Highlights 2019 Pediatrics





KARL STORZ, Your Partner in Pediatric Surgery

The diagnosis and therapy of children requires instruments that are appropriately adapted to the anatomical characteristics of the pediatric patient.

The following pages provide you with an overview of the product portfolio specially developed for the specialist disciplines listed below:

- Anesthesiology and Emergency Medicine
- Laparoscopic Pediatric Surgery

- Pediatric Pneumology
 - Gastroenterology

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- Pediatric Urology
- Proctology in the Pediatric Population

Furthermore, KARL STORZ offers child-specific instrumentation for the specialist disciplines listed below:

- Neurosurgery
- Endoscopes and instruments for ENT
- Units and Accessories for Pediatrics
- Telepresence

• Esophagoscopy

Additional information on these specialist disciplines is available on the KARL STORZ website: **www.karlstorz.com**

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Proctology in the Pediatric Population



C-MAC[®] S for Pediatrics

The new MILLER single-use video laryngoscopes

The new pediatric single-use video laryngoscopes from KARL STORZ set new standards in airway management. The single-use MILLER 0 and 1 form a perfect symbiosis with the C-MAC[®] S Pediatric IMAGER and meet the highest hygiene standards.

- Blade and handle form one continuous piece: Risk of cross-contamination is drastically reduced
- BlueButton: Documentation with the innovative multifunction button
- Simple Plug & Play thanks to the universal C-MAC® system interface
- Compatible with the C-MAC® III Monitor, C-MAC® PM II and C-HUB® II
- Extremely safe and break-resistant C-MAC® S video laryngoscopes
- Ergonomic handle specially designed to meet requirements in pediatrics
- For direct and indirect laryngoscopy with MILLER blades

- 8403 ZXK
 C-MAC® Monitor for CMOS Endoscopes, screen size 7" with 1280 x 800 pixel resolution, two camera inputs, a USB and a HDMI port, optimized user interface, video and image capture in real time on SD card, playback of recorded video clips and still images, data transfer from SD card to USB flash drive possible, splash-proof according to IP54, suitable for wipe disinfection, shock-resistant ABS plastic housing, intelligent power management with rechargeable Li-lon batteries, VESA 75 mounting option, power adaptor for EU, UK, USA and Australia, power supply 110-240 VAC, 50/60 Hz, for use with CMOS video endoscopes including:
 SD Card ULTRA, 16 GB
 Protection Cap
 VESA 75 Quick Clip
 Mains Adaptor Set
- 8403 X C-MAC[®] Connecting Cable, with C-MAC[®] system interface, for C-MAC[®] Monitor 8403 ZXK or C-HUB[®] II 20 2903 01, length 200 cm, for use with C-MAC[®] Video Laryngoscopes 8403 xxx
- 8403 XSP **C-MAC® S Pediatric IMAGER,** with C-MAC® system interface, for manual and machine disinfection up to 65 °C and High Level Disinfection (HLD) acc. to US standards, for use with C-MAC® Connecting Cable 8403 X, C-MAC® Monitor 8403 ZX, C-MAC® PM 8403 XD or C-HUB® II **20**290301 and single-use C-MAC® S Video Laryngoscopes 051110-10, 051111-10
- 051110-10* C-MAC[®] S Video Laryngoscope MILLER #0, for single use, package of 10, for use with C-MAC[®] S Pediatric IMAGER 8403 XSP
- 051111-10* C-MAC[®] S Video Laryngoscope MILLER #1, for single use, package of 10, for use with C-MAC[®] S Pediatric IMAGER 8403 XSP





C-MAC® Video Laryngoscopes for Pediatrics and Neonatology

For solutions that fit: The new MACINTOSH 0

To meet requirements for pediatrics and neonatology, particularly when dealing with the difficult airway, the C-MAC[®] video laryngoscope portfolio has been expanded to include the MACINTOSH 0. Five different blades are available for video laryngoscopy in pediatrics and neonatology: MILLER 0 and 1, MACINTOSH 0 and 2 as well as D-BLADE Ped. Thanks to the extremely low blade profile and the optimal distance from the camera to the distal tip, the new MACINTOSH 0 and the enhanced MILLER 0 are particularly suitable for the intubation of premature babies.

- Particularly flat model, especially suited for neonatology
- For direct and indirect laryngoscopy
- For routine clinical use and training
- Specially shaped and shortened handle for pediatrics and neonatology
- The new C-MAC® PM connecting cable provides more room to maneuver

- 8403 GXC **C-MAC® Video Laryngoscope MIL #1,** CMOS technology, with MILLER laryngoscope blade, size 1, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II **20**290301 as well as C-MAC® PM 8403 XD
- 8403 DXC **Same,** size 0
- 8403 KXC **C-MAC® Video Laryngoscope MAC #2,** CMOS technology, with MACINTOSH laryngoscope blade, size 2, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II **20** 2903 01 as well as C-MAC® PM 8403 XD
- 8403 EXC **C-MAC® Video Laryngoscope MAC #0,** CMOS technology, with MACINTOSH laryngoscope blade, size 0, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II **20**290301 as well as C-MAC® PM 8403 XD
- 8403 HXP **C-MAC® Video Laryngoscope D-BLADE Ped.,** pediatric, CMOS technology, for difficult intubation in children, with C-MAC® system interface, documentation of images and video sequences via the BlueButton, for use with C-MAC® Connecting Cable 8403 X for C-MAC® Monitor 8403 ZXK or C-HUB® II **20**290301 as well as C-MAC® PM 8403 XD
- 8403 ZXK C-MAC[®] Monitor for CMOS Endoscopes, screen size 7" with 1280 x 800 pixel resolution, two camera inputs, a USB and a HDMI port, optimized user interface, video and image capturing in real time on SD card
- 8403 X C-MAC[®] Connecting Cable, with C-MAC[®] system interface, for C-MAC[®] Monitor 8403 ZXK or C-HUB[®] II 20290301, length 200 cm, for use with C-MAC[®] video laryngoscopes 8403 xxx
- 8403 XDK C-MAC[®] PM Set, unit with LCD monitor and power supply for all C-MAC[®] laryngoscopes, screen size 3.5", monitor movable via two rotation axes, rechargeable Li-ion batteries, 1 h operation time, 2 h charging time, power management with capacity indicator, protection class IPX8
- 8403 XDL **Charging Unit,** for one rechargeable battery for C-MAC[®] PM, with power supply and mains adaptor for EU, UK, USA and AUS, power supply 100-240 VAC, 50/60 Hz, suitable for wipe disinfection, for use with Battery 8403 XDA and C-MAC[®] PM 8403 XD/XDK
- 8403 XDP **C-MAC® PM Connecting Cable,** for the transmission of digital signals from C-MAC® PM 8403 XD to C-MAC® video laryngoscopes 8403xxx (C-MAC® system interface), length 50 cm
- 8403 XDA **Battery,** rechargeable Li-lon battery for power supply of C-MAC[®] PM 8403 XD, charging via Charging Unit 8403 XDL, optimal operation time of 60 min, suitable for wipe disinfection



Retromolar Intubation Endoscope 2.0

The thinnest member of the C-MAC® product family

Children are not small adults. Anatomical differences, and possibly specific pathologies, of children and infants make airway management difficult for the inexperienced intubator. This is why we incorporated the 2.0 intubation endoscope with eyepiece into the C-MAC[®] product family. It can be easily connected to the C-MAC[®] monitor by means of the C-CAM[®]. The retromolar intubation endoscope is an expert tool for airway management in pediatric patients.

- For difficult airways in children and newborns
- Suitable for ET tubes with inner diameters ranging from 2.5 to 3.5 mm
- Continuous oxygen insufflation via the tube holder ensures additional safety
- Video-assisted intubation when using C-CAM[®] and a mobile light source in conjunction with the C-MAC[®] III monitor or C-HUB[®] II

- 11605 CK Intubation Endoscope Set, with eyepiece, outer diameter 2 mm, for ETT 2.5-3.5 mm, working length 22 cm, distal bending 40°, angle of view 80°, for use with LED Battery Light Sources (11301 D1, D3, D4, DE, DF), 8-pin C-CAM® Camera Head 20 2901 32 including:
 Intubation Endoscope 2.0 x 22 Case
 Tube Holder, for tube fixation, with O₂ application
- 11301 D1 **Battery Light Source LED for Endoscopes,** with fine screw thread, boost mode for temporary increase in brightness, burning time > 120 min, weight approx. 78 g, for use with KARL STORZ endoscopes
- 11301 D3 Same, with coarse screw thread
- 121306 P Photo Battery, lithium, 3 V, CR 123 A
- 11301 DE **Battery Light Source LED for Endoscopes,** rechargeable, with click connection, boost mode for temporary increase in brightness, color temperature 5500 K, lithium-ion batteries, charging time 60 min, burning time at 100% brightness 40 min, weight approx. 150 g, suitable for wipe disinfection
- 11301 DF Same, with coarse screw thread
- 11301 DG **Charging Unit,** for two LED battery light sources, with fixed integrated power supply and adaptor for EU, UK, USA and AUS, power supply 110-240 VAC, 50/60 Hz, suitable for wipe disinfection, for use with 11301 DE/DF Battery Light Source LED
- 20 2901 32 C-CAM[®] Camera Head, 8-pin, one-chip CMOS camera head, resolution 640 x 480, focal length f = 20 mm, for use with C-HUB[®] 20 2901 01 and C-HUB[®] II 20 2903 01 as well as C-MAC[®] Monitors 8402 ZX/8403 ZX
- 8403 ZXK C-MAC® Monitor for CMOS Endoscopes, screen size 7" with 1280 x 800 pixel resolution, two camera inputs, a USB and a HDMI port, optimized user interface, video and image capture in real time on SD card, playback of recorded video clips and still images, data transfer from SD card to USB flash drive possible, splash-proof according to IP54, suitable for wipe disinfection, shock-resistant ABS plastic housing, intelligent power management with rechargeable Li-ion batteries, VESA 75 mounting option, power adaptor for EU, UK, USA and Australia, power supply 110-240 VAC, 50/60 Hz, for use with CMOS video endoscopes including

SD Card ULTRA, 16 GB Protection Cap VESA 75 Quick Clip Mains Adaptor Set

20 2903 01 C-HUB® II Camera Control Unit, for use with C-CAM® Camera Head 20 2901 32, Electronic Module 8402 X, C-MAC® Connecting Cable 8403 X or compatible CMOS video endoscopes, Interfaces: USB 2.0, S-Video output (NTSC), HDMI output, power socket



Bronchoscopy Instruments for Children

A practical set classification for the clinical routine

KARL STORZ offers instruments for pediatric bronchoscopy that are customized to the anatomy of children. This includes bronchoscopes in various sizes and lengths as well as optical forceps and accessories. To optimally structure our comprehensive product range for the benefit of our customers, we offer a total of three sets for foreign body removal in children. They are organized by age and corresponding tracheal diameter. Each set includes the appropriate bronchoscope sizes with a compatible telescope, optical forceps, and accessories. The instrument sets therefore offer everything needed for foreign body removal.

Sets:

- Set 1: Age group 0-6 months
- Set 2: Age group 6 months 6 years
- Set 3: Age group 6-14 years

Set 2: Age Group 6 Months - 6 Years

HOPKINS® Telescope and Bronchoscopes

- 10324 AA **HOPKINS® Straight Forward Telescope 0°,** diameter 2.9 mm, length 36 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 10339 DD DOESEL-HUZLY Bronchoscope, size 3.5, length 26 cm
- 10339 CC DOESEL-HUZLY Bronchoscope, size 4, length 26 cm
- 10339 CD DOESEL-HUZLY Bronchoscope, size 3.5, length 30 cm
- 10339 C DOESEL-HUZLY **Bronchoscope,** size 4, length 30 cm
- 10339 BB DOESEL-HUZLY Bronchoscope, size 4.5, length 30 cm

Optical Forceps and Instrumentation

- 10378 HF **Optical Forceps,** with alligator jaws, for the controlled grasping of hard foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS[®] Telescope 10324 AA
- 10378 CF **Optical Forceps,** 2 x 2 teeth, for the controlled grasping of coins and flat foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS[®] Telescope 10324 AA
- 10378 KF **Optical Forceps,** with KILLIAN bean jaws, for the controlled grasping of peanuts and soft foreign bodies, with force-limited handle, incl. cleaning adaptor, for use with HOPKINS[®] Telescope 10324 AA
- 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm

Accessories

- 10101 FA **Prismatic Light Deflector, autoclavable,** with connection to fiber optic light cable (not to be used with 8574 K/KB/KT/KW)
- 10924 D Adaptor, for respirator
- 10318 K Injection Cannula, for positive pressure assisted ventilation system, LUER-Lock, outer diameter 3.5 mm, for use with bronchoscope series 10318 and 10339
- 10338 S Instrument Guide for Suction Catheters, short, for bronchoscopes for children and infants
- 10338 N Rubber Telescope Guide, for use with telescopes and optical forceps

Wire Trays

- 39502 ZL Wire Tray for Cleaning, Sterilization and Storage of instruments, long, stackable, including hole plate walls and foldaway handles, external dimensions: 535 x 250 x 66 mm
- 39100 SL Silicone Grid Insert LARGE DIAMOND GRID, blue, extra wide meshed, for storage of instruments in wire trays, external dimensions: 530 x 240 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

Sets 1 and 3 are set out in detail in ENDOWORLD[®] "Bronchoscopy Instruments for Children" (Order No.: 96082014E).



Flexible SILVER SCOPE® Gastroscopes

The medium gastroscope for standard and pediatric use

- Elegant 7.8 mm outer diameter with 2.8 mm working channel
- Excellent deflection up to 210°

The slim gastroscope for pediatric use and in case of stenoses

- Very slender sheath with 5.9 mm outer diameter and a 2.0 mm working channel
- Particularly well suited for examinations on patients with stenoses and very young patients
- Excellent deflection up to 210°

13823 PKSK/NKSK Medium Gastroscope	Flexible Video Gastroscope, v Sheath outer diameter: Working channel diameter: Max. deflection up/down: Max. deflection left/right: Working length: Direction of view:	vith reduced outer diameter 7.8 mm 2.8 mm 210°/100° 120°/120° 1100 mm 0°		
13820 PKSK/NKSK Slim Gastroscope	Flexible Video Gastroscope Sheath outer diameter: Working channel diameter: Max. deflection up/down: Max. deflection left/right: Working length: Direction of view:	5.9 mm 2 mm 210°/100° 120°/120° 1100 mm 0°		
To clean endoscopes 138	23 PKSK/NKSK, the following I	orush is recommended:		
110952-50*	Cleaning Brush, with double-sided brush, length 250 cm, brush diameter 3.2 mm, unsterile, for single use, package of 50, for use with flexible endoscopes with working channel diameters 2.6-3 mm			
To clean endoscopes 138 channel in the insertion tu		rush is recommended for the working/suction	on	
110942-50*	Cleaning Brush, with double-sided brush, length 160 cm, brush diameter 2.6 mm, unsterile, for single use, package of 50, for use with flexible endoscopes with working channel diameters 2-2.3 mm			
To clean the suction chan	nel in the insertion tube, the fol	lowing brush is recommended:		
110962-50*	Cleaning Brush, with double-sided brush, length 230 cm, brush diameter 4.5 mm, unsterile, for single use, package of 50, for use with flexible endoscopes with working channel diameters 3.2-4.2 mm			





Slim Colonoscopes for Pediatric Applications

- Elegant 11.2 mm outer diameter with 3.4 mm working channel
- Enhanced endoscope flexibility for greater patient comfort
- Excellent deflection up to 210°
- Three innovative visualization technologies for easy tissue differentiation:
 - CLARA: Homogeneous illumination
 - CHROMA: Contrast enhancement
 - SPECTRA*: Spectral color shift and color exchange
- CO₂ insufflation prevents postoperative pain
- Possible to clean water jet channel with a brush
- Available in three different lengths

* SPECTRA: Not for sale in the U.S.

13920 PKSK/NKSK Sigmoidoscope with Water Jet Channel	Flexible Video Sigmoidoscope Sheath outer diameter: Working channel diameter: Max. deflection up/down: Max. deflection left/right: Working length: Direction of view:	
13926 PKSK/NKSK Slim Colonoscope with Water Jet Channel	Flexible Video Colonoscope, v Sheath outer diameter: Working channel diameter: Max. deflection up/down: Max. deflection left/right: Working length: Direction of view:	11.2 mm 3.4 mm
13927 PKSK/NKSK Slim Colonoscope with Water Jet Channel	Flexible Video Colonoscope, v Sheath outer diameter: Working channel diameter: Max. deflection up/down: Max. deflection left/right: Working length: Direction of view:	11.2 mm

We recommend the use of the IMAGE1 S[™] camera platform and the CO₂MBI[®] LED light source with the endoscope.

The following brushes are recommended for cleaning the slim colonoscopes and the sigmoidoscope

110962-50*	Cleaning Brush, with double-sided brush, length 230 cm, brush diameter 4.5 mm, unsterile, for single use, package of 50, for use with flexible endoscopes with working channel diameters 3.2-4.2 mm	2
110920-10*	Biofilm Removal Device Cleaning Brush, flocked, length 200 cm, unsterile, for single use, package of 10, for use with flexible endoscopes with a working channel diameter of 1.2 mm	2
110932-50*	Cleaning Brush, length 200 cm, brush diameter 1.7 mm, unsterile, for single use, package of 50, for use with flexible endoscopes with working channel diameters 1.2-1.5 mm	2



The instruments recommended for the slim colonoscopes and sigmoidoscopes can be viewed on the KARL STORZ website.



New Trocar Generation for Laparoscopic Pediatric Surgery

The newly designed trocar generation combines single-use with reusable components. Whereas cannulas and trocars feature a design with reusable components, the new valve seal is intended for single use.

Special Features

- The ergonomic shape of the trocar ensures safe and reliable handling during placement
- The new plastic trocar housing ensures that the weight is considerably reduced and the trocar is well-balanced
- One-piece sealing system for single use (package of 10), now also available as a sterile version
- Minimal friction between the valve seal and the instrument
- Available in diameters 2.5 mm, 3.5 mm and 6 mm with a working length of 5 cm

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Size	2.5 mm	3.5 mm	6 mm
Working length	5 cm	5 cm	5 cm
Color code	blue	green	black
Trocar, with pyramidal tip, including valve seal, sterile, for single use, package of 10	11603 GZS	30114 GZS	30160 GZS
Trocar, with blunt conical tip including valve seal, sterile, for single use, package of 10		30114 GNS	30160 GNS
Trocar, with conical tip including valve seal, sterile, for single use, package of 10		30114 GYS	30160 GYS

Valve Seals, for single use, package of 10

	unsterile 횣		
For trocars size 2.5 mm	11603-XV2	021099-10	mtro
For trocars size 3.5 mm	30114-XV3	021199-10	
For trocars size 6 mm	30160-XV5	021299-10	

Further sizes and lengths can be found in the Laparoscopy catalog and the online Laparoscopy catalog at www.karlstorz.com.



The New RoTaLock™ Trocar

The TAN ROTALOCK[™] trocar is a self-retaining trocar that was specially developed for neonatal surgery/pediatric laparoscopic surgery.

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, now also available as a sterile version
- Available in sizes 3.5 mm and 6 mm

30114 RO	 TAN ROTALOCK[™] Trocar, without LUER-Lock connector for insufflation, size 3.5 mm, working length 3 cm, color code: green including: Cannula Valve Seal, sterile, for single use, package of 10 Fixation Tube, package of 5
30114 RB	ROTALOCK™ Trocar
30160 RO	 TAN ROTALOCK[™] Trocar, with LUER-Lock connector for insufflation, size 6 mm, working length 5 cm, color code: black including: Cannula Valve Seal, sterile, for single use, package of 10 Fixation Tube, package of 5

30160 RB **ROTALOCK™ Trocar**

Valve Seals, for single use, package of 10

	unsterile		
For trocars size 3.5 mm	30114-XV3	021199-10	mtp
For trocars size 6 mm	30160-XV5	021299-10	



Three-part Dismantling CLICK*line* Series for Pediatric Laparoscopic Surgery

The CLICKLINE instrument line (diameter 3.5 mm, length 20 cm) for pediatric laparoscopic surgery features great stability while its efficient, modular construction offers a high level of flexibility.

Special Features:

- Working length (20 cm) adapted to the special requirements of pediatric laparoscopy
- Modular concept: 3-part dismantling instruments fulfil the highest hygiene demands while offering the best possible variability
- Diverse combination possibilities thanks to a wide range of jaws with various outer sheaths and CLICKLINE handles
- Additional stability thanks to combination with metal outer sheath
- Working inserts with fully integrated joints

In addition to this instrument line (3.5 mm, three-part dismantling) we also offer 3 mm instruments with a length of 20 cm (two-part dismantling). Further information can be found in the main Laparoscopy catalog and the online Laparoscopy catalog at www.karlstorz.com.

CLICKline Dissecting Forceps, insulated, size 3.5 mm, length 20 cm



Operating instruments, **length 20 cm,** for use **with trocars size 3.5 mm**



Double action jaws

Working Insert	Complete Instrument						
31110 ML	31151 ML	31152 ML	31153 ML	31156 ML	31121 ML	31149 ML	
CLICKLINE KELLY Dissecting and Grasping Forceps, long							
31110 MD	31151 MD	31152 MD	31153 MD	31156 MD	31121 MD	31149 MD	
CLICKLINE KELLY Dissecting and Grasping Forceps							
31110 R	31151 R	31152 R	31153 R	31156 R	31121 R	31149 R	
CLICKLINE Dissecting and Grasping Forceps, right-angled jaws							
31110 UL	31151 UL	31152 UL	31153 UL	31156 UL	31121 UL	31149 UL	
CLICKLINE REDDICK-OLSEN Dissecting and Grasping Forceps, robust							

Jaw length in mm (approx. measurements)

Further dissecting and grasping forceps can be found in the main Laparoscopy catalog and the online Laparoscopy catalog at www.karlstorz.com.

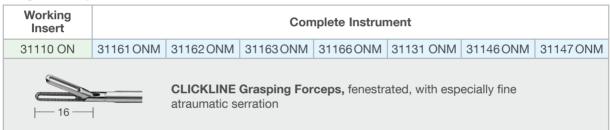
CLICK*line* Grasping Forceps, not insulated, size 3.5 mm, length 20 cm



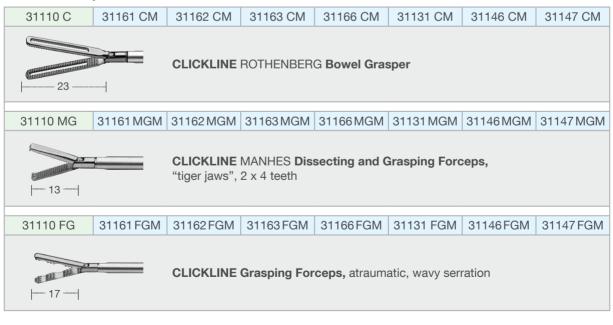
Operating instruments, **length 20 cm,** for use **with trocars size 3.5 mm**

	Longth				Handle			
Length		33161	33162	33163	33166	33131	33146	33147
	20 cm			*	φ 0	•	•	+

Single action jaws



Double action jaws



Jaw length in mm (approx. measurements)

Further grasping forceps can be found in the main Laparoscopy catalog and the online Laparoscopy catalog at www.karlstorz.com.

CLICK*line* Scissors, insulated, size 3.5 mm, length 20 cm

Operating instruments, **length 20 cm,** for use **with trocars size 3.5 mm**





CLICK⁺line

Length		Handle	
Lengui	33151	33121	33149
20 cm			

Double action jaws

Working Insert	Complete Instrument													
31110 MW	31151 MW	31151 MW 31121 MW												
10 -	CLICKLINE Scissors, s	serrated, curved, conical												

Single action jaws

H

31110 EH	31151 EH	31151 EH 31121 EH								
	CLICKLINE Micro Hoo	k Scissors								

Jaw length in mm (approx. measurements)

Further scissors can be found in the main Laparoscopy catalog and the online Laparoscopy catalog at www.karlstorz.com.



RoBi[®] – Rotating Bipolar Grasping Forceps and Scissors for Pediatric Laparoscopic Surgery

The rotating and bipolar instruments are available with a diameter of 3.5 mm and a working length of 20 cm and allow precise work on tissue. The instrument design and materials used ensure the highest mechanical stability. The force limiter integrated in the handle prevents the jaws from overloading. Color coding on the forceps insert and the handle enables clear identification of the new, modular ROBI[®] components.

Special Features:

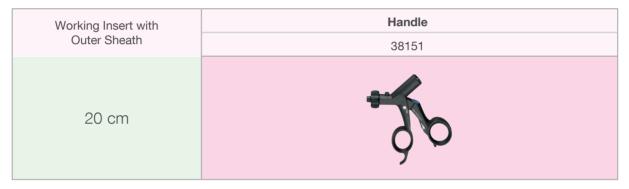
- Rotating and bipolar instruments, for the first time with a diameter of 3.5 mm, working length 20 cm
- Jaws with robust hinge in conjunction with force limiter allows precise and secure grasping
- Insulated outer sheath, 360° rotating sheath
- Modular construction for optimal cleaning

RoBi[®] Bipolar Grasping Forceps and Scissors, size 3.5 mm

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

 Bi

Operating instruments, **length 20 cm,** for use **with trocars size 3.5 mm**



Double action jaws

Working Insert with Outer Sheath	Complete Instrument
38810 MD	38851 MD
12 mm -	ROBI [®] KELLY Grasping Forceps, CLERMONT-FERRAND model, especially suitable for dissection, color code: light blue
38810 ON	38851 ON
12 mm -	ROBI® Grasping Forceps, CLERMONT-FERRAND model, with especially fine atraumatic serration, fenestrated jaws, color code: light blue
38810 PT	38851 PT
⊢ 16 mm -	ROBI® TAN Grasping Forceps, CLERMONT-FERRAND model, especially suitable for dissection, color code: light blue
38810 MW	38851 MW
13 mm -	ROBI® METZENBAUM Scissors, CLERMONT-FERRAND model, curved blades, color code: light blue

Jaw length in mm (approx. measurements)

Further information can be found in the main Laparoscopy catalog and the online Laparoscopy catalog at www.karlstorz.com.

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Instrument Set for Pyloromyotomy

KARL STORZ offers a complete instrument set for pyloromyotomy featuring instruments that are specifically designed for this indication.

Percutaneous pyloric knife with knife insert for single use:

- Optimal cutting every time
- Integrated ratchet mechanism allows the knife insert to be locked in 8 positions (1.5 mm steps) and extended to the desired length in a controlled manner in order to achieve the required cutting depth.

GEIGER Percutaneous Pyloric Grasper

• Grasping forceps for stabilizing the pylorus during pyloromyotomy

The instrument set for pyloromyotomy also includes various pyloric spreaders and graspers that are suitable for both percutaneous applications and for use with a trocar.

26167 DRS	 Pyloric Knife, with LUER-Lock connector for cleaning, size 3 mm, length 10 cm including: Handle, with outer sheath Knife Insert, for single use, unsterile, package of 10
30352 PS	 CLICKLINE GEIGER Pyloric Spreader, rotating, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, for percutaneous use, double action jaws, size 3 mm, length 20 cm including: Plastic Handle, with MANHES style ratchet Outer Sheath with Working Insert
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, with larger contact area Metal Outer Sheath Forceps Insert
31161 VTM	CLICKLINE TAN Pyloric Spreader and Grasping Forceps, rotating, dismantling, without connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, in- and outside serrated jaws, size 3.5 mm, length 20 cm including: Metal Handle, without ratchet, with larger contact area Metal Outer Sheath Forceps Insert
31151 VR	 CLICKLINE TAN Dissecting and Grasping Forceps, rotating, dismantling, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, jaws with rounded tips, size 3.5 mm, length 20 cm including: Plastic Handle, without ratchet, with larger contact area Metal Outer Sheath, insulated Forceps Insert

Further sizes and lengths can be found in the Laparoscopy catalog and the online Laparoscopy catalog at www.karlstorz.com.



ENDOFLATOR® 50

The new insufflator with integrated heating element and sensitive mode for laparoscopic pediatric surgery

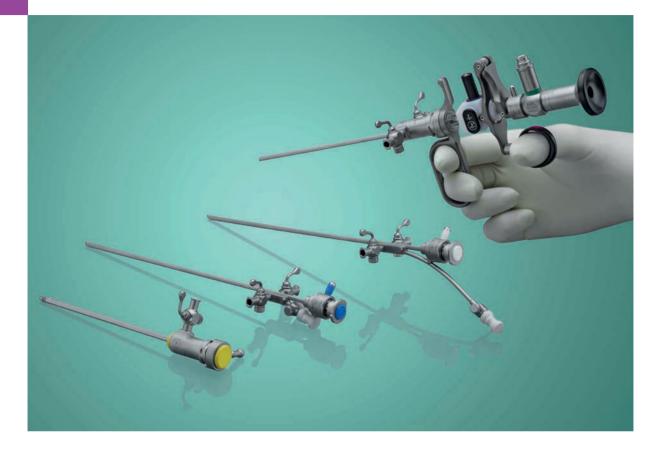
Special Features:

- Optimized control of the insufflation pressure for pediatric applications as well as safety limits for pressure (up to max. 15 mmHg) and flow (up to max. 15 l/min)
- Stable OR field thanks to innovative regulation
- Gas heating adapts to various ambient conditions and reliably prevents telescope fogging
- In combination with the S-PILOT[®] smoke evacuation system, creates optimal viewing conditions and a stable OR field, even in small cavity surgery*

^{*} Further information on the S-PILOT® smoke evacuation system is available in the UNITS Highlights.

Highlights PEDIATRICS | 1-2019

- UI 500 **ENDOFLATOR® 50 SCB,** with integrated SCB module, power supply 100-240 VAC, 50/60 Hz, System requirements for use with SCB-PC: SCB control NEO System with installed SCB control NEO Software Release 20090001-45 or higher
- 20090170 SCB Connecting Cable, length 100 cm
- 20400030 Universal Wrench
- 031210-10 **Insufflation Tubing Set with Gas Filter,** heatable, hydrophobic on both sides, sterile, for single use, package of 10, for use with ENDOFLATOR[®] 50



Thin, Pediatric System for Pediatric Urology

From childhood to old age, size plays a crucial role in urology. The pediatric system from KARL STORZ for newborn babies and children offers urologists and pediatric urologists or surgeons significant enhancements in urological care. The development of the 1.2 mm miniature telescope enables the further reduction of the previous cystoscopes, reflux cystoscopes, urethrotomes and resectoscopes while offering a new product line with special instruments for the field of pediatric urology.

Special Features:

- Excellent optical quality with the smallest possible diameter
- Straightforward and gentle patient treatment thanks to the smallest possible sheath size
- Bifunctional working element pediatric resectoscope and urethrotome
- Special sheath for the treatment of vesicoureteral reflux

- 27033 AA **Miniature Straight Forward Telescope 0°,** diameter 1.2 mm, length 20 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 27033 C Cystoscope-Urethroscope Sheath, 8 Fr., with 4 Fr. working channel, working length 16 cm, color code: blue
- 27033 CR **Cystoscope-Urethroscope Sheath,** 8 Fr., with 4 Fr. working channel, for reflux needles, working length 16 cm, color code: white
- 27033 EH Electrotome including: **Working Element Cutting Loop Coagulation Electrode High Frequency Cord Protection Tube** 27033 R Resectoscope Sheath, with LUER-Lock stopcock, 9 Fr., color code: yellow 27033 EK **Working Element Set** including: **Working Element** Knife
- 27033 U Urethrotome Sheath, with LUER-Lock stopcock, 8 Fr.
- 27033 F Telescope Bridge, with 1 lockable channel



Operating Cystoscope-Urethroscope for Children

For straightforward and gentle treatment

The operating cysto-urethroscopes with atraumatic tip and excellent gliding properties provide the operating surgeon with enhanced possibilities for diagnosis as well as straightforward and gentle treatment of the patient. The straight working channel and the excellent telescope significantly enhance the efficient performance of various procedures.

Special Features:

- Atraumatically shaped distal end of sheath with rounded tip
- Minimal sheath diameter
- Maximum irrigation due to the large, straight working channel

27030 KAK Pediatric Cysto-Urethroscope, 8 Fr., 6°, 1 step, 8-11 Fr., length 13 cm, autoclavable, with angled evepiece, fiber optic light transmission incorporated, with 2 lateral irrigation ports and 1 working channel 4 Fr., for use with instruments up to 4 Fr. The following accessories are included in delivery: **Insertion Aid** Instrument Port with Sealing System and Quick Release Lock LUER-Lock Tube Connector, male LUER-Lock Tube Connector, with stopcock Seal, package of 10 **Cleaning Adaptor** 27030 KBK Pediatric Cysto-Urethroscope, 9.5 Fr., 6°, 1 step, 9.5-11 Fr., length 13 cm, autoclavable, with angled eyepiece, fiber optic light transmission incorporated, with 2 lateral irrigation ports and 1 working channel 6 Fr. for operating instruments 5 Fr. The following accessories are included in delivery: **Insertion Aid** Instrument Port with Sealing System and Quick Release Lock LUER-Lock Tube Connector, male

LUER-Lock Tube Connector, with stopcock Seal, package of 10 Cleaning Adaptor

The entire KARL STORZ product portfolio for pediatric urology can be found in the main Urology and Pediatric Surgery catalogs.



E.P.Si.T. – Endoscopic Pilonidal Sinus Treatment

The pilonidal sinus is an acute or chronic inflammatory process in the subcutaneous adipose tissue, often occurring in the sacrococcygeal region¹. E.P.Si.T. – Endoscopic Pilonidal Sinus Treatment – proceeds in two phases. In the first – diagnostic – phase, the sinus cavity and the sinus tracts are examined. The aim of the second – therapeutic – phase is to ablate the abscess cavity and to eliminate the fistula². Both phases are performed under direct endoscopic control.

Special Features:

- E.P.Si.T. can be performed in an outpatient setting
- Ablation of the abscess cavity and elimination of the fistula under direct vision
- High patient satisfaction³
- Straightforward, safe, effective and reproducible method of treatment³
- Instruments can also be used to treat anal fistulas (VAAFT technique)

24511	Fistulectomy Set, including: Fistuloscope 8°, angled eyepiece, outer diameter 3.3 x 4.7 mm, working length 18 cm Handle Obturator Wire Tray for Cleaning, Sterilization and Storage Sealing Cap "Endoscopic Seal", sterile, package of 10
100020-10*	Sealing Cap "Endoscopic Seal", for working channels of 4-10 Fr. instruments, STERILE Sterile, for single use, package of 10
24515	Coagulation Electrode, unipolar, for fistulectomy, 7 Fr., length 53 cm
24514	Fistula Brush, including:3-ring HandleOuter SheathFistula Brush Insert, outer diameter 4 mm, unsterile, for single useFistula Brush Insert, outer diameter 4.5 mm, unsterile, for single useFistula Brush Insert, outer diameter 5 mm, unsterile, for single use(2)(3)(4)(5)(5)(6)(7)(7)(8)(8)(9) <t< td=""></t<>
30251 KJ	 CLICKLINE REDDICK-OLSEN Grasping Forceps, rotating, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, size 2 mm, length 30 cm including: Plastic Handle, without ratchet, with larger contact area at the finger ring

Outer Sheath, with working insert

Sources:

- ¹ AWMF Summary of the S3 Guidelines 081/009: Sinus pilonidalis
- ² Endoscopic Pilonidal Sinus Treatment: A Prospective Multicentre Trial. P. Meinero et al., 2016
- ³ Endoscopic Pilonidal Sinus Treatment, Giarratano G et al., 2017





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Imaging and OR Integration



KARL STORZ OR1[™]

Future-oriented integration meets innovative data management



KARL STORZ SE & Co. KG, Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany www.karlstorz.com

Further information and an overview of Pediatrics products from KARL STORZ can be viewed on



www.karlstorz.com, in the Human Medicine section, Pediatrics

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



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