S-PORT®

S-PORT® is a single-port platform that is suitable for performing hybrid procedures (LAP/Single Port) where the single-port entry can also be used as an extraction site.

Special Features:

- Modular system
- Great freedom of movement
- Stable platform for precise control of telescopes and instruments
- Simple extraction of resected tissue
- Variable adjustment of the incision size
- Cost-effective and reusable, except for the wound protector
- Can be combined with ROTATIP® instruments featuring jaw and sheath rotation
23030 PA  LEROY S-PORT®, single portal surgery access system, adaptable in sizes 15-45 mm, including wound protector (package of 10)

23030 FA  Wound Protector, package of 10, sterile, for single use

For use with:
- HOPKINS® Forward-Oblique Telescope 30°, diameter 5 mm, length 50 cm (item no. 26048 BSA)
- Instrumentation specially adapted for single-port surgery (ROTATIP® instruments with various sheath curves) or alternatively with standard instrumentation for laparoscopy

Further telescopes and other instrumentation for use with S-PORT® can be found in the Laparoscopy catalog.
S-PILOT® – The Comprehensive and Automatic Solution for Smoke Evacuation

The S-PILOT® from KARL STORZ offers a solution for smoke evacuation which removes airborne particles quickly and easily from the abdomen to ensure clear visibility. The S-PILOT® automatically starts smoke evacuation when a connected HF unit** is activated. Alternatively, smoke evacuation can be activated independently of a HF unit.
**Compatible with: KARL STORZ AUTOCON® III 400 and several HF units from other manufacturers. More detailed information is available in ENDOWORLD® UNITS 12: S-PILOT® – The solution for smoke evacuation**
Telescope with Variable Direction of View

The ENDOCAMELEON® HOPKINS® telescope with rod lens system and a rigid 10 mm sheath offers a variable direction of view. This allows optimal adjustment of the viewing direction to any OR situation.

Special Features:

- Variable direction of view 0° – 90°
- Enhanced illumination
- Easy-to-use adjustment knob for selecting the direction of view, now with fin
- Combines the convenient handling of the proven HOPKINS® telescope with the advantages and potential of a telescope offering various directions of view
- Particularly suitable for use in anatomically narrow working spaces
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>26003 EC</td>
<td><strong>ENDOCAMELEON® HOPKINS® Telescope</strong>, diameter 10 mm, length 31 cm, <strong>autoclavable</strong>, variable direction of view $0^\circ$ – $90^\circ$, with adjusting knob with fin for selecting the direction of view, fiber optic light transmission incorporated, color code: gold</td>
</tr>
<tr>
<td>495 NCSC</td>
<td><strong>Fiber Optic Light Cable</strong>, with straight connector, extremely heat-resistant, enhanced light transmission, with safety lock, diameter 4.8 mm, length 250 cm</td>
</tr>
<tr>
<td>39501 BEC</td>
<td><strong>Wire Tray for Cleaning, Sterilization and Storage</strong> of one <strong>ENDOCAMELEON®</strong>, 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</td>
</tr>
</tbody>
</table>
Fluorescence Imaging

The near-infrared (NIR/ICG) system from KARL STORZ provides visualization beyond the tissue surface. Near-infrared (NIR) technology makes it possible to visualize the distribution of the fluorescent contrast agent indocyanine green (ICG), which enables enhanced visualization of anatomical structures such as the biliary ducts, the lymphatic system and blood vessels.

Special Features:
- Fluorescence mode with background illumination
- Rapid switchover via footswitch between white light and ICG modes
- Telescopes for endoscopic and open surgical interventions (VITOM®)
- In addition to 10 mm telescopes, telescopes with a diameter of 5 mm (0° and 30°) are also available now
- Optimal illumination and contrast enhancement thanks to the IMAGE1 S™ camera platform
- Now with new imaging option: Choice between green and blue fluorescence coloring
Fluorescence Imaging with the NIR/ICG System

Visualization of perfusion, e.g., for colorectal anastomoses

- Rapid perfusion assessment of a planned resection zone, e.g., for colon anastomoses, esophagus anastomoses and gastric bypass anastomoses
- NIR/ICG fluorescence imaging represents an intraoperative solution in real time
- Allows better differentiation between well-perfused tissue and ischemic areas

Visualization of the gallbladder and bile ducts

Following intravenous administration, ICG naturally collects in the gallbladder and bile ducts. This allows the rapid and reliable identification of gallbladder and bile duct anatomy.

- Allows the reliable differentiation between the cystic duct and the common bile duct
- Intraoperative leaks displayed with ICG
- Shortened surgical duration with ICG compared to standard cholangiography
Visualization of the lymphatic system

NIR/ICG imaging enables non-radioactive visualization of the entire lymph system surrounding a tumor in real time.

- Detection rates compare favorably with established methods of lymph node visualization
- Multidisciplinary use, for example, in gynecology, urology and general surgery

Use in liver surgery

- The NIR/ICG system enables the diagnosis of liver metastases, primary liver tumors and bile leakage
- In liver segmentectomy, the NIR/ICG system can be used to visualize the course of vessels in individual liver segments

* Source: Prof. Luigi Boni, IRCCS - Ca' Granda, Policlinico Hospital, University of Milan, Milan, Italy
** Source: Niclas Kvarnström, M.D., Sahlgrenska University Hospital, Göteborg, Sweden
*** SPECTRA A: IMAGE1 S™ camera platform mode for color shift and switch. Not available for sale in the U.S.
Scope Warmer

For fog-free work and brilliant imaging

- No fogging of the endoscope, providing greater patient safety and reducing surgery time
- Convenient handling as no other heat source (electricity, warm water, etc.) is 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. 2 hours after activation
100120-15* **Scope 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* **Scope 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.
CLICKline Single-Use Scissors – Simply Sharp!

The new single-use scissor inserts 34310 MA-D and 34310 MS-D can be combined with all reusable handles in the KARL STORZ CLICKLINE series, providing a practical solution for regular use or as a backup system.

Special Features:

- Scissor blades are always sharp, resulting in optimal cutting effect
- Inserts sterile-packed in individual blister packs and delivered in packages of 10 in a dispenser box
- Proven scissor blade designs
- Cost-effective solution: “Single use meets reusable”
- Color coding allows clear identification of the single-use components
CLICKline Single-Use Scissors with Outer Sheath, size 5 mm, length 36 cm, sterile, for single use

For use with reusable handles in the CLICKLINE series, e.g.

34310 MA-D  CLICKLINE Scissors Insert with Outer Sheath, curved, double action jaws, spoon-shaped jaws, length of blades 17 mm, sterile, for single use, package of 10

34310 MS-D  CLICKLINE METZENBAUM Scissors Insert with Outer Sheath, curved, double action jaws, length of blades 12 mm, sterile, for single use, package of 10

33151  CLICKLINE Plastic Handle, without ratchet, with larger contact area at the finger ring, with connector pin for unipolar coagulation

33149  CLICKLINE Plastic Handle, axial, without ratchet, double action shanks, rotating, insulated, with connector pin for unipolar coagulation

Further handles for combination with the single-use scissors can be found in the Laparoscopy catalog.
RoBi® – Rotating Bipolar Grasping Forceps and Scissors in sizes 3.5 mm and 5 mm

The new generation of ROBi® instruments allows precise work on tissue. The enhanced instrument design and the materials used ensure the highest mechanical stability.

Special Features:

• Available in sizes 3.5 and 5 mm
• Robust joint mechanism in conjunction with the force limiter ensures powerful, yet safe grasping
• Ideal in combination with the new high-end HF unit AUTOCON® III 400 with a mode specially adapted to ROBi® instruments
• For optimal cleaning: Can be dismantled into individual components

To view the application video, please scan the QR code
RoBi® Bipolar Grasping Forceps and Scissors, size 3.5 mm

Rotating, 2-part, dismantling, with connector pin for bipolar coagulation, CLERMONT-FERRAND model

Operating instruments, length 36 cm, for use with trocars size 3.5 mm

<table>
<thead>
<tr>
<th>Working Insert with Outer Sheath</th>
<th>Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38151</td>
</tr>
</tbody>
</table>

36 cm

Double action jaws

<table>
<thead>
<tr>
<th>Working Insert with Outer Sheath</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>38910 MD</td>
<td>38951 MD</td>
</tr>
<tr>
<td><img src="image-url" alt="Image" /></td>
<td><strong>ROBi® KELLY Grasping Forceps</strong>, CLERMONT-FERRAND model, especially suitable for dissection, color code: light blue</td>
</tr>
<tr>
<td>38910 ON</td>
<td>38951 ON</td>
</tr>
<tr>
<td><img src="image-url" alt="Image" /></td>
<td><strong>ROBi® Grasping Forceps</strong>, CLERMONT-FERRAND model, with especially fine atraumatic serration, fenestrated jaws, color code: light blue</td>
</tr>
<tr>
<td>38910 MW</td>
<td>38951 MW</td>
</tr>
<tr>
<td><img src="image-url" alt="Image" /></td>
<td><strong>ROBi® Scissors</strong>, CLERMONT-FERRAND model, curved blades, color code: light blue</td>
</tr>
</tbody>
</table>

| Jaw length in mm (approximate measurements) |

Further information is available in the Laparoscopy catalog.
RoBi® Bipolar Grasping Forceps, size 5 mm

Rotating, 3-part, dismantling, with connector pin for bipolar coagulation, CLERMONT-FERRAND model

Operating instruments, lengths 36 cm and 43 cm, for use with trocars size 6 mm

<table>
<thead>
<tr>
<th>Outer Sheath</th>
<th>Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 cm</td>
<td>38151</td>
</tr>
<tr>
<td>43 cm</td>
<td></td>
</tr>
</tbody>
</table>

Double action jaws

<table>
<thead>
<tr>
<th>Working Insert</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>38610 ON</td>
<td>38651 ON</td>
</tr>
<tr>
<td>38710 ON</td>
<td>38751 ON</td>
</tr>
<tr>
<td>38610 CL</td>
<td>38651 CL</td>
</tr>
<tr>
<td>38710 MD</td>
<td>38751 MD</td>
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<tr>
<td>38610 MD</td>
<td>38651 MD</td>
</tr>
<tr>
<td>38710 MD</td>
<td>38751 MD</td>
</tr>
</tbody>
</table>

ROBi® Grasping Forceps, CLERMONT-FERRAND model, with especially fine atraumatic serration, fenestrated jaws, color code: light blue

ROBi® Grasping Forceps, CLERMONT-FERRAND model, wide jaws, for dissection, grasping and bipolar coagulation of large vessels and tissue layers, color code: light blue

ROBi® KELLY Grasping Forceps, CLERMONT-FERRAND model, especially suitable for dissection, color code: light blue

ROBi® KELLY Grasping Forceps, long, CLERMONT-FERRAND model, especially suitable for dissection, color code: light blue

Jaw length in mm (approximate measurements)

Further bipolar grasping forceps and additional information can be found in the Laparoscopy catalog.
RoBi® Bipolar Scissors 5 mm

Rotating, 3-part, dismantling, with connector pin for bipolar coagulation, CLERMONT-FERRAND model

Operating instruments, lengths 36 cm and 43 cm, for use with trocars size 6 mm

<table>
<thead>
<tr>
<th>Outer Sheath</th>
<th>Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 cm</td>
<td>38151</td>
</tr>
<tr>
<td>43 cm</td>
<td></td>
</tr>
</tbody>
</table>

Single action jaws

<table>
<thead>
<tr>
<th>Working Insert</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>38610 MT</td>
<td>38651 MT</td>
</tr>
<tr>
<td>ROBi® Scissors, CLERMONT-FERRAND model, straight jaws, for cutting vessels and tissue layers, color code: light blue</td>
<td></td>
</tr>
<tr>
<td>23 mm</td>
<td></td>
</tr>
</tbody>
</table>

| 38610 MZ       | 38651 MZ            |
| ROBi® Scissors, CLERMONT-FERRAND model, straight jaws, serrated, color code: light blue |
| 23 mm          |

Double action jaws

| 38610 MW       | 38651 MW            |
| ROBi® METZENBAUM Scissors, CLERMONT-FERRAND model, curved jaws, slender scissor blades, color code: light blue |
| 20 mm          |

Jaw length in mm (approximate measurements)

Further information is available in the Laparoscopy catalog.
Instrument Set for Minilaparoscopy

Minilaparoscopy has now become a popular surgical technique as this method – also in hybrid procedures with standard instruments (diameter 5 mm) – represents a flat learning curve for the user and enhanced cosmetic results for the patient.

Special Features:

- Complete instrument set for minilaparoscopy (diameter 3.5 mm) available: Trocars, unipolar and bipolar instruments, suction-irrigation systems, suture and ligature instruments
- Modular design: 3-part dismantling instruments for maximum hygiene and variability
- Diverse combination possibilities thanks to a wide range of jaws with various outer sheaths and CLICKLINE handles
- Additional stability due to optional combination with metal outer sheath
- Rotating bipolar instruments (ROBI®, diameter 3.5 mm)
The entire KARL STORZ product portfolio for minilaparoscopy and accessories can be found in the Laparoscopy catalog and the Minilaparoscopy catalog excerpt.
Flexible Video Choledochoscopes

The flexible video choledochoscopes from KARL STORZ allow exploration of both the intra- and extrahepatic bile ducts as well as the surgical removal of gallstones.

Special Features:

- “Chip-on-the-tip” technology for excellent image quality*
- Compatible with the IMAGE1 S™ platform and backward-compatible to IMAGE 1 HUB™ HD
- Menu navigation via camera head (e.g., Picture-in-Picture)
- Minimal sheath circumference – 2.8 and 5.3 mm
- Infinitely adjustable deflection up to 270°
- Direct transmission of hand movements through to the distal end

*To view the application video, please scan the QR code
11292 VSK  **Flexible Video Choledochoscope IMAGE1 S™**, 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  **Same**, with contrapositive deflection mechanism

**For use with the following camera systems:**
- IMAGE1 S™
- IMAGE 1 HUB™ HD in conjunction with Video Endoscope Adaptor TC 002

11292 VPK  **Flexible Video Choledochoscope, PAL**, deflection of distal tip: 210°/140°
- Direction of view: 0°
- Angle of view: 120°
- Working channel inner diameter: 2.1 mm
- Sheath size: 5.3 mm
- Working length: 37 cm

11292 VPUK  **Same**, with contrapositive deflection mechanism

**For use with the following camera systems:**
- IMAGE1 S™ in conjunction with Video Endoscope Adaptor TC 001
- IMAGE 1 HUB™ HD in conjunction with Video Endoscope Adaptor 22 2000 77
- TELECAM/TELE PACK X LED in conjunction with Video Endoscope Adaptor 20 2130 70

**Further accessories for intraoperative choledochoscopy and cholangiography:**

- **Grasping Forceps, for guiding video choledochoscopes**
  - 33561 PG  **CLICKLINE BERCI Grasping Forceps**, size 10 mm, double action jaws, with silicone pads

- **Cholangiography Fixation Clamp**
  - 28378 CH  **OLSEN Cholangiography Fixation Clamp**, with channel for catheter 6 Fr., length 27 cm

Further information on flexible video choledochoscopes and accessories is available in the Laparoscopy catalog.

Further information on camera systems is available in the Telepresence catalog.
Flexible Choledocho-Fiberscopes

The flexible choledocho-fiberscopes from KARL STORZ allow the exploration of intra- and extrahepatic bile ducts as well as the surgical removal of gallstones.

Special Features:

- Large working channel allows irrigation while a stone basket is used
- Large field of view and wide range of distal tip deflection facilitate orientation and positioning even if the bile duct is very tortuous
- Long service life ensured by robust design and sturdy mechanical components
- Compatible with all KARL STORZ camera systems
11292 ADK1  **Choledocho-Fiberscope**, steerable, direction of view 0°, angle of view 90°, working channel inner diameter 3.6 Fr., distal tip outer diameter 7.5 Fr., deflection up/down 160°/120°, working length 50 cm

11292 ADUK1  **Choledocho-Fiberscope**, steerable, with contrapositive deflection mechanism, direction of view 0°, angle of view 90°, working channel inner diameter 3.6 Fr., distal tip outer diameter 7.5 Fr., deflection up/down 160°/120°, working length 50 cm

11292 DEK1  **Choledocho-Fiberscope**, steerable, direction of view 0°, angle of view 110°, working channel inner diameter 6 Fr., distal tip outer diameter 15.5 Fr., deflection up/down 180°/100°, working channel 36 cm

**Further Accessories for Intraoperative Choledochoscopy and Cholangiography:**

**Grasping Forceps for Guiding Choledocho-Fiberscopes**

33561 PG  **CLICKLINE BERCI Grasping Forceps**, size 10 mm, double action jaws, with silicone pads

**Cholangiography Fixation Clamp**

28378 CH  **OLSEN Cholangiography Fixation Clamp**, with channel for catheter 6 Fr., length 27 cm

Further accessories for choledochoscopy and cholangiography can be found in the Laparoscopy catalog.
NATHANSON Liver Retractors

The new NATHANSON liver retractors are particularly characterized by a large and atraumatic surface area.

Special Features:

- Large surface area for the stable retraction of the entire liver
- Fatigue-free retraction when used in conjunction with a mechanical holding system
- Available in three sizes
NATHANSON **Liver Retractor**, small surface area, diameter 5 mm

NATHANSON **Liver Retractor**, medium surface area, diameter 5 mm

NATHANSON **Liver Retractor**, large surface area, diameter 6 mm

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**Holding System**, autoclavable, with quick release coupling KSLOCK

 including:

**Rotation Socket**, to clamp to the OR table, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand

**Articulated Stand**, reinforced version, L-shaped, 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)

**Clamping Jaw**, metal, clamping range 4.8 up to 12.5 mm, with quick release coupling KSLOCK (male), for use with instrument and telescope sheaths
Needle Holder with Righting Function

KARL STORZ has expanded its portfolio to include a new needle holder with a needle righting function. The needle holder offers significant time and handling advantages, especially for interrupted suturing. The needle, which is clamped flat in the needle holder, can be raised at the site by means of the rotary wheel.

Special Features:

- Righting function for the clamped needle by turning the rotary wheel
- The ergonomic handle design allows relaxed and precise work
- The smooth-running, precisely settable ratchet facilitates secure positioning of the needle
The clamped needle in the needle holder can be introduced with a 11 mm trocar (Fig. 1). Using the rotary wheel (Fig. 2), the needle can be brought into an upright position (Fig. 3).

Fig. 1

Fig. 2

Fig. 3

26173 HA **Macro Needle Holder**, with needle righting function, ergonomic straight handle with ratchet, ratchet position right, jaws straight, with tungsten carbide inserts, diameter 5 mm, length 33 cm

In addition to the needle holder with needle righting function, KARL STORZ offers a wide range of other needle holders. Further information is available in the Laparoscopy catalog.
KARL STORZ KOH Macro Needle Holder, dismantling

The dismantling KOH macro needle holder (diameter 5 mm) consists of three individual parts: Handle, outer sheath and working insert. A choice of six different handles and four different working inserts allows an individual configuration of the needle holder – depending on the surgeon’s preferences.

Special Features:

- The tungsten carbide inserts ensure stable, secure holding of the needle and suture material while still being highly resistant.
- The smooth-running, precisely settable ratchet facilitates secure positioning of the needle.
- The ergonomic design of the handles allows relaxed and precise work.
- Even better cleaning results as the instrument can be dismantled into three parts: Handle, outer sheath and working insert.
- Thanks to the modular design, only the component with the defect needs to be replaced in the event of damage – an environmentally friendly and cost-efficient solution.
Handles and Outer Sheaths for KOH Macro Needle Holders

Handles, axial and pistol-shaped, 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 top

- **30173 PR** Handle, pistol-shaped, with disengageable ratchet, ratchet position right
- **30173 PL** Handle, pistol-shaped, with disengageable ratchet, ratchet position left
- **30173 PO** Handle, pistol-shaped, with disengageable ratchet, ratchet position top

Metal Outer Sheath

**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
KOH Macro Needle Holder

**dismantling, size 5 mm**

Operating instruments, lengths 33 and 43 cm, **with axial handle** for use with trocars size 6 mm

<table>
<thead>
<tr>
<th>Length</th>
<th>Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 cm</td>
<td>30173 AR</td>
</tr>
<tr>
<td></td>
<td>30173 AL</td>
</tr>
<tr>
<td></td>
<td>30173 AO</td>
</tr>
<tr>
<td>43 cm</td>
<td></td>
</tr>
</tbody>
</table>

**Single action jaws**

<table>
<thead>
<tr>
<th>Working Insert</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>30173 R</td>
<td>30173 RAR</td>
</tr>
<tr>
<td></td>
<td>30173 RAL</td>
</tr>
<tr>
<td></td>
<td>30173 RAO</td>
</tr>
<tr>
<td>30178 R</td>
<td>30178 RAR</td>
</tr>
<tr>
<td></td>
<td>30178 RAL</td>
</tr>
<tr>
<td></td>
<td>30178 RAO</td>
</tr>
<tr>
<td>30173 L</td>
<td>30173 LAR</td>
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<tr>
<td></td>
<td>30173 LAL</td>
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<tr>
<td></td>
<td>30173 LAO</td>
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<tr>
<td>30178 L</td>
<td>30178 LAR</td>
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<td></td>
<td>30178 LAO</td>
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<td>30173 FAR</td>
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<td></td>
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<td></td>
<td>30173 FAA</td>
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<td>30178 F</td>
<td>30178 FAR</td>
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<tr>
<td></td>
<td>30173 GAL</td>
</tr>
<tr>
<td></td>
<td>30173 GAO</td>
</tr>
</tbody>
</table>

**KOH Macro Needle Holder**, jaws curved to right, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0

**KOH Macro Needle Holder**, jaws curved to left, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0

**KOH Macro Needle Holder**, straight jaws, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0

**KOH Macro Assistant Needle Holder**, straight jaws
KOH Macro Needle Holder

dismantling, size 5 mm

Operating instruments, lengths 33 and 43 cm, with pistol grip handle, for use with trocars size 6 mm

<table>
<thead>
<tr>
<th>Length</th>
<th>Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>33 cm</td>
<td>30173 PR</td>
</tr>
<tr>
<td>43 cm</td>
<td>30173 PR</td>
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Single action jaws

<table>
<thead>
<tr>
<th>Working Insert</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>30173 R</td>
<td>30173 RPR 30173 RPL 30173 RPO</td>
</tr>
<tr>
<td>30178 R</td>
<td>30178 RPR 30178 RPL 30178 RPO</td>
</tr>
</tbody>
</table>

KOH Macro Needle Holder, jaws curved to right, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0

<table>
<thead>
<tr>
<th>Working Insert</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>30173 L</td>
<td>30173 LPR 30173 LPL 30173 LPO</td>
</tr>
<tr>
<td>30178 L</td>
<td>30178 LPR 30178 LPL 30178 LPO</td>
</tr>
</tbody>
</table>

KOH Macro Needle Holder, jaws curved to left, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0

<table>
<thead>
<tr>
<th>Working Insert</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>30173 F</td>
<td>30173 FPR 30173 FPL 30173 FPO</td>
</tr>
<tr>
<td>30178 F</td>
<td>30178 FPR 30178 FPL 30178 FPO</td>
</tr>
</tbody>
</table>

KOH Macro Needle Holder, straight jaws, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0

<table>
<thead>
<tr>
<th>Working Insert</th>
<th>Complete Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>30173 G</td>
<td>30173 GPR 30173 GPL 30173 GPO</td>
</tr>
</tbody>
</table>

KOH Macro Assistant Needle Holder, straight jaws
To prevent the risk of hernia, large trocar sites should be closed after laparoscopic interventions. KARL STORZ offers a special reusable fascial closure instrument for this purpose.

Special Features:

- A simple, cost-effective solution for trocar site closures
- Integrated grasping forceps facilitate the passing and retrieval of sutures during wound closure
- Another possible application in laparoscopic hernia surgery for the fixation of the synthetic mesh to the abdominal wall
BERCI Fascial Closure Instrument, for subcutaneous ligature of trocar incisions, size 2.8 mm, length 17 cm, for closure of trocar incision wounds.

Further information is available in the Laparoscopy catalog.
KARL STORZ Suction and Irrigation Systems

KARL STORZ offers a wide range of suction and irrigation systems. Diverse combination possibilities for handles as well as suction and irrigation tubes can be selected to achieve the desired suction or irrigation results. The appropriate tubing systems are also available from KARL STORZ.

Special Features:

- A broad range of suction and irrigation tubes available in various lengths and diameters allows the user to select KARL STORZ suction and irrigation systems to meet individual needs.
- The modular system allows KARL STORZ handles to be combined with various suction and irrigation tubes as well as tubing sets.
- Suction and irrigation systems provide powerful suction and irrigation thanks to the customary KARL STORZ high quality standards.

Discover our range of suction and irrigation systems and assemble your preferred KARL STORZ suction and irrigation system.
37112 A  Handle, straight, with clamping valve, for suction and irrigation, autoclavable
37113 A  Handle, pistol grip, with clamping valve, for suction and irrigation, autoclavable
37112 RV Suction and Irrigation Handle, straight, with roller valve, for suction and irrigation, autoclavable
26167 ANL Suction and Irrigation Tube, with lateral holes, size 3.5 mm, length 36 cm, for use with handles for irrigation and suction
37360 LH Suction and Irrigation Tube, with lateral holes, size 5 mm, length 36 cm, for use with suction and irrigation handles
37460 LH Suction and Irrigation Tube, with lateral holes, size 5 mm, length 43 cm, for use with suction and irrigation handles
37560 LH Suction and Irrigation Tube, with lateral holes, size 10 mm, length 36 cm, for use with suction and irrigation handles

For use with the following tubing sets

031133-10* Tubing Set, sterile, for single use, package of 10, for use with KARL STORZ Handles 37112 A (straight), 37113 A (pistol grip) and 37112 RV

031518-10* Cassette Tubing Set, with two puncture needles, sterile, for single use, package of 10, for use with HAMOU® ENDOMAT® 26331120 (laparoscopy)

Note: Tubing Set 031134-10* is required when using Handles 37112 A, 37113 A and 37112 RV in conjunction with Cassette Tubing Set 031518-10*. Tubing sets for older models are available in the MTP Single-Use Products catalog.

031134-10* Tubing Set, sterile, for single use, package of 10, for use with KARL STORZ Handles 37112 A (straight), 37113 A (pistol grip) and 37112 RV in combination with silicone tube inner diameter 5 mm at the patient end

* mtp.

Further combination possibilities for handles for suction and irrigation, suction and irrigation tubes as well as tubing sets are available in the Laparoscopy catalog.

Further information on KARL STORZ suction and irrigation pumps is available in the Laparoscopy catalog.
Surgical Sponge Holder

The surgical sponge holder from KARL STORZ is available in two different sizes (5 mm and 10 mm) and can be used for blunt exposition and dissection in laparoscopic surgery.

Special Features:

- Easy sponge fixation (self-retaining)
- Available in sizes 5 mm and 10 mm
- Also suitable for blunt exposition and dissection
- The clamped sponge can also be used intraoperatively for cleaning soiled trocar seals

To view the application video, please scan the QR code
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

Further information on the surgical sponge holder is available in the Laparoscopy catalog.
Imaging and OR Integration

Storage and administration of image and video data
Flexible support for image sources
Centralized communication interface

KARL STORZ OR1™
Future-oriented integration meets innovative data management
Further information and an overview of Laparoscopy products from KARL STORZ can be viewed on

www.karlstorz.com in the Human Medicine section, Laparoscopy in Surgery, Gynecology, and Urology