



# LAPAROSCOPY IN SURGERY, GYNECOLOGY, UROLOGY

9th EDITION 1/2022

Chapter			Pages
<b>1</b>	BASIC SETS	LAP-SET	1-16
<b>2</b>	VIDEOENDOSCOPES, HOPKINS® TELESCOPES, Diameters 2 – 10 mm	TEL	17-38
<b>3</b>	TROCARS FOR LAPAROSCOPY, Sizes 2.5 – 22 mm AND S-PORT	TROC, RSE, DIL-SET	39-74
<b>4</b>	DISSECTING AND GRASPING FORCEPS, Sizes 2 – 10 mm	DGC-INTRO, DGC, BI-COA	75-152
<b>5</b>	SCISSORS, PUNCHES AND FORCEPS FOR BIOPSY, Sizes 2 – 10 mm	SCC-INTRO, SCC	153-178
<b>6</b>	INSTRUMENTS FOR UNIPOLAR AND BIPOLAR COAGULATION, sizes 3.5 and 5 mm	DISS	179-188
<b>7</b>	PALPATION PROBES, RETRACTORS, DISSECTORS AND EXTRACTORS	NP, EXTRA	189-200
<b>8</b>	SUTURE AND LIGATURE	NH, SL	201-222
<b>9</b>	HANDLES AND INSTRUMENTS FOR SUCTION AND IRRIGATION	IS-ACC-INTRO, IS-ACC	223-232
<b>10</b>	HOLDING SYSTEMS AND TRAINERS	LHT	233-256
<b>11</b>	VISUALIZATION SYSTEMS FOR OPEN AND MICRO SURGERY	LAP-VITOM	257-276
<b>12</b>	INTRAOPERATIVE CHOLANGIOGRAPHY, CHOLEDOCHOSCOPY, MICRO KNIVES	CHOLE	277-290
<b>13</b>	FLEXIBLE ENDOSCOPES IN SURGERY	GE-LAP	291-296
<b>14</b>	INSTRUMENTS FOR ENDOSCOPICALLY ASSISTED THYROIDECTOMY AND PARATHYROIDECTOMY	ISE	297-312
<b>15</b>	GYNECOLOGY	GYN-ACC	313-342
<b>16</b>	ACCESSORIES FOR LAPAROSCOPY IN UROLOGY	URO-LAP	343-346
<b>17</b>	UNITS AND ACCESSORIES	LAP-UNITS	U 1-44
<b>18</b>	COMPONENTS / SPARE PARTS	LAP-SP	SP 1-86



# THE WORLD OF ENDOSCOPY

Not all the products listed in this document are certified according to Regulation 2017/745/EU.

For this reason, some products requiring certification under this regulation may not be available in these countries.



Information on events is available on the KARL STORZ website  
[www.karlstorz.com](http://www.karlstorz.com)

## LAPAROSCOPY IN SURGERY, GYNECOLOGY, UROLOGY

9th EDITION 1/2022

# Important Notes:

**It is recommended to check the suitability of the product for the intended procedure prior to use.**

---

Endoscopes and accessories contained in this catalog have been designed in part with the cooperation of physicians and are manufactured by the KARL STORZ group. If subcontractors are hired to manufacture individual components, these are made according to proprietary KARL STORZ plans or drawings. Furthermore, these products are subject to strict quality and control guidelines of the KARL STORZ group. Both contractual and general legal provisions prohibit subcontractors from supplying components manufactured by order of KARL STORZ to competitors.

Any assumptions that competitors' endoscopes and accessories are acquired from the same suppliers as the KARL STORZ products are not correct. Moreover, endoscopes and instruments provided by competitors are not manufactured according to the design specifications of KARL STORZ. This means it cannot be assumed that these endoscopes and accessories – even if they look identical on the outside – are constructed in the same manner and have been tested according to the same criteria.

## Standardized Design and Labeling

KARL STORZ participates both in national and international bodies involved in the development of standards for endoscopes and endoscopic accessories. Standardized design and development therefore have long been implemented consistently by KARL STORZ. The user can rest assured that all products by the KARL STORZ group have been designed and constructed not only in compliance with strict internal quality guidelines, but also with international standards. All data relevant for safe use, such as viewing direction, sizes and diameters, or notes regarding sterilization of telescopes, are applied to the instruments, have been formulated according to international standards, and therefore provide reliable information.

As we constantly seek to improve and modify our products, we reserve the right to make changes in design that vary from catalog descriptions.

## Original or Counterfeit

KARL STORZ products are name brand articles renowned around the world and represent the state of the art in important areas of healthcare. A large number of “copy cat” products are currently being offered in many markets. These products are designed intentionally to resemble KARL STORZ products and use marketing strategies that at least point out their compatibility with KARL STORZ products. These products are by no means genuine products, since genuine KARL STORZ products are sold worldwide exclusively under the name of KARL STORZ, which appears on the packaging and the product. In the absence of such labeling, the product is not from KARL STORZ.

KARL STORZ, therefore, is unable to ensure that such products are actually compatible with genuine KARL STORZ products or can be used with them without injury to the patient.

It is recommended to check the suitability of the product for the intended procedure prior to use. Please note that the described products in this medium may not be available yet in all countries due to different regulatory requirements.

Not all the products listed in this document are certified according to European Medical Devices Directive 93/42/EEC or Regulation 2017/745/EU. For this reason, some products requiring certification under this Directive/Regulation may not be available in every country.

© All product illustrations, product descriptions and texts are the intellectual property of KARL STORZ SE & Co. KG. Their use and reproduction by third parties require the express approval of KARL STORZ SE & Co. KG. All rights reserved.



## BASIC SETS

USER INFORMATION .....3

LAPAROSCOPIC SURGERY ..... 4-11

LAPAROSCOPIC GYNECOLOGY .....12-13

LAPAROSCOPIC UROLOGY .....14

WIRE TRAYS AND CONTAINERS .....15



# User Information

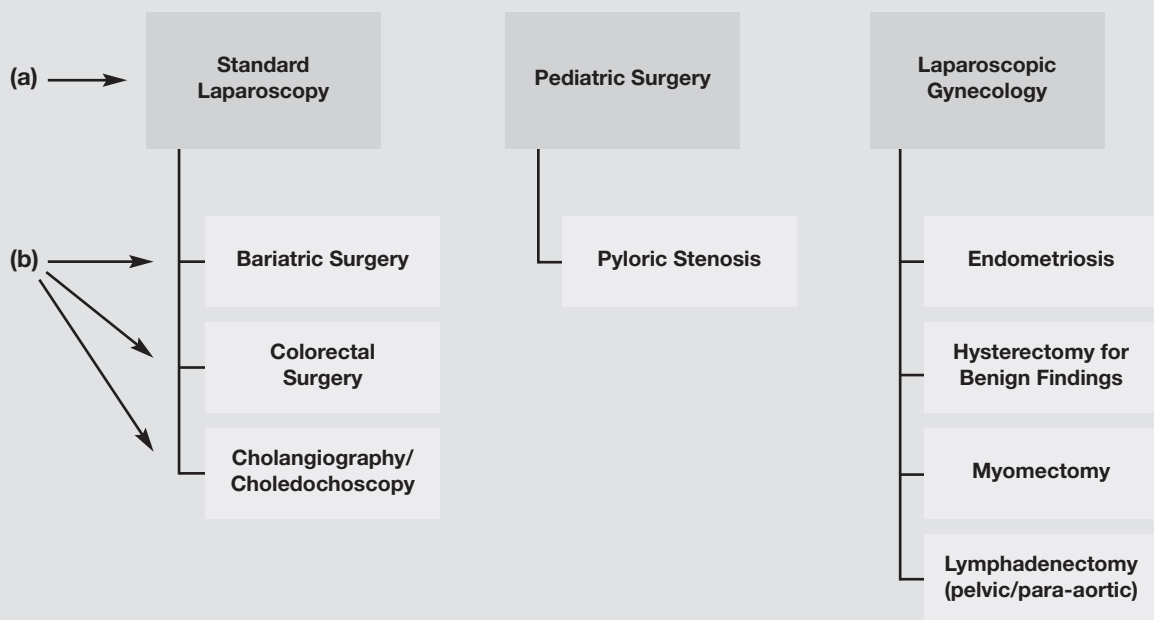
For easy location of the appropriate instrument set

The basic set comprises a **basic set** and one or more **supplementary sets**.

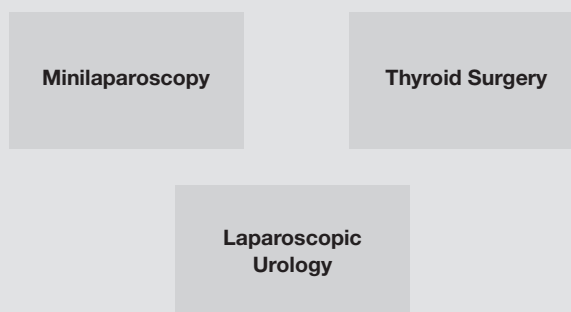
## For the optimal basic equipment:

- (a) Select a **basic set**  
The instruments listed in the basic set are the minimum required for a specific application.
- (b) **Supplementary sets** can be selected that include special instruments for specific indications such as, for example, bariatric and colorectal surgery.

## Basic sets and corresponding supplementary sets at a glance



## Basic sets without supplementary sets



# Units for Laparoscopy – 4K, 3D/2D, NIR/ICG

Basic Set

**STORZ**  
KARL STORZ — ENDOSKOPE



The user interface of the displayed units may depending on the approved software versions in various countries

9-20



# Units for Laparoscopy – 4K, 3D/2D, NIR/ICG

Basic Set

## Monitor:

TM 350 **32" 4K/3D Monitor**

## Camera system:

TC 201EN\*\* **IMAGE1 S CONNECT® II**,  
4K technology, basic module

TC 304 **IMAGE1 S™ 4U-LINK**, module for  
rigid endoscopy, 4K technology

TH 121 **IMAGE1 S™ 4U RUBINA®**, OPAL1®  
NIR/ICG, two-chip 4K UHD camera head

26606 ACA **TIPCAM®1 RUBINA®**, 4K/3D-NIR/ICG  
videoendoscope 0°, diameter 10 mm

26606 BCA **TIPCAM®1 RUBINA®**, 4K/3D-NIR/ICG  
videoendoscope 30°, diameter 10 mm

## Light source:

TL 400 **Cold Light Fountain POWER LED  
RUBINA®**, OPAL1® NIR/ICG

495 TIP **Fiber Optic Light Cable**, diameter 4.8 mm,  
length 300 cm, with safety lock

495 NCSC **Fiber Optic Light Cable**, diameter 4.8 mm,  
length 250 cm, with safety lock

495 NAC **Fiber Optic Light Cable**, diameter 3.5 mm,  
length 230 cm, with safety lock

## Optional:

UF 101 **One-Pedal Footswitch**, one-stage

## Pump system:

UP 210 **ENDOMAT® SELECT**, suction or irrigation  
pump

UP 601 **SURGERY Software**, license

031524-10\* **Tubing Set**

## Optional:

UP 610 **ADVANCED Package**, software, license

## Insufflation:

UI 500S1 **ENDOFLATOR® 50 SCB**

031210-10\* **Insufflation Tubing Set with Gas  
Filter**, heatable

UP 501S1 **S-PILOT®**, for smoke evacuation

031447-10\* **Tubing Set**, for smoke, gas and fluid  
suction

031111-10\* **Smoke Evacuation Filter**

**Optional:**

UI 003 **Low Pressure Tube**, for the central  
CO<sub>2</sub> gas supply, length 600 cm

20 4000 27\*\*\* **CO<sub>2</sub> High Pressure Tube**, American  
connector/German connector, length  
102 cm

## Documentation:

WD 350-EN\*\*\*\* **AIDA® with SMARTSCREEN®**

TC 009 **USB Adaptor**, for ACC 1 and ACC 2

## HF Unit

UH 400\*\*\* **AUTOCON® III 400 High-End**

27805 **Neutral Electrode**

27806 UR **Neutral Electrode  
Connecting Cable**

UF 902 **Two-Pedal HF Footswitch**

## Equipment Cart:

UG 220 **Equipment Cart**, wide

UG 500 **Monitor Holder**

UG 310 **Isolation Transformer**

UG 410 **Earth Leakage Monitor**

## Optional:

UG 501 **Monitor Holder Adaptor**

UG 520 **Monitor Holding Arm**

UG 609 **Bottle Holder**, for CO<sub>2</sub> bottles

UG 902 **Footswitch Holder**, for two-pedal  
HF footswitch

UG 605 **Keyboard Tray**, narrow

UG 619 **Cable Manager**, 2-piece



\*\* Also available in the following languages: DE, ES, FR, IT, PT, RU, SE

\*\*\* Order numbers may differ from country to country

\*\*\*\* Also available in the following languages: DE, ES, FR, IT, PT, RU

**Basic Set**

- 26003 AA **HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green  
 or  
 26003 BA **HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

**Alternative 3D Telescopes:**

- 26606 ACA **TIPCAM®1 S RUBINA®**, OPAL1® NIR/ICG, 4K/3D, with two distally integrated video chips, direction of view 0°, diameter 10 mm, length 32 cm, **autoclavable**, freely programmable camera head buttons, including video connecting cable  
 or  
 26606 BCA **TIPCAM®1 RUBINA®**, OPAL1® NIR/ICG, 4K/3D, with two distally integrated video chips, direction of view 30°, diameter 10 mm, length 32 cm, **autoclavable**, freely programmable camera head buttons, including video connecting cable
- 495 NCSC **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
- 26120 JL VERESS **Pneumoperitoneum Needle**, with spring-loaded blunt inner cannula, LUER-Lock, **autoclavable**, diameter 2.1 mm, length 13 cm
- 30103 TMR TERNAMIAN **EndoTIP Cannula**, with thread and rotatable insufflation stopcock, size 11 mm, working length 10.5 cm, color code: green
- 30103 MP **Trocar**, with pyramidal tip, with insufflation stopcock, size 11 mm, working length 10.5 cm, color code: green
- 3x 30160 MP **Trocar**, with pyramidal tip, with insufflation stopcock, size 6 mm, working length 10.5 cm, color code: black
- 30140 DB **Reduction Sleeve**, 11/5 mm
- 30141 DB **Reducer**, 11/5 mm
- 33356 AF **CLICKliné Grasping Forceps**, rotating, dismantling, double action jaws, with disengageable ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 33351 MD **CLICKliné KELLY Dissecting and Grasping Forceps**, rotating, dismantling, double action jaws, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 33353 UL **CLICKliné REDDICK-OLSEN Dissecting and Grasping Forceps**, rotating, dismantling, double action jaws, with hemostat style ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 33351 ON **CLICKliné Grasping Forceps**, rotating, dismantling, single action jaws, atraumatic, fenestrated, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 34351 EH **CLICKliné Hook Scissors**, rotating, dismantling, single action jaws, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 34310 EH **CLICKliné Scissors Insert**, for hook scissors, size 5 mm, length 36 cm
- 34351 MS **CLICKliné METZENBAUM Scissors**, rotating, dismantling, double action jaws, curved, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm  
 or  
 34310 MS-D **CLICKliné METZENBAUM Scissors Insert**, with outer sheath, curved, double action jaws, size 5 mm, length 36 cm, sterile, for single use, package of 10
- 33151 **CLICKliné Plastic Handle**, rotating, without ratchet, with large contact area at the finger ring, insulated, with connector pin for unipolar coagulation
- 26775 CL CADIERE **Coagulation and Dissection Electrode**, insulated sheath, L-shaped, distal tip tapered, with cm-marking, with connector pin for unipolar coagulation, size 5 mm, length 43 cm
- 26005 M **Unipolar High Frequency Cord**, with 5 mm plug for AUTOCON®, length 300 cm
- 38651 MD **ROBI® KELLY Dissecting and Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, suitable for dissection, size 5 mm, length 36 cm
- 38651 ON **ROBI® Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, with fine atraumatic serration, fenestrated jaws, double action jaws, size 5 mm, length 36 cm
- 38651 MW **ROBI® METZENBAUM Scissors**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, curved jaws, slender scissor blades, for cutting and bipolar coagulation, size 5 mm, length 36 cm
- 38610 MW **ROBI® METZENBAUM Scissors Insert**, CLERMONT-FERRAND model, double action jaws, curved jaws, slender scissor blades, size 5 mm, length 36 cm
- 26176 LE **Bipolar High Frequency Cord**, length 300 cm
- 26173 BN **Suction and Irrigation Tube**, with lateral holes, anti-reflex surface, with two-way stopcock for single-hand control, size 5 mm, length 36 cm  
 or  
 37360 LH **Suction and Irrigation Tube**, with lateral holes, size 5 mm, length 36 cm
- 37113 A **Handle**, pistol grip, with clamping valve, for suction and irrigation, **autoclavable**
- 26173 AM BERCI **Fascial Closure Instrument**, for subcutaneous ligation of trocar incisions, size 2.8 mm, length 17 cm
- 26173 KPL KOH **Macro Needle Holder**, with tungsten carbide insert, pistol handle with disengageable ratchet, jaws curved to left, size 5 mm, length 33 cm
- 26173 KPR KOH **Macro Needle Holder**, with tungsten carbide insert, pistol handle with disengageable ratchet, jaws curved to right, size 5 mm, length 33 cm
- 26172 AE **Endo-Loop Ligature**, with ROEDER knot, for bleeding stumps, with absorbable synthetic suture, sterile, for single use, USP 0, size 3 mm, length 33 cm, package of 12

Laparoscopy Basic Set continued on next page



### Supplementary Set for Bariatric Surgery

- 26003 EC **ENDOCAMELEON® HOPKINS® Telescope**, diameter 10 mm, length 31 cm, **autoclavable**, variable direction of view from 0° – 90°, adjustment knob for selecting the desired direction of view, fiber optic light transmission incorporated, color code: gold
- 30103 MC **Trocar**, with conical tip, insufflation stopcock and multifunctional valve, size 11 cm, working length 10.5 cm, color code: green
- 30108 MP **Trocar**, with pyramidal tip, insufflation stopcock and multifunctional valve, size 13.5 cm, working length 11.5 cm, color code: blue
- 30141 DB **Reducer**, 11/5 mm
- 30142 HB **Double Reducer**, 13/10 mm, 13.5/10 mm, 13/5 mm and 13.5/5 mm
- 30623 GB **Retractor for Gastric Banding**, size 10 mm, length 36 cm
- 30623 URL CUSCHIERI **Retractor**, large contact surface, size 10 mm, length 36 cm
- 33563 BLS **CLICKlinē BABCOCK Clamp**, rotating, dismantling, double action jaws, with hemostat style ratchet, without connector pin for unipolar coagulation, size 10 mm, length 36 cm
- 33763 DU **CLICKlinē DUVAL Grasping Forceps**, rotating, dismantling, double action jaws, with hemostat style ratchet, without connector pin for unipolar coagulation, size 10 mm, length 36 cm
- 33500 CM **CLICKlinē Metal Outer Sheath, with cm-marking**
- 33363 ON **CLICKlinē Grasping Forceps**, rotating, dismantling, single action jaws, atraumatic, fenestrated, with hemostat style ratchet, without connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 33325 ML **CLICKlinē KELLY Dissecting and Grasping Forceps**, rotating, dismantling, double action jaws, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 33325 KW **CLICKlinē MATKOWITZ Grasping Forceps**, rotating, dismantling, double action jaws, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- 33300 CM **CLICKlinē Metal Outer Sheath, with cm-marking**
- 26178 KPL KOH **Macro Needle Holder**, with tungsten carbide insert, pistol handle with disengageable ratchet, ratchet position left, jaws curved to left, size 5 mm, length 43 cm
- 26178 KPR KOH **Macro Needle Holder**, with tungsten carbide insert, pistol handle with disengageable ratchet, ratchet position right, jaws curved to right, size 5 mm, length 43 cm
- 30444 LR **Clip Applicator**, dismantling, rotating, size 10 mm, length 36 cm, for PILLING-WECK Titanium Clips 30460 AL
- 30460 AL PILLING-WECK **Titan-Clip**, medium-large, box with 16 sterile cartridges, 10 clips each, for use with Clip Applicator 30444 LR
- Optional**
- 26003 BEA **HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 10 mm, length 42 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 28172 HK **Socket**, to clamp to the OR table
- 28272 HA **Articulated Stand**
- 28272 UKN **Clamping Jaw**, metal, for use with instrument and telescope sheaths

**ENDOCAMELEON®: Recommended in conjunction with IMAGE1 S™** (CLARA and CHROMA modes)  
see units basic set on page 5

**Please note:** Grasping forceps and scissors are also available in in XL lengths.

**Containers for the Sterilization and Storage of Telescopes** see HYGIENE catalog

**Laparoscopy Basic Set** continued on next page

### Supplementary Set for Colorectal Surgery

30108 MC	<b>Trocar</b> , with conical tip, insufflation stopcock, multifunctional valve, size 13.5 mm, working length 11.5 cm, color code: blue
30142 HB	<b>Double Reducer</b> , 13/10 mm, 13.5/10 mm, 13/5 mm and 13.5/5 mm
33353 ME	<b>CLICK'liné Grasping Forceps</b> , rotating, dismantling, single action jaws, with hemostat style ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
33352 ML	<b>CLICK'liné KELLY Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, long, with ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
33352 ON	<b>CLICK'liné Grasping Forceps</b> , rotating, dismantling, single action jaws, with ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
33352 C	<b>CLICK'liné Bowel Grasper</b> , rotating, dismantling, double action jaws, with ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
33562 BC	<b>CLICK'liné BABCOCK Clamp</b> , rotating, dismantling, double action jaws, with ratchet, without connector pin for unipolar coagulation, size 10 mm, length 36 cm
38651 KF	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, rotating, dismantling, flat jaws, fenestrated, single action jaws, with connector pin for bipolar coagulation, size 5 mm, length 36 cm
26596 SK	<b>KÖCKERLING Knot Tier</b> , for extracorporeal knotting, size 5 mm, length 36 cm
33541 H	<b>CLICK'liné H-Retractor, autoclavable</b> , size 10 mm, length 36 cm
30623 T	<b>T-Retractor</b> , with LUER-Lock connector for cleaning, <b>autoclavable</b> , size 10 mm, length 30 cm
30623 VL	<b>V-Retractor</b> , with rotation wheel for angling and extending the distal tip, with LUER-Lock connector for cleaning, <b>autoclavable</b> , size 10 mm, length 30 cm
30623 I	<b>I-Retractor</b> , with rotation wheel for angling and extending the distal tip, with LUER-Lock connector for cleaning, <b>autoclavable</b> , size 10 mm, length 36 cm
30623 HA	<b>Articulating H-Retractor</b> , long jaws, double action jaws, jaws open in parallel, bendable to 90°, <b>autoclavable</b> , size 10 mm, length 36 cm
30623 H	<b>Handle Attachment, autoclavable</b> , for use with retractors

### Supplementary Set for Cholangiography/Choledochoscopy

11292 VSK	<b>Flexible Video Choledochoscope</b> , working channel inner diameter 1.2 mm, sheath size 2.8 mm, working length 50 cm
26169 DO	<b>BERCI Micro Knife</b> , pointed, distendable, size 5 mm, length 31 cm
28378 CH	<b>OLSEN Fixation Clamp</b> , with channel catheter 6 Fr., length 27 cm
26020 XR	<b>BERCI Plastic Stylet</b>
33531 PG	<b>CLICK'liné BERCI Grasping Forceps</b> , double action jaws, with silicone pads, size 10 mm

Containers for the Sterilization and Storage of Telescopes see HYGIENE catalog

# Minilaparoscopy

## Basic Set

26003 BA	<b>HOPKINS® Forward-Oblique Telescope 30°</b> , enlarged view, diameter 10 mm, length 31 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: red <b>or</b> 26046 BA <b>HOPKINS® Forward-Oblique Telescope 30°</b> , diameter 5 mm, length 29 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: red
26007 BA	<b>HOPKINS® Forward-Oblique Telescope 30°</b> , enlarged view, diameter 3.3 mm, length 25 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: red
495 NCSC	<b>Fiber Optic Light Cable</b> , with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
495 NAC	<b>Fiber Optic Light Cable</b> , with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 3.5 mm, length 230 cm
533 TVA	<b>Adaptor, autoclavable</b> , permits telescope changing under sterile conditions
26120 JL	VERESS <b>Pneumoperitoneum Needle</b> , with spring-loaded blunt inner cannula, LUER-Lock, <b>autoclavable</b> , diameter 2.1 mm, length 13 cm
30160 GYG	<b>Trocar</b> , with conical tip, LUER-Lock connector for insufflation and valve seal, size 6 mm, working length 10 cm, color code: black
30117 GP	<b>Trocar</b> , with pyramidal tip, LUER-Lock connector for insufflation and valve seal, size 3.9 mm, working length 10 cm, color code: red-green
3x 30114 GYG	<b>Trocar</b> , with conical tip, LUER-Lock connector for insufflation and valve seal, size 3.5 mm, working length 10 cm, color code: green
31351 ML	<b>CLICKliné KELLY Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, long, with connector pin for unipolar coagulation, without ratchet, size 3.5 mm, length 36 cm
31366 ONM	<b>CLICKliné Grasping Forceps</b> , rotating, dismantling, single action jaws, fenestrated, with fine atraumatic serration, with disengageable ratchet, without connector pin for unipolar coagulation, size 3.5 mm, length 36 cm
31351 MW	<b>CLICKliné Scissors</b> , rotating, dismantling, double action jaws, serrated, curved, conical, with LUER-Lock irrigation connector for cleaning, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 36 cm
31351 EH	<b>CLICKliné Micro Hook Scissors</b> , rotating, dismantling, single action jaws, with connector pin for unipolar coagulation, without ratchet, size 3.5 mm, length 36 cm
25775 CNL	CADIERE <b>Coagulation and Dissection Electrode</b> , L-shaped, distal tip tapered, with cm-marking, with connector pin for unipolar coagulation, size 3.5 mm, length 36 cm
26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug for AUTOCON®, length 300 cm
38951 MD	<b>ROBI® KELLY Grasping Forceps</b> , CLERMONT-FERRAND model, rotating, dismantling, double action jaws, with connector pin for bipolar coagulation, size 3.5 mm, length 36 cm
38951 ON	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, rotating, dismantling, with fine atraumatic serration, fenestrated, double action jaws, with connector pin for bipolar coagulation, size 3.5 mm, length 36 cm
38951 MW	<b>ROBI® Scissors</b> , CLERMONT-FERRAND model, rotating, dismantling, curved scissor blades, double action jaws, with connector pin for bipolar coagulation, size 3.5 mm, length 36 cm
26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm
26167 ANL	<b>Suction and Irrigation Tube</b> , with lateral holes, size 3.5 mm, length 36 cm, for use with handles for irrigation and suction
30805	<b>Handle with Two-Way Stopcock</b> , for suction and irrigation, <b>autoclavable</b> , for use with suction and irrigation tubes sizes 3, 3.5 und 5 mm
26167 LNL	KOH <b>Ultramicro Needle Holder</b> , with tungsten carbide inserts, jaws curved to left, straight handle, with disengageable ratchet, size 3.5 mm, length 36 cm
26167 RNL	KOH <b>Ultramicro Needle Holder</b> , with tungsten carbide inserts, jaws curved to right, straight handle, with disengageable ratchet, size 3.5 mm, length 36 cm

Containers for the Sterilization and Storage of Telescopes see HYGIENE catalog



### Basic Set

26011 AA	<b>HOPKINS® Straight Forward Telescope 0°</b> , enlarged view, diameter 5 mm, length 24 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: green
	or
26007 AA	<b>HOPKINS® Straight Forward Telescope 0°</b> , enlarged view, diameter 3.3 mm, length 25 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: green
495 NAC	<b>Fiber Optic Light Cable</b> , with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 3.5 mm, length 230 cm
26120 J	VERESS <b>Pneumoperitoneum Needle</b> , with spring-loaded blunt inner cannula, LUER-Lock, <b>autoclavable</b> , diameter 2.1 mm, length 10 cm
30117 GP	<b>Trocar</b> , with pyramidal tip, LUER-Lock connector for insufflation and silicone leaflet valve, size 3.9 mm, working length 10 cm color code: red-green
30160 GYS	<b>Trocar</b> , with conical tip, LUER-Lock connector and valve seal, size 6 mm, working length 5 cm, color code: black
4x 30114 GZS	<b>Trocar</b> , with pyramidal tip, LUER-Lock connector and valve seal, size 3.5 mm, working length 5 cm, color code: green
31151 MW	<b>CLICK'liné Scissors</b> , rotating, dismantling, double action jaws, serrated, curved, conical, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
2x 31151 UL	<b>CLICK'liné REDDICK-OLSEN Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, robust, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
31153 ON	<b>CLICK'liné Grasping Forceps</b> , rotating, dismantling, single action jaws, with fine atraumatic serration, fenestrated, with hemostat style ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
31151 EH	<b>CLICK'liné Micro Hook Scissors</b> , rotating, dismantling, single action jaws, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
31151 MD	<b>CLICK'liné KELLY Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
26870 UNS	<b>Coagulation and Dissecting Electrode</b> , L-shaped, insulated, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug for AUTOCON®, length 300 cm
38851 MD	<b>ROBI® KELLY Grasping Forceps</b> , CLERMONT-FERRAND model, double action jaws, with connector pin for bipolar coagulation, size 3.5 mm, length 20 cm
38851 ON	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, with fine atraumatic serration, fenestrated jaws, double action jaws, with connector pin for bipolar coagulation, size 3.5 mm, length 20 cm
38851 MW	<b>ROBI® Scissors</b> , CLERMONT-FERRAND model, curved blades, double action jaws, with connector pin for bipolar coagulation, size 3.5 mm, length 20 cm
26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm
26167 ANS	<b>Suction and Irrigation Tube</b> , with lateral holes, size 3.5 mm, length 20 cm, for use with handles for irrigation and suction
30805	<b>Handle with Two-Way Stopcock</b> , for suction and irrigation, <b>autoclavable</b> , for use with suction and irrigation tubes sizes 3, 3.5 und 5 mm
31143 REM	<b>CLICK'liné Palpation Probe</b> , retractable, size 3.5 mm, length 20 cm
26167 LNS	KOH <b>Ultramicro Needle Holder</b> , jaws curved to left, with tungsten carbide insert, straight handle, with disengageable ratchet, size 3.5 mm, length 20 cm
26167 RNS	KOH <b>Ultramicro Needle Holder</b> , jaws curved to right, with tungsten carbide insert, straight handle, with disengageable ratchet, size 3.5 mm, length 20 cm

### Supplementary Set for Pyloric Stenosis

26167 DRS	<b>Pyloric Knife</b> , size 3 mm, length 10 cm
31161 PSM	<b>CLICK'liné Percutaneous Pyloric Spreader</b> , rotating, dismantling, size 3.5 mm, length 20 cm
30361 PS	<b>CLICK'liné GEIGER Pyloric Grasper</b> , rotating, for percutaneous use, size 3 mm, length 20 cm

### Optional Instruments, size 2 mm

30251 MSS	<b>CLICK'liné METZENBAUM Scissors</b> , rotating, double action jaws, curved, size 2 mm, length 20 cm
30251 KJS	<b>CLICK'liné REDDICK-OLSEN Dissecting and Grasping Forceps</b> , rotating, double action jaws, size 2 mm, length 20 cm
30200 FNS	KOH <b>Ultramicro Needle Holder</b> , straight handle, with ratchet, size 2 mm, length 20 cm

**Containers for the Sterilization and Storage of Telescopes** see HYGIENE catalog

# Endoscopically Assisted Thyroidectomy and Parathyroidectomy

## Basic Sets

### Video-assisted Thyroidectomy and Parathyroidectomy, MICCOLI Recommended Set

#### Telescopes and Instruments:

- 26046 BA **HOPKINS® Forward-Oblique Telescope 30°**, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 2x 477002 HALLE-MICCOLI **Elevator**, blunt, width 2 mm, length 19 cm
- 786505 MICCOLI **Vessels Suspender Hook**, malleable, length 21 cm
- 2x 801910 MICCOLI **Retractor**, double-ended, size 35 x 10 mm and 21 x 10 mm, length 16 cm
- 801911 MICCOLI **Retractor**, double-ended, size 45 x 10 mm and 21 x 10 mm, length 16 cm
- 222500 BELLUCCI **Scissors**, blade length 8 mm, working length 8 cm
- 31151 UL **CLICKlinē REDDICK-OLSEN Dissecting and Grasping Forceps**, rotating, dismantling, double action jaws, robust, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
- 31151 MW **CLICKlinē Scissors**, rotating, dismantling, double action jaws, serrated, curved, conical, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
- 38851 ON **CLICKlinē Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with fine atraumatic serration, fenestrated, with connector pin for bipolar coagulation, size 3.5 mm, length 20 cm

### STRIK Extracervical Approach in Thyroid Surgery (ABBA Method)

- 26046 BA **HOPKINS® Forward-Oblique Telescope 30°**, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 2x 30160 ACL **Trocar**, with conical tip, insufflation stopcock and automatic valve, size 6 mm, working length 20 cm, color code: black
- or:**
- 2x 30160 MCL **Trocar**, with conical tip, insufflation stopcock and multifunctional valve, size 6 mm, working length 20 cm, color code: black
- 30103 AC **Trocar**, with conical tip, insufflation stopcock and automatic valve, size 11 mm, working length 10.5 cm, color code: green
- or:**
- 30103 MC **Trocar**, with conical tip, insufflation stopcock and multifunctional valve, size 11 mm, working length 10.5 cm, color code: green
- 30140 DB **Reduction Sleeve**, 11/5 mm
- 30140 KA **Reduction Sleeve**, 6/3 mm
- 38651 MD **ROBI® KELLY Dissecting and Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, suitable for dissection, size 5 mm, length 36 cm
- 38651 ON **ROBI® Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, with fine atraumatic serration, fenestrated jaws, double action jaws, size 5 mm, length 36 cm
- 38651 MW **ROBI® METZENBAUM Scissors**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, curved jaws, slender scissor blades, for cutting and bipolar coagulation, size 5 mm, length 36 cm
- 31151 MD **CLICKlinē KELLY Dissecting and Grasping Forceps**, rotating, dismantling, double action jaws, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm
- 31151 MW **CLICKlinē Scissors**, rotating, dismantling, double action jaws, serrated, curved, conical, without ratchet, with connector pin for unipolar coagulation, size 3.5 mm, length 20 cm

**Containers for the Sterilization and Storage of Telescopes** see HYGIENE catalog

### Basic Set

26003 AA	<b>HOPKINS® Straight Forward Telescope 0°</b> , enlarged view, diameter 10 mm, length 31 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: green
	or
26046 AA	<b>HOPKINS® Straight Forward Telescope 0°</b> , enlarged view, diameter 5 mm, length 29 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: green
<b>Alternative 3D Telescopes:</b>	
26606 ACA	<b>TIPCAM®1 RUBINA®</b> , OPAL1® NIR/ICG, 4K/3D, with two distally integrated video chips, direction of view 0°, diameter 10 mm, length 31 cm, <b>autoclavable</b> , freely programmable camera head buttons, including video connecting cable
495 NCSC	<b>Fiber Optic Light Cable</b> , with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm
26120 JL	<b>VERESS Pneumoperitoneum Needle</b> , with spring-loaded blunt inner cannula, LUER-Lock, <b>autoclavable</b> , diameter 2.1 mm, length 13 cm
2x 30103 MA	<b>Trocar</b> , with blunt tip, insufflation stopcock and multifunctional valve, size 11 mm, working length 10.5 cm, color code: green
3x 30160 MA	<b>Trocar</b> , with blunt tip, insufflation stopcock and multifunctional valve, size 6 mm, working length 10.5 cm, color code: black
33362 ME	<b>CLICKliné® Grasping Forceps</b> , rotating, dismantling, single action jaws, width of jaws 4.8 mm, with multiple teeth, for atraumatic and accurate grasping, with ratchet, without connector pin for unipolar coagulation, size 5 mm, length 36 cm
33362 FM	<b>CLICKliné® Claw Forceps</b> , rotating, dismantling, single action jaws, 2 x 3 teeth, with ratchet, without connector pin for unipolar coagulation, size 5 mm, length 36 cm
33362 ON	<b>CLICKliné® Grasping Forceps</b> , rotating, dismantling, single action jaws, with fine atraumatic serration, fenestrated, with ratchet, without connector pin for unipolar coagulation, size 5 mm, length 36 cm
33362 UM	<b>CLICKliné® Ovary Grasping Forceps</b> , rotating, dismantling, double action jaws, serrated, with ratchet, without connector pin for unipolar coagulation, size 5 mm, length 36 cm
33352 ML	<b>CLICKliné® KELLY Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, long, with ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
34561 GS	<b>CLICKliné® Spoon Forceps</b> , rotating, dismantling, single action jaws, without ratchet, without connector pin for unipolar coagulation, size 10 mm, length 36 cm
34361 EH	<b>CLICKliné® Hook Scissors</b> , rotating, dismantling, single action jaws, without ratchet, without connector pin for unipolar coagulation, size 5 mm, length 36 cm
34351 MA	<b>CLICKliné® Scissors</b> , rotating, dismantling, double action jaws, serrated, spoon-shaped, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
38651 KL	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, single action jaws, flat jaws, for dissection, grasping and bipolar coagulation, size 5 mm, length 36 cm
38651 ON	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, with fine atraumatic serration, fenestrated jaws, double action jaws, size 5 mm, length 36 cm
38651 ML	<b>ROBI® KELLY Dissecting and Grasping Forceps</b> , CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, suitable for dissection, size 5 mm, length 36 cm
26173 BN	<b>Suction and Irrigation Tube</b> , with lateral holes, anti-reflex surface, with two-way stopcock for single-hand control, size 5 mm, length 36 cm
37360 CP	<b>Suction and Irrigation Tube</b> , for puncture and suction of cysts, size 5 mm, length 36 cm, for use with suction/irrigation handles
37370 GC	<b>GORDTS and CAMPO Coagulating Suction and Irrigation Tube</b> , bipolar, diameter 5 mm, length 36 cm, for use with suction and irrigation handles
30810	<b>Handle</b> , for suction and irrigation, <b>autoclavable</b> , for use with 5 mm coagulation suction tubes and 3, 3.5 and 5 mm suction and irrigation tubes
26775 UF	<b>Coagulation and Dissection Electrode</b> , L-shaped, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
30675 ND	<b>High Frequency Needle</b> , for splitting and coagulation, insulated, retractable, with connector pin for unipolar coagulation, size 5 mm, length 31 cm
2x 26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug for AUTOCON®, length 300 cm
2x 26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm
39301 C	<b>Plastic Container for Sterilization and Storage of two Telescopes</b> , perforated, with transparent lid, with silicone telescope holder, external dimensions (w x d x h): 520 x 90 x 45 mm, for laparoscopy telescopes size 10 mm or similar
39301 CHS	<b>Silicone Telescope Holder</b> , for two rigid endoscopes up to diameter 10 mm, for Plastic Container 39301 AS/BS/CS
30173 LAR	<b>KOH Macro Needle Holder</b> , dismantling, axial handle with disengageable ratchet, ratchet position right, jaws curved to left, single action jaws, with tungsten carbide inserts, diameter 5 mm, length 33 cm
30173 RAL	<b>KOH Macro Needle Holder</b> , dismantling, axial handle with disengageable ratchet, ratchet position left, jaws curved to right, single action jaws, with tungsten carbide inserts, diameter 5 mm, length 33 cm

**Basic Set for Laparoscopic Gynecology** continued on next page



26596 CL	<b>CICE Knot Tier</b> , CLERMONT-FERRAND model, for extracorporeal knotting, size 5 mm, length 36 cm
26168 TN	<b>TINTARA Uterine Manipulator</b> , complete
33331 ST	<b>CLICKline TCHARTCHIAN Dissecting and Grasping Forceps</b> "JET GRASPER®", rotating, dismantling, single action jaws, with integrated irrigation function, size 5 mm, length 36 cm

### Supplementary Set for Endometriosis

26168 D	<b>Uterine Manipulator</b> , CLERMONT-FERRAND model, complete or 26168 Z KECKSTEIN <b>Uterine Manipulator</b> , complete
30103 SK	<b>C.C.L. Vaginal Extractor</b> , diameter 11 mm, with insulated ball-shaped sphere, diameter 35 mm
33562 FS	<b>CLICKline Claw Forceps</b> , rotating, dismantling, with ratchet, without connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, single action jaws, 2 x 3 teeth, size 10 mm, length 36 cm
26166 RG	<b>Rectal Plug</b> , large
26166 RK	<b>Rectal Plug</b> , small
26166 GL	<b>Handle</b> , for rectal plugs, strongly curved
26166 GS	<b>Handle</b> , for rectal plugs, slightly curved

### Supplementary Set for Hysterectomy for Benign Findings

26168 D	<b>Uterine Manipulator</b> , CLERMONT-FERRAND model, complete or 26168 Z KECKSTEIN <b>Uterine Manipulator</b> , complete or 26168 K HOHL <b>Uterine Manipulator</b> , complete or 26168 DZ DONNEZ <b>Uterine Manipulator</b> , complete or 26168 J MANGESHIKAR <b>Uterine Manipulator</b> , complete
26183 M	BRUCKER/MESSROGHLI <b>SUPRALOOP</b> , size 5 mm, length 30 cm

### Additional Instruments for Myomectomy

26175 BL	<b>Myoma Fixation Instrument</b> , screw-shaped, size 5 mm
----------	--

### Supplementary Set for Lymphadenectomy (pelvic/para-aortic)

33352 SN	<b>CLICKline SCHNEIDER Lymph Node Grasping Forceps</b> , rotating, dismantling, single action jaws, atraumatic, with ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
38651 MW	<b>ROBI® METZENBAUM Scissors</b> , CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, curved jaws, slender scissor blades, for cutting and bipolar coagulation, size 5 mm, length 36 cm

Containers for the Sterilization and Storage of Telescopes see HYGIENE catalog

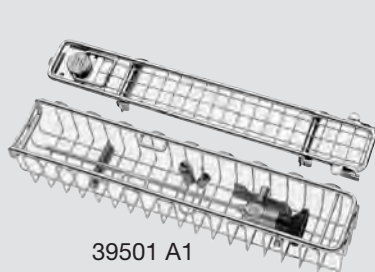
26003 BA	<b>HOPKINS® Forward-Oblique Telescope 30°</b> , enlarged view, diameter 10 mm, length 31 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: red
3x 30160 MP	<b>Trocar</b> , with pyramidal tip, insufflation stopcock and multifunctional valve, size 6 mm, working length 10.5 cm, color code: black
2x 30103 MP	<b>Trocar</b> , with pyramidal tip, insufflation stopcock and multifunctional valve, size 11 mm, working length 10.5 cm, color code: green
2x 30108 MP	<b>Trocar</b> , with pyramidal tip, insufflation stopcock and multifunctional valve, size 13.5 mm, working length 11.5 cm, color code: blue
30142 HB	<b>Double Reducer</b> , 13/10 mm, 13.5/10 mm, 13/5 mm and 13.5/5 mm
2x 30141 DB	<b>Reducer</b> , 11/5 mm
2x 33352 MG	<b>CLICK'liné Grasping Forceps</b> , "tiger jaws", rotating, dismantling, single action jaws, 2 x 4 teeth, with ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
33351 MD	<b>CLICK'liné KELLY Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
2x 33351 R	<b>CLICK'liné Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, right-angled jaws, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
33563 RG	<b>CLICK'liné Grasping Forceps</b> , rotating, dismantling, double action jaws, right-angled jaws, with hemostat style ratchet, size 10 mm, length 36 cm
33561 MLL	<b>CLICK'liné KELLY Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, without ratchet, without connector pin for unipolar coagulation, size 10 mm, length 36 cm
33561 PR	<b>CLICK'liné RASSWEILER Dissecting and Grasping Forceps</b> , rotating, dismantling, double action jaws, without ratchet, without connector pin for unipolar coagulation, size 10 mm, length 36 cm
34561 GS	<b>CLICK'liné Spoon Forceps</b> , rotating, dismantling, single action jaws, without ratchet, without connector pin for unipolar coagulation, size 10 mm, length 36 cm
34351 MS	<b>CLICK'liné METZENBAUM Scissors</b> , rotating, dismantling, double action jaws, curved, without ratchet, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
34310 MS	<b>METZENBAUM Scissors Insert</b> , size 5 mm, length 36 cm
38651 MD	<b>ROBI® KELLY Dissecting and Grasping Forceps</b> , CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, suitable for dissection, size 5 mm, length 36 cm
32340 PT	<b>Surgical Sponge Holder</b> , self-retaining, size 5 mm, length 30 cm
26173 BN	<b>Suction and Irrigation Tube</b> , with lateral holes, anti-reflex surface, with two-way stopcock for single-hand control, size 5 mm, length 36 cm
26173 SKG	<b>RASSWEILER Needle Holder</b> , straight jaws, size 5 mm, length 33 cm
26173 SKL	<b>RASSWEILER Needle Holder</b> , convex/concave, slender jaws, curved to left, size 5 mm, length 33 cm

**Containers for the Sterilization and Storage of Telescopes** see HYGIENE catalog

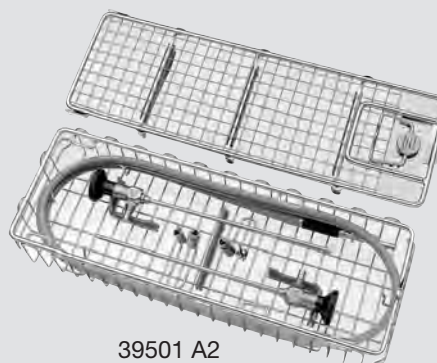
# Wire Trays and Containers

for the cleaning, sterilization and storage of telescopes and instruments

## Telescopes



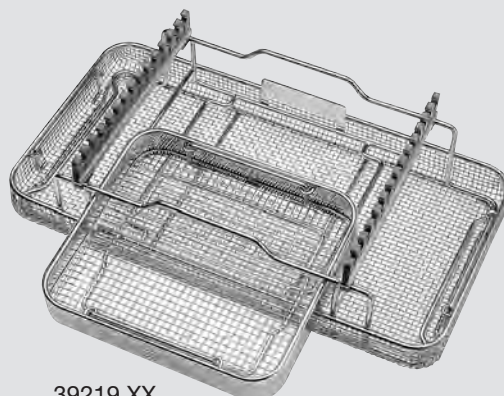
39501 A1



39501 A2

- 39501 A1 **Wire Tray for Cleaning, Sterilization and Storage** of one rigid endoscope, including holder for light post adaptors, silicone telescope holders and lid, external dimensions (w x d x h): 290 x 60 x 52 mm, for rigid endoscopes up to diameter 5 mm and working length 20 cm
- 39501 B1 **Wire Tray for Cleaning, Sterilization and Storage** of one rigid endoscope, including holder for light post adaptors, silicone telescope holders and lid, external dimensions (w x d x h): 430 x 65 x 52 mm, for rigid endoscopes up to diameter 10 mm and working length 34 cm
- 39501 A2 **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): 352 x 125 x 54 mm, for rigid endoscopes up to diameter 10 mm and working length 20 cm
- 39501 B2 **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 and working length 32 cm
- 39501 C **Wire Tray for Cleaning, Sterilization and Storage** of one rigid endoscope, with silicone telescope holder and lid, external dimensions (w x d x h): 670 x 80 x 52 mm, for telescopes for bronchoscopy and esophagoscopy
- 39501 BEC **Wire Tray for Cleaning, Sterilization and Storage** of one ENDOCAMELEON®, length 32 cm and one light cable, including holder for light post adaptor, silicone telescope holder and lid, external dimensions (w x d x h): 480 x 125 x 54 mm

## Instruments



39219 XX

- 39219 XX **Instrument Rack for Cleaning, Sterilization and Storage** of up to 14 instruments with diameter 2.5 to 10 mm, incl. variable bars with silicone holders, rack with Tray 39502 V for drawer and Wire Tray 39502 X, external dimensions (w x d x h): 480 x 250 x 125 mm





# VIDEOENDOSCOPES, HOPKINS® TELESCOPES, DIAMETERS 2 – 10 mm

IMAGE1 S™ RUBINA® <sup>NEW</sup> , HOPKINS® TELESCOPES FOR FLUORESCENCE-SUPPORTED PERFUSION EVALUATION USING ICG .....	18-28
ENDOCAMELEON® .....	29-30
HOPKINS® TELESCOPES, DIAMETERS 2 – 10 mm .....	31-34
HOPKINS® TELESCOPES WITH WITH INBUILT WORKING CHANNEL .....	35-36
ACCESSORIES .....	37-38

# IMAGE1 S™ Camera Platform

## Overview

IMAGE1 S CONNECT® II, basic module



TC 201

IMAGE1 S™ 4U-LINK



TC 304

IMAGE1 S D3-LINK®



TC 302

IMAGE1 S™ 4U



TH 120

IMAGE1 S™ 4U RUBINA®



TH 121

TIPCAM®1 RUBINA®



26606 ACA  
26606 BCA

TIPCAM®1



26605 AA/BA  
7240 AA3D/BA3D/FA3D  
28164 AA3D/BA3D/FA3D

VITOM® 3D

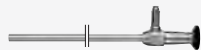


TH 200

Rigid Endoscopes



HOPKINS® RUBINA®



POWER LED RUBINA®



TL 400

LED Light Source



TL 300

4K Monitor



TM 343  
TM 440

4K/3D Monitor



TM 350  
TM 450

3D Monitor



TM 330  
TM 263

3D Polarization Glasses



TM 003

IMAGE1 S CONNECT® II, basic module



TC 201

IMAGE1 S™ X-LINK



TC 301

IMAGE1 S™ H3-LINK



TC 300

Flexible Videoendoscopes



IMAGE1 S™ HX



TH 110  
TH 111

IMAGE1 S™ HX FI




TH 112  
TH 113

Three-Chip FULL HD Camera Heads




TH 100, TH102, TH103,  
TH104, TH106


Rigid Endoscopes



PDD Endoscope




VITOM® II PDD



20916025 AIA

Rigid Endoscopes



LED Light Source



20 1614 01-1

D-LIGHT C



20 1336 01-133

LED Light Source



TL 300

FULL HD Monitor



TM 220

FULL HD Monitor



TM 220

# IMAGE1 S™ RUBINA® – *NEW* mORe to discover

IMAGE1 S™ RUBINA® combines the latest imaging technologies 4K, 3D and fluorescence imaging (NIR/ICG) in one product family. The products impress with 4K image quality in 2D and 3D as well as new NIR/ICG fluorescence modes. The new POWER LED RUBINA® makes this possible. The new modes such as,

for example, the superimposed NIR/ICG signal in the white light image, provide valuable information. In addition, IMAGE1 S™ RUBINA® offers the display intensity of the NIR/ICG signal and a pure near infrared mode in monochromatic color display for the clear delineation of structures.

The following components are included in the IMAGE1 S™ RUBINA® product family:

- IMAGE1™ S 4U RUBINA® – 4K camera head with new NIR/ICG functionalities
- TIPCAM®1 RUBINA® – 4K/3D NIR/ICG videoendoscope with automatic horizon control
- POWER LED RUBINA® – Laser-free LED light source for white light and excitation of NIR/ICG
- HOPKINS® RUBINA® – Enhanced\* NIR/ICG telescopes and new models

The IMAGE1 S™ RUBINA® technology thus provides new functionalities for the KARL STORZ fluorescence imaging system OPAL1® as well as very good image brightness and richness of color and detail.



\* in comparison to previous models



# TIPCAM®1 RUBINA® <sup>NEW</sup>

The New 4K/3D NIR/ICG Videoendoscope



## TIPCAM®1 RUBINA® – The New 4K/3D NIR/ICG Videoendoscope

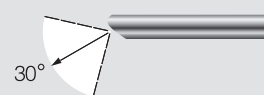
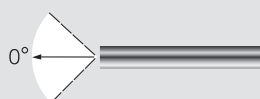
TIPCAM®1 RUBINA® provides surgeons with excellent depth perception. The stereoscopic 3D system in 4K quality is particularly helpful when performing interventions that require good spatial vision. Thanks to the modular system design, existing IMAGE1 S™ 2D systems can be upgraded to 3D. Whether for laparoscopy, gynecology, urology, or heart surgery – the new TIPCAM®1 RUBINA® features a wide range of applications.

- 4K image chain
- Automatic horizon control for better orientation and handling
- 4K/3D NIR/ICG videoendoscopes with 10 millimeter diameter as well as 0° and 30° directions of view
- Easy toggle from 3D to 2D
- OPAL1® NIR/ICG visualization modes: Overlay, Monochromatic and Intensity Map
- Easy integration into the IMAGE1 S™ platform



### 10 mm Videoendoscope

autoclavable



26606 ACA **TIPCAM®1 RUBINA®**, OPAL1® NIR/ICG, 4K/3D, high-resolution videoendoscope with two distally integrated video chips, for NIR/ICG fluorescence imaging in combination with POWER LED RUBINA®, direction of view 0°, for use with IMAGE1 S CONNECT® II and IMAGE1 S™ 4U-LINK

26606 BCA **Same**, direction of view 30°

#### Specifications:

Frame rate	50/60 Hz	Cable length	300 cm
Image sensor	2-chip	Cable routing	straight
Resolution	3840 × 2160 pixels	Camera head buttons	freely programmable
Scanning method	progressive scan	Reprocessing	<b>autoclavable</b> , hydrogen peroxide sterilization
Direction of view	26606 ACA: 0° 26606 BCA: 30°	S-Technologies	CLARA, CHROMA, SPECTRA in 2D and 3D
Outer diameter	10 mm	Degree of protection	in conjunction with Camera Control Unit IMAGE1 S™: CF-Defib
Working length	32 cm		
Weight	420 g		

#### Optional Accessories:

**UR 200 ARTIP® SOLO Camera Guidance System** for image quality stabilization and guidance of 3D and 4K laparoscopes only see chapter 10 – HOLDING SYSTEMS AND TRAINERS

# POWER LED RUBINA® <sup>NEW</sup>

The new LED light source for white light and NIR/ICG applications



Power, efficiency, durability and flexibility are the hallmarks of the POWER LED RUBINA™ cold light source based purely on LED technology. The light source can be used for white light as well as fluorescence applications for displaying NIR/ICG or autofluorescence in the near infrared range. In conjunction with other RUBINA® components, it allows the use of various new modes for displaying the NIR/ICG signal: A superimposed NIR/ICG signal in the white light image, a display intensity of a NIR/ICG signal as well as a pure near infrared mode in monochromatic color display for the clear delineation of structures. Only long-life LEDs are used so no laser protection measures are necessary.

- OPAL1® NIR/ICG technology with new functionalities
- Straightforward user interface thanks to intuitive touch screen
- Constant light intensity throughout the entire service life
- Noise level lower than previous models



TL 400

**Cold Light Fountain Power LED RUBINA®**, for NIR/ICG fluorescence imaging and standard endoscopic diagnosis, power supply 100 – 125/220 – 240VAC, 50/60 Hz, including:

- Mains Cord**
- Patch Cable**
- Sync Connecting Cable**
- OPAL1® NIR/ICG Demonstration Card**

**Specifications:**

Illumination technology	2x LED
Color temperature	approx. 5700 K
Average lamp service life	min. 30,000 h
Light intensity adjustment	automatic via KS HIVE manual via KS HIVE manual via touch screen (in white light mode)
Fluorescence imaging	<b>NIR/ICG</b>
Unit communication	KS HIVE
Power consumption	220 VA

Power supply	100 – 240 VAC
Power frequency	50/60 Hz
Dimensions w x h x d	305 x 120 x 370 mm
Weight	7.4 kg
Cleaning	wipe disinfection
Protection class	1
Degree of protection	CF with KARL STORZ light cables CF Defib)

# IMAGE1 S™ 4U RUBINA® <sup>NEW</sup>

The new 4K-NIR/ICG camera head



IMAGE1 S™ 4U RUBINA® combines 4K imaging technology with fluorescence imaging for displaying indocyanine green (ICG) and autofluorescence in the near infrared range. The technology features very good image quality as well as new NIR/ICG fluorescence modes. The new modes, e.g., the superimposed NIR/ICG signal in the white light image, provide the user with valuable information. In addition, IMAGE1 S™ RUBINA® offers the display intensity of a NIR/ICG signal and a pure near infrared mode in monochromatic color display for a clear delineation of structures.

- Native 4K image resolution with very good image brightness and richness of color and detail
- OPAL1® NIR/ICG technology with new functionalities
- S-Technologies in white light and the overlay modes Overlay and Intensity Map
- Enhanced\* NIR/ICG telescopes and new models
- Laser-free LED light source for white light and excitation of NIR/ICG



TH 121

**IMAGE1 S™ 4U RUBINA®**, OPAL1® NIR/ICG, two-chip 4K UHD camera head, for use with IMAGE1 S CONNECT® II and IMAGE1 S™ 4U-LINK

**Specifications:**

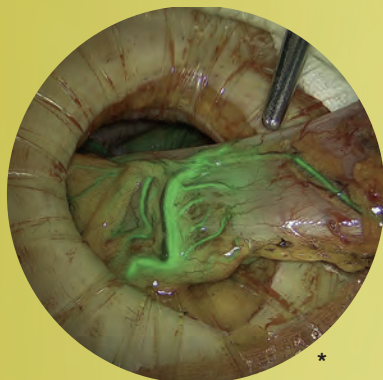
Frame rate	50/60 Hz	Cable length	300 cm
Image sensor	2-chip	Cable routing	angled
Resolution	3840 × 2160 pixels	Camera head buttons	freely programmable
Scanning method	progressive scan	Grip mechanism	standard eyepiece adaptor
Lens	fixed focus	Reprocessing	soakable, EO sterilization, hydrogen peroxide sterilization
Focal length	f = 19 mm	S-Technologies	CLARA, CHROMA, SPECTRA
Dimensions w x h x d	55 x 41 x 150 mm	Degree of protection	in conjunction with Camera Control Unit IMAGE1 S™: CF-Defib
Weight	260 g		

\* in comparison to previous models

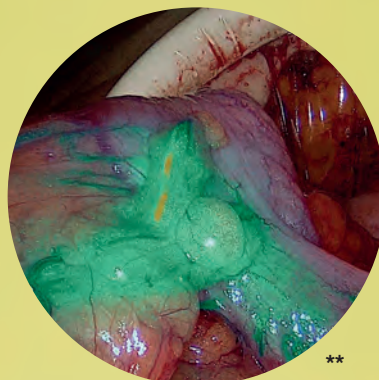
# HOPKINS® Telescopes

for fluorescence-supported perfusion evaluation using ICG,  
diameter 10 mm and diameter 5 mm

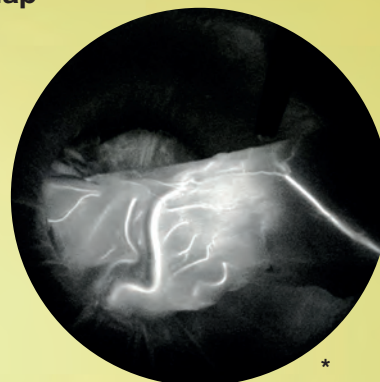
**STORZ**  
KARL STORZ — ENDOSKOPE



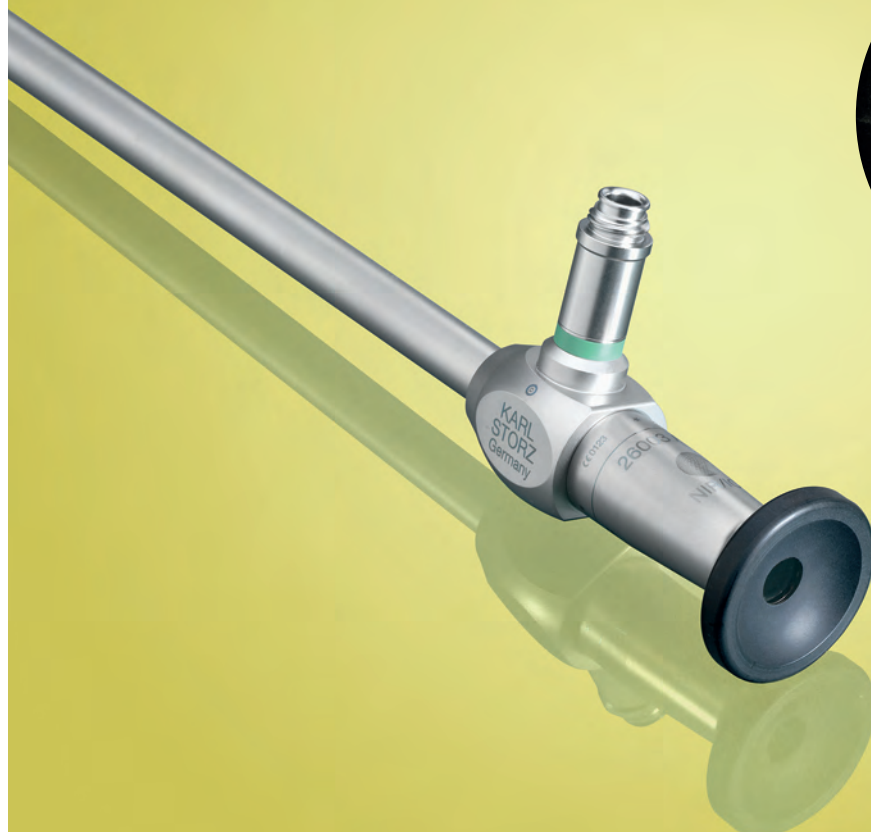
Overlay



Intensity Map



Monochromatic



\* **Source:** Prof. Luigi Boni, Fondazione IRCCS - Ca' Granda - Policlinico Hospital of Milan, University of Milan, Milan, Italy

\*\* **Source:** Dr. Michael Zünd, Zuger Kantonspital, Baar, Switzerland

## Description

Indocyanine green (ICG) is a photographic dye that is used as a fluorescence marker in fluorescence imaging. Due to its ability to bind to plasma proteins, ICG remains in the vascular system and so enables the evaluation of circulation in tissues and organs.

The new POWER LED RUBINA® from KARL STORZ, in conjunction with a precise camera system and specialized endoscopic telescopes, adapts the requirements of fluorescence imaging to ICG. Consequently, ICG-based fluorescence diagnosis can now be used in endoscopic applications, which was only possible in open surgical procedures for a long time.

The ICG system can be used for multiple disciplines, including blood flow diagnosis of tissues and organs or for detecting sentinel lymph nodes during tumor resection as well as the visualization of bile ducts during hepatobiliary surgery.

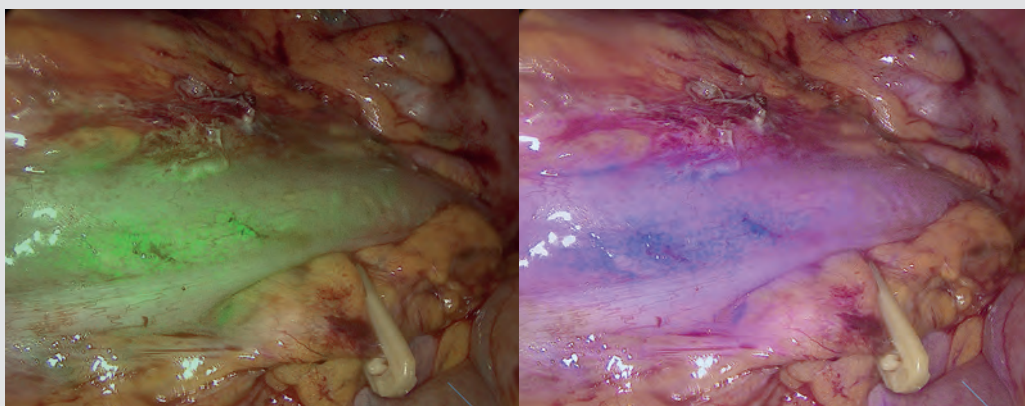
Experience has been gained with the ICG system for the control of anastomoses in rectal or bariatric surgery and flap transplants.

The ICG system is easy to use. All components are suitable for universal use for both fluorescence and pure white light applications.

Endoscopic procedures combined with the fluorescence marker indocyanine green (ICG) enables perfusion evaluation, e.g., of suspected ischemia or anastomoses following colorectal or bariatric surgery.\*

*Comments by Prof. Dr. T. CARUS,  
Elisabeth-Krankenhaus Thuine, Germany*

## Visualization of perfusion, e.g., in colorectal anastomoses



*Source: Prof. Dr. T. CARUS, Elisabeth-Krankenhaus, Thuine, Germany*

\* **Source:** *Intraoperative fluorescence angiography in colorectal surgery, T. CARUS & P. PICK, Der Chirurg (90), pages 887-890, 2019*

## Description

### Visualization of the Biliary System

Intravenously administered ICG naturally collects in the biliary system. The KARL STORZ ICG system enables illumination of the collected ICG and thus rapid identification of the biliary system anatomy. It is possible to switch between white light and ICG fluorescence modalities at the click of a button and thus perform cholecystectomy procedures quickly and easily.

The KARL STORZ ICG system presents the following benefits for cholecystectomy procedures:

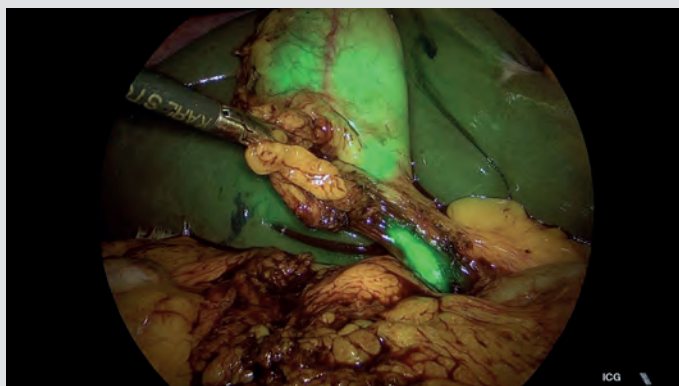
- Visualization beyond the tissue surface in real time
- Fluorescence-guided anatomical mapping
- Effective use of surgical time and improved surgical outcomes

- Empowers the surgeon with greater spatial awareness to provide better patient care

The IMAGE1 S™ RUBINA® system allows us to virtually “navigate” the anatomy of the extrahepatic biliary tree and obtain a fluorescence cholangiography in real time, eliminating the need for dissection or cannulation of the cystic duct. The new POWER LED RUBINA® enhances visualization and thus enables work in the near-infrared mode.

*Prof. Luigi BONI  
Fondazione IRCCS - Ca' Granda - Policlinico  
Hospital of Milan, University of Milan, Milan,  
Italy*

### Fluorescence-guided identification of the biliary system during a laparoscopic cholecystectomy



**Source:** Prof. Luigi BONI, Fondazione IRCCS - Ca' Granda - Policlinico Hospital of Milan, University of Milan, Milan, Italy

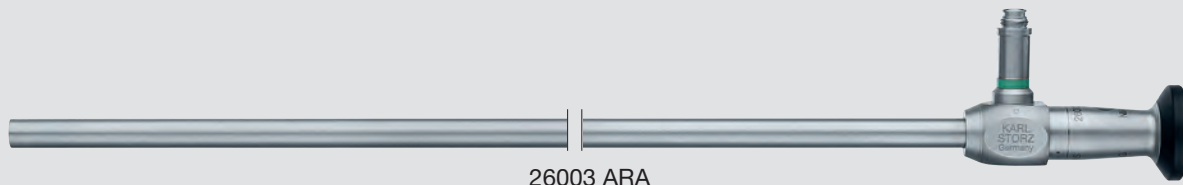
\* **Source:** Clinical applications of indocyanine green (ICG) enhanced fluorescence in laparoscopic surgery, L. BONI et al., Surg Endosc (29), pp. 2046–2055, 2015

# HOPKINS® Telescopes

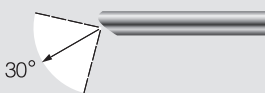
for fluorescence-supported perfusion evaluation using ICG

Diameter 10 mm, length 31 cm, 42 cm

Trocars size 11 mm



26003 ARA **HOPKINS® RUBINA® 0°**, NIR/ICG, straight-forward telescope 0°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, for indocyanine green (ICG), fiber optic light transmission incorporated, color code: green



26003 BRA **HOPKINS® RUBINA® 30°**, NIR/ICG, forward-oblique telescope 30°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, for indocyanine green (ICG), fiber optic light transmission incorporated, color code: red

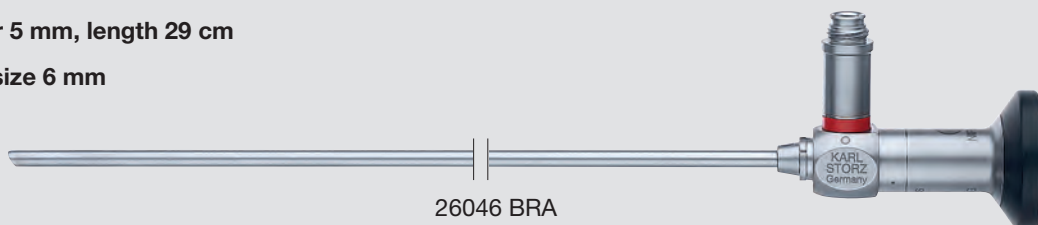


26003 FRA **HOPKINS® RUBINA® 45°**, NIR/ICG, forward-oblique telescope 45°, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, for indocyanine green (ICG), fiber optic light transmission incorporated, color code: black

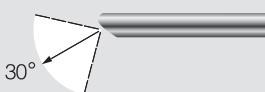
26003 FREA **Same**, length 42 cm

Diameter 5 mm, length 29 cm

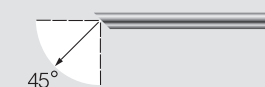
Trocars size 6 mm



26046 ARA **HOPKINS® RUBINA® 0°**, NIR/ICG, straight forward telescope 0°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, for indocyanine green (ICG), fiber optic light transmission incorporated, color code: green



26046 BRA **HOPKINS® RUBINA® 30°**, NIR/ICG, forward-oblique telescope 30°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, for indocyanine green (ICG), fiber optic light transmission incorporated, color code: red



26046 FRA **HOPKINS® RUBINA® 45°**, NIR/ICG, forward-oblique telescope 45°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, for indocyanine green (ICG), fiber optic light transmission incorporated, color code: black

**Components/Spare Parts** see chapter 18

Recommended light cables for fluorescence-supported perfusion evaluation using ICG.

For use with 10 mm ICG telescopes



495 NCSC

**Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm

For use with 5 mm ICG telescopes



495 NAC

**Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, with safety lock, enhanced light transmission, can be used for ICG applications, diameter 3.5 mm, length 230 cm

**Trocars for use with telescopes with diameters 10 mm and diameter 5 mm** see pages 45-48, 53-54, 60-61, 65 and 69

**Containers for Sterilization and Storage of Telescopes** see HYGIENE catalog





**Recommended in combination with IMAGE1 S™ (CLARA and CHROMA modes)**

### Telescope with variable direction of view

Until now, surgeons had to choose in advance which telescope or direction of view to use in a procedure. Moreover, surgeons were restricted to the selected direction of view throughout the surgery or had to make an intraoperative telescope change.

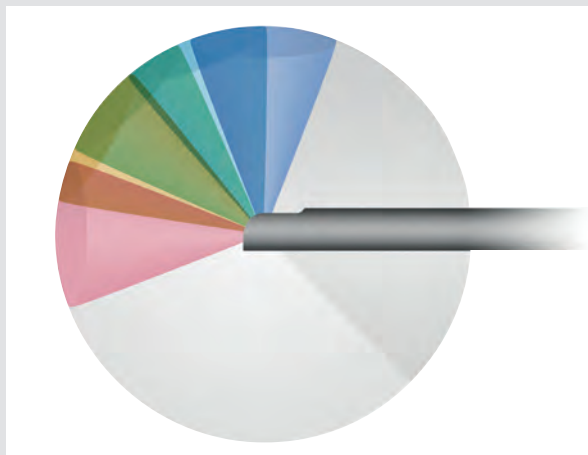
To prevent this predicament in the future, we developed the ENDOCAMELEON®: a telescope that allows you to adjust the desired direction of view between 0° and 90°.

The ENDOCAMELEON® technology does not take up extra intracorporal space due to external moving parts.

Image alignment is the same as rigid telescopes: The direction of view is selected by simply turning the adjustment knob.

As the ENDOCAMELEON® is equipped with a standard eyepiece, the variable direction of view benefits all standard camera systems. Thanks to the HOPKINS® rod lens system, ENDOCAMELEON® also offers image quality that enables a useful application of three-chip cameras or HD camera systems.

With the ENDOCAMELEON®, visual inspection of the entire surgical field is possible. This only requires a simple turn of the adjusting knob.



*ENDOCAMELEON® with variable direction of view, lateral view*



*ENDOCAMELEON® with variable direction of view, isometric view*



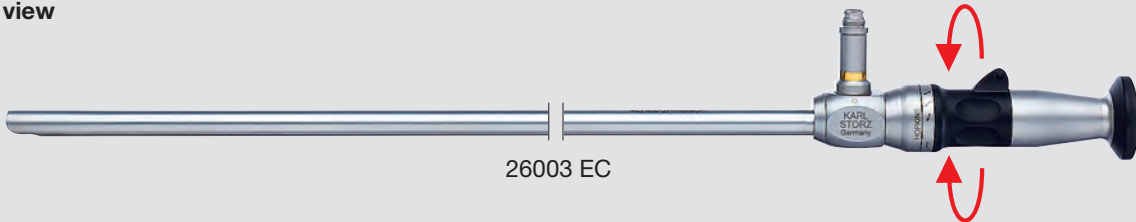
Diameter 10 mm, length 31 cm

Trocars size 11 mm

Recommended in combination with IMAGE1 S™ (CLARA and CHROMA modes)

**Special Features:**

- Variable direction of view 0° – 90°
- HOPKINS® telescope with rod lens system
- Adjustment knob for selecting the direction of view
- Rigid sheath with a diameter of 10 mm



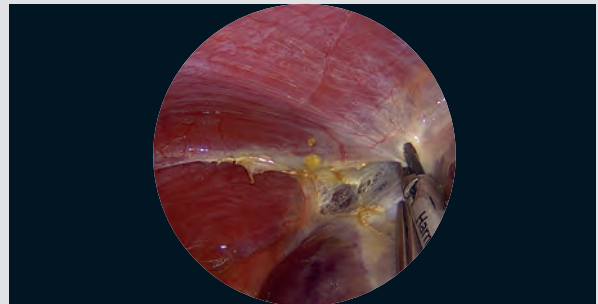
26003 EC

**ENDOCAMELEON® HOPKINS® Telescope**, diameter 10 mm, length 31 cm, **autoclavable**, variable direction of view 0° – 90°, adjustment knob with fin for selecting the direction of view, fiber optic light transmission incorporated, color code: gold



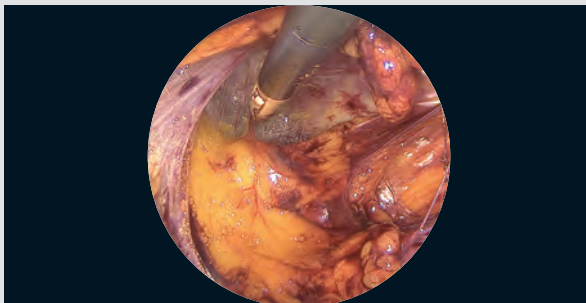
**Fig. 1: Bariatric Surgery – Sleeve gastrectomy**  
– Complete visualization of the gastroesophageal junction  
– 45°– 90°

Prof. Carus, Germany



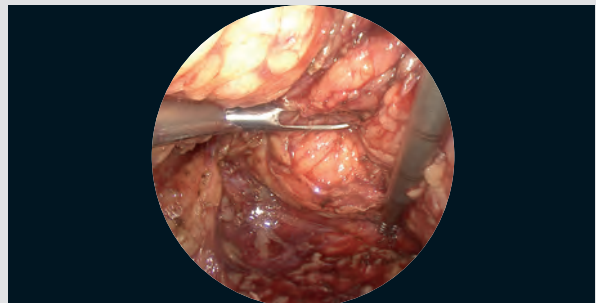
**Fig. 2: Liver Segment Resection**  
– Better visualization of the postero-superior segments of the liver  
– 45°

Prof. Abu Hilal, Italy



**Fig. 3: Hernia Surgery – TEP**  
– Complete visualization of the hernial sac  
– 45°

Prof. Boni, Italy



**Fig. 4: Colorectal Surgery – Rectum resection**  
– Complete visualization of the anastomosis  
– 30°– 90°

Prof. Kanehira, Japan

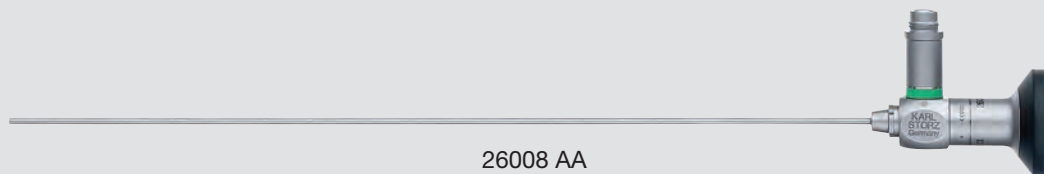
**Containers for Sterilization and Storage of Telescopes** see page 15

**Components/Spare Parts** see chapter 18



Diameter 2 mm, length 26 cm

Trocars size 2.5 mm

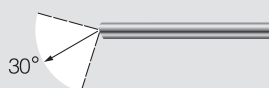


26008 AA



26008 AA

**HOPKINS® Straight Forward Telescope 0°**, diameter 2 mm, length 26 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

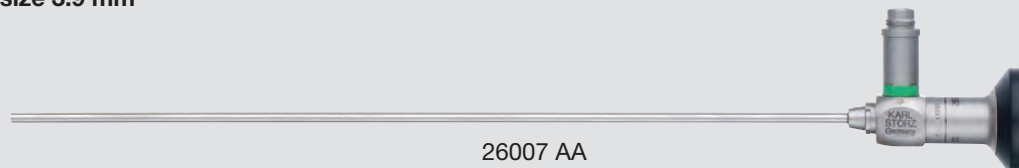


26008 BA

**HOPKINS® Forward-Oblique Telescope 30°**, diameter 2 mm, length 26 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

Diameter 3.3 mm, length 25 cm

Trocars size 3.9 mm



26007 AA



26007 AA

**HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 3.3 mm, length 25 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



26007 BA

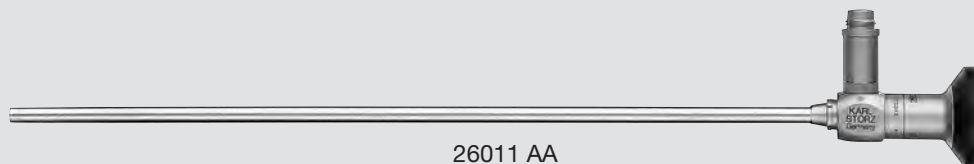
**HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 3.3 mm, length 25 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

2-151

**Trocars for use with telescopes with diameter 2 mm** see pages 51 and 58  
**Trocars for use with telescopes with diameter 3.3 mm** see pages 44 and 59  
**Containers for Sterilization and Storage of Telescopes** see HYGIENE catalog  
**Components/Spare Parts** see chapter 18

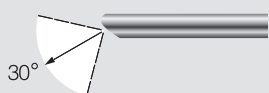
Diameter 5 mm, length 24 cm

Trocars size 6 mm



26011 AA

**HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 5 mm, length 24 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

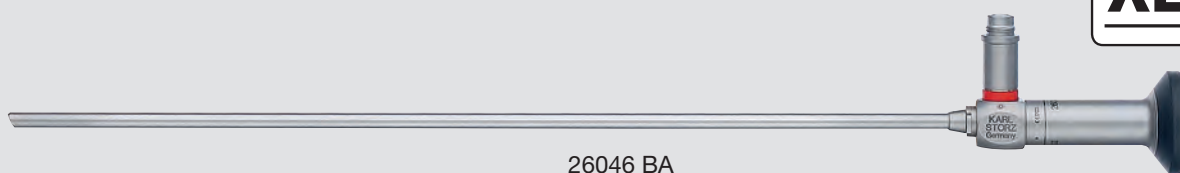


26011 BA

**HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 5 mm, length 24 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

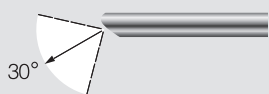
Diameter 5 mm, length 29 cm

Trocars size 6 mm



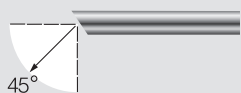
26046 AA

**HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



26046 BA

**HOPKINS® Forward-Oblique Telescope 30°**, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



26046 FA

**HOPKINS® Telescope 45°**, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

**Trocars for use with telescopes with diameter 5 mm** see pages 45-46, 53, 60, 65 and 69

**Containers for Sterilization and Storage of Telescopes** see HYGIENE catalog

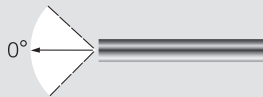
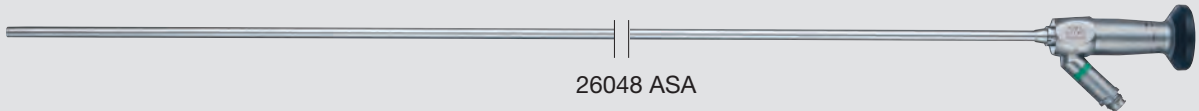
**Components/Spare Parts** see chapter 18

# HOPKINS® Telescopes

Diameter 5.5 mm, length 50 cm

Trocars size 6 mm

Recommended for use in single-port procedures



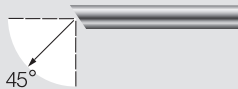
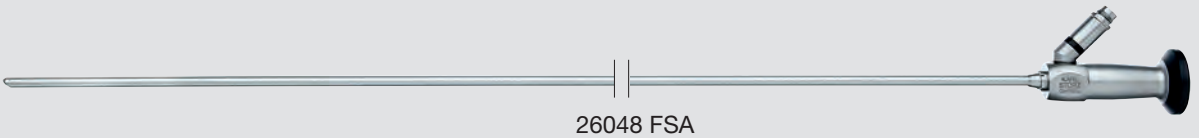
26048 ASA

**HOPKINS® Straight Forward Telescope 0°**, diameter 5.5 mm, length 50 cm, **autoclavable**, fiber optic light transmission incorporated, light connection offset by 180° and angled 45°, color code: green



26048 BSA

**HOPKINS® Forward-Oblique Telescope 30°**, diameter 5.5 mm, length 50 cm, **autoclavable**, fiber optic light transmission incorporated, light connection offset by 180° and angled 45°, color code: red



26048 FSA

**HOPKINS® Telescope 45°**, diameter 5.5 mm, length 50 cm, **autoclavable**, fiber optic light transmission incorporated, light connection angled 45°, color code: black

Diameter 10 mm, length 31 cm

Trocars size 11 mm

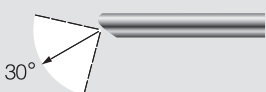


26003 AA



26003 AA

**HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



26003 BA

**HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



26003 FA

**HOPKINS® Telescope 45°**, enlarged view, diameter 10 mm, length 31 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

Diameter 10 mm, length 42 cm

Trocars size 11 mm

Recommended for use for surgery in the adipose patient



26003 BEA



26003 AEA

**HOPKINS® Straight Forward Telescope 0°**, enlarged view, diameter 10 mm, length 42 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



26003 BEA

**HOPKINS® Forward-Oblique Telescope 30°**, enlarged view, diameter 10 mm, length 42 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



26003 FEA

**HOPKINS® Telescope 45°**, enlarged view, diameter 10 mm, length 42 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

Trocars for use with telescopes with diameter 10 mm see pages 47-48, 54, 61, 66 and 69

Containers for Sterilization and Storage of Telescopes see HYGIENE catalog

Components/Spare Parts see chapter 18

# HOPKINS® Telescopes

with inbuilt working channel 6 mm

Diameter 10 mm, length 27 cm

Trocars size 11 mm

for use with **CLICKline**®, **TAKE APART**® and **ROBI**® instruments size 5 mm and length 43 cm



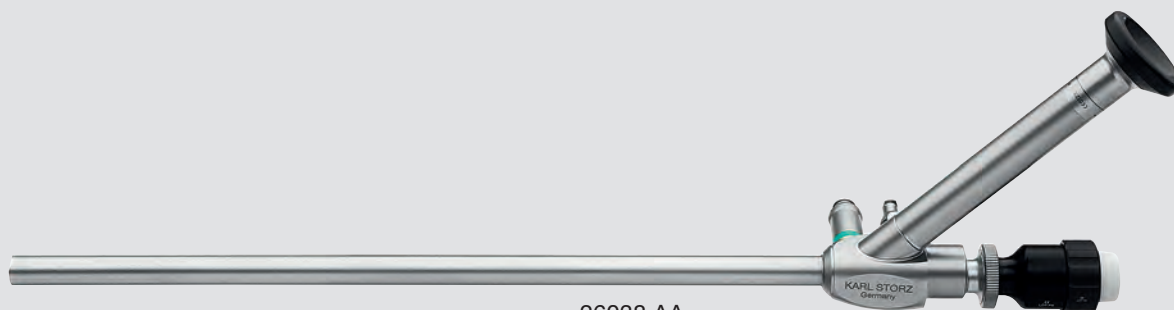
26034 AA



0°

26034 AA

**HOPKINS® Straight Forward Telescope 0°**, with parallel eyepiece, diameter 10 mm, length 27 cm, **autoclavable**, fiber optic light transmission incorporated, **with 6 mm working channel**



26038 AA



0°

26038 AA

**HOPKINS® Straight Forward Telescope 0°**, with angled eyepiece, diameter 10 mm, length 27 cm, **autoclavable**, fiber optic light transmission incorporated, **with 6 mm working channel**

**Trocars for use with telescopes with diameter 10 mm** see pages 47-48, 54, 61, 66 and 69

**Containers for Sterilization and Storage of Telescopes** see HYGIENE catalog

**Components/Spare Parts** see chapter 18

# HOPKINS® Telescopes

with inbuilt working channel 7.5 mm

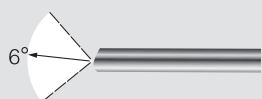
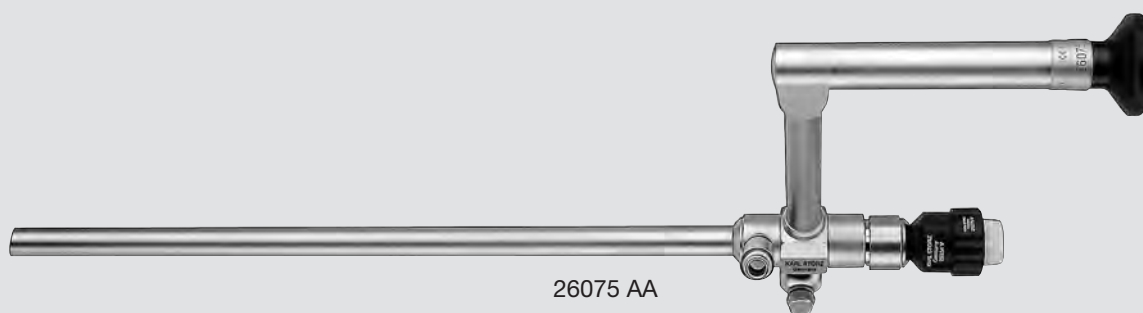
Diameter 11 mm, length 27.5 cm

Trocars size 13.5 mm

## Special Features:

The HOPKINS® telescope with 7.5 mm working channel enables the use of:

- Operating instruments up to diameter 7 mm
- HICAP® insufflation connection – essential feature for smoke evacuation



26075 AA

**HOPKINS® Wide Angle Straight Forward Telescope 6°**, with parallel eyepiece, diameter 11 mm, length 27.5 cm, **autoclavable**, fiber optic light transmission incorporated, **with 7.5 mm working channel**

**Trocars for use with telescopes with diameter 11 mm** see pages 55, 66-67 and 69

**Containers for Sterilization and Storage of Telescopes** see HYGIENE catalog

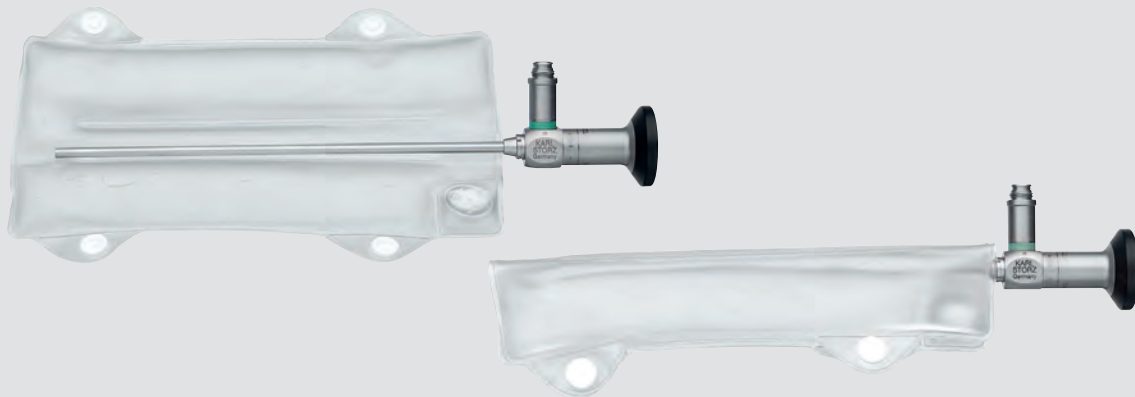
**Components/Spare Parts** see chapter 18



## Endoscope Warmers

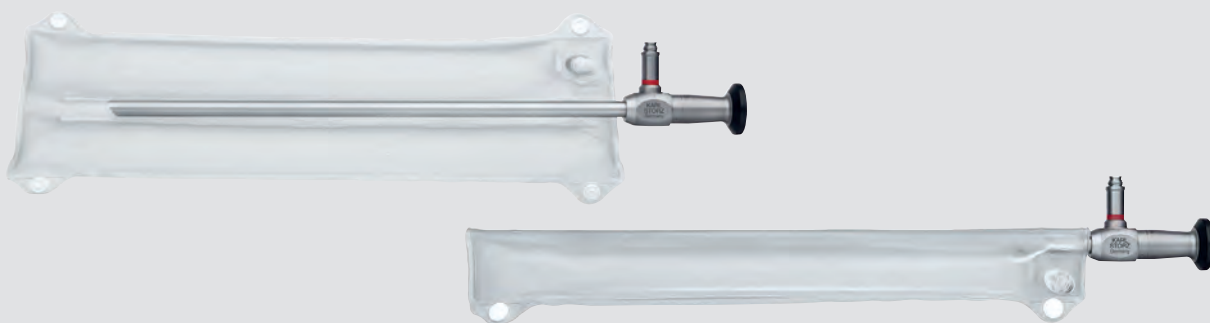
### Special Features:

- No endoscope fogging
- Easy to handle as no other heat source (electricity, warm water etc.) required
- Product is sterile on delivery and is ready for immediate use
- Two scopes can be heated in the warmer at the same time
- Available in two different sizes
- Can be used for approx. two hours after activation



100120-15

100120-15 **Endoscope Warmer**, 12 x 20 cm, sterile, for single use, package of 15, for use with all standard rigid endoscopes featuring optical systems with lengths that fit into the pad



100121-10

100121-10 **Endoscope Warmer**, 12 x 36 cm, sterile, for single use, package of 10, for use with all standard rigid endoscopes featuring optical systems with lengths that fit into the pad

# Fiber Optic Light Cables and Antifog Solution

## 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.

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



# TROCARS FOR LAPAROSCOPY, Sizes 2.5 – 22 mm AND S-PORT

OPEN LAPAROSCOPY .....41

TERNAMIAN ENDOTIP CANNULAS  
Sizes 3.9 – 11 mm .....42-48

VERESS  
PNEUMOPERITONEUM NEEDLES .....49

TROCARS  
Sizes 2.5 – 22 mm .....50-69

S-PORT .....70-71

ACCESSORIES .....72-74

# Trocars for Laparoscopy

## Special Features:

- Stainless steel
- Autoclavable
- **Oblique end:** Cannulas with an oblique end allow smooth entry and perforation of the peritoneum.
- With and without **stopcock for insufflation** and therefore also suitable for “single-site” surgical procedures
- **Color coding:** For easier identification of different sizes and lengths
- TERNAMIAN ENDOTIP System:  
With the TERNAMIAN ENDOTIP system, KARL STORZ presents a reusable instrument which provides entry into the abdominal cavity under visual control. The TERNAMIAN ENDOTIP system replaces standard trocars while preserving the integrity of both the fascia and the fascial shutter mechanism.

- Trocars with pyramidal, blunt, conical or a combination of tips.



Combined pyramidal, blunt and conical tip that enables atraumatic yet smooth introduction of the trocar.

## Trocars with flap valves (automatic and multifunctional):



Trocars with **automatic valves** allow the introduction of instruments without any significant loss of gas resulting from valves being opened prematurely. Sharp instruments, such as needles, hook dissectors or knives may become blunt as a result of repeated contact with the valve flap.



To prevent this sort of wear from occurring, KARL STORZ developed the **multifunctional valve** which can be opened both automatically and manually. When blunt instruments are inserted, the valve flaps open automatically. When inserting sharp instruments, the valve can be opened manually (by applying finger pressure). This protects sharp or sensitive instruments.

## Trocars with silicone leaflet valves



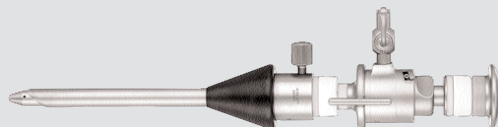
As the **silicone leaflet valve** features a modular construction, it can be cleaned when dismantled. It is suitable for pediatric surgery as well as both extracorporeal and intracorporeal suturing techniques with conventional suture material using straight and curved needles. The elastic silicone leaflet valve seals off the cannula while preventing damage to the introduced suture threads.

## Trocars with valve seal



The **valve seal** is a one-piece sealing system that is designed for single use (sterile). Its lightweight construction and very low friction between the seal and the instrument allows precise and delicate work.

For KARL STORZ trocars only the individual components are numbered. The catalog number for the **entire assembled trocar**, as shown in the table in **bold print**, does not appear on the instrument.



30103 AO

- 30103 AO **Trocar**, size 11 mm, color code: green including:  
**Cannula**, with 2 flanges for fixation of sutures, adjustable cone, with insufflation stopcock, working length 13 cm  
**Trocar only**, with blunt tip  
**Automatic Valve**  
**Cone**



30103 CM1

- 30103 CM1 **Metal Cone**, with lateral suture anchor, for trocars size 11 mm, color code: green



30160 C3

- 30160 C3 **Cone**, ribbed, with 2 discs for fixation of sutures, for trocars size 6 mm, color code: black  
 30103 C3 **Same**, size 11 mm, color code: green



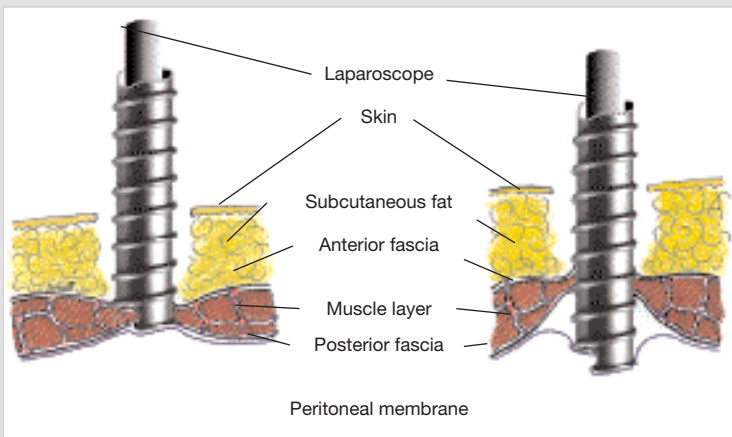
26031 SO

- 26031 SO **Retractor**, S-shaped, 2 pieces, length 17 cm

2-984

**Trocars with blunt tip** see pages 52-55, 59-62 and 64-69  
**Components/Spare Parts** see chapter 18

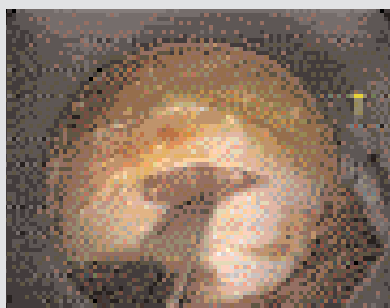
The TERNAMIAN ENDOTIP System (Endoscopic Threaded Imaging Port) is a KARL STORZ instrument for optically controllable access to the abdominal cavity. The TERNAMIAN ENDOTIP replaces conventional trocars and, due to its special design, offers a range of advantages for both surgeon and patient.



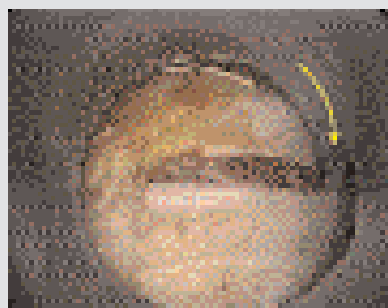
- The tissue is not cut through as it is when punctured with a conventional trocar, but is merely displaced. The integrity of the fasciae is preserved, and, therefore, that of the fascial closure mechanism.

- As sharp points or cutting trocars are not used, the risk of unintentional injuries to the patient is eliminated.
- Since the TERNAMIAN ENDOTIP System is not pushed into the peritoneum by applying pressure, but is introduced by controlled rotation, injuries to organs caused by uncontrolled penetration of the abdominal wall are virtually impossible.

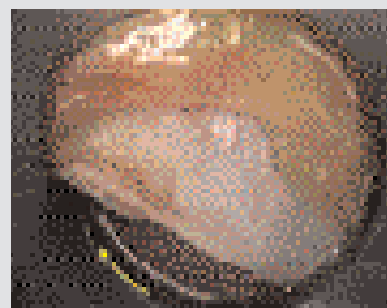
- In conjunction with a HOPKINS® telescope, the surgeon has an excellent, enlarged image of the point of penetration and is, therefore, able to carefully monitor the penetration under optical control. The various tissue layers can be identified precisely.
- The special design of the TERNAMIAN ENDOTIP System ensures a secure hold in the abdominal wall and prevents gas loss at the point of penetration.\*



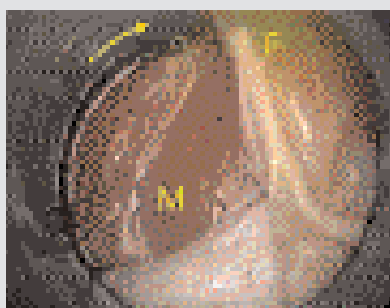
A small horizontal anterior rectus fascial incision is made under magnified video control. Blunt cannula tip (T).



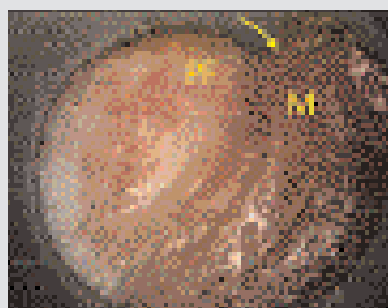
The TERNAMIAN ENDOTIP cannula is engaged in the anterior rectus fascial window and rotated clockwise.



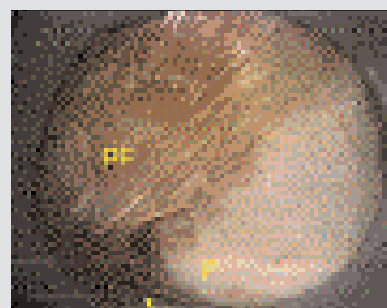
Under clear visual control the cannula advances atraumatically without applying axial penetration force.



Rotation stretches radially, transposes and then lifts the anterior rectus fascia (F) and muscle (M) on to the cannula's outer thread.

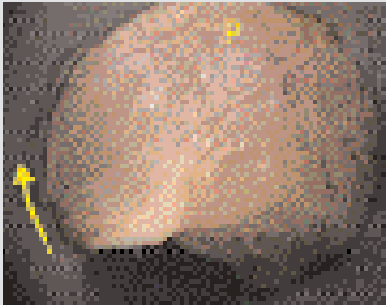


The rectus muscle (M) is transposed laterally to expose the posterior rectus fascia (PF).



Further rotation will lift the posterior rectus fascia (PF) and advance the cannula to the pre-peritoneal space (P).

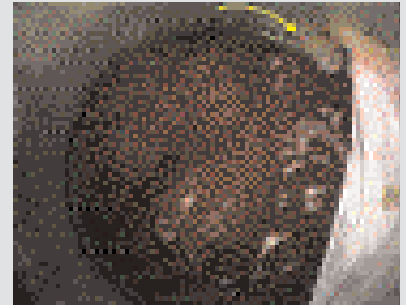
\* Sources: see page 43



The thin peritoneal membrane transilluminates and appears blue-gray in color (P).



Continuous video control demonstrates different entry and exit layers clearly. This unique feature of the TERNAMIAN EndoTIP System allows the surgeon to stop advancing the cannula if bowel, vessels or adhesions are observed.



Access is under magnified visual control and atraumatic. Fascia and muscle fibers are not transected. The cannula's thread acts as a stabilizer to prevent slippage and discourage CO<sub>2</sub> leakage.



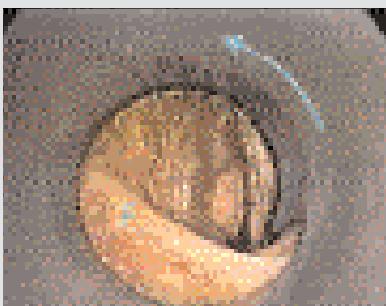
When the surgery is completed the cannula is rotated counter-clockwise. The different tissue layers disengage from the outer thread to converge in perfect apposition.



The peritoneum appears first (P), followed by the posterior rectus fascia (PF), rectus muscle (M), and then the anterior rectus fascia.



The rectus muscle fibers meet vertically to seal the peritoneal window, while the anterior rectus fascia shuts horizontally, to restore the natural tissue fiber orientation.



Since access is under visual control, hiatal or omental herniation along the cannula's tract is avoided. Lower half of anterior rectus fascia (F).



As sharp instruments or trocars are not used, muscle and fascial fibers are not transected and no tripolar fascial rent is sustained.



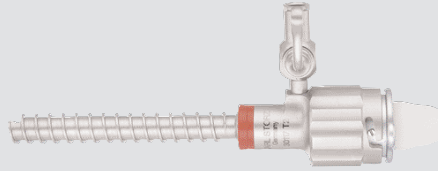
Tissue integrity is preserved at the access and exit site, maintaining the natural muscle shutter-mechanism.

\* **Sources:** *Laparoscopic Abdominal Entry by the Ternamian Threaded Visual System*, A. TERNAMIAN, *Laparoscopic Entry*, pp. 33-66, 2011  
*Endoscopic Threaded Imaging Port (EndoTIP) for Laparoscopy: Experience with Different Body Weights*, A. TERNAMIAN & M. DEITEL, *Obesity Surgery* (9), pp. 44-47, 1999

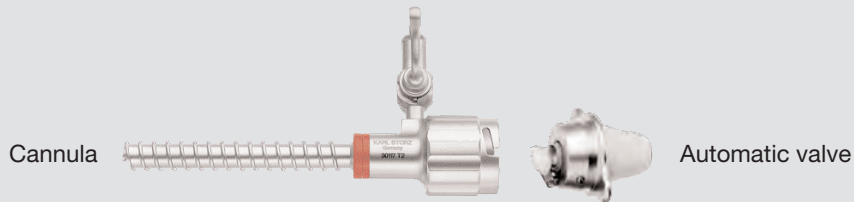
# TERNAMIAN EndoTIP Cannulas

Size 3.9 mm

For use with instruments size 3/3.5 mm  
and telescopes diameter 3.3 mm






30117 MT



Cannula

Automatic valve

<b>Size:</b>		<b>3.9 mm</b>
Working length:		5 cm
Color code:		red
	TERNAMIAN <b>ENDOTIP</b> Cannula including: <b>Cannula</b> , with thread and insufflation stopcock <b>Automatic Valve</b>	<b>30117 MT</b>  30117 T2 30117 A1
<b>Accessories</b> 	<b>Telescope Stopper</b> , sterile, for single use, package of 12 	30117 CS

Telescopes for use with TERNAMIAN **ENDOTIP** cannulas, size 3.9 mm see page 31  
Components/Spare Parts see chapter 18



# TERNAMIAN EndoTIP Cannulas

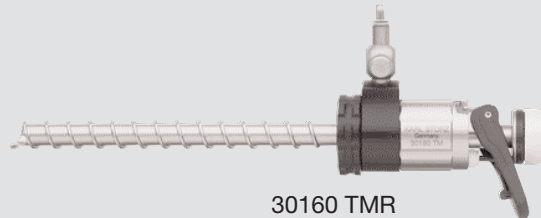
Size 6 mm

For use with instruments and telescopes diameter 5 mm

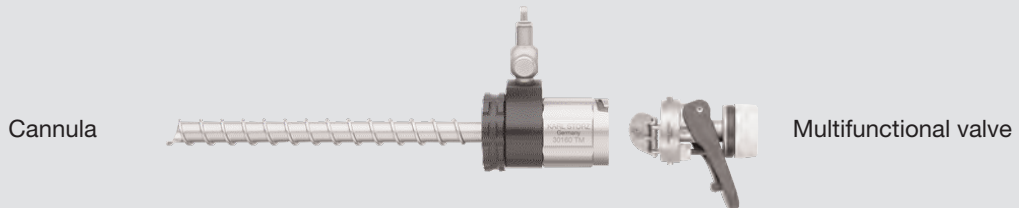


**Special Features:**

- Detachable stopcock housing
- Weight reduction due to plastic housing
- Color coding of housing indicates sizes (6 mm black/11 mm green)






30160 TMR



Cannula

Multifunctional valve

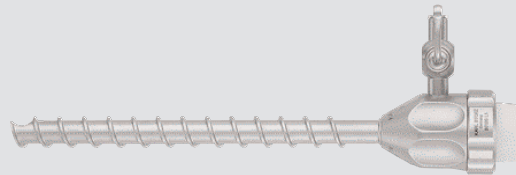
Size:		6 mm	
Working length:		8.5 cm	10.5 cm
Color code:		black	black
	<b>TERNAMIAN ENDOTIP Cannula</b> including: <b>Cannula</b> , with thread and rotatable insufflation stopcock <b>Multifunctional Valve</b>	<b>30160 TKR</b>	<b>30160 TMR</b>
		30160 TK	30160 TM
		30160 M1	30160 M1
<b>Accessories</b> 	<b>Telescope Stopper</b> , sterile, for single use, package of 12 	30160 CS	

**Telescopes for use with TERNAMIAN ENDOTIP cannulas, size 6 mm** see pages 27 and 32-33  
**Dilation Sleeves** see page 74, **Accessories for Trocars** see pages 72-73  
**Components/Spare Parts** see chapter 18

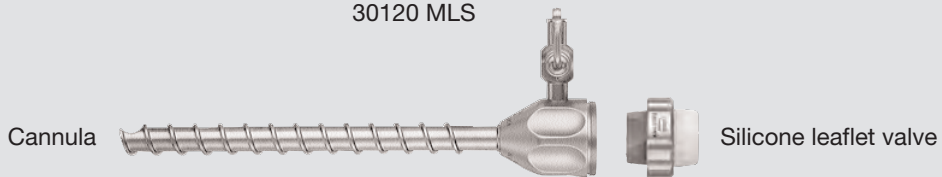
# TERNAMIAN EndoTIP Cannulas

Size 6 mm

For use with instruments and telescopes  
diameter 5 mm






30120 MLS



Cannula

Silicone leaflet valve

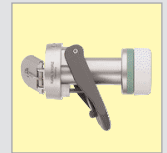
<b>Size:</b>		<b>6 mm</b>	
Working length:		6.5 cm	10.5 cm
Color code:		black	black
	<b>TERNAMIAN ENDOTIP Cannula</b> including: <b>Cannula</b> , with thread and insufflation stopcock <b>Silicone Leaflet Valve</b>	<b>30120 MSS</b>  30120 T9  30120 L1	<b>30120 MLS</b>  30120 T8  30120 L1
<b>Accessories</b> 	<b>Telescope Stopper</b> , sterile, for single use, package of 12 	30160 CS	

**Telescopes for use with TERNAMIAN ENDOTIP cannulas, size 6 mm** see pages 27 and 32-33  
**Dilation Sleeves** see page 74, **Accessories for Trocars** see pages 72-73  
**Components/Spare Parts** see chapter 18

# TERNAMIAN EndoTIP Cannulas

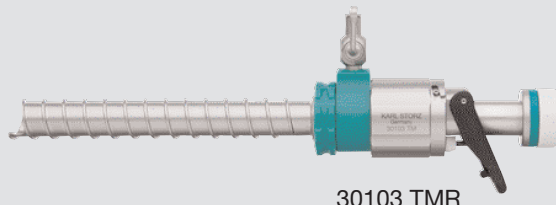
Size 11 mm

For use with telescopes diameter 10 mm



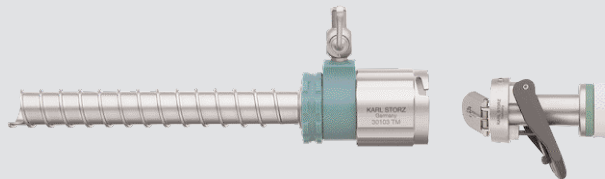
**Special Features:**

- Detachable stopcock housing
- Weight reduction thanks to plastic housing
- Color coding of housing indicates size (6 mm black/11 mm green)

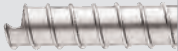




30103 TMR

Cannula



Multifunctional valve

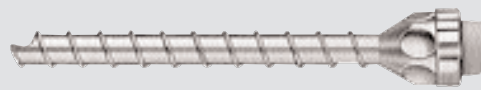
<b>Size:</b>		<b>11 mm</b>
Working length:		10.5 cm
Color code:		green
	TERNAMIAN <b>ENDOTIP Cannula</b> including: <b>Cannula</b> , with thread and rotatable insufflation stopcock <b>Multifunctional Valve</b>	<b>30103 TMR</b>  30103 TM  30103 M1
<b>Accessories</b> 	<b>Telescope Stopper</b> , sterile, for single use, package of 12 	30103 CS

Telescopes for use with TERNAMIAN **ENDOTIP** cannulas, size 11 mm see pages 27, 30 and 34  
**Dilation Sleeves** see page 74, **Accessories for Trocars** see pages 72-73  
**Components/Spare Parts** see chapter 18

# TERNAMIAN EndoTIP Cannulas

Size 11 mm

For use with telescopes diameter 10 mm






30103 ML



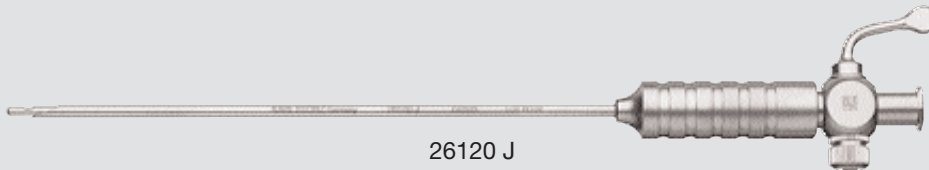
Cannula

Silicone leaflet valve

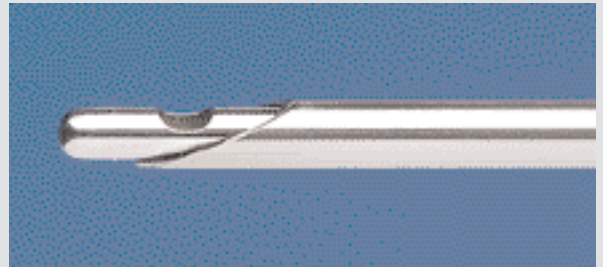
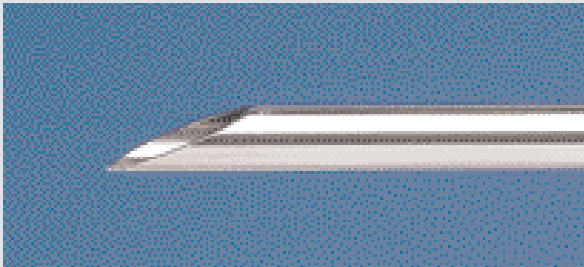
<b>Size:</b>		<b>11 mm</b>
Working length:		10.5 cm
Color code:		green
	TERNAMIAN <b>ENDOTIP</b> Cannula including: <b>Cannula</b> , with thread, without insufflation stopcock <b>Silicone Leaflet Valve</b>	<b>30103 ML</b>  30103 T6  30103 L1
<b>Accessories</b> 	<b>Telescope Stopper</b> , sterile, for single use, package of 12 	30103 CS

**Telescopes for use with TERNAMIAN ENDOTIP cannulas, size 11 mm** see pages 27, 30 and 34  
**Dilation Sleeves** see page 74, **Accessories for Trocars** see pages 72-73  
**Components/Spare Parts** see chapter 18

# VERESS Pneumoperitoneum Needles



- |           |   |
|-----------|---|
| 26120 JK  | VERESS <b>Pneumoperitoneum Needle</b> , with spring-loaded blunt inner cannula, LUER-Lock, <b>autoclavable</b> , diameter 2.1 mm, length 7 cm |
| 26120 J   | <b>Same</b> , length 10 cm  |
| 26120 JL  | <b>Same</b> , length 13 cm  |
| 26120 JLL | <b>Same</b> , length 15 cm  |
| 26120 XL  | <b>Same</b> , length 18 cm  |



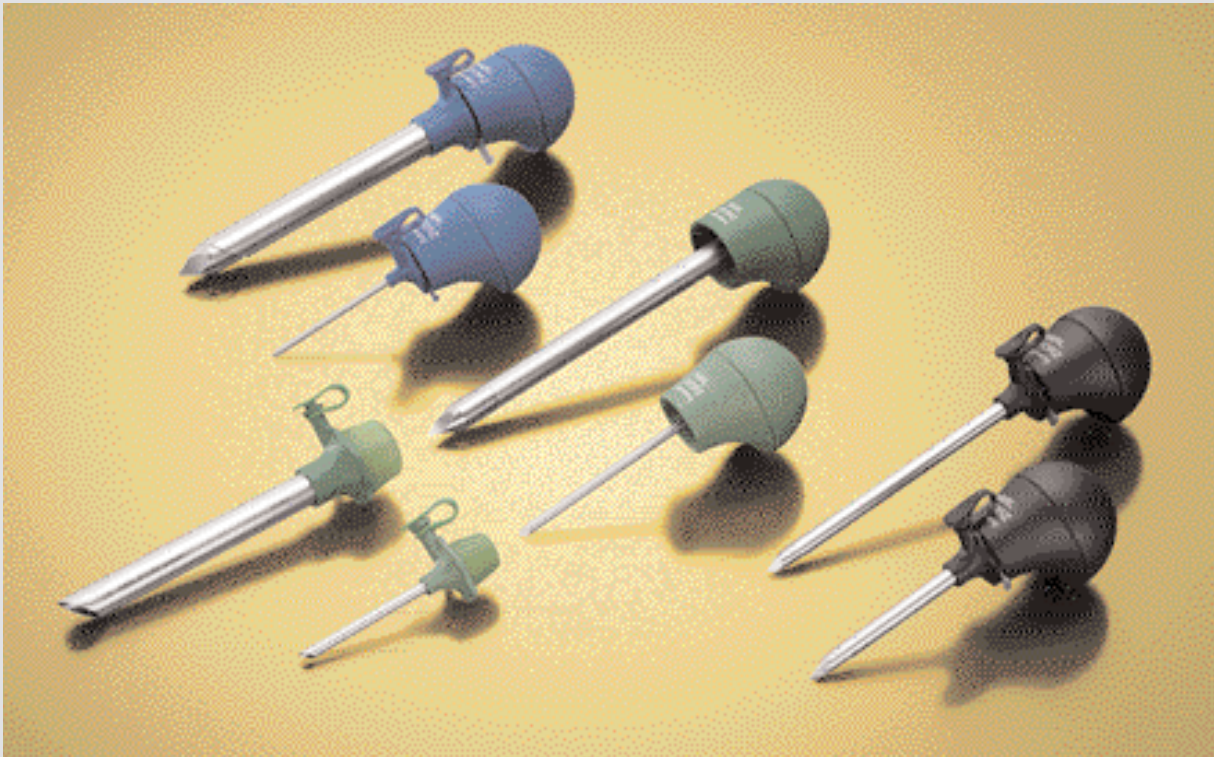
## Trocars for Laparoscopy

### Special Features:

- Good balance (optimal weight distribution in the distal and proximal ends) thanks to lightweight design
- Trocar housing and proximal end of the trocar made of colored plastic
- Color coded in blue, green and black according to trocar size
- Valve seals for single use included with each trocar set in packages of 10 (sterile)
- Low friction between seal and instrument
- Trocars are available in sizes 2.5 mm, 3.5 mm and 6 mm with a length of 5 cm for laparoscopy in pediatric surgery as well as in sizes 3.5 mm, 6 mm, 11 mm and 13.5 mm with a length of 10 cm for laparoscopy in adult surgery
- Reducer 30141 RS for trocar sizes 11 mm and 13.5 mm (see Accessories on page 72)



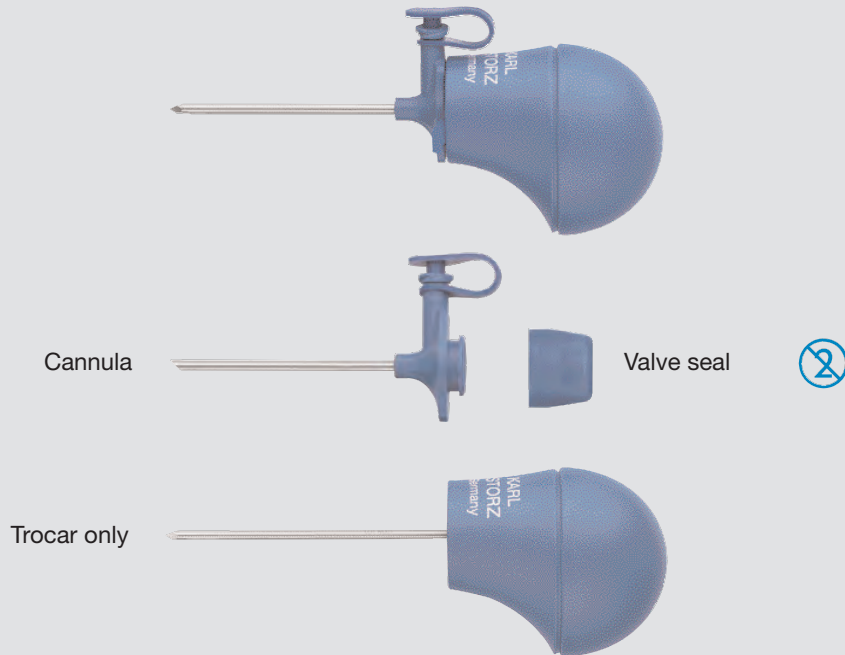
The **valve seal** is a one-piece sealing system that is designed for single use (sterile). A special feature is its lightweight construction and low friction between the seal and the instrument.




# Trocars

Size 2.5 mm

For use with instruments and telescopes diameter 2 mm



<b>Size:</b>	<b>2.5 mm</b>
Working length:	5 cm
Color code:	blue
	<p><b>Trocar</b>, with pyramidal tip including:</p> <p><b>Cannula</b>, with LUER-Lock connector</p> <p><b>Trocar only</b></p> <p><b>Valve Seal</b>, sterile, for single use, package of 10</p>
	<p><b>11603 GZS</b></p> <p>11603 G5</p> <p>11603 ZS</p> <p>021099-10*</p>

2-151

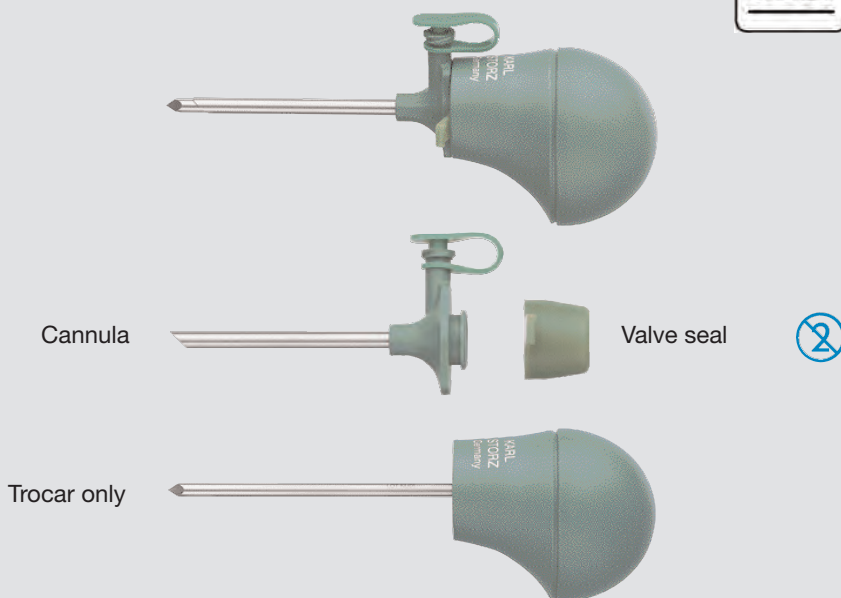


Telescopes for use with trocars size 2.5 mm see page 31  
Components/Spare Parts see chapter 18

# Trocars

Size 3.5 mm

For use with instruments and telescopes diameters 3 and 3.5 mm



Size:		3.5 mm	
		5 cm green	10 cm green
Working length:			
Color code:			
	<b>Trocar</b> , with pyramidal tip including: <b>Cannula</b> , with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal</b> , sterile, for single use, package of 10	<b>30114 GZS</b>  30114 G5  30114 ZS 021199-10*	<b>30114 GZG</b>  30114 G6  30114 ZG 021199-10*
	<b>Trocar</b> , with blunt conical tip including: <b>Cannula</b> , with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal</b> , sterile, for single use, package of 10	<b>30114 GNS</b>  30114 G5  30114 NS 021199-10*	<b>30114 GNG</b>  30114 G6  30114 NG 021199-10*
	<b>Trocar</b> , with conical tip including: <b>Cannula</b> , with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal</b> , sterile, for single use, package of 10	<b>30114 GYS</b>  30114 G5  30114 YS 021199-10*	<b>30114 GYG</b>  30114 G6  30114 YG 021199-10*



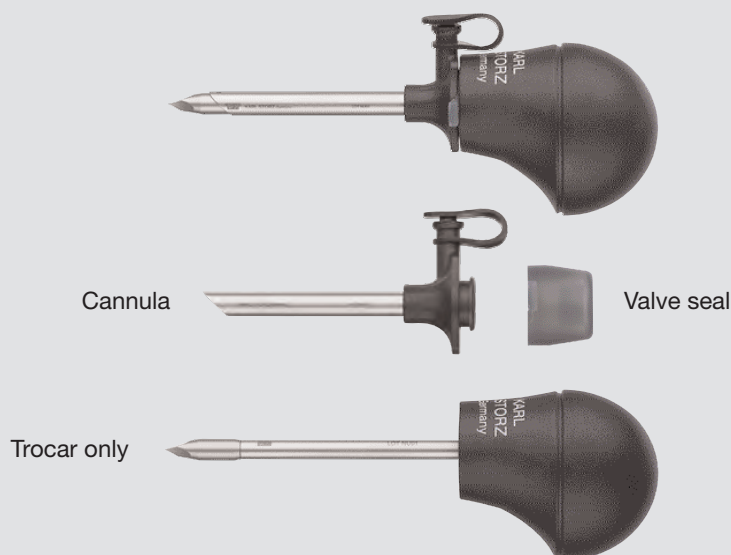
Components/Spare Parts see chapter 18



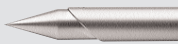


# Trocars

Size 6 mm

For use with instruments and telescopes diameter 5 mm



Size:		6 mm	
Working length:		5 cm	10 cm
Color code:		black	black
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal,</b> sterile, for single use, package of 10	<b>30160 GZS</b>  30160 G5  30160 ZS 021299-10*	<b>30160 GZG</b>  30160 G6  30160 ZG 021299-10*
	<b>Trocar, with blunt conical tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal,</b> sterile, for single use, package of 10	<b>30160 GNS</b>  30160 G5  30160 NS 021299-10*	<b>30160 GNG</b>  30160 G6  30160 NG 021299-10*
	<b>Trocar, with conical tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal,</b> sterile, for single use, package of 10	<b>30160 GYS</b>  30160 G5  30160 YS 021299-10*	<b>30160 GYG</b>  30160 G6  30160 YG 021299-10*



Telescopes for use with trocars size 6 mm see pages 27 and 32-33

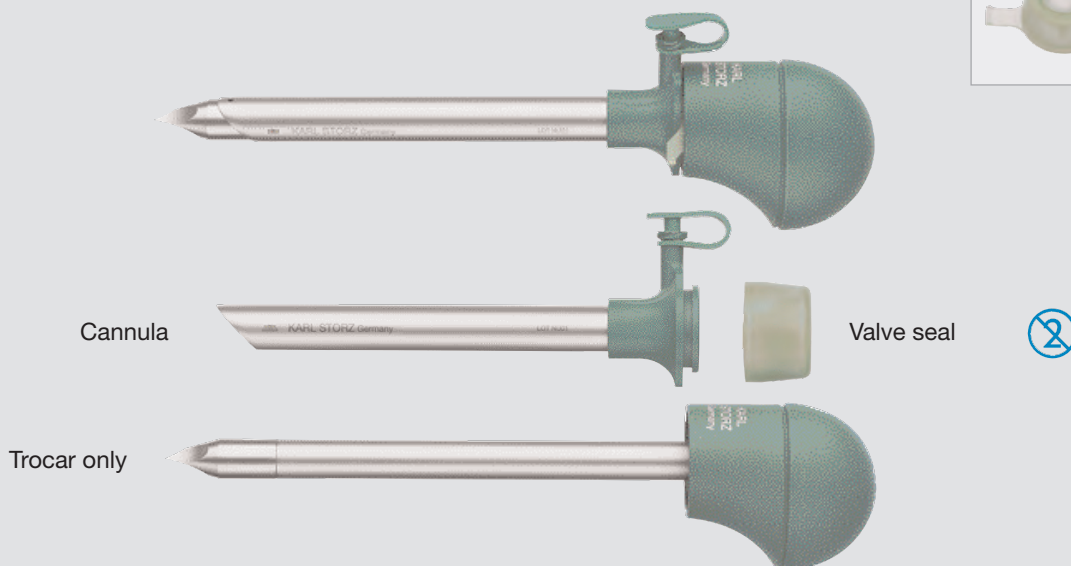
Accessories for Trocars see pages 72-73

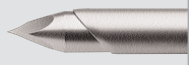


Components/Spare Parts see chapter 18

# Trocars

Size 11 mm

For use with instruments and telescopes diameter 10 mm



<b>Size:</b>	<b>11 mm</b>
Working length:	10 cm
Color code:	green
	<p><b>Trocar, with pyramidal tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal,</b> sterile, for single use, package of 10</p> <p><b>30103 GZG</b>  30103 G6  30103 ZG 021399-10*</p>
	<p><b>Trocar, with blunt conical tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal,</b> sterile, for single use, package of 10</p> <p><b>30103 GNG</b>  30103 G6  30103 NG 021399-10*</p>
	<p><b>Trocar, with conical tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal,</b> sterile, for single use, package of 10</p> <p><b>30103 GYG</b>  30103 G6  30103 YG 021399-10*</p>

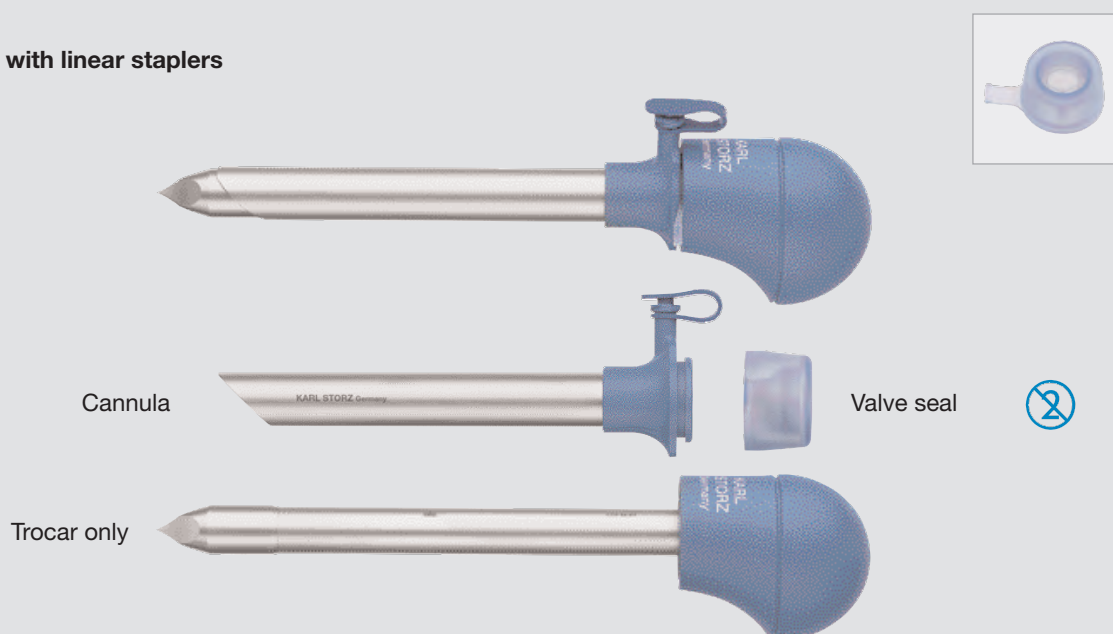


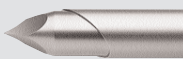


Telescopes for use with trocars size 11 mm see pages 27, 30, 34-35  
Dilation Sleeves see page 74, Accessories for Trocars see pages 72-73  
Components/Spare Parts see chapter 18

# Trocars

Size 13.5 mm

For use with linear staplers



<b>Size:</b>	<b>13.5 mm</b>	
Working length:	10 cm	
Color code:	blue	
	<p><b>Trocar</b>, with pyramidal tip including: <b>Cannula</b>, with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal</b>, sterile, for single use, package of 10</p>	<p><b>30108 GZG</b>  30108 G6  30108 ZG 021499-10*</p>
	<p><b>Trocar</b>, with blunt conical tip including: <b>Cannula</b>, with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal</b>, sterile, for single use, package of 10</p>	<p><b>30108 GNG</b>  30108 G6  30108 NG 021499-10*</p>
	<p><b>Trocar</b>, with conical tip including: <b>Cannula</b>, with LUER-Lock connector <b>Trocar only</b> <b>Valve Seal</b>, sterile, for single use, package of 10</p>	<p><b>30108 GYG</b>  30108 G6  30108 YG 021499-10*</p>

2-151



**Dilation Sleeves** see page 74

**Accessories for Trocars** see pages 72-73

**Components/Spare Parts** see chapter 18

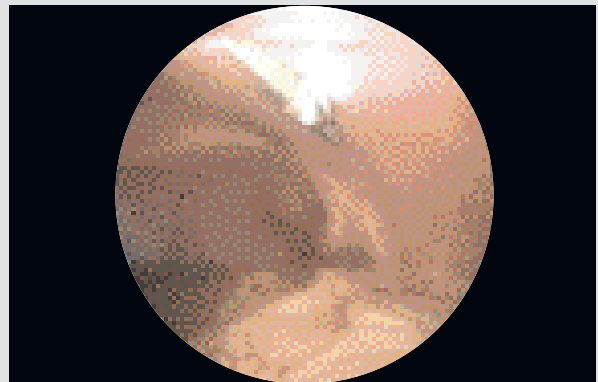
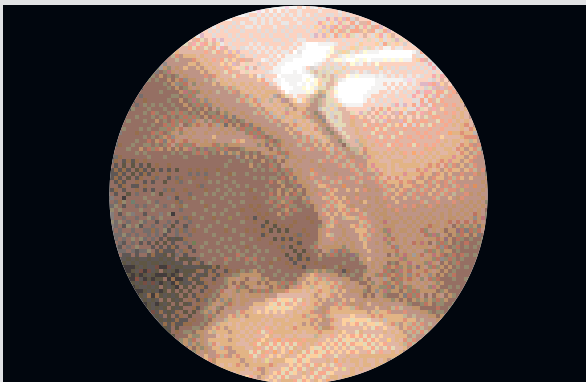
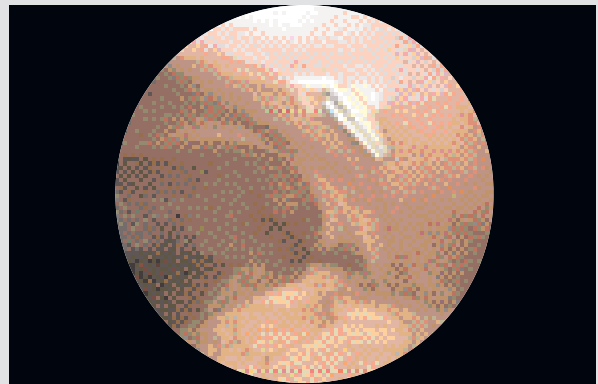
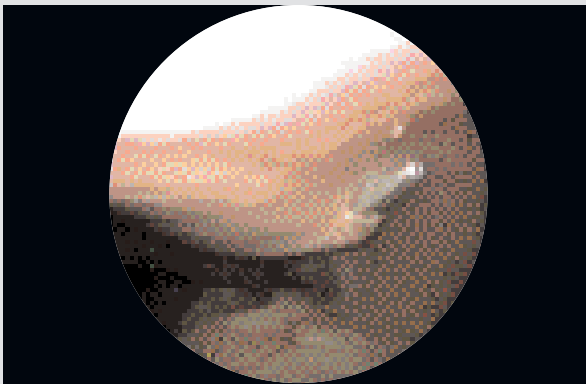
# TAN RoTaLock® Trocar

Sizes 3.5 and 6 mm



## Special Features:

- Distal tip of the cannula enables fixation directly under the abdominal wall and prevents the cannula from slipping out of the abdominal wall
- Due to the short length of the sheath, the distal tip of the cannula does not hinder opening of the jaws
- One-piece sealing system for single use. A package of 10 sterile valve seals is included in each trocar set.
- Available in sizes 3.5 and 6 mm



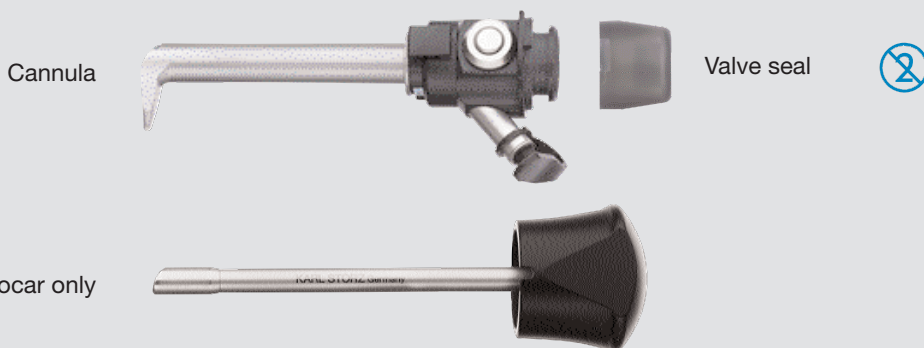
*Figs. 1-4: Introducing the ROTALOCK® trocar*

# TAN RoTaLock® Trocar

Sizes 3.5 and 6 mm

RoTaLock

**XS**



## For use with instruments size 3 mm

<b>Size:</b>		<b>3.5 mm</b>
Working length:		3 cm
Color code:		green
	<b>TAN ROTALOCK® Trocar</b> including: <b>Cannula</b> , without LUER-Lock connector <b>Valve Seal</b> , sterile, for single use, package of 10 <b>Fixation Disc</b> , package of 5	<b>30114 RO</b>  30114 RT 021199-10* 30114 RS
<b>Optional:</b>	<b>Trocar only</b>	30114 RB

## For use with instruments size 5 mm

<b>Size:</b>		<b>6 mm</b>
Working length:		5 cm
Color code:		black
	<b>TAN ROTALOCK® Trocar</b> including: <b>Cannula</b> , with LUER-Lock connector <b>Valve Seal</b> , sterile, for single use, package of 10 <b>Fixation Disc</b> , package of 5	<b>30160 RO</b>  30160 RT 021299-10* 30160 RS
<b>Optional:</b>	<b>Trocar only</b>	30160 RB



# Trocars

Size 2.5 mm

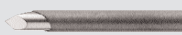
For use with instruments size 2 mm



Cannula

Silicone leaflet valve

Trocar only

<b>Size:</b>	<b>2.5 mm</b>
Working length:	4 cm
Color code:	blue
	<p><b>Trocar</b>, with pyramidal tip including:</p> <p><b>Cannula</b>, with LUER-Lock connector</p> <p><b>Trocar only</b></p> <p><b>Silicone Leaflet Valve</b></p>
	<p><b>11603 GK</b></p> <p>11603 G1</p> <p>11603 K</p> <p>11603 L1</p>



Telescopes for use with trocars size 2.5 mm see page 31  
Components/Spare Parts see chapter 18

# Trocars

Size 3.9 mm

For use with instruments sizes 3 and 3.5 mm and telescopes diameter 3.3 mm



Size:		3.9 mm			
		5 cm red	7.5 cm red-white	10 cm red-green	
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Silicone Leaflet Valve</b>	<b>30117 GPK</b>  30117 G3  30117 PK 30117 L1	<b>30117 GPM</b>  30117 G2  30117 PM 30117 L1	<b>30117 GP</b>  30117 G1  30117 P 30117 L1	
		<b>Trocar, with blunt tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Silicone Leaflet Valve</b>	<b>30117 GAK</b>  30117 G3  30117 AK 30117 L1	<b>30117 GAM</b>  30117 G2  30117 AM 30117 L1	<b>30117 GA</b>  30117 G1  30117 A 30117 L1

Telescopes for use with trocars size 3.9 mm see page 31  
Components/Spare Parts see chapter 18





# Trocars

Size 6 mm



For use with instruments and telescopes diameter 5 mm



Size:		6 mm		
		5 cm black-green	8.5 cm black-white	10.5 cm black
Working length:				
Color code:				
	<b>Trocar, with conical tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Silicone Leaflet Valve</b>	<b>30160 GYK</b>  30160 G3  30160 YK 30160 L1	<b>30160 GYM</b>  30160 G2  30160 Y 30160 L1	<b>30160 GC</b>  30160 G1  30160 C 30160 L1
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Silicone Leaflet Valve</b>	<b>30160 GZK</b>  30160 G3  30160 ZK 30160 L1	<b>30160 GZM</b>  30160 G2  30160 Z 30160 L1	<b>30160 GP</b>  30160 G1  30160 P 30160 L1
	<b>Trocar, with blunt tip</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Silicone Leaflet Valve</b>	<b>30160 GXK</b>  30160 G3  30160 XK 30160 L1	<b>30160 GXM</b>  30160 G2  30160 X 30160 L1	<b>30160 GA</b>  30160 G1  30160 A 30160 L1
	<b>Trocar</b> including: <b>Cannula,</b> with LUER-Lock connector <b>Trocar only</b> <b>Silicone Leaflet Valve</b>	–	–	<b>30160 GB</b>  30160 G1  30160 B 30160 L1

Telescopes for use with trocars size 6 mm see pages 27 and 32-33

Accessories for Trocars see pages 72-73

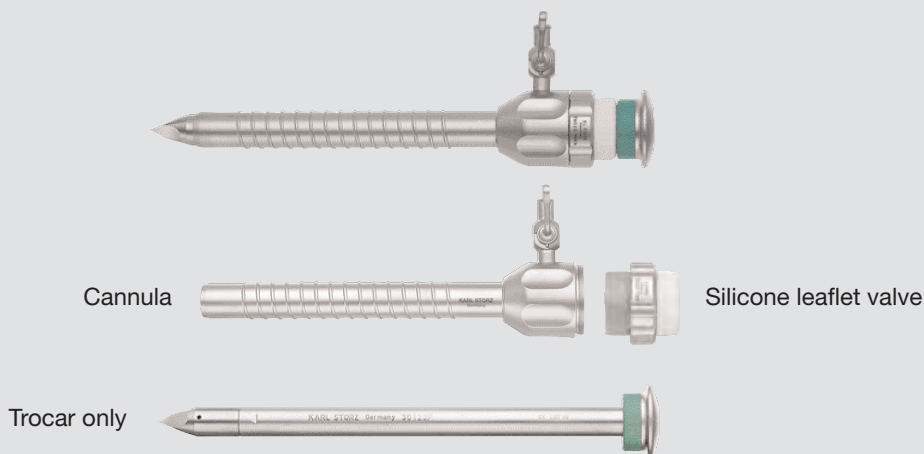
Components/Spare Parts see chapter 18






# Trocars

Size 11 mm

For use with instruments and telescopes diameter 10 mm



<b>Size:</b>	<b>11 mm</b>	
Working length:	10.5 cm	
Color code:	green	
	<p><b>Trocar, with conical tip</b> including: <b>Cannula, with thread</b> <b>Trocar only</b> <b>Silicone Leaflet Valve</b></p>	<p><b>30123 TCS</b></p> <p>30123 TS1 30123 C 30123 L1</p>
	<p><b>Trocar, with pyramidal tip</b> including: <b>Cannula, with thread</b> <b>Trocar only</b> <b>Silicone Leaflet Valve</b></p>	<p><b>30123 TPS</b></p> <p>30123 TS1 30123 P 30123 L1</p>
	<p><b>Trocar, with blunt tip</b> including: <b>Cannula, with thread</b> <b>Trocar only</b> <b>Silicone Leaflet Valve</b></p>	<p><b>30123 TBS</b></p> <p>30123 TS1 30123 B 30123 L1</p>
	<p><b>Trocar</b> including: <b>Cannula, with thread</b> <b>Trocar only</b> <b>Silicone Leaflet Valve</b></p>	<p><b>30123 TFS</b></p> <p>30123 TS1 30123 F 30123 L1</p>

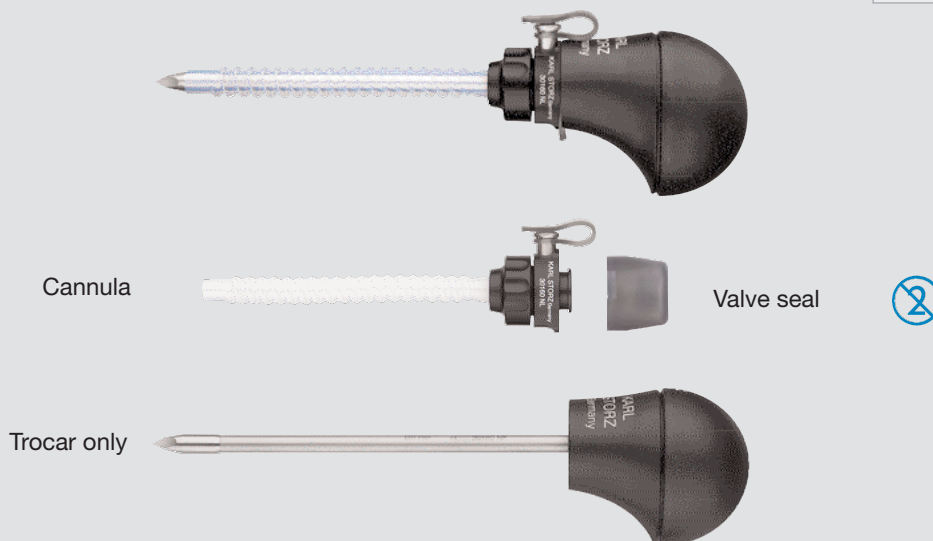
7-11


Telescopes for use with trocars size 11 mm see pages 27, 30 and 34-35  
Dilation Sleeves see page 74, Accessories for Trocars see pages 72-73  
Components/Spare Parts see chapter 18

# Trocars with Flexible Sleeves

Sizes 6 and 11 mm

For use with curved operating instruments



<b>Size:</b>		<b>6 mm</b>	<b>11 mm</b>
Working length:		8.5 cm	8.5 cm
Color code:		black	green
	<b>Trocar</b> , with pyramidal tip including: <b>Cannula</b> , flexible, with valve seal <b>Trocar only</b> <b>Valve Seal</b> , sterile, for single use, package of 10	<b>30160 NKL</b>  30160 NL  30160 NK 021299-10*	-
	<b>Trokar</b> , with blunt conical tip including: <b>Cannula</b> , flexible, with valve seal <b>Trocar only</b> <b>Valve Seal</b> , sterile, for single use, package of 10	<b>30160 NOL</b>  30160 NL  30160 NO 021299-10*	<b>30103 NOL</b>  30103 NL  30103 O 021399-10*
<b>Accessories:</b>	<b>Plastic Cannula, autoclavable,</b> for flexible trocars, package of 5  	30120 X	30123 X



**Note:** 6 mm cannulas with 9 mm head size for easier exchange of instruments: 30120 NLS.  
**Components/Spare Parts** see chapter 18

## CARVALHO Trocars



### Description

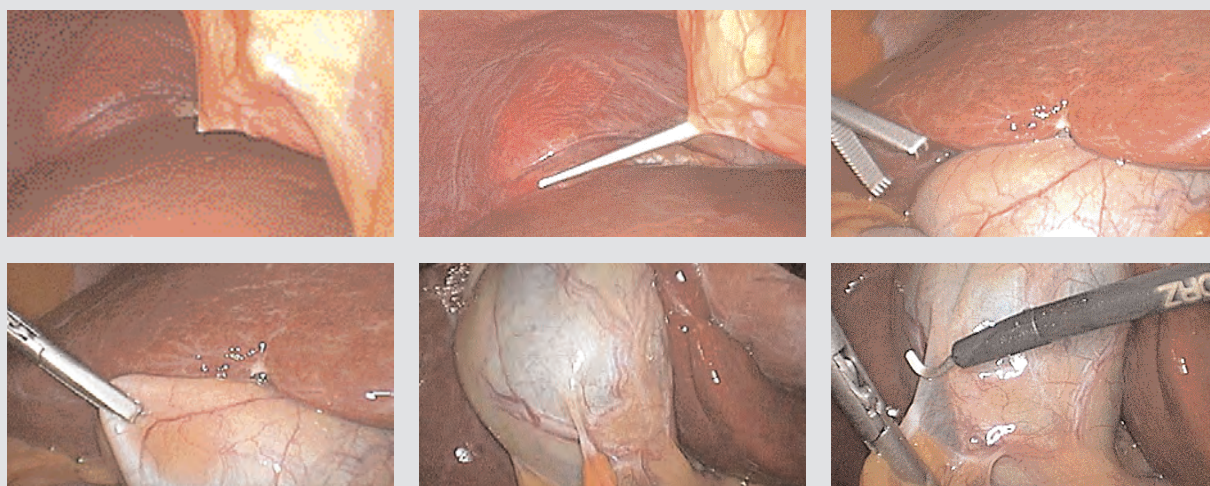
Minilaparoscopy is the natural development of minimally invasive surgery. It was first presented in 1996, proposing to diminish surgical trauma by reducing the diameter of the standard conventional laparoscopic instruments. However, minilaparoscopy as originally described in the '90s did not become popular because it was so complicated. Having available only disposable trocars or reusable ones with high friction forces, expensive mini-scopes that were very fragile and offered very poor vision as well as mini instruments that were too flimsy made minilaparoscopy unpopular and limited for laparoscopic surgeons.

KARL STORZ offers a rubber-seal-free mini trocar. In order to increase the precision of movement and decrease surgical stress during mini procedures, no seal is used, minimizing usual friction forces between trocar and instrument. KARL STORZ has registered this principle under the trademark LOWFRIX. The special trocar was designed to resemble a long needle, with very little technical tolerances and matching exactly the diameter of the corresponding instrument. In this trocar system, free left lumen is minimal, therefore eliminating the need for additional rubber sealing or a valve system to prevent gas loss (gas loss < 0.15 l/min per trocar).

The outer part of the rubber seal-free trocar system resembles a needle but is longer than traditional mini trocars. Its insert with a progressive dilating tip and minimal gap causes less damage during insertion to muscle layers and skin than traditional trocars. To facilitate insertion, its insert fits very firmly with a LUER Lock connector type which can also be used for suction or gas inflation, being especially useful for creating the retroperitoneal space for TEP hernia and lumbar symp-

thectomies. By reducing the friction forces between the trocar and the mini instruments, the system diminishes trocar movement and dislocation of the trocar in the skin, consequently improving wound healing and cosmetic results. A great improvement is also found in the precision of movements during dynamic surgical tasks (e. g. suturing), resulting in less stress to the surgeon.

Minilaparoscopy nowadays is perfectly seen as a great refinement of laparoscopy, because it not only retains the same principles of instrument triangulation and access to anatomical structures but also offers the same ergonomics and safety. In many cases, the use of mini no-rubber trocars can increase the surgeon's dexterity and precision necessary for the development of modern minilaparoscopic surgery. In operations such as TEP inguinal hernia repair or lumbar sympathectomy, where surgical space is very narrow and precision highly desired, the use of no-rubber mini trocars leads to a decrease in operating time. Other advantages of mini are better aesthetic results, as well as less pain, a shorter hospital stay, and quicker return to work.\*



\* **Sources:** *Big Operations Using Mini Instruments: The Evolution of Mini Laparoscopy in the Surgical Realm;* J. REDAN, G. CARVALHO et al.; *Surg Technol Int* (27), S. 19-30, 2015  
*Renaissance of Minilaparoscopy in the NOTES and Single Port Era,* G. CARVALHO et al., *JSLs* (15), 2011

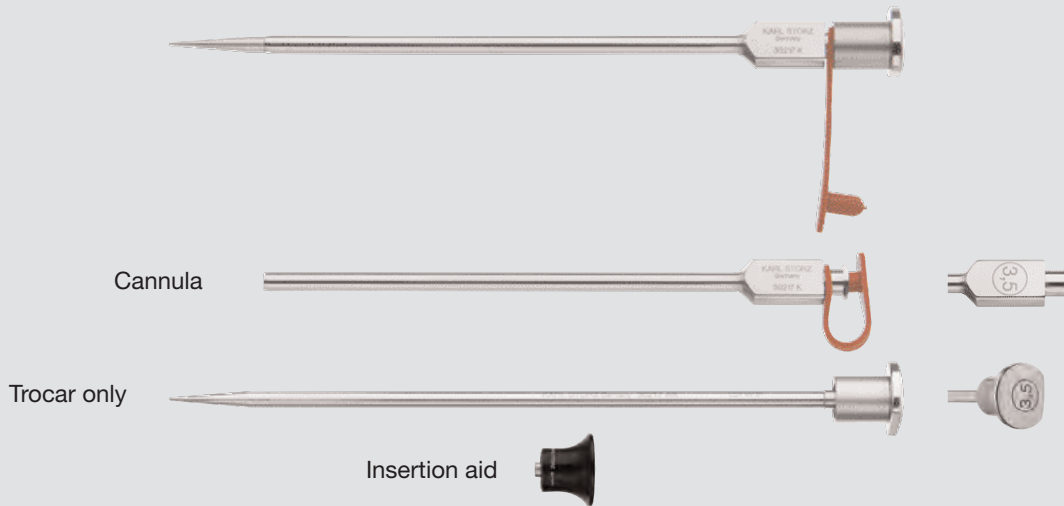
# CARVALHO Trocars

Sizes 3 and 3.5 mm




**Special Features:**

- Trocar features long, flat tapered design
- LUER-Lock connects trocar to cannula, preventing dislocation of the trocar
- LUER-Lock connector at the proximal end of the cannula allows use solely as insufflation port
- Flat trocar head allows placement on the OR tray
- Insertion aid supports instrument changeover
- Available for instruments in sizes 3 mm and 3.5 mm
- Labeling on trocar sleeve and trocar for identification of compatible instrument size



**For use with instruments diameter 3 mm**

<b>Size:</b>	<b>3 mm</b>
Working length:	15 cm
Color code:	green
	<p>CARVALHO Trocar, with blunt tip including:</p> <p><b>Low-friction Cannula</b> 30214 K</p> <p><b>Trocar only</b> 30214 AK</p> <p><b>Insertion Aid</b> 30214 K1</p>

**For use with instruments diameter 3.5 mm**

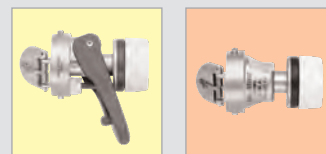
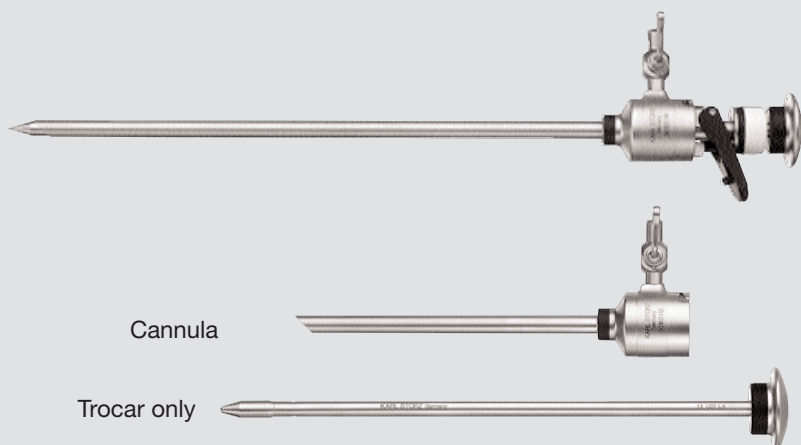
<b>Size:</b>	<b>3.5 mm</b>
Working length:	10 cm
Color code:	red
	<p>CARVALHO Trocar, with blunt tip including:</p> <p><b>Low-friction Cannula</b> 30217 K</p> <p><b>Trocar only</b> 30217 AK</p> <p><b>Insertion Aid</b> 30214 K1</p>

**Components/Spare Parts** see chapter 18

# Trocars




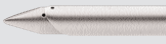
Size 6 mm

For use with instruments and telescopes diameter 5 mm



Multifunctional valve

Automatic valve

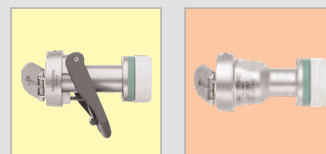
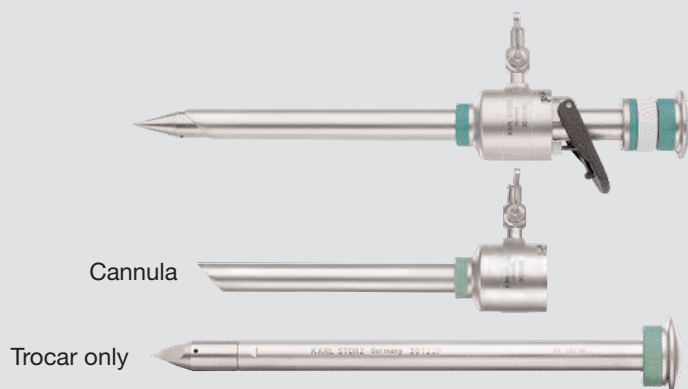
Size:		6 mm			
		8.5 cm black-white	10.5 cm black	8.5 cm black-white	10.5 cm black
		Multifunctional Valve		Automatic Valve	
	<b>Trocar, with conical tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Ventil</b>	<b>30160 WY</b> 30160 H1 30160 Y 30160 M1	<b>30160 MC</b> 30160 H2 30160 C 30160 M1	<b>30160 FY</b> 30160 H1 30160 Y 30160 A1	<b>30160 AC</b> 30160 H2 30160 C 30160 A1
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Valve</b>	<b>30160 WZ</b> 30160 H1 30160 Z 30160 M1	<b>30160 MP</b> 30160 H2 30160 P 30160 M1	<b>30160 FZ</b> 30160 H1 30160 Z 30160 A1	<b>30160 AP</b> 30160 H2 30160 P 30160 A1
	<b>Trocar, with blunt tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Valve</b>	<b>30160 WX</b> 30160 H1 30160 X 30160 M1	<b>30160 MA</b> 30160 H2 30160 A 30160 M1	<b>30160 FX</b> 30160 H1 30160 X 30160 A1	<b>30160 AA</b> 30160 H2 30160 A 30160 A1
	<b>Trocar</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Valve</b>	–	<b>30160 MB</b> 30160 H2 30160 B 30160 M1	–	<b>30160 AB</b> 30160 H2 30160 B 30160 A1

Telescopes for use with trocars size 6 mm see pages 27 and 32-33  
 Dilation Sleeves see page 74, Accessories for Trocars see pages 72-73  
 Components/Spare Parts see chapter 18

# Trocars

Size 11 mm






For use with instruments and telescopes diameter 10 mm



Multifunctional valve



Automatic valve

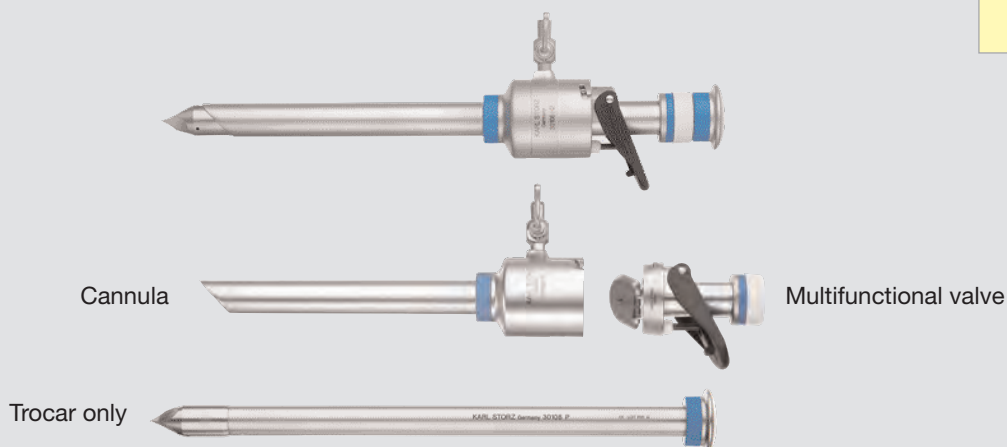
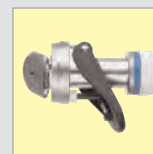
Size:		11 mm			
Working length:		8.5 cm	10.5 cm	8.5 cm	10.5 cm
Color code:		green-white	green	green-white	green
		Multifunctional Valve		Automatic Valve	
	<b>Trocar</b> , with conical tip including: <b>Cannula</b> <b>Trocar only</b> <b>Ventil</b>	<b>30103 WY</b> 30103 H1 30103 Y 30103 M1	<b>30103 MC</b> 30103 H2 30103 C 30103 M1	<b>30103 FY</b> 30103 H1 30103 Y 30103 A1	<b>30103 AC</b> 30103 H2 30103 C 30103 A1
	<b>Trocar</b> , with pyramidal tip including: <b>Cannula</b> <b>Trocar only</b> <b>Ventil</b>	<b>30103 WZ</b> 30103 H1 30103 Z 30103 M1	<b>30103 MP</b> 30103 H2 30103 P 30103 M1	<b>30103 FZ</b> 30103 H1 30103 Z 30103 A1	<b>30103 AP</b> 30103 H2 30103 P 30103 A1
	<b>Trocar</b> , with blunt tip including: <b>Cannula</b> <b>Trocar only</b> <b>Ventil</b>	<b>30103 WX</b> 30103 H1 30103 X 30103 M1	<b>30103 MA</b> 30103 H2 30103 A 30103 M1	<b>30103 FX</b> 30103 H1 30103 X 30103 A1	<b>30103 AA</b> 30103 H2 30103 A 30103 A1
	<b>MOTSON Trocar</b> , with conical, blunt tip including: <b>Cannula</b> <b>Trocar only</b> <b>Ventil</b>	—	<b>30103 MMO</b> 30103 H2 30103 MO 30103 M1	—	<b>30103 AMO</b> 30103 H2 30103 MO 30103 A1
	<b>Trocar</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Ventil</b>	—	<b>30103 WSB</b> 30103 H2 30103 SB 30103 M1	—	<b>30103 FSB</b> 30103 H2 30103 SB 30103 A1




Telescopes for use with trocars size 11 mm see pages 27, 30 and 34-35  
Dilation Sleeves see page 74, Accessories for Trocars see pages 72-73  
Components/Spare Parts see chapter 18

# Trocars

Size 13.5 mm

For use with linear staplers



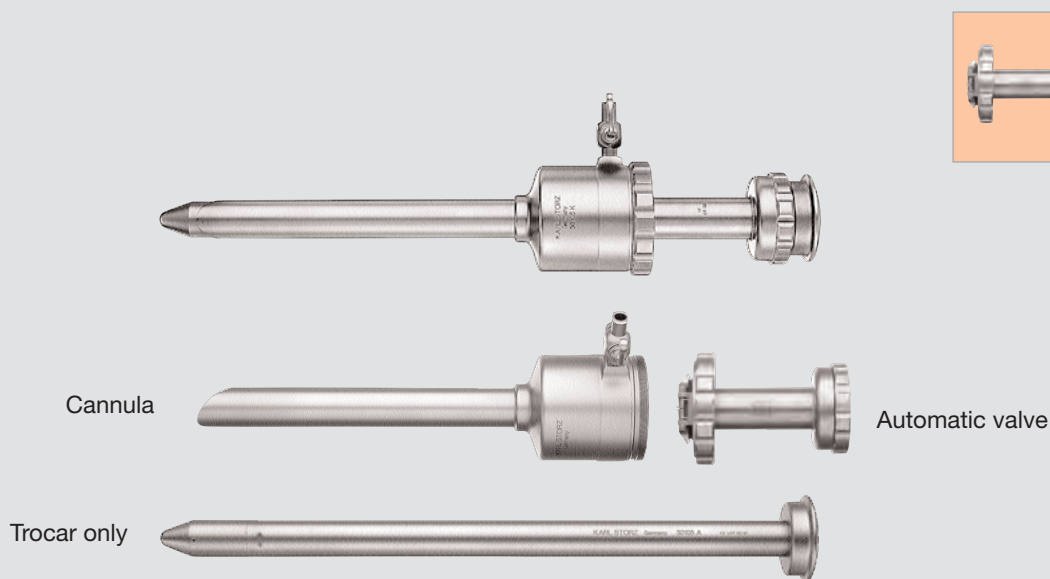
<b>Size:</b>		<b>13.5 mm</b>
Working length:		11.5 cm
Color code:		blue
	<b>Trocar, with conical tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Multifunctional Valve</b>	<b>30108 MC</b>  30108 H2 30108 C 30108 M1
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Multifunctional Valve</b>	<b>30108 MP</b>  30108 H2 30108 P 30108 M1
	<b>Trocar, with blunt tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Multifunctional Valve</b>	<b>30108 MA</b>  30108 H2 30108 A 30108 M1



8-071

**Dilation Sleeves** see page 74  
**Accessories for Trocars** see pages 72-73  
**Components/Spare Parts** see chapter 18

# Trocars

Sizes 15 and 22 mm



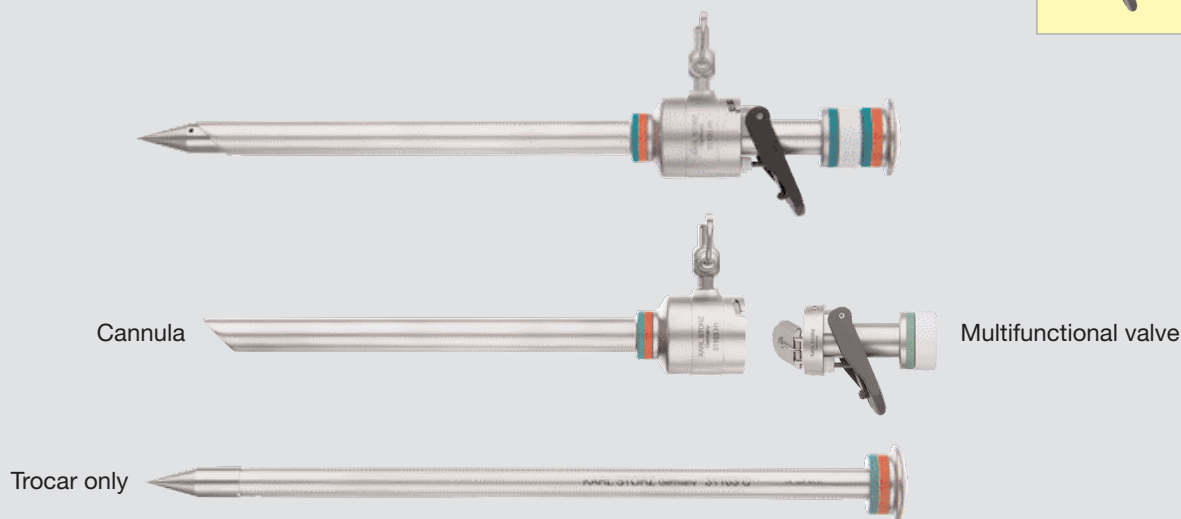
<b>Size:</b>		<b>15 mm</b>	<b>22 mm</b>
Working length:		12 cm	12 cm
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Automatic Valve</b>	<b>30105 KP</b>  30105 H2 30105 P 30105 K1	<b>30106 KP</b>  30106 H2 30106 P 30106 K1
	<b>Trocar, with blunt tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Automatic Valve</b>	<b>30105 KA</b>  30105 H2 30105 A 30105 K1	<b>30106 KA</b>  30106 H2 30106 A 30106 K1




**Dilation Sleeves** see page 74  
**Accessories for Trocars** see pages 72-73  
**Components/Spare Parts** see chapter 18



# Trocars for Adipose Patients

Sizes 6, 11 and 13.5 mm



Size:	6 mm	11 mm	13.5 mm
Working length:	15 cm	15 cm	15 cm
Color code:	black-red	green-red	blue-red
	<b>Trocar, with conical tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Multifunctional Valve</b> <b>31160 MC</b> 31160 H1 31160 C 30160 M1	<b>31103 MC</b> 31103 H1 31103 C 30103 M1	—
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Multifunctional Valve</b> <b>31160 MP</b> 31160 H1 31160 P 30160 M1	<b>31103 MP</b> 31103 H1 31103 P 30103 M1	<b>31108 MP</b> 31108 H1 31108 P 30108 M1
	<b>Trocar, with blunt tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Multifunctional Valve</b> <b>31160 MA</b> 31160 H1 31160 A 30160 M1	<b>31103 MA</b> 31103 H1 31103 A 30103 M1	—

2-15

Telescopes for use with trocars size 6 mm see pages 27 and 32-33  
 Telescopes for use with trocars size 11 mm see pages 27, 30 and 34-35  
 Dilation Sleeves see page 74, Accessories for Trocars see pages 72-73  
 Components/Spare Parts see chapter 18

# S-PORT

for single portal surgery

**S-PORTAL**  
SINGLE-PORTAL-ACCESS

An outstanding feature of the S-PORT system is its modular construction. This system is a flexible unit that allows the use of both straight and curved instruments. Yet another benefit is that the incision size can be

adjusted according to indication. Furthermore, resected material can be removed thanks to the single-use wound protector.



# S-PORT

for single portal surgery

**S-PORTAL**  
SINGLE-PORTAL-ACCESS

## Special Features:

- Modular system
- Variable incision size
- Compatible with all instruments
- Reusable, with the exception of the wound protection sheet
- Compatible with all standard wound protector sheets



23030 PA

23030 PA

**S-PORT, Single Portal Surgery Access System**, adaptable in sizes 15 – 45 mm

including:

**Port Ring**

**S-PORT Attachment**, for X-CONE and S-PORT seals

**S-PORT Seal**

**Wound Protector**, sterile, for single use, package of 10



**Insertion Aid S-PORT**, to facilitate assembly

**Removal Tool**, to remove the wound protector sheet and to dismantle S-PORT

# Accessories

Reduction Sleeves/Extractors and Reducers

## Reduction Sleeves/Extractors



30140 DB

Instrument Diameter	Outer Diameter of Trocar Cannula – Color Code				
	6 mm black	11 mm green	13 mm black	15 mm	22 mm
3 mm	30140 KA	30140 DA	–	–	–
5 mm	–	30140 DB	30140 HB	30140 FB	30140 GB
8 mm	–	30140 DD	–	–	–
10 mm	–	–	30140 HE	30140 FE	30140 GE

## Reducers, for use with trocars with automatic valves and TERNAMIAN ENDOTIP cannulas with automatic valves



30141 AA



30141 DB

- 30141 AA **Reducer, 6/3 mm**
- 30141 DB **Same, 11/5 mm**
- 30141 HB **Same, 13/5 mm and 13.5/5 mm**
- 30141 HE **Same, 13/11 mm**

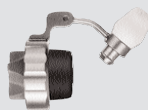
## Double Reducer



30142 HB

- 30142 HB **Double Reducer, 13/10 mm, 13.5/10 mm, 13/5 mm and 13.5/5 mm**

## Reducers, for use with trocars with silicone leaflet valves and TERNAMIAN ENDOTIP cannulas with silicone leaflet valves



30160 RE

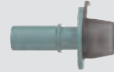
- 30160 RE **Reducer, 6/3 mm**
- 30103 RE **Same, 11/5 mm**

Components/Spare Parts see chapter 18

# Accessories

Reducer, Thread Sleeves and Distance Holders

## Reducers, for use with trocars with valve seals



30141 RS



30142 RS

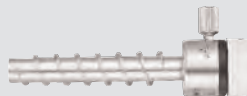


30141 RS     **Reducer**, to reduce from 11 mm to 5 mm

30142 RS     **Reducer**, to reduce from 13.5 mm to 5 mm

**Note:** Attaching the appropriate valve seal to a reducer can lead to a reduction of up to 2 mm.

## Thread Sleeves



30160 S

30160 S     **Thread Sleeve**, for trocars size 6 mm,  
color code: black

30103 S     **Thread Sleeve**, for trocars size 11 mm,  
color code: green

30108 S     **Thread Sleeve**, for trocars size 13.5 mm,  
color code: blue

## Distance Holders, to limit the depth of puncture



30103 D

30160 D     **Distance Holder**, for trocars size 6 mm,  
color code: black

30103 D     **Distance Holder**, for trocars  
size 11 mm,  
color code: green

**Components/Spare Parts** see chapter 18

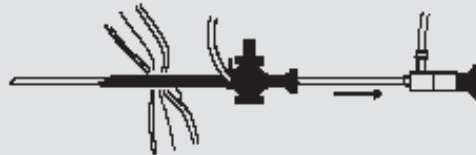
# Accessories

## Dilation Sleeves

- 26020 HL **Dilation Sleeve**, for trocars with diameter 6/11 mm
- 26020 HM **Same**, for trocars with diameter 11/15 mm
- 26020 HP **Same**, for trocars with diameter 11/22 mm

The atraumatic Dilation Rods 26020 OM and 26020 OE enable 6 or 11 mm cannulas to be exchanged for cannulas with a larger diameter.

### Example: 6/11 mm



1. Telescope with 6 mm cannula



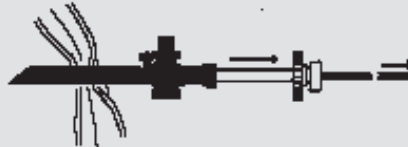
2. The dilation rod is inserted into the 6 mm cannula



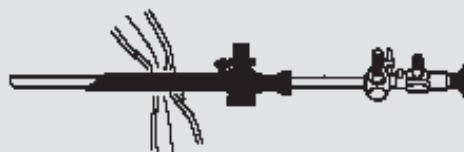
3. The 6 mm cannula is removed and the incision into the skin is enlarged to 10 mm



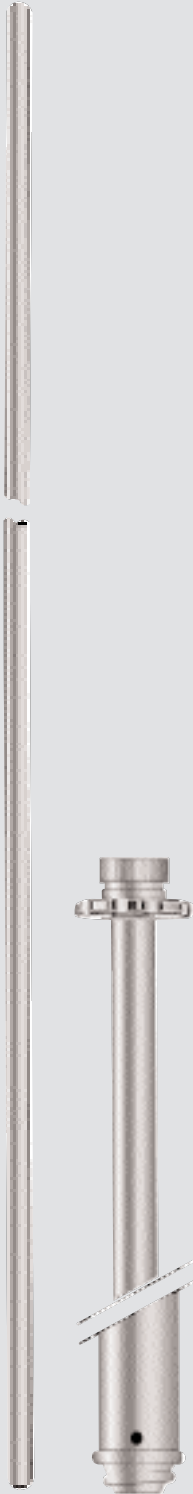
4. The 11 mm cannula is inserted over the directing probe and pushed to the skin. Then the directing probe is retracted 10 cm, before the cannula with the dilation sleeve perforates the abdominal wall by turning to the right continuously



5. Holding the inserted cannula in place, the dilation rod and sleeve are removed



6. Telescope (or 10 mm operating instrument) with 11 mm cannula





# DISSECTING AND GRASPING FORCEPS

## Sizes 2 – 10 mm

**CLICKlinē** HANDLES  
AND OUTER SHEATHS .....77-85

**CLICKlinē** DISSECTING AND  
GRASPING FORCEPS  
Sizes 2 – 3.5 mm .....86-94

**CLICKlinē** DISSECTING AND  
GRASPING FORCEPS  
Size 5 mm .....95-129

**CLICKlinē** DISSECTING AND  
GRASPING FORCEPS  
Size 10 mm .....130-134

SURGICAL SPONGE HOLDERS,  
Sizes 5 and 10 mm .....135

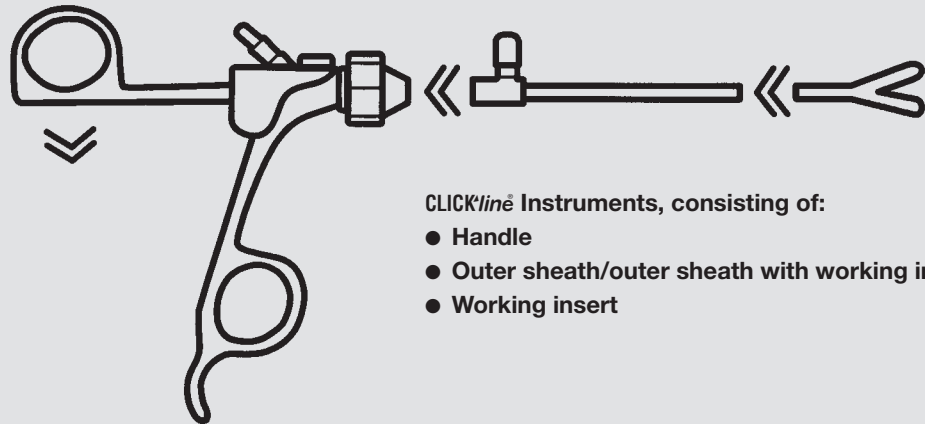
TAKE-APART® DISSECTING AND GRASPING  
FORCEPS, sizes 3 – 5 mm  
FOR BIPOLAR COAGULATION .....136-143

ROBI® BIPOLAR GRASPING FORCEPS  
Sizes 3.5 – 5 mm .....144-149

ACCESSORIES .....150-151







**CLICK'line® Instruments, consisting of:**

- Handle
- Outer sheath/outer sheath with working insert
- Working insert

The **CLICK'line®** series continues the development of instruments which have proven their value for years. When the rear handle is positioned horizontally, the handle can be separated from the outer sheath and the

working insert at the press of a button. The HF connection is mounted at a 45° angle on the upper side of the handle, thereby guiding the high frequency cable away from the field of operation.

**Available in sizes 2 to 10 mm, CLICK'line® instruments can be completely disassembled into separate components:**

- Handle
- Outer sheath/outer sheath with working insert
- Working insert

**This reusable two/three-piece design offers the surgeon the following benefits:**

- Available in sizes 2, 3, 3.5, 5 and 10 mm and lengths 20, 30, 36 and 43 cm
- Choice of handle styles
- Can be dismantled at the press of a button
- Autoclavable in its assembled state
- If damage occurs, only the component with the defect needs to be replaced – not the entire instrument

**Due to the modular CLICK'line® system, the user can individually assemble the desired instrument at any time.**

# User Information

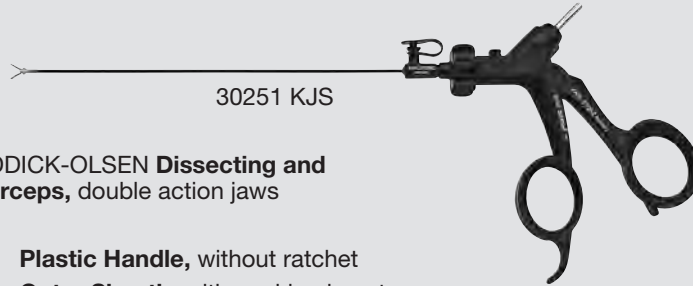
For easy location of the correct catalog number for the required CLICK*line*® instrument

## How to find the required instrument:

- (a) Select the required **instrument size** and the required **type of jaws**
- (b) Select the required **handle style**
  - **Metal handles: without** connector pin for unipolar coagulation, against a **blue background** in the table
  - **Handles, insulated: with** connector pin for unipolar coagulation, against a **red background** in the table
- (c) The catalog number for the fully assembled instrument can be found at the point where the horizontal line of the respective working length (see below) intersects with the vertical column of the required handle.

### Example:

30251 KJS     **CLICK*line*® REDDICK-OLSEN Dissecting and Grasping Forceps**, double action jaws including:  
 33151     **Plastic Handle**, without ratchet  
 30210 KJS     **Outer Sheath**, with working insert



## Dissecting and Grasping Forceps

CLICK*line*® – rotating, dismantling, with and without connector for unipolar coagulation

Size 2 mm

Operating instruments, length 20 cm, for use with trocars size 2.5 mm

**XS**     ↓  
unipolar

Length	Handle						
	33151 (b)	33152	33153	33156	33161	33146	33147
(a) 20 cm							
Double action jaws							
Outer Sheath with Working Insert	Complete Instrument						
30240 AS	- (c)	-	-	-	30261 AS	30246 AS	30247 AS

**CLICK*line*® BABCOCK Grasping Forceps**, atraumatic, fenestrated

12     Jaw length in mm

### Please note:

For CLICK*line*® instruments only the **individual component parts** are numbered. The catalog number for the **complete instrument** is **not** on the instrument. Instruments with **insulated handles with connector pin** for unipolar coagulation, are shown against the **red background**, instruments with **handles without connector pin** for unipolar coagulation are shown against the **blue background**. The color **green** indicates the **working lengths**.

# Plastic Handles

for Dissecting and Grasping Forceps, insulated, with large contact area,  
CLICK'liné – rotating, with connector pin for unipolar coagulation



Plastic Handles, insulated, with and without ratchets, with large contact area at the finger ring – made of high-quality plastics



33151 **CLICK'liné Plastic Handle, without ratchet, with large contact area at the finger ring**



33152 **CLICK'liné Plastic Handle, with ratchet, with large contact area at the finger ring**



33153 **CLICK'liné Plastic Handle, with hemostat style ratchet, with large contact area at the finger ring**

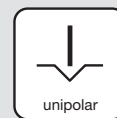


33156 **CLICK'liné Plastic Handle, with disengageable ratchet, with large contact area at the finger ring**

**Metal Handles with large contact area** see page 82  
**Accessories for Handles** see page 150

# Plastic Handles

for Dissecting and Grasping Forceps, insulated,  
CLICK'line® – rotating, with connector pin for unipolar coagulation



## Plastic Handles, insulated, with and without ratchet



33121 **CLICK'line® Plastic Handle, without ratchet**



33122 **CLICK'line® Plastic Handle, with ratchet**



33123 **CLICK'line® Plastic Handle, with hemostat style ratchet**



33126 **CLICK'line® Plastic Handle, with disengageable ratchet**

Accessories for Handles see page 150

# Plastic Handles

for Dissecting and Grasping Forceps, insulated,  
CLICK'line® – with connector pin for unipolar coagulation



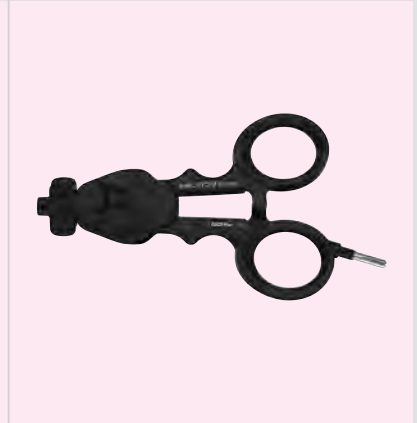
## Plastic Handles, insulated, with and without ratchet



33149 **CLICK'line® Plastic Handle**, axial, rotating, **without** ratchet, double action shanks



33149 P **CLICK'line® Plastic Handle**, axial, non-rotating, **without** ratchet, double action shanks, with 4 locking positions



33148 **CLICK'line® Plastic Handle**, axial, rotating, **with** ratchet, double action shanks

## Plastic Handle, insulated, without ratchet



33151 P **CLICK'line® Plastic Handle**, non-rotating, **without** ratchet, with 4 locking positions

2-151

Accessories for Handles see page 150

# Metal Handles

for Dissecting and Grasping Forceps, with large contact area,  
CLICK'line – rotating, without connector for unipolar coagulation



Metal Handles, with and without ratchet, with large contact area at the finger ring



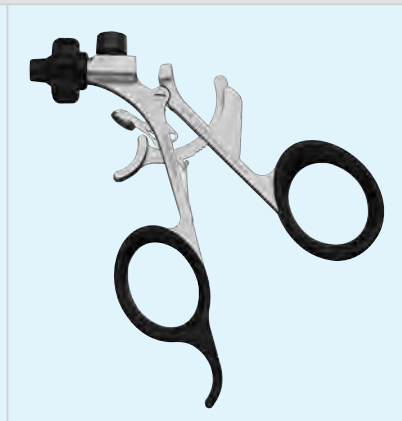
33161 **CLICK'line Metal Handle, without ratchet, with large contact area at the finger ring**



33162 **CLICK'line Metal Handle, with ratchet, with large contact area at the finger ring**



33163 **CLICK'line Metal Handle, with hemostatic style ratchet, with large contact area at the finger ring**



33166 **CLICK'line Metal Handle, with disengageable ratchet, with large contact area at the finger ring**

Accessories for Handles see page 150

# Metal Handles

for Dissecting and Grasping Forceps,  
CLICK'line® – rotating, without connector for unipolar coagulation

## Metal Handles, with and without ratchet



33131 CLICK'line® Metal Handle,  
without ratchet



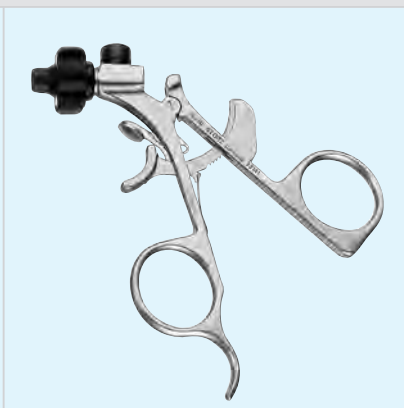
33132 CLICK'line® Metal Handle,  
with ratchet



33133 CLICK'line® Metal Handle,  
with hemostat style ratchet



33139 CLICK'line® Metal Handle,  
with ratchet



33141 CLICK'line® Metal Handle,  
with disengageable ratchet

# Metal Handles

for Dissecting and Grasping Forceps,  
CLICK*line* – rotating, without connector for unipolar coagulation

## Metal Handles, axial, with and without ratchet



33146 **CLICK'line Metal Handle**, axial, with **hemostat style ratchet**, double action handle shanks



33147 **CLICK'line Metal Handle**, axial, **without ratchet**, double action handle shanks

Accessories for Handles see page 150



# Metal Outer Sheaths

for Dissecting and Grasping Forceps, CLICK'linē

## Metal Outer Sheaths, insulated



### Size 3.5 mm

31100 **CLICK'linē Metal Outer Sheath, insulated**, with LUER-Lock irrigation connector for cleaning, size 3.5 mm, length 20 cm

31300 **Same**, length 36 cm

### Size 5 mm

33200 **CLICK'linē Metal Outer Sheath, insulated**, with LUER-Lock irrigation connector for cleaning, size 5 mm, length 30 cm

33300 **Same**, length 36 cm

33400 **Same**, length 43 cm



33300 CM **CLICK'linē Metal Outer Sheath, insulated**, with cm-marking, with LUER-Lock irrigation connector for cleaning, size 5 mm, length 36 cm

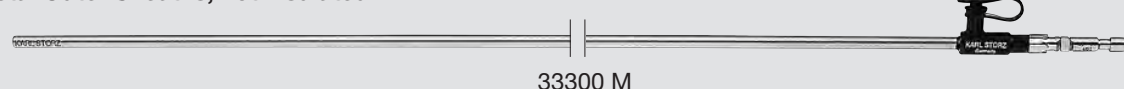
33400 CM **Same**, length 43 cm

### Size 10 mm



33500 **CLICK'linē Outer Sheath, insulated**, with LUER-Lock irrigation connector for cleaning, size 10 mm, length 36 cm

## Metal Outer Sheaths, not insulated



### Size 3.5 mm

31100 M **CLICK'linē Metal Outer Sheath**, with LUER-Lock irrigation connector for cleaning, size 3.5 mm, length 20 cm

31300 M **Same**, length 36 cm

### Size 5 mm

33200 M **CLICK'linē Metal Outer Sheath**, with LUER-Lock irrigation connector for cleaning, size 5 mm, length 30 cm

33300 M **Same**, length 36 cm

33400 M **Same**, length 43 cm

### Size 10 mm



33500 M **CLICK'linē Metal Outer Sheath**, with LUER-Lock irrigation connector for cleaning, size 10 mm, length 36 cm



33500 CM **CLICK'linē Metal Outer Sheath**, with cm-marking, with LUER-Lock irrigation connector for cleaning, size 10 mm, length 36 cm

### Please note:

The non-insulated metal outer sheaths may only be used in conjunction with metal handles without a connector pin for unipolar coagulation.

**Working Inserts for CLICK'linē Instruments size 3.5 mm** see pages 87-93

**Working Inserts for CLICK'linē Instruments size 5 mm** see pages 96-129

**Working Inserts for CLICK'linē Instruments size 10 mm** see pages 130-134

**Accessories for Outer Sheaths** see page 150

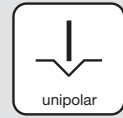
**Component/Spare Parts** see chapter 18

# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling,  
with and without connector for unipolar coagulation

Size 2 mm

Operating instruments, length 20 cm,  
for use with trocars size 2.5 mm



Length	Handle						
	33151	33152	33153	33156	33161	33146	33147
20 cm							

## Double action jaws

Outer Sheath with Working Insert	Complete Instrument						
30240 AS	-	-	-	-	30261 AS	30246 AS	30247 AS
   12	CLICK <sup>line</sup> BABCOCK Grasping Forceps, atraumatic, fenestrated						
30210 KJS	30251 KJS	30252 KJS	30253 KJS	30256 KJS	-	30246 KJS	30247 KJS
   7	CLICK <sup>line</sup> REDDICK-OLSEN Grasping Forceps						

Components/Spare Parts see chapter 18

# Dissecting and Grasping Forceps

CLICK'linē – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

Size 3.5 mm



Operating instruments, lengths 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm

Length	Handle					
	33151	33152	33153	33156	33121	33149
20 cm						
36 cm						

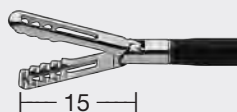
## Double action jaws

Working Insert	Complete Instrument					
31110 VR	31151 VR	31152 VR	31153 VR	31156 VR	31121 VR	31149 VR
31310 VR	31351 VR	31352 VR	31353 VR	31356 VR	31321 VR	31349 VR



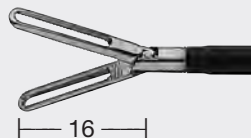
CLICK'linē TAN Dissecting and Grasping Forceps, jaws with rounded tips

31110 AF	31151 AF	31152 AF	31153 AF	31156 AF	31121 AF	31149 AF
31310 AF	31351 AF	31352 AF	31353 AF	31356 AF	31321 AF	31349 AF



CLICK'linē Grasping Forceps, atraumatic, fenestrated

31110 OD	31151 OD	31152 OD	31153 OD	31156 OD	31121 OD	31149 OD
31310 OD	31351 OD	31352 OD	31353 OD	31356 OD	31321 OD	31349 OD



CLICK'linē Grasping Forceps, fenestrated, with fine atraumatic serration

## Single action jaws

31110 ME	31151 ME	31152 ME	31153 ME	31156 ME	31121 ME	31149 ME
31310 ME	31351 ME	31352 ME	31353 ME	31356 ME	31321 ME	31349 ME



CLICK'linē Grasping Forceps, with multiple teeth

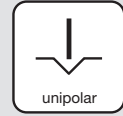
2-15

# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm



Length	Handle					
	33151	33152	33153	33156	33121	33149
20 cm						
36 cm						

## Double action jaws

Working Insert	Complete Instrument					
31110 ML	31151 ML	31152 ML	31153 ML	31156 ML	31121 ML	31149 ML
31310 ML	31351 ML	31352 ML	31353 ML	31356 ML	31321 ML	31349 ML



— 14 —

CLICK<sup>line</sup> KELLY Dissecting and Grasping Forceps, long

31110 MD	31151 MD	31152 MD	31153 MD	31156 MD	31121 MD	31149 MD
31310 MD	31351 MD	31352 MD	31353 MD	31356 MD	31321 MD	31349 MD



— 10 —

CLICK<sup>line</sup> KELLY Dissecting and Grasping Forceps

31110 R	31151 R	31152 R	31153 R	31156 R	31121 R	31149 R
31310 R	31351 R	31352 R	31353 R	31356 R	31321 R	31349 R



— 10 —

CLICK<sup>line</sup> Dissecting and Grasping Forceps, right-angled

## Single action jaws

31110 ON	31151 ON	31152 ON	31153 ON	31156 ON	31121 ON	31149 ON
31310 ON	31351 ON	31352 ON	31353 ON	31356 ON	31321 ON	31349 ON



— 16 —

CLICK<sup>line</sup> Grasping Forceps, fenestrated, with fine atraumatic serration

Components/Spare Parts see chapter 18

# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector for unipolar coagulation



Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
20 cm							
36 cm							

## Double action jaws

Working Insert	Complete Instrument						
31110 ML	31161 MLM	31162 MLM	31163 MLM	31166 MLM	31131 MLM	31146 MLM	31147 MLM
31310 ML	31361 MLM	31362 MLM	31363 MLM	31366 MLM	31331 MLM	31346 MLM	31347 MLM



CLICK'liné KELLY Dissecting and Grasping Forceps, long

14

31110 MD	31161 MDM	31162 MDM	31163 MDM	31166 MDM	31131 MDM	31146 MDM	31147 MDM
31310 MD	31361 MDM	31362 MDM	31363 MDM	31366 MDM	31331 MDM	31346 MDM	31347 MDM



CLICK'liné KELLY Dissecting and Grasping Forceps

10

31110 R	31161 RM	31162 RM	31163 RM	31166 RM	31131 RM	31146 RM	31147 RM
31310 R	31361 RM	31362 RM	31363 RM	31366 RM	31331 RM	31346 RM	31347 RM



CLICK'liné Dissecting and Grasping Forceps, right-angled

10

## Single action jaws

31110 ON	31161 ONM	31162 ONM	31163 ONM	31166 ONM	31131 ONM	31146 ONM	31147 ONM
31310 ON	31361 ONM	31362 ONM	31363 ONM	31366 ONM	31331 ONM	31346 ONM	31347 ONM

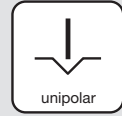


CLICK'liné Grasping Forceps, fenestrated, with fine atraumatic serration

16

# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation




Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm


Length	Handle					
	33151	33152	33153	33156	33121	33149
20 cm						
36 cm						

## Double action jaws

Working Insert	Complete Instrument					
31110 UL	31151 UL	31152 UL	31153 UL	31156 UL	31121 UL	31149 UL
31310 UL	31351 UL	31352 UL	31353 UL	31356 UL	31321 UL	31349 UL


 CLICK'liné REDDICK-OLSEN Dissecting and Grasping Forceps, robust

31110 K	31151 K	31152 K	31153 K	31156 K	31121 K	31149 K
31310 K	31351 K	31352 K	31353 K	31356 K	31321 K	31349 K


 CLICK'liné Grasping Forceps, atraumatic, fenestrated

## Single action jaws

31110 FA	31151 FA	31152 FA	31153 FA	31156 FA	31121 FA	31149 FA
31310 FA	31351 FA	31352 FA	31353 FA	31356 FA	31321 FA	31349 FA

 CLICK'liné KOH Grasping Forceps, straight

31110 FR	31151 FR	31152 FR	31153 FR	31156 FR	31121 FR	31149 FR
31310 FR	31351 FR	31352 FR	31353 FR	31356 FR	31321 FR	31349 FR

 CLICK'liné KOH Grasping Forceps, curved to right, for ipsilateral suturing technique

Components/Spare Parts see chapter 18

# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling,  
without connector for unipolar coagulation



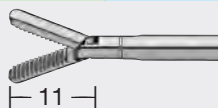
Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
20 cm							
36 cm							

## Double action jaws

Working Insert	Complete Instrument						
31110 UL	31161 ULM	31162 ULM	31163 ULM	31166 ULM	31131 ULM	31146 ULM	31147 ULM
31310 UL	31361 ULM	31362 ULM	31363 ULM	31366 ULM	31331 ULM	31346 ULM	31347 ULM



CLICK'line REDDICK-OLSEN Dissecting and Grasping Forceps, robust

31110 K	31161 KM	31162 KM	31163 KM	31166 KM	31131 KM	31146 KM	31147 KM
31310 K	31361 KM	31362 KM	31363 KM	31366 KM	31331 KM	31346 KM	31347 KM



CLICK'line Grasping Forceps, atraumatic, fenestrated

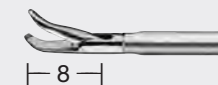
## Single action jaws

31110 FA	31161 FAM	31162 FAM	31163 FAM	31166 FAM	31131 FAM	31146 FAM	31147 FAM
31310 FA	31361 FAM	31362 FAM	31363 FAM	31366 FAM	31331 FAM	31346 FAM	31347 FAM



CLICK'line KOH Grasping Forceps, straight

31110 FR	31161 FRM	31162 FRM	31163 FRM	31166 FRM	31131 FRM	31146 FRM	31147 FRM
31310 FR	31361 FRM	31362 FRM	31363 FRM	31366 FRM	31331 FRM	31346 FRM	31347 FRM



CLICK'line KOH Grasping Forceps, curved to right,  
for ipsilateral suturing technique

# Dissecting and Grasping Forceps

CLICK<sup>liné</sup> – rotating, dismantling, insulated, with connector pin for unipolar coagulation

Size 3.5 mm

Operating instruments, lengths 20 and 36 cm, for use with trocars sizes 3.5 and 3.9 mm



Length	Handle					
	33151	33152	33153	33156	33121	33149
20 cm						
36 cm						

## Double action jaws

Working Insert	Complete Instrument					
31110 A	31151 A	31152 A	31153 A	31156 A	31121 A	31149 A
31310 A	31351 A	31352 A	31353 A	31356 A	31321 A	31349 A



CLICK<sup>liné</sup> BABCOCK Grasping Forceps, atraumatic, fenestrated

31110 C	31151 C	31152 C	31153 C	31156 C	31121 C	31149 C
31310 C	31351 C	31352 C	31353 C	31356 C	31321 C	31349 C



CLICK<sup>liné</sup> ROTHENBERG Bowel Grasper

31110 VT	31151 VT	31152 VT	31153 VT	31156 VT	31121 VT	31149 VT
31310 VT	31351 VT	31352 VT	31353 VT	31356 VT	31321 VT	31349 VT



CLICK<sup>liné</sup> TAN Pyloric Spreader and Grasping Forceps, in- and outside serrated jaws

31110 MG	31151 MG	31152 MG	31153 MG	31156 MG	31121 MG	31149 MG
31310 MG	31351 MG	31352 MG	31353 MG	31356 MG	31321 MG	31349 MG



CLICK<sup>liné</sup> Dissecting and Grasping Forceps, "tiger jaws", 2 x 4 teeth

31110 FG	31151 FG	31152 FG	31153 FG	31156 FG	31121 FG	31149 FG
31310 FG	31351 FG	31352 FG	31353 FG	31356 FG	31321 FG	31349 FG



CLICK<sup>liné</sup> Grasping Forceps, atraumatic, wavy serration



# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector for unipolar coagulation



Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
20 cm							
36 cm							

## Double action jaws

Working Insert	Complete Instrument						
31110 A	31161 AM	31162 AM	31163 AM	31166 AM	31131 AM	31146 AM	31147 AM
31310 A	31361 AM	31362 AM	31363 AM	31366 AM	31331 AM	31346 AM	31347 AM



CLICK'liné BABCOCK Grasping Forceps, atraumatic, fenestrated

31110 C	31161 CM	31162 CM	31163 CM	31166 CM	31131 CM	31146 CM	31147 CM
31310 C	31361 CM	31362 CM	31363 CM	31366 CM	31331 CM	31346 CM	31347 CM



CLICK'liné ROTHENBERG Bowel Grasper

31110 VT	31161 VTM	31162 VTM	31163 VTM	31166 VTM	31131 VTM	31146 VTM	31147 VTM
31310 VT	31361 VTM	31362 VTM	31363 VTM	31366 VTM	31331 VTM	31346 VTM	31347 VTM



CLICK'liné TAN Pyloric Spreader and Grasping Forceps, in- and outside serrated jaws

31110 MG	31161 MGM	31162 MGM	31163 MGM	31166 MGM	31131 MGM	31146 MGM	31147 MGM
31310 MG	31361 MGM	31362 MGM	31363 MGM	31366 MGM	31331 MGM	31346 MGM	31347 MGM



CLICK'liné Dissecting and Grasping Forceps, "tiger jaws", 2 x 4 teeth

31110 FG	31161 FGM	31162 FGM	31163 FGM	31166 FGM	31131 FGM	31146 FGM	31147 FGM
31310 FG	31361 FGM	31362 FGM	31363 FGM	31366 FGM	31331 FGM	31346 FGM	31347 FGM



CLICK'liné Grasping Forceps, atraumatic, wavy serration

# Percutaneous Pyloric Spreader, GEIGER Pyloric Grasper

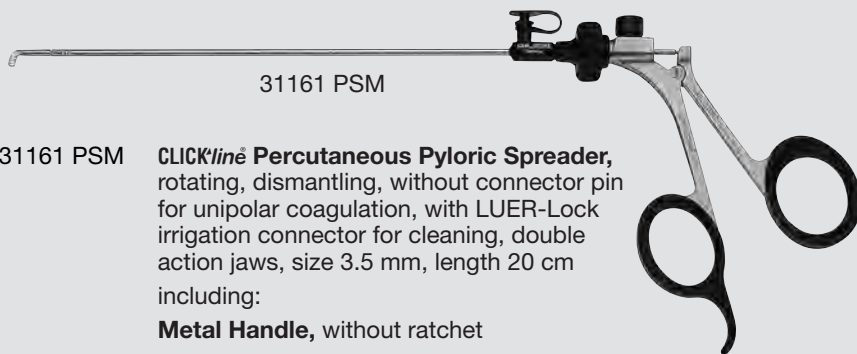
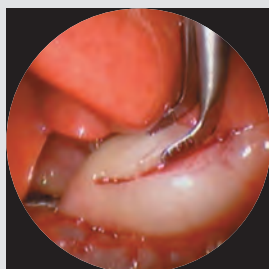
Size 3.5 mm

Operating instruments, length 20 cm



Minimally invasive surgery is constantly being refined due to the development of new techniques and instruments. Weber-Ramstedt pyloromyotomy and the Benson pyloric spreader have already been proven valuable in open surgery. KARL STORZ offers a special percutaneous pyloric spreader for minimal access. The

design of the miniature access percutaneous pyloric spreader is modeled after the Benson spreader. The spreader has the following features: It is slim, it has a double action mechanism, its angled jaws are serrated on the outside and inside and it can be used without a trocar.



31161 PSM

**31161 PSM** **CLICKline® Percutaneous Pyloric Spreader**, rotating, dismantling, without connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, size 3.5 mm, length 20 cm including:

- Metal Handle**, without ratchet
- Outer Sheath**, with working insert



30361 PS

**30361 PS** **CLICKline® GEIGER Pyloric Grasper**, rotating, without connector pin for unipolar coagulation, with irrigation connector for cleaning, for percutaneous use, double action jaws, size 3 mm, length 20 cm including:

- Metal Handle**, without ratchet
- Outer Sheath**, with working insert

Components/Spare Parts see chapter 18

# Dissecting and Grasping Forceps “JET GRASPER®”

CLICK'line® – rotating, dismantling, without connector for unipolar coagulation

## Size 5 mm

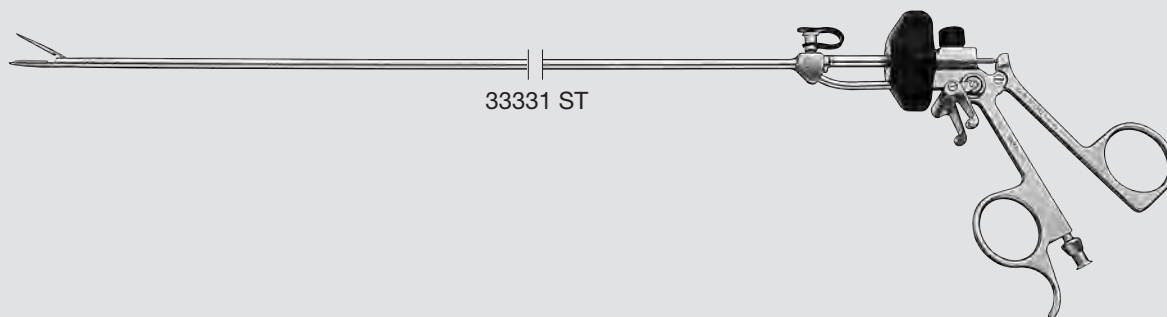
Operating instruments, **length 36 cm**,  
for use **with trocars size 6 mm**

The **CLICK'line®** instrument “JET GRASPER®” is a grasping forceps with an integrated irrigation function. The idea is to enable dilation of adhered tissue layers with the help

of an irrigation jet (pocket formation) to gain more space for further preparation or dissection.

## Special Features

- With integrated irrigation function
- Duckbill jaws with irrigation port
- Special handle and outer sheath with irrigation channel



33331 ST



**CLICK'line® TCHARTCHIAN Dissecting and Grasping Forceps “JET GRASPER®”**, rotating, dismantling, without connector pin for unipolar coagulation, with integrated irrigation function, with LUER-Lock irrigation connector for cleaning, single action jaws, size 5 mm, length 36 cm

including:

**Metal Handle**, without ratchet

**Rotating Wheel**

**Outer Sheath with Working Insert**

**Cleaning Brush**

**Components/Spare Parts** see chapter 18

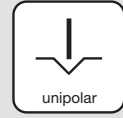
# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

Size 5 mm

Operating instruments, lengths 30 and 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



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Single action jaws

Working Insert	Complete Instrument					
33310 IN	33351 IN	33352 IN	33353 IN	33356 IN	33321 IN	33349 IN
 NEW 27	<b>CLICK<sup>line</sup> INAKI Dissecting and Grasping Forceps</b> , slender, atraumatic, fenestrated, curved					
33310 MF	33351 MF	33352 MF	33353 MF	33356 MF	33321 MF	33349 MF
 24	<b>CLICK<sup>line</sup> Dissecting and Grasping Forceps</b> , atraumatic					
33310 MR	33351 MR	33352 MR	33353 MR	33356 MR	33321 MR	33349 MR
 20	<b>CLICK<sup>line</sup> Dissecting and Grasping Forceps</b> , “duckbill jaws”, blunt, to effect mechanical hemostasis					
33310 MS	33351 MS	33352 MS	33353 MS	33356 MS	33321 MS	33349 MS
33410 MS	33451 MS	33452 MS	33453 MS	33456 MS	33421 MS	33449 MS
 14	<b>CLICK<sup>line</sup> Dissecting and Grasping Forceps</b> , “duckbill jaws”, blunt, to effect mechanical hemostasis					
33210 MT	33251 MT	33252 MT	33253 MT	33256 MT	33221 MT	33249 MT
33310 MT	33351 MT	33352 MT	33353 MT	33356 MT	33321 MT	33349 MT
 20	<b>CLICK<sup>line</sup> Dissecting and Grasping Forceps</b> , “duckbill jaws”, blunt, to effect mechanical hemostasis					

# Dissecting and Grasping Forceps

CLICK<sup>linē</sup> – rotating, dismantling,  
without connector for unipolar coagulation





## Size 5 mm

Operating instruments, lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Single action jaws

Working Insert	Complete Instrument						
33310 MF	33361 MF	33362 MF	33363 MF	33366 MF	33331 MF	33346 MF	33347 MF
  — 24 —	CLICK <sup>linē</sup> Dissecting and Grasping Forceps, atraumatic, suitable for the grasping and removal of hollow organs						
33310 MR	33361 MR	33362 MR	33363 MR	33366 MR	33331 MR	33346 MR	33347 MR
  — 20 —	CLICK <sup>linē</sup> Dissecting and Grasping Forceps, “duckbill jaws”, blunt, to effect mechanical hemostasis						
33310 MS	33361 MS	33362 MS	33363 MS	33366 MS	33331 MS	33346 MS	33347 MS
33410 MS	33461 MS	33462 MS	33463 MS	33466 MS	33431 MS	33446 MS	33447 MS
  — 14 —	CLICK <sup>linē</sup> Dissecting and Grasping Forceps, “duckbill jaws”, blunt, to effect mechanical hemostasis						
33210 MT	33261 MT	33262 MT	33263 MT	33266 MT	33231 MT	33246 MT	33247 MT
33310 MT	33361 MT	33362 MT	33363 MT	33366 MT	33331 MT	33346 MT	33347 MT
  — 20 —	CLICK <sup>linē</sup> Dissecting and Grasping Forceps, “duckbill jaws”, blunt, to effect mechanical hemostasis						

# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation




Size 5 mm

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



Length	Handle					
	33151	33152	33153	33156	33121	33149
36 cm						

## Single action jaws






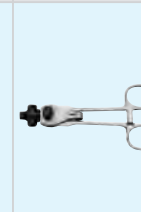
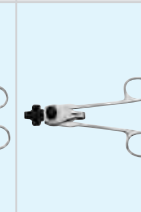
Working Insert	Complete Instrument					
33310 MU 	33351 MU	33352 MU	33353 MU	33356 MU	33321 MU	33349 MU
	<b>CLICK<sup>line</sup> Dissecting and Grasping Forceps</b> , conical, blunt, to effect mechanical hemostasis					
33310 MV 	33351 MV	33352 MV	33353 MV	33356 MV	33321 MV	33349 MV
	<b>CLICK<sup>line</sup> Dissecting and Grasping Forceps</b> , conical, blunt, to effect mechanical hemostasis					
33310 MP 	33351 MP	33352 MP	33353 MP	33356 MP	33321 MP	33349 MP
	<b>CLICK<sup>line</sup> Dissecting and Grasping Forceps</b> , “dolphin nose”, small					

# Dissecting and Grasping Forceps




CLICK'linē – rotating, dismantling,  
without connector for unipolar coagulation

Size 5 mm

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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

## Single action jaws

Working Insert	Complete Instrument						
33310 MU	33361 MU	33362 MU	33363 MU	33366 MU	33331 MU	33346 MU	33347 MU
   20	CLICK'linē Dissecting and Grasping Forceps, conical, blunt, to effect mechanical hemostasis						
33310 MV	33361 MV	33362 MV	33363 MV	33366 MV	33331 MV	33346 MV	33347 MV
   14	CLICK'linē Dissecting and Grasping Forceps, conical, blunt, to effect mechanical hemostasis						
33310 MP	33361 MP	33362 MP	33363 MP	33366 MP	33331 MP	33346 MP	33347 MP
   10	CLICK'linē Dissecting and Grasping Forceps, “dolphin nose”, small						

# Dissecting and Grasping Forceps

CLICK'line® – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, **lengths 30 and 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



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Single action jaws

Working Insert	Complete Instrument					
33210 MN	33251 MN	33252 MN	33253 MN	33256 MN	33221 MN	33249 MN
33310 MN	33351 MN	33352 MN	33353 MN	33356 MN	33321 MN	33349 MN
33410 MN	33451 MN	33452 MN	33453 MN	33456 MN	33421 MN	33449 MN



— 26 —

**CLICK'line® MOURET Dissecting and Grasping Forceps,**  
slender, atraumatic, fenestrated

33310 MM

33351 MM

33352 MM

33353 MM

33356 MM

33321 MM

33349 MM



— 30 —

**CLICK'line® MOURET Dissecting and Grasping Forceps,**  
with slender curved jaws, large reservoir








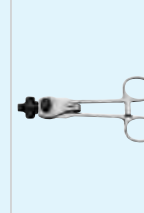
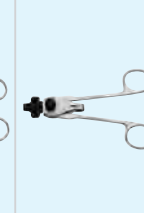





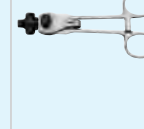
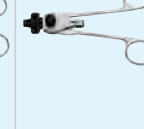





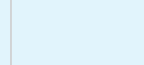
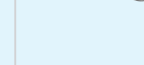
# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Single action jaws

Working Insert	Complete Instrument						
33210 MN	33261 MN	33262 MN	33263 MN	33266 MN	33231 MN	33246 MN	33247 MN
33310 MN	33361 MN	33362 MN	33363 MN	33366 MN	33331 MN	33346 MN	33347 MN
33410 MN	33461 MN	33462 MN	33463 MN	33466 MN	33431 MN	33446 MN	33447 MN



— 26 —

CLICK'line MOURET Dissecting and Grasping Forceps,  
slender, atraumatic, fenestrated

33310 MM	33361 MM	33362 MM	33363 MM	33366 MM	33331 MM	33346 MM	33347 MM
----------	----------	----------	----------	----------	----------	----------	----------



— 30 —

CLICK'line MOURET Dissecting and Grasping Forceps,  
with slender curved jaws, large reservoir

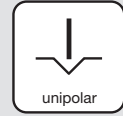
# Dissecting and Grasping Forceps

CLICK<sup>liné</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

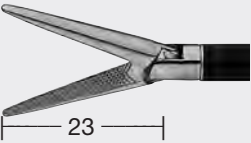



Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 6 mm

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



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Double action jaws

Working Insert	Complete Instrument					
33310 MH	33351 MH	33352 MH	33353 MH	33356 MH	33321 MH	33349 MH
   23	CLICK <sup>liné</sup> Dissecting and Grasping Forceps, atraumatic					
33310 DF	33351 DF	33352 DF	33353 DF	33356 DF	33321 DF	33349 DF
33410 DF	33451 DF	33452 DF	33453 DF	33456 DF	33421 DF	33449 DF
   17	CLICK <sup>liné</sup> Dissecting and Grasping Forceps, atraumatic					
33210 DN	33251 DN	33252 DN	33253 DN	33256 DN	33221 DN	33249 DN
33310 DN	33351 DN	33352 DN	33353 DN	33356 DN	33321 DN	33349 DN
33410 DN	33451 DN	33452 DN	33453 DN	33456 DN	33421 DN	33449 DN
   18	CLICK <sup>liné</sup> Dissecting and Grasping Forceps, "dolphin nose"					
33310 KJ	33351 KJ	33352 KJ	33353 KJ	33356 KJ	33321 KJ	33349 KJ
33410 KJ	33451 KJ	33452 KJ	33453 KJ	33456 KJ	33421 KJ	33449 KJ
   13	CLICK <sup>liné</sup> REDDICK-OLSEN Dissecting and Grasping Forceps					

# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Double action jaws

Working Insert	Complete Instrument						
33310 MH	33361 MH	33362 MH	33363 MH	33366 MH	33331 MH	33346 MH	33347 MH
	<b>CLICK'liné Dissecting and Grasping Forceps, atraumatic</b>						
33310 DF	33361 DF	33362 DF	33363 DF	33366 DF	33331 DF	33346 DF	33347 DF
33410 DF	33461 DF	33462 DF	33463 DF	33466 DF	33431 DF	33446 DF	33447 DF
	<b>CLICK'liné Dissecting and Grasping Forceps, atraumatic</b>						
33210 DN	33261 DN	33262 DN	33263 DN	33266 DN	33231 DN	33246 DN	33247 DN
33310 DN	33361 DN	33362 DN	33363 DN	33366 DN	33331 DN	33346 DN	33347 DN
33410 DN	33461 DN	33462 DN	33463 DN	33466 DN	33431 DN	33446 DN	33447 DN
	<b>CLICK'liné Dissecting and Grasping Forceps, "dolphin nose"</b>						
33310 KJ	33361 KJ	33362 KJ	33363 KJ	33366 KJ	33331 KJ	33346 KJ	33347 KJ
33410 KJ	33461 KJ	33462 KJ	33463 KJ	33466 KJ	33431 KJ	33446 KJ	33447 KJ
	<b>CLICK'liné REDDICK-OLSEN Dissecting and Grasping Forceps</b>						

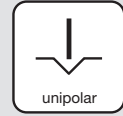
# Dissecting and Grasping Forceps

CLICK*liné* – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 6 mm

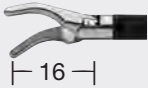
Operating instruments, length 43 cm,  
for use with telescopes with inbuilt  
working channel and trocars size 6 mm



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Double action jaws

Working Insert	Complete Instrument					
33210 MD	33251 MD	33252 MD	33253 MD	33256 MD	33221 MD	33249 MD
33310 MD	33351 MD	33352 MD	33353 MD	33356 MD	33321 MD	33349 MD
33410 MD	33451 MD	33452 MD	33453 MD	33456 MD	33421 MD	33449 MD



CLICK*liné* KELLY Dissecting and Grasping Forceps

33210 ML	33251 ML	33252 ML	33253 ML	33256 ML	33221 ML	33249 ML
33310 ML	33351 ML	33352 ML	33353 ML	33356 ML	33321 ML	33349 ML
33410 ML	33451 ML	33452 ML	33453 ML	33456 ML	33421 ML	33449 ML



CLICK*liné* KELLY Dissecting and Grasping Forceps, long

33310 DK	33351 DK	33352 DK	33353 DK	33356 DK	33321 DK	33349 DK
----------	----------	----------	----------	----------	----------	----------



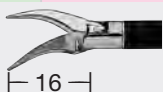
CLICK*liné* DeBAKEY Grasping Forceps,  
curved and slender jaws, atraumatic

33310 UY	33351 UY	33352 UY	33353 UY	33356 UY	33321 UY	33349 UY
----------	----------	----------	----------	----------	----------	----------



CLICK*liné* UYAMA Dissecting and Grasping Forceps,  
long jaws, with reservoir, fine, for dissection

33310 NO	33351 NO	33352 NO	33353 NO	33356 NO	33321 NO	33349 NO
----------	----------	----------	----------	----------	----------	----------



CLICK*liné* NOSHIRO Dissecting and Grasping Forceps,  
short jaws, fine, for dissection

# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

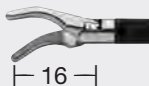
Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 6 mm

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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Double action jaws

Working Insert	Complete Instrument						
33210 MD	33261 MD	33262 MD	33263 MD	33266 MD	33231 MD	33246 MD	33247 MD
33310 MD	33361 MD	33362 MD	33363 MD	33366 MD	33331 MD	33346 MD	33347 MD
33410 MD	33461 MD	33462 MD	33463 MD	33466 MD	33431 MD	33446 MD	33447 MD



CLICK'liné KELLY Dissecting and Grasping Forceps

33210 ML	33261 ML	33262 ML	33263 ML	33266 ML	33231 ML	33246 ML	33247 ML
33310 ML	33361 ML	33362 ML	33363 ML	33366 ML	33331 ML	33346 ML	33347 ML
33410 ML	33461 ML	33462 ML	33463 ML	33466 ML	33431 ML	33446 ML	33447 ML



CLICK'liné KELLY Dissecting and Grasping Forceps, long

33310 DK	33361 DK	33362 DK	33363 DK	33366 DK	33331 DK	33346 DK	33347 DK
----------	----------	----------	----------	----------	----------	----------	----------



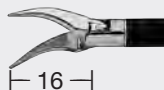
CLICK'liné DeBAKEY Grasping Forceps,  
curved and slender jaws, atraumatic

33310 UY	33361 UY	33362 UY	33363 UY	33366 UY	33331 UY	33346 UY	33347 UY
----------	----------	----------	----------	----------	----------	----------	----------



CLICK'liné UYAMA Dissecting and Grasping Forceps,  
long jaws, with reservoir, fine, for dissection

33310 NO	33361 NO	33362 NO	33363 NO	33366 NO	33331 NO	33346 NO	33347 NO
----------	----------	----------	----------	----------	----------	----------	----------



CLICK'liné NOSHIRO Dissecting and Grasping Forceps,  
short jaws, fine, for dissection

# Dissecting and Grasping Forceps

CLICK'line® – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 6 mm

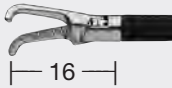
Operating instruments, length 43 cm,  
for use with telescopes with inbuilt  
working channel and trocars size 6 mm



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Double action jaws

Working Insert	Complete Instrument					
33210 R	33251 R	33252 R	33253 R	33256 R	33221 R	33249 R
33310 R	33351 R	33352 R	33353 R	33356 R	33321 R	33349 R
33410 R	33451 R	33452 R	33453 R	33456 R	33421 R	33449 R



CLICK'line® Dissecting and Grasping Forceps, jaws right-angled

33210 UL	33251 UL	33252 UL	33253 UL	33256 UL	33221 UL	33249 UL
33310 UL	33351 UL	33352 UL	33353 UL	33356 UL	33321 UL	33349 UL
33410 UL	33451 UL	33452 UL	33453 UL	33456 UL	33421 UL	33449 UL



CLICK'line® REDDICK-OLSEN Dissecting and Grasping Forceps, robust

33210 HM	33251 HM	33252 HM	33253 HM	33256 HM	33221 HM	33249 HM
33310 HM	33351 HM	33352 HM	33353 HM	33356 HM	33321 HM	33349 HM
33410 HM	33451 HM	33452 HM	33453 HM	33456 HM	33421 HM	33449 HM



CLICK'line® Dissecting and Grasping Forceps, "alligator jaws"

# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Double action jaws

Working Insert	Complete Instrument						
33210 R	33261 R	33262 R	33263 R	33266 R	33231 R	33246 R	33247 R
33310 R	33361 R	33362 R	33363 R	33366 R	33331 R	33346 R	33347 R
33410 R	33461 R	33462 R	33463 R	33466 R	33431 R	33446 R	33447 R



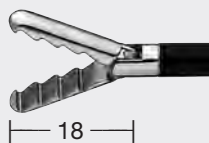
CLICK'line Dissecting and Grasping Forceps, jaws right-angled

33210 UL	33261 UL	33262 UL	33263 UL	33266 UL	33231 UL	33246 UL	33247 UL
33310 UL	33361 UL	33362 UL	33363 UL	33366 UL	33331 UL	33346 UL	33347 UL
33410 UL	33461 UL	33462 UL	33463 UL	33466 UL	33431 UL	33446 UL	33447 UL



CLICK'line REDDICK-OLSEN Dissecting and Grasping Forceps, robust

33210 HM	33261 HM	33262 HM	33263 HM	33266 HM	33231 HM	33246 HM	33247 HM
33310 HM	33361 HM	33362 HM	33363 HM	33366 HM	33331 HM	33346 HM	33347 HM
33410 HM	33461 HM	33462 HM	33463 HM	33466 HM	33431 HM	33446 HM	33447 HM



CLICK'line Dissecting and Grasping Forceps, "alligator jaws"

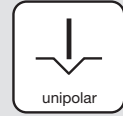
# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths **30 and 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



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Single action jaws

Working Insert	Complete Instrument					
33210 ON	33251 ON	33252 ON	33253 ON	33256 ON	33221 ON	33249 ON
33310 ON	33351 ON	33352 ON	33353 ON	33356 ON	33321 ON	33349 ON
33410 ON	33451 ON	33452 ON	33453 ON	33456 ON	33421 ON	33449 ON



CLICK<sup>line</sup> Grasping Forceps, with fine atraumatic serration, fenestrated

33210 LF	33251 LF	33252 LF	33253 LF	33256 LF	33221 LF	33249 LF
33310 LF	33351 LF	33352 LF	33353 LF	33356 LF	33321 LF	33349 LF
33410 LF	33451 LF	33452 LF	33453 LF	33456 LF	33421 LF	33449 LF



CLICK<sup>line</sup> Grasping Forceps, atraumatic, with hollow jaws

33210 CC	33251 CC	33252 CC	33253 CC	33256 CC	33221 CC	33249 CC
33310 CC	33351 CC	33352 CC	33353 CC	33356 CC	33321 CC	33349 CC
33410 CC	33451 CC	33452 CC	33453 CC	33456 CC	33421 CC	33449 CC



CLICK<sup>line</sup> CROCE-OLMI Grasping Forceps, atraumatic, fenestrated, curved



# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, **lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

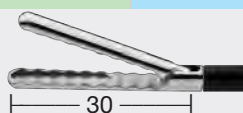
## Single action jaws

Working Insert	Complete Instrument						
33210 ON	33261 ON	33262 ON	33263 ON	33266 ON	33231 ON	33246 ON	33247 ON
33310 ON	33361 ON	33362 ON	33363 ON	33366 ON	33331 ON	33346 ON	33347 ON
33410 ON	33461 ON	33462 ON	33463 ON	33466 ON	33431 ON	33446 ON	33447 ON



CLICK'line Grasping Forceps, with fine atraumatic serration, fenestrated

33210 LF	33261 LF	33262 LF	33263 LF	33266 LF	33231 LF	33246 LF	33247 LF
33310 LF	33361 LF	33362 LF	33363 LF	33366 LF	33331 LF	33346 LF	33347 LF
33410 LF	33461 LF	33462 LF	33463 LF	33466 LF	33431 LF	33446 LF	33447 LF



CLICK'line Grasping Forceps, atraumatic, with hollow jaws

33210 CC	33261 CC	33262 CC	33263 CC	33266 CC	33231 CC	33246 CC	33247 CC
33310 CC	33361 CC	33362 CC	33363 CC	33366 CC	33331 CC	33346 CC	33347 CC
33410 CC	33461 CC	33462 CC	33463 CC	33466 CC	33431 CC	33446 CC	33447 CC



CLICK'line CROCE-OLMI Grasping Forceps, atraumatic, fenestrated, curved

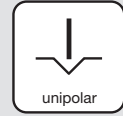
# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm



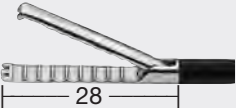

Operating instruments, lengths **30 and 36 cm**,  
for use with trocars size **6 mm**

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



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Single action jaws

Working Insert	Complete Instrument					
33310 SN	33351 SN	33352 SN	33353 SN	33356 SN	33321 SN	33349 SN
   22	<b>CLICK<sup>line</sup> SCHNEIDER Lymph Node Grasping Forceps, atraumatic</b>					
33310 DY	33351 DY	33352 DY	33353 DY	33356 DY	33321 DY	33349 DY
33410 DY	33451 DY	33452 DY	33453 DY	33456 DY	33421 DY	33449 DY
   24	<b>CLICK<sup>line</sup> DeBAKEY Grasping Forceps, atraumatic</b>					
33310 WT	33351 WT	33352 WT	33353 WT	33356 WT	33321 WT	33349 WT
   28	<b>CLICK<sup>line</sup> Grasping Forceps, atraumatic</b>					
33210 BA	33251 BA	33252 BA	33253 BA	33256 BA	33221 BA	33249 BA
33310 BA	33351 BA	33352 BA	33353 BA	33356 BA	33321 BA	33349 BA
33410 BA	33451 BA	33452 BA	33453 BA	33456 BA	33421 BA	33449 BA
   16	<b>CLICK<sup>line</sup> BABCOCK Grasping Forceps, atraumatic, jaws with multiple teeth, fenestrated</b>					

# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Single action jaws

Working Insert	Complete Instrument						
33310 SN	33361 SN	33362 SN	33363 SN	33366 SN	33331 SN	33346 SN	33347 SN
   22	<b>CLICK'line SCHNEIDER Lymph Node Grasping Forceps</b> , atraumatic						
33310 DY	33361 DY	33362 DY	33363 DY	33366 DY	33331 DY	33346 DY	33347 DY
33410 DY	33461 DY	33462 DY	33463 DY	33466 DY	33431 DY	33446 DY	33447 DY
   24	<b>CLICK'line DeBAKEY Grasping Forceps</b> , atraumatic						
33310 WT	33361 WT	33362 WT	33363 WT	33366 WT	33331 WT	33346 WT	33347 WT
   28	<b>CLICK'line Grasping Forceps</b> , atraumatic						
33210 BA	33261 BA	33262 BA	33263 BA	33266 BA	33231 BA	33246 BA	33247 BA
33310 BA	33361 BA	33362 BA	33363 BA	33366 BA	33331 BA	33346 BA	33347 BA
33410 BA	33461 BA	33462 BA	33463 BA	33466 BA	33431 BA	33446 BA	33447 BA
   16	<b>CLICK'line BABCOCK Grasping Forceps</b> , atraumatic, jaws with multiple teeth, fenestrated						

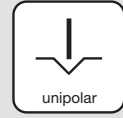
# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, **length 36 cm**,  
zur Verwendung **with trocars size 6 mm**

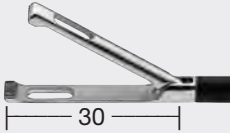
Operating instruments, **length 43 cm**,  
for use with telescopes with inbuilt  
working channel and trocars size 6 mm



Length	Handle					
	33151	33152	33153	33156	33121	33149
36 cm						
43 cm						

## Single action jaws

Working Insert	Complete Instrument					
33310 BB	33351 BB	33352 BB	33353 BB	33356 BB	33321 BB	33349 BB
33410 BB	33451 BB	33452 BB	33453 BB	33456 BB	33421 BB	33449 BB



**CLICK'line BABCOCK Grasping Forceps**, atraumatic, jaws with multiple teeth, fenestrated, long

33310 AA	33351 AA	33352 AA	33353 AA	33356 AA	33321 AA	33349 AA
----------	----------	----------	----------	----------	----------	----------



**CLICK'line MOURET Grasping Forceps**, atraumatic, fenestrated, slender

33310 AB	33351 AB	33352 AB	33353 AB	33356 AB	33321 AB	33349 AB
----------	----------	----------	----------	----------	----------	----------



**CLICK'line MOURET Grasping Forceps**, atraumatic, fenestrated, round jaws, slender

33310 MA	33351 MA	33352 MA	33353 MA	33356 MA	33321 MA	33349 MA
----------	----------	----------	----------	----------	----------	----------



**CLICK'line Grasping Forceps**, "cobra jaws", 1 x 2 teeth

# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							
43 cm							

## Single action jaws

Working Insert	Complete Instrument						
33310 BB	33361 BB	33362 BB	33363 BB	33366 BB	33331 BB	33346 BB	33347 BB
33410 BB	33461 BB	33462 BB	33463 BB	33466 BB	33431 BB	33446 BB	33447 BB



CLICK'liné BABCOCK Grasping Forceps, atraumatic, with multiple teeth, fenestrated, long

33310 AA	33361 AA	33362 AA	33363 AA	33366 AA	33331 AA	33346 AA	33347 AA
----------	----------	----------	----------	----------	----------	----------	----------



CLICK'liné MOURET Grasping Forceps, atraumatic, fenestrated, slender

33310 AB	33361 AB	33362 AB	33363 AB	33366 AB	33331 AB	33346 AB	33347 AB
----------	----------	----------	----------	----------	----------	----------	----------



CLICK'liné MOURET Grasping Forceps, atraumatic, fenestrated, round jaws, slender

33310 MA	33361 MA	33362 MA	33363 MA	33366 MA	33331 MA	33346 MA	33347 MA
----------	----------	----------	----------	----------	----------	----------	----------



CLICK'liné Grasping Forceps, "cobra jaws", 1 x 2 teeth

# Dissecting and Grasping Forceps

CLICK<sup>liné</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm


Operating instruments, lengths 30 and 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

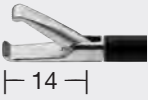


Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						


## Single action jaws

Working Insert	Complete Instrument					
33310 M	33351 M	33352 M	33353 M	33356 M	33321 M	33349 M
	<b>CLICK<sup>liné</sup> Grasping Forceps</b> , with multiple teeth, width of jaws 3 mm, for atraumatic and accurate grasping					

33310 FM	33351 FM	33352 FM	33353 FM	33356 FM	33321 FM	33349 FM
33410 FM	33451 FM	33452 FM	33453 FM	33456 FM	33421 FM	33449 FM
	<b>CLICK<sup>liné</sup> Claw Forceps</b> , 2 x 3 teeth					

33210 ME	33251 ME	33252 ME	33253 ME	33256 ME	33221 ME	33249 ME
33310 ME	33351 ME	33352 ME	33353 ME	33356 ME	33321 ME	33349 ME
33410 ME	33451 ME	33452 ME	33453 ME	33456 ME	33421 ME	33449 ME
	<b>CLICK<sup>liné</sup> Grasping Forceps</b> , with multiple teeth, width of jaws 4.8 mm, for atraumatic and accurate grasping					

33210 MG	33251 MG	33252 MG	33253 MG	33256 MG	33221 MG	33249 MG
33310 MG	33351 MG	33352 MG	33353 MG	33356 MG	33321 MG	33349 MG
33410 MG	33451 MG	33452 MG	33453 MG	33456 MG	33421 MG	33449 MG

	<b>CLICK<sup>liné</sup> Grasping Forceps</b> , “tiger jaws”, 2 x 4 teeth, for grasping and removal of solid organs, in particular during adhesiolyses					
---	---	--	--	--	--	--

# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector pin for unipolar coagulation





## Size 5 mm

Operating instruments, lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Single action jaws

Working Insert	Complete Instrument						
33310 M	33361 M	33362 M	33363 M	33366 M	33331 M	33346 M	33347 M
  —14—	<b>CLICK'liné Grasping Forceps</b> , with multiple teeth, width of jaws 3 mm, for atraumatic and accurate grasping						
33310 FM	33361 FM	33362 FM	33363 FM	33366 FM	33331 FM	33346 FM	33347 FM
33410 FM	33461 FM	33462 FM	33463 FM	33466 FM	33431 FM	33446 FM	33447 FM
  —26—	<b>CLICK'liné Claw Forceps</b> , 2 x 3 teeth						
33210 ME	33261 ME	33262 ME	33263 ME	33266 ME	33231 ME	33246 ME	33247 ME
33310 ME	33361 ME	33362 ME	33363 ME	33366 ME	33331 ME	33346 ME	33347 ME
33410 ME	33461 ME	33462 ME	33463 ME	33466 ME	33431 ME	33446 ME	33447 ME
  —14—	<b>CLICK'liné Grasping Forceps</b> , with multiple teeth, width of jaws 4.8 mm, for atraumatic and accurate grasping						
33210 MG	33261 MG	33262 MG	33263 MG	33266 MG	33231 MG	33246 MG	33247 MG
33310 MG	33361 MG	33362 MG	33363 MG	33366 MG	33331 MG	33346 MG	33347 MG
33410 MG	33461 MG	33462 MG	33463 MG	33466 MG	33431 MG	33446 MG	33447 MG
  —14—	<b>CLICK'liné Grasping Forceps</b> , “tiger jaws”, 2 x 4 teeth, for grasping and removal of solid organs, in particular during adhesiolyses						

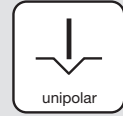
# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated, with connector pin for unipolar coagulation

Size 5 mm

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

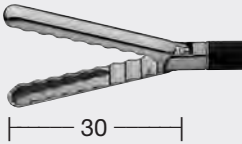
Operating instruments, length 43 cm, for use with telescopes with inbuilt working channel and trocars size 6 mm



Length	Handle					
	33151	33152	33153	33156	33121	33149
36 cm						
43 cm						

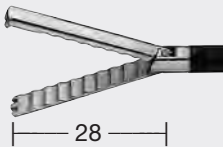
## Double action jaws

Working Insert	Complete Instrument					
33310 LFD	33351 LFD	33352 LFD	33353 LFD	33356 LFD	33321 LFD	33349 LFD
33410 LFD	33451 LFD	33452 LFD	33453 LFD	33456 LFD	33421 LFD	33449 LFD



CLICK<sup>line</sup> Grasping Forceps, atraumatic, hollow jaws

33310 WTD	33351 WTD	33352 WTD	33353 WTD	33356 WTD	33321 WTD	33349 WTD
-----------	-----------	-----------	-----------	-----------	-----------	-----------



CLICK<sup>line</sup> Grasping Forceps, atraumatic

33310 DYD	33351 DYD	33352 DYD	33353 DYD	33356 DYD	33321 DYD	33349 DYD
33410 DYD	33451 DYD	33452 DYD	33453 DYD	33456 DYD	33421 DYD	33449 DYD



CLICK<sup>line</sup> DeBAKEY Grasping Forceps, atraumatic

33310 CG	33351 CG	33352 CG	33353 CG	33356 CG	33321 CG	33349 CG
----------	----------	----------	----------	----------	----------	----------



CLICK<sup>line</sup> Dissecting and Grasping Forceps, atraumatic, hollow jaws



# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

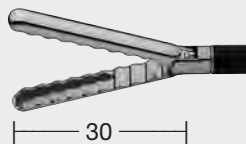
Operating instruments, **length 36 cm**,  
for use **with trocars size 6 mm**

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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							
43 cm							

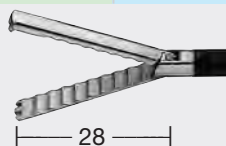
## Double action jaws

Working Insert	Complete Instrument						
33310 LFD	33361 LFD	33362 LFD	33363 LFD	33366 LFD	33331 LFD	33346 LFD	33347 LFD
33410 LFD	33461 LFD	33462 LFD	33463 LFD	33466 LFD	33431 LFD	33446 LFD	33447 LFD



CLICK'liné Grasping Forceps, atraumatic, hollow jaws

33310 WTD	33361 WTD	33362 WTD	33363 WTD	33366 WTD	33331 WTD	33346 WTD	33347 WTD
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------



CLICK'liné Grasping Forceps, atraumatic

33310 DYD	33361 DYD	33362 DYD	33363 DYD	33366 DYD	33331 DYD	33346 DYD	33347 DYD
33410 DYD	33461 DYD	33462 DYD	33463 DYD	33466 DYD	33431 DYD	33446 DYD	33447 DYD



CLICK'liné DeBAKEY Grasping Forceps, atraumatic

33310 CG	33361 CG	33362 CG	33363 CG	33366 CG	33331 CG	33346 CG	33347 CG
----------	----------	----------	----------	----------	----------	----------	----------



CLICK'liné Dissecting and Grasping Forceps, atraumatic, hollow jaws

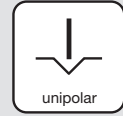
# Dissecting and Grasping Forceps

CLICK<sup>liné</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, length 30 und 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



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Double action jaws

Working Insert	Complete Instrument					
33210 AF	33251 AF	33252 AF	33253 AF	33256 AF	33221 AF	33249 AF
33310 AF	33351 AF	33352 AF	33353 AF	33356 AF	33321 AF	33349 AF
33410 AF	33451 AF	33452 AF	33453 AF	33456 AF	33421 AF	33449 AF



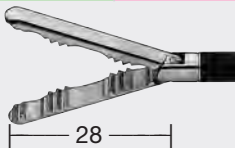
CLICK<sup>liné</sup> Grasping Forceps, atraumatic, fenestrated

33310 OD	33351 OD	33352 OD	33353 OD	33356 OD	33321 OD	33349 OD
----------	----------	----------	----------	----------	----------	----------



CLICK<sup>liné</sup> Grasping Forceps, fenestrated, with fine atraumatic serration

33310 FG	33351 FG	33352 FG	33353 FG	33356 FG	33321 FG	33349 FG
33410 FG	33451 FG	33452 FG	33453 FG	33456 FG	33421 FG	33449 FG



CLICK<sup>liné</sup> Grasping Forceps, atraumatic

33210 D	33251 D	33252 D	33253 D	33256 D	33221 D	33249 D
33310 D	33351 D	33352 D	33353 D	33356 D	33321 D	33349 D



CLICK<sup>liné</sup> Grasping Forceps, atraumatic, spoon-shaped, with multiple teeth

33310 K	33351 K	33352 K	33353 K	33356 K	33321 K	33349 K
---------	---------	---------	---------	---------	---------	---------



CLICK<sup>liné</sup> Grasping Forceps, atraumatic, fenestrated

# Dissecting and Grasping Forceps

CLICK'linē – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Double action jaws

Working Insert	Complete Instrument						
33210 AF	33261 AF	33262 AF	33263 AF	33266 AF	33231 AF	33246 AF	33247 AF
33310 AF	33361 AF	33362 AF	33363 AF	33366 AF	33331 AF	33346 AF	33347 AF
33410 AF	33461 AF	33462 AF	33463 AF	33466 AF	33431 AF	33446 AF	33447 AF



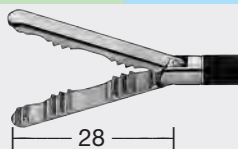
CLICK'linē Grasping Forceps, atraumatic, fenestrated

33310 OD	33361 OD	33362 OD	33363 OD	33366 OD	33331 OD	33346 OD	33347 OD
----------	----------	----------	----------	----------	----------	----------	----------



CLICK'linē Grasping Forceps, fenestrated, with fine atraumatic serration

33310 FG	33361 FG	33362 FG	33363 FG	33366 FG	33331 FG	33346 FG	33347 FG
33410 FG	33461 FG	33462 FG	33463 FG	33466 FG	33431 FG	33446 FG	33447 FG



CLICK'linē Grasping Forceps, atraumatic

33210 D	33261 D	33262 D	33263 D	33266 D	33231 D	33246 D	33247 D
33310 D	33361 D	33362 D	33363 D	33366 D	33331 D	33346 D	33347 D



CLICK'linē Grasping Forceps, atraumatic, spoon-shaped, with multiple teeth

33310 K	33361 K	33362 K	33363 K	33366 K	33331 K	33346 K	33347 K
---------	---------	---------	---------	---------	---------	---------	---------



CLICK'linē Grasping Forceps, atraumatic, fenestrated

7-11z

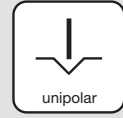
# Dissecting and Grasping Forceps

CLICK<sup>linē</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 6 mm

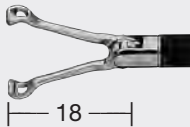
Operating instruments, length 43 cm,  
for use with telescopes with inbuilt  
working channel and trocars size 6 mm



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Double action jaws

Working Insert	Complete Instrument					
33210 A	33251 A	33252 A	33253 A	33256 A	33221 A	33249 A
33310 A	33351 A	33352 A	33353 A	33356 A	33321 A	33349 A
33410 A	33451 A	33452 A	33453 A	33456 A	33421 A	33449 A



CLICK<sup>linē</sup> BABCOCK Grasping Forceps, atraumatic, fenestrated

18

33210 C	33251 C	33252 C	33253 C	33256 C	33221 C	33249 C
33310 C	33351 C	33352 C	33353 C	33356 C	33321 C	33349 C
33410 C	33451 C	33452 C	33453 C	33456 C	33421 C	33449 C



CLICK<sup>linē</sup> Bowel Grasper, fenestrated

37

33310 CK	33351 CK	33352 CK	33353 CK	33356 CK	33321 CK	33349 CK
33410 CK	33451 CK	33452 CK	33453 CK	33456 CK	33421 CK	33449 CK



CLICK<sup>linē</sup> Bowel Grasper, fenestrated, short

18

33310 UK	33351 UK	33352 UK	33353 UK	33356 UK	33321 UK	33349 UK
----------	----------	----------	----------	----------	----------	----------



CLICK<sup>linē</sup> KOH Urethra Grasping Forceps, insulated jaws, concave inwardly curved jaws, continuously toothed

21

# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling,  
without connector pin for unipolar coagulation

## Size 5 mm

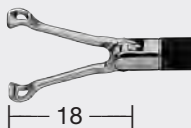
Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 6 mm

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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Double action jaws

Working Insert	Complete Instrument						
33210 A	33261 A	33262 A	33263 A	33266 A	33231 A	33246 A	33247 A
33310 A	33361 A	33362 A	33363 A	33366 A	33331 A	33346 A	33347 A
33410 A	33461 A	33462 A	33463 A	33466 A	33431 A	33446 A	33447 A



CLICK'line BABCOCK Grasping Forceps, atraumatic, fenestrated

33210 C	33261 C	33262 C	33263 C	33266 C	33231 C	33246 C	33247 C
33310 C	33361 C	33362 C	33363 C	33366 C	33331 C	33346 C	33347 C
33410 C	33461 C	33462 C	33463 C	33466 C	33431 C	33446 C	33447 C



CLICK'line Bowel Grasper, fenestrated

33310 CK	33361 CK	33362 CK	33363 CK	33366 CK	33331 CK	33346 CK	33347 CK
33410 CK	33461 CK	33462 CK	33463 CK	33466 CK	33431 CK	33446 CK	33447 CK



CLICK'line Bowel Grasper, fenestrated, short

33310 UK	33361 UK	33362 UK	33363 UK	33366 UK	33331 UK	33346 UK	33347 UK
----------	----------	----------	----------	----------	----------	----------	----------



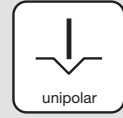
CLICK'line KOH Urethra Grasping Forceps, insulated jaws, concave inwardly curved jaws, continuously toothed

# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

Size 5 mm

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



Length	Handle					
	33151	33152	33153	33156	33121	33149
36 cm						

## Double action jaws






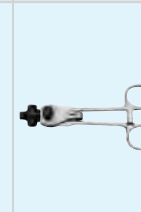
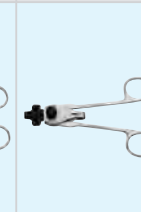
Working Insert	Complete Instrument					
33310 VK	33351 VK	33352 VK	33353 VK	33356 VK	33321 VK	33349 VK
	<b>CLICK<sup>line</sup> Adhesion Forceps, one fenestrated jaw</b>					
33310 VT	33351 VT	33352 VT	33353 VT	33356 VT	33321 VT	33349 VT
	<b>CLICK<sup>line</sup> Oviduct Forceps</b>					
33310 VA	33351 VA	33352 VA	33353 VA	33356 VA	33321 VA	33349 VA
	<b>CLICK<sup>line</sup> Mesoovarian Forceps</b>					

# Dissecting and Grasping Forceps

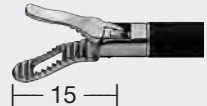


CLICK'liné – rotating, dismantling,  
without connector pin for unipolar coagulation

Size 5 mm

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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

## Double action jaws

Working Insert	Complete Instrument						
33310 VK	33361 VK	33362 VK	33363 VK	33366 VK	33331 VK	33346 VK	33347 VK
   15	CLICK'liné Adhesion Forceps, one fenestrated jaw						
33310 VT	33361 VT	33362 VT	33363 VT	33366 VT	33331 VT	33346 VT	33347 VT
   13	CLICK'liné Oviduct Forceps						
33310 VA	33361 VA	33362 VA	33363 VA	33366 VA	33331 VA	33346 VA	33347 VA
   15	CLICK'liné Mesoovarian Forceps						

# Dissecting and Grasping Forceps

CLICK<sup>line</sup> – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

Size 5 mm

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



Length	Handle					
	33151	33152	33153	33156	33121	33149
36 cm						

## Double action jaws

Working Insert	Complete Instrument					
33310 SW	33351 SW	33352 SW	33353 SW	33356 SW	33321 SW	33349 SW
 23	CLICK <sup>line</sup> SWOLIN Grasping Forceps, atraumatic, blunt edges and teeth protect against injury and allow the fallopian tubes or similarly delicate structures to be held gently					
33310 AG	33351 AG	33352 AG	33353 AG	33356 AG	33321 AG	33349 AG
 16	CLICK <sup>line</sup> MANGESHIKAR Grasping Forceps, serrated					






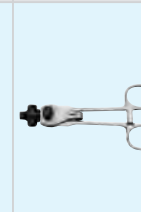
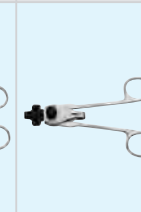


# Dissecting and Grasping Forceps



CLICK'linē – rotating, dismantling,  
without connector pin for unipolar coagulation

Size 5 mm

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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

## Double action jaws

Working Insert	Complete Instrument						
33310 SW	33361 SW	33362 SW	33363 SW	33366 SW	33331 SW	33346 SW	33347 SW
   23	<b>CLICK'linē SWOLIN Grasping Forceps</b> , atraumatic, blunt edges and teeth protect against injury and allow the fallopian tubes or similarly delicate structures to be held gently						
33310 AG	33361 AG	33362 AG	33363 AG	33366 AG	33331 AG	33346 AG	33347 AG
   16	<b>CLICK'linē MANGESHIKAR Grasping Forceps</b> , serrated						

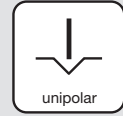
# Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, lengths **30 and 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



Length	Handle					
	33151	33152	33153	33156	33121	33149
30 cm						
36 cm						
43 cm						

## Double action jaws

Working Insert	Complete Instrument					
33310 KW	33351 KW	33352 KW	33353 KW	33356 KW	33321 KW	33349 KW
   18	<b>CLICK'line MATKOWITZ Grasping Forceps</b>					
33210 G	33251 G	33252 G	33253 G	33256 G	33221 G	33249 G
33310 G	33351 G	33352 G	33353 G	33356 G	33321 G	33349 G
33410 G	33451 G	33452 G	33453 G	33456 G	33421 G	33449 G
   14	<b>CLICK'line Grasping Forceps, 2 x 4 teeth</b>					
33310 J	33351 J	33352 J	33353 J	33356 J	33321 J	33349 J
   11	<b>CLICK'line BERCI Multifunctional Grasping Forceps, 1 x 1 teeth</b>					
33310 PM	33351 PM	33352 PM	33353 PM	33356 PM	33321 PM	33349 PM
   17	<b>CLICK'line MANGESHIKAR Grasping Forceps, 2 x 1 teeth</b>					

# Dissecting and Grasping Forceps

CLICK'liné – rotating, dismantling,  
without connector pin for coagulation

## Size 5 mm

Operating instruments, **lengths 30 and 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

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							
43 cm							

## Double action jaws

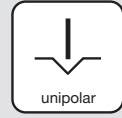
Working Insert	Complete Instrument						
33310 KW	33361 KW	33362 KW	33363 KW	33366 KW	33331 KW	33346 KW	33347 KW
	<b>CLICK'liné MATKOWITZ Grasping Forceps</b>						
33210 G	33261 G	33262 G	33263 G	33266 G	33231 G	33246 G	33247 G
33310 G	33361 G	33362 G	33363 G	33366 G	33331 G	33346 G	33347 G
33410 G	33461 G	33462 G	33463 G	33466 G	33431 G	33446 G	33447 G
	<b>CLICK'liné Grasping Forceps, 2 x 4 teeth</b>						
33310 J	33361 J	33362 J	33363 J	33366 J	33331 J	33346 J	33347 J
	<b>CLICK'liné BERCI Multifunctional Grasping Forceps, 1 x 1 teeth</b>						

# Dissecting and Grasping Forceps

CLICK<sup>liné</sup> – rotating, dismantling, insulated,  
with connector pin for coagulation

Size 5 mm

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



Length	Handle					
	33151	33152	33153	33156	33121	33149
36 cm						

## Double action jaws

Working Insert	Complete Instrument					
33310 TF	33351 TF	33352 TF	33353 TF	33356 TF	33321 TF	33349 TF
<p>CLICK<sup>liné</sup> Ovary Grasping Forceps, serrated</p>						

# Dissecting and Grasping Forceps

CLICK'linē – rotating, dismantling,  
without connector pin for coagulation

Size 5 mm

Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 6 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
30 cm							
36 cm							

## Double action jaws






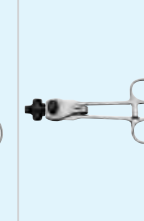
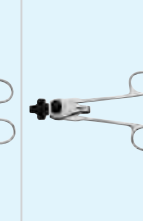
Working Insert	Complete Instrument						
33310 TF	33361 TF	33362 TF	33363 TF	33366 TF	33331 TF	33346 TF	33347 TF
 40	CLICK'linē Ovary Grasping Forceps, serrated						
33210 UM	33261 UM	33262 UM	33263 UM	33266 UM	33231 UM	33246 UM	33247 UM
33310 UM	33361 UM	33362 UM	33363 UM	33366 UM	33331 UM	33346 UM	33347 UM
 27	CLICK'linē Ovary Grasping Forceps, serrated						
33310 AV	33361 AV	33362 AV	33363 AV	33366 AV	33331 AV	33346 AV	33347 AV
 17	CLICK'linē Grasping Forceps, for stapler pressure plates						

# Dissecting and Grasping Forceps





CLICK*liné* – rotating, dismantling,  
without connector pin for coagulation

Size 10 mm

Operating instruments, length 36 cm,  
for use with trocars size 11 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

## Double action jaws






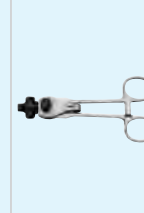
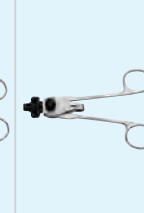
Working Insert	Complete Instrument						
33510 PR	33561 PR	33562 PR	33563 PR	33566 PR	33531 PR	33546 PR	33547 PR
 43	<b>CLICK<i>liné</i> Dissecting and Grasping Forceps, atraumatic, for grasping organs</b>						
33510 MLL	33561 MLL	33562 MLL	33563 MLL	33566 MLL	33531 MLL	33546 MLL	33547 MLL
 44	<b>CLICK<i>liné</i> KELLY Dissecting and Grasping Forceps, long</b>						
33510 RG	33561 RG	33562 RG	33563 RG	33566 RG	33531 RG	33546 RG	33547 RG
 26	<b>CLICK<i>liné</i> Grasping Forceps, jaws right-angled</b>						
33510 AF	33561 AF	33562 AF	33563 AF	33566 AF	33531 AF	33546 AF	33547 AF
 32	<b>CLICK<i>liné</i> Grasping Forceps, atraumatic, fenestrated</b>						

# Dissecting and Grasping Forceps

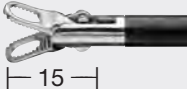


CLICK<sup>liné</sup> – rotating, dismantling,  
without connector pin for coagulation

Size 10 mm

Operating instruments, length 36 cm,  
for use with trocars size 11 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

## Double action jaws




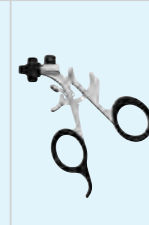

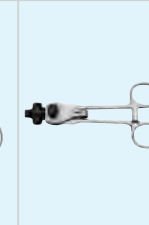
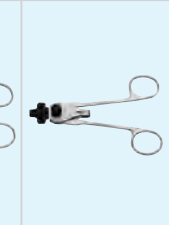
Working Insert	Complete Instrument						
33510 TH	33561 TH	33562 TH	33563 TH	33566 TH	33531 TH	33546 TH	33547 TH
   15	CLICK <sup>liné</sup> Grasping Forceps, fenestrated						
33510 BC	33561 BC	33562 BC	33563 BC	33566 BC	33531 BC	33546 BC	33547 BC
   34	CLICK <sup>liné</sup> BABCOCK Clamp						
33510 BLS	33561 BLS	33562 BLS	33563 BLS	33566 BLS	33531 BLS	33546 BLS	33547 BLS
   33	CLICK <sup>liné</sup> BABCOCK Clamp, rounded jaws, long						

# Dissecting and Grasping Forceps




CLICK<sup>line</sup> – rotating, dismantling,  
without connector pin for coagulation

Size 10 mm

Operating instruments, length 36 cm,  
for use with trocars size 11 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

## Double action jaws

Working Insert	Complete Instrument						
33510 UO	33561 UO	33562 UO	33563 UO	33566 UO	33531 UO	33546 UO	33547 UO
   20	CLICK <sup>line</sup> SAWALHE Tenaculum Forceps, short						
33510 UM	33561 UM	33562 UM	33563 UM	33566 UM	33531 UM	33546 UM	33547 UM
   32	CLICK <sup>line</sup> SAWALHE Tenaculum Forceps						
33510 UN	33561 UN	33562 UN	33563 UN	33566 UN	33531 UN	33546 UN	33547 UN
   34	CLICK <sup>line</sup> SAWALHE Tissue Grasping Forceps						






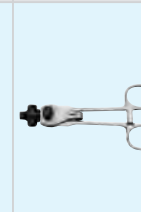
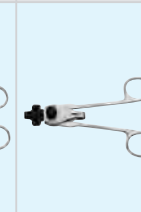


# Dissecting and Grasping Forceps

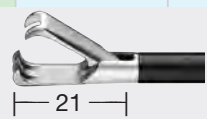

CLICK<sup>liné</sup> – rotating, dismantling,  
without connector pin for coagulation

Size 10 mm


Operating instruments, length 36 cm,  
for use with trocars size 11 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

## Single action jaws

Working Insert	Complete Instrument						
33510 FK	33561 FK	33562 FK	33563 FK	33566 FK	33531 FK	33546 FK	33547 FK
   21	CLICK <sup>liné</sup> Claw Forceps, 2 x 3 teeth, short						
33510 FS	33561 FS	33562 FS	33563 FS	33566 FS	33531 FS	33546 FS	33547 FS
   35	CLICK <sup>liné</sup> Claw Forceps, 2 x 3 teeth						

## Double action jaws




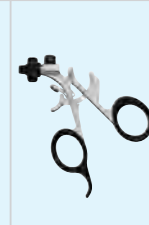

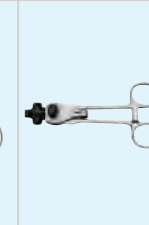
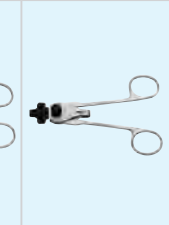
33510 SR	33561 SR	33562 SR	33563 SR	33566 SR	33531 SR	33546 SR	33547 SR
   22	CLICK <sup>liné</sup> Forceps, to retrieve lost gallstones						

# Dissecting and Grasping Forceps


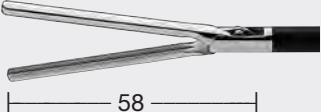

CLICK<sup>line</sup> – rotating, dismantling,  
without connector pin for coagulation

Size 10 mm

Operating instruments, length 36 cm,  
for use with trocars size 11 mm

Length	Handle						
	33161	33162	33163	33166	33131	33146	33147
36 cm							

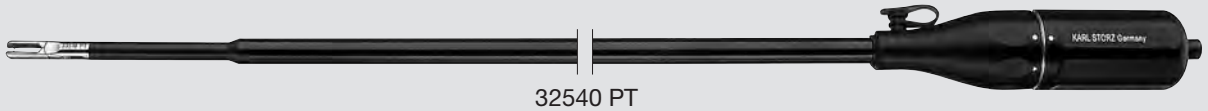
## Double action jaws

Working Insert	Complete Instrument						
33710 DU	33761 DU	33762 DU	33763 DU	33766 DU	33731 DU	33746 DU	33747 DU
 44	CLICK <sup>line</sup> DUVAL Grasping Forceps, with reinforced bayonet coupling, for use with Outer Sheath 33700						
33510 GF	33561 GF	33562 GF	33563 GF	33566 GF	33531 GF	33546 GF	33547 GF
 58	CLICK <sup>line</sup> Bowel Grasper, two rows of atraumatic teeth						
33510 CB	33561 CB	33562 CB	33563 CB	33566 CB	33531 CB	33546 CB	33547 CB
 53	CLICK <sup>line</sup> Bowel Grasper						

# Surgical Sponge Holders

## Sizes 5 and 10 mm

Operating instruments, **length 30 cm**,  
for use **with trocars size 6 and 11 mm**



32340 PT

**Surgical Sponge Holder**, self-retaining,  
size 5 mm, length 30 cm

including:

**Handle**

**Outer Sheath**, insulated

**Sponge Holder Insert**



32540 PT

**Surgical Sponge Holder**, self-retaining,  
size 10 mm, length 30 cm

including:

**Handle**

**Outer Sheath**, insulated

**Sponge Holder Insert**

### **Spherical sponges recommended for size 5 mm:**

DIN 61630/VM 20 (4 x 4 cm) or spherical sponge for similar geometry and basis weight.

### **Spherical sponges recommended for size 10 mm:**

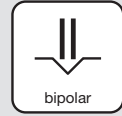
DIN 61630/VM 24 (8 x 8 cm) or spherical sponge for similar geometry and basis weight;  
compatible with 10 mm trocars.

**Handle 32121 can be used with both 5 mm and 10 mm surgical sponge holders.**

**Components/Spare Parts** see chapter 18

# Handles and Outer Sheaths for Bipolar Forceps

TAKE-APART® – with connector pin for bipolar coagulation



Size 3 mm

TAKE-APART® bipolar instruments, consisting of:

- Handle
- Outer Sheath
- Working Insert

## TAKE-APART® Handles



26184 HR **TAKE APART®  
Bipolar Spring  
Handle**



26184 HM **TAKE APART®  
Bipolar Ring  
Handle**

## TAKE APART® Outer Sheath



26184 HSS/HS/H

- 26184 HSS **TAKE APART® Outer Sheath**, for bipolar instruments, size 3 mm, length 20 cm
- 26184 HS **Same**, length 30 cm
- 26184 H **Same**, length 36 cm

Working Inserts for TAKE APART® Instruments size 3 mm see page 137  
Components/Spare Parts see chapter 18



# Bipolar Forceps

TAKE-APART® – with connector pin for bipolar coagulation

Size 3 mm

Operating instruments, lengths 20, 30 and 36 cm,  
for use with trocars size 3.5 mm



Outer Sheath	Handle	
	26184 HR	26184 HM
Length 20 cm		
Length 30 cm		
Length 36 cm		

Working Insert	Complete Instrument	
26184 HVS	26184 RCS	26184 HCS
26184 HV	26184 RC	26184 HC
26184 HVL	26184 RCL	26184 HCL



**TAKE-APART® Bipolar Coagulation Forceps, width of jaws 1 mm**

26184 PTS	26184 HPS	26184 MPS
-----------	-----------	-----------



**TAKE-APART® TAN Bipolar Coagulation Forceps**

26184 HTS	26184 HAS	26184 MAS
26184 HT	26184 HA	26184 MA
26184 HTL	26184 HAL	26184 MAL



**TAKE-APART® Bipolar Coagulation Forceps**

**Please note:**

For TAKE-APART® instruments only the **individual component parts** are numbered. The catalog number for the **complete instrument**, as shown above against the **white** background, is not on the instrument. The color **green** indicates the working inserts.

**Bipolar High Frequency Cords** see accessories on page 151

# Bipolar Forceps with Non-Retracting Jaws

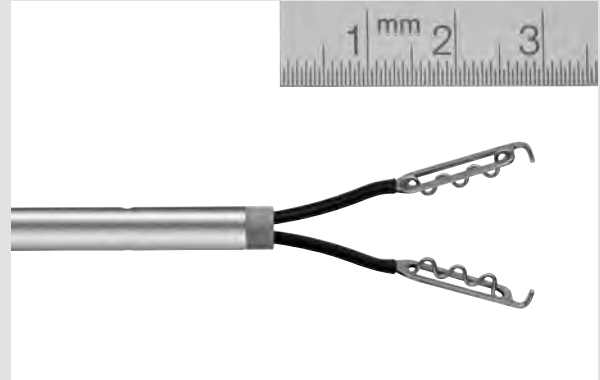
Some short remarks by M. HESSELING, M. D.

The current bipolar grasping forceps is one of the most frequently used instruments in surgical laparoscopy. In previously used models (single sheath bipolar forceps), the coagulating parts retracted by about 1 cm after the forceps were closed. In order to coagulate at the desired site, the surgeon had to compensate for this

backward movement with an active forward movement (Fig. 1 – 6). This additional necessary movement made handling more difficult, especially in the “learning phase” and in a situation in which easy handling is of utmost importance for coagulating an existing hemorrhage.



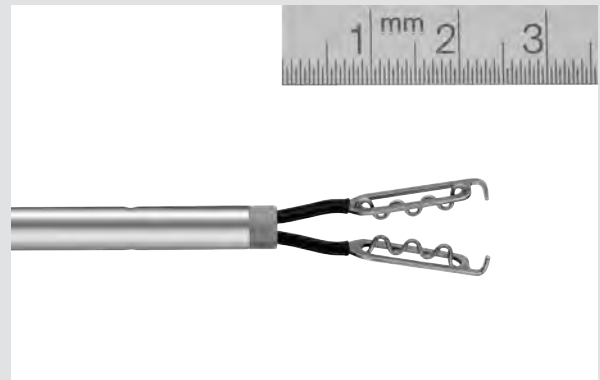
**Fig. 1:** “Former” bipolar coagulation forceps with opened jaws



**Fig. 2**



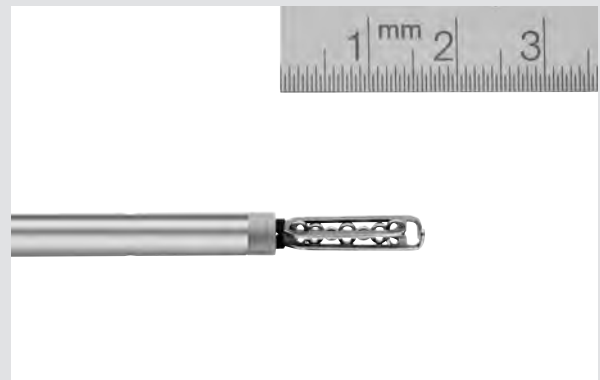
**Fig. 3:** While closing the jaws, the coagulating parts retract: A compensating movement of the surgeon is necessary



**Fig. 4**



**Fig. 5:** “Former” bipolar coagulation forceps with closed jaws



**Fig. 6**

# Bipolar Forceps with Non-Retracting Jaws

Some short remarks by M. HESSELING, M. D.

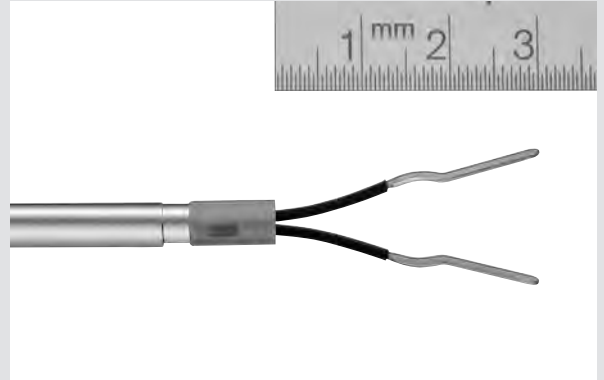
Because of their “double tube” design, the forceps no longer require this compensating movement. The coagulating parts remain at the point where they had been originally positioned (Fig. 7 – 12). This facilitates the handling of the instrument especially for less experienced surgeons. The targeted coagulation of a hemorrhage is facilitated. Interfering compensating movements are no longer necessary. A change-over to this

system does not require complete replacement as existing inserts and cables can still be used.

**Conclusion:** The bipolar coagulation forceps system should facilitate handling and correct placement of the forceps, especially for beginners or surgeons having little experience with the previous system, since the compensating movement is no longer necessary.



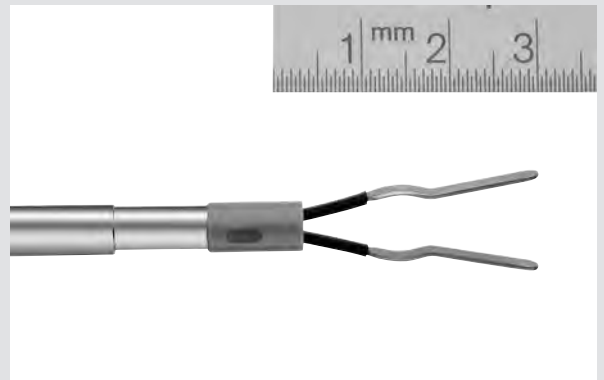
**Fig. 7:** New bipolar coagulation forceps with opened jaws



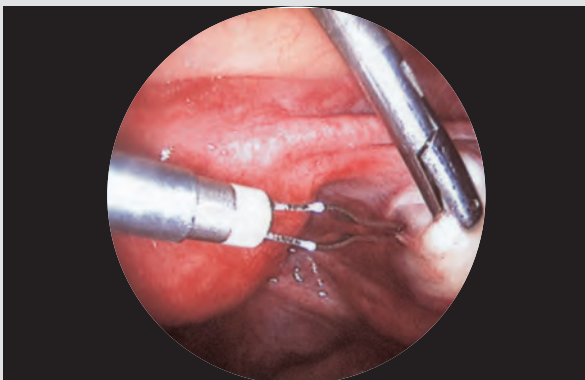
**Fig. 8**



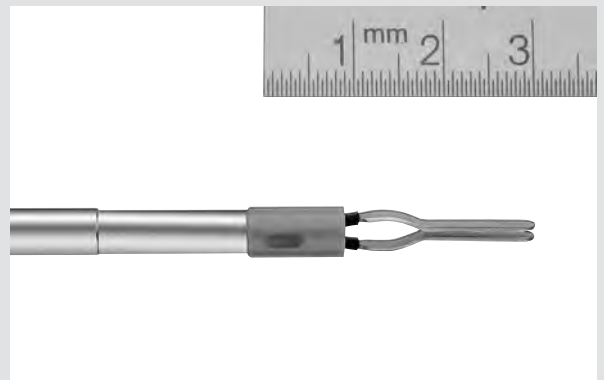
**Fig. 9:** New bipolar coagulation forceps: closing of the jaws without any “compensating movement” by the surgeon



**Fig. 10**



**Fig. 11:** New bipolar coagulation forceps closed: the coagulating parts remain in their former position

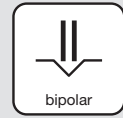


**Fig. 12**

# Handles and Outer Sheaths for Bipolar Forceps

TAKE-APART® – with connector pin for bipolar coagulation

Size 5 mm



TAKE-APART® bipolar instruments, consisting of:

- Handle
- Outer sheath
- Inner sheath
- Working insert

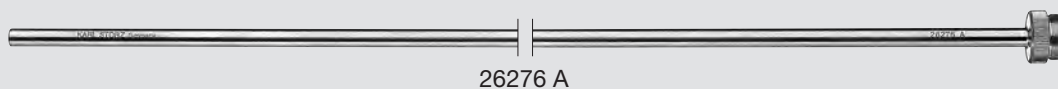
TAKE-APART® Handles



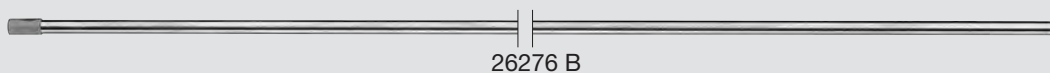
26296 HR **TAKE APART®  
Bipolar Spring  
Handle**

26296 HM **TAKE APART®  
Bipolar Ring  
Handle**

TAKE APART® Outer and Inner Sheath



26276 A **TAKE APART® Outer Sheath**, for bipolar instruments, size 5 mm, length 33 cm  
26277 A **Same**, length 43 cm



26276 B **TAKE APART® Inner Sheath**, for bipolar instruments, size 5 mm, length 33 cm  
26277 B **Same**, length 43 cm

**Please note:**

TAKE-APART® instruments length 43 cm, for use with HOPKINS® Straight Forward Telescopes 26034 AA, 26038 AA and HOPKINS® Wide Angle Straight Forward Telescope 26075 AA

**Working Inserts for TAKE APART® Instruments size 5 mm** see pages 141-143

**Components/Spare Parts** see chapter 18



# Bipolar Forceps

with movable inner sheath and non-retracting jaws,  
**TAKE-APART®** – with connector pin for bipolar coagulation

Size 5 mm

Operating instruments, **length 33 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 Inner Sheath	Handle	
	26296 HR	26296 HM
Length 33 cm		
Length 43 cm		

Working Insert	Complete Instrument	
26176 HT	26276 HA	26276 MA
26177 HT	26277 HA	26277 MA



**TAKE-APART® Bipolar Coagulation Forceps**

26176 HE	26276 RE	26276 ME
26177 HE	26277 RE	26277 ME



**TAKE-APART® Bipolar Coagulation Forceps, robust**

26176 DS	26276 RS	26276 MS
26177 DS	26277 RS	26277 MS



**TAKE-APART® Bipolar Coagulation Forceps**

26176 RH	26276 RA	26276 RB
----------	----------	----------



**TAKE-APART® Bipolar Coagulation Forceps, 2 x 2 teeth, robust**

26176 AS	26276 RG	26276 MG
----------	----------	----------



**TAKE-APART® SCAR-Blade Bipolar Knife**

**Please note:**

For **TAKE-APART®** instruments only the **individual component parts** are numbered. The catalog number for the **complete instrument**, as shown above against the **white** background, is not on the instrument. The color **green** indicates the working inserts.

**Bipolar High Frequency Cords** see accessories on page 151

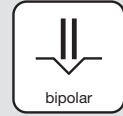
# Bipolar Forceps

with movable inner sheath and non-retracting jaws,  
**TAKE-APART®** – with connector pin for bipolar coagulation





Size 5 mm

Operating instruments, **length 33 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 Inner Sheath	Handle	
	26296 HR	26296 HM
Length 33 cm		
Length 43 cm		

Working Insert	Complete Instrument	
26176 HN	26276 RK	26276 HK
	<b>TAKE-APART® SCHNEIDER Bipolar Coagulation Forceps, robust jaws</b>	
26176 KL	26276 MH	26276 MM
26177 KL	26277 MH	26277 MM
	<b>TAKE-APART® Bipolar Coagulation Forceps, robust</b>	
26176 HX	26276 HL	26276 ML
	<b>TAKE-APART® Bipolar Coagulation Forceps</b>	
26176 HU	26276 HB	26276 MB
	<b>TAKE-APART® Bipolar Micro Forceps</b>	

**Please note:**

For **TAKE-APART®** instruments only the **individual component parts** are numbered. The catalog number for the **complete instrument**, as shown above against the **white** background, is not on the instrument. The color **green** indicates the working inserts.

**Bipolar High Frequency Cords** see accessories on page 151

# Bipolar Forceps

with movable inner sheath and non-retracting jaws,  
**TAKE-APART®** – with connector pin for bipolar coagulation

Size 5 mm

Operating instruments, **length 33 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 Inner Sheath	Handle	
	26296 HR	26296 HM
Length 33 cm		
Length 43 cm		

Working Insert	Complete Instrument	
26176 HW	26276 RD	26276 HD
26177 HW	26277 RD	26277 HD



**TAKE-APART® Bipolar Coagulation Forceps**, width of jaws 3 mm

26176 HV	26276 RC	26276 HC
26177 HV	26277 RC	26277 HC



**TAKE-APART® Bipolar Coagulation Forceps**, width of jaws 1 mm

26176 HO	26276 RO	26276 MO
26177 HO	26277 RO	26277 MO



**TAKE-APART® Bipolar Coagulation Forceps**,  
 with cross serration, width of jaws 3 mm

26176 HP	26276 RP	26276 MP
----------	----------	----------



**TAKE-APART® Bipolar Coagulation Forceps**,  
 with cross serration, width of jaws 1 mm

**Please note:**

For **TAKE-APART®** instruments only the **individual component parts** are numbered. The catalog number for the **complete instrument**, as shown above against the **white** background, is not on the instrument. The color **green** indicates the working inserts.

**Bipolar High Frequency Cords** see accessories on page 151

A prerequisite for successful, minimally invasive laparoscopic procedures is the selection of the correct HF instruments and units combined with the basic principles of surgery.

During a surgical procedure, the operating surgeon must be able to grasp various tissue structures, to dissect and work on the relevant organ (incision/dissection), and to control hemorrhage (suturing and/or hemostasis). Instruments that perform multiple functions means there is less need for instrument exchange. This saves the surgeon time and effort.

KARL STORZ set itself the task of designing instruments that meet the specific demands of minimally invasive surgery and developed the rotating, bipolar (“ROBI®”) instruments – the CLERMONT-FERRAND model – in co-operation with Prof. Wattiez for this purpose. Like all other instruments in the ROBI® series, they are fully rotatable by 360° and can be disassembled into a handle, sheath and insert. The instruments are autoclavable and easy to handle and clean.



**ROBI® Bipolar Grasping Forceps**

### Grasping Function

The use of retractors in minimally invasive surgery is not always possible or useful. The surgeon, therefore, requires an instrument that is capable of grasping tissue precisely and is able to maintain the tissue at a safe distance to the operating site.

To meet various needs and requirements, the jaws of the ROBI® bipolar grasping forceps vary in regard to size and width. Jaws with rougher toothings are suitable for grasping thicker and heavier tissue whereas jaws with finer toothings are better for grasping more fragile tissue structures. Fenestrated jaws offer the advantage that even structures which are difficult to grasp can be securely gripped.

To enable optimum grasping, even from less favorable angles and positions, all instruments can be rotated 360°. This function proves to be particularly advantageous when using monoarticulate forceps in order to place the jaws in the ideal position.

### Dissection Function

The identification of tissue structures via dissection is a prerequisite for minimizing risks in precision surgery.

The delicate KELLY jaws represent a standard dissection instrument without which the CLERMONT-FERRAND series would not be complete. By opening the handle, the jaws can be moved and the tissue surface can be spread apart. Conventional bipolar forceps, for example, have no joint between the jaws. Closure of the jaws is effected by sliding an external tube. As a result, opening is usually passive.

The joint mechanism of the ROBI® instruments provides the surgeon with a natural tactile feedback. The force exerted on the tissue can, therefore, be felt at the handle and thus permits a precise dose for dissection. “Tactile feedback enables optimal tissue dissection,” according to Wattiez.

Micro instruments are being increasingly used in dissection due to their enhanced precision and advancements in high frequency technology.

### The Coagulation Function

The use of bipolar energy offers some advantages over unipolar energy. The applied current flows between the branches of the utilized HF instrument and must not travel over long distances through the body of the patient via a neutral electrode. With the aim of providing maximum user safety, ROBI® instruments were designed and equipped with bipolar HF technology to ensure minimal patient discomfort.

Despite these safety precautions, it is important to observe basic rules and principles for optimum work with bipolar HF energy and to keep risks at a minimum. In general, it is important to ensure that no critical viscera is in contact with the instrument and that only the relevant tissue is grasped between the two jaws of the forceps when activating or contacting the bipolar instrument.

Coagulation occurs by means of heating the tissue. If the tissue is heated too severely or the HF application times are too long, there is a risk that burns will occur around the operating site. Heat dispersion can be

restricted by selecting the appropriate HF power setting. A 30 – 50 W power setting is generally sufficient for laparoscopic interventions. In principle, the higher the selected HF power setting, the shorter the exposure time and vice versa. The longer the exposure time, the more extensive the heat dispersion. Care must be taken that HF energy has adequate penetration depth, which is not always easy for the surgeon to see or predict. After selecting the power setting, the surgeon applies the energy with as short an exposure time as possible.

The power setting used generally depends on the size of the selected jaws as the density of the energy transferred to the tissue is directly relative to the size of the jaws. With the same power setting, the narrower the jaws, the greater the energy density.

The thicker the jaws, the higher the power setting required. With thicker jaws, the operating surgeon has to choose a higher power setting (approx. 50 W) but with a shorter exposure time. With thinner jaws, a lower power setting of approximately 35 W is selected.

Tissue impedance is another important aspect that needs to be considered in order to avoid unintentional thermal damage. Through more or less heavy compression of the tissue, the surgeon can alter the tissue impedance and, thus, modify the dispersion of electrical energy. The more the tissue is compressed, the greater the impedance. Altering the electrical HF energy



influences coagulation time, which then becomes shorter. In contrast to conventional bipolar forceps, grasping forceps from the ROBI® series – thanks to their tactile feedback – allow the pressure applied to the tissue to be altered and, as a result, the impedance to be changed.\*

During the procedure, blood and tissue may coagulate on the jaws. This may act as an insulation layer and change the distribution of energy. In extreme cases, there is no current flow and coagulation is no longer possible. To prevent soiling of the jaws, the appropriate power setting depending on the size of the jaws must be selected. Furthermore, long exposure times and coagulation in blood should be avoided. Precise, preventative coagulation is the best safety precaution.

### ROBI® Bipolar Scissors

#### Cutting Function

To meet the different requirements of various tissue structures during the incision phase, we also added curved METZENBAUM scissors as well as serrated jaws for difficult-to-grasp tissue structures to the existing straight scissor versions in the CLERMONT-FERRAND series.

#### Coagulation Function

Bipolar ROBI® scissors have also been specially designed for use with HF energy and enable both coagulation and cutting in the coagulated area. Of course, the same safety precautions apply to ROBI® scissors regarding the use of bipolar HF energy as described above for grasping forceps.

#### Conclusion

Optimization of the minimally invasive intervention is dependent on the number and selection of functions that are possible for the surgeon. ROBI® grasping forceps offer the surgeon an instrument with grasping, dissection and coagulation functions. ROBI® scissors also offer the possibility of dissection and coagulation as well as, of course, incision. Thanks to the quick-change ROBI® system, working inserts can be rapidly exchanged during surgery and according to surgical requirements.

The ROBI® grasping forceps and scissors from the CLERMONT-FERRAND series feature a high degree of user-friendliness in the customary KARL STORZ tradition.

\* **Source:** *Principles and Safety Measures of Electrosurgery in Laparoscopy*, I. ALKATOUT et al., JSLS, 2012

# ROBI® Bipolar Grasping Forceps

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



## Special Features:

- 360° rotating sheath
- The HF connection (without stop) is mounted at a 45° angle on the upper side of the handle, thereby guiding the high frequency cable away from the field of operation
- Instruments in size 3.5 mm can be disassembled into a handle and working insert with outer sheath
- Color coding on the working insert and handle
- Handle 38151 is compatible with both the 3.5 mm and 5 mm ROBI® systems

ROBI® Handle, insulated, for sizes 3.5 und 5 mm



38151 ROBI® Plastic Handle, without ratchet

Size 5 mm

ROBI® Metal Outer Sheaths, insulated



- 38600 ROBI® Metal Outer Sheath, insulated, with LUER-Lock irrigation connector for cleaning, size 5 mm, length 36 cm
- 38700 Same, length 43 cm

**Please note:** ROBI® instruments, length 43 cm, for use with HOPKINS® Straight Forward Telescopes 26034 AA, 26038 AA and HOPKINS® Wide Angle Straight Forward Telescope 26075 AA

**Working Inserts for ROBI® Instruments size 3.5 mm** see page 147

**Working Inserts for ROBI® Instruments size 5 mm** see pages 148-149

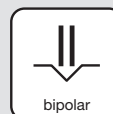
**Accessories for Outer Sheaths** see page 150

**Components/Spare Parts** see chapter 18


# ROBI® Bipolar Grasping Forceps

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

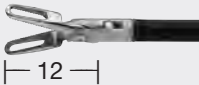
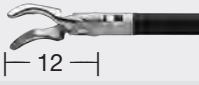

Size 3.5 mm



Operating instruments, lengths 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm

Outer Sheath	Handle
	38151
Length 20 cm	
Length 36 cm	

### Double action jaws

Outer Sheath with Working Insert	Complete Instrument
38810 ON	38851 ON
38910 ON	38951 ON
   12	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, fenestrated, with fine atraumatic serration
38810 MD	38851 MD
38910 MD	38951 MD
   12	<b>ROBI® KELLY Grasping Forceps</b> , CLERMONT-FERRAND model, suitable for dissection
38810 PT	38851 PT
   16	<b>ROBI® TAN Grasping Forceps</b> , CLERMONT-FERRAND model, suitable for dissection

**Please note:**

For **ROBI®** instruments 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 accessories on page 151

**Components/Spare Parts** see chapter 18

# ROBI® Bipolar Grasping Forceps

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

Size 5 mm



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

Outer Sheath	Handle
Length 36 cm	38151

## Single action jaws

Working Insert	Complete Instrument
38610 CS	38651 CS
   16	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, narrow jaws, for dissection, grasping and bipolar coagulation of fine structures
38610 CL	38651 CL
   12	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, wide jaws, for dissection, grasping and bipolar coagulation of large vessels and tissue layers
38610 KL	38651 KL
   19	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, flat jaws, for dissection, grasping and bipolar coagulation
38610 KF	38651 KF
   14	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, flat jaws, fenestrated, for dissection, grasping and bipolar coagulation

## Double action jaws

38610 OM	38651 OM
   18	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, with fine atraumatic serration, fenestrated jaws, with large proximal recess

### 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 accessories on page 151



# ROBI® Bipolar Grasping Forceps

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

Size 5 mm



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	

## Double action jaws


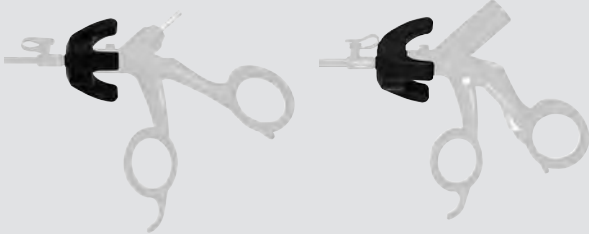

Working Insert	Complete Instrument
38610 ON	38651 ON
38710 ON	38751 ON
	<b>ROBI® Grasping Forceps</b> , CLERMONT-FERRAND model, fenestrated, with fine atraumatic serration
38610 WA	38651 WA
	<b>ROBI® WATTIEZ Grasping Forceps</b> , CLERMONT-FERRAND model, with multiple teeth, for atraumatic and accurate grasping
38610 MD	38651 MD
38710 MD	38751 MD
	<b>ROBI® KELLY Dissecting and Grasping Forceps</b> , CLERMONT-FERRAND model
38610 ML	38651 ML
	<b>ROBI® KELLY Dissecting and Grasping Forceps</b> , CLERMONT-FERRAND model
38610 MA	38651 MA
	<b>ROBI® MALZONI Dissecting and Grasping Forceps</b> , CLERMONT-FERRAND model

### 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 accessories on page 151

# Accessories for Handles and Outer Sheaths

	<p>33120 G <b>Rotating Wheel</b>, for <b>CLICK'line</b> and <b>ROBI</b>® handles, <b>autoclavable</b>, makes rotation of outer sheath more comfortable, package of 5</p> 
	<p>29100 <b>Plug</b>, for LUER-Lock irrigation connector for cleaning, <b>autoclavable</b>, black, package of 10</p> <p>29100 A <b>Color-Coded Plug</b>, for LUER-Lock irrigation connector for cleaning, red, green, black, 10 each, package of 30</p> <p>29100 R <b>Plug</b>, for LUER-Lock irrigation connector for cleaning, <b>autoclavable</b>, red, package of 10</p> <p>29100 G <b>Plug</b>, for LUER-Lock irrigation connector for cleaning, <b>autoclavable</b>, green, package of 10</p>

# Accessories

## Unipolar and Bipolar High Frequency Cords

### Unipolar High Frequency Cords







KARL STORZ High Frequency  
Instrument Surgery Units

	26002 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type T older models and Ellman
	26004 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, compatible with Martin HF units
	26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type ICC and Erbe VIO 301
	26006 M	<b>Unipolar High Frequency Cord</b> , with 8 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Valleylab models

### Bipolar High Frequency Cords



KARL STORZ High Frequency  
Instrument Surgery Units

	26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe-Coagulator, T and ICC series
	26176 LM	<b>Bipolar High Frequency Cord</b> , length 300 cm, compatible with Martin HF units
	26176 LV	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 28.58 mm, for AUTOCON® III and AUTOCON® II, compatible with Valleylab coagulators, for use with high frequency surgical units with bipolar sockets with 28.58 mm pin distance
	26176 LW	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 22 mm, compatible with high frequency surgical units with bipolar sockets with 22 mm pin distance

**Please note:** All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 **ML**, 26176 **LVL**.





## SCISSORS, PUNCHES AND FORCEPS FOR BIOPSY Sizes 2 – 10 mm

**CLICKlinē** HANDLES  
AND OUTER SHEATHS .....154-159

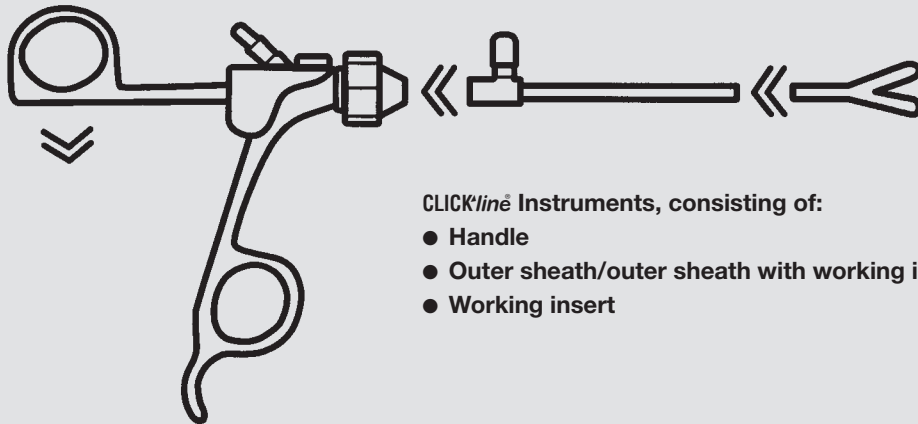
**CLICKlinē** SCISSORS, PUNCHES  
AND FORCEPS  
Sizes 2 – 3.5 mm .....160-161

**CLICKlinē** SCISSORS, PUNCHES  
AND FORCEPS  
Sizes 5 and 10 mm .....162-169

**ROBI®** BIPOLAR SCISSORS  
Sizes 3.5 and 5 mm .....170-174

**KNIVES FOR PYLOROMYOTOMY**  
Size 3 mm .....175

**ACCESSORIES** .....176-177



**CLICK'line® Instruments, consisting of:**

- Handle
- Outer sheath/outer sheath with working insert
- Working insert

The **CLICK'line®** series continues the development of instruments which have proven their value for years. When the rear handle is positioned horizontally, the handle can be separated from the outer sheath and the

working insert at the press of a button. The HF connection is mounted at a 45° angle on the upper side of the handle, thereby guiding the high frequency cable away from the field of operation.

**Available in size 2 to 10, CLICK'line® instruments can be completely disassembled into separate components:**

- Handle
- Outer sheath/outer sheath with working insert
- Working insert

**This reusable two/three-piece design offers the surgeon the following benefits:**

- Available in sizes 2, 3, 3.5, 5 and 10 mm and lengths 20, 30, 36 and 43 cm
- Choice of handle styles
- Can be dismantled at the press of a button
- Autoclavable in its assembled state
- If damage occurs, only the component with the defect needs to be replaced – not the entire instrument

**Due to the modular CLICK'line® system, the user can individually assemble the desired instrument at any time.**

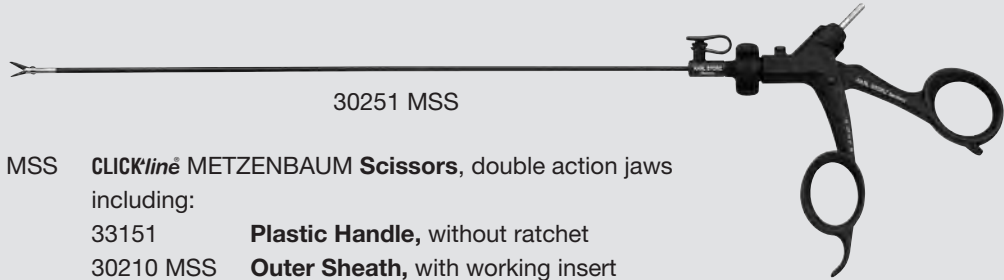
# User Information

For easy location of the correct catalog number for the required CLICK<sup>liné</sup> instrument

## How to find the required instrument:

- (a) Select the required **instrument size** and the required **type of jaws**
- (b) Select the required **handle style**
  - **Metal handles: without** connector pin for unipolar coagulation, against a **blue background** in the table
  - **Handles, insulated: with** connector pin for unipolar coagulation, against a **red background** in the table
- (c) The catalog number for the fully assembled instrument can be found at the point where the horizontal line of the respective working length (see below) intersects with the vertical column of the required handle.

### Example:



30251 MSS CLICK<sup>liné</sup> METZENBAUM Scissors, double action jaws including:  
 33151 Plastic Handle, without ratchet  
 30210 MSS Outer Sheath, with working insert

## Scissors

CLICK<sup>liné</sup> – rotating, dismantling, insulated, with connector pin for unipolar coagulation

Size 2 mm  
 Operating instruments, length 20 cm, for use with trocars size 2.5 mm

(a)	Length	Handle		
		33151 (b)	33121	33149
20 cm				
Double action jaws				
Outer Sheath with Working Insert		Complete Instrument		
	30210 MSS	30251 MSS (c)	30221 MSS	30249 MSS

CLICK<sup>liné</sup> METZENBAUM Scissors, curved  
 | 6 |  
 | — | Jaw length in mm

### Please note:

For CLICK<sup>liné</sup> instruments only the **individual component parts** are numbered. The catalog number for the **complete instrument** is **not** on the instrument. Instruments with **insulated handles with connector pin** for unipolar coagulation, are shown against the **red background**, instruments with **handles without connector pin** for unipolar coagulation are shown against the **blue background**. The color **green** indicates the **working lengths**.

# Plastic Handles

for Scissors, Punches and Biopsy Forceps, insulated,  
CLICK'liné – rotating, with connector pin for unipolar coagulation



33151 **CLICK'liné Plastic Handle, without ratchet, with large contact area at the finger ring**



33121 **CLICK'liné Plastic Handle, without ratchet**



33149 **CLICK'liné Plastic Handle, axial, without ratchet, double action shanks**

Accessories for Handles see page 176



## Metal Handles

for Scissors, Punches and Biopsy Forceps,  
CLICK'line – rotating, without connector pin for unipolar coagulation



33161 CLICK'line Metal Handle,  
without ratchet, with  
large contact area at the  
finger ring



33131 CLICK'line Metal Handle,  
without ratchet

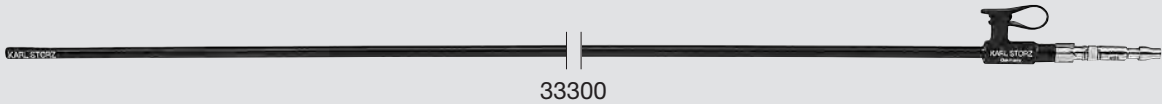


33147 CLICK'line Metal Handle,  
axial, without ratchet,  
double action  
handle shanks

# Metal Outer Sheaths

for Scissors, Punches and Biopsy Forceps, CLICK<sup>line</sup>

## Metal Outer Sheaths, insulated



### Size 3.5 mm

31100	<b>CLICK<sup>line</sup> Metal Outer Sheath, insulated,</b> with LUER-Lock irrigation connector for cleaning, size 3.5 mm, length 20 cm
31300	<b>Same,</b> length 36 cm

### Size 5 mm

33200	<b>CLICK<sup>line</sup> Metal Outer Sheath, insulated,</b> with LUER-Lock irrigation connector for cleaning, size 5 mm, length 30 cm
33300	<b>Same,</b> length 36 cm
33400	<b>Same,</b> length 43 cm



33300 CM	<b>CLICK<sup>line</sup> Metal Outer Sheath, insulated,</b> with cm-marking, with LUER-Lock irrigation connector for cleaning, size 5 mm, length 36 cm
33400 CM	<b>Same,</b> length 43 cm

### Size 10 mm



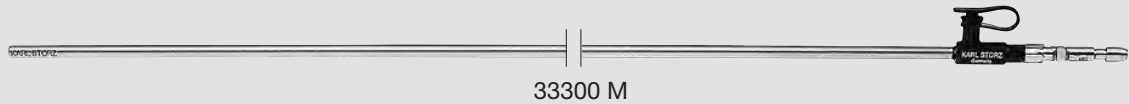
33500	<b>CLICK<sup>line</sup> Outer Sheath, insulated,</b> with LUER-Lock irrigation connector for cleaning, size 10 mm, length 36 cm
-------	---

**Working Inserts for CLICK<sup>line</sup> Instruments size 3.5 mm** see page 161  
**Working Inserts for CLICK<sup>line</sup> Instruments size 5 mm** see pages 163-168  
**Working Inserts for CLICK<sup>line</sup> Instruments size 10 mm** see page 169  
**Accessories for Handles** see page 176  
**Components/Spare Parts** see chapter 18

# Metal Outer Sheaths

for Scissors, Punches and Biopsy Forceps, CLICK'linē

## Metal Outer Sheaths, not insulated



### Size 3.5 mm

31100 M	<b>CLICK'linē Metal Outer Sheath</b> , with LUER-Lock irrigation connector for cleaning, size 3.5 mm, length 20 cm
31300 M	<b>Same</b> , length 36 cm

### Size 5 mm

33200 M	<b>CLICK'linē Metal Outer Sheath</b> , with LUER-Lock irrigation connector for cleaning, size 5 mm, length 30 cm
33300 M	<b>Same</b> , length 36 cm
33400 M	<b>Same</b> , length 43 cm

### Size 10 mm



33500 M	<b>CLICK'linē Metal Outer Sheath</b> , with LUER-Lock irrigation connector for cleaning, size 10 mm, length 36 cm
---------	---



33500 CM	<b>CLICK'linē Metal Outer Sheath</b> , with <b>cm-marking</b> , with LUER-Lock irrigation connector for cleaning, size 10 mm, length 36 cm
----------	--

#### Please note:

The metal outer sheaths may only be used in conjunction with handles without connector pin for sunipolar coagulation.

**Working Inserts for CLICK'linē Instruments size 3,5 mm** see page 161

**Working Inserts for CLICK'linē Instruments size 5 mm** see pages 163-168

**Working Inserts for CLICK'linē Instruments size 10 mm** see page 169

**Accessories for Handles** see page 176

**Components/Spare Parts** see chapter 18

# Scissors

CLICK'liné – rotating, dismantling, insulated, with connector pin for unipolar coagulation

Size 2 mm

Operating instruments, length 20 cm,  
for use with trocars size 2.5 mm



Length	Handle		
	33151	33121	33149
20 cm			

## Double action jaws

Outer Sheath with Working Insert	Complete Instrument		
30210 MSS	30251 MSS	30221 MSS	30249 MSS
	CLICK'liné METZENBAUM Scissors, curved		

6

Components/Spare Parts see chapter 18

# Scissors and Forceps for Biopsy

CLICK*line*® – rotating, dismantling, insulated,  
with connector pin for unipolar coagulation

Size 3.5 mm

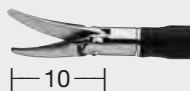
Operating instruments, length 20 and 36 cm,  
for use with trocars sizes 3.5 and 3.9 mm



Length	Handle		
	33151	33121	33149
20 cm			
36 cm			

## Double action jaws

Working Insert	Complete Instrument		
31110 MW	31151 MW	31121 MW	31149 MW
31310 MW	31351 MW	31321 MW	31349 MW



CLICK*line*® Scissors, serrated, curved, conical

|— 10 —|

## Single action jaws

31110 EH	31151 EH	31121 EH	31149 EH
31310 EH	31351 EH	31321 EH	31349 EH



CLICK*line*® Micro Hook Scissors

|— 6 —|

31110 DB	31151 DB	31121 DB	31149 DB
31310 DB	31351 DB	31321 DB	31349 DB



CLICK*line*® BLAKESLEY Dissecting and Biopsy Forceps

|— 10 —|

# Single-use Scissors

CLICK'line – rotating, dismantling

The single-use scissors can be combined with all reusable handles from the KARL STORZ **CLICK'line** series. This makes the single-use scissors fully downward compatible, providing a practical solution for regular use or as a backup system.

The instrument design is based on the scissor jaws of the already available reusable **CLICK'line** Scissor Inserts 34310 MA and 34310 MS.

Color coding at the proximal end of the instrument allows clear identification of the single-use components.



# Single-use Scissors

CLICK'liné – rotating, dismantling

Size 5 mm

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



### Special Features:

- Scissor blades are always sharp
- Sterile packed for immediate use in the OR
- Proven scissor blade design
- Compatible with all handles from the CLICK'liné series (without ratchet)
- Cost-effective solution: “single-use meets reusable”



The single-use scissors are delivered in packages of 10 in a **dispenser box** with instructions for use.



Each scissors insert with outer sheath, including 3 patient labels, are sterile packed in an **individual blister pack**.



34310 MA-D



34310 MA-D **CLICK'liné Scissors Insert with Outer Sheath**, curved, double action jaws, spoon-shaped jaws, size 5 mm, length 36 cm, sterile, for single use, package of 10



34310 MS-D **CLICK'liné METZENBAUM Scissors Insert with Outer Sheath**, curved, double action jaws, size 5 mm, length 36 cm, sterile, for single use, package of 10

# Scissors

CLICK<sup>line</sup> – rotating, dismantling,  
with and without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, length 30, 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

Length	Handle					
	33151	33121	33149	33161	33131	33147
30 cm						
36 cm						
43 cm						

## Double action jaws

Working Insert	Complete Instrument					
34210 MS	34251 MS	34221 MS	34249 MS	34261 MS	34231 MS	34247 MS
34310 MS	34351 MS	34321 MS	34349 MS	34361 MS	34331 MS	34347 MS
34410 MS	34451 MS	34421 MS	34449 MS	34461 MS	34431 MS	34447 MS



CLICK<sup>line</sup> METZENBAUM Scissors, curved

34210 MA	34251 MA	34221 MA	34249 MA	34261 MA	34231 MA	34247 MA
34310 MA	34351 MA	34321 MA	34349 MA	34361 MA	34331 MA	34347 MA
34410 MA	34451 MA	34421 MA	34449 MA	34461 MA	34431 MA	34447 MA



CLICK<sup>line</sup> Scissors, serrated blades, spoon-shaped, curved

34210 MW	34251 MW	34221 MW	34249 MW	34261 MW	34231 MW	34247 MW
34310 MW	34351 MW	34321 MW	34349 MW	34361 MW	34331 MW	34347 MW
34410 MW	34451 MW	34421 MW	34449 MW	34461 MW	34431 MW	34447 MW



CLICK<sup>line</sup> Scissors, serrated, curved, conical

34210 MD	34251 MD	34221 MD	34249 MD	34261 MD	34231 MD	34247 MD
34310 MD	34351 MD	34321 MD	34349 MD	34361 MD	34331 MD	34347 MD



CLICK<sup>line</sup> Scissors, straight



# Scissors

CLICK'liné – rotating, dismantling,  
with and without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, length 30, 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

Length	Handle					
	33151	33121	33149	33161	33131	33147
30 cm						
36 cm						
43 cm						

## Single action jaws

Working Insert	Complete Instrument					
34310 MT	34351 MT	34321 MT	34349 MT	34361 MT	34331 MT	34347 MT
   15	CLICK'liné Scissors, serrated					

34210 EH	34251 EH	34221 EH	34249 EH	34261 EH	34231 EH	34247 EH
34310 EH	34351 EH	34321 EH	34349 EH	34361 EH	34331 EH	34347 EH
34410 EH	34451 EH	34421 EH	34449 EH	34461 EH	34431 EH	34447 EH
   10	CLICK'liné Hook Scissors					







34210 EK	34251 EK	34221 EK	34249 EK	34261 EK	34231 EK	34247 EK
34310 EK	34351 EK	34321 EK	34349 EK	34361 EK	34331 EK	34347 EK
34410 EK	34451 EK	34421 EK	34449 EK	34461 EK	34431 EK	34447 EK
   9	CLICK'liné Hook Scissors, jaws not crossing					

# Scissors





CLICK'liné – rotating, dismantling,  
with and without connector pin for unipolar coagulation

## Size 5 mm

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

Length	Handle					
	33151	33121	33149	33161	33131	33147
36 cm						

## Single action jaws

Working Insert	Complete Instrument					
34310 S	34351 S	34321 S	34349 S	34361 S	34331 S	34347 S
  7	<b>CLICK'liné Micro Dissecting Scissors</b>					
34310 SL	34351 SL	34321 SL	34349 SL	34361 SL	34331 SL	34347 SL
  7	<b>CLICK'liné Micro Dissecting Scissors, curved</b>					
34310 ES	34351 ES	34321 ES	34349 ES	34361 ES	34331 ES	34347 ES
  6	<b>CLICK'liné Micro Hook Scissors</b>					
34310 SF	34351 SF	34321 SF	34349 SF	34361 SF	34331 SF	34347 SF
  14	<b>CLICK'liné Micro Scissors, long jaws with rounded tips, self-sharpening</b>					



















# Biopsy Forceps and Punch Forceps

CLICK'line – rotating, dismantling,  
with and without connector pin for unipolar coagulation

## Size 5 mm

Operating instruments, length 30, 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

Length	Handle					
	33151	33121	33149	33161	33131	33147
30 cm						
36 cm						
43 cm						

## Single action jaws

Working Insert	Complete Instrument					
34210 DB	34251 DB	34221 DB	34249 DB	34261 DB	34231 DB	34247 DB
34310 DB	34351 DB	34321 DB	34349 DB	34361 DB	34331 DB	34347 DB
34410 DB	34451 DB	34421 DB	34449 DB	34461 DB	34431 DB	34447 DB



CLICK'line BLAKESLEY Dissecting and Biopsy Forceps

34210 MB	34251 MB	34221 MB	34249 MB	34261 MB	34231 MB	34247 MB
34310 MB	34351 MB	34321 MB	34349 MB	34361 MB	34331 MB	34347 MB
34410 MB	34451 MB	34421 MB	34449 MB	34461 MB	34431 MB	34447 MB



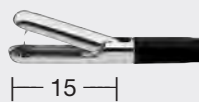
CLICK'line Biopsy Forceps

34310 DZ	34351 DZ	34321 DZ	34349 DZ	34361 DZ	34331 DZ	34347 DZ
34410 DZ	34451 DZ	34421 DZ	34449 DZ	34461 DZ	34431 DZ	34447 DZ



CLICK'line Biopsy Punch Forceps, with two teeth

34310 DZL	34351 DZL	34321 DZL	34349 DZL	34361 DZL	34331 DZL	34347 DZL
-----------	-----------	-----------	-----------	-----------	-----------	-----------



CLICK'line Biopsy Punch Forceps, long, with two teeth













# Biopsy Forceps and Punch Forceps

CLICK<sup>line</sup> – rotating, dismantling,  
with and without connector pin for unipolar coagulation



## Size 5 mm

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

Length	Handle					
	33151	33121	33149	33161	33131	33147
36 cm						
43 cm						

## Single action jaws




Working Insert	Complete Instrument					
34310 DS	34351 DS	34321 DS	34349 DS	34361 DS	34331 DS	34347 DS
  —12—	CLICK <sup>line</sup> FRANGENHEIM <b>Biopsy Forceps</b> , through-cutting					
34310 DH	34351 DH	34321 DH	34349 DH	34361 DH	34331 DH	34347 DH
34410 DH	34451 DH	34421 DH	34449 DH	34461 DH	34431 DH	34447 DH
  —10—	CLICK <sup>line</sup> <b>Biopsy Punch</b> , through-cutting					

# Spoon Forceps



CLICK*line* – rotating, dismantling,  
without connector pin for unipolar coagulation

**Size 10 mm**

Operating instruments, **length 36 cm**,  
for use **with trocars size 11 mm**

Length	Handle		
	33161	33131	33147
36 cm			

## Single action jaws

Working Insert	Complete Instrument		
34510 GS	34561 GS	34531 GS	34547 GS
  — 32 —	CLICK <i>line</i> Spoon Forceps		
34710 GSG	34761 GSG	34731 GSG	34747 GSG
  — 32 —	CLICK <i>line</i> Spoon Forceps, reinforced jaws, for use with Outer Sheath 33700		

A prerequisite for successful, minimally invasive laparoscopic procedures is the selection of the correct HF instruments and units combined with the basic principles of surgery.

During a surgical procedure, the operating surgeon must be able to grasp various tissue structures, to dissect and work on the relevant organ (incision/dissection), and to control hemorrhage (suturing and/or hemostasis). Instruments that perform multiple functions means there is less need for instrument exchange. This saves the surgeon time and effort.

KARL STORZ set itself the task of designing instruments that meet the specific demands of minimally invasive surgery and developed the rotating, bipolar (“ROBI®”) instruments – the CLERMONT-FERRAND model – in co-operation with Prof. Wattiez for this purpose. Like all other instruments in the ROBI® series, they are fully rotatable by 360° and can be disassembled into a handle, sheath and insert. The instruments are autoclavable and easy to handle and clean.



**ROBI® Bipolar Grasping Forceps**

### Grasping Function

The use of retractors in minimally invasive surgery is not always possible or useful. The surgeon, therefore, requires an instrument that is capable of grasping tissue precisely and is able to maintain the tissue at a safe distance to the operating site.

To meet various needs and requirements, the jaws of the ROBI® bipolar grasping forceps vary in regard to size and width. Jaws with rougher toothing are suitable for grasping thicker and heavier tissue whereas jaws with finer toothing are better for grasping more fragile tissue structures. Fenestrated jaws offer the advantage that even structures which are difficult to grasp can be securely gripped.

To enable optimum grasping, even from less favorable angles and positions, all instruments can be rotated 360°. This function proves to be particularly advantageous when using monoarticulate forceps in order to place the jaws in the ideal position.

### Dissection Function

The identification of tissue structures via dissection is a prerequisite for minimizing risks in precision surgery.

The delicate KELLY jaws represent a standard dissection instrument without which the CLERMONT-FERRAND series would not be complete. By opening the handle, the jaws can be moved and the tissue surface can be spread apart. Conventional bipolar forceps, for example, have no joint between the jaws. Closure of the jaws is effected by sliding an external tube. As a result, opening is usually passive.

The joint mechanism of the ROBI® instruments provides the surgeon with a natural tactile feedback. The force exerted on the tissue can, therefore, be felt at the handle and thus permits a precise dose for dissection. “Tactile feedback enables optimal tissue dissection,” according to Wattiez.

Micro instruments are being increasingly used in dissection due to their enhanced precision and advancements in high frequency technology.

### The Coagulation Function

The use of bipolar energy offers some advantages over unipolar energy. The applied current flows between the branches of the utilized HF instrument and must not travel over long distances through the body of the patient via a neutral electrode. With the aim of providing maximum user safety, ROBI® instruments were designed and equipped with bipolar HF technology to ensure minimal patient discomfort.

Despite these safety precautions, it is important to observe basic rules and principles for optimum work with bipolar HF energy and to keep risks at a minimum. In general, it is important to ensure that no critical viscera is in contact with the instrument and that only the relevant tissue is grasped between the two jaws of the forceps when activating or contacting the bipolar instrument.

Coagulation occurs by means of heating the tissue. If the tissue is heated too severely or the HF application times are too long, there is a risk that burns will occur around the operating site. Heat dispersion can be

restricted by selecting the appropriate HF power setting. A 30 – 50 W power setting is generally sufficient for laparoscopic interventions. In principle, the higher the selected HF power setting, the shorter the exposure time and vice versa. The longer the exposure time, the more extensive the heat dispersion. Care must be taken that HF energy has adequate penetration depth, which is not always easy for the surgeon to see or predict. After selecting the power setting, the surgeon applies the energy with as short an exposure time as possible.

The power setting used generally depends on the size of the selected jaws as the density of the energy transferred to the tissue is directly relative to the size of the jaws. With the same power setting, the narrower the jaws, the greater the energy density.

The thicker the jaws, the higher the power setting required. With thicker jaws, the operating surgeon has to choose a higher power setting (approx. 50 W) but with a shorter exposure time. With thinner jaws, a lower power setting of approximately 35 W is selected.

Tissue impedance is another important aspect that needs to be considered in order to avoid unintentional thermal damage. Through more or less heavy compression of the tissue, the surgeon can alter the tissue impedance and, thus, modify the dispersion of electrical energy. The more the tissue is compressed, the greater the impedance. Altering the electrical HF energy



influences coagulation time, which then becomes shorter. In contrast to conventional bipolar forceps, grasping forceps from the ROBI® series – thanks to their tactile feedback – allow the pressure applied to the tissue to be altered and, as a result, the impedance to be changed.\*

During the procedure, blood and tissue may coagulate on the jaws. This may act as an insulation layer and change the distribution of energy. In extreme cases, there is no current flow and coagulation is no longer possible. To prevent soiling of the jaws, the appropriate power setting depending on the size of the jaws must be selected. Furthermore, long exposure times and coagulation in blood should be avoided. Precise, preventative coagulation is the best safety precaution.

### ROBI® Bipolar Scissors

#### Cutting Function

To meet the different requirements of various tissue structures during the incision phase, we also added curved METZENBAUM scissors as well as serrated jaws for difficult-to-grasp tissue structures to the existing straight scissor versions in the CLERMONT-FERRAND series.

#### Coagulation Function

Bipolar ROBI® scissors have also been specially designed for use with HF energy and enable both coagulation and cutting in the coagulated area. Of course, the same safety precautions apply to ROBI® scissors regarding the use of bipolar HF energy as described above for grasping forceps.

#### Conclusion

Optimization of the minimally invasive intervention is dependent on the number and selection of functions that are possible for the surgeon. ROBI® grasping forceps offer the surgeon an instrument with grasping, dissection and coagulation functions. ROBI® scissors also offer the possibility of dissection and coagulation as well as, of course, incision. Thanks to the quick-change ROBI® system, working inserts can be rapidly exchanged during surgery and according to surgical requirements.

The ROBI® grasping forceps and scissors from the CLERMONT-FERRAND series feature a high degree of user-friendliness in the customary KARL STORZ tradition.

\* **Source:** *Principles and Safety Measures of Electrosurgery in Laparoscopy*, I. ALKATOUT et al., JSLS, 2012

# ROBI® Bipolar Scissors

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



## Special Features:

- 360° rotating sheath
- The HF connection (without stop) is mounted at a 45° angle on the upper side of the handle, thereby guiding the high frequency cable away from the field of operation
- Instruments in size 3.5 mm can be disassembled into a handle and working insert with outer sheath
- Color coding on the working insert and handle
- Handle 38151 is compatible with both the 3.5 mm and 5 mm ROBI® systems

ROBI® Handle, insulated, for sizes 3.5 and 5 mm



38151 ROBI® Plastic Handle, without ratchet

Size 5 mm

ROBI® Metal Outer Sheaths, insulated



- |       |  |
|-------|--|
| 38600 | ROBI® Metal Outer Sheath, insulated, with LUER-Lock irrigation connector for cleaning, size 5 mm, length 36 cm |
| 38700 | Same, length 43 cm   |

**Please note:** ROBI® instruments, length 43 cm, for use with HOPKINS® Straight Forward Telescopes 26034 AA, 26038 AA and HOPKINS® Wide Angle Straight Forward Telescope 26075 AA

**Working Inserts for ROBI® Instruments size 3.5 mm** see page 173

**Working Inserts for ROBI® Instruments size 5 mm** see pages 174

**Accessories for Handles** see page 176

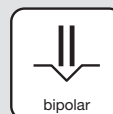
**Components/Spare Parts** see chapter 18



# ROBI® Bipolar Scissors

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

Size 3.5 mm



Operating instruments, lengths 20 and 36 cm,  
for use with trocars size 3.5 and 3.9 mm

Outer Sheath	Handle
	38151
Length 20 cm	
Length 36 cm	

### Double action jaws

Outer Sheath with Working Insert	Complete Instrument
38810 MW	38851 MW
38910 MW	38951 MW



ROBI® Scissors, CLERMONT-FERRAND model, curved scissor blades

### 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

**Components/Spare Parts** see chapter 18

# ROBI® Bipolar Scissors

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

Size 5 mm



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
	<b>ROBI® Scissors</b> , CLERMONT-FERRAND model, straight jaws, for cutting and bipolar coagulation of vessels and tissue layers
38610 MZ	38651 MZ
	<b>ROBI® Scissors</b> , CLERMONT-FERRAND model, straight jaws, serrated, for cutting and bipolar coagulation

## Double action jaws

38610 MW	38651 MW
38710 MW	38751 MW
	<b>ROBI® METZENBAUM Scissors</b> , 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

# Knives for Pyloromyotomy



**Size 3 mm**

Operating instruments, **length 20 cm**,  
for use **with trocars size 3.5 mm**

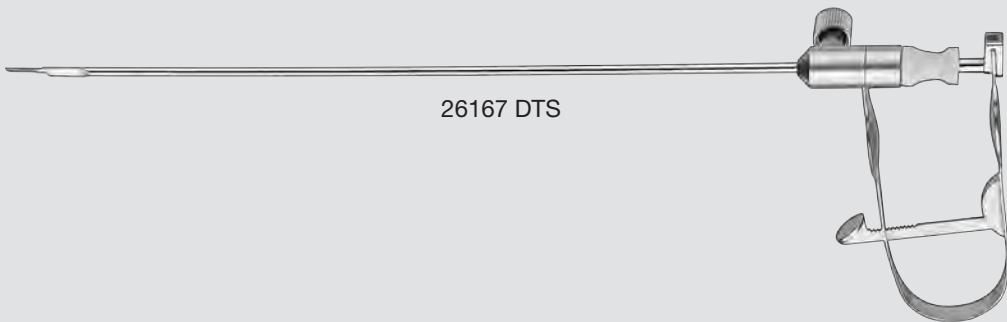


26167 DFS



26167 DFS

**ALAIN-GROUSSEAU Pylorotome**,  
distendable, size 3 mm, length 20 cm



26167 DTS



26167 DTS

**TAN Endotome**, distendable, U-spring  
handle with ratchet, with LUER-Lock  
connector for cleaning, size 3 mm,  
length 20 cm, including Knife 26167 KTS



26167 DRS



26167 DRS

**Pyloric Knife**, with LUER-Lock connector for  
cleaning, size 3 mm, length 10 cm  
including:

**Handle**, with outer sheath

**Knife Insert**, unsterile, for single use,  
package of 10




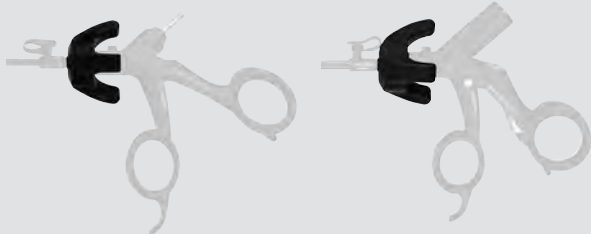

26167 KRS

**Knife Insert**, unsterile, for single use,  
package of 10



**Components/Spare Parts** see chapter 18

# Accessories for Handles and Outer Sheaths

	<p>33120 G     <b>Rotating Wheel</b>, for <b>CLICK'line</b> and <b>ROBI</b>® handles, <b>autoclavable</b>, makes rotation of outer sheath more comfortable, package of 5</p> 
	<p>29100     <b>Plug</b>, for LUER-Lock irrigation connector for cleaning, <b>autoclavable</b>, black, package of 10</p> <p>29100 A     <b>Color-Coded Plug</b>, for LUER-Lock irrigation connector for cleaning, red, green, black, 10 each, package of 30</p> <p>29100 R     <b>Plug</b>, for LUER-Lock irrigation connector for cleaning, <b>autoclavable</b>, red, package of 10</p> <p>29100 G     <b>Plug</b>, for LUER-Lock irrigation connector for cleaning, <b>autoclavable</b>, green, package of 10</p>

Components/Spare Parts see chapter 18

# Accessories

## Unipolar and Bipolar High Frequency Cords

### Unipolar High Frequency Cords







KARL STORZ High Frequency  
Instrument Surgery Units

	26002 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type T older models and Ellman
	26004 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, compatible with Martin HF units
	26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type ICC and Erbe VIO 301
	26006 M	<b>Unipolar High Frequency Cord</b> , with 8 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Valleylab models

### Bipolar High Frequency Cords



KARL STORZ High Frequency  
Instrument Surgery Units

	26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe-Coagulator, T and ICC series
	26176 LM	<b>Bipolar High Frequency Cord</b> , length 300 cm, compatible with Martin HF units
	26176 LV	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 28.58 mm, for AUTOCON® III and AUTOCON® II, compatible with Valleylab coagulators, for use with high frequency surgical units with bipolar sockets with 28.58 mm pin distance
	26176 LW	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 22 mm, compatible with high frequency surgical units with bipolar sockets with 22 mm pin distance

**Please note:** All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 **ML**, 26176 **LVL**.





## INSTRUMENTS FOR UNIPOLAR AND BIPOLAR COAGULATION

### Sizes 3.5 and 5 mm

COAGULATION AND DISSECTION ELECTRODES WITHOUT SUCTION CHANNEL, UNIPOLAR, Sizes 3.5 and 5 mm .....	180-183
DISSECTION NEEDLES WITHOUT SUCTION CHANNEL, UNIPOLAR, Sizes 3.5 and 5 mm .....	184-185
COAGULATION AND DISSECTION ELECTRODES WITH SUCTION CHANNEL, UNIPOLAR, Size 5 mm .....	186
COAGULATION INSTRUMENTS, BIPOLAR Size 5 mm .....	187
ACCESSORIES .....	188

# Coagulation and Dissection Electrodes

without suction channel, insulated sheath,  
with connector pin for unipolar coagulation

Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars size 3.5 mm



Length	Instrument
20 cm	
36 cm	

Distal Tip	Instrument
	26870 UNS <b>Coagulation and Dissection Electrode, L-shaped</b>
	26870 UNL <b>Coagulation and Dissection Electrode, L-shaped</b>
	26665 UNL <b>Coagulation and Dissection Electrode, spatula-shaped, blunt</b>

### Special Features:

- The hook electrode is suitable for resection, insulating structures as well as dissection and coagulation.
- The distal tip is semicircular: The thick outer curvature enables dissection.

Length	Instrument
36 cm	

Distal Tip	Instrument
	25775 CNL <b>CADIERE Coagulation and Dissection Electrode, L-shaped, with cm-marking, distal tip tapered</b>

Units for use with Coagulation and Dissection Electrodes see chapter 17, UNITS



# Coagulation and Dissection Electrodes

without suction channel, insulated sheath,  
with connector pin for unipolar coagulation

Size 5 mm

Operating instruments, lengths 30 and 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



Length	Instrument
30 cm	
36 cm	
43 cm	

Distal Tip	Instrument
	26772 UF 26775 UF 26778 UF <b>Coagulation and Dissection Electrode, L-shaped</b>
	26775 UE 26778 UE <b>Coagulation and Dissection Electrode, spatula-shaped, blunt</b>
	26775 S <b>Coagulation and Dissection Electrode, knife-shaped</b>
	26775 R <b>MANGESHIKAR Coagulation Electrode, with ball end</b>

### Special Features:

- The hook electrode is suitable for resection, insulating structures as well as dissection and coagulation.
- The distal tip is semicircular: The thick outer curvature enables dissection.

Length	Instrument
36 cm	
43 cm	

Distal Tip	Instrument
	26775 C 26775 CL <b>CADIERE Coagulation and Dissection Electrode, L-shaped, with cm-marking, distal tip tapered</b>

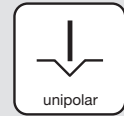
Units for use with Coagulation and Dissection Electrodes see chapter 17, UNITS

# Coagulation and Dissection Electrodes, with Exchangeable Electrode Tips

without suction channel, insulated sheath,  
with connector pin for unipolar coagulation

Size 5 mm

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



## Special Features:

- Exchangeable electrode tips



30775 UF

**Coagulation and Dissection Electrode, L-shaped, with connector pin for unipolar coagulation, size 5 mm, length 36 cm including:**

**Outer Sheath, insulated**

**Plastic Handle**

**Electrode, L-shaped**

30775 UFE

**Exchangeable Electrode Tip, L-shaped, autoclavable, package of 6**



Units for use with Coagulation and Dissection Electrodes see chapter 17, UNITS  
Components/Spare Parts see chapter 18

# Coagulation and Dissection Electrodes

without suction channel, insulated sheath,  
with connector pin for unipolar coagulation

Size 5 mm

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

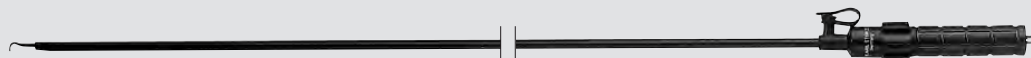


## Special Features:

- Continuously articulating up to 15°
- Axial high frequency connector pin takes the cable away from the operative field
- LUER connector for cleaning
- Autoclavable

One of the main problems in laparoscopy is the restricted working angle of the operating instrument which is due to the fixed position of the trocars in the abdominal wall. This problem is usually resolved by placing more trocars in order to obtain access to additional working angles.

This particular situation was the reason for developing the unipolar angulating electrodes. These instruments can continuously be articulated up to an angle of 15° and, therefore, provide several working angles through one access. Both electrode models can be used for preparation, dissection and unipolar coagulation, whereas the spatula is especially suitable for cleavage and dissection.



26785 RL



26785 RL

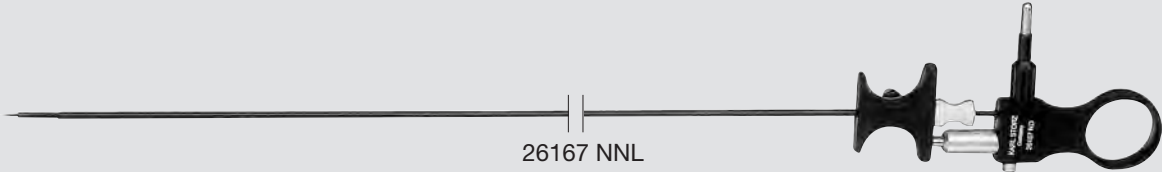
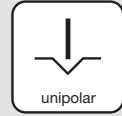
REMORGIDA **Coagulation and Dissection Electrode**, L-shaped, distal tip can be angled up to 15°, with connector pin for unipolar coagulation, size 5 mm, length 36 cm

# Dissection Needles

without suction channel, insulated sheath,  
with connector pin for unipolar coagulation

## Size 3.5 mm

Operating instruments, **length 36 cm**,  
for use with **trocars size 3.5 mm**

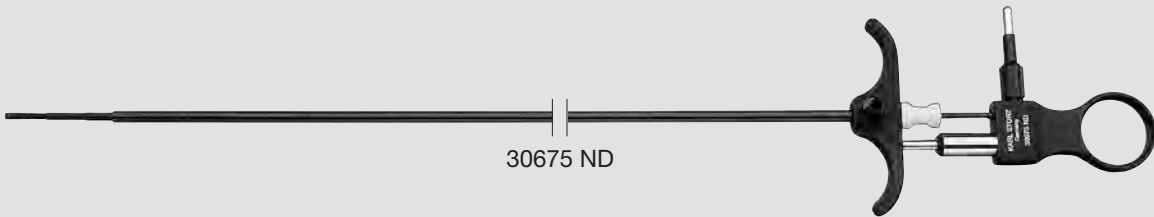
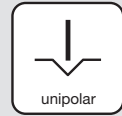


26167 NNL **KOH Ultramicro High Frequency Electrode**,  
for splitting and coagulation, insulated,  
retractable, with connector pin for unipolar  
coagulation, size 3.5 mm, length 36 cm

26167 NNX **Spare Needle Electrode, autoclavable**, size 3.5 mm,  
length 36 cm, package of 5, for use with KOH  
Ultramicro High Frequency Electrode 26167 NNL

## Size 5 mm

Operating instruments, **length 31 cm**,  
for use with **trocars size 6 mm**



30675 ND **High Frequency Needle**, for splitting and  
coagulation, insulated, retractable, with connector pin  
for unipolar coagulation, size 5 mm, length 31 cm,  
incl. Spare Needle Electrode 26175 NE



26175 NE **Spare Needle Electrode, autoclavable**,  
diameter 0.7 mm, length 31 cm, for use with  
High Frequency Needle 30675 ND

26175 NL **Spare Needle Electrode, autoclavable**, package  
of 1, diameter 1.1 mm, length 31 cm, for use with  
High Frequency Needle 30675 ND

26175 NS **Same**, diameter 0.5 mm

**Units for use with Dissection Needles** see chapter 17, **UNITS**  
**Components/Spare Parts** see chapter 18

# Handles for Coagulation and Dissection Electrodes

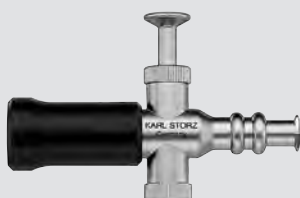
with suction channel



30803

**Handle**, without irrigation and suction connector, **autoclavable**, for use with 5 mm coagulating and dissecting electrodes with suction channel

For suction or irrigation



30804

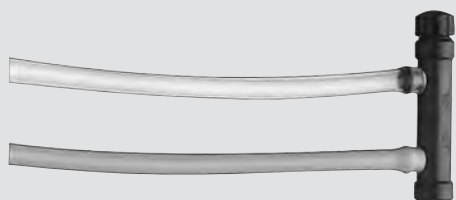
**Handle with Trumpet Valve**, for suction or irrigation, **autoclavable**, for use with 5 mm coagulation suction tubes as well as 3, 3.5 and 5 mm suction and irrigation tubes

For suction and irrigation



30810

**Handle**, for suction and irrigation, **autoclavable**, for use with 5 mm coagulation suction tubes as well as 3, 3.5 and 5 mm suction and irrigation tubes



30811

**Silicone Tubing Set, autoclavable**, for use with Handle 30810

031132-10\*

**Tubing Set**, sterile, for single use, package of 10, for use with Handle 30810



2-987



Further Handles see chapter 9

Components/Spare Parts see chapter 18

# Coagulation and Dissection Electrodes


with suction and irrigation channel, insulated sheath,  
with connector pin for unipolar coagulation






## Size 5 mm

Operating instruments, **lengths 30 and 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



Length	Instrument
30 cm	
36 cm	
43 cm	

Distal Tip	Instrument
	37270 SC
	37370 SC
	37470 SC
	37270 DB
	37370 DB
	37470 DB
	37270 DL
	37370 DL
	37470 DL
	37370 DH
	37370 DU



39105 C

**Irrigation Adaptor**, for 5 mm coagulation  
and dissection electrodes with suction  
channel and LUER-Lock connector

### Please note:

If only coagulation is required, use **Handle 30803**.

**Handles for Suction and Irrigation** see chapter 9, pages 224-226

**Units for use with Handle for Suction and Irrigation** see chapter 17, UNITS

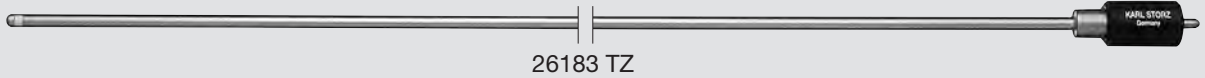
**Components/Spare Parts** see chapter 18

# Bipolar Ball Electrode, Bipolar Needle, Bipolar Coagulation Suction Tubes

with connector pin for bipolar coagulation

Size 5 mm

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

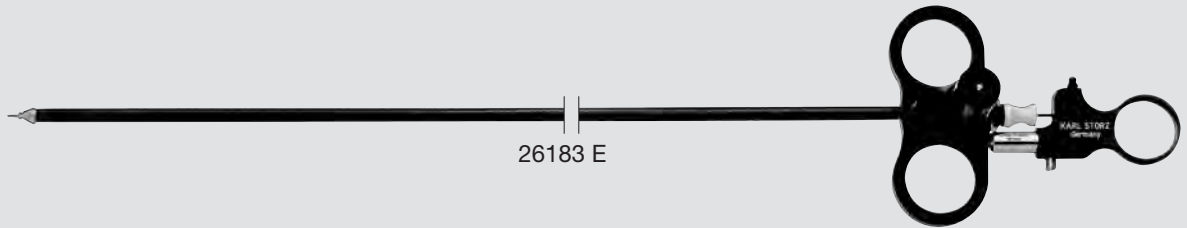


26183 TZ



26183 TZ

**Bipolar Ball Electrode**, size 5 mm,  
length 36 cm



26183 E



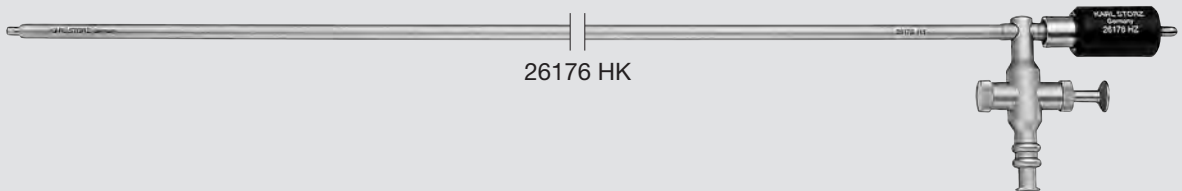
26183 E

**Bipolar Needle**, size 5 mm, length 36 cm

26183 EN

**Spare Electrode, autoclavable**,  
for use with 26183 E, package of 5

Operating instruments, lengths 33 and 36 cm,  
for use with trocars size 6 mm



26176 HK



26176 HK

**TAKE-APART® Bipolar Coagulation Suction Tube**,  
with stopcock, size 5 mm, length 33 cm

including:

**Suction Tube**

**Coagulation Electrode**



37370 GC



37370 GC

**GORDTS and CAMPO Coagulation  
Suction and Irrigation Tube**, bipolar,  
diameter 5 mm, length 36 cm, for use with  
suction and irrigation handles

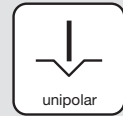
**Handles for Suction and Irrigation** see chapter 9, pages 224-226

**Components/Spare Parts** see chapter 18

# Accessories

## Unipolar and Bipolar High Frequency Cords

### Unipolar High Frequency Cords



KARL STORZ High Frequency  
Instrument Surgery Units

	26002 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type T older models and Ellman
	26004 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, compatible with Martin HF units
	26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type ICC and Erbe VIO 301
	26006 M	<b>Unipolar High Frequency Cord</b> , with 8 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Valleylab models

### Bipolar High Frequency Cords



KARL STORZ High Frequency  
Instrument Surgery Units

	26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe-Coagulator, T and ICC series
	26176 LM	<b>Bipolar High Frequency Cord</b> , length 300 cm, compatible with Martin HF units
	26176 LV	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 28.58 mm, for AUTOCON® III and AUTOCON® II, compatible with Valleylab coagulators, for use with high frequency surgical units with bipolar sockets with 28.58 mm pin distance
	26176 LW	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 22 mm, compatible with high frequency surgical units with bipolar sockets with 22 mm pin distance

**Please note:** All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 **ML**, 26176 **LVL**.





# PALPATION PROBES, RETRACTORS, DISSECTORS AND EXTRACTORS

## PALPATION PROBES

Sizes 3.5 – 5 mm .....191

## DISSECTORS AND RETRACTORS

Sizes 3.5 – 12 mm .....192-196

## RETRACTORS FOR

RECTAL SURGERY .....197-199

EXTRACTORS .....200



# Palpation Probes



## Size 3.5 mm

Operating instruments, **lengths 20 and 36 cm**,  
for use **with trocars size 3.5 mm**



26167 TNS

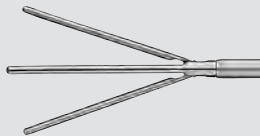


26167 TNS **Palpation Probe**, with cm-marking,  
size 3.5 mm, length 20 cm

26167 TNL **Same**, length 36 cm



31143 REM



31143 REM **CLICKline<sup>®</sup> Palpation Probe**, dismantling,  
without connector pin for unipolar  
coagulation, with LUER-Lock irrigation  
connector for cleaning, retractable, double  
action jaws, size 3.5 mm, length 20 cm  
including:

- Handle**
- Metal Outer Sheath**
- Forceps Insert**

31343 REM **Same**, length 36 cm

## Size 5 mm

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

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



26175 T



26175 T **Palpation Probe**, with cm-markings,  
size 5 mm, length 36 cm

26178 T **Same**, length 43 cm

**Components/Spare Parts** see chapter 18

# CUSCHIERI Sharp Dissector

dismantling

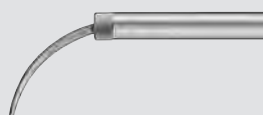
## Size 5 mm

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

### Dismantling Variable Curvature Dissector

When closed, the functional component of the instrument is restrained inside a straight metal outer sheath. It is introduced in the closed position through a standard 6 mm cannula. Once inside the peritoneal cavity and within the operative field, the functional end can be extended to the desired curvature to commensurate with the needs of dissection. When fully extruded, the functional tip forms a semicircle with a radius 1.5 – 3.0 cm. Only the end of the dissector has a bevelled cutting

edge, the sides are blunt. The end of the dissector can, therefore, be passed behind viscera (e. g. oesophagus) or vessels with a gentle side to side movement to emerge on the contralateral side. Once the structure has been negotiated in this way, blunt posterior mobilization is effected by a back and forth movement of the fully extruded curved functional piece. Before removal, the functional dissecting end is retracted inside the restraining outer sheath.



30623 GK

**CUSCHIERI Dismantling Variable Curvature Dissector**,  
sharp, large curvature, size 5 mm, length 36 cm  
including:  
**Handle**  
**Outer Sheath**  
**Insert Dissector**, large curvature

**Components/Spare Parts** see chapter 18

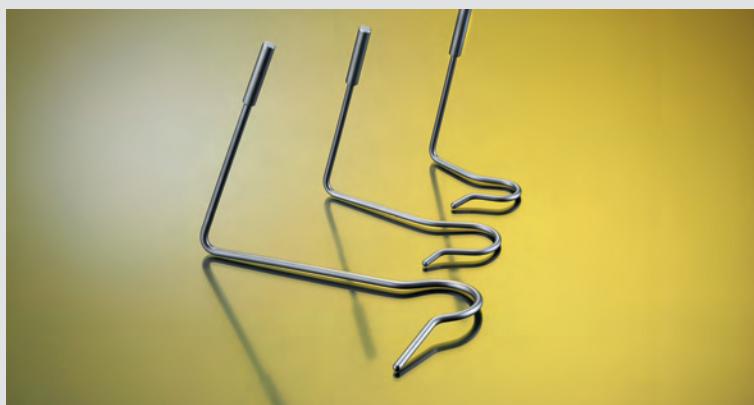
# NATHANSON Liver Retractors

for percutaneous applications

The NATHANSON liver retractors round off the existing product portfolio for retractors from KARL STORZ.

## Special Features:

- For percutaneous applications
- Available in three sizes – small, medium and large
- Application in pediatric and adult surgery



- |           |  |
|-----------|--|
| 30623 NAL | NATHANSON <b>Liver Retractor</b> , large contact area, diameter 6 mm, distance distal tip 105 mm |
| 30623 NAM | NATHANSON <b>Liver Retractor</b> , medium contact area, diameter 5 mm, distance distal tip 69 mm |
| 30623 NAS | NATHANSON <b>Liver Retractor</b> , small contact area, diameter 5 mm, distance distal tip 59 mm  |

## Recommended accessories:

### Holding Systems

The following holding systems are recommended for fixating the liver retractors:

- |           |   |
|-----------|---|
| 28172 HR  | <b>Rotation Socket</b>                    |
| 28272 UKN | <b>Clamping Jaw</b> , small               |
| 28272 HC  | <b>Articulated Stand</b> , L-shaped, long |

Alternative: **ARTIP® BASE** <sup>NEW</sup>

- |            |   |
|------------|---|
| 28172 HR   | <b>Rotation Socket</b>                  |
| 28272 UKN  | <b>Clamping Jaw</b> , small             |
| 28272 TM   | <b>ARTIP® BASE Unit</b>                 |
| 28272 TL   | <b>ARTIP® BASE Holding Arm</b> , long   |
| 28272 TA   | <b>ARTIP® BASE Rechargeable Battery</b> |
| 28272 TC   | <b>ARTIP® BASE Charging Unit</b>        |
| 041151-30* | <b>Cover</b> , with elastic tip         |



**Components/Spare Parts** see chapter 18

The distal end of the liver retractor can be activated by rotation of the proximal part of the handle. The retractor is introduced into the peritoneal cavity in its straight, unactivated form. Once inside the abdomen, the distal end is closed with the help of forceps and slipped under the liver. The liver can be safely held clear of the

operative site in this manner for extended periods of time.

This instrument was developed in conjunction with Professor Sir Alfred Cuschieri and his staff at the University of Dundee.

### Special Features:

- Retraction of the liver for extended periods of time
- Dismantling for cleaning purposes

### Size 5 mm

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



30623 U

CUSCHIERI **Retractor**, size 5 mm, length 36 cm, contact surface approx. 21 cm<sup>2</sup>

### Size 10 mm

Operating instrument, **length 36 cm**,  
for use **with trocars size 11 mm**



30623 UR

CUSCHIERI **Retractor**, size 10 mm, length 36 cm, contact surface approx. 14 cm<sup>2</sup>



30623 URL

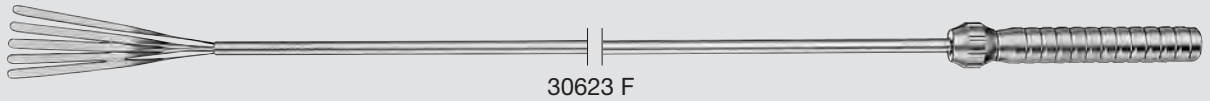
CUSCHIERI **Retractor, large contact surface**, size 10 mm, length 36 cm, contact surface approx. 30 cm<sup>2</sup>

**Components/Spare Parts** see chapter 18

# Fan Retractors

## Size 5 mm

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

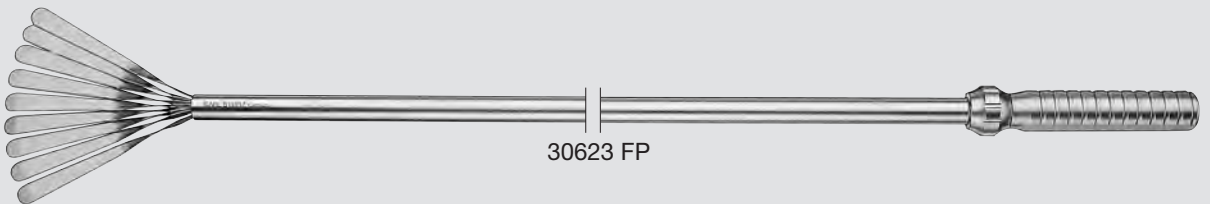


30623 F

**Fan Retractor**, dismantling, retractable,  
size 5 mm, length 36 cm, opening angle in  
extended position approx. 16°

## Size 10 mm

Operating instrument, **length 36 cm**,  
for use **with trocars size 11 mm**

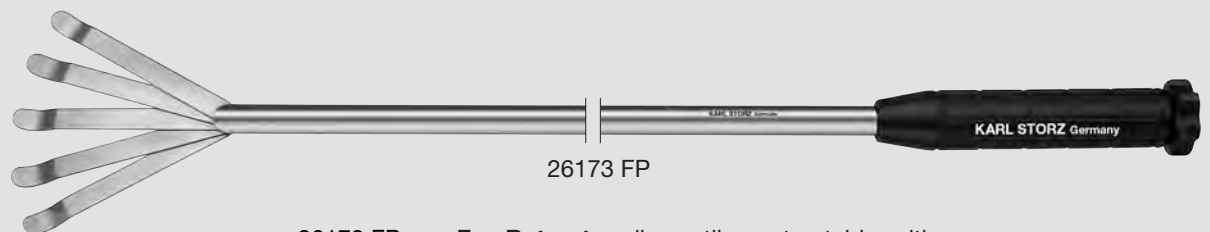


30623 FP

**Fan Retractor**, dismantling, retractable,  
size 10 mm, length 36 cm, opening angle in  
extended position approx. 60°

## Size 12 mm

Operating instrument, **length 36 cm**,  
for use **with trocars size 13 mm**



26173 FP

**Fan Retractor**, dismantling, retractable, with  
proximal rotating wheel for expansion, size 12 mm,  
length 36 cm, opening angle in extended position  
approx. 60°

**Components/Spare Parts** see chapter 18

# Retractors

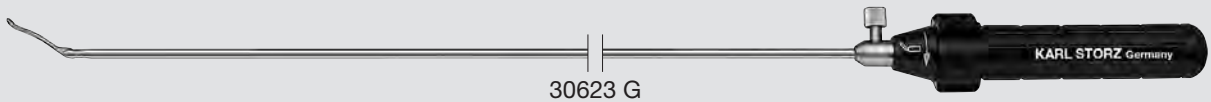
Sizes 5 and 10 mm

Operating instruments, length 36 cm,  
 for use with trocars sizes 6 and 11 mm

**Special Features:**

- Distal tip articulating up to 90°
- Blunt, atraumatic retractor working element
- Fenestrated retractor working element

The instrument is used as a blunt retractor in stomach and bowel surgery. In gastric banding, the stomach band is anchored in the fenestration and pulled around the esophagus.



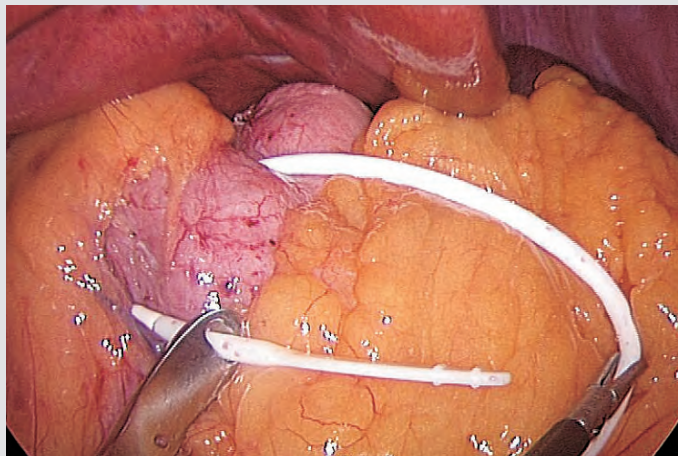
30623 G

**Retractor for Gastric Banding,**  
 size 5 mm, length 36 cm



30623 GB

**Same, size 10 mm**



**Components/Spare Parts** see chapter 18



## Retractors

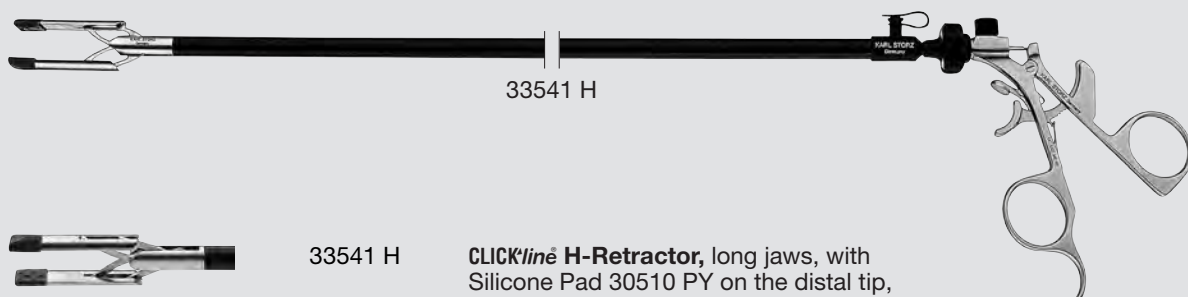
for laparoscopic colorectal surgery

### Special Features:

- Helps to display the various structures in difficult anatomies (e.g., particularly in obese male patients)
- Various retractor shapes for different anatomies
- Angle adjustment dial facilitates use

### Size 10 mm

Operating instruments, length 36 cm,  
for use with trocars size 11 mm



33541 H

**CLICK'line® H-Retractor**, long jaws, with Silicone Pad 30510 PY on the distal tip, double action jaws, jaws open in parallel, **autoclavable**, ratchet engages while handle opens, size 10 mm, length 36 cm including:

**Metal Handle**, with disengageable ratchet

**Outer Sheath**, insulated

**H-Retractor Insert**

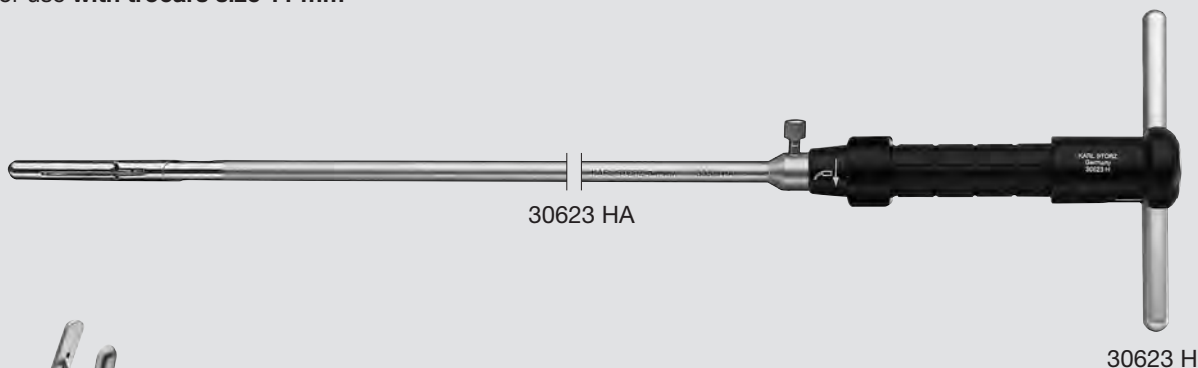
**Silicone Pad**, package of 6

# Retractors

for laparoscopic colorectal surgery

Size 10 mm

Operating instruments, **length 36 cm**,  
for use **with trocars size 11 mm**



30623 HA

**Articulating H-Retractor**, long jaws,  
double action jaws, jaws open in parallel,  
bendable to 90°, **autoclavable**,  
size 10 mm, length 36 cm



30623 H

30623 H

**Handle Attachment**, autoclavable,  
for use with retractors

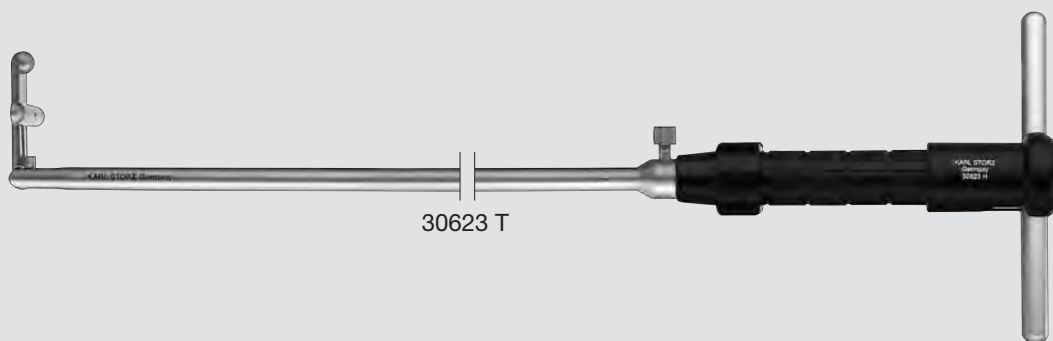
**Further Instruments for Colorectal Surgery** see PROCTOLOGY catalog  
**Components/Spare Parts** see chapter 18

## Retractors

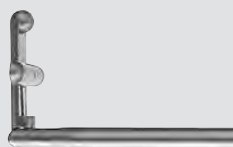
for laparoscopic colorectal surgery

Size 10 mm

Operating instruments, lengths 30 and 36 cm,  
for use with trocars size 11 mm



30623 H



30623 T

**T-Retractor**, with rotation wheel for angling and extending the distal tip, with LUER-Lock connector for cleaning, **autoclavable**, size 10 mm, length 30 cm



30623 VL

**V-Retractor**, with rotation wheel for angling and extending the distal tip, with LUER-Lock connector for cleaning, **autoclavable**, size 10 mm, length 30 cm



30623 I

**I-Retractor**, with rotation wheel for angling the distal tip, with LUER-Lock connector for cleaning, **autoclavable**, size 10 mm, length 36 cm



30623 H

30623 H

**Handle Attachment, autoclavable**, for use with retractors

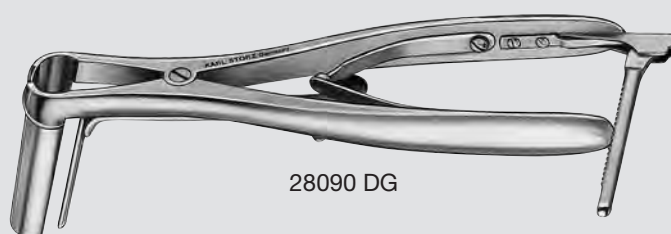
Further Instruments for Colorectal Surgery see PROCTOLOGY catalog  
Components/Spare Parts see chapter 18

## The Gall Bladder Extractor

The gall bladder extractor can be useful for removing the gall bladder from the abdominal cavity after it has been detached from the liver bed. Before cholecystectomy the extractor is slid over the central 11 mm trocar sleeve in the umbilical region until it becomes visible in the abdominal cavity. Then the freed gall bladder is drawn into the trocar sleeve with the grasping forceps. Following this, the gall bladder extractor is opened as

wide as possible and at the same time the trocar sleeve, together with the grasped gall bladder, is drawn out by the extractor.

If total cholecystectomy cannot be carried out completely at one time because too many stones or stones which are too large have lodged in the gall bladder fundus, the stones can be removed with a lithotomy forceps by opening the gall bladder extractor.



28090 DG

28090 DG **3-Blade Speculum**, for gall bladder extraction, length 6 cm



28090 SG

28090 SG **Speculum**, for gall bladder extraction, length 6 cm



# SUTURE AND LIGATURE

## NEEDLE HOLDERS

Sizes 2 – 5 mm .....202-215

## KNOT TIERS

Sizes 3.5 – 5 mm .....216-218

## PERCUTANEOUS SUTURING

AND FASCIAL CLOSURE .....219

## CLIP APPLICATORS, size 10 mm

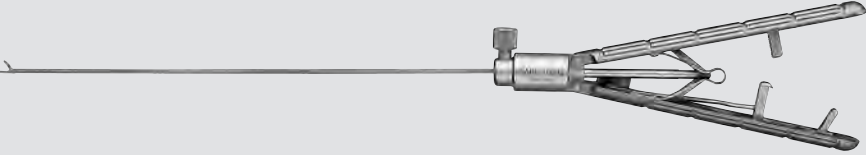
AND ENDO-LOOP LIGATURES .....220-221


# KOH Ultramicro Needle Holders



## Size 2 mm

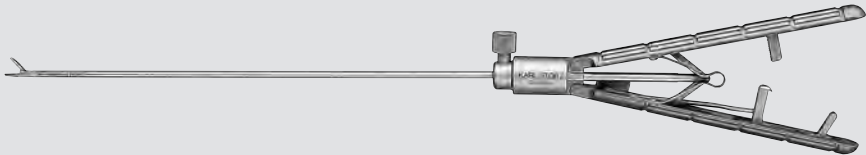
Operating instruments, length 20 cm,  
for use with trocars size 2.5 mm


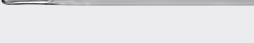

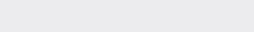
Length	Instrument
20 cm	

Distal Tip	Instrument
	30200 FNS KOH Ultramicro Needle Holder, straight handle, with disengageable ratchet

## Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars size 3.5 mm

Length	Instrument
20 cm	
36 cm	

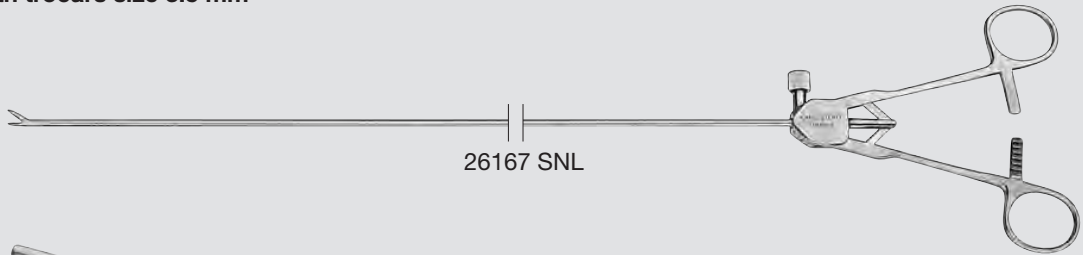
Distal Tip	Instrument
	26167 LNS KOH Ultramicro Needle Holder, jaws curved to left, with tungsten carbide insert, straight handle, with disengageable ratchet
	26167 LNL
	26167 RNS KOH Ultramicro Needle Holder, jaws curved to right, with tungsten carbide insert, straight handle, with disengageable ratchet
	26167 RNL

Components/Spare Parts see chapter 18

# Needle Holders

## Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars size 3.5 mm



26167 SNL SAWALHE **Needle Holder**, 90° opening jaws, axial ring handle with ratchet, size 3.5 mm, length 36 cm

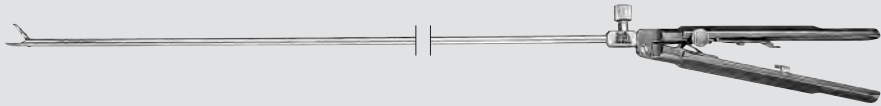






26167 MNS LIMA **Needle Holder**, jaws curved to left, axial ring handle with ratchet, size 3.5 mm, length 20 cm


# SZABO-BERCI Needle Holders “PARROT-JAW®”


## Size 5 mm

Operating instruments, length 33 cm,  
for use with trocars size 6 mm

Length	Instrument
33 cm	

Distal Tip	Instrument
	26173 SC SZABO-BERCI Needle Holder “PARROT-JAW”, straight handle, with ratchet
	26173 SE SZABO-BERCI Needle Holder “PARROT-JAW”, with tungsten carbide insert, straight handle, with ratchet
	26173 CQ SZABO-BERCI Needle Holder “PARROT-JAW”, straight handle, with ratchet
	26173 CE SZABO-BERCI Needle Holder “PARROT-JAW”, with tungsten carbide insert, straight handle, with ratchet

Length	Instrument
33 cm	

Distal Tip	Instrument
	26173 SP SZABO-BERCI Needle Holder “PARROT-JAW”, with hard material coated jaws, straight handle, with ratchet

**Please note:**

Using the needle holder with a needle larger than recommended may result in a mechanical damage to the instrument.

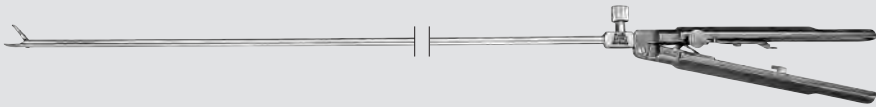
**Components/Spare Parts** see chapter 18






# SZABO-BERCI Assistant Needle Holders "FLAMINGO-JAW®"

Size 5 mm

Operating instruments, length 33 cm,  
for use with trocars size 6 or 11 mm with reduction sleeves

Length	Instrument
33 cm	

Distal Tip	Instrument	
	26173 QR	SZABO-BERCI Assistant Needle Holder "FLAMINGO-JAW®", straight handle, with ratchet
	26173 DQ	SZABO-BERCI Assistant Needle Holder "FLAMINGO-JAW®", straight handle, without ratchet
	26173 SD	SZABO-BERCI Assistant Needle Holder "FLAMINGO-JAW®", straight handle, without ratchet

**Please note:**

Using the needle holder with a needle larger than recommended may result in a mechanical damage to the instrument.

**Components/Spare Parts** see chapter 18

## Needle Holder with Righting Function

The existing product portfolio of needle holders has been expanded to include the needle holder with a needle righting function. The needle, which is clamped

flat in the needle holder, can be raised in the site by means of the rotary wheel.

### Special Features:

- **Righting function for the clamped needle via the rotary wheel**
- **The precisely settable ratchet facilitates positioning of the needle**



26173 HA **Macro Needle Holder**, with needle righting function, straight handle with ratchet, ratchet position right, jaws straight, with tungsten carbide inserts, diameter 5 mm, length 33 cm

The needle, which is clamped flat in the needle holder, can be introduced through a 11 mm trocar (Figure 1) and, by means of the rotary wheel (Figure 2), is raised in the site (Figure 3).

Figure 1



Figure 2

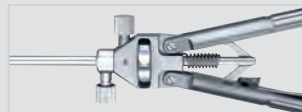


Figure 3



# KOH Macro Needle Holders


## Size 5 mm




Operating instruments, lengths 33 and 43 cm, for use with trocars size 6 mm

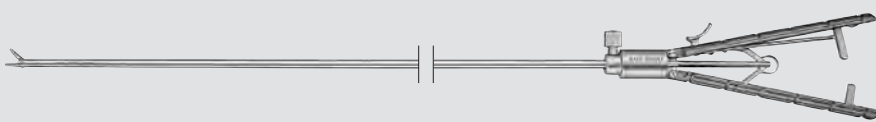
The 5 mm KOH macro needle holder allows precise holding of the needles.



### Special Features:

- Tungsten carbide inserts for secure holding of the needle
- Precise adjustable ratchet
- Axial and pistol handles

Length	Instrument
33 cm	
43 cm	

Distal Tip	Instrument
	26173 KAF
	26178 KAF
	26173 KAL
	26178 KAL
	26173 KAR
	26178 KAR

Length	Instrument
33 cm	
43 cm	

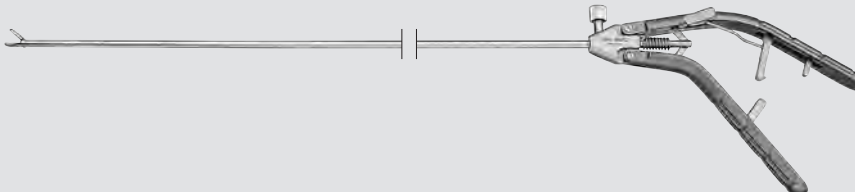
Distal Tip	Instrument
	26173 ML
	26178 ML
	26173 MC
	26178 MC





Components/Spare Parts see chapter 18

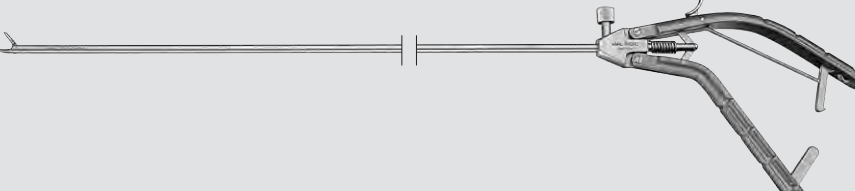
# KOH Macro Needle Holders, KOH Assistant Needle Holder



Size 5 mm

Operating instruments, lengths 33 and 43 cm, for use with trocars size 6 mm

Length	Instrument
33 cm	
43 cm	

Distal Tip	Instrument	
	26173 KPF	KOH <b>Macro Needle Holder</b> , straight jaws, with tungsten carbide insert, pistol handle with disengageable ratchet, ratchet position left
	26178 KPF	
	26173 KPL	KOH <b>Macro Needle Holder</b> , jaws curved to left, with tungsten carbide insert, pistol handle with disengageable ratchet, ratchet position left
	26178 KPL	
	26173 KPR	KOH <b>Macro Needle Holder</b> , jaws curved to right, with tungsten carbide insert, pistol handle with disengageable ratchet, ratchet position right
	26178 KPR	
	26173 KG	KOH <b>Assistant Needle Holder</b> , straight jaws with distal hole, pistol handle with disengageable ratchet, ratchet position left

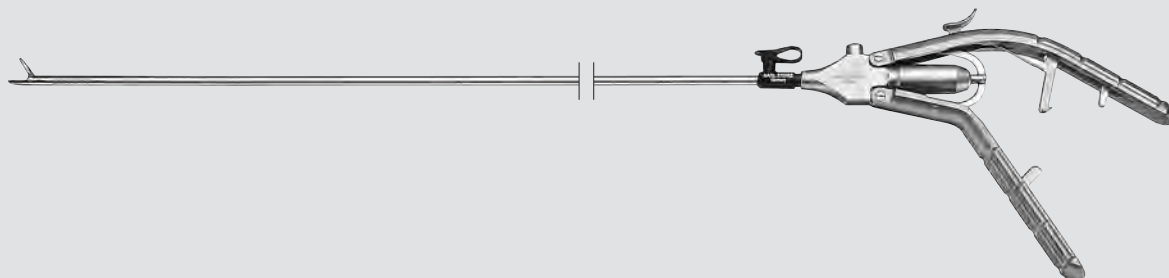
Length	Instrument
33 cm	

Distal Tip	Instrument	
	26173 KL	KOH <b>Macro Needle Holder</b> , jaws curved to left, with tungsten carbide insert, handle with ratchet, ratchet position on top
	26173 KC	KOH <b>Macro Needle Holder</b> , jaws curved to right, with tungsten carbide insert, handle with ratchet, ratchet position on top

Components/Spare Parts see chapter 18

# KOH Macro Needle Holders

dismantling



**KOH Macro Needle Holder, size 5 mm, dismantling, consisting of:**

- **Handle**
- **Outer sheath**
- **Working insert**

Cleaning and sterilization are gaining increasing importance for KARL STORZ as a manufacturer of surgical instruments.

Similar to all our surgical instruments, the cleaning and hygiene of our needle holders also play an important

role. The possibility of dismantling the needle holder allows cleaning of all individual components.

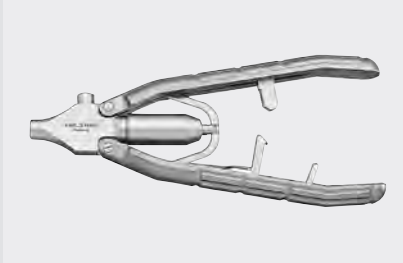
**The reusable dismantling design offers the user the following benefits:**

- **Can be disassembled into three separate components**
- **Autoclavable**
- **Cleaning connector**
- **Choice of six different handles and three different working inserts**
- **Jaws with tungsten carbide inserts**
- **In the event of damage, only the component with the defect needs to be replaced.**

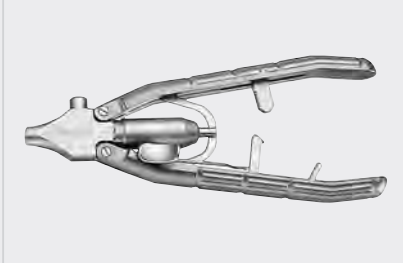
# Handles and Outer Sheaths

KOH Macro Needle Holders, dismantling

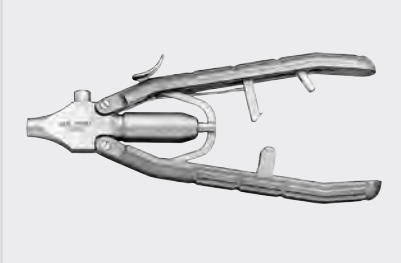
## Handles, axial and pistol grip, with disengageable ratchet



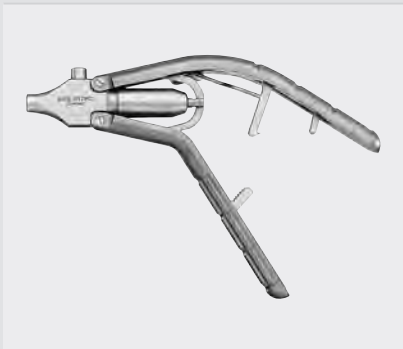
30173 AR **Handle**, axial, with **disengageable** ratchet, ratchet position right



30173 AL **Handle**, axial, with **disengageable** ratchet, ratchet position left



30173 AO **Handle**, axial, with **disengageable** ratchet, ratchet position on top



30173 PR **Handle**, pistol grip, with **disengageable** ratchet, ratchet position right



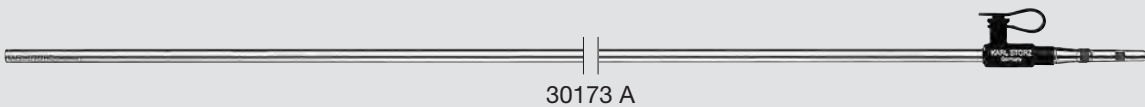
30173 PL **Handle**, pistol grip, with **disengageable** ratchet, ratchet position left



30173 PO **Handle**, pistol grip, with **disengageable** ratchet, ratchet position on top

## Metal Outer Sheaths

Size 5 mm



- 30173 A **Metal Outer Sheath**, with LUER-Lock connector for cleaning, size 5 mm, length 33 cm
- 30178 A **Same**, length 43 cm


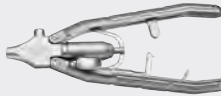
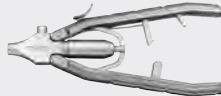



Components/Spare Parts see chapter 18

# KOH Macro Needle Holders

dismantling

## Size 5 mm

Operating instruments, **lengths 33 and 43 cm**, with axial handle  
for use **with trocars size 6 mm**

Length	Handle		
	30173 AR	30173 AL	30173 AO
33 cm			
43 cm			

## Single action jaws

Working Insert	Complete Instrument		
30173 R	30173 RAR	30173 RAL	30173 RAO
30178 R	30178 RAR	30178 RAL	30178 RAO



KOH **Macro Needle Holder**, jaws curved to right, with tungsten carbide insert

30173 L	30173 LAR	30173 LAL	30173 LAO
30178 L	30178 LAR	30178 LAL	30178 LAO



KOH **Macro Needle Holder**, jaws curved to left, with tungsten carbide insert

30173 F	30173 FAR	30173 FAL	30173 FAO
30178 F	30178 FAR	30178 FAL	30178 FAO



KOH **Macro Needle Holder**, straight jaws, with tungsten carbide insert

30173 G	30173 GAR	30173 GAL	30173 GAO
---------	-----------	-----------	-----------





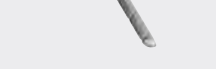
KOH **Macro Assistant Needle Holder**, straight jaws

# KOH Macro Needle Holders

dismantling

## Size 5 mm

Operating instruments, lengths **33 and 43 cm**, with pistol grip handle for use with **trocars size 6 mm**

Length	Handle		
	30173 PR	30173 PL	30173 PO
33 cm			
43 cm			

## Single action jaws

Working Insert	Complete Instrument		
30173 R	30173 RPR	30173 RPL	30173 RPO
30178 R	30178 RPR	30178 RPL	30178 RPO



KOH **Macro Needle Holder**, jaws curved to right, with tungsten carbide insert

30173 L	30173 LPR	30173 LPL	30173 LPO
30178 L	30178 LPR	30178 LPL	30178 LPO



KOH **Macro Needle Holder**, jaws curved to left, with tungsten carbide insert

30173 F	30173 FPR	30173 FPL	30173 FPO
30178 F	30178 FPR	30178 FPL	30178 FPO



KOH **Macro Needle Holder**, straight jaws, with tungsten carbide insert

30173 G	30173 GPR	30173 GPL	30173 GPO
---------	-----------	-----------	-----------



KOH **Macro Assistant Needle Holder**, straight jaws



## Needle Holders

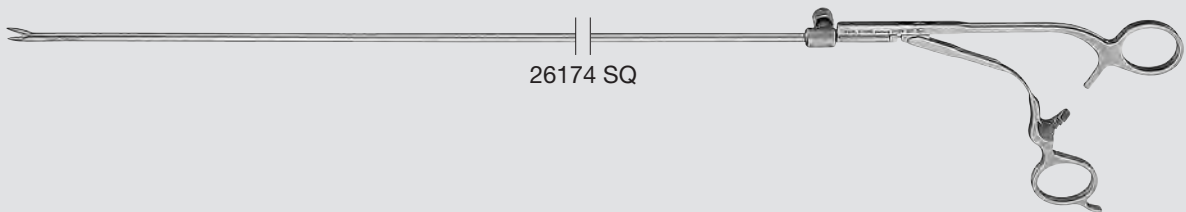
### Size 5 mm

Operating instruments, **length 36 cm**,  
for use **with trocars size 6 or 11 mm with reduction sleeves**

### Suturing Instrument

KARL STORZ presents an instrument for endoscopic sutures that is designed entirely in accordance with anatomical and functional surgical requirements. This

is particularly apparent from the handle section of the needle holder.



26174 SQ

**Needle Holder**, straight, with tungsten carbide inserts, **CHERON** handle with hemostat style ratchet, size 5 mm, length 36 cm, for use with Spoon Needle 26173 L, with resorbable synthetic suture, sterile, package of 12, USP 2/0, length 20 cm

**Please note:**

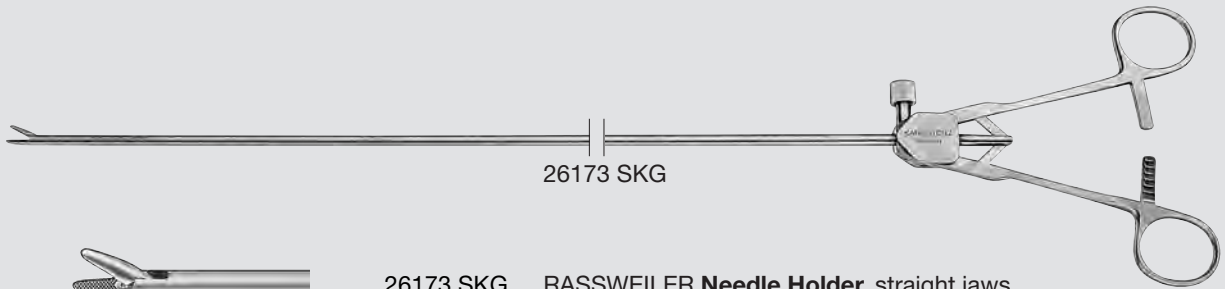
Using the needle holder with a needle larger than recommended may result in a mechanical damage to the instrument.

**Components/Spare Parts** see chapter 18

# RASSWEILER Needle Holders

Size 5 mm

Operating instruments, length 33 cm,  
for use with trocars size 6 or 11 mm with reduction sleeves



26173 SKG

26173 SKG RASSWEILER Needle Holder, straight jaws, axial ring handle with ratchet, size 5 mm, length 33 cm



26173 SKL

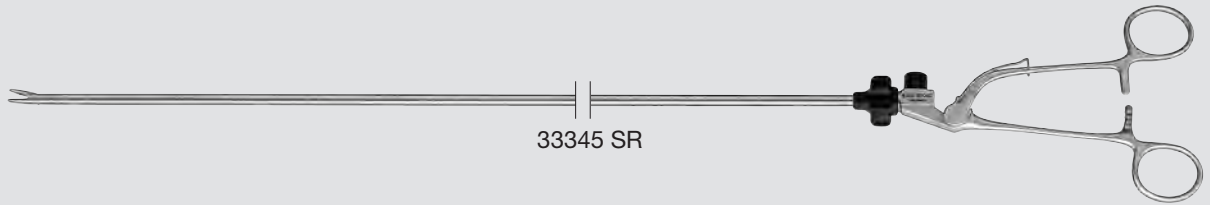
26173 SKL RASSWEILER Needle Holder, convex/concave, slender jaws, curved to left, axial ring handle with ratchet, size 5 mm, length 33 cm

Components/Spare Parts see chapter 18

## MOURET Needle Holder

**Size 5 mm**

Operating instruments, **length 36 cm**,  
for use **with trocars size 6 or 11 mm with reduction sleeves**



33345 SR

**CLICK<sup>line</sup> MOURET Needle Holder**,  
with straight jaws, single action jaws,  
size 5 mm, length 36 cm  
including:  
**MOURET Metal Handle**, axial,  
with hemostat style ratchet  
**Metal Outer Sheath**  
**Needle Holder Insert**, straight,  
jaws with groove

# Knot Tiers

Size 3.5 mm

Operating instruments, lengths 20 and 36 cm,  
for use with trocars size 3.5 mm



26167 KNL



26167 KNS **Knot Tier**, for extracorporeal knotting,  
size 3.5 mm, length 20 cm

26167 KNL **Same**, length 36 cm

## Special Features:

- Open and closed end within one instrument. By turning the instrument around, the surgeon can use the form of the instrument which is best suited for each ligature, without having to request an exchange of instruments
- Small cross-section distal end
- Atraumatic, can also be used as a palpation probe



26167 DNL



26167 DNS **Knot Tier**, for extracorporeal knotting,  
size 3.5 mm, length 20 cm



26167 DNL **Same**, length 36 cm

## Knot Tiers

### Size 5 mm

Operating instruments, lengths 36 and 46 cm,  
for use with trocars size 6 or 11 mm with reduction sleeves



26596 CL



26596 CL

**CICE Knot Tier**, CLERMONT-FERRAND model,  
for extracorporeal knotting, size 5 mm, length 36 cm



26596 SK



26596 SK

**KÖCKERLING Knot Tier**, for extracorporeal knotting,  
size 5 mm, length 36 cm

26596 SKL

**Same**, length 46 cm



26596 CC



26596 CC

**CIRAVOLO Knot Tier**, for extracorporeal knotting, with  
L-shaped fenestration at distal end, for secure  
placement of simple knots, size 5 mm, length 36 cm



26596 MA



26596 MA

**MANGESHIKAR Knot Tier**,  
for extracorporeal knotting, size 5 mm,  
length 36 cm

## Knot Tiers

### Size 5 mm

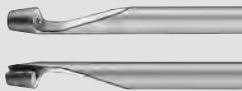
Operating instruments, **length 36 cm**,  
for use **with trocars size 6 mm**

### Special Features:

- **Open and closed end with one instrument.** By turning the instrument around, the surgeon can use the form of the instrument which is suitable for the particulars of each ligature, without having to request an exchange of instruments
- **Small cross-section distal end**
- **Atraumatic, can also be used as a palpation probe**



26596 D

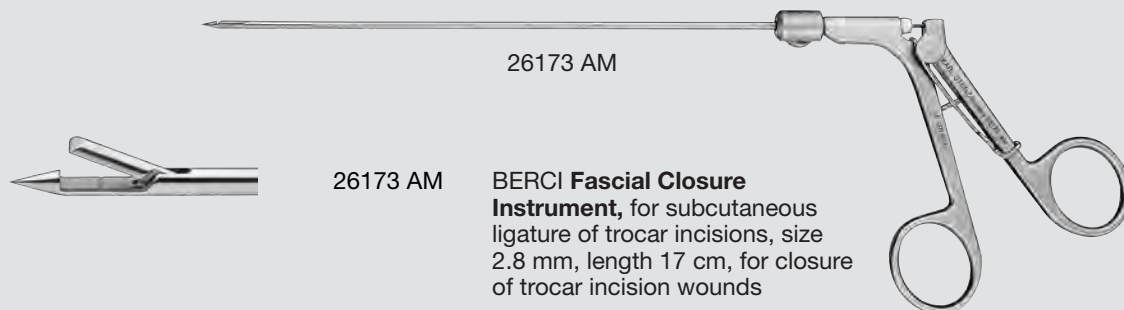


26596 D

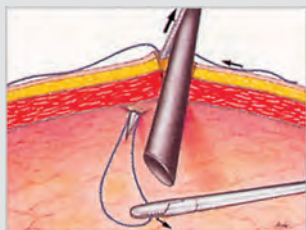
**Knot Tier**, for extracorporeal knotting,  
with open and closed end, size 5 mm,  
length 36 cm

# BERCI Fascial Closure Instrument

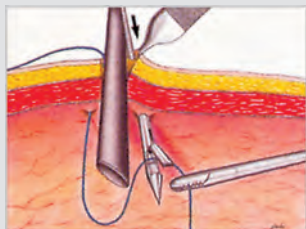
for subcutaneous fascial closure



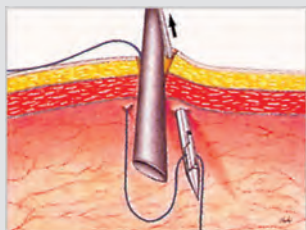
Grasp the suture in mid-length with forceps. Under direct laparoscopic vision and adequate pneumoperitoneum, place the fascial closure instrument into subcutaneous tissue directly adjacent to the trocar cannula. The instrument should incorporate all tissue layers as entry is made into the peritoneal cavity. Release suture.



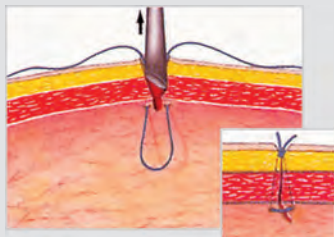
Remove instrument. Leave adequate loop of suture in the peritoneal cavity and adequate extracorporeal tails.



Again, under direct vision, reinsert the fascial closure instrument, without suture, on opposite side of trocar cannula. Place into the subcutaneous tissue incorporating all tissue layers. Grasp and retrieve the suture and instrument.



Remove instrument. The forceps will hold the suture upon removal.



Following removal of trocar, tie suture in normal fashion. The fascial closure instrument facilitates full thickness abdominal wall closure.

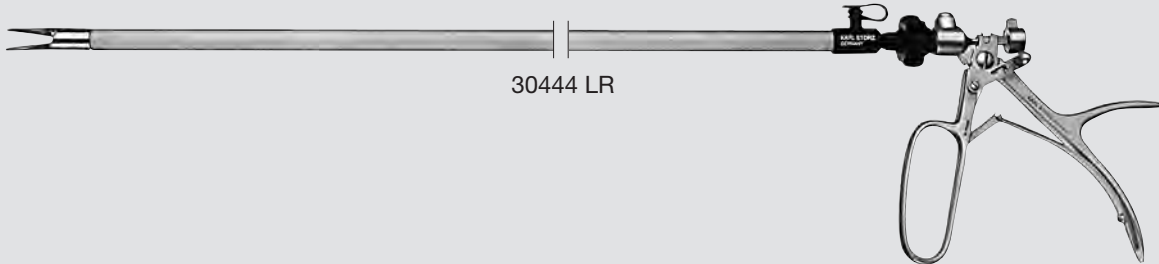
**Components/Spare Parts** see chapter 18

# Applicators for Titanium Clips

dismantling, rotating

Size 10 mm

Operating instruments, length 36 cm,  
for use with trocars size 11 mm



30444 LR



30444 LR

**Clip Applicator**, dismantling, rotating, size 10 mm, length 36 cm, for PILLING-WECK Titanium Clips 30460 AL (medium-large), with ratchet to lock the jaw holding the clip

including:

**Metal Handle**, with ratchet

**Metal Outer Sheath**

**Clip Applicator Insert**



Actual size

30460 AL

PILLING-WECK **Titanium Clips**, medium-large, box with 16 sterile cartridges, 10 clips each, for use with Clip Applicator 30444 LR



30444 GA

**Clip Applicator**, dismantling, rotating, size 10 mm, length 36 cm, for PILLING-WECK Titanium Clips 30460 AP (medium), with ratchet to lock the jaw holding the clip

including:

**Metal Handle**, with ratchet

**Metal Outer Sheath**

**Clip Applicator Insert**



Actual size

30460 AP

PILLING-WECK **Titanium Clip**, medium, box with 10 sterile cartridges, 25 clips each, for use with Clip Applicator 30444 GA



30444 ET

**Clip Applicator**, dismantling, rotating, size 10 mm, length 36 cm, for Ethicon Titanium Clips LT-300 (medium-large), with ratchet to lock the jaw holding the clip

including:

**Metal Handle**, with ratchet

**Metal Outer Sheath**

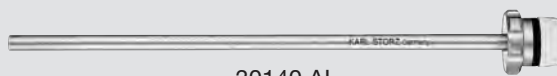
**Clip Applicator Insert**

**Caution:**

The use of clips other than those indicated can lead to damage of the jaws.

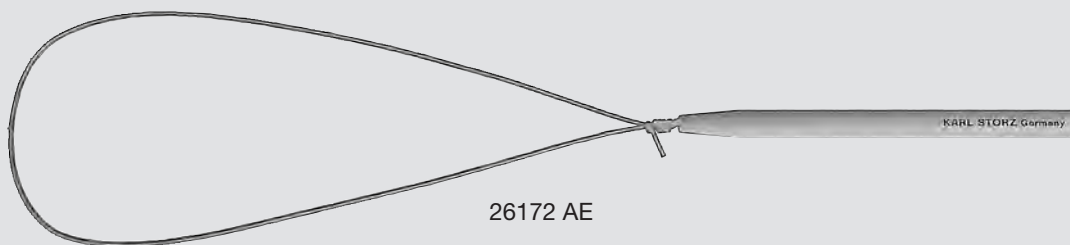
Components/Spare Parts see chapter 18





30140 AL

30140 AL **Applicator**, for endo-ligature of bleeding vessels and for application of 3 mm needle holders in trocar size 6 mm, color code: black



26172 AE

26172 AE **Endo-Loop Ligature**, with ROEDER knot, for bleeding stumps, with absorbable synthetic suture, sterile, for single use, USP 0, size 3 mm, length 33 cm, package of 12














# HANDLES AND INSTRUMENTS FOR SUCTION AND IRRIGATION

HANDLES FOR SUCTION AND IRRIGATION .....224-227

SUCTION AND IRRIGATION TUBES, PUNCTURE NEEDLES, Sizes 3.5 – 10 mm .....228-230

NEEDLES AND INJECTION NEEDLES .....231

# Handles for Suction and Irrigation

Handles	Function	Compatibility Matrix				
		Suction and Irrigation Tubes, sizes			for use with mtp tubing sets only	for use with coagulation suction-irrigation tubes
		3 and 3.5 mm	5 mm	10 mm		
 30804	for suction or irrigation	●	●	–	–	●
 30805	for suction and irrigation	●	●	–	–	–
 30810	for suction and irrigation	●	●	–	–	●
 37112 A	for suction and irrigation	●	●	●	* 	●
 37113 A	for suction and irrigation, with central working channel	●	●	●	* 	●

**Please note:**

Detailed descriptions of the handles see pages 225-226

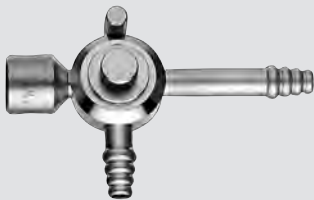
10 mm suction and irrigation tubes should only be used with the handles recommended, as these are the only handles that provide an adequate in-/outflow.

# Handles for Suction and Irrigation



30804

**Handle with Trumpet Valve**, for suction or irrigation, **autoclavable**, for use with 5 mm coagulation suction tubes as well as 3, 3.5 and 5 mm suction and irrigation tubes



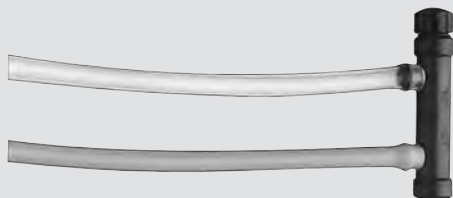
30805

**Handle with Two-Way Stopcock**, for suction and irrigation, **autoclavable**, for use with suction and irrigation tubes size 3, 3.5 and 5 mm



30810

**Handle**, for suction and irrigation, **autoclavable**, for use with 5 mm coagulation suction tubes as well as 3, 3.5 and 5 mm suction and irrigation tubes



30811

**Silicone Tubing Set, autoclavable**, for use with Handle 30810

031132-10\*

**Tubing Set, sterile**, for single use, package of 10, for use with Handle 30810

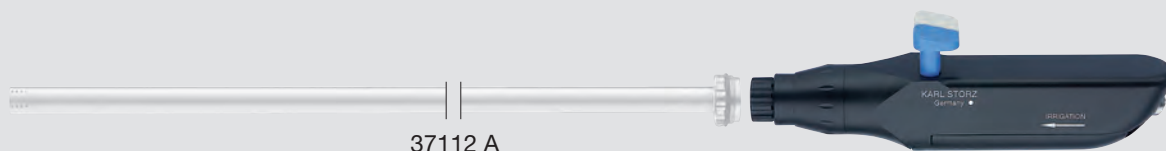


2-985

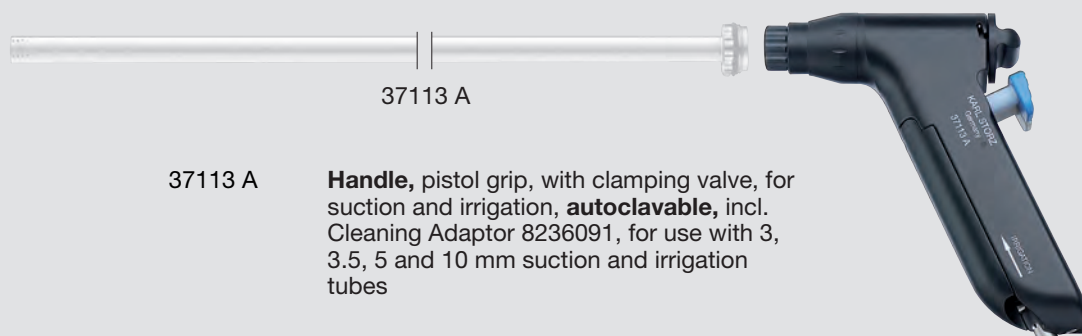


**Please note:**  
Units for use with Handles for Suction and Irrigation see chapter 17, UNITS  
Components/Spare Parts see chapter 18

## Handles for Suction and Irrigation



37112 A     **Handle**, straight, with clamping valve, for suction and irrigation, **autoclavable**, incl. Cleaning Adaptor 8236091, for use with 3, 3.5, 5 and 10 mm suction and irrigation tubes



37113 A     **Handle**, pistol grip, with clamping valve, for suction and irrigation, **autoclavable**, incl. Cleaning Adaptor 8236091, for use with 3, 3.5, 5 and 10 mm suction and irrigation tubes

### Note:

Handles 37112 A and 37113 A can be used with sterile tubing sets, see page 227

**Special Suction and Irrigation Tubes**, size 10 mm, length 30 cm, for use with 5 mm instruments, length 43 cm, through the central working channel of Handle 37113 A, see page 229

**Units for use with Handles for Suction and Irrigation** see chapter 17, UNITS

**Components/Spare Parts** see chapter 18

# Tubing Sets

for use with Handles 37112 A and 37113 A

For suction and irrigation via gravity

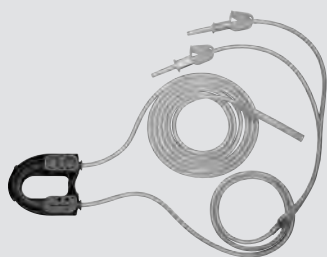
STERILE 



031133-10

031133-10\* **Tubing Set**, sterile, for single use, package of 10, for use with Handles 37112 A, straight, and 37113 A, pistol grip

For suction and irrigation with a pump



031524-10

031524-10 **Tubing Set for Irrigation, FC**, sterile, for single use, package of 10, for use with HAMOU® ENDOMAT® SCB 26 3311 20-1 and ENDOMAT® SELECT UP 210

**Note:** Tubing Set 031134-10 is required when using Handles 37112 A and 37113 A in conjunction with Cassette Tubing Set 031518-10.



031134-10

031134-10\* **Tubing Set**, sterile, for single use, package of 10, for use with Handles 37112 A, straight, and 37113 A, pistol grip, in combination with silicone tube inner diameter 5 mm at the patient end

# Suction and Irrigation Tubes



## Size 3.5 mm

Operating instruments, lengths 20 and 36 cm, for use with trocars size 3.5 mm

Length	Instrument
20 cm	
36 cm	

Distal End	Instrument
	26167 ANS
	26167 ANL

**Suction and Irrigation Tube**, with lateral holes, for use with handles for irrigation and suction

## Size 5 mm

Operating instruments, lengths 30 and 36 cm, for use with trocars size 6 mm

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

Length	Instrument
30 cm	
36 cm	
43 cm	

Distal End	Instrument
	37260 LH
	37360 LH
	37460 LH
	37360 SC
	37360 CP

**Suction and Irrigation Tube**, with lateral holes

**Suction and Irrigation Tube**

**Suction and Irrigation Tube**, for puncture and suction of cysts

**Please note:**

Handles for use with Suction and Irrigation Tubes see pages 225-226

Units for use with Handles for Suction and Irrigation see chapter 17, UNITS

Components/Spare Parts see chapter 18

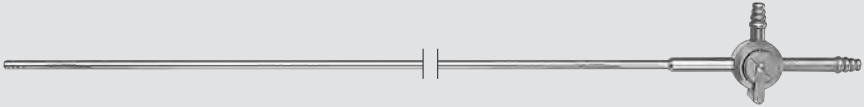



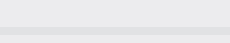

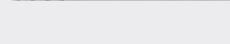
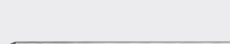
# Suction and Irrigation Tubes

## Size 5 mm

Operating instruments, **lengths 30 and 36 cm**,  
for use **with trocars size 6 mm**


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

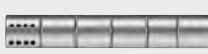
Length	Instrument
30 cm	
36 cm	
43 cm	

Distal End	Instrument
	26172 BN
	26173 BN
	26174 BN
	26173 BL
	26173 BK

## Size 10 mm

Operating instruments, **length 36 cm**,  
for use **with trocars size 11 mm**

Length	Instrument
36 cm	

Distal End	Instrument
	37560 LH

**Please note:**

**Handles for use with Suction and Irrigation Tubes** see pages 225-226

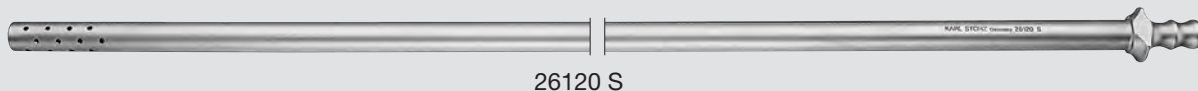
**Units for use with Handles for Suction and Irrigation** see chapter 17, UNITS

**Components/Spare Parts** see chapter 18

# Suction and Irrigation Tubes

Size 10 mm

Operating instruments, length 36 cm,  
for use with trocars size 11 mm

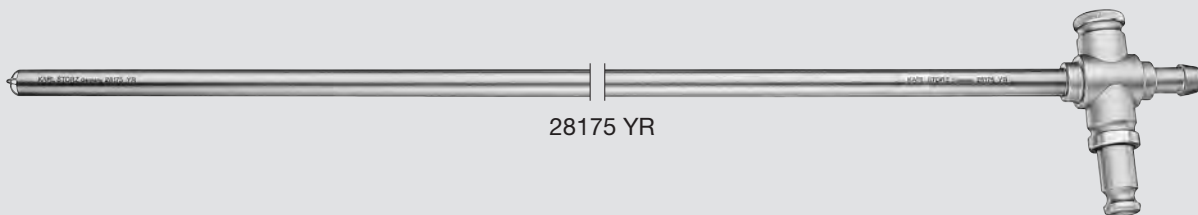


26120 S



26120 S

**Ascites Suction Tube**, size 10 mm,  
length 36 cm



28175 YR



28175 YR

**OLSEN Suction or Irrigation Tube**,  
with protective basket, with trumpet  
valve, size 10 mm, length 36 cm

**Please note:**

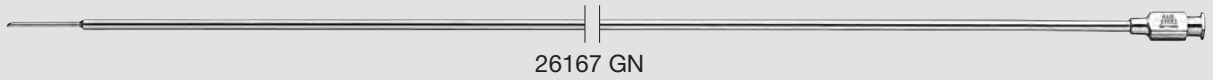
**Units for use with Handles for Suction and Irrigation** see chapter 17, UNITS

**Components/Spare Parts** see chapter 18

## Needles, Injection Needles

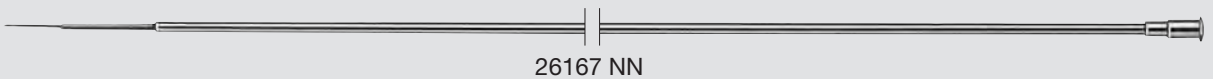
### Size 3.5 mm

Operating instruments, **length 30 cm**,  
for use **with trocars size 3.5 mm**



26167 GN

**MENGHINI Liver Biopsy Needle**, LUER-Lock,  
size 3.5 mm, needle diameter 1.6 mm, length 30 cm



26167 NN

**KOH Ultramicro Injection Cannula**,  
size 3.5 mm, length 30 cm

### Size 5 mm

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 6 mm trocars**

Length	Instrument
36 cm	
43 cm	

Distal End	Instrument	
	26175 G	<b>MENGHINI Liver Biopsy Needle</b> , LUER-Lock, needle diameter 1.6 mm
	26178 G	
	26175 PD	<b>Injection Needle</b> , LUER-Lock, diameter 0.8 mm
	26175 P	<b>Injection Needle</b> , LUER-Lock, diameter 1.2 mm
	26178 P	
	26175 R	<b>Injection Needle</b> , LUER-Lock, diameter 1.6 mm
	26178 R	





## HOLDING SYSTEMS AND TRAINERS

ACTIVE CAMERA GUIDANCE **NEW**  
SYSTEM .....235-239

BATTERY-OPERATED **NEW**  
HOLDING ARM .....240-244

MECHANICAL HOLDING SYSTEMS . . .245-247

LAPAROSCOPY TRAINERS AND  
TRAINING MODELS .....248-256



# ARTIP® SOLO <sup>NEW</sup>

The camera guidance system

The ARTIP® SOLO is a camera guidance system designed for holding and guiding laparoscopes only. The camera guidance system mainly serves to stabilize the image quality of 3D and 4K systems. The camera is guided without the aid of an assistant. As a result, the assistant can actively participate in surgery and operating surgeons have control over their own fields of view. ARTIP® SOLO can be moved in three different

ways: Manually, via joystick or using voice control. Whereas precise instrument movements are set using a joystick, pressing the unlock button allows manual dynamic movement. Alternatively, the ARTIP® SOLO can be moved into the desired position by voice control. The ARTIP® SOLO camera guidance system is attached to the OR table.

## Special Features:

- Support and guidance of laparoscopes
- Image quality stabilization of 3D/2D and 4K systems
- Stable and tremor-free surgical field of view, even in extreme endoscope positions
- Precise control via a joystick
- Hands-free operation via voice control
- Autonomous imaging positioning: No misunderstandings between the surgeon and assistants
- Autoclavable elements and sterile cover for the main component
- Setup on any OP table with standard rails (DIN EN 19054)



# Active Camera Guidance System <sup>NEW</sup> ARTIP® SOLO

Overview

A ready-for-use ARTIP® SOLO camera guidance system consists of a holding arm, a removable and sterilizable universal joint, an endoscope clamp, a tension sleeve, a joystick and an instrument mount.

The voice control option can also be used to control the camera guidance system. A mobile stand is recommended for storage and transport.



\* For use with the following **CLICK<sup>line</sup>** instruments:  
33121, 33121 W, 33122, 33123, 33151, 33151 P, 33152, 33153



# Active Camera Guidance System <sup>NEW</sup> ARTIP® SOLO

Overview

**STORZ**  
KARL STORZ — ENDOSKOPE



UR 201

**ARTIP® SOLO VOICE Voice Control**,  
for controlling and positioning the  
ARTIP® SOLO via voice commands  
including:

**Connecting Cable**

**Y-Cable**

**Headset**

**Charging Station for Headset**

**Mains Cord**

# Active Camera Guidance System <sup>NEW</sup>

## ARTIP® SOLO

Components and Accessories

### Components

	<p>UR 200     <b>ARTIP® SOLO Camera Guidance System</b>, for holding and guiding laparoscopes, clamps to the OR table with quick release lock</p>
	<p>UR 016     <b>ARTIP® SOLO Mobile Stand</b>, for the storage and transport of the ARTIP® SOLO</p>
	<p>UR 010     <b>ARTIP® SOLO Sterile Set</b>, including: <b>Sterilization Tray</b> <b>Universal Joint</b> <b>Endoscope Clamp</b> <b>Tension Sleeve</b>, for endoscope, diameter 10 mm <b>Tension Sleeve</b>, for endoscope, diameter 5 mm</p>
	<p>UR 018     <b>Sterilization Tray for ARTIP® SOLO</b>, wire tray for machine cleaning with holder for universal joint, endoscope clamp, two tension sleeves and space for joystick and instrument mount</p>
	<p>UR 012     <b>ARTIP® SOLO Endoscope Clamp, autoclavable</b>, in combination with Tension Sleeve UR 014 or UR 015 a pivoting connection between the universal joint and the endoscope</p>
	<p>UR 013     <b>ARTIP® SOLO Universal Joint, autoclavable</b>, is a pivoting joint between the ARTIP® SOLO and the endoscope clamp</p>
	<p>UR 014     <b>ARTIP® SOLO Tension Sleeve</b>, for endoscope, diameter 5 mm, <b>autoclavable</b> UR 015     <b>Same</b>, diameter 10 mm</p>
	<p>UR 008     <b>ARTIP® SOLO Joystick left, autoclavable</b>, for controlling and positioning the ARTIP® SOLO, for use on the left instrument, with cable connection to the ARTIP® SOLO UR 009     <b>Same, right</b></p>
	<p>UR 011     <b>ARTIP® SOLO Instrument Mount 1A, autoclavable</b>, for attaching the joystick to the following KARL STORZ Handles: 33121, 33121 W, 33122, 33123, 33151, 33151 P, 33152, 33153</p>

# Active Camera Guidance System <sup>NEW</sup>

## ARTIP® SOLO

Components and Accessories

### Recommended set configuration:

UR 200S1	<p><b>ARTIP® SOLO Starter Set</b>, including:</p> <p><b>ARTIP® SOLO Camera Guidance System</b></p> <p><b>Mobile Stand</b></p> <p>3x <b>Covers</b>, sterile, package of 50</p> <p><b>Sterilization Tray</b></p> <p><b>Universal Joint</b></p> <p><b>Endoscope Clamp</b></p> <p><b>Tension Sleeve</b>, for endoscope, diameter 10 mm</p> <p><b>Tension Sleeve</b>, for endoscope, diameter 5 mm</p> <p><b>Instrument Mount</b></p>
UR 008S1	<p><b>ARTIP® SOLO Joystick Set left</b>, for 150 applications including:</p> <p><b>ARTIP® SOLO Camera Guidance System</b></p> <p><b>ARTIP® SOLO Joystick</b>, left</p> <p>3x <b>Covers</b>, sterile, package of 50</p>
UR 009S1	<p><b>Same, right</b></p>

### Optional:



UR 201	<p><b>ARTIP® SOLO VOICE Voice Control</b>, for controlling and positioning the ARTIP® SOLO via voice commands including:</p> <p><b>Connecting Cable</b></p> <p><b>Y-Cable</b></p> <p><b>Headset</b></p> <p><b>Charging Station for Headset</b></p> <p><b>Mains Cord</b></p>
--------	---

### Accessories



UR 017	<p><b>ARTIP® SOLO Cover</b>, with elastic tip, 30 x 178 cm, sterile, for single use, package of 50, for use with ARTIP® SOLO</p>
--------	--

**Components/Spare Parts** see chapter 18

# Battery-operated Holding Arm <sup>NEW</sup> ARTIP® BASE

Ergonomics and efficiency are gaining increasing significance in the daily OR routine. As a result, assistance systems such as holding arms are becoming more and more important. With the new ARTIP® BASE holding system, KARL STORZ addresses these very needs. The ARTIP® BASE holding arm can be used with only one hand and thus facilitates

the flexible positioning of KARL STORZ endoscopes, the VITOM® system and instruments for open, microsurgical and minimally invasive procedures. The holding system is battery-operated and, thanks to its slender design, can be easily installed and used on all standard OR tables. The ARTIP® BASE also offers great flexibility thanks to its 5 degrees of movement.

## Special Features:

- Suitable for interdisciplinary use – thanks to KSLOCK interface
- Setup on all OR tables with standard rails (DIN EN 19054)
- Single-hand positioning possible
- Supports 4-handed operations
- Autoclavable holding arm elements
- Battery-operated

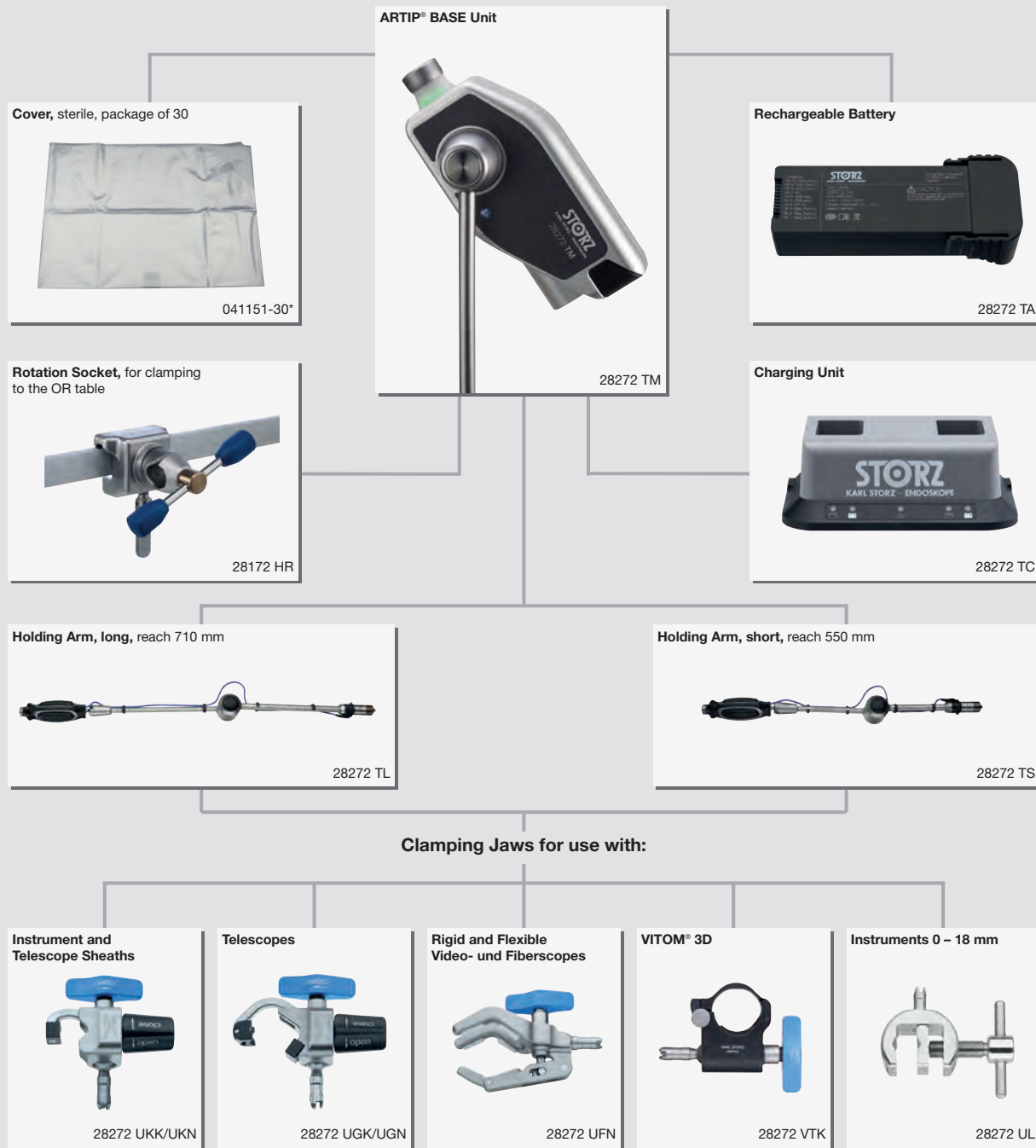


# Battery-operated Holding Arm <sup>NEW</sup> ARTIP® BASE

Overview

A ready-for-use ARTIP® BASE holding system comprises a base unit, a holding arm and a rechargeable battery. The base unit along with the socket must be draped in a sterile cover. The holding arms are autoclaved. The ARTIP® BASE holding arm is

equipped with a quick-release coupling mechanism that allows the attachment of KARL STORZ clamping jaws. KARL STORZ endoscopes, the VITOM® system or other instruments can thus be easily affixed to the ARTIP® BASE holding arm.



# Battery-operated Holding Arm

## ARTIP® BASE

Components and Accessories

### Components

	<p>28272 TL</p>	<p><b>ARTIP® BASE Holding Arm, long</b>, sterilizable holding and control element with KSLOCK interface, reach 710 mm, for use with ARTIP® BASE Unit 28272 TM and KSLOCK adaptor</p>
	<p>28272 TS</p>	<p><b>ARTIP® BASE Holding Arm, short</b>, sterilizable holding and control element with KSLOCK interface, reach 550 mm, for use with ARTIP® BASE Unit 28272 TM and KSLOCK adaptor</p>
	<p>28272 TM</p>	<p><b>ARTIP® BASE Unit</b>, for use with Holding Arm 28272 TL/TS, Rechargeable Battery 28272 TA and Charging Unit 28272 TC</p>
	<p>28272 TA</p>	<p><b>ARTIP® BASE Rechargeable Battery</b>, rated voltage 14.4 V, rated capacity 2500 mAh, cell type 4S Li-ion, 18650, with LED status indicator, for use with ARTIP® BASE Unit 28272 TM and Charging Unit 28272 TC</p>
	<p>28272 TC</p>	<p><b>ARTIP® BASE Charging Unit</b>, for charging and storing max. two rechargeable batteries, including connecting cable, for use with Rechargeable Battery 28272 TA</p>

# Battery-operated Holding Arm ARTIP® BASE

Components and Accessories

## Recommended set configuration:

28272 TLS **ARTIP® BASE Set Holding Arm long**, single-handed positioning holding arm for easy and flexible positioning of KARL STORZ endoscopes, the VITOM® system and instruments for open, microsurgical and minimally invasive procedures including:  
**ARTIP® BASE Unit**  
**ARTIP® BASE Holding Arm, long**  
**2x ARTIP® BASE Rechargeable Battery**  
**ARTIP® BASE Charging Unit**  
**Cover**, sterile, for single use, package of 30

28272 TSS **Same, Holding Arm short**

## Accessories



28172 HR **Rotation Socket**, to clamp to the operating table, with one mounted Butterfly Nut 28172 HRS, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand



041151-30\* **Cover**, with elastic tip, 42 x 105 cm, sterile, for single use, package of 30, for use with ARTIP® BASE and holding systems

# Battery-operated Holding Arm

## ARTIP® BASE

Recommended Clamping Jaws

### Clamping Jaws

	<p>28272 UGK <b>Clamping Jaw</b>, with ball joint, large, clamping range 16.5 – 23 mm, with quick release coupling KSLOCK (male), for use with all square-headed HOPKINS® telescopes</p>
	<p>28272 UKK <b>Clamping Jaw</b>, with ball joint, small, metal, clamping range 4.8 – 12.5 mm, with quick release coupling KSLOCK (male), for use with instrument and telescope sheaths</p>
	<p>28272 CN <b>Clamping Cylinder</b>, folding, for flexible mounting of 10 mm telescopes on the telescope sheath, <b>autoclavable</b>. The clamping cylinder allows vertical movement and rotation of the telescope.</p>
	<p>28272 UGN <b>Clamping Jaw</b>, metal, clamping range 16.5 – 23 mm, with quick release coupling KSLOCK (male), for use with all square-headed HOPKINS® telescopes</p>
	<p>28272 UKN <b>Clamping Jaw</b>, metal, clamping range 4.8 – 12.5 mm, with quick release coupling KSLOCK (male), for use with instrument and telescope sheaths</p>
	<p>28272 VTK <b>VITOM® 3D Clamping Jaw</b>, with ball joint and quick release coupling KSLOCK (male), for use with VITOM® 3D and KARL STORZ holding systems with quick release coupling KSLOCK</p>
	<p>28272 UFN <b>Clamping Jaw for Videoscopes and Fiberscopes</b>, with quick release coupling KSLOCK (male), for use with rigid and flexible videoscopes or fiberscopes and KARL STORZ holding systems with quick release coupling KSLOCK</p>
	<p>28272 UL <b>Clamping Jaw</b>, universal, clamping range 0 – 18 mm, with quick release coupling KSLOCK (male)</p>



# Mechanical Holding Systems

with KSLOCK



The mechanical holding systems from KARL STORZ offer a versatile and convenient possibility for the secure positioning of instruments and telescopes.

A wide range of accessories enables the systems to be configured for any desired fields of application. The robust construction ensures reliable positioning without oscillation.

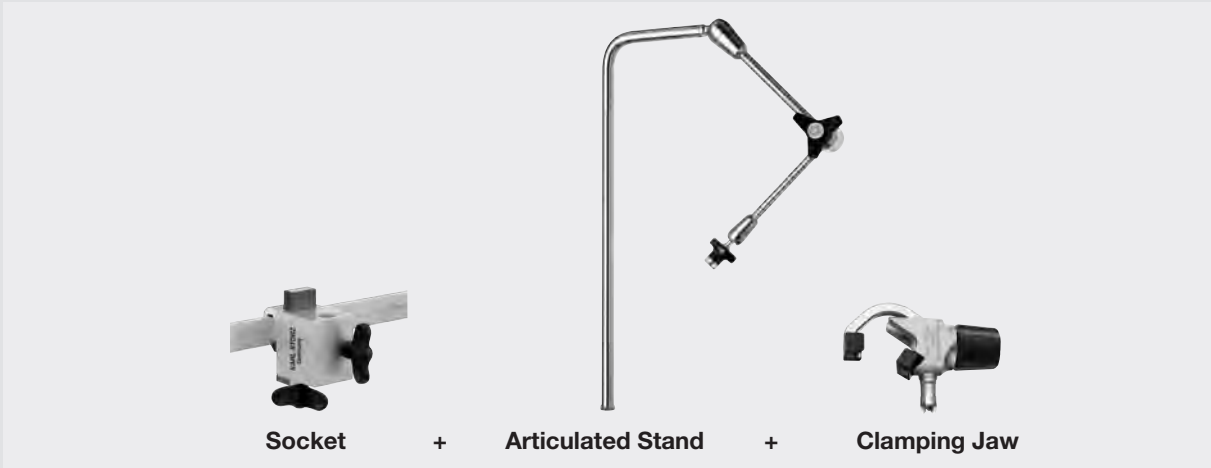
## Special Features:

- Straightforward and flexible positioning
- Many fields of application possible thanks to various articulated stands and a wide range of accessories
- Socket for use with European and United States standard rails of OR table
- Variable height adjustment by using the socket
- Additional extension rod for the adjustment of particularly large working distances
- Direct placement on the operating table
- All instruments and telescopes can be released or fixed with the central clamp
- Autoclavable
- KSLOCK rapid coupling for mounting clamping jaws, instruments and accessories with KSLOCK pins



# Mechanical Holding Systems

with KSLOCK



## Socket

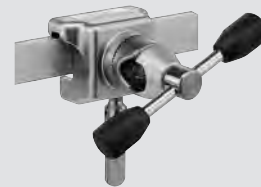
### Standard Socket

28172 HK



### Rotation Socket

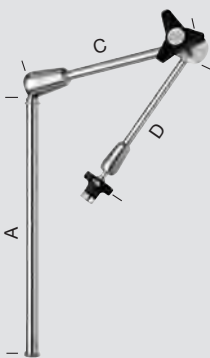
28172 HR



## Articulated Stand

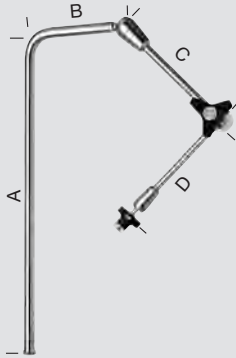
### straight

28272 HA



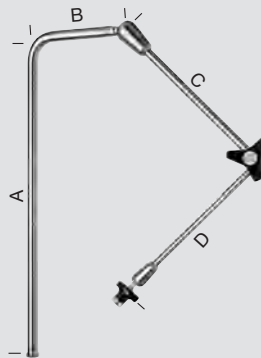
### L-shaped

28272 HB



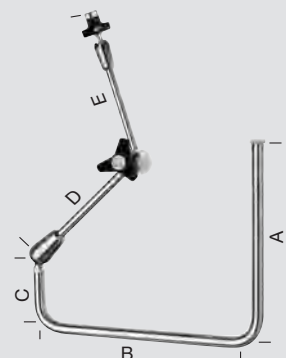
### L-shaped, long

28272 HC



### U-shaped

28272 HD



A 30 cm

B -

C 20 cm

D 17 cm

A 48 cm

B 15 cm

C 20 cm

D 17 cm

A 48 cm

B 15 cm

C 27 cm

D 24 cm

A 25 cm

B 31 cm

C 10 cm

D 20 cm

E 17 cm

To complete the mechanical holding system, a clamping jaw is required.  
Clamping Jaws for the Mechanical Holding System see page 247  
Components/Spare Parts see chapter 18




# Mechanical Holding Systems

Recommended Clamping Jaws and Accessories

## Clamping Jaws

	28272 UGN	<b>Clamping Jaw</b> , metal, clamping range 16.5 – 23 mm, with quick release coupling KSLOCK (male), for use with all square-headed HOPKINS® telescopes
	28272 UKN	<b>Clamping Jaw</b> , metal, clamping range 4.8 – 12.5 mm, with quick release coupling KSLOCK (male), for use with instrument and telescope sheaths
	28272 UGK	<b>Clamping Jaw</b> , with ball joint, large, clamping range 16.5 – 23 mm, with quick release coupling KSLOCK (male), for use with all square-headed HOPKINS® telescopes
	28272 UKK	<b>Clamping Jaw</b> , with ball joint, small, metal, clamping range 4.8 – 12.5 mm, with quick release coupling KSLOCK (male), for use with instrument and telescope sheaths
	28272 UL	<b>Clamping Jaw</b> , universal, clamping range 0 – 18 mm, with quick release coupling KSLOCK (male)
	28272 UFN	<b>Clamping Jaw for Videoscopes and Fiberscopes</b> , with quick release coupling KSLOCK (male), for use with rigid and flexible videoscopes or fiberscopes and KARL STORZ holding systems with quick release coupling KSLOCK
	28272 VTK	<b>VITOM® 3D Clamping Jaw</b> , with ball joint and quick release coupling KSLOCK (male), for use with VITOM® 3D and KARL STORZ holding systems with quick release coupling KSLOCK

## Accessories

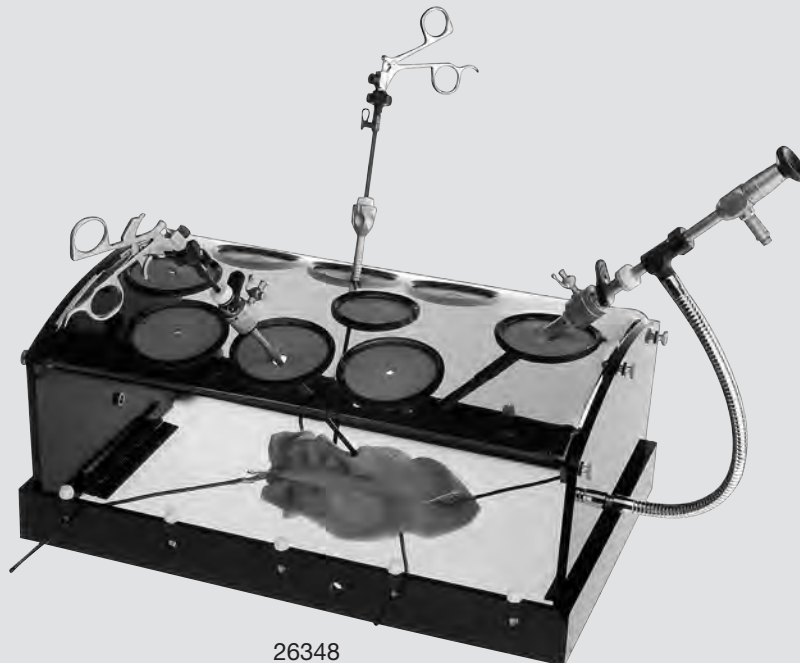
	28272 CN	<b>Clamping Cylinder</b> , folding, for flexible mounting of 10 mm telescopes on the telescope sheath, <b>autoclavable</b> . The clamping cylinder allows vertical movement and rotation of the telescope.
	28172 HM	<b>Extension Rod</b> , 50 cm, with lateral clamp for height adjustment of the articulated stand, for use with Articulated Stands 28272 HA/HB/HC and Sockets 28172 HK/HR
	041150-20*	<b>Cover</b> , 42 x 177 cm, with elasticated tip, sterile, for single use, package of 20

\* 

# SZABO-BERCI-SACKIER Laparoscopic Trainer

The SZABO-BERCI-SACKIER laparoscopic trainer is designed to simulate laparoscopic procedures, especially the different suturing techniques. It contains diaphragms at the typical puncture sites and a flexible endoscope holder that provides the surgeon with the

ability to manipulate instruments with both hands. The SZABO-BERCI-SACKIER laparoscopic trainer can be used to practice the surgical skills necessary to complete a successful laparoscopic procedure.



26348

SZABO-BERCI-SACKIER Laparoscopic Trainer

**Components/Spare Parts** see chapter 18

# BITTNER Training Model

for hernia surgery

The hernia training model illustrated here was developed on the basis of a pelvis specimen cast during cadaver surgery following full dissection of the entire pelvic region. Consequently, the training model represents the anatomical size of the human pelvis as true to detail as possible. All important anatomical landmarks (epigastric vessels, iliac vessels, symphysis and Cooper's ligament, inguinal nerves, ileopubic tract, internal inguinal ring) are represented in a schematic diagram.

This model is ideal for the practice training of the following surgical stages in both laparoscopic (TAPP) and endoscopic (TEP, steps 2 and 3) hernioplasty:

1. Opening the peritoneum
2. Implantation of a mesh size 10 x 15 cm
3. Fixation of the mesh
4. Closure of the peritoneum through suturing

Furthermore, the training model enables a test run to be performed in order to evaluate the user-friendliness of various meshes and fixation techniques.

*Prof. Dr. R. BITTNER, M. D.*



*BITTNER hernia training model, with SZABO-BERCI-SACKIER laparoscopic trainer*



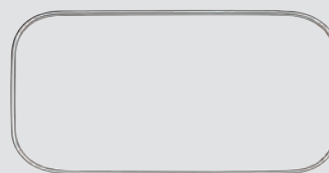
26342 M



26342 U



26342 P



26342 B

- 26342 M **BITTNER Hernia Model**, silicone model for training of mesh fixation in laparoscopic inguinal hernia repair (TAPP/TEP method)
- 26342 P **Peritoneum Replacement Foil**, package of 50
- 26342 U **Support Frame**, for positioning Hernia Model 26342 M in Laparoscopic Trainer 26348
- 26342 B **Fixation Aid**, for fixating Peritoneum Replacement Foil 26342 P to BITTNER Hernia Model 26342 M

Endoscopic Surgery Trainer is available in two different types meeting the requirements of both general surgery and gynecology. Since gynecological and surgical laparoscopy usually requires different puncture sites for trocar insertion, the two models are supplied with different top plates. Foam rubber diaphragms are inserted into the four puncture sites to guide the trocars.

Both models are equipped with a working plate to which a training module or other appropriate training objects can be attached.

The Endoscopic Surgery Trainer is supplied in a case and can be disassembled. Worn parts can be reordered individually.



26332 A **Endoscopic Surgery Trainer "SURGERY" Model**  
including:

- Base Plate**
- "SURGERY" Top Plate**
- Fixation Clamps**, package of 2
- Silicone Insert**, package of 4
- Case**
- "SURGERY" Drape**

26332 B **Endoscopic Surgery Trainer "GYNECOLOGY" Model**  
including:

- Base Plate**
- "GYNECOLOGY" Top Plate**
- Fixation Clamps**, package of 2
- Silicone Insert**, package of 4
- Case**
- "GYNECOLOGY" Drape**

**Components/Spare Parts** see chapter 18

# Training Model for Laparoscopic Surgery

Modell European Academy of Gynecological Surgery (EAGS)



26332 N

- 26332 N      **Training Model for Laparoscopic Surgery, EAGS model**  
including:  
**Base Plate**  
**Top Plate, EAGS model**  
**Foam Rubber Insert, package of 8**  
**Case**  
**Drape**

2-151

**Please note:**

The LASTT (The Laparoscopic Skills Testing and Training model) wooden models are available from EAGS erhältlich ([www.theacademyhouse.org](http://www.theacademyhouse.org))

**Components/Spare Parts** see chapter 18

# SZINICZ Laparoscopic Trainer

Simulation Trainer with Pulsating Organ Perfusion (P.O.P.)

## Pulsating Organ Perfusion (P.O.P.)

Pulsating organ perfusion was developed for simulation of operations in minimally invasive surgical techniques and opens up new perspectives in laparoscopy/thoracoscopy training.

Following interventions can be practised with the P.O.P. Simulation Trainer under most realistic conditions on animal organs or organ complexes:

- **Laparoscopic operations (liver, gallbladder, small intestine, colon, spleen, etc.)**
- **Thoracic surgery (heart, lungs, aorta)**
- **Anastomosis of the gastro-intestinal tract (both laparoscopic and open surgery)**
- **Urological minimally invasive surgery (kidney, ureter, adrenal, etc.)**
- **Gynecological minimally invasive surgery (adnexae, cysts, etc.)**
- **Mastering complications**
- **Team training**

## Perfect Surgery as a Result of Optimal Training

Up to now, animal experiments were the only adequate means of practising clinical operations. In contrast, P.O.P. offers significant advantages. P.O.P. simulates all types of hemorrhages (parenchymatous, capillary, venous) without the time limitations associated with test animals. It is thereby not only possible to learn standard interventions, but also to master (hemorrhagic) complications. In contrast to animal experiments, the exercises can be repeated as often as desired and almost without any time limitations.

All technologies familiar from clinical work such as high frequency surgery techniques (unipolar, bipolar), laser, ultrasound dissection, aquadissection, tissue sealing and adhesion can be applied in the P.O.P. simulation trainer.

Prof. Gerhard Szinicz, M. D. and his staff were awarded the “1993 Felix Wankel Animal Protection Research Prize” (Ludwig Maximilian University of Munich) for the concept and idea of this innovative method of training.

## Functional Principle:

The central artery of animal organs or organ complexes is catheterized and connected to the pump of the P.O.P. simulation trainer. The perfusion medium (colored tap water) in the pelvitrainer is conveyed into the organ by the pump. The pump works with an electronically controlled frequency of approximately (65 lifts per minute) and is pressure-controlled (maximum pressure approximately 140 mmHg). The organs are supported on a perforated metal grid. The perfusion fluid passes back into the simulation trainer via side branches of the arteries, veins and parenchymal lesions.

The above-mentioned organs and organ complexes are available deep-frozen and can be preserved at -20 °C for up to a year. You can order online at [www.optimist.at](http://www.optimist.at)



The P.O.P. Trainer DOCK SYSTEM offers the possibility to extend the areas of application for pulsating organ perfusion in the simulation of endoscopic, proctological and endourological OR techniques. The rotating and tilting ball joint enables changing adapters with a diameter of 10 mm to 40 mm.



# SZINICZ Laparoscopic Trainer

Simulation Trainer with Pulsating Organ Perfusion (P.O.P.)



26342 KB

26342 KB    **SZINICZ Laparoscopic Trainer,**  
DOCK SYSTEM, with pulsating organ  
perfusion, complete, with mains  
adaptor 230 VAC, 50/60 Hz

## User Description

### ProDelphus Laparoscopy Trainer

Laparoscopy trainers are now being used throughout the world to teach minimally invasive surgical skills as the use of human and animal cadavers is restricted in many countries for ethical and financial reasons.

The ProDelphus trainer is made of Neoderma. "Surgical Neoderma" is a malleable, cost-effective, atoxic and moldable material. Furthermore, it does not compromise the quality of instruments (telescopes, forceps etc.).

If the trainer is used at moderate temperatures (between 18 and 32 °C) in a dry room, the material can last up to 2 years. A mixture of various polymers enabled the creation of 36 different materials that can be used to replicate almost all human organs.

The elastic and resilient material in various colors enables dissection of structures recreated to resemble the human body. When subjected to ultrasound or tomography, Neoderma images are similar to reality.

The material can be used to replicate any part of the human anatomy (abdomen, pelvis, head etc.) as well as diverse pathologies.

This trainer enables users to learn dissecting and suturing techniques and to simulate laparoscopic and laparotomic OR procedures.

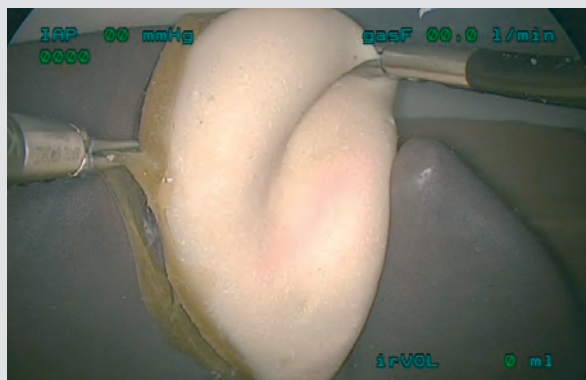
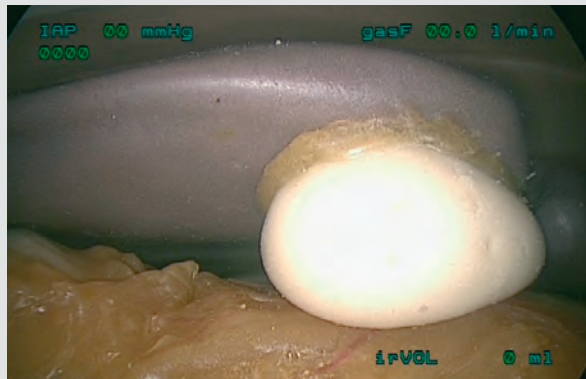
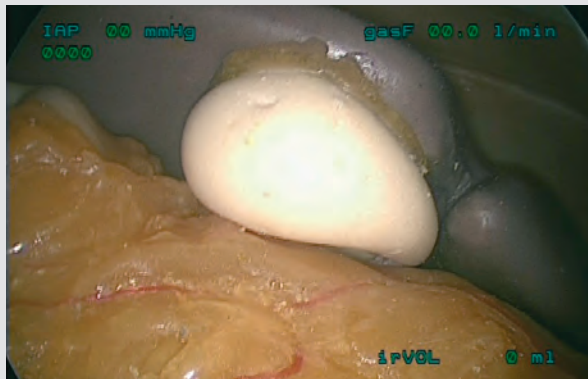
*Prof. Luca MENCAGLIA,  
Oncological Center of Florence, Italy*



# LYRA Laparoscopic Simulator

The LYRA laparoscopic simulator offers the following training possibilities:

- The trainer consists of a body simulator and several organs made of surgical Neoderma, providing a feeling of authenticity.
- The replicated peritoneum and abdominal wall allows for training with instruments and “patients” under realistic conditions.
- Enables the training of appendectomies, bowel dissection and suturing, adhesiolysis, general gynecological interventions, urethral dissection, etc.
- Exchangeable elements, according to requirements



**Figs. 1 – 6:** Tightening the gall bladder and dissection

7-11



26344 L2

26344 L2 LYRA **Laparoscopic Simulator**, for laparoscopic and robot-assisted surgery, including the urinary tract, complete including:

LYRA **Body Laparoscopic Simulator**

**Neoderma Organ**, liver

**Neoderma Organ**, spleen

**Neoderma Organ**, stomach

**Neoderma Organ**, peritoneum

**Neoderma Organ**, bowel

**Neoderma Organ**, abdominal wall

**Neoderma Organ**, cul-de-sac

**Neoderma Organ**, vaginal block

**Neoderma Organ**, uterus

**Neoderma Suturing Model**, basic training

## Optional Accessories

26344 LF **Neoderma Organ Set**, with bowels and organs, for use with LYRA Laparoscopic Simulator 26344 L2

**Components/Spare Parts** see chapter 18

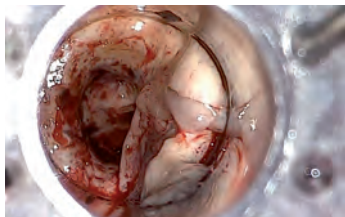


# VISUALIZATION SYSTEMS FOR OPEN AND MICRO SURGERY

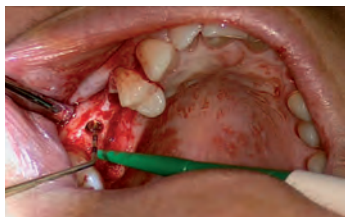
# VITOM® 2D

## Potential applications

The VITOM® system can be used for many specialties in open surgery. In addition to visualization under white light, the VITOM® system also supports the option for fluorescence imaging (NIR/ICG and PDD).



**Port-based interventions**  
see NEUROSURGERY catalog



**Dysgnathia surgery, flap preparation**  
see ORAL AND MAXILLOFACIAL SURGERY catalog



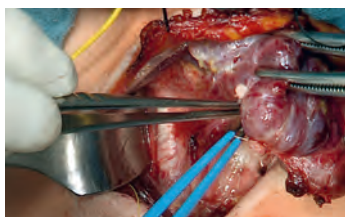
**Open rhinoplasty, septoplasty, adenotomy**  
see ENDOSCOPES AND INSTRUMENTS  
FOR ENT, ESOPHAGOSCOPY –  
BRONCHOSCOPY catalog



**Mitral valve surgery,  
pediatric heart surgery**  
see ENDOSCOPES AND INSTRUMENTS  
FOR CARDIOVASCULAR SURGERY catalog



**Mini-thoracotomy**  
see THORAX catalog

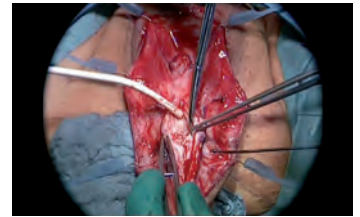


**Open thyroidectomy**  
see LAPAROSCOPY IN SURGERY,  
GYNECOLOGY, UROLOGY catalog



**Loop conization, colposcopy**  
see GYNECOLOGY catalog

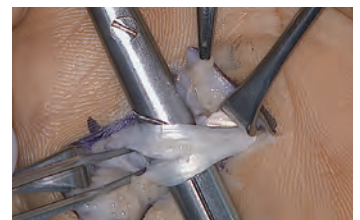
① **Urethral reconstruction, hypospadias/epispadias correction, artificial sphincter implantation, open prostatectomy**  
see UROLOGY catalog



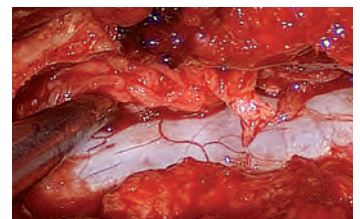
① **Artificial sphincter implantation, rectal prolapse**  
see PROCTOLOGY catalog



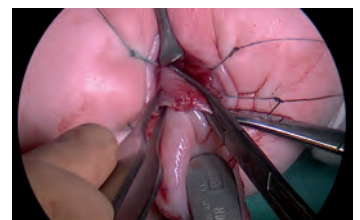
① **Dupuytren's contracture, ulnar shortening osteotomy, arthroplasty**  
see ARTHROSCOPY AND SPORTS MEDICINE catalog



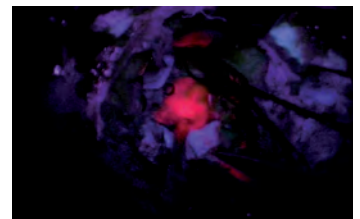
① **Herniated discs, spinal stenosis, spondylolysis**  
see SPINE SURGERY catalog



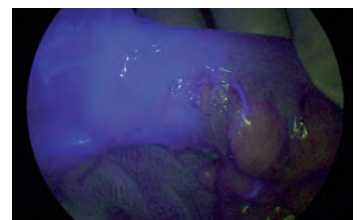
① **Anorectal malformation, hypospadias correction, epispadias correction, ambiguous genitalia**  
see PEDIATRIC SURGERY catalog



① **Display of glioblastoma in neurosurgery**  
see FLUORESCENCE IMAGING WITH PDD



① **Perfusion assessment of anastomoses or free flaps, visualization of sentinel lymph nodes**  
see FLUORESCENCE IMAGING WITH NIR/ICG



# VITOM® 2D

2D visualization for open surgery with minimal access

## Brilliant Visualization

The IMAGE1 S™ camera system provides support for all interventions in minimally invasive and open surgery. VITOM® provides great depth of field, optimal magnification as well as good contrast and color reproduction, which are the ideal prerequisites for the visualization of interventions in open surgery.

## Documentation

The VITOM® system is suitable for the documentation of interventions in open surgery with minimal access.

## Ergonomic Work

Enhanced images of the open surgical procedure can be observed via a monitor from a convenient distance by the surgeon, the assistant as well as the entire OR team. The system offers everyone present in the OR a view of the surgical field.

## Teaching and Training

The VITOM® system is also suitable for both teaching and training purposes as the system offers an unrestricted and magnified view of the surgical site both inside and outside the OR.





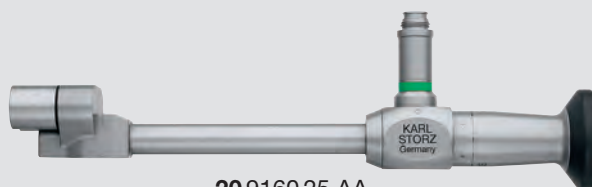
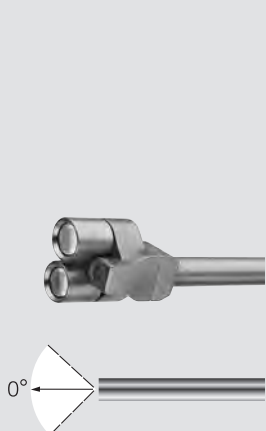
# VITOM® 2D

2D visualization for open surgery with minimal access

## VITOM® Telescope 0°

The VITOM® telescope 0° is particularly suitable for the documentation of open surgeries. Thanks to its design

and 0° direction of view, the telescope can be easily positioned by an assistant.



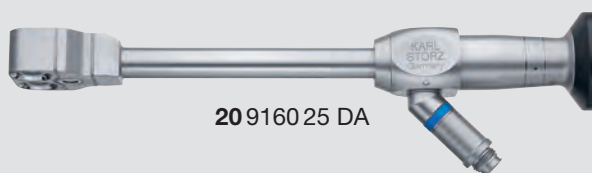
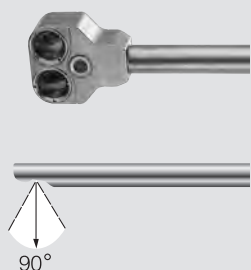
209160 25 AA

**209160 25 AA VITOM® Telescope 0° with Integrated Illuminator, VITOM® HOPKINS® straight forward telescope 0°, working distance 25 – 75 cm, length 11 cm, autoclavable, with fiber optic light transmission incorporated and condensor lenses, color code: green**

## VITOM® Telescope 90°

For the visualization of an intervention, the VITOM® telescope with a 90° direction of view is recommended as it allows flexible and ergonomic positioning above

the surgical site. This is a particular advantage for operating surgeons who wish to benefit from a clear and enlarged view on the monitor during a procedure.



209160 25 DA



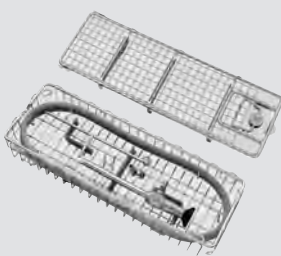
**209160 25 DA VITOM® Telescope 90° with Integrated Illuminator, VITOM® HOPKINS® telescope 90°, working distance 25 – 75 cm, length 11 cm, autoclavable, with fiber optic light transmission incorporated and condensor lenses, color code: blue**

**Note:** VITOM® is always used with a holding system.

**Holding Systems** see chapter 10

**Specifications** see page 269

**Components/Spare Parts** see chapter 18

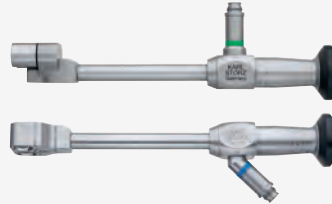
		VITOM® Scope 0°	VITOM® Scope 90°
		with Integrated Illuminator	
		20 9160 25 AA	20 9160 25 DA
495 TIP	 <p><b>Fiber Optic Light Cable</b>, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 300 cm, for use with TIPCAM®</p>	●	●
495 NVC	 <p><b>Fiber Optic Light Cable</b>, with 90° deflection to the instrument, very narrow radius of curvature, diameter 4.8 mm, length 300 cm</p>	●	-
39501 A2	 <p><b>Wire Tray for Cleaning, Sterilization and Storage</b> 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): 352 x 125 x 54 mm, for rigid endoscopes up to diameter 10 mm and working length 20 cm</p>	●	●

**Please note:** The instruments displayed are not included in the sterilization and storage tray.

# VITOM® 2D

Overview

VITOM® Scope 0° with Integrated Illuminator  
VITOM® Scope 90° with Integrated Illuminator



20 9160 25 AA/DA

Clamping Cylinder



28272 CN

Fiber Optic Light Cable



495 TIP

Mechanical Holding Arm



28272 UGK

28272 HC

28172 HR

IMAGE1 S™ 4U One-Chip 4K UHD  
Camera Head



TH 120

Cold Light Fountain POWER LED 300 SCB



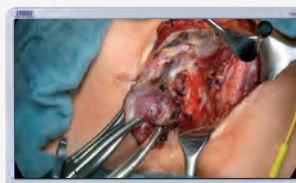
TL 300

IMAGE1 S™ Camera Systems



TC 201EN  
TC 304

32" 4K Monitor



TM 343

# VITOM® II NIR/ICG and PDD

Visualization system for fluorescence imaging in open surgery  
with OPAL1® technology

## OPAL1® – Fluorescence imaging based on the IMAGE1 S™ camera platform

Thanks to the OPAL1® technologies based on the IMAGE1 S™ camera platform, KARL STORZ is able to offer better visualization of anatomical structures or malignancies that are hidden to the naked eye under white light in minimally invasive and open surgery.

Near-infrared (NIR/ICG) fluorescence imaging allows the assessment of organ and tissue perfusion, e.g., following anastomoses or bypasses. It also makes it possible to display the bile duct anatomy during cholecystectomies or in the case of suspected lymphatic leakage. Furthermore, this technology can be used to visualize the lymphatic system. The fluorescent dye indocyanine green (ICG) is used in this case.



Photodynamic diagnosis (PDD) is able to detect the high concentrations of fluorescent porphyrine products that indicate bladder tumors.

At the core of these fluorescence procedures is the IMAGE1 S™ camera platform which, in combination with various light sources and telescopes, forms the basis for OPAL1® technologies for fluorescent imaging. This combination offers physicians additional visual support in FULL HD image quality that is able to aid decision-making processes on a regular basis.

### Fields of application for VITOM® II NIR/ICG:

- Perfusion assessment in open surgery
- Visualization of the lymphatic system\*
- Bile duct visualization



### Fields of application for VITOM® II PDD:

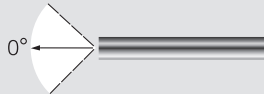
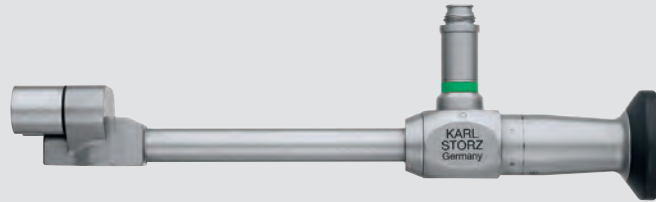
- Fluorescence-guided resection of high-grade gliomas



\* Please verify that the fluorescent dye indocyanine green is approved for the respective indication in your country. Fluorescence Diagnosis see TELEPRESENCE catalog

# VITOM® II NIR/ICG

Visualization system for near infrared (NIR/ICG) fluorescence imaging in open surgery



**209160 25 AGA VITOM® II NIR/ICG Telescope 0°**, with integrated illuminator and observation filter for fluorescence diagnostics with ICG, HOPKINS®, working distance 25 – 75 cm for white light, 20 – 30 cm for fluorescence applications, length 11 cm, **autoclavable**, with fiber optic light transmission incorporated and condensor lenses, color code: green



**495 NCSC Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm

The IMAGE1 S™ platform is recommended for NIR/ICG applications.  
For suitable light sources for NIR/ICG applications see TELEPRESENCE catalog

# VITOM® II NIR/ICG

Overview

VITOM® II NIR/ICG Telescope  
with Integrated Illuminator



20 9160 25 AGA

Clamping Cylinder



28272 CN

Fluid or Fiber Optic Light Cables



495 FR  
495 NCSC

Mechanical Holding Arm



28272 UGK

28272 HC

28172 HR

IMAGE1 S™ RUBINA®



TH 121

POWER LED RUBINA®



TL 400

IMAGE1 S™ Camera Systems



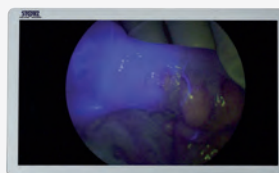
TC 201EN  
TC 304

One-Pedal Footswitch



UF 101

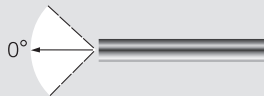
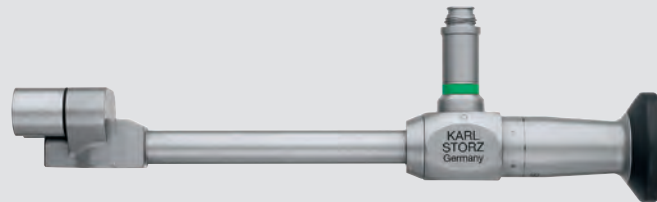
27" FULL HD Monitor



TM 220

# VITOM® II PDD

Visualization system for open surgery with minimal access  
with OPAL1® technology



20 9160 25 AIA

**VITOM® II PDD Telescope 0°**, with integrated illuminator and observation filter for fluorescence diagnostics with PDD, HOPKINS®, working distance 25 – 75 cm for white light, 20 – 30 cm for fluorescence applications, length 11 cm, **autoclavable**, with fiber optic light transmission incorporated and condensor lenses, color code: green



495 FR

**Fluid Light Cable**, diameter 5 mm, length 250 cm

The IMAGE1 S™ platform is recommended for PDD applications.  
For suitable light sources for NIR/ICG applications see TELEPRESENCE catalog

# VITOM® II PDD

Overview

VITOM® II PDD Telescope 0°  
with Integrated Illuminator



209160 25 AIA

Clamping Cylinder



28272 CN

Fluid Light Cable



495 FR

Mechanical Holding Arm



28272 UGK

28272 HC

28172 HR

One-Chip FULL HD Camera Head



TH 112

Cold Light Fountain D-LIGHT C/AF SCB



20 1336 01-133

IMAGE1 S™ Camera Systems



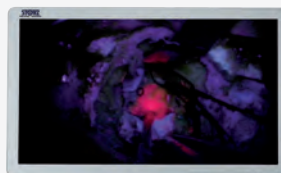
TC 200EN  
TC 301

One-Pedal Footswitch



20014130

27" FULL HD Monitor



TM 220



<b>Working distance:</b>	25 – 75 cm		
<b>Depth of view at working distance of:</b>	<b>25 cm</b>	<b>50 cm</b>	<b>75 cm</b>
<b>Depth of view:</b>	approx. 3.5 cm	approx. 7 cm	approx. 10 cm
<b>Field of view at working distance of:</b>	<b>25 cm</b>	<b>50 cm</b>	<b>75 cm</b>
IMAGE1 S™ H3-Z camera zoom 1x	5 cm	10 cm	15 cm
IMAGE1 S™ H3-Z camera zoom 2x	3.5 cm	7 cm	10.5 cm
<b>Reproduction scale at working distance of:</b>	<b>25 cm</b>	<b>50 cm</b>	<b>75 cm</b>
<b>26" Monitor:</b>			
H3-Z camera zoom 1x	approx. 8x	approx. 4x	approx. 3x
H3-Z camera zoom 2x	approx. 16x	approx. 8x	approx. 6x
<b>42" Monitor:</b>			
H3-Z camera zoom 1x	approx. 14x	approx. 7x	approx. 5x
H3-Z camera zoom 2x	approx. 28x	approx. 14x	approx. 10.5x
<b>52" Monitor:</b>			
H3-Z camera zoom 1x	approx. 17x	approx. 8x	approx. 6x
H3-Z camera zoom 2x	approx. 34x	approx. 16x	approx. 12x

**Note:**

A working distance of max. 30 cm is recommended in order to receive an optimal signal for fluorescence applications with VITOM® II NIR/ICG and VITOM® PDD.

# VITOM® 3D

3D visualization for microsurgery and open surgery

The application possibilities of the VITOM® 3D are similar to that of the operating microscope. The surgeon can work comfortably with VITOM® 3D via a 3D monitor which allows for a free choice of working positions. The most important functions are controlled via the IMAGE1 PILOT, which is mounted on the OR table in the direct vicinity of the surgeon. The VITOM® 3D system provides many surgical disciplines with a solution for the visualization of microsurgical and open surgical interventions.

The VITOM® 3D can be used with the IMAGE1 S™ platform. The visualization and documentation of surgeries can thus be carried out with an existing endoscopy tower. This ideally supports combined work with endoscopes as in, for example, endoscopically assisted microsurgery (EAM).

### Benefits at a glance:

- Ergonomic work – the user is not confined to the eyepiece
- Improved workflow – the entire OR team can view the procedure in the same image quality as the surgeon
- Flexible, diverse application possibilities – from visualization and documentation to education and training
- Beneficial for endoscopically assisted microsurgery as it is possible to combine VITOM® 3D with endoscopes
- Compact, lightweight and portable system
- Economic synergetic effects from 3D visualization for microsurgery and open surgery as well as endoscopy based on the IMAGE1 S™ platform



# VITOM® 3D

Overview

VITOM® 3D, with integrated illumination  
Cover, for VITOM® 3D, sterile



TH 200  
TH 001\*

VERSACRANE™ light



UR 300

Fiber Optic Light Cables



495 TIP  
495 VIT

IMAGE1 PILOT  
IMAGE1 PILOT Sterile Cover



TC 014  
041150-20\*

IMAGE1 S™ Camera Systems



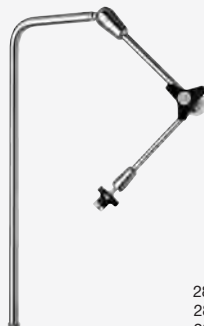
TC 201EN  
TC 302

Cold Light Fountain POWER LED 300 SCB



TL 300

Holding Arm for IMAGE1 PILOT



28272 HC  
28272 HB  
28172 HR

3D Monitors



TM 330, TM 263

3D Polarization Glasses  
3D Clip-on Glasses



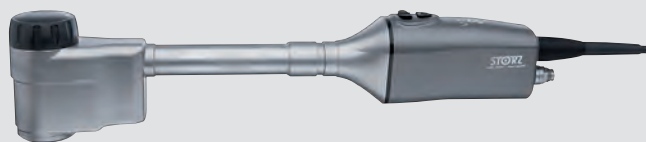
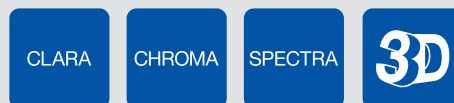
TM 003  
9800 C

11-16z



# VITOM® 3D

3D visualization for microsurgery and open surgery



TH 200

**VITOM® 3D**, with zoom and focus function, integrated illumination and horizontal alignment, working distance 20 – 50 cm, fiber optic light transmission incorporated, suitable for wipe disinfection, for use with IMAGE1 S D3-LINK® TC 302 and IMAGE1 PILOT TC 014

TC 014

**IMAGE1 PILOT**, control unit with 3D wheel, 4 programmable function keys and USB port, for intuitive control of camera systems and connected units, for use with IMAGE1 S™ and VITOM® 3D TH 200

**Specifications:**

Frame rate	50/60 Hz
Image sensor	2-chip, 4K
Image display	3D, 2D
Scanning method	progressive scan
Zoom	infinitely variable
Working distance (WD)	<b>20 – 50 cm</b>
Magnification (WD 30 cm with 32" 3D monitor)	approx. 8 – 30 x
Cable length	500 cm
Cable routing	straight

Cleaning	wipe disinfection
Sterilization concept	single-use covers
Control concept	IMAGE1 PILOT for intuitive control of all relevant functions (zoom, focus, menu, navigation), 4 buttons for rapid access, 3D wheel
Camera head buttons	freely programmable
S-Technologies	CLARA, CHROM, SPECTRA
Degree of protection	in conjunction with the IMAGE1 S™ camera control unit: CF-Defib

**IMAGE1 PILOT is required for the use of VITOM® 3D.**

**VITOM® 3D and IMAGE1 PILOT are always used with a holding system.**

**Please note:** Special clamping jaws are available for mounting VITOM® 3D to the holding system.

**Holding Systems** see chapter 10

**VERSACRANE™ LIGHT holding system for the convenient positioning of VITOM®**



UR 300

**UR 300**     **VERSACRANE™ LIGHT Holding Arm**, mechanical mobile holding arm, with quick release coupling KSLOCK, for short-term, non-invasive and flexible positioning of VITOM® telescopes for open, microsurgical and minimally invasive surgery, for use with KARL STORZ clamping jaws and VITOM® telescopes  
 including:  
**VERSACRANE™ LIGHT Holding Arm**  
**Mobile Stand**  
**Mechanical Friction Brakes**

**WARNING:** The VERSACRANE™ holding arm cannot be used with rigid endoscopes!

**Clamping Jaws and Accessories for VITOM® 3D**

28272 VTK     **VITOM® 3D Clamping Jaw**, with ball joint and quick release coupling KSLOCK (male), for use with VITOM® 3D and KARL STORZ holding systems with quick release coupling KSLOCK

TH 001     **Cover**, for VITOM® 3D, sterile, for single use, package of 10



11-16i







**Note:** The 550 cm long Light Cable 495 VIT is necessary for the use of VERSACRANE™ LIGHT.

	<p>28272 VTK <b>VITOM® 3D Clamping Jaw</b>, with ball joint and quick release coupling KSLOCK (male), for use with VITOM® 3D and KARL STORZ holding systems with quick release coupling KSLOCK</p>
	<p>28272 VTP <b>VITOM® 3D Clamping Jaw</b>, for POINT SETTER, with dovetail connector, for use with VITOM® 3D and POINT SETTER holding system</p>
	<p>495 TIP <b>Fiber Optic Light Cable</b>, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 300 cm, for use with TIPCAM®</p>
	<p>495 VIT <b>Fiber Optic Light Cable</b>, with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 550 cm</p>
	<p>TH 001 <b>Cover</b>, for VITOM® 3D, sterile, for single use, package of 10</p>
	<p>TH 002 <b>VITOM® 3D Illuminator</b>, additional lighting for VITOM® 3D, with 1 adjustable lens, <b>autoclavable</b>, for use with VITOM® 3D and light cable</p>
	<p>TH 003 <b>Protective Cover</b>, high-grade protective cover, padded imitation leather, for protecting the VITOM® 3D during storage and transport, for use with VITOM® 3D and holding arm</p>
	<p>39502 ZH <b>Wire Tray, stackable</b>, with hole plates          39502 LH <b>Lid</b>          39100 SH <b>Silicone Grid Insert</b>          39100 PS <b>Fixation Pin</b>, package of 12          39360 AS <b>Silicone Tie-Downs</b>, package of 12</p>







**Please note:** The instruments displayed are not included in the sterilization and storage tray.

## IMAGE1 PILOT with holding system for fixation to the operating table

	<p>TC 014</p>	<p><b>IMAGE1 PILOT</b>, control unit with 3D wheel, 4 programmable function keys and USB port, for intuitive control of camera systems and connected units, for use with IMAGE1 S™ and VITOM® 3D TH 200</p>
	<p>28172 HR</p>	<p><b>Rotation Socket</b>, to clamp to the operating table, with one mounted Butterfly Nut 28172 HRS, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand</p>
	<p>28272 HB</p>	<p><b>Articulated Stand</b>, reinforced version, L-shaped, with one mechanical central clamp for all five joint functions, height 48 cm, operating range 52 cm, with quick release coupling KSLOCK (female)</p>
	<p>28272 HC</p>	<p><b>Articulated Stand</b>, L-shaped, long, reinforced version, especially large swivel range, with one mechanical central clamp for all five joint functions, height 48 cm, swivel range 66 cm, with quick release coupling KSLOCK (female)</p>
	<p>041150-20</p>	<p><b>Cover</b>, with elasticated tip, 42 x 177 cm, sterile, for single use, package of 20, for use with KARL STORZ holding systems and IMAGE1 PILOT</p>

## Monitors

	<p>TM 263</p>	<p><b>26" 3D Monitor</b>, screen resolution 1920 x 1080, image format 16:9</p>
	<p>TM 330</p>	<p><b>32" 3D Monitor</b>, screen resolution 1920 x 1080, image format 16:9</p>
	<p>9832 SFH</p>	<p><b>Monitor Stand</b>, for professional use, height-adjustable, tiltable, rotation +/-30°, disinfectable, color white, with VESA 200 adaptor, for use with 32" monitors up to 15 kg</p>
	<p>9826 SF</p>	<p><b>Monitor Stand</b>, basic monitor stand, tiltable, rotation +/-30°, disinfectable, color white, with VESA 100 adaptor, for use with all monitors with VESA 100 adaptors up to 12 kg</p>
	<p>TM 003</p>	<p><b>3D Polarization Glasses</b>, fogless, passive, for use with 3D monitors</p>
	<p>9800 C</p>	<p><b>3D Clip-on Glasses</b>, circularly polarized, for use with 3D monitors</p>

11-16



**Holding Systems for VITOM® 3D** see chapter 10  
**Components/Spare Parts** see chapter 18







# INTRAOPERATIVE CHOLANGIOGRAPY CHOLEDOCHOSCOPY, MICRO KNIVES

# Intraoperative Cholangiography

Instruments for catheter placement

## Size 10 mm

Operating instrument, **length 50 cm**,  
for use with trocars size 11 mm

For cholangiography, the metal trocar inserted through the upper midline incision interferes (metal shadow) with the display of the biliary ductal system filled with contrast medium. This disturbing phenomenon can be avoided if:

- The plastic stylet is introduced under visual control after the cystic duct has been cannulated.
- The metal trocar is withdrawn over the stylet.
- The cholangiogram is performed without interfering metal shadows.
- The metal trocar is reinserted over the plastic (guide) stylet into the abdomen under visual control.
- The stylet is removed.



26020 XR

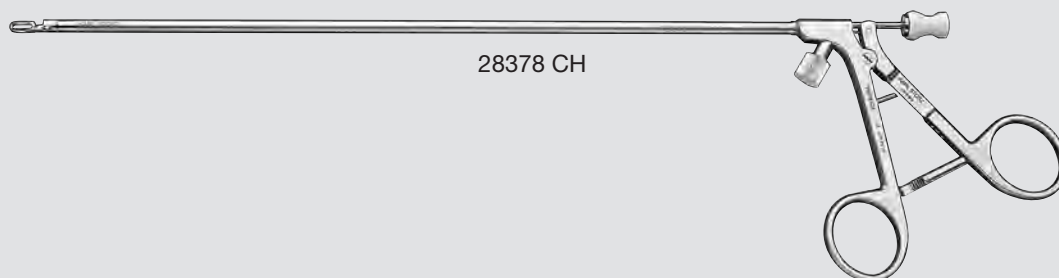
26020 XR    **BERCI Plastic Stylet**

# Intraoperative Cholangiography

Instruments for catheter placement

## Size 5 mm

Operating instrument, **length 27 cm**,  
for use with trocars size 6 mm



28378 CH



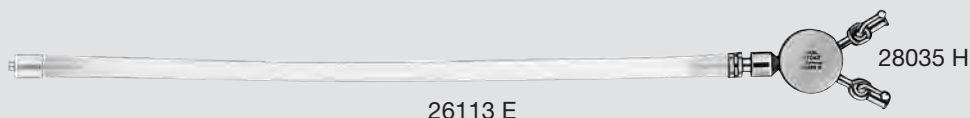
28378 CH

**OLSEN Cholangiography Fixation Clamp**,  
with channel catheter 6 Fr., length 27 cm

## Optional Accessories:

10468 C

**Suction Catheter**, 6 Fr., with Adaptor 10479 C



26113 E

28035 H

28035 H

**Two-Way Stopcock**, with 2 valves,  
for contrast medium and saline  
solution

26113 E

**Tubing**, flexible, with 2 LUER-Lock  
connectors

**Components/Spare Parts** see chapter 18

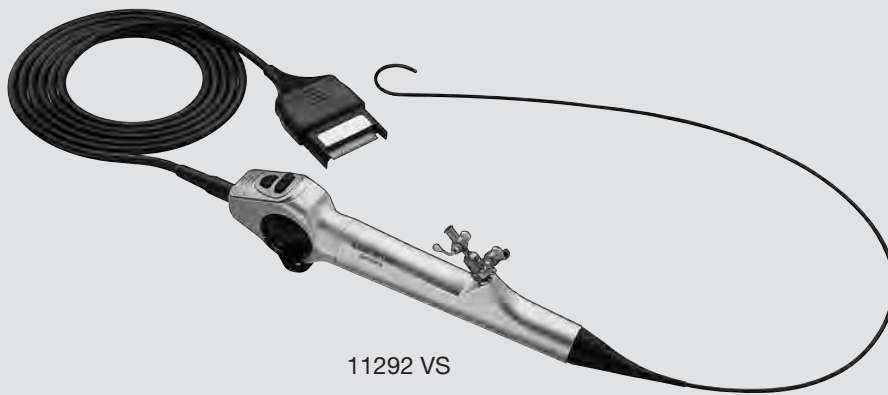
# Intraoperative Choledochoscopy, Video Choledochoscopes

The flexible video choledochoscopes from KARL STORZ allow the exploration of both intra- and extrahepatic bile ducts as well as the surgical removal of gallstones.

## Video Choledochoscope, 2.8 mm

### Special Features:

- CMOS technology
- Integrated LED light source
- Atraumatic tip
- Menu navigation via camera head (e.g., Picture-in-Picture)
- Video choledochoscope for use with IMAGE1 S™, TELECAM C3 or TELE PACK+

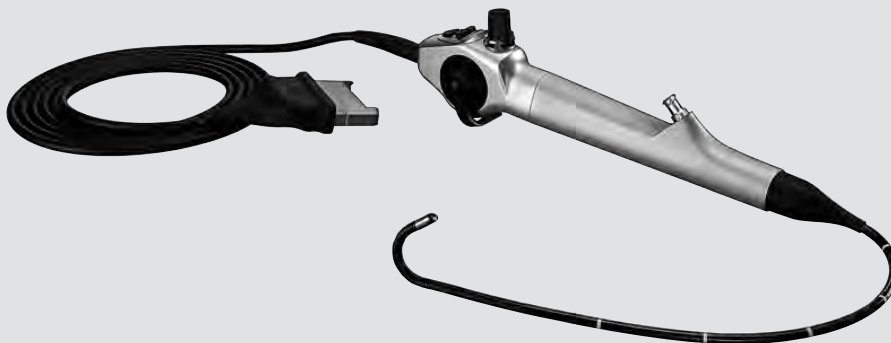


11292 VS

## Video Choledochoscope, 5.3 mm

### Special Features:

- CMOS technology
- Atraumatic tip
- Chip-on-the-tip technology in HD resolution
- Menu navigation via camera head (e.g., Picture-in-Picture)
- Video choledochoscope for use with IMAGE1 S™, TELECAM C3 or TELE PACK+



11292 VH

# Intraoperative Choledochoscopy, Video Choledochoscopes

## Two Deflection Mechanisms

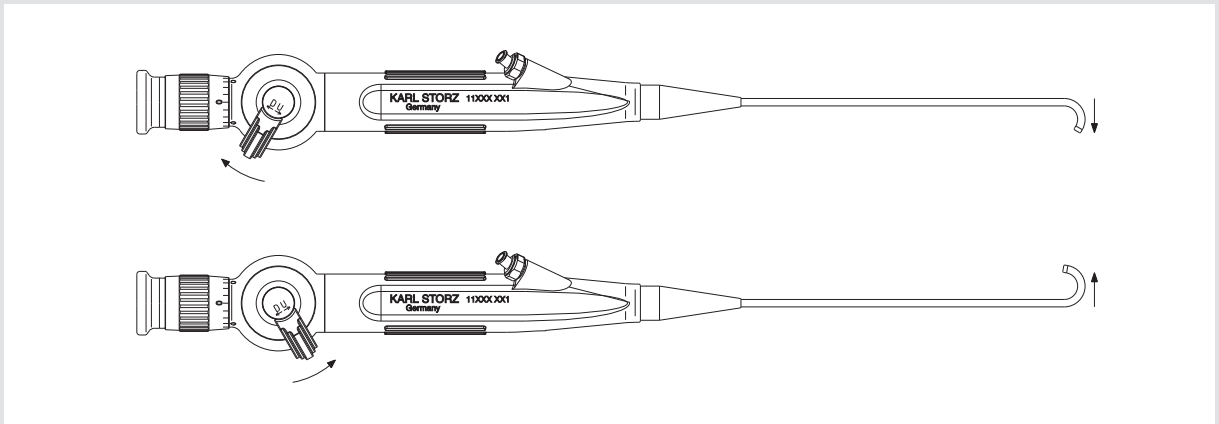
You wouldn't force someone who is left-handed to write with his right hand. Yet many flexible endoscopes impose exactly this type of limitation by forcing their operators to use counter-intuitive deflection mechanisms.

KARL STORZ answers this challenge by offering a choice of deflection mechanisms: either positive or contrapositive. With positive (or "logical") deflection, a downward movement of the lever mechanism causes

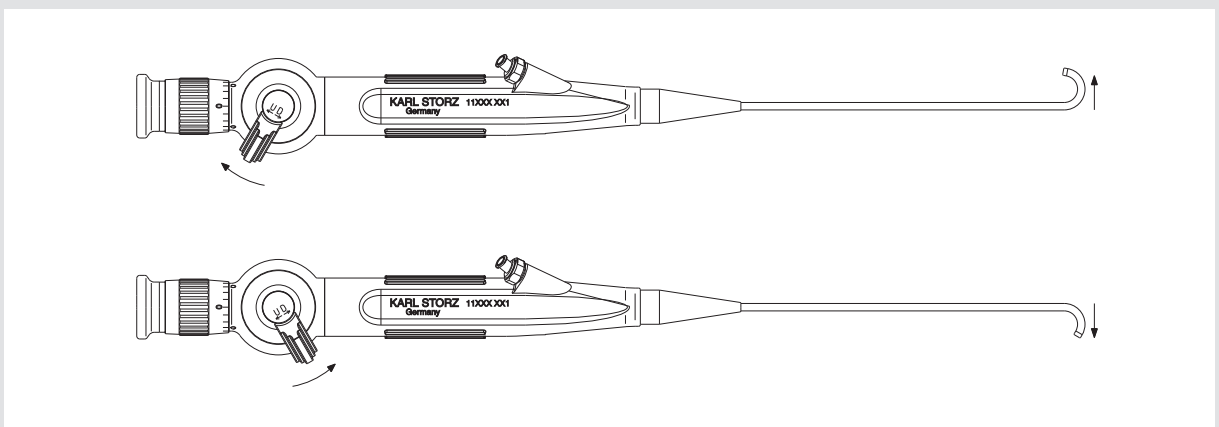
a upward movement of the endoscope tip, and vice versa. Reverse this orientation by choosing the contra-positive mechanism: a downward movement of the lever mechanism now causes an downward movement of the endoscope tip.

Either way, a flexion of the thumb on the deflection lever sweeps the endoscope tip into the areas of the anatomy to be reached.

**Choose the active tip deflection mechanism, your are most comfortable with:**

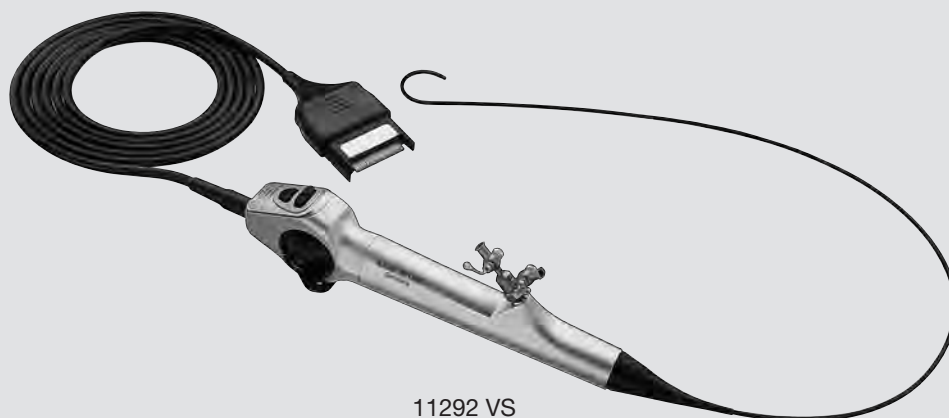


*Positive deflection mechanism*



*Contrapositive deflection mechanism*

Recommended for the transcystic approach (cystic duct)



11292 VS

**11292 VSK Flexible Video Choledochoscope Set, steerable**  
 Deflection of distal tip: 270°/270°  
 Direction of view: 0°  
 Angle of view: 90°  
 Working channel inner diameter: 1.2 mm  
 Sheath size: 2.8 mm  
 Working length: 50 cm

**11292 VSUK Flexible Video Choledochoscope Set, steerable, with contrapositive deflection mechanism**  
 Deflection of distal tip: 270°/270°  
 Direction of view: 0°  
 Angle of view: 90°  
 Working channel inner diameter: 1.2 mm  
 Sheath size: 2.8 mm  
 Working length: 50 cm

#### Compatible Camera Systems:

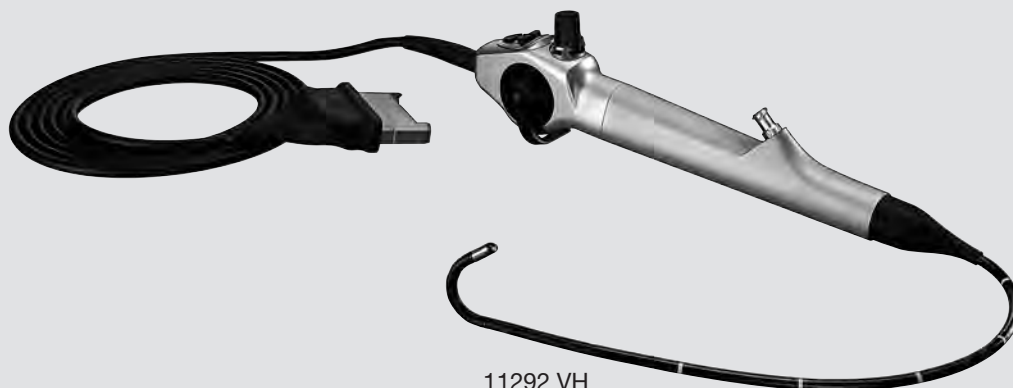
**IMAGE 1S™**, as of software version 3.1  
**TELECAM C3**, as of software version 1.0  
**TELE PACK+**, as of software version 1.0

#### Recommended Container for Sterilization:

**39406 AS Plastic Container for Flexible Endoscopes, specially suited for gas and hydrogen peroxide (Sterrad®) sterilization and storage, for use with one flexible endoscope, external dimensions (w x d x h): 550 x 260 x 90 mm**

**Accessories included in the delivery of Video Choledochoscopes 11292 VSK/VSUK** see pages 286-287  
**Containers for the Sterilization and Storage of Endoscopes** see HYGIENE catalog  
**Components/Spare Parts** see chapter 18

Recommended for the choledochal approach (choledochal duct)



11292 VH

11292 VHK	<b>Flexible HD Video Choledochoscope Set</b> , positive deflection, with suction channel and integrated light source
	Deflection of distal tip: 210°/140°
	Direction of view: 0°
	Angle of view: 100°
	Working channel inner diameter: 2.3 mm
	Sheath size: 5.3 mm
	Working length: 37 cm

#### Compatible Camera Systems:

**IMAGE 1S™**, as of software version 4.1  
**TELECAM C3**, as of software version 2.0  
**TELE PACK+**, as of software version 2.1

#### Recommended Container for Sterilization:

39406 AS	<b>Plastic Container for Flexible Endoscopes</b> , specially suited for gas and hydrogen peroxide (Sterrad®) sterilization and storage, for use with one flexible endoscope, external dimensions (w x d x h): 550 x 260 x 90 mm
----------	---

**Accessories included in the delivery of Video Choledochoscope 11292 VHK** see pages 286-287  
**Containers for the Sterilization and Storage of Endoscopes** see HYGIENE catalog



11292 AD1  
11292 DE1

11292 ADK1 **Choledocho-Fiberscope Set, 7.5 Fr., steerable**  
 Deflection of distal tip: 160°/120°  
 Direction of view: 0°  
 Angle of view: 90°  
 Working channel inner diameter: 1.2 mm  
 Distal tip outer diameter: 2.5 mm  
 Working length: 50 cm

11292 DEK1 **Choledocho-Fiberscope Set, 15.5 Fr., steerable**  
 Deflection of distal tip: 180°/100°  
 Direction of view: 0°  
 Angle of view: 110°  
 Working channel inner diameter: 2 mm  
 Sheath size: 5.2 mm  
 Working length: 35 cm

#### Recommended Containers for Sterilization:

##### For 11292 AD1:

39402 AS **Plastic Container for Sterilization**, specially suited for gas and hydrogen peroxide (Sterrad®) sterilization and storage, perforated, with lid, for use with flexible endoscopes up to max. 95 cm working length, external dimensions (w x d x h): 550 x 260 x 92 mm

##### For 11292 DE1:

39401 AS **Plastic Container for Sterilization**, specially suited for gas and hydrogen peroxide (Sterrad®) sterilization and storage, perforated, with lid, for use with flexible endoscopes up to max. 39 cm working length, external dimensions (w x d x h): 690 x 170 x 92 mm

**Accessories included in the delivery of Choledocho-Fiberscopes 11292 ADK1/DEK1** see pages 288-289  
**Containers for the Sterilization and Storage of Endoscopes** see HYGIENE catalog



# Intraoperative Choledochoscopy, Rigid Choledochoscope, curved

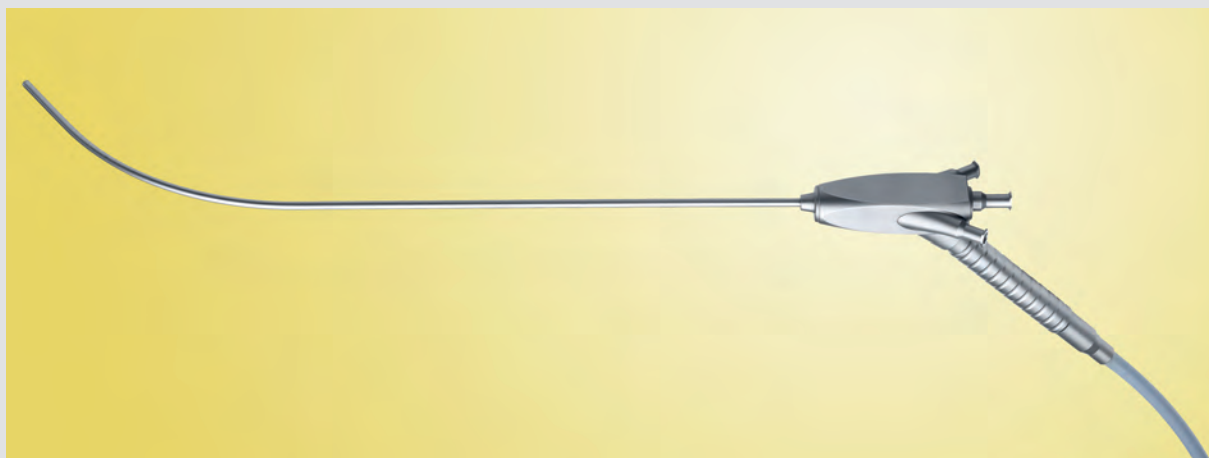
## Rigid, Curved Choledochoscope 3.5 mm For use with flexible trocars size 6 mm

The rigid choledochoscope with distal curvature can complement the flexible choledochoscope or provide a cost-effective alternative and thus allows the

exploration of both intra- und extrahepatic bile ducts as well as the surgical removal of gallstones.

### Special Features:

- Cost-effective alternative to flexible choledochoscopy
- Autoclavable
- 2 working channels that allow the simultaneous introduction of stone baskets as well as laser probes



- 28021 AA **Rigid Choledochoscope**, distally curved, diameter 3.5 mm, length 34 cm, **autoclavable**, with irrigation connector, two working channels 1.1 mm, with remote eyepiece, fiber optic light transmission incorporated

### Recommended Accessories:












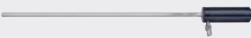
- 39502 ZL **Wire Tray for Cleaning, Sterilization and Storage** of instruments, long, stackable, including hole plate walls and foldaway handles, external dimensions (w x d x h): 535 x 250 x 66 mm
- 39100 PS **Fixation Pin**, including screw and washer, to screw instruments into position in wire trays, height 38 mm, package of 12, for use with Silicone Tie-Downs 39360 AS
- 39360 AS **Silicone Tie-Downs**, package of 12, for use with Fixation Pins 39100 PS and 39360 AP
- 39100 SL **Silicone Grid Insert LARGE DIAMOND GRID**, blue, extra wide mesh, for storage of instruments in wire trays, external dimensions (w x d): 530 x 240 mm
- 39752 A2 **Container**, with MicroStop®, for sterilization and sterile storage, external dimensions: 600 x 300 x 160 mm

Accessories for intraoperative choledochoscopy see page 290

# Accessories

for Video Choledochoscopes

**Accessories included in the delivery of video choledochoscopes:**


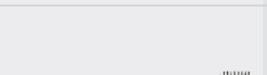





			11292 VSK / 11292 VSUK	11292 VHK
	27677 X	<b>Case</b>	●	—
	27677 SX	<b>Case</b>	—	●
	11025 E	<b>Pressure Compensation Cap</b> , for ventilation during gas and plasma sterilization	●	●
	13242 XL	<b>Leakage Tester</b> , with bulb and manometer	●	●
	11293 F	<b>Applicator and Guide Tube</b> , for use with trocars size 6 mm	●	—
	11003 KD	<b>Biopsy Forceps</b> , flexible, double action jaws, 3 Fr./1 mm, length 75 cm	●	—
	11003 KC	<b>Grasping Forceps</b> , flexible, double action jaws, 3 Fr./1 mm, length 75 cm	●	—
	27023 TD	<b>Stone Basket</b> , nitinol, with tip, helical, 2.5 Fr., length 120 cm, 4 wires, basket diameter 16 mm, sterile, for single use	●	—
	27023 TF	<b>Stone Basket</b> , nitinol, with tip, helical, 3 Fr., length 120 cm, 4 wires, basket diameter 16 mm, sterile, for single use	—	●
	27014 Y	<b>LUER-Adaptor</b> , with seal	●	—
	27550 N	<b>Seal</b> , for instrument ports, package of 10, single use recommended	●	—
	27001 RA	<b>Cleaning Adaptor</b>	●	—
	11272 X	<b>Applicator and Guide Tube</b>	—	●

**Components/Spare Parts** see chapter 18





# Accessories

for Video Choledochoscopes

## Accessories included in the delivery of video choledochoscopes:

			11292 VSK / 11292 VSUK	11292 VHK
	110931-50*	<b>Cleaning Brush</b> , length 125 cm, brush diameter 1.7 mm, unsterile, for single use, package of 50	●	—
	110940-50*	<b>Cleaning Brush</b> , with double-sided brush, length 90 cm, brush diameter 2.6 mm, unsterile, for single use, package of 50	—	●
	28172 GE	<b>Applicator</b>	—	●
	11014 L	<b>LUER Port with Stopcocks</b>	—	●
	11301 CD1	<b>Irrigation Adaptor</b>	—	●
	11301 P	<b>Seal for Suction Valve Port</b>	—	●
	100010-10*	<b>Sealing Cap "Endoscopic Seal"</b>	—	●

## Further Accessories for 11292 VHK:

	11301 CE1	<b>Suction Valve</b> , for single use, package of 20
	11301 CB1	<b>Suction Valve</b> , reusable
	11002 SS	<b>Grasping Forceps</b> , flexible, double action jaws, 5 Fr./1.67 mm, length 60 cm
	11001 SL	<b>Biopsy Forceps</b> , flexible, double action jaws, oval, 5 Fr./1.67 mm, length 60 cm











3-21



# Accessories

for intraoperative choledochoscopy

## Accessories included in the delivery of Choledocho-Fiberscopes:


			11292 ADK1	11292 DEK1
	27677 A	<b>Case</b>	●	●
	11025 E	<b>Pressure Compensation Cap</b> , for ventilation during gas and plasma sterilization	●	●
	13242 XL	<b>Leakage Tester</b> , with bulb and manometer	●	●
	11293 F	<b>Applicator and Guide Tube</b> , for use with trocars size 6 mm	●	—
	11003 KD	<b>Biopsy Forceps</b> , flexible, double action jaws, 3 Fr./1 mm, length 75 cm	●	—
	11003 KC	<b>Grasping Forceps</b> , flexible, double action jaws, 3 Fr./1 mm, length 75 cm	●	—
	11002 SS	<b>Grasping Forceps</b> , flexible, double action jaws, 5 Fr./1.67 mm, length 60 cm	—	●
	11001 SL	<b>Biopsy Forceps</b> , flexible, double action jaws, oval, 5 Fr./1.67 mm, length 60 cm	—	●
	27023 TD	<b>Stone Basket</b> , nitinol, with tip, helical, 2.5 Fr., length 120 cm, 4 wires, basket diameter 16 mm, sterile, for single use	●	—
	27023 TF	<b>Stone Basket</b> , nitinol, with tip, helical, 3 Fr., length 120 cm, 4 wires, basket diameter 16 mm, sterile, for single use	—	●

**Components/Spare Parts** see chapter 18

# Accessories

for intraoperative choledochoscopy

## Accessories included in the delivery of Choledoch-Fiberscopes:

			11292 ADK1	11292 DEK1
	27014 Y	<b>LUER-Adaptor, with seal</b>	●	●
	27550 N	<b>Seal, for instrument ports, package of 10, single use recommended</b>	●	●
	27001 RA	<b>Cleaning Adaptor</b>	●	●
	11272 X	<b>Applicator and Guide Tube</b>	—	●
	28172 GE	<b>Applicator</b>	—	●
	110931-50*	<b>Cleaning Brush, length 125 cm, brush diameter 1.7 mm, unsterile, for single use, package of 50</b>	●	—
	110940-50*	<b>Cleaning Brush, with double-sided brush, length 90 cm, brush diameter 2.6 mm, unsterile, for single use, package of 50</b>	—	●
	27550 C	<b>Sealing Cap, hole diameter 1.2 mm</b>	●	—
	6002000	<b>LUER Cone Set</b>	●	—

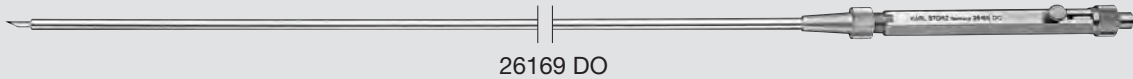
3-21



# Accessories

for intraoperative choledochoscopy

Operating instruments **length 31 cm**,  
for use with trocars size 6 mm



26169 DO



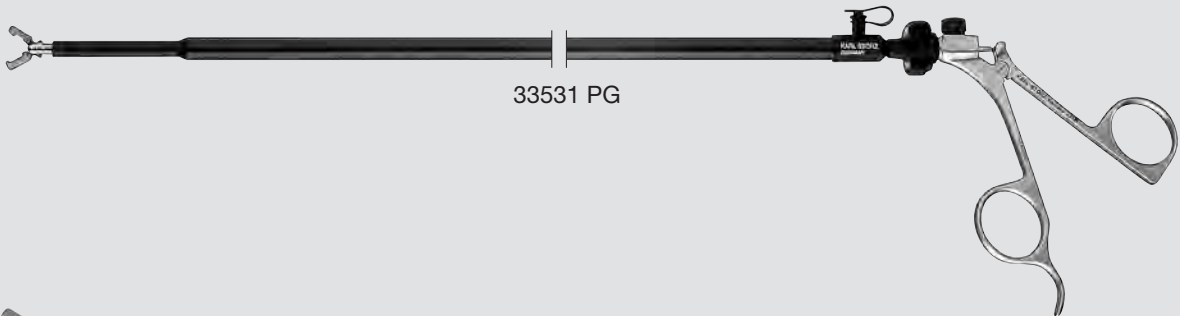
26169 DK **Micro Knife**, straight, retractable,  
size 5 mm, length 31 cm



26169 DO **BERCI Micro-Knife**, pointed, retractable,  
size 5 mm, length 31 cm

## Size 10 mm

Operating instruments, **length 36 cm**,  
for use with trocars size 11 mm



33531 PG



33531 PG **CLICKline** BERCI **Grasping Forceps**, double action  
jaws, with silicone pads, for introduction of the  
choledochoscope in the biliary duct, size 10 mm  
including:  
**Metal Handle**, without ratchet  
**Outer Sheath**, insulated  
**BERCI Forceps Insert**, with silicone pads

30510 PX **Silicone Pad**, for BERCI forceps insert,  
package of 10

**Components/Spare Parts** see chapter 18



## FLEXIBLE ENDOSCOPES IN SURGERY

# Lower Gastrointestinal Tract, SILVER SCOPE® Colonoscopes

The SILVER SCOPE® product line offers a selection of different colonoscopes to suit every application – from the 40 cm long rectoscope to the sigmoidoscope through to the colonoscope with a length of 160 cm.

Due to its enhanced flexibility and slender insertion

sheath, the slim colonoscope is beneficial for narrow anatomies.

A water jet channel provides clear visualization, allowing better tissue assessment and making hygienic standards easier to maintain.

## Special Features:

- Three innovative visualization technologies for tissue differentiation:
  - CLARA: Homogeneous illumination
  - CHROMA: Contrast enhancement
  - SPECTRA: Spectral color shift
- Possible to clean entire water jet channel with a brush
- Control handle made of lightweight metal



SILVER SCOPE®	Order no.		Sheath outer diameter	Working channel diameter	Working length	Water jet channel	Deflection		Angle of view	Depth of field
	PAL	NTSC					up/down	left/right		
Standard Colonoscope 3.8/1400	13924	13924	12.9 mm	3.8 mm	1400 mm	-	180°/180°	160°/160°	160°	2-100 mm
Standard Colonoscope 3.8/1600	13925	13925	12.9 mm	3.8 mm	1600 mm	●	180°/180°	160°/160°	160°	2-100 mm
Slim Colonoscope 11.2/3.4/1330	13926	13926	11.2 mm	3.4 mm	1330 mm	●	210°/180°	160°/160°	160°	2-100 mm
Slim Colonoscope 11.2/3.4/1530	13927	13927	11.2 mm	3.4 mm	1530 mm	●	210°/180°	160°/160°	160°	2-100 mm
Sigmoidoscope 11.2/3.4/800	13920	13920	11.2 mm	3.4 mm	800 mm	●	210°/180°	160°/160°	160°	2-100 mm

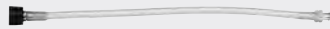








Components/Spare Parts see chapter 18






# Lower Gastrointestinal Tract, SILVER SCOPE® Colonoscopes

Accessories

The order number of the flexible endoscope (including corresponding components) ends with PKS/NKS. Endoscopes 13920 PKS/NKS, 13924 PKS/NKS\*\*, 13925 PKS/NKS, 13926 PKS/NKS and 13927 PKS/NKS can be ordered as a set (PKS/NKS). The following products are then included in delivery:

	13991 SS	<b>Irrigation Tube</b> , reusable, for the working channel of flexible videoendoscopes
	13991 YS	<b>Y-Irrigation Tube</b> , reusable, for flexible videoendoscopes
	13991 SWJ	<b>Cleaning Adaptor</b> , for water jet channel, LUER-Lock connector for manual and machine cleaning
	11025 XE	<b>Pressure Compensation Cap</b>
	13991 DA	<b>Sealing Cap</b> , for working channel, package of 10
	13991 SRV	<b>Cleaning Valve</b>
	13991 SAV	<b>Suction Valve</b>
	13991 SSV	<b>Air/Water Valve</b>
	110925-100*	<b>Valve Brush</b> , double-sided
	13990 SFN	<b>Protective Film</b>
	27677 KV	<b>Case</b>

### Optional accessories:

	202130 70	<b>Video Connecting Cable</b>
	TC 001	<b>IMAGE1 S™ Videoendoscope Adaptor 0°</b>
	TC 013	<b>IMAGE1 S™ Videoendoscope Adaptor 90°</b>



\*\* without Cleaning Adaptor 13991 SWJ

# Lower Gastrointestinal Tract, TROIDL Flexible Video Rectoscope

The TROIDL rectoscope offers the following advantages over rigid endoscopy:

- Diagnosis possibility for surgical illnesses and surgical procedures in the rectal area, e.g., polyps, ulcers, carcinoma, anastomoses, stenoses, hemorrhoids, fissures and fistula
- Possibility to combine rigid and flexible endoscopy thanks to modular IMAGE1 S™ camera platform
- Inversion up to 210° improves visualization compared to rigid rectoscopy and, consequently, diagnostic and therapeutic options thanks to forward and retrograde viewing




SILVER SCOPE®	Order no.		Sheath outer diameter	Working channel diameter	Working length	Deflection		Angle of view	Depth of field
	PAL	NTSC				up/down	left/right		
TROIDL Rectoscope, flexible	13912 PKS	13912 NKS	11.8 mm	3.4 mm	400 mm	210°/120°	120°/120°	140°	2-100 mm

Components/Spare Parts see chapter 18




# Lower Gastrointestinal Tract, TROIDL Flexible Video Rectoscope

Accessories

The order number of the flexible endoscope (including corresponding components) ends with PKS/NKS. Endoscopes 13912 PKSK/NKSK can be ordered as a set (PKSK/NKSK). The following products are then included in delivery:

	13991 SS	<b>Irrigation Tube</b> , reusable, for the working channel of flexible videoendoscopes
	13991 YS	<b>Y-Irrigation Tube</b> , reusable, for flexible videoendoscopes
	11025 XE	<b>Pressure Compensation Cap</b>
	13242 LX	<b>Leakage Tester</b>
	13991 DA	<b>Sealing Cap</b> , for working channel, package of 10
	13991 SRV	<b>Cleaning Valve</b>
	13991 SAV	<b>Suction Valve</b>
	13991 SSV	<b>Air/Water Valve</b>
	110925-100*	<b>Valve Brush</b> , double-sided
	13990 SFN	<b>Protective Film</b>
	27677 KV	<b>Case</b>

### Optional accessories:

	202130 70	<b>Video Connecting Cable</b>
	TC 001	<b>IMAGE1 S™ Videoendoscope Adaptor 0°</b>
	TC 013	<b>IMAGE1 S™ Videoendoscope Adaptor 90°</b>







# INSTRUMENTS FOR ENDOSCOPICALLY ASSISTED THYROIDECTOMY AND PARATHYROIDECTOMY

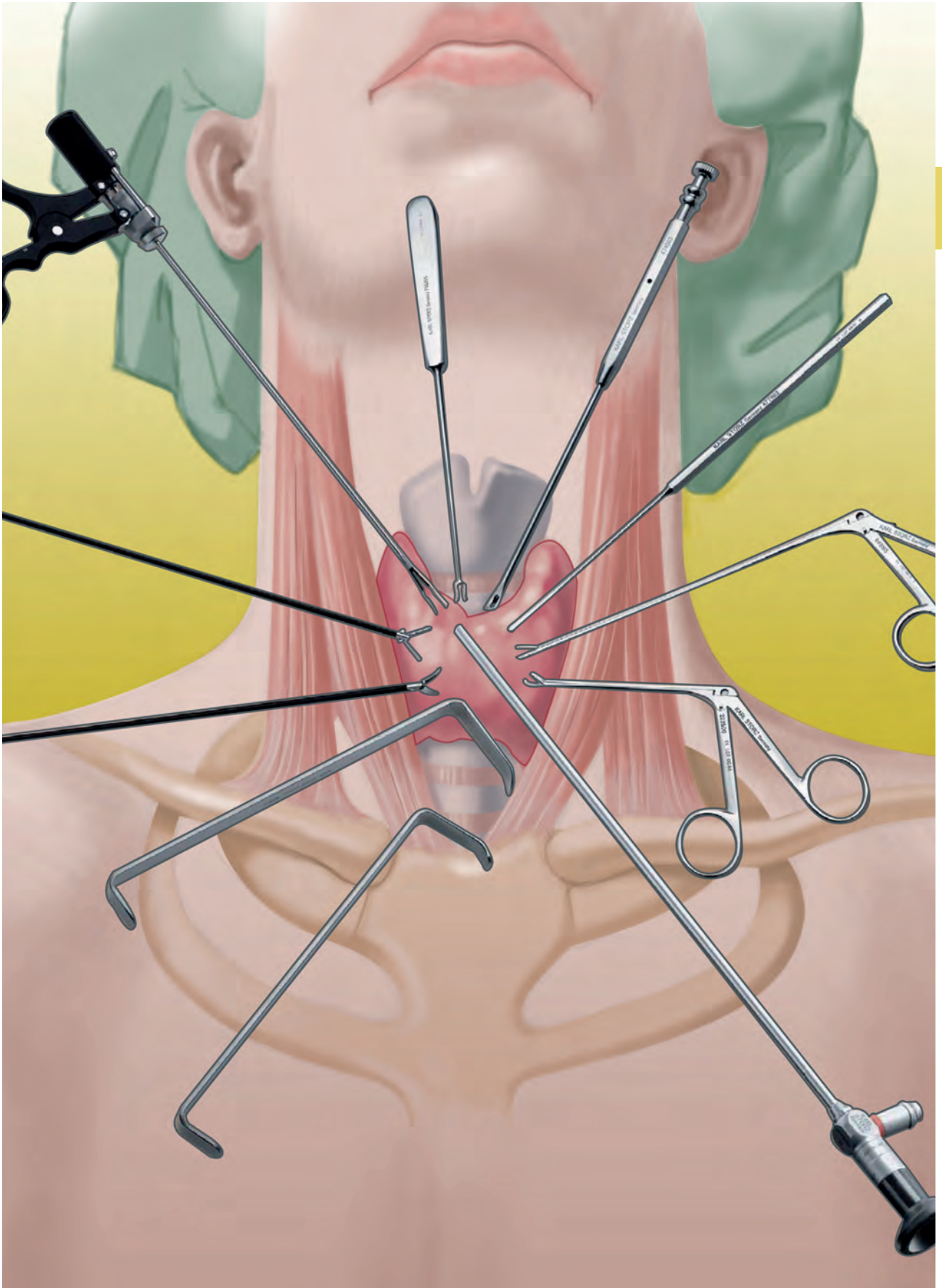
MICCOLI INSTRUMENTS FOR  
VIDEO-ASSISTED THYROIDECTOMY AND  
PARATHYROIDECTOMY .....299-304

STRIK INSTRUMENTS FOR THE  
EXTRACERVICAL APPROACH FOR  
THYROID SURGERY,  
ABBA METHOD. ....305-310

ACCESSORIES .....311



# MICCOLI Instruments for Video-Assisted Thyroidectomy and Parathyroidectomy



## Description

### Preparation of the Patient

The patient, under general endotracheal anesthesia, is placed in the supine position; the neck is not hyper-extended. The operative field is prepared in the same way as in conventional surgery. A sterile drape is positioned to protect the skin.

### Preparation of the operative space

A 15 mm horizontal incision is performed about 2 cm above the sternal notch. Subcutaneous fat and platysma are carefully dissected to minimize bleeding.

The cervical linea alba is then identified and divided longitudinally at least 3 cm. The strap muscles are separated from the thyroid lobe by blunt dissection and then gently retracted with one small conventional retractor (order no. 801910 or 801911). A second retractor of this type is placed directly on the thyroid lobe following blunt dissection. Subsequently, both retractors are gently retracted medially and lifted up.

Dissection of the lobe from the strap muscles is performed completely through the skin incision using gentle retraction and conventional instruments.

Both of the retractors are used to maintain the operative space, facilitating insertion of a 30° 5 mm endoscope through the skin incision. Under direct endoscopic vision, dissection of the thyrotracheal groove is completed using small instruments (2 mm in diameter), including atraumatic elevators (order no. 477002 or 474002) and appropriate grasping forceps and scissors.

### Ligature of the middle thyroid vein

It is particularly important to avoid both bipolar and monopolar electrocautery prior to exposing the inferior laryngeal nerve. Hemostasis is then achieved by means of small (3 mm) conventional vascular clips applied with a reusable applicator. The first vessel to be ligated is the middle vein, if present, or the small veins between the jugular vein and the thyroid capsule.

Complete retraction of the thyroid lobe is now possible, leaving the operative field ready for both video-assisted thyroid and parathyroid procedures.

### Ligature of vascular pedicle

Retracting the superior pole inferiorly with a malleable hook (order no. 786505) and preparing the vessel with a spatula (order no. 477002/474004) exposes the upper pedicle of the thyroid. Vessels are then ligated by means of clips.

Preparation of the parathyroid hilus can also be obtained by loading the parathyroid adenoma on a hook (order no. 786505), thereby exposing the vessels for clip ligation.

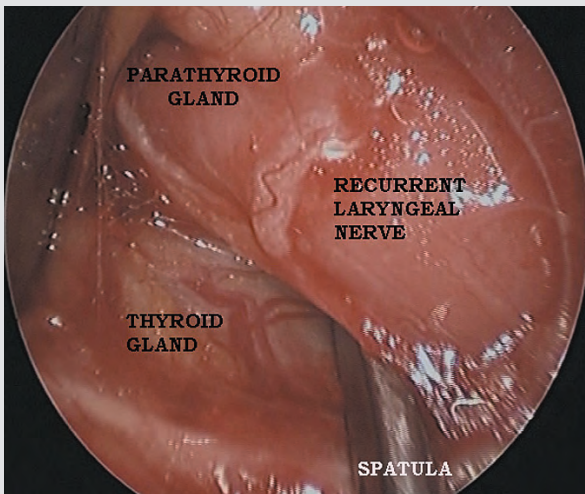
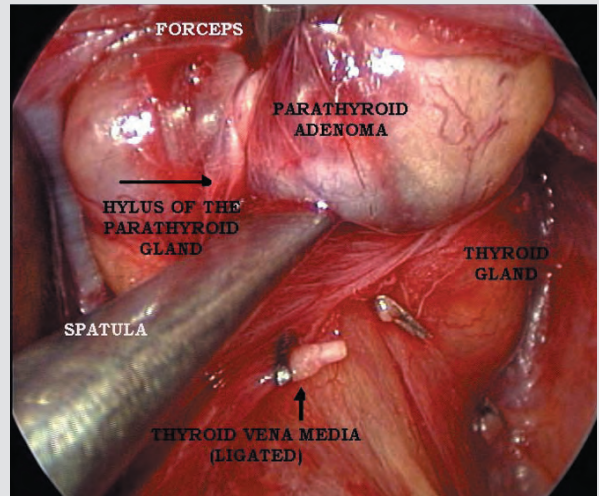
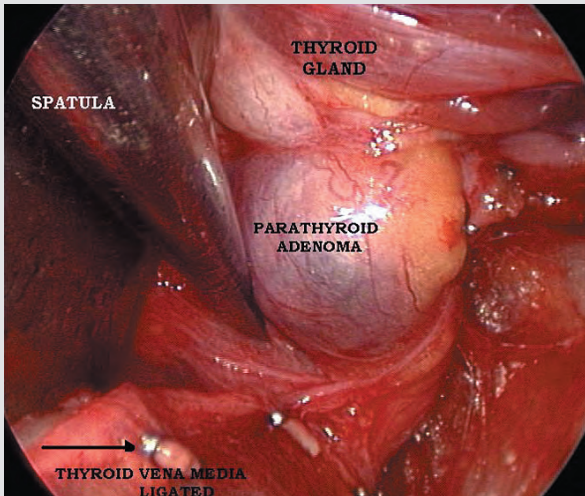
*Prof. P. MICCOLI  
University of Pisa, Italy*

**Basic Set** see chapter 1

**A description of the procedure can be found on our homepage [www.karlstorz.com](http://www.karlstorz.com)**

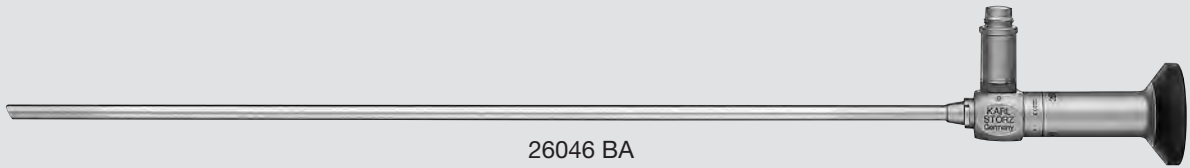


# MICCOLI Instruments for Video-Assisted Thyroidectomy and Parathyroidectomy

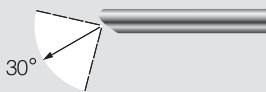


*Prof. Paolo Miccoli,  
U.O. Chirurgia Generale II  
Dipartimento di Chirurgia  
Università di Pisa  
Via Roma, 67 – Ospedale Santa Chiara  
56100 Pisa – Italy*

Diameter 5 mm, length 29 cm



26046 BA



26046 BA

**HOPKINS® Forward-Oblique Telescope 30°**, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



477002

477002

**HALLE-MICCOLI Elevator**, blunt, width 2 mm, length 19 cm, (2 items recommended)

477004

**HALLE Elevator**, blunt, width 4 mm, length 19 cm

**VITOM® system for open surgery with minimal access and further information on the use of the VITOM® system for open thyroidectomy** see chapter 11

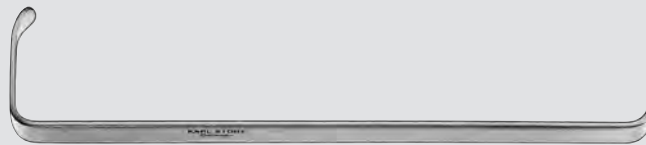
**Container for Sterilization and Storage of Telescopes** see HYGIENE catalog

**Components/Spare Parts** see chapter 18



786505

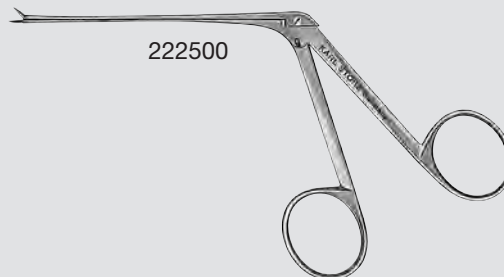
786505 MICCOLI **Vessels Suspender Hook**, malleable, length 21 cm



801910

801910 MICCOLI **Retractor**, double-ended, size 35 x 10 mm and 21 x 10 mm, length 16 cm, (2 items recommended)

801911 **Same**, size 45 x 10 mm and 21 x 10 mm



222500



222500 BELLUCCI **Scissors, dismantling**, cutting length 8 mm, working length 8 cm

Size 3.5 mm, length 20 cm



31151 MW



31151 UL

**CLICKline® REDDICK-OLSEN Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, robust, size 3.5 mm, length 20 cm

including:

**Plastic Handle**, without ratchet

**Outer Sheath**, insulated

**Forceps Insert**



31151 MW

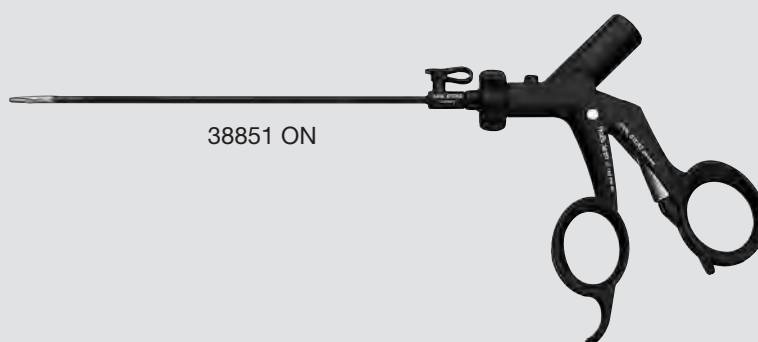
**CLICKline® Scissors**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, serrated, curved, conical, size 3.5 mm, length 20 cm

including:

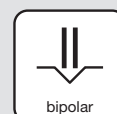
**Plastic Handle**, without ratchet

**Outer Sheath**, insulated

**Scissors Insert**



38851 ON



38851 ON

**ROBI® Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, with fine atraumatic serration, fenestrated, double action jaws, size 3.5 mm, length 20 cm, color code: light blue

including:

**ROBI® Plastic Handle**

**ROBI® Outer Sheath with Forceps Insert**

Components/Spare Parts see chapter 18

# Instruments for the Extracervical Approach for Thyroid Surgery

STRIK ABBA Method



# Instruments for the Extracervical Approach for Thyroid Surgery

STRIK ABBA Method

## Description

### Introduction

Thyroid surgery has undergone a series of developments in recent years. Alongside the importance of correct medical indications and operative procedures, the recurrent nerve and the prevention of injury to this nerve remain in focus. Cosmesis is another aspect that is gaining increasing importance. The extracervical approach has been developed as an alternative procedure over a number of years. The relocation of the approach to a region that is less problematic cosmetically leads to a more widespread acceptance of this intervention.

Existing instrument sets for minimally invasive surgery can, to a large extent, be used for the ABBA method.

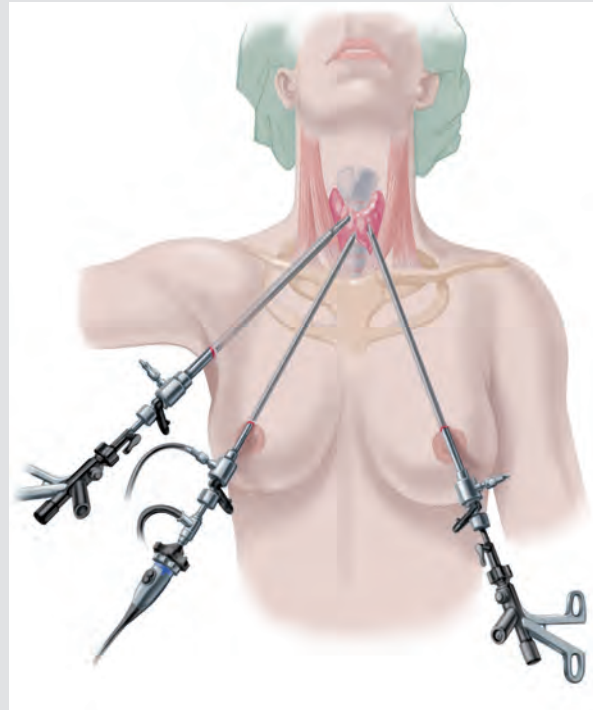
### Method

The extracervical approach for the ABBA method is selected to the right of the anterior axillary line and bilaterally perimammilarly (Fig. 1). The patient is positioned supine with both arms away from the body.

First a working channel is passed subcutaneously from the right axillary margin along the pectoral fascia as far as the platysma. A 6 mm trocar with a length of 20 cm is introduced just below the skin via a right perimammilar incision, without injuring the mammary gland, and advanced over the clavicle into the prepared space under the platysma. Following the detachment of the platysma lobe from the larynx, a further trocar (6 mm) is introduced via the left perimammilar approach. Whereas the right perimammilar approach is utilized for the 5 mm HOPKINS® rod lens telescope, the axillary and the left perimammilar approaches are used as working channels.

Detachment of the thyroid lobe usually starts at the inferior pole. The attached connective tissue is deflected bluntly and the vessels dissected using ultrasound as close to the organ as possible. Care must be taken not to compromise the blood supply when atraumatically displacing the parathyroid glands. Dissection can gradually be continued caudally and laterally along the rami of the inferior thyroid.

The superior parathyroid must be located in the orifice of the rami of the inferior thyroid and also bluntly



**Fig. 1:** Approaches

deflected without compromising the blood flow. After identifying the nerve, the thyroid gland can be detached from its tracheal attachment site. From the caudal direction, the superior pole can then be mobilized following detachment of the thyroid lobe. Once the thyroid lobe has been completely excised, it is generally removed via the axillary approach.

### Indications

The indication spectrum is the same as that for standard thyroid surgery. In addition to nodular goiters, indications also include adenomata and cold nodules requiring an histological examination.

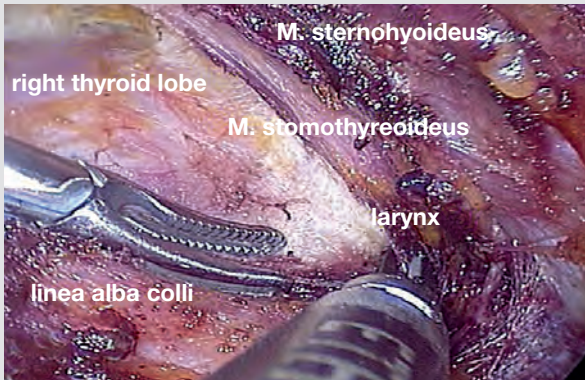
A conventional procedure is still recommended for cytological proof of malignancy. Indications such as Basedow's disease or Hashimoto's thyroiditis are, however, also suitable for this technique.

**Basic Set** see chapter 1

**A description of the procedure can be found on our homepage [www.karlstorz.com](http://www.karlstorz.com)**

# Instruments for the Extracervical Approach for Thyroid Surgery

STRIK ABBA Method



**Fig. 2:** Detachment of the neck muscles up to the larynx and bilaterally to the sternocleidomastoid muscles



**Fig. 3:** Removal of the excised thyroid lobe via the axillary approach

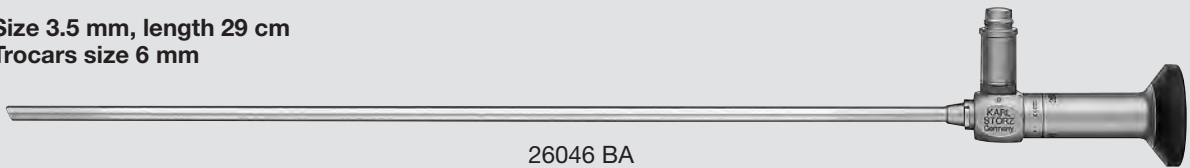


**Fig. 4:** Bimammillary and axillary approach. Cosmetic results 14 days postoperative: approach incisions are now barely visible

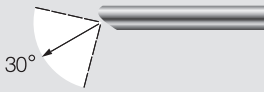
# Instruments for the Extracervical Approach for Thyroid Surgery

STRIK ABBA Method

Size 3.5 mm, length 29 cm  
Trocars size 6 mm



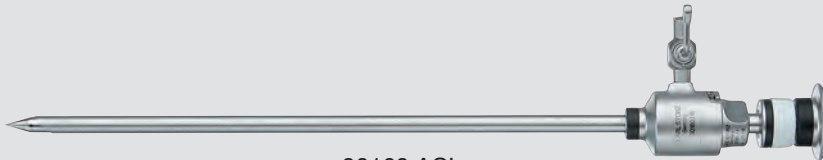
26046 BA



26046 BA

**HOPKINS® Forward-Oblique Telescope 30°**, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

Size 6 mm



30160 ACL



30160 ACL

**Trocar**, with conical tip, size 6 mm, working length 20 cm, color code: black

including:

**Cannula**, without valve, with insufflation stopcock

**Trocar only**

**Automatic Valve**

30160 MCL

**Trocar**, with conical tip, size 6 mm, working length 20 cm, color code: black

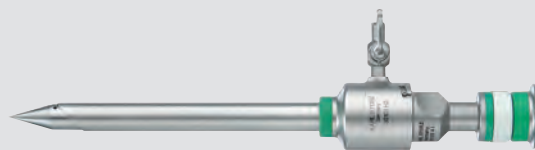
including:

**Cannula**, without valve, with insufflation stopcock

**Trocar only**

**Multifunctional Valve**

Size 11 mm



30103 AC



30103 AC

**Trocar**, with conical tip, size 11 mm, working length 10.5 cm, color code: green

including:

**Cannula**, without valve, with insufflation stopcock

**Trocar only**

**Automatic Valve**

30103 MC

**Trocar**, with conical tip, size 11 mm, working length 10.5 cm, color code: green

including:

**Cannula**, without valve, with insufflation stopcock

**Trocar only**

**Multifunctional Valve**

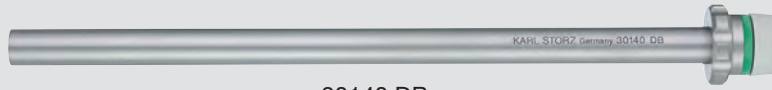
Container for Sterilization and Storage of Telescopes see HYGIENE catalog

Components/Spare Parts see chapter 18



# Instruments for the Extracervical Approach for Thyroid Surgery

STRIK ABBA Method



30140 DB

30140 DB **Reduction Sleeve**, reusable, instrument diameter 5 mm, cannula outer diameter 11 mm, color code: green

30140 KA **Reduction Sleeve**, reusable, instrument diameter 3 and 3.5 mm, cannula outer diameter 6 mm, color code: black

Size 3.5 mm, length 20 cm



31151 MW



31151 MD **CLICK'linē KELLY Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, size 3.5 mm, length 20 cm including:

**Plastic Handle**, without ratchet

**Outer Sheath**, insulated

**Forceps Insert**



31151 MW **CLICK'linē Scissors**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, serrated, curved, conical, size 3.5 mm, length 20 cm including:

**Plastic Handle**, without ratchet

**Outer Sheath**, insulated

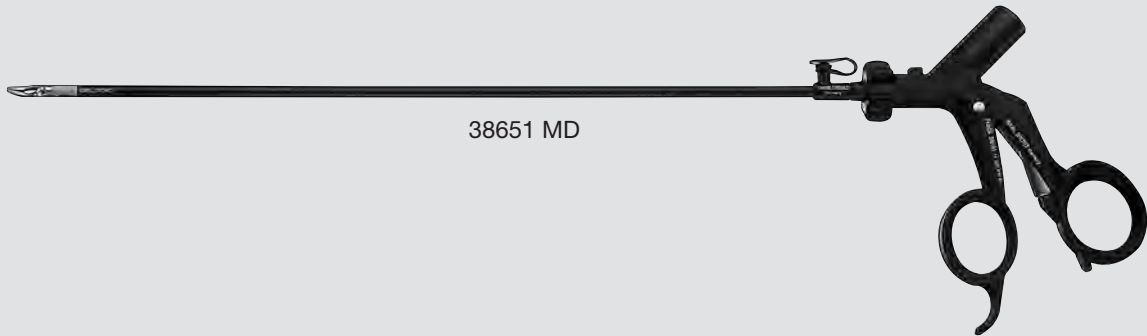
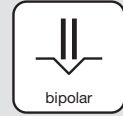
**Scissors Insert**

**Components/Spare Parts** see chapter 18

# Instruments for the Extracervical Approach for Thyroid Surgery

STRIK ABBA Method

Size 5 mm, length 36 cm



38651 MD



38651 MD

**ROBI® KELLY Dissecting and Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, suitable for dissection, size 5 mm, length 36 cm, color code: light blue

including:

**Plastic Handle**, without ratchet

**Metal Outer Sheath**, insulated

**Forceps Insert**



38651 ON

**ROBI® Grasping Forceps**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, fenestrated jaws, with fine atraumatic serration, size 5 mm, length 36 cm, color code: light blue

including:

**ROBI® Plastic Handle**, without ratchet

**ROBI® Metal Outer Sheath**

**ROBI® Forceps Insert**



38651 MW

**ROBI® METZENBAUM Scissors**, CLERMONT-FERRAND model, rotating, dismantling, with connector pin for bipolar coagulation, double action jaws, curved jaws, slender scissor blades, for cutting and bipolar coagulation, size 5 mm, length 36 cm, color code: light blue

including:

**ROBI® Plastic Handle**, without ratchet

**ROBI® Metal Outer Sheath**

**ROBI® Scissors Insert**

Components/Spare Parts see chapter 18

# Accessories

## Unipolar and Bipolar High Frequency Cords

### Unipolar High Frequency Cords







KARL STORZ High Frequency  
Instrument Surgery Units

	26002 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type T older models and Ellman
	26004 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, compatible with Martin HF units
	26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type ICC and Erbe VIO 301
	26006 M	<b>Unipolar High Frequency Cord</b> , with 8 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Valleylab models

### Bipolar High Frequency Cords



KARL STORZ High Frequency  
Instrument Surgery Units

	26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe-Coagulator, T and ICC series
	26176 LM	<b>Bipolar High Frequency Cord</b> , length 300 cm, compatible with Martin HF units
	26176 LV	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 28.58 mm, for AUTOCON® III and AUTOCON® II, compatible with Valleylab coagulators, for use with high frequency surgical units with bipolar sockets with 28.58 mm pin distance
	26176 LW	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 22 mm, compatible with high frequency surgical units with bipolar sockets with 22 mm pin distance

**Please note:** All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 **ML**, 26176 **LVL**.





## GYNECOLOGY

UTERINE CANNULA,  
UTERINE GRASPING FORCEPS .....314

UTERINE MANIPULATORS .....315-327

RECTAL PLUGS .....328

C.C.L. VAGINAL EXTRACTORS .....329-331

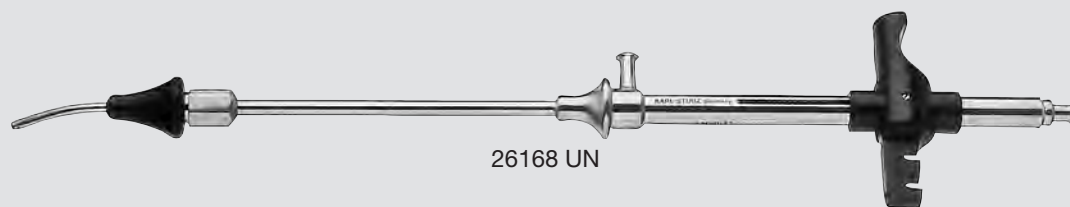
UNIPOLAR AND  
BIPOLAR LOOPS .....332-336

ACCESSORIES FOR LAPAROSCOPY .337-339

INSTRUMENT SET FOR  
LAPAROSCOPICALLY ASSISTED  
CREATION OF A NEOVAGINA .....340-342

# Uterine Cannula, Uterine Grasping Forceps

for laparoscopy and pertubation

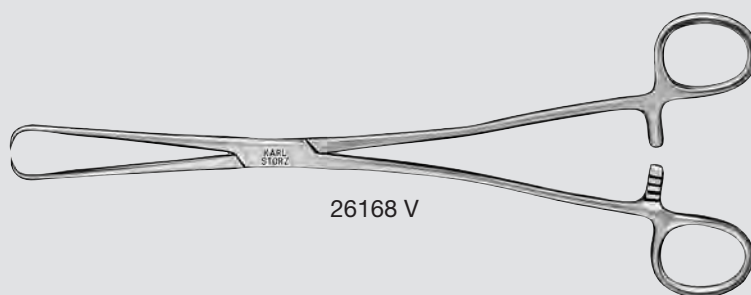


26168 UN



26168 UN

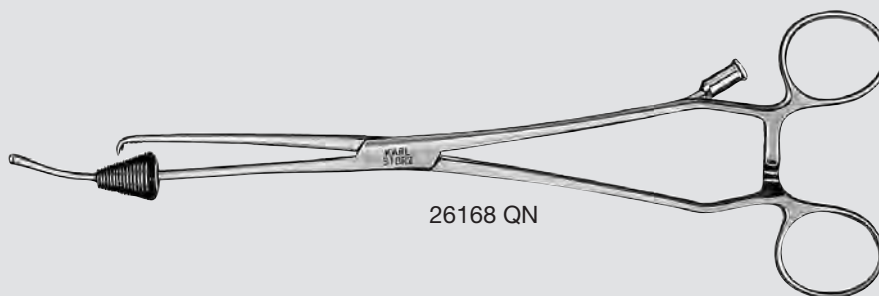
COHEN **Uterine Cannula**, with LUER-Lock adaptor for cleaning



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

Components/Spare Parts see chapter 18

## Uterine Manipulators

Hysterectomy is often performed in gynecological laparoscopy. The uterine manipulator is a key instrument in this procedure, providing the correct amount of tissue tension needed for any anatomical surgery. Furthermore, it can be used to mobilize the uterus and to keep adjoining organs, such as the bowel, bladder or ureter safely away. Moving the uterine manipulator in the cranial direction distances the uterine artery away from the ureter, allowing subsequent transection and coagulation of the artery.

With the aid of the integrated cap, the manipulator can be used visualize the fornix in Total Laparoscopic Hysterectomy (TLH). This allows the operating surgeon to visually and palpably identify the site of the vaginal opening.

The uterine manipulator also proves useful for organ-sparing laparoscopic or reproductive surgical procedures such as, for example, chromopertubation.

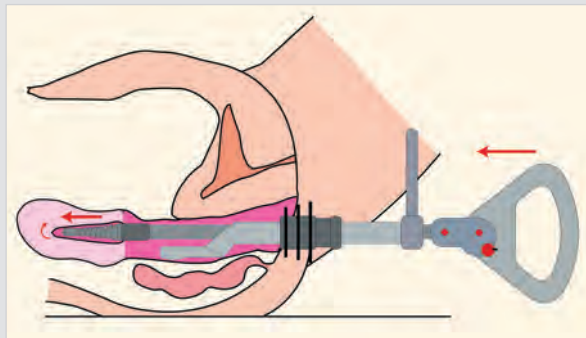
Each uterine manipulator is equipped with caps as well as spiral and working inserts in various sizes and can thus be adapted to suit various anatomical structures.



# Uterine Manipulator

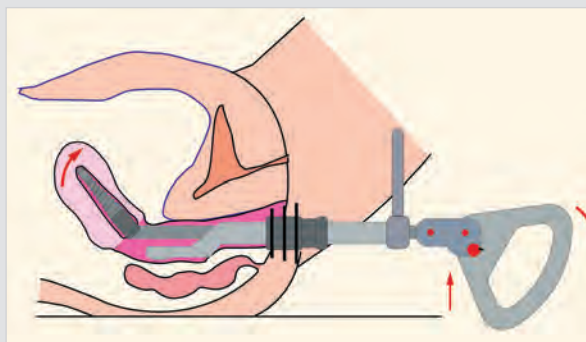
CLERMONT-FERRAND Model

**For mobilization of the uterus, identification of the vaginal fornices and sealing of the vagina during hysterectomy**



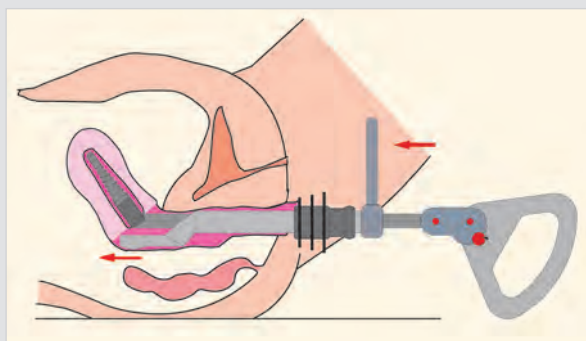
## Insertion of the instrument

After the patient has been prepared (drapes positioned and the vagina disinfected) and the cervix has been dilated, the instrument is aligned, after being locked in the axial position with the snap-in mechanism (intra-uterine rod in instrument axis). The manipulator is inserted into the cervix and then the intrauterine rod is turned clockwise until the hinge head gently touches the cervix.



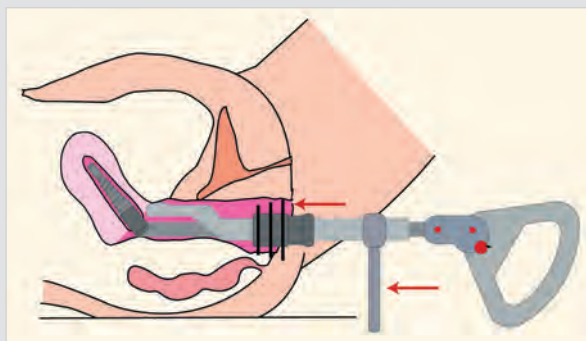
## Mobilization of the uterus

When the instrument has been locked, pulsion and lateroversion movements are possible in the axial position or by using the curvature of the intra-uterine rod. A graduated snap-in mechanism enables the manipulator to be locked in 5 different positions (0°, 30°, 45°, 60° and 90°). Unrestricted motion of the uterus manipulator is possible by shifting the snap-in release button which is mounted on the handle.



## Identification of the vaginal fornices

The uterus is held in the desired position by the manipulator handle and, if necessary, locked with the snap-in mechanism. Identification of the fornix can be carried out by pushing the manipulator rod forward. This rod is located on the side opposite the anatomical blade. In order to identify the posterior fornix, for example, the uterus has to be brought into the anteversion position and the manipulator rod, pointing vertically upwards, has to be pushed forward.



## Sealing

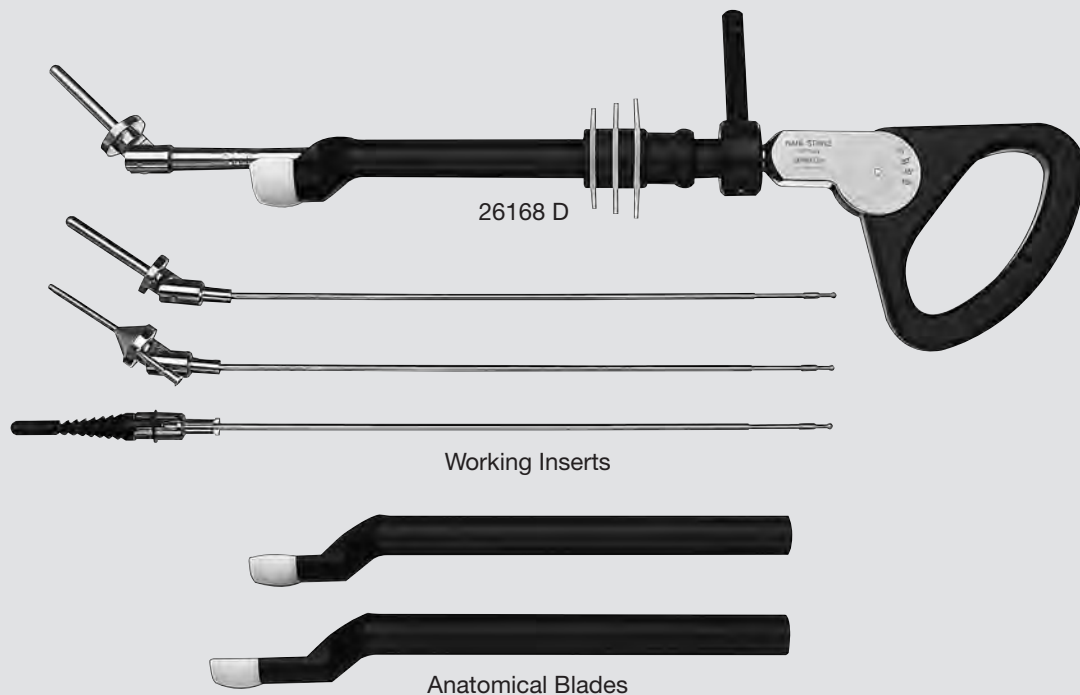
The escape of CO<sub>2</sub> has to be prevented when opening the fornix. For this purpose, the silicone seals are inserted into the vagina by pushing them along the axis of the instrument.



# Uterine Manipulator

CLERMONT-FERRAND Model

For mobilization of the uterus, identification of the vaginal fornices and sealing of the vagina during hysterectomy



- 26168 D **Uterine Manipulator**, CLERMONT-FERRAND model including:
- Handle**, with fixation screw
  - Manipulator Rod**
  - Sealing Cylinder**
  - Silicone Seal**, package of 3 (3 sizes)
  - Sheath**
  - Working Insert**, conical, with thread, medium
  - Working Insert**, atraumatic, diameter 7 mm, length 50 mm
  - Working Insert**, with connector for chromopertubation, atraumatic, diameter 4 mm, length 40 mm
  - Anatomical Blade**, short, diameter 36 mm, length 48 mm
  - Cleaning Adaptor**

## Recommended Accessories

- 26168 DF **Working Insert**, conical, with thread, short
- 26168 DH **Same**, long
- 26168 DO **Working Insert**, atraumatic, diameter 7 mm, length 60 mm
- 26168 DQ **Working Insert**, with connector for chromopertubation, atraumatic, diameter 4 mm, length 60 mm
- 26168 DJ **Attachment with Cap**, diameter 28 mm, length 43 mm
- 26168 DM **Anatomical Blade**, medium, diameter 36 mm, length 58 mm
- 26168 DL **Anatomical Blade**, long, diameter 36 mm, length 68 mm

**Components/Spare Parts** see chapter 18

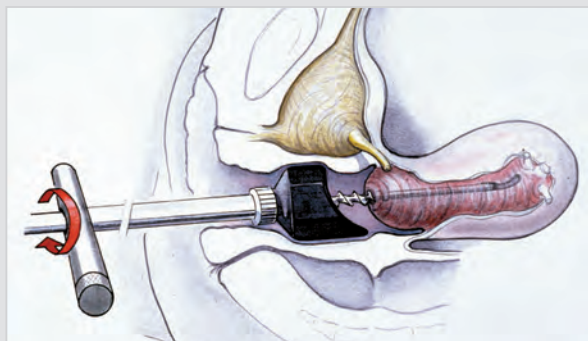
## Description

Our aim was to develop a technique for endoscopic hysterectomy that fulfills the requirements for a reliable, atraumatic procedure with reduced blood loss. Since we believe hybrid surgery (laparoscopically assisted vaginal hysterectomy) makes the procedure more complicated, our goal has been to perform the surgery using only laparoscopic techniques. Additionally, hybrid procedures are not a true alternative to time-proven vaginal hysterectomies. The key instrument for our procedure is the HOHL uterine manipulator (Figs. 1, 2). We developed this device so it can be tightly screwed into the uterine cervix, providing the correct amount of tissue stretching needed for any anatomical surgery. Additionally, any adjoining organs in danger of being injured, such as the bladder or ureter, can be moved safely away.

Cranial displacement of the uterus eliminates the need for bladder dissection, ensuring the bladder remains neurologically intact (Fig. 2).

This cranial displacement permits a true intrafascial hysterectomy without destroying the fascia ring (fascia endopelvina), thereby preventing postoperative enteroceles and prolapse of the vaginal stump. Located exactly at the transition between the vagina and cervix, the cap permits the reliable, bloodless dissection of the vagina through bicoagulation and electrical dissection of the ligamenta cardinalia and sacrouterina (Figs 3, 4). Once the vagina has been completely dissected, the uterus can be withdrawn into the vagina where it continues to act as a seal until laparoscopic closure. Cervical portio caps of different sizes allow the HOHL uterine manipulator to be used not only in women with a narrow vagina and small cervix but also in women with a very large uterine cervix. The manipulator can be fixed in place in both narrow and wide cervical channels using three different spiral threads. Different probe sizes accommodate the full range of potential uterine sizes.

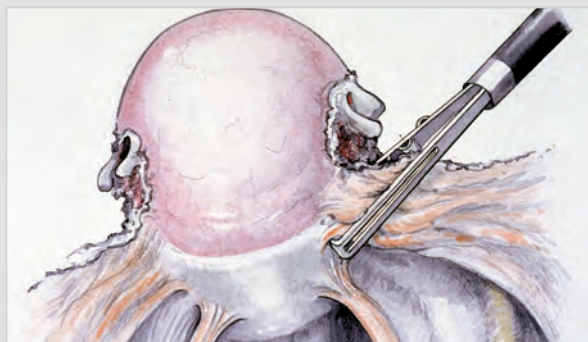
*Prof. Dr. med. M. HOHL,  
Baden, Switzerland*



**Fig. 1:** With its worm-like thread, the HOHL uterine manipulator screws into the cervix.



**Fig. 2:** Tightening the uterus moves the bladder and ureters out of the way. The tissue is then stretched.

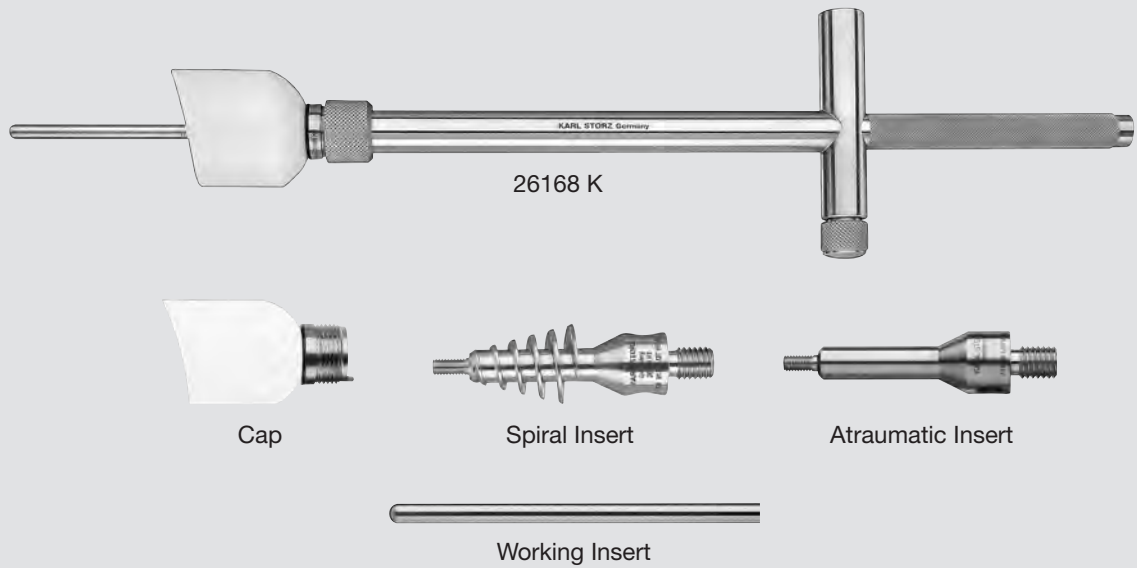


**Fig. 3:** Bicoagulation of vascularized ligaments on the cervical portio cap.



**Fig. 4:** Electrosurgical dissection of ligaments and vaginal tissue on the cervical portio cap. Intrafascial hysterectomy fully preserves the fascia ring.

# HOHL Uterine Manipulator



- 26168 K    **HOHL Uterine Manipulator**  
including:  
**Handle**  
**Manipulator Rod**  
**Cap**, diameter 40 mm, length 30 mm  
**Cap**, diameter 35 mm, length 30 mm  
**Cap**, diameter 32 mm, length 30 mm  
**Spiral Insert**, diameter 20 mm  
**Spiral Insert**, diameter 15 mm  
**Working Insert**, diameter 6 mm, length 60 mm  
**Working Insert**, diameter 6 mm, length 80 mm  
**Working Insert**, diameter 6 mm, length 100 mm  
**Key**, for spiral insert

## Recommended Accessories

- 26168 KP    **Spiral Insert**, large, diameter 25 mm  
26168 KH    **Working Insert**, diameter 6 mm, length 40 mm  
26168 KN    **Working Insert**, diameter 6 mm, length 30 mm  
26168 KQ    **Atraumatic Insert**, diameter 8 mm, length 45 mm

**Components/Spare Parts** see chapter 18

**Grasper with atraumatic insert  
for use with HOHL uterine manipulator**

**Description**

**Model for subtotal hysterectomy**

It is often not possible to fixate the uterus with a spiral insert in many surgical situations. This is why another fixation system was developed which, similar to a bullet forceps, firmly grasps the outer surface of the cervix. This ensures a secure and stable connection

between the manipulator and the uterus. Short and atraumatic inserts allow the use of instruments for subtotal hysterectomy.

*Prof. Dr. med. M. HOHL,  
Baden, Switzerland*



26168 KO



Working Inserts



Hand Wheel

- 26168 KO **Manipulator Probe**, with atraumatic working insert and grasper including:
- Working Insert**, diameter 4 mm, length 3 cm
  - Working Insert**, diameter 4 mm, length 4 cm
  - Working Insert**, diameter 4 mm, length 6 cm
  - Hand Wheel**

**Components/Spare Parts** see chapter 18

## DONNEZ Uterine Manipulator

### Description

#### Uterine manipulators have several fields of application:

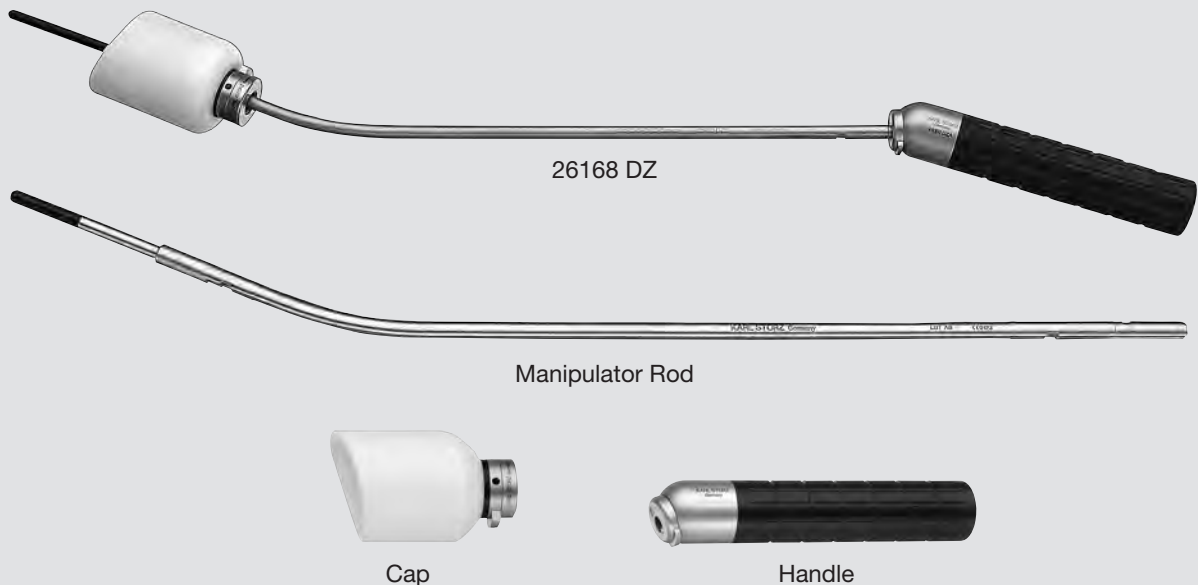
- Uterine mobilization (anteversion, retroversion and lateral movement) for exposure of the surgical field
- Visualization of the vagina and the cervix to allow separation during laparoscopic hysterectomy

#### The most important requirements when designing the uterine manipulator was to obtain an instrument that would:

- Clearly expose the vaginal fornix
- Be easy to handle and allow the use of HF instruments.

The DONNEZ uterine manipulator was specifically developed for use during total or subtotal laparoscopic hysterectomy to enable sectioning the vagina or cervix, i.e., using unipolar scissors.

*Prof. J. DONNEZ,  
Brussels, Belgium*



26168 DZ

#### DONNEZ Uterine Manipulator

including:

##### Handle

**Manipulator Rod**, including Working Inserts 6290495 (diameter 4 mm, length 22 mm), 7821391 (diameter 5.5 mm, length 42 mm) and 7904791 (diameter 4 mm, length 52 mm)

**Cap**, diameter 34 mm, length 36 mm

**Cap**, diameter 24 mm, length 36 mm

**Cap**, diameter 42 mm, length 36 mm

**Components/Spare Parts** see chapter 18

## Description

### Benefits:

- Suitable for all benign interventions in gynecological laparoscopy
- Great mobility (95° ante flexion/30° retro flexion): Cap can also be inserted at an angle to allow precise surgical steps
- Various accessories enable adjustment to various anatomical structures

## Using the manipulator for conservative surgery

### Adhesions and deep infiltrating endometriosis

The manipulator can also be used with an atraumatic insert – with or without a cap – for conservative surgery and particularly to treat adhesions and deep infiltrating endometriosis. The KECKSTEIN uterine manipulator is used to remove deep infiltrating endometriosis in the extraperitoneal space as well as the uterus (adenomyosis).

## Handling

### Hysterectomy

A screw mechanism enables the insert to be introduced into the cervix and fixed into place. A ceramic cap in conjunction with a sheath can be pushed over the rod of the instrument and inserted into the vagina where it is directly positioned and attached to the portio. By turning the manipulator handle, the cap can be deflected towards the ventral (95 degrees) and dorsal (30 degrees) directions and fixed in any position. This manipulation enables the uterus to be brought into a vertical, strong anteversion or a retroversion position. Simultaneously tilting the manipulator handle (dorsal, ventral, right and left) utilizes all degrees of freedom in the pelvis.

### Procedures for determining sterility

A special, atraumatic insert with the option for chromopertubation enables the uterine manipulator to be used to establish sterility or for organ-preserving surgical procedures on the uterus or the adnexa (optional). The uterine manipulator is fixated to the anterior lip of the external uterine orifice via a spring mechanism with a bullet forceps.

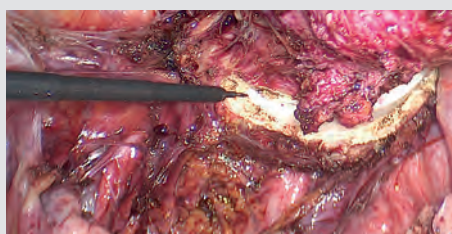
Access to the operative field (circular vaginal fornix, uterine vessels, etc.) is thus improved. This is a decisive advantage, particularly in the case of adhesions and severe endometriosis as well as large uteri.

The KECKSTEIN uterine manipulator can be used on its own with an atraumatic tip for laparoscopic supracervical hysterectomy without a cap.

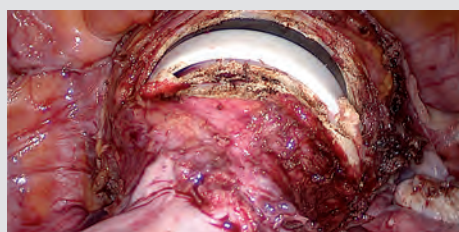
*Prof. Dr. J. KECKSTEIN,  
Primarius Landeskrankenhaus Villach, Austria*



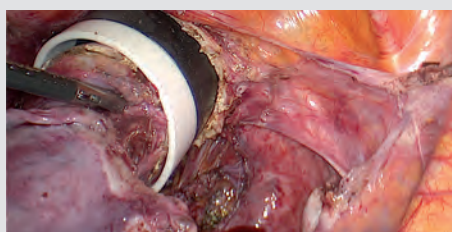
**Fig. 1:** Visualization of the fornix



**Fig. 2:** Opening the anterior vaginal vault

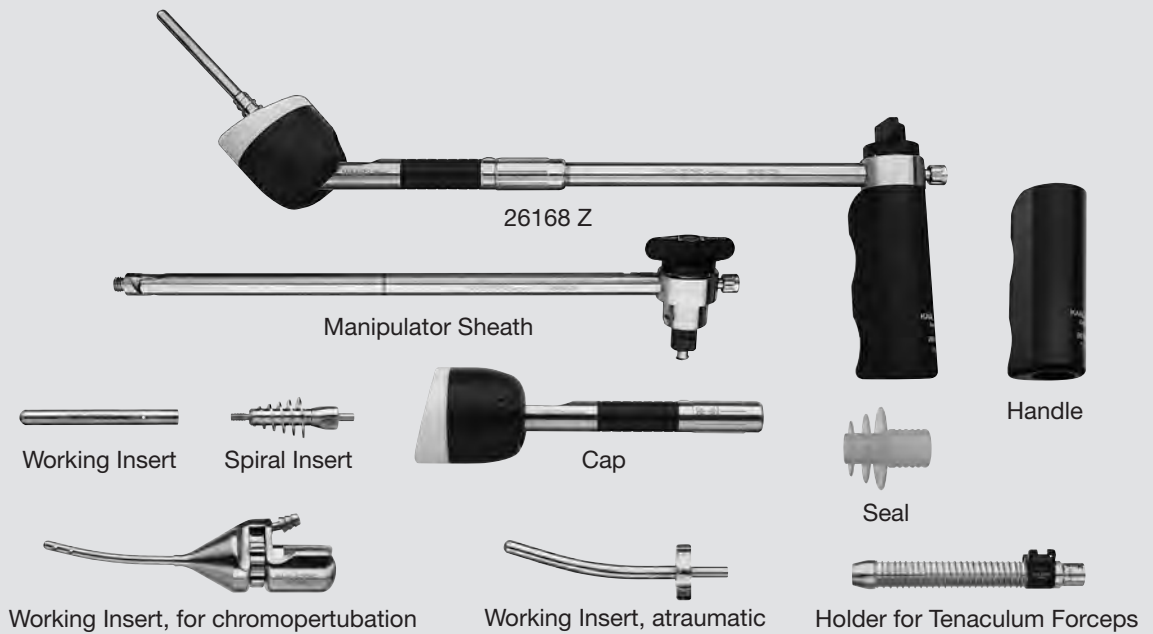


**Fig. 3:** Opening the posterior vaginal vault



**Fig. 4:** Fully detached uterus

# KECKSTEIN Uterine Manipulator



26168 Z

**KECKSTEIN Uterine Manipulator**  
including:

**Handle**

**Manipulator Sheath**

**Cap**, diameter 37 mm, length 30 mm

**Cap**, diameter 42 mm, length 30 mm

**Spiral Insert**, diameter 15 mm

**Spiral Insert**, diameter 20 mm

**Working Insert**, length 60 mm

**Working Insert**, length 40 mm

**Y-Tube Connector**, length 190 mm

2x **LUER-Lock Tube Connector**

**Seal**

**Working Insert**, for chromopertubation, length 30 mm

**Working Insert**, atraumatic, length 60 mm

**Tenaculum Forceps**, length 22 cm

**Holder for Tenaculum Forceps**

**Pertubation Tube**

## Recommended Accessories

26168 ZE

**Cap**, diameter 47 mm, length 30 mm

26168 ZF

**Spiral Insert**, diameter 12 mm

26168 ZK

**Working Insert**, diameter 6 mm, length 80 mm

26168 ZS

**Working Insert**, diameter 6 mm, length 30 mm

26168 ZT

**Seal**

26168 ZN

**Working Insert**, for chromopertubation, diameter 3 mm, length 50

26168 ZO

**Working Insert**, atraumatic, diameter 5 mm, length 40 mm

26168 ZR

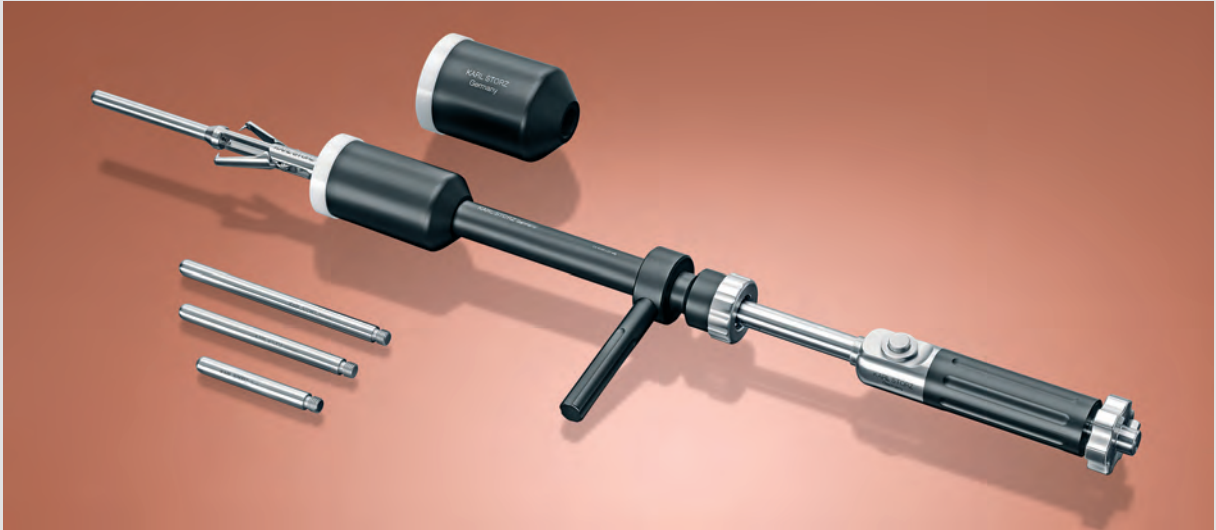
**Working Insert**, atraumatic, diameter 5 mm, length 90 mm

**Components/Spare Parts** see chapter 18

# MANGESHIKAR Uterine Manipulator

The MANGESHIKAR uterine manipulator can be used for the following interventions:

- for Total Laparoscopic Hysterectomy (TLH)
- for Laparoscopic Supracervical Hysterectomy (LASH)
- for Laparoscopy-Assisted Vaginal Hysterectomy (LAVH).



## Optional Accessories

In addition to the recommended set, further covers (one small and one large) are available for the operating surgeon.

## For Total Laparoscopic Hysterectomy (TLH)

Three caps in various sizes are available for Total Laparoscopic Hysterectomy to help visualize the fornix when removing the uterus. The forceps with a

proximally mounted rotary wheel is distended and attached to the portio.

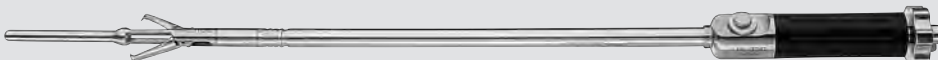


## For Laparoscopic Supracervical Hysterectomy (LASH)

The MANGESHIKAR uterine manipulator can also be used for the LASH procedure without the sheath with cap.

## Special Features:

- Several uterine inserts for various uterus lengths
- Reusable





## MANGESHIKAR Uterine Manipulator

### Special Features:

- Five different caps (three included in the set and two optional)
- Eight different inserts
- Fully autoclavable



- 26168 J MANGESHIKAR Uterine Manipulator including:
- Handle**
  - Outer Sheath**
  - Forceps Attachment**
  - Cap**, diameter 28 mm, length 66 mm
  - Cap**, diameter 33 mm, length 66 mm
  - Cap**, diameter 38 mm, length 66 mm
  - Working Insert**, diameter 8 mm, length 50 mm
  - Working Insert**, diameter 8 mm, length 60 mm
  - Working Insert**, diameter 8 mm, length 70 mm
  - Working Insert**, diameter 8 mm, length 80 mm
  - Working Insert**, diameter 8 mm, length 90 mm
  - Working Insert**, diameter 8 mm, length 100 mm
  - Working Insert**, diameter 8 mm, length 110 mm
  - Working Insert**, diameter 8 mm, length 120 mm
  - Manipulator Sheath**
  - 5x **Seal**
  - 5x **Silicone Leaflet Washers**

### Recommended Accessories

- 26168 JD **Cap**, diameter 23 mm, length 66 mm
- 26168 JH **Cap**, diameter 43 mm, length 66 mm
- 26168 JS **Working Insert**, for chromopertubation, diameter 8 mm, length 50 mm
- 26168 JT **Working Insert**, for chromopertubation, diameter 8 mm, length 60 mm
- 26168 JR **Handle**, screw-on type
- 26168 JU **Working Insert**, curved, diameter 8 mm, length 50 mm
- 26168 JW **Working Insert**, curved, diameter 8 mm, length 60 mm
- 26168 JX **Working Insert**, curved, diameter 8 mm, length 70 mm
- 26168 JY **Forceps Attachment**, for curved Inserts

**Components/Spare Parts** see chapter 18

## Description

### TINTARA Uterine Manipulator for Laparoscopic Surgery and Perturbation

Laparoscopic adnexal surgery and diagnostic laparoscopy are the most frequently performed procedures in gynecologic surgery. The use of a uterine manipulator is recommended for both purposes.

The TINTARA uterine manipulator was designed for surgical procedures on uteri of various sizes and for chromoperturbation. The tube adaptor at the pivoting head prevents dye leakage from any rotating joints.

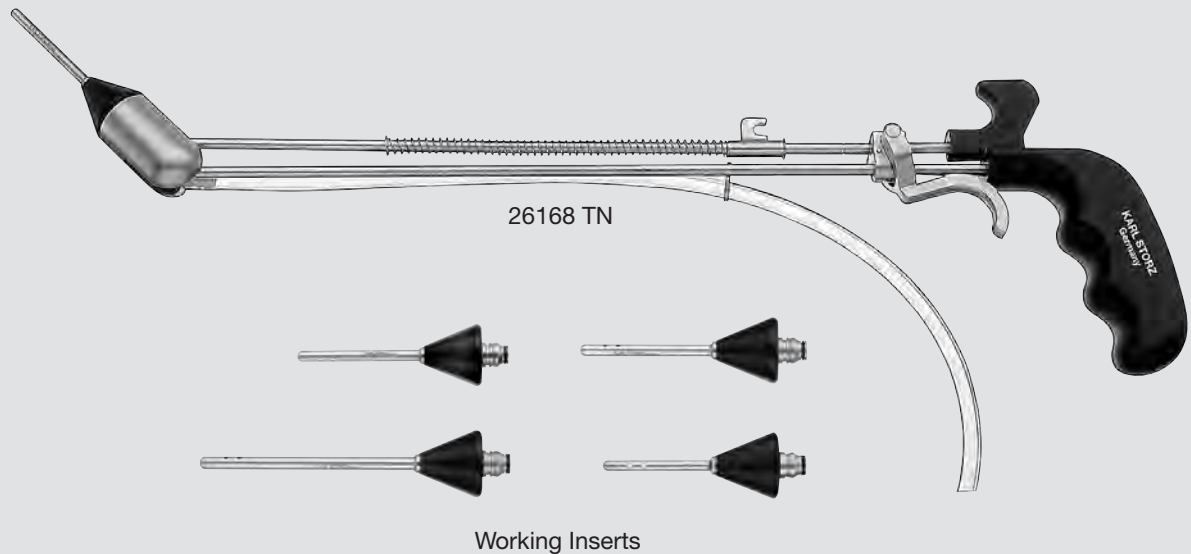
*H. TINTARA, M. D.,  
Songkhla, Thailand*

## Special Features:

### For laparoscopic surgery and perturbation

- Enables anteflexion and lateral deviation of the uterus inside the pelvis during the course of gynecological laparoscopic surgery
- Anteflexion of the uterus up to 90°, as well as elevation of the uterus to identify the posterior vaginal fornix and posterior vaginal wall
- Interchangeable intrauterine inserts, suitable for various uterine sizes
- Graduation marks indicate the uterine angulation
- Retains the cervix via spring-action fixation for the tenaculum
- The locking mechanism makes it easy to operate; pulling the lever locks the manipulator and pushing the lever back unlocks it

# TINTARA Uterine Manipulator



- 26168 TN TINTARA Uterine Manipulator  
including:  
**Handle**  
**Working Insert**, diameter 4 mm, length 50 mm  
**Working Insert**, diameter 4.5 mm, length 50 mm  
**Working Insert**, diameter 4.8 mm, length 80 mm  
**Tube Support**

## Recommended Accessories

- 26168 TNF **Working Insert**, diameter 4 mm, length 40 mm  
26168 TNG **Working Insert**, diameter 8 mm, length 50 mm  
26168 TNH **Working Insert**, curved, diameter 8 mm, length 80 mm  
26168 TNK **Working Insert**, curved, diameter 10 mm, length 100 mm  
26168 TNS **Pertubation Tube**, with LUER-Lock Tube Connector 600008  
26168 V **Tenaculum Forceps**, length 22 cm

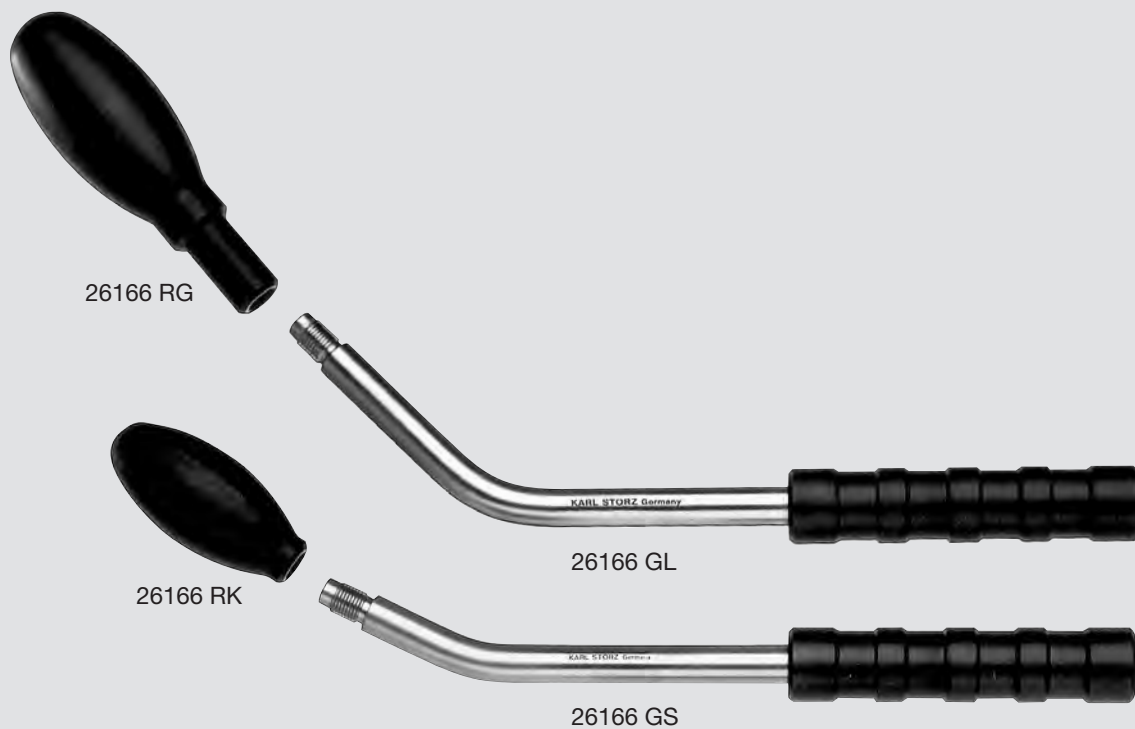
**Components/Spare Parts** see chapter 18

# Rectal Plugs

CLERMONT-FERRAND Model

The rectal plugs can be useful for improved visualization or mobilization of the bowel. In the case of deeply infiltrating endometriosis in the rectosigmoid or the recto-vaginal septum, for example, the correct

display of the bowel is of particular importance so that endometriotic lesions as well as neighboring structures can be laparoscopically displayed or delineated.



- 26166 RG **Rectal Plug**, large, diameter 35 mm, length 71 mm
- 26166 RK **Rectal Plug**, small, diameter 30 mm, length 62 mm
- 26166 GL **Handle**, for rectal plugs, **strongly curved**
- 26166 GS **Handle**, for rectal plugs, **slightly curved**

## C.C.L. Vaginal Extractor

### Description

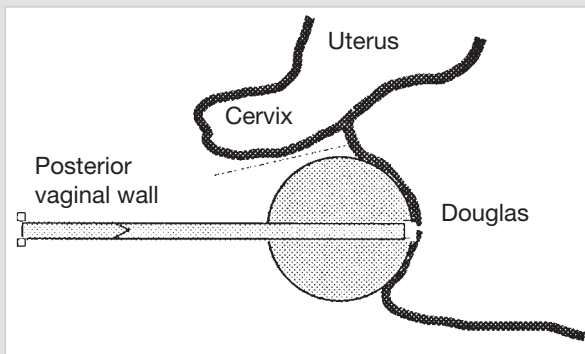
Progress in laparoscopic surgery has been hindered by difficulties encountered during the extraction of tissue masses exceeding the diameter of conventionally used trocars. Transabdominal methods require larger incisions while transvaginal extractions are associated with CO<sub>2</sub> leakage. These technical difficulties are overcome by the C.C.L. vaginal extractor which enables removal of tissue masses as large as 6 to 7 cm without loss of gas. The C.C.L. vaginal extractor consists of a trocar fitted with a ball-shaped head at one extremity.

The round surface of the sphere adapts well into the posterior vaginal fornix and has a midline horizontal groove on one side that guides the surgeon during the intra-abdominal peritoneal incision.

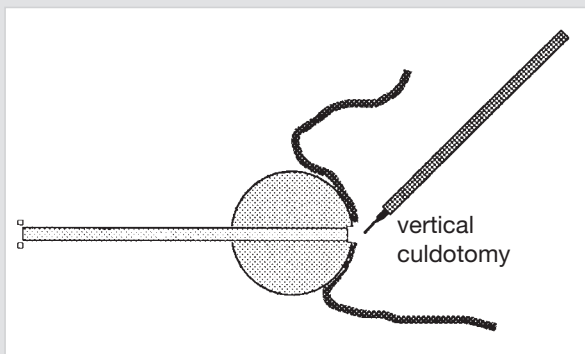
After culdotomy is performed, tissue is seized with a grasping forceps introduced through the trocar. Tissue masses may be placed in a tied plastic pouch prior to extraction in order to prevent dissemination and to facilitate passage through the incision. The entire procedure is safe because of continuous endoscopic control. This procedure has been used for the extraction of ovaries, organic cysts, tubal pregnancies and myomas, and takes an average of 10 to 15 minutes. No postoperative complications have been observed.

*S. SPUHLER, M. D. and E. CHARDONNENS, M. D.,  
Lausanne, Switzerland*

### Procedure



**Fig. 1:** Introduction of the C.C.L. extractor into the posterior vaginal fornix



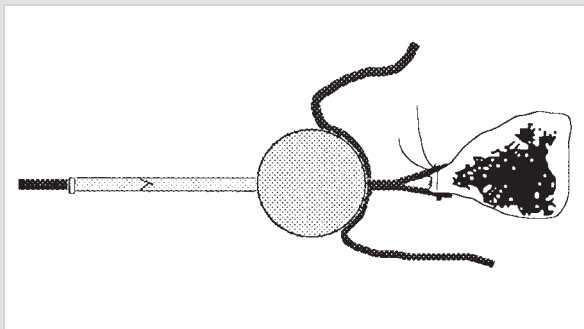
**Fig. 2:** Culdotomy by unipolar or bipolar section

### Step 1:

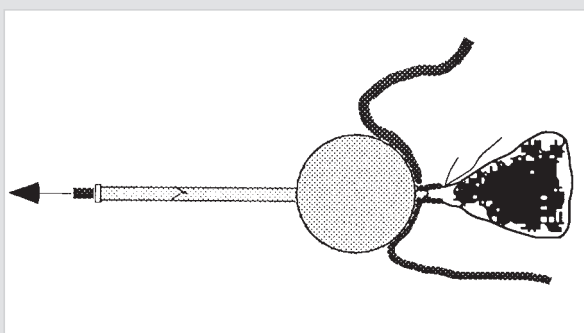
The C.C.L. extractor is introduced into the posterior vaginal fornix without the grasping forceps. The extractor has to be directed medially and posteriorly for correct placement. This step is performed by an assistant positioned between the patient's legs which are positioned at a 90° angle. The location of the C.C.L. sphere has to be between the uterosacral ligaments. This is visually controlled through the laparoscope.

### Step 2:

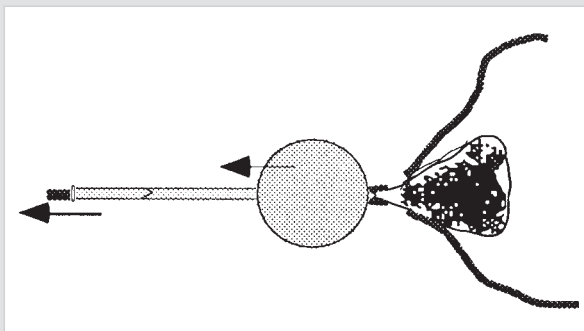
Once the sphere has been correctly applied against the posterior vaginal fornix, a horizontal incision is performed endoscopically at the level of the Douglas pouch. Unipolar techniques, bipolar techniques or CO<sub>2</sub> LASER can be used. A second assistant aids visualization by displaying the rectum and the sigmoid colon.



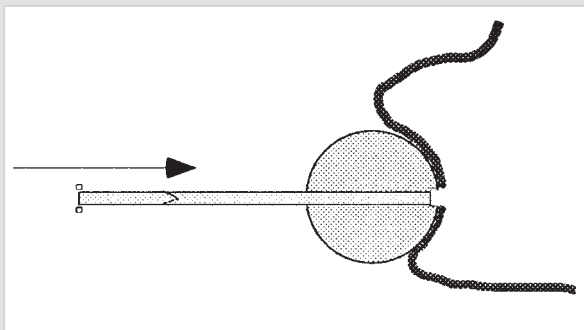
**Fig. 3:** The grasping forceps are introduced through the C.C.L. extractor.



**Fig. 4:** The grasping forceps are withdrawn.



**Fig. 5:** The tissue specimen is extracted together with the entire C.C.L. extractor unit.



**Fig. 6:** The C.C.L. extractor without the extracting forceps is once again introduced, preventing the escape of CO<sub>2</sub>.

**Step 3:**

The grasping forceps are passed through the C.C.L. extractor previously placed in the vagina. The excised tissue is grasped between the tongs of the forceps under endoscopic control. This can be placed into an extraction bag in order to avoid the risk of parietal contamination.

**Step 4:**

The grasping forceps are withdrawn until the mass is brought into contact with the C.C.L. sphere.

**Step 5:**

In order to take advantage of the large culdotomic incision, as compared to the trocar diameter, the tissue specimen is extracted in one movement together with the entire C.C.L. extractor unit. This procedure allows the removal of large tissue fragments.

**Step 6:**

After removal of tissue has been performed, the C.C.L. extractor without the extracting forceps is once again introduced into the posterior vaginal fornix under endoscopic vision in order to prevent the escape of CO<sub>2</sub> during the rest of the operation (hemostasis, revision, irrigation etc.).

# C.C.L. Vaginal Extractors



30103 SG

30103 SG **C.C.L. Vaginal Extractor**, diameter 11 mm,  
with insulated ball-shaped sphere,  
diameter 40 mm

including:

**Automatic Valve**, size 11 mm

**Cannula**

30103 SK **Same**, diameter 35 mm



33532 FS



33532 FS

**CLICK'line®-Claw Forceps**, rotating,  
dismantling, without connector pin for  
unipolar coagulation, with LUER-Lock  
irrigation connector for cleaning, single  
action jaws, 2 x 3 teeth, size 10 mm,  
length 36 cm

including:

**Metal Handle**, with ratchet

**Outer Sheath**, insulated

**Forceps Insert**

**Components/Spare Parts** see chapter 18

## Description

Supracervical hysterectomy is gaining increasing importance as it offers the patient a wide range of benefits:

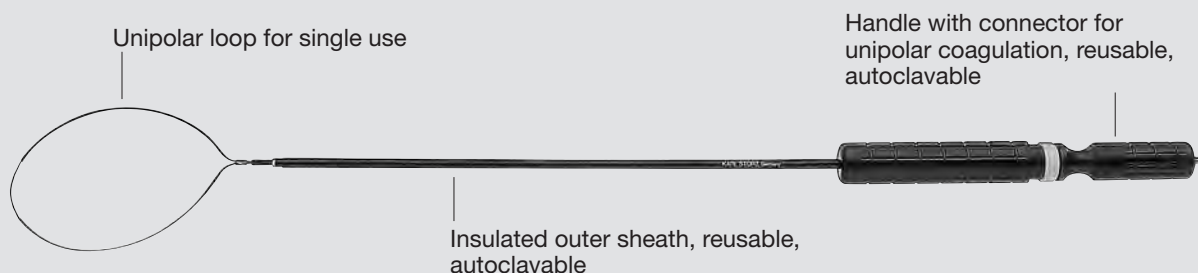
- Preservation of anatomical structures (vagina, portio, uterosacral ligaments)
- Organ-preserving measures (only diseased tissue is removed)

The BRUCKER/MESSROGHLI SUPRALOOP was developed to enable this procedure to be performed more effectively by allowing faster, safer supracervical removal of the uterus.

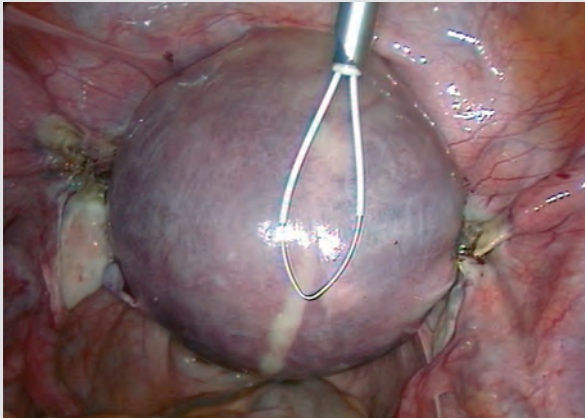
## Benefits for the user:

- Simplest, safest operation in laparoscopic supracervical hysterectomy
- Compared to unipolar hooks: Reduction of operating times thanks to quick separation of the uterus from the cervix
- Additional cost savings thanks to the reusable handle and outer sheath; both parts are autoclavable
- Only the loop itself must be changed after each intervention

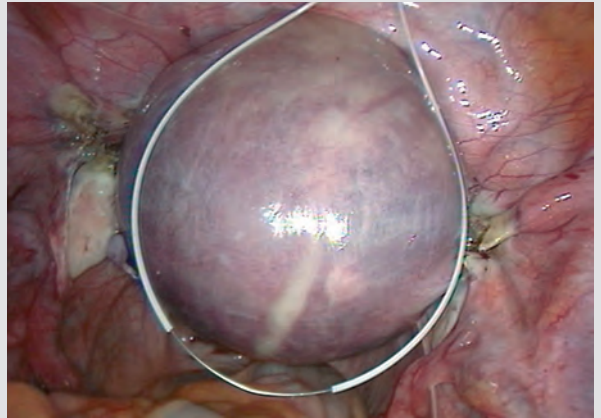
*Dr. S. Brucker,  
Universitätsfrauenklinik Tübingen, Germany*



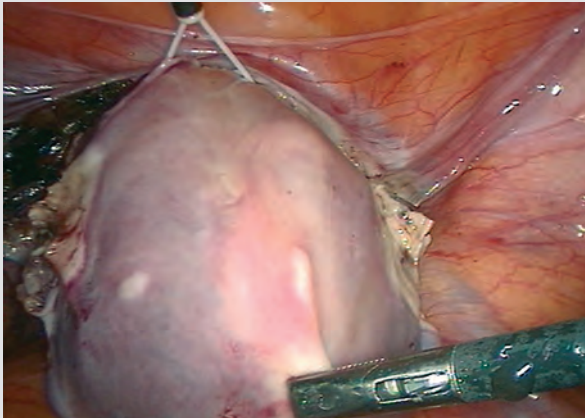




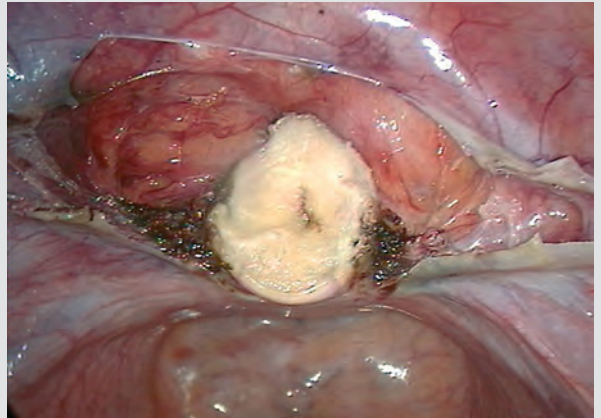
*The SUPRALOOP is inserted into the abdominal cavity via a 6 mm trocar.*



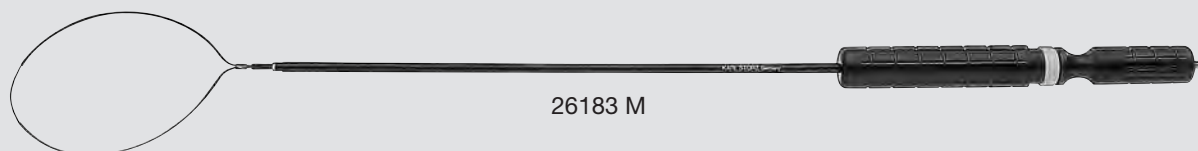
*The loop is then positioned around the uterus,...*



*...after carefully checking the correct positioning, the loop is retracted...*



*...and the uterus is removed with unipolar current.*



26183 M BRUCKER/MESSROGHLI **SUPRALOOP**,  
size 5 mm, length 30 cm  
including:  
**SUPRALOOP Handle**  
**SUPRALOOP Outer Sheath**  
**Spare Loop for SUPRALOOP**

26183 MD **Spare Loop for SUPRALOOP**, unipolar, size 200 x  
150 mm, unsterile, for single use, for use with  
Handle 26183 MA and Outer Sheath 26183 MB



#### Recommended Accessories

26005 M **Unipolar High Frequency Cord**, with 5 mm plug,  
length 300 cm, for use with AUTOCON® III and  
AUTOCON® II, compatible with Erbe type ICC and  
Erbe VIO 301

26006 M **Unipolar High Frequency Cord**, with 8 mm plug,  
length 300 cm, for use with AUTOCON® III and  
AUTOCON® II, compatible with Valleylab models

**Components/Spare Parts** see chapter 18

# SupraLoop Bipolar Loop

## Description

Supracervical hysterectomy is gaining increasing importance as it offers the patient a wide range of benefits:

- Preservation of anatomical structures (vagina, portio, uterosacral ligaments)
- Organ-preserving measures (only diseased tissue is removed)

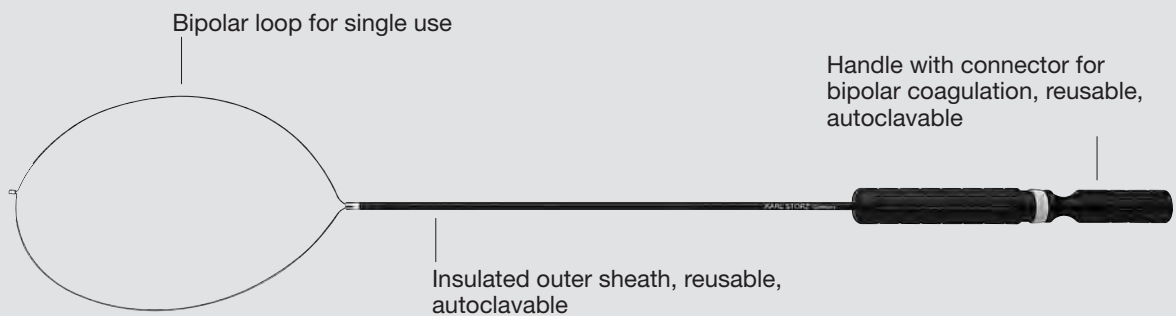
Special instruments were developed to enable this procedure to be performed more effectively by allowing fast and safe removal of the uterus.

## Benefits for the user:

- Easy and safe application
- Compared to unipolar hooks: Reduction of operating time due to quick separation of the uterus from the cervix

- Only the loop itself needs to be exchanged after each intervention

*Dr. S. Brucker,  
Universitätsfrauenklinik Tübingen, Germany*



# SupraLoop Bipolar Loop



26183 N **SUPRALOOP Set**, bipolar, size 5 mm, length 30 cm  
including:  
**SUPRALOOP Handle**  
**SUPRALOOP Outer Sheath**  
**Spare Loop for SUPRALOOP**

26183 ND **Spare Loop for SUPRALOOP**, bipolar, size  
200 x 150 mm, unsterile, for single use, for  
use with Handle 26183 NA and Outer Sheath  
26183 MB



## Recommended Accessories

26176 LE **Bipolar High Frequency Cord**, length 300 cm,  
for use with AUTOCON® III and AUTOCON® II,  
compatible with Erbe-Coagulator, T and ICC  
series

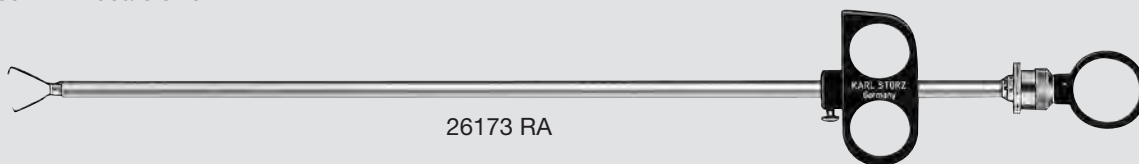
**Components/Spare Parts** see chapter 18

## Ring Applicators

for use with 2 silastic rings

### Multiple puncture approach

Operating instruments,  
for use with trocars size 7 mm

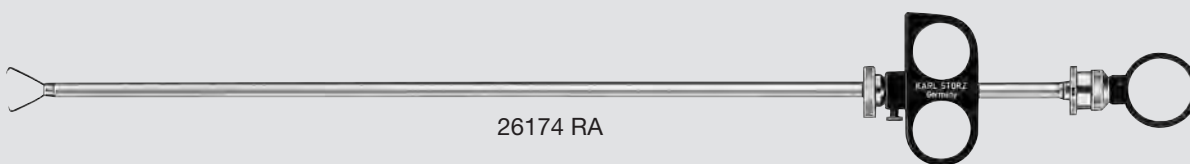


26173 RA

26173 RA **Ring Applicator**, may be fitted with 2 silastic rings

### Single puncture approach

Operating instruments,  
for use with Telescopes 26034 AA and 26038 AA with inbuilt working channel

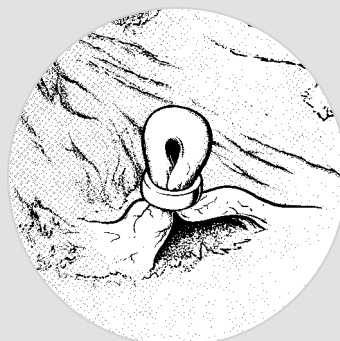
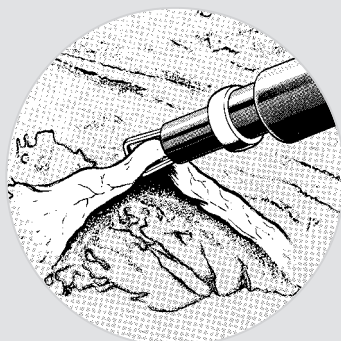


26174 RA

26174 RA **Ring Applicator**, may be fitted with 2 silastic rings

26173 R **Silastic Rings**, for ligation, autoclavable, package of 50

26173 RSY **Silastic Rings**, for ligation, autoclavable, package of 8



8-925

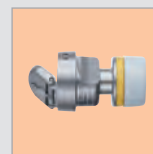
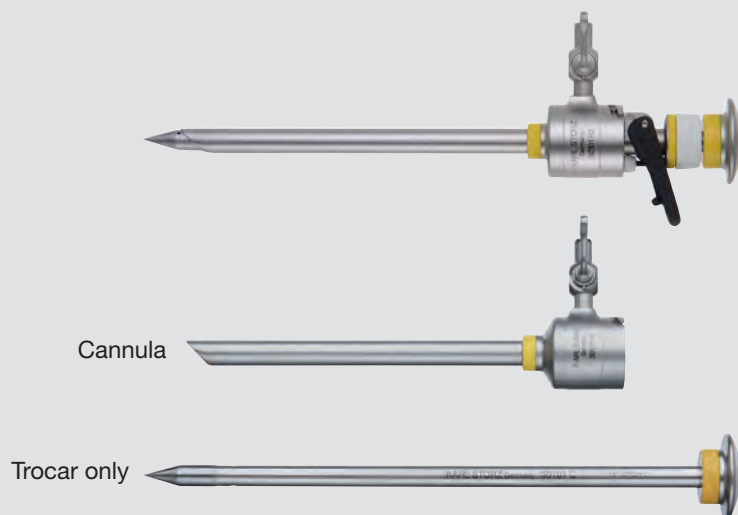
**Trocars size 7 mm** see page 338

**Components/Spare Parts** see chapter 18

# Trocars

Size 7 mm



For use with Ring Applicators



Multifunctional valve



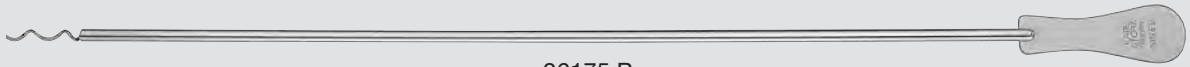
Automatic valve

Size:		7 mm	
Working length:		10.5 cm	10.5 cm
Color code:		yellow	yellow
		Multifunctional Valve	Automatic Valve
	<b>Trocar, with conical point</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Valve</b>	<b>30101 MC</b>  30101 H2 30101 C 30101 M1	<b>30101 AC</b>  30101 H2 30101 C 30101 A1
	<b>Trocar, with pyramidal tip</b> including: <b>Cannula</b> <b>Trocar only</b> <b>Valve</b>	<b>30101 MP</b>  30101 H2 30101 P 30101 M1	<b>30101 AP</b>  30101 H2 30101 P 30101 A1

HEINKEL-SEMM **Dilation Set** see chapter 3, page 74  
**Accessories for Trocars** see chapter 3, pages 72-73  
**Ring Applicators** see page 337  
**Components/Spare Parts** see chapter 18

# Myoma Fixation Instruments

Operating instruments,  
for use with trocars size 6 or 11 mm



26175 B



26175 B

**Myoma Fixation Instrument**, with spiral  
tip, size 5 mm

26175 BA

**Same**, size 10 mm



26175 BL



26175 BL

**Myoma Fixation Instrument**, screw-  
shaped, size 5 mm

# Instrument Set for Laparoscopically Assisted Creation of a Neovagina

BRUCKER/WALLWIENER Recommended Set

**STORZ**  
KARL STORZ — ENDOSKOPE

## Description

Laparoscopy-assisted neovaginoplasty for the operative correction of vaginal aplasia, especially in the case of Mayer-Rokitansky-Küster-Hauser syndrome and in certain cases of testicular feminization, could become a standard procedure thanks to the benefits offered by minimally invasive methods.

The Mayer-Rokitansky-Küster-Hauser syndrome, with an incidence of approx. 1:5000 in female neonates, is caused by inhibition malformation that results in aplasia of the uterus or vagina. In the majority of cases, primary amenorrhea is the first indication of such malformations. Owing to the fully developed, functional ovaries, development of the secondary sexual characteristics is normal and therefore leads to a normal female phenotype.

The surgical creation of a neovagina is carried out if the woman expresses a wish to be able to have intercourse. Should this be the case, it is essential for the surgeon to have a profound knowledge of the anatomical changes associated with the different types of aplasia syndrome. Mayer-Rokitansky-Küster-Hauser syndrome is accompanied in approx. 30% of cases by malformations of the kidneys.

In order to achieve optimal operative results with the shortest possible operation and recuperation times and to minimize technical and surgical complications, application instruments, including a mechanical traction device, have been developed and optimized for laparoscopy-assisted neovagina creation.

## Operative technique

The operative principle is based on stretching the vaginal membrane intra-abdominally. Pressure is exerted continuously on the vaginal dimple via a pluggable segmented dummy connected to two threads to form a neovagina within a matter of days. Using the Wallwiener vagino-abdominal perforation method, the two threads are drawn intra-abdominally from the vaginal dimple using the straight single-prong thread guide, by means of which the vaginal dimple is perforated and then pulled outside the abdominal wall with a large curved thread guide that is positioned retroperitoneally from cranial to caudal. Outside the abdominal wall, the threads are held taut by a traction device and tightened daily so that a constant stretching pressure is exerted on the vaginal dimple. The vesicorectal tunnel does not have to be dissected laparoscopically.

## Applicators

The following applicators are part of the set:

- Straight thread guide for vagino-abdominal perforation according to WALLWIENER; curved thread guides in two different versions with various curvatures for peritonealization
- Pluggable segmented dummy

This modified curvature also facilitates the positioning of the traction device as cranially as possible while allowing the execution of a complete peritonealization. Positioning the device as far toward cranial as possible enables a precisely cranioventral tensile direction, thus ensuring greatest dilation potential of the neovagina as regards maximizing length.

This correct position prevents an excessively ventral tensile direction which tends to result in too short neovaginas or even bladder lesions due to luxation of the pluggable segmented dummy intravaginally.

Alongside optimal imaging, intra-laparoscopic simultaneous cystoscopy for the purpose of diaphanoscopy-laparoscopic visualization of the exact localization of the bladder site before the vaginal perforation of the rectovaginal septum is just as essential as ruling out, by means of cystoscopy, a bladder and ureter lesion, or the intraoperative introduction of suprapubic urinary drainage to prevent urethral necrosis.

The rectum dilator, also recommended for use with the set (Clermont-Ferrand model), serves to distance the rectum from the rectovaginal septum, base of the bladder and path of the ureters, if digital distancing is insufficient.

A postoperative dummy is inserted into the vagina immediately after removing the traction device and pluggable segmented dummy. It must be worn for several months post-surgery in conjunction with copious applications of estrogen-containing cream. It is to be worn continuously in the first 3 – 4 weeks after the operation and thereafter worn at least at night. Initial coitus can take place as soon as 3 weeks after surgery.

It should be noted that failure of the first surgical intervention diminishes the chances of the expected or anticipated results. This must be considered in the light of the great importance the neovagina and its proper functioning undoubtedly bears for the woman.

In principle, this surgical technique is a complex surgical-endoscopic procedure and requires the surgical team to have the corresponding skills.

*Prof. Dr. med. D. WALLWIENER and S. BRUCKER, M.D.  
Tübingen, Germany*

7-11



# Instrument Set for Laparoscopically Assisted Creation of a Neovagina

BRUCKER/WALLWIENER Recommended Set

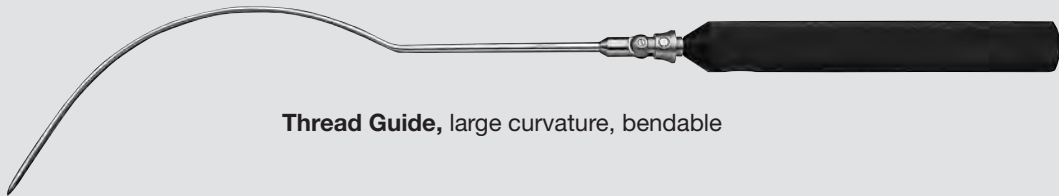
26188 NB BRUCKER/WALLWIENER Instrument Set for Laparoscopically Assisted Creation of a Neovagina including:



**Traction Device**



**Thread Guide, straight**



**Thread Guide, large curvature, bendable**



**Outer Sheath, for use with Thread Guide 26188 FT**



**Pluggable Segmented Dummy**



**Distension Dummy, size 2.4 x 11 cm**



**Cleaning Brush, round, rigid, outer diameter 2.5 mm, for working channel diameter 2 – 2.4 mm, length 35 cm**

**Components/Spare Parts** see chapter 18

# Instrument Set for Laparoscopically Assisted Creation of a Neovagina

BRUCKER/WALLWIENER Recommended Set

## Recommended Accessories



26166 RK

26166 RG **Rectal Plug**, large, diameter 35 mm, length 71 mm

26166 RK **Rectal Plug**, small, diameter 30 mm, length 62 mm



26166 GS

26166 GL **Handle**, for rectal plugs, **strongly curved**

26166 GS **Same**, **slightly curved**

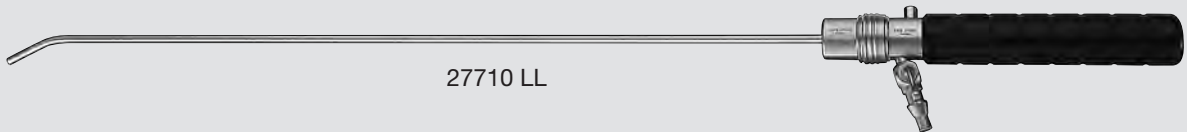


## ACCESSORIES FOR LAPAROSCOPY IN UROLOGY

# LASER Applicator for Laparoscopy

## Special Features:

- Integrated suction channel
- For LASER fibers with a diameter of 0.7 – 0.9 mm



27710 LL

27710 LL

**LASER Applicator**, for manipulation of the LASER fiber

including:

**Handle**

**Outer Sheath**

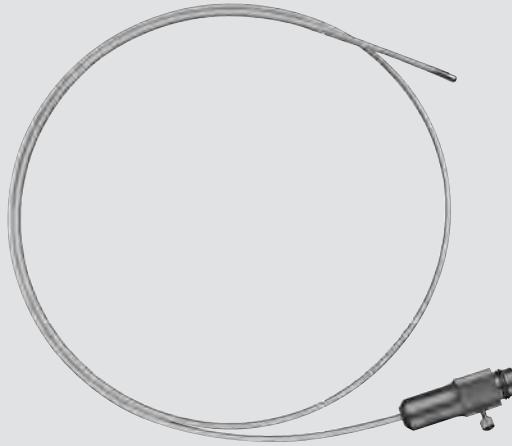
**Inner Sheath**, unsterile, for single use, package of 5

**Components/Spare Parts** see chapter 18

## Fiber Optic Ureter Probe

The cold light fibers are arranged in such a way that there is a band of light every cm along its length.

The illuminating ureter probe is connected to a cold light fountain and positioned, with the aid of a cystoscope, before or during surgery.



496 U

496 U

**Fiber Optic Ureter Probe, 7 Fr.**

### LED Battery Light Source – “Power of Light”

The LED battery light source from KARL STORZ for rigid endoscopes and fiberscopes is watertight and completely immersible for cleaning and disinfection

and can be sterilized with ETO, FO gas, Steris® and Sterrad®.

#### Special Features:

- 50,000 lux LED light source
- No special batteries needed – can be purchased at any store
- LED service life of more than 50,000 hours



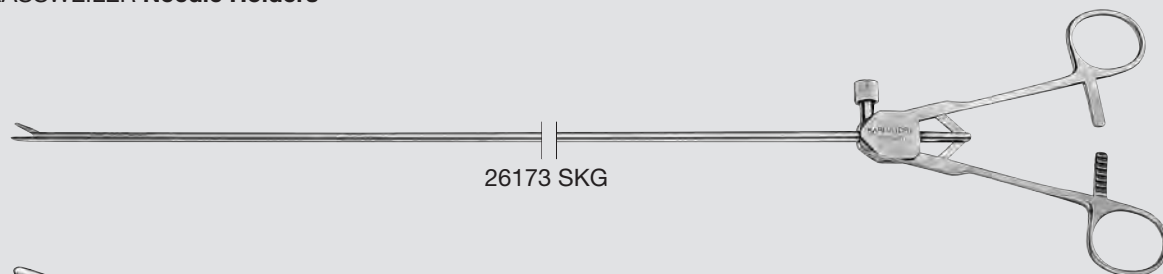
11301 D3

11301 D3

**Battery Light Source LED for Endoscopes**, with coarse thread, boost mode for temporary increase in brightness, burning time > 120 min, weight approx. 78 g, for use with KARL STORZ endoscopes

Size 5 mm

### RASSWEILER Needle Holders



26173 SKG RASSWEILER **Needle Holder**, straight jaws, axial ring handle with ratchet, size 5 mm, length 33 cm



26173 SKL RASSWEILER **Needle Holder**, convex/concave, slender jaws, curved to left, axial ring handle with ratchet, size 5 mm, length 33 cm

**Please note:**

Using the needle holders with a needle larger than recommended may result in mechanical damage to the instrument.

**Components/Spare Parts** see chapter 18







# Units and Accessories for Laparoscopy



- **INSUFFLATORS AND SMOKE SUCTION CONTROL**
- **SUCTION AND IRRIGATION SYSTEMS**
- **HIGH FREQUENCY SURGERY UNITS**

The units manufactured by KARL STORZ combine long-lasting precision mechanics with modern micro-electronic programmable controls. At KARL STORZ, a special emphasis is placed on user and patient safety. The quality assurance system of KARL STORZ is certified in accordance with the requirements of ISO 9001/EN 46001. It guarantees constant quality testing in the selection of materials and components. At the end of each manufacturing process, tests are carried out with automatic measuring and testing systems developed specially for this purpose. The results are recorded and logged. That gives each device a distinct “fingerprint” that can be checked at any time before and after it is delivered to the customer.

The standardized, modular design of KARL STORZ units was developed based on extensive ergonomic studies and is conceived for ease of care and cleaning and user-friendly practice, as well as to meet the demands of the special hygienic standards required in surgery. Clearly laid out adjacent function keys and displays are user-friendly and make it easier to constantly monitor actual and set parameters. Acoustic and visual warning signals also assist the user. The settings can be changed manually at any time. Automatic microelectronic control systems relieve surgeons in their work and lets them fully concentrate on medical procedures.

The overall KARL STORZ product line includes the following categories of units with accessories:

- **Insufflators and Smoke Suction Control**
- **Suction and Irrigation Systems**
- **Motor Systems**
- **HF Surgery Units**

INSUFFLATORS AND  
 SMOKE GAS SUCTION CONTROL

SUCTION AND IRRIGATION SYSTEMS

HIGH FREQUENCY SURGERY UNITS





## ■ INSUFFLATORS

ENDOFLATOR® 40 SCB

ENDOFLATOR® 50 SCB

## ■ SMOKE SUCTION CONTROL

S-PILOT®

## ■ INSUFFLATORS FOR FLEXIBLE ENDOSCOPES

COLD LIGHT FOUNTAIN CO<sub>2</sub> MBI LED  
with integrated insufflation pump

## Special Features:

- Flow rate up to 40 l/min with KARL STORZ HICAP® trocars
- With two insufflation modes for HIGH-FLOW and PEDIATRIC applications
- “PEDIATRICS” mode: Small adjustment increments in the lower output range as well as safety limits for pressure (max. 15 mmHg) and flow (max. 15 l/min)
- SECUVENT® safety system for reducing any intracavitary overpressure
- Communication with IMAGE1 S™ for control from the sterile field



# ENDOFLATOR® 40 SCB

Recommended Standard Set Configuration



UI 400S1 **ENDOFLATOR® 40 SCB**, set with integrated SCB module, power supply 100 – 240 VAC, 50/60 Hz including:

- SCB Connecting Cable**, length 100 cm
- Universal Wrench**
- Insufflation Tubing Set**, with gas filter, sterile, for single use, package of 10



### Specifications:

Operating mode	- PEDIATRIC mode - HIGH FLOW mode
Gas flow	- PEDIATRIC mode: 0.1 – 15 l/min - HIGH FLOW mode: 1 – 40 l/min
Pressure	- PEDIATRIC mode: 1 – 15 mmHg - HIGH FLOW mode: 1 – 30 mmHg
Gas	CO <sub>2</sub>
Measuring/control system	Electronic
Parameter display	- Set pressure - Actual pressure (intraabdominal) - Gas flow - Gas consumption: 0 – 999 l - Status display gas consumption

SECUVENT® safety system	•
Power supply	100 – 240 VAC, 50/60 Hz
Dimensions w x h x d	305 x 164 x 315 mm
Weight	7.4 kg
Certified to	IEC 60601-1

5-161



**Optional Accessories for ENDOFLATOR® 40 SCB** see pages U 12-13  
**Components/Spare Parts** see chapter 18

# ENDOFLATOR® 40 SCB

System Components

INSUFFLATORS AND SMOKE GAS SUCTION CONTROL

High Pressure Tube,  
Pin-Index connector



20 4000 22 length 55 cm  
20 4000 28 length 102 cm

High Pressure Tube,  
German connector



20 4000 21 length 55 cm  
20 4000 27 length 102 cm

High Pressure Tube,  
ISO connector



20 4002 22 length 102 cm

Low Pressure Tube,  
for central CO<sub>2</sub> gas supply



UI 001, length 150 cm  
UI 002, length 300 cm  
UI 003, length 600 cm

UNIT SIDE

PATIENT SIDE

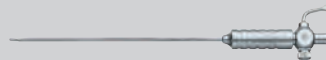


Insufflation Tubing Set



031200-01\*

VERESS Pneumoperitoneum Cannula



26120 J

HICAP® Trocar



30103 HP



Further Insufflation Tubing Sets and Filters see pages U 12-13  
Further VERESS Needles and Trocars see chapter 3

## ENDOFLATOR® 50 SCB

### Special Features:

- Flow rate up to 50 l/min with KARL STORZ HICAP® trocars
- Gas heating to body temperature
- With two insufflation modes for HIGH-FLOW and PEDIATRIC applications
- Can be combined with S-PILOT® - the solution for your surgical smoke management
- “PEDIATRICS” mode: Small adjustment increments in the lower output range as well as safety limits for pressure (max. 15 mmHg) and flow (max. 15 l/min)
- SECUVENT® safety system for reducing any intracavitary overpressure
- Communication with IMAGE1 S™ for control from the sterile field



**ENDOFLATOR® 50 SCB**  
with speed-flow insufflation (50 l/min),  
Recommended Standard Set Configuration



UI 500S1 **ENDOFLATOR® 50 SCB**, with integrated SCB module, power supply 100 – 240 VAC, 50/60 Hz including:  
**SCB Connecting Cable**, length 100 cm  
**Universal Wrench**  
**Heated Insufflation Tubing Set**, with gas filter, sterile, for single use, package of 10



**Specifications:**

Operating mode	- PEDIATRIC mode - HIGH FLOW mode
Gas flow	- PEDIATRIC mode: 0.1 – 15 l/min - HIGH FLOW mode: 1 – 50 l/min
Pressure	- PEDIATRIC mode: 1 – 15 mmHg - HIGH FLOW mode: 1 – 30 mmHg
Gas	CO <sub>2</sub>
Measuring/control system	Electronic
Parameter display	- Set pressure - Actual pressure (intraabdominal) - Gas flow - Gas consumption: 0-999 l - Status display gas consumption

SECUVENT® safety system	●
Heating element	●
Power supply	100 – 240 VAC, 50/60 Hz
Dimensions w x h x d	305 x 164 x 315 mm
Weight	7.8 kg
Certified to	IEC 60601-1



**Optional Accessories for ENDOFLATOR® 50 SCB** see pages U 12-13  
**Components/Spare Parts** see chapter 18



# ENDOFLATOR® 50 SCB

System Components

High Pressure Tube,  
Pin-Index connector



20 4000 22 length 55 cm  
20 4000 28 length 102 cm

High Pressure Tube,  
German connector



20 4000 21 length 55 cm  
20 4000 27 length 102 cm

High Pressure Tube,  
ISO connector



20 4002 22 length 102 cm

Low Pressure Tube,  
for central CO<sub>2</sub> gas supply



UI 001, length 150 cm  
UI 002, length 300 cm  
UI 003, length 600 cm

UNIT SIDE

PATIENT SIDE



Heatable Insufflation Tubing Set



031210-01\*

VERESS Pneumoperitoneum Needle



26120 J

HICAP® Trocar



30103 HP

5-161













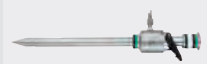
Further Insufflation Tubing Sets and Filters see pages U 12-13

Further VERESS Needles and Trocars see chapter 3

# Optional Accessories

for Insufflators

INSUFFLATORS AND SMOKE GAS SUCTION CONTROL







			for use with		
			ENDOFLATOR® 40 SCB UI 400S1	ENDOFLATOR® 50 SCB UI 500S1	
	031200-10*	<b>Insufflation Tubing Set with Gas Filter</b> , length 300 cm, hydrophobic on both sides, sterile, for single use, package of 10, for use with insufflation units with a maximum gas flow of 50 l/min (Electronic ENDOFLATOR®, THERMOFLATOR®)	STERILE 	•	•
	031210-10*	<b>Same</b> , heatable	STERILE 	-	•
	031122-25	<b>Gas Filter</b> , with ISO connectors, hydrophobic on both sides, sterile, for single use, package of 25, for use with insufflation units with a maximum gas flow of 50 l/min (Electronic ENDOFLATOR®, THERMOFLATOR®, ENDOFLATOR® 40 and ENDOFLATOR® 50)	STERILE 	•	•
	UI 004	<b>Insufflation Tube</b> , sterilizable, inner diameter 9 mm, length 250 cm		•	•
	031622-10	<b>Insufflation Tubing Set with Gas Filter</b> , length 400 cm, two patient-side tube connections, hydrophobic on both sides, sterile, for single use, package of 10, for use with insufflation units with a maximum gas flow of 30 l/min (Electronic ENDOFLATOR®, THERMOFLATOR®, ENDOFLATOR® 40 and ENDOFLATOR® 50)	STERILE 	•	•
	26120 J	VERESS <b>Pneumoperitoneum Needle</b> , with spring-loaded blunt inner cannula, LUER-Lock, <b>autoclavable</b> , diameter 2.1 mm, length 10 cm		•	•
	30103 HP	<b>HICAP® Trocar</b> , size 11 mm, color code: green		•	•



Components/Spare Parts see chapter 18

# Optional Accessories

for Insufflators

			for use with	
			<i>ENDOFLATOR® 40 SCB UI 400S1</i>	<i>ENDOFLATOR® 50 SCB UI 500S1</i>
	20 4000 21	<b>CO<sub>2</sub> High Pressure Tube</b> , American connection/German connection, length 55 cm	●	●
	20 4000 27	<b>Same</b> , length 102 cm		
	20 4000 22	<b>CO<sub>2</sub> High Pressure Tube</b> , American connection/Pin-Index connection, length 55 cm	●	●
	20 4000 28	<b>Same</b> , length 102 cm		
	20 4002 22	<b>CO<sub>2</sub> High Pressure Tube</b> , American connection/ISO connection, length 102 cm	●	●
	UI 001	<b>Low Pressure Tube</b> , for the central CO <sub>2</sub> gas supply, length 150 cm	●	●
	UI 002	<b>Same</b> , length 300 cm		
	UI 003	<b>Same</b> , length 600 cm		
	UI 005	<b>Bottle Holder</b> , fold-away, holder for CO <sub>2</sub> gas bottles 1000 ml, including attachments	●	●
	20 0903 70	<b>SCB Connecting Cable</b> , length 60 cm	●	●
	20 0900 70	<b>Same</b> , length 30 cm		

# S-PILOT®

The solution for smoke evacuation

## Special Features:

- Regulated suction and filtering of surgical plume during endoscopic procedures
  - Thanks to the tube design, the S-PILOT® can be combined with an existing suction pump. An additional vacuum pump for smoke evacuation is not required.
  - Valve opens automatically for smoke evacuation when combined with HF units connected via the SCB interface
  - Individual adjustment of suction power from the sterile field
  - Activation via footswitch or the unit itself
- Individual integration into existing systems possible:
    - Can be combined with pressure-regulated insufflators in a modular manner\*
    - Automatic activation with KARL STORZ AUTOCON® III 400 and other HF units
    - Automatic activation with KARL STORZ UNIDRIVE® S III motor system for suctioning fluid from the shaver attachment
    - Automatic activation with KARL STORZ CALCUSON ultrasonic generator for suctioning fluid






\* **Combinable Insufflators from KARL STORZ** see pages U 9-11 KARL STORZ ENDOFLATOR® 50 with HIGH-FLOW up to 50 l/min and HICAP® trocar

# S-PILOT®

The solution for smoke evacuation,  
Recommended Standard Set Configuration



- UP 501S1 **S-PILOT® Set**, incl. footswitch, power supply 100 – 240 VAC, 50/60 Hz  
including:  
**One-Pedal Footswitch**  
**Tubing Set Suction\***, sterile, for single use, package of 10 STERILE   
**SCB Connecting Cable**, length 100 cm
- UP 501S2 **S-PILOT® Set**, incl. control cable, power supply 100 – 240 VAC, 50/60 Hz  
including:  
**S-PILOT®**  
**Tubing Set Suction\***, sterile, for single use, package of 10 STERILE   
**Connecting Cable**, for use with CALCUSON, ENDOMAT® LC, UNIDRIVE® S III, ENDOMAT® LC or UNIDRIVE® S III and S-PILOT®
- UP 501S3 **S-PILOT® Set**, without footswitch, power supply 100 – 240 VAC, 50/60 Hz  
including:  
**Tubing Set Suction\***, sterile, for single use, package of 10 STERILE   
**SCB Connecting Cable**, length 100 cm

#### Specifications:

Power supply	100 – 240 VAC, 50/60 Hz	Dimensions w x h x d	356 x 55 x 305 mm
Rated power	43 VA	Weight	1.9 kg



**Optional Accessories for S-PILOT®** see page U 17  
**Components/Spare Parts** see chapter 18

UNIT SIDE

PATIENT SIDE



Tubing Set, for smoke, gas and fluid suction



031447-10\*

**For use with**



UI 500








**ENDOFLATOR® 50 SCB**



UI 400

**ENDOFLATOR® 40 SCB**



	<p>031447-10* <b>Tubing Set for Smoke, Gas and Fluid Suction</b>, with connector for second suction tube, sterile, for single use, package of 10, for use with S-PILOT®, for laparoscopy</p>	<p>STERILE </p>
	<p>031111-10* <b>Smoke Evacuation Filter</b>, unsterile, for single use, package of 10</p>	<p></p>
	<p>20 0141 30 <b>One-Pedal Footswitch</b>, digital, one-stage, for irrigation</p>	
	<p>UP 004 <b>S-PILOT® Connecting Cable</b>, diameter 3.5 mm, length 300 cm, for use with AUTOCON® III 400, ConMed System 2450 or 5000</p>	
	<p>UP 005 <b>S-PILOT® Connecting Cable</b>, diameter 2.5 mm, length 300 cm, for use with Valleylab Force Triad or Valleylab Force FX</p>	

# Cold Light Fountain CO<sub>2</sub>MBI® LED SCB

with integrated insufflation pump

## Special Features:

- LED light source with integrated CO<sub>2</sub> insufflator
- Insufflation with regular room air with switchover function for two CO<sub>2</sub> insufflation modes possible
- The best of both worlds: High cost-effectiveness coupled with the brightness and durability of LED technology
- Minimum service life of 30,000 hours LED
- Environmentally friendly as the LED light is free of lead and mercury
- Automatic light source control via the CCU generates optimal illumination



TL 100S1

**Cold Light Fountain CO<sub>2</sub>MBI® LED SCB**, with high-performance LED, integrated KARL STORZ-SCB and integrated insufflation pump for air and CO<sub>2</sub> insufflation, for use with KARL STORZ videoendoscopes, power supply 100 – 240 VAC, 50/60 Hz

including:

- Irrigation Bottle Holder**
- Holding Ring**, for water bottles
- Water Bottle**
- Irrigation Adaptor**, for water bottles
- SCB Connecting Cable**
- Universal Wrench**

## Specifications:

Illumination technology	LED
Color temperature	approx. 6400 K
Average lamp service life	30,000 h
Light intensity adjustment	automatic via SCB manual via SCB manual via touch screen
Unit communication	KARL STORZ Communication Bus (2 x SCB)
Rated power	120 VA
Power supply	100 – 240 VAC
Power frequency	50/60 Hz

Dimensions w x h x d	305 x 110 x 313 mm
Weight	8.5 kg
Cleaning	wipe disinfection
Protection class	1
Degree of safety	CF (with KARL STORZ light cables CF Defib)
Pump	integrated pump with two power levels
Insufflation	CO <sub>2</sub> or air
CO <sub>2</sub> gas supply	central or via bottle

**Components/Spare Parts** see chapter 18



# Cold Light Fountain CO<sub>2</sub>MBI® LED SCB

Accessories

	TL 001	<b>Irrigation Bottle Holder</b> , for use with Cold Light Fountain CO <sub>2</sub> MBI® LED SCB TL 100
	TL 002	<b>Holding Ring</b> , for Water Bottle 13992 BS, for use with Irrigation Bottle Holder TL 001
	TL 003	<b>Holding Ring</b> , for use with Ampuwa Plastipur irrigation bottles, in combination with Irrigation Bottle Holder TL 001
	20 0901 70	<b>SCB Connecting Cable</b> , length 100 cm
	13992 BS	<b>Water Bottle</b> , 250 ml
	13991 SW	<b>Irrigation Adaptor</b> , for Water Bottle 13992 BS for rinsing the double tube
	20 4000 30	<b>Universal Wrench</b>
	20 4000 27	<b>CO<sub>2</sub> High Pressure Tube</b> , American connector/German connector, length 102 cm
	UI 001 UI 002 UI 003	<b>Low Pressure Tube</b> , for the central CO <sub>2</sub> gas supply, length 150 cm <b>Same</b> , length 300 cm <b>Same</b> , length 600 cm





# ENDOMAT® SELECT

Roller pump for the irrigation or suction of fluids

## Special Features:

- Roller pump system for flow-controlled irrigation
- Max. flow setting: 3500 ml/min
- Fields of application can be expanded at any time
- Unit and accessories easy to use
- Multidisciplinary use
- With connection option for KARL STORZ Communication Bus (KARL STORZ-SCB)



# ENDOMAT® SELECT

Roller pump for the irrigation or suction of fluids,  
Recommended Standard Set Configuration



#### Basic Unit:

UP 210 **ENDOMAT® SELECT**, suction or irrigation pump, incl.  
mains cord, power supply 100 – 240 VAC, 50/60 Hz

#### Software Module for Surgery:

UP 601 **SURGERY Software, License**, allows selection of the  
procedures “LAP”, “THOR” and “PROCTO”, for use with  
ENDOMAT® SELECT UP 210

#### Specifications:

Software package	Surgery	Operating mode	Irrigation, flow-controlled
Flow max.	3500 ml/min	Dimensions w x h x d	305 x 110 x 260 mm
Power supply	100 – 240 VAC, 50/60 Hz	Certified to	IEC 60601-1
Weight	4.7 kg		
Parameter display	- Set flow - Actual flow		

#### Note:

ENDOMAT® SELECT only functions after uploading a software module (e.g., UP 601). When placing an order for this system, please consult Configuration Flyer 96311002.

**Optional Accessories for ENDOMAT® SELECT** see pages U 25, U 28-30

**Components/Spare Parts** see chapter 18

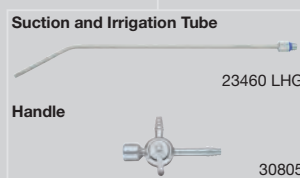
# ENDOMAT® SELECT

System Components

SUCTION AND IRRIGATION SYSTEMS




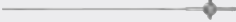
UNIT SIDE

PATIENT SIDE



# ENDOMAT® SELECT

Optional Accessories

	<p>031524-10    <b>Tubing Set for Irrigation</b>, FC, sterile, for single use, package of 10, for use with HAMOU® ENDOMAT® SCB 26 3311 20-1 and ENDOMAT® SELECT UP 210</p>	<p>STERILE </p>
	<p>031564-10*    <b>Tubing Day Set for Irrigation</b>, FC, sterile, package of 10, for use with HAMOU® ENDOMAT® SCB 26 3311 20-1 in combination with Patient Tube 031162-10 and ENDOMAT® SELECT UP 210</p>	<p>STERILE</p>
	<p>26173 BN    <b>Suction and Irrigation Tube</b>, with lateral holes, anti-reflex surface, with two-way stopcock for single-hand control, size 5 mm, length 36 cm</p>	
	<p>UP 610    <b>ADVANCED Package, Software, License</b>, extends functions of installed software packages, for use with ENDOMAT® SELECT UP 210</p>	



# HAMOU® ENDOMAT® SCB

Suction and Irrigation System,  
Recommended Standard Set Configuration

## Special Features:

- Pressure-regulated suction and irrigation system for use in laparoscopy and gynecology
- Touch screen control
- Adjustable parameters for LAP and HYST mode can be automatically selected by the choice of tubing cassette
- Simultaneous display of set values and actual values enables continuous monitoring of suction and irrigation parameters
- With connection possibilities to the KARL STORZ Communication Bus (SCB) as of Software Release 20090001-45 and higher



- 26 3311 01-1** HAMOU® ENDOMAT® SCB, with integrated SCB module, power supply 100 – 240 VAC, 50/60 Hz including:
- SCB Connecting Cable**, length 100 cm
  - Cassette Tubing Set, PC**, for single use
  - Cassette Tubing Set, FC**, for single use



## Specifications:

Pressure	- HYST 0-200 mmHg - LAP 100/ 300/ 500 mmHg
Flow	- LAP 0-1300 ml/min - HYS 200/400/600 ml/min
Suction pressure regulated	- HYST 0.1-(-)0.8 bar (-80 kPa) - LAP 0.1-(-)0.8 bar (-80 kPa)

Power supply	100-240 VAC, 50/60 Hz
Dimensions w x h x d	305 x 164 x 375 mm
Weight	9.3 kg
Certified to	IEC 60601-1



**Optional Accessories for HAMOU® ENDOMAT® SCB** see pages U 28-30  
**Components/Spare Parts** see chapter 18



# HAMOU® ENDOMAT® SCB

System Components

UNIT SIDE

PATIENT SIDE



HYST Tubing Set 031523-10\*  
LAP Tubing Set 031524-10\*



Alternative:  
Tubing Set, for suction



030547-01\* (SSU)

Silicone Tubing Set, for suction,  
part 1 of 2



26 3311 42

Filter



031124-10\*

Suction and Irrigation Tube



26173 BN

Suction Jars, 1.5 l and 2.5 l



030301-01\*  
030302-01\*

Suction Liners, 1.5 l and 2.5 l



030315-30\*  
030325-30\*

Coupling Piece



030362-10\*

Bottle Caps  
Suction Bottles, 5 l  
Bottle Stands  
Holder for  
Bottle Stand



20 3000 34  
20 3000 50  
20 3000 32  
20 3000 33

Silicone Tubing Set, for suction,  
part 2 of 2



26 3311 42

Alternative:  
Tubing Set, for suction



030249-10\* (SSU)

SUCTION AND IRRIGATION SYSTEMS

3-987











# Optional Accessories

for suction and irrigation systems

for use with

ENDOMAT® SELECT  
UP 210

ENDOMAT®  
n. HAMOU® SCB  
26331101-1

	<b>26 3100 35</b>	<b>Bottle Cap</b> , sterilizable, for use with irrigation bottles 1 l and 1.5 l, sterile (cylindrical and square) type Abbott and Baxter Laboratories	-	-
	<b>26 3102 35</b>	<b>Bottle Cap</b> , sterilizable, for use with irrigation bottle 1 l, sterile (round), type Fresenius and B. Braun (old type) and Delta Pharma (round)	-	-
	<b>26 3103 35</b>	<b>Bottle Cap</b> , sterilizable, for use with irrigation bottle 1 l, sterile (round or square), type B. Braun (old type) and Delta Pharma	-	-
	<b>20 3000 52</b>	<b>Suction Bottle</b> , 1.5 l, sterilizable	●	●
	<b>20 3000 34</b>	<b>Bottle Cap</b> , for suction bottles 1.5 l and 5 l, sterilizable	●	●
	<b>20 3001 30</b>	<b>Bottle Stand</b> , for suction bottle 1.5 l or irrigation bottle 1 l	●	●
	<b>26173 BN</b>	<b>Suction and Irrigation Tube</b> , with lateral holes, anti-reflex surface, with two-way stopcock for single-hand control, size 5 mm, length 36 cm	●	●
	<b>26173 VG</b>	<b>Puncture Needle</b> , for sterile infusion solution 1 l, sterilizable, working length 22 cm	-	-
	<b>860015 B</b>	<b>Puncture Needle</b> , for sterile infusion solution 500 ml, sterilizable, working length 18 cm	-	-
	<b>26 3100 50</b>	<b>Irrigation Liquid Bottle</b> , 1 l, sterilizable	-	-








# Optional Accessories

for suction and irrigation systems

for use with

**ENDOMAT® SELECT**  
UP 210

**ENDOMAT®**  
n. HAMOU® SCB  
26 3311 01-1

	20 3000 50	<b>Suction Bottle</b> , 5 l, sterilizable	●	●
	20 3000 34	<b>Bottle Cap</b> , for suction bottles 1.5 l and 5 l, sterilizable	●	●
	20 3000 32	<b>Bottle Stand</b> , for suction bottle 5 l	●	●
	20 3000 33	<b>Bottle Stand Holder</b> , for Bottle Stand 20 3000 32	●	●
	20 0142 30	<b>One-Pedal Footswitch</b> , digital, two-stage, for activating a higher flow for improved visibility	●	-
	20 0141 30	<b>One-Pedal Footswitch</b> , digital, one-stage, for irrigation	●	-
	26 3311 42	<b>Silicone Tubing Set</b> , for suction, sterilizable	-	●
	20 0900 70	<b>SCB Connecting Cable</b> , length 30 cm	●	●
	20 3001 45	<b>Silicone Tubing Set</b> , sterilizable, for irrigation/insufflation, for use with Puncture Needle 860015 B	-	-
	031124-10*	<b>Filter</b> , for suction, connection on bottle side with special connection, connection on unit side with cone, unsterile, for single use, package of 10, for use with all standard suction pumps with tube connections 	-	●

# Optional Accessories

for suction and irrigation systems

SUCTION AND IRRIGATION SYSTEMS

		for use with	
		ENDOMAT® SELECT UP 210	HAMOUM® ENDOMAT® SCB 26331101-1
	031523-10 <b>Tubing Set for Irrigation, PC, sterile,</b> for single use, package of 10, for use with HAMOUM® ENDOMAT® SCB 26331120-1 and ENDOMAT® SELECT <div style="float: right; border: 1px solid black; padding: 2px;">STERILE</div> 	●	●
	031524-10 <b>Tubing Set for Irrigation, FC, sterile,</b> for single use, package of 10, for use with HAMOUM® ENDOMAT® SCB 26331120-1 and ENDOMAT® SELECT UP 210		
	030302-01* <b>Suction Jar, 2.5 l</b>	-	●
	030320-40* <b>Suction Liner, 2.5 l,</b> for single use, package of 40 	-	●
	030362-10* <b>Coupling Piece,</b> package of 10	-	●
	030547-01 <b>Tubing Set for Suction, 150 cm,</b> with EXTRA-LARGE LUER-Lock, unsterile, for use with HAMOUM® ENDOMAT® SCB 26331120-1	-	●



Components/Spare Parts see chapter 18

# UNIMAT® 30

Universal Suction Pump,  
Recommended Standard Set Configuration

### Special Features:

- Suction performance of 30 l/min
- Particularly low noise and vibration
- Fast vacuum build-up to 85 kPa
- Maintenance-free cylinder/piston system
- Easy to use
- Hydrophobic bacterial filter protects pump
- Compatible with both reusable and single-use collection systems



**25 3200 01 UNIMAT® 30, Suction Pump Set,**  
power supply 230 VAC, 50/60 Hz  
including:  
**Filter**  
**Secretion Bottle**  
**Bottle Cap**  
**Connecting Tube, short**  
**Patient Tube**  
**Overflow Case**  
**Mains Cord, length 300 cm**

**25 3200 01C Same,** power supply 115 VAC, 50/60 Hz

### Specifications:

Suction performance	30 l/m
Vacuum	up to 85 kPa, up to 640 mmHg
Power supply	115/230 VAC, 50/60 Hz
Dimensions w x h x d	245 x 345 x 282 mm
Weight	7.4 kg
Certified to	IEC 60601-1

Rated power/ power consumption	1 A, 100 Watt (115 VAC) 0.45 A, 100 Watt (230 VAC)
Protection class	I, BF, IPX 1
Inspections or certifications	MDD 93/42 EWG, EN 60601-1, EN 60601-1-2, EN 10079-1, ISO 9001, UL 2601-1

**Optional Accessories for UNIMAT® 30** see page U 33  
**Components/Spare Parts** see chapter 18

UNIT SIDE

PATIENT SIDE



Connecting Tube, short



253200 83

Filter  
Secretion Bottle  
Bottle Cap  
Overflow Case



253200 80  
253200 81  
253200 82  
253200 85

Patient Tube



253200 84

# UNIMAT® 30

## Optional Accessories

	<p>25 3200 80* 25 3200 81 25 3200 82 25 3200 85</p>	<p><b>Filter</b>, for suction, unsterile, for use with UNIMAT® 30 <b>Suction Bottle</b> <b>Bottle Cap</b> <b>Overflow Case</b></p>
	<p>25 3200 83</p>	<p><b>Connecting Tube</b>, short</p>
	<p>25 3200 84</p>	<p><b>Patient Tube</b></p>
	<p>400 A</p>	<p><b>Mains Cord</b>, length 300 cm</p>
	<p>UG 624</p>	<p><b>Pump Holder</b>, for mounting suction pump UNIMAT® 30 25 3200 01 to equipment cart UG xxx</p>
	<p>030301-01* 030302-01*</p>	<p><b>Suction Jar</b>, 1.5 l <b>Suction Jar</b>, 2.5 l</p>
	<p>030310-40* 030320-40*</p>	<p><b>Suction Liner</b>, 1.5 l, for single use, package of 40 <b>Suction Liner</b>, 2.5 l, for single use, package of 40</p>
	<p>030315-30* 030325-30*</p>	<p><b>Suction Liner</b>, 1.5 l, with solidifier, for single use, package of 30 <b>Suction Liner</b>, 2.5 l, with solidifier, for single use, package of 30</p>
	<p>030362-10*</p>	<p><b>Coupling Piece</b>, package of 10</p>
	<p>030748-01*</p>	<p><b>Tubing Set for Suction</b>, length 150 cm, unsterile</p>
	<p>030350-05*</p>	<p><b>Standard Clampholder</b>, plastic, package of 5</p>



Components/Spare Parts see chapter 18







## ■ HIGH FREQUENCY SURGERY UNITS

AUTOCON® III 400

AUTOCON® III 300

# AUTOCON® III 400 High-End

High Frequency Surgery Units

The high-end HF unit from KARL STORZ provides a high level of user comfort and ease of use thanks to its 9" touch screen display.

A footswitch allows settings to be changed during surgery directly from the sterile area. Alternatively, two sockets with separate instruments can be controlled via a footswitch.

The maximum power of 400 Watt (unipolar and bipolar) is regulated by a generator. Only the amount of energy required for the desired tissue effect is emitted.

## Benefits at a glance:

- Touch screen
- Interdisciplinary use
- 400 W unipolar and bipolar performance
- Neutral electrode monitoring
- Automatic control for smoke evacuation with the S-PILOT® from KARL STORZ
- Can be integrated into KARL STORZ OR1™



# AUTOCON® III 400 High-End

High Frequency Surgery Units



**UH 400** **AUTOCON® III 400 High-End**, without CE certification, power supply 220 – 240 VAC, 50/60 Hz including:

**Mains Cord**

**HF connecting sockets unipolar:**

2x 3-pin US type  
5 mm connector KARL STORZ/Erbe VIO  
2x 4 mm connector (via footswitch)  
BOVIE (via footswitch)

**HF connecting sockets bipolar:**

2x 2-pin US type (28.58)  
3x KARL STORZ/Erbe VIO

**Connecting socket:**

Neutral Electrode 2-pol

Can be integrated into OR1™ with KARL STORZ OR1™ SCB control WU 300. System requirements: SCB-R-UI Software Release 20090001-46 or higher.

**UH 400E** **Same**, with CE certification, power supply 220 – 240 VAC, 50/60 Hz

**UH 400U** **Same**, without CE certification, power supply 100 – 127 VAC, 50/60 Hz

**UH 400UE** **Same**, with CE certification, power supply 100 – 127 VAC, 50/60 Hz

**Specifications:**

Max. power	unipolar: 400 Watt (at 200 Ohm) bipolar: 400 Watt (at 75 Ohm)	Output frequency	350 kHz/1 MHz
Power supply	220 – 240 VAC, 50/60 Hz (UH 400, UH 400E) 100 – 127 VAC, 50/60 Hz (UH 400U, UH 400UE)	Dimensions w x h x d	447 x 177 x 457 mm
Weight	12.5 kg	Certified to	IEC 60601-1
Sockets	Unipolar sockets: 2 Bipolar sockets: 2 (can be expanded to 3)		

**Optional Accessories for AUTOCON® III 400 High-End** see page U 42  
**Components/Spare Parts** see chapter 18

# AUTOCON® III 400 High-End

High Frequency Surgery Units,  
System Components

One-Pedal HF Footswitch



UF 901

Two-Pedal HF Footswitch



UF 902

UNIT SIDE

PATIENT SIDE



Connecting Cable



27806 US

Neutral Electrode



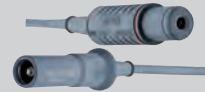
27802

Unipolar High Frequency Cord



26005 M

Bipolar High Frequency Cord



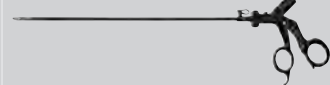
26176 LE

CLICK<sup>line</sup> KELLY Dissecting and Grasping Forceps



33351 MD

ROBI<sup>®</sup> KELLY Dissecting and Grasping Forceps



38651 MD

Coagulation and Dissection Electrode, L-shaped



26775 UF

Bipolar Ball Electrode



26183 TZ

# AUTOCON® III 300

High Frequency Surgery Units

With a maximum output of 400 Watt unipolar and bipolar 200 Watt, the AUTOCON® III 300 HF generator is a new member of the III generator product family.

The exterior of the HF generator is equipped with a bipolar and a unipolar jack as well as a socket for connecting the neutral electrode.

Proven features such as the possibility to adjust modes and settings via a footswitch from the sterile field have also been retained in this generator.

## Benefits at a glance:

- Touch screen
- Interdisciplinary use
- 400 Watt unipolar and 200 Watt bipolar performance
- Neutral electrode monitoring
- Automatic smoke evacuation with S-PILOT® from KARL STORZ
- Can be integrated into KARL STORZ OR1™



# AUTOCON® III 300

High Frequency Surgery Units



**UH 300** **AUTOCON® III 300**, without CE certification, power supply 220 – 240 VAC, 50/60 Hz including:

**Mains Cord**

**HF connecting sockets unipolar:**

3-pin US type  
5 mm connector KARL STORZ/Erbe VIO

**HF connecting sockets bipolar:**

2-pin US type (28.58 mm)  
2x KARL STORZ/Erbe VIO

**Connecting socket:**

Neutral Electrode 2-pol

Can be integrated into OR1™ with KARL STORZ OR1™ SCB control WU 300. System requirements: SCB-R-UI Software Release 20090001-46 or higher.

**UH 300E** **Same**, with CE certification, power supply 220 – 240 VAC, 50/60 Hz

**UH 300U** **Same**, without CE certification, power supply 100 – 127 VAC, 50/60 Hz

**UH 300UE** **Same**, with CE certification, power supply 100 – 127 VAC, 50/60 Hz

**Specifications:**

Max. power	unipolar: 400 Watt (at 100 Ohm) bipolar: 200 Watt (at 75 Ohm)	Output frequency	350 kHz/1 MHz
Power supply	220 – 240 VAC, 50/60 Hz (UH 300, UH 300E) 100 – 127 VAC, 50/60 Hz (UH 300U, UH 300UE)	Dimensions w x h x d	447 x 177 x 457 mm
Weight	1.8 kg	Certified to	IEC 60601-1
Sockets	Unipolar sockets: 1 Bipolar sockets: 1 (can be expanded to 2)		

**Optional Accessories for AUTOCON® III 300** see page U 42

**Components/Spare Parts** see chapter 18

# AUTOCON® III 300

High Frequency Surgery Units,  
System Components

One-Pedal HF Footswitch



UF 901

Two-Pedal HF Footswitch



UF 902

UNIT SIDE

PATIENT SIDE



Connecting Cable



27806 US

Neutral Electrode



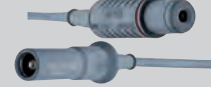
27802

Unipolar High Frequency Cord



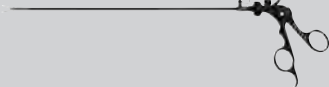
26005 M

Bipolar High Frequency Cord



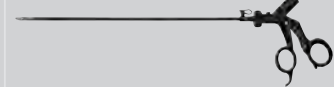
26176 LE

CLICKline® KELLY Dissecting and Grasping Forceps



33351 MD

ROBI® KELLY Dissecting and Grasping Forceps



38651 MD

Coagulation and Dissection Electrode, L-shaped



26775 UF

Bipolar Ball Electrode



26183 TZ

## Optional Accessories

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

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

	<p>UF 901     <b>One-Pedal HF Footswitch</b>, with button for switchover function, for use with HF generators</p>
	<p>UF 902     <b>Two-Pedal HF Footswitch</b>, with button for switchover function, for use with HF generators</p>
	<p>27806 US     <b>Neutral Electrode Connecting Cable</b>, for use with Neutral Electrode 27802</p>
	<p>27802     <b>Neutral Electrode</b>, contact surface divided into two, A=169 cm<sup>2</sup>, 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 </p>
	<p>26 5200 43     <b>Electrode Handle</b>, with 2 buttons for activating the unipolar generator, yellow button: unipolar cutting, blue button: unipolar coagulation, Connecting Cable 26 5200 45 required</p>
	<p>26 5200 45     <b>High Frequency Cable</b>, for Electrode Handle 26 5200 43, length 400 cm, for use with AUTOCON® III 400 and AUTOCON® III 300</p>



# Accessories

## Unipolar and Bipolar High Frequency Cords

### Unipolar High Frequency Cords







KARL STORZ High Frequency  
Instrument Surgery Units

	26002 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type T older models and Ellman
	26004 M	<b>Unipolar High Frequency Cord</b> , with 4 mm plug, length 300 cm, compatible with Martin HF units
	26005 M	<b>Unipolar High Frequency Cord</b> , with 5 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe type ICC and Erbe VIO 301
	26006 M	<b>Unipolar High Frequency Cord</b> , with 8 mm plug, length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Valleylab models

### Bipolar High Frequency Cords



KARL STORZ High Frequency  
Instrument Surgery Units

	26176 LE	<b>Bipolar High Frequency Cord</b> , length 300 cm, for use with AUTOCON® III and AUTOCON® II, compatible with Erbe-Coagulator, T and ICC series
	26176 LM	<b>Bipolar High Frequency Cord</b> , length 300 cm, compatible with Martin HF units
	26176 LV	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 28.58 mm, for AUTOCON® III and AUTOCON® II, compatible with Valleylab coagulators, for use with high frequency surgical units with bipolar sockets with 28.58 mm pin distance
	26176 LW	<b>Bipolar High Frequency Cord</b> , length 300 cm, pin distance on unit side 22 mm, compatible with high frequency surgical units with bipolar sockets with 22 mm pin distance

**Please note:** All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 **ML**, 26176 **LVL**.



# COMPONENTS / SPARE PARTS



The chapter “Components / Spare Parts” contains detailed information on KARL STORZ instruments.

For easy location and reference, an index is available which lists the order number of the spare parts as well as those of the entire instrument, set or unit.

### Hotline

Queries concerning products, exchange, maintenance and cleaning can be addressed to Technical Support: +49 (0)7461/708-980, from Monday to Thursday from 7 – 18 h and Friday from 7 – 17 h.

### Example:

Components / Spare Parts		Catalog page
<b>26034 AA</b>	<b>HOPKINS® Straight Forward Telescope 0°</b>	35
<b>Spare Parts</b>		
	<b>26034 V Adaptor</b> , with silicone leaflet valve, for working channels	
	<b>495 F Receptacle</b> , diameter 9 mm, for Wolf fiber optic light cable	
	<b>495 G Screw Base</b> , for KARL STORZ fiber optic light cables and Olympus Corporation	
	<b>6127590 Sealing Cap</b> , (50/4), for trocars size 6 mm	
		<b>30120 Y Silicone Leaflet Washer</b> , autoclavable, package of 5

Components/spare parts with corresponding order number of the instrument and reference to catalog page

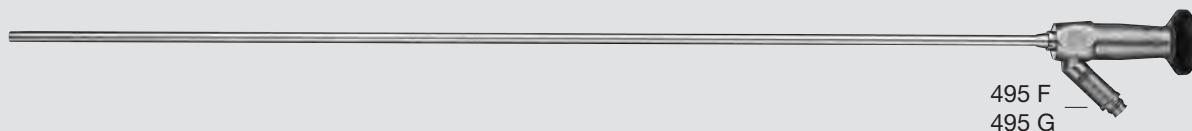


# Telescopes

HOPKINS® Telescopes

Components / Spare Parts	Catalog page
--------------------------	--------------

<b>26048 ASA</b>	HOPKINS® Straight Forward Telescope 0°	33
<b>26048 BSA</b>	HOPKINS® Forward-Oblique Telescope 30°	33
<b>26048 FSA</b>	HOPKINS® Telescope 45°	33



### Spare parts



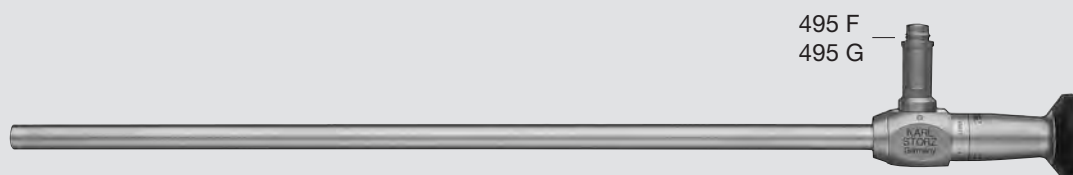
**495 F**  
**Receptacle,**  
diameter 9 mm, for  
Wolf fiber optic light cable



**495 G**  
**Screw Base,** for  
KARL STORZ fiber optic  
light cables and Olympus  
Corporation

Components / Spare Parts	Catalog page
--------------------------	--------------

<b>26003 AA</b>	HOPKINS® Straight Forward Telescope 0°, enlarged view	34
<b>26003 AEA</b>	HOPKINS® Straight Forward Telescope 0°, enlarged view	34
<b>26003 BA</b>	HOPKINS® Forward-Oblique Telescope 30°, enlarged view	34
<b>26003 BEA</b>	HOPKINS® Forward-Oblique Telescope 30°, enlarged view	34
<b>26003 FA</b>	HOPKINS® Telescope 45°, enlarged view	34
<b>26003 FEA</b>	HOPKINS® Telescope 45°, enlarged view	34



### Spare Parts



**495 F**  
**Receptacle,**  
diameter 9 mm, for  
Wolf fiber optic light cable



**495 G**  
**Screw Base,** for  
KARL STORZ fiber optic  
light cables and Olympus  
Corporation

Components / Spare Parts	Catalog page
<b>26003 EC</b> <b>ENDOCAMELEON® HOPKINS® Telescope</b>	30



**Spare Parts**

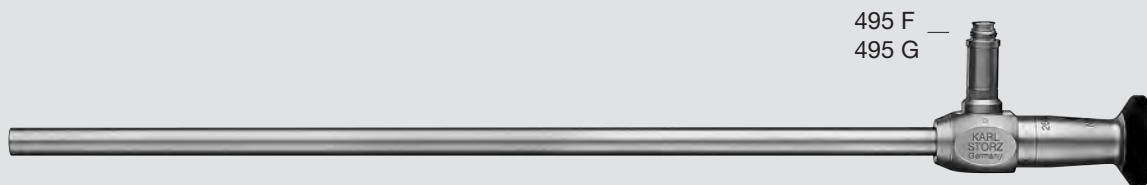


**495 F**  
**Receptacle,**  
diameter 9 mm, for  
Wolf fiber optic light cable



**495 G**  
**Screw Base,** for  
KARL STORZ fiber optic  
light cables and Olympus  
Corporation

Components / Spare Parts	Catalog page
<b>26003 ARA</b> <b>HOPKINS® RUBINA® 0°, NIR/ICG, diameter 10 mm</b>	27
<b>26003 BRA</b> <b>HOPKINS® RUBINA® 30°, NIR/ICG, diameter 10 mm</b>	27
<b>26003 FRA</b> <b>HOPKINS® RUBINA® 45°, NIR/ICG, diameter 10 mm</b>	27
<b>26003 FREA</b> <b>HOPKINS® RUBINA® 45°, NIR/ICG, diameter 10 mm</b>	27
<b>26046 ARA</b> <b>HOPKINS® RUBINA® 0°, NIR/ICG, diameter 5 mm</b>	27
<b>26046 BRA</b> <b>HOPKINS® RUBINA® 30°, NIR/ICG, diameter 5 mm</b>	27
<b>26046 FRA</b> <b>HOPKINS® RUBINA® 45°, NIR/ICG, diameter 5 mm</b>	27



**Spare Parts**



**495 F**  
**Receptacle,**  
diameter 9 mm, for  
Wolf fiber optic light cable



**495 G**  
**Screw Base,** for  
KARL STORZ fiber optic  
light cables and Olympus  
Corporation

# Telescopes

HOPKINS® Telescopes

## Components / Spare Parts

Catalog page

<b>26007 AA</b>	<b>HOPKINS® Straight Forward Telescope 0°</b> , enlarged view	31
<b>26007 BA</b>	<b>HOPKINS® Forward-Oblique Telescope 30°</b> , enlarged view	31
<b>26008 AA</b>	<b>HOPKINS® Straight Forward Telescope 0°</b>	31
<b>26008 BA</b>	<b>HOPKINS® Forward-Oblique Telescope 30°</b>	31
<b>26011 AA</b>	<b>HOPKINS® Straight Forward Telescope 0°</b> , enlarged view	32
<b>26011 BA</b>	<b>HOPKINS® Forward-Oblique Telescope 30°</b> , enlarged view	32



## Spare Parts



**495 F**  
**Receptacle**,  
diameter 9 mm, for  
Wolf fiber optic light cable



**495 G**  
**Screw Base**, for  
KARL STORZ fiber optic  
light cables and Olympus  
Corporation

## Components / Spare Parts

Catalog page

<b>26046 AA</b>	<b>HOPKINS® Straight Forward Telescope 0°</b> , enlarged view	32
<b>26046 BA</b>	<b>HOPKINS® Forward-Oblique Telescope 30°</b>	32, 302, 308
<b>26046 FA</b>	<b>HOPKINS® Telescope 45°</b> , enlarged view	32



## Spare Parts



**495 F**  
**Receptacle**,  
diameter 9 mm, for  
Wolf fiber optic light cable



**495 G**  
**Screw Base**, for  
KARL STORZ fiber optic  
light cables and Olympus  
Corporation



# Telescopes

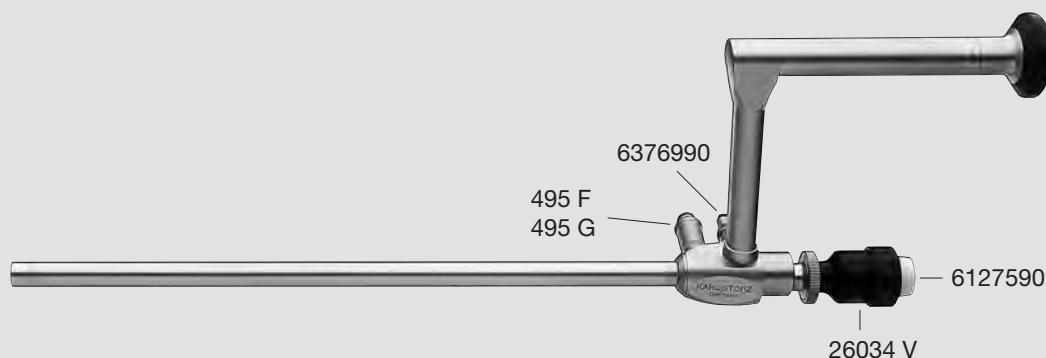
HOPKINS® Telescopes with Working Channel

Components / Spare Parts

Catalog page

26034 AA HOPKINS® Straight Forward Telescope 0°

35



## Spare Parts



26034 V  
**Adaptor**, with silicone leaflet valve, for working channel



8458190  
**Stopcock**



495 F  
**Receptacle**, diameter 9 mm, for Wolf fiber optic light cable



6985691  
**Spring Cap**



495 G  
**Screw Base**, for KARL STORZ fiber optic light cables and Olympus Corporation



7720590  
**Silicone Leaflet Washer**



6127590  
**Sealing Cap**, (50/4), for trocars size 6 mm

30120 Y  
**Silicone Leaflet Seal**, autoclavable, package of 5

# Telescopes

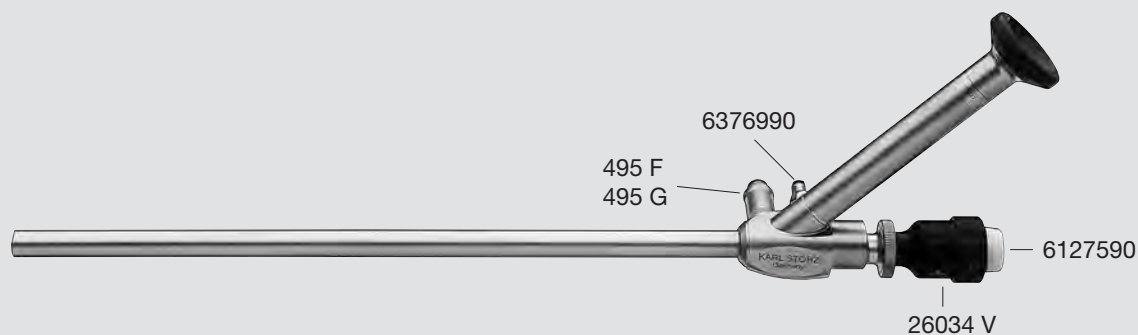
HOPKINS® Telescopes with Working Channel

Components / Spare Parts

Catalog page

26038 AA HOPKINS® Straight Forward Telescope 0°

35



## Spare Parts



26034 V  
**Adaptor**, with silicone leaflet valve, for working channel



8458190  
**Stopcock**



495 F  
**Receptacle**, diameter 9 mm, for Wolf fiber optic light cable



6985691  
**Spring Cap**



495 G  
**Screw Base**, for KARL STORZ fiber optic light cables and Olympus Corporation



7720590  
**Silicone Leaflet Washer**



6127590  
**Sealing Cap**, (50/4), for trocars size 6 mm

30120 Y  
**Silicone Leaflet Seal**, autoclavable, package of 5

# Telescopes

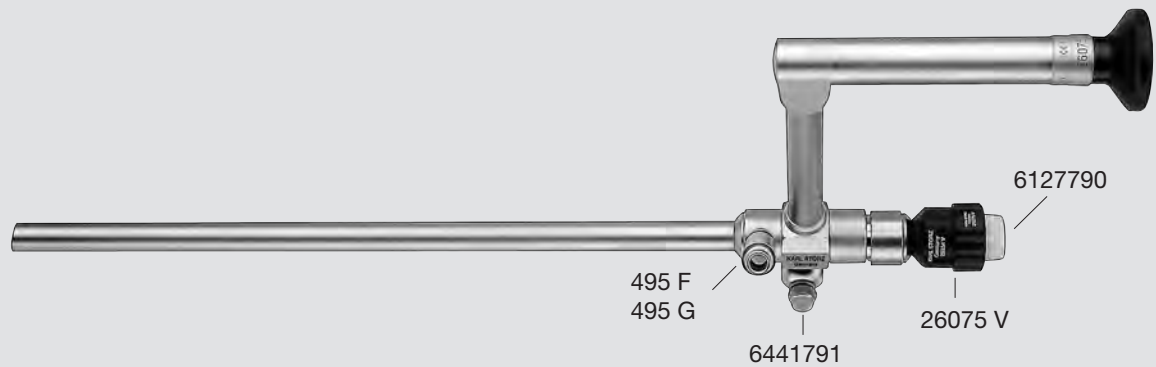
HOPKINS® Telescopes with Working Channel

Components / Spare Parts

Catalog page

26075 AA HOPKINS® Wide Angle Straight Forward Telescope 6°

36



## Spare Parts



26075 V  
**Adaptor**, with silicone leaflet valve, for working channel



6916191  
**Spring Cap**



495 F  
**Receptacle**, diameter 9 mm, for Wolf fiber optic light cable



8428590  
**Stopcock**



495 G  
**Screw Base**, for KARL STORZ fiber optic light cables and Olympus Corporation



7720590  
**Silicone Leaflet Washer**



6127790  
**Sealing Cap**, (50/6), for trocars size 7 mm

30120 Y  
**Silicone Leaflet Seal**, autoclavable, package of 5

# Trocars

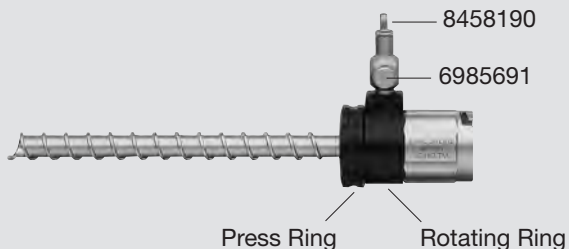
## Cannulas

### Components / Spare Parts

Catalog page

- 30160 TM** Cannula
- 30160 TK** Cannula
- 30103 TM** Cannula

- 45
- 45
- 47



### Spare Parts



**6985691**  
**Spring Cap**



**8458190**  
**Stopcock**

### Spare Parts for 30160 TM/TK



**8296591**  
**Rotating Ring**, with  
stopcock and O-ring

### Spare Parts for 30103 TM



**8296691**  
**Rotating Ring**, with  
stopcock and O-ring



**8356395**  
**Press Ring**



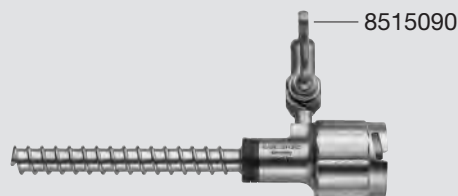
**7137595**  
**Press Ring**

### Components / Spare Parts

Catalog page

- 30117 T2** Cannula

44



### Spare Parts



**6985691**  
**Spring Cap**



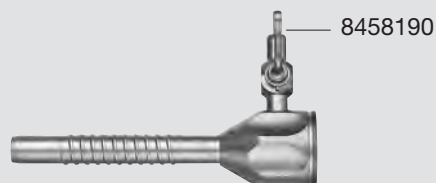
**8515090**  
**Stopcock**

### Components / Spare Parts

Catalog page

- 30123 TS1** Cannula

61



### Spare Parts



**6985691**  
**Spring Cap**



**8458190**  
**Stopcock**

# Trocars

Cannulas

Components / Spare Parts

Catalog page

**30120 T8** Cannula  
**30120 T9** Cannula

46  
46



## Spare Parts



**6985691**  
**Spring Cap**



**8458190**  
**Stopcock**

# Trocars

## Cannulas

### Components / Spare Parts

### Catalog page

<b>11603 G5</b>	<b>Cannula</b>	51
<b>30114 G5</b>	<b>Cannula</b>	52
<b>30114 G6</b>	<b>Cannula</b>	52
<b>30160 G5</b>	<b>Cannula</b>	53
<b>30160 G6</b>	<b>Cannula</b>	53
<b>30103 G6</b>	<b>Cannula</b>	54
<b>30108 G6</b>	<b>Cannula</b>	55



### Spare Parts for 11603 G5



021099-10\*  
**Valve Seal**, sterile, for single use, package of 10, color code: blue



29100 BX  
**Plug**, for LUER-Lock connector, blue, package of 10

### Spare Parts for 30114 G5/G6



021199-10\*  
**Valve Seal**, sterile, for single use, package of 10, color code: green



29100 GX  
**Plug**, for LUER-Lock connector, green, package of 10

### Spare Parts for 30160 G5/G6



021299-10  
**Valve Seal**, sterile, for single use, package of 10, color code: black



29100 SX  
**Plug**, for LUER-Lock connector, black, package of 10

### Spare Parts for 30103 G6



021399-10\*  
**Valve Seal**, sterile, for single use, package of 10, color code: green



29100 GX  
**Plug**, for LUER-Lock connector, green, package of 10

### Spare Parts for 30108 G6



021499-10  
**Valve Seal**, sterile, for single use, package of 10, color code: blue



29100 BX  
**Plug**, for LUER-Lock connector, blue, package of 10



# Trocars

## Cannulas

Components / Spare Parts	Catalog page
--------------------------	--------------

<b>30214 K</b>	Low-friction Cannula	64
<b>30217 K</b>	Low-friction Cannula	64



### Spare Parts

Spare Part for 30214 K



**29100 G**  
**Plug**, package of 10,  
autoclavable,  
color code: green

Spare Part for 30217 K



**29100 R**  
**Plug**, package of 10,  
autoclavable,  
color code: red

Components / Spare Parts	Catalog page
--------------------------	--------------

<b>11603 G1</b>	Cannula	58
<b>30117 G1</b>	Cannula	59
<b>30117 G2</b>	Cannula	59
<b>30117 G3</b>	Cannula	59
<b>30160 G1</b>	Cannula	60
<b>30160 G2</b>	Cannula	60
<b>30160 G3</b>	Cannula	60



### Spare Part



**29100**  
**Plug**, for LUER-Lock  
irrigation connector for  
cleaning, black,  
autoclavable,  
package of 10

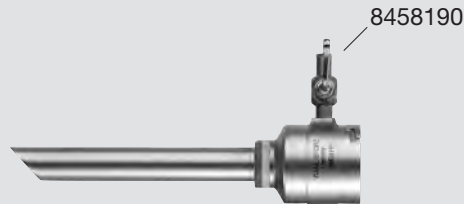
# Trocars

## Cannulas

### Components / Spare Parts

### Catalog page

<b>30101 H2</b>	<b>Cannula</b>	338
<b>30103 H1</b>	<b>Cannula</b>	66
<b>30103 H2</b>	<b>Cannula</b>	66
<b>30108 H2</b>	<b>Cannula</b>	67
<b>30160 H1</b>	<b>Cannula</b>	65
<b>30160 H2</b>	<b>Cannula</b>	65
<b>31160 H1</b>	<b>Cannula</b>	69
<b>31103 H1</b>	<b>Cannula</b>	69
<b>31108 H1</b>	<b>Cannula</b>	69



### Spare Parts



**6985691**  
**Spring Cap**



**8458190**  
**Stopcock**



# Trocars

## Cannulas

### Components / Spare Parts

Catalog page

**30105 H2**

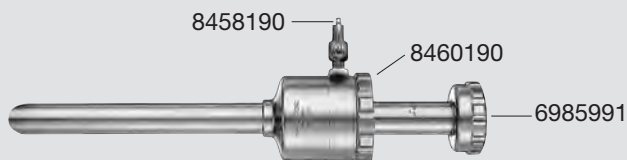
**Cannula**

68

**30105 K1**

**Automatic Valve**

68



### Spare Parts



6985691  
**Spring Cap**



6885490  
**Seal, diameter 15 mm**



8458190  
**Stopcock**



6236195  
**Seal**



8460190  
**Cap Nut**



6985991  
**Cap Nut**

### Components / Spare Parts

Catalog page

**30106 H2**

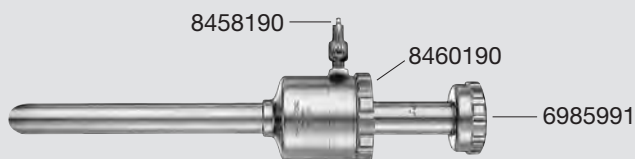
**Cannula**

68

**30106 K1**

**Automatic Valve**

68



### Spare Parts



6985691  
**Spring Cap**



6885390  
**Washer, diameter 22 mm**



8458190  
**Stopcock**



6236195  
**Seal**



8460190  
**Cap Nut**



6985991  
**Cap Nut**

# Trocars

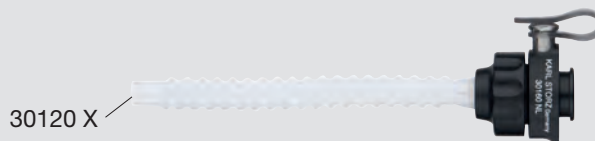
## Cannulas

Components / Spare Parts

Catalog page

**30160 NL** Cannula

62



### Spare Parts



021299-10  
**Valve Seal**, sterile, for  
single use, package of 10,  
color code: black



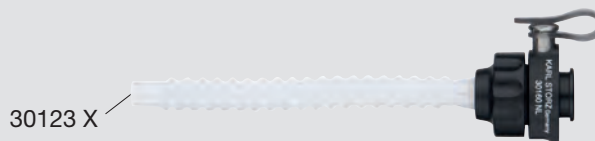
30120 X  
**Plastic Cannula**,  
autoclavable, package of 5

Components / Spare Parts

Catalog page

**30103 NL** Cannula

62



### Spare Parts



021399-10\*  
**Valve Seal**, sterile, for  
single use, package of 10,  
color code: green



30123 X  
**Plastic Cannula**,  
autoclavable, package of 5



# Trocars

## Cones

Components / Spare Parts

Catalog page

**30103 CM1 Metal Cone**

41



### Spare Parts



6062295  
Cone



7391190  
Sealing Cap, (60/12)

Components / Spare Parts

Catalog page

**30160 C3 Cone**

41



### Spare Parts



8464790  
Cone, grooved



6127690  
Sealing Cap, (50/5)

Components / Spare Parts

Catalog page

**30103 C3 Cone**

41



### Spare Parts



8407390  
Cone, grooved



7391190  
Sealing Cap, (60/12)

# Trocars

## Automatic Valves

Components / Spare Parts

Catalog page

**30101 A1 Automatic Valve**

338

### Spare Part



6127790  
**Sealing Cap, (50/6),**  
for trocars size 7 mm



— 6127790

Components / Spare Parts

Catalog page

**30103 A1 Automatic Valve**

66

### Spare Part



7616690  
**Sealing Cap, (60/10),**  
for trocars size 11 mm



— 7616690

Components / Spare Parts

Catalog page

**30117 A1 Automatic Valve**

44

### Spare Parts



6089590  
**Seal, mushroom-shaped**



6127090  
**Sealing Cap, (40/3)**

6089590 —

— 6127090



Components / Spare Parts

Catalog page

**30160 A1 Automatic Valve**

65

### Spare Part



6127590  
**Sealing Cap, (50/4),**  
for trocars size 6 mm



— 6127590

# Trocars

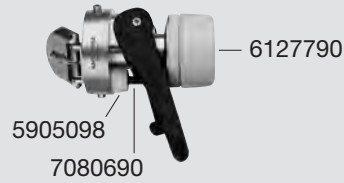
## Multifunctional Valves

Components / Spare Parts

Catalog page

**30101 M1 Multifunctional Valve**

338



### Spare Parts



5905098  
**Sealing Cap, small**



9063590  
**Tappet**



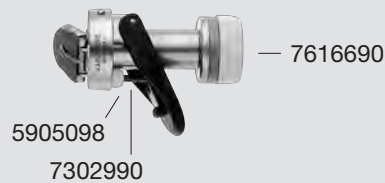
6127790  
**Sealing Cap, (50/6),**  
for trocars size 7 mm

Components / Spare Parts

Catalog page

**30103 M1 Multifunctional Valve**

47, 66, 69



### Spare Parts



5905098  
**Sealing Cap, small**



7302990  
**Tappet**



7616690  
**Sealing Cap, (60/10),**  
for trocars size 11 mm

# Trocars

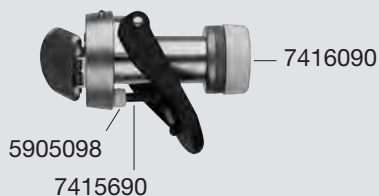
Multifunctional Valves, Silicone Leaflet Valves

Components / Spare Parts

Catalog page

**30108 M1 Multifunctional Valve**

67, 69



**Spare Parts**



5905098  
**Sealing Cap, small**



7415690  
**Tappet**



7416090  
**Sealing Cap, (60/13),**  
for trocars size 13 and/or  
size 13.5 mm

Components / Spare Parts

Catalog page

**30160 M1 Multifunctional Valve**

45, 65, 69



**Spare Parts**



5905098  
**Sealing Cap, small**



7080690  
**Tappet**



6127590  
**Sealing Cap, (50/4),**  
for trocars size 6 mm

Components / Spare Parts

Catalog page

**11603 L1 Silicone Leaflet Valve**

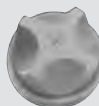
58



**Spare Parts**



6127290  
**Sealing Cap, (50/2.2),**  
for trocars size 2.5 mm



7720590  
**Silicone Leaflet Washer**  
  
30120 Y  
**Silicone Leaflet Seal,**  
autoclavable, package  
of 5

# Trocars

## Silicone Leaflet Valves

Components / Spare Parts Catalog page

<b>30103 L1</b>	<b>Silicone Leaflet Valve</b>	48
<b>30123 L1</b>	<b>Silicone Leaflet Valve</b>	61



**Spare Parts**



7616690  
**Sealing Cap**, (60/10),  
for trocars size 11 mm



7962190  
**Silicone Leaflet Washer**,  
large

Components / Spare Parts Catalog page

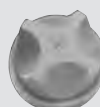
<b>30117 L1</b>	<b>Silicone Leaflet Valve</b>	59
-----------------	-------------------------------	----



**Spare Parts**



6127390  
**Sealing Cap**, (50/2.6),  
for trocars size 3.5 mm



7720590  
**Silicone Leaflet Washer**  
  
30120 Y  
**Silicone Leaflet Seal**,  
**autoclavable**, package  
of 5

Components / Spare Parts Catalog page

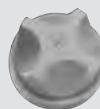
<b>30120 L1</b>	<b>Silicone Leaflet Valve</b>	46
<b>30160 L1</b>	<b>Silicone Leaflet Valve</b>	60



**Spare Parts**



6127590  
**Sealing Cap**, (50/4),  
for trocars size 6 mm



7720590  
**Silicone Leaflet Washer**  
  
30120 Y  
**Silicone Leaflet Seal**,  
**autoclavable**, package  
of 5

# Trocars

## Reduction Sleeves

### Components / Spare Parts

### Catalog page

<b>30140 KA</b>	<b>Reduction Sleeve</b>	72, 309
<b>30140 DA</b>	<b>Reduction Sleeve</b>	72
<b>30140 DB</b>	<b>Reduction Sleeve</b>	72, 309
<b>30140 FB</b>	<b>Reduction Sleeve</b>	72
<b>30140 GB</b>	<b>Reduction Sleeve</b>	72
<b>30140 HB</b>	<b>Reduction Sleeve</b>	72
<b>30140 DD</b>	<b>Reduction Sleeve</b>	72
<b>30140 HE</b>	<b>Reduction Sleeve</b>	72
<b>30140 FE</b>	<b>Reduction Sleeve</b>	72
<b>30140 GE</b>	<b>Reduction Sleeve</b>	72



### Spare Parts

Spare Part for 30140 DA/KA



**6127390**  
**Sealing Cap, (50/2.6),**  
for trocars size 3.5 mm

Spare Part for 30140 DD



**6127890**  
**Sealing Cap, (50/7.5)**

Spare Part for 30140 DB/EB/FB/GB/HB



**6127590**  
**Sealing Cap, (50/4),**  
for trocars size 6 mm

Spare Part for 30140 EE/HE/FE/GE



**7616690**  
**Sealing Cap, (60/10),**  
for trocars size 11 mm



# Trocars

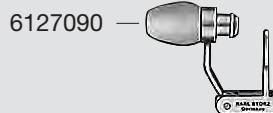
## Reducers

Components / Spare Parts

Catalog page

**30141 AA Reducer**

72



### Spare Part



6127090  
**Sealing Cap, (40/3)**

Components / Spare Parts

Catalog page

**30141 DB Reducer**

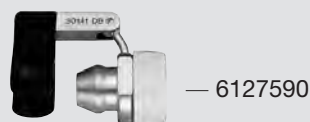
72

**30141 HB Reducer**

72

**30141 HE Reducer**

72



### Spare Parts

Spare Part for 30141 DB/HB

Spare Part for 30141 HE



6127590  
**Sealing Cap, (50/4),**  
for trocars size 6 mm



7616690  
**Sealing Cap, (60/10),**  
for trocars size 11 mm

Components / Spare Parts

Catalog page

**30142 HB Double Reducer**

72



### Spare Parts



6127590  
**Sealing Cap, (50/4),**  
for trocars size 6 mm



7616690  
**Sealing Cap, (60/10),**  
for trocars size 11 mm

# Trocars

Reducers

Components / Spare Parts

Catalog page

**30103 RE Reducer**

72



## Spare Parts



**6127590**  
**Sealing Cap, (50/4),**  
for trocars size 6 mm



**7962190**  
**Silicone Leaflet Washer,**  
large



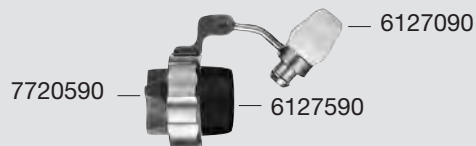
**7228790**  
**Sealing Cap, (60/11)**

Components / Spare Parts

Catalog page

**30160 RE Reducer**

72



## Spare Parts



**6127590**  
**Sealing Cap, (50/4),**  
for trocars size 6 mm



**7720590**  
**Silicone Leaflet Washer**



**6127090**  
**Sealing Cap, (40/3)**

**30120 Y**  
**Silicone Leaflet Seal,**  
autoclavable, package  
of 5

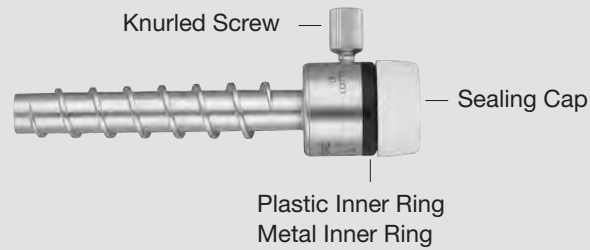
# Trocars

## Thread Sleeves

Components / Spare Parts

Catalog page

<b>30103 S</b>	<b>Thread Sleeve</b>	73
<b>30108 S</b>	<b>Thread Sleeve</b>	73
<b>30160 S</b>	<b>Thread Sleeve</b>	73



**Spare Parts for 30103 S**



7391190  
**Sealing Cap, (60/12)**



7351090  
**Metal Inner Ring**



7351190  
**Plastic Inner Ring**



7351490  
**Knurled Screw**

**Spare Parts for 30108 S**



7482990  
**Sealing Cap, (60/14)**



7482790  
**Metal Inner Ring**



7413795  
**Plastic Inner Ring**



7351490  
**Knurled Screw**

**Spare Parts for 30160 S**



6127690  
**Sealing Cap, (50/5)**



7385590  
**Metal Inner Ring**



7430790  
**Plastic Inner Ring**



7351490  
**Knurled Screw**

# Trocars

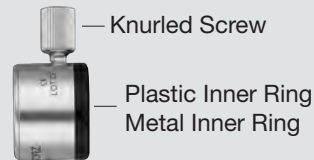
Distance Holders, Trocar

Components / Spare Parts

Catalog page

- 30103 D**      **Distance Holder**
- 30160 D**      **Distance Holder**

73  
73



**Spare Parts for 30103 D**



7351090  
**Metal Inner Ring**



7351490  
**Knurled Screw**



7351190  
**Plastic Inner Ring**

**Spare Parts for 30160 D**



7385590  
**Metal Inner Ring**



7351490  
**Knurled Screw**



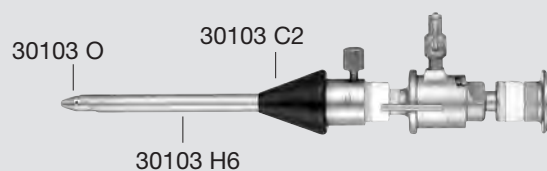
7430790  
**Plastic Inner Ring**

Components / Spare Parts

Catalog page

- 30103 AO**      **Trocar**
- 30103 H6      **Cannula**
- 30103 O      **Trocar only**
- 30103 A1      **Automatic Valve**
- 30103 C2      **Cone**

41



# Trocars

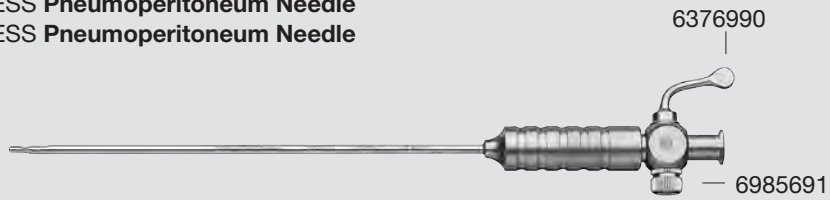
VERESS Pneumoperitoneum Needles

Components / Spare Parts

Catalog page

- 26120 J** VERESS Pneumoperitoneum Needle
- 26120 JL** VERESS Pneumoperitoneum Needle
- 26120 JLL** VERESS Pneumoperitoneum Needle

49, U 12  
49  
49



Spare Parts



6985691  
**Spring Cap**



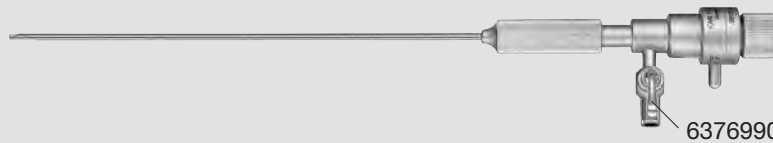
8458190  
**Stopcock**

Components / Spare Parts

Catalog page

- 26120 JK** VERESS Pneumoperitoneum Needle

49



Spare Parts



6985691  
**Spring Cap**



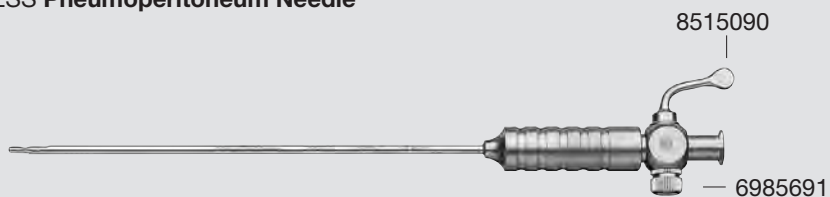
8458190  
**Stopcock**

Components / Spare Parts

Catalog page

- 26120 XL** VERESS Pneumoperitoneum Needle

49



Spare Parts



6985691  
**Spring Cap**



8458190  
**Stopcock**

# S-PORT

for single portal surgery

Components / Spare Parts

Catalog page

**23030 PA S-PORT**

71

- 23030 P **Port Ring**
- 23030 X **S-PORT Attachment**, for X-CONE and S-PORT seals
- 23030 SA **S-PORT Seal**
- 23030 FA **Wound Protector**, package of 10, sterile, for single use
- 23030 D **S-PORT Insertion Aid**, to facilitate assembly
- 23030 T **Removal Tool**, to remove the wound protector sheet and to dismantle the S-PORT



## Spare Parts



23030 S  
**Sealing Cap**



021399-10\*  
**Valve Seal**, sterile, for single use, package of 10, color code: green



23004 A4  
**Reducer**, 13/5 mm and 13/3 mm



021199-10\*  
**Valve Seal**, sterile, for single use, package of 10, color code: green



23004 A5  
**Reducer**, 13/10 mm



021299-10  
**Valve Seal**, sterile, for single use, package of 10, color code: black

Components / Spare Parts

Catalog page

**23030 X S-PORT Attachment**

71



## Spare Parts



6985691  
**Spring Cap**



8541890  
**Stopcock**



# Dissecting and Grasping Forceps

CLICK'liné Metal Outer Sheaths

Components / Spare Parts		Catalog page
<b>31100</b>	CLICK'liné Metal Outer Sheath, insulated	85, 158
<b>31300</b>	CLICK'liné Metal Outer Sheath, insulated	85, 158
<b>33200</b>	CLICK'liné Metal Outer Sheath, insulated	85, 158
<b>33300</b>	CLICK'liné Metal Outer Sheath, insulated	85, 158
<b>33300 CM</b>	CLICK'liné Metal Outer Sheath, insulated	85, 158
<b>33400</b>	CLICK'liné Metal Outer Sheath, insulated	85, 158
<b>33400 CM</b>	CLICK'liné Metal Outer Sheath, insulated	85, 158



## Spare Parts



**29100**  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10



**7909890**  
**Halfround Plate**



**7944790**  
**Silicone Ring**

# Dissecting and Grasping Forceps

CLICK'liné Outer Sheaths

Components / Spare Parts

Catalog page

**33500** CLICK'liné Metal Outer Sheath, insulated

85, 158



## Spare Parts



**29100**  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10



**7909890**  
**Halfround Plate**



**7944790**  
**Silicone Ring**

Components / Spare Parts

Catalog page

**31100 M** CLICK'liné Metal Outer Sheath  
**31300 M** CLICK'liné Metal Outer Sheath  
**33200 M** CLICK'liné Metal Outer Sheath  
**33300 M** CLICK'liné Metal Outer Sheath  
**33400 M** CLICK'liné Metal Outer Sheath  
**33500 M** CLICK'liné Metal Outer Sheath  
**33500 CM** CLICK'liné Metal Outer Sheath

85, 159  
 85, 159  
 85, 159  
 85, 159  
 85, 159  
 85, 159  
 85, 159



## Spare Parts



**29100**  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10



**7909890**  
**Halfround Plate**



**7944790**  
**Silicone Ring**



# Dissecting and Grasping Forceps

CLICK'line Percutaneous Pyloric Spreader, CLICK'line GEIGER Pyloric Grasping Forceps, CLICK'line Dissecting and Grasping Forceps "JET GRASPER", Outer Sheath

Components / Spare Parts

Catalog page

**31161 PSM** CLICK'line Percutaneous Pyloric Spreader

94

- 31110 PS —
- 33161 **Metal Handle**, without ratchet
- 31100 M **Metal Outer Sheath**
- 31110 PS **Forceps Insert**

31100 M



33161 —

Components / Spare Parts

Catalog page

**30361 PS** CLICK'line GEIGER Pyloric Grasper

94

- 33161 **Metal Handle**, without ratchet
- 30310 PS **Outer Sheath**, with working insert

30361 PS —



33161 —

Components / Spare Parts

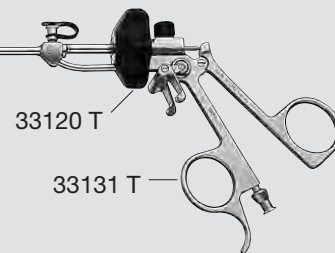
Catalog page

**33331 ST** CLICK'line TCHARTCHIAN Dissecting and Grasping Forceps "JET GRASPER"

95

- 33131 T **Metal Handle**, without ratchet
- 33120 T **Rotating Wheel**
- 33310 S **Outer Sheath with Working Insert**
- 27651 AS **Cleaning Brush**

33310 S



33120 T

33131 T

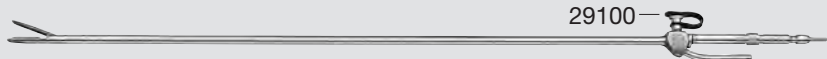
Components / Spare Parts

Catalog page

**33310 S** **Outer Sheath**, with working insert

95

29100 —



Spare Part



29100 **Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

# Dissecting and Grasping Forceps

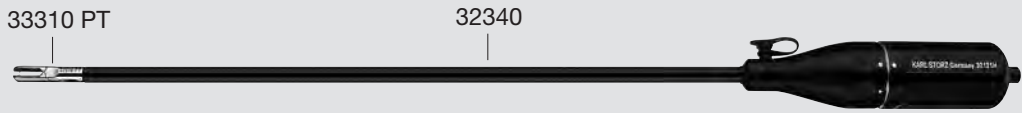
Surgical Sponge Holders, Handles, Outer Sheaths

Components / Spare Parts

Catalog page

**32340 PT** Surgical Sponge Holder

135



32121 Handle

32121

32340 Outer Sheath, insulated

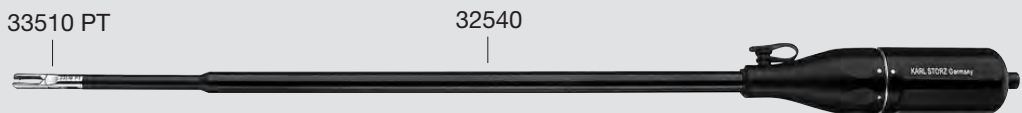
33310 PT Sponge Holder Insert

Components / Spare Parts

Catalog page

**32540 PT** Surgical Sponge Holder

135



32121 Handle

32121

32540 Outer Sheath, insulated

33510 PT Sponge Holder Insert

Components / Spare Parts

Catalog page

**32121** Handle

135



## Spare Parts



32121 K  
Handle Core



32121 H  
Handle Shell

Components / Spare Parts

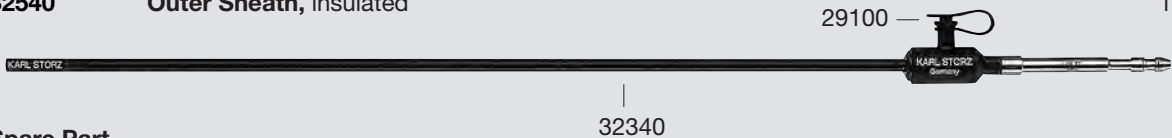
Catalog page

**32340** Outer Sheath, insulated

135

**32540** Outer Sheath, insulated

135



## Spare Part



29100  
**Plug**, for LUER-Lock  
irrigation connector for  
cleaning, black,  
autoclavable,  
package of 10

# Dissecting and Grasping Forceps

CLICK'liné Outer Sheaths with Working Inserts

## Components / Spare Parts

Catalog page

<b>30210 MSS</b>	CLICK'liné METZENBAUM Outer Sheath with Scissors Insert	160
<b>30210 KJS</b>	CLICK'liné REDDICK-OLSEN Outer Sheath with Forceps Insert	86
<b>30240 AS</b>	CLICK'liné BABCOCK Metal Outer Sheath with Forceps Insert	86



## Spare Part



29100  
**Plug**, for LUER-Lock  
irrigation connector for  
cleaning, black,  
autoclavable,  
package of 10

# Dissecting and Grasping Forceps

ROBI® Outer Sheaths, ROBI® Forceps and Scissors Inserts  
with Outer Sheath

## Components / Spare Parts

Catalog page

<b>38600</b>	<b>ROBI® Metal Outer Sheath</b> , insulated	146, 172
<b>38700</b>	<b>ROBI® Metal Outer Sheath</b> , insulated	146, 172



## Spare Part



29100  
**Plug**, for LUER-Lock  
irrigation connector for  
cleaning, black,  
autoclavable,  
package of 10

## Components / Spare Parts

Catalog page

<b>38810 ON</b>	<b>ROBI® Outer Sheath with Forceps Insert</b>	147
<b>38910 ON</b>	<b>ROBI® Outer Sheath with Forceps Insert</b>	147
<b>38810 MD</b>	<b>ROBI® KELLY Outer Sheath with Forceps Insert</b>	147
<b>38910 MD</b>	<b>ROBI® KELLY Outer Sheath with Forceps Insert</b>	147
<b>38810 PT</b>	<b>ROBI® TAN Outer Sheath with Forceps Insert</b>	147
<b>38810 MW</b>	<b>ROBI® Outer Sheath with Scissors Insert</b>	173
<b>38910 MW</b>	<b>ROBI® Outer Sheath with Scissors Insert</b>	173



## Spare Part



29100  
**Plug**, for LUER-Lock  
irrigation connector for  
cleaning, black,  
autoclavable,  
package of 10

# Dissecting and Grasping Forceps

Handles for TAKE APART® Bipolar Forceps and Scissors

Components / Spare Parts

Catalog page

<b>26184 HM</b>	<b>TAKE-APART® Bipolar Ring Handle</b>	136
<b>26184 HR</b>	<b>TAKE-APART® Bipolar Spring Handle</b>	136



## Spare Part



7072390  
**Sealing Cap,**  
diameter 1.8 mm

# Dissecting and Grasping Forceps

Handles for TAKE APART® Bipolar Forceps and Scissors

Components / Spare Parts

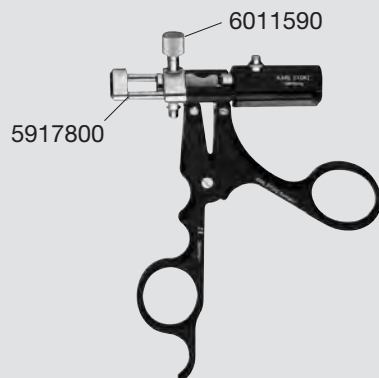
Catalog page

**26296 HM TAKE-APART® Bipolar Ring Handle**

140

**26296 HR TAKE-APART® Bipolar Spring Handle**

140



## Spare Parts



**6011590**  
**Plug, for LUER-Lock**  
connector



**27550 G-10**  
**Sealing Cap,**  
diameter 2.8 mm,  
package of 10



**5917800**  
**O-Ring**

# Miscellaneous Accessories

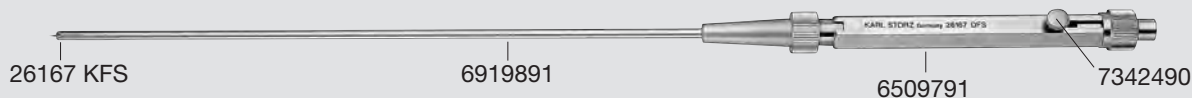
Pylorotome, Endotome, Pyloric Knife

Components / Spare Parts

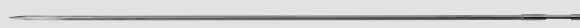
Catalog page

**26167 DFS** ALAIN-GROUSSEAU Pylorotome

175



## Spare Parts



26167 KFS  
Micro Knife



6919891  
Outer Sheath



6509791  
Handle, complete



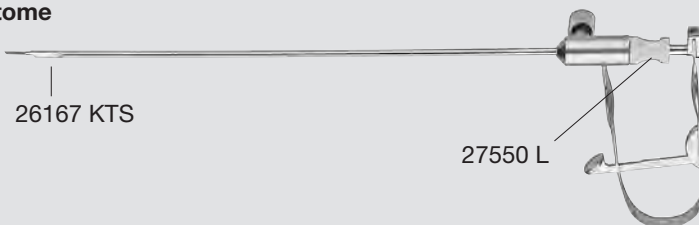
7342490  
Cap

Components / Spare Parts

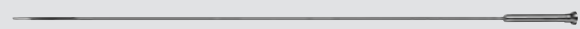
Catalog page

**26167 DTS** TAN Endotome

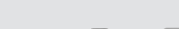
175



## Spare Parts



26167 KTS  
Knife



27550 L-10  
Sealing Cap



6011590  
Plug, for LUER-Lock  
connector

Components / Spare Parts

Catalog page

**26167 DRS** Pyloric Knife

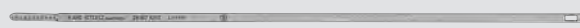
175

26167 KS Handle, with outer sheath

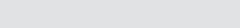
26167 KRS Knife Insert, unsterile, for single use, package of 10



## Spare Parts



26167 KRS  
Knife Insert, for single  
use, unsterile, package of  
10



29100  
Plug, for LUER-Lock  
irrigation connector for  
cleaning, black,  
autoclavable,  
package of 10

# Instruments for Unipolar and Bipolar Coagulation

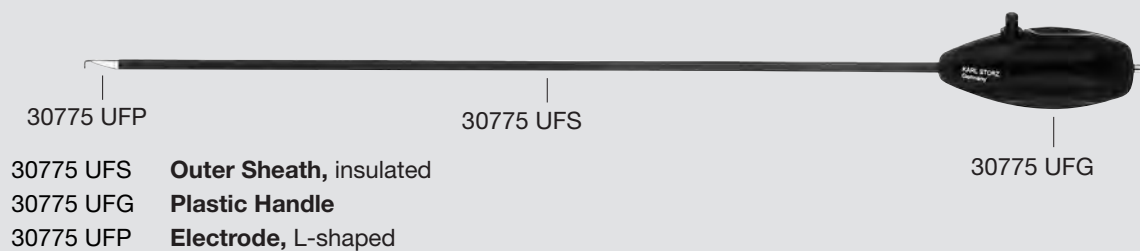
Coagulation and Dissection Electrode, KOH Ultramicro High Frequency Electrode, High Frequency Needle

Components / Spare Parts

Catalog page

**30775 UF** Coagulation and Dissection Electrode

182



30775 UFS **Outer Sheath**, insulated

30775 UFG **Plastic Handle**

30775 UFP **Electrode**, L-shaped

Components / Spare Parts

Catalog page

**26167 NNL** KOH Ultramicro High Frequency Electrode

184

26167 NNX



## Spare Parts



26167 NNX  
**Spare Needle Electrode**,  
autoclavable, size 3.5 mm,  
length 36 cm, package of 5



7072390  
**Sealing Cap**,  
diameter 1.8 mm



6276091  
**Plug**, with sleeve

Components / Spare Parts

Catalog page

**30675 ND** High Frequency Needle

184



## Spare Parts



26175 NE  
**Spare Needle Electrode**,  
diameter 0.7 mm,  
length 31 cm

26175 NS  
**Spare Needle Electrode**,  
autoclavable, diameter  
0.5 mm, length 31 cm,  
package of 1



7072390  
**Sealing Cap**,  
diameter 1.8 mm



6276091  
**Plug**, with sleeve



# Instruments for Unipolar and Bipolar Coagulation

REMORGIDA Coagulation and Dissection Electrode,  
Bipolar Needle

Components / Spare Parts

Catalog page

**26785 RL** REMORGIDA Coagulation and Dissection Electrode

183



## Spare Part



**29100**  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

Components / Spare Parts

Catalog page

**26183 E** Bipolar Needle

187



## Spare Parts



**27550 E-10**  
**Sealing Cap**, diameter 1.6 mm, package of 10

**26183 EN**  
**Spare Electrode**, autoclavable, package of 5

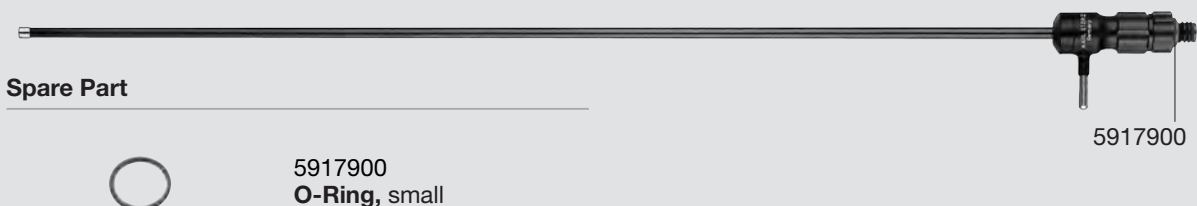
# Instruments for Unipolar and Bipolar Coagulation

Coagulation and Dissection Electrodes, Coagulation Suction Tubes

Components / Spare Parts Catalog page

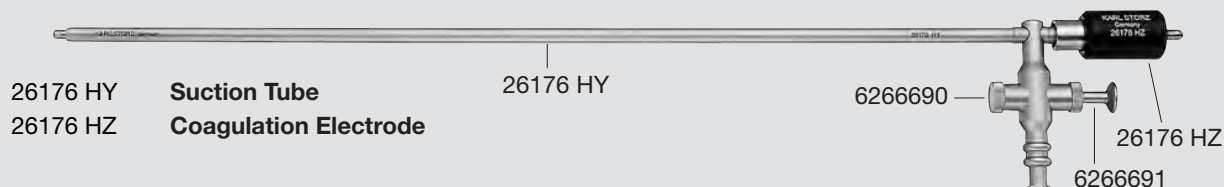
<b>37270 DB</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37270 DL</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37270 SC</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37370 DB</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37370 DH</b>	<b>CUSCHIERI Dissecting Suction Tube</b>	186
<b>37370 DL</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37370 DU</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37370 SC</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37470 DB</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37470 DL</b>	<b>Coagulation and Dissection Electrode</b>	186
<b>37470 SC</b>	<b>Coagulation and Dissection Electrode</b>	186

Spare Part



Components / Spare Parts Catalog page

<b>26176 HK</b>	<b>TAKE-APART® Bipolar Coagulation Suction Tube</b>	187
-----------------	---	-----

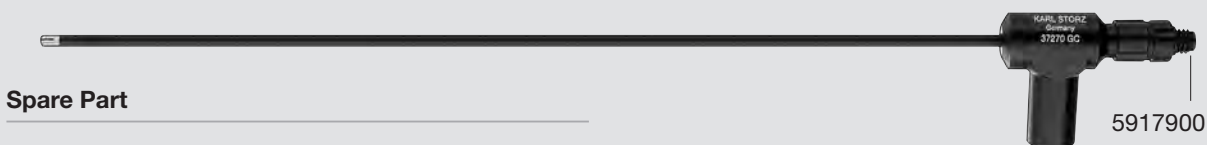


Spare Parts

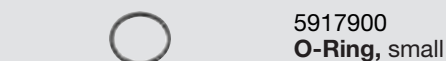


Components / Spare Parts Catalog page

<b>37370 GC</b>	<b>GORDTS and CAMPO Coagulation Suction and Irrigation Tube</b>	187
-----------------	---	-----



Spare Part



# Retractors

CUSCHIERI Retractors

Components / Spare Parts

Catalog page

**30623 U**

CUSCHIERI Retractor

194



## Spare Parts



30623 UA  
**Outer Sheath**



30623 UH  
**Handle**, including rotating wheel for deflection



30623 UI  
**Insert**, bendable



30623 US  
**Rotating Wheel**, for deflection

Components / Spare Parts

Catalog page

**30623 UR**

CUSCHIERI Retractor

194

## Spare Parts



30623 URA  
**Outer Sheath**



30623 UH  
**Handle**, including rotating wheel for deflection



30623 URI  
**Insert**, bendable



30623 US  
**Rotating Wheel**, for deflection

Components / Spare Parts

Catalog page

**30623 URL**

CUSCHIERI Retractor

194

## Spare Parts



30623 URA  
**Outer Sheath**



30623 UH  
**Handle**, including rotating wheel for deflection



30623 ULI  
**Insert**, bendable



30623 US  
**Rotating Wheel**, for deflection

# Retractors

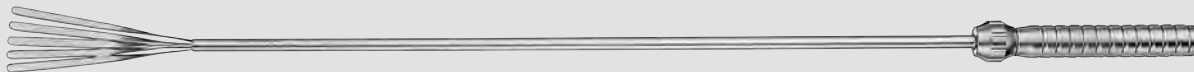
## Fan Retractors

Components / Spare Parts

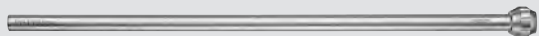
Catalog page

**30623 F** Fan Retractor

195



### Spare Part



6681391  
Outer Sheath

Components / Spare Parts

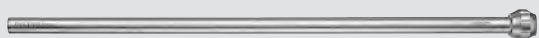
Catalog page

**30623 FP** Fan Retractor

195



### Spare Part



6681291  
Outer Sheath

# Retractors

Retractors for Gastric Banding, Retractors

Components / Spare Parts		Catalog page
<b>30623 G</b>	<b>Retractor for Gastric Banding</b>	196
<b>30623 GB</b>	<b>Retractor for Gastric Banding</b>	196
<b>30623 HA</b>	<b>Articulating H-Retractor</b>	198
<b>30623 T</b>	<b>T-Retractor</b>	199
<b>30623 VL</b>	<b>V-Retractor</b>	199
<b>30623 I</b>	<b>I-Retractor</b>	199

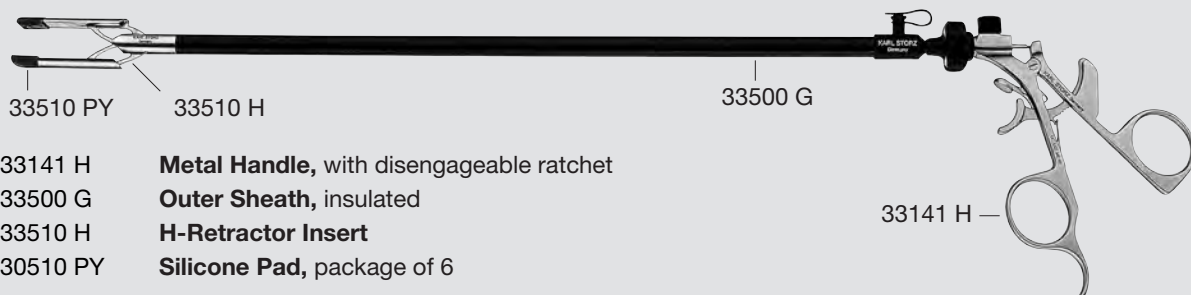


## Spare Part



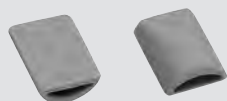
6011590  
**Plug**, for LUER-Lock connector

Components / Spare Parts		Catalog page
<b>33541 H</b>	<b>CLICK<sup>line</sup> H-Retractor</b>	197



33141 H **Metal Handle**, with disengageable ratchet  
 33500 G **Outer Sheath**, insulated  
 33510 H **H-Retractor Insert**  
 30510 PY **Silicone Pad**, package of 6

## Spare Part



30510 PY  
**Silicone Pad**, autoclavable, package of 6

Components / Spare Parts		Catalog page
<b>33500 G</b>	<b>Outer Sheath</b> , insulated	197



## Spare Parts



29100  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10



7909890  
**Halfround Plate**



7944790  
**Silicone Ring**

# Dissectors

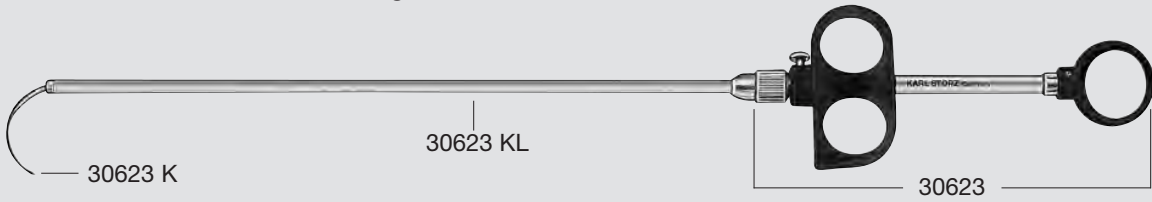
CUSCHIERI Dismantling Variable Curvature Dissector

Components / Spare Parts

Catalog page

**30623 GK** CUSCHIERI Dismantling Variable Curvature Dissector

192



- 30623 **Handle**
- 30623 KL **Outer Sheath**
- 30623 K **Insert Dissector, large curvature**

Components / Spare Parts

Catalog page

**30623** **Handle**

192



**Spare Part**



5911902  
**Knurled Screw**

Components / Spare Parts

Catalog page

**30623 KL** **Outer Sheath**

192



**Spare Part**



5904900  
**O-Ring**

## Palpation Probes

Components / Spare Parts

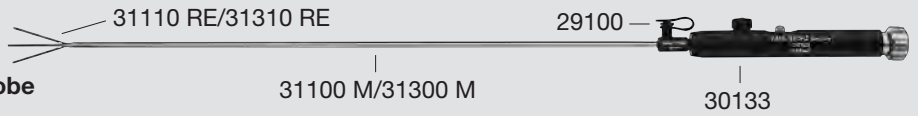
Catalog page

**31143 REM** Palpation Probe 191

30133 Handle

31100 M Metal Outer Sheath

31110 RE Forceps Insert



**31343 REM** Palpation Probe

30133 Handle

31300 M Metal Outer Sheath

31310 RE Forceps Insert

### Spare Part

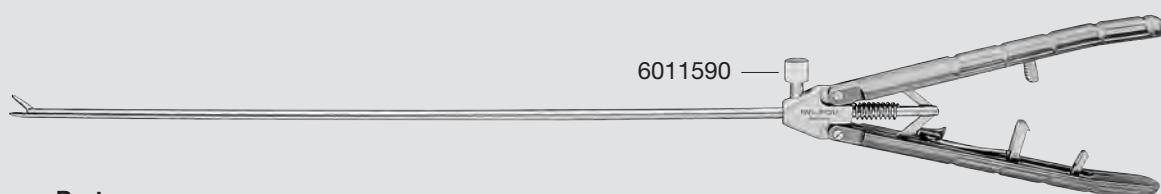


29100  
**Plug**, for LUER-Lock  
 irrigation connector for  
 cleaning, black,  
 autoclavable,  
 package of 10

# Suture and Ligature

## Needle Holders

Components / Spare Parts	Catalog page
<b>26167 LNS</b> KOH Ultramicro Needle Holder	202
<b>26167 LNL</b> KOH Ultramicro Needle Holder	202
<b>26167 RNS</b> KOH Ultramicro Needle Holder	202
<b>26167 RNL</b> KOH Ultramicro Needle Holder	202
<b>30200 FNS</b> KOH Ultramicro Needle Holder	202
<b>26173 KAF</b> KOH Macro Needle Holder	207
<b>26173 KAL</b> KOH Macro Needle Holder	207
<b>26173 KAR</b> KOH Macro Needle Holder	207
<b>26178 KAF</b> KOH Macro Needle Holder	207
<b>26178 KAL</b> KOH Macro Needle Holder	207
<b>26178 KAR</b> KOH Macro Needle Holder	207
<b>26173 ML</b> KOH Macro Needle Holder	207
<b>26173 MC</b> KOH Macro Needle Holder	207
<b>26178 ML</b> KOH Macro Needle Holder	207
<b>26178 MC</b> KOH Macro Needle Holder	207
<b>26173 DQ</b> SZABO-BERCI Assistant Needle Holder "FLAMINGO-JAW®"	205
<b>26173 QR</b> SZABO-BERCI Assistant Needle Holder "FLAMINGO-JAW®"	205
<b>26173 SD</b> SZABO-BERCI Assistant Needle Holder "FLAMINGO-JAW®"	205
<b>26173 CE</b> SZABO-BERCI Needle Holder "PARROT-JAW®"	204
<b>26173 CQ</b> SZABO-BERCI Needle Holder "PARROT-JAW®"	204
<b>26173 SC</b> SZABO-BERCI Needle Holder "PARROT-JAW®"	204
<b>26173 SE</b> SZABO-BERCI Needle Holder "PARROT-JAW®"	204
<b>26173 SP</b> SZABO-BERCI Needle Holder "PARROT-JAW®"	204



### Spare Part



**6011590**  
**Plug**, for LUER-Lock  
connector



# Suture and Ligature

## Needle Holders

### Components / Spare Parts

Catalog page

<b>26167 MNS</b>	LIMA Needle Holder	203
<b>26167 SNL</b>	SAWALHE Needle Holder	203
<b>26173 SKG</b>	RASSWEILER Needle Holder	214, 346
<b>26173 SKL</b>	RASSWEILER Needle Holder	214, 346



### Spare Part

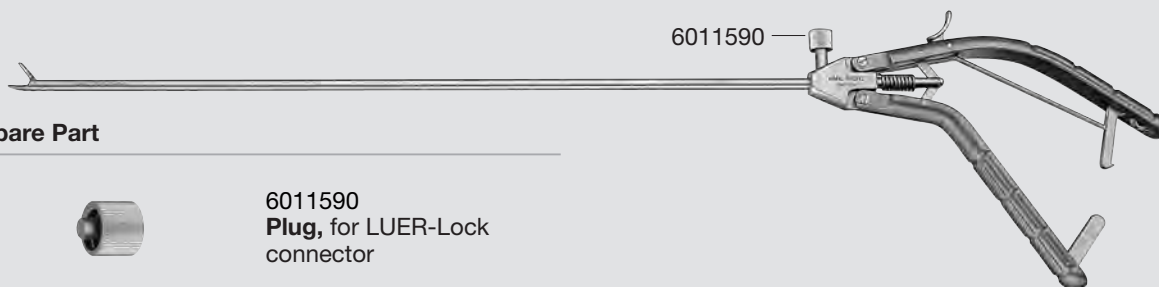


**6011590**  
**Plug**, for LUER-Lock  
connector

### Components / Spare Parts

Catalog page

<b>26173 KC</b>	KOH Macro Needle Holder	208
<b>26173 KL</b>	KOH Macro Needle Holder	208
<b>26173 KPF</b>	KOH Macro Needle Holder	208
<b>26173 KPL</b>	KOH Macro Needle Holder	208
<b>26173 KPR</b>	KOH Macro Needle Holder	208
<b>26178 KPF</b>	KOH Macro Needle Holder	208
<b>26178 KPL</b>	KOH Macro Needle Holder	208
<b>26178 KPR</b>	KOH Macro Needle Holder	208
<b>26173 KG</b>	KOH Assistant Needle Holder	208



### Spare Part



**6011590**  
**Plug**, for LUER-Lock  
connector

# Suture and Ligature

Metal Outer Sheaths for Dismantling Needle Holders,  
BERCI Fascial Closure Instrument

## Components / Spare Parts

Catalog page

**30173 A** Metal Outer Sheath  
**30178 A** Metal Outer Sheath

210  
210



## Spare Parts



**29100**  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10



**9562890**  
**Halfround Plate**



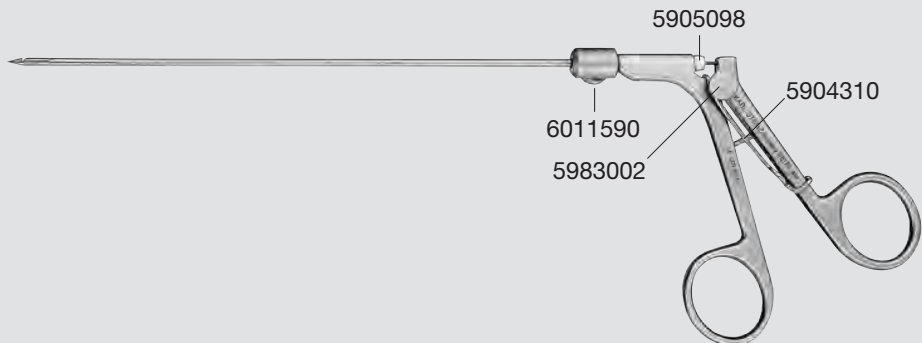
**9562990**  
**Clamping Ring**

## Components / Spare Parts

Catalog page

**26173 AM** BERICI Fascial Closure Instrument

219



## Spare Parts



**5904310**  
**Spring**, for handle



**5983002**  
**Knurled Screw**



**5905098**  
**Sealing Cap**, small



**6011590**  
**Plug**, for LUER-Lock connector

# Suture and Ligature

Needle Holder

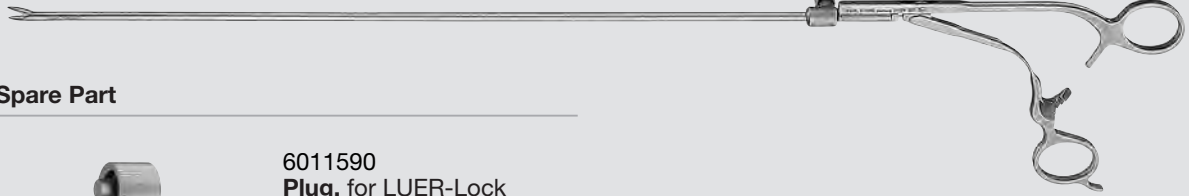
Components / Spare Parts

Catalog page

**26174 SQ** Needle Holder

213

6011590



## Spare Part



6011590  
**Plug**, for LUER-Lock  
connector

# Suture and Ligature

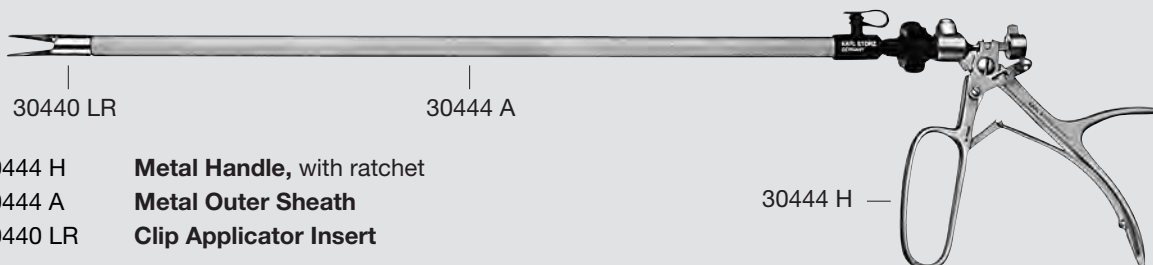
## Clip Applicators

Components / Spare Parts

Catalog page

**30444 LR** Clip Applicator

220



30444 H **Metal Handle, with ratchet**

30444 A **Metal Outer Sheath**

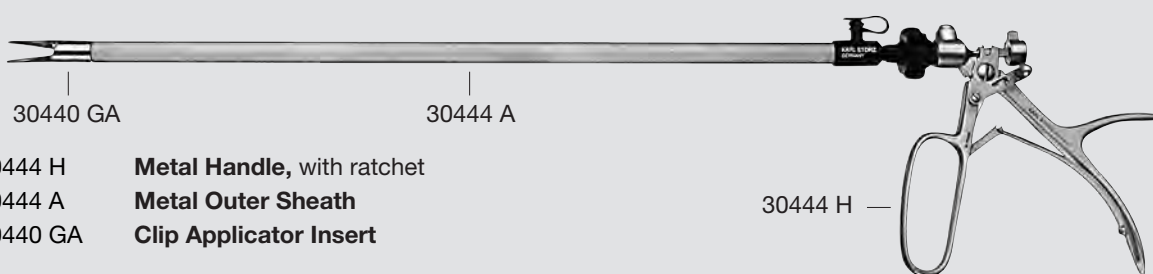
30440 LR **Clip Applicator Insert**

Components / Spare Parts

Catalog page

**30444 GA** Clip Applicator

220



30444 H **Metal Handle, with ratchet**

30444 A **Metal Outer Sheath**

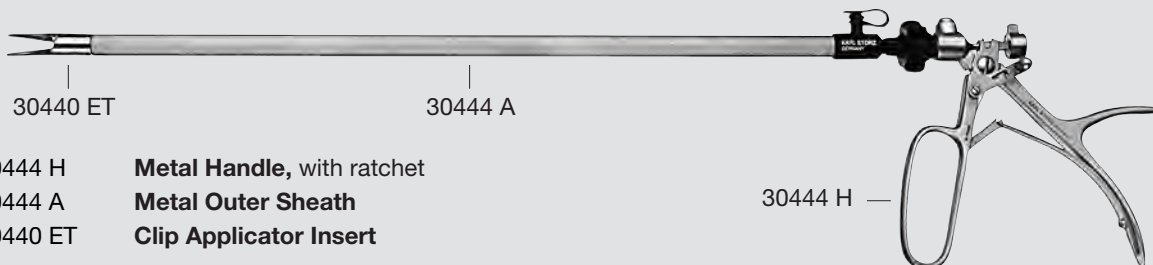
30440 GA **Clip Applicator Insert**

Components / Spare Parts

Catalog page

**30444 ET** Clip Applicator

220



30444 H **Metal Handle, with ratchet**

30444 A **Metal Outer Sheath**

30440 ET **Clip Applicator Insert**

Components / Spare Parts

Catalog page

**30444 A** Metal Outer Sheath

220



### Spare Parts



**29100**  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10



**7909890**  
**Halfround Plate**



**7944790**  
**Silicone Ring**

# Suction and Irrigation

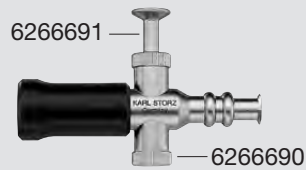
Handles for Suction and Irrigation

Components / Spare Parts

Catalog page

**30804** Handle with Trumpet Valve

185, 225



## Spare Parts



5905610  
**Spring**



6266690  
**Knurled Cap**



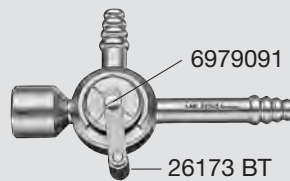
6266691  
**Piston**

Components / Spare Parts

Catalog page

**30805** Handle with Two-Way Stopcock

225



## Spare Parts



26173 BT

**Stopcock**



6979091  
**Spring Cap**

# Suction and Irrigation

Handles for Suction and Irrigation

Components / Spare Parts

Catalog page

**37112 A** Handle, straight

226



## Spare Parts



**37112 D**  
**Seal Set**



**8401290**  
**Adaptor**



**8236791**  
**Adaptor, complete**



**8401390**  
**Cap Nut**

Components / Spare Parts

Catalog page

**37113 A** Handle, pistol grip

226



## Spare Parts



**37113 D**  
**Seal Set**



**8401390**  
**Cap Nut**



**8236791**  
**Adaptor, complete**



**7648291**  
**Blind Plug**



**8401290**  
**Adaptor**

# Suction and Irrigation

## Suction and Irrigation Tubes

Components / Spare Parts		Catalog page
<b>26172 BN</b>	<b>Suction and Irrigation Tube</b>	229
<b>26173 BK</b>	<b>Suction and Irrigation Tube</b>	229
<b>26173 BN</b>	<b>Suction and Irrigation Tube</b>	229, U 25, U 28
<b>26174 BN</b>	<b>Suction and Irrigation Tube</b>	229
<b>26173 BL</b>	<b>Suction and Irrigation Tube</b>	229



### Spare Parts



26173 BT

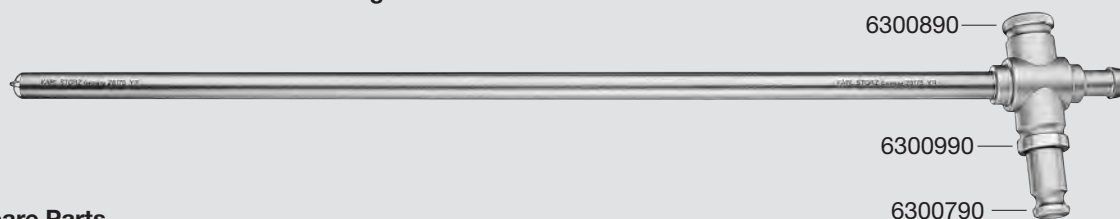
**Stopcock**



6353591

**Spring Cap**

Components / Spare Parts		Catalog page
<b>28175 YR</b>	<b>OLSEN Suction or Irrigation Tube</b>	230



### Spare Parts



5903110  
**Spring**

6300790  
**Piston**



6300890  
**Screw Cap**



6300990  
**Threaded Ring, for piston**

# Suction and Irrigation

## Suction and Irrigation Tubes

### Components / Spare Parts

Catalog page

<b>26167 ANS</b>	<b>Suction and Irrigation Tube</b>	228
<b>26167 ANL</b>	<b>Suction and Irrigation Tube</b>	228
<b>37260 LH</b>	<b>Suction and Irrigation Tube</b>	228
<b>37360 CP</b>	<b>Suction and Irrigation Tube</b>	228
<b>37360 LH</b>	<b>Suction and Irrigation Tube</b>	228
<b>37360 SC</b>	<b>Suction and Irrigation Tube</b>	228
<b>37460 LH</b>	<b>Suction and Irrigation Tube</b>	228



### Spare Part

5917900



5917900  
**O-Ring, small**

### Components / Spare Parts

Catalog page

<b>37560 LH</b>	<b>Suction and Irrigation Tube</b>	229
-----------------	------------------------------------	-----



### Spare Parts

8133590



5903000  
**O-Ring, large**



8133590  
**Adaptor**



5917900  
**O-Ring, small**



# Holding Systems

ARTIP® SOLO – Active Camera Guidance System,  
Mechanical Holding Systems

Components / Spare Parts

Catalog page

**UR 200**      **ARTIP® SOLO Camera Guidance System**

238

**Spare Part**

UR 022  
**ARTIP® SOLO Headset,**  
with charging station for  
headphones



Components / Spare Parts

Catalog page

**28172 HK**      **Socket, to clamp to the OR table**

246

**Spare Part**

ET35-91-090  
**Butterfly Nut,**  
for fixing the retaining rod



Components / Spare Parts

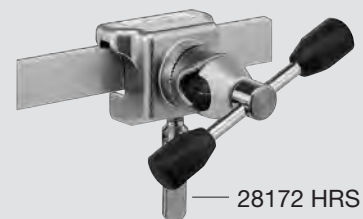
Catalog page

**28172 HR**      **Rotation Socket, to clamp to the operating table**

193, 243, 246, 275

**Spare Part**

28172 HRS  
**Butterfly Nut,** to clamp  
Socket 28172 HR to the  
operating table, one  
already mounted on  
Socket 28172 HR



Components / Spare Parts

Catalog page

**28272 HA**      **Articulated Stand**

246

**28272 HB**      **Articulated Stand**

246, 275

**28272 HC**      **Articulated Stand**

193, 246, 275

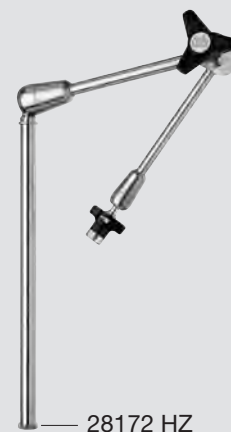
**28272 HD**      **Articulated Stand**

246

**Spare Part**



28172 HZ  
**Set Screw,**  
for articulated stands



# Trainer

SZABO-BERCI-SACKIER Laparoscopic Trainer

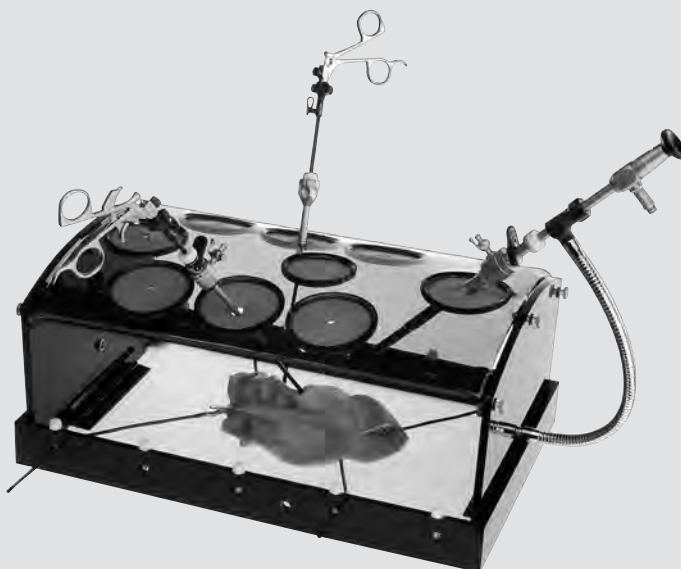
Components / Spare Parts

Catalog page

**26348**

**SZABO-BERCI-SACKIER Laparoscopic Trainer**

248



## Spare Parts



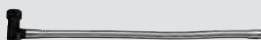
26348 A  
**Tissue Clip**



26348 N  
**Plastic Screw**



26348 B  
**Brass Screw**



26348 Z  
**Holding Device,**  
for fixation of training  
materials to be used  
with LAP trainer

26348 NL  
**Trainer Housing**

26348 TP  
**Lid**

# Trainers

Endoscopic Surgery Trainers,  
Training Model for Laparoscopic Surgery, EAGS model

Components / Spare Parts

Catalog page

**26332 A** Endoscopic Surgery Trainer "SURGERY" Model

250

- 26332 D Base Plate
- 26332 C "SURGERY" Top Plate
- 26332 L Fixation Clamps, package of 2
- 26332 P Silicone Insert, package of 4
- 26332 K Case
- 26332 TC "SURGERY" Drape



Components / Spare Parts

Catalog page

**26332 B** Endoscopic Surgery Trainer "GYNECOLOGY" Model

250

- 26332 D Base Plate
- 26332 G "GYNECOLOGY" Top Plate
- 26332 L Fixation Clamps, package of 2
- 26332 P Silicone Insert, package of 4
- 26332 K Case
- 26332 TG Drape



Components / Spare Parts

Catalog page

**26332 N** Training Model for Laparoscopic Surgery, EAGS model

251

- 26332 D Base Plate
- 26332 R Top Plate, EAGS model
- 26332 J Foam Rubber Insert, package of 8
- 26332 K Case
- 26332 T Drape



# Trainer

SZINICZ Laparoscopic Trainer

Components / Spare Parts

Catalog page

**26342 KB** SZINICZ Laparoscopic Trainer

253

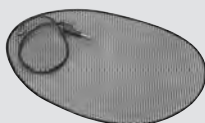


## Spare Parts



26341 B  
**Casing Cover**

26341 S  
**Manual**



26341 C  
**Base Plate**



26342 AA  
**Adaptor, 10 mm**



26341 D  
**Neopren Mat**



26342 AB  
**Adaptor, 12 mm**



26341 E  
**Pump, electronically controlled**



26342 AC  
**Adaptor, 15 mm**



26341 F  
**Perfusion Tube**



26342 AD  
**Adaptor, 26 mm**



26341 K  
**Mains Adaptor, 230 VAC**



26342 AE  
**Adaptor, 35 mm**



26341 N  
**Food Coloring, 250 g**



26342 KG  
**Ball Joint**



26341 P  
**Drain Plug**

26342 FR  
**Fixation Ring**



26341 R  
**Wire Tray**



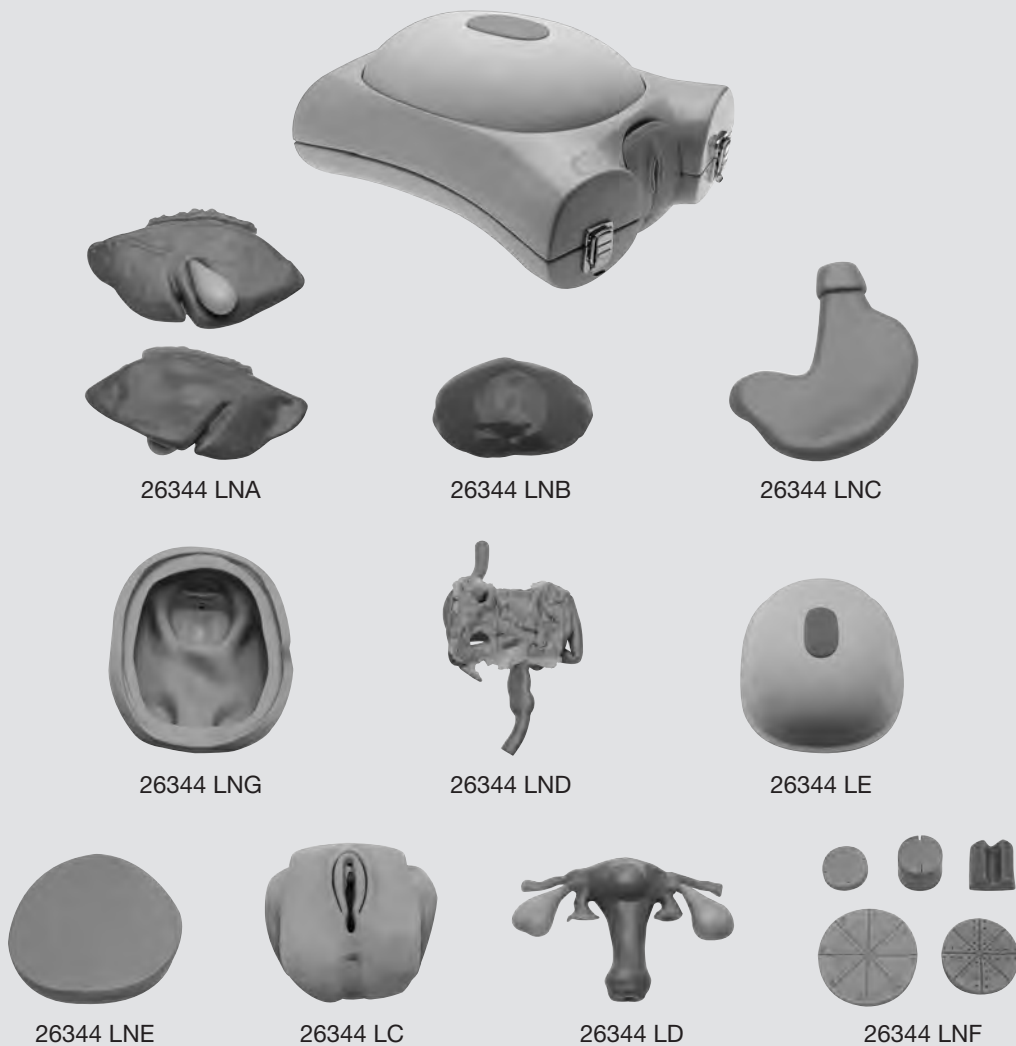
26342 WA  
**Water Outlet**

Components / Spare Parts

Catalog page

**26344 L2** LYRA Laparoscopic Simulator

256



- 26344 X LYRA **Body Laparoscopic Simulator**
- 26344 LNA **Neoderm Organ**, liver
- 26344 LNB **Neoderm Organ**, spleen
- 26344 LNC **Neoderm Organ**, stomach
- 26344 LNG **Neoderm Organ**, peritoneum
- 26344 LND **Neoderm Organ**, bowel
- 26344 LE **Neoderm Organ**, abdominal wall
- 26344 LNE **Neoderm Organ**, cul-de-sac
- 26344 LC **Neoderm Organ**, vaginal block
- 26344 LD **Neoderm Organ**, uterus
- 26344 LNF **Neoderm Organ**, suturing model

# Intraoperative Cholangiography, Choledochoscopy, Micro Knives

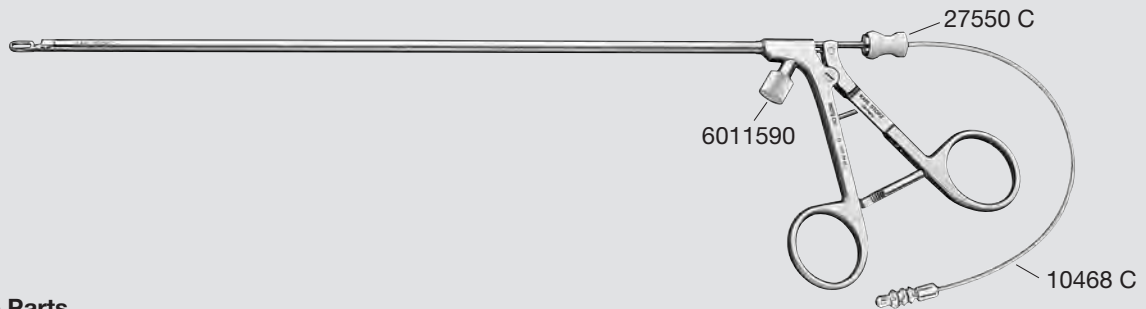
Instruments for Cholangiography

Components / Spare Parts

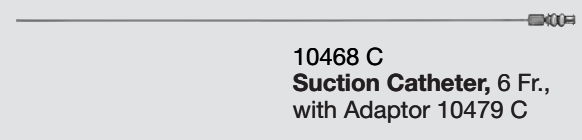
Catalog page

**28378 CH** OLSEN Cholangiography Fixation Clamp

279



## Spare Parts



**10468 C**  
**Suction Catheter, 6 Fr.,**  
with Adaptor 10479 C



**27550 C-10**  
**Sealing Cap, drill hole**  
diameter 1.2 mm, package  
of 10



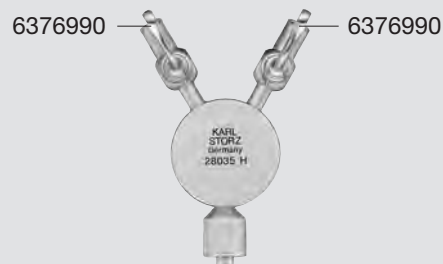
**6011590**  
**Plug, for LUER-Lock**  
connector

Components / Spare Parts

Catalog page

**28035 H** Two-Way Stopcock, with 2 valves

279



## Spare Parts



**6985691**  
**Spring Cap**



**6376990**  
**Stopcock, for**  
irrigation connector

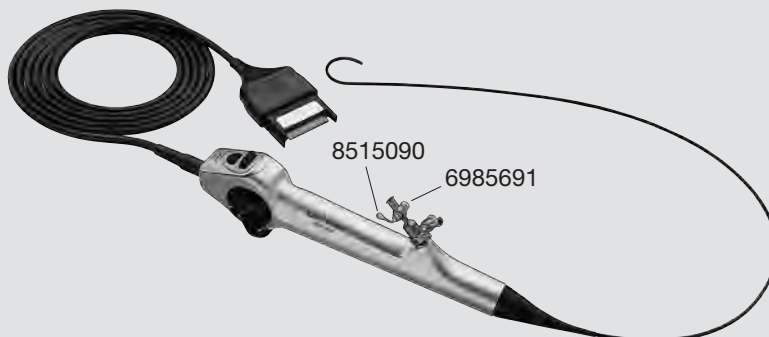
# Intraoperative Cholangiography, Choledochoscopy, Micro Knives

Video Choledochoscopes, Leakage Tester

Components / Spare Parts

Catalog page

<b>11292 VSK</b>	<b>Flexible Video Choledochoscope</b>	282
<b>11292 VSUK</b>	<b>Flexible Video Choledochoscope</b>	282



Spare Parts



**6985691**  
**Spring Cap**



**8515090**  
**Stopcock**

Components / Spare Parts

Catalog page

<b>13242 XL</b>	<b>Leakage Tester</b>	286, 288
-----------------	-----------------------	----------



**5500735**

Spare Parts



**5500735**  
**Silicone Tube**



**5907900**  
**O-Ring**

# Intraoperative Cholangiography, Choledochoscopy, Micro Knives

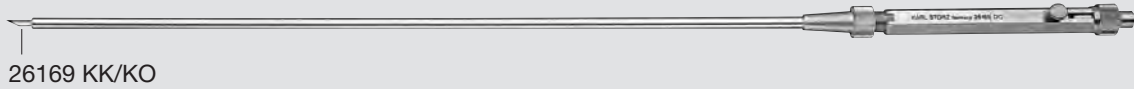
BERCI Micro Knife and Grasping Forceps

Components / Spare Parts

Catalog page

**26169 DO** BERICI Micro Knife  
**26169 DK** Micro Knife

290



**Spare Parts**



7354591  
**Cap**

Spare Part for 26169 DO

26169 KO  
**BERICI Spare Blade**

Spare Part for 26169 DK

26169 KK  
**Spare Blade**

Components / Spare Parts

Catalog page

**33531 PG** CLICK<sup>line</sup> BERICI Grasping Forceps

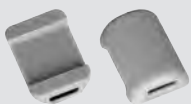
290



33131 **Metal Handle**, without ratchet  
33500 **Outer Sheath**, insulated  
33510 PG **BERICI Forceps Insert**, with silicone pads

33131 —

**Spare Part**



30510 PX  
**Silicone Pad**,  
package of 10



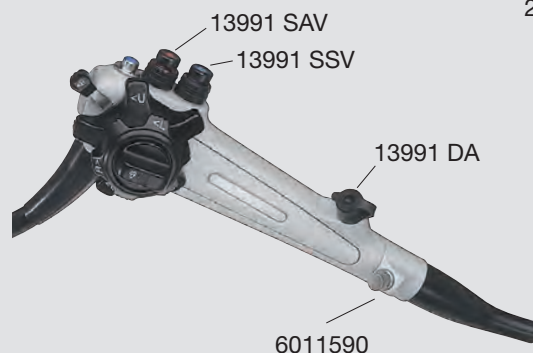
# Flexible Endoscopes in Surgery

SILVER SCOPE® Colonoscopes, Sigmoidoscopes, TROIDL Rectoscopes

## Components / Spare Parts

Catalog page

<b>13924 PKS</b>	Standard Colonoscope, SILVER SCOPE® series, PAL	292
<b>13924 NKS</b>	Standard Colonoscope, SILVER SCOPE® series, NTSC	292
<b>13925 PKS</b>	Standard Colonoscope, SILVER SCOPE® series, with water jet channel, PAL	292
<b>13925 NKS</b>	Standard Colonoscope, SILVER SCOPE® series, with water jet channel, NTSC	292
<b>13926 PKS</b>	Slim Colonoscope, SILVER SCOPE® series, with water jet channel, PAL	292
<b>13926 NKS</b>	Slim Colonoscope, SILVER SCOPE® series, with water jet channel, NTSC	292
<b>13927 PKS</b>	Slim Colonoscope, SILVER SCOPE® series, with water jet channel, PAL	292
<b>13927 NKS</b>	Slim Colonoscope, SILVER SCOPE® series, with water jet channel, NTSC	292
<b>13920 PKS</b>	Sigmoidoscope, SILVER SCOPE® series, with water jet channel, PAL	292
<b>13920 NKS</b>	Sigmoidoscope, SILVER SCOPE® series, with water jet channel, NTSC	292
<b>13912 PKS</b>	TROIDL Rectoscope, PAL	294
<b>13912 NKS</b>	TROIDL Rectoscope, NTSC	294



## Spare Parts



**13991 DA**  
**Sealing Cap**, for working channel, package of 10



**4723655**  
**Lanyard**, for plugs from the SILVER SCOPE® series



**4723665**  
**Fastening Strap Rivet**



**4711879**  
**Sealing Cap**, SILVER SCOPE® series, with lanyard



**13991 SAV**  
**Suction Valve**, reusable



**6011590**  
**Plug**, for LUER-Lock connector



**13991 SSV**  
**Air/Water Valve**



**11025 XE**  
**Pressure Compensation Cap**

# Flexible Endoscopes in Surgery

Valves, O-Rings, Leakage Tester

Components / Spare Parts

Catalog page

**13991 SRV** Cleaning Valve

293, 295

Spare Part



4720115  
O-Ring, 3.1 x 1.65 mm



Components / Spare Parts

Catalog page

**13991 SSV** Air/Water Valve

293, 295

Spare Part



4720115  
O-Ring, 3.1 x 1.65 mm



Components / Spare Parts

Catalog page

**O-Rings for Supply Connector**

—

Spare Parts



For water bottle connector at the supply connector:

For the sealing cap at the supply connector:



5944500  
O-Ring



5934300  
O-Ring

Components / Spare Parts

Catalog page

**13242 LX** Leakage Tester

295

Spare Parts

5500735



5500735  
Silicone Tube



7472791  
Adaptor

# Flexible Endoscopes in Surgery

Application Aid

Components / Spare Parts

Catalog page

**5682456** **Application Aid**, for exchanging O-rings,  
for use with Cleaning Valve 13991 SRV and  
Air/Water Valve 13991 SSV

—



## Spare Parts



**5925900**  
**O-Ring**, red, 3.1 x 1.6 mm



**5931500**  
**O-Ring**

# MICCOLI Instruments for Video-assisted Thyroidectomy and Parathyroidectomy

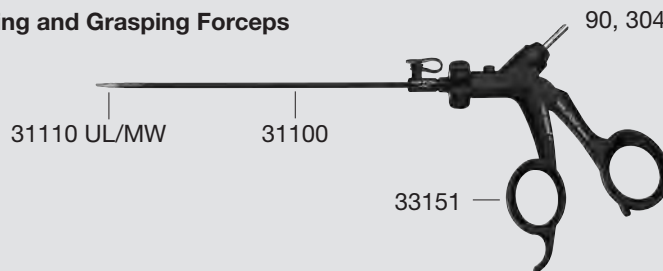
Dissecting and Grasping Forceps, Scissors, Grasping Forceps

## Components / Spare Parts

Catalog page

### 31151 UL CLICK*line* REDDICK-OLSEN Dissecting and Grasping Forceps

- 33151 Plastic Handle, without ratchet
- 31100 Outer Sheath, insulated
- 31110 UL Forceps Insert



### 31151 MW CLICK*line* Scissors

- 33151 Plastic Handle, without ratchet
- 31100 Outer Sheath, insulated
- 31110 MW Scissors Insert

161, 304, 309

## Spare Part



29100  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

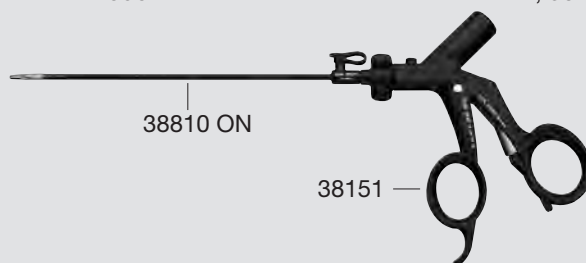
## Components / Spare Parts

Catalog page

### 38851 ON ROBI® Grasping Forceps, CLERMONT-FERRAND model

- 38151 ROBI® Plastic Handle
- 38810 ON ROBI® Outer Sheath with Forceps Insert

147, 304



## Spare Part



29100  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

# Instruments for the Extracervical Approach to Thyroid Surgery

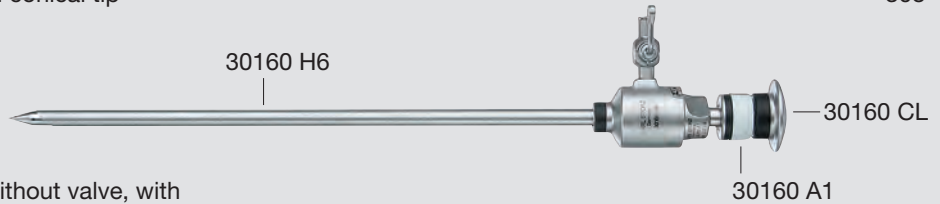
Trocars

Components / Spare Parts

Catalog page

**30160 ACL** Trocar, with conical tip

308



30160 H6 **Cannula**, without valve, with insufflation stopcock

30160 CL **Trocar only**

30160 A1 **Automatic Valve**

Components / Spare Parts

Catalog page

**30160 MCL** Trocar, with conical tip

308



30160 H6 **Cannula**, without valve, with insufflation stopcock

30160 CL **Trocar only**

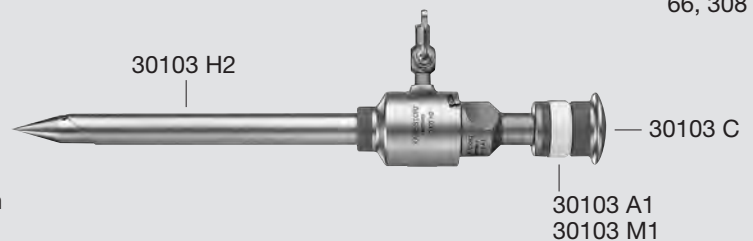
30160 M1 **Multifunctional Valve**

Components / Spare Parts

Catalog page

**30103 AC** Trocar, with conical tip

66, 308



30103 H2 **Cannula**, without valve, with insufflation stopcock

30103 C **Trocar only**

30103 A1 **Automatic Valve**

**30103 MC** Trocar, with conical tip

66, 308

30103 H2 **Cannula**, without valve, with insufflation stopcock

30103 C **Trocar only**

30103 M1 **Multifunctional Valve**

# Instruments for the Extracervical Approach to Thyroid Surgery

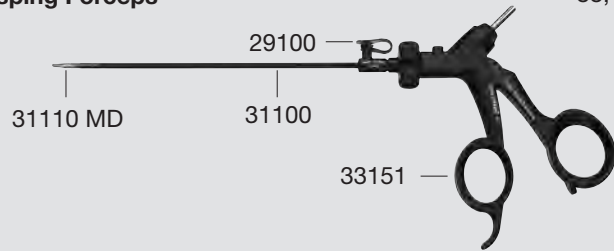
Dissecting and Grasping Forceps, Grasping Forceps, Scissors

Components / Spare Parts

Catalog page

**31151 MD** CLICK*liné* KELLY Dissecting and Grasping Forceps

88, 309



- 33151 **Plastic Handle**, without ratchet
- 31100 **Outer Sheath**, insulated
- 31110 MD **Forceps Insert**

### Spare Part



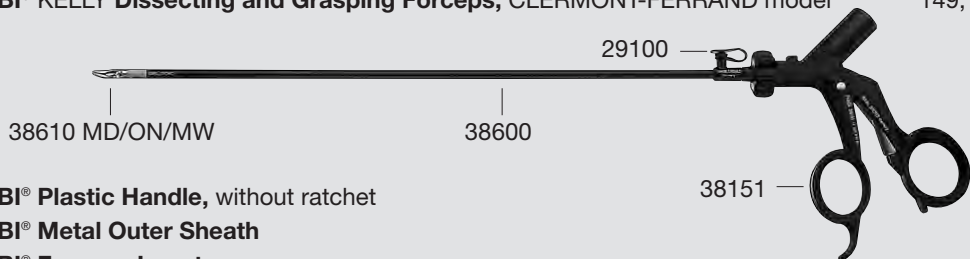
29100  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

Components / Spare Parts

Catalog page

**38651 MD** ROBI® KELLY Dissecting and Grasping Forceps, CLERMONT-FERRAND model

149, 310



- 38151 **ROBI® Plastic Handle**, without ratchet
- 38600 **ROBI® Metal Outer Sheath**
- 38610 MD **ROBI® Forceps Insert**

**38651 ON** ROBI® Grasping Forceps, CLERMONT-FERRAND model

149, 310

- 38151 **ROBI® Plastic Handle**, without ratchet
- 38600 **ROBI® Metal Outer Sheath**
- 38610 ON **ROBI® Forceps Insert**

**38651 MW** ROBI® METZENBAUM Scissors, CLERMONT-FERRAND model

174, 310

- 38151 **ROBI® Plastic Handle**, without ratchet
- 38600 **ROBI® Metal Outer Sheath**
- 38610 MW **ROBI® Scissors Insert**

### Spare Part



29100  
**Plug**, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

# Gynecology

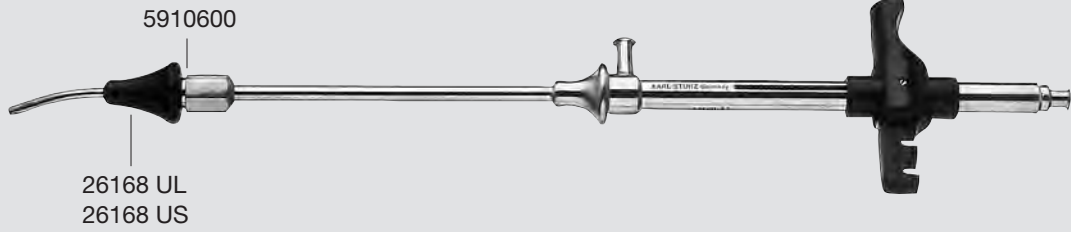
COHEN Uterine Cannula, Uterine Grasping Forceps

Components / Spare Parts

Catalog page

**26168 UN** COHEN Uterine Cannula

314



### Spare Parts



26168 UL  
Cone, large



5910600  
O-Ring, 3 x 1.5 mm



26168 US  
Cone, small

Components / Spare Parts

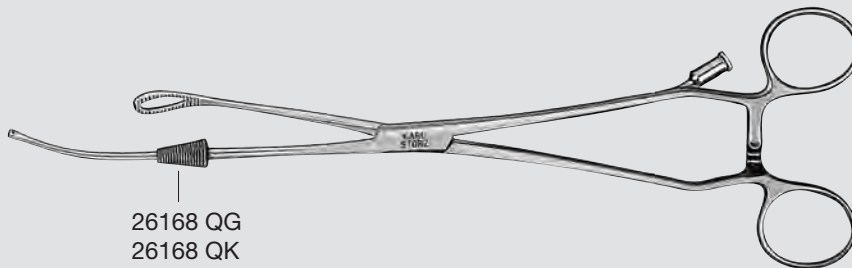
Catalog page

**26168 QB** QUINONES Uterine Grasping Forceps

314

**26168 QN** QUINONES-NEUBÜSER Uterine Grasping Forceps

314



### Spare Parts



26168 QG  
Cone, large



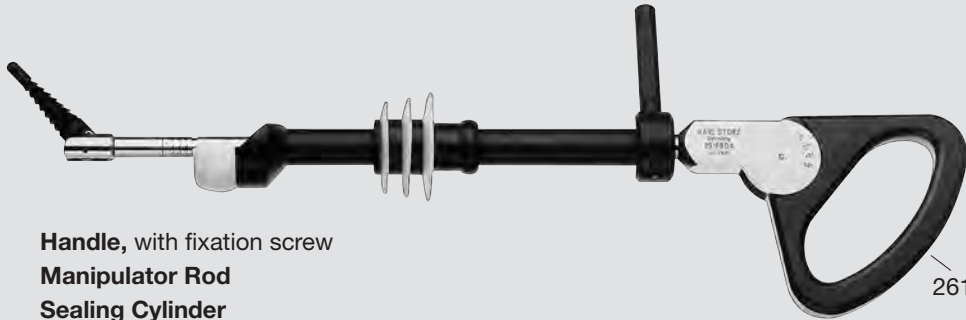
26168 QK  
Cone, small

Components / Spare Parts

Catalog page

**26168 D** Uterine Manipulator, CLERMONT-FERRAND model

317



26168 DA

- 26168 DA **Handle**, with fixation screw
- 26168 DB **Manipulator Rod**
- 26168 DC **Sealing Cylinder**
- 26168 DD **Silicone Seal**, package of 3 (3 sizes)
- 26168 DE **Sheath**
- 26168 DG **Working Insert**, conical, with thread, medium
- 26168 DN **Working Insert**, atraumatic, diameter 7 mm, length 50 mm
- 26168 DP **Working Insert**, with connector for chromopertubation, atraumatic, diameter 4 mm, length 40 mm
- 26168 DK **Anatomical Blade**, short, diameter 36 mm, length 48 mm
- 26168 DR **Cleaning Adaptor**

Components / Spare Parts

Catalog page

**26168 DA** Handle, for 26168 D

317

5967402



Spare Part



5967402  
**Screw**

Components / Spare Parts

Catalog page

**26168 DF** Working Insert, short

317

**26168 DG** Working Insert, medium

317

**26168 DH** Working Insert, long

317



Spare Parts



7978390  
**Fork, left**



7978490  
**Fork, right**

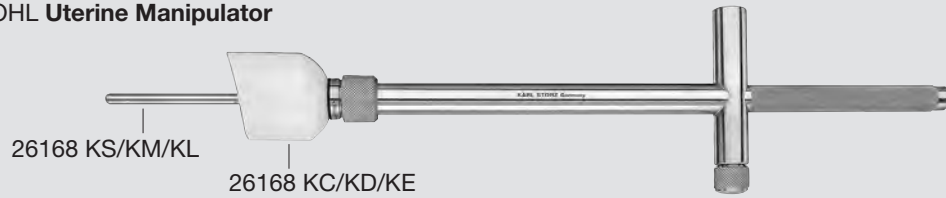


Components / Spare Parts

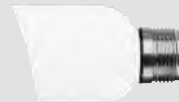
Catalog page

**26168 K** HOHL Uterine Manipulator

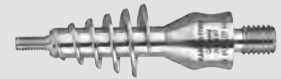
319



- 26168 KA **Handle**
- 26168 KB **Manipulator Rod**
- 26168 KC **Cap**, diameter 40 mm, length 30 mm
- 26168 KD **Cap**, diameter 35 mm, length 30 mm
- 26168 KE **Cap**, diameter 32 mm, length 30 mm
- 26168 KF **Spiral Insert**, diameter 20 mm
- 26168 KG **Spiral Insert**, diameter 15 mm
- 26168 KS **Working Insert**, diameter 6 mm, length 60 mm
- 26168 KM **Working Insert**, diameter 6 mm, length 80 mm
- 26168 KL **Working Insert**, diameter 6 mm, length 100 mm
- 26168 KR **Key**, for spiral caps



26168 KC



26168 KF/KG

Components / Spare Parts

Catalog page

**26168 KA** Handle

319

Spare Part



26168 KAS  
Fixation Screw



26168 KAS

Components / Spare Parts

Catalog page

**26168 KO** Manipulator Probe, with atraumatic working insert and grasper

320



26168 KOA **Manipulator Probe**

26168 KOB **Working Insert**, diameter 4 mm, length 3 cm

26168 KOB

26168 KOC **Working Insert**, diameter 4 mm, length 4 cm

26168 KOC

26168 KOD **Working Insert**, diameter 4 mm, length 6 cm

26168 KOD

26168 KOE **Hand Wheel**



26168 KOE

# Gynecology

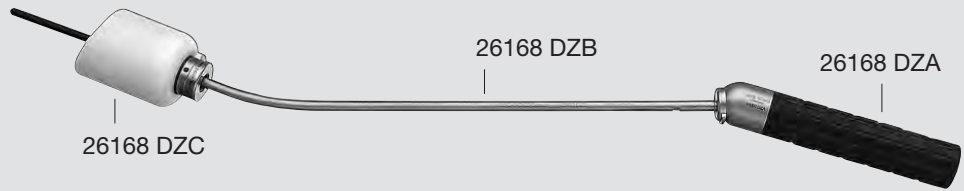
DONNEZ Uterine Manipulator,  
KECKSTEIN Uterine Manipulator

Components / Spare Parts

Catalog page

**26168 DZ** DONNEZ Uterine Manipulator

321



- 26168 DZA **Handle**
- 26168 DZB **Manipulator Rod**, including Working Inserts 6290495 (diameter 4 mm, length 22 mm), 7821391 (diameter 5.5 mm, length 42 mm) and 7904791 (diameter 4 mm, length 52 mm)
- 26168 DZC **Cap**, diameter 34 mm, length 36 mm
- 26168 DZD **Cap**, diameter 24 mm, length 36 mm
- 26168 DZE **Cap**, diameter 42 mm, length 36 mm

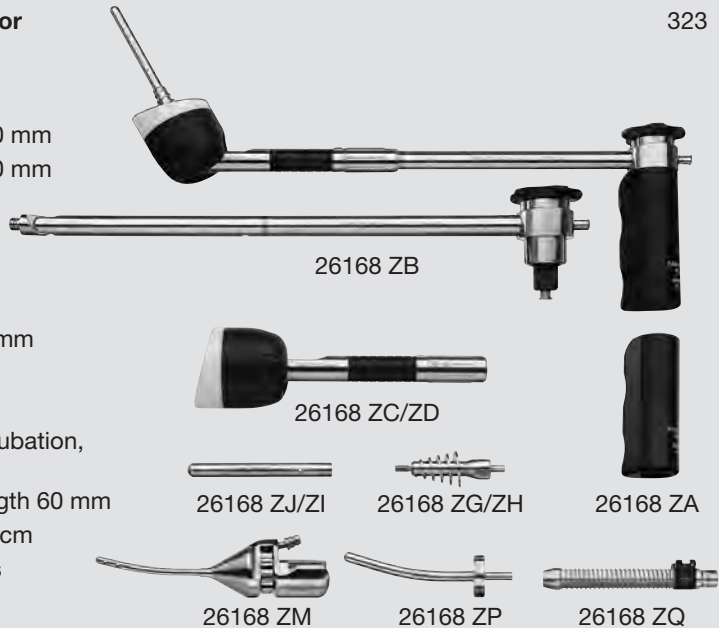
Components / Spare Parts

Catalog page

**26168 Z** KECKSTEIN Uterine Manipulator

323

- 26168 ZA **Handle**
- 26168 ZB **Manipulator Sheath**
- 26168 ZC **Cap**, diameter 37 mm, length 30 mm
- 26168 ZD **Cap**, diameter 42 mm, length 30 mm
- 26168 ZG **Spiral Insert**, diameter 15 mm
- 26168 ZH **Spiral Insert**, diameter 20 mm
- 26168 ZJ **Working Insert**, length 60 mm
- 26168 ZI **Working Insert**, length 40 mm
- 7362691 **Y-Tube Connector**, length 190 mm
- 27500 **LUER-Lock Tube Connector**
- 26168 ZT **Seal**
- 26168 ZM **Working Insert**, for chromopertubation, length 30 mm
- 26168 ZP **Working Insert**, atraumatic, length 60 mm
- 26168 V **Tenaculum Forceps**, length 22 cm
- 26168 ZQ **Holder for Tenaculum Forceps**
- 26168 TNS **Pertubation Tube**



Components / Spare Parts

Catalog page

- 26168 ZC** **Cap**, diameter 37 mm, length 30 mm
- 26168 ZD** **Cap**, diameter 42 mm, length 30 mm
- 26168 ZE** **Cap**, diameter 47 mm, length 30 mm



Spare Part



8248091  
**Control Element**,  
complete

# Gynecology

MANGESHIKAR Uterine Manipulator,

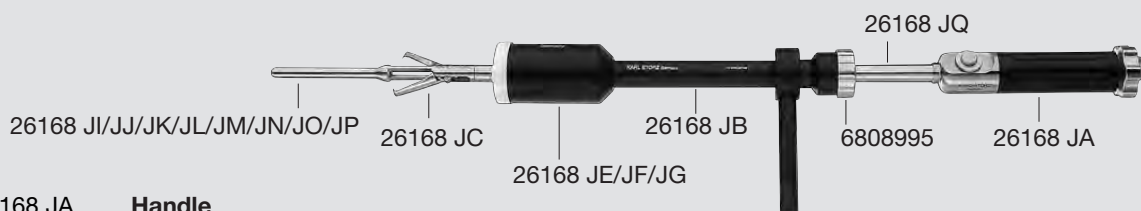
TINTARA Uterine Manipulator

Components / Spare Parts

Catalog page

**26168 J** MANGESHIKAR Uterine Manipulator

325



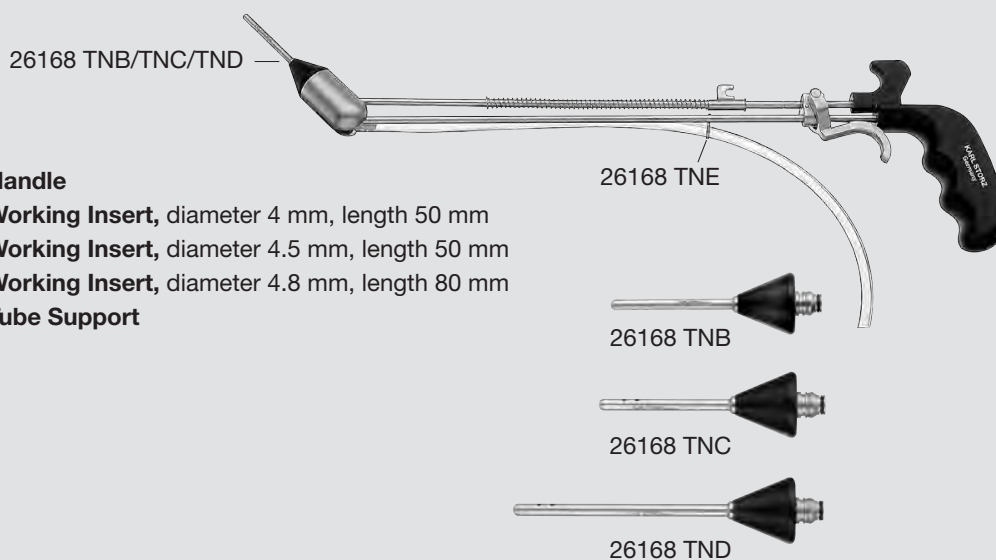
- 26168 JA **Handle**
- 26168 JB **Outer Sheath**
- 26168 JC **Forceps Attachment**
- 26168 JE **Cap**, diameter 28 mm, length 66 mm
- 26168 JF **Cap**, diameter 33 mm, length 66 mm
- 26168 JG **Cap**, diameter 38 mm, length 66 mm
- 26168 JI **Working Insert**, diameter 8 mm, length 50 mm
- 26168 JJ **Working Insert**, diameter 8 mm, length 60 mm
- 26168 JK **Working Insert**, diameter 8 mm, length 70 mm
- 26168 JL **Working Insert**, diameter 8 mm, length 80 mm
- 26168 JM **Working Insert**, diameter 8 mm, length 90 mm
- 26168 JN **Working Insert**, diameter 8 mm, length 100 mm
- 26168 JO **Working Insert**, diameter 8 mm, length 110 mm
- 26168 JP **Working Insert**, diameter 8 mm, length 120 mm
- 26168 JQ **Manipulator Sheath**
- 6808995 **Seal**
- 7962190 **Silicone Leaflet Washer**

Components / Spare Parts

Catalog page

**26168 TN** TINTARA Uterine Manipulator

327



- 26168 TNA **Handle**
- 26168 TNB **Working Insert**, diameter 4 mm, length 50 mm
- 26168 TNC **Working Insert**, diameter 4.5 mm, length 50 mm
- 26168 TND **Working Insert**, diameter 4.8 mm, length 80 mm
- 26168 TNE **Tube Support**

# Gynecology

C.C.L. Vaginal Extractor, CLICK<sup>line</sup> Claw Forceps, BRUCKER/MESSROGHLI SUPRALOOP

## Components / Spare Parts

Catalog page

- 30103 SG** C.C.L. Vaginal Extractor  
30103 A1 Automatic Valve, size 11  
30103 V1 Cannula



331

7616690

- 30103 SK** C.C.L. Vaginal Extractor  
30103 A1 Automatic Valve, size 11  
30103 V2 Cannula

## Spare Part



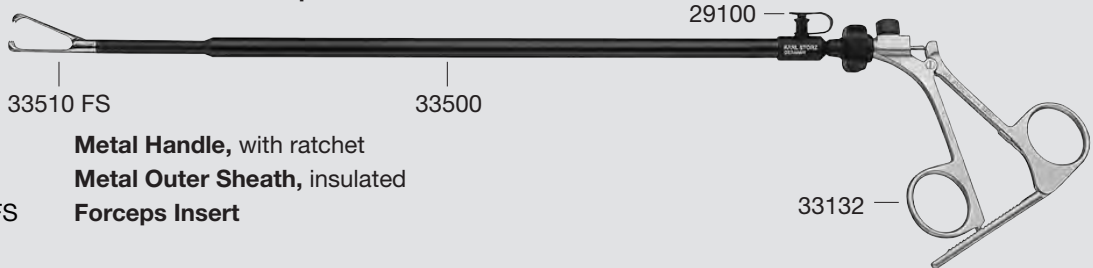
7616690  
**Sealing Cap**, (60/10),  
for trocars size 11 mm

## Components / Spare Parts

Catalog page

- 33532 FS** CLICK<sup>line</sup> Claw Forceps

331



33510 FS

33500

29100

33132

- 33132 **Metal Handle**, with ratchet  
33500 **Metal Outer Sheath**, insulated  
33510 FS **Forceps Insert**

## Spare Part



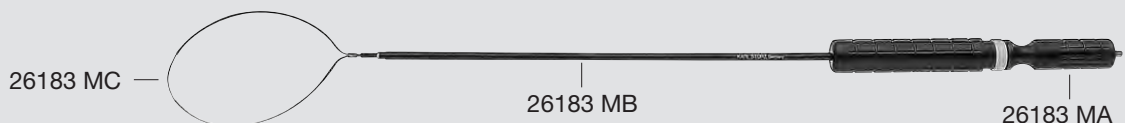
29100  
**Plug**, for LUER-Lock  
irrigation connector for  
cleaning, black,  
autoclavable,  
package of 10

## Components / Spare Parts

Catalog page

- 26183 M** BRUCKER/MESSROGHLI SUPRALOOP

334



26183 MC

26183 MB

26183 MA

- 26183 MA **Handle**, with connector pin for unipolar coagulation, autoclavable  
26183 MB **Outer Sheath**, insulated, size 5 mm, length 30 cm  
26183 MC **Spare Loop**, size 120 x 85 mm, unsterile, for single use

# Gynecology

Outer Sheath, SUPRALOOP

Components / Spare Parts

Catalog page

**26183 MB** Outer Sheath

334, 336

Spare Part



6154995  
**Sealing Cap**



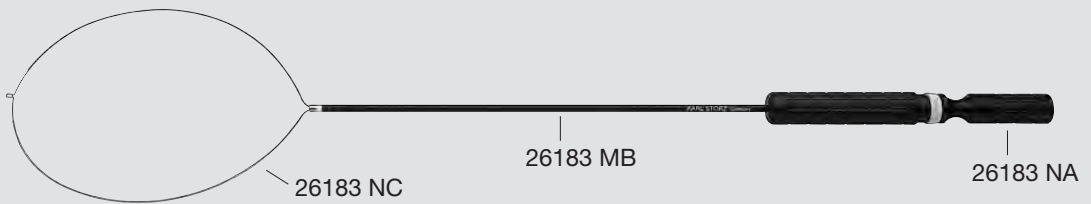
6154995

Components / Spare Parts

Catalog page

**26183 N** SUPRALOOP

336



26183 NA **Handle**, with connector pin for bipolar coagulation, autoclavable

26183 MB **Outer Sheath**, insulated, size 5 mm, length 30 cm

26183 NC **Spare Loop for SUPRALOOP**, size 120 x 85 mm, unsterile, for single use

# Gynecology

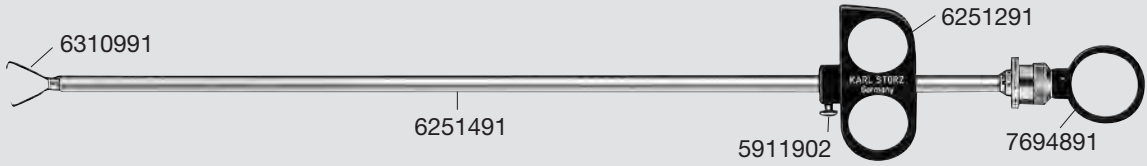
## Ring Applicators

Components / Spare Parts

Catalog page

**26173 RA Ring Applicator**

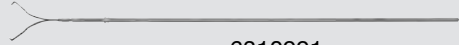
337



### Spare Parts



5901910  
**Spring**



6310991  
**Tension Rod, with grasper**



5911902  
**Knurled Screw**



6311890  
**Mounting Cone**



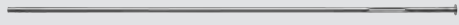
6251291  
**Traction Handle**



7694891  
**Activator**



6251391  
**Pusher**



7694991  
**Inner Sheath**



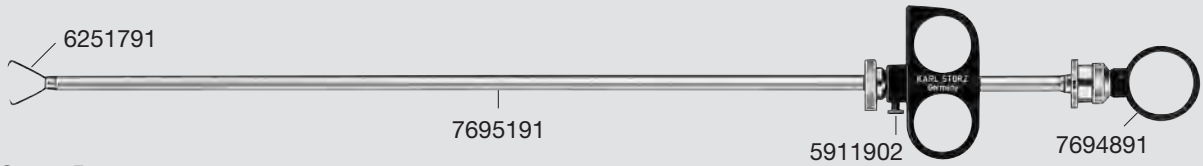
6251491  
**Outer Sheath**

Components / Spare Parts

Catalog page

**26174 RA Ring Applicator**

337



### Spare Parts



5901910  
**Spring**



6311890  
**Mounting Cone**



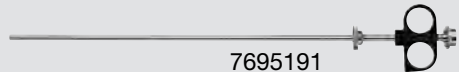
5911902  
**Knurled Screw**



7694891  
**Activator**



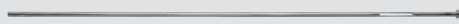
6251391  
**Pusher**



7695191  
**Outer Sheath**



6251791  
**Tension Rod, with grasper**



7695291  
**Inner Sheath**

# Gynecology

BRUCKER/WALLWIENER Instrument Set for Laparoscopically Assisted  
Creation of a Neovagina

Components / Spare Parts

Catalog page

**26188 NB** BRUCKER/WALLWIENER Instrument Set for Laparoscopically Assisted Creation of a Neovagina

341

26188 SA **Traction Device**

26188 FT **Thread Guide**, straight

26188 FL **Thread Guide**, large curvature, bendable

26188 FA **Outer Sheath**, for use with Thread Guide 26188 FT

26188 PP **Pluggable Segmented Dummy**

26188 PM **Distension Dummy**, size 2.4 cm x 11 cm

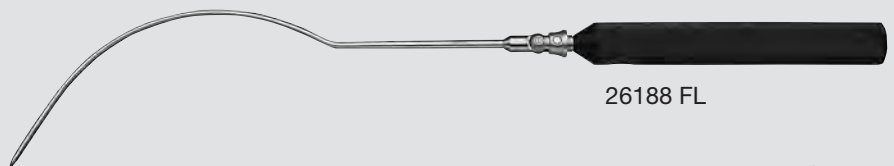
27650 C **Cleaning Brush**



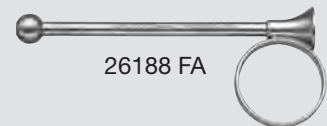
26188 SA



26188 FT



26188 FL



26188 FA



26188 PP



26188 PM



27650 C

# Urology

## LASER Applicator

Components / Spare Parts

Catalog page

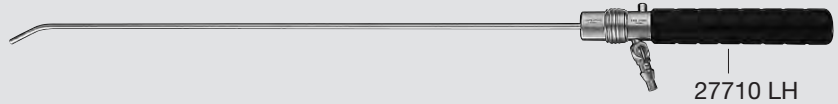
**27710 LL**    **LASER Applicator**

344

27710 LH    **Handle**

27710 LA    **Outer Sheath**

27710 LI    **Inner Sheath**





# Insufflators

ENDOFLATOR® 40 SCB, ENDOFLATOR® 50 SCB

Components / Spare Parts

Catalog page

## UI 400S1 ENDOFLATOR® 40 SCB

U 7

- UI 400 ENDOFLATOR® 40 SCB, power supply  
100 – 240 VAC, 50/60 Hz
- 20090170 SCB Connecting Cable, length 100 cm
- 20400030 Universal Wrench
- 031200-10 Insufflation Tubing Set, with gas filter, sterile,  
for single use, package of 10



SCB®

UI 400S1

## UI 500S1 ENDOFLATOR® 50 SCB

U 10

- UI 500 ENDOFLATOR® 50 SCB, power supply  
100 – 240 VAC, 50/60 Hz
- 20090170 SCB Connecting Cable, length 100 cm
- 20400030 Universal Wrench
- 031210-10 Heated Insufflation Tubing Set, with gas filter,  
sterile, for single use, package of 10



SCB®

UI 500S1

## Spare Parts



ET15-1708090  
**Mains Fuse,**  
T 2, AH 250 V, package  
of 10



20300184  
**LUER-Lock Tube  
Connector, male, tube  
diameter 10 mm**

# Insufflators

S-PILOT®, Cold Light Fountain CO<sub>2</sub>MBI® LED SCB

Components / Spare Parts

Catalog page

- UP 501S1**    **S-PILOT®**, including footswitch
- UP 501        **S-PILOT®**
- 20014130    **One-Pedal Footswitch**
- 031447-03\*   **Tubing Set Suction**, sterile, for single use, package of 5
- 20090170    **SCB Connecting Cable**, length 100 cm
- UP 501S2**    **S-PILOT®**, incl. control cable
- UP 501        **S-PILOT®**
- 031457-10\*   **Tubing Set Suction**, sterile, for single use, package of 10
- 27610070    **Connecting Cable**
- UP 501S3**    **S-PILOT®**, without footswitch
- UP 501        **S-PILOT®**
- 031447-03\*   **Tubing Set Suction**, sterile, for single use, package of 5
- 20090170    **SCB Connecting Cable**, length 100 cm



UP 501

U 15

Components / Spare Parts

Catalog page

- TL100 S1**    **Cold Light Fountain CO<sub>2</sub>MBI® LED SCB**
- TL 100        **Cold Light Fountain CO<sub>2</sub>MBI® LED SCB**
- TL 001        **Irrigation Bottle Holder**
- TL 002        **Holding Ring**, for water bottles
- 13992 BS     **Water Bottle**
- 13991 SW     **Irrigation Adaptor**, for water bottles
- 20090170    **SCB Connecting Cable**, length 100 cm
- 20400030    **Universal Wrench**



TL 100

U 18



# Suction and Irrigation Systems

HAMOU® ENDOMAT® SCB

Components / Spare Parts

Catalog page

- 26331101-1** HAMOU® ENDOMAT® SCB
- 26331120-1 HAMOU® ENDOMAT® SCB
- 20090170 **SCB Connecting Cable**, length 100 cm
- 031523-10\* **Cassette Tubing Set PC**, sterile, for single use
- 031524-10\* **Cassette Tubing Set FC**, sterile, for single use

U 26



26331120

## Spare Part



2027590  
**Mains Fuse**,  
T 2.0 AL (SB),  
package of 10

Components / Spare Parts

Catalog page

- 26331142** **Silicone Tubing Set**, for suction, sterilizable

U 29



## Spare Parts



27500  
**LUER-Lock Tube Connector**, male,  
tube diameter 9 mm

5935111018  
**LUER-Lock Connector**,  
male



20300180  
**Tubing Connector Set**

# Suction and Irrigation Systems

HAMOU® ENDOMAT® SCB

Components / Spare Parts

Catalog page

**20300034**    **Bottle Cap**

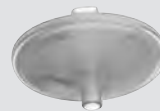
U 29



## Spare Parts



20300580  
**Overflow Case**, gray,  
for Bottle Cap 20300034



031124-10  
**Filter**, unsterile, for single  
use, for fluid suction,  
specially adapted,  
package of 10



2911590  
**Plunger Ball**, green,  
to overflow case,  
2 pcs required

# Suction and Irrigation Systems

ENDOMAT® SELECT

Components / Spare Parts

Catalog page

**UP 210**      **ENDOMAT® SELECT**

U 23

400 A      **Mains Cord**, length 300 cm



UP 210

## Spare Parts



031524-10  
**Tubing Set for Irrigation**,  
FC, sterile, for single use,  
package of 10



031564-10\*  
**Tubing Day Set for  
Irrigation**, FC, sterile, for  
single use, package of 10

# Suction and Irrigation Systems

UNIMAT® 30

Components / Spare Parts

Catalog page

- 25320001 UNIMAT® 30, Suction Pump Set**
- 25320020 **UNIMAT® 30**, suction pump, power supply 230 VAC, 50/60 Hz
- 25320080 **Filter**
- 25320081 **Secretion Bottle**
- 25320082 **Bottle Cap**
- 25320083 **Connecting Tube**, short
- 25320084 **Patient Tube**
- 25320085 **Overflow Case**
- 400 A **Mains Cord**, length 300 cm

U 31



25320001

## Spare Parts



1069400  
**Mains Fuse**,  
T 0.63 A, L 250 V



25320083  
**Connecting Tube**, short



25320080  
**Filter**



25320084  
**Patient Tube**

Components / Spare Parts

Catalog page

- 25320001C UNIMAT® 30, Suction Pump Set**, 115 VAC
- 25320020C **UNIMAT® 30**, suction pump, power supply 115 VAC, 50/60 Hz
- 25320080 **Filter**
- 25320081 **Secretion Bottle**
- 25320082 **Bottle Cap**
- 25320083 **Connecting Tube**, short
- 25320084 **Patient Tube**
- 25320085 **Overflow Case**
- 400 A **Mains Cord**, length 300 cm

U 31



25320001 C

## Spare Parts



1069500  
**Fuse**, T 1.6 A, L 250 V



25320083  
**Connecting Tube**, short



25320080  
**Filter**



25320084  
**Patient Tube**

# Suction and Irrigation Systems

UNIMAT® 30

Components / Spare Parts

Catalog page

25320081 **Suction Bottle**

U 33



25320082

## Spare Parts

25320082  
**Bottle Cap**

25320085  
**Overflow Case**



25320083  
**Connecting Tube, short**

# High Frequency Surgery Units

AUTOCON® III 400 High-End, AUTOCON® III 300

Components / Spare Parts

Catalog page

- UH 400** AUTOCON® III 400 High-End, without CE certification  
power supply 220 – 240 VAC, 50/60 Hz  
400 A **Mains Cord**, length 300 cm
- UH 400E** AUTOCON® III 400 High-End, with CE certification,  
power supply 220 – 240 VAC, 50/60 Hz  
400 A **Mains Cord**, length 300 cm
- UH 400U** AUTOCON® III 400 High-End, without CE certification  
power supply 100-127 VAC, 50/60 Hz  
400 B **Mains Cable**, US version, length 200 cm
- UH 400UE** AUTOCON® III 400 High-End, with CE certification,  
power supply 100-127 VAC, 50/60 Hz  
400 B **Mains Cord**, US version, length 200 cm



UH 400

U 37

**Spare Part** for use at 220-240 V:



1222890  
**Fuse**,  
2x 5 AH, package of 10

**Spare Part** for use at 100-127 V:



1432095  
**Line Fuse**,  
2x 10 AH, package of 10

Components / Spare Parts

Catalog page

- UH 300** AUTOCON® III 300, without certification,  
power supply 220 – 240 VAC, 50/60 Hz  
400 A **Mains Cord**, length 300 cm
- UH 300E** AUTOCON® III 300, with CE certification,  
power supply 220 – 240 VAC, 50/60 Hz  
400 A **Mains Cord**, length 300 cm
- UH 300U** AUTOCON® III 300, without certification,  
power supply 100 – 127 VAC, 50/60 Hz  
400 B **Mains Cord**, US version, length 200 cm
- UH 300UE** AUTOCON® III 300, with CE certification,  
power supply 100 – 127 VAC, 50/60 Hz  
400 B **Mains Cord**, US version, length 200 cm



UH 300

U 40

**Spare Part** for use at 230 V:



2027690  
**Mains Fuse**,  
220 – 240 VAC, T 4.0 AH,  
package of 10

**Spare Part** for use at 110 V:



2028090  
**Mains Fuse**,  
T 8.0 AL (SB),  
package of 10