STORZ

THE WORLD OF ENDOSCOPY

Information on events is available on the KARL STORZ website
www.karlstorz.com

GYNECOLOGY

7th EDITION 2/2015 US

Important information for U.S. customers

Note:
Certain devices and references made herein to specific indications of use may have not received clearance or approval by the United States Food and Drug Administration. Practitioners in the United States should first consult with their local KARL STORZ representative in order to ascertain product availability and specific labeling claims. Federal (USA) law restricts certain devices referenced herein to sale, distribution, and use by, or on the order of a physician, dentist, veterinarian, or other practitioner licensed by the law of the State in which she/he practices to use or order the use of the device.

Important Notes:

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

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

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

Standardized Design and Labeling

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

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

Original or Counterfeit

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

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

Units and Accessories for Video Endoscopy

Basic Set

KARL STORZ — ENDOSKOPE

9826 NB	**26" FULL HD Monitor**
TC 200EN*	**IMAGE1 S CONNECT**
TC 009	**USB Adaptor,** for ACC 1 and ACC 2
TC 300	**IMAGE1 S H3-LINK**
TH 100	**IMAGE1 S H3-Z Three-Chip FULL HD Camera Head**
20 1315 20	**Cold Light Fountain XENON NOVA® 175**
495 NT	**Fiber Optic Light Cable,** with straight connector, diameter 2.5 mm, length 180 cm
26 3311 01-1	HAMOU® **ENDOMAT® SCB**
20 5352 01-125	**AUTOCON® II 400 SCB**
20 017831	**Three-Pedal Footswitch**
27805	**Neutral Electrode**
27806	**Neutral Electrode Connecting Cable**
26005 M	**Unipolar High Frequency Cord**
27176 LEB	**Bipolar High Frequency Cord**
UG 220	**Equipment Cart, wide**
UG 500	**Monitor Holder**
29005 DFH	**Footswitch Holder,** for two- and three-pedal footswitches
UG 310	**Isolation Transformer**
UG 410	**Earth Leakage Monitor**

optional

26 3400 01-1	**HYSTEROMAT E.A.S.I.® SCB**
20 3303 02-1	**ENDOMAT® LC SCB**

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Office Hysteroscopy and Intrauterine HF Electrosurgery

Basic Set

KARL STORZ — ENDOSKOPE

Telescopes and Sheaths for Diagnostic and Office Hysteroscopy

26120 BA	**HOPKINS® Forward-Oblique Telescope 30°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red
26153 BI	BETTOCCHI® **Inner Sheath,** size 4.3 mm, with channel for semirigid 5 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26153 BO
26153 BO	BETTOCCHI® **Outer Sheath,** size 5 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheath 26153 BI

or

BETTOCCHI® **B.I.O.H.® Compact Hysteroscope, size 4 mm**

26252 BL	BETTOCCHI® **B.I.O.H.® Compact Hysteroscope,** HOPKINS® telescope 30°, size 4 mm, with channel for semirigid 5 Fr. operating instruments, with suction and irrigation valves for single or continuous-flow use, long handle including: **Outer Sheath** 2x **Suction and Irrigation Valve** **Monobloc Adaptor** **Seal,** for instrument ports, package of 10
39501 XC	**Tray for Cleaning, Sterilization and Storage** of one B.I.O.H.® compact hysteroscope, including cleaning adaptor, silicone telescope holders and lid, external dimensions (w x d x h): 460 x 150 x 80 mm, for use with Cleaning Adaptor 39501 XCA
26252 SP	**Sealing Set for B.I.O.H.®** including: 10x **O-Ring,** diameter 10/12 mm, for Valve 26252 BV 10x **O-Ring,** diameter 10.5 mm, for Valve 26252 BV 10x **O-Ring,** diameter 14 mm, for Valve 26252 BV 5x **Sealing Cap,** for working channel 5x **O-Ring,** for Sheath 26252 BO **Box**

or

CAMPO **TROPHYSCOPE® Compact Hysteroscope**

26008 BAC	CAMPO **TROPHYSCOPE®,** HOPKINS® telescope 30°, size 2.9 mm, length 24 cm, with irrigation connector, for use with Continuous-Flow Operating Sheaths 26152 DA and 26152 DB
26152 DA	**Continuous-Flow Operating Sheath,** size 3.7 mm, length 18 cm, with suction adaptor, for use with CAMPO TROPHYSCOPE® 26008 BAC
26152 DB	**Continuous-Flow Operating Sheath,** size 4.4 mm, length 16 cm, with channel for semirigid instruments 5 Fr., with 1 stopcock and 1 LUER-Lock adaptor, for use with CAMPO TROPHYSCOPE® 26008 BAC

Instruments and Accessories for Diagnostic and Office Hysteroscopy for use with all hysteroscopes listed above

26159 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
26159 SHW	**Scissors,** semirigid, pointed, single action jaws, 5 Fr., length 34 cm
26159 BE	**Bipolar Dissection Electrode,** semirigid, 5 Fr., length 36 cm
26159 GC	GORDTS/CAMPO **Bipolar Ball Electrode,** semirigid, 5 Fr., length 36 cm
26176 LE	**Bipolar High Frequency Cord,** length 300 cm

or

Hysteroscope for use with the Essure® Sterilization Method

26120 BA	**HOPKINS® Forward-Oblique Telescope 30°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red
26153 EA	**Hysteroscope Sheath,** size 5 mm, with channel for 5 Fr. operating instruments, no separate inner and outer sheaths, for use with Essure® sterilization method

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Office Hysteroscopy and Intrauterine Unipolar HF Electrosurgery

Basic Set

KARL STORZ — ENDOSKOPE

15 Fr.: Telescope and Instruments for Intrauterine, Unipolar HF Surgery

26020 FA **HOPKINS® Telescope 12°,** diameter 2.9 mm, length 30 cm, **autoclavable,**
fiber optic light transmission incorporated,
color code: black

26053 SL **Resectoscope Sheath,** including connecting tube for in- and outflow, for continuous irrigation and suction, 15 Fr., oblique beak, **rotatable** Inner Sheath 26053 XA, with ceramic insulation, **quick release lock**
color code: green

26053 OC **Standard Obturator,** for use with Resectoscope Sheath 26053 SL,
color code: green

26053 EH **Working Element Set,** unipolar
including:
Working Element
2x **Cutting Loop**
2x **Unipolar High Frequency Cord**
Protection Tube

or

22 Fr.: Telescope and Instruments for Intrauterine, Unipolar HF Surgery

26020 FA **HOPKINS® Telescope 12°,** diameter 2.9 mm, length 30 cm, **autoclavable,**
fiber optic light transmission incorporated,
color code: black

26055 SC **Resectoscope Sheath,** including connecting tube for in- and outflow, 22 Fr., oblique beak, **rotatable** Inner Sheath 26055 CB, with ceramic insulation, **quick release lock,**
color code: white

26055 CO **Standard Obturator,** for use with Resectoscope Sheaths 26055 LD, 26055 SL and 26055 SC,
color code: white

26055 ES **Working Element Set,** unipolar
including:
Working Element
2x **Cutting Loop,** angled
Cutting Electrode, pointed
Coagulation Electrode, ball end
2x **Unipolar High Frequency Cord**
Protection Tube

or

26 Fr.: Telescope and Instruments for Intrauterine, Unipolar HF Surgery

26105 FA **HOPKINS® Telescope 12°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,**
fiber optic light transmission incorporated,
color code: black

26050 SC **Resectoscope Sheath,** including connecting tube for in- and outflow, 26 Fr.,
oblique beak, **rotatable** Inner Sheath 26050 CA
with ceramic insulation, **quick release lock,**
color code: yellow

26040 OC **Standard Obturator,** for use with Resectoscope Sheaths 26040 SL, 26050 SL and 26050 SC,
color code: yellow

26050 EG **Working Element Set,** unipolar
including:
Working Element
2x **Cutting Loop,** angled
Coagulation Electrode, pointed
Coagulation Electrode, ball end, diameter 5 mm
Cutting Electrode, pointed
2x **Unipolar High Frequency Cord**
Protection Tube

3-15

Office Hysteroscopy and Intrauterine Bipolar HF Electrosurgery

Basic Set

KARL STORZ — ENDOSKOPE

15 Fr.: Telescope and Instruments for Intrauterine, Bipolar HF Surgery

26020 FA	**HOPKINS® Telescope 12°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: black
26053 SL	**Resectoscope Sheath,** including connecting tube for in- and outflow, for continuous irrigation and suction, 15 Fr., oblique beak, **rotatable** Inner Sheath 26053 XA with ceramic insulation, **quick release lock** color code: green
26053 OC	**Standard Obturator,** for use with Resectoscope Sheath 26053 SL, color code: green
26053 EBH	**Working Element Set,** bipolar including: **Working Element** 2x **Cutting Loop** **Bipolar High Frequency Cord** **Protection Tube**

or

22 Fr.: Telescope and Instruments for Intrauterine, Bipolar HF Surgery

26020 FA	**HOPKINS® Telescope 12°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: black
26055 SC	**Resectoscope Sheath,** including connecting tube for in- and outflow, 22 Fr., oblique beak, **rotatable** Inner Sheath 26055 CB with ceramic insulation, **quick release lock,** color code: white
26055 CO	**Standard Obturator,** for use with Resectoscope Sheaths 26055 LD, 26055 SL and 26055 SC, color code: white
26055 EBH	**Working Element Set,** bipolar including: **Working Element** 2x **Cutting Loop** **Cutting Electrode,** pointed **Coagulation Electrode,** ball end **Bipolar High Frequency Cord** **Protection Tube**

or

26 Fr.: Telescope and Instruments for Intrauterine, Bipolar HF Surgery

26105 FA	**HOPKINS® Telescope 12°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: black
26050 SC	**Resectoscope Sheath,** including connecting tube for in- and outflow, 26 Fr., oblique beak, **rotatable** Inner Sheath 26050 CA with ceramic insulation, **quick release lock,** color code: yellow
26040 OC	**Standard Obturator,** for use with Resectoscope Sheaths 26040 SL, 26050 SL and 26050 SC, color code: yellow
26040 EBH	**Working Element Set,** bipolar including: **Working Element, bipolar** **2x Cutting Loops**, bipolar **Cutting Electrode,** bipolar, pointed **Coagulation Electrode HALF MOON®,** bipolar, with ball end **Bipolar High Frequency Cord** **Protection Tube**

3-15

IBS® – BIGATTI **Intrauterine Shaver**

Basic Set

KARL STORZ — ENDOSKOPE

19 Fr.:

26208 AMA	**HOPKINS® Wide Angle Straight Forward Telescope 6°,** with parallel eyepiece, length 20 cm, **autoclavable,** fiber optic light transmission incorporated with working channel, with LUER-Lock connector for inflow, color code: green-blue

or

24 Fr.:

26092 AMA	**HOPKINS® Wide Angle Straight Forward Telescope 6°,** with parallel eyepiece, length 20 cm, **autoclavable,** fiber optic light transmission incorporated with working channel, with LUER-Lock connector for inflow, color code: yellow
26093 CD	**Operating Sheath,** 24 Fr., rotating, for continuous irrigation and passive outflow, with LUER-Lock stopcock, color code: white
26093 OC	**Hollow Obturator,** color code: white
26 7010 01-1	**UNIDRIVE® S III SCB,** power supply 100 – 120/230 – 240 VAC, 50/60 Hz
20 3303 02-1	**ENDOMAT® LC SCB,** suction pump, power supply 100 – 240 VAC, 50/60 Hz
26208 SA	**Shaver Blade GYN,** straight, sterilizable, concave cutting edge, double serrated, oval cutting window, diameter 4 mm, length 32 cm, for use with DRILLCUT-X® II Handpiece **26** 7020 50, color code: blue-green
26208 SB	**Shaver Blade GYN,** straight, sterilizable, double serrated cutting edge, rectangular cutting window, diameter 4 mm, length 32 cm, for use with DRILLCUT-X® II Handpiece **26** 7020 50, color code: blue-yellow
26 7020 50	**DRILLCUT-X® II Shaver Handpiece GYN,** for use with UNIDRIVE® S III SCB
26208 SZ	**Coagulation Electrode,** bipolar, for use with Intrauterine BIGATTI Shaver (IBS®)

3-15

Transvaginal Endoscopy

Basic Set

KARL STORZ — ENDOSKOPE

Basic Set for Diagnostic Transvaginal Endoscopy

CAMPO **and** GORDTS **Recommended Set**

26120 BA	**HOPKINS® Forward-Oblique Telescope 30°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red
26182 TA	**Puncture Needle,** with automatic spring mechanism, diameter 1.5 mm, length 30 cm
26182 TAA	**Spare Needle,** for use with Puncture Needle 26182 TA, package of 6
26182 TB	**Dilation Sheath,** diameter 3.8 mm, length 30 cm, for use with Puncture Needle 26182 TA
26182 TC	**Trocar Sheath,** with valve, with 1 stopcock, diameter 4.4 mm, length 20 cm, for use with Diagnostic Sheath 26182 D
26182 D	**Diagnostic Sheath,** with stopcock, diameter 3.7 mm, length 29 cm, for use through Trocar Sheath 26182 TC
26168 V	**Uterine Tenaculum Forceps,** length 22 cm

Supplementary Set for Operative Transvaginal Endoscopy

CAMPO **and** GORDTS **Recommended Set**

26182 TD	**Changing Rod,** diameter 2.9 mm, length 36 cm, for use with Operating Sheath 26182 TG
26182 TG	**Operating Sheath,** diameter 6.6 mm, length 29 cm, with channel for semirigid 5 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, with Obturator 26182 TH
26160 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 40 cm
26160 EHW	**Scissors,** semirigid, blunt, single action jaws, 5 Fr., length 40 cm
26160 DHW	**Punch,** semirigid, through-cutting, single action jaws, 5 Fr., length 40 cm
26160 BHW	**Biopsy Spoon Forceps,** semirigid, double action jaws, 5 Fr., length 40 cm
26159 BE	**Bipolar Dissection Electrode,** semirigid, 5 Fr., length 36 cm
26159 GC	GORDTS/CAMPO **Bipolar Ball Electrode,** semirigid, 5 Fr., length 36 cm
26158 BE	**Bipolar Dissection Electrode,** semirigid, 5 Fr., needle electrode angled 90°, length 36 cm

3-15

Fetoscopy

Basic Set

KARL STORZ — ENDOSKOPE

Set for Embryoscopy and Fetoscopy

11510 A	**Miniature Straight Forward Telescope 0°,** semirigid, with remote eyepiece, with rotating and locking LUER-Lock adaptor, fiber optic light transmission incorporated Direction of view: 0° Angle of view: 70° Working length: 20 cm Outer diameter: 1 mm
11510 P	**Protection Tube,** for Miniature Straight Forward Telescope 11510 A
39360 B	**Plastic Container for Sterilization and Storage,** with accessories
11510 KA	**Examination Sheath,** straight, with pyramidal obturator, diameter 1.3 mm, with 1 LUER-Lock adaptor, for single use, package of 2, for use with Miniature Straight-Forward Telescope 11510 A
11510 KE	**Operating Sheath,** straight, size 5.6 Fr., with pointed tip, with 2 obturators, with 0.8 mm working channel for laser fibers up to 400 micron-core (maximum outer diameter 700 micron) or Puncture Needle 11510 KC, with 2 LUER-Lock adaptors, for single use, package of 2, for use with Miniature Straight Forward Telescope 11510 A
11510 KD	**Operating Sheath,** straight, size 6.5 Fr., with pointed tip, with 2 obturators, with 1.1 mm working channel for laser fibers up to 600 micron-core (maximum outer diameter 900 micron) or Puncture Needle 11510 KC, with 2 LUER-Lock adaptors, package of 2, for use with Miniature Straight Forward Telescope 11510 A
11510 KI	**Operating Sheath,** curved, with pointed tip, size 5.6 Fr., with 2 obturators, with 0.8 mm working channel for laser fibers up to 400 micron-core (maximum outer diameter 700 micron) or Puncture Needle 11510 KC, with 2 LUER-Lock adaptors, package of 2, for use with Miniature Straight Forward Telescope 11510 A
11510 KC	**Puncture Needle,** diameter 0.6 mm, length 26.5 cm, package of 6, for use with Operating Sheaths 11510 KD/KE/KI
11510 L	**Biopsy Forceps,** semirigid, single action jaws, 3 Fr., length 25 cm

Set for the Early Second Trimester

Posterior Placenta

11506 AAK	**Miniature Straight Forward Telescope 0° Set,** straight, diameter 3.3 mm, length 30 cm, with 30,000 pixels, **autoclavable,** irrigation connector, central working channel 4 Fr., lateral working channel 3 Fr., with remote eyepiece, fiber optic light transmission incorporated, including: **Seal,** for working channel, package of 10 2x **LUER Adaptor,** with seal **Cleaning Brush** **Case**

Anterior Placenta

11508 AAK	**Miniature Straight Forward Telescope 0° Set,** curved, diameter 3.3 mm, length 30 cm, with 30,000 pixels, **autoclavable,** irrigation connector, central working channel 4 Fr., lateral working channel 3 Fr., with remote eyepiece, fiber optic light transmission incorporated including: **Seal,** for working channel, package of 10 2x **LUER Adaptor,** with seal **Cleaning Brush** **Case**

or

26008 BUA	**HOPKINS® Forward-Oblique Telescope 30°,** diameter 2 mm, length 26 cm, **autoclavable, fiber optic connector on opposite side,** fiber optic light transmission incorporated, color code: red
26161 UFK	**Operating Sheath,** straight, with Pyramidal Obturator 26161 UFO, size 11.5 Fr., with working channel for laser fibers up to 400 micron-core (maximum outer diameter 700 micron), with 1 stopcock and 1 LUER-Lock adaptor, for use with Working Insert 26161 UH
26161 UH	**Working Insert,** with steering lever, for use with Operating Sheath 26161 UFK

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Ductoscopy, MBE Set

Basic Set

KARL STORZ — ENDOSKOPE

Miniature Endoscopes for Ductoscopy:

11521 A	**Miniature Straight Forward Telescope 0°,** semiflexible, **autoclavable,** NITI, with integrated irrigation channel, with remote eyepiece, fiber optic light transmission incorporated, Outer diameter: 0.8 mm Irrigation channel: 0.25 mm Working length: 9 cm
11522 A	**Miniature Straight Forward Telescope 0°,** semirigid, **autoclavable,** NITI, with remote eyepiece, with integrated irrigation channel and working channel, fiber optic light transmission incorporated, Working length: 12 cm Outer diameter: 1.3 mm Irrigation channel: 0.25 mm Working channel: 0.6 mm
495 NTA	**Fiber Optic Light Cable,** diameter 2.5 mm, length 230 cm
11522 S	**Examination Sheath,** with blunt obturator, working length 5 cm, for use with Miniature Straight Forward Telescopes 11521 A and 11522 A
11522 SL	**Examination Sheath,** with blunt obturator, working length 9 cm, for use with Miniature Straight Forward Telescopes 11521 A and 11522 A

OPPELT ***"Easy-Check"*** **Micro Blood Extraction Set**:

26212	OPPELT ***"Easy-Check"*** **Micro Blood Extraction Set,** diameter 14 mm, length 20 cm
26212 K	**Miniature Blade,** sterile, package of 24, for use with OPPELT "Easy-Check" Micro Blood Extraction Set 26212
26212 R	**Capillary Tube,** heparinized, size 85µL, package of 750, for use with OPPELT "Easy-Check" Micro Blood Extraction Set 26212
11301 D3	**Battery Light Source LED for Endoscopes,** with coarse thread, brightness > 110 lm / > 150 klx, burning time 120 min, weight approx. 78 g, waterproof and fully immersible for cleaning and disinfection
495 NTA	**Fiber Optic Light Cable,** diameter 2.5 mm, length 230 cm

3-15

Mammaplasty

Basic Set

DELMAR **Recommended Set**

50251 MR	**Retractor,** for creation of an operation pocket, with handle for single hand use, width of spatula 30 mm, length 14 cm, with two lateral suction channels for smoke evacuation
50250 AA	**HOPKINS® Straight Forward Telescope 0°,** enlarged view, diameter 10 mm, length 31 cm, **autoclavable,** fiber optic light transmission incorporated, color code: green
50251 M	DELMAR **Unipolar Endo-Dissector,** size 20 mm, working length 28 cm, with connector pin for unipolar coagulation including: **Handle** **Sheath**
50251 ML	DELMAR **Unipolar Coagulation Electrode,** package of 5, for use with Unipolar Endo-Dissector 50251 M
50251 DE	ECKERT **Breast Dissector,** blunt, curved, size 10 mm, length 23 cm
33221 MD	CLICK*line*® KELLY **Dissecting and Grasping Forceps,** rotating, dismantling, insulated, with connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, double action jaws, size 5 mm, length 30 cm
50251 R	**Retractor,** with fiber optic light carrier, with teeth, with suction channel for smoke evacuation, width of spatula 30 mm, length 9 cm

3-15

Conization

Basic Set

26013 VDA	**VITOM® Telescope 90° with Integrated Illuminator,** VITOM® HOPKINS® telescope 90°, working distance 25 – 75 cm, length 11 cm, **autoclavable,** with green filter for colposcopy and incorporated fiber optic light transmission and condensor lenses, color code: blue
26165 UG	**Loop Electrode,** with insulated sheath, **autoclavable,** size 22 x 17 mm, working length 11 cm
26165 UM	**Loop Electrode,** with insulated sheath, **autoclavable,** size 15 x 13 mm, working length 10 cm
26165 UK	**Loop Electrode,** with insulated sheath, **autoclavable,** size 10 x 8 mm, working length 9 cm
26 5200 43	**Electrode Handle,** with 2 buttons for activating the unipolar generator, for use with AUTOCON® II 80, AUTOCON® II 200 and AUTOCON® II 400 SCB, yellow button: unipolar cutting, blue button: unipolar coagulation, High Frequency Cord **26** 5200 45 required
26 5200 45	**High Frequency Cable,** for Electrode Handle **26** 5200 43, length 400 cm
20 5308 01	**AUTOCON® II 80,** power supply 100 – 240 VAC, 50/60 Hz including: **Mains Cord**
20 0178 34	**Two-Pedal Footswitch,** digital, one-stage, for use with AUTOCON® II 80

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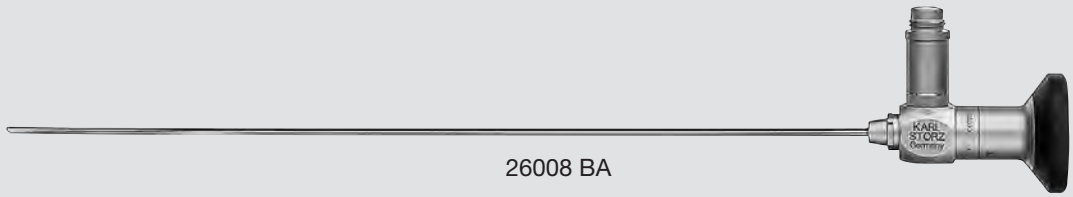
HYSTEROSCOPES FOR EXAMINATION AND OPERATION

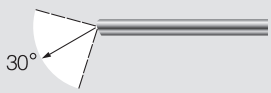
HOPKINS® Telescope

Diameter 2 mm

For use with Hysteroscopes and Fetoscopes



26008 BA



26008 BA **HOPKINS® Forward-Oblique Telescope 30°,** diameter 2 mm, length 26 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red

2-08i

Hysteroscopes see page 15
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

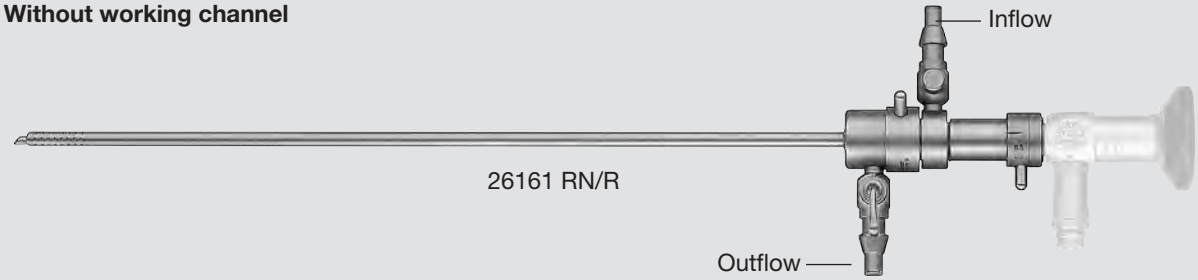
Hysteroscope Sheaths

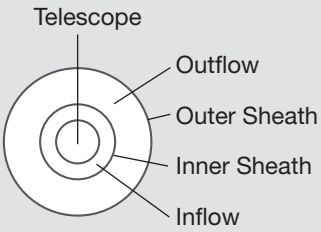
for continuous irrigation and suction

KARL STORZ — ENDOSKOPE

For use with 2 mm HOPKINS® Telescope 30° 26008 BA

Without working channel

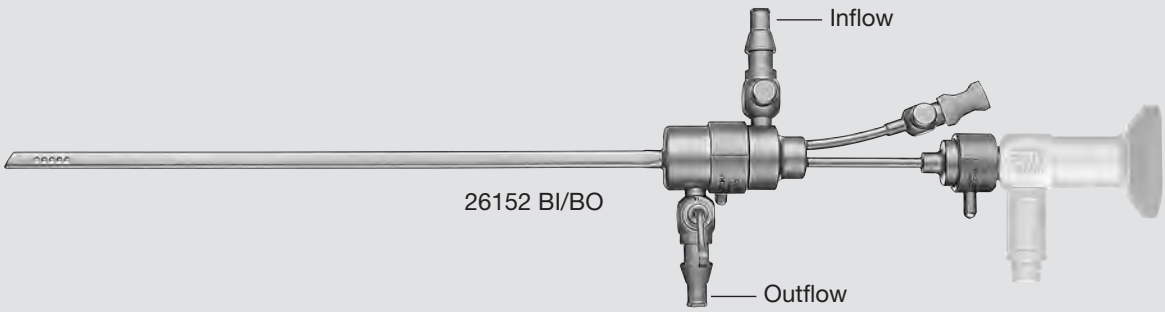


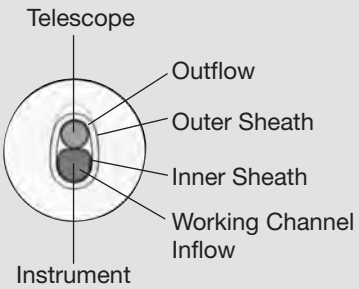


26161 RN	**Inner Sheath,** diameter 2.8 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26161 R
26161 R	**Outer Sheath,** diameter 3.6 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheaths 26161 RN and 26162 RN

With channel for semirigid 5 Fr. instruments

BETTOCCHI® **Sheaths, size 4 mm**





26152 BI	BETTOCCHI® **Inner Sheath,** size 3.6 mm, with channel for semirigid 5 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26152 BO
26152 BO	BETTOCCHI® **Outer Sheath,** size 4.2 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheath 26152 BI

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Semirigid Operating Instruments, Electrodes and Cords see pages 27-29 and 34
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

BETTOCCHI® **B.I.O.H.®**
Compact Hysteroscope

KARL STORZ — ENDOSKOPE

“Going beyond the Ordinary”

In 1996, we revolutionized the world of hysteroscopy by designing the first continuous-flow operating hysteroscope with a total diameter of 5 mm.

In 2001, we further reduced the total diameter of this scope thanks to the first 2 mm HOPKINS® rod lens telescope.

In the last ten years, anyone working with these two instruments appreciate their feasibilty and immense potential.

The desire to “go beyond the ordinary” has led us to develop the first integrated hysteroscope based on enhanced KARL STORZ technology.

Prof. S. BETTOCCHI,
Associate Professor OB/GYN,
University of Bari, Policlinic,
70125 Bari, Italy

Special Features:

- Reinforced telescope
  - Telescope integrated in inner sheath ensures higher stability
  - Small diameter of only 4 mm for atraumatic insertion into the cervix
- New lock mechanism
  - Fast connection of outer sheath via CLICK mechanism
  - Easy and fast connection of the outer sheath to the handle
- Suction and irrigation buttons on the handle
  - For single and continuous-flow applications
  - Single-hand activation of suction and irrigation
- New access to working channel
  - Automatic valve mechanism
  - Disposable sealing caps
  - Secure sealing
  - For use of semirigid 5 Fr. operating instruments and bipolar electrodes
- Ergonomic handle
  - New pistol-shaped handle
  - Fully autoclavable
- New connection design
  - “Monobloc” system: All connections (tubes and light cable) are positioned in the lower part of the instrument
  - Clear assignment of in- and outflow tubes
  - Easy rotation of hysteroscope

7-11

BETTOCCHI® **B.I.O.H.®**
Compact Hysteroscope

26252 BL

26252 BL BETTOCCHI® **B.I.O.H.® Compact Hysteroscope,** HOPKINS® telescope 30°, size 4 mm, with channel for semirigid 5 Fr. operating instruments, with suction and irrigation valves for single or continuous-flow use, long handle

including:

Outer Sheath

2x **Suction and Irrigation Valve**

Monobloc Adaptor

Seal, for instrument ports, package of 10

Recommended Accessories

39501 XC **Tray for Cleaning, Sterilization and Storage** of one B.I.O.H.® compact hysteroscope, including cleaning adaptor, silicone telescope holders and lid, external dimensions (w x d x h): 460 x 150 x 80 mm, for use with Cleaning Adaptor 39501 XCA

031317-10* **Tubing Set,** for single use, sterile, with Monobloc connector and irrigation and suction tube, connection to pump only with Tubing Set 031167-01, package of 10, for use with B.I.O.H.® Hysteroscope 26252 BB/BH in combination with HAMOU® ENDOMAT® SCB

* mtp

Semirigid Operating Instruments, Electrodes and Cords see pages 27-29 and 34
Components/Spare Parts see chapter 12

7-11₁

CAMPO **TROPHYSCOPE®**

The new TROPHYSCOPE®, the CAMPO compact hysteroscope, was specially developed for diagnostic hysteroscopy and hysteroscopy in the doctor's office or on an outpatient basis. Consequently, it provides maximum convenience for both patient and doctor.

Thanks to the 2 mm HOPKINS® telescope and the integrated irrigation channel, the TROPHYSCOPE® has a very small outer diameter of 2.9 mm. This is a considerable advantage when examining nulliparous women and infertility patients. As a rule, dilation of the cervical canal is unnecessary. Furthermore, the instrument's stability and distensions properties have been enhanced. Light transmission has also been enhanced by adding more optical fibers to ensure excellent image quality even with its small diameter.

With the single-flow version, the thin compact hysteroscope does not require assembly. The specially designed instrument tip and the instrument's expanded length ensures easy handling. This facilitates atraumatic access to the uterine cavity through the cervical canal and reduces the risk of injury to the endometrium. In addition, there is no risk of obscured vision through the adhesion of tissue to the instrument tip.

An innovative feature of this hysteroscope is the use of an additional outer sheath in active and passive positions. Two different sheaths are currently available: A continuous-flow sheath and an operating continuous flow sheath with a 5 Fr. working channel.

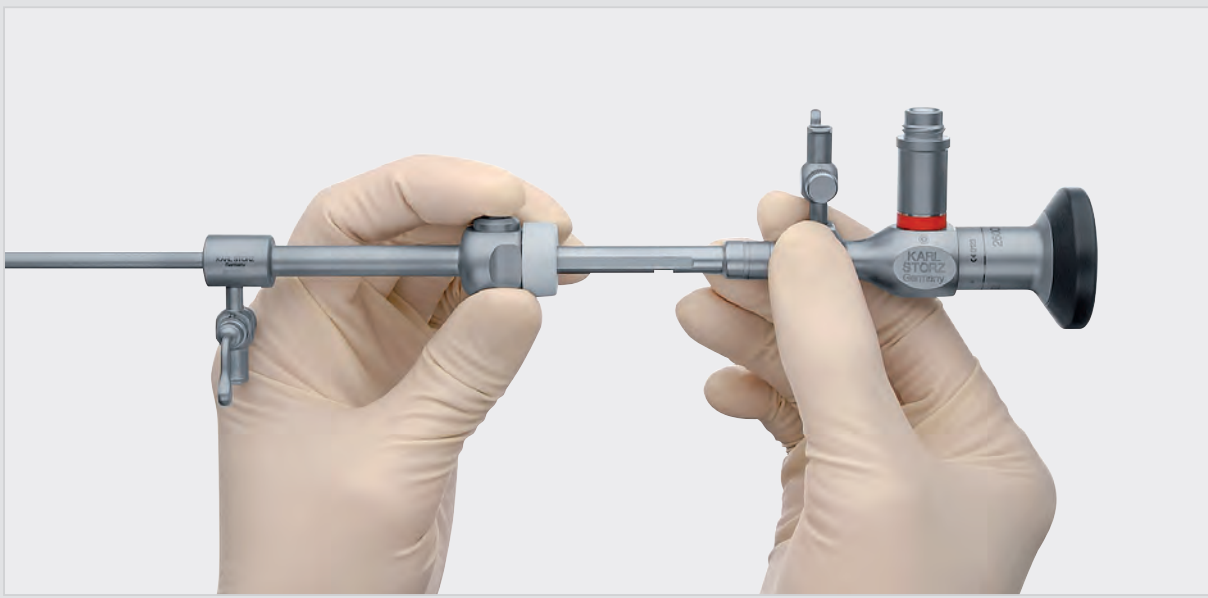
In its passive position, the continuous-flow sheath will not enlarge the instrument diameter for the diagnostic procedure, but can be activated and advanced distally if required.

With a simple push of a button and distal movement, the cervix is gently dilated with the help of the outer sheath. The continuous-flow sheath and/or operating sheath can be locked in the active position during the examination, providing additional functions such as continuous-flow or the application of a semiflexible 5 Fr. instruments (operating sheath), without the need to remove the hysteroscope.

Moreover, the operating sheath offers the possibility to perform minor surgical procedures such as biopsies, polyp resections or septum dissection.

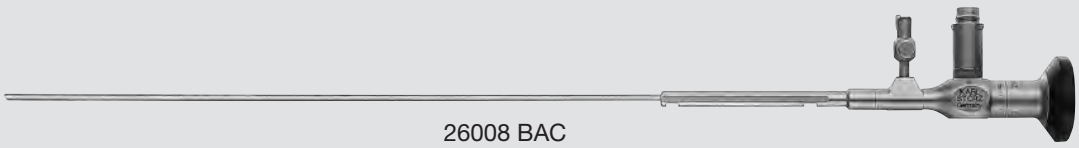
As the instrument is compatibile with a biodegradable high-level disinfection agent such as TRISTEL FUSE®, it can be reused again within a few minutes. This makes the instrument suitable for all office gynecologists and outpatient or IVF centers.

Dr. R. CAMPO,
Medical Director LIFE Leuven,
Belgium



7-11

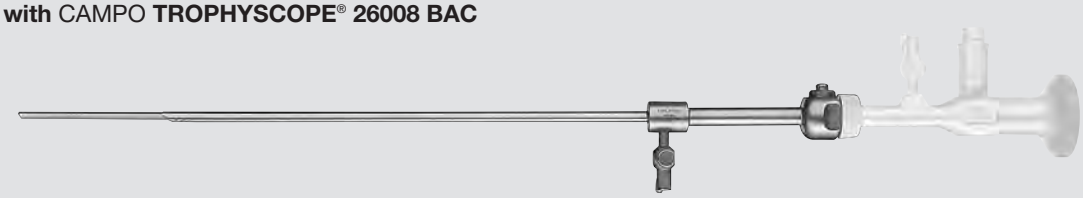
CAMPO **TROPHYSCOPE®, Continuous-Flow Operating Sheaths**



26008 BAC

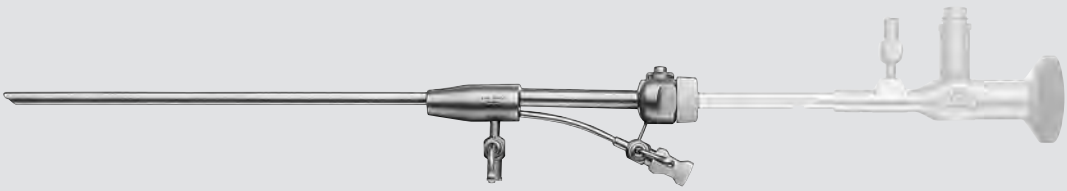
26008 BAC — CAMPO **TROPHYSCOPE®,** HOPKINS® telescope 30°, size 2.9 mm, length 24 cm, with irrigation connector, for use with Continuous-Flow Operating Sheaths 26152 DA and 26152 DB

For use with CAMPO **TROPHYSCOPE® 26008 BAC**



26152 DA (sheath in passive position)

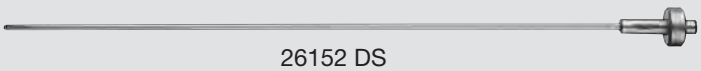
26152 DA — **Continuous-Flow Operating Sheath,** size 3.7 mm, length 18 cm, with suction adaptor, for use with CAMPO TROPHYSCOPE® 26008 BAC



26152 DB (sheath in active position)

26152 DB — **Continuous-Flow Operating Sheath,** size 4.4 mm, length 16 cm, with channel for semirigid instruments 5 Fr., with 1 stopcock and 1 LUER-Lock adaptor, for use with CAMPO TROPHYSCOPE® 26008 BAC

For use with Continuous-Flow Operating Sheaths 26152 DA/DB



26152 DS

NEW 26152 DS — **TROPHY Curette,** for use with Continuous-Flow Operating Sheaths 26152 DA and 26152 DB

Semirigid Operating Instruments, Electrodes and Cords see pages 27-29 and 34
Containers for Sterilization and Storage of Sheaths and Instruments see catalog HYGIENE

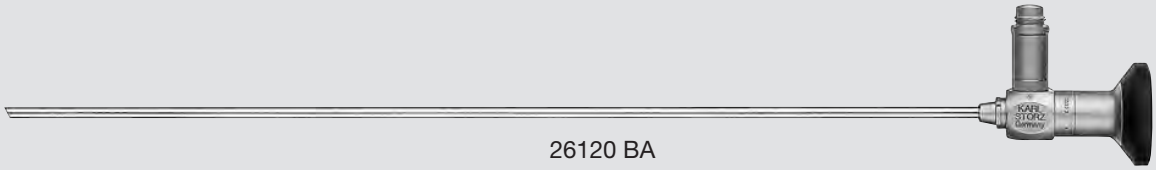
7-11

HOPKINS® Telescopes

Diameter 2.9 mm

KARL STORZ — ENDOSKOPE

For use with Hysteroscopes and in Transvaginal Endoscopy and/or Fertiloscopy

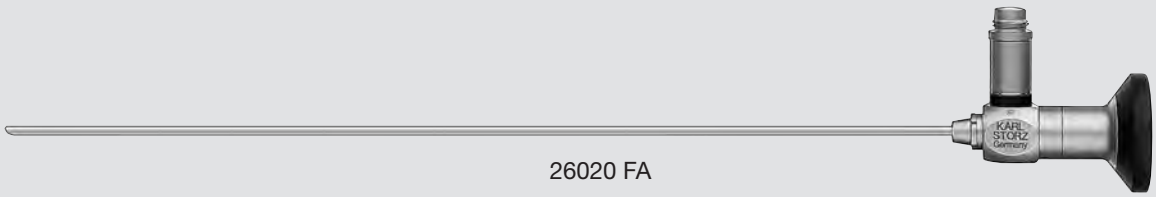


26120 BA

26120 BA **HOPKINS® Forward-Oblique Telescope 30°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red

Hysteroscopes see pages 21-23
Transvaginal Endoscopy see pages 72-73
Fertiloscopes see page 76

For use with Hysteroscopes and Resectoscopes



26020 FA

26020 FA **HOPKINS® Telescope 12°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: black

Hysteroscopes see pages 21-23
Resectoscopes see pages 40-47

Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

3-15

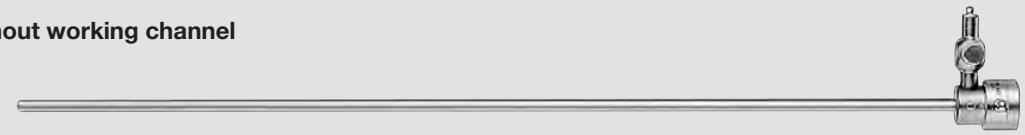
Hysteroscope Sheaths

for continuous irrigation and suction

KARL STORZ — ENDOSKOPE

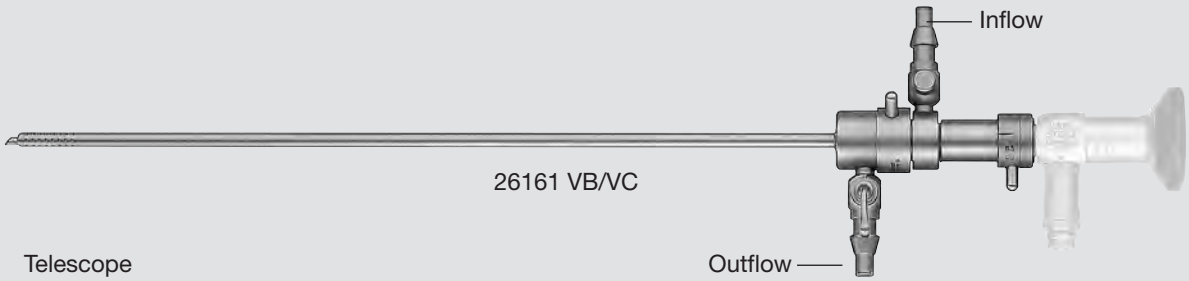
For use with 2.9 mm HOPKINS® Telescope 30° 26120 BA

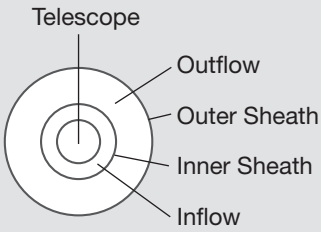
Without working channel



26161 VS

26161 VS **Examination Sheath,** diameter 4.1 mm, with 1 stopcock and 1 LUER-Lock adaptor



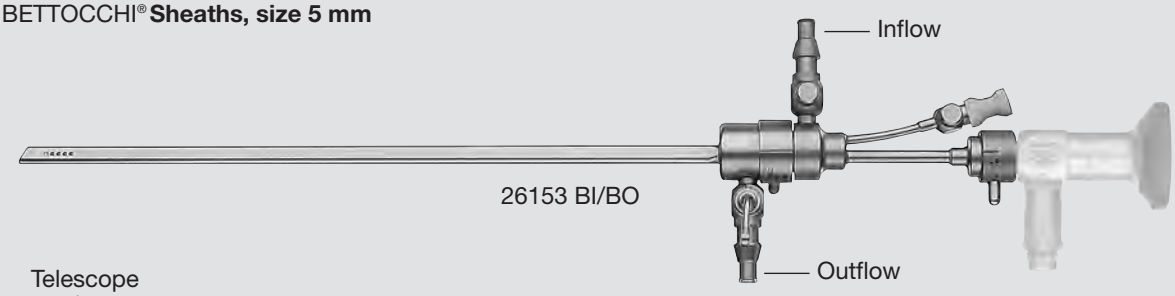


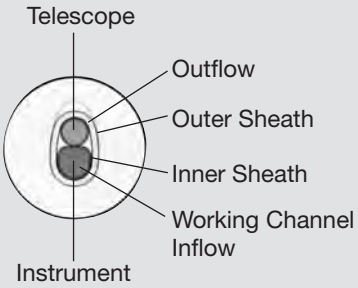
26161 VB **Inner Sheath,** diameter 3.8 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26161 VC

26161 VC **Outer Sheath,** diameter 4.5 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with 26161 VB and 26162 VB

With channel for semirigid 5 Fr. instruments

BETTOCCHI® **Sheaths, size 5 mm**





26153 BI BETTOCCHI® **Inner Sheath,** size 4.3 mm, with channel for semirigid 5 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26153 BO

26153 BO BETTOCCHI® **Outer Sheath,** size 5 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheath 26153 BI

3-15

Semirigid Operating Instruments, Electrodes and Cords see pages 27-29 and 34
Containers for Sterilization and Storage of Sheaths and Instruments see catalog HYGIENE

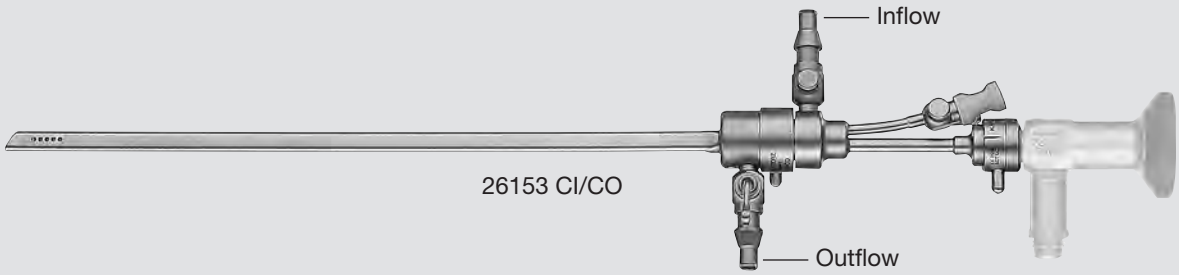
Hysteroscope Sheaths

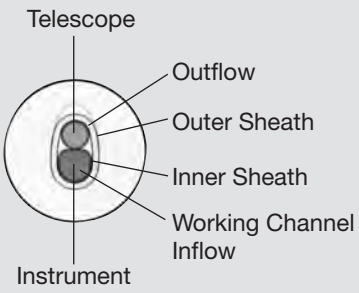
for continuous irrigation and suction,
for use with Ovabloc

KARL STORZ — ENDOSKOPE

For use with 2.9 mm HOPKINS® Telescope 30° 26120 BA

BETTOCCHI® **Sheaths, for use with Ovabloc**





26153 CI	BETTOCCHI® **Inner Sheath,** size 4.9 mm, with channel for semirigid 7 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26153 CO
26153 CO	BETTOCCHI® **Outer Sheath,** size 5.5 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheath 26153 CI

2-083

Semirigid Operating Instruments, Electrodes and Cords see pages 27-29 and 34
Containers for Sterilization and Storage of Sheaths and Instruments see catalog HYGIENE

Hysteroscope Sheaths

for continuous irrigation and suction,
for use with Essure® sterilization method

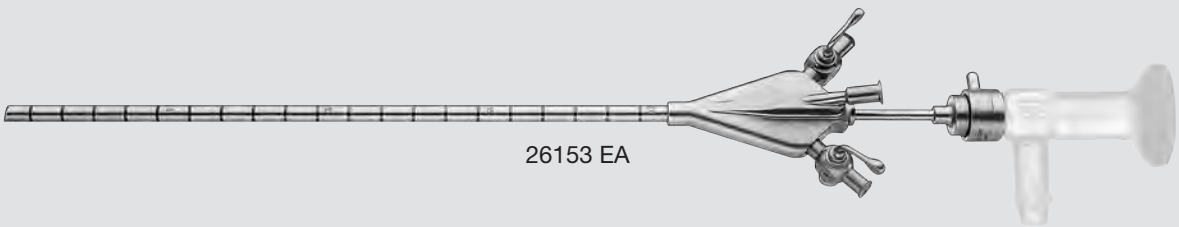
KARL STORZ — ENDOSKOPE

For use with 2.9 mm HOPKINS® Telescopes 12° and 30° 26020 FA and 26120 BA

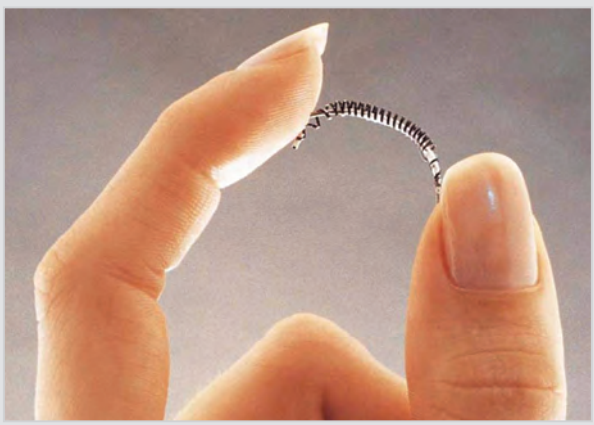
With channel for 5 Fr. instruments

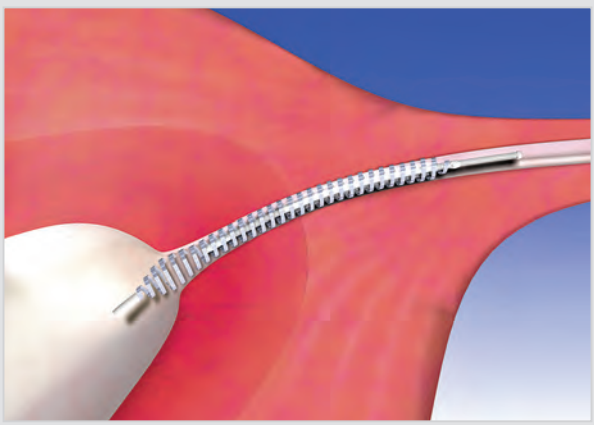
Special Features:

- **Specially designed sheath for optimum irrigation**
- **Lateral inflow and outflow ports for increased patient comfort**
- **Easy to use due to one-sheath system**
- **Working length of 21 cm for optimum access to tubal ostia during the sterilization procedure**
- **Compatible with both 12° and 30° telescopes**
- **For use with the Essure®* sterilization method**



26153 EA **Hysteroscope Sheath,** size 5 mm, with channel for 5 Fr. operating instruments, no separate inner and outer sheaths, for use with Essure® sterilization method





The microcoil is soft, flexible and adapts itself to the body.

2-082

***Note:** Essure® microcoils are available from the company Bayer Healthcare.

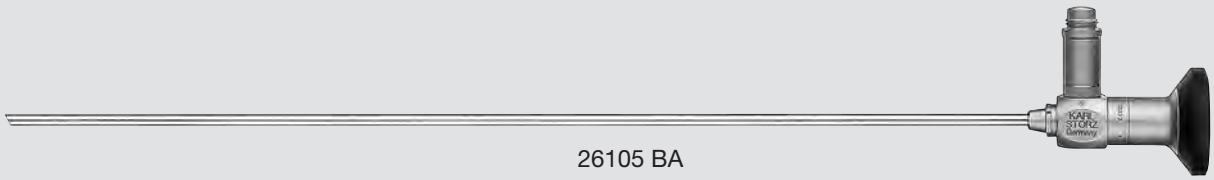
Semirigid Operating Instruments, Electrodes and Cords see pages 27-29 and 34
Containers for Sterilization and Storage of Sheaths and Instruments see catalog HYGIENE

HOPKINS® Telescopes

Diameter 4 mm

KARL STORZ — ENDOSKOPE

For use with Hysteroscopes

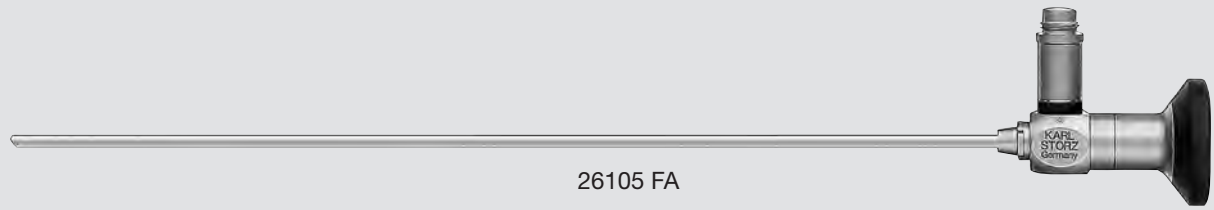


26105 BA

26105 BA **HOPKINS® Forward-Oblique Telescope 30°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: red

Hysteroscopes see page 25

For use with Hysteroscopes and Resectoscopes



26105 FA

26105 FA **HOPKINS® Telescope 12°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: black

Hysteroscopes see page 26
Resectoscopes see pages 49-52

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Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

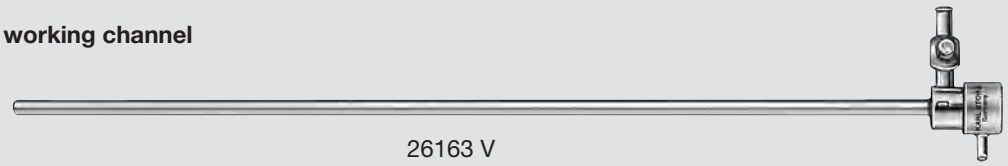
Hysteroscope Sheaths

for continuous irrigation and suction

KARL STORZ — ENDOSKOPE

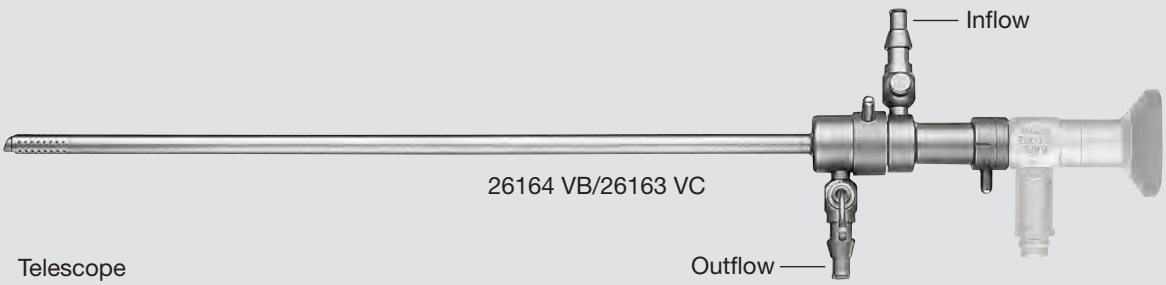
For use with 4 mm HOPKINS® Telescope 30° 26105 BA

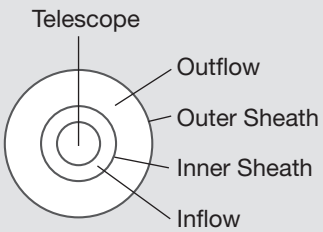
Without working channel



26163 V

26163 V **Examination Sheath,** diameter 5.1 mm, with 1 LUER-Lock adaptor



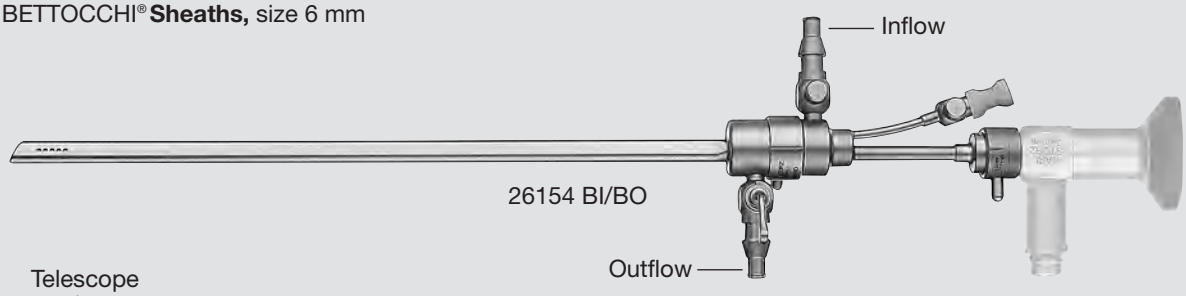


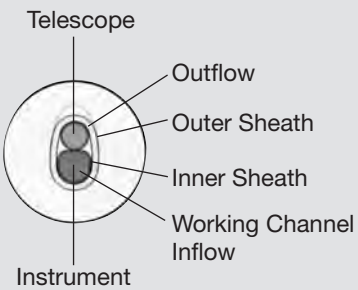
26164 VB **Inner Sheath,** diameter 5.2 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26163 VC

26163 VC **Outer Sheath,** diameter 6.2 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheaths 26163 VB and 26164 VB

With channel for semirigid 5 Fr. instruments

BETTOCCHI® **Sheaths,** size 6 mm





26154 BI BETTOCCHI® **Inner Sheath,** size 5.4 mm, with channel for semirigid 5 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26154 BO

26154 BO BETTOCCHI® **Outer Sheath,** size 6 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheath 26154 BI

3-15

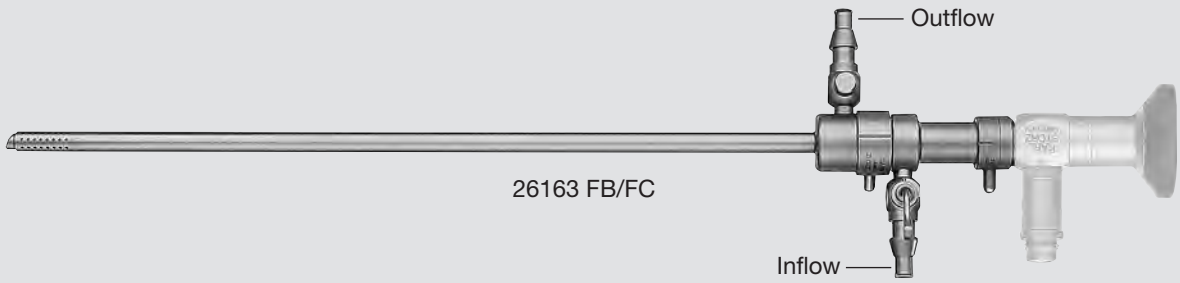
Semirigid Operating Instruments, Electrodes and Cords see pages 27-29 and 34
Containers for Sterilization and Storage of Sheaths and Instruments see catalog HYGIENE

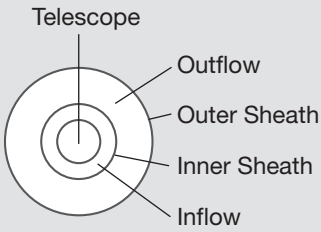
Hysteroscope Sheaths

for continuous irrigation and suction

For use with 4 mm HOPKINS® Telescope 12° 26105 FA

Without working channel





26163 FB	**Inner Sheath,** diameter 5.2 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Outer Sheath 26163 FC
26163 FC	**Outer Sheath,** diameter 6.2 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Inner Sheath 26163 FB

7-11

Containers for Sterilization and Storage of Sheaths and Instruments see catalog HYGIENE

Electrodes and Loops

5 Fr.

KARL STORZ — ENDOSKOPE

For use with B.I.O.H.®, TROPHYSCOPE® and Hysteroscope Sheaths

Applications of Bipolar Electrode 26158 BE and 26159 BE

In Hysteroscopy:

- **Uterine septum dissection**
- **Synechia**
- **Polypectomy and myomectomy (especially pedunculated myoma)**

In Transvaginal Endoscopy (TVE):

- **Adhesiolysis**
- **For ovarian drilling**

Applications of Bipolar Electrode 26159 GC

In Hysteroscopy and Transvaginal Endoscopy (TVE):

- **For coagulating minor bleeding**

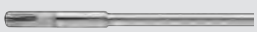
In Transvaginal Endoscopy (TVE):

- **For coagulating endometriotic lesions**

Bipolar Electrodes

bipolar

26159 BE **Bipolar Dissection Electrode,** semirigid, 5 Fr., length 36 cm



26159 GC GORDTS/CAMPO **Bipolar Ball Electrode,** semirigid, 5 Fr., length 36 cm

26158 BE **Bipolar Dissection Electrode,** semirigid, 5 Fr., needle electrode angled 90°, length 36 cm

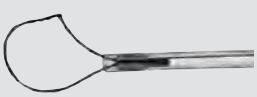
Bipolar Electrodes 26158 BE, 26159 BE and 26159 GC are for use in saline solution.

Unipolar Electrodes and Loop

unipolar

26159 N BETTOCCHI® **Needle Electrode,** unipolar, 5 Fr., length 34 cm

26770 B **Ball Electrode,** unipolar, 5 Fr., length 53 cm



26159 L BETTOCCHI® **Polypectomy Loop,** unipolar, 5 Fr., length 34 cm

2-082

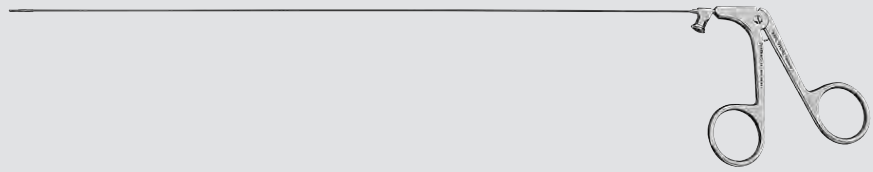
Units and Accessories for Intrauterine HF Surgery see chapter 11, UNITS

Semirigid Operating Instruments

5 Fr.

KARL STORZ — ENDOSKOPE

For use with B.I.O.H.®, TROPHYSCOPE® and Hysteroscope Sheaths

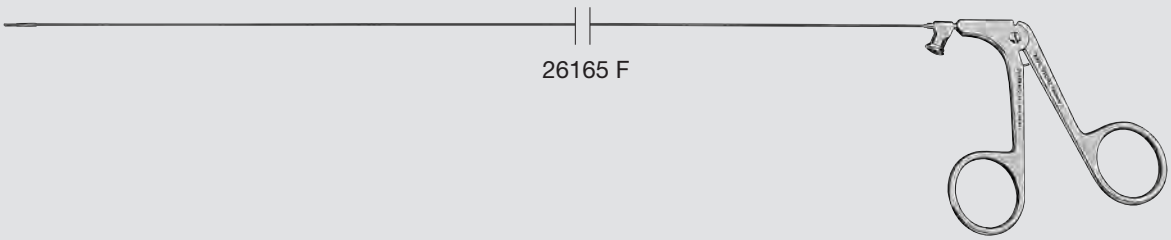
Length	Instrument	
34 cm 40 cm		
	26159 UHW 26160 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws
	26159 EHW 26160 EHW	**Scissors,** semirigid, blunt, single action jaws
	NEW 26159 DS NEW 26160 DS	DI SPIEZIO SARDO **Grasping Forceps,** semirigid, double action jaws
	26159 H 26160 H	HESSELING **Tenaculum Grasping Forceps,** semirigid, double action jaws
	NEW 26159 HS NEW 26160 HS	HESSELING and DI SPIEZIO SARDO **Tenaculum Grasping Forceps with Spike,** semirigid, double action jaws
	26159 SHW 26160 SHW	**Scissors,** semirigid, pointed, single action jaws
	26159 DHW 26160 DHW	**Punch,** semirigid, through-cutting, single action jaws
	26159 BHW 26160 BHW	**Biopsy Spoon Forceps,** semirigid, double action jaws
	26159 M –	BETTOCCHI® **Myoma Fixation Instrument,** semirigid
	26159 G –	BETTOCCHI® and DI SPIEZIO SARDO **Palpation Probe,** semirigid, scaled

6-052

Semirigid Operating Instruments

7 Fr.

For use with Hysteroscope Sheaths 26153 CI and 26153 CO



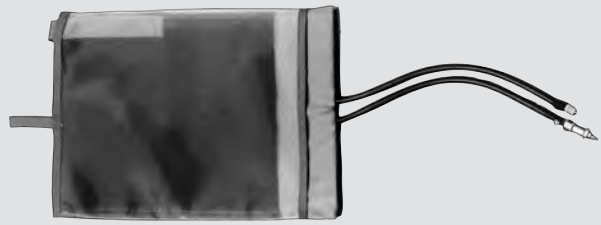
26165 F **Biopsy Forceps,** semirigid, double action jaws, 7 Fr., length 40 cm

26165 AJ **Grasping Forceps,** semirigid, double action jaws, 7 Fr., length 40 cm

26168 A **Scissors,** semirigid, single action jaws, 7 Fr., length 40 cm

2-082

Pressure Infusion Cuffs for Hysteroscopy



26 3101 38

26 3101 38 **Pressure Infusion Cuff,** 3 l

20 3100 93

20 3100 93 **Manometer,** for use with Pressure Cuffs **26** 3100 38 and **26** 3101 38

20 3100 90
20 3100 41

20 3100 90 **Rubber Foot Pump,** with silicone tubing, length 200 cm, with pressure relief valve, fits Pressure Cuffs **26** 3100 38 and **26** 3101 38

20 3100 41 **Silicone Tubing Set,** sterilizable, length 250 cm, for use with Pressure Cuffs **26** 3100 38 and **26** 3101 38 with Foot Pump **20** 3100 90

1-99$_5$

Flexible Hysteroscope

KARL STORZ — ENDOSKOPE

By estimates, more than 30% of all outpatient visits with gynecologists relate to examinations for abnormal uterine bleeding. The most frequent causes of abnormal uterine bleeding differ depending on patient age. Adolescent women and perimenopausal women often have irregular monthly cycles due to rare ovulation.

In postmenopausal women with abnormal bleeding, it is necessary to first exclude endometrial cancer as a cause. A woman suffering from regular yet strong bleeding usually suffers from uterine fibromas or endometriosis. It is important for the physician to decide whether or not the abnormal bleeding has causes due to uterine pathology. For this, several methods are available to the gynecologist, including, in addition to hysteroscopy, curettage, ultrasound, hysterosalpingograms, as well as sonograms and magnetic resonance imaging.

An endometrial biopsy, performed at the doctor's practice, should be performed in all women with unexpected postmenopausal bleeding. In the case of sustained bleeding, the uterine cavity should be examined if endometrial atrophy is diagnosed or the tissue is insufficient for diagnosis. Hysterosalpingograms are useful for patients interested in the patency of their fallopian tubes, but their sensitivity or accuracy is insufficient for an evaluation of the uterine cavity in women with abnormal uterine bleeding. Transvaginal sonography is an excellent method for determining the absence or presence of uterine fibromas, but not well-suited for localizing them.

The two most useful tests for evaluating the uterine cavity are sonohysterograms and outpatient hysteroscopies. Sonohysteroscopy is a procedure, during which 10 to 20 cm^3 saline is introduced through the cervical canal into the uterine cavity. At the same time, an ultrasound machine with vaginal probe is used to examine the uterine lining for irregularities. These irregularities may be due to uterine polyps, fibromas, or blood clots. The ultrasound image is not precise in differentiating between these modalities. The sono-hysterogram requires 10 to 20 minutes and causes light cramping in the patient.

Outpatient hysteroscopy is the best method for examining the uterine cavity. There is no sonographic image that must be interpreted. It is necessary to determine whether a rigid 3 – 4 mm or a flexible 3.6 mm hysteroscope should be used. Both have a working channel and use a small amount of saline for distending the uterus. In most cases, the rigid system requires a cervical tenaculum and paracervical blockade. When using the flexible hysteroscope, this is only necessary for less than 10% of patients, since the distal tip of the hysteroscope can be passed atraumatically through the cervical canal using the thumb manipulator. A thorough examination of the uterine cavity with the flexible hysteroscope usually is complete in less than one minute and does not cause any more cramps than sonography. A paracervical blockade is not necessary.

The low cost of outpatient hysteroscopy makes this procedure very attractive for the clinician. In the United States, the purchase costs for the device are more than recovered with one use per week. Patients are overwhelmingly enthusiastic about outpatient hysteroscopy. Patients are often frustrated about having to undergo repeated dilations and curettages during hysterectomy. It is very satisfactory to them to see the pathology causing their abnormal bleeding during an outpatient hysteroscopy. In contrast to sonographic images, hysteroscopic images are easy to understand. The patients know that the cause of their problems can be diagnosed quickly and with minimum discomfort. This results in a more precise treatment plan for them, and the outcomes are more satisfying. The patients are included to a greater extent into their treatment, and soon will choose those physicians who are able to treat them most effectively. The flexible hysteroscope is currently the most efficient and accurate diagnostic instrument in our arsenal for patients suffering from abnormal uterine bleeding.

K. B. ISAACSON, M.D.,
Head of Vincent Memorial Division of Gynecology,
Reproductive Endocrinology and Infertility,
Massachusetts General Hospital,
Boston, USA

2-02

Flexible Hysteroscope

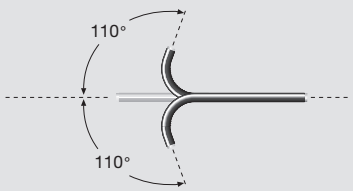
Outer diameter 3.5 mm

KARL STORZ — ENDOSKOPE

Special Features:

- **Small diameter**
- **For office hysteroscopy without dilation, without anesthesia**
- **Both CO_2 gas and liquids are suitable for dilation**
- **Large angle of view and deflectable distal tip for better orientation**
- **4 Fr. working channel for use with flexible 3 Fr. operating instruments**
- **First class optical quality of both lens system and image transmitting bundle**
- **Long life span due to tough construction and robust mechanical design**
- **Stiffness at the distal tip prevents buckling and makes the instrument easy to insert**
- **New lock mechanism to secure tip**
- **Simple leakage test within minutes without requiring further accessories**
- **Waterproof, fully immersible for cleaning and disinfection**
- **Sterilizable via EtO gas**
- **Recommended for video endoscopy in conjunction with the KARL STORZ camera systems**

11264 BB



11264 BB	**Hystero-Fiberscope**	
	Working channel:	1.48 mm
	Direction of view:	0°
	Angle of view:	110°
	Working length:	240 mm
	Outer diameter:	3.5/3.6 mm

1-994

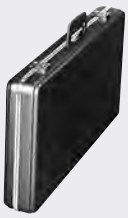
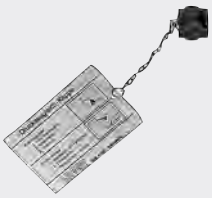
Units and Accessories for Hysteroscopy see chapter 11, UNITS
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

Accessories

for flexible hysteroscopes

KARL STORZ — ENDOSKOPE

Following accessories are included in delivery:

	27677 A	**Case,** plastic, without inserts, internal dimensions (w x d x h): 725 x 325 x 85 mm
	11033 KB	**Grasping Forceps,** flexible, single action jaws, 3 Fr., length 43 cm
	11033 KA	**Biopsy Forceps,** flexible, single action jaws, 3 Fr., length 43 cm
	26770 AA	**Coagulation Electrode,** unipolar, 3 Fr., length 53 cm
	11025 E	**Pressure Compensation Cap,** for ventilation during gas and plasma sterilization
	13242 XL	**Leakage Tester,** with bulb and manometer
	27651 AK	**Cleaning Brush,** round, flexible, outer diameter 2 mm, for working channel diameter 1.2 – 1.8 mm, length 75 cm

Optional Accessories

	6927691	**Adaptor for Two-Way Stopcock,** LUER-Lock, with O_2 tube connection

For use with two-way stopcock of recommended instruments:

	11003 KA	**Biopsy Forceps,** flexible, double action jaws, oval, diameter 1 mm, length 60 cm
	11003 KB	**Grasping Forceps,** flexible, double action jaws, diameter 1 mm, length 60 cm

Units and Accessories for Hysteroscopy see chapter 11, UNITS
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

2-022

Unipolar and Bipolar High Frequency Cords

KARL STORZ — ENDOSKOPE

Unipolar High Frequency Cords

unipolar

KARL STORZ Instrument	High Frequency Electrosurgical Unit		
		26002 M	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for models KARL STORZ, Erbe type T, older models and Ellman
		26004 M	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for use with Martin HF units
		26005 M	**Unipolar High Frequency Cord,** with 5 mm plug, length 300 cm, for AUTOCON® II 400 SCB system (111, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, AUTOCON® system (50, 200, 350) and Erbe type ICC
		26006 M	**Unipolar High Frequency Cord,** with 8 mm plug, length 300 cm, for use with AUTOCON® II 400 SCB system (112, 116) and Valleylab models

Bipolar High Frequency Cords

bipolar

KARL STORZ Instrument	High Frequency Electrosurgical Unit		
		26176 LE	**Bipolar High Frequency Cord,** length 300 cm, for AUTOCON® II 400 SCB system (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® series (50, 200, 350), Erbe-Coagulator, T and ICC series
		26176 LM	**Bipolar High Frequency Cord,** length 300 cm, for use with Martin HF units
		26176 LV	**Bipolar High Frequency Cord,** length 300 cm, for AUTOCON® II 400 SCB system (112, 114, 116, 122, 125), AUTOCON® II 200, AUTOCON® II 80 and Valleylab coagulators
		26176 LW	**Bipolar High Frequency Cord,** length 300 cm, pin distance on unit side 22 mm, for use with high frequency surgical units with bipolar sockets with 22 mm pin distance

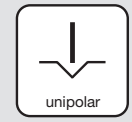
1-99$_5$

Please note: All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 M**L,** 26176 LV**L.**

Units and Accessories for Intrauterine HF Surgery see chapter 11, UNITS

UNIPOLAR AND BIPOLAR RESECTOSCOPES

Unipolar Resection



There are two commonly used modalities: unipolar and bipolar resection.

Basic principles of unipolar resection

In unipolar resection, the required thermal effect in the tissue is achieved by means of cutting and/or coagulation due to increased current density between the conducting electrode and the tissue.

A large neutral electrode, which is positioned as close as possible to the operating area, returns the applied current via the tissue to the HF generator.

To ensure a complete circuit, a non-conducting irrigation fluid (as a rule Purisole) is required.

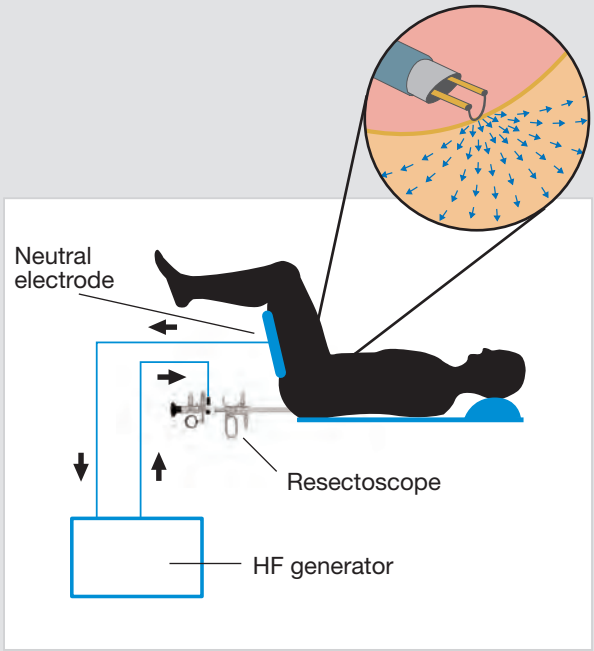
The use of a conducting irrigation solution, as utilized in bipolar resection, may result in lower electric resistance between the conducting electrode and the irrigation fluid as opposed to the tissue. This can cause an uncontrolled flow of current to pass through the patient's body via the irrigation fluid during energy transfer.

Possible risks of unipolar resection

Due to the current flow and depending on the amount of energy applied, nerve stimulation or reflex action can occur which, at worst, may lead to perforation of the tissue with the instrument.

Furthermore, error current (so-called leakage current) or incorrect neutral electrode placement can lead to the concentration of current density within a (very) small area. This increases heating in the tissue which may result in severe burns.

Modern HF generators, such as AUTOCON®II 400 from KARL STORZ, include early warning systems which detect leakage current or incorrectly positioned neutral electrodes. These systems can deactivate power output and thereby increase patient safety.



2-08

Bipolar Resection

Basic principles of bipolar resection

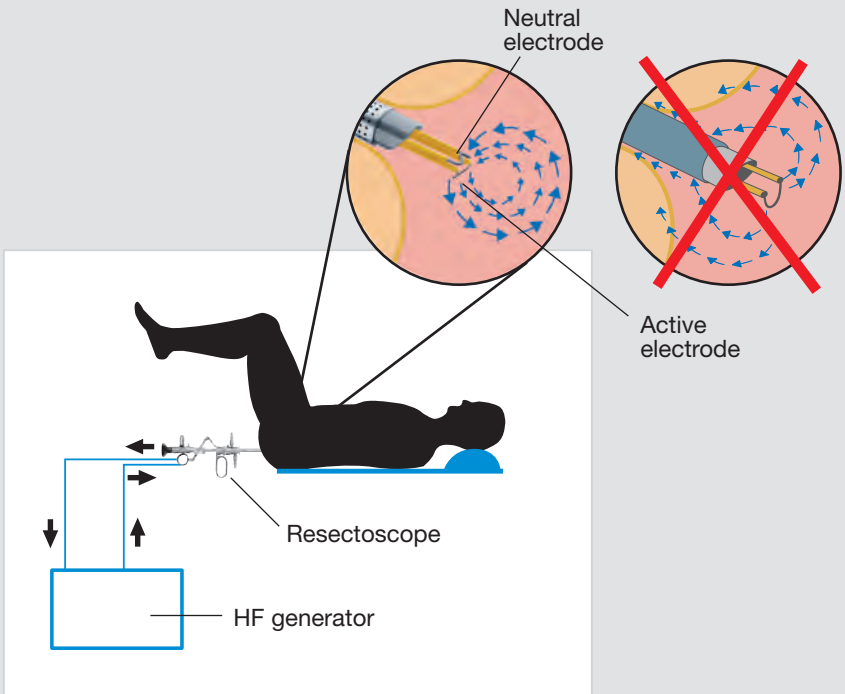
Bipolar resection was developed in recent years in order to reduce the electric current flowing through the patient to a minimum. In bipolar electrosurgery, a neutral electrode is positioned close to the conducting electrode.

The irrigation fluid, and no longer the tissue, is the medium used to return the current to the neutral electrode. As the irrigation fluid (in the case of bipolar resection sodium chloride NaCl 0.9%) shows far less resistance than tissue, a direct current does not flow from the active to the neutral electrode during energy transfer. A thermal effect does not occur.

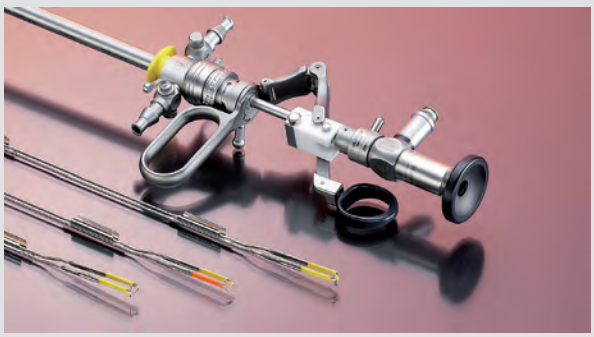
The main prerequisite for bipolar resection is, therefore, the formation of plasma in the irrigation fluid. This “insulation layer” around the cutting loop increases the electrical resistance between the active electrode and irrigation fluid as opposed to tissue. A thermal effect can then occur in the area of tissue in contact with the loop before the current flows through the neutral electrode via the irrigation fluid and is returned to the HF generator.

The system can only be considered bipolar if the current flow is not returned through the tissue or via instruments in contact with the tissue (i.e. the sheath). All contact areas between the current and tissue present a risk of strictures and burns, which are more severe the smaller the contact surface is.

A proper current flow path is only possible via the outer sheath of insulated instruments (i.e. the electrode) in systems available from the company KARL STORZ.



2-081



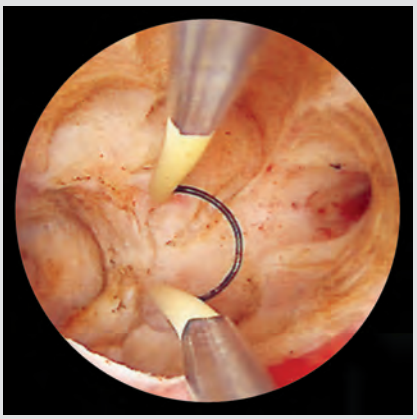


Fig. 1:
Unipolar resection

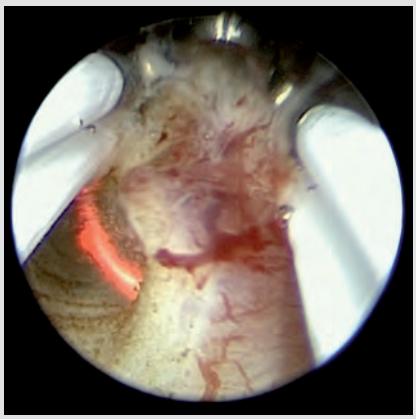


Fig. 2:
Bipolar resection

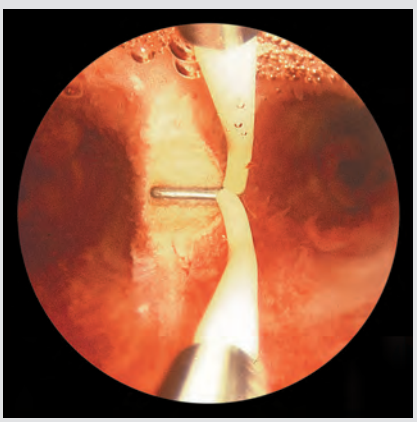


Fig. 3:
Unipolar resection

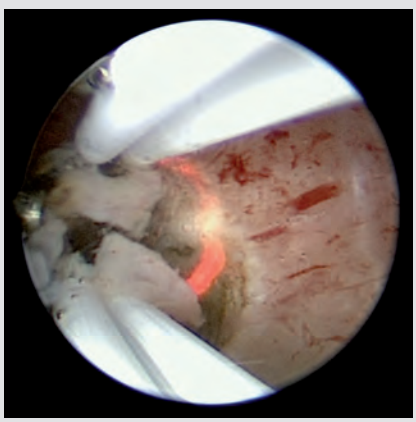


Fig. 4:
Bipolar resection

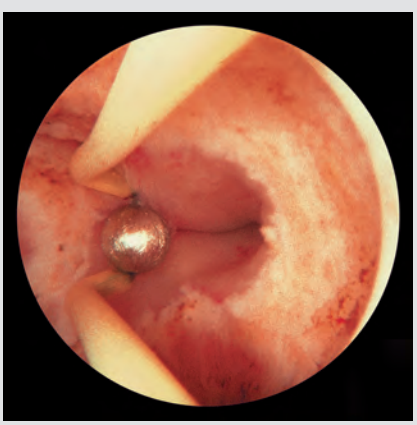


Fig. 5:
Unipolar resection

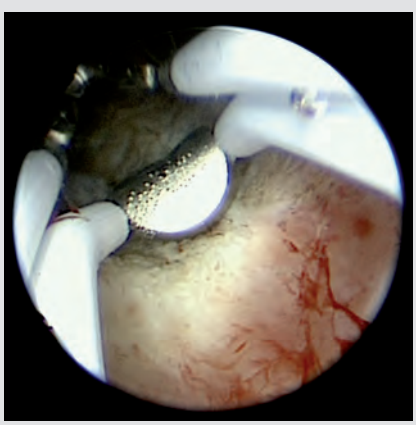


Fig. 6:
Bipolar resection

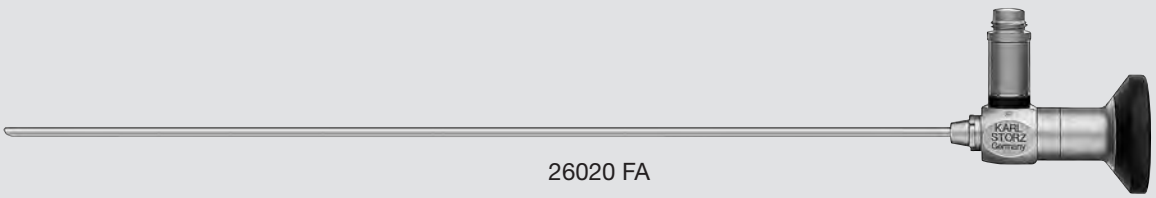
2-08i

HOPKINS® Telescope

Diameter 2.9 mm

KARL STORZ — ENDOSKOPE

For use with Hysteroscopes and Resectoscopes



26020 FA

26020 FA **HOPKINS® Telescope 12°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: black

4-15

Hysteroscopes see pages 21-23
Resectoscopes see pages 40-47
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

Working Elements NEW

for Resectoscopes, 15 Fr.

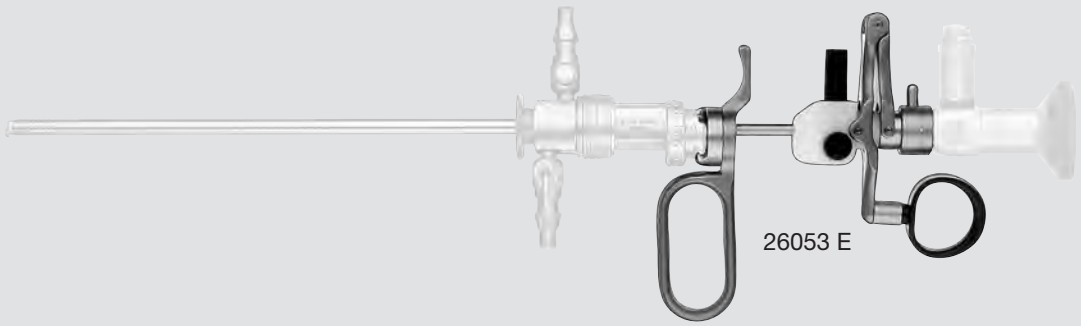
For use with Resectoscope Sheath 26053 SL and 2.9 mm HOPKINS® Telescope 12° 26020 FA

unipolar

Special Features:

- **One-stem electrodes with stabilizer**
- **High-frequency cord quick connection**

Cutting by means of a spring
Movable thumb support
In resting position the electrode tip is inside the sheath.



26053 E

26053 EH **Working Element Set,** unipolar
including:
Working Element
2x **Cutting Loop**
2x **Unipolar High Frequency Cord**
Protection Tube

26053 G

Working End	15 Fr., color code: green	Description
	26053 G	**Cutting Loop,** unipolar

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

4-15

Working Elements NEW

for Resectoscopes, 15 Fr.

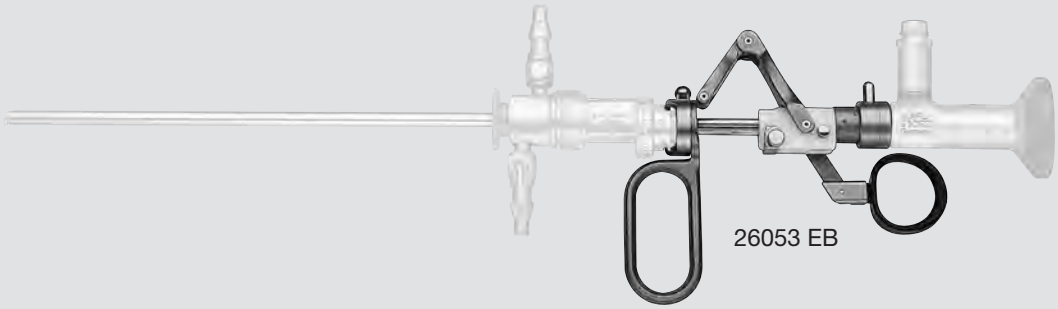
For use with Resectoscope Sheath 26053 SL and 2.9 mm HOPKINS® Telescope 12° 26020 FA

bipolar NaCl

Special Features:

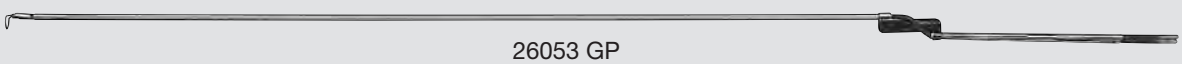
- **Resection in saline solution**
- **High level of safety due to direct current return via the electrode**
- **Deep coagulation effect**

Cutting by means of a spring
Movable thumb support
In resting position the electrode tip is inside the sheath.



26053 EB

26053 EBH **Working Element Set,** bipolar
including:
Working Element
2x **Cutting Loop**
Bipolar High Frequency Cord
Protection Tube



26053 GP

Working End	15 Fr., color code: green	Description
	26053 GP	**Cutting Loop,** bipolar

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

4-15

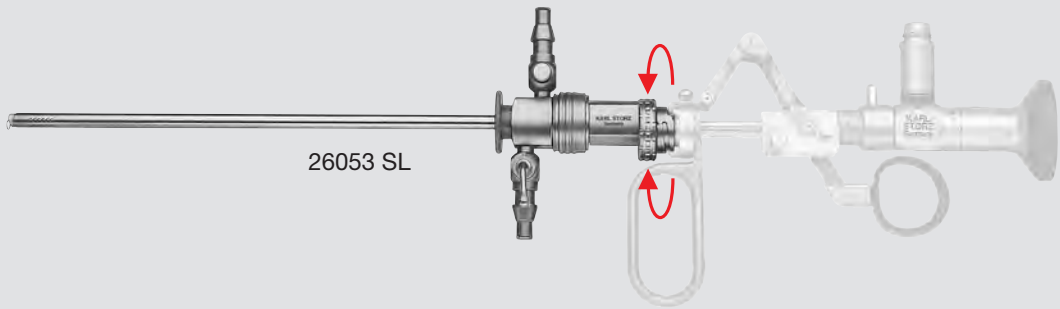
Resectoscope Sheaths NEW

for continuous irrigation and suction

For use with Working Elements 26053 E, 26053 EB and 2.9 mm HOPKINS® Telescope 12° 26020 FA for Resectoscopes, 15 Fr.

Special Features:

- **Rotating inner sheath**
- **Ceramic insert at distal beak to prevent burn damage**
- **Exchangeable inner sheath**



26053 SL	**Resectoscope Sheath,** including connecting tube for in- and outflow, for continuous irrigation and suction, 15 Fr., oblique beak, **rotatable** Inner Sheath 26053 XA with ceramic insulation, **quick release lock,** color code: green
26053 OC	**Standard Obturator,** for use with Resectoscope Sheath 26053 SL, color code: green

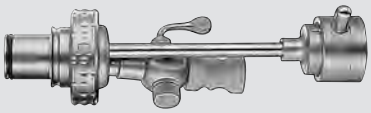
4-15

The listed resectoscope sheath above can be used with unipolar and bipolar working elements.

Telescope Bridge and Semirigid Operating Instruments

KARL STORZ — ENDOSKOPE

For use with Resectoscope Sheath 26053 SL and 2.9 mm HOPKINS® Telescope 12° 26020 FA



26053 CD

NEW	26053 CD	**Telescope Bridge,** with channel for semirigid 5 Fr. operating instruments, for use with Resectoscope Sheath 26053 SL

	26159 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
	NEW 26159 DS	DI SPIEZIO SARDO **Grasping Forceps**, semirigid, double action jaws, 5 Fr., length 34 cm
	26159 H	HESSELING **Tenaculum Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
	NEW 26159 HS	HESSELING and DI SPIEZIO SARDO **Tenaculum Grasping Forceps with Spike**, semirigid, double action jaws, 5 Fr., length 34 cm
	26159 EHW	**Scissors,** semirigid, blunt, single action jaws, 5 Fr., length 34 cm
	26159 SHW	**Scissors,** semirigid, pointed, single action jaws, 5 Fr., length 34 cm
	26159 DHW	**Punch,** semirigid, through-cutting, single action jaws, 5 Fr., length 34 cm
	26159 BHW	**Biopsy Spoon Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
	26159 M	BETTOCCHI® **Myoma Fixation Instrument,** semirigid, 5 Fr., length 34 cm

4-15

Working Elements

for One-Stem Electrodes with Stabilizers, 22 Fr.

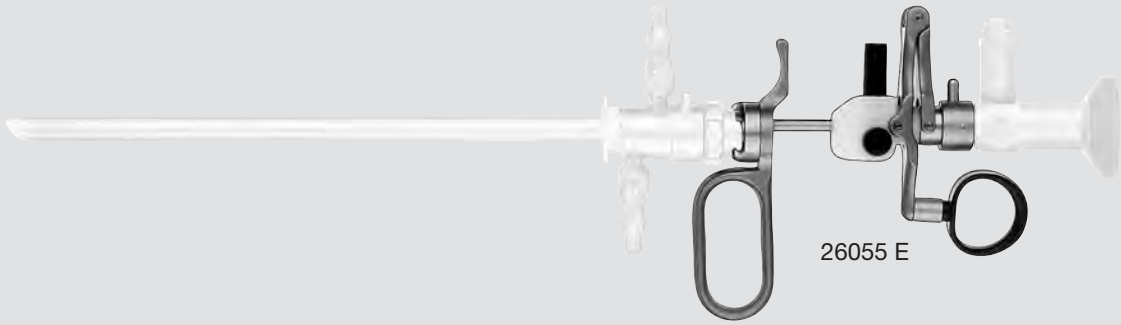
For use with Resectoscope Sheaths 26055 SL, 26055 SC, 26055 LD, 26055 BO and 2.9 mm HOPKINS® Telescope 12° 26020 FA

unipolar

Special Features:

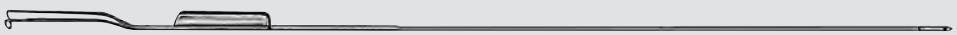
- **One-stem electrodes with stabilizer**
- **High-frequency cord quick connection**

Cutting by means of a spring
Movable thumb support
In resting position the electrode tip is inside the sheath.



26055 E

26055 ES **Working Element Set,** unipolar
including:
Working Element
2x **Cutting Loop,** angled
Cutting Electrode, pointed
Coagulation Electrode, ball end
2x **Unipolar High Frequency Cord**
Protection Tube



26055 G

Working End	22 Fr., Sheath Diameter 7 mm color code: white	Description
	26055 G	**Cutting Loop,** angled
	26055 H	**Cutting Loop,** angled 25°
	26055 N	**Coagulation Electrode,** ball end, diameter 3 mm
	26055 L	**Cutting Electrode,** pointed

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

4-15

Working Elements

for Two-Stem Electrodes with Stabilizers, 22 Fr.

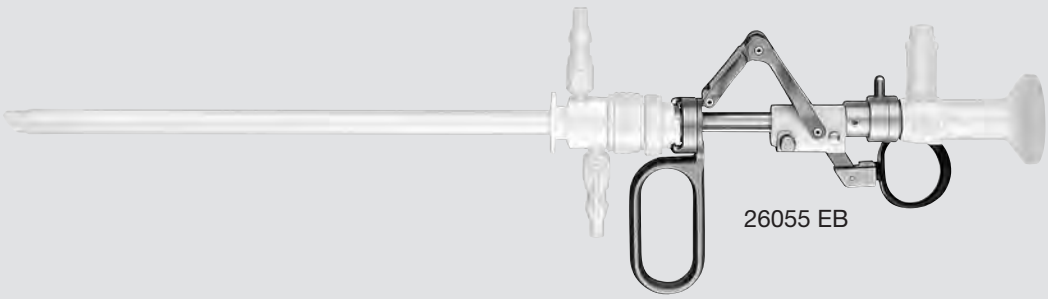
For use with Resectoscope Sheaths 26055 SL, 26055 SC, 26055 LD, 26055 BO and 2.9 mm HOPKINS® Telescope 12° 26020 FA

bipolar
NaCl

Special Features:

- **Resection in saline solution**
- **High level of safety due to direct current return via the electrode**
- **Deep coagulation effect**

Cutting by means of a spring
Movable thumb support
In resting position the electrode tip is inside the sheath.



26055 EB

26055 EBH **Working Element Set,** bipolar
including:
Working Element
2x **Cutting Loop**
Cutting Electrode, pointed
Coagulation Electrode, ball end
Bipolar High Frequency Cord
Protection Tube

26055 GP1

Working End	22 Fr., Sheath Diameter 7 mm color code: white	Description
	26055 GP1	**Cutting Loop,** bipolar
	26055 NB1	**Coagulation Electrode,** bipolar, ball end
	26055 BL1	**Cutting Electrode,** bipolar, pointed

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

4-15

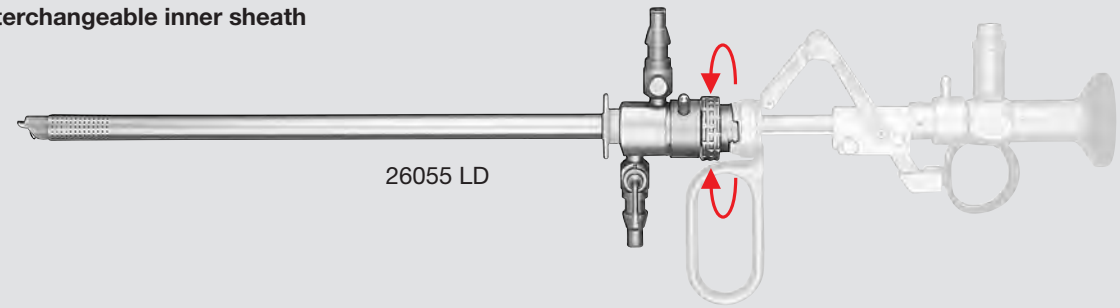
Resectoscope Sheaths

for continuous irrigation and suction

For use with Working Elements 26055 E, 26055 EB and 2.9 mm HOPKINS® Telescope 12° 26020 FA for Resectoscopes, 22 Fr.

Special Features:

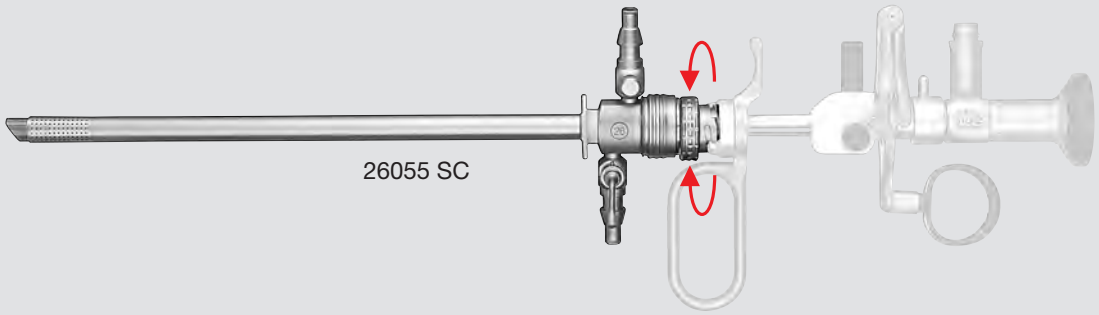
- **Inner sheath optionally fixed or rotating**
- **Ceramic insert at distal beak to prevent burn damage**
- **Interchangeable inner sheath**



26055 SL	**Resectoscope Sheath,** including connecting tube for in- and outflow for continuous irrigation and suction, 22 Fr., oblique beak, **fixed** Inner Sheath 26055 XB with ceramic insulation, color code: white
26055 LD	**Resectoscope Sheath,** including connecting tube for in- and outflow for continuous irrigation and suction, 22 Fr., oblique beak, **rotatable** Inner Sheath 26055 XE with ceramic insulation, color code: white

Special Features:

- **Easier to handle thanks to stable click mechanism**
- **Sheath can be connected in any position**
- **Ceramic insert at distal beak to prevent thermal damage**
- **Rotating inner sheath**



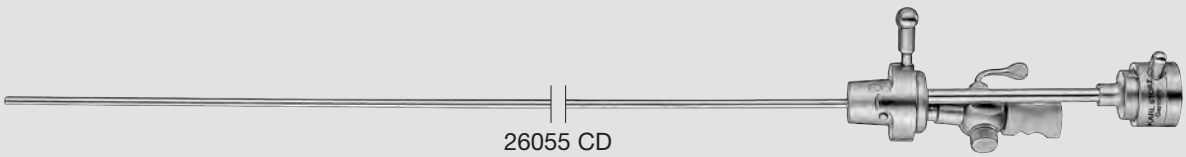
26055 SC	**Resectoscope Sheath,** including connecting tube for in- and outflow, 22 Fr., oblique beak, **rotatable** Inner Sheath 26055 CB with ceramic insulation, **quick release lock,** color code: white
26055 CO	**Standard Obturator,** for use with Resectoscope Sheaths 26055 LD, 26055 SL and 26055 SC, color code: white

The listed resectoscope sheaths above can be used with unipolar and bipolar working elements.

4-15

Telescope Bridge and Semirigid Operating Instruments

For use with Resectoscope Sheaths 26055 LD, 26055 SL, 26055 SC and 2.9 mm HOPKINS® Telescope 12° 26020 FA



26055 CD

	26055 CD	**Telescope Bridge,** with channel for semirigid 5 Fr. operating instruments, for use with Resectoscope Sheaths 26055 LD, 26055 SL and 26055 SC

	26159 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm

NEW	26159 DS	DI SPIEZIO SARDO **Grasping Forceps**, semirigid, double action jaws, 5 Fr., length 34 cm

	26159 H	HESSELING **Tenaculum Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm

NEW	26159 HS	HESSELING and DI SPIEZIO SARDO **Tenaculum Grasping Forceps with Spike**, semirigid, double action jaws, 5 Fr., length 34 cm

	26159 EHW	**Scissors,** semirigid, blunt, single action jaws, 5 Fr., length 34 cm

	26159 SHW	**Scissors,** semirigid, pointed, single action jaws, 5 Fr., length 34 cm

	26159 DHW	**Punch,** semirigid, through-cutting, single action jaws, 5 Fr., length 34 cm

	26159 BHW	**Biopsy Spoon Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm

	26159 M	BETTOCCHI® **Myoma Fixation Instrument,** semirigid, 5 Fr., length 34 cm

4-15

HOPKINS® Telescope

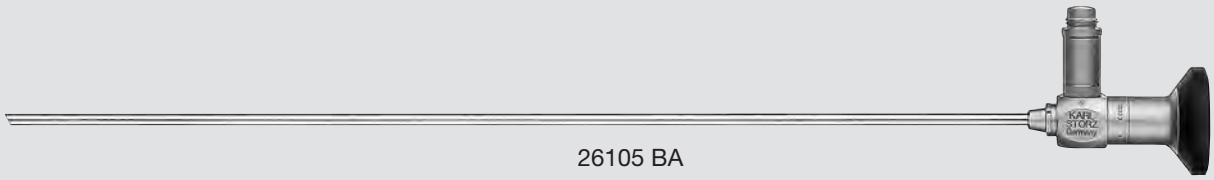
Diameter 4 mm

KARL STORZ — ENDOSKOPE

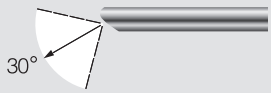
An optical system based on the HOPKINS® rod lens telescope is absolutely essential for intratuterine HF surgery due to the excellent image quality provided. In general, 12° as well as 30° telescopes can be used for this purpose. The 12° telescope is advantageous for surgical interventions using a resectoscope in the median uterine cavity (e.g., septum dissection) and is easy to handle. In the case of pathologies in the lateral uterine cavity, e.g., polyps and myomas, the 30° telescope provides an optimal visualization of the operative field. Furthermore, the 30° telescope can be used in diagnostic hysteroscopy to allow easier visualization of the tubal ostia by rotating the hysteroscope.

Prof. Dr. med. T. RÖMER,
Frauenheilkunde und Geburtshilfe Köln
Cologne, Germany

For use with Hysteroscopes



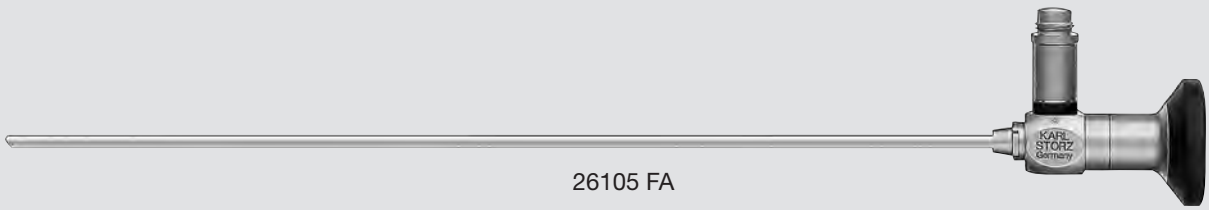
26105 BA



26105 BA **HOPKINS® Forward-Oblique Telescope 30°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: red

Hysteroscopes see page 25

For use with Hysteroscopes and Resectoscopes



26105 FA

26105 FA **HOPKINS® Telescope 12°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: black

Hysteroscopes see pages 21-23
Resectoscopes see pages 49-52

4-15

Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

Working Elements

for One-Stem Electrodes with Stabilizers, 26 Fr.

KARL STORZ — ENDOSKOPE

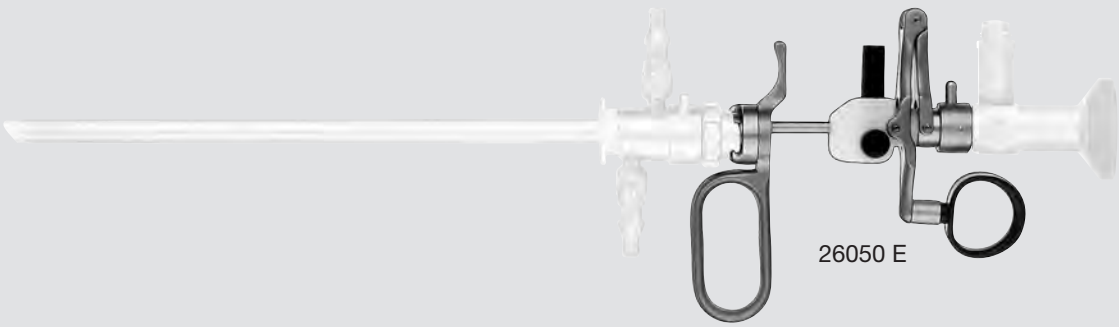
For use with Resectoscope Sheaths 26040 SL, 26050 SC, 26050 SL and 4 mm HOPKINS® Telescope 12° 26105 FA

unipolar

Special Features:

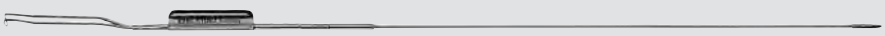
- **One-stem electrodes with stabilizer**
- **High-frequency cord quick connection**

Cutting by means of a spring
Movable thumb support
In resting position, the electrode tip is inside the sheath.



26050 E

26050 EG **Working Element Set,** unipolar
including:
Working Element
2x **Cutting Loop,** angled
Coagulation Electrode, ball end, diameter 5 mm
Cutting Electrode, pointed
2x **Unipolar High Frequency Cord**
Protection Tube



26050 G

Working End	26 Fr., Sheath Diameter 8 mm color code: yellow	Description
	26050 G	**Cutting Loop,** angled
	26050 J	**Cutting Loop,** straight
	26050 NK	**Coagulation Electrode,** ball end, diameter 5 mm
	26050 L	**Cutting Electrode,** pointed

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

4-15

Working Elements

for Two-Stem Electrodes with Stabilizers, 26 Fr.

KARL STORZ — ENDOSKOPE

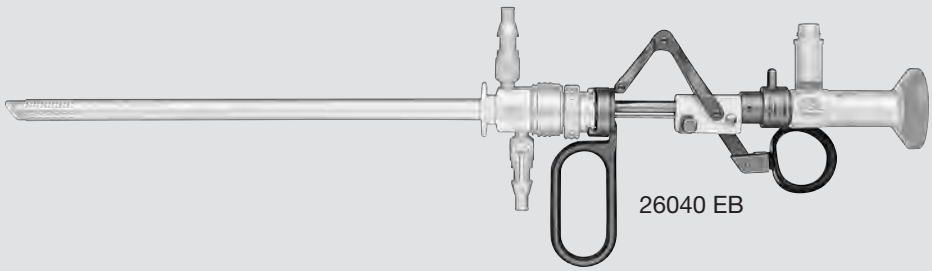
For use with Resectoscope Sheaths 26040 SL, 26050 SC and 26050 SL and 4 mm HOPKINS® Telescope 12° 26105 FA

bipolar
NaCl

Special Features:

- **Resection in saline solution**
- **High level of safety due to direct current return via the electrode**
- **Very deep coagulation effect**

Cutting by means of a spring
Movable thumb support
In rest position the electrode tip is inside the sheath.



26040 EB

26040 EBH **Working Element Set,** bipolar
including:
Working Element, bipolar
2x **Cutting Loop,** bipolar
Cutting Electrode, bipolar, pointed
Coagulation Electrode HALF MOON®, bipolar, with ball end
Bipolar High Frequency Cord
Protection Tube

26040 GP1

Working End	26 Fr., Sheath Diameter 8 mm color code: yellow	Description
	26040 GP1	**Cutting Loop,** bipolar
	26040 GD1	**Cutting Loop,** bipolar, small
	26040 BL1	**Cutting Electrode,** bipolar, pointed
	26040 NB1	**Coagulation Electrode HALF MOON®,** bipolar, ball end
	26040 JB1	**Cutting Loop,** bipolar, longitudinal, color code: yellow-orange

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

4-15

Resectoscope Sheaths

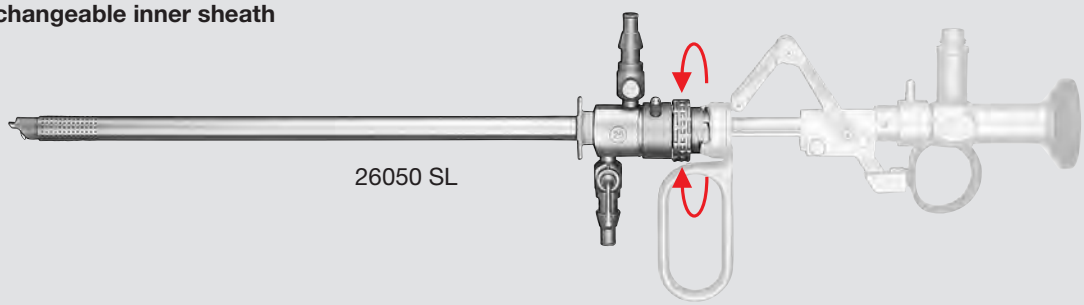
for continuous irrigation and suction

KARL STORZ — ENDOSKOPE

For use with Working Elements 26050 E, 26040 EB and 4 mm HOPKINS® Telescope 12° 26105 FA for Resectoscopes, 26 Fr.

Special Features:

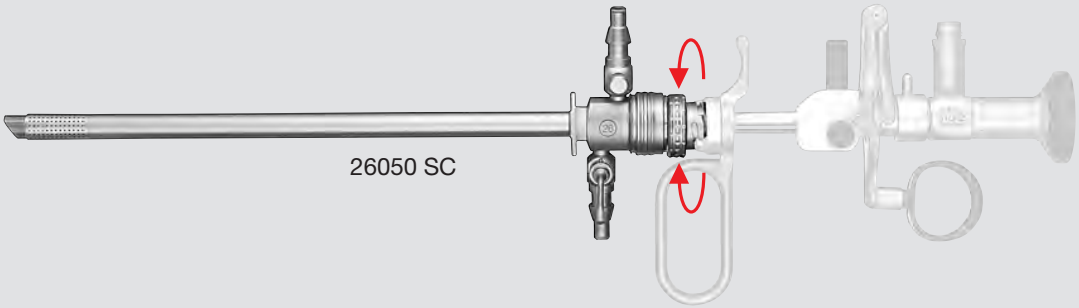
- **Inner sheath optionally fixed or rotating**
- **Ceramic insert at distal beak to prevent burn damage**
- **Interchangeable inner sheath**



26040 SL	**Resectoscope Sheath,** including connecting tube for in- and outflow, for continuous irrigation and suction, 26 Fr., oblique beak, **fixed** Inner Sheath 26040 XA with ceramic insulation, color code: yellow
26050 SL	**Resectoscope Sheath,** including connecting tube for in- and outflow, for continuous irrigation and suction, 26 Fr., oblique beak, **rotatable** Inner Sheath 26050 XA, with ceramic insulation, color code: yellow

Special Features:

- **Easier to handle thanks to stable click mechanism**
- **Sheath can be connected in any position**
- **Ceramic insert at distal beak to prevent thermal damage**
- **Rotating inner sheath**



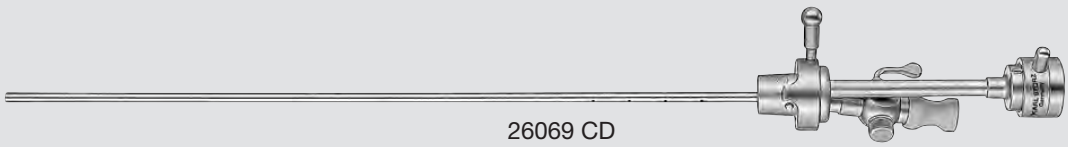
26050 SC	**Resectoscope Sheath,** including connecting tubes for in- and outflow, 26 Fr., oblique beak, **rotatable** Inner Sheath 26050 CA with ceramic insulation, **quick release lock,** color code: yellow
26040 OC	**Standard Obturator,** for use with Resectoscope Sheaths 26040 SL, 26050 SL and 26050 SC, color code: yellow

The listed resectoscope sheaths above can be used with unipolar and bipolar working elements.

4-15

Telescope Bridge and Semirigid Operating Instruments

For use with Resectoscope Sheaths 26040 SL, 26050 SC, 26050 SL, 4 mm HOPKINS® Telescopes 12° 26105 FA and 30° 26105 BA



26069 CD

	26069 CD	**Telescope Bridge,** with channel for semirigid 5 Fr. operating instruments, for use with Resectoscope Sheaths 26040 SL, 26050 SL and 26050 SC
	26159 UHW	**Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
 NEW	26159 DS	DI SPIEZIO SARDO **Grasping Forceps**, semirigid, double action jaws, 5 Fr., length 34 cm
	26159 H	HESSELING **Tenaculum Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
 NEW	26159 HS	HESSELING and DI SPIEZIO SARDO **Tenaculum Grasping Forceps with Spike**, semirigid, double action jaws, 5 Fr., length 34 cm
	26159 EHW	**Scissors,** semirigid, blunt, single action jaws, 5 Fr., length 34 cm
	26159 SHW	**Scissors,** semirigid, pointed, single action jaws, 5 Fr., length 34 cm
	26159 DHW	**Punch,** semirigid, through-cutting, single action jaws, 5 Fr., length 34 cm
	26159 BHW	**Biopsy Spoon Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm
	26159 M	BETTOCCHI® **Myoma Fixation Instrument,** semirigid, 5 Fr., length 34 cm

4-052

MAZZON **Basic Set**

for Intrauterine Unipolar HF Electrosurgery and (Cold) Myoma Eucleation

KARL STORZ — ENDOSKOPE

Clinical experience with operative hysteroscopy offers the possibility to combat and treat a growing number of pathologies. The success and safety of the surgical procedure depends on the quality and type of instruments used. We consider it important, therefore, to present our instruments of choice in everyday surgical practice.

Resectoscope

The use of a 0° telescope enhances the safety of surgical procedures performed with loop electrodes so that the loops always remain in the center of the field of vision. The loops do not appear in the margins or move out of the field of vision when extended as is the case when using forward-oblique telescopes. With the aid of two concentric sheaths, the resectoscope enables the inflow and outflow of liquid for dilation and continuous irrigation of the uterine cavity, which is essential in the presence of bleeding. In the rest position, the used working element ensures that the electric loop remains securely inside the resectoscope.

Recommended loops and specific applications:

26050 G Cutting Loop, angled
Resection inside or along the four walls of the uterine cavity (polypectomy, myomectomy, endometrial ablation)

26050 J Cutting Loop, straight
Frontal resection (metroplasty, synechia) or tangentially at the bottom of the uterus (polyps, myomas)

26050 M Cutting Loop, straight, 3 mm
Resection in the uterine horns, i.e. in areas inaccessible to other loops due their size (at the base of polyps or myomas in the uterine horns, removing the endometrium of the uterine horns during endometrial ablation)

26050 L Cutting Electrode, pointed
Suitable for resecting marginal synechia

26050 N Coagulation Electrode, ball end, 3 mm
When used with cutting energy suitable for removing the endometrium in the uterine horns (endometrial ablation)

26050 R Loop, straight, rectangular
26050 U Loop, knife-shaped
26050 T Loop, rake-shaped
These three mechanical loops are mainly used for the removal and enucleation of intramural components of G 1 and G 2 myomas.

Loops 26050 R and 26050 U are also suitable for synechiolysis, particularly in the case of severe adhesive structures.

The choice of loops depends on the procedure to be performed with the resectoscope.

Recommended loops for polypectomy:
26050 G, 26050 J, 26050 M

Recommended loops for synechiolysis:
26050 J, 26050 L, 26050 R, 26050 U

Recommended loops for metroplasty of the uterine septum:
26050 J

Recommended loops for myomectomy:
26050 G, 26050 J, 26050 M, 26050 R, 26050 U, 26050 T

Recommended loops for endometrial ablation:
26050 G, 26050 J, 26050 M, 26050 N

I. MAZZON, M.D.,
Head of Gynecology Department,
Casa di Cura Nuova Villa Claudia,
Rome, Italy

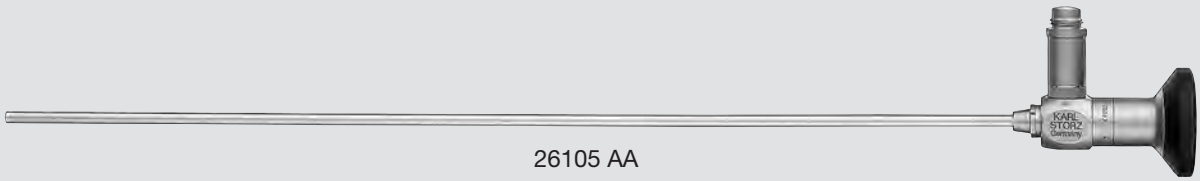
2-08

HOPKINS® Telescope

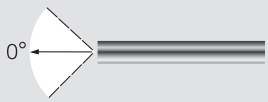
Diameter 4 mm

KARL STORZ — ENDOSKOPE

For use with Resectoscopes



26105 AA



	26105 AA	**HOPKINS® Straight Forward Telescope 0°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: green

4-15

Resectoscopes see page 55
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

MAZZON **Basic Set**

for Intrauterine Unipolar HF Electrosurgery and (Cold) Myoma Eucleation

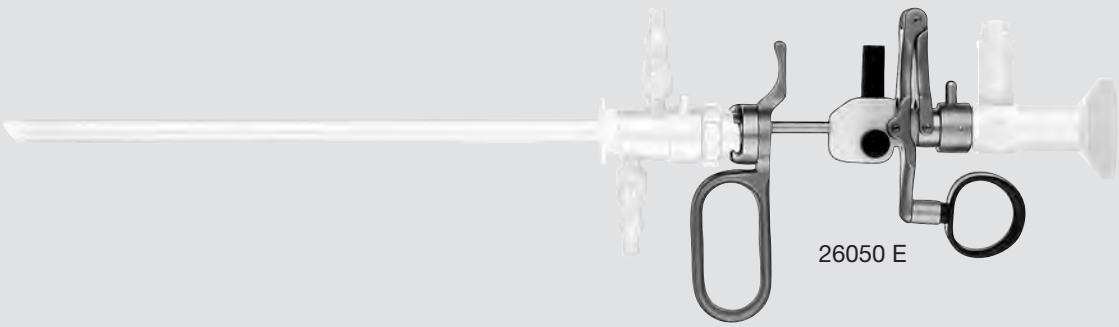
KARL STORZ — ENDOSKOPE

For use with Resectoscope Sheaths 26040 SL, 26050 SC, 26050 SL and 4 mm HOPKINS® Telescope 0° 26105 AA

Special Features:

- **One-stem electrodes**
- **High-frequency cord quick connection**

Cutting by means of a spring
Movable thumb support
In resting position, the electrode tip is inside the sheath.



26050 E

26050 E **Working Element**

MAZZON **Unipolar Cutting Loop**

unipolar

Special Features:

- **For endometrial ablation**
- **Smaller size permits better maneuverability in the uterine horns**

24 Fr.

26050 M

26050 M MAZZON **Cutting Loop,** unipolar, straight, round cut, 24 Fr., for endometrial resection near uterine horn, color code: yellow

4-15

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS

Non-Electrical Cold Loop Myoma Enucleation

KARL STORZ — ENDOSKOPE

For use with Resectoscope Sheaths 26040 SL, 26050 SC and 26050 SL

Submucous myomas represent one of the intrauterine pathologies in which hysteroscopic resection has proven especially beneficial and, due to its advantages, has superseded traditional surgery.

However, it is important to respect the indications, to assign the myomas indicated for operative hysteroscopy to this treatment, and to use correct and suitable hysteroscopic techniques.

Depending on the intracavitary and/or intramural development of the myomas, these neoformations may be divided into the following myoma types (classification according to the European Association for Hysteroscopy).

G 2 Myomas with primarily intramural development, intracavitary portion less than 50%.

G 1 Myomas with primarily intracavitary development, intramural portion less than 50%.

G 0 Myomas with intracavitary development only.

When treating the submucosal myoma, the relationship of this formation to the surrounding structures must be considered.

During the course of its volumetric growth, the myoma causes progressive displacement of the surrounding myometrium fibers, though without damaging or destroying them.

If the myoma develops towards the uterine cavity, it may penetrate through the myometrium fibers before it becomes submucosal.

Between the myoma and the surrounding myometrium, there is a pseudocapsule. There are two distinct spaces (cleavage planes), one between the myoma and the pseudocapsule, and another between the pseudocapsule and the surrounding myometrium. Vascular continuity consists exclusively of thin bridges of connective tissue, through each of which a small capillary vessel passes.

If the myoma shows only intracavitary development (G 0), the surgical intervention proceeds using the traditional technique of slicing (progressive removal).

With this technique, particular attention must be paid to removal of the attachment point, particularly in the case of exclusively intramural development. It was found that slicing in the attachment area leads to a destruction of myometrial bundles in the uterine wall, and that there are areas with thermal damage. Injury to the adjacent myometrium leads to formation of cicatricial fibroses in the area of the surgical intervention, which becomes more extensive the greater the damage caused by the thermal loop.

All of this may cause the occurrence of fibrous areas within the uterine wall, which are particularly disadvantageous if further pregnancies are desired.

For this reason I have been using my own technique (cold loop enucleation) for several years now in the treatment of intramural components of myoma:

After removing the intracavitary components of the myoma using the traditional technique, the mechanical properties of one of my own loops are used (strictly without application of electrical current). This electrode is introduced into the cleavage plane between the myoma and the surrounding myometrium, whereby the myoma is progressively detached from the uterine wall.

The myoma is progressively enucleated in this way, during which the intramural components are converted into solely intracavitary components.

The method always proceeds without the use of electrical current by following the cleavage plane and tearing the thin, vascular bridges of connective tissue. The possible presence of large vessels displaced by the myoma presents no danger. These vessels, easily injured using the traditional technique (slicing), are not harmed during cold loop enucleation if they are on the myometrial side of the cavity of the myoma.

Even if there were perforating (highly unlikely using this technique), damage would be minimal since it would be caused by a thin instrument and without the harmful effect of electrical current.

Once the enucleation has been completed, the intramural part of the myoma appears as an intracavitary neoplasm and may be removed as such in a safe manner using the traditional technique (slicing) from the uterine cavity.

After the intervention, the remaining cavity appears quite large. However, there is no thermal damage and no injury to the myometrial fibers, which therefore maintain their functionality and are able to repair the fovea itself by simple returning to their original position (since they are no longer displaced by the myoma). There is no fibrous conversion during this healing phase.

I. MAZZON, M.D.,
Head of Gynecology Department,
Casa di Cura Nuova Villa Claudia,
Rome, Italy

1-99₂

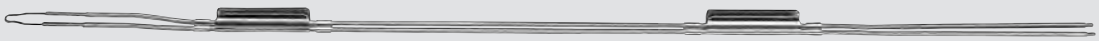
Non-Electrical Cold Loop Myoma Enucleation

For use with Unipolar Working Element 26050 E

26050 U

Working End	24 Fr.	Description
	26050 R	MAZZON **Loop,** straight, rectangular
	26050 T	MAZZON **Loop,** rake-shaped, with teeth
	26050 U	MAZZON **Loop,** knife-shaped

For use with Bipolar Working Element 26040 EB



26040 RB

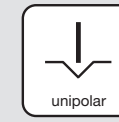
Working End	24 Fr.	Description
	26040 RB	MAZZON **Loop,** straight, rectangular
	26040 TB	MAZZON **Loop,** rake-shaped, with teeth

Resectoscope Sheaths see page 51

Unipolar and Bipolar High Frequency Cords

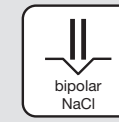
KARL STORZ — ENDOSKOPE

Unipolar High Frequency Cords



KARL STORZ Instrument	High Frequency Electrosurgical Unit		
		277	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for use with models KARL STORZ and Erbe type T, older models
		277 A	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for use with Martin HF units
		277 KE	**Unipolar High Frequency Cord,** with 5 mm plug, length 300 cm, for use with AUTOCON®II 400 SCB (111, 115, 122, 125), AUTOCON®II 200, AUTOCON®II 80, AUTOCON® (50, 200, 350) and Erbe type ICC
		277 KB	**Unipolar High Frequency Cord,** with 8 mm plug, length 300 cm, for use with models AUTOCON®II 400 SCB system (112, 116) and Valleylab

Bipolar High Frequency Cords



KARL STORZ Instrument	High Frequency Electrosurgical Unit		
		27176 LEB	**Bipolar High Frequency Cord,** for AUTOCON®II 400 SCB system (high-end), length 300 cm, for use with KARL STORZ bipolar resectoscopes

1-994

Please note:
All high frequency cords are delivered with a length of 300 cm. If a length of 500 cm is requested, please add the letter **L** to the part number, e. g., 277 KE**L**.

SHAVER SYSTEM FOR GYNECOLOGY

IBS® – BIGATTI **Intrauterine Shaver**

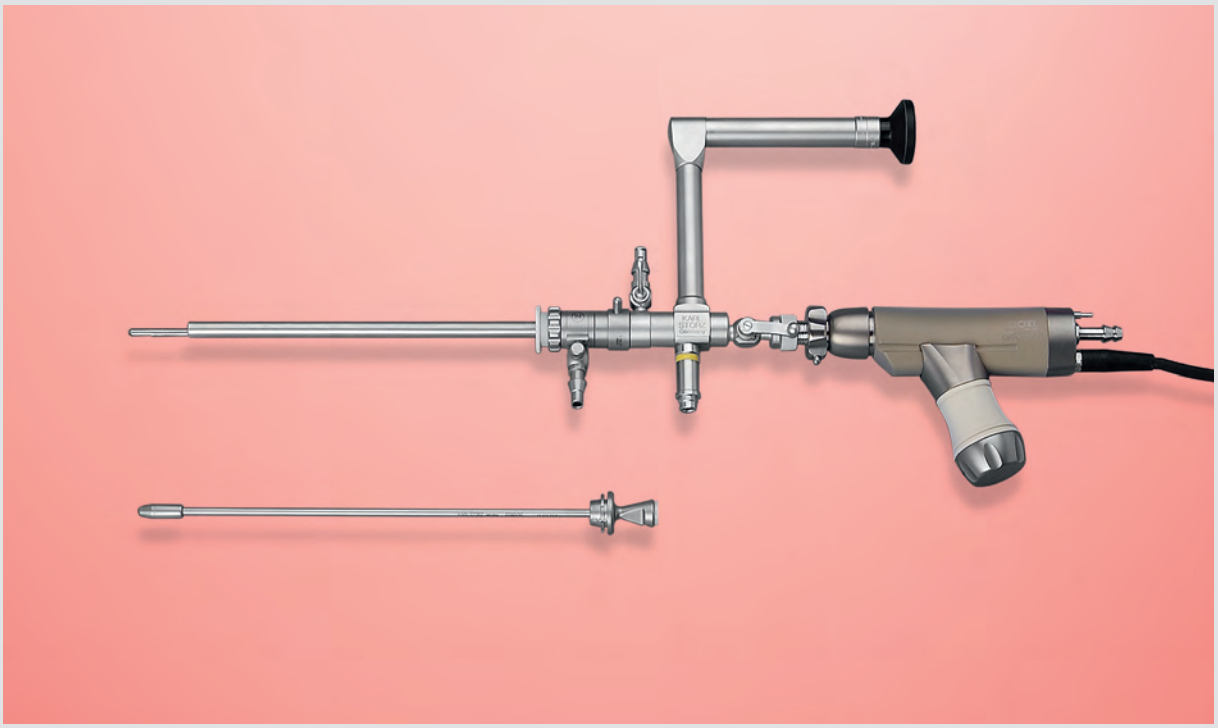
At present conventional resectoscopy can be considered the gold standard procedure for major hysteroscopic operations.

Despite well-recognized advantages of resectoscopy, several problems such as fluid overload, lack of visualization, uterine perforation due to unipolar or bipolar current and a long learning curve still remain unsolved.

In cooperation with KARL STORZ we developed a new shaver system that, introduced through a straight working channel of a telescope with parallel eyepiece, enables all kinds of operative procedures such as polypectomy, Type 0, 1, 2 myomectomy and endometrial ablation to be performed.

This preliminary study intends to evaluate the feasibility of this new technique which offers considerable advantages such as reduced dilation of the cervix, better visualization during the procedure as tissue chips are removed at the same time as resection, no coagulation or cutting current required, the use of normal saline instead of sorbitol and mannitol and a much faster learning curve.

G. BIGATTI,
U.O. di Ostetricia e Ginecologia,
Ospedale Classificato San Giuseppe,
20123 Milan, Italy

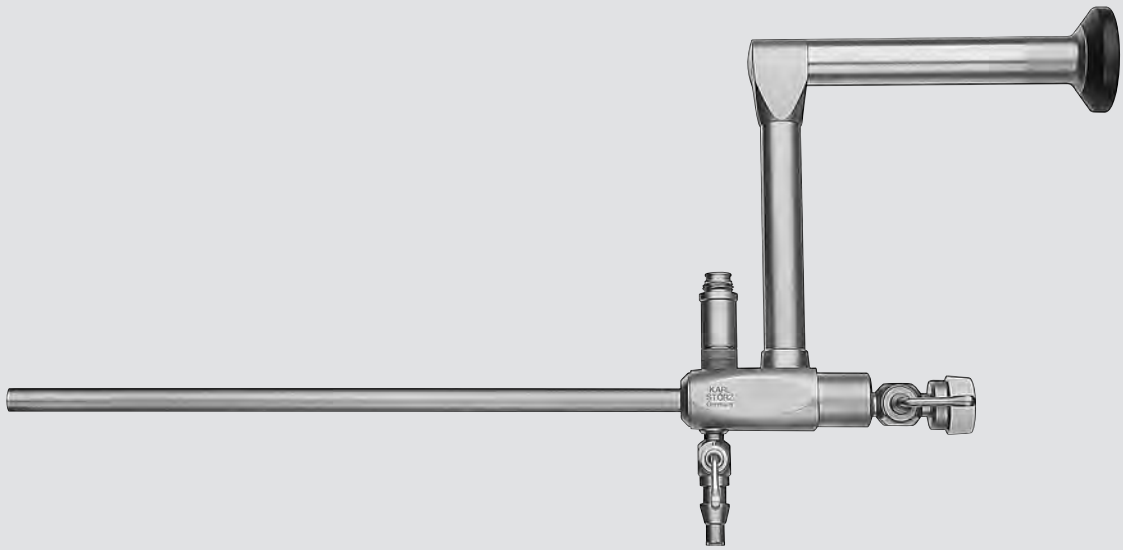


IBS® – BIGATTI Intrauterine Shaver NEW

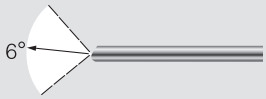
19 Fr.

KARL STORZ — ENDOSKOPE

Telescope



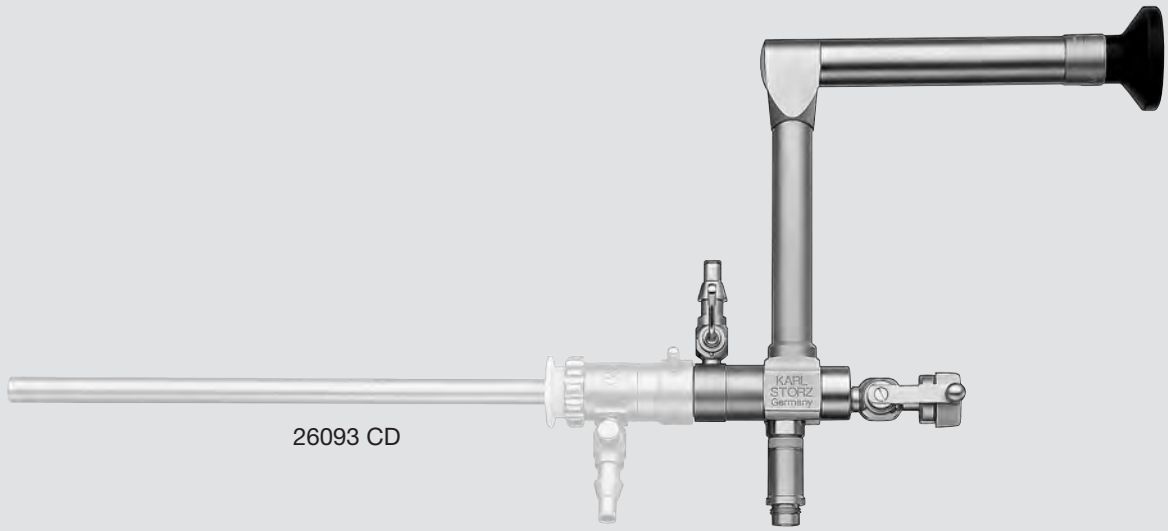
26208 AMA



26208 AMA **HOPKINS® Wide Angle Straight Forward Telescope 6°,** with parallel eyepiece, length 20 cm, 19 Fr., **autoclavable,** fiber optic light transmission incorporated with working channel, with LUER-Lock connection for inflow, color code: green-blue

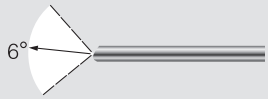
4-15

Telescope and Telescope Sheath



26093 CD

26092 AMA



26092 AMA **HOPKINS® Wide Angle Straight Forward Telescope 6°,**
with parallel eyepiece, length 20 cm, **autoclavable,**
fiber optic light transmission incorporated with working channel, with LUER-Lock connector for inflow,
color code: yellow

26093 CD 26093 OC

26093 CD **Operating Sheath, 24 Fr., rotating,**
for continuous irrigation and passive outflow,
with LUER-Lock stopcock,
color code: white

26093 OC **Hollow Obturator,**
color code: white

7-11₁

IBS® – BIGATTI **Intrauterine Shaver**

24 Fr.

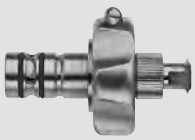
KARL STORZ — ENDOSKOPE

Handpiece 26 7020 50

- **Ergonomically designed handpiece, fits comfortably in the hand**
- **Powerful motor, also suitable for harder materials**
- **Absolutely silent running, no vibration**
- **Oscillation mode for shaver attachments, max. 5000 rpm**
- **360° rotating straight working inserts**
- **Wide range of shaver blades**
- **LOCK for fixation of shaver blades**
- **Central, straight suction channel**
- **Easy hygienic processing, suitable for use in washer and autoclavable at 134 °C**
- **Removable handle, ergonomically adjustable, flexible positioning**

26 7020 50

26 7020 50 **DRILLCUT-X® II Shaver Handpiece GYN,** for use with UNIDRIVE® S III SCB



40 7120 90 **Handle,** adjustable, for use with DRILLCUT-X® II Shaver Handpiece GYN **26** 7020 50

41250 RA **Cleaning Adaptor,** LUER-Lock, for cleaning DRILLCUT-X® II morcellator handpieces

For use with DRILLCUT-X® II Shaver Handpiece GYN

26208 SA

26208 SA **Shaver Blade GYN,** straight, sterilizable, concave cutting edge, double serrated, oval cutting window, diameter 4 mm, length 32 cm, for use with DRILLCUT-X® II Handpiece **26** 7020 50, color code: blue-green

26208 SB **Shaver Blade GYN,** straight, sterilizable, double serrated cutting edge, rectangular cutting window, diameter 4 mm, length 32 cm, for use with DRILLCUT-X® II Handpiece **26** 7020 50, color code: blue-yellow

7-11

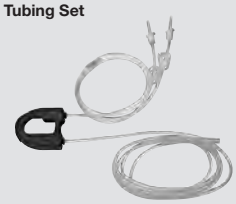
IBS® – BIGATTI Intrauterine Shaver

KARL STORZ — ENDOSKOPE

One-Pedal Footswitch

20 0162 30

HYST Tubing Set



031517-10*

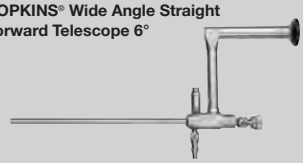
UNIT SIDE

PATIENT SIDE

Silicone Tubing Set,
for **suction**

20 3303 43

HOPKINS® Wide Angle Straight Forward Telescope 6°

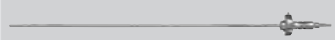


26208 AMA, 26092 AMA

DRILLCUT-X® II Shaver Handpiece GYN

26 7020 50

Shaver Blade GYN



26208 SA

7-11₁

* mtp

IBS® – BIGATTI **Intrauterine Shaver**

Tubing Set, for irrigation

031717-10*

UNIT SIDE

PATIENT SIDE

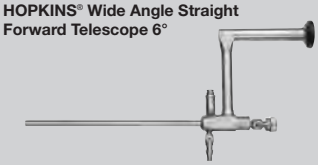
DRILLCUT-X® II Shaver Handpiece GYN

26 7020 50

Tubing Set, for suction

031217-10*

HOPKINS® Wide Angle Straight Forward Telescope 6°



26208 AMA, 26092 AMA

Shaver Blade GYN

26208 SA

* mtp

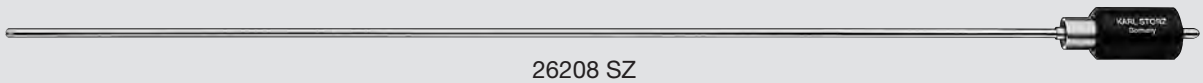
4-15

IBS® – BIGATTI Intrauterine Shaver

24 Fr.

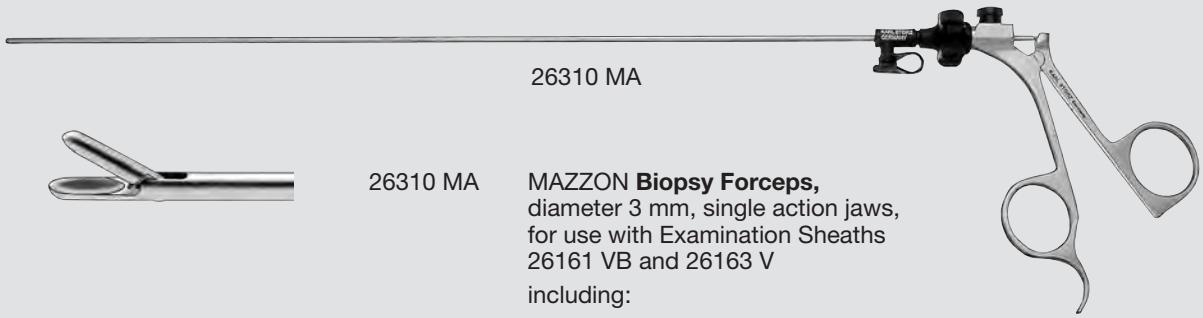
For use with HOPKINS® Wide Angle Telescope 26092 AMA

Further instruments



26208 SZ

NEW 26208 SZ **Coagulation Electrode,** bipolar, for use with Intrauterine BIGATTI Shaver (IBS®)



26310 MA

26310 MA MAZZON **Biopsy Forceps,** diameter 3 mm, single action jaws, for use with Examination Sheaths 26161 VB and 26163 V

including:

CLICK*line*® **Metal Handle,** without ratchet

Outer Sheath, with working insert

26310 MG MAZZON **Grasping Forceps,** with alligator jaws, diameter 3 mm, double action jaws, for use with Examination Sheaths 26161 VB and 26163 V

including:

CLICK*line*® **Metal Handle,** with hemostat style ratchet

Outer Sheath, with working insert

4-15

High Frequency Electrosurgical Units see chapter 11, UNITS
Components/Spare Parts see chapter 12

TRANSVAGINAL ENDOSCOPES
FERTILOSCOPES

Transvaginal Endoscopy TVE

KARL STORZ — ENDOSKOPE

Transvaginal Endoscopy (TVE) is a new technique for the outpatient or clinical endoscopic examination of the entire female reproductive tract.

By using specially developed, high-quality optical instruments, saline as a distension medium, and a distension trocar system, it becomes possible to endoscopically visualize the vagina, cervix, and uterus. Transvaginal access allows visualization of both tube and ovary. The status of the fallopian tubes is evaluated with the methylene blue test, as well as by fimbrioscopy or salpingoscopy. The entire procedure is performed on an outpatient basis and thus has a much better diag-nostic value along with better patient tolerance than a hysterosalpingography (HSG).

Indications

Transvaginal Endoscopy is indicated mainly for patients with primary or secondary sterility without apparent pathology during routine vaginal exam and transvaginal ultrasound examination. This examination is designed for the examination of the female genital tract on an outpatient basis and replaces HSG for the evaluation of early stage infertility.

Other indications for this examination method are pain mapping, post-operative controls, or use after drug therapy, physiology of tubes and ovaries, as well as presymptomatic diagnosis of tubal pregnancy.

Contraindications for this procedure are intact hymen, vaginal stenosis, vaginal infection, hidden Douglas pouch, fixed retroverted uterus, extreme obesity, hemoperitoneum, and a prolapsed tumor in the Douglas pouch. Unclear adnexal findings during gynecological examination or sonography preclude transvaginal endoscopy as a first-line outpatient approach.

Technique

The entire examination is performed on an outpatient basis or at the doctor's office and lasts about 15 to 30 minutes.

The patient is positioned in dorsal lithotomy position. If desired, the partner may be present and may observe the entire examination on the video screen. A routine vaginal examination and transvaginal ultrasound exam are performed to assess uterus size and position and exclude major pathological changes in the Douglas pouch.

Following disinfection of the vagina with diluted chlorhexidine solution, first the vaginal-cervical hysteroscopy is performed.

The hysteroscope is inserted into the vagina without speculum, and an infusion of prewarmed Ringer's lactate solution at a preset pressure between 80 and 120 mmHg is started. First the cervix is identified. After thorough inspection of the cervix, the hysteroscope is inserted into the cervical canal. The distension fluid dilates the cervical canal and the hysteroscope can be inserted painlessly and atraumatically. The cavum is inspected by repeatedly rotating the hysteroscope by 30° but not moving it along the longitudinal axis, which usually causes more pain.

The hysteroscope is removed, and a Collins speculum is inserted. Then a local anesthetic is applied to the center of the posterior vaginal vault and posterior cervical lobe, which is fixed and pushed forward.

A custom-designed trocar with guidance needle was developed especially for transvaginal endoscopy. This permits a safe insertion of the trocar into the Douglas pouch. The trocar system is loaded by pulling the needle backwards with the elastic spring.

In patients with normal anatomy, the elastic spring mechanism is fixed in position 10 or 15. The number marked on the scale shows the penetration depth of the needle. The activated and assembled system is placed into the posterior vaginal vault, exactly on the center line, approximately 10 – 15 mm above the transition between vaginal wall and cervix. The instrument is pushed towards the Douglas pouch.

The elastic spring mechanism can be activated by simply pressing the actuation button, ensuring a quick and painless penetration of the needle through the vaginal skin, fatty tissue, and peritoneum into the Douglas pouch.

The needle hereby facilitates the introduction of the dilator and trocar. The dilator is then removed and replaced with the 2.9 mm hysteroscopy telescope and irrigation sheath. Only after the correct position of the trocar in the abdomen has been visually verified, the slow and continuous infusion of a prewarmed Ringer's lactate solution is started.

6-021

The clamp on the posterior cervix lip is used only to lift the cervix and exert a slight counter-pressure to ensure correct visualization when the system is positioned. In this way a firm contact is achieved between the vaginal skin and the dilatation system when the trocar is inserted.

Do not pull the genital organs towards yourself, since this may result in a lesion of the uterine serosa or intestine when the needle is introduced.

In contrast to laparoscopy, there is no 360° view at the beginning of the examination, and the diagnostic procedure, therefore, must be strictly standardized.

The examination is started by localizing the posterior uterine wall. Then the tubo-ovarial structures are localized by rotating and lateralizing the telescope. Once the ovary has been identified, the fossa ovarica with the ligamentum ovarium proprium must be identified in order to begin the inspection of the ovarian surface. Next to the ovarium ligamentum, the isthmoampullary segment of the tube is located. The tube can then be gradually inspected. The Douglas pouch and paracervical ligaments are thoroughly inspected. Then the other side is examined in the same manner.

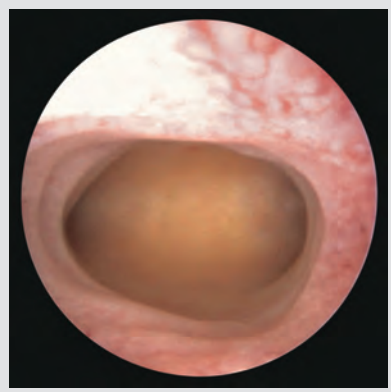
The patency of the tubes is checked by instilling diluted methylene blue. With some experience it is possible to perform a transvaginal salpingoscopy without using any other instruments.

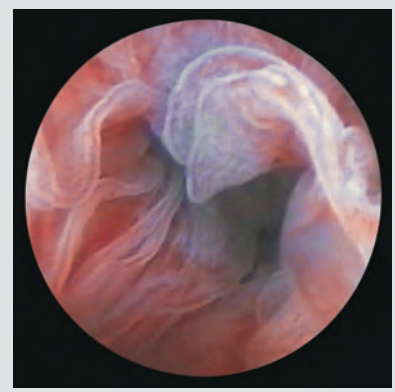
When using a high-resolution digital camera and strong light source, the examination can be observed well on a video screen. For documentation, the KARL STORZ AIDA® system is used.

A diagnostic procedure usually requires between 200 and 400 ml of fluid, whereby as much fluid as possible is removed at the end of the examination through the trocar. The puncture site in the posterior vaginal vault is not sutured, except if active bleeding occurs. The patients are instructed that a slight vaginal discharge or bleeding may occur, and that they should not use any tampons and should also abstain from sexual intercourse for several days. After the procedure, the patient is able to leave the clinic or office immediately.

When evaluating this method, its precise diagnostic value, as well as a cost/benefit analysis, it is obvious that this technique should replace HSG in infertile patients as a first line examination technique. It also allows a more careful and earlier selection of patients requiring a surgical procedure.

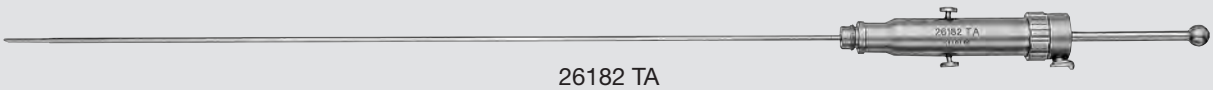
R. CAMPO, M.D., Prof. S. GORDTS, M.D.,
Leuven Institute for Fertility and Embryology (L.I.F.E.),
Leuven, Belgium





6-022

26182 GORDTS AND CAMPO **Transvaginal Endoscopy Set**
including:



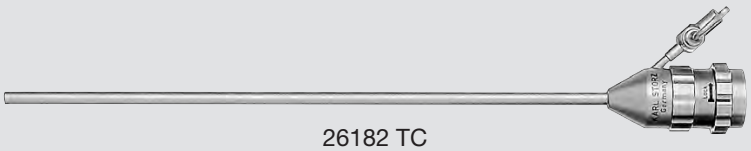
26182 TA

26182 TA **Puncture Needle,** with automatic spring mechanism, diameter 1.5 mm, length 30 cm

26182 TAA **Spare Needle,** for use with Puncture Needle 26182 TA, package of 6

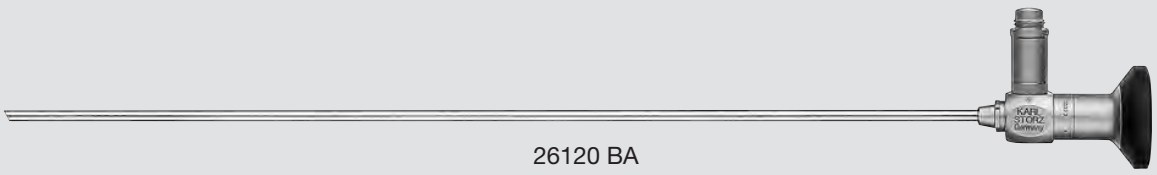
26182 TB

26182 TB **Dilation Sheath,** diameter 3.8 mm, length 30 cm, for use with Puncture Needle 26182 TA



26182 TC

26182 TC **Trocar Sheath,** with valve, with 1 stopcock, diameter 4.4 mm, length 20 cm, for use with Diagnostic Sheath 26182 D

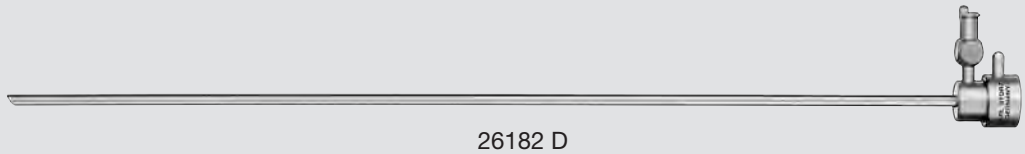


26120 BA

26120 BA **HOPKINS® Forward-Oblique Telescope 30°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red

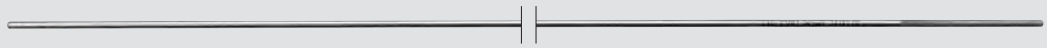
6-023

Containers for Sterilization and Storage of Telescopes see catalog HYGIENE



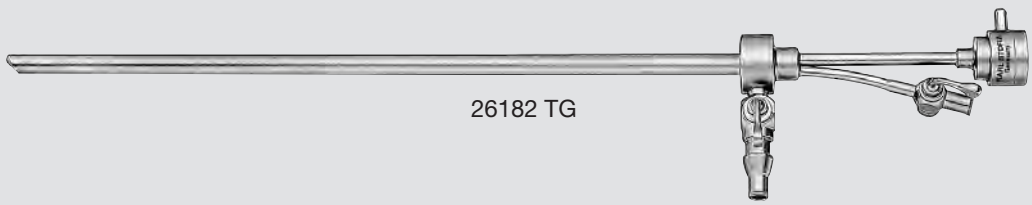
26182 D

26182 D **Diagnostic Sheath,** with stopcock, diameter 3.7 mm, length 29 cm, for use through Trocar Sheath 26182 TC



26182 TD

26182 TD **Changing Rod,** diameter 2.9 mm, length 36 cm, for use with Operating Sheath 26182 TG



26182 TG

26182 TG **Operating Sheath,** diameter 6.6 mm, length 29 cm, with channel for semirigid 5 Fr. operating instruments, with 1 stopcock and 1 LUER-Lock adaptor, with Obturator 26182 TH

For use with the CAMPO and GORDTS **Transvaginal Endoscopy (TVE) Set**

39360 BK

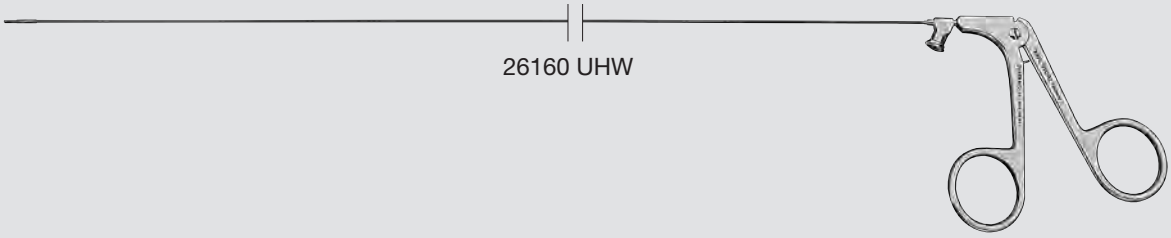
39360 BK **Plastic Container for Sterilization and Storage,** with accessories

6-023

Semirigid Operating Instruments

5 Fr.

For use with Operating Sheath 26182 TG



26160 UHW **Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 40 cm

26160 EHW **Scissors,** semirigid, blunt, single action jaws, 5 Fr., length 40 cm

26160 DHW **Punch,** semirigid, through-cutting, single action jaws, 5 Fr., length 40 cm

26160 BHW **Biopsy Spoon Forceps,** semrigid, double action jaws, 5 Fr., length 40 cm

Bipolar Electrodes

Applications of Bipolar Electrode 26158 BE and 26159 BE

In Hysteroscopy:
- **Uterine septum dissection**
- **Synechia**
- **Polypectomy and myomectomy (especially pedunculated myoma)**

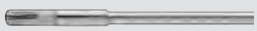
In Transvaginal Endoscopy (TVE):
- **Adhesiolysis**
- **For ovarian drilling**

Applications of Bipolar Electrode 26159 GC

In Hysteroscopy and Transvaginal Endoscopy (TVE):
- **For coagulating minor bleeding**

In Transvaginal Endoscopy (TVE):
- **For coagulating endometriotic lesions**

26159 BE **Bipolar Dissection Electrode,** semirigid, 5 Fr., length 36 cm



26159 GC GORDTS/CAMPO **Bipolar Ball Electrode,** semirigid, 5 Fr., length 36 cm

26158 BE **Bipolar Dissection Electrode,** semirigid, 5 Fr., needle electrode angled 90°, length 36 cm

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Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS

Fertiloscopy

We described the concept of fertiloscopy in 1997.

Fertiloscopy consists of a combination of hydrolaparoscopy, as described by GORDTS, in conjunction with a test of tubal patency, salpingoscopy, microsalpingoscopy, and hysteroscopy.

The results of the “Fly-Studie”, a prospective, randomized multi-center study comparing fertiloscopy and diagnostic laparoscopy, suggest that fertiloscopy should replace laparoscopy for the treatment of infertility in patients without obvious pathology.

We recently developed possible surgical uses for fertiloscopy. These are based on the use of the fertiloscope’s function channel, which allows the insertion of instruments with a diameter of 5 Fr. by using scissors, forceps (KARL STORZ), and a bipolar probe.

The following procedures are performed routinely: Ovary drilling in patients with PCO syndrome, adhesiolysis for adhesions located strictly in the tubo-ovarial region, and coagulation/destruction of minimal or mild endometriosis. If the pathology appears to be more severe, the operative laparoscopy remains the therapeutic gold standard.

A. WATRELOT, M.D.,
CRES®-Centre de Recherche et d’Étude de la Stérilité,
Lyon, France

Product:
The Fertiloscopy Kit F42K (fitted with 2 balloon introducers: FTO 1.40 introducer and FH 1.29 introducer)

Fertility Focus Limited
Unit 19D, University of Warwick Science Park
Warwick Technology Park
Gallows Hill, Warwick, CV34 6UW, UK
Tel: +44 (0) 1926 400054
e-mail: orders@fertility-focus.com

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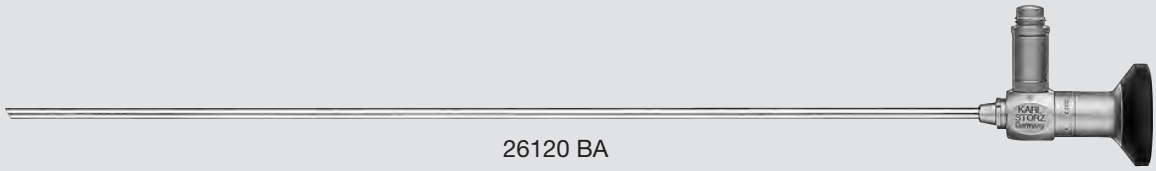
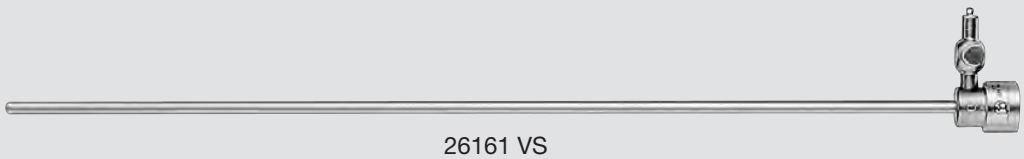
Fertiloscopy Set



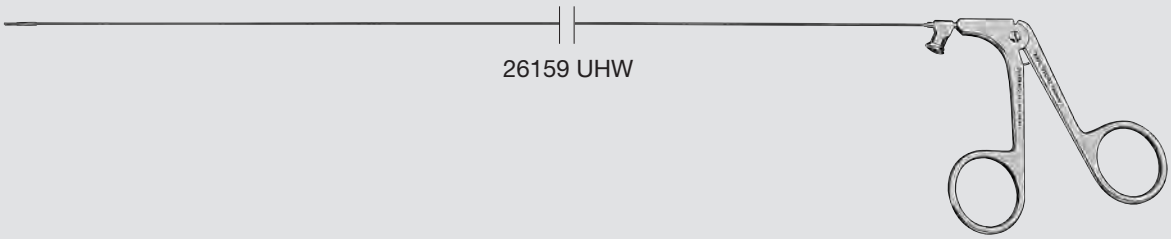
26120 BA

26120 BA **HOPKINS® Forward-Oblique Telescope 30°,** diameter 2.9 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red



26161 VS

26161 VS **Examination Sheath,** diameter 4.1 mm, with 1 stopcock and 1 LUER-Lock adaptor



26159 UHW

26159 BHW **Biopsy Spoon Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm

26159 EHW **Scissors,** semirigid, blunt, single action jaws, 5 Fr., length 34 cm

26159 UHW **Biopsy and Grasping Forceps,** semirigid, double action jaws, 5 Fr., length 34 cm

6-022

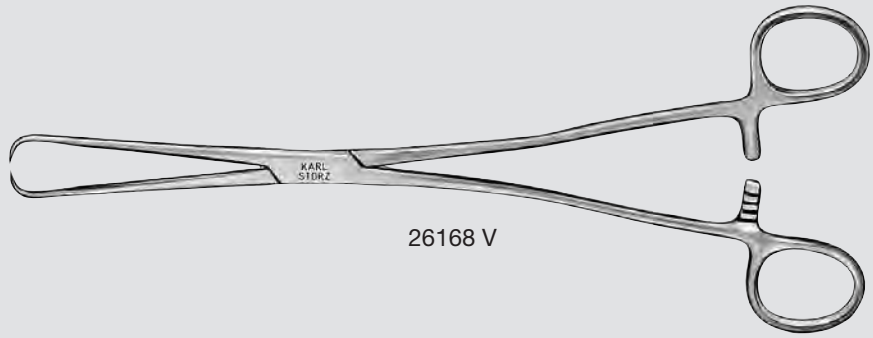
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

Uterine Cannula,
Uterine Grasping Forceps

for laparoscopy and pertubation

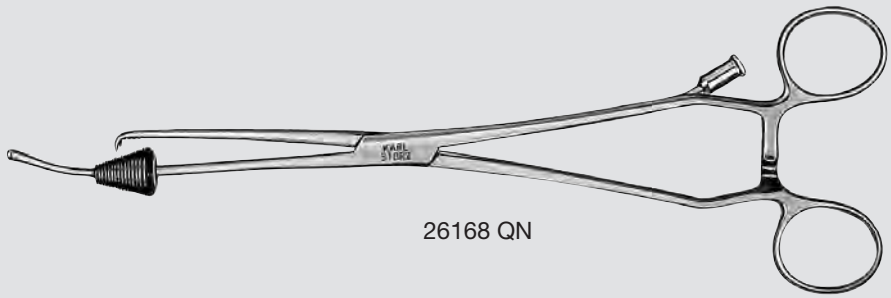
26168 UN

26168 UN COHEN **Uterine Cannula,** with 1 large cone 26168 UL and small cone 26168 US, spring-loaded fixation for Uterine Tenaculum Forceps 26168 V, with LUER-Lock adaptor for cleaning



26168 V

26168 V **Tenaculum Forceps,** length 22 cm



26168 QN

26168 QB QUINONES **Uterine Grasping Forceps,** blunt jaws, with 1 large and small cone, with channel for pertubation, length 24 cm

26168 QN QUINONES-NEUBÜSER **Uterine Grasping Forceps,** toothed jaws, with 1 large and small cone, with channel for pertubation, length 24 cm

1-993

Bipolar High Frequency Cords

bipolar

KARL STORZ Instrument	High Frequency Electrosurgical Unit		
		26176 LE	**Bipolar High Frequency Cord,** length 300 cm, for AUTOCON® II 400 SCB system (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® series (50, 200, 350), Erbe-Coagulator, T and ICC series
		26176 LM	**Bipolar High Frequency Cord,** length 300 cm, for use with Martin HF units
		26176 LV	**Bipolar High Frequency Cord,** length 300 cm, for AUTOCON® II 400 SCB system (112, 114, 116, 122, 125), AUTOCON® II 200, AUTOCON® II 80 and Valleylab coagulators
		26176 LW	**Bipolar High Frequency Cord,** length 300 cm, pin distance on unit side 22 mm, for use with high frequency surgical units with bipolar sockets with 22 mm pin distance

Please note:
All high frequency cords on this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 M**L,** 26176 LV**L.**

Units and Accessories for Intrauterine HF Electrosurgery see chapter 11, UNITS

1-99$_5$

FETOSCOPES

Transabdominal Embryoscopy and Fetoscopy

Complementing Amniocentesis in the First Trimester of Pregnancy

KARL STORZ — ENDOSKOPE

Introduction

Early prenatal diagnosis often approaches the limits of ultrasonography in precise assessment of the fetus in the first and second trimesters of pregnancy. Further evaluation of a malformed fetus can be done by fetoscopy. For a long time, the development of diagnostic fetoscopy was prevented by its invasiveness; however, refinement of this technology allowed us to present a semirigid endoscope that is 1 mm in diameter and can be used with a 1.3 mm needle introduced transabdominally. This provides a clear image of external fetal anatomy, and access to fetal tissues; amniocentesis can therefore be performed at the same time.

Materials and Methods

The semirigid 0° straight-forward miniature endoscope is 1 mm in diameter and 20 cm in length. It has a 70° field of view and is made of over 10,000 pixels. The miniature endoscope is connected to its focusing eyepiece by a 100 cm flexible portion. The needlescope is connected to the 18 gauge (1.3 mm) trocar via a lateral female LUER-Lock adaptor to enable suction and irrigation. This trocar may include a single needle, or have a 1 to 1.1 mm operating channel on the side.

Several instruments, including a 24 gauge puncture needle, a 1 mm biopsy forceps, or a 600 micron laser fiber, may be used through the lateral operating channel under full endoscopic vision.

The light guide is connected to the eyepiece and to a xenon light source. The camera used is equipped with a zoom lens. Local analgesia is achieved by injecting 10 ml of 1% non-adrenalized xylocaine into the myometrium. The needle is inserted transabdominally into the amniotic cavity, and the endoscope is directed towards the fetal parts under continuous sonographic guidance. Amniocentesis can be performed either before or during the fetoscopy.

Discussion

Embryoscopy was first performed transcervically using various types of hysteroscopes ranging from 6 to 22 mm in diameter. The scope was passed transcervically under ultrasound guidance into the extracoelomic cavity without disturbing the amnion. For this reason, this technique should be performed between 7.5 and 11 weeks' gestation. It is therefore confined to diagnosis of severe genetic syndromes with a high risk of recurrence that may be diagnosed in the form of external structural defects prior to 11 weeks' gestation. This procedure cannot be performed after 11 weeks, since the extracoelomic space has disappeared, and trauma to the amnion becomes more likely. Ultrasonographic examination of the fetus in the first trimester is best performed after 11 weeks' gestation and is currently offered to a low risk population for precise dating of pregnancy as well as part of screening for fetal aneuploidy. The most common abnormalities diagnosed or suspected at this stage of pregnancy include: exencephaly, abnormal nuchal area (cystic hygromata or nuchal translucency), exomphalos, facial cleft, abnormal position of the limbs and hydrops fetalis. Complete examination of a 12-week-old fetus by ultrasound is very unlikely, and lethal or complex abnormalities as well as isolated structural defects can be associated with additional abnormalities not detected by ultrasound. Therefore, abnormalities that are strongly suspected must be confirmed. One option is to wait for a detailed ultrasound examination in the second trimester of pregnancy, but this is rarely considered by the parents who are usually anxious to request a rapid and complete fetal evaluation, especially when a termination of the pregnancy is a possible option.

Verification of prenatally diagnosed abnormalities is therefore critical for genetic counseling. However, despite medical advice, when termination is requested in the first trimester, some patients will not be willing to go through stresses caused by induced labor, and dilatation or aspiration techniques are unlikely to allow a thorough post-mortem examination. The fetal anatomy therefore should be assessed prior to evacuation, and transabdominal feto scopy is another option for this.

Prior to the development of high-resolution ultrasound equipment, transabdominal fetoscopy was performed using 6 and 2.2 mm endoscopes for examining the human fetus and fetal blood sampling or fetal tissue biopsy. However, fetal loss occurred in as much as 4% to 8% of cases. Further development and refinement of this technology allowed direct visualization of the fetus with a fiber optic endoscope that could be guided inside the amniotic cavity through a 20 – 21 gauge amniocentesis needle. However, micro-endoscopy using a flexible endoscope with a diameter of 0.5 mm presents several limitations: the resolution depth is short (up to 15 mm), the field of view is very narrow (approx. 5 mm in diameter at 1 cm), and lighting often insufficient. These limitations result from a compromise between the number of optic and light fibers that can be incorporated in the endoscope (currently 3,000 fibers).

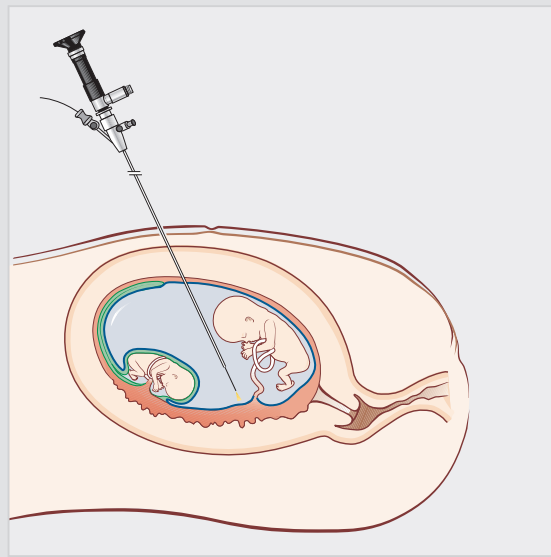
1-99$_2$

This only permits partial visualization of the fetal anatomy and depends on high resolution ultrasound to direct the needle towards the fetal part under investigation. The new miniature endoscope presented here allows better visualization with increased depth (from 2 mm to more than 5 cm) and a 70° angle of view (2 cm diameter at 1 cm), and the light source provides a clear image of the fetus, reducing the procedure time.

There are several concerns regarding the use of this new examination technique:

- Care should be taken in making a diagnosis of fetal abnormality in the first trimester since precise sonographic evaluation is usually only possible in the second trimester of pregnancy. This causes parents anxiety that may or may not be justified and might lead to a termination of a normal pregnancy, especially when this can be done at the parents request in the first trimester of pregnancy. Furthermore, even when termination of pregnancy is performed for major fetal abnormality, induction with prostaglandins provides a better opportunity for post-mortem examination than destructive techniques. This is particularly important since fetoscopy offers only an incomplete evaluation of the external fetal anatomy, and associated internal abnormalities can be missed by ultrasound at this stage of pregnancy.
- The risks to the developing retina are still in question; however no retinal damage or other development abnormalities were established in chicken or in sheep after exposure to embryoscopic and fetoscopic white light. Human data are still limited but infants born after first trimester transcervical embryoscopy did not demonstrate any visual abnormalities.
- The procedure-related risk of miscarriage can probably be estimated to be between that of second trimester fetoscopy performed for diagnostic purpose and that of first trimester amniocentesis. The semi-flexible miniature endoscope is passed through a 1.3 mm needle compatible with first trimester diagnosis. This procedure will add one minute to an amniocentesis. We therefore believe that fetoscopy probably does not significantly increase the basic risk of amniocentesis done at the same gestational age. However, this remains to be demonstrated and patients should be counseled accordingly.

Prof. Y. VILLE M. D.,
Université Paris-Ouest, CHI Poissy, St Germain,
Département Obstétrique Gynécologie,
Poissy Cedex, France



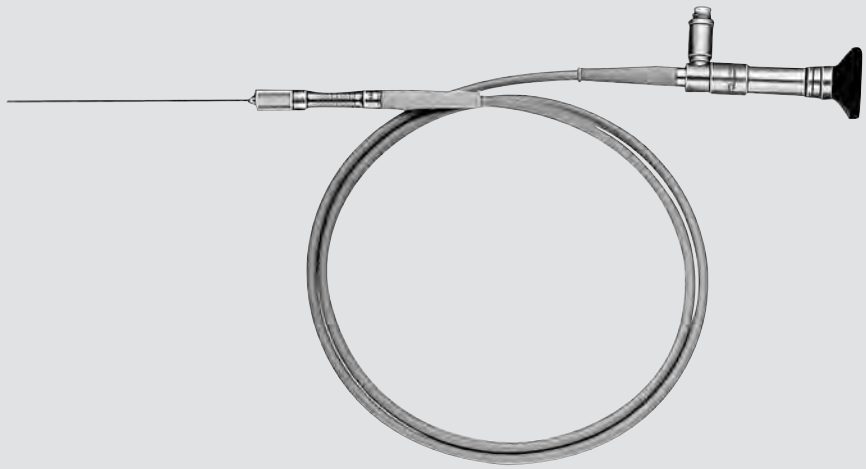
1-992

Transabdominal Embryoscopy and Fetoscopy Set

Miniature Straight Forward Telescope

KARL STORZ — ENDOSKOPE

Size 1 mm, for use with fetoscopes



11510 A

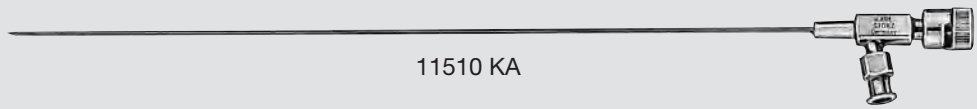
11510 A **Miniature Straight Forward Telescope 0°,**
semirigid, with remote eyepiece, with rotating and locking LUER-Lock adaptor, fiber optic light transmission incorporated

Direction of view:	0°
Angle of view:	70°
Working length:	20 cm
Outer diameter:	1 mm

1-99$_5$

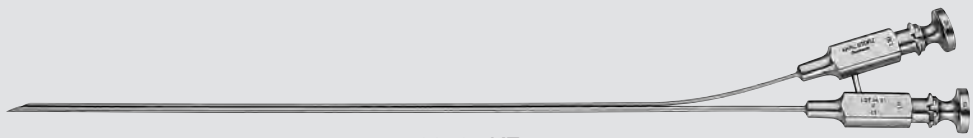
Fetoscopes see pages 83-84

For use with Miniature Straight Forward Telescope 11510 A



11510 KA

11510 KA **Examination Sheath,** straight, with pyramidal obturator, diameter 1.3 mm, with 1 LUER-Lock adaptor, package of 2, for use with Miniature Straight-Forward Telescope 11510 A



11510 KE

11510 KE **Operating Sheath,** straight, size 5.6 Fr., with pointed tip, with 2 obturators, with 0.8 mm working channel for laser fibers up to 400 micron-core (maximum outer diameter 700 micron) or Puncture Needle 11510 KC, with 2 LUER-Lock adaptors, package of 2, for use with Miniature Straight Forward Telescope 11510 A

11510 KD

11510 KD **Operating Sheath,** straight, size 6.5 Fr., with pointed tip, with 2 obturators, with 1.1. mm working channel for laser fibers up to 600 micron-core (maximum outer diameter 900 micron) or Puncture Needle 11510 KC, with 2 LUER-Lock adaptors, package of 2, for use with Miniature Straight Forward Telescope 11510 A

1-99s

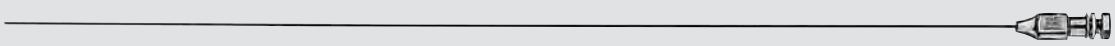
Transabdominal Embryoscopy and Fetoscopy Set

Fetoscope Sheath and Puncture Needle

For use with Miniature Straight Forward Telescope 11510 A

11510 KI

11510 KI	**Operating Sheath,** curved, with pointed tip, size 5.6 Fr., with 2 obturators, with 0.8 mm working channel for laser fibers up to 400 micron-core (maximum outer diameter 700 micron) or Puncture Needle 11510 KC, with 2 LUER-Lock adaptors, package of 2, for use with Miniature Straight Forward Telescope 11510 A



11510 KC

11510 KC	**Puncture Needle,** diameter 0.6 mm, length 26.5 cm, for single use, package of 6, for use with Operating Sheaths 11510 KD/KE/KI

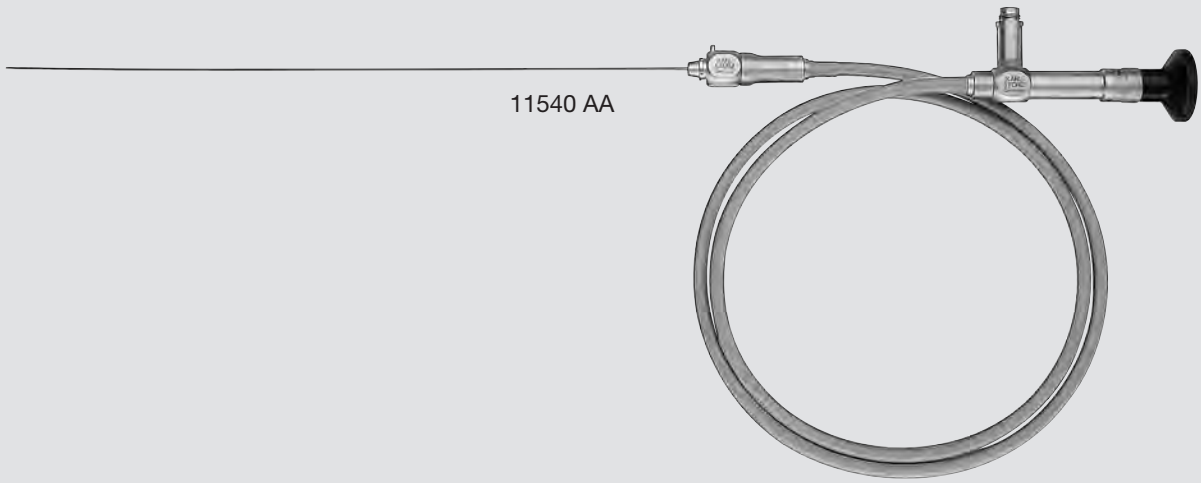
2-15

Transabdominal Fetoscopy Set in the Second Trimester

Miniature Straight Forward Telescope

KARL STORZ — ENDOSKOPE

Size 1.3 mm, for use with Fetoscopes



11540 AA **Miniature Straight Forward Telescope 0°,**
semirigid, with remote eyepiece, **autoclavable,**
fiber optic light transmission incorporated

Direction of view:	0°
Angle of view:	90°
Working length:	30.6 cm
Outer diameter:	1.3 mm

Fetoscopes see pages 86-87

2-15

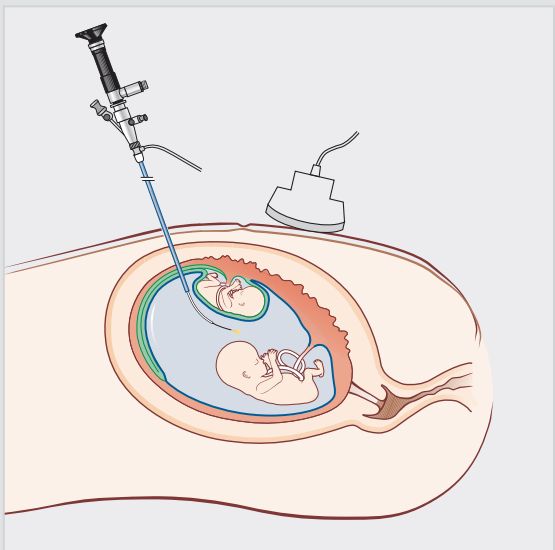
For use with Miniature Straight Forward Telescope 11540 AA

11540 KA

11540 KA **Operating Sheath,** straight, with pointed tip, size 8 Fr., with 2 obturators, with working channel size 1 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Miniature Straight Forward Telescope 11540 AA

11540 KB

11540 KB **Operating Sheath,** curved, with pointed tip, size 8 Fr., with 2 obturators, with working channel size 1 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Miniature Straight Forward Telescope 11540 AA



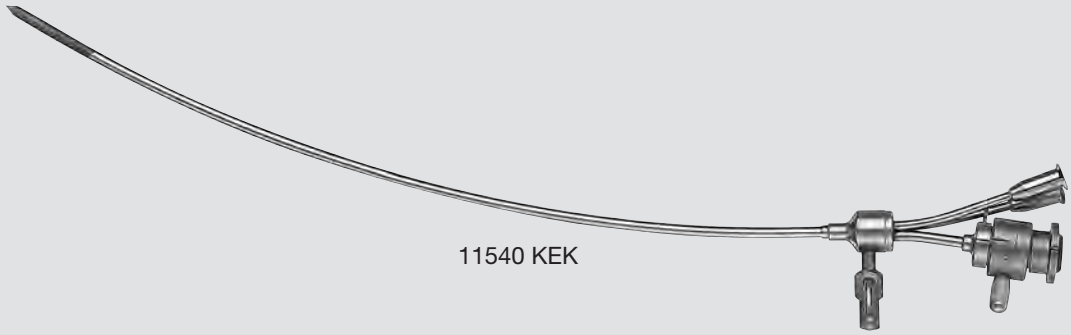
2-082

Transabdominal Fetoscopy Set in the Second Trimester

Fetoscope Sheath and Puncture Needle

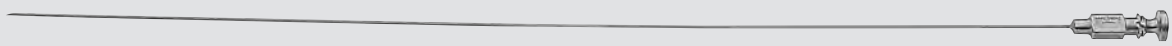
KARL STORZ — ENDOSKOPE

For use with Miniature Straight Forward Telescope 11540 AA



11540 KEK

11540 KEK **Operating Sheath,** curved, with obturator with conical tip, size 3.3 mm, with 2 channels, for use with Miniature Straight Forward Telescope 11540 AA



11540 KD

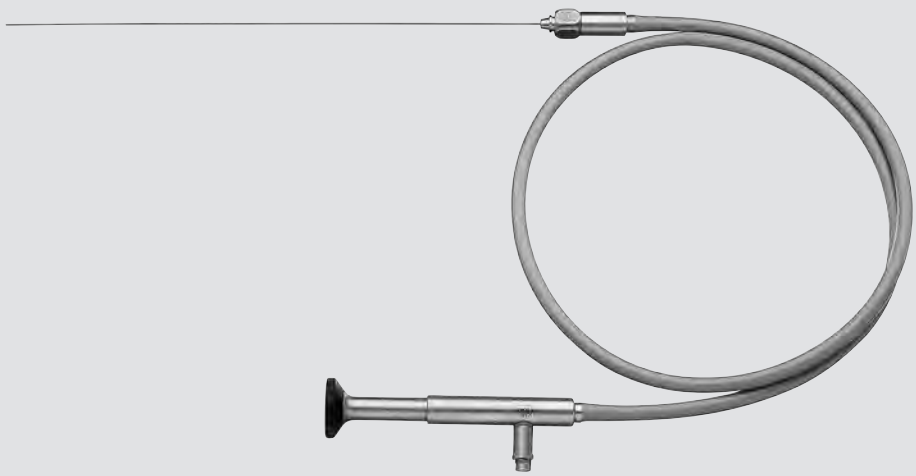
11540 KD **Puncture Needle,** diameter 0.9 mm, length 35 cm, for single use, package of 6, for use with Operating Sheath 11540 KEK

2-15

Transabdominal Fetoscopy Set in the Second Trimester

Miniature Straight Forward Telescope

Size 2 mm, for use with fetoscopes



11630 AA

11630 AA	**Miniature Straight Forward Telescope 0°,** semirigid, **autoclavable,** with remote eyepiece, fiber optic light transmission incorporated Direction of view: 0° Angle of view: 95° Working length: 30 cm Outer diameter: 2 mm

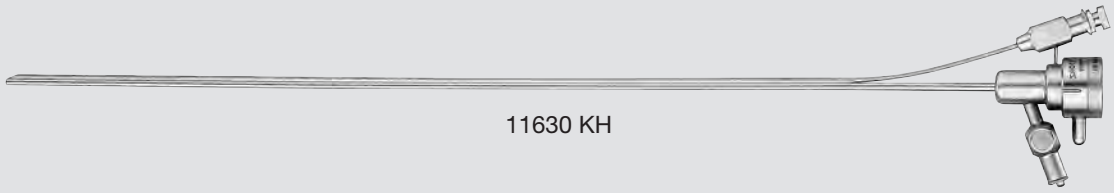
215

Fetoscopes see page 89

For use with Miniature Straight Forward Telescope 11630 AA

11630 KF

11630 KF **Operating Sheath,** straight, with pointed tip, 9 Fr., with 2 obturators, with working channel size 1 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Miniature Straight Forward Telescope 11630 AA

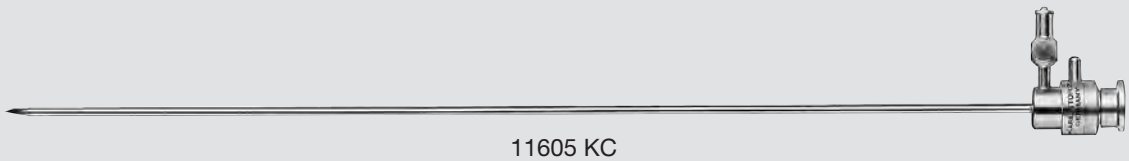


11630 KH

11630 KH **Operating Sheath,** straight, with blunt tip, size 9 Fr., with 2 obturators, with working channel size 1 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Miniature Straight Forward Telescope 11630 AA

11605 FK

11605 FK **Operating Sheath,** straight, with Pyramidal Obturator 11605 FO, size 9 Fr., with working channel size 1 mm for laser fibers up to 400 micron-core (maximum outer diameter 700 micron), with 1 stopcock and 1 LUER-Lock adaptor, for use with Miniature Straight Forward Telescope 11630 AA

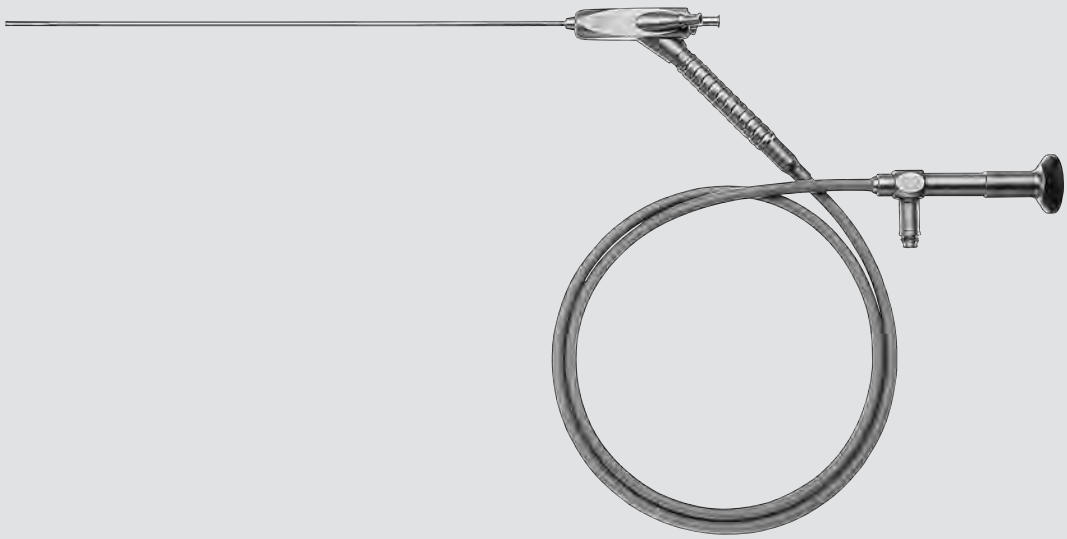


11605 KC

11605 KC **Examination Sheath,** straight, with pyramidal Obturator 11605 KCO, diameter 2.7 mm, with 1 stopcock and 1 LUER-Lock adaptor, for use with Miniature Straight Forward Telescope 11630 AA

4-052

Transabdominal Fetoscopy Set in the Second Trimester



11506 AA

11506 AAK **Miniature Straight Forward Telescope 0° Set,** straight, diameter 3.3 mm, length 30 cm, with 30,000 pixels, **autoclavable,** irrigation connector, central working channel 4 Fr., lateral working channel 3 Fr., with remote eyepiece, fiber optic light transmission incorporated

including:

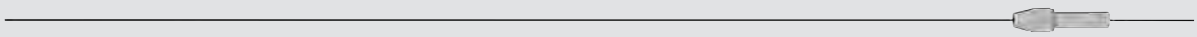
Seal, for instrument ports, package of 10

2x **LUER Adaptor,** with seal

Cleaning Brush

Case

Recommended Accessories



11506 P

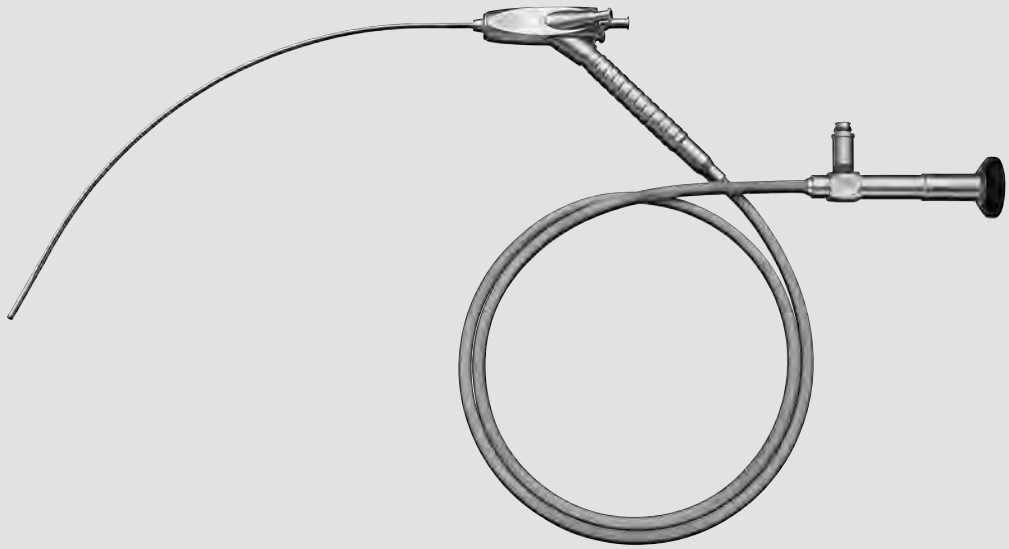
11506 P **Puncture Needle,** sharp, individually adjustable handle, length 50 cm, sterile, package of 10, for use with Miniature Straight Forward Telescopes 11506 AA and 11508 AA

2-15

Components/Spare Parts see chapter 12

Transabdominal Fetoscopy Set NEW in the Second Trimester

KARL STORZ — ENDOSKOPE



11508 AA

11508 AAK **Miniature Straight Forward Telescope 0° Set,** curved, diameter 3.3 mm, length 30 cm, with 30,000 pixels, **autoclavable,** irrigation connector, central working channel 4 Fr., lateral working channel 3 Fr., with remote eyepiece, fiber optic light transmission incorporated

including:

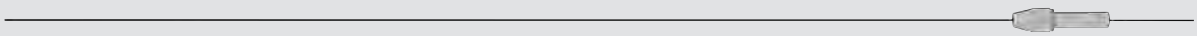
Seal, for instrument ports, package of 10

2x **LUER-Adaptor,** with seal

Cleaning Brush

Case

Recommended Accessories



11506 P

11506 P **Puncture Needle,** sharp, individually adjustable handle, length 50 cm, sterile, package of 10, for use with Miniature Straight Forward Telescopes 11506 AA and 11508 AA

2-15

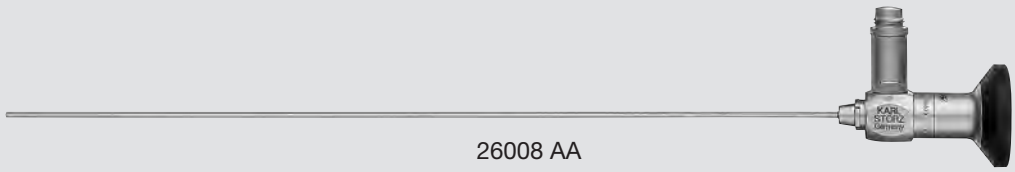
Components/Spare Parts see chapter 12

HOPKINS® Telescopes

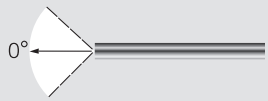
Diameter 2 mm

KARL STORZ — ENDOSKOPE

For use with Fetoscopes



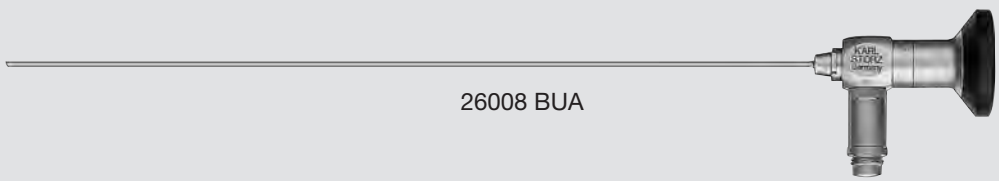
26008 AA



26008 AA **HOPKINS® Straight Forward Telescope 0°,** diameter 2 mm, length 26 cm, **autoclavable,** fiber optic light transmission incorporated, color code: green

26008 FUA

26008 FUA **HOPKINS® Telescope 12°,** diameter 2 mm, length 26 cm, **autoclavable, fiber optic connector on opposite side,** fiber optic light transmission incorporated, color code: black



26008 BUA

26008 BUA **HOPKINS® Forward-Oblique Telescope 30°,** diameter 2 mm, length 26 cm, **autoclavable, fiber optic connector on opposite side,** fiber optic light transmission incorporated, color code: red

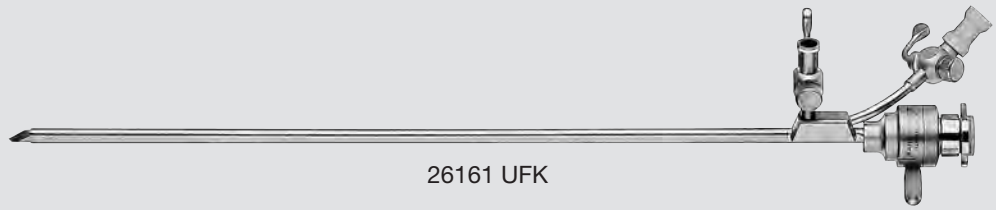
6-023

Fetoscopes see page 93
Containers for Sterilization and Storage of Telescopes see catalog HYGIENE

For use with HOPKINS® Telescopes 26008 AA, 26008 FUA and 26008 BUA

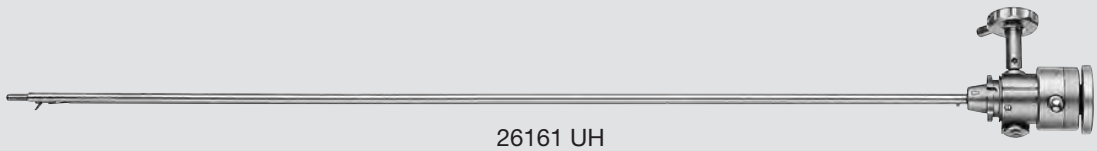
26161 UK

26161 UK **Operating Sheath,** straight, with Pyramidal Obturator 26161 UO, size 9 Fr., with working channel for laser fibers up to 400 micron-core (maximum outer diameter 700 micron), with 1 stopcock and 1 LUER-Lock adaptor, for use with HOPKINS® Telescope 26008 AA



26161 UFK

26161 UFK **Operating Sheath,** straight, with Pyramidal Obturator 26161 UFO, size 11.5 Fr., with working channel for laser fibers up to 400 micron-core (maximum outer diameter 700 micron), with 1 stopcock and 1 LUER-Lock adaptor, for use with Working Insert 26161 UH



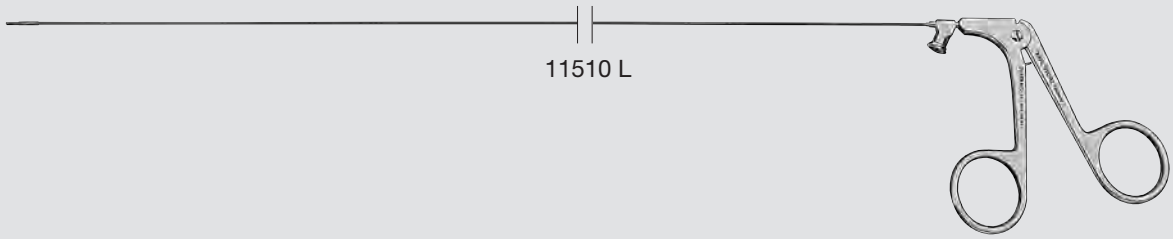
26161 UH

26161 UH **Working Insert,** with steering lever, for use with Operating Sheath 26161 UFK

3-15

Units and Accessories for Fetoscopy see chapter 11, UNITS

3 Fr.



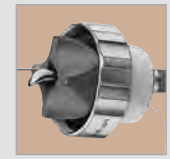
11510 L **Biopsy Forceps,** semirigid, single action jaws, 3 Fr., length 25 cm

11510 C **Grasping Forceps,** semirigid, double action jaws, 3 Fr., length 35 cm

2-15

Trocars for Fetoscopy

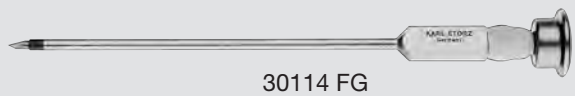
with LUER-Lock connector



Size 2.6 mm
for use with TAKE-APART® Bipolar Grasping Forceps 26167 FG

Size:		**2.6 mm**	
Working length:		10 cm	13 cm
Color code:		black-yellow	black
	**Trocar,** with pyramidal tip	**11516 CS**	**11516 CL**
	including:		
	Cannula, with LUER-Lock connector	11516 C1	11516 C2
	Trocar only	11516 S	11516 L
	Silicone Leaflet Valve	11603 L1	11603 L1

Size 3.2 mm
for use with TAKE-APART® Bipolar Grasping Forceps 26167 FG



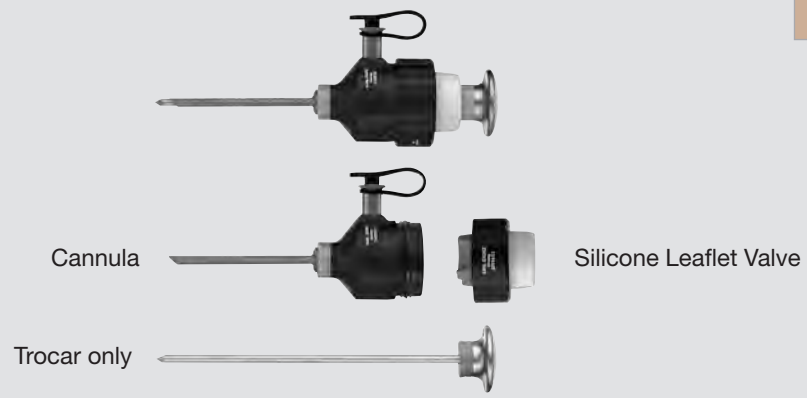
30114 FG

30114 FG **Fetoscopy Trocar,** with LUER-Lock connector, size 3.2 mm, length 10 cm

4-053

Trocars for Fetoscopy

with LUER-Lock connector



Size 3.5 mm
for use with TAKE-APART® Bipolar Grasping Forceps 26184 HLS

Size:		**3.5 mm**
Working length: Color code:		10 cm green-yellow
	**Trocar,** with pyramidal tip including: **Cannula,** with LUER-Lock connector **Trocar only** **Silicone Leaflet Valve**	**30114 GKL** 30114 G2 30114 C 30114 L1

Size 3.9 mm
for use with Operating Sheaths 11630 KF/KH

Size:		**3.9 mm**	
Working length: Color code:		10 cm red-green	13 cm red
	**Trocar,** with pyramidal tip including: **Cannula,** with LUER-Lock connector **Trocar only** **Silicone Leaflet Valve**	**11517 BS** 11517 B2 11517 S 30117 L1	**11517 BL** 11517 B1 11517 L 30117 L1

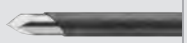
2-15

Trocars for Fetoscopy

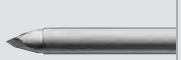
KARL STORZ — ENDOSKOPE

<u>with</u> LUER-Lock connector

Size 4.7 mm
for use with Operating Sheath 26161 UF

Size:		**4.7 mm**
Working length:		10 cm
Color code:		blue
	**Trocar,** with pyramidal tip	**11518 AS**
	including:	
	Cannula, with LUER-Lock connector	11518 A2
	Trocar only	11518 S
	Silicone Leaflet Valve	30118 L1

Size 3.6 x 5.4 and 3.2 x 4.95 mm
for use with Bipolar Optical Grasping Forceps 11540 HLS (11519 AS)
and Bipolar Optical Grasping Forceps 11540 FG (11520 AS)

Size:		**3.6 x 5.4 mm**	**3.2 x 4.95 mm**
Working length:		10 cm	10 cm
Color code:		blue	blue-white
	**Trocar,** with pyramidal tip, drop-shaped profile	**11519 AS**	**11520 AS**
	including:		
	Cannula, with LUER-Lock connector	11519 A2	11520 A2
	Trocar only	11519 S	11520 S
	Silicone Leaflet Valve	30160 L1	30160 L1
	Sealing Cap	6127490	6127490

3-15

Trocars only, for Fetoscopy

For use with flexible trocars

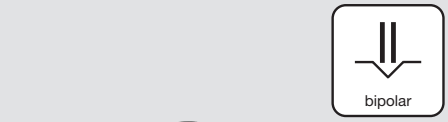
11650 TD

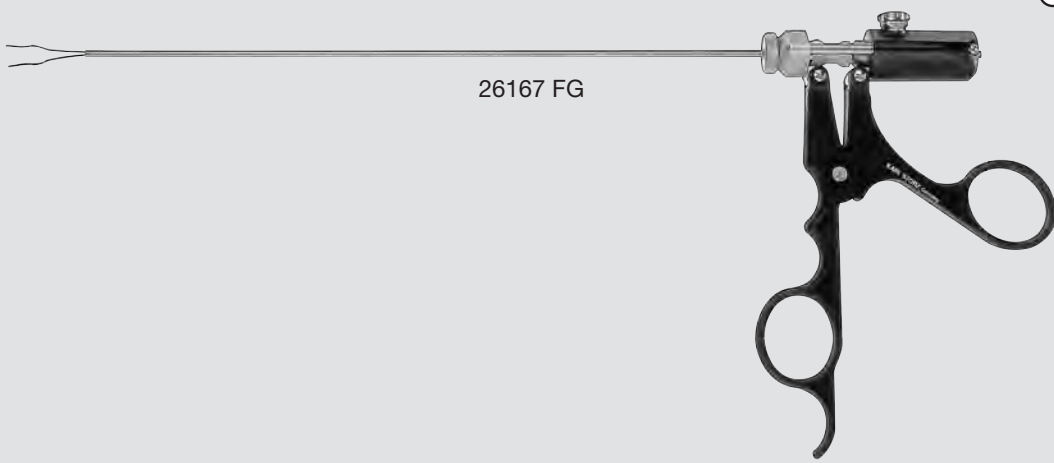
11650 TD	**Trocar only,** 7 Fr., diameter 2.5 mm, length 16 cm, package of 2
11650 TG	**Trocar only,** 10 Fr., diameter 3.3 mm, length 17 cm, package of 2
11650 TH	**Same,** 11 Fr., diameter 3.6 mm
11650 TI	**Same,** 12 Fr., diameter 3.9 mm

2-081

Please note:
Products 11650 TD, 11650 TG, 11650 TH and 11650 TI are designed for use with the flexible trocars offered by the company Cook (CHECK-FLO® PERFORMER® INTRODUCER SETS: RCF–x.x–38-J or RCFP–x.x–38-J).

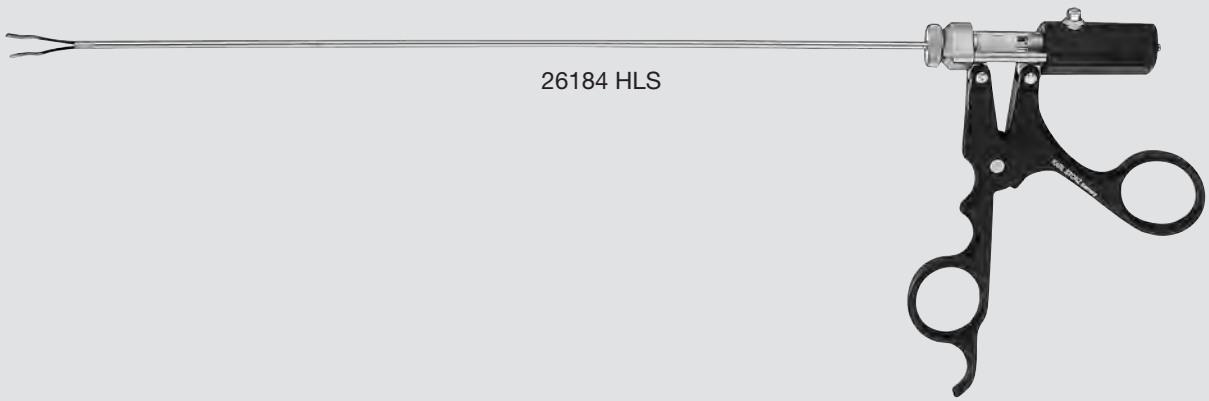
Size 2.4 mm, for use with Trocars 11516 CL and 11516 CS





26167 FG **TAKE-APART® Bipolar Grasping Forceps,**
flat jaws, serrated, size 2.4 mm, length 26 cm
including:
Handle
Outer Sheath
Working Insert, package of 5, for single use

Size 3 mm, for use with Trocar 30114 GKL



26184 HLS **TAKE-APART® Bipolar Grasping Forceps,**
flat jaws, serrated, size 3 mm, length 30 cm
including:
Handle
Outer Sheath
Working Insert

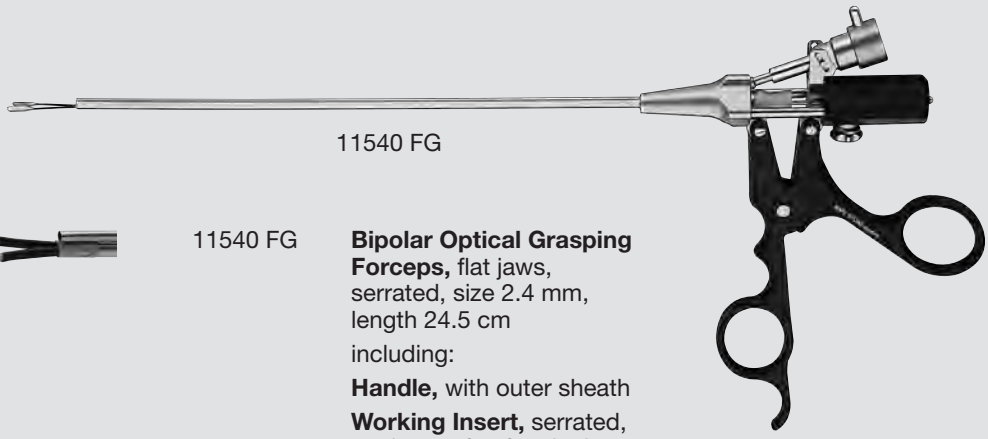
4-053

Units and Accessories for HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

For use with Miniature Straight Forward Telescope 11540 AA

bipolar

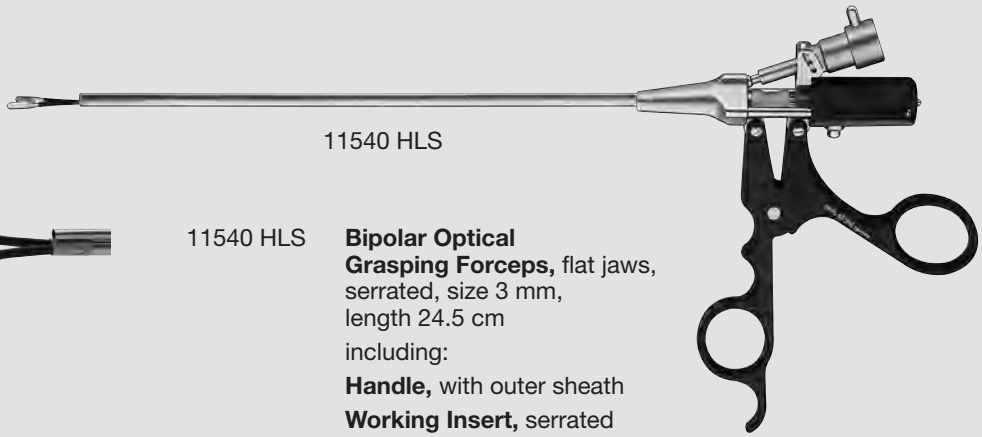
Size 2.4 mm, for use with Trocar 11520 AS



11540 FG

11540 FG **Bipolar Optical Grasping Forceps,** flat jaws, serrated, size 2.4 mm, length 24.5 cm
including:
Handle, with outer sheath
Working Insert, serrated, package of 5, for single use

Size 3 mm, for use with Trocar 11519 AS



11540 HLS

11540 HLS **Bipolar Optical Grasping Forceps,** flat jaws, serrated, size 3 mm, length 24.5 cm
including:
Handle, with outer sheath
Working Insert, serrated

2-15

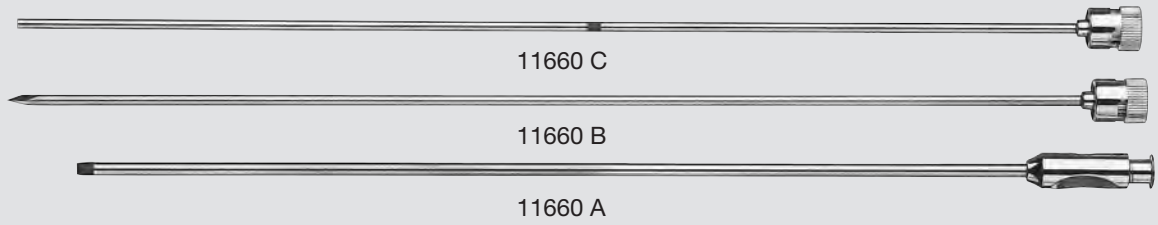
Units and Accessories for HF Electrosurgery see chapter 11, UNITS
Components/Spare Parts see chapter 12

Instruments for Fetoscopy

Shunting Set, CVS Biopsy Forceps, CVS Biopsy Cannulas and Palpation Probe

KARL STORZ — ENDOSKOPE

Shunting Set, diameter 3 mm



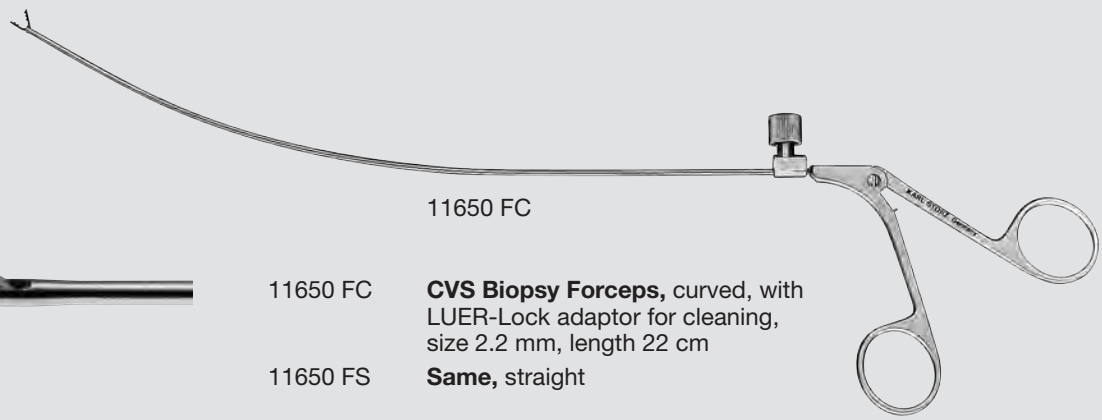
11660 C

11660 B

11660 A

11660	**Shunting Set** including: **Outer Sheath,** diameter 3 mm, length 19.5 mm 3x **Obturator,** with pyramidal tip **Pusher**

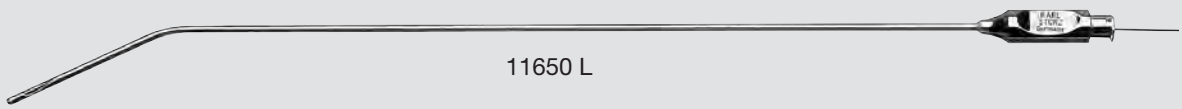
CVS Biopsy Forceps, size 2.2 mm



11650 FC

11650 FC	**CVS Biopsy Forceps,** curved, with LUER-Lock adaptor for cleaning, size 2.2 mm, length 22 cm
11650 FS	**Same,** straight

CVS Biopsy Cannulas, size 2 mm



11650 L

11650 L	**CVS Biopsy Cannula,** with opening to the left, with 1 LUER-Lock adaptor, size 2 mm, length 22 cm
11650 R	**Same,** with opening to the right

Palpation Probe, diameter 3 mm

11650 P

11650 P	**Palpation Probe,** with cm markings, with irrigation channel, diameter 3 mm, length 40 cm, with LUER-Lock adaptor, with blunt obturator

Components/Spare Parts see chapter 12

4-052

Accessories for Fetoscopy

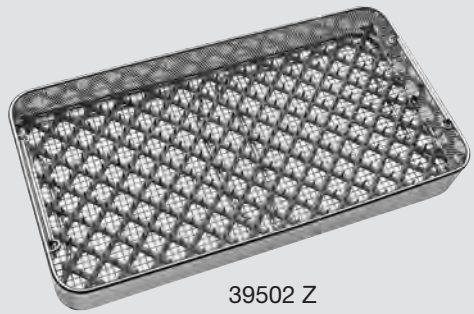
	26040 BX	**Telescope Lock Plug,** with LUER-Lock for aspiration of liquid
	495 EW	**Light Adaptor,** angled 90°, diameter 4.8 mm, free rotatable, to connect with standard telescopes
	11510 V	**Tuohy Borst Y-Connector,** rotating, with one-way stopcock, sterile, package of 5
	6011590	**Plug,** for lateral LUER-Lock adaptor
	27001 RA	**Cleaning Adaptor,** for Instrument Ports 27001 G/GF/GH/GP/GG
	27001 E	**Insertion Aid,** for guide wires
	27550 N	**Seal,** for instrument ports, package of 10, single use recommended
	27014 Y	**LUER-Adaptor,** with seal

4-052

Wire Trays for Cleaning, Sterilization and Storage of Instruments

KARL STORZ — ENDOSKOPE

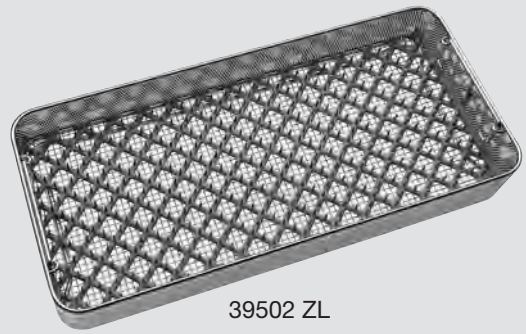
For use with Miniature Straight Forward Telescopes 11510 A, 11540 AA and 11630 AA



39502 Z

39502 Z	**Wire Tray for Cleaning, Sterilization and Storage** of instruments, stackable, including hole plate walls and foldaway handles, external dimensions (w x d x h): 480 x 250 x 66 mm
39502 L	**Lid,** for use with Wire Tray 39502 Z
39100 S	**Silicone Grid Insert, "Large Diamond Grid",** blue, extra wide meshed, for the storage of instruments in standard wire baskets, plastic and sterilization containers, external dimensions (w x d): 470 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

For use with Miniature Straight Forward Telescopes 11506 AA and 11508 AA



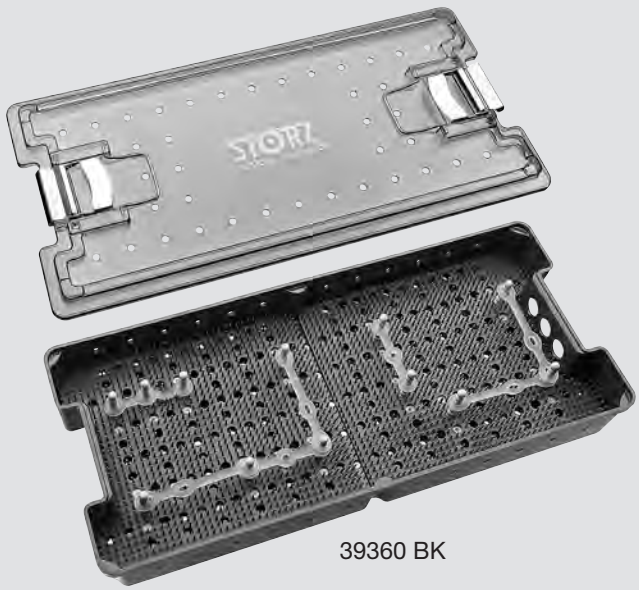
39502 ZL

39502 ZL	**Wire Tray for Cleaning, Sterilization and Storage** of instruments, long, stackable, including hole plate walls and foldaway handles, external dimensions (w x d x h): 535 x 250 x 66 mm
39502 LX	**Lid,** for use with Wire Tray 39502 ZL
39100 SL	**Silicone Grid Insert "Large Diamond Grid",** blue, extra wide mashed, for storage of instruments in wire baskets, 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

2-15

Plastic Container for Sterilization and Storage of Instruments

For use with Miniature Straight Forward Telescopes 11510 A, 11540 AA, 11630 AA, 11506 AA and 11508 AA



39360 BK

39360 BK **Plastic Container for Sterilization and Storage of Variable Instrument Sets,** perforated, with transparent lid, with silicone mat, **single-level storage,** (1 additional insert), external dimensions (w x d x h): 525 x 240 x 70 mm

including:

Snap-in Clip, package of 12

Silicone Tie-Downs, package of 12

Tool

3-15

Please note: The instruments displayed are not included in the trays.

Components/Spare Parts see chapter 12

MICRO BLOOD EXTRACTION SET
AMNIOSCOPES AND CYSTOSCOPES

OPPELT *"Easy-Check"*
Micro Blood Extraction Set

The *"Easy-Check"* micro blood extraction set is a reusable instrument set for obtaining blood samples, eliminating the need for multiple or complex instrument changeovers. A light guide incorporated in the amnioscope and capillary tube enables an optimal illumination of the fetal scalp. An LED battery light source (11301 D3) or a standard cold light source can be used as a light source.

The *"Easy-Check"* micro blood extraction set enables low-risk, efficient and prompt blood sampling from the fetal scalp in order to determine fetal oxygen supply during difficult obstetric situations.

P. OPPELT, M.D.
Abteilung für Gynäkologie und Geburtshilfe,
Allgemeines Krankenhaus Linz, Austria

Special Features:

- **Instrument set for micro blood extraction during labor**
- **Increased safety for the fetus as the penetration depth of the knife is limited**
- **Optimal illumination of the OR field and the sheath**
- **Easy handling**
- **Minimal sheath diameter**
- **Autoclavable**

26212

26212 — OPPELT ***"Easy-Check"*** **Micro Blood Extraction Set,** diameter 14 mm, length 20 cm

Accessories (not included in delivery):

26212 K — **Miniature Blade,** sterile, package of 24, for use with OPPELT *"Easy-Check"* Micro Blood Extraction Set 26212

26212 R — **Capillary Tube,** heparinized, size 85 µL, package of 750, for use with OPPELT "Easy-Check" Micro Blood Extraction Set 26212

Recommended Accessories:

11301 D3

11301 D3 — **Battery Light Source LED for Endoscopes,** with coarse thread, boost mode for temporary increase in brightness, burning time > 120 min, weight approx. 78 g, waterproof and fully immersible for cleaning and disinfection

2-08₁

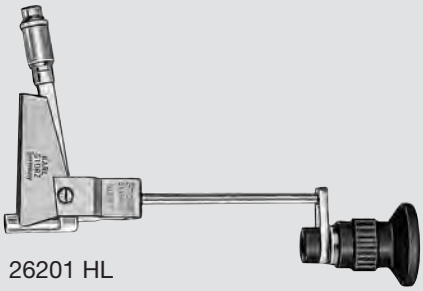
Recommended for use with the "safe CLINITUBES" (REF 942-895-D941P-240-85, 250 x 85 µL) from the company Radiometer Copenhagen

Amnioscopes

26203 B

26216

26201 H



26201 HL

SALING **Amnioscopes**

26203 A	SALING **Amnioscope**, complete, diameter 20 mm, length 20 cm including: **Outer Sheath** **Obturator**
26203 B	SALING **Amnioscope**, complete, diameter 16 mm, length 20 cm including: **Outer Sheath** **Obturator**
26203 C	SALING **Amnioscope**, complete, diameter 12 mm, length 20 cm including: **Outer Sheath** **Obturator**

Additional Instruments:

26201 H	**Prismatic Light Deflector,** without magnification loupe, with connector for fiber optic light cable
26201 HL	**Prismatic Light Deflector,** with loupe holder, **autoclavable** Adjustable Magnifier 10338 TA included, magnification 2x
26216	**Sponge Holder,** length 30 cm

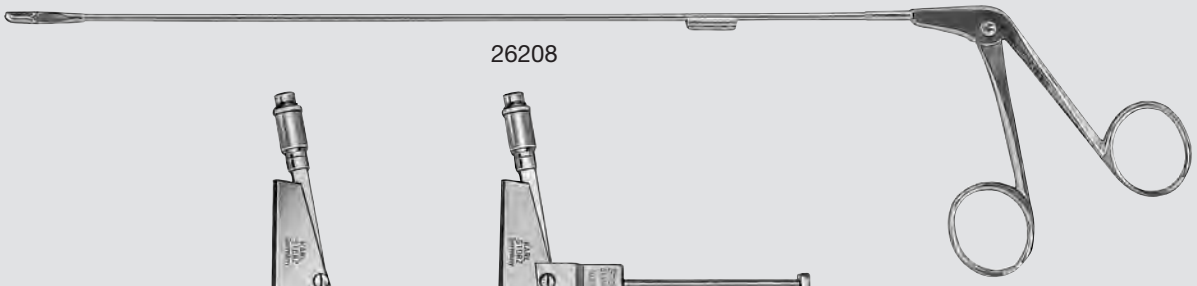
Components/Spare Parts see chapter 12

1-993

Blood Sampling Set

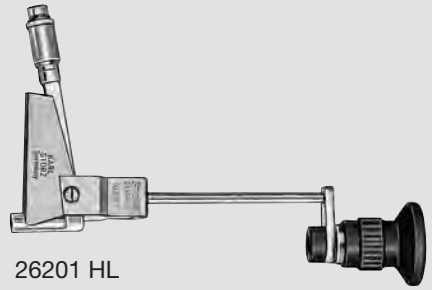
26204 B

26206



26208

26201 H



26201 HL

SALING **Amnioscopes**

26204 A	SALING **Amnioscope,** complete, diameter 33 mm, length 14 cm including: **Outer Sheath** **Obturator**
26204 B	SALING **Amnioscope,** complete, diameter 20 mm, length 20 cm including: **Outer Sheath** **Obturator**
26204 C	SALING **Amnioscope**, complete, diameter 16 mm, length 20 cm including: **Outer Sheath** **Obturator**

Additional Instruments:

26201 H	**Prismatic Light Deflector,** without magnification loupe, with connector for fiber optic light cable
26201 HL	**Prismatic Light Deflector,** with loupe holder, **autoclavable** Adjustable Magnifier 10338 TA included, magnification 2x

26206	**Knife Holder**
26207 M	**Micro Blood Sampling Knife,** for single use, package of 20

26208	**Catheter Guiding Forceps**
26209	**PVC Tube,** not heparinized, length 10 m

1-994

Components/Spare Parts see chapter 12

IUD Grasping Forceps

10387 W

10387 W TERRUHN **Foreign Body Forceps,** atraumatic, with rotatable jaws, diameter 3 mm, working length 20.5 cm

For locating and recovering an intrauterine device (IUD) lost in the uterus atraumatically and without dilation and anesthesia.

It is also easy to grasp an arm of the T cross-bar.

An ingrown Copper 7 with up-turned string immediately after removal.

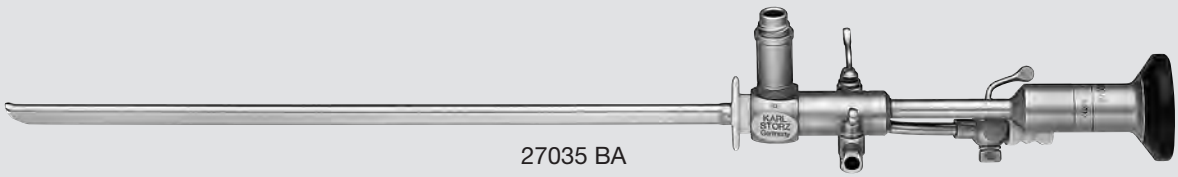
1-992

Universal Cysto-Urethroscopes

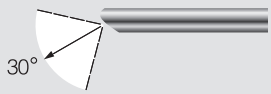
17 Fr.,
for outpatient cysto-urethroscopy

Special Features:

- **Minimal discomfort for the patient**
- **Biopsies**
- **Foreign body retrieval**
- **Treatment of strictures and bladder stones**
- **Easy to use**
- **Atraumatic instrument tip**
- **High stability**
- **For use with semirigid and flexible forceps**
- **For inserting ureteral splints**



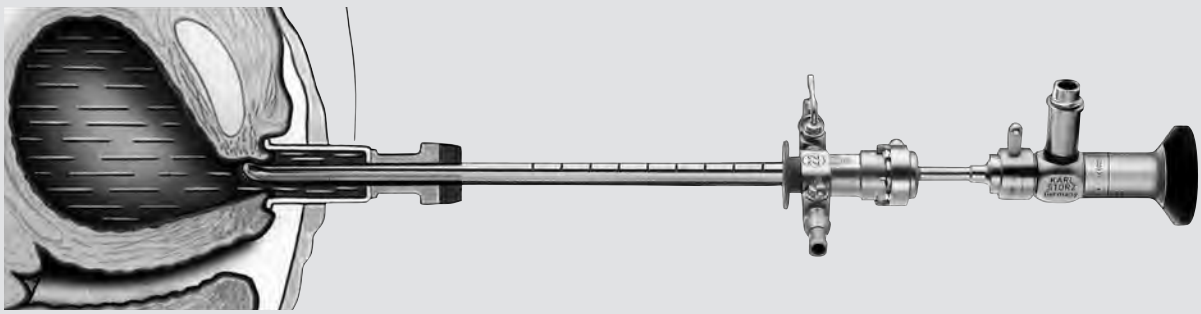
27035 BA



27035 BA **Universal Cysto-Urethroscope,** with HOPKINS® forward-oblique telescope 30°, enlarged view, **autoclavable,** 17 Fr., fiber optic light transmission incorporated, 7 Fr. working channel, color code: red-yellow

Cystoscope Adaptor for female urethroscopy

The NICKELL Cystoscope Adaptor should be pressed against the urethra orifice after insertion of the cystoscope to avoid leaking of irrigation fluid and the collapse of the urethra. This also permits a full length urethroscopy in the female urethra.



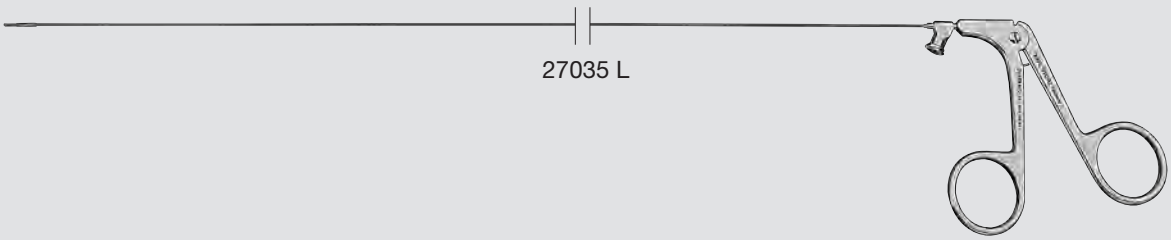
27026 X

27026 X NICKELL **Cystoscope Adaptor,** for female urethroscopy, for use with Cystoscope-Urethroscope Sheaths 27026 A – U, 27026 AB – DB and HOPKINS® Telescopes 27005 AA/BA/FA

4-15

Semirigid Operating Instruments see page 111
Container for Sterilization and Storage of Telescopes see catalog HYGIENE

7 Fr.,
for use with Universal Cysto-Urethroscope 27035 BA



	27035 L	**Biopsy Forceps,** semirigid, double action jaws, 7 Fr., length 40 cm
	27035 F	**Grasping Forceps,** semirigid, double action jaws, 7 Fr., length 40 cm
	27035 D	**Forceps,** semirigid, through-cutting, single action jaws, 7 Fr., length 40 cm
	27035 S	**Hook Scissors,** semirigid, serrated, double action jaws, 7 Fr., length 40 cm

1-993

VITOM®
COLPOSCOPY

VITOM®

Visualization System for Open Surgery with Minimal Access

KARL STORZ — ENDOSKOPE

4-15

VITOM®

Visualization System for Open Surgery with Minimal Access

Today, most surgical procedures still involve open surgery, while a steadily growing proportion is performed endoscopically. As a full-range supplier in minimally invasive surgery, KARL STORZ takes account of this fact with the new HAVE 1™ concept. In conjunction with the innovative VITOM® system, KARL STORZ camera and documentation systems can be used for visualizing and documenting open surgeries as well. Combining technologies for minimally invasive procedures with those for open surgery is efficient, economic, and improves the workflow in the operating room. HAVE 1™ – the visualization and documentation solution for minimally invasive and open surgery from a single source.

Benefits of HAVE 1™:

- **Only KARL STORZ offers the VITOM® system, which allows visualizing and documenting open surgeries in all medical specialties**
- **Excellent FULL HD image quality**
- **Great depth of field**
- **Large working distance**
- **Ergonomic work via the monitor**
- **Compact design requiring minimal space in the OR**
- **Use of existing KARL STORZ FULL HD endoscopy system**

Brilliant Visualization in FULL HD

KARL STORZ HAVE 1™:

H	IMAGE1 S	FULL HD camera platform
A	AIDA™ compact NEO HD	Medical Data Management System
V	VITOM®	Brilliant visualization of open surgeries
e	Endoscopy	The diamond standard in minimally invasive surgery
1	The complete solution from a single source	Your contact for imaging and documentation

HAVE 1™ Video

4-15

VITOM® for Loop Conization

The Visualization System in the OR

KARL STORZ — ENDOSKOPE

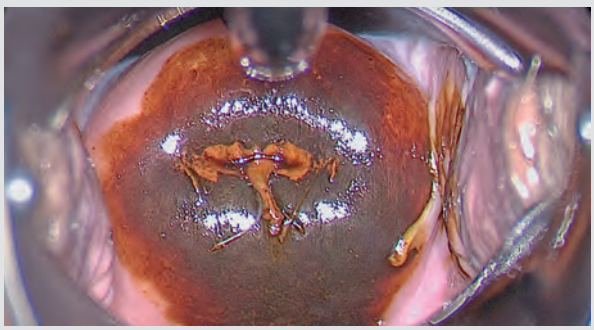
Loop conization should only be performed under 5 – 10x magnification. This enables the performance of an atraumatic procedure suitable for precanceroses, ensuring as little tissue loss as possible while providing sufficient oncological certainty.

Your experience with laparoscopic surgery is optimal training for performing surgery via monitor. Consequently, the VITOM® exoscope in conjunction with HD video technology represents an ideal module for future loop conizations. It enables you to easily diagnose lesions according to their extent and severity, visualize them on the monitor in HD technology, and make digital recordings at the same time. Loop conization is performed under magnification with maximum tissue preservation and without complications. An initial clinical study reported a high clinical value for this procedure (Vercellino et al., in press).

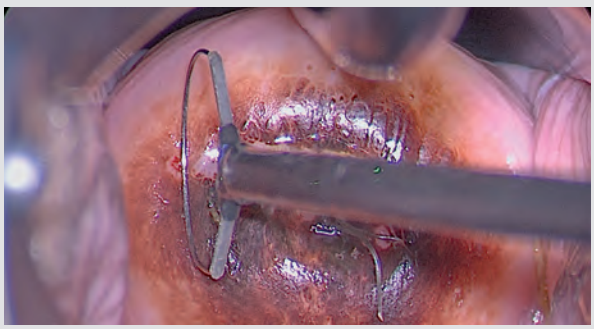
Prof. Dr. med. A. SCHNEIDER, M.P.H.,
Institute for Cytology and Dysplasia
Fürstenberg-Karree, Medical Care Center
Berlin, Germany

Use of the System

The VITOM® telescope is an exoscope which, unlike an endoscope, is not inserted into the body but placed at a working distance of 25 – 75 cm above the surgical field. The VITOM® system can be used in the OR for the visualization and documentation of colposcopic interventions in FULL HD quality, i.e. for conization with the electrical loop as an excellent alternative to conventional colposcopes. The colposcope can thus be replaced by the VITOM® system, providing the surgeon with a range of application areas for the individual system components. In addition, the VITOM® system greatly enhances image quality.



VITOM® colpophotogram of a 46-year-old patient with Pap Group IVa-p and evidence of HPV 51 and 52 as well as cervical intraepithelial neoplasia grade 3 (CIN3) histologically diagnosed through brush biopsy. A small circular, iodine-negative atypical transformation zone type 2 can be identified here. The visualization mode CLARA delivers an excellent and clear image of the portio.



A tissue-sparing loop excision was performed under VITOM® control with a 10 mm loop. A histopathological examination of the excision specimen in sano showed CIN 3.

Loop conization is performed under monitor control. The 90° VITOM® exoscope mounted to the VERSACRANE™ holding arm combined with the mounted IMAGE1 S HD camera delivers a high-resolution image of the iodine-stained portio. The large working distance between the VITOM® exoscope and surgical field provides the surgeon with more freedom of movement, making it easier to navigate the speculum and other instruments.

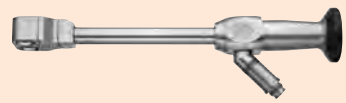
4-15

VITOM® for Loop Conization

Overview for the OR

KARL STORZ — ENDOSKOPE

VITOM® Telescope 90° with Integrated Illuminator



26003 VDA
26013 VDA

Clamping Cylinder

28272 CN

Fiber Optic Light Cable

495 TIP

VERSACRANE™ Holding System

28272 GS
28272 GM

IMAGE1 S H3-Z Three-Chip FULL HD Camera Head

TH 100

Cold Light Fountain XENON 300 SCB

20 1331 01-1

IMAGE1 S Camera System

TC 200EN
TC 300

26" FULL HD Monitor

9826 NB

4-15

VITOM® for Colposcopy

Visualization System for the Gynecological Practice and Outpatient Clinic

KARL STORZ — ENDOSKOPE

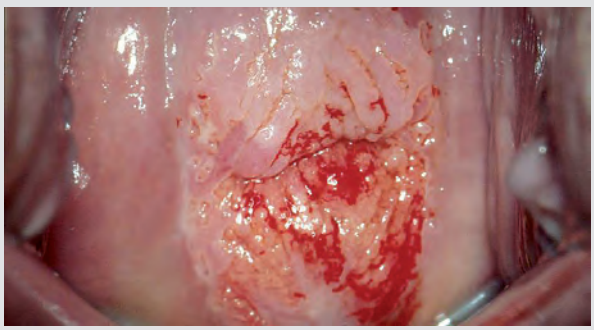
Combined with the IMAGE1 S camera system, the AIDA™ documentation system and a FULL HD monitor, the VITOM® 25 exoscope presents an ideal unit for colposcopy consultation. The TELE PACK X LED system offers a compact and space-saving alternative for this purpose. In addition, the entire endoscopic imaging system can be supplemented with hysteroscopes or cystoscopes for use in the doctor's office or outpatient clinic.

VITOM® enables colposcopic differential diagnosis and targeted biopsy from the most affected area in real time. The most important steps are recorded with video colposcopy and allow subsequent evaluation or comparison with findings at follow-up examinations. Should surgery be necessary, surgeons can again visualize the localization and extent of the tissue change to be removed prior to the intervention. The different visualization modes of the IMAGE1 S system allow examination of the identified lesion with various contrast and color nuances. This is particularly useful for the differential diagnosis of changes in the skin.

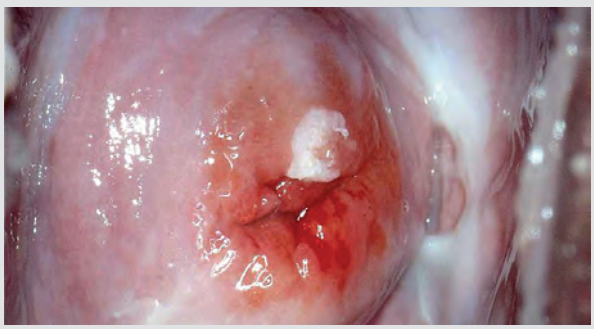
The correlation between video colposcopical recordings with histological images leads to new insights in colposcopy:

- The four pathognomonic signs – inner border sign, ridge sign, rag sign und cuffed gland openings – are strongly associated with the presence of high-grade cervical intraepithelial neoplasia and feature a reproducible histopathological correlation.
- Pathognomonic signs are gaining increasing importance and increase the specificity of detection and lower the rate of false-positive test results for the detection of high-grade precancerosis.
- The new brush biopsy technique features the same sensitivity as conventional excisional biopsy yet is practically painless for the patient and less traumatic to tissue.

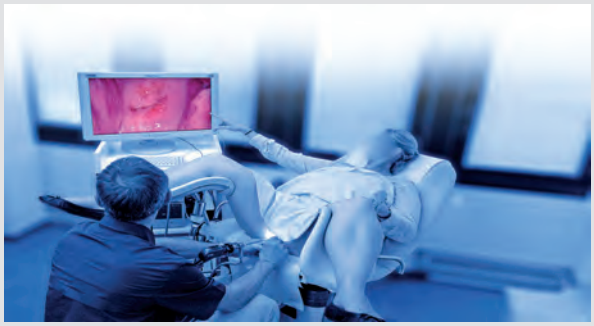
Prof. Dr. med. A. SCHNEIDER, M.P.H.,
Institute for Cytology and Dysplasia
Fürstenberg-Karree Medical Care Center
Berlin, Germany



Atypical transformation zone with a suspected CIN 3 lesion



Cytology: Pap class II, HR-HPV



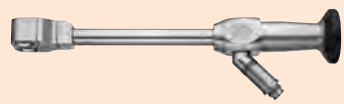
Colposcopic examination using VITOM® exoscopy. The patient and physician both view the image of the portio findings on the HD monitor. The patient is integrated in the examination process and can make informed decisions on further diagnosis and therapy.

4-15

VITOM® for Colposcopy

Overview for the Gynecological Practice and Outpatient Clinic

VITOM® Telescope 90° with Integrated Illuminator



26003 VDA
26013 VDA

Clamping Cylinder

28272 CN

Fiber Optic Light Cable

495 TIP

VERSACRANE™ Holding System

28272 GS
28272 GM

TELECAM One-Chip Camera Head

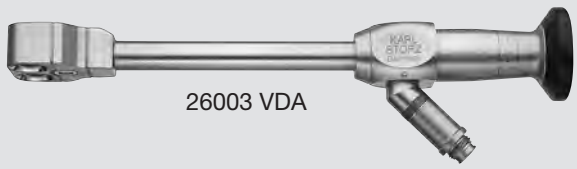
20 2120 30

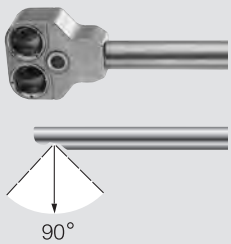
TELE PACK X LED

TP100 EN

4-15

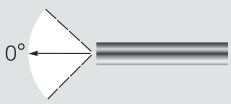
Exoscope and Illumination – VITOM® Telescope with Integrated Illuminator
Length 11 cm





26003 VDA **VITOM® Telescope 90° with Integrated Illuminator,** VITOM® HOPKINS® telescope 90°, working distance 25 – 75 cm, length 11 cm, **autoclavable,** with incorporated fiber optic light transmission and condensor lenses,
color code: blue
Note: The scope used in this set is denoted **20** 9160 25 DA.

26013 VDA **VITOM® Telescope 90° with Integrated Illuminator,** VITOM® HOPKINS® telescope 90°, working distance 25 – 75 cm, length 11 cm, **autoclavable, with green filter** for colposcopy and incorporated fiber optic light transmission and condensor lenses,
color code: blue
Note: The scope used in this set is denoted **20** 9160 25 DA.



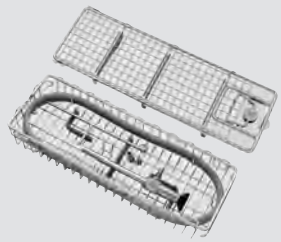
Optional:

26003 VAA **VITOM® 25 HOPKINS® Straight Forward Telescope 0°,** working distance 25 – 75 cm, diameter 10 mm, length 11 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: green
Note: The scope used in this set is denoted **20** 9160 20.

Specifications:

Working distance	25 cm, 50 cm, 75 cm
Depth of view	approx. 3.5 cm, 7 cm, 10 cm
Field of view	
IMAGE1 S H3-Z camera zoom 1x	5 cm, 10 cm, 15 cm
IMAGE1 S H3-Z camera zoom 2x	3.5 cm, 7 cm, 10.5 cm
Reproduction scale	
26" Monitor:	
H3-Z camera zoom 1x	approx. 8x, 4x, 3x
H3-Z camera zoom 2x	approx. 16x, 8x, 6x
42" Monitor:	
H3-Z camera zoom 1x	approx. 14x, 7x, 5x
H3-Z camera zoom 2x	approx. 28x, 14x, 10,5x
52" Monitor:	
H3-Z camera zoom 1x	approx. 17x, 8x, 6x
H3-Z camera zoom 2x	approx. 34x, 16x, 12x

4-15

		VITOM® Telescope 90° with Integrated Illuminator		VITOM® Telescope 0°
		26003 VDA	26013 VDA	26003 VAA
				
495 TIP	**Fiber Optic Light Cable,** with straight connector, extremely heat-resistant, enhanced light transmission, diameter 4.8 mm, length 300 cm	●	●	●
				
495 NVC	**Fiber Optic Light Cable,** with 90° deflection to the instrument, very narrow radius of curvature, diameter 4.8 mm, length 300 cm	–	–	●
	 			
	20 9170 00 495 UV			
20 9170 00	**VITOM® 25 Illuminator,** with 2 adjustable lenses and holding device for VITOM® 25 telescopes, **autoclavable,** for use with VITOM® 25 telescopes (**20** 9160 20 and equivalent models) and Y-Fiber Optic Light Cable 495 UV, not suitable for use with VITOM® telescopes of the 2nd generation with integrated illuminator	–	–	●
495 UV	**Y-Fiber Optic Light Cable,** 2x diameter 3.5 mm, length 230 cm, for simultaneous connection of two instruments			
				
20 9180 20	**VITOM® 25 Distance Rod,** length 25 cm	–	–	●
				
39501 A2	**Wire Tray for Cleaning, Sterilization and Storage** of two rigid endoscopes and one light cable, including holder for light post adaptors, silicone telescope holders and lid, external dimensions (w x d x h): 352 x 125 x 54 mm, for rigid endoscopes up to diameter 10 mm and working length 20 cm	●	●	●

4-15

Instruments and Electrodes for Conization

HAMOU® **Loop Electrodes**, **for resection of cervical neoplasias, for use with an insulated speculum and with AUTOCON® II 80, AUTOCON® II 200 and AUTOCON® II 400 SCB**

After precise localization of the neoplasia and the endocervical border limit, therapeutic conization may be performed using a loop electrode of various diameters.

The cutting current must be regulated precisely and automatically to avoid complications.

Loop Electrodes for Conization

	**26** 5200 43	**Electrode Handle,** with 2 buttons for activating the unipolar generator, for use with AUTOCON® II 80, AUTOCON® II 200 and AUTOCON® II 400 SCB, yellow button: unipolar cutting, blue button: unipolar coagulation (Cable **26** 5200 45 required)
	**26** 5200 45	**High Frequency Cable,** for Electrode Handle **26** 5200 43, length 400 cm
	26165 UG	**Loop Electrode,** with insulated sheath, **autoclavable,** size 22 x 17 mm, working length 11 cm
	26165 UM	**Loop Electrode,** with insulated sheath, **autoclavable,** size 15 x 13 mm, working length 10 cm
	26165 UK	**Loop Electrode,** with insulated sheath, **autoclavable,** size 10 x 8 mm, working length 9 cm

Ring Curette for Conization

	26165 RK	**Ring Curette,** bayonet-shaped, 45° curved upwards, very sharp, diameter 5 mm, with round handle, working length 16 cm

4-15

Units and Accessories for HF Surgery see chapter 11, UNITS

HD Imaging with Colposcopes

Direct Adaption

With the colposcope the surgeon always has a perfect view of the portio or the vulva.

Assistants, nurses, students and/or patients, however, often experience poor colposcope imaging. Furthermore, surgical interventions or findings cannot be documented.

KARL STORZ offers solutions from one source that equip colposcopes from leading manufacturers with advanced FULL HD technology. To achieve optimal results, all components in the video chain – from the camera system to the monitor – must be of the highest quality. The most straightforward and professional connection between the camera and the colposcope is the so-called direct adaption. Here the H3-M COVIEW® microscope camera and the corresponding QUINTUS® TV adaptor are directly connected to the colposcope via the C-MOUNT connection.

Direct adaption to the colposcope from Carl Zeiss Meditec

4-15

TH 106

TH 106 **IMAGE1 S H3-M COVIEW® Three-Chip FULL HD C-MOUNT Camera Head,** 50/60 Hz, S-Technologies available, progressive scan, with C-MOUNT thread for coupling to microscopes, 2 freely programmable camera head buttons, with detachable camera head cable, length 900 cm, for use with IMAGE1 S and IMAGE 1 HUB™ HD

20 9230 55

20 9230 55 **QUINTUS® Z 55 TV Adaptor,** for CARL ZEISS MEDITEC operating microscopes, f = 55 mm, recommended for IMAGE1 HD H3-M/H3-M COVIEW®, H3, H3-Z as well as S1 and S3 camera heads

20 9230 00 Z

20 9230 00 Z **QUINTUS® Zoom TV Adaptor,** for CARL ZEISS MEDITEC operating microscopes, with variable focal length f = 43 – 86 mm, for use with all KARL STORZ cameras (SD and HD)

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For further information on KARL STORZ Cold Light Fountains, Camera Systems and Monitors
see catalog TELEPRESENCE

HOLDING SYSTEMS AND TRAINING MODELS

Mechanical Holding Systems

with KSLOCK

KARL STORZ — ENDOSKOPE

KS*lock*

The mechanical holding systems from KARL STORZ offer a versatile, convenient and cost-effective possibility for the secure positioning of instruments and telescopes.

A wide range of accessories enables the systems to be configured for any desired fields of application. The robust construction ensures reliable positioning without oscillation.

Special Features:

- **Simple, fast and accurate positioning**
- **Many fields of application possible thanks to various articulated stands and a wide range of accessories**
- **Flexible positioning enables a large number of different positions**
- **All joints can be easily released or fixed by means of the central clamp**
- **Socket for use with European and United States standard rails of OR table**
- **Variable height adjustment by using the socket**
- **Extension Rod 28172 HM for the adjustment of particularly large working distances, for example, the VITOM® system**
- **Ergonomical positioning at the operating table**
- **Eases the work routine of the assistant**
- **Instruments and telescopes are clamped securely**
- **Steady imaging of the operation field**
- **Maintenance-free solid construction**
- **Autoclavable**
- **KSLOCK rapid coupling for mounting clamping jaws, instruments and accessories with KSLOCK pins**

4-15

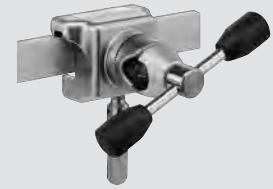
KS*lock*

Socket +

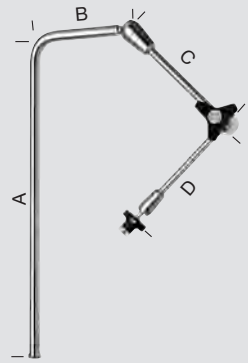
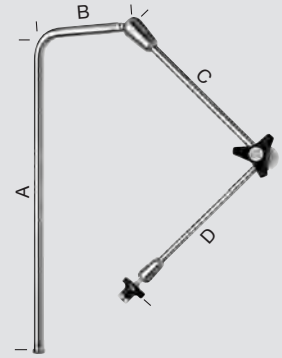
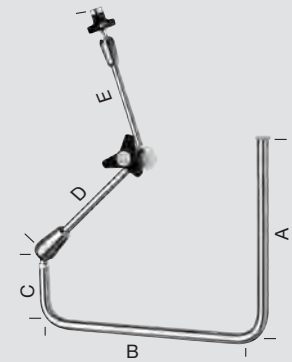
Articulated Stand +

Clamping Jaw

Socket

Standard Socket	Rotation Socket
28172 HK	28172 HR
	

Articulated Stand

straight		L-shaped		L-shaped, long		U-shaped	
28272 HA		28272 HB		28272 HC		28272 HD	
							
A 30 cm	B –	A 48 cm	B 15 cm	A 48 cm	B 15 cm	A 25 cm	B 31 cm
C 20 cm	D 17 cm	C 20 cm	D 17 cm	C 27 cm	D 24 cm	C 10 cm	D 20 cm
						E 17 cm	

A clamping jaw is required to complete the mechanical holding system.
Clamping Jaws for the Mechanical Holding System see page 130

4-15

VERSACRANE™ Holding System

VERSACRANE™ is a versatile holding system that was especially designed for use with the VITOM® telescope system.

It enables easy and precise positioning of the VITOM® telescope and camera head in gynecological, urological and proctological interventions when the patient is in the lithotomy position.

- **Ready for immediate use**
  The VERSACRANE™ holding arm is mounted on a mobile stand so that it can be quickly transported to the operating room and positioned before surgery.
- **Individual adjustment**
  Thanks to its gas-spring-supported arm, the VERSACRANE™ holding arm offers weight compensation for the camera head and VITOM® telescope. The braking force of each joint can also be adjusted individually.
- **Single hand use**
  An outstanding feature of the VERSACRANE™ system is its straightforward use. The VITOM® telescope and the camera system can easily be positioned with one hand.

28272 GS	**VERSACRANE™ Holding Arm,** low, for use in the lithotomy position, spring-supported, with quick release coupling KSLOCK, for use with Mobile Stand 28272 GM and KARL STORZ clamping jaws. The VERSACRANE™ holding arm is intended for use with VITOM® scopes/exoscopes.
28272 GM	**Mobile Stand,** for use with VERSACRANE™ Holding Arm 28272 GS

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Clamping Jaws for the VERSACRANE™ Holding System see page 130

Note: Should the need arise, a sterile cover may be used for the VERSACRANE™ holding arm. The VERSACRANE™ holding arm may not be used with rigid endoscopes.

ENDOCRANE® Holding System

The ENDOCRANE® holding arm is the system of choice if a particularly fast, accurate and safe positioning of instruments or endoscopes is required, i.e., in neurosurgery, laparoscopy or orthopedics.

The ENDOCRANE® holding arm helps surgeons and assistant surgeons to save time as the positioning of instruments and telescopes is faster and easier than with a manual holding system.

The system also relieves the assistant surgeon from having to guide the camera and delivers steady images.

The ENDOCRANE® holding system features a special piezoelectric locking joint mechanism.

This achieves positioning without misalignment as well as rapid locking (30 ms), meeting the demands of a clinical setting.

The system can be used with one hand and the large working radius of 50 cm allows variable use. A holding capacity of 20 N (2 kg) is possible in any position.

The holding arm features a fail-safe function which prevents a loss of retention force in the case of malfunction, i. e. power failure.

The system is very compact and can be mounted directly on standard OR table rails.

28272 EH

28272 EH **ENDOCRANE®,** piezoregulated holding arm, including stand

including:

Socket, to clamp to the OR table

Control Unit

Cover*, elasticated, package of 20

Spring Balance

Mains Cord

Case

* mtp

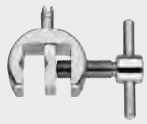
Clamping Jaws for the ENDOCRANE® Holding System see page 130
Components/Spare Parts see chapter 12

4-15

Holding Systems

Recommended Clamping Jaws and Accessories

KARL STORZ — ENDOSKOPE

			for use with: Mechanichal holding systems	VERSACRANE™ holding system	ENDOCRANE® holding system
Clamping Jaws					
	28272 UGN	**Clamping Jaw,** metal, clamping range 16.5 up to 23 mm, with quick release coupling KSLOCK (male), for use with all square-headed HOPKINS® telescopes	●	●	●
	28272 UKN	**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	●	–	●
	28272 UGK	**Clamping Jaw,** with ball joint, large, clamping range 16.5 to 23 mm, with quick release coupling KSLOCK (male), for use with all square-headed HOPKINS® telescopes	●	–	–
	28272 UKK	**Clamping Jaw,** with ball joint, small, metal, clamping range 4.8 to 12.5 mm, with quick release coupling KSLOCK (male), for use with instrument and telescope sheaths	●	–	–
	28272 UL	**Clamping Jaw,** universal, clamping range 0 to 18 mm, with quick release coupling KSLOCK (male)	●	–	●
	28272 UF	**Clamping Jaw,** for use with all KARL STORZ polymer housing fiberscopes, with quick release coupling KSLOCK (male)	●	–	●
Accessories					
	28272 CN	**Clamping Cylinder,** folding, for flexible mounting of 10 mm telescopes on the telescope sheath, **autoclavable.** The clamping cylinder allows vertical movement and rotation of the telescope.	●	●	●
	28172 HM	**Extension Rod,** 50 cm, with lateral clamp for height adjustment of the articulated stand, for use with Articulated Stands 28272 HA/HB/HC and Sockets 28172 HK/HR	●	–	–
	041150-20*	**Cover,** elasticated, package of 20	●	●	●

* mtp

4-15

High-End Simulator NEW

for Hysteroscopy

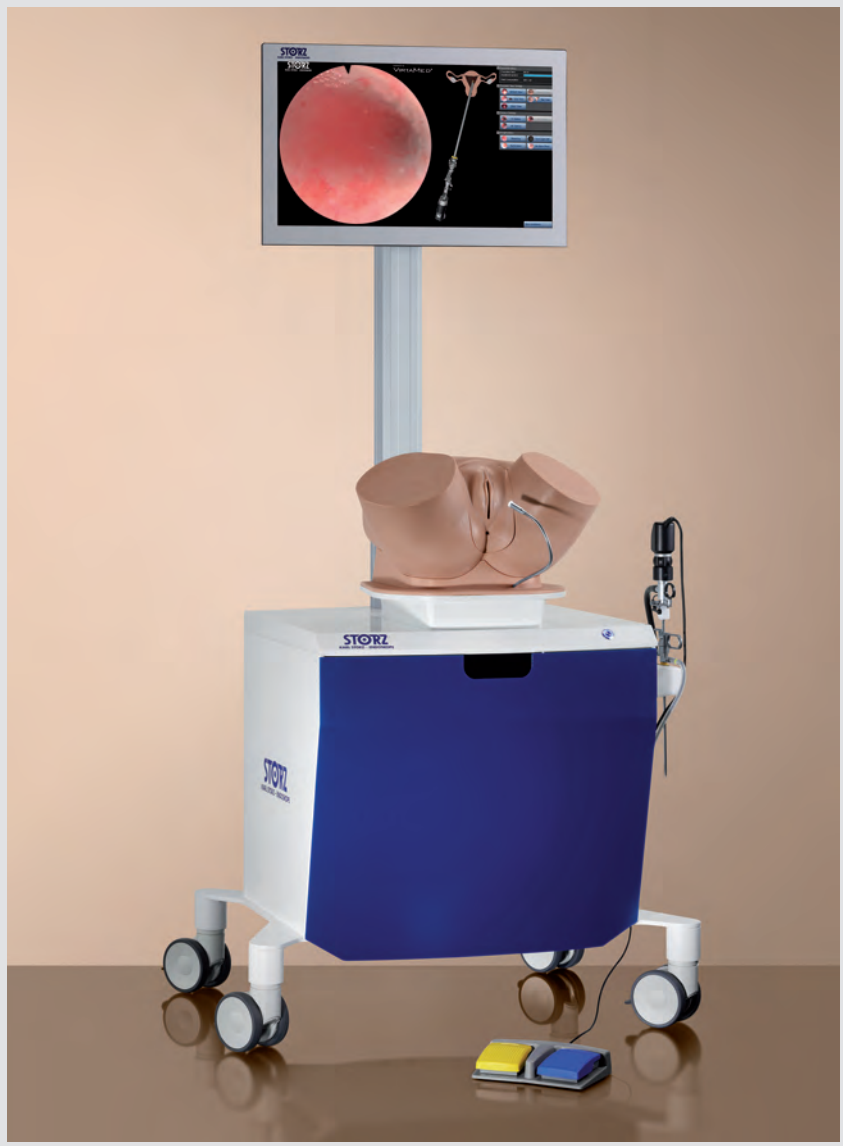
KARL STORZ — ENDOSKOPE

POWERED BY VIRTAMED

The KARL STORZ simulator for hysteroscopy provides gynecologists with a training model for teaching and training the practical skills and know-how required for minimally invasive techniques.

Guided training enables trainees to enhance their surgical skills in a virtual environment and to manage complications with no risk for live patients. The simulator offers objective, comparable and reproducible performance feedback to complete the learning process. A resectoscope equipped with sensors and specially adapted to the simulation trainer makes it possible to follow steps and movements on the monitor. The modified KARL STORZ resectoscope helps trainees become familiar with instruments in a straightforward and highly realistic manner.

The anatomical pelvis model delivers realistic, tactile feedback in a highly realistic training environment using adapted original instruments. Furthermore, the simulation software provides a wide range of intraoperative scenarios.



4-15

High-End Simulator NEW

for Hysteroscopy

KARL STORZ — ENDOSKOPE

Virtual platform for versatile and risk-free GYN training

Diagnostic Hysteroscopy

12 virtual patients with various pathologies and levels of difficulty offer the user the possibility to practice with telescopes with different directions of view and to gain experience.

Learning objectives:

- To correctly position and navigate the hysteroscope
- To establish uterine distension and to improve viewing conditions by means of fluid management
- To inspect the entire uterine cavity and to describe visible pathologies

Polyp Removal

8 virtual patients with various polyps in multiple locations provide training for the first steps in operative hysteroscopy using a loop electrode.

Learning objectives:

- To inspect the entire uterine cavity and to describe visible pathologies
- To resect polyps using the loop electrode
- To completely remove polyps while preserving healthy tissue

Myomectomy

Resection of 8 different types of intrauterine fibromas (type 0) in challenging positions and with different levels of difficulty.

Learning objectives:

- To inspect the entire uterine cavity and to describe visible pathologies
- To resect the myoma in small fragments; safe handling of the loop electrode
- To coagulate sources of bleeding

Endometrium Ablation with the Rollerball

4 virtual patients with varying shapes of uterine cavities offer the possibility to gain practice in HF surgery in challenging locations in the uterus.

Learning objectives:

- To inspect the entire uterine cavity and to describe visible pathologies
- To ablate the entire endometrial surface in a safe and systematic way

Module for Advanced Hysteroscopic Resection

- 4 virtual patients for advanced hysteroscopy provide surgical situations with adhesions, a septum and complex fibromas (types 0, I and II).
- Learning objectives comprise the removal of the intramural parts of a fibroma and the re-establishment of a uterine cavity without perforation with the resection instrument.
- Parameters established by experts offer an objective feedback for maximum learning efficiency.

4-15

High-End-Simulator NEW

Software Modules

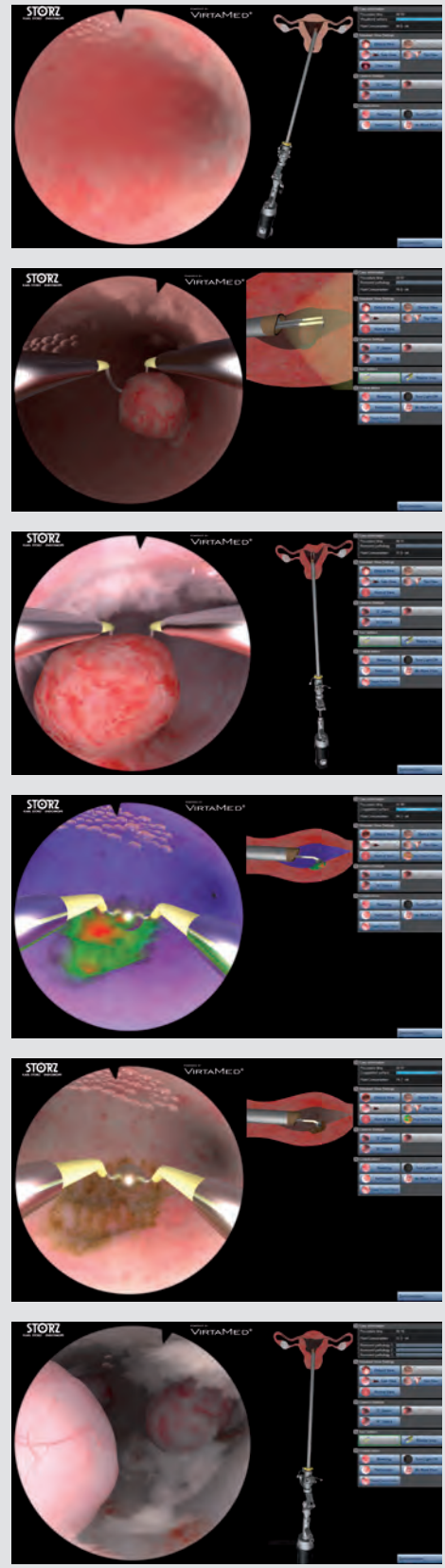
KARL STORZ — ENDOSKOPE

GYN Basic Module
- 12 virtual patient cases for diagnostic interventions
- 8 virtual patients for polypectomy
- 8 virtual patients for myomectomy (type 0)
- 4 virtual patients for endometrium ablation with the rollerball
- Customized courses with up to 8 patients designed upon request
- Feedback report with objective metrics
- Active and/or passive working element

GYN Advanced Hysteroscopy Module
- 8 virtual patient cases for essential hysteroscopy skills training (access, distension, navigation, polyp removal, adhesion removal, etc.)
- SimProctor™ helps guide trainees with tips, tricks and useful hints
- Customized courses with up to 8 patients designed upon request
- Feedback report with objective metrics
- Hysteroscope
- Grasper/punch

GYN Advanced Resection Module
- 8 virtual patient cases with multiple polyps, multiple myoma types 0, I and II, synechiae and a septum
- Training for advanced therapeutic hysteroscopy
- Customized courses with up to 8 patients designed upon request
- Feedback report with objective metrics

Essure® Module
- 8 virtual patient cases for the training of Essure® with increasing levels of difficulty
- Customized courses with up to 8 patients designed upon request
- Feedback report with objective metrics
- Hysteroscope for stationary GynTrainer
- Hysteroscope for portable GynTrainer
- Essure® instrument



4-15

High-End Simulator NEW

Stationary GynTrainer

KARL STORZ — ENDOSKOPE

Special Features:

- **GYN basic module with skills training for:**
  - **– Diagnostic hysteroscopy**
  - **– Polyp removal**
  - **– Myomectomy**
  - **– Endometrium ablation**
- **Further software packages can be installed**
- **Anatomic pelvis model, with magnetic tracking**
- **High-end PC with 23" multi-touch screen**
- **Mobile cart and height-adjustable monitor**
- **Software technology choice between unipolar and bipolar loops**
- **Software technology choice between three camera telescopes: 0°, 12° and 30°**

573620

573622	**Stationary GynTrainer,** with active working element, in a reusable transport box
573623	**Stationary GynTrainer,** with active working element, in disposable packaging
573620	**Stationary GynTrainer,** with passive working element, in a reusable transport box
573621	**Stationary GynTrainer,** with passive working element, in disposable packaging

4-15

Accessories included in delivery see page 136

High-End Simulator NEW

Stationary GynTrainer

KARL STORZ — ENDOSKOPE

The following accessories are included with the stationary GynTrainer:

5733207

5733207 **Anatomical Pelvis Model,** with stand and electromagnetic tracking, including Anatomical Uterus Insert 5733200, for use with GynTrainer

5733200 **Anatomical Uterus Insert,** with electromagnetic tracking, for use with stationary GynTrainer, for use with GynTrainer with Anatomical Pelvis Model 5733207

Optional

5733001 **Transport Case,** for all stationary trainers, reusable, recommended for frequent shipment

5733200

5733205

5733208

5733205 **Passive Resectoscope,** adapted original instrument with passive working element, for use with GynTrainer with

Optional

5733206 **Active Resectoscope,** adapted original instrument with active working element, for use with GynTrainer with

5733209

5733208 **Tenaculum,** adapted titanium tenaculum, for use with GynTrainer with Anatomical Pelvis Model

5733209 **Speculum,** adapted speculum, for use with GynTrainer with Anatomical Pelvis Model

4-15

High-End Simulator NEW

Stationary GynTrainer

KARL STORZ — ENDOSKOPE

Additional software packages:

573223	**GYN Advanced Hysteroscopy Module** including: **Hysteroscope,** for stationary GynTrainer **Grasper/Punch,** for stationary GynTrainer
573224	**GYN Advanced Resection Module**
573225	**Essure® Module** including: **Hysteroscope,** for stationary GynTrainer **Essure® Instrument**

The following accessories are included with software modules GYN Hysteroscopy and Essure®:

5733202

5733202	**Hysteroscope,** with working channel, for use with GynTrainer with Anatomical Pelvis Model

Available separately:

5733201	**Refurbishment of Anatomical Uterus Insert,** replacement of worn components, refurbishment, calibration and function control

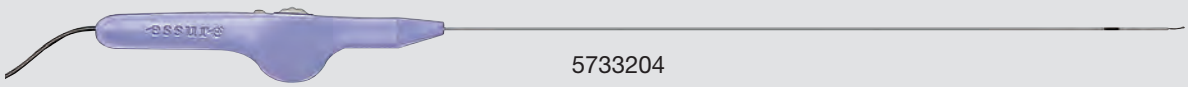
4-15

High-End Simulator NEW

Stationary GynTrainer

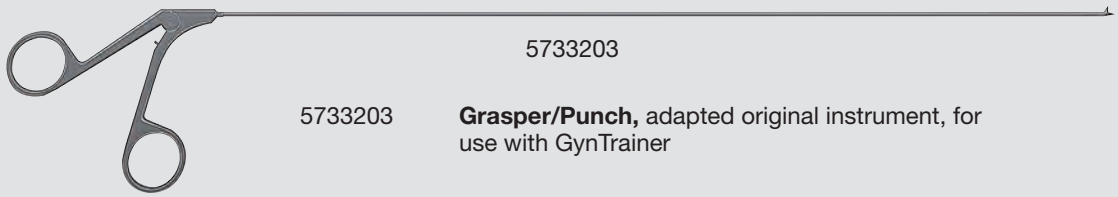
KARL STORZ — ENDOSKOPE

Replacement Instruments:



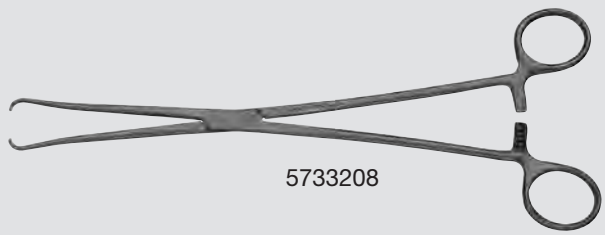
5733204

5733204 **Adapted Essure® Instrument,** Essure® add-on module required, for use with GynTrainer



5733203

5733203 **Grasper/Punch,** adapted original instrument, for use with GynTrainer



5733208

5733208 **Tenaculum,** adapted titanium tenaculum, for use with GynTrainer with Anatomical Pelvis Model

5733209

5733209 **Speculum,** adapted speculum, for use with GynTrainer with Anatomical Pelvis Model

4-15

High-End Simulator NEW

Portable GynTrainer

KARL STORZ — ENDOSKOPE

Special Features:

- **GYN basic module with skills training for:**
  - **– Diagnostic hysteroscopy**
  - **– Polyp removal**
  - **– Myomectomy**
  - **– Endometrium ablation**
- **Further software packages can be installed**
- **Simball tracking system, without anatomical pelvis model**
- **High-end laptop with 17" multi-touch screen**
- **Robust trolley, suitable for mobile use**
- **Software technology choice between unipolar and bipolar loops**
- **Software technology choice between three camera telescopes: 0°, 12° and 30°**

573145

573646 **Portable GynTrainer,** with active working element

573645 **Portable GynTrainer,** with passive working element

The following accessories are included with the portable GynTrainer:

5733401

5733401 **Passive Working Element,** adapted original instrument, for use with portable GynTrainer

Optional

5733402 **Active Working Element,** adapted original instrument, for use with portable GynTrainer

4-15

Additional software packages:

573229	**GYN Advanced Hysteroscopy Skills Module** including: **Hysteroscope,** for portable GynTrainer **Grasper/Punch,** for portable GynTrainer
573224	**GYN Advanced Resection Module**
573226	**Essure® Module** including: **Hysteroscope,** for portable GynTrainer **Essure® Instrument**

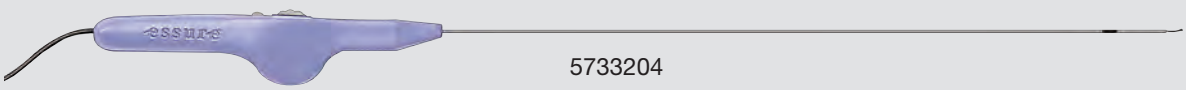
The following accessories are included with software modules GYN Hysteroscopy and Essure®:

5733403

5733403	**Hysteroscope,** with working channel, for use with portable GynTrainer

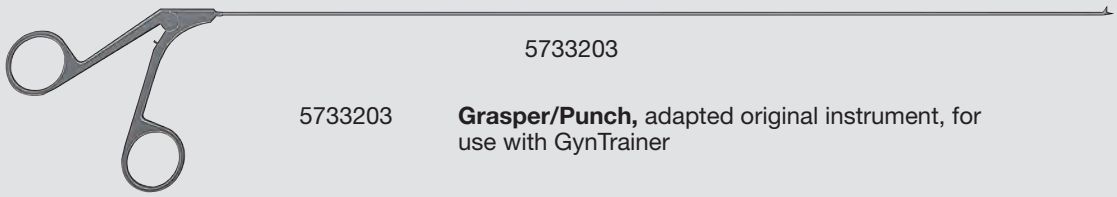
4-15

Replacement Instruments:



5733204

5733204 **Adapted Essure® Instrument,** Essure® add-on module required, for use with GynTrainer



5733203

5733203 **Grasper/Punch,** adapted original instrument, for use with GynTrainer

4-15

LYRA
Hystero-Trainer Eva II

The hysteroscopy trainer with vagina and uterus models manufactured in Neoderma provides the closest training to reality in diagnostic and/or office hysteroscopy. A uterus from animal tissue or Neoderma can be integrated into the system. The trainer offers very good realistic training possibilities for performing atraumatic procedures without the use of a speculum or tenaculum to hold the portico. This method is also called vagino-cervico hysteroscopy.

The introduction of a hysteroscope can occur similar to reality, enabling the surgeon to train hand-eye coordination. Simulation with semiflexible instruments for i.e. biopsy, septum dissection and polyp removal is also possible.

The workstation for operative hysteroscopy has similar components to the trainers for diagnostic or office hysteroscopy.

Operative hysteroscopy is a challenging skill that can be acquired through continuous and regular practice. Surgery involves complex hand-eye coordination, which can be enhanced through systematic training.

Furthermore, the hysteroscopy trainer enables surgical interventions to be practised using the uterus model and simulates the precise resection of pathologies.

26343	LYRA **Hystero-Trainer Eva II** including: **Neoderm Uterus,** with polyps **Neoderm Uterus,** with septum and polyps **Neoderm Uterus,** with septum without polyps **Vaginal Block,** for biological organ structures/uteri **Vaginal Block,** for artificial uteri (Neoderm) **Neutral Electrode,** for unipolar use **Neoderm Uterus,** for biological implants **Base Body**

7-11

Components/Spare Parts see chapter 12

TELESCOPES AND INSTRUMENTS FOR DUCTOSCOPY AND MAMMAPLASTY

Ductoscopy

KARL STORZ — ENDOSKOPE

Mammary endoscopy or ductoscopy allows direct visualization of the lactiferous ducts of the mammary gland. It makes it possible to view minimal pathological correlates, e.g., blood in secretion, before they can be detected with conventional imaging procedures.

Indications:

This procedure is mainly used in the case of pathological secretion of the mammary gland. In contrast to conventional, unselective ductectomy, this method permits a selective excision of the affected lactiferous ducts under direct vision.

Some practitioners also use this method to perform ductal lavage on patients with a high-risk status due to family history or to examine painful, inflammatory processes of the mammary gland.

The procedure can be performed under local or general anesthesia. Extramammary causes should first be ruled out before clarification of pathological secretions. A ductectomy is indicated if an intramammary pathogenesis is suspected. First the lactiferous duct is dilated with superfine Hegar dilators. Magnifying spectacles will greatly facilitate this process. To avoid the risk of a via falsa, the lactiferous ducts should be stretched. These can be held in position using threads, as can be seen in Fig. 1.

The ductoscopes used are available with a diameter of 0.8 mm and 1.3 mm. The choice of ductoscopes depends on the number of working channels required. The ductoscope measuring 0.8 mm is available with an irrigation channel whereas the 1.3 mm scope is equipped with an irrigation and a working channel.

The first working channel is generally used for the hydrodilation of the lactiferous ducts with isotonic saline solution. Marking wires or even biopsy forceps can be introduced through the second working channel. Before introduction with the ductoscope, the instruments should be fully assembled and inspected by the operating surgeon. Furthermore, the operating surgeon should clarify orientation (ventral, dorsal) in the area before inserting the ductoscope as the endocamera has no room for maneuver.

Following dilation, the ductoscope is inserted in the lactiferous duct under continuous water pressure. Water pressure is generated via a 20 ml syringe, which is connected to the working channel with an extension tube, in order to facilitate inspection of the lactiferous ducts.

Following a short learning curve, it is now possible to insert the ductoscope into various lactiferous ducts at the bifurcation. Compression at the base of the breast enables the pathological secretion to be expressed at the bifurcation site. This allows the surgeon to identify the pathological nipple discharge.

In order to perform selective extirpation of the pathological duct, the discovered findings must be marked. This can be achieved in two ways. One possibility is to use the second working channel of the ductoscope to introduce a marking wire.

The other possibility is to use indirect imaging such as sonography to mark suspicious findings directly before the ductoscope tip. Some authors recommend removing suspicious findings in the proximity of the endoscope under direct vision. The incision selected should observe the standard techniques practiced in oncoplastic breast surgery.

A high-resolution digital camera and infinitely adjustable light source permits a clear display of the intervention on a video screen and documentation with the AIDA system.

An intervention requires approx. 20-40 ml dilation liquid. After the instruments are removed, glandular adaptation and suturing is performed in the usual manner.

Ductoscopy enables direct visualization and examination of pathological processes inside the lactiferous ducts before detection with imaging procedures is possible. Furthermore, the procedure allows selective lactiferous duct extirpation with minimal excision volume as opposed to unselective dutectomy.

Priv.-Doz. Dr. med. M. HAHN,
Senior Consultant Senology,
Universitäts-Frauenklinik Tübingen,
Germany

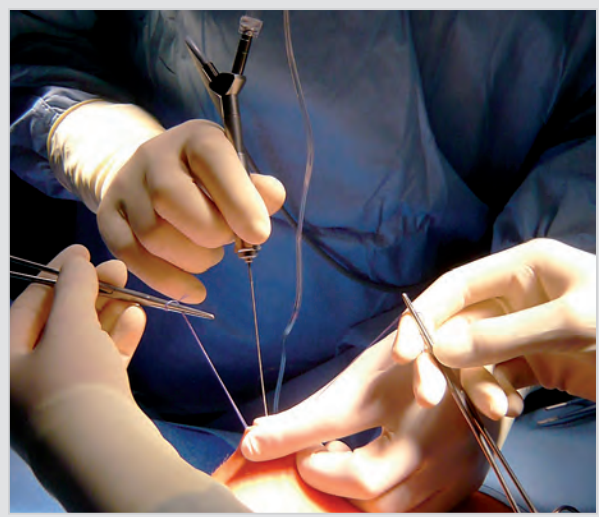
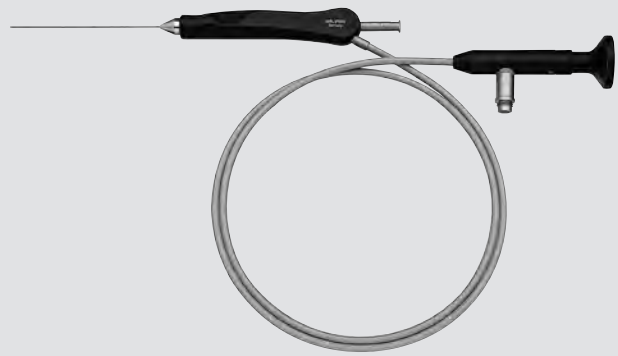


Fig. 1: *Ductoscopy with the 0.8 mm ductoscope*

4-15

Special Features:

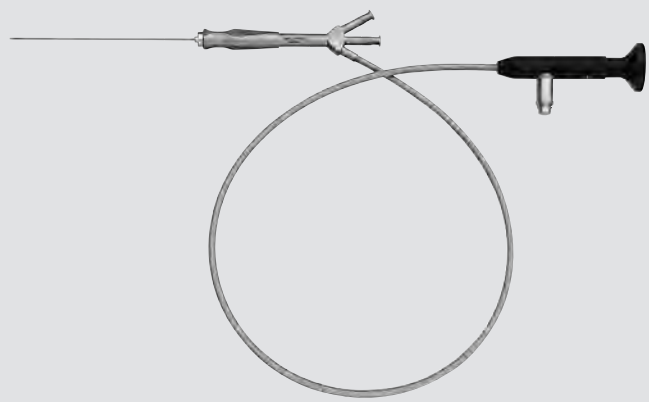
- **Minimal sheath diameter**
- **Superior image quality**
- **Maximum irrigation performance due to irrigation channel with lateral irrigation connections**
- **Ergonomically shaped handle**
- **Autoclavable**



11521 A

11521 A **Miniature Straight Forward Telescope 0°,** semiflexible, **autoclavable,** NITI, with integrated irrigation channel, with remote eyepiece, fiber optic light transmission incorporated

Outer diameter:	0.8 mm
Irrigation channel:	0.25 mm
Working length:	9 cm



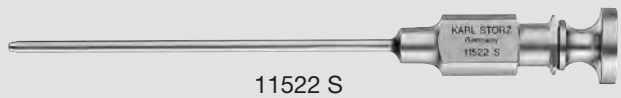
11522 A

11522 A **Miniature Straight Forward Telescope 0°,** semirigid, **autoclavable,** NITI, with remote eyepiece, with integrated irrigation channel and working channel, fiber optic light transmission incorporated,

Outer diameter:	1.3 mm
Irrigation channel diameter:	0.25 mm
Working channel diameter:	0.6 mm
Working length:	12 cm

4-15

For use with Miniature Straight Forward Telescopes 11521 A and 11522 A



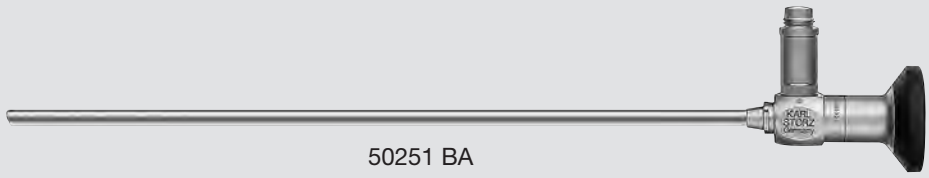
11522 S

11522 S	**Examination Sheath,** with blunt obturator, working length 5 cm, for use with Miniature Straight Forward Telescopes 11521 A and 11522 A
11522 SL	**Examination Sheath,** with blunt obturator, working length 9 cm, for use with Miniature Straight Forward Telescopes 11521 A and 11522 A

4-15

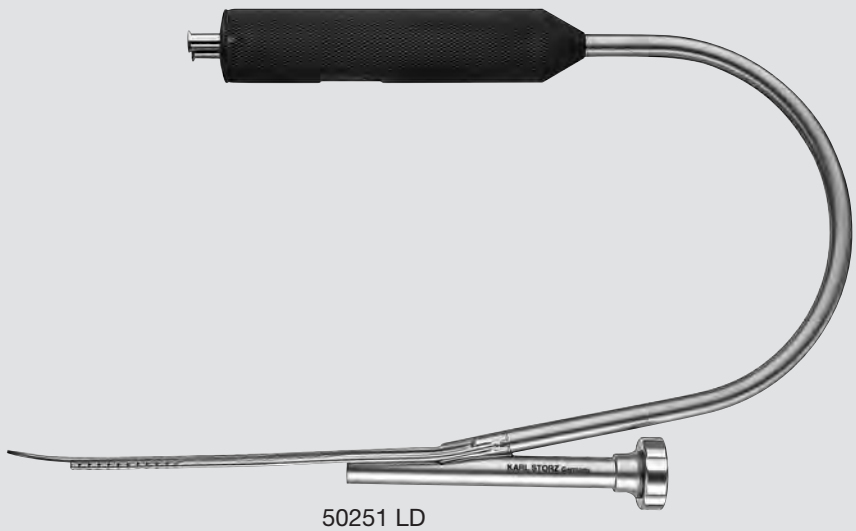
Optical Retractors

for Mammaplasty



50251 BA

50251 BA **HOPKINS® Forward-Oblique Telescope 30°,** enlarged view, diameter 5 mm, length 24 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: red

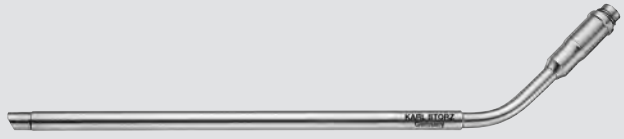


50251 LD

50251 LD **Optical Retractor,** for creation of an operation pocket, with 2 separate suction channels for smoke evacuation, with handle for single-hand use, for use with HOPKINS® Telescope 50251 BA

including:

Telescope Sheath



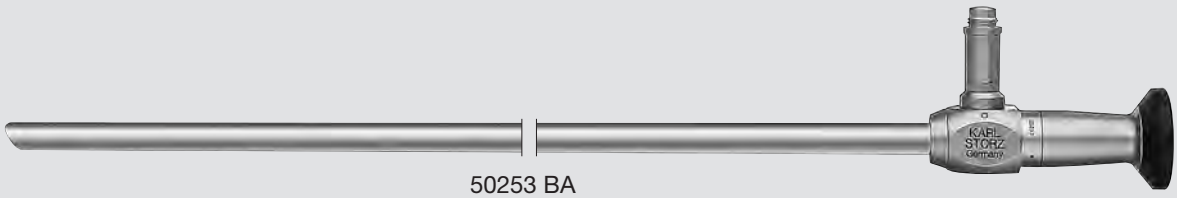
50251 LT

50251 LT **Fiber Optic Light Carrier,** for non-endoscopic applications, for use with Optical Retractors 50251 LC and 50251 LD

4-15

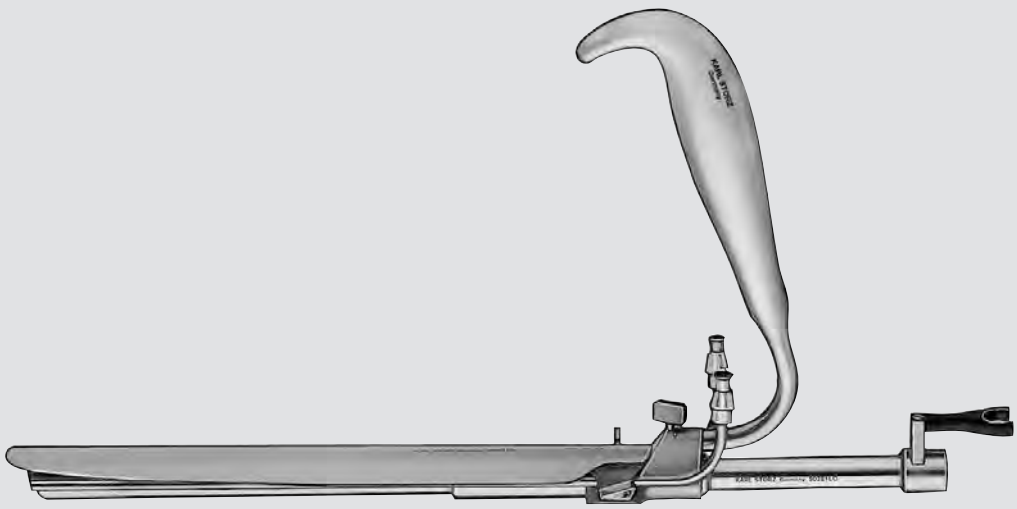
Optical Retractors

for Mammaplasty



50253 BA

50253 BA **HOPKINS® Forward-Oblique Telescope 30°,** enlarged view, diameter 10 mm, length 31 cm, **autoclavable,** fiber optic light transmission incorporated,
color code: red



50251 LG

50251 LG **Optical Retractor,** width of spatula 25 mm, with 2 individually adjustable lateral suction channels for smoke evacuation, for use with HOPKINS® Telescope 50253 BA

4-15

Illuminated Retractors

for Mammaplasty

KARL STORZ — ENDOSKOPE

496 H

50251 R

496 H	**Retractor,** with fiber optic light carrier, width of spatula 25 mm, length 14 cm
50251 R	**Retractor,** with fiber optic light carrier, with teeth, with suction channel for smoke evacuation, width of spatula 30 mm, length 9 cm
50251 RG	**Retractor,** with fiber optic light carrier, with atraumatic teeth, with suction channel for smoke evacuation, width of spatula 35 mm, length 12 cm

4-15

Optical and Illuminated Retractors

TÜBINGEN Model

50251 RB

For the submammary and the inframammary approach

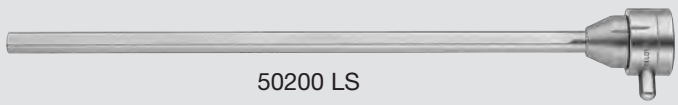
50251 RS	**Illuminated Retractor,** TÜBINGEN model, width of blade 30 mm, fiber optic light carrier integrated in blade, length 15 cm, for use with HOPKINS® Telescope 30° 50230 BA including: **Handle**
50230 BA	**HOPKINS® Forward-Oblique Telescope 30°,** enlarged view, diameter 4 mm, length 18 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red

For the axillary approach (latissimus dorsi flap)

50251 RB	**Illuminated Retractor,** TÜBINGEN model, width of blade 40 mm, fiber optic light carrier integrated in blade, length 20 cm, for use with HOPKINS® Telescope 30° 26105 BA including: **Handle**
26105 BA	**HOPKINS® Forward-Oblique Telescope 30°,** enlarged view, diameter 4 mm, length 30 cm, **autoclavable,** fiber optic light transmission incorporated, color code: red

Recommended Fiber Optic Light Cable

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



50200 LS

50200 LS	**Telescope Sheath**

Telescope 50200 LS is required to use the endoscope.

Components/Spare Parts see chapter 12

References: *Krämer, B., Röhm, C., Wallwiener, D. & Hoffmann, J., 2006. Der endoskopisch assistierte Latissimus-dorsi-flap (LDF) mit modifiziertem Instrumentarium (Retraktor). Senologie – Zeitschrift für Mammadiagnostik und -therapie, Thieme-Verlag, (3) S. 93. DOI: 10.1055/s-2006-953737*

4-15

50251 DE

50251 DE ECKERT **Breast Dissector,** blunt, curved, size 10 mm, length 23 cm

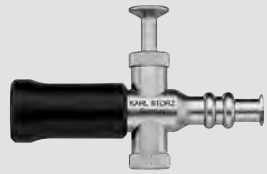
50251 DF ECKERT **Breast Dissector**, blunt, hook-shaped curve, size 10 mm, length 23 cm

50251 T

50251 T **Coagulation Suction Tube,** spatula-shaped, blunt, straight, size 5 mm, length 30 cm

50251 TC

50251 TC **Coagulation Suction Tube,** spatula-shaped, blunt, curved downwards, spatula turned right by 90°, size 5 mm, length 30 cm



30804

30804 **Handle with Trumpet Valve,** for suction or irrigation, **autoclavable,** for use with 5 mm coagulation suction tubes, 3 and 5 mm suction and irrigation tubes

4-15

DELMAR **Unipolar Endo-Dissector**

KARL STORZ — ENDOSKOPE

The unipolar endo-dissector has been developed for preparation of the implant pocket for breast implants under endoscopic vision.

The endo-dissector is used with a 0° telescope with a diameter of 10 mm in order to create a retro mammary or retro pectoral pocket through the axillary approach. In addition, the endo-dissector is equipped with a unipolar coagulation electrode which enables the surgeon to dissect and coagulate tissue under visual control.

By means of endoscopic view, the unipolar endodissector facilitates very precise preparation in respect of the shape of the implant.

The fact that it is possible to coagulate at the same time means that a bloodless pocket can be maintained, without haematoma. No drainage is necessary.

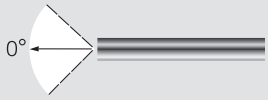
The characteristics of the unipolar endo-dissector make this method an excellent alternative to other procedures which are carried out either submammary or on the mammilla.

H. DELMAR, M. D.
Cap d'Antibes, France

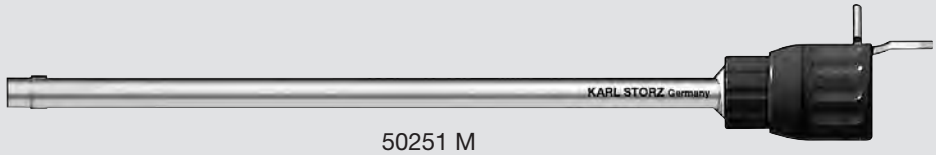
4-15

DELMAR **Unipolar Endo-Dissector Set**

50250 AA



50250 AA **HOPKINS® Straight Forward Telescope 0°,** enlarged view, diameter 10 mm, length 31 cm, **autoclavable,** fiber optic light transmission incorporated, color code: green



50251 M

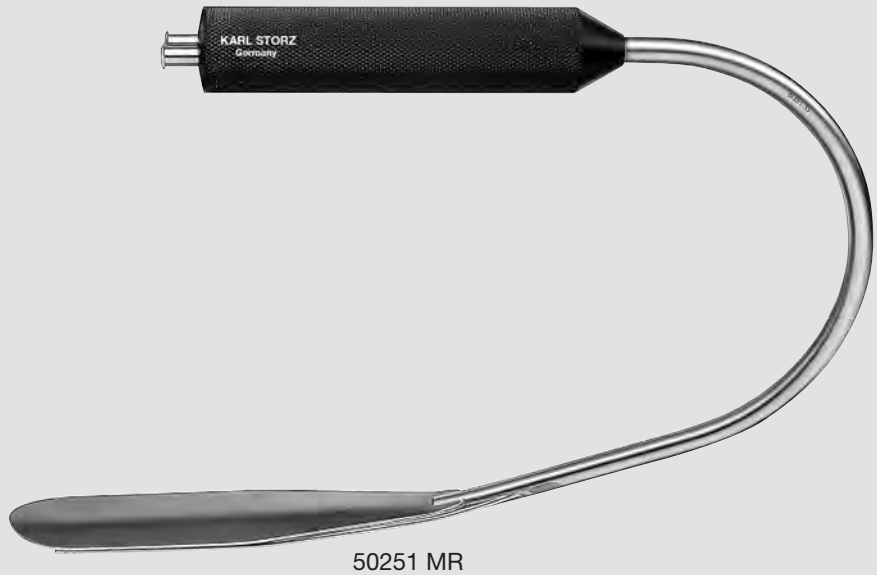
50251 M DELMAR **Unipolar Endo-Dissector,** size 20 mm, working length 28 cm, with connector pin for unipolar coagulation

including:

Handle

Sheath

50251 ML DELMAR **Unipolar Coagulation Electrode,** package of 5, for use with Unipolar Endo-Dissector 50251 M



50251 MR

50251 MR **Retractor,** for creation of an operation pocket, with handle for single hand use, width of spatula 30 mm, length 14 cm, with two lateral suction channels for smoke evacuation

High Frequency Cords for Unipolar Coagulation see chapter 11, UNITS
Components/Spare Parts see chapter 12

4-15

UNITS AND ACCESSORIES

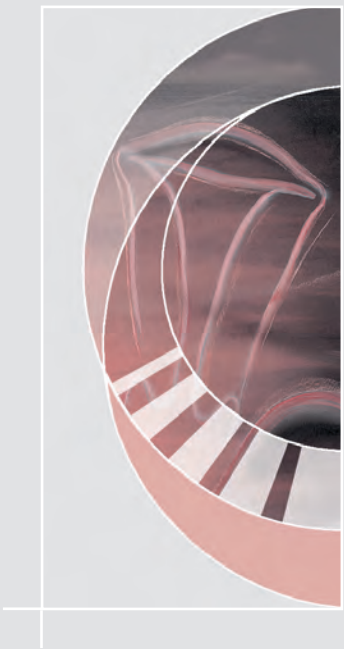
INSUFFLATORS

SUCTION AND IRRIGATION SYSTEMS

MOTOR SYSTEMS

HIGH FREQUENCY SURGICAL UNITS

KARL STORZ — ENDOSKOPE



INSUFFLATORS
SUCTION AND IRRIGATION SYSTEMS
MOTOR SYSTEMS
HIGH FREQUENCY SURGERY UNITS

The units manufactured by KARL STORZ combine long-lasting precision mechanics with state-of-the-art microelectronic programmable controls. At KARL STORZ, the greatest emphasis is placed on user and patient safety. The quality assurance system of KARL STORZ is certified in accordance with the requirements of ISO 9001/EN 46001. It guarantees constant quality testing in the selection of materials and components. At the end of each manufacturing process, tests are carried out with automatic measuring and testing systems developed specially for this purpose. The results are recorded and logged. That gives each device a distinct "fingerprint" that can be checked at any time before and after it is delivered to the customer.

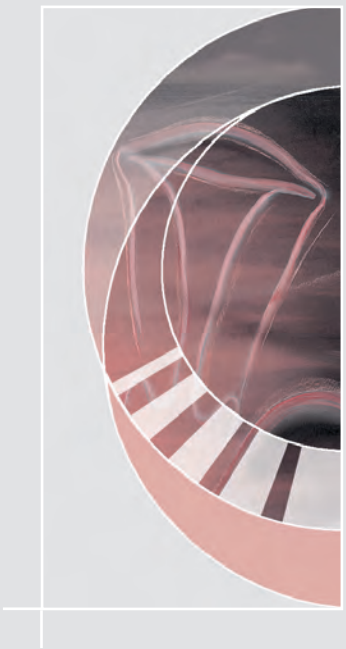
The standardized, modular design of KARL STORZ units was developed based on extensive ergonomic studies and is conceived for ease of care and cleaning and user-friendly practice, as well as to meet the demands of the special hygienic standards required in surgery. Clearly laid out adjacent function keys and displays guarantee efficient operation and make it easier to constantly monitor actual and set parameters. Acoustic and visual warning signals also assist the user. The settings can be changed manually at any time. Automatic microelectronic control systems guarantee optimum operating conditions and therefore relieve the surgeon in his work who can then fully concentrate on medical procedures.

The overall KARL STORZ product line includes the following categories of units with accessories:

- **Insufflators**
- **Suction and Irrigation Systems**
- **Motor Systems**
- **Lithotripsy Systems**
- **High Frequency Surgery Units**

1-993

KARL STORZ — ENDOSKOPE



INSUFFLATORS

HAMOU® **MICRO HYSTEROFLATOR® SCB**

HAMOU® **MICRO-HYSTEROFLATOR® SCB**

for Distension of the Cavum Uteri with CO_2 Insufflation, Recommended Standard Set Configuration

KARL STORZ — ENDOSKOPE

Special Features:

- **Simple, fully automatic operation**
- **High degree of patient safety**
- **Clear, adjacent bar diagrams for set values and actual values allow easy monitoring of insufflation procedure**
- **Precision jog keys for precise preselection of values**
- **Optical and acoustic warning signals in case of patient overpressure**
- **Electrically controlled gas refill (i.e. caused by loss of gas while changing instruments)**
- **With connection possibilities to the KARL STORZ Communication Bus (KARL STORZ-SCB)**

26 4315 08-1 HAMOU® **MICRO-HYSTEROFLATOR® SCB,** CO_2 insufflator with HAMOU® electronic adjustment and adjustment of insufflation parameters, with KARL STORZ Communication Bus (KARL STORZ-SCB), max. insufflation pressure 200 mmHg, max. insufflation flow 100 ml/min, power supply 100 – 240 VAC, 50/60 Hz

including:

Silicone Tubing Set, sterilizable

Universal Wrench

SCB Connecting Cable, length 100 cm

Gas Filter*, for single use, sterile, package of 10

Specifications:

Gas flow	0-100 ml/min
Pressure in steps of 25 mmHg	0-200 (0-26600 Pa) mmHg
Gas	CO_2
Measuring/control system	electronic
Power supply	100-240 VAC, 50/60 Hz

Pressure gauge for gas bottles	- Gas bottle pressure - Intrauterine pressure: 0-200 (0-26600 Pa) (mmHg) - Gas flow 0-100 ml/min - Gas load
Dimensions w x h x d	305 x 155 x 270 mm
Weight	6 kg
Certified to	IEC 601-1, CE acc. to MDD

* mtp

1-994

Optional Accessories for HAMOU® **MICRO-HYSTEROFLATOR® SCB** see page U 8

Components/Spare Parts see chapter 12

HAMOU® **MICRO-HYSTEROFLATOR®** SCB

System Components

CO_2 Bottle,
Pin-Index connection

26 4000 91 **empty**
26 4000 93 **filled**

CO_2 Bottle,
German connection

26 4000 90 **empty**
26 4000 92 **filled**

High Pressure Tube,
Pin-Index connection

20 4000 22 length 55 cm
20 4000 28 length 102 cm

High Pressure Tube,
German connection

20 4000 21 length 55 cm
20 4000 27 length 102 cm

High Pressure Tube,
ISO connection

20 4002 22 length 102 cm

Low Pressure Tube,
central CO_2 gas supply

UI001 length 150 cm
UI002 length 300 cm
UI003 length 600 cm

UNIT SIDE

PATIENT SIDE

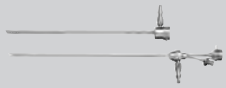
Gas Filter,
for single use, sterile

031123-10*

Silicone Tube, for insufflation

20 4000 42

Hysteroscopy Sheath



26153 BI/26153 BO

* mtp

1-99₂

Optional Accessories

for HAMOU® **MICRO-HYSTEROFLATOR® SCB**

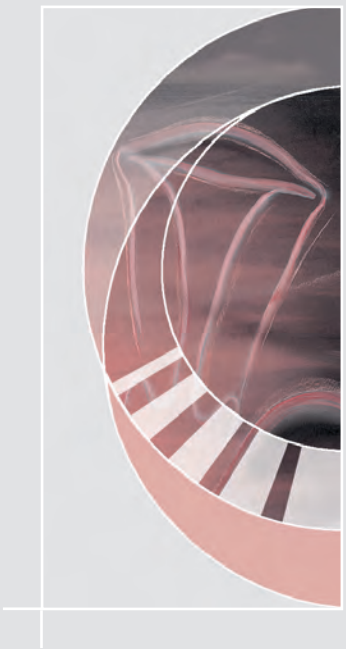
KARL STORZ — ENDOSKOPE

	**20** 4000 32	**High Pressure Inline Gas Filter**
	**20** 4000 21 **20** 4000 27	**CO_2 High Pressure Tube,** American connection/German connection, length 55 cm **Same,** length 102 cm
	**20** 4000 22 **20** 4000 28	**CO_2 High Pressure Tube,** American connection/Pin-Index connection, length 55 cm **Same,** length 102 cm
	**20** 4002 22	**CO_2 High Pressure Tube,** American connection/ISO connection, length 102 cm
	UI 001 UI 002 UI 003	**Low Pressure Tube,** for the central CO_2 gas supply, length 150 cm **Same,** length 300 cm **Same,** length 600 cm
	**20** 0900 70 **20** 0903 70	**SCB Connecting Cable,** length 30 cm **Same,** length 60 cm
	**26** 4000 90 **26** 4000 92	**CO_2 Bottle,** empty, with German connection **Same,** filled
	**26** 4000 91 **26** 4000 93	**CO_2 Bottle,** empty, with Pin-Index connection **Same,** filled
	031123-10*	**Gas Filter,** for single use, sterile, package of 10

* mtp

1-99₂

KARL STORZ — ENDOSKOPE



SUCTION AND IRRIGATION SYSTEMS

HYSTEROMAT E.A.S.I.® SCB

HAMOU® **ENDOMAT® SCB**

ENDOMAT® LC SCB

EQUIMAT® SCB

HYSTEROMAT E.A.S.I.® SCB

Double Roller Suction and Irrigation System,
Recommended Standard Set Configuration

KARL STORZ — ENDOSKOPE

Special Features:

- **Constant monitoring of intrauterine pressure due to controlled suction/irrigation function**
- **Intuitive use via touch screen**
- **Can be used in diagnostic and operative hysteroscopy as well as laparoscopy and with the intrauterine shaver**
- **Pre-configured procedure options**
- **Possibility to create own procedures**

26 3400 01-1 **HYSTEROMAT E.A.S.I.® SCB,**
power supply 100 – 240 VAC, 50/60 Hz,
HYSTEROMAT E.A.S.I.® SCB: SCB ready,
compatible from RUI Release 45

including:

Mains Cord

SCB Connecting Cable

Basic Tubing Set*, for single use

Accessories

031217-10* **Suction Tubing Set,** for single use, sterile, package of 10, for use with HYSTEROMAT E.A.S.I.® SCB and UROMAT E.A.S.I.® SCB

031717-10* **Irrigation Tubing Set,** with two puncture needles, for single use, sterile, package of 10, for use with HYSTEROMAT E.A.S.I.® SCB and UROMAT E.A.S.I.® SCB

031162-10* **Patient Tube,** for single use, sterile, package of 10, for use with Pump Tubing Day Set 031161-01, 031167-01, 031168-01, 031261-01 and 031767-01

031767-10* **Pump Tubing Day Set,** with two puncture needles, sterile, package of 10, for use with HYSTEROMAT E.A.S.I.® SCB and UROMAT E.A.S.I.® SCB in combination with Patient Tube 031162-01

Specifications:

Pressure-regulated	- HYST 0-100 mmHg - LAP 0-400 mmHg
Flow-regulated	- HYST 0-200 ml/min - LAP 100-1300 ml/min
Power supply	100-240 VAC, 50/60 Hz

Dimensions w x h x d	447 x 155 x 313 mm
Weight	8.8 kg
Certified to	IEC 601-1, CE acc. to MDD

* mtp

4-15

Optional Accessories for HYSTEROMAT E.A.S.I.® see pages U 18-19

Components/Spare Parts see chapter 12

HYSTEROMAT E.A.S.I.® SCB

System Components

KARL STORZ — ENDOSKOPE

Two-Pedal Footswitch
(optional)

26 340330

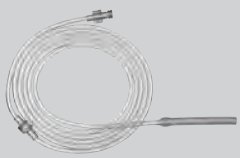
Tubing Set, for irrigation

031717-10*

UNIT SIDE

PATIENT SIDE

Tubing Set, for suction



031217-10*

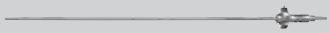
DRILLCUT-X® II Shaver Handpiece GYN

26 702050

Resection:
HOPKINS® Telescope 12°
Working Element Set, bipolar
Resectoscope Sheath

26020 FA
26055 EBH
26055 BO

Shaver Blade GYN



26208 SA

Hysteroscopy:
B.I.O.H.® Hysteroscope

26252 BH

* mtp

SUCTION AND IRRIGATION SYSTEMS

4-15

HAMOU® **ENDOMAT®** SCB

Suction and Irrigation System,
Recommended Standard Set Configuration

KARL STORZ — ENDOSKOPE

Special Features:

- **Pressure-regulated suction and irrigation system for use in laparoscopy and gynecology**
- **Modern color touch screen as user interface**
- **Maximum parameters for LAP and HYST mode are automatically fixed by the choice of the tubing cassette**
- **Ergonomic tubing cassette system**
- **Simultaneous display of set values and actual values enables continuous monitoring of suction and irrigation parameters**
- **With connection possibilities to the KARL STORZ Communication Bus (SCB) as of Software Release 20090001-45 and higher**

26 3311 01-1 HAMOU® **ENDOMAT® SCB,** with integrated SCB module, power supply 100 – 240 VAC, 50/60 Hz

including:

SCB Connecting Cable, length 100 cm

Cassette Tubing Set, for single use

VACUsafe Suction*, 2 l

Accessories

031517-10* **Cassette Tubing Set,** with two puncture needles, for single use, sterile, package of 10, for hysteroscopy

031518-10* **Same,** for laparoscopy

Specifications:

Pressure	- HYST 0-200 mmHg - LAP 100/ 300/ 500 mmHg
Flow	- LAP 0-1300 ml/min - HYS 200/400/600 ml/min
Suction pressure, regulated	- HYST 0.1-(-)0.8 bar (-80 kPa) - LAP 0.1-(-)0.8 bar (-80 kPa)

Power supply	100-240 VAC, 50/60 Hz
Dimensions w x h x d	305 x 164 x 315 mm
Weight	9 kg
Certified to	IEC 601-1, CE nach MDD

* mtp

Optional Accessories for HAMOU® **ENDOMAT® SCB** see pages U 18-19

Components/Spare Parts see chapter 12

4-15

HYST Tubing Set 031517-10*
LAP Tubing Set 031518-10*

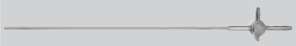
UNIT SIDE

PATIENT SIDE

Silicone Tubing Set, for **suction,** part 1 of 2

26 3311 42

Suction and Irrigation Tube

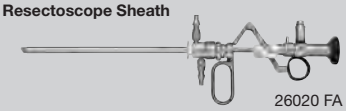


26173 BN

Filter

031124-10*

Resection:
HOPKINS® Telescope 12°
Working Element Set, bipolar
Resectoscope Sheath



26020 FA
26055 EBH
26055 BO

Bottle Caps
Suction Bottles, 5 l
Bottle Stand
Holders for
Bottle Stand

20 3000 34
20 3000 50
20 3000 32
20 3000 33

* mtp

Silicone Tubing Set, part 2 of 2

26 331142

CAMPO **TROPHYSCOPE®**
Continuous-Flow Operating Sheath

26008 BAC
26152 DB

SUCTION AND IRRIGATION SYSTEMS

4-15

ENDOMAT® LC SCB

Roller Pump Suction System,
Recommended Standard Set Configuration

KARL STORZ — ENDOSKOPE

Special Features:

- **Simple roller pump system, flow-regulated, for suction**
- **Activation via footswitch of UNIDRIVE® S III motor system**
- **With connection possibilities to the KARL STORZ Communication Bus (KARL STORZ-SCB)**

20 3303 02-1 **ENDOMAT® LC SCB,** suction pump, power supply 100 – 240 VAC, 50/60 Hz, for use with UNIDRIVE® S III, system requirements for use with SCB-PC: SCB-R-UI Software Release, V03.20.00.xx or higher

including:

Silicone Tubing Set, for suction, sterilizable

SCB Connecting Cable, length 100 cm

Control Cable, UNIDRIVE® S III – KARL STORZ pump systems

Specifications:

Flow-regulated	0-1000 ml/min
Pressure	non-regulated: max. 1125 mmHg (150 kPa)
Suction pressure	non-regulated: -0.46 bar (-46 kPa)
Power supply	100-240 VAC, 50/60 Hz

Dimensions w x h x d	305 x 110 x 260 mm
Weight	4.5 kg
Certified to	IEC 601-1, CE acc. to MDD

7-111

Optional Accessories for ENDOMAT® LC SCB see page U 19

Components/Spare Parts see chapter 12

For information on Shaver Systems see chapter 4

ENDOMAT® LC SCB

System Components

KARL STORZ — ENDOSKOPE

UNIT SIDE

PATIENT SIDE

Silicone Tubing Set,
for **suction**

20 3303 43

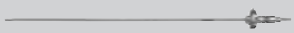
Bottle Caps
Suction Bottles, 5 l
Bottle Stand
Holders for
Bottle Stand

20 3000 34
20 3000 50
20 3000 32
20 3000 33

DRILLCUT-X® II Shaver Handpiece GYN

26 7020 50

Shaver Blade GYN



26208 SA

7-11₁

EQUIMAT® SCB

System Components for Measuring Volume Difference

KARL STORZ — ENDOSKOPE

Special Features:

- **Exact determination and monitoring of volume difference**
- **Increased patient safety**
- **Acoustic and optical status display**
- **Freely programmable limiting values**
- **Independent of the used suction/irrigation system**
- **Exchange of irrigation liquid bottles possible during the operation**

20 3020 03-1 **EQUIMAT® SCB,** system for differential gravimetric volume measuring, with integrated SCB module, power supply 100 – 240 VAC, 50/60 Hz

including:

Scale Measuring Element II

Suspension Holder

SCB Connecting Cable, length 100 cm

Specifications:

Volume display	- Measuring range: 0-30000 ml - Resolution: 5 ml - Alarm limiting value: 0-2000 ml
Flow display	- Measuring range: 0-19999 ml/min - Resolution: 10 ml/min - Alarm limiting value: 0-500 ml/min

Dimensions w x h x d	305 x 101 x 233 mm
Weight	3.1 kg
Certified to	IEC 601-1, CE acc. to MDD

1-03₃

Optional accessories for EQUIMAT® SCB see pages U 18-19

Components/Spare Parts see chapter 12

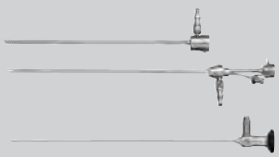
Scale Measuring Element II

38 3321 30

UNIT SIDE

PATIENT SIDE

Hysteroscope Sheath, with telescope



26153 BO
26153 BI
26120 BA

Silicone Tubing Set, for suction

20 3000 41

Suspension Holder **20** 3020 31
and suction bottle 5 l,
with bottle cap
and bottle stand

optional:

Suction Bottle, 5 l	**20** 3000 50
Bottle Cap	**20** 3000 34
Bottle Stand	**20** 3000 32

8-05

Optional Accessories

for Suction and Irrigation Systems

KARL STORZ — ENDOSKOPE

			for use with			
			HYSTEROMAT E.A.S.I.®	HAMOU® ENDOMAT® SCB	ENDOMAT® LC SCB	EQUIMAT® SCB
	031217-10*	**Suction Tubing Set,** for single use, sterile, package of 10, for use with HYSTEROMAT E.A.S.I.® SCB and UROMAT E.A.S.I.® SCB	●	–	–	–
	031717-10*	**Irrigation Tubing Set,** with two puncture needles, for single use, sterile, package of 10, for use with HYSTEROMAT E.A.S.I.® SCB and UROMAT E.A.S.I.® SCB	●	–	–	–
	031162-10*	**Patient Tube,** for single use, sterile, package of 10, for use with Pump Tubing Day Set 031161-01, 031167-01, 031168-01, 031261-01 and 031767-01	●	–	–	–
	031767-10*	**Pump Tubing Day Set,** with two puncture needles, sterile, package of 10, for use with HYSTEROMAT E.A.S.I.® SCB and UROMAT E.A.S.I.® SCB in combination with Patient Tube 031162-01	●	–	–	–
	031517-10* 031518-10*	**Cassette Tubing Set,** with two puncture needles, for single use, sterile, package of 10, for hysteroscopy **Same,** for laparoscopy	–	●	–	–
	031247-10*	**Tubing Set,** for suction, for single use, sterile, package of 10	–	–	●	–

* mtp

4-15

Optional Accessories

for Suction and Irrigation Systems

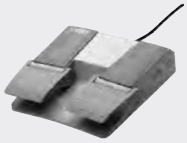
KARL STORZ — ENDOSKOPE

			for use with			
			HYSTEROMAT E.A.S.I.® SCB	HAMOU® ENDOMAT® SCB	ENDOMAT® LC SCB	EQUIMAT® SCB
	**20** 3303 43	**Silicone Tubing Set,** for suction, sterilizable	–	–	●	–
	**20** 3000 41	**Silicone Tubing Set,** sterilizable, to be fed into suction bottle	–	–	–	●
	**26** 3311 42	**Silicone Tubing Set,** for suction, sterilizable	–	●	–	–
	**20** 3000 50	**Suction Bottle,** 5 l, sterilizable	●	●	●	●
	20 3000 52	**Suction Bottle,** 1.5 l, sterilizable				
	20 3000 32	**Bottle Stand,** for suction bottle 5 l				
	20 3001 30	**Bottle Stand,** for suction bottle 1.5 l or irrigation bottle 1 l				
	20 3000 33	**Bottle Stand Holder,** for Bottle Stand **20** 3000 32				
	20 3000 34	**Bottle Cap,** for suction bottles 1.5 l and 5 l, sterilizable				

Optional Accessories

for Suction and Irrigation Systems

KARL STORZ — ENDOSKOPE

			for use with			
			HYSTEROMAT® E.A.S.I.®	HAMOU® ENDOMAT® SCB	ENDOMAT® LC SCB	EQUIMAT® SCB
	030648-10*	**VACUsafe Connecting Tube,** 30 cm, with green multiadaptor, unsterile, package of 10	–	●	–	●
	030847-10*	**VACUsafe EXTRA-LARGE LUER-Lock Tubing Set**	–	●	–	●
	030020-18* 030220-48*	**VACUsafe Canister,** 2 l, package of 18 **VACUsafe Suction Bag,** 2 l, with filter, for single use, package of 48, color code: green	–	●	–	●
	030970-10*	**Tissue Trap Filter,** with adaptor, for single use, package of 10, for use with VACUsafe suction bags and other suction bottle systems	●	●	●	●
	**20** 0900 70	**SCB Connecting Cable,** length 30 cm	●	●	●	●
	**26** 3403 30	**Two-Pedal Footswitch,** one-stage, for activating a higher flow for improved visibility	●	–	–	–

* mtp

4-15

MOTOR SYSTEMS

IBS® – BIGATTI Intrauterine Shaver

IBS® – BIGATTI **Intrauterine Shaver**

For use with DRILLCUT-X® II Morcellator Handpiece GYN 26 7020 50

Special Features

- **Maximum number of revolutions can be preset**
- **Consistently high motor performance over the entire range of revolutions**
- **Processor controlled number of revolutions and motor torque**
- **Optimized user control**
- **Operating elements are simple and clear to read**
- **Automatic handpiece recognition**
- **Integrated control connection for KARL STORZ pump systems in combination mode**
- **For use with: DRILLCUT-X® II GYN morcellator handpiece**
- **With connection possibilites to the KARL STORZ Communication Bus (KARL STORZ-SCB)**

26 7010 01-1 **UNIDRIVE® S III SCB,** power supply 100 – 240 VAC, 50/60 Hz
including:
Mains Cord
One-Pedal Footswitch, two-stage
SCB Connecting Cable, length 100 cm

Specifications:

Operation mode	oscillating (morcellator)
Max. rotations	40,000 (rpm) Blade 500 – 5000 (rpm)
Power supply	100-120/230-240 VAC, 50/60 Hz

Dimensions w x h x d	305 x 165 x 233 mm
Weight	4 kg
Certified to	IEC 601-1, CE acc. to MDD

Components/Spare Parts see chapter 12

MOTOR SYSTEMS

4-15

IBS® – BIGATTI **Intrauterine Shaver**

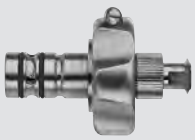
KARL STORZ — ENDOSKOPE

Handpiece 26 7020 50

- **Ergonomically designed handpiece, fits comfortably in the hand**
- **Powerful motor, also suitable for harder materials**
- **Absolutely silent running, no vibration**
- **Oscillation mode for shaver attachments, max. 5000 rpm**
- **360° rotating straight working inserts**
- **Wide range of shaver blades**
- **LOCK for fixation of shaver blades**
- **Central, straight suction channel**
- **Easy hygienic processing, suitable for use in washer and autoclavable at 134 °C**
- **Removable handle, ergonomically adjustable, flexible positioning**

26 7020 50

26 7020 50 **DRILLCUT-X® II Shaver Handpiece GYN,** for use with UNIDRIVE® S III SCB



40 7120 90 **Handle,** adjustable, for use with DRILLCUT-X® II Shaver Handpiece GYN **26** 7020 50

41250 RA **Cleaning Adaptor,** LUER-Lock, for cleaning DRILLCUT-X® II morcellator handpieces

For use with DRILLCUT-X® II Shaver Handpiece GYN

26208 SA

26208 SA **Shaver Blade GYN,** straight, sterilizable, concave cutting edge, double serrated, oval cutting window, diameter 4 mm, length 32 cm, for use with DRILLCUT-X® II Handpiece **26** 7020 50, color code: blue-green

26208 SB **Shaver Blade GYN,** straight, sterilizable, double serrated cutting edge, rectangular cutting window, diameter 4 mm, length 32 cm, for use with DRILLCUT-X® II Handpiece **26** 7020 50, color code: blue-yellow

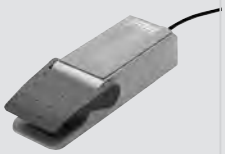
MOTOR SYSTEMS

4-15

IBS® – BIGATTI Intrauterine Shaver

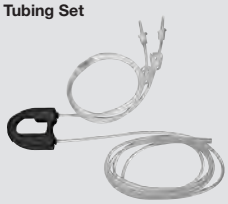
KARL STORZ — ENDOSKOPE

One-Pedal Footswitch



20 0162 30

HYST Tubing Set



031517-10

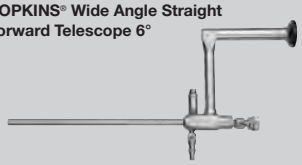
UNIT SIDE

PATIENT SIDE

Silicone Tubing Set,
for **suction**

20 3303 43

HOPKINS® Wide Angle Straight Forward Telescope 6°



26208 AMA, 26092 AMA

DRILLCUT-X® II Shaver Handpiece GYN

26 7020 50

Shaver Blade GYN

26208 SA

* mtp

MOTOR SYSTEMS

4-15

IBS® – BIGATTI **Intrauterine Shaver**

KARL STORZ — ENDOSKOPE

Tubing Set, for irrigation

031717-10*

UNIT SIDE

PATIENT SIDE

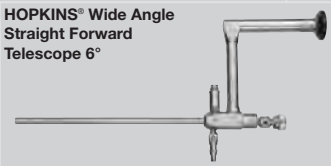
DRILLCUT-X® II Shaver Handpiece GYN

26 7020 50

Tubing Set, for suction

031217-10*

HOPKINS® Wide Angle Straight Forward Telescope 6°



26208 AMA, 26092 AMA

Shaver Blade GYN

26208 SA

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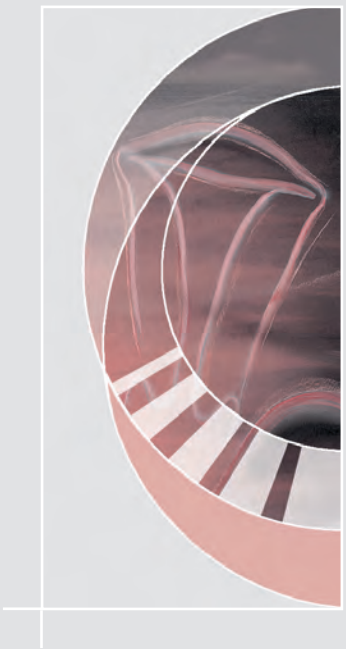
MOTOR SYSTEMS

4-15

KARL STORZ — ENDOSKOPE



HIGH FREQUENCY SURGERY UNITS

AUTOCON® II 400 SCB

AUTOCON® II 80

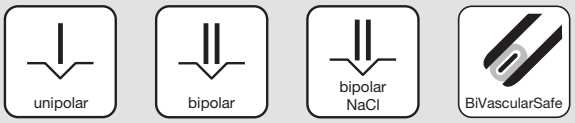
HIGH FREQUENCY
SURGERY UNITS

AUTOCON® II 400 SCB

KARL STORZ — ENDOSKOPE

Special Features:

- For interdisciplinary use
- Cutting-edge next-generation unit with a convenient, easy-to-disinfect touch screen
- Bi-Vascular-Safe mode for bipolar coagulation and thermofusion of large-lumen vessels
- Equipped with 2 bipolar or 2 unipolar HF outputs depending on unit
- Defibrillator-safe CF outputs for maximum patient and user safety
- Permanent safety due to continuous monitoring of the contact between the neutral electrode and the patient during unipolar use
- 2 freely programmable foot pedals can be connected simultaneously
- Automatic activation of HF energy or via hand-switch or footswitch depending on mode used
- Self-test for maximum patient and user safety
- Unit versions for standard use, bipolar resection and thermofusion of large-lumen vessels according to individual user requirements
- Up to 28 pre-programmed procedures for a wide range of disciplines make the unit extremely simple to operate. 100 program memories are available for individual programming.



HIGH FREQUENCY SURGERY UNITS

2-08

Integrated voltage stability control or arc control
The two state-of-the-art generators both guarantee optimal surgical cutting and coagulation power that adapts continuously to the particular indication, especially when there are wide variations in the tissue structures and tissue impedances. At the press of a button, the operator can switch between arc control (TOP Cut mode) and voltage stability control (POWER Cut mode).

TOP Cut mode
In this mode, the HF energy required for a cutting effect is automatically reduced to the necessary physical minimum in each individual case. The electric arc always remains at a constant level, thus ensuring a uniform surgical effect. Such precise work offers a clear safety advantage and produces a cut that conserves tissue and reduces stress for the patient.

This increased safety with the AUTOCON®II 400 SCB unit is achieved by using the latest and fastest microprocessor and sensor technology, which enables the unit to capture all the important parameters, such as variable incision speed, geometry of the active electrode, different impedance behavior of biological tissue types and fluids, and transition and contact resistances. This data is then used to adjust the HF power output and HF voltage. This means that the operator is not restricted in his work or obliged to adapt to the HF unit. On the contrary, the HF unit adapts optimally to all the user's application and operating techniques.

POWER Cut mode with constant HF voltage and power
This mode ensures a uniform surgical effect and consistent cutting efficiency over a wide impedance range and many different tissue types.

RAM system – return electrode application monitoring
This safety system continuously monitors the contact quality between the neutral electrode and the patient's skin, and additionally indicates it with symbols. If the contact surface area decreases, the safety system gives an early visual and acoustic alarm, thus preventing a burn under the application site of the patient electrode. To increase the contact reliability of the neutral electrode, the user can prevent the application of single-faced electrodes.

Gastro Cut and Papillo Cut
These two new resection modes, which were specially developed by KARL STORZ for use in flexible endoscopy, permit a fractionated and controlled cut with no bleeding. The special HF generator technology allows controlled output of cutting and coagulation pulse current. Both the pulse sequence and the pulse speed can be set separately and specifically for each mode.

LF/HF leakage currents
Stray currents and the associated risk of burns are minimized by design measures.

SCB- and OR1™-compatible
The units are designed for integration in the KARL STORZ Communication Bus (SCB). Full integratability of the HF unit in the networked, and even speech-controlled, operating room of the future is already a standard feature (system requirement: RUI software release 2009001-26 or later).

C-Cut® mode and LAP-C-Cut mode – the intermittent coagulation-cutting mode with AUTOCON®II 400 SCB
Designed for blood-free cutting during laparoscopy and when using irrigation liquids, the electric current is specially modulated and offers a reproducible coagulation current with high cutting efficiency. This makes time-consuming subsequent coagulation a thing of the past. Using the C-Cut® mode thus reduces the need for blood transfusions and saves surgery time. The result is an overall reduction in operating costs, and for the patient it means additional protection.

Bipolar generator with 370 W HF power
This outstanding performance range allows the unit to be used in conjunction with the newly developed bipolar special and standard accessories. This high-end unit is even suitable for indications using irrigation liquids, which in the past could only be performed with special-purpose HF systems. The safety of the bipolar technology from KARL STORZ eliminates the need for applying a neutral electrode, including for interventions which used to be standard unipolar procedures.

Unipolar generator with 300 W HF power
With a peak power of 300 watts, the AUTOCON®II 400 SCB is ideally equipped for interventions in all areas of use.

2-081

AUTOCON® II 400 SCB

Safety Aspects and Main Features

KARL STORZ — ENDOSKOPE

Precise power setting and power limitation
Exact fine tuning in 1 W steps is provided for interventions requiring maximum precision with very low power.

Up to 8 hemostatic effects
Individual selection of up to 8 hemostatic effects for unipolar and bipolar cutting, each with up to 370 W output, permits optimal control of coagulation and the surgical effect in every situation.

Forceps auto-start function
When the forceps tips contact the tissue, bipolar coagulation is activated automatically after a freely adjustable delay of up to 9.9 seconds.

6.5" touch screen
The color touch screen makes the AUTOCON®II 400 SCB the world's first HF unit with this new, user-friendly operating technology. It also offers the important advantage of very easy cleaning and wipe-down disinfection.

100 program memories
Simple programming of the indication-related unit parameters makes the AUTOCON®II 400 SCB easy and intuitive to operate because all the programs can be stored in numeric order or text-based with user name and indication. The stored programs can be called up in the indication list at the touch of a button.

Bipolar coagulation auto-stop function
Automatic power shutdown when the coagulation procedure has been ended.

Self-test program
A comprehensive software safety concept ensures smooth, safe use after switching on. Detected component faults are indicated by an error code display, enabling rapid troubleshooting. The self-test also includes the connected accessories for the specific purpose of minimizing waiting times in preoperative work-up.

Software upgrade
The service port on the back of the unit allows the HF functions of the AUTOCON®II 400 SCB to be expanded economically for future forms of HF treatment. This means that the AUTOCON®II 400 SCB is always up-to-date.

HIGH FREQUENCY SURGERY UNITS

2-08

AUTOCON® II 400 SCB, AUTOCON® II 80

Special Features

KARL STORZ — ENDOSKOPE

Special Features:	AUTOCON® II 400 SCB	AUTOCON® II 80
Degree of coagulation (effect) can be preselected in several steps: The degree of coagulation measures extent of coagulation depth	●	–
Bi-Vascular-Safe mode for bipolar coagulation and thermofusion of large-lumen vessels	●	–
Easy to use due to automatic mode selection thanks to recognition of instrument-cable connection	●	–
Spray coagulation: Coagulation with modulated HF voltage (Up > 500 V); very long arcs enable coagulation of large and bleeding areas of tissue without contact to tissue	●	–
Autostart function: Manual adjustment of operating time limit for bipolar coagulation	●	–
Voltage-regulated cutting	●	–
Arc-controlled cutting, unipolar	●	–
Separate papillo-cut and gastro-cut functions enable fractionated cutting with regulated HF current at different cutting speeds for flexible endoscopy	●	–
Autostart function for bipolar coagulation: Automatic activation of coagulation current as soon as coagulation electrode touches tissue with both branches	●	–
Activation of HF functions possible via footswitch or manual control switch for unipolar or bipolar	●	–
Bipolar resection with KARL STORZ bipolar electrotomes	●	–
Bipolar application with NaCl irrigation solution	●	–
Modular connecting sockets for unipolar and bipolar applications can be selected according to individual requirements	●	●
100 applications with text can be stored	●	–
Convenient use via 6.5" touch screen	●	–
Switchover function enables switching between two modes within a user program via a footswitch from the sterile area	●	–
Compatible with KARL STORZ Communication Bus (KARL STORZ-SCB)	●	–
Service port for software updates and HF functionality upgrades	●	–

8-053

AUTOCON® II 400 SCB

Specifications

KARL STORZ — ENDOSKOPE

HF Modes	Effects	P max. at 500 Ohm	V_P max. at 500 Ohm	Crest Factor	Arc Control	Voltage Control
Unipolar						
TOP-Cut	8	300	1040	1.4	●	–
POWER-Cut	8	300	740	1.4	–	●
C-Cut®	8	200	1450	3.2 – 3.6	–	●
LAP-C-Cut	8	200	1450	3.2 – 3.6	–	●
Gastro-Cut	4	200	880	1.4	–	●
Papillo-Cut	4	200	880	1.4	–	●
Standard Coag	8	200 (at 50 Ohm)	190	1.4	–	●
Forced Coag	4	120	1800	6.0	–	●
Spray Coag	2	120	4300	7.4	–	●
Bipolar						
Bipolar-Cut	8	100	740	1.4	–	●
Saline-C-Cut	8	370	770	1.4	–	●
Saline-C-Cut ++*	8	300 (at 75 Ohm)	490	1.4	–	●
Saline-Time-C-Cut	8 time 0.1-1 sec.	370	770	1.4	–	●
Saline-Time-C-Cut ++*	8 time 0.1-1 sec.	300 (at 75 Ohm)	490	1.4	–	●
Saline Coag	8	200 (at 75 Ohm)	190	1.4	–	●
Saline Coag ++*	8	200 (at 50 Ohm)	190	1.4	–	●
Saline-Time-Coag	8 time 0.1-1 sec.	200 (at 75 Ohm)	190	1.4	–	●
Saline-Time-Coag ++*	8 time 0.1-1 sec.	200 (at 75 Ohm)	190	1.4	–	●
Bipolar Soft Coag	8	120 (at 75 Ohm)	190	1.4	–	●
Bipolar Soft with Auto-Stop	8	120 (at 75 Ohm)	190	1.4	–	●
Bi-Vascular-Safe**	8	300 (at 25 Ohm)	220	1.4	–	●

*Only for units with additional resection module

**with software package “Bi-Vascular-Safe”

Specifications:

Safety systems	- Automatic self-test - Maldosage - Neutral electrode safety system (dynamic, two-part, one- and two-part NE) - LF/HF leakage current monitor - Activation time - Deactivable HF

Power supply	**20** 5352 2x-12x: 220-240 VAC, 50/60 Hz **20** 5352 2xU12x: 100-120 VAC, 50/60 Hz
Dimensions w x h x d	448 x 164 x 345 mm
Weight	10 kg
Certified to	IEC 60601-1, CE acc. to MDD

8-05i

HIGH FREQUENCY SURGERY UNITS

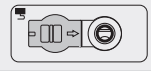
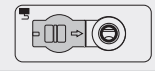
AUTOCON® II 400 SCB

High Frequency Surgery Unit,
Recommended Standard Set Configurations

KARL STORZ — ENDOSKOPE

AUTOCON® II 400 SCB,
power supply 220 – 240 VAC, 50/60 Hz
including:
Mains Cord
SCB Connecting Cable, length 100 cm

AUTOCON® II 400 SCB,
power supply 100 – 120 VAC, 50/60 Hz
including:
Mains Cord
SCB Connecting Cable, length 100 cm

Application	Standard: Unipolar/Bipolar	High-End
Unit version	-122 (220 – 240 VAC) U122 (100 – 120 VAC)	-125 (220 – 240 VAC) U125 (100 – 120 VAC)
Product No.	**20** 5352 01-122 **20** 5352 01U122	**20** 5352 01-125 **20** 5352 01U125 basic unit
	–	**20** 5352 02-125 **20** 5352 02U125 basic unit, incl. additional resection module
	–	**20** 5352 03-125 **20** 5352 03U125 basic unit, incl. Bi-Vascular-Safe mode
	–	**20** 5352 04-125 **20** 5352 04U125 basic unit, incl. additional resection module + Bi-Vascular-Safe mode
Socket Position		
1	Bipolar Combination 	Bipolar Combination 
2	Bipolar Combination 	Bipolar Multifunction 
3	Unipolar 3-pin and Erbe 	Unipolar 3-pin and Erbe 
4	NE 6.3 mm jack and 2-pin 	NE 6.3 mm jack and 2-pin 

Optional Accessories for AUTOCON® II 400 SCB see pages U 38-41
Components/Spare Parts see chapter 12

8-052

AUTOCON® II 400 SCB

System Components

KARL STORZ — ENDOSKOPE

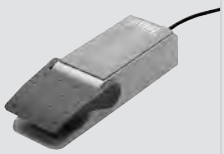
Three-Pedal Footswitch

20 0178 31

Two-Pedal Footswitch

20 0178 30

One-Pedal Footswitch



20 0178 32

UNIT SIDE

PATIENT SIDE

Bipolar High Frequency Cord

26176 LE

Bipolar Dissection Electrode

26159 BE

Bipolar High Frequency Cord

27176 LEB

Conization:
Unipolar High Frequency Cord

26 5200 45

Handle

26 5200 43

Unipolar High Frequency Cord

277 KE

Connecting Cable

27806
27806 A

Resectoscope, bipolar

27040 DBH

Conization:
Loop Electrodes

26165 UG/UM/UK

Resectoscope, unipolar

27050 DH

Neutral Electrode

27805

HIGH FREQUENCY SURGERY UNITS

8-05

AUTOCON® II 80

High Frequency Electrosurgical Unit,
Recommended Standard Set Configurations

KARL STORZ — ENDOSKOPE

20 5308 01 **AUTOCON® II 80,**
power supply 100 – 240 VAC, 50/60 Hz
including:
Mains Cord

Specifications:

HF rated power	- Dry Cut: 80 Watt/500 Ohm - Forced Coag: 50 Watt/500 Ohm - Soft Coag: 80 Watt/100 Ohm - Auto Cut: 80 Watt/500 Ohm - Bipolar Soft: 80 Watt/100 Ohm
Max. voltage	- Dry Cut: 830Vp - Forced Coag: 1200Vp - Soft Coag: 180Vp - Auto Cut: 500Vp - Bipolar Soft: 180Vp

Safety systems	- permanent power control - maldosage - neutral electrode safety system - automatic self-test
Power supply	100-240 VAC, 50/60 Hz
Dimensions w x h x d	280 x 135 x 300 mm
Weight	4 kg
Certified to	IEC 60601-1, CE acc. to MDD

7-11

Optional accessories for AUTOCON® II 80 see pages U 38-41

Components/Spare Parts see chapter 12

AUTOCON® II 80

System Components

KARL STORZ — ENDOSKOPE

Two-Pedal Footswitch

20 0178 34

One-Pedal Footswitch

20 0178 33

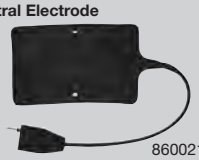
UNIT SIDE

PATIENT SIDE

Connecting Cable

27806

Neutral Electrode



860021 E

Bipolar High Frequency Cord

26176 LE

Unipolar High Frequency Cord

26 5200 45

Handle

26 5200 43

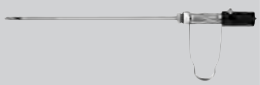
Handle with Cord, unipolar

26 5200 46

Unipolar High Frequency Cord

26005 M

TAKE-APART® Bipolar Grasping Forceps



26180 HA

Conization: Loop Electrode

26165 UG/UM/UK

Knife Electrode

26 5200 36

CLICK*line*® Grasping Forceps

33321 MF

HIGH FREQUENCY SURGERY UNITS

7-11

Optional Accessories

for AUTOCON® II 400 SCB and AUTOCON® II 80

KARL STORZ — ENDOSKOPE

			for use with AUTOCON® II 400 SCB	for use with AUTOCON® II 80
	**20** 0178 31	**Three-Pedal Footswitch,** for use with AUTOCON® II 400 SCB	●	–
	**20** 0178 30	**Two-Pedal Footswitch,** for use with AUTOCON® II 400 SCB and AUTOCON® II 200	●	–
	**20** 0178 32	**One-Pedal Footswitch,** for activating coagulation, for use with AUTOCON® II 400 SCB and AUTOCON® II 200	●	–
	**20** 0178 34	**Two-Pedal Footswitch,** digital, one-stage, for use with AUTOCON® II 80	–	●
	**20** 0178 33	**One-Pedal Footswitch,** digital, one-stage, for use with AUTOCON® II 80	–	●
	27805	**Neutral Electrode,** of conductive silicone with 2 rubber ties for fastening, contact surface A = 500 cm², for use with Connecting Cable 27806	●	●
	860021 E	**Neutral Electrode,** of conductive silicone, with 1 rubber tie for fastening, contact surface A = 187 cm², for use with Connecting Cable 27806	–	●
	27806	**Neutral Electrode Connecting Cable,** for Neutral Electrodes 27805 and 860021 E, length 400 cm	-111 -115 -122 -125	●
	27806 UR	**Neutral Electrode Connecting Cable,** for Neutral Electrode 27805	-112 -116 -122 -125	●
	27806 US	**Neutral Electrode Connecting Cable,** for Neutral Electrode 27802	-112 -116 -122 -125	●
	27802	**Neutral Electrode,** for single use, contact surface divided into two, A = 169 cm², package of 50, Connecting Cable 27801 required	●	●
	27801	**Connecting Cable,** for connecting Neutral Electrode 27802, length 500 cm	-111 -115 -122 -125	●
	**26** 5200 43	**Electrode Handle,** with 2 buttons for activating the unipolar generator, yellow button: unipolar cutting, blue button: unipolar coagulation (Cable **26** 5200 45 required)	●	●
	**26** 5200 45	**High Frequency Cable,** for Electrode Handle **26** 5200 43, length 400 cm	-111 -115 -122 -125	●
	**26** 5200 46	**Electrode Handle,** without buttons, with integrated connecting cable, length 300 cm	-111 -115 -122 -125	●

HIGH FREQUENCY SURGERY UNITS

8-05₃

Surgery Electrodes Set

Accessories

KARL STORZ — ENDOSKOPE

unipolar

20 5300 08 **Surgery Electrodes Set**
including:

Container with Lid and Sterilizing Insert, for
16 electrodes with diameter 4 mm

Wire Snare, 5 mm

Same, 10 mm

Ribbon Snare, 10 mm

KIRSCHNER **Spatula Electrode,**
straight

MAGENAU **Knife Electrode,**
angled

Knife Electrode, lancet-shaped

Ball Electrode, 2 mm

Same, 4 mm

Same, 6 mm

Needle Electrode

Flat Electrode, 8 x 10 mm

Same, 10 x 15 mm

1-99₃

For use with Electrode Handles 26 5200 43 and 26 5200 46
Components/Spare Parts see chapter 12

HIGH FREQUENCY SURGERY UNITS

Unipolar High Frequency Cords, for use with unipolar working elements

unipolar

KARL STORZ Instrument	High Frequency Surgery Units		
		277	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for use with models KARL STORZ and Erbe type T, older models
		277 A	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for use with Martin HF units
		277 KE	**Unipolar High Frequency Cord,** with 5 mm plug, length 300 cm, for use with AUTOCON® II 400 SCB (111, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, AUTOCON® (50, 200, 350) and Erbe type ICC
		277 KB	**Unipolar High Frequency Cord,** with 8 mm plug, length 300 cm, for use with models AUTOCON® II 400 SCB system (112, 116) and Valleylab

High Frequency Cords

unipolar

KARL STORZ Instrument	High Frequency Surgery Units		
		26002 M	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for models KARL STORZ, Erbe type T, older models and Ellman
		26004 M	**Unipolar High Frequency Cord,** with 4 mm plug, length 300 cm, for use with Martin HF units
		26005 M	**Unipolar High Frequency Cord,** with 5 mm plug, length 300 cm, for AUTOCON® II 400 SCB system (111, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, AUTOCON® system (50, 200, 350) and Erbe type ICC
		26006 M	**Unipolar High Frequency Cord,** with 8 mm plug, length 300 cm, for use with AUTOCON® II 400 SCB system (112, 116) and Valleylab models

Please note: All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 M**L**, 26176 LV**L**.

Bipolar High Frequency Cords, for use with bipolar working elements

bipolar NaCl

KARL STORZ Instrument	High Frequency Surgery Units	
	27176 LEB	**Bipolar High Frequency Cord,** for AUTOCON® II 400 SCB system (high-end), length 300 cm, for use with KARL STORZ bipolar resectoscopes
	27176 LEBL	**Same,** length 500 cm

Bipolar High Frequency Cords

bipolar

KARL STORZ Instrument	High Frequency Surgery Units	
	26176 LE	**Bipolar High Frequency Cord,** length 300 cm, for AUTOCON® II 400 SCB system (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® series (50, 200, 350), Erbe-Coagulator, T and ICC series
 	26176 LM	**Bipolar High Frequency Cord,** length 300 cm, for use with Martin HF units
	26176 LV	**Bipolar High Frequency Cord,** length 300 cm, for AUTOCON® II 400 SCB system (112, 114, 116, 122, 125), AUTOCON® II 200, AUTOCON® II 80 and Valleylab coagulators
	26176 LW	**Bipolar High Frequency Cord,** length 300 cm, pin distance on unit side 22 mm, for use with high frequency surgical units with bipolar sockets with 22 mm pin distance

Please note: All high frequency cords of this page are delivered with a length of 300 cm. If a length of 500 cm is requested please add letter **L** to the part number, e. g. 26002 M**L**, 26176 LV**L**.

Compatibility

High Frequency Cords to AUTOCON® HF Electrosurgical Units

AUTOCON® II 80	**20** 5308 20	–	**20** 5308 20	–	–
AUTOCON® II 400 SCB	**20** 5352 20-111 **20** 5352 20-115	**20** 5352 20-112 **20** 5352 20-116	**20** 5352 20-122	**20** 5352 20-125 **20** 5352 21-125	**20** 5352 22-125 **20** 5352 23-125
Unipolar High Frequency Cords					
27806	●	–	●	●	●
27801	●	–	●	●	●
27806 UR	–	●	●	●	●
27806 US	–	●	●	●	●
26 5200 45	●	–	●	●	●
26 5200 46	●	–	●	●	●
26002 M	●	●	●	●	●
26005 M	●	–	●	●	●
26006 M	–	●	–	–	–
Bipolar High Frequency Cords					
26176 LE	●	–	●	●	●
26176 LV	–	●	●	●	●
Bipolar High Frequency Cords/Instruments to Multifunction Socket					
AUTOCON® II 400 SCB	**20** 5352 20-115	**20** 5352 20-116	–	**20** 5352 20-125 **20** 5352 21-125	**20** 5352 22-125 **20** 5352 23-125
20 5400 21	–	–	–	–	●
20 5400 22	–	–	–	–	●
20 5400 23	–	–	–	–	●

COMPONENTS
SPARE PARTS

Introduction

The chapter “Components / Spare Parts” contains detailed information on KARL STORZ instruments.

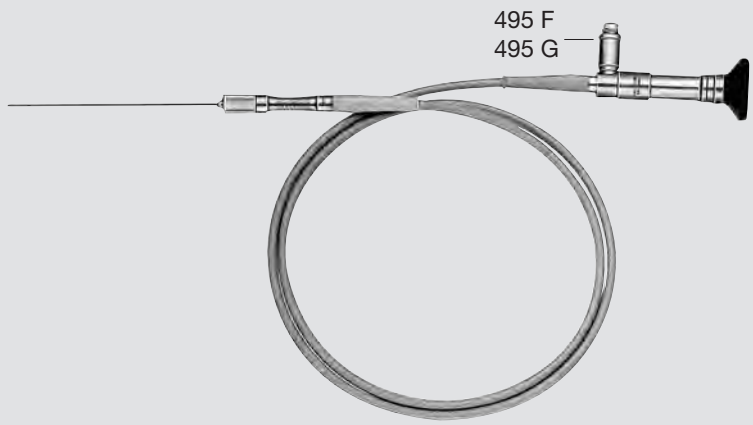
For easy location and reference, an index is available which lists the order number of the spare parts as well as those of the entire instrument, set or unit.

Hotline

Queries concerning products, exchange, maintenance and cleaning can be addressed to the KARL STORZ EP1 Hotline: 07461/708-980, from Monday to Thursday from 7-18 h and Friday from 7-17 h.

Example:

Components / Spare Parts		Catalog page
11510 A	**Miniature Straight Forward Telescope 0°**	82
11540 AA	**Miniature Straight Forward Telescope 0°**	85
11630 AA	**Miniature Straight Forward Telescope 0°**	88



Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic light cables and Olympus Corporation

Spare parts assigned to instrument with catalog page reference and order numbers for individual components/spare parts

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Table of Contents

COMPONENTS / SPARE PARTS

KARL STORZ — ENDOSKOPE

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COMPONENTS / SPARE PARTS

KARL STORZ — ENDOSKOPE

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COMPONENTS / SPARE PARTS

KARL STORZ — ENDOSKOPE

Numerical Index

COMPONENTS / SPARE PARTS

KARL STORZ — ENDOSKOPE

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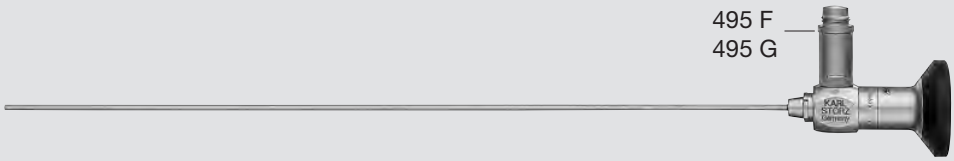
Hysteroscopes for Examination and Operation

Telescopes

Components / Spare Parts		Catalog page
26008 BA	**HOPKINS® Forward-Oblique Telescope 30°**	14
26120 BA	**HOPKINS® Forward-Oblique Telescope 30°**	20
26020 FA	**HOPKINS® Telescope 12°**	20
26105 BA	**HOPKINS® Forward-Oblique Telescope 30°, enlarged view**	24
26105 FA	**HOPKINS® Telescope 12°, enlarged view**	24



Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts		Catalog page
26252 BL	BETTOCCHI® **B.I.O.H.® Compact Hysteroscope, long handle**	17
26252 BB	BETTOCCHI® **B.I.O.H.® Compact Hysteroscope,** only	
26252 BO	**Outer Sheath**	
26252 BV	**Suction and Irrigation Valve**	
26252 BM	**Monobloc Adaptor**	
27550 N	**Seal,** for instrument ports, package of 10	

Components / Spare Parts		Catalog page
26252 SP	**Sealing Set for B.I.O.H.®**	3
5921100	**O-Ring,** diameter 10/12 mm, for Valve 26252 BV	
5922700	**O-Ring,** diameter 10.5 mm, for Valve 26252 BV	
5936400	**O-Ring,** diameter 14 mm, for Valve 26252 BV	
7609791	**Sealing Cap,** for working channel	
5922000	**O-Ring,** for Sheath 26252 BO	
9211970	**Box**	

4-15

Components / Spare Parts — Catalog page

26008 BAC CAMPO **TROPHYSCOPE®** 19

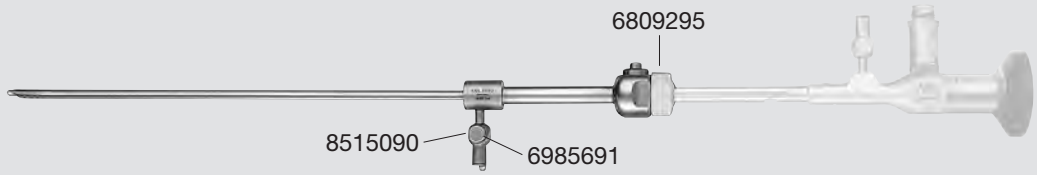
Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic light cables and Olympus Corporation

Components / Spare Parts — Catalog page

26152 DA **Continuous-Flow Operating Sheath** 19



Spare Parts

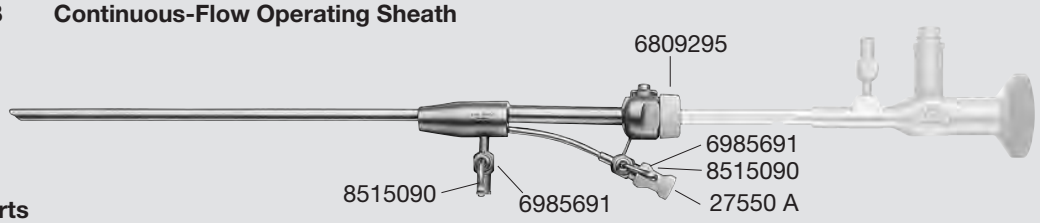
6809295
Sealing Cap

6985691
Spring Cap

8515090
Stopcock

Components / Spare Parts — Catalog page

26152 DB **Continuous-Flow Operating Sheath** 19



Spare Parts

6809295
Sealing Cap

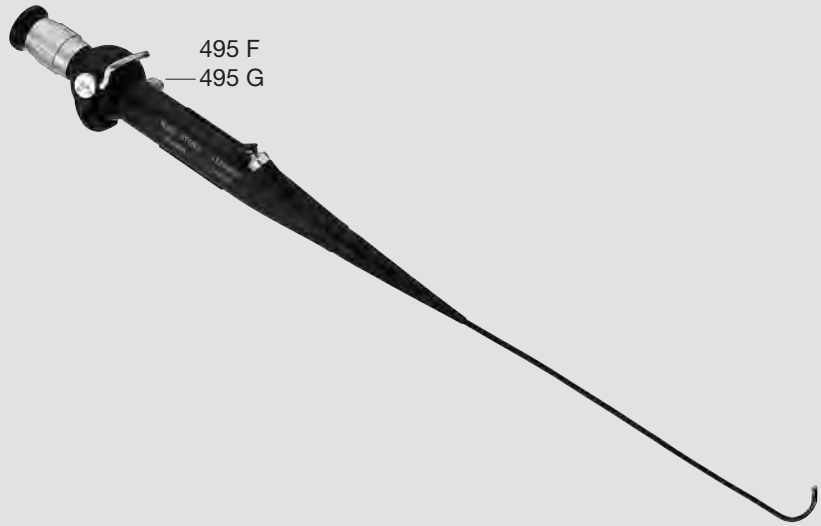
6985691
Spring Cap

8515090
Stopcock

27550 A-10
Sealing Cap, drill hole diameter 0.8 mm, package of 10

4-15

Components / Spare Parts		Catalog page
11264 BB	**Hystero-Fiberscope**	32



Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic light cables and Olympus Corporation

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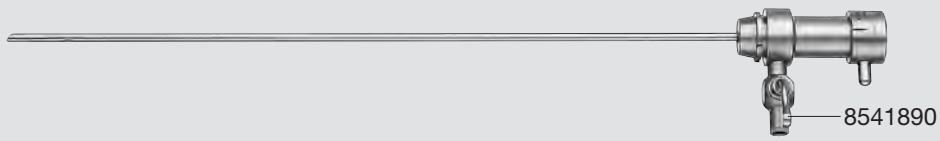
Components / Spare Parts		Catalog page
26161 RN	**Inner Sheath**	15
26161 VB	**Inner Sheath**	21
26163 FB	**Inner Sheath**	26
26164 VB	**Inner Sheath**	25

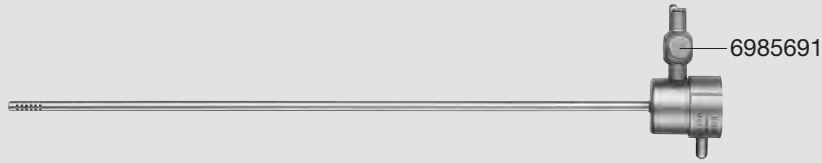


Spare Parts

6985691
Spring Cap

8541890
Stopcock

Components / Spare Parts		Catalog page
26161 R	**Outer Sheath**	15
26161 VC	**Outer Sheath**	21
26163 FC	**Outer Sheath**	26
26163 VC	**Outer Sheath**	25



Spare Parts

6985691
Spring Cap

8541890
Stopcock

Components / Spare Parts		Catalog page
26163 V	**Examination Sheath**	25

Spare Parts

6985691
Spring Cap

8458190
Stopcock

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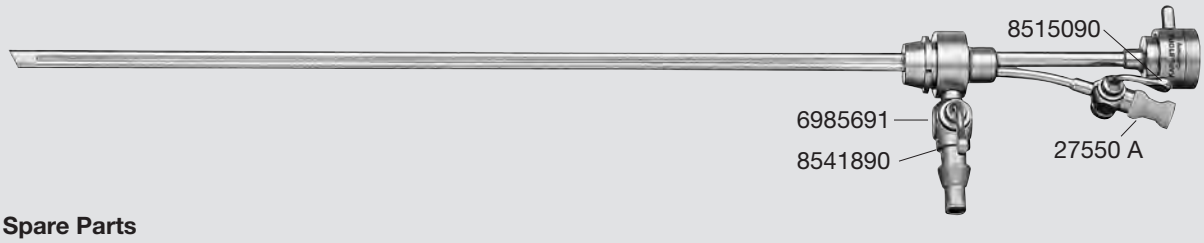
Components / Spare Parts		Catalog page
26152 BI	BETTOCCHI® **Inner Sheath**	15
26153 BI	BETTOCCHI® **Inner Sheath**	21
26153 CI	BETTOCCHI® **Inner Sheath**	22
26154 BI	BETTOCCHI® **Inner Sheath**	25



Spare Parts

27550 A-10
Sealing Cap, drill hole diameter 0.8 mm, package of 10

8515090
Stopcock

6985691
Spring Cap

8541890
Stopcock

Components / Spare Parts		Catalog page
26152 BO	BETTOCCHI® **Outer Sheath**	15
26153 BO	BETTOCCHI® **Outer Sheath**	21
26153 CO	BETTOCCHI® **Outer Sheath**	22
26154 BO	BETTOCCHI® **Outer Sheath**	25

Spare Parts

6985691
Spring Cap

8541890
Stopcock

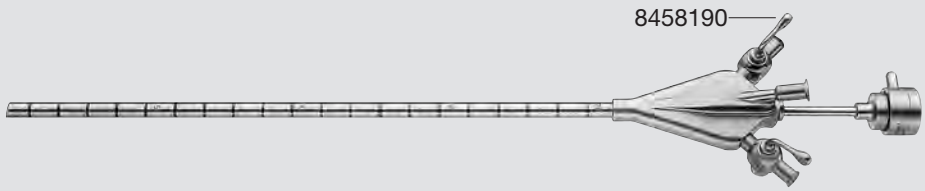
Hysteroscopes for Examination and Operation

Hysteroscope Sheath, Polypectomy Loop

KARL STORZ — ENDOSKOPE

Components / Spare Parts — Catalog page

26153 EA **Hysteroscope Sheath** — 23



Spare Parts

6985691
Spring Cap

8458190
Stopcock

Components / Spare Parts — Catalog page

26159 L BETTOCCHI® **Polypectomy Loop** — 27

Spare Parts

26159 LA
Handle

6966691
Contact Piece

26159 LC
Spare Loop

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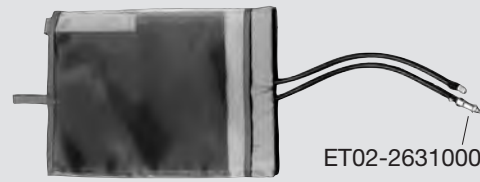
Hysteroscopes for Examination and Operation

Pressure Infustion Cuff, Rubber Foot Pump

KARL STORZ — ENDOSKOPE

Components / Spare Parts		Catalog page
26310138	**Pressure Infusion Cuff,** 3 l	30



Spare Parts

ET02-52-82-500
Spare Bladder, 3000 ml

ET02-26310000
Pressure Relief Valve

Components / Spare Parts		Catalog page
20310090	**Rubber Foot Pump**	30

Spare part

ET02-51-20-001
Blow-off Valve

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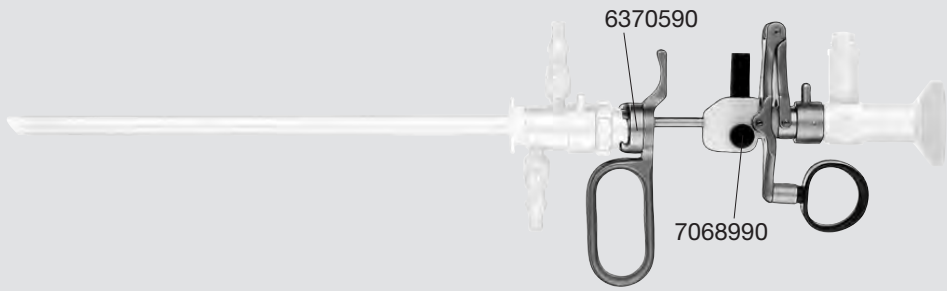
Unipolar and Bipolar Resection

Working Elements

Components / Spare Parts		Catalog page
26053 EH	**Working Element Set,** unipolar	40
26053 E	**Working Element**	
26053 G	**Cutting Loop**	
277	**Unipolar High Frequency Cord**	
280	**Protection Tube**	
26055 ES	**Working Element Set,** unipolar	44
26055 E	**Working Element**	
26055 G	**Cutting Loop,** angled	
26055 L	**Cutting Electrode,** pointed	
26055 N	**Coagulation Electrode,** ball end	
277	**Unipolar High Frequency Cord**	
280	**Protection Tube**	
26050 EG	**Working Element Set,** unipolar	49
26050 E	**Working Element**	
26050 G	**Cutting Loop,** angled	
26050 NK	**Coagulation Electrode,** ball end, diameter 5 mm	
26050 L	**Cutting Electrode,** pointed	
277	**Unipolar High Frequency Cord**	
280	**Protection Tube**	



Spare Parts

27040 TZ
Triangular Arbor

6370590
Teflon Seal

7068990
Rubber Cap

Spare part for 26053 E

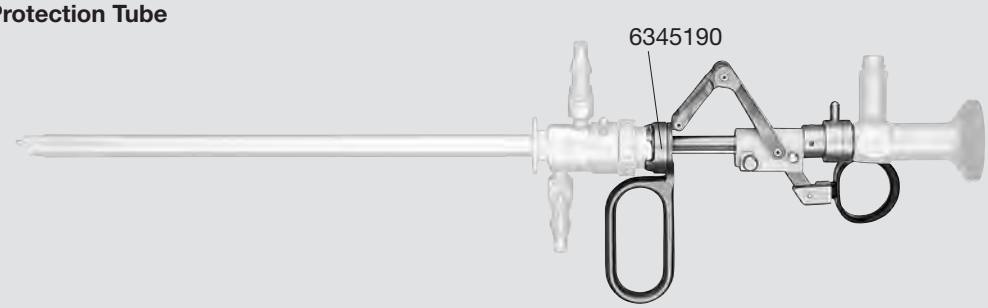
7956395
Seal

4-15

Unipolar and Bipolar Resection

Working Elements

Components / Spare Parts		Catalog page
26053 EBH	**Working Element Set,** bipolar	41
26053 EB	**Working Element**	
26053 GP	**Cutting Loop**	
27176 LEB	**Bipolar High Frequency Cord**	
280	**Protection Tube**	
26055 EBH	**Working Element Set,** bipolar	45
26055 EB	**Working Element**	
26055 GP1	**Cutting Loop**	
26055 BL1	**Cutting Electrode,** pointed	
26055 NB1	**Coagulation Electrode,** ball end	
27176 LEB	**Bipolar High Frequency Cord**	
280	**Protection Tube**	
26040 EBH	**Working Element Set,** bipolar	50
26040 EB	**Working Element,** bipolar	
26040 GP1	**Cutting Loop,** bipolar	
26040 BL1	**Cutting Electrode,** bipolar, pointed	
26040 NB1	**Coagulation Electrode HALF MOON®,** bipolar, with ball end	
27176 LEB	**Bipolar High Frequency Cord**	
280	**Protection Tube**	



Spare Parts

27040 TZ
Triangular Arbor

6345190
Teflon Seal

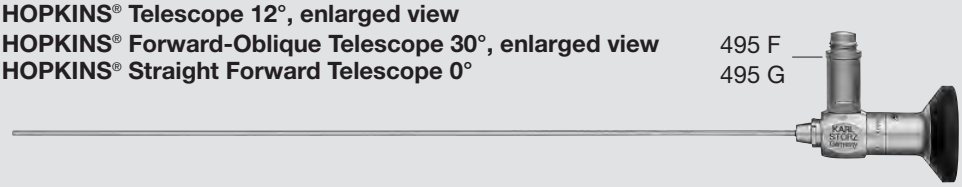
4-15

Unipolar and Bipolar Resection

Telescopes, Sheaths

KARL STORZ — ENDOSKOPE

Components / Spare Parts		Catalog page
26020 FA	**HOPKINS® Telescope 12°**	39
26105 FA	**HOPKINS® Telescope 12°, enlarged view**	48
26105 BA	**HOPKINS® Forward-Oblique Telescope 30°, enlarged view**	48
26105 AA	**HOPKINS® Straight Forward Telescope 0°**	54

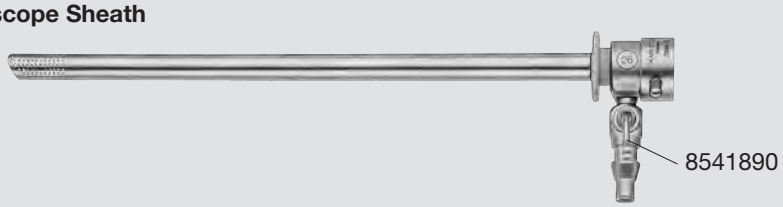


Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts		Catalog page
26040 SL	**Resectoscope Sheath**	51
26055 SL	**Resectoscope Sheath**	46

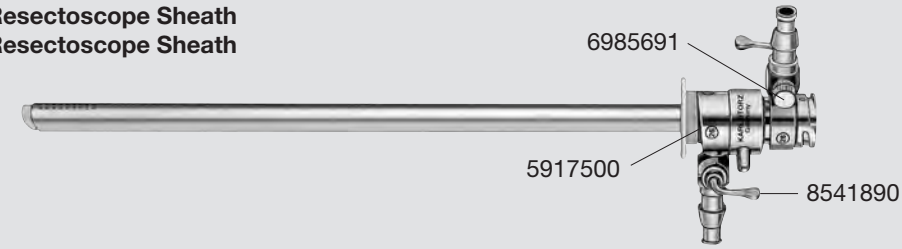


Spare Parts

6985691
Spring Cap

8541890
Stopcock

Components / Spare Parts		Catalog page
26050 SC	**Resectoscope Sheath**	51
26050 SL	**Resectoscope Sheath**	51
26055 LD	**Resectoscope Sheath**	46
26055 SC	**Resectoscope Sheath**	46



Spare Parts

5917500
O-Ring, silicone,
inner diameter 11 mm,
outer diameter 13 mm

8541890
Stopcock

6985691
Spring Cap

4-15

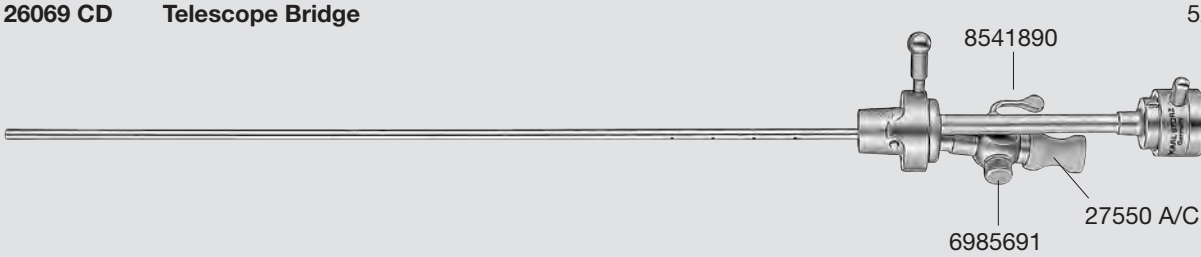
Components / Spare Parts		Catalog page
26055 XB	**Inner Sheath**	46
26055 XE	**Inner Sheath**	46
26055 CB	**Inner Sheath**	46
26040 XA	**Inner Sheath**	51
26050 XA	**Inner Sheath**	51

Spare Parts

6985691
Spring Cap

8541890
Stopcock

Components / Spare Parts		Catalog page
26053 CD	**Telescope Bridge**	43
26055 CD	**Telescope Bridge**	47
26069 CD	**Telescope Bridge**	52



Spare Parts

6985691
Spring Cap

8541890
Stopcock

Spare part for 26055 CD and 26053 CD

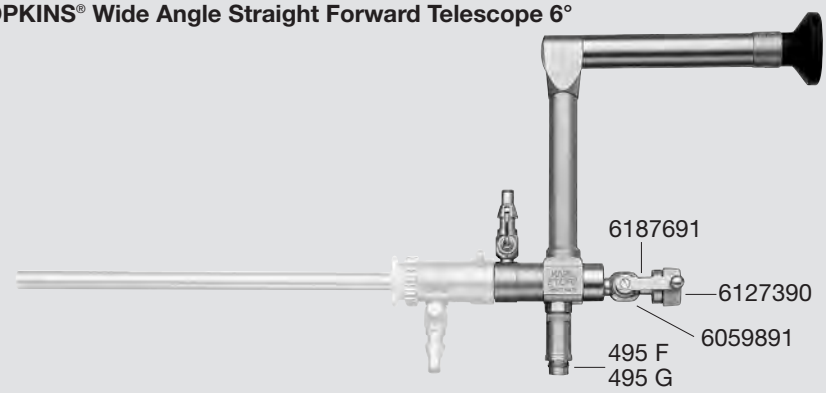
27550 C-10
Sealing Cap, drill hole diameter 1.2 mm, package of 10

Spare part for 26069 CD

27550 A-10
Sealing Cap, drill hole diameter 0.8 mm, package of 10

4-15

Components / Spare Parts		Catalog page
26208 AMA	**HOPKINS® Wide Angle Straight Forward Telescope 6°**	62
26092 AMA	**HOPKINS® Wide Angle Straight Forward Telescope 6°**	63



Spare Parts

6059891
Spring Cap Working Channel

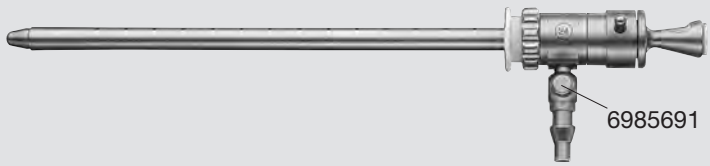
6187691
Stopcock Working Channel

6127390
Sealing Cap, (50/2.6)

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts		Catalog page
26093 CD	**Operating Sheath**	63



Spare Parts

6985691
Spring Cap

8541890
Stopcock

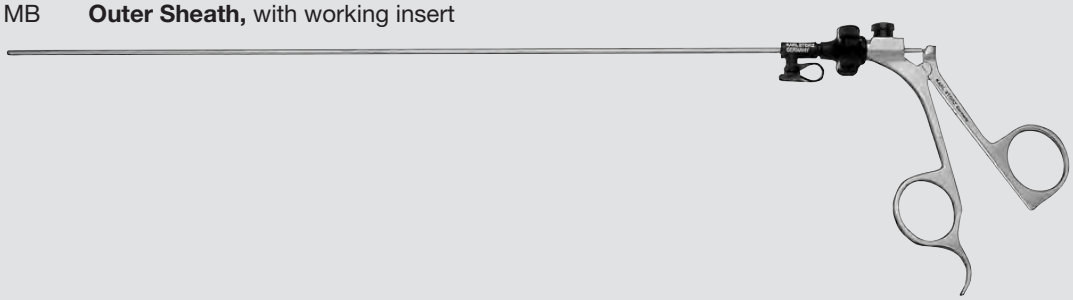
4-15

Shaver System for Gynecology

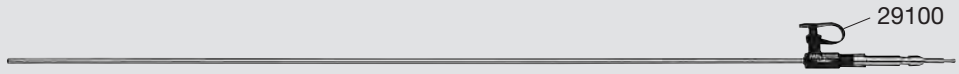
MAZZON **Biopsy Forceps,** MAZZON **Grasping Forceps**

KARL STORZ — ENDOSKOPE

Components / Spare Parts		Catalog page
26310 MA	MAZZON **Biopsy Forceps**	67
33131	CLICK'*line*® **Metal Handle,** without ratchet	
26310 MB	**Outer Sheath,** with working insert	



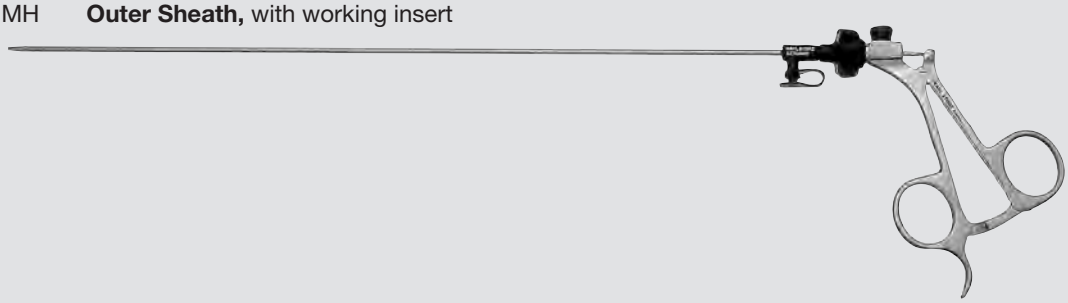
Components / Spare Parts		Catalog page
26310 MB	**Outer Sheath,** with working insert	67



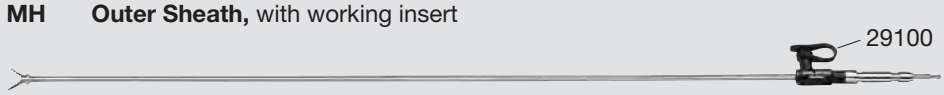
Spare part

29100
Plug, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

Components / Spare Parts		Catalog page
26310 MG	MAZZON **Grasping Forceps,** with alligator jaws	67
33133	CLICK'*line*® **Metal Handle,** with hemostat style ratchet	
26310 MH	**Outer Sheath,** with working insert	



Components / Spare Parts		Catalog page
26310 MH	**Outer Sheath,** with working insert	67



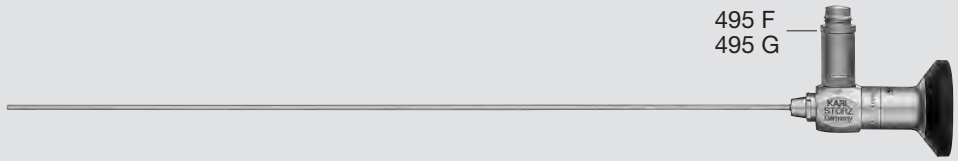
Spare part

29100
Plug, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

4-15

Components / Spare Parts — Catalog page

26120 BA **HOPKINS® Forward-Oblique Telescope 30°** — 72, 76



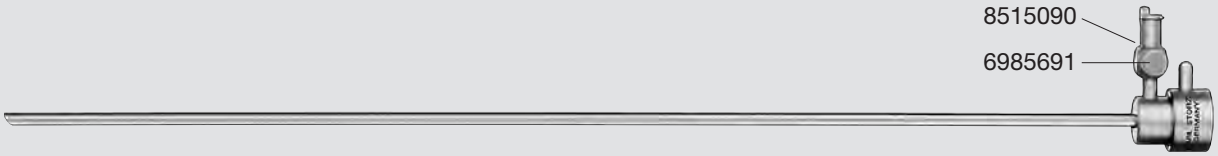
Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Componenten / Spare Parts — Katalogseite

26182 D **Diagnostic Sheath** — 73



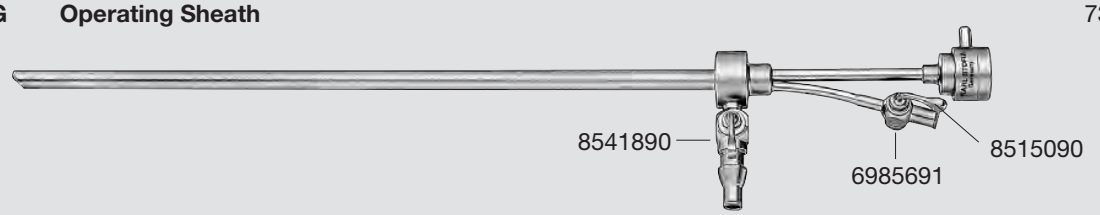
Spare Parts

6985691
Spring Cap

8515090
Stopcock

Components / Spare Parts — Catalog page

26182 TG **Operating Sheath** — 73



Spare Parts

6985691
Spring Cap

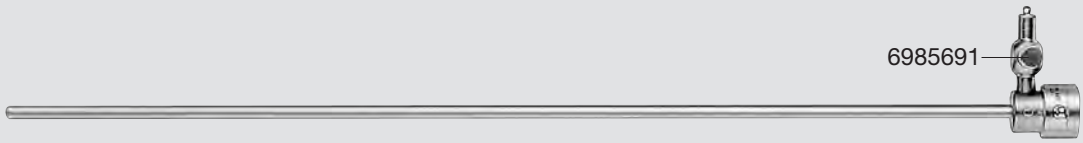
8541890
Stopcock

8515090
Stopcock

4-15

Components / Spare Parts — Catalog page

26161 VS **Examination Sheath** — 21, 76



Spare Parts

6985691
Spring Cap

8541890
Stopcock

Components / Spare Parts — Catalog page

26182 TC **Trocar Sheath** — 72

Spare Parts

27550 A-10
Sealing Cap, drill hole diameter 0.8 mm, package of 10

7720590
Silicone Leaflet Washer

6545190
Seal, gray

8515090
Stopcock

6985691
Spring Cap

8894290
Reducer

7362491
Fixation Sleeve

4-15

Transvaginal Endoscopy, Fertiloscopy

Puncture Needle

Components / Spare Parts	Catalog page
26182 TA **Puncture Needle**	72

Spare Parts

7361991
Stopper, complete

7362191
Clamping Fixture

7362091
Housing, complete

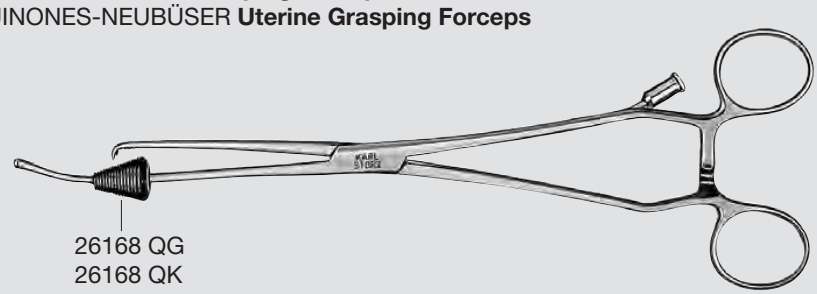
4-15

Transvaginal Endoscopy, Fertiloscopy

QUINONES **and** QUINONES-NEUBÜSER **Uterine Grasping Forceps,**
COHEN **Uterine Cannula**

KARL STORZ — ENDOSKOPE

Components / Spare Parts		Catalog page
26168 QB	QUINONES **Uterine Grasping Forceps**	77
26168 QN	QUINONES-NEUBÜSER **Uterine Grasping Forceps**	77

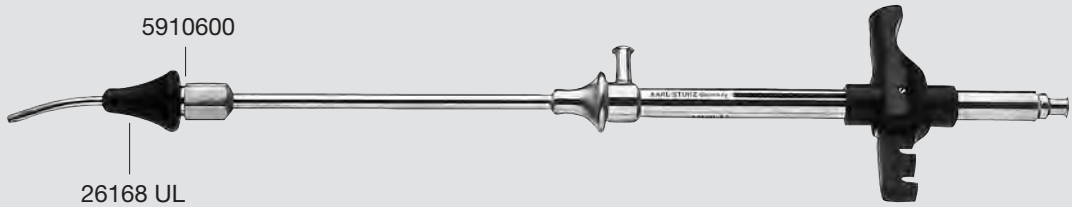


Spare Parts

26168 QG
Cone, large

26168 QK
Cone, small

Components / Spare Parts		Catalog page
26168 UN	COHEN **Uterine Cannula**	77



Spare Parts

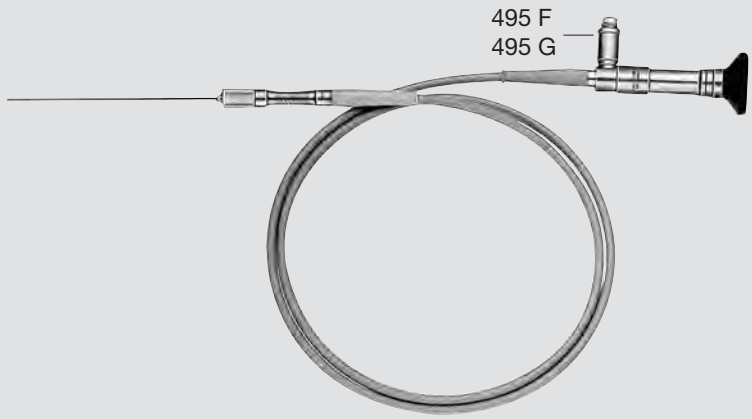
26168 UL
Cone, large

5910600
O-Ring, 3 x 1.5 mm

26168 US
Cone, small

4-15

Components / Spare Parts		Catalog page
11510 A	**Miniature Straight Forward Telescope 0°**	82
11540 AA	**Miniature Straight Forward Telescope 0°**	85
11630 AA	**Miniature Straight Forward Telescope 0°**	88

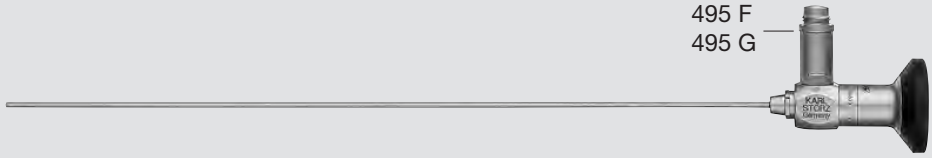


Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts		Catalog page
26008 AA	**HOPKINS® Straight Forward Telescope 0°**	92
26008 FUA	**HOPKINS® Telescope 12°**	92
26008 BUA	**HOPKINS® Forward-Oblique Telescope 30°**	92



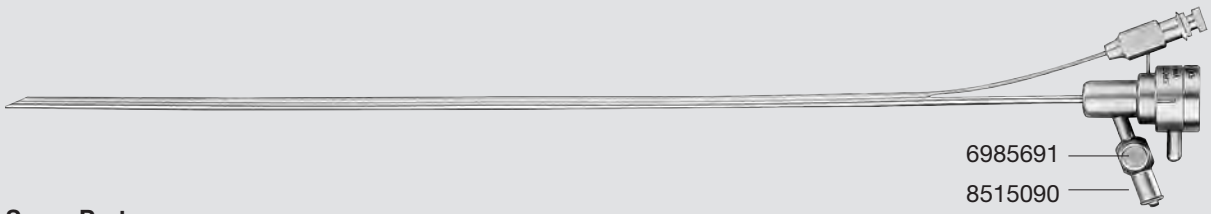
Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

4-15

Components / Spare Parts		Catalog page
11540 KA	**Operating Sheath**	86
11540 KB	**Operating Sheath**	86
11630 KF	**Operating Sheath**	89
11630 KH	**Operating Sheath**	89



Spare Parts

6985691
Spring Cap

8515090
Stopcock

Components / Spare Parts		Catalog page
11605 FK	**Operating Sheath**	89

Spare Parts

11605 FO
Obturator

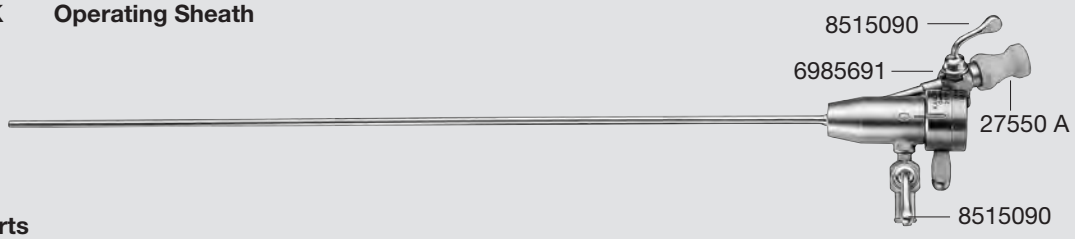
6985691
Spring Cap

27550 A-10
Sealing Cap, drill hole diameter 0.8 mm, package of 10

8515090
Stopcock

Components / Spare Parts — Catalog page

26161 UK **Operating Sheath** 93



Spare Parts

26161 UO
Obturator

6985691
Spring Cap

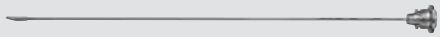
27550 A-10
Sealing Cap, drill hole diameter 0.8 mm, package of 10

8515090
Stopcock

Components / Spare Parts — Catalog page

26161 UFK **Operating Sheath** 93

Spare Parts



26161 UFO
Obturator,
with pyramidal tip

6985691
Spring Cap

27550 A-10
Sealing Cap, drill hole diameter 0.8 mm, package of 10

8515090
Stopcock

4-15

Components / Spare Parts — Catalog page

11605 KC **Examination Sheath** — 89

Spare Parts

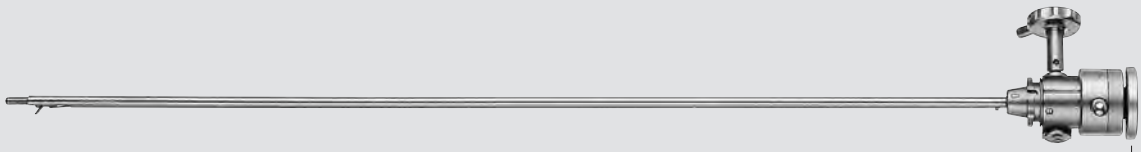
11605 KCO
Obturator

8515090
Stopcock

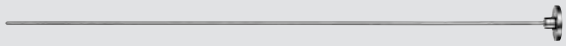
6985691
Spring Cap

Components / Spare Parts — Catalog page

26161 UH **Working Insert** — 93



Spare Parts



26161 UHO
Obturator

Components / Spare Parts — Catalog page

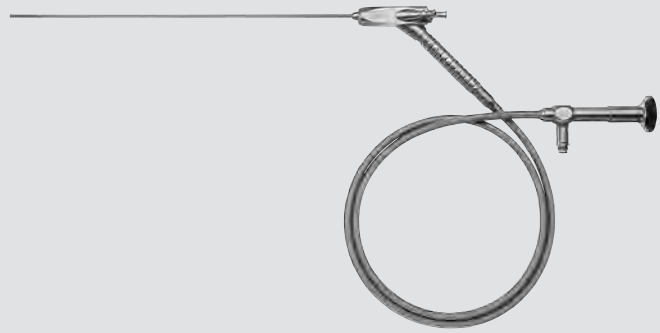
11650 P **Palpation Probe** — 101

Spare Parts

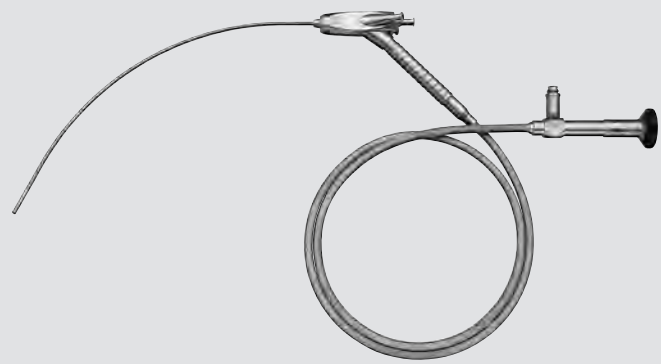
7437491
Obturator

4-15

Components / Spare Parts		Catalog page
11506 AAK	**Miniature Straight Forward Telescope 0° Set**	90
11506 AA	**Miniature Straight Forward Telescope 0°**	
27550 N	**Seal,** for instrument ports, package of 10	
27014 Y	**LUER-Adaptor,** with seal	
27651 AK	**Cleaning Brush**	
27677 A	**Case**	



Components / Spare Parts		Catalog page
11508 AAK	**Miniature Straight Forward Telescope 0° Set**	91
11508 AA	**Miniature Straight Forward Telescope 0°**	
27550 N	**Seal,** for instrument ports, package of 10	
27014 Y	2x **LUER-Adaptor,** with seal	
27651 AK	**Cleaning Brush**	
27677 A	**Case**	

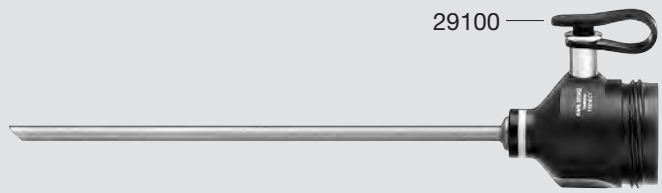


Components / Spare Parts		Catalog page
30114 FG	**Fetoscopy Trocar**	95

Spare Parts

8259290
Sealing Cap

Components / Spare Parts		Catalog page
11516 C1	**Cannula**	95
11516 C2	**Cannula**	95
11517 B1	**Cannula**	96
11517 B2	**Cannula**	96
30114 G2	**Cannula**	96
11518 A2	**Cannula**	97
11519 A2	**Cannula**	97
11520 A2	**Cannula**	97



Spare Parts

29100
Plug, for LUER-Lock irrigation connector for cleaning, black, autoclavable, package of 10

4-15

Components / Spare Parts		Catalog page
11603 L1	**Silicone Leaflet Valve**	95

Spare Parts

7720590
Silicone Leaflet Washer

6127290
Sealing Cap, (50/2.2)

Components / Spare Parts		Catalog page
30114 L1	**Silicone Leaflet Valve**	96
30117 L1	**Silicone Leaflet Valve**	96

Spare Parts

7720590
Silicone Leaflet Washer

6127390
Sealing Cap, (50/2.6)

Components / Spare Parts		Catalog page
30118 L1	**Silicone Leaflet Valve**	97
30160 L1	**Silicone Leaflet Valve**	97

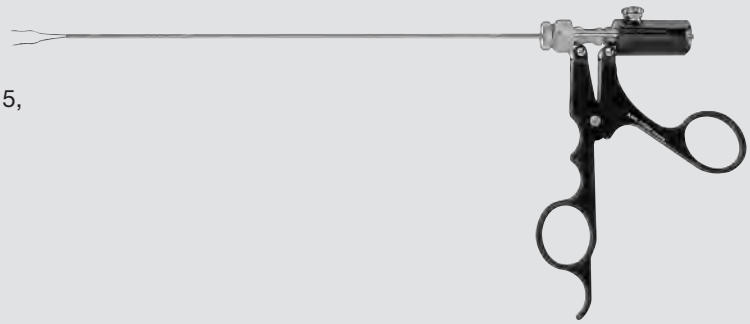
Spare Parts

7720590
Silicone Leaflet Washer

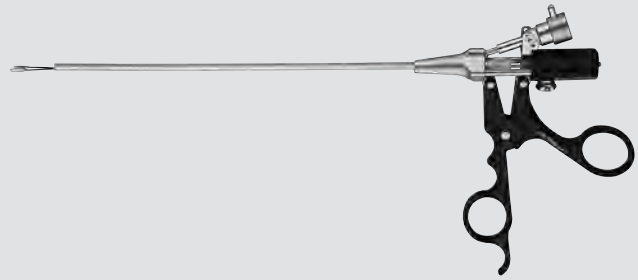
6127590
Sealing Cap, (50/4)

4-15

Components / Spare Parts		Catalog page
26167 FG	**TAKE-APART® Bipolar Grasping Forceps**	99
26167 FGR	**Handle**	
26167 FGF	**Outer Sheath**	
26167 FGE	**Working Insert,** package of 5, for single use	



Components / Spare Parts		Catalog page
11540 FG	**Bipolar Optical Grasping Forceps**	100
11540 FGR	**Handle,** with outer sheath	
11540 FGE	**Working Insert,** serrated, package of 5, for single use	



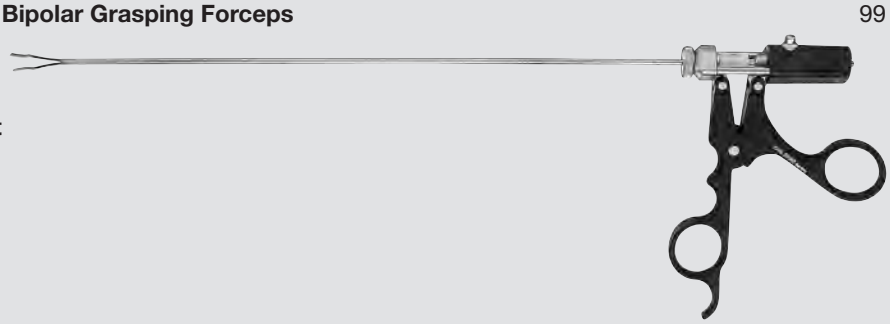
Components / Spare Parts		Catalog page
26167 FGR	**TAKE-APART® Bipolar Ring Handle**	99
11540 FGR	**Handle,** with outer sheath	100

Spare Parts

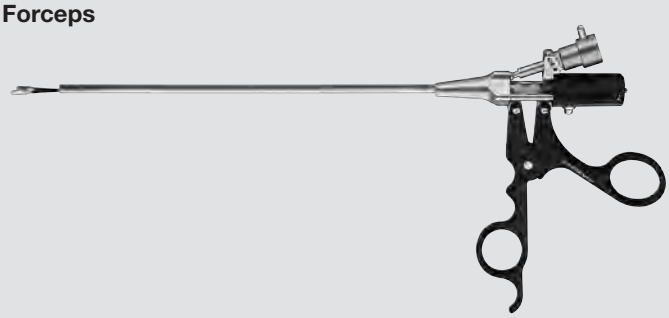
27550 E-10
Sealing Cap,
diameter 1.6 mm, package of 10

7280890
Spring Washer

Components / Spare Parts		Catalog page
26184 HLS	**TAKE-APART® Bipolar Grasping Forceps**	99
26184 HM	**Handle**	
26184 HS	**Outer Sheath**	
26184 KLS	**Working Insert**	



Components / Spare Parts		Catalog page
11540 HLS	**Bipolar Optical Grasping Forceps**	100
11540 HM	**Handle,** with outer sheath	
11540 KLS	**Working Insert,** serrated	



Components / Spare Parts		Catalog page
26184 HM	**TAKE-APART® Bipolar Ring Handle**	99
11540 HM	**Handle,** with outer sheath	100

Spare Parts

7072390
Sealing Cap,
diameter 1.8 mm

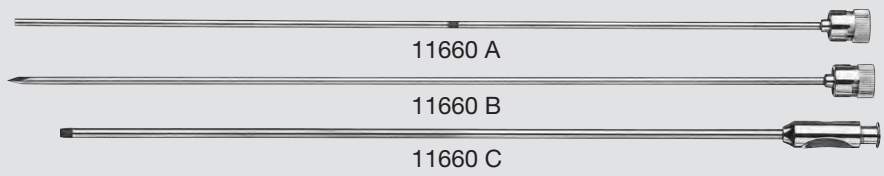
7280890
Spring Washer

4-15

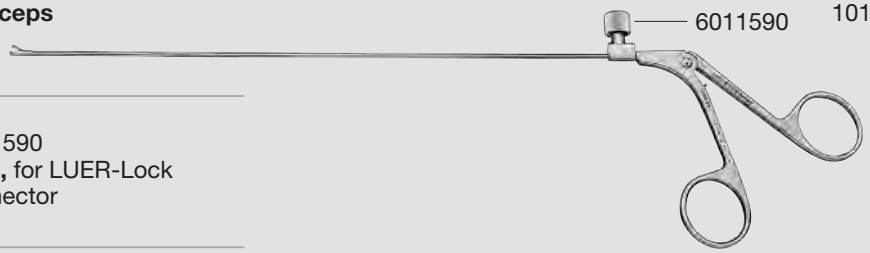
Fetoscopy

Shunting Set, Biopsy Forceps, Plastic Container

Components / Spare Parts		Catalog page
11660	**Shunting Set**	101
11660 A	**Outer Sheath,** diameter 3 mm, length 19.5 mm	
11660 B	3x **Obturator,** with pyramidal tip	
11660 C	**Pusher**	



Components / Spare Parts		Catalog page
11650 FC	**CVS Biopsy Forceps**	101
11650 FS	**CVS Biopsy Forceps**	101



Spare Parts

6011590
Plug, for LUER-Lock connector

Components / Spare Parts		Catalog page
39360 BK	**Plastic Container for Sterilization and Storage of Variable Instrument Sets**	104
39360 AP	**Snap-in Clip,** package of 12	
39360 AS	**Silicone Tie-Downs,** package of 12	
39360 AR	**Tool**	

4-15

Micro Blood Extraction Set, Amnioscopes and Cystoscopes

Amnioscopes

Components / Spare Parts		Catalog page
26203 A	SALING **Amnioscope**	107
26203 AS	**Outer Sheath**	
26203 AO	**Obturator**	
26203 B	SALING **Amnioscope**	
26203 BS	**Outer Sheath**	
26203 BO	**Obturator**	
26203 C	SALING **Amnioscope**	
26203 CS	**Outer Sheath**	
26203 CO	**Obturator**	

Components / Spare Parts		Catalog page
26204 A	SALING **Amnioscope**	108
26204 AS	**Outer Sheath**	
26204 AO	**Obturator**	
26204 B	SALING **Amnioscope**	
26204 BS	**Outer Sheath**	
26204 BO	**Obturator**	
26204 C	SALING **Amnioscope**	
26204 CS	**Outer Sheath**	
26204 CO	**Obturator**	

4-15

Micro Blood Extraction Set, Amnioscopes and Cystoscopes

Amnioscopes

KARL STORZ — ENDOSKOPE

Components / Spare Parts — Catalog page

26201 H **Prismatic Light Deflector** — 107, 108

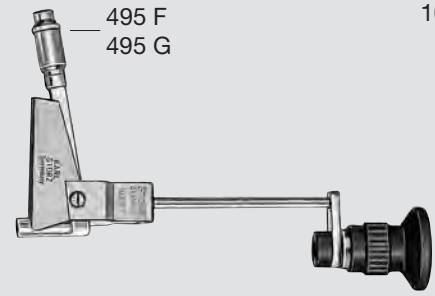
Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts — Catalog page

26201 HL **Prismatic Light Deflector** — 107, 108



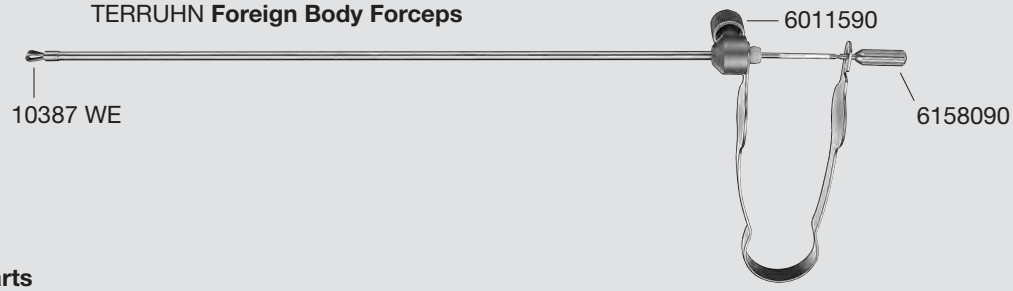
Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

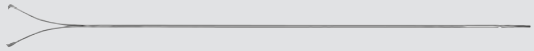
495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts — Catalog page

10387 W TERRUHN **Foreign Body Forceps** — 109



Spare Parts

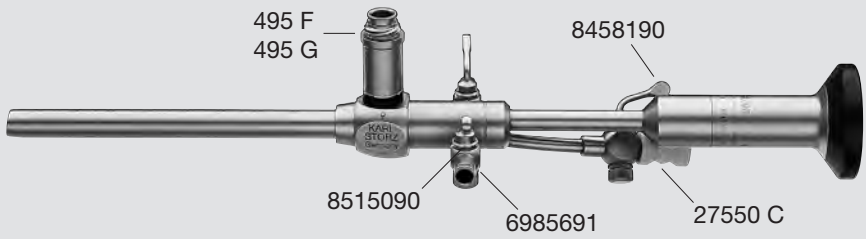


10387 WE
Forceps Insert

6011590
Plug, for LUER-Lock
connector

4-15

Components / Spare Parts	Catalog page
27035 BA **Universal Cysto-Urethroscope,** with HOPKINS® forward-oblique telescope 30°, enlarged view	110



Spare Parts

27550 C-10
Sealing Cap, drill hole diameter 1.2 mm, package of 10

495 F
Receptacle, diameter 9 mm, for Wolf fiber optic light cable

495 G
Screw Base, for KARL STORZ fiber optic light cables and Olympus Corporation

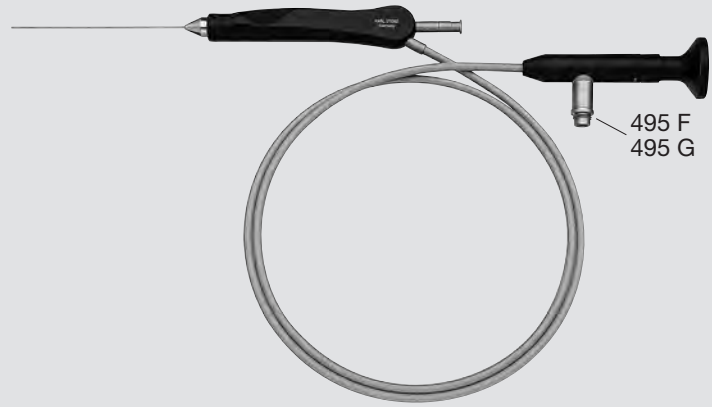
8515090
Stopcock

6985691
Spring Cap

8458190
Stopcock

4-15

Components / Spare Parts		Catalog page
11521 A	**Miniature Straight Forward Telescope 0°**	145
11522 A	**Miniature Straight Forward Telescope 0°**	145

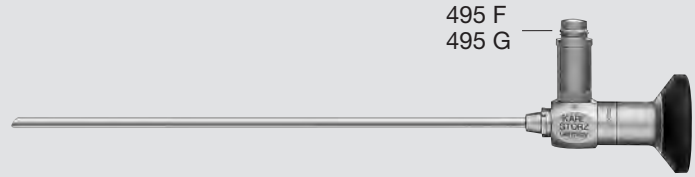


Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts		Catalog page
50251 BA	**HOPKINS® Forward-Oblique Telescope 30°,** enlarged view	147

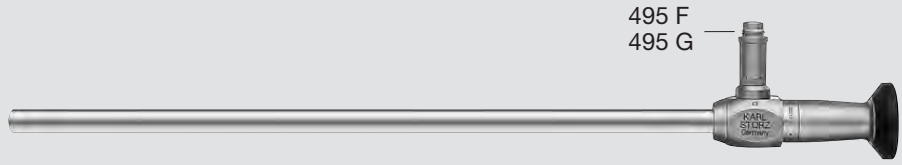


Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Components / Spare Parts		Catalog page
50250 AA	**HOPKINS® Straight Forward Telescope 0°,** enlarged view	153
50253 BA	**HOPKINS® Forward-Oblique Telescope 30°,** enlarged view	148

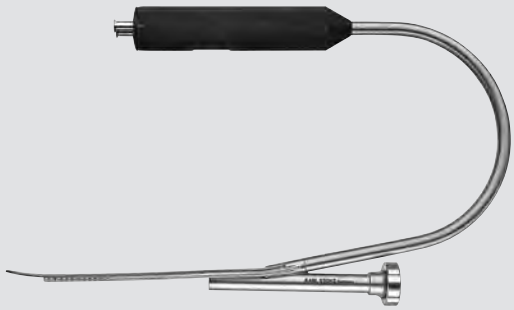


Spare Parts

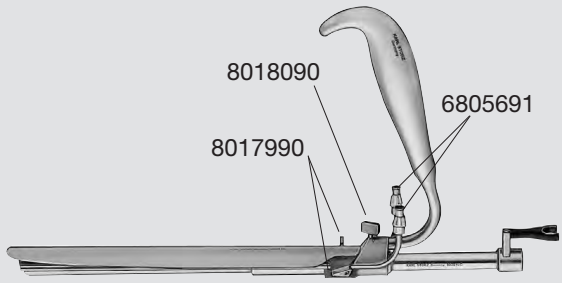
495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

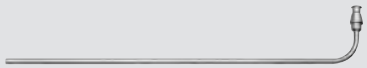
Components / Spare Parts		Catalog page
50251 LD	**Optical Retractor**	147
50251 LSR	**Retractor**	
50251 LCS	**Telescope Sheath**	



Components / Spare Parts		Catalog page
50251 LG	**Optical Retractor**	148



Spare Parts



6805691
Suction Tube, complete

8017990
Clamping Screw

8017990
Clamping Screw

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Components / Spare Parts		Catalog page
496 H	**Retractor**	149

Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

496 HF
Fiber Optic Light Carrier

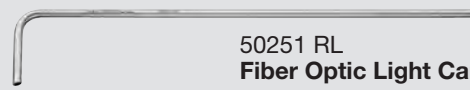
Components / Spare Parts		Catalog page
50251 R	**Retractor**	149
50251 RG	**Retractor**	149

Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

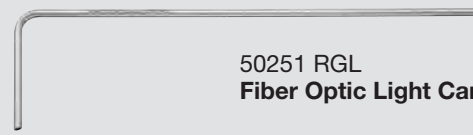
495 G
Screw Base, for
KARL STORZ fiber optic
light cables and Olympus
Corporation

Spare Parts for 50251 R



50251 RL
Fiber Optic Light Carrier

Spare Parts for 50251 RG



50251 RGL
Fiber Optic Light Carrier

Telescopes and Instruments for Ductoscopy and Mammaplasty

Illuminated Retractors, Coagulation Suction Tubes, Handle,
DELMAR **Unipolar Endo-Dissektor**

KARL STORZ — ENDOSKOPE

Components / Spare Parts — Catalog page

50251 RB **Illuminated Retractor** — 150

50251 RBB **Illuminated Retractor**
50251 RHB **Handle**

50251 RS **Illuminated Retractor**

50251 RSB **Illuminated Retractor**
50251 RHB **Handle**

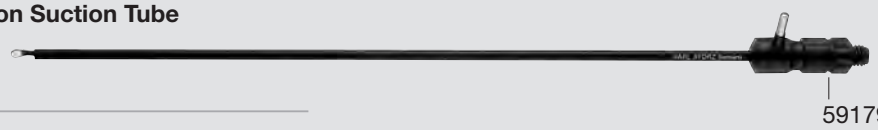
Spare Parts

495 F
Receptacle,
diameter 9 mm, for
Wolf fiber optic light cable

495 G
Screw Base, for
KARL STORZ fiber optic light cables and Olympus Corporation

Components / Spare Parts — Catalog page

50251 T **Coagulation Suction Tube** — 151
50251 TC **Coagulation Suction Tube** — 151

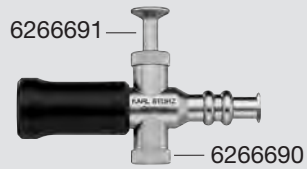


Spare Parts

5917900
O-Ring, small

Components / Spare Parts — Catalog page

30804 **Handle with Trumpet Valve** — 151



Spare Parts

5905610
Spring

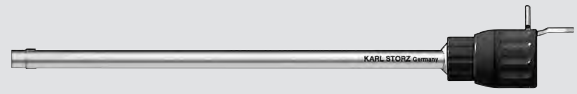
6266691
Piston

6266690
Knurled Cap

Components / Spare Parts — Catalog page

50251 M DELMAR **Unipolar Endo-Dissector** — 153

50251 MH **Handle**
50251 MS **Sheath**



4-15

Components / Spare Parts		Catalog page
28172 HK	**Socket,** to clamp to the OR table	127

Spare Parts

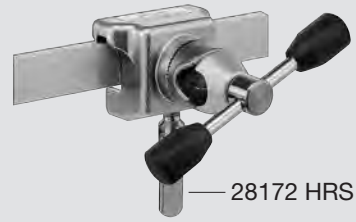
ET35-91-090
Butterfly Nut,
for fixing the retaining rod

ET35-91-090

Components / Spare Parts		Catalog page
28172 HR	**Rotation Socket,** to clamp to the operating table	127

Spare Parts

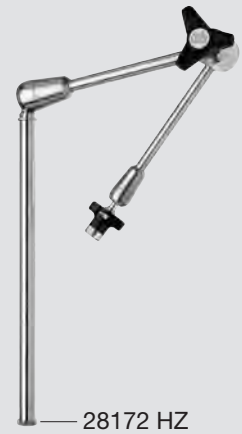
28172 HRS
Butterfly Nut, to clamp Socket 28172 HR to the operating table, one already mounted on Socket 28172 HR


28172 HRS

Components / Spare Parts		Catalog page
28272 HA	**Articulated Stand**	127
28272 HB	**Articulated Stand**	127
28272 HC	**Articulated Stand**	127
28272 HD	**Articulated Stand**	127

Spare Parts

28172 HZ
Set Screw,
for articulated stands


28172 HZ

Components / Spare Parts		Catalog page
28272 EH	**ENDOCRANE®,** piezoregulated holding arm	129
28272 EHS	**ENDOCRANE® Arm,** including stand	
28172 HG	**Socket,** to clamp to the OR table	
20780020	**Control Unit**	
041150-20*	**Cover,** elasticated, package of 20	
28272 ECW	**Spring Balance**	
400 A	**Mains Cord,** length 300 cm	
27677 BV	**Case**	


28272 EHS

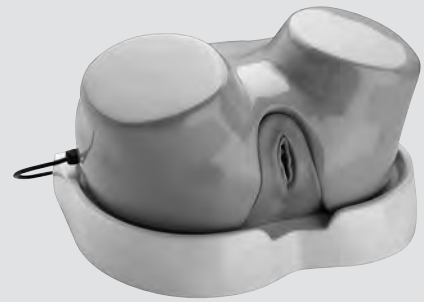
* mtp

Training Models

LYRA **Hystero-Trainer Eva II**

KARL STORZ — ENDOSKOPE

Components / Spare Parts		Catalog page
26343	LYRA **Hystero-Trainer Eva II**	141
26343 A1	**Neoderm Uterus,** with polyps	
26343 A2	**Neoderm Uterus,** with septum and polyps	
26343 A3	**Neoderm Uterus,** with septum without polyps	
26343 B	**Vaginal Block,** for biological organ structures/uteri	
26343 C	**Vaginal Block,** for artificial uteri (Neoderm)	
26343 D	**Neutral Electrode,** for unipolar use	
26343 F	**Neoderm Uterus,** for biological implants	
26343 X	**Base Body**	



4-15

Components / Spare Parts		Catalog page
26431508-1	HAMOU® **MICRO-HYSTEROFLATOR® SCB**	U 6
26431520-1	HAMOU® **MICRO-HYSTEROFLATOR®,** power supply 100 – 240 VAC, 50/60 Hz	
20400042	**Silicone Tubing Set,** sterilizable	
20400030	**Universal Wrench**	
20090170	**SCB Connecting Cable,** length 100 cm	
031123-10*	**Gas Filter,** for single use, sterile, package of 10	

26431520-1

Spare Parts

2027590
Mains Fuse, T 2.0 AL (SB), package of 10

Components / Spare Parts		Catalog page
20400022	**CO_2 High Pressure Tube**	U 8
20400028	**CO_2 High Pressure Tube**	U 8

Spare Parts

2903390
Seal, for use with CO_2 bottle, Pin-Index connector

Components / Spare Parts		Catalog page
20400021	**CO_2 High Pressure Tube**	U 8
20400027	**CO_2 High Pressure Tube**	U 8

Spare Parts

2903490
Seal, for use with CO_2 bottle, German connection

Components / Spare Parts		Catalog page
20400042	**Silicone Tubing Set**	U 7

Spare Parts

600007
LUER-Lock Tube Connector, male, tube diameter 6 mm

600008
LUER-Lock Tube Connector, female, tube diameter 6 mm

* mtp

4-15

Components / Spare Parts		Catalog page
26340001-1	**HYSTEROMAT E.A.S.I.® SCB**	U 10
26340020-1	**HYSTEROMAT E.A.S.I.® SCB** power supply 100 – 240 VAC, 50/60 Hz	
400 A	**Mains Cord**	
20090170	**SCB Connecting Cable,** length 100 cm	
031917-10	**Basic Tubing Set,** for single use	

26340020-1

Spare Parts

1973290
Mains Fuse,
T 1.6 AL (SB),
package of 10

* mtp

4-15

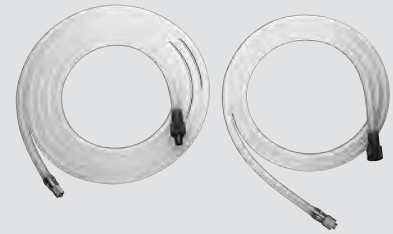
Components / Spare Parts		Catalog page
26331101-1	HAMOU® **ENDOMAT® SCB**	U 12
26331120-1	HAMOU® **ENDOMAT® SCB**	
20090170	**SCB Connecting Cable,** length 100 cm	
031951-10*	**Cassette Tubing Set,** for single use	
031520-03*	**VACUsafe Suction,** 2 l	

26331120-1

Spare Parts

2027590
Mains Fuse,
T 2.0 AL (SB),
package of 10

Components / Spare Parts		Catalog page
26 3311 42	**Silicone Tubing Set,** for suction, sterilizable	U 19



Spare Parts

27500
LUER-Lock Tube Connector, male,
tube diameter 9 mm

59351111018
LUER-Lock Connector,
male

20300180
Tubing Connector Set

* mtp

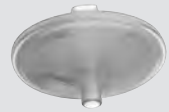
Components / Spare Parts — Catalog page

20300034 **Bottle Cap** — U 19

Spare Parts

20300580
Overflow Case, gray,
for Bottle Cap 20300034

2911590
Plunger Ball, green,
to overflow case,
2 pcs required



031124-10*
Filter, for single use,
unsterile, for use in fluid
suction, specially adapted,
package of 10

* mtp

4-15

Components / Spare Parts		Catalog page
20330302-1	**ENDOMAT® LC SCB**	U 14
20330320-1	**ENDOMAT® LC SCB,** power supply 100 – 240 VAC, 50/60 Hz	
20330343	**Silicone Tubing Set,** for suction, sterilizable	
20090170	**SCB Connecting Cable,** length 100 cm	
20701070	**Control Cable,** UNIDRIVE® S III – KARL STORZ pump systems	

20330320-1

Spare Parts

2027390
Mains Fuse,
T 1.0 A (SB),
package of 10

Components / Spare Parts		Catalog page
20330343	**Silicone Tubing Set,** for suction, sterilizable	U 19

Spare Parts

20330393
Pump Tube, sterilizable,
package of 25

20300482
Connector Set

Components / Spare Parts		Catalog page
20302003-1	**EQUIMAT® SCB**	U 16
20302020-1	**EQUIMAT® SCB,** power supply 100 – 240 VAC, 50/60 Hz	
38332130	**Scale Measuring Element II**	
20302031	**Suspension Holder**	
20090170	**SCB Connecting Cable,** length 100 cm	

20302020-1

Spare Parts

2027390
Mains Fuse,
T 1.0 A (SB),
package of 10

Components / Spare Parts		Catalog page
26701001-1	**UNIDRIVE® S III SCB**	U 23
20701020-1	**UNIDRIVE® S III SCB,** power supply 100 – 240 VAC, 50/60 Hz	
400 A	**Mains Cord**	
20016230	**One-Pedal Footswitch,** two-stage	
20090170	**SCB Connecting Cable,** length 100 cm	

20701020-1

Spare part for use at 230 V:

2027590
Mains Fuse,
T 2.0 AL (SB),
package of 10

Spare part for use at 110 V:

2027690
Mains Fuse,
T 4.0 AL (SB),
package of 10

4-15

Components / Spare Parts — Catalog page

2053520x-12x **AUTOCON® II 400 SCB** — U 34

2053522x-12x **AUTOCON® II 400 SCB,** power supply 220 – 240 VAC, 50/60 Hz
400 A **Mains Cord**
20090170 **SCB Connecting Cable,** length 100 cm

2053522x-12x
2053522xU12x

2053520xU12x **AUTOCON® II 400 SCB**

2053522xU12x **AUTOCON® II 400 SCB,** power supply 100 – 120 VAC, 50/60 Hz
400 A **Mains Cord**
20090170 **SCB Connecting Cable,** length 100 cm

Spare part for use at 230 V:

2027690
Mains Fuse,
T 4.0 AL (SB),
package of 10

Spare part for use at 110 V:

2028090
Mains Fuse,
T 8.0 AL (SB),
package of 10

Components / Spare Parts — Catalog page

20530801 **AUTOCON® II 80** — U 36

20530820 **AUTOCON® II 80,** power supply 100 – 240 VAC, 50/60 Hz
400 A **Mains Cord,** length 300 cm

20530820

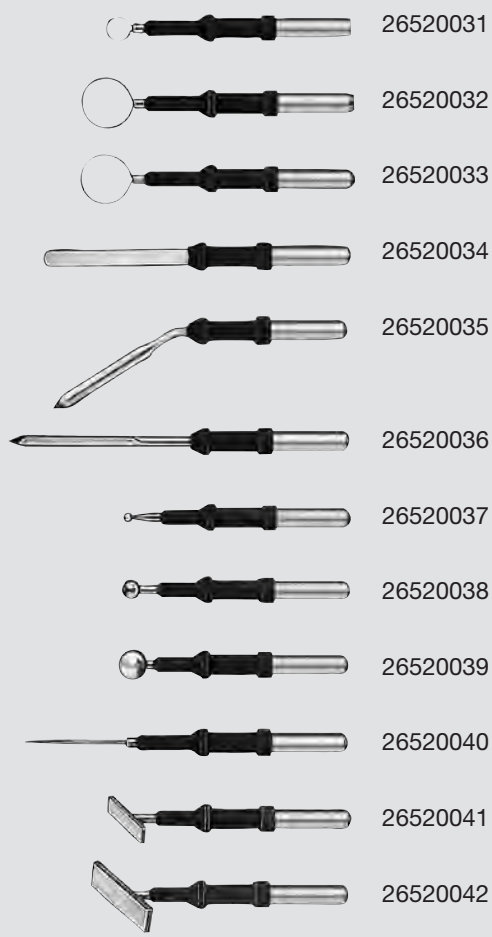
Spare Parts

2027690
Mains Fuse,
T 4.0 AL (SB),
package of 10

4-15

Surgery Electrodes Set

Components / Spare Parts		Catalog page
20530008	**Surgery Electrodes Set**	U 39
20530031	**Container with Lid and Sterilizing Insert,** for 16 electrodes with diameter 4 mm	
26520031	**Wire Snare,** 5 mm	
26520032	**Wire Snare,** 10 mm	
26520033	**Ribbon Snare,** 10 mm	
26520034	KIRSCHNER **Spatula Electrode,** straight	
26520035	MAGENAU **Knife Electrode,** angled	
26520036	**Knife Electrode,** lancet-shaped	
26520037	**Ball Electrode,** 2 mm	
26520038	**Ball Electrode,** 4 mm	
26520039	**Ball Electrode,** 6 mm	
26520040	**Needle Electrode**	
26520041	**Flat Electrode,** 8 x 10 mm	
26520042	**Flat Electrode,** 10 x 15 mm	



4-15