Highlights 2018



Urology





A Revolution in Transurethral Treatment Concepts

Complete system and diverse electrodes

The new bipolar concept from KARL STORZ sets new standards in terms of effectiveness, economic efficiency, patient safety and reliability and therefore revolutionizes the treatment of BPS and/or bladder tumors.

The system is supported by the new KARL STORZ HF Generator AUTOCON® III 400. The performance of bipolar applications has thus been further enhanced and optimized.

The KARL STORZ product portfolio includes loops for resection, incision, en-bloc resection as well as vaporization and enucleation electrodes for the prostate, bladder and urethra.

KARL STORZ provides a modern, adaptive morcellator system for enucleation that enables fast and efficient morcellation or the removal of prostate tissue from the bladder.



Special features of the transurethral treatment concept

- Perfect symbiosis with HF surgery: Treatment, technology and economic efficiency
- All techniques can be performed with a bipolar working element by selecting the appropriate electrode
- Real bipolar system: No current backflow via the sheath
- Precise cutting and initial incision without delay: Automatic and optimized HF current regulation with the new AUTOCON® III 400 HF generator
- Maximum efficiency with minimal, controlled current flow
- Minimal tissue penetration; reduced obturator nerve stimulation
- A generator for all techniques: Bipolar vaporization, enucleation and standard TUR

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HOPKINS® Telescopes

27005 BA **HOPKINS® Forward-Oblique Telescope 30°,** enlarged view,

diameter 4 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated,

color code: red

27005 FA **HOPKINS® Telescope 12°,** enlarged view,

diameter 4 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated,

color code: black

Working Elements

27040 EB Working Element, bipolar

Passive (cutting by means of a spring), movable thumb support.

In rest position the electrode tip is inside the sheath.

27040 DB Working Element, bipolar

Active (cutting by means of a finger grip), movable thumb support.

In rest position the electrode tip is outside the sheath.

Resectoscope Sheaths

27050 SCK Resectoscope Sheath, quick-release lock,

including connecting tube for in- and outflow, 26 Fr., oblique beak,

rotating inner sheath with ceramic insulation,

color code: yellow

27040 BOK Resectoscope Sheath, with LUER-Lock stopcock and obturator,

including connecting tube for inflow, 24 Fr., oblique beak, Obturator 27040 OC included in delivery,

color code: yellow

27241 BOK Resectoscope Sheath, with central valve and obturator,

including connecting tube for in- and outflow, 24 Fr., oblique beak,

Obturator 27040 OC included in delivery,

color code: yellow

Obturator

27040 OC Standard Obturator,

for 24/26 Fr. Sheaths 27050 SCK, 27040 BOK, 27241 BOK

High Frequency Generator

UH 400 AUTOCON® III 400 High-End,

with KARL STORZ-SCB control NEO, power supply 220-240 VAC, 50/60 Hz,

including mains cord

UF 902 **Two-Pedal Footswitch,** with button for switchover function, for use with HF generators

UH 801 Bipolar High Frequency Cord, length 400 cm, for KARL STORZ AUTOCON® III 400 SCB,

for use with KARL STORZ bipolar resectoscopes

Bipolar Electrodes

24/26 Fr. Electrodes, for use with HOPKINS® Telescopes 27005 BA/FA	Size and Color Code	Electrodes – reusable (package of 6)	Electrodes – for single use (package of 10)
Cutting Loop for TUR-P			
8	diameter 0.35 mm color code: yellow	27040 GP1	011160-10*
Cutting Loop for TUR-B			
	diameter 0.30 mm color code: yellow/orange	27040 GP130	011165-10*
	diameter 0.30 mm color code: yellow/orange	27040 JB130	011167-10*
2	diameter 0.30 mm color code: yellow/orange	27040 JBE130	011166-10*
Vaporization Electrode HALF MOC	N®		
ě –	diameter 0.35 mm color code: yellow	27040 NB	011156-10*
Enucleation Electrode			
Z	diameter 0.35 mm color code: yellow	27040 VE	011169-10*





Stop Guessing. Start Knowing. PDD – Flexibility in Visualization with IMAGE1 S™

From diagnosis through to the treatment and aftercare of urinary bladder carcinoma, KARL STORZ offers a complete solution that is perfectly tailored to your needs. The new generation of HX-FI camera heads now allows you to perform Photodynamic Diagnosis (PDD) in FULL HD. This technology provides brilliant and high-resolution images in both white light and PDD mode.

In contrast to competitors, KARL STORZ offers OPAL1® technology for PDD as well as the functions of the S-Technologies CHROMA (contrast enhancement) and SPECTRA* (spectral color shift) in a single system.

- Brilliant, razor-sharp FULL HD imaging
- Flexibility in visualization with PDD fluorescence imaging and S-Technologies
- Straightforward use of the PDD functionality via the IMAGE1 S™ camera platform

^{*} SPECTRA: Not available for sale in the U.S.

PDD System Components

- TH 112 **IMAGE1 STM HX FI One-Chip FULL HD Camera Head,** S-Technologies (CHROMA, SPECTRA A and B**) available, OPAL1® technologies (PDD) in combination with light source D-LIGHT C or D-LIGHT C/AF, fixed focus, progressive scan, soakable, gas- and plasma-sterilizable, focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 STM (X-LINK)
- TH 113 IMAGE1 S™ HX FI One-Chip FULL HD Pendulum Camera Head, S-Technologies (CHROMA, SPECTRA A and B) available, OPAL1® technologies (PDD) in combination with light source D-LIGHT C or D-LIGHT C/AF, fixed focus, progressive scan, soakable, gas- and plasmasterilizable, focal length f = 16 mm, 2 freely programmable camera head buttons, for use with IMAGE1 S™ (X-LINK)
- TC 200EN*** **IMAGE1 S CONNECT™**, connect module, for use with up to 3 link modules, resolution 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-120 VAC/200-240 VAC, 50/60 Hz
- TC 301 **IMAGE1 S™ X-LINK,** link module, for use with flexible video endoscopes and one-chip camera heads (up to FULL HD), power supply 100-120 VAC/200-240 VAC, 50/60 Hz
- 27005 BIA **HOPKINS® Forward-Oblique Telescope 30°,** enlarged view, diameter 4 mm, **autoclavable,** for photodynamic diagnosis (PDD), fiber optic light transmission incorporated, special filter, color code: red
- 27005 FIA **HOPKINS® Telescope 12°,** enlarged view, diameter 4 mm, **autoclavable,** for photodynamic diagnosis (PDD), fiber optic light transmission incorporated, special filter, color code: black
- 20 1336 01-1 Cold Light Fountain D-LIGHT C SCB, with integrated KARL STORZ-SCB, high-performance light unit for photodynamic diagnosis (PDD) ALA URO/ALA NEURO/Hypericine and for standard endoscopic diagnosis, including a 300 Watt Xenon bulb and KARL STORZ light cable connection, power supply 100-125/220-240 VAC, 50/60 Hz
- 495 FS Fluid Light Cable, diameter 2 mm, length 220 cm

^{**} SPECTRA A and B: Not available for sale in the U.S.

^{***}Also available in the following languages: DE, ES, FR, IT, PT, RU



Digital Video Cysto-Urethroscopes from KARL STORZ – Precision in Diagnostics and Follow-up Care

• Economical & mobile:

The C-VIEW® video cystoscope with CMOS chip technology offers a particularly economical entry into digital imaging technology. Together with the portable C-MAC® monitor, the space-saving all-in-one system with integrated LED illumination and documentation function is excellent for cross-specialty, mobile patient treatment.

• Premium & universal:

The KARL STORZ video cysto-urethroscope with high-resolution CCD chip technology, in conjunction with the IMAGE1 S^{TM} camera platform, delivers excellent image quality and sets new standards in the fields of diagnostics and follow-up care. For fluorescence diagnostics, the PDD system opens new dimensions for the early detection of bladder carcinomas.

Flexible Cysto-Urethroscopes

11272 VK **CMOS Video Cysto-Urethroscope,** C-VIEW® KIT, steerable, working channel inner diameter 6.5 Fr., direction of view 0°, angle of view 120°, sheath size 16 Fr., working length 37 cm

11272 VPK **Video Cysto-Urethroscope,** PAL, deflection of distal tip 210°/140°, direction of view 0°, angle of view 120°, working channel inner diameter 6.5 Fr., sheath size 16 Fr., working length 37 cm

11272 VPIK **Video Cysto-Urethroscope,** PAL, for photodynamic diagnosis (PDD), with integrated suction unit, deflection of distal tip 210°/140°, direction of view 0°, angle of view 120°, working channel inner diameter 6.5 Fr., sheath size 16 Fr., working length 37 cm

The following accessories are included in delivery:

Case
Grasping Forceps
Biopsy Forceps
Pressure Compensation Cap
Leakage Tester
Cleaning Brush
LUER-Adaptor
Irrigation Tube for Cleaning
Video Connecting Cable (for video cysto-urethroscopes only)

Imaging Systems

for use with the mobile video cystoscope with CMOS-chip technology, C-VIEW®

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, 8 GB **Protection Cap VESA 75 Quick Clip Mains Adaptor Set**

For use with the video cysto-urethroscope with CCD-chip technology

TC 200EN



IMAGE1 S CONNECT™, connect module, for use with up to 3 link modules, resolution 1920 x 1080 pixels, with integrated KARL STORZ-SCB and digital Image Processing Module, power supply 100-120 VAC/200-240 VAC, 50/60 Hz including:

Mains Cord, length 300 cm

DVI-D Connecting Cable, length 300 cm SCB Connecting Cable, length 100 cm

USB Flash Drive, 32 GB

USB Silicone Keyboard, with touchpad, US



IMAGE1 S™ X-LINK, link module, for use with flexible video endoscopes and one-chip camera heads (up to FULL HD), power supply 100-120 VAC/200-240 VAC, 50/60 Hz. for use with IMAGE1 S CONNECT™ TC 200 includina:

Mains Cord, length 300 cm Link Cable, length 20 cm



TL 300

TC 301



Cold Light Fountain POWER LED 300 SCB, with integrated KARL STORZ-SCB, high-performance LED module and one KARL STORZ light outlet, power supply 100-240 VAC, 50/60 Hz including:

Mains Cord

Optional Accessories

	Reusable	For single use
Stone Basket, nitinol, without tip, straight, 3 Fr., length 70 cm, 4 wires, basket diameter 12 mm, sterile, for single use	-	27023 KF
Coagulation Electrode, unipolar, 4 Fr., length 73 cm	27723 T	-
Seal, for Instrument Ports 27001 G/GF/GH/GP, LUER-Adaptor 27014 Y and 26252 BS/BL, package of 10, single use recommended	_	27550 N

Further monitors, light sources as well as camera control units can be found in the Urology catalog.



A New Generation of Pressure-Controlled PCNL Systems

The revolutionary MIP system ensures atraumatic and effective stone treatment with fewer complications for all stone sizes.

- Innovative pressure management: All systems from the MIP series are designed as open systems
- Efficient stone retrieval: The "vacuum cleaner" hydrodynamic effect makes it possible to retrieve stones without forceps, graspers or stone baskets
- One-step dilation: Following a skin incision, the access tract is dilated in a single step
- Versatility: The right instrument is available for any kidney stone location and size
- Innovative applicator for direct closure and contrast agent injection: Access tracts to
 the kidney can be directly closed after stone retrieval using a gelatin-thrombin matrix
 applied with the aid of an applicator. In addition, the applicator can be used to inject
 contrast agent
- Application-oriented sheaths: For standard and supine techniques as well as pediatric interventions

MIP M Set

27830 KAK Nephroscope for MIP M, with angled eyepiece, 12 Fr., 12°, length 22 cm, autoclavable,

 $1\ \ \text{working channel 6.7 Fr. for instruments up to 5 Fr., fiber optic light transmission incorporated,}\\$

for use with Operating Sheaths 27830 BA/BB/BC/BAS/BBS/BCS

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

Wire Tray

27830 BB Operating Sheath, 16.5/17.5 Fr., working length 15 cm, for continuous irrigation and

suction, for use with Nephroscope for MIP M 27830 KA, One Step Dilator 27830 AB $\,$

and Applicator 27830 CF

27830 BBS **Operating Sheath,** for the supine position, 16.5/17.5 Fr., working length 18 cm, for continuous

irrigation and suction, for use with Nephroscope for MIP M 27830 KA, One Step Dilator 27830 AB

and Applicator 27830 CFS

27830 BK Operating Sheath for Children, 16.5/17.5 Fr., working length 7.5 cm, for continuous irrigation

and suction, for use with Nephroscope for MIP M 27830 KA and One Step Dilator 27830 AB

27830 AB One Step Dilator, with central channel and a second eccentric channel for guide wires,

for use with 16.5/17.5 Fr. Operating Sheaths 27830 BB/BBS

27830 CF Applicator for Sealant, including sheath and rod, for use with Operating Sheaths 27830 BA/BB/BC

27830 CFS Applicator, for the supine position, including sheath and rod, for use with Operating Sheaths

27830 BAS/BBS/BCS

MIP XS/S - Percutaneous Nephroscope

27820 KAK Nephroscope for MIP XS/S, with angled eyepiece, 7.5 Fr., 6°, length 24 cm, autoclavable,

1 working channel 2 Fr., 1 irrigation channel 3 Fr., fiber optic light transmission incorporated,

for use with Operating Sheaths 27820 BA/BB/BAS/BBS

MIP L - Percutaneous Nephroscope

27840 KAK **Nephroscope for MIP L,** with angled eyepiece, 19.5 Fr., HOPKINS® rod lens system 12°,

length 22 cm, **autoclavable**, 12.4 Fr. working channel for use with instruments up to 11.5 Fr., fiber optic light transmission incorporated, for use with Operating Sheaths 27840 BA/BB/BAS/BBS

and Instrument Port 27840 GP

Further dilators, sheaths and applicators as well as accessories can be found in the Urology catalog.



We Realize Innovations – The Thin Uretero-Renoscope from KARL STORZ

With a new generation of uretero-renoscopes, KARL STORZ presents a future-oriented advancement in a new design. The even more slender sheath shape provides the instruments with excellent balance and ensures comfort and ergonomics. A much smoother tapered step ensures excellent gliding properties and allows the surgeon to treat patients easily and gently.

- Minimal sheath circumference
- Sheath with very smooth, long tapered step
- Excellent gliding properties for the highest patient comfort
- Large working channel for maximum irrigation performance
- Excellent view
- Atraumatic sheath end for easy insertion into the ureter

Rigid Uretero-Renoscope

27000 LK **Uretero-Renoscope,** 7 Fr., 6°, length 43 cm, **autoclavable,** with angled eyepiece,

fiber optic light transmission incorporated, 2 lateral irrigation ports and 1 working channel 4.8 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

Flow Control Stopcock

Wire Tray

Optional Accessories

		Reusable	For single use 2
	Stone Basket, nitinol, with tip, helical, 2.5 Fr., length 120 cm, 4 wires, basket diameter 16 mm, package of 1	_	27023 TD
	Stone Basket, nitinol, without tip, straight, 2.5 Fr., length 120 cm, 4 wires, basket diameter 16 mm, package of 3	_	27023 LD
~~~	Cytology Brush, 3 Fr., unsterile, package of 5	_	27023 Y
	CALCULASE II Fiber, 230 µm, length 300 cm, package of 6, for use with CALCULASE II	<b>27</b> 750271-P6	<b>27</b> 750277-P6
	Forceps, rigid, for grasping stone fragments, double action jaws, 4 Fr., length 60 cm, color code: blue	27424 F	_
	Biopsy Forceps, rigid, double action jaws, 4 Fr., length 60 cm, color code: blue	27424 Z	_

Further rigid uretero-renoscopes can be found in the Urology catalog.



# As Every Detail Counts – Visibly Higher Resolution with the Flexible Uretero-Renoscopes FLEX-X^C and FLEX-X^{2S}

KARL STORZ presents a new generation of flexible uretero-renoscopes that enables you to benefit from proven properties such as minimal sheath circumference, excellent torque stability and maneuverability – now combined with a noticeably higher image resolution. During the course of product development, it was possible to maximize the image quality of the FLEX-X^C video uretero-renoscope, while the number of fibers for the FLEX-X^S uretero-reno-fiberscope could be doubled.

A wide range of optional accessories such as stone baskets, laser fibers and guide wires rounds off the product portfolio.

#### **Video Uretero-Renoscope FLEX-X^c:**

- Now with 2.6x higher image resolution
- Larger, clearer images at high zoom levels
- Optimized visualization with S-Technologies

#### **Uretero-Reno-Fiberscope FLEX-X^{2S}:**

- Now with double fiber capacity
- True-to-detail image quality thanks to higher resolution

## Flexible Uretero-Renoscopes

11278 VSK **Video Uretero-Renoscope FLEX-X^c, Set,** steerable, compatible with IMAGE1 S[™], deflection of distal tip 270°/270°, direction of view 0°, angle of view 90°,

working channel 3.6 Fr., sheath size 8.5 Fr., working length 70 cm

11278 AK1 **Uretero-Reno-Fiberscope FLEX-X^{2s}, Set,** steerable, deflection of distal tip 270°/270°,

direction of view 0°, angle of view 88°, working channel inner diameter 3.6 Fr., sheath size 7.5 Fr., working length 67 cm, including 2x LUER-Lock tube connectors

The following accessories are included in delivery:

Case

**Pressure Compensation Cap** 

Leakage Tester

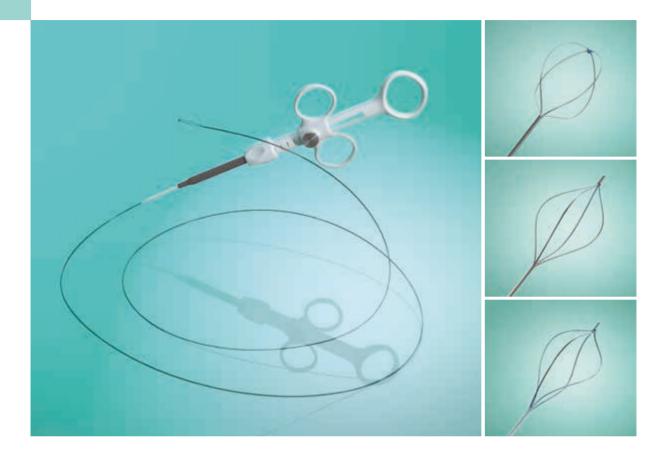
**Cleaning Brush** 

LUER-Adaptor, with seal

Optional Accessories		Reusable	For single use 2
	Fiber Fixation Kit, for the fixation of laser fibers in the working channels of flexible endoscopes up to diameter 1 mm including: Fiber Fixation Cleaning Adaptor Seal, package of 10	11014 YK	_
	Endoscopic Seal, STERILE for working channels of 3-7 Fr. instruments, package of 10	_	100010-10*
	Stone Basket, nitinol, without tip, straight, 1.9 Fr., length 120 cm, 4 wires, basket diameter 12 mm	_	27023 LB
	Guide Wire, 3 Fr., STERILE with ball end, package of 10	_	27025 P
	CALCULASE II Fiber, 230 µm, length 300 cm, package of 6, for use with CALCULASE II	<b>27</b> 750271-P6	<b>27</b> 750277-P6
	Cleaning Brush, length 90 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	_	110930-50







# KARL STORZ Single-use Stone Baskets

# The ideal stone basket for each requirement

The numerous indications and methods of application in stone therapy require stone baskets with various properties – a challenge that KARL STORZ meets with its new product line of nitinol stone baskets. The highly flexible nitinol wires allow baskets to adapt very easily to difficult anatomies and are also gentle on the working channel of your instruments.

#### Nitinol stone baskets recommended for...

#### ... rigid cystoscopy

Order no.	Size	Form	Wires	Working length
27023 TH	5 Fr.	with tip, straight	4	90 cm

#### ... flexible cystoscopy and percutaneous nephrolithotomy

Order no.	Size	Form	Wires	Working length
27023 KF	3 Fr.	without tip, straight	4	70 cm

#### ... semirigid uretero-renoscopy

Order no.	Size	Form	Wires	Working length
27023 TD	2.5 Fr.	with tip, helical	4	120 cm
27023 LD	2.5 Fr.	without tip, straight	4	120 cm
27023 TF	3 Fr.	with tip, helical	4	120 cm
27023 LF	3 Fr.	without tip, straight	4	120 cm

#### ... flexible uretero-renoscopy

Order no.	Size	Form	Wires	Working length
27023 LB	1.9 Fr.	without tip, straight	4	120 cm



# The New Trocar Generation from KARL STORZ

The new trocar generation combines single-use and reusable components. In line with the KARL STORZ company philosophy, the cannulas and trocars were designed with reusable components in mind. The valve seal is intended for single use.

#### Special Features:

- Ergonomic shape of the trocar ensures safe and comfortable handling during placement of the trocar
- One-piece sealing system for single use
- Minimal friction between the valve seal and the instrument
- Considerably reduced weight and good balance thanks to the newly designed plastic trocar housing
- Color coding for clear identification of different sizes
- Available in the sizes 2.5 mm 13.5 mm

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

Size	6 r	nm	11 mm
Working length	5 cm	10 cm	10 cm
Color code	black	black	green
<b>Trocar,</b> with pyramidal tip including <b>valve seal,</b> for single use, package of 10	30160 GZS	30160 GZG	30103 GZG
<b>Trocar,</b> with blunt conical tip including <b>valve seal,</b> for single use, package of 10	30160 GNS	30160 GNG	30103 GNG
<b>Trocar,</b> with conical tip including <b>valve seal,</b> for single use, package of 10	30160 GYS	30160 GYG	30103 GYG

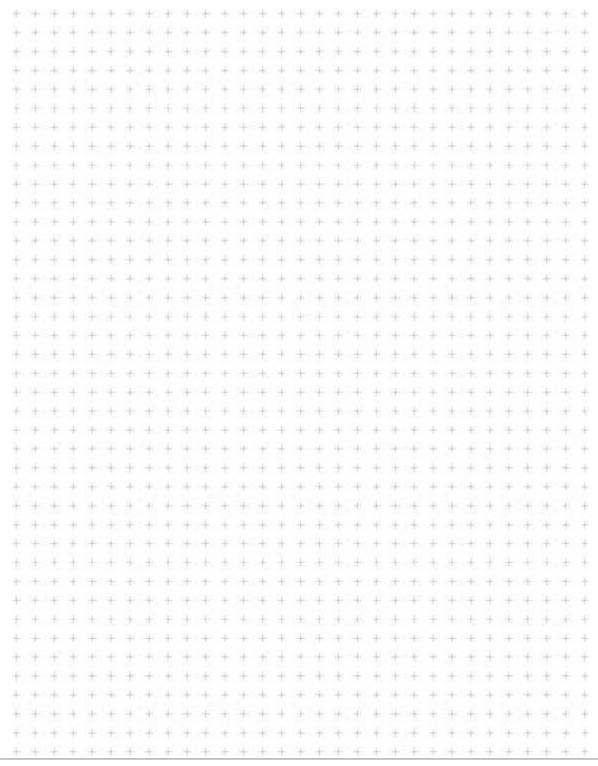
Size	13.5 mm
Working length	10 cm
Color code	blue
<b>Trocar,</b> with pyramidal tip including <b>valve seal,</b> for single use, package of 10	30108 GZG
<b>Trocar,</b> with blunt conical tip including <b>valve seal,</b> for single use, package of 10	30108 GNG
<b>Trocar,</b> with conical tip including <b>valve seal,</b> for single use, package of 10	30108 GYG

#### Valve Seals, for single use, package of 10

For trocars size 2.5 mm	11603-XV2
For trocars size 3.5 mm	30114-XV3
For trocars size 6 mm	30160-XV5
For trocars size 11 mm	30103-XV10
For trocars size 13.5 mm	30108-XV13

30141 RS **Reducer,** to reduce from 11 mm to 5 mm 30142 RS **Reducer,** to reduce from 13.5 mm to 5 mm

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



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