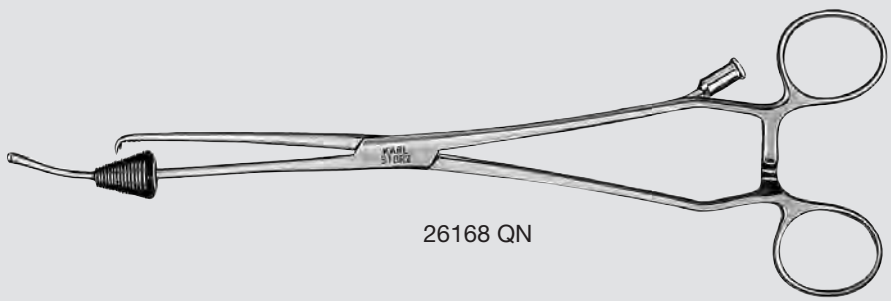
1.7 Cohen tipo
Su dviejų dydžių kūgiais
Spyruoklinė žnyplių
fiksacija.

26168 UN COHEN **Uterine Cannula,** with 1 large cone 26168 UL and small cone 26168 US, spring-loaded fixation for Uterine Tenaculum Forceps 26168 V, with LUER-Lock adaptor for cleaning



26168 V

26168 V **Tenaculum Forceps,** length 22 cm



26168 QN

26168 QB QUINONES **Uterine Grasping Forceps,** blunt jaws, with 1 large and small cone, with channel for pertubation, length 24 cm

26168 QN QUINONES-NEUBÜSER **Uterine Grasping Forceps,** toothed jaws, with 1 large and small cone, with channel for pertubation, length 24 cm

1-993

Plastic Containers for Sterilization and Storage

of instruments

39301 H

1.8 Perforuotas
Su permatomu dangčiu
Su silikoniniu kilimėliu

39301 F	**Plastic Container for Sterilization and Storage,** perforated, with transparent lid, with silicone mat, external dimensions (w x d x h): 253 x 233 x 62 mm
39301 G	**Plastic Container for Sterilization and Storage,** perforated, with transparent lid, with silicone mat, external dimensions (w x d x h): 510 x 114 x 60 mm
39301 H	**Plastic Container for Sterilization and Storage,** perforated, with transparent lid, with silicone mat, external dimensions (w x d x h): 513 x 237 x 62 mm
39301 J	**Plastic Container for Sterilization and Storage,** perforated, with transparent lid, with silicone mat, external dimensions (w x d x h): 527 x 253 x 138 mm

39312 B

39312 B	**Plastic Container for Sterilization and Storage,** perforated, with transparent lid and silicone mat, for use with up to 15 instruments with working length up to 43 cm, external dimensions (w x d x h): 680 x 325 x 155 mm

Please note: The instruments displayed are not included in the plastic containers.
Components and Spare Parts see pages 57 ff.

5-964

KARL STORZ — ENDOSKOPE

GEBRAUCHSANWEISUNG

UH 400/400 U/401/401 U Hochfrequenz-Chirurgiegerät AUTOCON® III 400

INSTRUCTION MANUAL

UH 400/400 U/401/401 U High frequency surgical unit AUTOCON® III 400

MANUAL DE INSTRUCCIONES

UH 400/400 U/401/401 U Aparato quirúrgico de alta frecuencia AUTOCON® III 400

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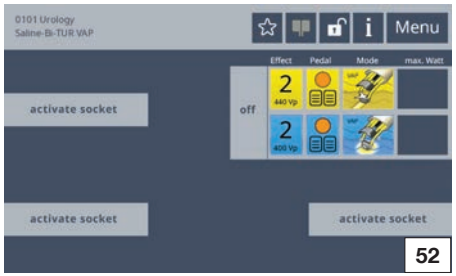
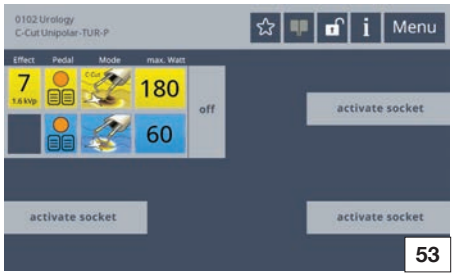
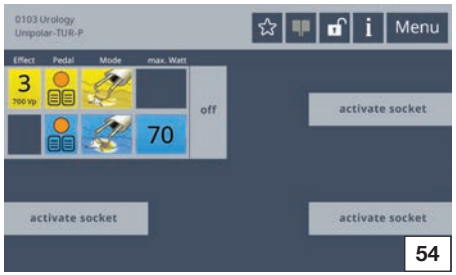


52



53



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5.11.12 Basis-Programme (Prozeduren)

Prozeduren sind Programme, in denen Parameter wie Spannung und Leistung, für fachgebietsspezifische, medizinische Eingriffe festgelegt sind. Sie können entweder eigene Prozeduren/Programme erstellen (siehe Abschnitt 5.11.8) oder auf von KARL STORZ definierte Prozeduren zurückgreifen. Diese Prozeduren sind unterschiedlichen Fachgebieten, wie z. B. Urologie, Laparoskopie usw. zugeordnet und beginnen mit der Nummer 0100. Standardmäßig (Auslieferungszustand) sind alle fachgebietsspezifischen KARL STORZ Prozeduren/Programme sowie ein Standard-Programm freigeschaltet (sichtbar). Diese Programme sowie neu erstellte können nicht verändert oder gelöscht werden (außer die entsprechende Einstellung im Menü Service-Program Restrictions – Abschnitt 5.11.4 – wurde geändert). In diesem Menü können Sie auch die Fachgebietsprozeduren »anwendergerecht« ein-/ausblenden.

Zur Auswahl siehe Abschnitt 5.11.6 Menü »Programme«.

ⓘ Der Prozedurname ist jeweils in der Statuszeile angezeigt (siehe Abschnitt 5.2.2).

Beim AUTOCON® III 400 sind die werkseitig eingestellten vordefinierten Prozeduren/Programme in folgende Benutzergruppen eingeteilt:

- Fachgebiet Urologie (0100-0105; siehe Abb. 51 bis 56)
- Fachgebiet Gynäkologie (0200-0208; siehe Abb. 57 bis 64)
- Fachgebiet Laparoskopie (0300-0303; siehe Abb. 65 bis 68); Prozedur 0303: BiVascularSafe nur bei Modellen UH 401 und UH 401U möglich
- Fachgebiet Gastroenterologie (0400-0401; siehe Abb. 69 bis 70)
- Anwendungsbereich offene Chirurgie (0500-0501; siehe Abb. 71 bis 72) Prozedur 0501: BiVascularSafe nur bei Modellen UH 401 und UH 401U möglich
- Fachgebiet Pädiatrie (0600; siehe Abb. 73)

5.11.12 Basic programs (procedures)

Procedures are programs in which parameters such as voltage and output are determined for specialist medical interventions.
You can either create your own procedures/programs (see section 5.11.8) or use procedures defined by KARL STORZ. These procedures are assigned to different disciplines, e.g. urology, laparoscopy and start with the number 0100. All specialist KARL STORZ procedures/programs and a standard program are enabled (visible) as standard (upon delivery). These programs and newly created ones cannot be changed or deleted (unless the corresponding setting in the menu Service – Program Restrictions, section 5.11.4, has been changed). In this menu you can display/hide the specialist procedures to suit your needs.

For selection see section 5.11.6 Menu 'Programs'.

2.1 Skirtas endoskopinėms ir atviroms operacijoms

ⓘ The procedure name is displayed in the status bar (see section 5.2.2).

The predefined procedures/programs set in the factory for the AUTOCON® III 400 are divided into the following user groups:

- Specialization urology (0100-0105; see Fig. 51 to 56)
- Specialization gynecology (0200-0208; see Fig. 57 to 64)
- Specialization laparoscopy (0300-0303; see Fig. 65 to 68); Procedure 0303: BiVascularSafe only possible with models UH 401 and UH 401U
- Specialization gastroenterology (0400-0401; see Fig. 69 to 70)
- Application open surgery (0500-0501; see Fig. 71 to 72) Procedure 0501: BiVascularSafe only possible with models UH 401 and UH 401U
- Specialization pediatrics (0600; see Fig. 73)

5.11.12 Programas básicos (procedimientos)

Los procedimientos son programas en los que parámetros tales como tensión y potencia se han determinado de forma fija para intervenciones médicas en especialidades específicas.
Usted puede generar sus propios procedimientos/programas (véase la sección 5.11.8) o utilizar los procedimientos definidos por KARL STORZ. Estos procedimientos están asignados a diferentes especialidades, tales como urología, laparoscopia, etc., y comienzan con el número 0100. De forma estándar (estado de suministro) están habilitados (visibles) todos los procedimientos/programas KARL STORZ específicos de especialidades, así como un programa estándar. Estos programas, así como otros creados nuevos, no pueden ser modificados o borrados (salvo que se haya modificado el ajuste correspondiente en el menú Servicio – Restricciones de programa – sección 5.11.4 –). En este menú también puede insertar/ocultar los procedimientos de especialidades conforme a los deseos del usuario.

Con respecto a la selección, véase la sección 5.11.6 del menú "Programas".

ⓘ El nombre del procedimiento aparece indicado en cada caso en la línea de estado (véase la sección 5.2.2).

Los procedimientos/programas predefinidos ajustados de fábrica en el AUTOCON® III 400 están distribuidos en los siguientes grupos de usuario:

- Especialidad de urología (0100-0105; véanse las figs. 51-56)
- Especialidad de ginecología (0200-0208; véanse las figs. 57-64)
- Especialidad de laparoscopia (0300-0303; véanse las figs. 65-68); Procedimiento 0303: BiVascularSafe solamente puede aplicarse en los modelos UH 401 y UH 401U
- Especialidad de gastroenterología (0400-0401; véanse las figs. 69-70)
- Campo de aplicación de cirugía abierta (0500-0501; véanse las figs. 71-72) Procedimiento 0501: BiVascularSafe solamente puede aplicarse en los modelos UH 401 y UH 401U
- Especialidad de pediatría (0600; véase la fig. 73)

Beschreibung

3 Beschreibung

3.1 Anzeige- und Bedienelemente

3.1.1 Bedienelemente der Vorderseite

ⓘ Die Aktivierungsbalken (⑦ - ⑩) leuchten gelb oder blau auf, sobald ein Instrument an der zugehörigen Buchse aktiviert wird.

① Standby-Taster (EIN – weiß umleuchtet)
② Symbol »Standby Taster«
③ Neutralelektrode bei HF von Erde isoliert
④ Symbol »Defibrillationsgeschütztes Anwendungsteil des Typs CF«
⑤ Symbol »Gebrauchsanweisung befolgen«
⑥ Touchscreen mit Aktivierungstasten der Modi
⑦ Aktivierungsbalken obere unipolare Buchse
⑧ Aktivierungsbalken untere unipolare Buchse
⑨ Aktivierungsbalken obere bipolare Buchse
⑩ Aktivierungsbalken untere bipolare Buchse

Description

3 Description

3.1 Display and control elements

3.1.1 Control elements on the front panel

ⓘ While activating an instrument, the activation bar (⑦ - ⑩) of the corresponding socket illuminates yellow or blue.

① Standby button (ON – surrounded by a white light)
② Symbol ‘Standby button’
③ Neutral electrode isolated from ground for HF
④ Symbol ‘CF type applied part with defibrillation protection’
⑤ Symbol ‘Observe instruction manual’
⑥ Touch screen with mode selection buttons
⑦ Activation bar upper unipolar socket
⑧ Activation bar lower unipolar socket
⑨ Activation bar upper bipolar socket
⑩ Activation bar lower bipolar socket

Descripción

3 Descripción

3.1 Elementos de indicación y de mando

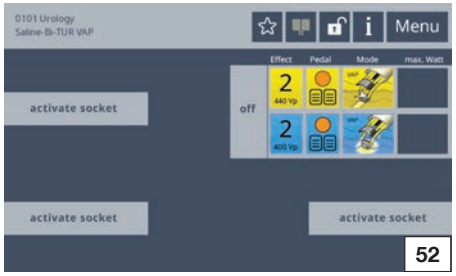
3.1.1 Elementos de mando de la parte delantera

ⓘ La barra de activación (⑦ - ⑩) se enciende de color amarillo o azul tan pronto como se activa un instrumento en el conector correspondiente.

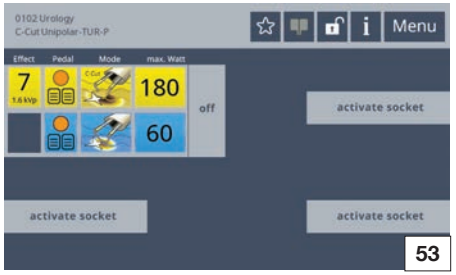
① Pulsador standby (CON. – rodeado por anillo iluminado)
② Símbolo “Pulsador standby”
③ Electrodo neutro para AF aislado de tierra
④ Símbolo “Pieza de aplicación protegida contra desfibrilación de la clase CF”
⑤ Símbolo “Consultar el Manual de instrucciones”
⑥ Pantalla táctil con teclas de activación de los modos
⑦ Barra de activación del conector unipolar superior
⑧ Barra de activación del conector unipolar inferior
⑨ Barra de activación del conector bipolar superior
⑩ Barra de activación del conector bipolar inferior

2.2 Valdomas spalvotu, lietimui jautriu ekranu

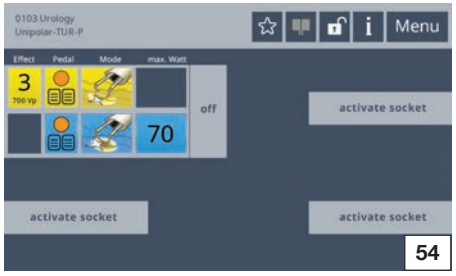
51



52



53



54

5.11.12 Basis-Programme (Prozeduren)

Prozeduren sind Programme, in denen Parameter wie Spannung und Leistung, für fachgebietsspezifische, medizinische Eingriffe festgelegt sind. Sie können entweder eigene Prozeduren/Programme erstellen (siehe Abschnitt 5.11.8) oder auf von KARL STORZ definierte Prozeduren zurückgreifen. Diese Prozeduren sind unterschiedlichen Fachgebieten, wie z. B

2.3 Su vartotojo pasirenkamomis gamyklinėmis (arba užprogramuojamomis pagal gamintojo rekomendacijas) darbinėmis programomis.
2.4 Galimybė sukurti individualias darbines programas.

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Zur Auswahl siehe Abschnitt 5.11.6 Menü »Programme«.

ⓘ Der Prozedurname ist jeweils in der Statuszeile angezeigt (siehe Abschnitt 5.2.2).

Beim AUTOCON® III 400 sind die werkseitig eingestellten vordefinierten Prozeduren/Programme in folgende Benutzergruppen eingeteilt:

- Fachgebiet Urologie (0100-0105; siehe Abb. 51 bis 56)
- Fachgebiet Gynäkologie (0200-0208; siehe Abb. 57 bis 64)
- Fachgebiet Laparoskopie (0300-0303; siehe Abb. 65 bis 68); Prozedur 0303: BiVascularSafe nur bei Modellen UH 401 und UH 401U möglich
- Fachgebiet Gastroenterologie (0400-0401; siehe Abb. 69 bis 70)
- Anwendungsbereich offene Chirurgie (0500-0501; siehe Abb. 71 bis 72) Prozedur 0501: BiVascularSafe nur bei Modellen UH 401 und UH 401U möglich
- Fachgebiet Pädiatrie (0600; siehe Abb. 73)

5.11.12 Basic programs (procedures)

Procedures are programs in which parameters such as voltage and output are determined for specialist medical interventions.
You can either create your own procedures/programs (see section 5.11.8) or use procedures defined by KARL STORZ. These procedures are assigned to different disciplines, e.g. urology, laparoscopy and start with the number 0100. All specialist KARL STORZ procedures/programs and a standard program are enabled (visible) as standard (upon delivery). These programs and newly created ones cannot be changed or deleted (unless the corresponding setting in the menu Service – Program Restrictions, section 5.11.4, has been changed). In this menu you can display/hide the specialist procedures to suit your needs.

For selection see section 5.11.6 Menu ‘Programs’.

ⓘ The procedure name is displayed in the status bar (see section 5.2.2).

The predefined procedures/programs set in the factory for the AUTOCON® III 400 are divided into the following user groups:

- Specialization urology (0100-0105; see Fig. 51 to 56)
- Specialization gynecology (0200-0208; see Fig. 57 to 64)
- Specialization laparoscopy (0300-0303; see Fig. 65 to 68); Procedure 0303: BiVascularSafe only possible with models UH 401 and UH 401U
- Specialization gastroenterology (0400-0401; see Fig. 69 to 70)
- Application open surgery (0500-0501; see Fig. 71 to 72) Procedure 0501: BiVascularSafe only possible with models UH 401 and UH 401U
- Specialization pediatrics (0600; see Fig. 73)

5.11.12 Programas básicos (procedimientos)

Los procedimientos son programas en los que parámetros tales como tensión y potencia se han determinado de forma fija para intervenciones médicas en especialidades específicas.
Usted puede generar sus propios procedimientos/programas (véase la sección 5.11.8) o utilizar los procedimientos definidos por KARL STORZ. Estos procedimientos están asignados a diferentes especialidades, tales como urología, laparoscopia, etc., y comienzan con el número 0100. De forma estándar (estado de suministro) están habilitados (visibles) todos los procedimientos/programas KARL STORZ específicos de especialidades, así como un programa estándar. Estos programas, así como otros creados nuevos, no pueden ser modificados o borrados (salvo que se haya modificado el ajuste correspondiente en el menú Servicio – Restricciones de programa – sección 5.11.4 –). En este menú también puede insertar/ocultar los procedimientos de especialidades conforme a los deseos del usuario.

Con respecto a la selección, véase la sección 5.11.6 del menú “Programas”.

ⓘ El nombre del procedimiento aparece indicado en cada caso en la línea de estado (véase la sección 5.2.2).

Los procedimientos/programas predefinidos ajustados de fábrica en el AUTOCON® III 400 están distribuidos en los siguientes grupos de usuario:

- Especialidad de urología (0100-0105; véanse las figs. 51-56)
- Especialidad de ginecología (0200-0208; véanse las figs. 57-64)
- Especialidad de laparoscopia (0300-0303; véanse las figs. 65-68); Procedimiento 0303: BiVascularSafe solamente puede aplicarse en los modelos UH 401 y UH 401U
- Especialidad de gastroenterología (0400-0401; véanse las figs. 69-70)
- Campo de aplicación de cirugía abierta (0500-0501; véanse las figs. 71-72) Procedimiento 0501: BiVascularSafe solamente puede aplicarse en los modelos UH 401 y UH 401U
- Especialidad de pediatría (0600; véase la fig. 73)

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Im Menü »Programme« können gespeicherte Programme gelöscht werden (sofern die Funktion unter »Programmeinstellungen« im Abschnitt 5.11.4 freigeschaltet ist).

1. Hierzu in der Programmliste das zu löschende Programm durch Tippen auf den Programmnamen auswählen (siehe Abb. 36 oder 37). Um vertikal in der Programmliste zu navigieren, die entsprechende Taste ▲/▼ drücken.
2. Um das gewählte Programm unwiderruflich zu löschen, die Taste »Papierkorb« wählen.

☛ Das gewählte Programm wird nach Bestätigung einer Sicherheitsabfrage gelöscht.

5.11.7 Menü »Favoriten«

Im Menü »Favoriten« können die festgelegten Favoriten ausgewählt werden. Eine Schnellauswahl ist im Hauptbildschirm über das Sternsymbol möglich.

Über die Tasten ◀/▶ im unteren Bildschirmbereich gelangen Sie auf die nächste Seite der Favoritenliste (siehe Abb. 40).

1. Mit »OK« bestätigen, um die Auswahl zu übernehmen.
2. Die Taste »zurück« drücken, um zum Hauptbildschirm zu gelangen.

5.11.8 Menü »Programm speichern«

Im Menü »Programm speichern« (siehe Übersicht unter 5.11.1) kann die aktuelle Einstellung unter demselben oder einem anderen Programmnamen abgespeichert werden (siehe Abb. 41). Diese Funktion ist standardmäßig (bei Auslieferung) freigeschaltet; siehe »Programmeinstellungen« im Abschnitt 5.11.4.

Mit einer Tastatur können Programmnamen erstellt werden. Zur Wahl stehen Symbole, Groß- und Kleinbuchstaben, sowie Nummern.

Mit der Taste »Enter« können zweizeilige Programmnamen vergeben werden.

1. Mit »OK« bestätigen, um die Auswahl zu übernehmen.
2. Die Taste »zurück« drücken, um zum Hauptbildschirm zu gelangen.

Saved programs can be deleted in the 'Programs' menu (if the function is enabled under 'Program settings' in section 5.11.4).

1. To this end, select the program to be deleted in the program list by clicking on the program name (see Fig. 36 or 37). To navigate vertically in the program list, press the corresponding button ▲/▼.
2. To delete the selected program permanently, select the 'recycle bin' button.

☛ The selected program is deleted upon confirmation of a prompt.

5.11.7 Menu 'Favorites'

The defined favorites can be selected in the 'Favorites' menu. A fast selection of the favorites is possible using the star button in the main screen.

Access the next page of the favorites list using the buttons ◀/▶ in the lower part of the screen (see Fig. 40).

1. Confirm with 'OK' to accept the selection.
2. Press the 'back' button to return to the main screen.

5.11.8 Menu 'Save program'

In the 'Save program' menu (see overview under 5.11.1) the current setting can be saved under the same or another program name (see Fig. 41). This function is enabled as standard (upon delivery); see 'Program settings' in section 5.11.4.

Program names can be created using the keyboard. Symbols, capital or small letters or numbers are selection options.

Program names spread over two lines can be assigned using the 'Enter' button.

1. Confirm with 'OK' to accept the selection.
2. Press the 'back' button to return to the main screen.

En el menú "Programas" se pueden borrar programas guardados (siempre que la función correspondiente esté habilitada en "5 Ajustes de programa" según el apartado 5.11.4).

1. Para ello, seleccione dentro de la lista de programas el programa que desee borrar pulsando el nombre del programa correspondiente (véanse las figs. 36 o 37). Para desplazarse verticalmente en la lista de programas, presione la tecla ▲/▼ correspondiente.
2. Para borrar de forma definitiva el programa seleccionado, presione la tecla "Papelera".

☛ Ahora se acepta un mensaje de confirmación y, acto seguido, el programa seleccionado queda borrado.

5.11.7 Menú "Favoritos"

En el menú "Favoritos" pueden seleccionarse los favoritos. El símbolo de estrella disponible en la pantalla principal permite efectuar una selección rápida.

Para acceder a la página siguiente de la lista de favoritos, presione las teclas ◀/▶ en el área inferior de la pantalla (véase la fig. 40).

1. Confirme para aplicar la selección pulsando la tecla "OK".
2. Para acceder a la pantalla principal, presione la tecla "Volver".

5.11.8 Menú "Guardar programa"

El menú "Guardar programa" (véase la vista general en el apartado 5.11.1) permite almacenar el ajuste actual con el mismo nombre de programa o un nombre de programa diferente (véase la fig. 41). Esta función está habilitada de forma estándar (en el suministro); véase "Ajustes de programa" en el apartado 5.11.4.

Usando el teclado pueden crearse nombres de programa, pudiéndose elegir símbolos, mayúsculas y minúsculas y números.

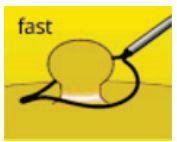
Con la tecla "Intro" pueden denominarse programas con nombres de dos líneas.

1. Confirme para aplicar la selección pulsando la tecla "OK".
2. Para acceder a la pantalla principal, presione la tecla "Volver".

2.4 Galimybė išsaugoti individualias darbines programas.

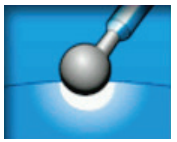
2.5 5.
14 monopolinio pjovimo režimų, kurių maksimali galia 400 W.

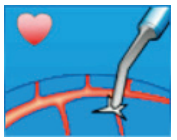
Bildzeichen Modus	Bezeichnung	CCS	ARC CONTROL	Form der HF-Spannung	HF-Leistungsbegrenzung		Spitzen-spannung	Defaultwerte	
					Effekt	Leistungsbereich		Effekt	max. Watt
Unipolare Modi Schneiden									
	Laparoskopie	Ja	Ja	sinusförmig konstant	1 2 3 4 5 6 7 8 9	1 W – 200 W	400 Vp 450 Vp 560 Vp 650 Vp 650 Vp 700 Vp 700 Vp 700 Vp 750 Vp	5	100
	Standard	Ja	Ja	sinusförmig konstant	1 2 3 4 5 6 7 8 9	1 W – 400 W	400 Vp 450 Vp 560 Vp 650 Vp 650 Vp 700 Vp 700 Vp 700 Vp 750 Vp	5	100
	Mikro	Ja	Ja	sinusförmig konstant	1 2 3 4 5 6 7 8 9	1 W – 50 W	280 Vp 340 Vp 380 Vp 400 Vp 400 Vp 400 Vp 450 Vp 450 Vp 450 Vp	5	20
	Resektion	Ja	Ja	sinusförmig konstant	1 2 3 4 5	250 W	650 Vp 700 Vp 700 Vp 700 Vp 750 Vp	2	---
	Resektion C-Cut®	Ja	Ja	sinusförmig moduliert	1 2 3 4 5 6 7 8 9	1 W – 200 W	1,4 kVp 1,4 kVp 1,4 kVp 1,4 kVp 1,5 kVp 1,6 kVp 1,6 kVp 1,6 kVp 1,6 kVp	6	160

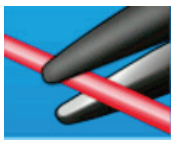
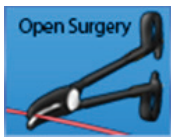
Bildzeichen Modus	Bezeichnung	CCS	ARC CONTROL	Form der HF-Spannung	HF-Leistungsbegrenzung		Spitzen-spannung	Defaultwerte	
					Effekt	Leistungsbereich		Effekt	max. Watt
Unipolare Modi Schneiden									
	SupraLoop	Ja	Ja	sinusförmig konstant	1 2 3	300 W 350 W 400 W	650 Vp	1	---
	Trocken	Ja	Ja	sinusförmig moduliert	1 2 3 4 5 6 7 8 9	1 W – 200 W	1,4 kVp 1,4 kVp 1,4 kVp 1,4 kVp 1,5 kVp 1,6 kVp 1,6 kVp 1,6 kVp 1,6 kVp	5	100
	Gastro Loop 1	Ja	Ja	sinusförmig abwechselnd Cut-, Coag- und Pause-Phasen	1 2 3 4 5	400 W	750 Vp	3	---
	Gastro Loop 2	Ja	Ja	sinusförmig abwechselnd Cut-, Coag- und Pause-Phasen	1 2 3 4 5	400 W	750 Vp	3	---
	Gastro Loop 3	Ja	Ja	sinusförmig abwechselnd Cut-, Coag- und Pause-Phasen	1 2 3 4 5	400 W	750 Vp	3	---

Bildzeichen Modus	Bezeichnung	CCS	ARC CONTROL	Form der HF-Spannung	HF-Leistungsbegrenzung		Spitzen-spannung	Defaultwerte	
					Effekt	Leistungsbereich		Effekt	max. Watt
Unipolare Modi Schneiden									
	Gastro Knife 1	Ja	Ja	sinusförmig abwechselnd Cut- und Coag-Phasen	1 2 3 4 5	300 W	650 Vp 650 Vp 650 Vp 700 Vp 750 Vp	3	---
	Gastro Knife 2	Ja	Ja	sinusförmig abwechselnd Cut- und Coag-Phasen	1 2 3 4 5	300 W	650 Vp 650 Vp 650 Vp 700 Vp 750 Vp	3	---
	Gastro Knife 3	Ja	Ja	sinusförmig abwechselnd Cut- und Coag-Phasen	1 2 3 4 5	300 W	650 Vp 650 Vp 650 Vp 700 Vp 750 Vp	3	---
	Argon	Ja	Ja	sinusförmig konstant	1 2 3 4 5 6 7 8 9	1 W – 300 W	400 Vp 450 Vp 560 Vp 650 Vp 650 Vp 700 Vp 700 Vp 700 Vp 750 Vp	5	100

2.6
14 monopolinės koaguliacijos režimų, kurių maksimali galia 250 W

Bildzeichen Modus	Bezeichnung	CCS	ARC CONTROL	Form der HF-Spannung	HF-Leistungsbegrenzung		Spitzen-spannung	Defaultwerte	
					Effekt	Leistungsbereich		Effekt	max. Watt
Unipolare Modi Koagulieren									
	Laparoskopie			sinusförmig moduliert	-	1 W – 120 W	1,8 kVp	---	60
	Moderat			sinusförmig konstant	1 2 3	1 W – 120 W	250 Vp	2	60
	Forciert coag			impulsförmig moduliert	-	1 W – 80 W	3,5 kVp	---	50
	Resektion			sinusförmig moduliert	-	1 W -120 W	2,2 kVp	---	60
	Spray			impulsförmig moduliert	1 2 3 4	1 W – 120 W	3,0 kVp 3,8 kVp 4,6 kVp 5,0 kVp	2	80
	Forciert mixed			sinusförmig moduliert	1 2 3	1 W – 120 W	1,5 kVp 2,0 kVp 2,5 kVp	2	60
	Forciert cutting			sinusförmig moduliert	1 2 3 4	1 W – 250 W	1,5 kVp 1,5 kVp 1,3 kVp 1,3 kVp	2	80

Bildzeichen Modus	Bezeichnung	CCS	ARC CONTROL	Form der HF-Spannung	HF-Leistungsbegrenzung		Spitzen-spannung	Defaultwerte	
					Effekt	Leistungsbereich		Effekt	max. Watt
Unipolare Modi Koagulieren									
	Gastro Coag			sinusförmig moduliert	1 2 3	1 W – 50 W	1,8 kVp 2,2 kVp 2,8 kVp	2	15
	Argon flexibel			impulsförmig moduliert	-	1 W – 120 W	4,4 kVp	---	20
	Argon flex. Puls			impulsförmig moduliert	1 2 3	1 W – 80 W	4,4 kVp	2	20
	Argon offen			impulsförmig moduliert	-	1 W – 120 W	4,6 kVp	---	80
	Cardiac Thorax			sinusförmig moduliert	-	1 W – 100 W	1,8 kVp	---	40
	Cardiac Mammaria			sinusförmig moduliert	-	1 W – 60 W	1,8 kVp	---	15
	SimCoag			sinusförmig moduliert impulsförmig moduliert impulsförmig moduliert	1 2 3	1 W – 120 W	2,0 kVp 2,5 kVp 4,6 kVp	2	60

Mode symbol	Designation	CCS	ARC CONTROL	HF voltage form	HF power limitation		Peak voltage	Default values	
					Effect	Power range		Effect	Max. Watt
■ Bipolar coagulation modes									
	RoBi®			sinusoidal constant	-	1 W – 100 W	110 Vp	---	40
	Laparoscopy			sinusoidal constant	-	1 W – 120 W	150 Vp	---	50
	Standard			sinusoidal constant	-	1 W – 120 W	150 Vp	---	40
	Bip. resection ■			sinusoidal constant	1 2 3 4	125 W 200 W 275 W 350 W	190 Vp	3	---
	Bip. vaporization			sinusoidal constant	1 2 3	250 W	190 Vp 400 Vp 500 Vp	2	---
	BiVascularSafe			sinusoidal modulated	-	200 W	190 Vp	---	---
	BiVascularSafe Open Surgery			sinusoidal modulated	-	200 W	190 Vp	---	---

2.7 7. Bipolinis koaguliacijos režimas: rezektoskopija, maksimali galia 350 W.

Bedienung

Anwendungsgebiete

Laparoskopisches Koagulieren

Geeignete Instrumente

- Laparoskopische Instrumente

5.10.2 Laparoskopie

Dieser Modus wird zur Koagulation in Verbindung mit bipolaren laparoskopischen Instrumenten eingesetzt.

Anwendungsgebiete

Laparoskopisches Koagulieren

Geeignete Instrumente

- Laparoskopische Instrumente

5.10.3 Standard

Dieser Modus wird zur lichtbogenfreien Kontaktkoagulation unter Verwendung von Pinzetten eingesetzt.

Anwendungsgebiete

Bipolare Koagulation

Geeignete Instrumente

- bipolare Pinzetten

5.10.4 Bip. Resektion

Dieser Modus wird im Bereich der bipolaren Blutstillung in der Gynäkologie sowie in der Urologie bei der Resektion unter leitfähiger Spülflüssigkeit (Kochsalzlösung) eingesetzt.

Operation

Application areas

Laparoscopic coagulation

Suitable instruments

- Laparoscopic instruments

5.10.2 Laparoscopy

This mode is used for coagulation in combination with bipolar laparoscopic instruments.

Application areas

Laparoscopic coagulation

Suitable instruments

- Laparoscopic instruments

5.10.3 Standard

This mode is used for arcless contact coagulation with forceps.

Application areas

Bipolar coagulation

Suitable instruments

- Bipolar forceps

5.10.4 Bip. resection

This mode is used for bipolar hemostasis in gynecology and in urology for resection under conductive irrigant solution (saline).

Manejo

Campos de aplicación

Coagulación laparoscópica

Instrumentos apropiados

- Instrumentos laparoscópicos

5.10.2 Laparoscopia

Este modo se utiliza para la coagulación en combinación con instrumentos laparoscópicos bipolares.

Campos de aplicación

Coagulación laparoscópica

Instrumentos apropiados

- Instrumentos laparoscópicos

5.10.3 Estándar

Este modo sirve para la coagulación por contacto sin arco voltaico practicada con pinzas.

Campos de aplicación

Coagulación bipolar

Instrumentos apropiados

- Pinzas bipolares

5.10.4 Resección bip.

Este modo se utiliza para la hemostasia bipolar en ginecología, así como en urología para practicar una resección con líquido de irrigación conductivo (solución fisiológica salina).

2.7 darbui NaCl tirpale

Auf die Verwendung von NaCl als Spülflüssigkeit achten.

Anwendungsgebiete

Hysteroskopie, Transurethrale Resektion Prostata (TUR-P), Operative Behandlung von Blasentumoren (TUR-BT)

Geeignete Instrumente

- Resektoskop
- Resektionsschlinge
- Vaporisations-Elektrode

Auf Gewebekontakt während der bipolaren Koagulation achten, um eine unerwünschte Erhitzung des Spülmediums zu vermeiden.

Make sure that NaCl is used as an irrigation medium.

Application areas

Hysteroscopy, transurethral prostate resection (TUR-P), surgical treatment of bladder tumors (TUR-BT)

Suitable instruments

- Resectoscope
- Resection loop
- Vaporization electrode

Make sure that the instrument has contact with the tissue while activating bipolar coagulation to avoid an unintended heating of the irrigation fluid.

Asegúrese de que se utiliza NaCl como líquido de irrigación.

Campos de aplicación

Histeroscopia, resección transuretral de la próstata (RTU-P), tratamiento quirúrgico de tumores vesicales (RTU-TV).

Instrumentos apropiados

- Resectoscopio
- Asa de resección
- Electrodo de vaporización

Asegúrese de que durante la coagulación bipolar haya contacto con el tejido, a fin de evitar un calentamiento involuntario del medio de irrigación.

5.10.5 Bip. Vaporisation

Dieser Modus wird im Bereich der bipolaren Blutstillung in der Gynäkologie, sowie in der Urologie bei der Vaporisation eingesetzt.

Auf die Verwendung von NaCl als Spülflüssigkeit achten.

Anwendungsgebiete

Hysteroskopie, Transurethrale Resektion Prostata (TUR-P), Operative Behandlung von Blasentumoren (TUR-BT), Vaporisation des Prostatagewebes (TUR-VAP)

Geeignete Instrumente

- Resektoskop
- Vaporisations-Elektrode

Auf Gewebekontakt während der bipolaren Koagulation achten, um eine unerwünschte Erhitzung des Spülmediums zu vermeiden.

5.10.5 Bip. vaporization

This mode is used for bipolar hemostasis in gynecology and in urology with vaporization.

Make sure that NaCl is used as an irrigation medium.

Application areas

Hysteroscopy, transurethral prostate resection (TUR-P), surgical treatment of bladder tumors (TUR-BT), vaporization of prostate tissue (TUR-VAP)

Suitable instruments

- Resectoscope
- Vaporization electrode

Make sure that the instrument has contact with the tissue while activating bipolar coagulation to avoid an unintended heating of the irrigation fluid.

5.10.5 Vaporización bip.

Este modo se utiliza para la hemostasia bipolar en ginecología, así como en urología con fines de vaporización.

Asegúrese de que se utiliza NaCl como líquido de irrigación.

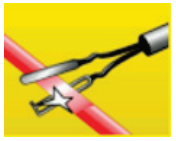
Campos de aplicación

Histeroscopia, resección transuretral de la próstata (RTU-P), tratamiento quirúrgico de tumores vesicales (RTU-TV), vaporización de tejido de la próstata (RTU-VAP)

Instrumentos apropiados

- Resectoscopio
- Electrodo de vaporización

Asegúrese de que durante la coagulación bipolar haya contacto con el tejido, a fin de evitar un calentamiento involuntario del medio de irrigación.

Mode symbol	Designation	CCS	ARC CONTROL	HF voltage form	HF power limitation		Peak voltage	Default values	
					Effect	Power range		Effect	Max. Watt
■ Bipolar cutting modes									
	Bip. cutting	Yes	Yes	sinusoidal constant	-	1 W – 200 W	400 Vp	---	100
	Bipolar scissors			sinusoidal constant	-	1 W – 120 W	200 Vp	---	40
	Bip. resection	Yes	Yes	sinusoidal constant	1 2 3 4	250 W	500 Vp	2	---
	Bip. vaporization	Yes	Yes	sinusoidal constant	1 2 3	300 W 300 W 400 W	350 Vp 400 Vp 450 Vp	2	---

2.8 Bipolinis pjovimo režimas: rezektoskopija, maksimali galia 250 W.

5.9.3 Bip. Resektion

2.8 darbui NaCl tirpale

Dieser bipolare Modus wird in der Gynäkologie und in der Urologie bei der Resektion mit Schlingenelektroden unter leitfähiger Spülflüssigkeit (Kochsalzlösung) eingesetzt. Die Lichtbogenregelung erzeugt den Schnitteffekt bei gleichzeitig minimierter Leistungsabgabe. ARC-Control bewirkt unverzügliches Schneiden und vermeidet ein Verkleben der Elektrode.

ⓘ Auf die Verwendung von NaCl als Spülflüssigkeit achten.

Während der Anwendung eine Dauerspülung durchführen.

Ausschließlich leitfähiges Gleitgel verwenden, da ansonsten Schädigungen der Harnröhre auftreten können.

Daueraktivierungen vermeiden.

Anwendungsgebiete

Hysteroskopie, Transurethrale Resektion Prostata (TUR-P), Operative Behandlung von Blasentumoren (TUR-BT).

Geeignete Instrumente

- Resektoskop (bipolar)
- Resektionsschlinge

ⓘ Optimale Ergebnisse sind ausschließlich bei der Verwendung des codierten KARL STORZ Resektionskabels möglich.

5.9.3 Bip. resection

This bipolar mode is used in gynecology and in urology for resection with loop electrodes under conductive irrigant solution (saline). Arc control generates the cutting effect with simultaneously minimized output power. ARC Control facilitates direct cutting and prevents electrode adhesion.

ⓘ Make sure that NaCl is used as an irrigation medium.

Secure a continuous irrigation during the application.

Always use conductive lubricants to avoid damages of the urethra.

Avoid continuous activations.

Application areas

Hysteroscopy, transurethral prostate resection (TUR-P), surgical treatment of bladder tumors (TUR-BT).

Suitable instruments

- Resectoscope (bipolar)
- Resection loop

ⓘ Optimum results are possible only when using the coded KARL STORZ resection cable.

5.9.3 Resección bip.

Este modo bipolar se utiliza en ginecología y urología para practicar una resección con electrodos de asa usando líquido de irrigación conductivo (solución fisiológica salina). La regulación del arco voltaico genera el efecto de corte, suministrando al mismo tiempo la mínima potencia necesaria. ARC Control produce cortes inmediatos y evita que el electrodo quede adherido.

ⓘ Asegúrese de que se utiliza NaCl como líquido de irrigación.

Asegúrese de que la irrigación es continua durante la aplicación.

Utilice siempre lubricantes conductivos para evitar lesiones en la uretra.

Evite activaciones continuas.

Campos de aplicación

Histeroscopia, resección transuretral de la próstata (RTU-P), tratamiento quirúrgico de tumores vesicales (RTU-TV).

Instrumentos apropiados

- Resectoscopio (bipolar)
- Asa de resección

ⓘ Para obtener resultados óptimos es indispensable utilizar el cable de resección KARL STORZ codificado.

Optional Accessories

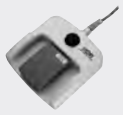
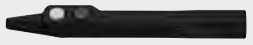
for AUTOCON® III 400 High-End and AUTOCON® III 300

2.9.5 Laidas vienkartiniams paciento elektrodams prijungti

2.9.1 3 funkcijų kojinis jungiklis

2.9.4 Vienkartiniai paciento elektrodai

For use with AUTOCON® III 300 and AUTOCON® III 400

	UF 901	**One-Pedal HF Footswitch,** with button for switchover function, for use with HF generators
	UF 902	**Two-Pedal HF Footswitch,** with button for switchover function, for use with HF generators
	27806 US	**Neutral Electrode Connecting Cable,** for use with Neutral Electrode 27802
	27802	**Neutral Electrode,** contact surface divided into two, A·=·169 cm², for single use, package of 50, for use with AUTOCON® 50/200/350, AUTOCON® II 400 all versions, AUTOCON® III 400 and AUTOCON® III 300, Connecting Cable 27806 US required
	**26** 5200 43	**Electrode Handle,** with 2 buttons for activating the unipolar generator, yellow button: unipolar cutting, blue button: unipolar coagulation, Connecting Cable **26** 5200 45 required
	**26** 5200 45	**High Frequency Cable,** for Electrode Handle **26** 5200 43, length 400 cm, for use with AUTOCON® III 400 and AUTOCON® III 300

Kokybės kriterijus nr. 5
Komplekte su elektrochirurginiu generatoriumi (techninės specifikacijos 2 p.) pateikiamas kojinis jungiklis (techninės specifikacijos 2.9.1 p.) nėra bevielis

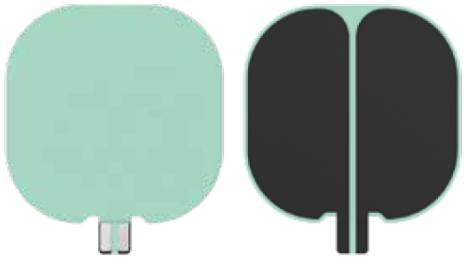
HIGH FREQUENCY SURGERY UNITS

5-16₁

2.9.3 Daugkartinis paciento elektrodas su jungiamuoju laidu

Reusable with contact stud

NESSY® RePlate 200, contact surface 194 cm², reusable, can be monitored



No. 20193-090	
= 1	
	max 95 °C
30193-088	

NESSY® RePlate Fixation, length 82 cm

No. 20193-091	
= 1	
	max 95 °C
30193-088	

Contact spray/Signaspray®, for NESSY® RePlate

No. 20193-092	
= 1	
D181820	

Connecting cables for return electrodes	Length	Piece	No.
Return electrode cable, VIO, ICC, ACC, T-Series, Standard, for return electrodes with contact stud	4 m 5 m	1 1	20194-077 20194-078
Return electrode cable, VIO, ICC, ACC, non-Erbe units, International, for return electrodes with split contact surface and contact stud	4 m 5 m	1 1	20194-080 20194-087

Standard Sets

UG803	**Subrack,** COR mobile stand, low, rides on 4 antistatic dual wheels, with locking brakes, low beam module, incl. cable manager and handle, total height: 1019 mm
	including:
UG800	**Base Module,** COR mobile stand
UG801	**Beam Module,** COR mobile stand, small

2.9.2 Vežimėlis su fiksuojamais (stabdomais) ratukais, pritaikytas siūlomam elektrochirurgijos įrenginiui laikyti ir transportuoti

UG804	**Subrack,** COR mobile stand, high, rides on 4 antistatic dual wheels, with locking brakes, high beam module, incl. cable manager and handle, total height: 1343 mm
	including:
UG800	**Base Module,** COR mobile stand
UG802	**Beam Module,** COR mobile stand, high

UG910	**COR HF Mobile Stand,** low, rides on 4 antistatic dual wheels, with locking brakes, low beam module, incl. cable manager and handle
	including:
UG803	**Subrack,** COR mobile stand, low
UG822	**HF Shelf,** COR mobile stand

UG911	**COR Pump Mobile Stand,** low, rides on 4 antistatic dual wheels, with locking brakes, low beam module, incl. cable manager and handle,
	including:
UG803	**Subrack,** COR mobile stand, low
UG816	**Pump Holder,** COR mobile stand, for use with the UNIMAT® 30 vacuum pump

ENDOMAT® SELECT NEW

Roller pump for the irrigation of fluids

3.2 Skirtas irigacijai

3.1 Ratukinio tipo;

KARL STORZ — ENDOSKOPE

SUCTION AND IRRIGATION SYSTEMS

Special Featues:

- **Roller pump system for pressure-controlled irrigation**
- **Max. pressure setting: 150 mmHg**
- **Interface and communication with UNIDRIVE® S III ARTHRO SCB supports reliable joint distension**
- **Unit and accessories extremely easy to use**
- **Multidisciplinary use**
- **With connection option for KARL STORZ Communication Bus (KARL STORZ-SCB)**
- **Boost mode: For stabilization of the cavity when shaver is activated or for hemostasis by activating an additional one-pedal footswitch**

2.6 Intended application areas on the patient

3.2 gimdos ertmės

The product can be used on patients in the following areas:

Discipline	Application area
SURG	Abdomen, thorax, procto
GYN	Uterus
URO	Lower and upper urinary tract
ART	Joints in the foot, knee, hip, shoulder, hand or finger
SPINE	Thoracic and lumbar vertebral column
ENT/NEURO	Cleaning endoscope lenses
GI	Upper and lower gastrointestinal tract

2.7 Intended conditions of use

The product may only be used in hospitals and doctors' offices in suitable ambient conditions.

Condition	Operation
Frequency of use	One or more times a day
Length of use	Several minutes to several hours a day
Place of installation	Positioning on a level, vibration-free surface
Mobility	Can be moved if placed on a cart.
Combination	Can be used on the patient at the same time as other devices.
Control	Can be controlled via the KARL STORZ HIVE.

3.4 Su programinės įrangos paketais bei užprogramuotais darbo režimais histeroskopijai;

The following software modules are currently available for use with ENDOMAT® SELECT*

UP 601 **Surgery, Software, License,** allows selection of the procedures “LAP”, “THOR” and “PROCTO”, for use with ENDOMAT® SELECT UP 220

UP 602 **Hysteroscopy, Software, License,** allows selection of the procedure “HYS”, for use with ENDOMAT® SELECT UP 220

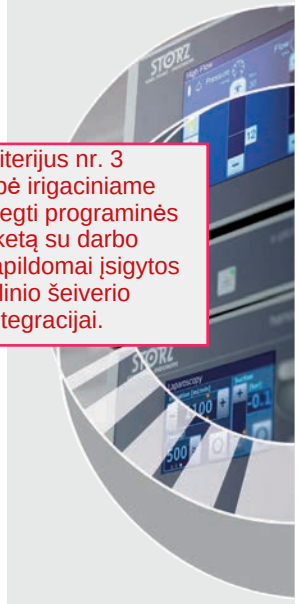
UP 603 **IBS® Shaver, Software, License,** allows selection of the procedure “IBS® Shaver”, for use with ENDOMAT® SELECT UP 220

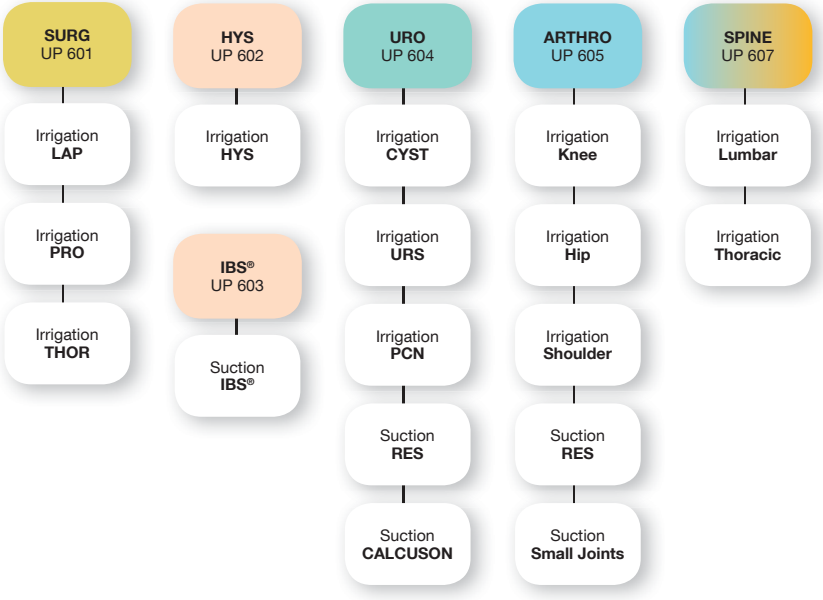
UP 604 **Urology, Software, License,** allows selection of the procedures “CYST”, “RES”, “URS”, “CALCUSON” and “PCN”, for use with ENDOMAT® SELECT UP 220

UP 605 **Arthroscopy, Software, License,** allows selection of the procedures “KNEE”, “HIP”, “SHOULDER” and “Small Joints”, for use with ENDOMAT® SELECT UP 220

UP 607 **Spine, Software, License,** allows selection of the procedures “Lumbar” and “Thoracic”, for use with ENDOMAT® SELECT UP 220

Kokybės kriterijus nr. 3
Yra galimybė irigaciniame siurblyje įdiegti programinės įrangos paketą su darbo režimais papildomai įsigytos intravaginalinio šeiverio sistemos integracijai.





*Please note that at least one software package must be ordered to ensure a fully functional unit.

4 Product description

4.1 Description of operation

The ENDOMAT SELECT is a roller pump that can be used for irrigation and suction of fluids during operations in various disciplines of human and veterinary medicine. It is not possible to combine disciplines of human and veterinary medicine.

The device automatically adapts to suit the type of operation being performed by providing the optimum operating parameters when a tubing set for a specific discipline is attached, provided the product is enabled for the area of application. The product can be configured in such a way that only the areas of application that the user wants to use are displayed. Further disciplines can be retrofitted, and extended setting options are available with the Advanced software package.

3.3 Valdymas lietimui jautriu ekranu

In urological and arthroscopic applications, the irrigation pressure can also be increased briefly with a BOOST function. In other applications, either the irrigation flow or the irrigation pressure can be limited.

The product is operated and controlled via a touch screen. The current operating state can be checked by displaying the set and actual values of the irrigation pressure or flow. If the set value deviates continuously, an electronic safety circuit blocks the delivery or suction, and acoustic signals sound. An electronic auto-check system tests the various system components when the product is started and notifies the operator of any failures detected.

The range of functions of the product varies according to the installed software package. For the required accessories for the respective software package, see see chapter *Accessories and spare parts* [p. 66].

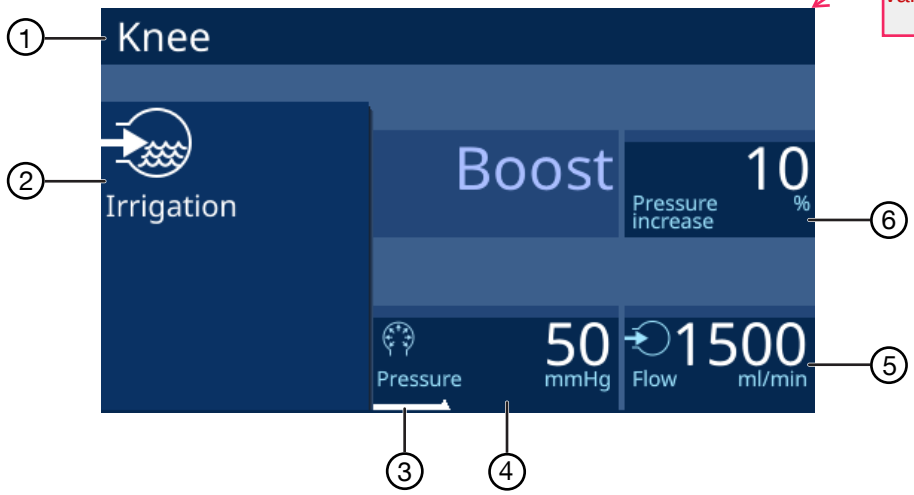
4.2 Product overview

ENDOMAT SELECT – Front view

1 Standby button
2 ■ TFT touchscreen
3 Pump lever (cartridge locking lever)
4 Light barrier
5 Pump rollers

4.3 Touchscreen

3.5 Skaitinis darbinių parametrų reikšmių vaizdavimas ekrane



1	Discipline name	4	Limitation of pressure
2	Start/stop irrigation/suction	5	Limitation of flow
3	Irrigation/suction display	6	Boost pressure increase

Irrigation or suction display

The irrigation or suction function is activated:

- Actual value: orange-colored line
- Set value: white marking

Limitation of pressure or flow

Whether the flow or pressure can be limited depends on the discipline and the installed Advanced software package.

Boost pressure increase

Boost pressure increase is only available in the disciplines of arthroscopy and urology. The boost pressure increase can be set with the button or footswitch in 10% steps from 10% – 50%.

3.6 Galimybė dirbti su daugkartiniais žarnelių rinkiniais

Reusable Tubing Sets for ENDOMAT® SELECT

Reusable tubing sets for the irrigation or suction of fluids are now available for the multidisciplinary ENDOMAT® SELECT single roller pump.

The following reusable tubing sets are now available for ENDOMAT® SELECT:

- For flow-controlled applications, e.g., in laparoscopy, thoracoscopy and proctology.

UP 007

Tubing Set, irrigation, FC, reusable, sterilizable, for use with ENDOMAT® SELECT SCB UP 220 and HAMOU® ENDOMAT® SCB **26**3311 20-1

3.7.1 Daugkartinių žarnelių rinkinys laparoskopijai

- For pressure-controlled applications, e.g., in hysteroscopy, cystoscopy or interventions in arthroscopy and spine surgery

UP 008

Tubing Set, irrigation, PC, reusable, sterilizable, for use with ENDOMAT® SELECT SCB UP 220 and HAMOU® ENDOMAT® SCB **26**3311 20-1

3.7.2 Daugkartinių žarnelių rinkinys histeroskopijai

- For use in hysteroscopic tissue ablation with the IBS® shaver system or for the removal of tissue chips during resection (TUR-B/P)

UP 009

Tubing Set, suction, DS, reusable, sterilizable, for use with ENDOMAT® SELECT SCB UP 220

3.6 Galimybė dirbti su vienkartiniais žarnelių rinkiniais

The following tubing sets can be used with the system:

For pressure-controlled applications, for example, in hysteroscopy, cystoscopy or interventions in arthroscopy and spine surgery.

031523-10 **Tubing Set, Irrigation,** pressure-controlled, for single use, sterile, package of 10, for use with KARL STORZ HAMOU® ENDOMAT® **26** 3311 20 and ENDOMAT® SELECT UP 220

For flow-controlled applications, for example, in laparoscopy, thoracoscopy and proctology.

031524-10 **Tubing Set, Irrigation,** flow-controlled, for single use, sterile, package of 10, for use with KARL STORZ HAMOU® ENDOMAT® **26** 3311 20 and ENDOMAT® SELECT UP 220

For use during the hysteroscopic removal of tissue with the IBS® shaver system or removal of tissue chips during resection (TUR-B/P)

030647-10 **Tubing Set, Suction,** direct suction, for single use, sterile, package of 10, for use with KARL STORZ ENDOMAT® SELECT

For use in combination with the CALCUSON lithotripsy unit in urology

031647-10 **Tubing Set, Suction,** bottle suction, for single use, sterile, package of 10, for use with KARL STORZ ENDOMAT® SELECT

For the ordering process, please use Configuration Flyer 96311002.

Further information is available in the Product Highlight ENDOMAT® SELECT 96311003.

Availability

The ENDOMAT® SELECT unit as well as the above-mentioned software modules and corresponding single-use tubing sets are now in stock.

More software packages will be available in the near future for utilization of ENDOMAT® SELECT during GI, ENT and NEURO surgeries and for further features regarding the general unit settings as well as the enhancement of certain software modules.

Bipolar Resection

bipolar

Basic principles of bipolar resection

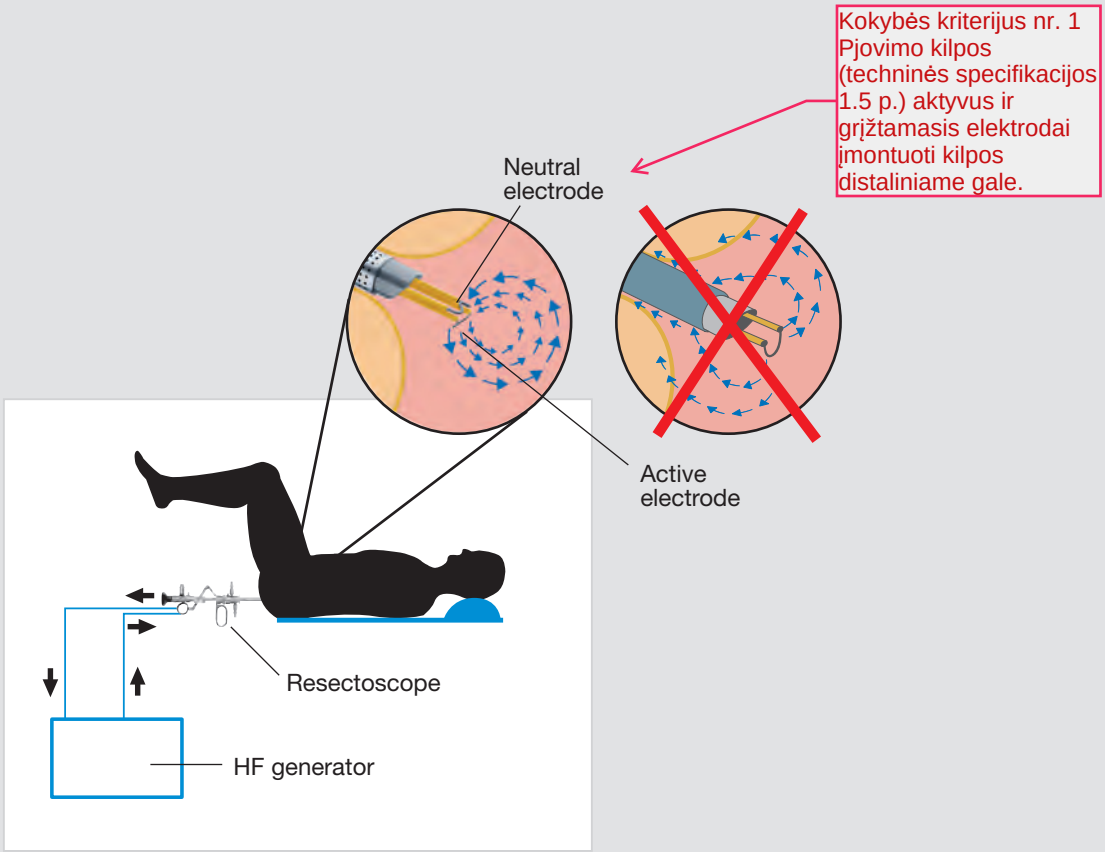
Bipolar resection was developed in recent years in order to reduce the electric current flowing through the patient to a minimum. In bipolar electrosurgery, a neutral electrode is positioned close to the conducting electrode.

The irrigation fluid, and no longer the tissue, is the medium used to return the current to the neutral electrode. As the irrigation fluid (in the case of bipolar resection sodium chloride NaCl 0.9%) shows far less resistance than tissue, a direct current does not flow from the active to the neutral electrode during energy transfer. A thermal effect does not occur.

The main prerequisite for bipolar resection is, therefore, the formation of plasma in the irrigation fluid. This “insulation layer” around the cutting loop increases the electrical resistance between the active electrode and irrigation fluid as opposed to tissue. A thermal effect can then occur in the area of tissue in contact with the loop before the current flows through the neutral electrode via the irrigation fluid and is returned to the HF generator.

The system can only be considered bipolar if the current flow is not returned through the tissue or via instruments in contact with the tissue (i.e. the sheath). All contact areas between the current and tissue present a risk of strictures and burns, which are more severe the smaller the contact surface is.

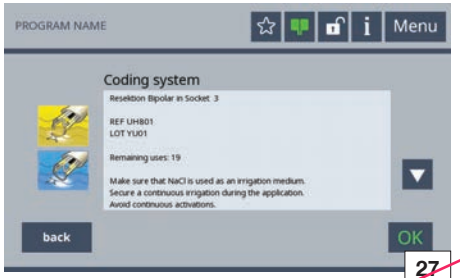
A proper current flow path is only possible via the outer sheath of insulated instruments (i.e. the electrode) in systems available from the company KARL STORZ.



2-081

Designation	Value
Degree of protection acc. to IEC 60259	IP 21
Irrigation pressure	HYS, URO, ART, SPINE: 20 – 150 mmHg
	LAP, GI: 100 – 300 – 500 mmHg (adjustable with "Advanced" package)
	Accuracy (up to 100 mmHg): ±10 mmHg Accuracy (100 – 150 mmHg): ±10%
Irrigation flow	Accuracy (0 – 3,500 ml/min): ± 20% Accuracy when using patient tubing 031162-10 for day sets: ± 25%
	HYS, URO, SPINE: 200 – 400 – 600 ml/min ART: 1,500 – 2,000 – 2,500 ml/min (adjustable with "Advanced" package for HYS, URO, SPINE, and ART)
	SURG: 100 – 2,500 ml/min (ADVANCED: 100 – 3,500 ml/min) GI: 100 – 1,000 ml/min ENT/NEURO: 50 – 65 – 80 – 95 – 110 – 130 ml/min Motor system: 50 – 65 – 80 – 95 – 110 – 130 ml/min
Suction flow	IBS Shaver: 100 – 300 ml/min RES: 100 – 1,000 ml/min CALCUSON: 300 – 1,000 ml/min HYS: 10 – 180 ml/min ART: 100 – 1,000 ml/min
Irrigation pressure	VET ART – Small Animal: 20 – 150 mmHg; increments: 10 mmHg Boost: 10% – 20% – 30% – 40% – 50%
	VET ART – Large Animal: 20 – 400 mmHg; increments: 10 mmHg Boost: 10% – 20% – 30% – 40% – 50%
	VET SURG – SURG: 100 – 300 – 500 mmHg
Irrigation flow	VET ART – Small Animal: 1,500 – 2,000 – 2,500 ml/min
	VET ART – Large Animal: 1,500 – 2,000 – 2,500 ml/min
	VET SURG – SURG: 100 – 3,500 ml/min; increments: 100 ml/min
Suction flow	VET SURG – Direct suction: 100 – 1,000 ml/min; increments: 100 ml/min
	VET SURG – Bottle suction: 300 – 1,000 ml/min; increments: 100 ml/min

Kokybės kriterijus nr. 2
Irigacinio siurblio (techninės specifikacijos 3 p.) maksimalus skysčių padavimo greitis 3500 ml/min.



27

Kokybės kriterijus nr. 4
Elektrochirurginis generatorius (techninės specifikacijos 2 p.) turi instrumento automatinio atpažinimo funkciją (prijungus darbinį instrumentą (bipoliarinį rezektoskopą), įrenginys automatiškai nustato atitinkamą darbo režimą.

5.5.6 Codierungssystem

Das Codierungssystem dient zur automatischen Instrumenten-Identifikation. Das Codierungssystem erkennt das angeschlossene codierte KARL STORZ Instrument und wählt die Vorzugsparameter automatisch aus.

1. Das codierte Instrument in eine Buchse des AUTOCON® III 400 stecken.

☛ Die Daten des Instruments werden gelesen (siehe Abb. 27).

☛ Es erscheint eine Beschreibung des Instruments:

- Instrumentenname
- Erkannte Buchse
- Artikelnummer
- Chargennummer
- Verbleibende Benutzungen

☛ Die Parameter werden nach 5 Sekunden automatisch übernommen und im Hauptbildschirm angezeigt.

- Wird das codierte Instrument an einer Buchse ohne voreingestellte Parameter angeschlossen, werden durch das Codierungssystem die idealen Einstellungen für das codierte KARL STORZ Instrument geladen.
- Wird das codierte Instrument an einer Buchse mit voreingestellten Parametern angeschlossen, findet eine Plausibilitätsprüfung statt. Falls die voreingestellten Werte für das codierte Instrument in einem zulässigen Rahmen liegen, werden diese nicht überschrieben. Das codierte Instrument kann nun mit den voreingestellten Parametern verwendet werden.
  - oder-
  Die Auswahl mit der Taste »OK« übernehmen.
  Um ohne Veränderung der Auswahl zum Hauptbildschirm zurückzukehren, die Taste »zurück« drücken.

☛ Das codierte Instrument kann nun verwendet werden.

☛ Die zulässigen Parameter für das codierte KARL STORZ Instrument bleiben anwählbar, alle weiteren Modi sind grau hinterlegt.

5.5.6 Coding system

The coding system enables automatic instrument identification. The coding system recognizes the connected coded KARL STORZ instrument and automatically selects the preferred parameters.

1. Insert the coded instrument in an AUTOCON® III 400 socket.

☛ The instrument data is read (see Fig. 27).

☛ A description of the instrument appears:

- Instrument name
- Recognized socket
- Article number
- Batch number
- Remaining usages

☛ The parameters are transferred automatically after 5 seconds and shown in the main screen.

- If the coded instrument is connected to a socket without preset parameters, with the coded system the ideal settings are loaded for the coded KARL STORZ instrument.
- If the coded instrument is connected to a socket with preset parameters, a plausibility check is performed. If the preset values for the coded instrument are within the permitted range, these are not overwritten. The coded instrument can now be used with the preset parameters.
  - or-
  The selection is saved by pressing the ‘OK’ button.
  To return to the main screen without changing the selection, press the ‘back’ button.

☛ The coded instrument can now be used.

☛ The permitted parameters for the coded KARL STORZ instrument can still be selected, all other modes are gray.

5.5.6 Sistema de codificación

El sistema de codificación sirve para la identificación automática de instrumentos. El sistema de codificación reconoce el instrumento KARL STORZ codificado que esté conectado y selecciona automáticamente los parámetros preferidos.

1. Inserte el instrumento codificado en un conector del AUTOCON® III 400.

☛ Acto seguido se leen los datos del instrumento (véase la fig. 27).

☛ Aparece una descripción del instrumento:

- nombre del instrumento
- conector reconocido
- número de artículo
- número del lote
- usos restantes

☛ Después de 5 segundos, los parámetros se aplican automáticamente y aparecen indicados en la pantalla principal.

- Si el instrumento codificado se conecta a un conector sin parámetros preajustados, mediante el sistema de codificación se cargan los ajustes ideales para el instrumento KARL STORZ codificado.
- Si el instrumento codificado se conecta a un conector con parámetros preajustados, se lleva a cabo una comprobación de verosimilitud. En caso de que los valores preajustados para el instrumento codificado se encuentren dentro de un margen admisible, estos no son sobreescritos. Ya puede utilizarse entonces el instrumento codificado con los parámetros preajustados.
  - o bien –
  Confirme su selección pulsando la tecla “OK”.
  Para volver a la pantalla principal sin cambiar la selección, presione la tecla “zurück” (Volver).

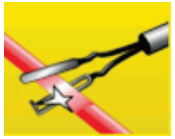
☛ Ya puede utilizarse entonces el instrumento codificado.

☛ Los parámetros admisibles para el instrumento KARL STORZ codificado permanecen seleccionables, todos los demás modos aparecen representados de color gris.

Kokybės kriterijus nr. 6
Prie elektrochirurginio generatoriaus (techninės specifikacijos 2 p.) galima prijungti papildomai įsigytą bipoliarinį instrumentą, atliekantį kraujagyslių užlydimo (koaguliacijos) ir pjovimo funkcijas, skirtą naudoti atviroms ir laparoskopinėms operacijoms.

5.9 Bipolare Modi Schneiden

5.9.1 Bip. Schneiden



Dieser Modus wird zum Schneiden in Verbindung mit bipolaren laparoskopischen Instrumenten eingesetzt.

Anwendungsgebiete

Laparoskopisches Schneiden

Geeignete Instrumente

- Laparoskopische Instrumente

5.9.2 Bipolare Schere

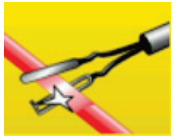
Dieser Modus dient zur Anwendung von bipolaren Scheren. Es können Koagulationen vor bzw. während des mechanischen Schneidens, punktförmige sowie flächige Koagulationen durchgeführt werden.

Anwendungsgebiete

Präparieren, Koagulieren und Schneiden von Gewebe

5.9 Bipolar cutting modes

5.9.1 Bip. cutting



This mode is used for cutting with bipolar laparoscopic instruments.

Application areas

Laparoscopic cutting

Suitable instruments

- Laparoscopic instruments

5.9.2 Bipolar scissors

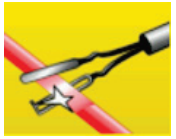
This mode is used with bipolar scissors. It can be used for coagulation before or during mechanical cutting, point coagulation and surface coagulation.

Application areas

Preparation, coagulation and cutting of tissue

5.9 Modos bipolares Corte

5.9.1 Corte bip.



Este modo se utiliza para el corte en combinación con instrumentos laparoscópicos bipolares.

Campos de aplicación

Corte laparoscópico

Instrumentos apropiados

- Instrumentos laparoscópicos

5.9.2 Tijeras bipolares

Este modo se utiliza para la aplicación de tijeras bipolares. Pueden llevarse a cabo coagulaciones antes del corte mecánico o durante el mismo, así como coagulaciones puntiformes y extensas.

Campos de aplicación

Preparación, coagulación y corte de tejido

ROBI® Bipolar Scissors

rotating, dismantling, with connector pin for bipolar coagulation,
Modell CLERMONT-FERRAND

KARL STORZ — ENDOSKOPE

Size 5 mm

Kokybės kriterijus nr. 6
Prie elektrochirurginio generatoriaus (techninės specifikacijos 2 p.) galima prijungti papildomai įsigytą bipoliarinį instrumentą, atliekantį kraujagyslių užlydimo (koaguliacijos) ir pjovimo funkcijas, skirtą laparoskopinėms operacijoms.

RoBi

bipolar

Operating instruments, **length 36 cm,** for use **with trocars size 6 mm**

Operating instruments, **length 43 cm,** for use with telescopes with inbuilt working channel and trocars size 6 mm

Outer Sheath	Handle
	38151
Length 36 cm	
Length 43 cm	

Single action jaws

Working Insert	Complete Instrument
38610 MT	38651 MT
 23	**ROBI® Scissors,** CLERMONT-FERRAND model, straight jaws, for cutting and bipolar coagulation of vessels and tissue layers
38610 MZ	38651 MZ
 23	**ROBI® Scissors,** CLERMONT-FERRAND model, straight jaws, serrated, for cutting and bipolar coagulation

Double action jaws

38610 MW	38651 MW
38710 MW	38751 MW
 20	**ROBI®** METZENBAUM **Scissors,** CLERMONT-FERRAND model, curved jaws, slender scissor blades, for cutting and bipolar coagulation

Please note:
For the instrument only the **individual component parts** are numbered. The catalog number for the **complete instrument** is not on the instrument. Please take this number from the numbers indicated in the red background of the table above. The color **green** indicates the working inserts.

Bipolar High Frequency Cords see page 176

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