

# Highlights

LAP 8 3.0 09/2019-E



## Flexible Endoscopy in Surgery

**STORZ**  
KARL STORZ – ENDOSKOPE





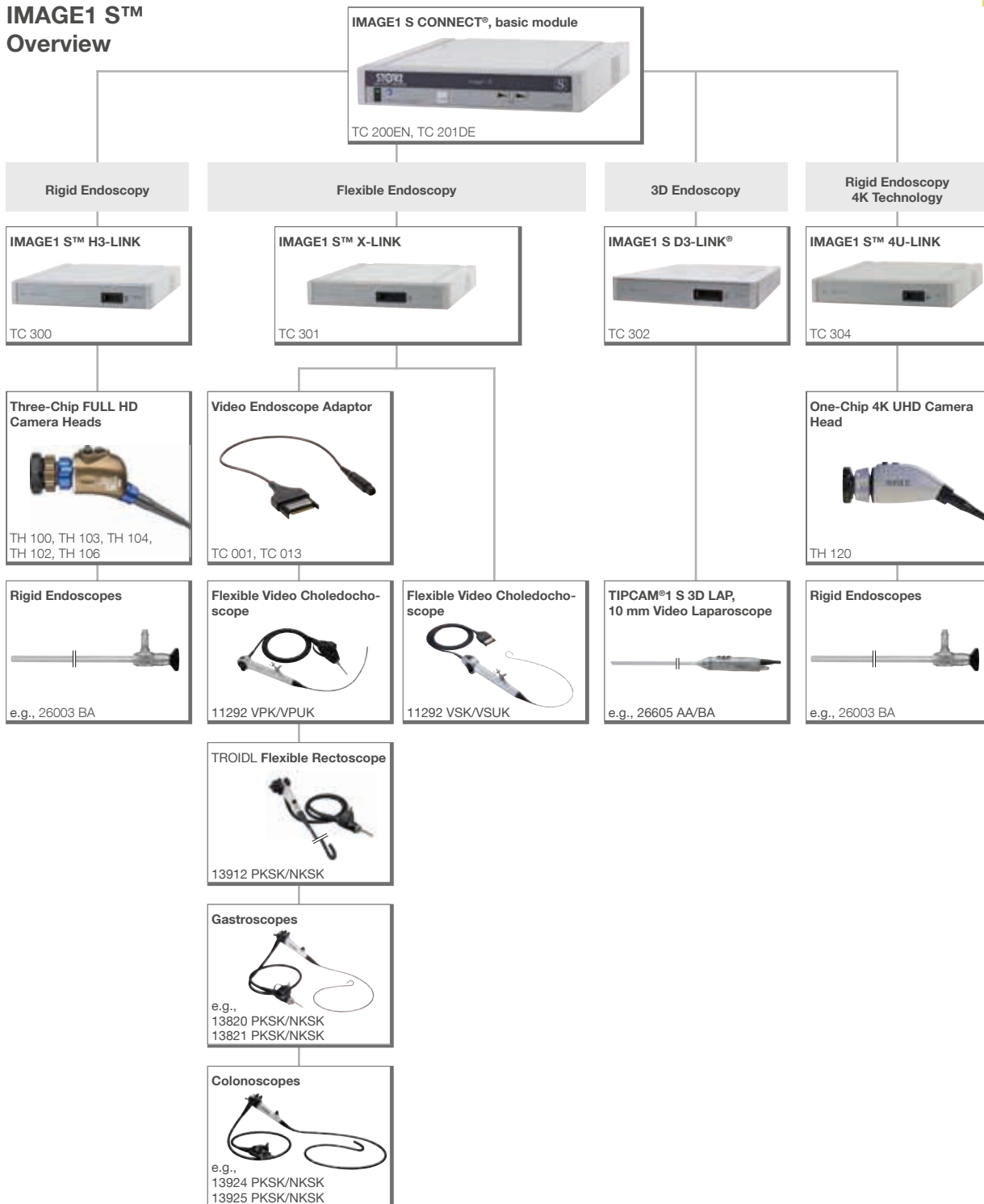
## IMAGE1 S™ – Hybrid Platform for Flexible Endoscopy in Surgery

Flexible endoscopy is becoming increasingly prevalent in general and visceral surgery. The modular IMAGE1 S™ camera system combines rigid (2D, 3D and 4K) as well as flexible endoscopy in one system and thus allows the use of both applications.

### Special Features:

- For use with KARL STORZ video endoscopes (video choledochoscopes, TROIDL flexible rectoscopes, colonoscopes, gastroscopes)
- Possible to combine rigid and flexible endoscopy thanks to the modular IMAGE1 S™ camera platform
- Picture-in-Picture mode enables the simultaneous display of laparoscopic and endoscopic images
- Cost-effective solution as it eliminates the need for a second video tower

## IMAGE1 S™ Overview



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

Further information on camera systems is available in the Telepresence catalog.



## CO<sub>2</sub>mbi<sup>®</sup> LED – LED Technology with Air or CO<sub>2</sub> Insufflation

The CO<sub>2</sub>MBI<sup>®</sup> LED is a unique cold light fountain with an integrated air or CO<sub>2</sub> insufflation pump. Particularly during longer procedures, CO<sub>2</sub> insufflation minimizes post-operative pain as CO<sub>2</sub> gas is more quickly absorbed by the patient's body. In the eco mode, the unit automatically switches to air insufflation in the pause phase and thus actively saves CO<sub>2</sub>.

### Special Features:

- Choice of insufflation with regular room air or CO<sub>2</sub> according to individual requirements
- Powerful LED technology is durable, energy-saving, environmentally friendly and significantly reduces running costs
- Procurement costs amortized after just a few years
- Automatic light source control
- Touch screen
- For use with KARL STORZ video endoscopes



	TL 100 S1 <b>Cold Light Fountain CO2MBI® LED SCB</b>
With:	High-performance LED, KARL STORZ-SCB
Including:	<b>Irrigation Bottle Holder</b> <b>Holding Ring</b> , for water bottles <b>Water Bottle</b> <b>Irrigation Adaptor</b> , for water bottles <b>SCB Connecting Cable</b> <b>Universal Wrench</b>

**Specifications:**

Illumination technology	High-performance LED
Color temperature	approx. 6400 K
LED module service life	approx. 30,000 h
Light intensity adjustment	automatic via SCB manual via SCB manual via touch screen
Light outlets	1
Unit communication	KARL STORZ Communication Bus (2x SCB)
Power consumption	120 VA
Power supply	100-240 VAC
Line frequency	50/60 Hz
Dimensions (w x h x d)	305 x 110 x 380 mm
Weight	8.5 kg
Cleaning	wipe disinfection
Protection classes	1, CF
Pump	integrated insufflation pump with two power levels
Insufflation	room air and two CO <sub>2</sub> insufflation modes
Gas supply	choice between low and high pressure

**Further light sources for flexible and rigid endoscopy can be found in the Telepresence catalog.**



## 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**, 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™

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 information on flexible video choledochoscopes is available in the Laparoscopy catalog.**

**Further information on camera systems is available in the Telepresence catalog.**



## KARL STORZ TROIDL SILVER SCOPE® Flexible Rectoscope

The flexible TROIDL SILVER SCOPE® rectoscope combines the fundamental advantages of flexible endoscopy with the application possibilities of rectoscopy.

### Special Features:

- Working length of 40 cm ensures easy handling
- Up to 210° inversion improves visualization and, consequently, diagnostic and therapeutic options thanks to forward and retrograde viewing
- Field of application especially suited for surgical conditions and procedures in the rectal area
- Fatigue-free work thanks to ergonomically shaped control unit
- Possibility to combine rigid and flexible endoscopy thanks to modular IMAGE1 S™ camera platform



13912 PKSK TROIDL **Rectoscope**, flexible, 11.8 mm x 40 cm, color system PAL,  
Direction of view: 0°  
Sheath diameter: 11.8 mm  
Working channel diameter: 3.4 mm  
Deflection up/down: 210°/120°  
Deflection left/right: 120°/120°  
Field of view: 140°  
Working length: 40 cm

13912 NKSK **Same**, color system NTSC

**For use with the following camera systems:**

- IMAGE1 S™
- IMAGE 1 HUB™ HD
- TELECAM/TELE PACK X GI

**Please note:**

One of the following video endoscope adaptors is required to connect the flexible TROIDL Rectoscope 13912 PKS/13912 NKS to a camera control unit:

For use with **IMAGE1 S™:**

TC 001 **IMAGE1 S™ Video Endoscope Adaptor**, color systems PAL/NTSC, length 60 cm,  
for use with IMAGE1 S™ X-LINK TC 301

For use with **IMAGE 1 HUB™ HD:**

**22 2000 77 Video Endoscope Adaptor**, color systems PAL/NTSC, length 90 cm

For use with **TELECAM/TELE PACK X GI:**

**20 2130 70 Video Endoscope Adaptor**, for use between KARL STORZ video endoscopes and  
TELECAM Camera Control Units (CCU) or TELE PACK video units

**Further information on the TROIDL flexible rectoscope is available in the Laparoscopy catalog.**

**Further information on camera systems and units is available in the Telepresence catalog.**



## Flexible SILVER SCOPE® Gastroscopes

The IMAGE1 S™ camera platform from KARL STORZ in conjunction with the SILVER SCOPE® series sets new standards in gastroenterology and offers examiners versatile visualization options for diagnostics and treatment.

### Special Features:

- The KARL STORZ S-Technologies (CLARA, CHROMA, SPECTRA\*) make it easier for examiners to assess the mucosal structure
- Ergonomically shaped control unit for fatigue-free working
- Large deflection area for a complete view
- Homogeneous image brightness, even under difficult lighting conditions
- Individually programmable remote control buttons, double assignment

\* not for sale in the U.S.

13820 PKSK/NKSK  
Slim Gastroscope

**Flexible Video Gastroscope**

Direction of view:	0°
Sheath outer diameter:	5.9 mm
Working channel diameter:	2 mm
Working length:	1100 mm
Deflection up/down:	210°/100°
Deflection left/right:	120°/120°

13823 PKSK/NKSK  
Medium Gastroscope

**Flexible Video Gastroscope**

Direction of view:	0°
Sheath outer diameter:	7.8 mm
Working channel diameter:	2.8 mm
Working length:	1100 mm
Deflection up/down:	210°/100°
Deflection left/right:	120°/120°

13821 PKSK/NKSK  
Routine Gastroscope

**Flexible Video Gastroscope**

Direction of view:	0°
Sheath outer diameter:	9.3 mm
Working channel diameter:	2.8 mm
Working length:	1100 mm
Deflection up/down:	210°/100°
Deflection left/right:	120°/120°

13826 PKSK/NKSK  
Gastroscope with  
Water Jet Channel

**Interventional Gastroscope with Double Channel**

Direction of view:	0°
Sheath outer diameter:	12 mm
Working channel diameter:	3.8 mm and 2.8 mm
Working length:	1100 mm
Deflection up/down:	210°/100°
Deflection left/right:	120°/120°

**Further information on flexible SILVER SCOPE® gastroscopes is available in the Gastroenterology catalog.**

**Further information on camera systems and units is available in the Telepresence catalog.**



## Flexible SILVER SCOPE® Colonoscopes

The IMAGE1 S™ camera platform from KARL STORZ in conjunction with the SILVER SCOPE® series sets new standards in gastroenterology and offers examiners versatile visualization options for diagnostics and treatment.

### Special Features:

- KARL STORZ S-Technologies offer the examiner five visualization modes
- Homogeneous image brightness, even under difficult lighting conditions
- Ergonomically shaped control unit for fatigue-free working
- Excellent deflection, tight radius
- Individually programmable remote control buttons, double assignment

13920 PKSK/NKSK  
Sigmoidoscope with  
Water Jet Channel

**Flexible Video Sigmoidoscope, with reduced outer diameter**

Direction of view:	0°
Sheath outer diameter:	11.2 mm
Working channel diameter:	3.4 mm
Working length:	800 mm
Deflection up/down:	210°/180°
Deflection left/right:	160°/160°

13926 PKSK/NKSK  
Slim Colonoscope with  
Water Jet Channel

**Flexible Video Colonoscope, with reduced outer diameter**

Direction of view:	0°
Sheath outer diameter:	11.2 mm
Working channel diameter:	3.4 mm
Working length:	1330 mm
Deflection up/down:	210°/180°
Deflection left/right:	160°/160°

13927 PKSK/NKSK  
Slim Colonoscope with  
Water Jet Channel

**Flexible Video Colonoscope, with reduced outer diameter**

Direction of view:	0°
Sheath outer diameter:	11.2 mm
Working channel diameter:	3.4 mm
Working length:	1530 mm
Deflection up/down:	210°/180°
Deflection left/right:	160°/160°

13924 PKSK/NKSK  
Routine Colonoscope

**Flexible Video Colonoscope**

Direction of view:	0°
Sheath outer diameter:	12.9 mm
Working channel diameter:	3.8 mm
Working length:	1400 mm
Deflection up/down:	180°/180°
Deflection left/right:	160°/160°

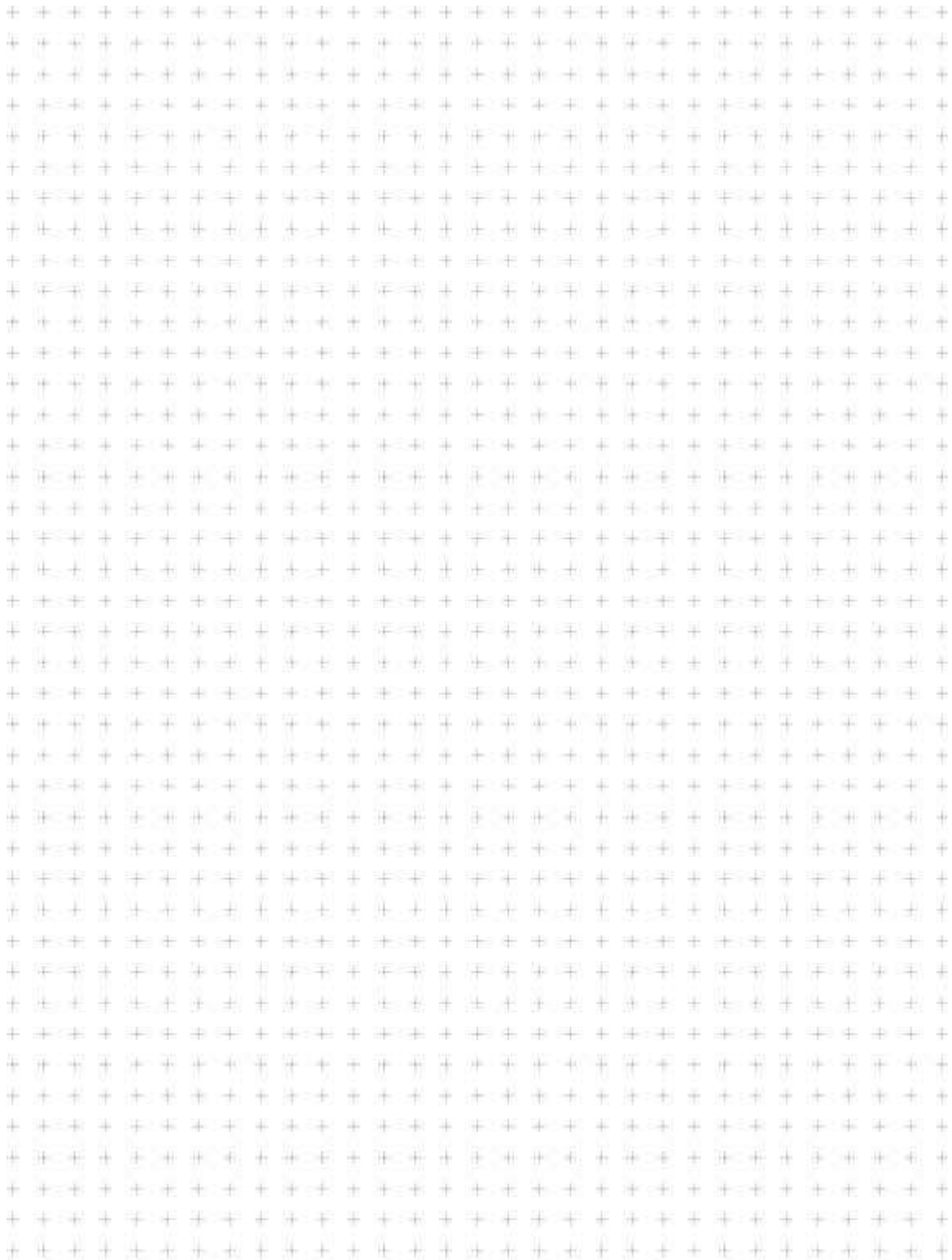
13925 PKSK/NKSK  
Routine Colonoscope

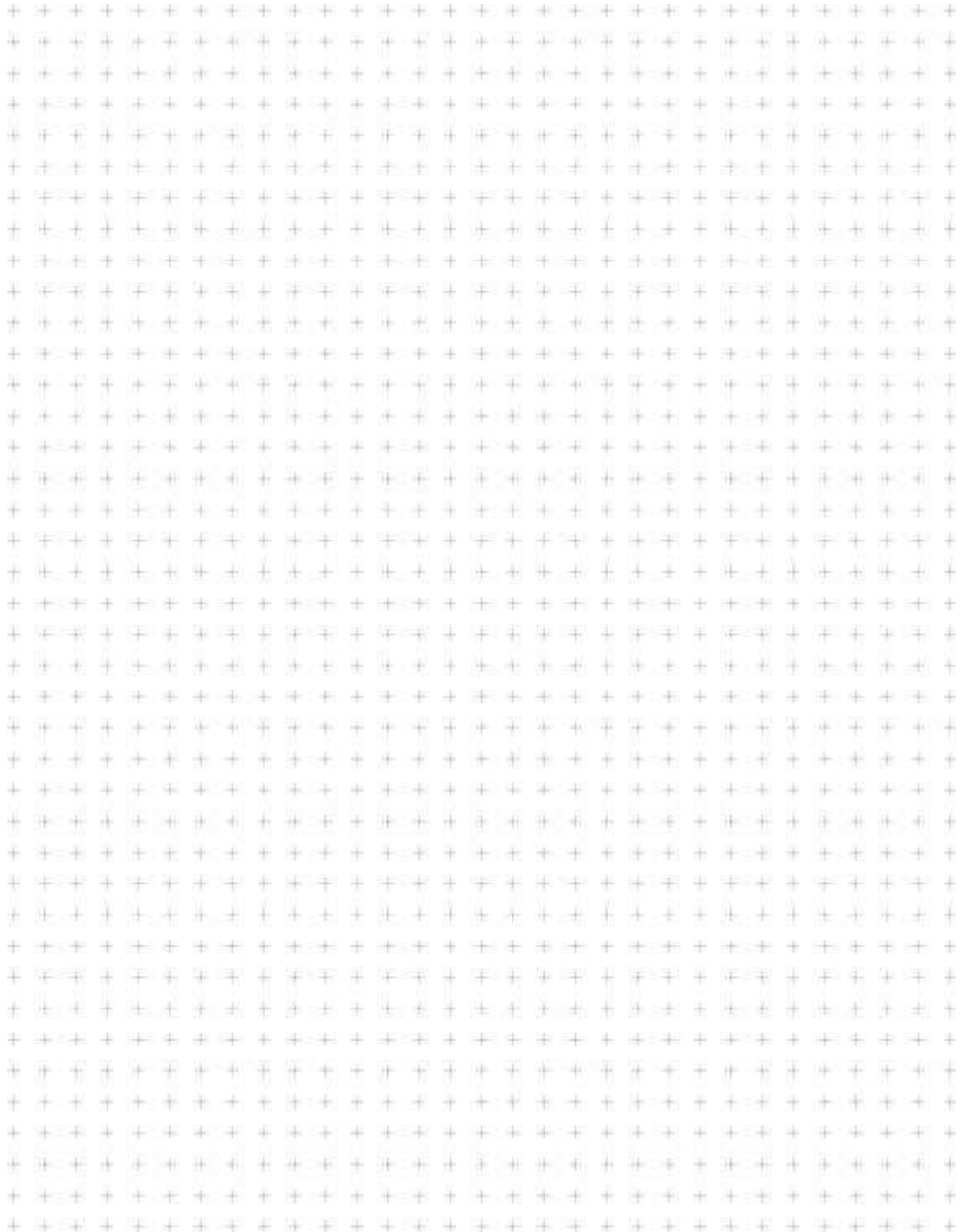
**Flexible Video Colonoscope with Water Jet Channel**

Direction of view:	0°
Sheath outer diameter:	12.9 mm
Working channel diameter:	3.8 mm
Working length:	1600 mm
Deflection up/down:	180°/180°
Deflection left/right:	160°/160°

**Further information on flexible SILVER SCOPE® colonoscopes is available in the Gastroenterology catalog.**

**Further information on camera systems and units is available in the Telepresence catalog.**





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



**STORZ**  
KARL STORZ—ENDOSKOPE

THE DIAMOND STANDARD



KARL STORZ SE & Co. KG  
Dr.-Karl-Storz-Straße 34, 78532 Tuttlingen/Germany  
Postbox 230, 78503 Tuttlingen/Germany  
Phone: +49 (0)7461 708-0  
Fax: +49 (0)7461 708-105  
E-Mail: [info@karlstorz.com](mailto:info@karlstorz.com)  
[www.karlstorz.com](http://www.karlstorz.com)