

9th EDITION 1/2013 US

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# ENDOSCOPES AND INSTRUMENTS FOR ENT ESOPHAGOSCOPY - BRONCHOSCOPY

9th EDITION 1/2013 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:**

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.



# KARL STORZ Items Not Available in the U.S. August, 2013

## Pending 510(k) / PMA not currently available for sale in the U.S.

Order no.	Description	Section	Page
<b>20</b> 7120 33	High-Speed Micro-Motor	E 63 E US, SI 49 D US	80, 207
252573	INTRA Drill Handpiece	E 67 E	85
<b>40</b> 7120 55	DrillCut-X® II N Shaver Handpiece	SI 53 C US, NAV 8	211, 668
<b>20</b> 2901 32	C-CAM® Camera Head	SI 71 D US	229
7230 AP/BP/CP	HOPKINS® II Telescopes	SI 82 E US	240
<b>20</b> 5205 01	AUTOCON® 50	COA 20 C US	412
13304 CS	CMOS Video Esopharyngoscope KIT	ESO 3 B	585
11900 AP/AN	Video Bronchoscope for Autofluorescence	BRO-VIDEO 2 A US	610
<b>25</b> 3200 01	UNIMAT® 30	BRO-FIB-ACC 8 US	624
39502 NAV1	Wire Tray for Navigation Probe		
	and Patient Tracker	NAV 6	666
39502 NAV2	Wire Tray for Suction Tubes		
	and Instrument Tracker	NAV 7	667
28272 EH	ENDOCRANE®	ENT-MICRO 20 US	692

**Note:** References made herein to specific endoscopic procedures or techniques represent the opinions and/or experiences of the named physician(s). KARL STORZ Endoscopy-America, Inc. neither warrants nor represents the appropriateness or efficacy of said procedures. Physicians are encouraged to consult medical literature regarding techniques, compliances and hazards prior to performance of any endoscopic procedure.

**Note:** Some items are pending 510(k). Please contact KARL STORZ Customer Support at (800) 421-0837 regarding the current regulatory status of products above.



# **TERMS AND CONDITIONS**KARL STORZ Endoscopy-America, Inc.

#### 1. ORDERS:

Orders are to be placed with the Customer Support Department of KARL STORZ Endoscopy-America, Inc. ("KSEA") or with its sales force. However, orders will only be accepted by KSEA's Customer Support Department in El Segundo, California and only on the condition that in the event of any conflicting, inconsistent and/or additional provisions in a Customer purchase order or other document, the within Terms and Conditions will supersede and prevail and such conflicting, inconsistent and/or additional provisions shall be of no force or effect; KSEA hereby objects to such other provisions or terms proposed by Customer. By accepting delivery of products, and/or the performance of services, from KSEA, and/or by paying for same, Customer agrees that notwithstanding anything to the contrary in Customer's own purchase order or other document, Customer accepts and agrees to the within Terms and Conditions, all of which constitute the sole and entire Agreement of KSEA and Customer, unless and to the extent modified and/or superseded by an agreement in writing signed by both Customer and an authorized representative of KSEA.

#### 2 PRICES:

Prices are subject to change without notice. Nevertheless, prices in effect at the time that an order is accepted will prevail. Written quotations are valid for 60 days unless otherwise specified. All applicable taxes, as well as shipping and/or handling charges, will be added to the invoice.

#### 3 TERMS

Shipments are F.O.B. shipping point, freight prepaid by KSEA and added to the invoice. Unless modified in writing, invoices are due and payable upon receipt; net 30 days. A finance charge may be assessed on all unpaid balances over 30 days equal to one and one-half percent (1-1/2%) per month, or the maximum amount allowed by law, whichever is less. Any and all collection expenses, including reasonable attorneys' fees, which are incurred by KSEA to secure payment of any sums due from Customer and/or to effectuate repossession of products purchased from KSEA, but not paid for, will be borne by Customer. All controversies, disputes and claims, shall be adjudicated by a court of competent jurisdiction within the County of Los Angeles, State of California or the United States District Court, Central District of California, which courts shall have exclusive jurisdiction of such matters. All transactions by and between Customer and KSEA shall be governed by and construed in accordance with the laws of the State of California without regard to its conflict of laws principles. The invalidity or unenforceability of any of the within Terms and Conditions will not affect the validity or enforceability of any other or remaining Term or Condition hereof. The within Terms and Conditions apply to products that are supplied to Customer as samples or loans from KSEA. Amounts payable to KSEA for the purchase, lease, or rent of products and/or services are not subject to withholding, set-off, or counter-claim under any circumstances without prior written consent of KSEA.

#### 4. SECURITY INTEREST:

Until Customer has paid KSEA in full for all products purchased pursuant to an order, KSEA shall have, and Customer hereby grants to KSEA, a security interest in all products purchased, pursuant to such order, and in all proceeds therefrom (including that which Customer receives as payment from an insurer or third party for or as a result of any damage to or loss of said products), to secure payment of the entire purchase price for all products sold, shipped and delivered to Customer pursuant to such order, and to secure all costs, expenses or other charges relating thereto which are payable by Customer to KSEA. Customer is required to execute and deliver such documents, as required and requested by KSEA, to perfect KSEA's security interest(s).

#### 5. SHIPPING:

Although KARL STORZ products are carefully packed to minimize in-transit damage, all shipments should be carefully examined upon receipt and if a product is damaged, Customer must document the nature and extent of the damage and immediately contact KSEA. If concealed loss or damage is discovered, Customer must retain all packing materials and immediately notify KSEA, requesting an inspection. If shipments are received short, Customer must contact KSEA's Customer Support Department at once. KSEA reserves the right to make partial shipments on any Order. Invoices for partial shipments are payable upon receipt. KSEA is not liable for any damages caused by or attributable to delays and/or non-delivery due to any cause whatsoever.

## 6. RETURN POLICY:

A return merchandise authorization (RMA) must be obtained from KSEA's Customer Support Department prior to returning any products. When phoning or writing KSEA, for an RMA, the Customer Support Representative must be provided with: (1) Customer name and number, as it appears on the invoice; (2) the telephone number and the person to contact; (3) the applicable P.O. number; (4) the KARL STORZ catalog number and, if applicable, the serial number for each product; and, (5) the reason for the return. KSEA reserves the right to refuse or return any products sent back to KSEA without prior authorization of its Customer Support Department. Returns must be carefully packed and shipped pre-paid to KSEA, Attn: RMA number. KSEA's Customer Support Department will provide the return address and the RMA number. When returning products, Customer should include a copy of the original invoice or packing slip to ensure prompt issuing of credit. Full credit will only be issued for products that are received within 60 days of date of shipment and so long as such items are unused, in resalable condition and in their original product container. All products received after 60 days, but not more than 90 days, from the date of shipment will be assessed to a 15% inspection fee, which will be deducted from the credit to be issued for the returned product. Shipping charges will be reimbursed, inspection fees will not be charged and full credit will be given if the return was due to an error on the part of KSEA. The following products may not be returned for credit or exchanged: (1) products held longer than 90 days from date of shipment; (2) sterile packaged products where the package is opened and/or damaged; (3) discontinued products; (4) instruments that are etched or engraved by the Customer; (5) products damaged by the Customer; (6) products purchased "as is" or as demo products; and, (7) used products. In order to prevent the transmission of disease to the medical facilities' and/or KSEA's personnel, all products must be cleaned and then sterilized and/or disinfected before sending such products back to KSEA, who reserves the right to return unclean and contaminated products to the Customer. Additionally, if any product becomes damaged and is not immediately returned, KSEA assumes no responsibility or liability for Customer's continued use of that damaged product. KSEA does not guarantee the performance, and may decline to repair or accept for repair/exchange, any product that has been repaired, modified and/or altered by any person or entity other than KSEA or an authorized repair facility of KSEA.

## 7. INSTALLATION, PREVENTATIVE MAINTENANCE, AND OTHER SERVICES:

Subject to resource availability, KSEA may, in its sole discretion, (i) install and setup the product, perform preventative maintenance services, provide onsite or remote troubleshooting services and other services, (ii) provide software updates and (iii) provide loaners in case of back orders.

#### 8. TRAINING:

To the extent reasonable as to the complexity and quantity of products, KSEA will provide training regarding the proper use of products at or near the time of delivery or installation, as applicable. KSEA may also provide additional training regarding the proper use of products upon Customer's request, in KSEA's sole discretion and subject to availability of KSEA personnel.



#### 9 REPAIR PROGRAM:

If repairs become necessary, for other than damages incurred during initial shipment, the Customer must follow the RMA procedure set forth in the "Return Policy" in Section 6, above. Warranty repairs will be made without charge (see "Warranty Policy", Section 10 below, for covered repairs). All other repairs are subject to KSEA's applicable standard repair or exchange charges. If requested, Customer will be advised of the estimated cost of the repair work or a product exchange before it is undertaken. All repairs carry a 90 day warranty. Exchange products carry the applicable KARL STORZ new product warranty. If the damaged product is not returned within thirty (30) days of receipt of the replacement product, Customer will be invoiced for the full list price of the replacement. Subject to the availability of product, KSEA may, in its sole discretion, provide Customer with loaner product while non-warranty repairs are being made. Subject to resource availability, KSEA may, in its sole discretion, perform minor non-warranty repairs without charge. KSEA reserves the right to refuse or return any product sent back without prior authorization of KSEA's Customer Support Department.

#### 10. WARRANTY POLICY:

Except as otherwise provided herein and/or by the applicable warranty information for a specific product or type of product, all products are generally warranted to be in good working order at the date of delivery and free from defects in workmanship and materials for one (1) year from date of delivery. However, since some products carry a shorter or a longer warranty period, Customer should check with KSEA's Customer Support Department or product specific literature, instruction manual and/or labeling for the exact warranty period. Any such product(s) with a defect occurring during the applicable warranty period will be promptly replaced or, at the sole discretion of KSEA, repaired at no charge to Customer. All repairs shall be performed in a good and workmanlike manner and all replaced parts or products shall be free from defects in materials and workmanship for the remainder of the original warranty period (if any) or the ninety (90) day period set forth in section 9, Repair Program, above, whichever is longer, when used by qualified personnel who are trained in their use. Subject to availability of product, KSEA may, in its sole discretion, provide Customer with loaner product while the defective product is being replaced or repaired during warranty period. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED AND/OR STATUTORY, INCLUDING, BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS AND/OR OF SUITABILITY FOR A PARTICULAR PURPOSE, WITH RESPECT TO ALL KARL STORZ PRODUCTS OR SERVICES. ANY AND ALL OTHER WARRANTIES, REPRESENTATIONS AND/OR GUARANTEES, OF ANY TYPE, NATURE OR EXTENT, BE IT IMPLIED, EXPRESS AND/OR WHETHER ARISING UNDER OR AS A RESULT OF ANY STATUTE, LAW, COMMERCIAL USAGE, CUSTOM, TRADE OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED AND DISCLAIMED. Any contrary course of performance by and between the parties will not modify any representations and/or warranties set forth herein. KSEA neither assumes nor authorizes any person to assume for it any other liabilities in conjunction with and/or related to the sale and/or use of its products. To ensure proper use, handling and care of KARL STORZ products, Customer should consult the product specific literature, instruction manual, and/or labeling included with the product or otherwise available. Repairs, modifications or alterations of KARL STORZ products, performed by any person or entity, other than by KSEA or an authorized repair facility of KSEA, nullifies and otherwise voids all applicable KARL STORZ warranties. Repair or replacement of a KARL STORZ product shall not extend the term of any applicable warranty. The remedies provided herein are Customer's exclusive remedies under this Warranty Policy.

#### 11. LIMITATION OF LIABILITY:

KSEA is not liable, either directly or by way of express or implied indemnity, for: (1) any damages which might arise or be caused, whether by the Customer or by any of the users of the products provided by KSEA, as a result of, in connection with, or otherwise attributable to: (a) misuse, abuse, mishandling and/or improper operation and/or storage; (b) repairs, servicing, modifications and/or alterations performed by any person or entity, other than KSEA or an authorized repair facility of KSEA; (c) use in combination with adaptors, accessories and/or equipment from other manufacturers unless authorized or recommended by KSEA, (d) use in any manner other than those for which such products are designed and are otherwise intended to be used, or (e) a failure to comply with power and grounding specifications provided by KSEA and, (2) any special, incidental, consequential, punitive, exemplary or indirect damages, including but not limited to alleged damages for delayed shipment, non-delivery, product failure, product design or production, inability to use such products or services, loss of future business (lost profits), or from any other cause, whatsoever, in connection with or arising from the purchase, sale, lease, rental, installation or use of KARL STORZ products, even if KSEA has been advised of the possibility of such damages. SOME JURISDICTIONS DO NOT ALLOW EXCLUSIONS AND DISCLAIMERS OF CERTAIN WARRANTIES OR LIMITATIONS OF LIABILITY, SO THE LIMITATIONS AND/OR EXCLUSIONS, SET FORTH IN THESE TERMS AND CONDITIONS, MAY NOT APPLY. IN THAT EVENT, KSEA'S LIABILITY WILL BE LIMITED TO THE GREATEST EXTENT PERMITTED BY LAW IN THE SUBJECT JURISDICTION

#### 12. DISCOUNTS AND REBATES:

The dollar value of discounts and rebates (if any) provided by KSEA to Customer are intended to be discounts or reductions in price described in and in accordance with 42 U.S.C. Section 1320a-7b(b)(3)(A) and 42 C.F.R. Section 1001.952(h). Customer has an obligation to accurately record and may have an obligation to report all such reductions in purchase price to the Department of Health and Human Services ("DHHS") or other federal agency, state agencies, or other payers, as applicable. Customer acknowledges that this section is sufficient to effectively advise Customer of its obligations under applicable federal and state laws and regulations.

#### 13. SOFTWARE OWNERSHIP AND LICENSING:

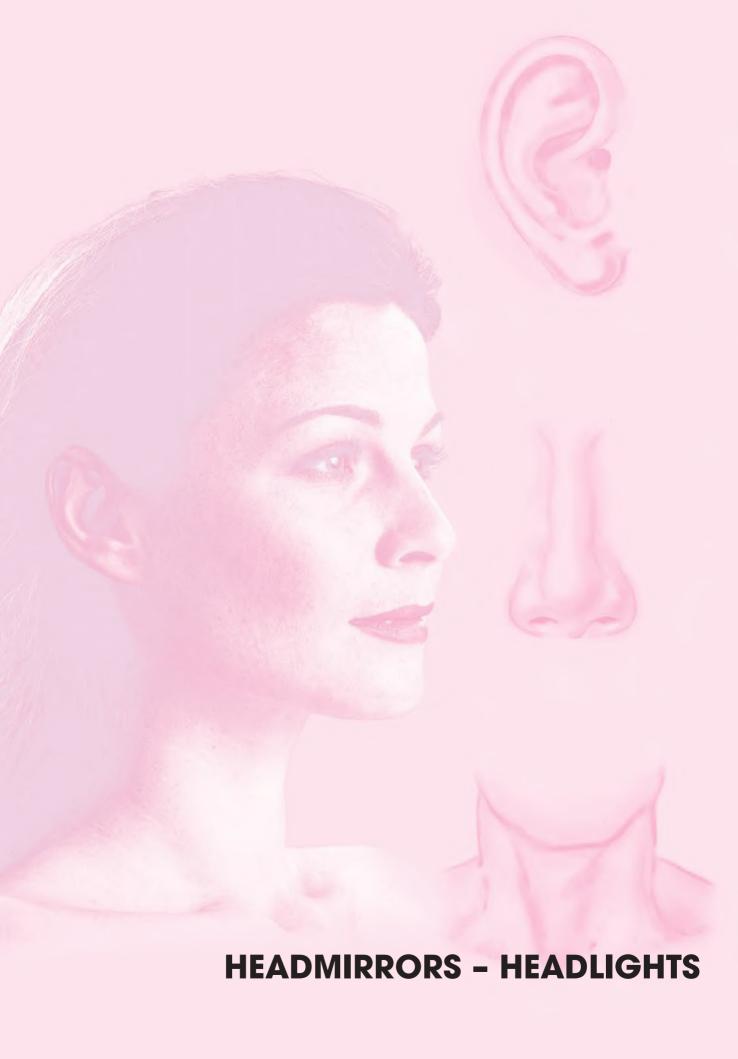
With respect to products provided by KSEA and/or its affiliated/related entities (collectively, "KARL STORZ") and containing software components, Customer is granted a non-exclusive, limited, non-transferable license (the "License") to use the programmed logic, computer programs and/or software, including software developed by or on behalf KARL STORZ ("KARL STORZ Software") and/or software developed by or on behalf of a third party ("Third Party Software") (collectively, "Software") embedded in, or for use in conjunction with, such products, internally, but only in the form in which delivered to Customer and for the sole purpose of operating in accordance with KARL STORZ' written instructions for the products provided to Customer (and for no other product or purpose). The Software, and all modifications, enhancements and upgrades thereto, will, at all times, remain the property of KARL STORZ or the applicable third party. Customer may not duplicate, copy, reverse engineer, de-compile, or disassemble the Software or in any way modify the Software. Customer has no right to, and may not, create derivatives of the Software, and Customer may not attempt to copy, create or re-create the source code of the Software. Any and all such modifications or enhancements to the Software by Customer, in contravention of this License, will immediately become the sole property of KARL STORZ. Customer hereby acknowledges and agrees that (i) the purchase, lease or other acquisition of products does not constitute a transfer of the Software, (ii) the Software is the property of KARL STORZ or the applicable third party, (iii) Customer neither owns nor acquires any interest in any copyright, patent or other intellectual property right in or to the Software as a result of such purchase, lease or other acquisition of products, (iv) KARL STORZ, or the applicable third party, retains and owns all right, title, and interest in and to the Software and the ownership rights therein, at all times, regardless of the form or media in or on which the original or other copies of the Software may exist, and (v) by using the products, Customer is subject to, and is bound by, the terms of any separate third-party license agreement relating to the Third Party Software. In the event of a failure of Customer or its agents, employees or representatives, to comply with any terms and conditions of the License herein granted, the License will, without any further action by KARL STORZ or any other party, immediately end and terminate.

## **KARL STORZ Intellectual Property Rights**

KARL STORZ GmbH & Co. KG is the proprietor and/or licensee of the following US-Patents in the fields of Endoscopes and Instruments for ENT



and instruments for ENT		RARE STORE	LINDOSKOPL
US 6749563 8666 AN 8666 DN  US 6635010 10020 CA 10324 CA 1218 CA 1230 CA 1232 CA 28162 CKA 10020 BA  US 6618207 8713 AA 8713 BA 8713 FA 7220 AA 7220 BA 7220 FA	US 6099467 US 6632173 8707 DA 8707 DP 10338 TA 10338 TRA 789800 P  US 6641531 7230 AP 7230 BP 7230 FP 8712 AP 8712 AP 8712 AP 8712 CP 8700 CP 8710 AP 8711 AP 10320 AP 10320 BP 10320 DP	US 6840932 651503 651504 651505 US 5474571 653010 US 5741296 10510 N 10510 B 10510 AA US 7229406 8707 DP	



## **Headmirrors**





074090 **Headmirror Standard,** with ball joint, replaceable mirror, diameter 90 mm, including:

Headband, narrow

075090 **Headmirror Standard,** with ball joint, replaceable mirror, diameter 90 mm,

including:

Headband, wide



076090 ZIEGLER Headmirror,

replaceable mirror, diameter 90 mm,

including:

Headband, narrow

077090 ZIEGLER Headmirror,

replaceable mirror, diameter 90 mm,

including:

Headband, wide

Components/Spare Parts see chapter 16

## LED Headlight POWER OF LIGHT



## **Special Features:**

- Integrated battery/battery light source allows more freedom of movement
- No separate light source required
- No separate light cable required
- No mains supply required
- Low energy consumption
- No need to change lamp (50,000 hours service life)
- Available as rechargeable and battery versions
- More brightness and luminosity compared to warm light headlights
- Versions with white or yellow light available; both ensure that tissue structure can be recognized in their true colors

- Minimal heat generation
- Luminous field can be focused adjustable from 10 to 100 mm at a working distance of 40 cm
- Soft, flexible headband ensures optimal fitting
- Ergonomic fit
- Easy vertical and horizontal adjustment to the shape of the head
- Individual adjustment possible during wear
- Optional: Extension Cable 094105 for attaching the battery and/or rechargeable battery box to OR clothing



# LED Headlight POWER OF LIGHT



## **Battery Versions**

094100 **LED Headlight,** light model, with white light, battery box

on headband, illumination area adjustable from 10 - 100 mm

in diameter with 40 cm working distance

including: Headband Battery Box

2x Photo Batteries, lithium, 3 V, CR 123 A

094110 Same,

with yellowish light

## **Rechargeable Battery Versions**

094120 **LED Headlight,** light model, with white light, rechargeable battery box

on headband, illumination area adjustable from 10 - 100 mm

in diameter with 40 cm working distance

including: **Headband** 

Rechargeable Battery Box, with 1 Li-lon rechargeable battery

**Battery Charger Li-Ion** 

**Mains Cord** 

094130 Same,

with yellowish light

Components/Spare Parts see chapter 16

## **Headlight KS60**

with Cold Light Illumination



## **Special Features:**

- Luminous field can be focused adjustable from 20 to 80 mm at a working distance of 40 cm – resulting in brightness of over 175,000 lux
- Double lens system provides outstanding illumination in the depths of the operating field
- Precise delineation and no luminous field color margins
- Homogeneous illumination of the luminous field without shadows
- Lightweight headband provides improved comfort, also suitable for a small head size, can be adjusted both horizontally and vertically
- Sterilizable handle allows adjustment under sterile conditions, movable and height adjustable
- Light cable is divided in the head area, ensuring even distribution of weight
- Extremely robust and flexible light cable due to special protective casing
- Convenient light cable length of 290 cm provides greater freedom of movement



310060

**Headlight KS60,** with double lens system and Y-fiber optic light cable, >175,000 lux, illuminated area adjustable from 20 – 80 mm in diameter with 40 cm working distance, with removable and sterilizable focus handle

including:

Headband

Y-Fiber Optic Light Cable

Clip with Band



Same,

including:

**Y-Fiber Optic Light Cable,** with 90° deflection to the cold light source

Components/Spare Parts see chapter 16

with Cold Light Illumination



## **Special Features:**

- Excellent illumination in the depth of the operating field
- Ideally suited for all areas of medicine
- 150 percent more brightness in comparison to standard headlights
- Diameter of light field can be adjusted from 10 to 60 mm
- Sterilizable handle, removable
- Headlight can be adjusted with the sterile hand
- Comfortable, adjustable headband, including forehead cushion with push-button lock
- Clip for attaching the fiber optic light cable to OR clothing



094051

**Headlight,** with ball joint and vertical height adjustment, front section movable in all directions, with removable and sterilizable focus handle

including:

Headband

Fiber Optic Light Cable

Clip with Band



Same,

including:

**Fiber Optic Light Cable,** with 90° deflection to the cold light source

Components/Spare Parts see chapter 16

4-95,

HNO-J 5 D 7

with Cold Light Illumination



## **Special Features:**

- Homogeneous, clearly defined light field
- Shadow-free illumination
- No color margins
- Greatly enhanced brightness
- Optimal wearing comfort
- Considerably lighter

- Ergonomic design
- Tried and tested standard model for examinations and operations
- Diameter of light field (20 80 mm) can be adjusted via the aperture







310010

**Headlight,** light model, illuminated area 20 – 80 mm in diameter with 35 cm working distance, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the cold light source

including:

Headband

Clip with Band

310020

Same,

including:

Headband, with cross band



310015

**Headlight,** light model, illuminated area 20 – 80 mm in diameter with 35 cm working distance, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with 90° deflection to the cold light source

including:

Headband

Clip with Band

310025

Same,

including:

Headband, with cross band

Components/Spare Parts see chapter 16

with Cold Light Illumination

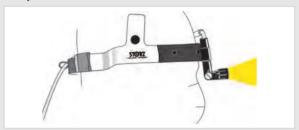


## **Special Features:**

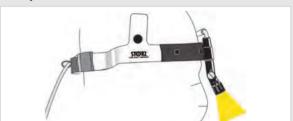
- Headlight can be adjusted in 3 dimensions: height adjustment on the headband, front can be turned 45° to the right or left and also tilted horizontally downwards to a max. of 165°
- Headlight is self-retaining in all positions; no deviation from the selected position
- Protective ring for the front lens prevents damage
- Uniformly bright field of vision

- Small, lightweight model with thin fiber optic light cable, total weight of only 300 g
- Fiber optic light cable can be connected to either the left or the right of the headband
- Wide headband with bridges on either side to prevent slipping is comfortable to wear
- Replaceable forehead cushion
- Recommended for use with spectacle loupes

#### 90° position



#### 165° position







094301

**Headlight,** lightweight model, illuminated area 65 mm in diameter with 40 cm working distance, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the cold light source

including:

Headband

Clip with Band



094305

Same,

including:

**Fiber Optic Light Cable,** with 90° deflection to the cold light source

Components/Spare Parts see chapter 16

4 050

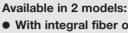
HNO-J 7 E

with Cold Light Illumination



## **Special Features:**

- Advanced model of 094301 headlight
- Diameter of light field can be adjusted from 30 to 230 mm



 With integral fiber optic light cable or suitable for attachable fiber optic light cable







094320

**Headlight,** light model, illuminated area adjustable from 30 – 230 mm in diameter with 40 cm working distance, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the cold light source

including:

Headband

Clip with Band



094325

Same,

including:

Fiber Optic Light Cable, with 90° deflection to the cold light source

094330

**Headlight,** light model, illuminated area adjustable from 30 – 230 mm with 40 cm working distance, with connection for use with thin, 230 cm long Fiber Optic Light Cable 495 NTAS with straight plug or 495 NTXS with 90° deflection to the cold light source

including:

Headband

Clip with Band



For use with Headlight 094330:

495 NTAS Fiber Optic Light Cable, diameter 2.5 mm, length 230 cm

or

495 NTXS Fiber Optic Light Cable, with 90° deflection to the

cold light fountain, diameter 2.5 mm, length 230 cm

Components/Spare Parts see chapter 16

## Headlight "CLAR 73"

with Cold Light Illumination



## **Special Features:**

- Homogeneous, clearly defined light field
- Shadow-free illumination
- Mirror with slit for monocular viewing
- Concave mirror set in solid, protective mounting
- Optimum comfort with headband; normal glasses can be worn

## **Special Features:**

- Tried and tested standard model for examinations and operations
- Diameter of the light field can be changed by means of the aperture setting
- Weight: 400 g
- With Headband 078730, vertical cable guide, for fiber optic light cable diameter 3.5 mm





095501

Headlight "CLAR 73", with 230 cm long integral fiber optic light cable, diameter 3.5 mm, with straight plug to the cold light source

including:

Headband

Clip with Band



095505

Same,

including:

**Fiber Optic Light Cable,** with 90° deflection to the cold light source

Components/Spare Parts see chapter 16

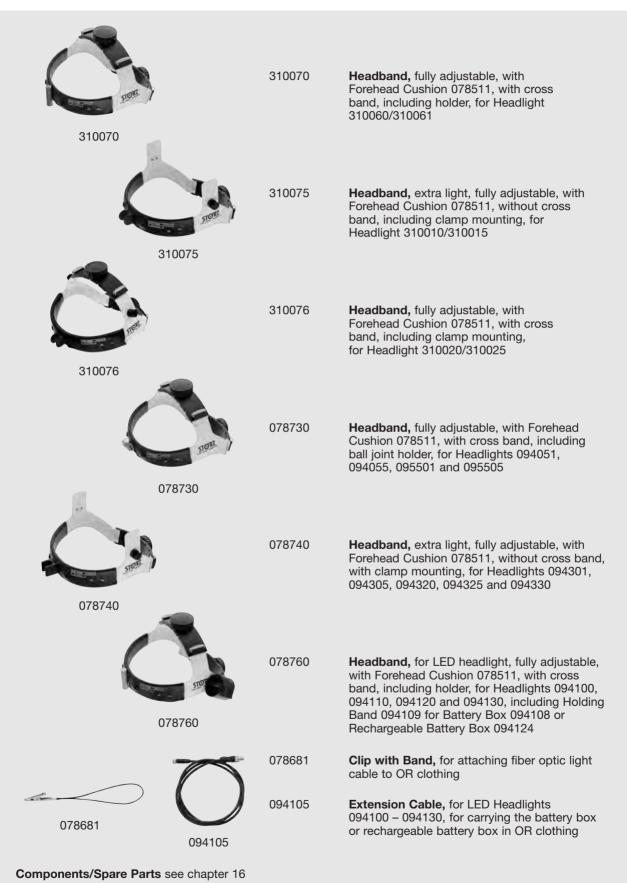
HNO-J 9 E

11

## **Headbands**

for Cold Light Illumination





12 HNO-J 10 D



## **Otoscopy**

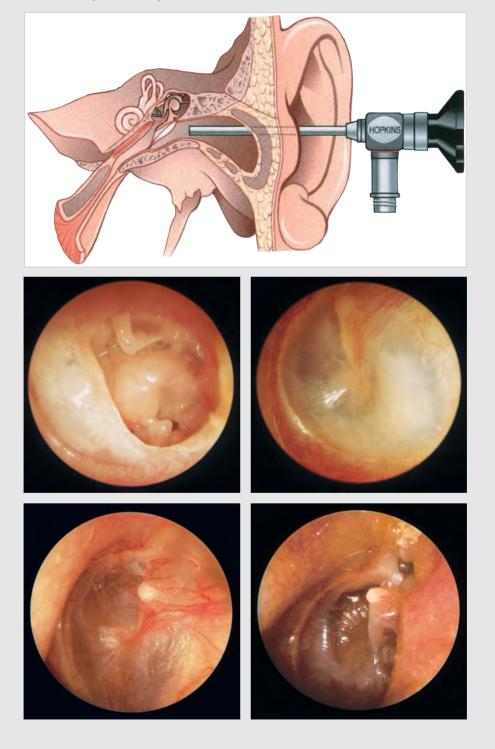
with HOPKINS® Telescopes



## **Special Features:**

- Ideal for overview of the entire eardrum
- The wide angle lens enables a natural, undistorted, panoramic overview of the complete eardrum
- Clear, bright and extremely sharp picture with high resolution and sharpness in depth

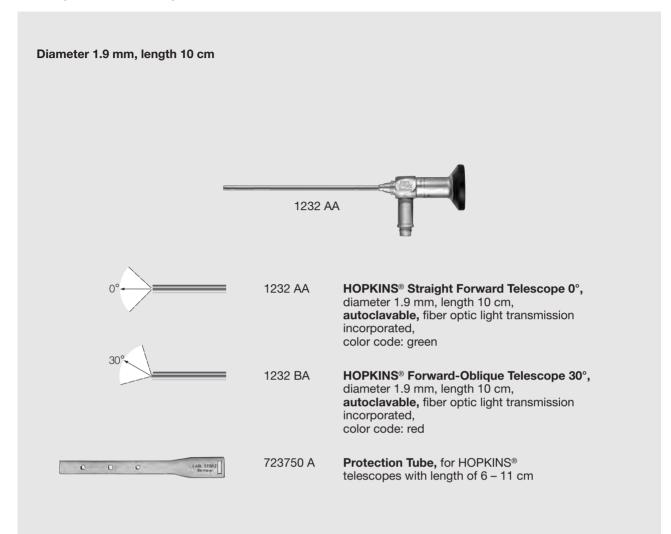
 HOPKINS® telescopes 4 mm for adults, 3 and 2.7 mm for small children or particularly narrow auditory canal, as well as 1.9 mm for use through an incision in the eardrum



## **HOPKINS®** Telescopes



for Preoperative and Postoperative Examination of the Middle Ear



## **HOPKINS®** Telescopes

**Tympanoscopy in Practice** 



## Diameter 3 mm, length 6 cm





1218 AA

Tele-Otoscope with HOPKINS® Straight Forward Telescope 0°, diameter 3 mm, length 6 cm, autoclavable, fiber optic light transmission incorporated, color code: green



1218 BA

Tele-Otoscope with HOPKINS® Forward-Oblique Telescope 30°, diameter 3 mm, length 6 cm, autoclavable, fiber optic light transmission incorporated, color code: red

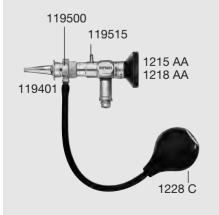
## Diameter 4 mm, length 6 cm





1215 AA

Tele-Otoscope with HOPKINS® Straight Forward Telescope 0°, diameter 4 mm, length 6 cm, autoclavable, fiber optic light transmission incorporated, color code: green



119500

119515

HAWKE **Pneumatic Adaptor,** for Ear Specula 119401 – 119410, including rubber bulb with tube and screw-on cone, for use with Tele-Otoscope 1218 AA

**Bridge,** for Pneumatic Adaptor 119500, for use with Tele-Otoscope 1215 AA with Ear Specula 119401 – 119404 and Tele-Otoscope 1218 AA with Ear Specula 119401 – 119410

## **HOPKINS® Telescopes**





## Diameter 2.7 mm, length 11 cm



0° 1230 AA

HOPKINS® Straight Forward Telescope 0°, diameter 2.7 mm, length 11 cm, autoclavable, fiber optic light transmission incorporated, color code: green



HOPKINS® Forward-Oblique Telescope 30°, diameter 2.7 mm, length 11 cm, autoclavable, fiber optic light transmission incorporated, color code: red

#### **Battery Light Source LED for Endoscopes**





11301 DG

11301 D4 Battery Light Source LED for Endoscopes, with fast screw thread,

brightness > 110 lm / > 150 klx, burning time > 120 min, weight approx. 150 g ready for use, **suitable for wipe disinfection,** with 2 Photo Batteries 121306 P

11301 DE Battery Light Source LED for Endoscopes, rechargeable, with click

connection, brightness > 110 lm / >150 klx, color temperature 5500 K, lithium-ion batteries, charging time 60 min, burning time at 100% brightness 40 min, weight approx. 150 g ready for use, **suitable for wipe disinfection** 

11301 DF **Same,** with fast screw thread

11301 DG Charging Unit, for 11301 DE/11301 DF, for two LED battery light sources, with

fixed integrated power supply and adaptor for EU, UK, USA and Australia, power supply 110 – 240 VAC, 50/60 Hz, suitable for wipe disinfection

094129 **Battery Charger Li-Ion,** for charging the rechargeable

battery box, power supply 100 – 240 VAC, 50/60 Hz

094127 Mains Cord, for Battery Charger 094129, length 150 cm

Components/Spare Parts see chapter 16

E-TEL 3 B 17

## **CMOS Video Otoscope**



## **Special Features:**

- For imaging and documentation of the auditory canal and eardrum
- High-resolution CMOS sensor
- Integrated LED illumination with high light intensity
- First-class optical system

- Optimal hygiene via exchangeable, disposable ear specula
- Lightweight, ergonomic design
- Manual focus ring
- Compatible with KARL STORZ C-MAC® monitor system and C-HUB® camera control unit



121200 K

121200 K CMOS Video Otoscope KIT, with integrated LED illumination, for use with C-HUB® 20 2901 01 and Monitor 8402 ZX

including:

Ear Speculum, outer diameter 4 mm, black, for single use, unsterile, package of 100





8402 ZX

121200 C CMOS Video Otoscope with C-HUB®, with integrated LED illumination

Ear Speculum, outer diameter 4 mm, black, for single use, unsterile, package of 100

C-HUB® CMOS Camera Control Unit,

Interfaces: USB 2.0, S-Video output (NTSC), power socket

**Power Supply** 

S-Video (Y/C) Connecting Cable

**USB Connecting Cable** 

121200 M CMOS Video Otoscope with Monitor, with integrated LED illumination

including:

Ear Speculum, outer diameter 4 mm, black, for single use, unsterile, package of 100

Monitor, screen size 7", memory option with SD card, rechargeable battery, power adaptor for EU, UK, USA and Australia, power supply 110 - 240 VAC, 50/60 Hz, suitable for wipe disinfection

Accessory:

121204 Ear Speculum, for CMOS video otoscope, outer diameter 4 mm,

black, for single use, unsterile, package of 1000

Components/Spare Part see catalog TELEPRESENCE

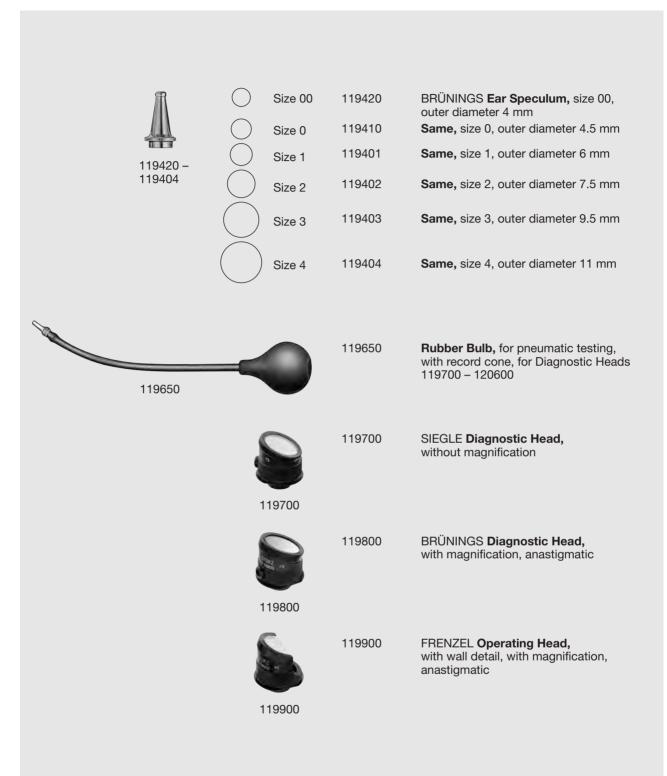




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Components/Spare Parts see chapter 16





3-96

Components/Spare Parts see chapter 16



Λ	○ 3 mm	122003	HARTMANN <b>Ear Speculum,</b> standard model, outer diameter 3 mm, length 3.6 cm
	○ 4 mm	122004	Same, outer diameter 4 mm
	5 mm	122005	Same, outer diameter 5 mm
122003 –	6 mm	122006	Same, outer diameter 6 mm
122007	7,5 mm	122007	Same, outer diameter 7.5 mm
122503 - 122505	3 mm 4 mm 5 mm	122503 122504 122505	HARTMANN <b>Ear Speculum,</b> short, for children, outer diameter 3 mm, length 2.7 cm <b>Same,</b> outer diameter 4 mm <b>Same,</b> outer diameter 5 mm
123008 123009	8,5 mm	123008 123009	BOUCHERON <b>Ear Speculum,</b> for postoperative treatment, outer diameter 8.5 mm, length 3.6 cm <b>Same,</b> outer diameter 10 mm

 $3-99_{2}$ 



	0	4 mm	123031	FARRIOR <b>Ear Speculum,</b> round, size 1, outer diameter 4 mm, length 4.5 cm
	$\bigcirc$	5 mm	123032	Same, size 2, outer diameter 5 mm
		6 mm	123033	Same, size 3, outer diameter 6 mm
123031 -		7 mm	123034	Same, size 4, outer diameter 7 mm
123037		8 mm	123035	Same, size 5, outer diameter 8 mm
		9 mm	123036	Same, size 6, outer diameter 9 mm
		10 mm	123037	Same, size 7, outer diameter 10 mm
	0	4.0 x 4.8 mm	123041	FARRIOR <b>Ear Speculum,</b> oval, size 1, 4.0 x 4.8 mm, length 4.3 cm
<i>A</i> \	$\circ$	5.0 x 5.8 mm	123042	<b>Same,</b> size 2, 5.0 x 5.8 mm
		5.5 x 6.3 mm	123043	<b>Same,</b> size 3, 5.5 x 6.3 mm
		6.0 x 6.8 mm	123044	<b>Same,</b> size 4, 6.0 x 6.8 mm
123041 –	$\overline{\bigcirc}$	6.5 x 7.3 mm	123045	<b>Same,</b> size 5, 6.5 x 7.3 mm
123049	$\tilde{\bigcirc}$	7.0 x 7.8 mm	123046	<b>Same,</b> size 6, 7.0 x 7.8 mm
	$\overline{\bigcirc}$	7.5 x 8.3 mm	123047	<b>Same,</b> size 7, 7.5 x 8.3 mm
	$\tilde{\bigcirc}$	8.0 x 8.8 mm	123048	<b>Same,</b> size 8, 8.0 x 8.8 mm
	Ŏ	8.5 x 9.3 mm	123049	<b>Same,</b> size 9, 8.5 x 9.3 mm
			123205	HOLMGREEN <b>Endaural Ear Speculum,</b> self-retaining, outer diameter 5 mm
			123206	Same, outer diameter 6 mm

-992

123207

123205 -123207 Same, outer diameter 7 mm





125300	Tuning Fork, C-128, with weights
125400	Same, C <sup>1</sup> -256, with weights
125500	Same, C <sup>2</sup> -512, without weights
125600	Same, C <sup>3</sup> -1024, without weights
125700	Same, C <sup>4</sup> -2048, without weights
125800	Same, C5-4096, without weights
125501	Tuning Fork, C <sup>2</sup> -512, without weights, with stand
125501 125601	<b>Tuning Fork,</b> C²-512, without weights, with stand <b>Tuning Fork,</b> C³-1024, without weights, with stand
000.	, , , , , , , , , , , , , , , , , , , ,
125601	Tuning Fork, C <sup>3</sup> -1024, without weights, with stand
125601 126000	Tuning Fork, C³-1024, without weights, with stand Tuning Fork, A¹-440, with stand

3-994

Components/Spare Parts see chapter 16









138805 FRENZEL **Nystagmus Spectacles,** black frame,

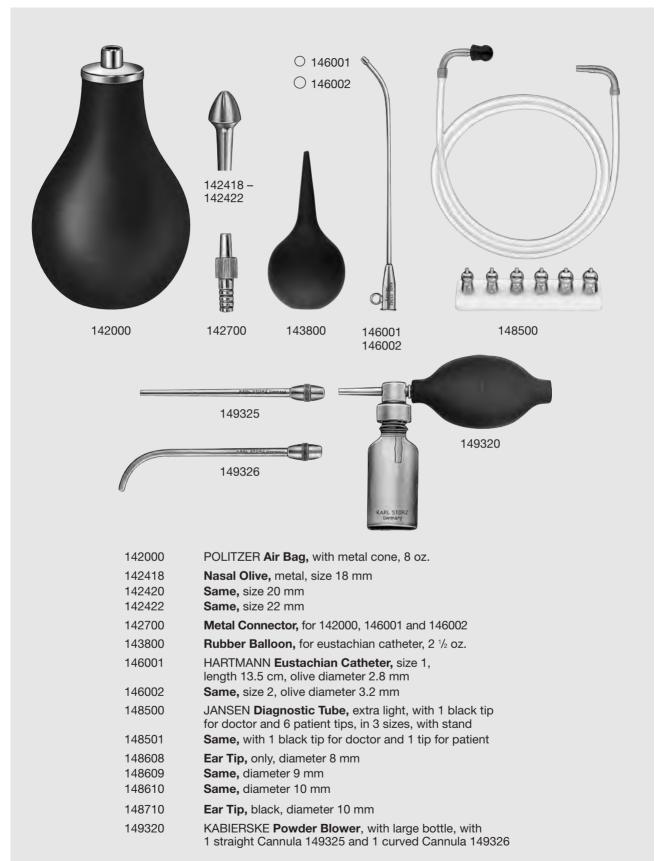
with ventilation slot, rubber band and cable with 25 mm flat-cable plug, including 2 Lamps 138964, 4 V

138905 FRENZEL Nystagmus Spectacles,

black frame, with attached, adjustable battery handle and ventilation slots, including 2 Lamps 138964, 4 V, for use with 3 Batteries 121306 (not included in delivery)

Components/Spare Parts see chapter 16



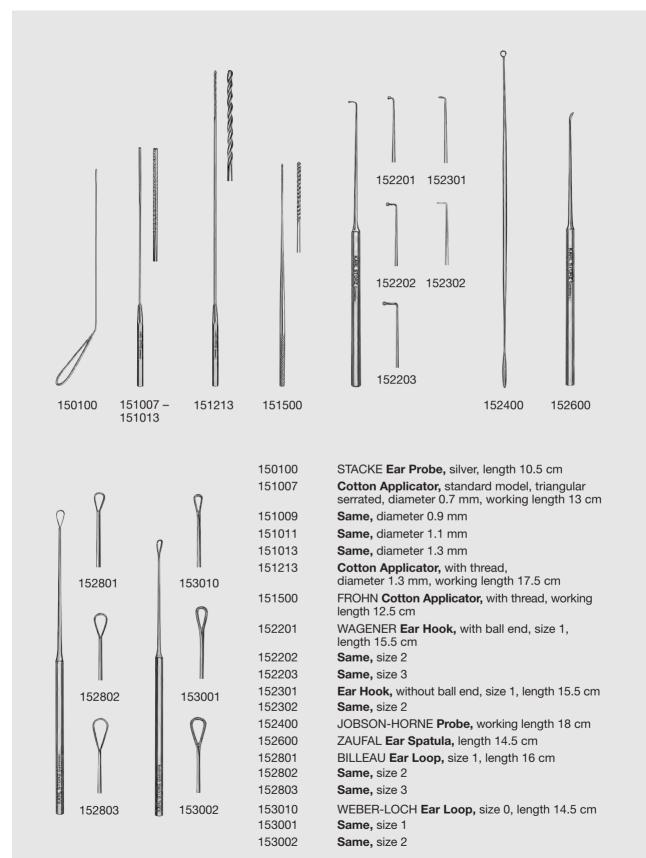


3-991

Components/Spare Parts see chapter 16

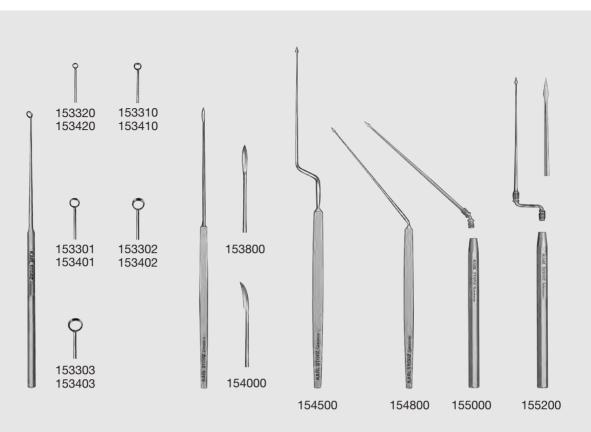
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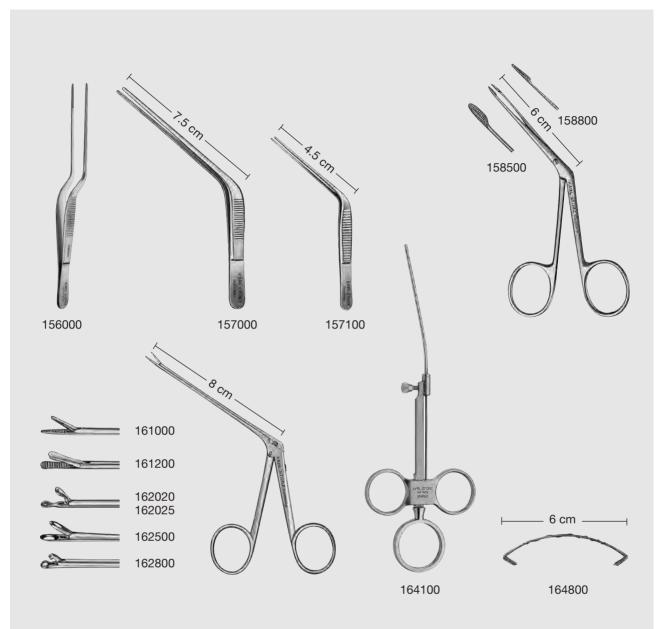






153320 153310 153301 153302 153303	BUCK Ear Curette, blunt, size 00, length 14.5 cm Same, size 0 Same, size 1 Same, size 2 Same, size 3
153420	BUCK <b>Ear Curette,</b> sharp, size 00, length 14.5 cm
153410 153401	Same, size 0 Same, size 1
153402	Same, size 2
153403	Same, size 3
153800 154000	POLITZER <b>Ear Knife,</b> straight, working length 6.5 cm <b>Same,</b> curved
154500	TRAUTMANN Ear Knife, delicate, bayonet-shaped, working length 7.5 cm
154800	POLITZER Ear Knife, delicate, angular, working length 7.5 cm
155000 155200	Ear Knife, screw handle, angular, working length 8 cm Same, bayonet-shaped

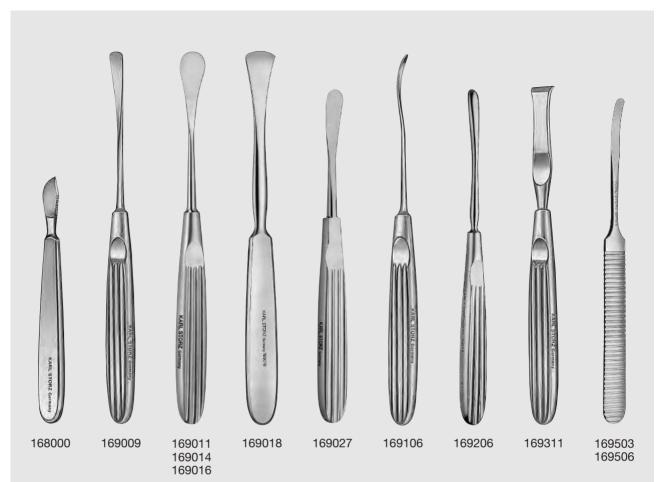




156000	LUCAE <b>Ear Forceps</b> , bayonet-shaped, length 14.5 cm	162020	HARTMANN <b>Ear Forceps,</b> round cupped jaws, diameter 2 mm, working length 8 cm
157000	TRÖLTSCH Ear Dressing Forceps,	162025	Same, diameter 2.5 mm
	serrated, standard model, working length 7.5 cm	162500	STRÜMPEL <b>Ear Forceps</b> , working length 8 cm
157100	TRÖLTSCH Ear Dressing Forceps, serrated, small and delicate,	162800	HARTMANN <b>Ear Forceps,</b> through-cutting, straight, working length 8 cm
	working length 4.5 cm	164100	KRAUSE Ear Snare, length 18 cm
158500	HARTMANN <b>Ear Dressing Forceps</b> , slender, working length 6 cm	164800	Snare Wire, for Ear Snares 164100,
158800	Same, extra delicate		package of 25
161000	HARTMANN <b>Ear Forceps</b> , serrated, working length 8 cm		
161200	Ear Forceps, duckbill, flat, serrated jaws, working length 8 cm		

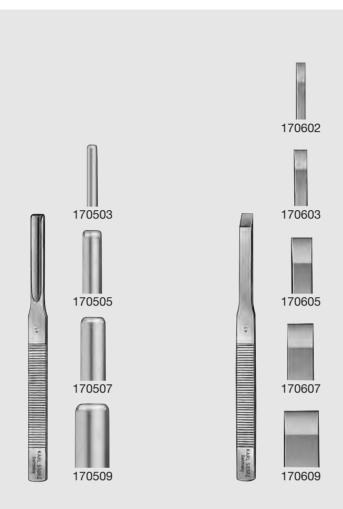
-66-





168000	MUCK Periosteal Knife, length 13 cm
169009 169011 169014 169016	JANSEN Raspatory, width 9 mm, length 19.5 cm Same, width 11 mm Same, width 14 mm Same, width 16 mm
169018	LANGENBECK <b>Raspatory</b> , width 18 mm, length 19 cm
169027	JANSEN Raspatory, width 9 mm, length 17 cm
169106	v. EICKEN <b>Raspatory,</b> width 6 mm, length 19.5 cm
169206	Raspatory, ERLANGEN model, slightly curved, width 6 mm, length 17.5 cm
169203	Same, width 3 mm
169204	Same, width 4 mm
169311	FARABEUF Raspatory, width 11 mm, length 18 cm
169503	WILLIGER Elevator, width 3.5 mm, length 16 cm
169506	Same, width 5 mm





170503	TRAUTMANN <b>Mastoid Gouge</b> , width 3 mm, length 14 cm
170505	Same, width 5 mm
170507	Same, width 7 mm
170509	Same, width 9 mm
170602	TRAUTMANN <b>Mastoid Chisel</b> , width 2 mm, length 14 cm
170603	Same, width 3 mm
170605	Same, width 5 mm
170607	Same, width 7 mm
170609	Same, width 9 mm

 $3-99_{2}$ 



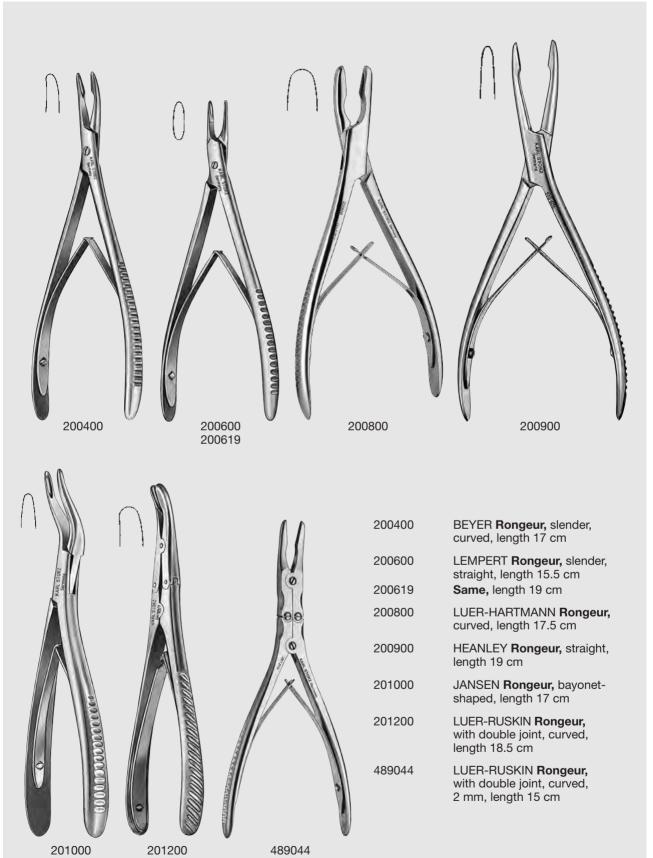




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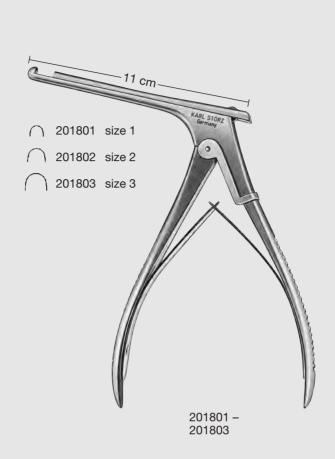
E 13 D 31





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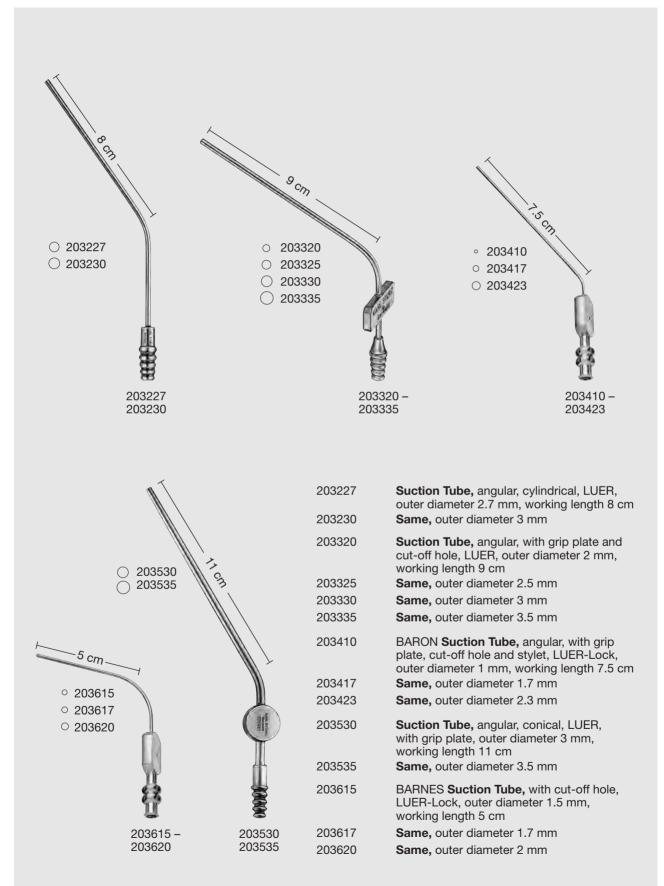




KERRISON **Rongeur,** size 1, working length 11 cm 201801

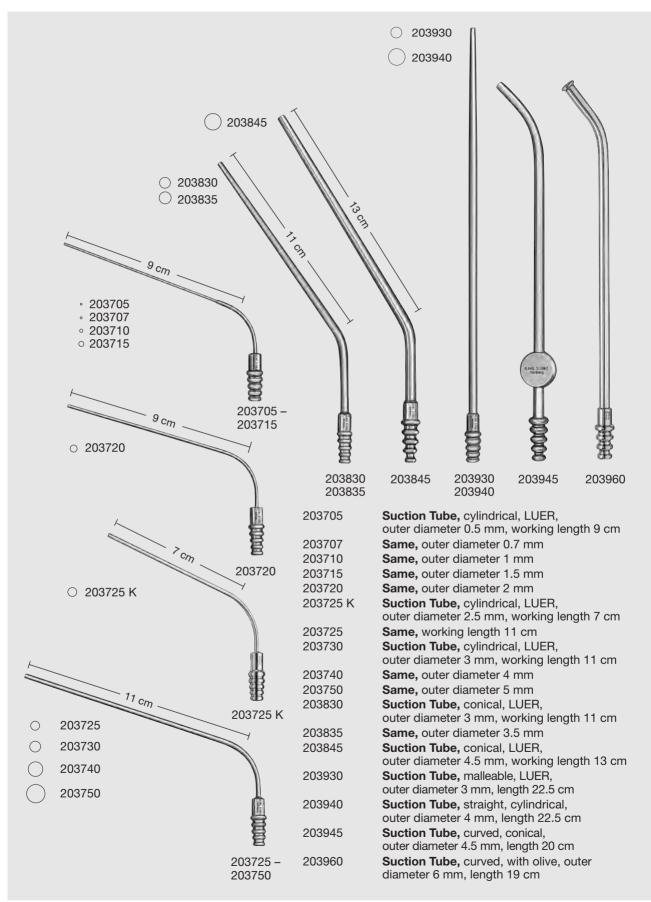
201802 Same, size 2 201803 Same, size 3







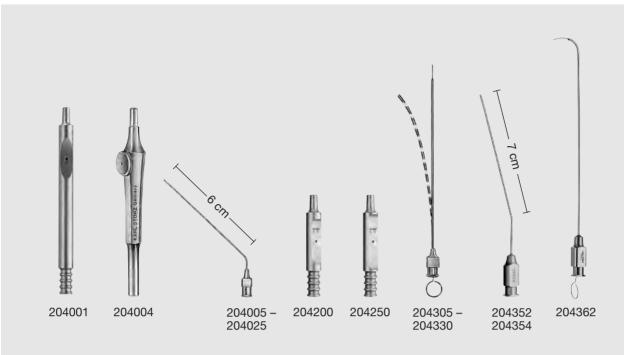




12-90

E 17 D 35

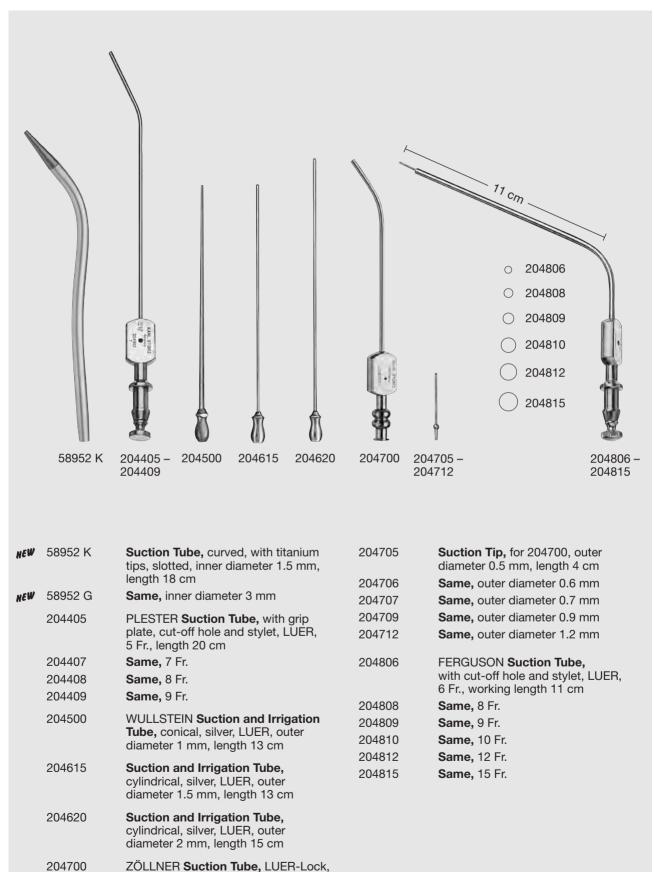




204001	Suction Handle, with cut-off hole, LUER cone, length 10 cm, for use with Suction Tubes 204005 – 204025,		204305	Suction Tube, straight, LUER-Lock, malleable, outer diameter 0.5 mm, length 10 cm
	204305 – 204330		204307	Same, outer diameter 0.7 mm
204004	WULLSTEIN Suction Handle, with cut-of	f	204310	Same, outer diameter 1 mm
	hole, LUER cone, length 10 cm, for use with Suction Tubes 204005 – 204025,		204313	Same, outer diameter 1.3 mm
	204305 – 204330		204315	Same, outer diameter 1.5 mm
	201000 201000		204320	Same, outer diameter 2 mm
204005	Suction Tube, angular, LUER-Lock,		204325	Same, outer diameter 2.5 mm
	outer diameter 0.5 mm, working length 6 cm		204330	Same, outer diameter 3 mm
204007	Same, outer diameter 0.7 mm		204352	Suction Tube, angular, malleable,
204008	Same, outer diameter 0.8 mm			LUER-Lock, outer diameter
204010	Same, outer diameter 1 mm			0.7 mm, working length 7 cm,
204013	Same, outer diameter 1.3 mm		004054	for use with Handle 204250
204015	Same, outer diameter 1.5 mm		204354	Same, outer diameter 1 mm
204020	Same, outer diameter 2 mm	u z W	204360	Suction Tube, curved 6 mm,
204025	Same, outer diameter 2.5 mm	Mem	204000	LUER-Lock, outer diameter 0.8 mm, length 10 cm
204200	FISCH <b>Suction Handle,</b> with cut-off hole, LUER cone, length 5.5 cm, for use with Suction Tubes 204005 – 204025, 204305 – 204330	NEW	204361	Irrigation Cannula, curved 6 mm, LUER-Lock, outer diameter 1 mm, length 10 cm
004050		NEW	204362	Suction Tube, curved 6 mm,
204250	FISCH <b>Suction Handle</b> , with long thumb grip, cut-off hole diameter 1 mm, inner diameter 1.7 mm, LUER cone, length 5.5 cm, for use with Suction Tubes 204352 – 204354			LUER-Lock, outer diameter 1.2 mm, length 10 cm
		NEW	204365	Same, curved 8 mm
		NEW	204366	Same, curved 8 mm, outer diameter 1.6 mm





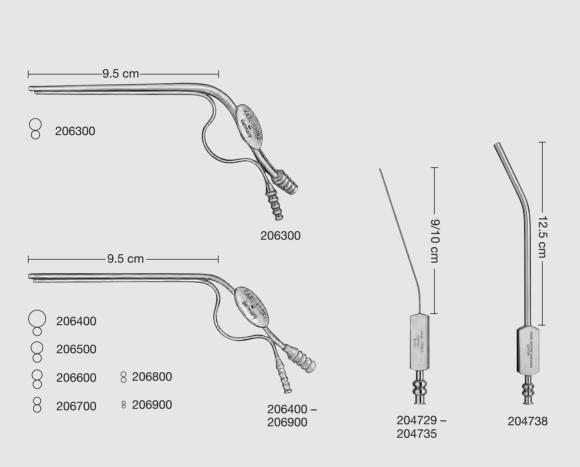


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E 19 D 37

outer diameter 2.5 mm, length 13 cm





206300	FISCH Suction and Irrigation Tube, conical, suction tube outer diameter 3.2 mm, irrigation tube outer diameter	207000	Silicone Tubing, autoclavable, coil length 100 cm, outer diameter 8 mm
206400	2 mm, working length 9.5 cm  FISCH Suction and Irrigation Tube, cylindrical, suction tube outer diameter 4.5 mm, irrigation tube outer diameter 2 mm, working length 9.5 cm	204729 204730 204732	FISCH <b>Suction Tube,</b> angular, with grip plate, outer diameter 1.2 mm, working length 9 cm <b>Same,</b> outer diameter 1.5 mm <b>Same,</b> outer diameter 2 mm
206500	<b>Same,</b> suction tube outer diameter 3 mm, irrigation tube outer diameter 2 mm	204733 204735	Same, outer diameter 2.2 mm
206600	<b>Same,</b> suction tube outer diameter 2.5 mm, irrigation tube outer diameter 2 mm	204735	Same, outer diameter 3 mm, working length 10 cm Same, outer diameter 5 mm.
206700	<b>Same,</b> suction tube outer diameter 1.9 mm, irrigation tube outer diameter 1.9 mm	204700	working length 12.5 cm
206800	<b>Same,</b> suction tube outer diameter 1.5 mm, irrigation tube outer diameter 1.5 mm		
206900	Same, suction tube outer diameter 1 mm, irrigation tube outer diameter 1 mm		



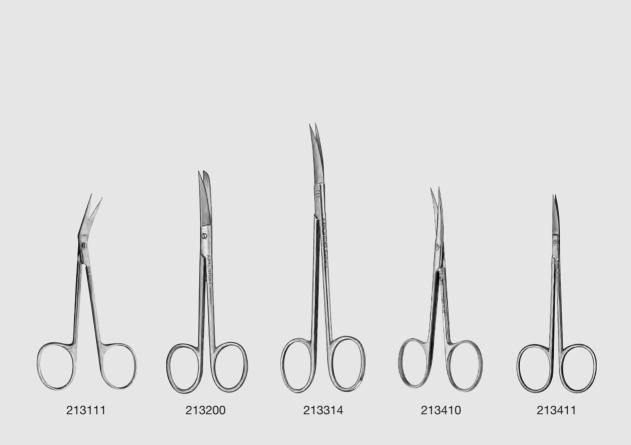




3-99

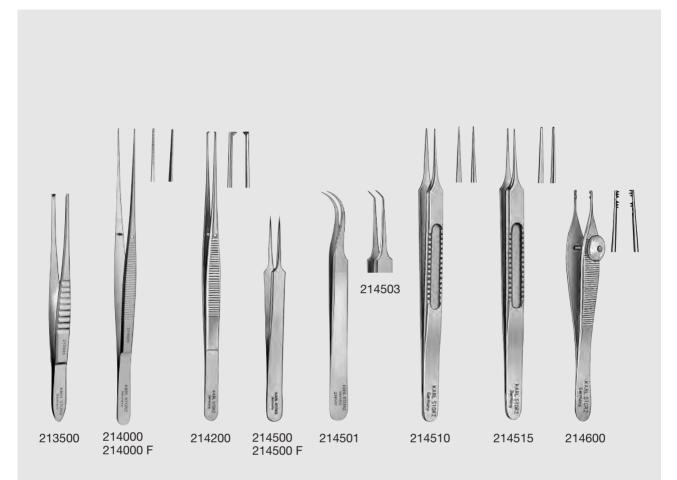
E 21 E 39





213111	Scissors, angled, very delicate, sharp/sharp, length 11 cm
213200	Scissors, curved, sharp/blunt, length 12 cm
213314	WULLSTEIN <b>Scissors</b> , curved, sharp/sharp, length 14 cm
213410	FISCH <b>Scissors</b> , extra delicate, curved, sharp/sharp, length 10.5 cm
213411	FISCH <b>Scissors,</b> fine, curved, sharp/sharp, length 10.5 cm





213500	<b>Tissue Forceps,</b> 1 x 2 teeth, length 11.5 cm
214000 214000 F	WULLSTEIN <b>Forceps</b> , serrated, length 15 cm <b>Same</b> , soft spring-action
214200	WULLSTEIN <b>Forceps,</b> 1 x 2 teeth, length 15 cm
214500	Jeweler Forceps, fine, pointed, length 11 cm
214500 F	Same, soft spring-action
214501	Suture Forceps, curved, smooth, length 11.5 cm
214503	Suture Forceps, angled, length 11 cm
214510	<b>Suture Forceps,</b> smooth, width of jaws 0.5 mm, length 16 cm
214515	Same, width of jaws 0.8 mm
214600	DERLACKI Clamp, Ossicle Holding, length 12 cm

2-904

E 23 E 41

# Ear <sup>⋈€₩</sup>



#### **Special Features:**

- Movable blades provide optimal retraction of the operative field, even under difficult anatomical conditions
- Exchangeable blades (2-prong/3-prong/full blade) enable individual adjustment of the retractor in all OP setups
- 5 different blades available
- One retractor replaces many different models
- Low blade replacement costs





219552





219553

219555

CARL STORE Server

219562



219563

219550	OTT <b>Retractor,</b> length 13 cm, for use with adjustable, detachable valves 219552 – 219563	219555	Valve, full blade, for use with Retractor 219550
0.40550		219562	Valve, 2 prongs, 90°, blunt,
219552	Valve, 2 prongs, 45°, blunt,		for use with Retractor 219550
	for use with Retractor 219550	219563	Same, 3 prongs
219553	Same, 3 prongs		, , 3

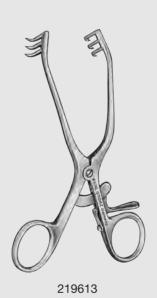














214811	WEITLANER <b>Retractor,</b> 2 x 3 prongs, blunt, length 11 cm	219511
214813	WEITLANER <b>Retractor</b> , 3 x 4 prongs,	219513
	sharp, length 13 cm	219613
214816	Same, length 16 cm	
214820	Same, length 20 cm	219714 K
215001	JANSEN <b>Retractor,</b> 3 x 3 prongs, blunt, length 10 cm	

WULLSTEIN **Retractor**, 3 x 3 prongs, length 11 cm **Same**, length 13 cm

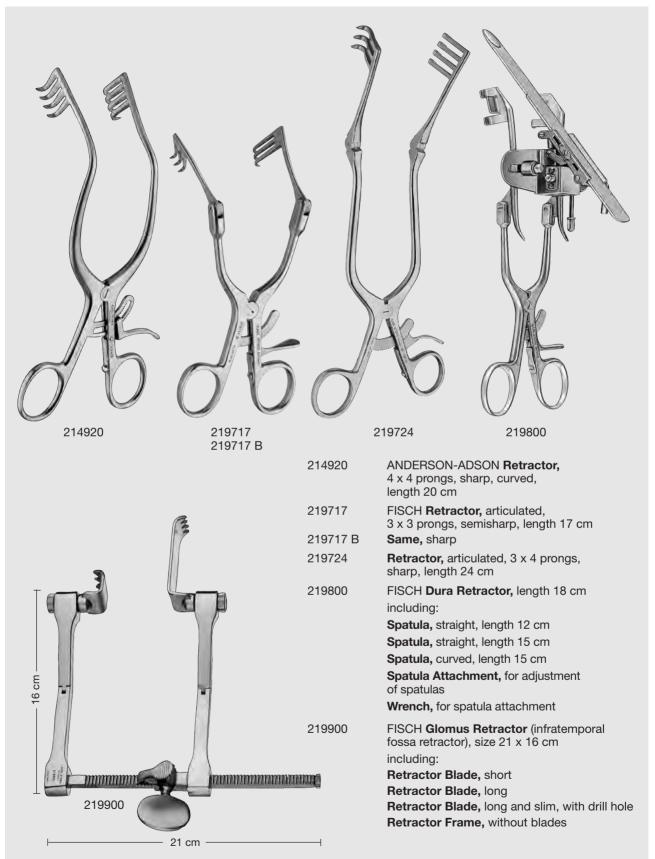
BELLUCCI **Retractor**, 3 x 3 prongs, length 13 cm

DALCHOW **Retractor**, small model for children, 3 x 3 prongs, sharp, with adjustable swivel arms, length 14 cm

2-00,

E 25 D 43

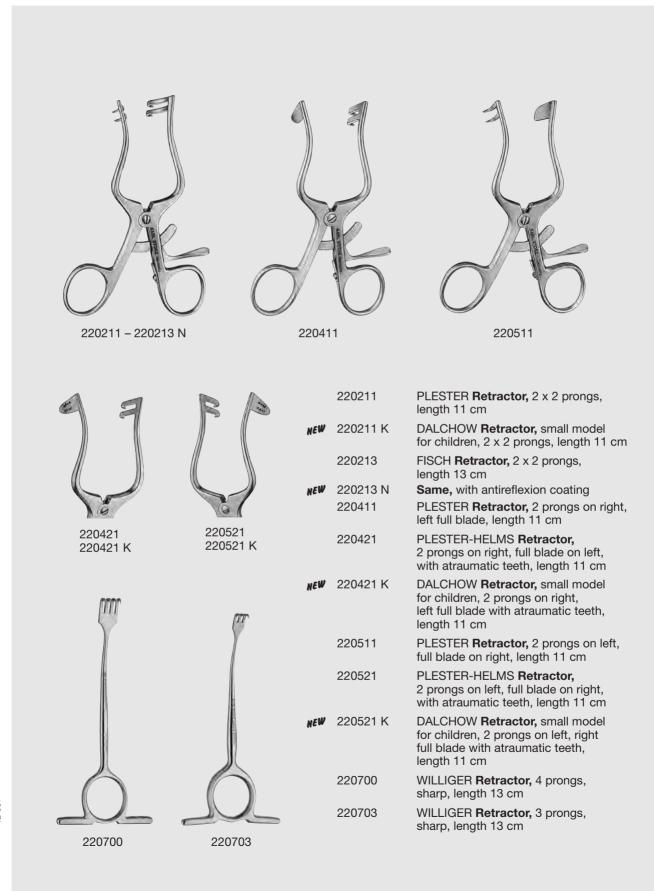




12-90

Components/Spare Parts see chapter 16

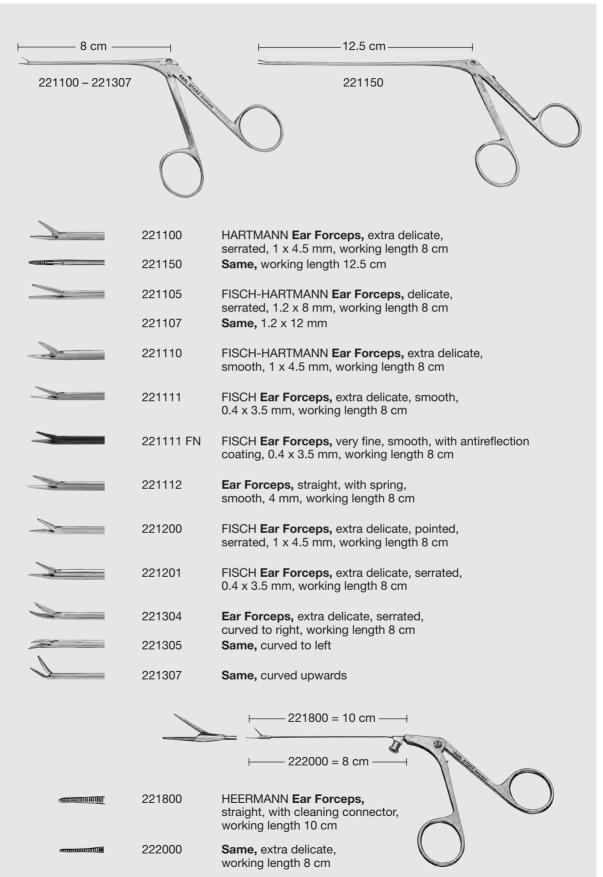




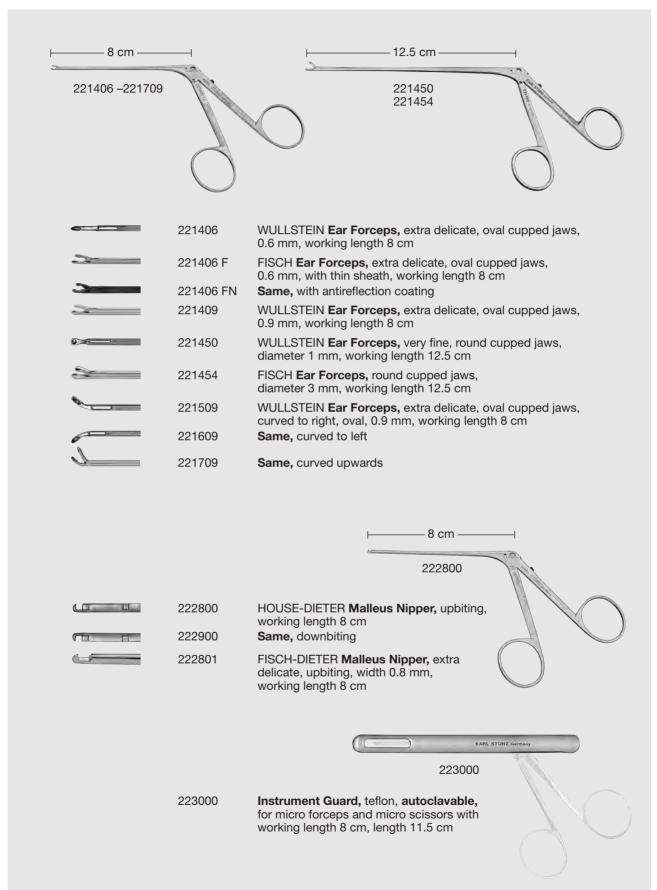
12-904

E 27 C 45



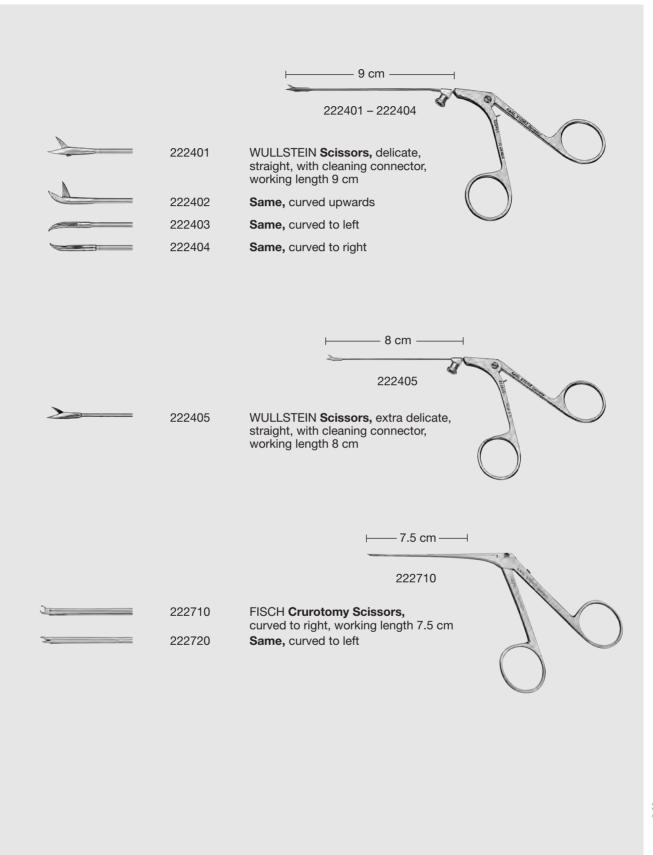




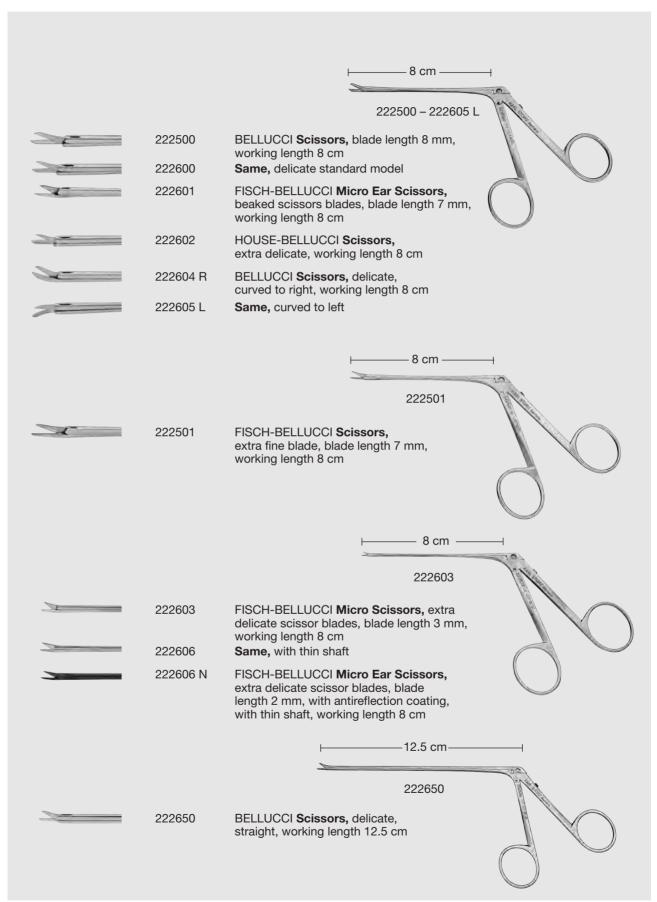


E 29 D



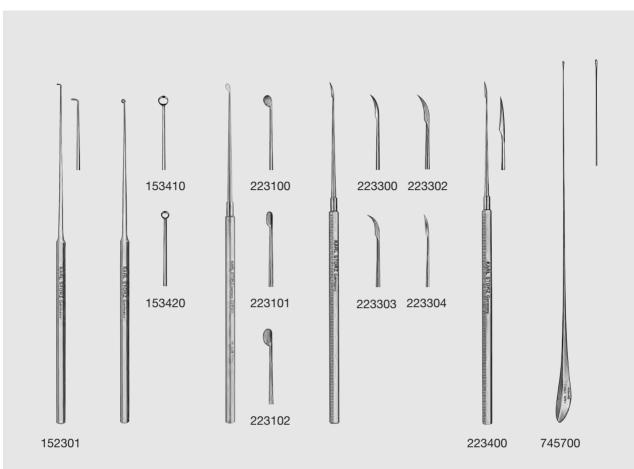






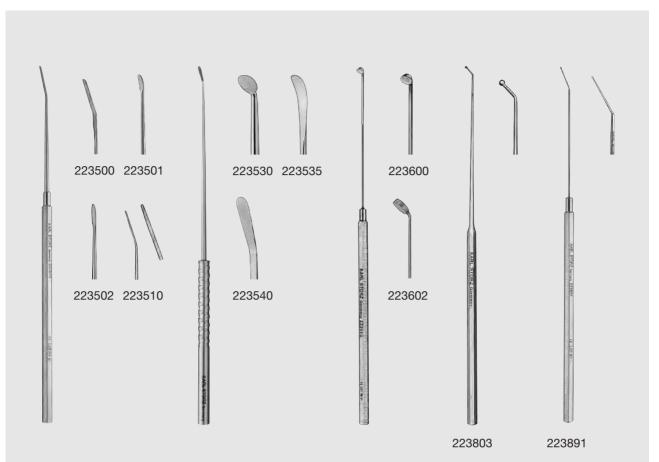
E 31 D





152301	Ear Hook, without ball end, size 1, length 15.5 cm
153410 153420	BUCK <b>Ear Curette,</b> sharp, size 0, length 14.5 cm ${\bf Same,}$ size 00
223100	PLESTER <b>Knife</b> , round, vertical, standard size 3.5 x 2.5 mm, length 16 cm
223101	Same, medium 4 x 2 mm
223102	<b>Same,</b> large 4.5 x 2.5 mm
223300	PLESTER <b>Sickle Knife</b> , double-edged, standard model, slightly curved, length 16 cm
223302	Same, medium curved
223303	Same, strongly curved
223304	Same, extra delicate, slightly curved
223400	KLEY Knife, footplate, length 16 cm
745700	SEIFFERT <b>Probe, for salivary duct,</b> silver, extra delicate, diameter 0.5 mm, length 18 cm





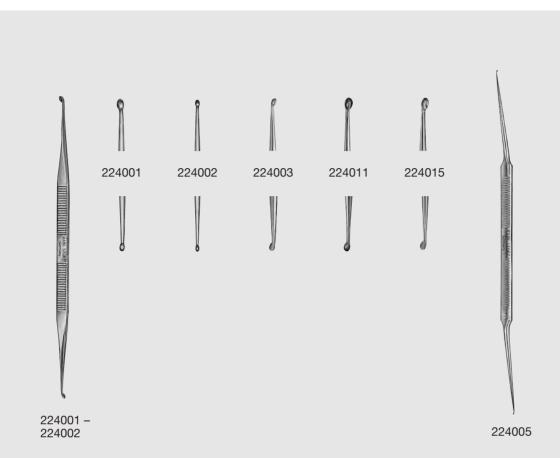
223500	ROSEN <b>Elevator,</b> tip angled 15°, 12 mm long, width 1.5 mm, length 16 cm
223501	BEALES <b>Elevator</b> , curved, width 1.5 mm, length 16 cm
223502	HUGHES <b>Elevator</b> , curved, width 1.1 mm, length 16 cm
223510	HOUSE <b>Elevator,</b> tip angled 15°, 12 mm long, width 1 mm, length 16 cm
223530	BEHRBOHM <b>Dissector</b> , for dissection in the region of the paranasal sinuses, skull base and petrous bone, sharp, long flat spatula, tip angled 15°, with round handle, size 2 mm, length 17 cm
223535	BEHRBOHM <b>Dissector</b> , for dissection in the region of the paranasal sinuses, skull base and petrous bone, sharp, slightly curved spatula, straight, with round handle, size 3 mm, length 17 cm
223540	BEHRBOHM <b>Dissector,</b> for dissection in the region of the paranasal sinuses, skull base and petrous bone, sharp, round spatula, tip angled 45°, with round handle, size 3 mm, length 17 cm
223600	<b>Tympanic Mirror,</b> REGENSBURG model, stainless steel, diameter 3 mm, length 16 cm
223602	Micro Mirror, metal, stainless steel, diameter 5 mm, length 16 cm
223803	Seeker, with ball end, angled 45°, size 3, length 15.5 cm
223891	Seeker, extra delicate, angled 25°, with ball end diameter 1 mm, length 16 cm

3-993

E 33 E 51







224001	HOUSE <b>Curette</b> , large, spoon sizes 2 x 3.2 mm and 1.6 x 2.6 mm, length 15 cm
224002	Same, small, spoon sizes 1 x 1.6 mm and 1.3 x 2 mm
224003	HOUSE <b>Curette</b> , medium, spoon sizes 1 x 1.8 mm and 2 x 2.8 mm, length 15 cm
224005	HOUSE <b>Curette,</b> angular, extra small, spoon sizes 0.6 x 0.8 mm and 0.8 x 1 mm, length 17 cm
224011	HOUSE <b>Curette,</b> straight, extra large, spoon sizes 2.3 x 3.5 mm and 2.7 x 4.3 mm, length 15 cm
224015	HOUSE-BABIGHIAN <b>Curette</b> , toothed, extra large, spoon sizes 2.4 x 3.4 mm and 2.6 x 4 mm, length 16 cm



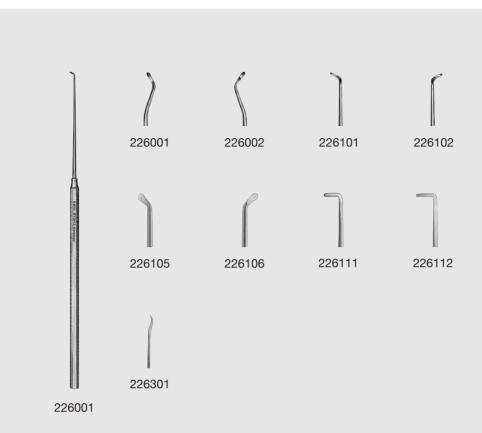




3-90

E 35 E 53

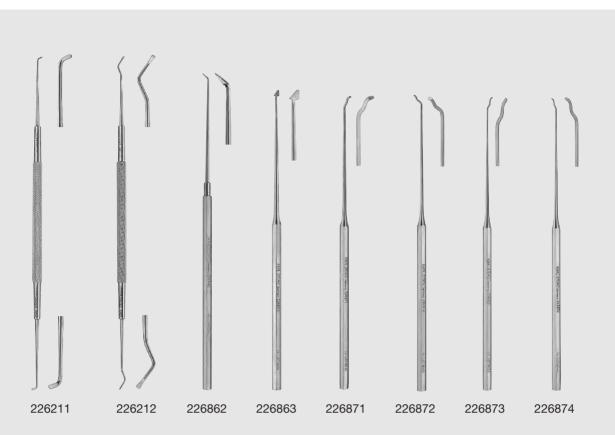




226001 226002	FISCH <b>Micro Raspatory,</b> double curved to right, length 16 cm <b>Same,</b> left
226101	FISCH <b>Micro Raspatory,</b> single curved to right, length 16 cm
226102	Same, left
226105	DALCHOW <b>Micro Raspatory,</b> single curved to right, width 1.5 mm, length 16 cm
226106	Same, left
226111	CRABTREE <b>Dissector Pick</b> , length 16 cm, 90°, flat, width 0.5 mm, length 1.5 mm
226112	Same, length 2.5 mm
226301	FISCH <b>Tenotome</b> , sickle-shaped, extra delicate, length 16 cm



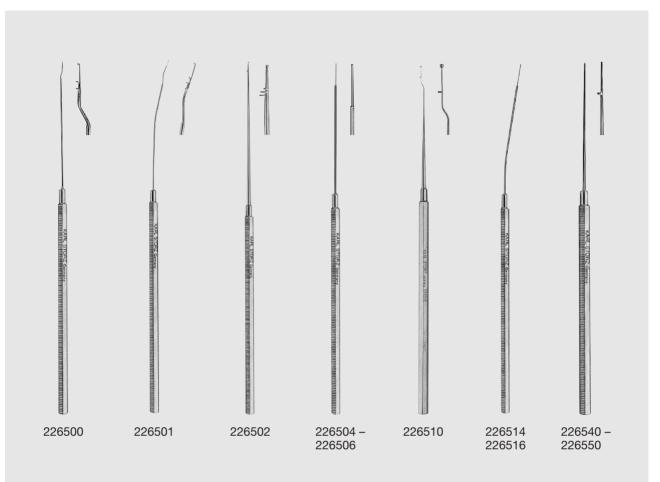




	226211	THOMASSIN <b>Dissector</b> , double-ended, distal tips with single curve to right or to left, length 18 cm
	226212	THOMASSIN <b>Dissector</b> , double-ended, distal tips with double curve to right or to left, length 18 cm
	226862	HOUSE <b>Lancet Knife,</b> triangular, rounded tip angled upwards $45^{\circ}$ , size 2 x 3 mm, length 16 cm
NEW	226863	ROSEN <b>Lancet Knife</b> , triangular, rounded tip angled upwards 45°, size 3 x 3 mm, length 15.5 cm
NEW	226871	WHIRLY-BIRD <b>Knife</b> , sharp, strong right curved, size 1 x 5 mm, length 15 cm
NEW	226872	Same, strong left curved
NEW	226873	WHIRLY-BIRD <b>Knife</b> , sharp, slight right curved, size 0.75 x 5 mm, length 15 cm
NEW	226874	Same, slight left curved







226500	FISCH <b>Measuring Rod,</b> marker pins at 3, 4 and 5 mm, length 16 cm
226501	FISCH <b>Measuring Rod,</b> curved, marker pins at 3, 4 and 5 mm, length 16 cm
226502	<b>Measuring Rod,</b> for stapes prosthesis, straight, marker pins at 3.5, 4 and 4.5 mm, length 17 cm
226504	FISCH <b>Caliper,</b> diameter 0.4 mm, marker pin at 10 mm, length 16 cm
226506	Same, diameter 0.6 mm
226510	PLESTER <b>Depth Gauge</b> , with ball tip, marker pin at 5 mm, length 16 cm
226514	FISCH <b>Caliper,</b> angled shaft, diameter 0.4 mm, marker pin at 10 mm, length 16 cm
226516	Same, diameter 0.6 mm
226540	HOUSE <b>Caliper Strut,</b> for 4 mm distance, marker pin at 4 mm, length 16 cm
226545	Same, for 4.5 mm distance, marker pin at 4.5 mm
226550	Same, for 5 mm distance, marker pin at 5 mm

225150

225150 **Protection Tube,** metal, for straight ear micro instruments with octogonal handle, length 6 cm





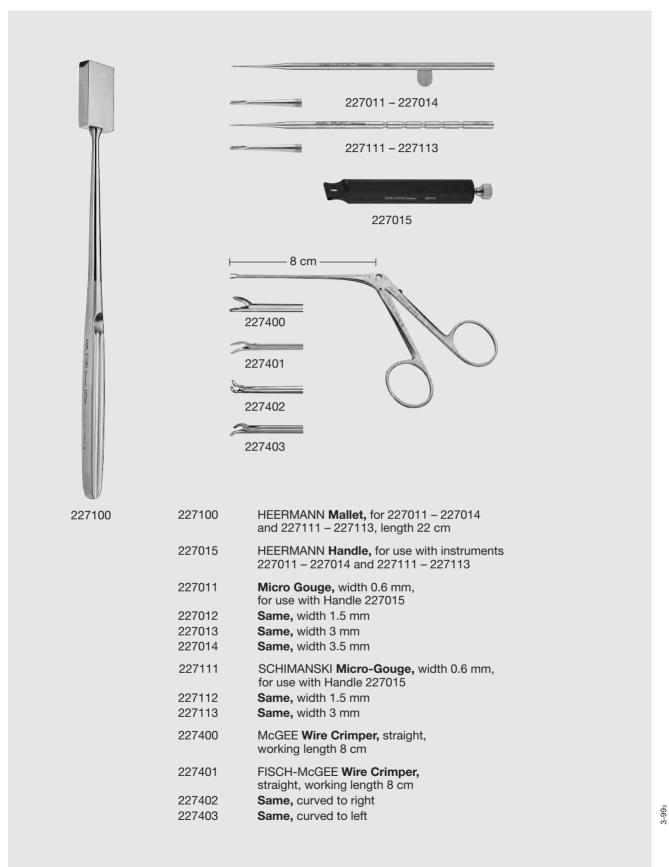
226600 -	226710 —	226753 —	226	810 – 2	0.8 5 0.0 A 5
226600 - 226608	226710 – 226730	226753 – 226761	2268 2268		26910 – 26925
226600  226604 226605 226606 226607  226608 226710  226715 226720 226723 226725 226730	FISCH Manual Perforator, diameter 0.3 mm, length 16 cm Same, diameter 0.5 mm Same, diameter 0.6 mm  Perforator, diameter 0.7 mm, length 16 cm Same, diameter 0.8 mm  Round Knife 0°, straight, diameter 1 mm, length 16 cm Same, diameter 1.5 mm Same, diameter 2 mm Same, diameter 2.3 mm Same, diameter 2.3 mm Same, diameter 3 mm Same, diameter 3 mm		226810 226815 226820 226823 226825 226830 226835 226910 226915 226920 226923 226925	Round Knife 45°, diameter 1 mm, le Same, diameter 2 Same, diameter 2 Same, diameter 3 Same, diameter 3 Same, diameter 3 Round Knife 90°, diameter 1 mm, le Same, diameter 1 Same, diameter 2	ength 16 cm .5 mm mm .3 mm .5 mm mm .5 mm .5 mm .5 mm .5 mm
226753 226755 226757 226759 226761	Round Knife 25°, diameter 1 mm, length 16 cm Same, diameter 1.5 mm Same, diameter 2 mm Same, diameter 2.5 mm Same, diameter 3 mm				

 $3-99_{2}$ 

E 39 F 57

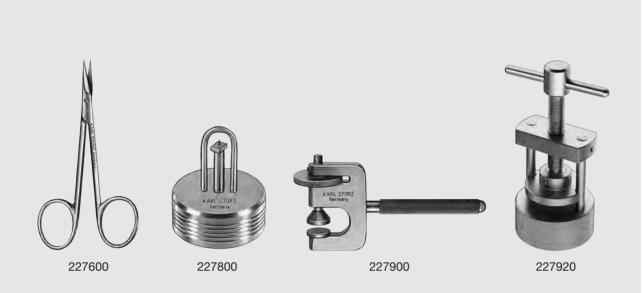






58 E 40 H





227600 GUILFORD-WRIGHT Wire Cutter, serrated, length 10 cm

227800 SCHUKNECHT Wire Bending Die

227900 SHEA Vein Press, diameter 16 mm, length 13 cm

227920 Vein Press, LÜBECK model, diameter 38 mm





231000



231008

KARL STORZ



231009 231010



231011

231000 **Hone,** "ARKANSAS" oil stone, wedge-shaped, 10 x 4 cm

231008 **Preparation Plate,** glass, 10 x 8 cm 231009 FISCH **Glass Cutting Board,** 

FISCH **Glass Cutting Board,** with square millimeter gradations (25 x 20 mm), 10 x 8 cm

231010 **Cutting Block,** plastic, white, 8 x 4 x 1 cm

231011 **Cutting Block,** Teflon, with grip plate,

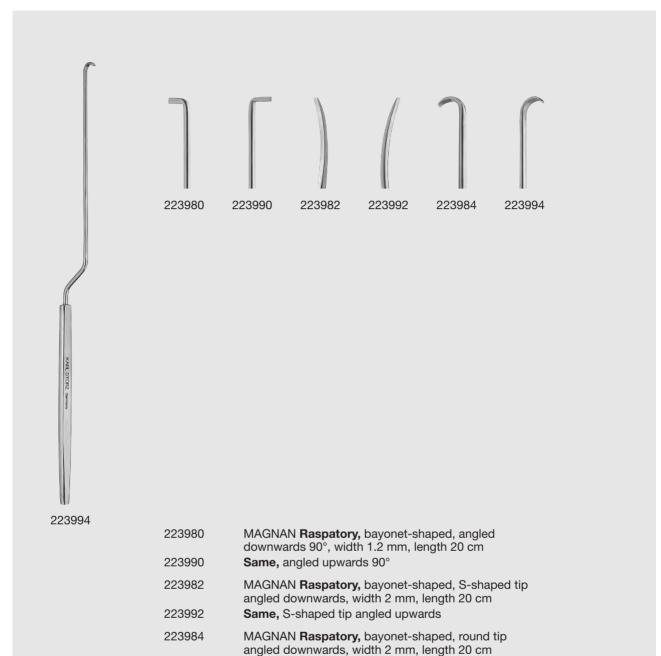
20 x 15 x 1 cm

 $\frac{3-992}{2}$ 

## MAGNAN Ear Micro Instruments

223994

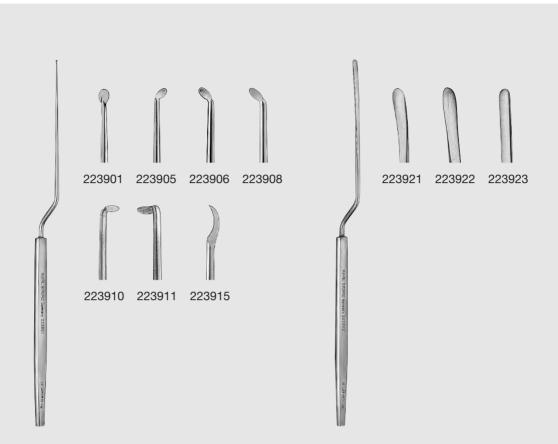




3-11

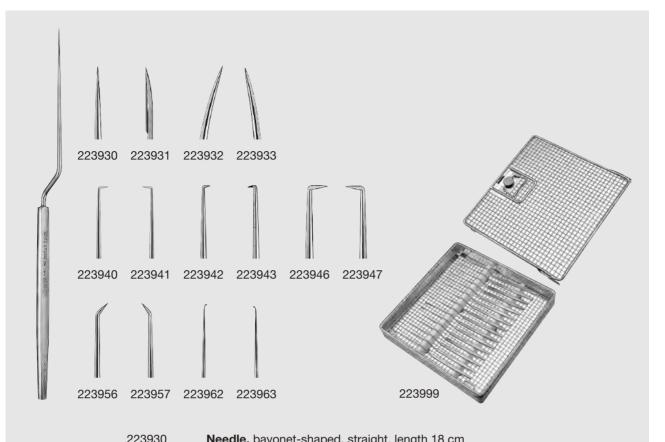
Same, round tip curved upwards





223901	Round Knife 0°, bayonet-shaped, straight, diameter 1.5 mm, length 18 cm
223905	Round Knife 45°, bayonet-shaped, curved upwards, diameter 1.5 mm, length 18 cm
223906	Same, curved downwards
223908	Round Knife 45°, bayonet-shaped, curved downwards, diameter 2.3 mm, length 18 cm
223910	Round Knife 90°, bayonet-shaped, curved upwards, diameter 1.5 mm, length 18 cm
223911	Same, curved downwards
223915	<b>Tenotome,</b> bayonet-shaped, sickle knife curved downwards, extra fine, length 18 cm
223921	<b>Elevator,</b> bayonet-shaped, curved downwards, sharp, width 4 mm, length 18 cm
223922	Same, width 2 mm
223923	<b>Elevator,</b> bayonet-shaped, slightly curved downwards, blunt, width 3 mm, length 18 cm





223930	Needle, bayonet-snaped, straight, length 18 cm
223931	Knife, footplate, bayonet-shaped, length 18 cm
223932	<b>Needle,</b> bayonet-shaped, curved upwards, strong long curve, length 18 cm
223933	Same, curved downwards
223940	Pick 90°, bayonet-shaped, curved upwards, 0.5 mm, length 18.5 cm
223941	Same, curved downwards
223942	<b>Pick,</b> 90°, bayonet-shaped, curved upwards, 1 mm, length 18 cm
223943	Same, curved downwards
223946	<b>Pick,</b> 90°, bayonet-shaped, curved upwards, 2 mm, length 18 cm
223947	Same, curved downwards
223956	<b>Pick,</b> 45°, bayonet-shaped, curved upwards, 2 mm, length 18 cm
223957	Same, curved downwards
223962	<b>Hook,</b> footplate, bayonet-shaped, curved upwards, 0,2 mm, length 18 cm
223963	Same, curved downwards
223999	<b>Metal Tray,</b> for sterilizing and storage of ear instruments, perforated, bottom part with holder for 16 bayonet-shaped ear micro-instruments, lid with silicone bridges, external dimensions (w x h x d): $250 \times 240 \times 40 \text{ mm}$

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

















231020

MILEWSKI **Cartilage Cutting Block**, with 4 exchangeable templates including:

**Cutting Block,** plastic, white, **autoclavable,** size 120 x 45 x 15 mm

Frame, metal, U-shaped, with 2 pins to hold the templates

**Template for Ear Cartilage,** with 5 round holes 5, 7, 8, 9 and 10 mm diameter and 2 oval holes  $9 \times 11$  mm and  $12 \times 14$  mm, thickness 0.5 mm

Same, thickness 1 mm

**Template for Nasal Cartilage,** with 3 rectangular holes  $5.5 \times 30$  mm,  $15 \times 15$  mm and  $10 \times 30$  mm, thickness 1 mm

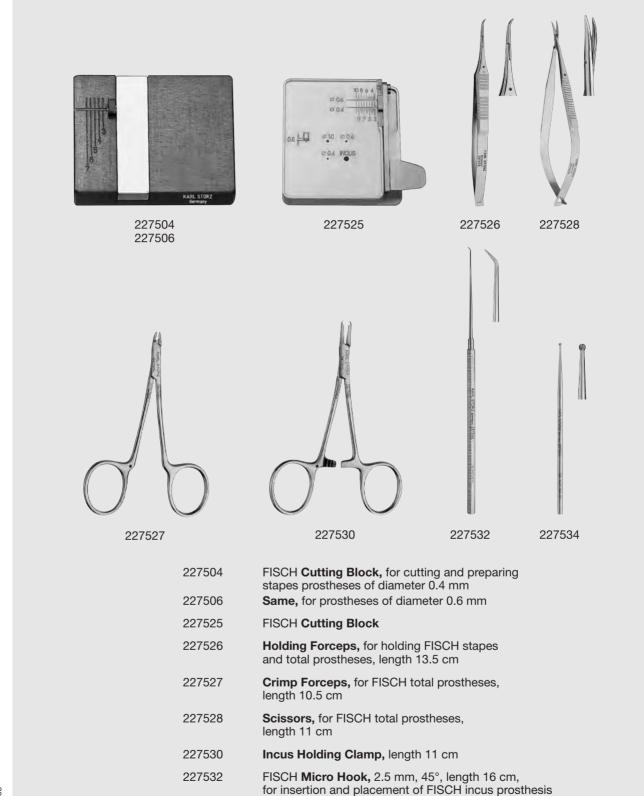
Same, thickness 0.5 mm

Stamp, cylindrical, with handle, to press the cartilage on the cutting block

-071

Components/Spare Parts see chapter 16





1-03

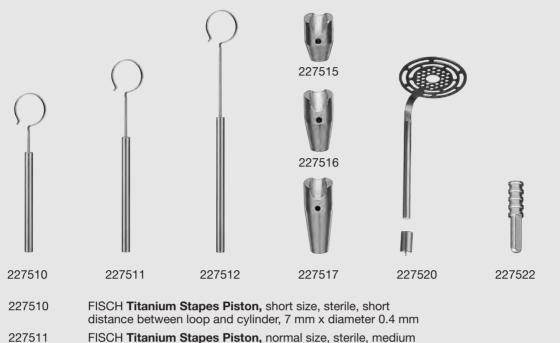
E 47 B 65

length 7 cm

Diamond Straight Shaft Burr, diameter 1.4 mm,

227534





distance between loop and cylinder, 7 mm x diameter 0.4 mm

FISCH Titanium Stapes Piston, normal size, sterile, medium distance between loop and cylinder, 8.5 mm x diameter 0.4 mm

FISCH Titanium Stapes Piston, long size, sterile, long distance between loop and cylinder, 10 mm x diameter 0.4 mm

FISCH Titanium Incus Prosthesis, normal size, sterile, 3 mm x diameter 2 / 1.3 mm

FISCH Titanium Incus Prosthesis, long size, sterile, 4 mm x diameter 2 / 1.3 mm

FISCH Titanium Incus Prosthesis, extra long size, sterile, 5 mm x diameter 2 / 1.3 mm

FISCH Titanium Total Prosthesis with foot, sterile, 10 mm x diameter 0.6 mm

FISCH Titanium Neomalleus Prosthesis, sterile, 5 mm x diameter 1.1 mm



239728 F **Metal Tray,** for sterilization and storage of instruments, perforated, base with holder and silicone mat, lid with silicone bridges and handle, external dimensions (w x d x h) 275 x 178 x 36 mm

**Base with Lid,** with holders and silicone bridges **Silicone Mat** 

Components/Spare Parts see chapter 16

includina:

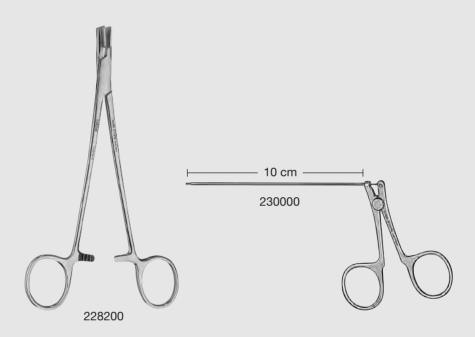
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#### **Advantages of the TÜBINGEN Ventilation Tube:**

- No defense mechanism
- Surface prevents infection
- Larger lumen provides better drainage

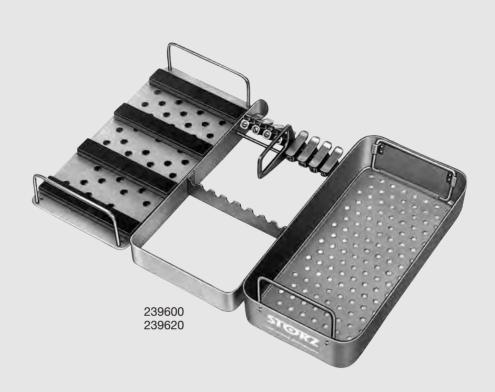
Highly polished gold-plated surface prevents crusting or movement of the lumen



228200 **Gelfoam Press,** length 18 cm

230000 **Ventilation Drainage Tube Inserter,** working length 10 cm

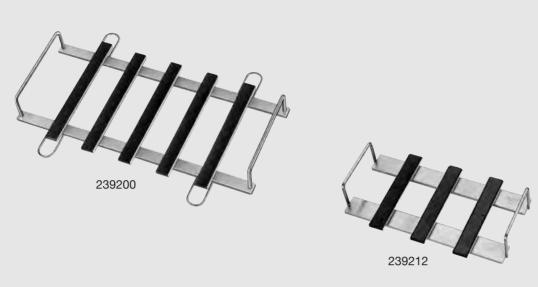




239600 Instrument Rack, for 8 instruments, size 195 x 100 mm

**Instrument Rack,** for 5 instruments, size 195 x 100 mm, with holder for ear specula, for ventilation tube set, may be used with Metal Case 239020 239620





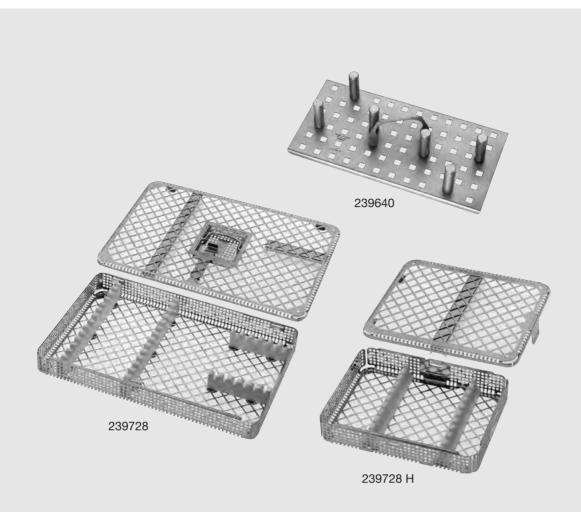


239200 Magnetic Instrument Rack, with 2 handles and 5 magnetic stripes, size 280 x 190 mm, may be used with Metal Case 239000 or 239075

239212 **Magnetic Instrument Rack,** with 2 handles and 3 magnetic stripes, size 180 x 95 mm, may be used with Metal Case 239000 or 239075

239215 **Magnetic Instrument Rack,** without handles, with 3 magnetic stripes, size 170 x 150 mm, may be used with Metal Case 239000 or 239075





39781 A **MiniSet Container,** with MicroStop®, for sterilization and

sterile storage, external dimensions (w x d x h): 310 x 189 x 80 mm,

internal dimensions (w x d x h): 283 x 177 x 60 mm

including:

Base

Lid

Microbiological Barrier, with MicroStop®

239640 Rack, for approx. 8 micro ear forceps with ring handle, size 195 x 100 mm

239728 **Metal Tray**, for sterilization and storage of ear instruments, perforated,

base with holder for 20 straight ear micro instruments with octagonal handle, lid with silicone bridges, external dimensions (w x d x h): 275 x 175 x 36 mm

NEW 239728 H Same, base with holder for 10 straight ear micro instruments with octagonal

Handle type 223300, external dimensions (w x d x h): 178 x 135 x 37 mm

Components/Spare Parts see chapter 16

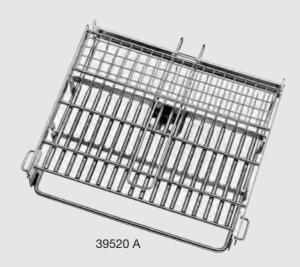
Further accessories for MiniSet Containers see catalog HYGIENE





NEW 39520 AK

**Rack**, provides safe storage of up to 6 KARL STORZ octagonal ear micro surgery instruments during cleaning and sterilization, with special guard for the instrument tips, for easy instrument assistance, with detachable lid, external dimensions (w x d x h): 95 x 215 x 40 mm



39520 A

**Rack,** provides safe storage of up to 18 KARL STORZ octagonal ear micro surgery instruments during cleaning and sterilization, with special guard for the instrument tips, for easy instrument assistance during surgery, with detachable lid, external dimensions (w x d x h): 230 x 200 x 40 mm (compatible with standard trays)

# 11-03

# LENARZ Additional Instruments for Cochlear Implantation Operations



Cochlea implantation is carried out under general anesthetic. Following an incision behind the auricle, formation of the skin flap in the subcutaneous fascia and placement of the scalp clips, a periostial flap is cut around the auditory meatus with an expansion of 1.5 cm x 1.5 cm, forming a periostial pocket for insertion of the implant. This is done with a Plester raspatory (position 32). Using rose-head and diamond drill bits, the mastoidectomy is positioned as such that the cortical bone above, behind and below remains in order to support the electrode. A clear view of the sigmoid sinus, the sinus dura mater angle, the bone plate in the direction of the central cranial bone, the mastoid cavity with the incus, the horizontal kinetic lambyrinth, the posterior wall of the auditory meatus, as well as the outline of the canal for the facial nerve in the mastoid is achieved. The cells on the posterior wall of the auditory meatus need to be completely drilled away so that only the cortical layer remains. A bone bed is created 1 cm behind the mastoid. When doing so, the projection of the electrode outlet is directed towards the sinus dura mater angle.

To facilitate drilling, the periostial skin flap is lifted with the aid of a special suction hook (position 26). Various rose-head and diamond drill bits are used to drill the bone bed. The size of the bone bed can be determined with the aid of a drilling guide. The size is dependent on the type of implant being used. For a nucleus implant only the electronic part of the implant is inset in the bone, whereas the antenna part is positioned in the direction of the occiput under the periost. The formation of the bone bed is considerably simplified by using a diamond drill (position 14). This enables a smooth bone edge to be achieved without damage to the dura mater. The connection of the bone bed to the mastoid is established either via a bone canal or a bone tunnel. Exact projection focused on the sinus dura mater angle virtually excludes any possibility of damage to the sigmoid sinus or the dura mater. The diameter should be slightly larger than the diameter of the cochlea implant electrode.

Then the construction of the posterior tympanotomy is carried out with the assistance of the microscope. Landmarks for this procedure are the position of the horizontal and the so-called digastric bridge which indicates the preceding arch of the beginning of the digastric muscle at the tip of the mastoid. If a line is drawn between the incudostpedial joint and the digastric bridge, the canal for the facial nerve is in a medial position from the line. Then a diamond drill bit, size 2.35 mm is used to carefully drill out the bone lateral to the canal for the facial nerve along the posterior auditory meatus in the direction of the middle ear. In doing so, the bridge remains in place. With careful drilling the chorda tympani becomes visible. By

changing to a diamond drill bit with a narrow shaft and a diameter of 1.4 mm (position 17), the posterior tympanotomy can be completed. By utilizing the entire space between the bone encased facial nerve of the chorda tympani and the bridge a sufficient view into the tympanum is achieved where, the incudostapedia joint, the tendons of the stapedial muscle, the promontory of the tympanic cavity and the round window niche can be identified.

Using the same polished drill bit with a diameter of 1.4 mm (position 17) the cochleostomy is now created. First of all the bone lip over the round window is drilled from the cauda to the cranium until the membrane becomes visible. Then the drill is used to prepare the cochleostomy in front of the round window and slightly below its upper end. The promontory bone is thinned until the endosteum becomes visible. The drilling is carried out with continuous irrigation. Using the smaller diamond drill of 1.0 mm (position 16) the surrounding bone is then removed until a diameter of approx. 1.5 mm is achieved. When the endosteum has been sufficiently exposed, it is carved with the aid of a curved needle and then folded to the side. One then has a view of the scala tympani, as well as the basilary membrane on their upper anterior border. Care has to be taken to protect this membrane. If necessary, using this drill or the drill of 0.6 mm (position 15) the cochleostomy can be expanded. Its diameter should be drilled to a maximum of 1.5 mm. The size can be determined with the aid of the hook probe (position 18). Small bone edges can be smoothed with the right angle hooks (position 24 and 25). The bone dust is rinsed out with the aid of a thin suction tube using Ringer's irrigation solution. Then healon is carefully installed in the scala tympani as a lubricant. While doing so, intracochlea increases in pressure are to be avoided.

The implant is then placed in the created bone bed. The SCHÖNBORN thyroid hook (position 27) is used to lift the periost and, subsequently, the electrode cable is introduced into the canal or tunnel which has been prepared and guided in the direction of the mastoid. The electronic model can then be fixed into place in the implant bed with the aid of the taut periostal pocket. Additional suture fixation is not necessary.

The temporal muscle described in the posterior part is then detached. By introducing the Plester raspatory (position 32) the reference electrode can be grasped with an anatomical forceps and pushed under the muscle. The stimulating electrode is then grasped with an introduction forceps for cochlea transplant electrodes (position 20 and 21) and the tip is rotated as such that when being introduced into the cochlea tract it points from the basilary membrane towards the modiolus. The electrode can then be pushed through

# LENARZ Additional Instruments for Cochlear Implantation Operations



the cochlea gradually with the aid of the forceps and an anatomical forceps. The fine positioning is achieved using a micro guide instrument which is claw-shaped with a tip which is curved upwards or downwards (position 22 and 23). The stylet can subsequently be removed from the electrode.

In the latest version of electrode development the socalled "advanced off stylet technique" is used during the introduction of the electrode. With this technique, after the electrode has been advanced to the marking on the stylet ball it is held in place with the aid of a forceps and then the electrode is advanced further into the cochlea with the aid of an introduction forceps. When it has been completely introduced up to the balloon-shaped enlargement on the shaft of the electrode the electrode is held in place and the stylet is completely removed.

The cochleostomy is closed using small pieces of connective tissue or muscle which are positioned carefully around the electrode. The electrode carrier is stabilized in the drilled mastoid in an S shape using the cortical lip (Fig. 13). In children this has to take the growth process of the cranium into account.

After carrying out the intraoperative electrophysiological measurements (impedance tests on the electrode, reflex thresholds of the stapedius and neural response telemetry) the wound is closed gradually, with the aid of a skin plaster if necessary.

To ensure that the procedure is as atraumatic as possible, it is essential that instruments of the correct size are used, in particular the drill bits and the suction tubes. As one gets closer to the cochlea it becomes increasingly important to use small lumen suction devices and small drill bits. The hand should be well supported at all times. It is essential that drilling is carried out with irrigation in order to prevent overheating of the tissue and, above all, to prevent the development of drilling dust in the cochlea. When introducing the electrode care needs to be taken that it is not squeezed too tightly by the forceps because this could result in damage to the thin electrode wires or the stylet. The specially designed forceps enable the electrode to be grasped securely and guided precisely without compressing the electrode.

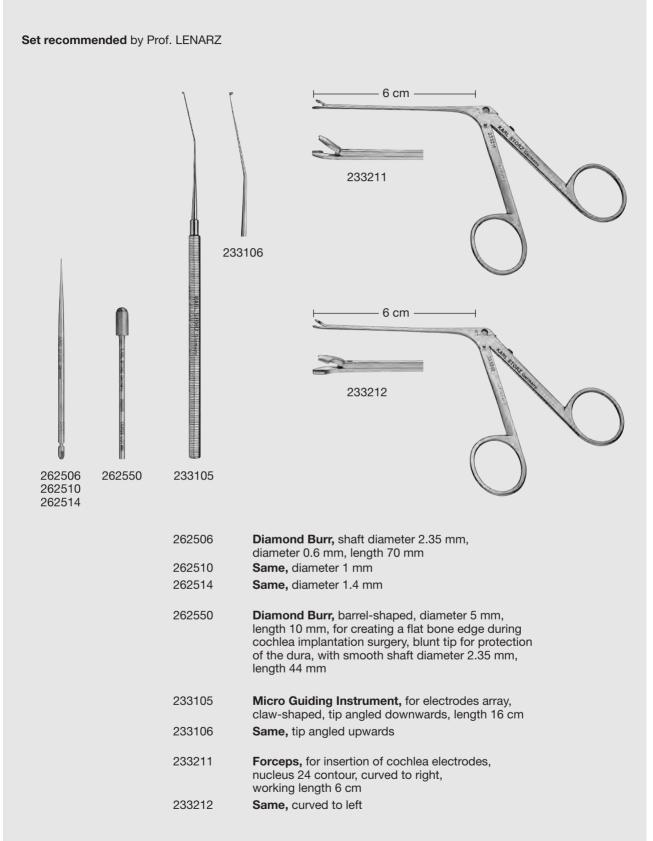
> Prof. Dr. Th. LENARZ, Medizinische Hochschule Hannover, Klinik und Poliklinik für Hals-Nasen-Ohrenheilkunde, Hannover, Germany

11\_03

LENARZ **Additional Instruments for Cochlear Implantation Operations** see chapter 9, RECOMMENDED SETS FOR ENT, pages 434-435

# Micro Instruments for Cochlear Implantation Operations

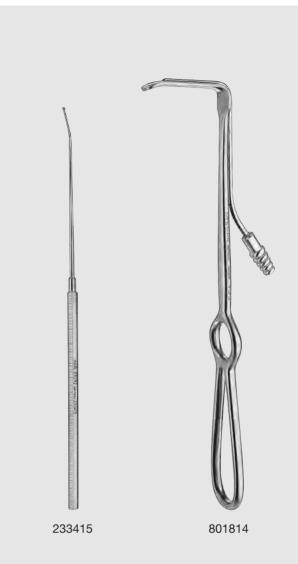




74 E 56 C

# Micro Instruments for Cochlear Implantation Operations





233415 **Seeker,** angled 15°, with ball end, diameter 1.3 mm, length 18 cm

801814 LENARZ **Retractor,** 43 x 11 mm, slim and flat blade with integrated suction tube,

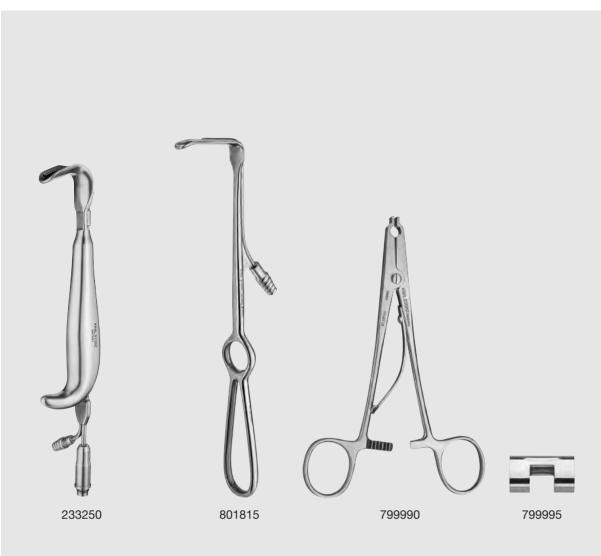
length 21.5 cm

3-07

LENARZ **Additional Instruments for Cochlear Implantation** see chapter 9, RECOMMENDED SETS FOR ENT, pages 434-435

# Additional Instruments for Cochlear Implantation Operations





233250 DALCHOW-O'DONOGHUE **Retractor**,

for cochlea implant operations

including

**Retractor,** with ergonomic handle, cold light illumination, suction channel with cut-off hole, LUER, concave blade,

20 x 30 mm, length 19.5 cm

Fiber Optic Light Carrier, with suction tube, length 18.5 cm

801815 ISSING **Retractor**, 43 x 11 mm, slim and flat blade

with integrated suction tube, length 21.5 cm

799990 RANEY Applying and Removing Forceps,

for scalp haemostasis clips, length 16 cm

799995 RANEY Scalp Haemostasis Clips, package of 12

Components/Spare Parts see chapter 16

76 E 58 C





## MOTOR SYSTEMS

- NEW UNIDRIVE® SIII ENT SCB
- NEW UNIDRIVE® SIII ECO
- **NEW** High-Performance EC Micro Motor II
- **NEW** High-Speed Micro Motors
- NEW INTRA Drill Handpieces
  Burrs
- **NEW** High-Speed Handpieces

Special Features



#### UNIDRIVE® SIII ENT SCB/UNIDRIVE® SIII ECO

#### The multifunctional unit for ENT





UNIDRIVE® SIII ENT SCB

UNIDRIVE® S III ECO

Special Features:	UNIDRIVE® SIII	UNIDRIVE® SIII
Touch Screen: Straightforward function selection via touch screen	•	-
Set values of the last session are stored	•	•
Optimized user control due to touch screen	•	-
Choice of user languages	•	-
Operating elements are single and clear to read due to color display	•	-
One unit – multifunctional: – Shaver system for surgery of the paranasal sinuses and anterior skull base – INTRA Drill Handpieces (40,000 rpm and 80,000 rpm) – Sinus Shaver	•	•
Two motor outputs: Two motor outputs enable simultaneous connection of two motors: For example, a shaver and micro motor	•	•
Soft start function	•	-
Formulated error messages	•	-
Integrated irrigation and coolant pump:  – Absolutely homogeneous, micro-processor controlled irrigation rate throughout the entire irrigation range  – Quick and easy connection of the tubing set	•	•
Easy program selection via automated motor recognition	•	•
Continuously variable revolution range	•	•
Maximum number of revolutions and motor torque: Microprocessor-controlled revolutions per minute. Therefore the preselected parameters are maintained all the time during drilling.	•	•
Maximum number of revolutions can be preset	•	•
SCB model with connections to the KARL STORZ Communication Bus (KARL STORZ-SCB)	•	-
Irrigator rod included	•	-





#### **System specifications**

Mode		Order No.	rpm
Shaver mode Operation mode: Max. rev. (rpm):	oscillating in conjunction with Handpiece: DrillCut-X® II Shaver Handpiece	<b>40</b> 712050	10,000*
Sinus burr mode Operation mode: Max. rev. (rpm):	rotating in conjunction with Handpiece: DrillCut-X® II Shaver Handpiece	<b>40</b> 712050	12,000
High-speed drilling mode Operation mode: Max. rev. (rpm):	counterclockwise or clockwise in conjunction with: High-Speed Micro Motor	<b>20</b> 7120 33	
Drilling mode Operation mode: Max. rev. (rpm):	counterclockwise or clockwise in conjunction with: micro motor and connecting cable	<b>20</b> 7110 33 <b>20</b> 7111 73	40,000
Power supply:	100 – 240 VAC, 50/60 Hz		
Dimensions: (w x h x d)	300 x 165 x 265 mm		

#### Two outputs for parallel connection of two motors

#### Integrated irrigation pump:

Flow: adjustable in 9 steps

<sup>\*</sup> Approx. 4,000 rpm is recommended as this is the most efficient suction/performance ratio.

	UNIDRIVE® S III ENT SCB	UNIDRIVE® S III ECO
Touch Screen:	6.4" / 300 cd/m <sup>2</sup>	
Weight:	5.2 kg	4.7 kg
Certified to:	IEC 601-1 CE acc. to MDD	IEC 60601-1
Available languages:	English, French, German, Spanish, Italian, Portuguese, Greek, Turkish, Polish, Russian	numerical codes

Special features of the high-performance EC micro motor II and the high-speed micro motor



#### Special features of high-performance EC micro motor II:

- Self-cooling, brushless high-performance EC micro motor
- Smallest possible dimensions
- Autoclavable
- Can be processed in a cleaning machine
- Detachable connecting cable

- INTRA coupling enables a wide variety of applications
- Maximum torque 4 Ncm
- Number of revolutions can be continuously adjusted up to 40,000 rpm



20711033

**20**711033 **High-Performance EC Micro Motor II,** for

use with UNIDRIVE® II/UNIDRIVE® ENT/ECO and Connecting Cable 20 7110 73, or for use with UNIDRIVE® S III ENT/ECO and Connecting Cable 20 7111 73



20711173

Connecting Cable, to connect High-Performance EC Micro Motor 20 7110 33 to UNIDRIVE® S III ENT/ECO

#### Special Features of the high-speed micro motor:

- Brushless high-speed micro motor
- Smallest possible dimensions
- Autoclavable

- Can be processed in a cleaning machine
- Maximum torque 6 Ncm



20712033

**20** 7120 33 **High-Speed Micro-Motor,** max. speed 40,000 rpm, including connecting cable, for use with UNIDRIVE® S III ENT

3-131

E 63 E US 81

# UNIDRIVE® S III ENT SCB, **UNIDRIVE® S III ECO**

**Recommended System Configuration** 



#### **UNIDRIVE® SIII ENT SCB**

#### **UNIDRIVE® SIII ECO**





40 7016 20-1

40 7014 20

40 7016 01-1 UNIDRIVE® S III ENT SCB, motor control unit with color display, touch screen, two motor outputs, integrated irrigation pump and SCB module, power supply 100 - 240 VAC, 50/60 Hz

includina:

**Mains Cord** 

**Irrigator Rod** 

Two-Pedal Footswitch, two-stage, with proportional function

Clip Set, for use with silicone tubing set 20 7116 40

SCB Connecting Cable, length 100 cm

Single Use Tubing Set\*, sterile, package of 3

#### 40 7014 01

UNIDRIVE® SIII ECO. motor control unit with two motor outputs and integrated irrigation pump, power supply 100 – 240 VAC, 50/60 Hz includina:

**Mains Cord** 

Two-Pedal Footswitch, two-stage, with proportional function

Clip Set, for use with silicone tubing set 20 7116 40

Single Use Tubing Set\*, sterile, package of 3

#### Specifications:

Touch Screen	UNIDRIVE® S III ENT SCB: 6,4"/300 cd/m²	Dimensions w x h x d	300 x 165 x 265 mm
Flow	9 steps	Weight	5.2 kg
Power supply	100-240 VAC, 50/60 Hz	Certified to	IEC 601-1, CE acc. to MDD



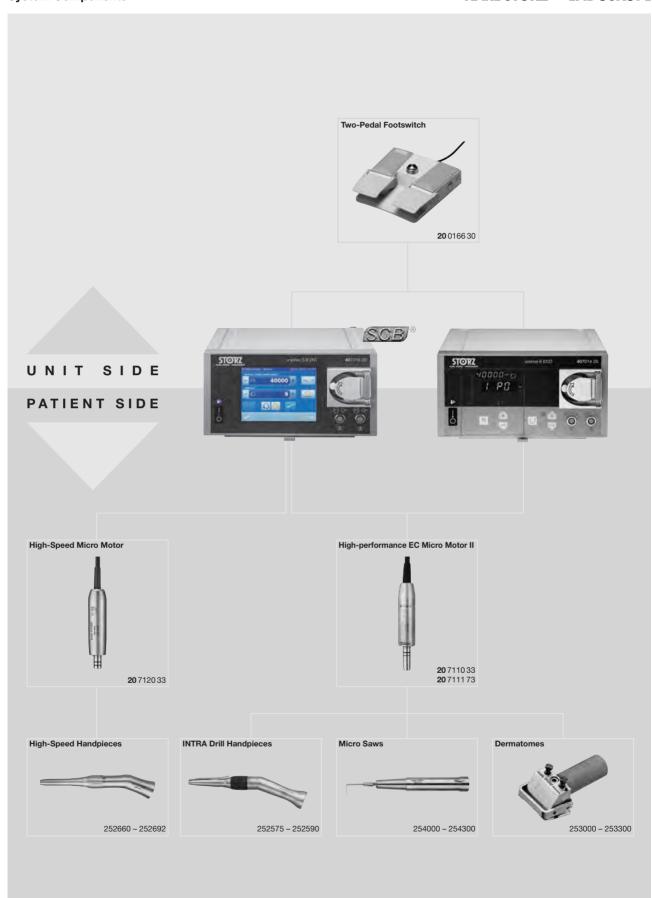
mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

Components/Spare Parts see chapter 16

# UNIDRIVE® S III ENT SCB, NEW UNIDRIVE® S III ECO

**System Components** 





# Optional Accessories for UNIDRIVE® S III ENT SCB and UNIDRIVE® S III ECO





	280053	Pana Spray, 6x 500 ml bottles – HAZARDOUS GOODS – UN 1950 including: Spray Nozzle
	280053 C	<b>Spray Nozzle,</b> for the reprocessing of INTRA burr handpieces, for use with Pana Spray 280053 B
	031131-10*	<b>Tubing Set,</b> for irrigation, for single use, sterile, package of 10



mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

## **INTRA Drill Handpieces**

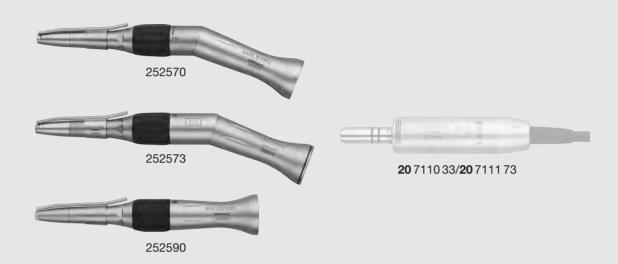
for ear micro surgery



#### **Special Features:**

- Tool-free closing and opening of the drill
- Right/left rotation
- Max. rotating speed up to 40,000 or 80,000 rpm
- Detachable irrigation tubes
- Lightweight construction

- Low-vibration operation
- Low maintenance
- Can be processed in a cleaning machine
- Safe grip



252570	INTRA Drill Handpiece, angled, length 12.5 cm,
	turn

transmission 1:1 (40,000 rpm), for use with KARL STORZ high-performance EC micro motor II and straight shaft burrs

252573 **INTRA Drill Handpiece,** angled, length 12.5 cm,

transmission 1:2 (80,000 rpm), for use with KARL STORZ high-performance EC micro motor II and straight shaft burrs

252590 **INTRA Drill Handpiece,** straight, length 11 cm,

transmission 1:1 (40,000 rpm), for use with KARL STORZ high-performance EC micro motor II and straight shaft burrs

2-13

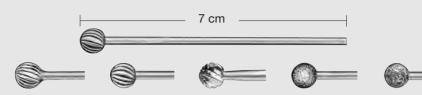
**High Performance EC Micro Motor 20 7110 33 and Connecting Cable 20 7111 73** see page 81 **Components/Spare Parts** see chapter 16

## **Burrs**



Straight Shaft Burrs, length 7 cm, for use with INTRA Drill Handpieces 252590, 252570, 252573

260000



Detail	Size	Dia. mm	Standard	Tungsten Carbide	Transverse Tungsten Carbide	Diamond	Diamond, coarse
	006	0.6	260006	261006	-	262006	_
	007	0.7	260007	261007	-	262007	-
-	800	0.8	260008	261008	-	262008	-
0	010	1	260010	261010	-	262010	-
Ç	014	1.4	260014	261014	261114	262014	-
0	018	1.8	260018	261018	-	262018	-
0	023	2.3	260023	261023	261123	262023	262223
0	027	2.7	260027	261027	-	262027	262227
	031	3.1	260031	261031	261131	262031	262231
0====	035	3.5	260035	261035	-	262035	262235
0====	040	4	260040	261040	261140	262040	262240
	045	4.5	260045	261045	-	262045	262245
	050	5	260050	261050	261150	262050	262250
	060	6	260060	261060	261160	262060	262260
	070	7	260070	261070	-	262070	262270

	sizes 006 – 070, length 7 cm, set of 15
261000	<b>Tungsten Carbide Straight Shaft Burr,</b> stainless, sizes 006 – 070, length 7 cm, set of 15
261100	<b>Tungsten Carbide Straight Shaft Burr,</b> with cross cut, stainless, sizes 014 – 060, length 7 cm, set of 6
262000	<b>Diamond Straight Shaft Burr,</b> stainless, sizes 006 – 070, length 7 cm, set of 15
262200	Rapid Diamond Straight Shaft Burr, stainless, with coarse diamond coating for precise drilling and abrasion without hand pressure and generating minimal heat, sizes 023 – 070, length 7 cm, set of 9, color code: gold

Standard Straight Shaft Burr, stainless,

#### **Burrs**

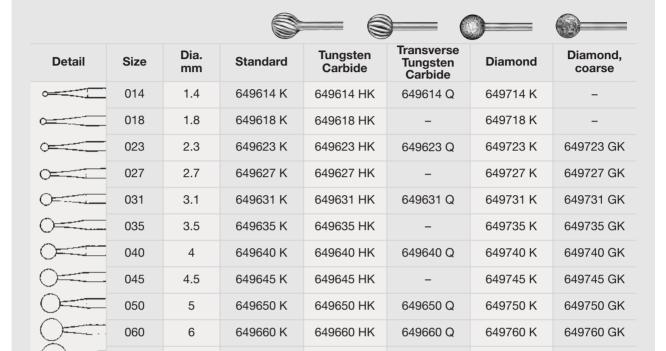


5.7 cm -

649770 K

649770 GK

Straight Shaft Burrs, length 5.7 cm, for use with INTRA Drill Handpieces 252590, 252570, 252573



649600 K Standard Straight Shaft Burr, stainless, sizes 014 – 070,

length 5.7 cm, set of 11

649670 K

7

070

649600 HK Tungsten Carbide Straight Shaft Burr, stainless, sizes 014 – 070,

649670 HK

length 5.7 cm, set of 11

649700 K **Diamond Straight Shaft Burr,** stainless, sizes 014 – 070,

length 5.7 cm, set of 11

649700 GK Rapid Diamond Straight Shaft Burr, stainless, with coarse diamond

coating for precise drilling and abrasion without hand pressure and generating minimal heat, sizes 023 – 070, length 5.7 cm, set of 9,

color code: gold

Straight Shaft Burrs, cylindrical, barrel-shaped, and bud-shaped



Size	Dia.	cylindrical	barrel-shaped	bud-shaped	
Size	mm	length 7 cm			
020	2	262560	-	-	
040	4	_	262561	-	
050	5	265050	-	263050	
060	6	265060	-	263060	
070	7	265070	-	263070	
070	/	265070	-	263070	

2.00-

E 69 D 87





#### LINDEMANN Burrs, conical, stainless, length 7 cm



#### **Burrs Accessories**



280090



280080



280120

280090 Size Template, for drills, stainless steel,

sterilizable

280080 **Brush,** for cleaning atraumatic jaws,

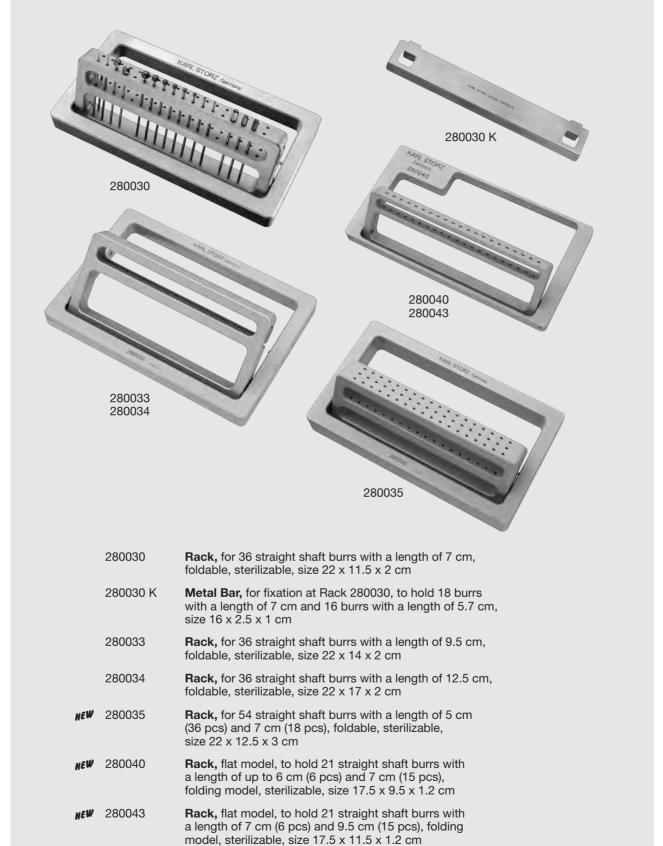
sterilizable, package of 5

280120 **Temporal Bone Holder,** bowl-shaped, with

3 fixation screws for tensioning the petrosal bone and with evacuation tube for irrigation liquid



#### **Accessories for Burrs**



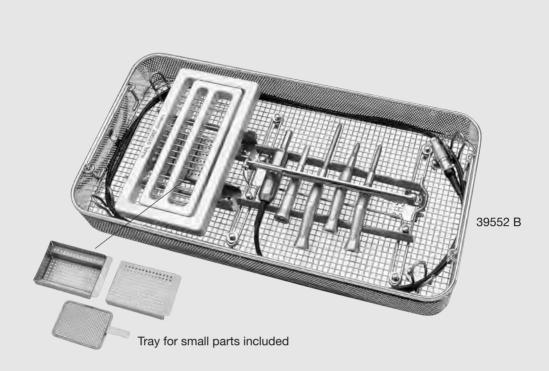
3-071

E 71 C 89

Please note: The burrs displayed are not included in the rack.

#### **Accessories for Burrs**





39552 A

**Wire Tray,** provides safe storage of accessories for KARL STORZ drilling/grinding systems during cleaning and sterilization, includes tray for small parts, for use with Rack 280030, rack **not** included

#### for storage of:

- Up to 6 drill handpieces
- Connecting cable
- EC micro motor
- Small parts

39552 B

**Wire Tray,** provides safe storage of accessories for KARL STORZ drilling/grinding systems during cleaning and sterilization, includes tray for small parts, for use with Rack 280030, rack **included** 

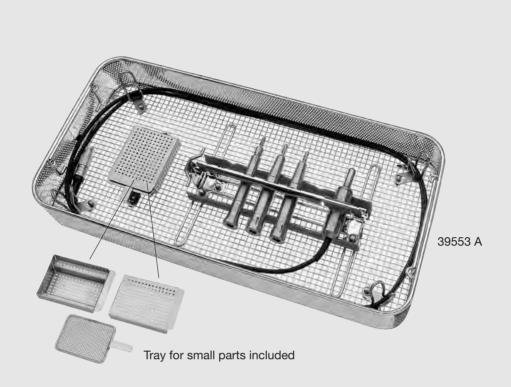
#### for storage of:

- Up to 6 drill handpieces
- Connecting cable
- EC micro motor
- Up to 36 drill bits and burrs
- Small parts

**Please note:** The instruments displayed are not included in the sterilizing and storage trays.

## **Accessories for Burrs**





39553 A

**Wire Tray,** provides safe storage of accessories for the KARL STORZ micro saw system during cleaning and sterilization, includes basket for small parts

#### for storage of:

- Up to 6 saw handpieces
- Connecting cable
- EC micro motor
- Saw blades

Please note: The instruments displayed are not included in the sterilizing and storage tray.

## **Accessories for Dermatomes**





39554 A

**Wire Tray,** provides safe storage of accessories for the KARL STORZ dermatome system during cleaning and sterilization

#### for storage of:

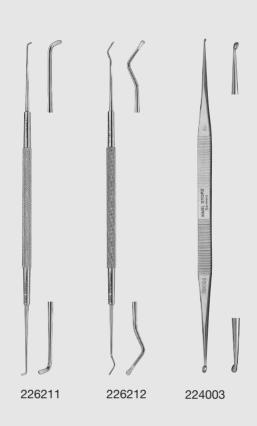
- Up to 2 dermatomesConnecting cableEC micro motor with INTRA coupling

Please note: The instruments displayed are not included in the sterilizing and storage tray.

E 74 B US

# Instrument Set for Endoscopic Surgery acc. to the International Working Group on Endoscopic Ear Surgery (IWGESS)

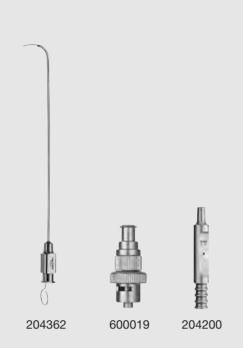




227201	Ear Hook, curved right, working length 5.5 cm, length 16 cm
227202	Same, curved left
227203	Same, curved backwards
227206	Ear Dissector, curved right, working length 5.5 cm, length 16 cm
227207	Same, curved left
227208	Same, curved backwards
227211	Curette, spoon-shaped, diameter 1 cm, length 16 cm
226211	THOMASSIN <b>Dissector</b> , double-ended, distal tips with single curve to right or to left, length 18 cm
226212	Same, distal tips with double curve to right or to left
227213	Curette, double-ended, spoon-shaped tips diameter 1 mm and 1.5 mm, end position angled $90^\circ$ to sheath, length 17 cm
224003	HOUSE <b>Curette</b> , medium, spoon sizes 1 x 1.8 mm and 2 x 2.8 mm, length 15 cm
227230	<b>Round Knife,</b> diameter 3 mm, easy to handle due rotating tube olive, length 19 cm

# Instrument Set for Endoscopic Surgery acc. to the International Working Group on Endoscopic Ear Surgery (IWGESS)





204357	Suction Cannula, curved 3 mm, LUER-Lock, outer diameter 0.6 mm, length 10 cm
204358	Same, outer diameter 0.8 mm
204359	Same, outer diameter 1 mm
204360	Suction Tube, curved 6 mm, LUER-Lock, outer diameter 0.8 mm, length 10 cm
204361	Irrigation Cannula, curved 6 mm, LUER-Lock, outer diameter 1 mm, length 10 cm
204362	Suction Tube, curved 6 mm, LUER-Lock, outer diameter 1.2 mm, length 10 cm
204365	Same, curved 8 mm
204366	Same, curved 8 mm, outer diameter 1.6 mm
600019	LUER Cone Connector, male, rotating
204200	FISCH <b>Suction Handle,</b> with cut-off hole, LUER cone, length 5.5 cm, for use with Suction Tubes 204005 – 204025, 204305 – 204330
227251	<b>Ear Forceps,</b> 45° curved right, extra delicate, oval cupped jaws, 0.6 mm, working length 10 cm
227252	Same, 45° curved left
227253	Same, 45° curved upwards
227255	<b>Ear Forceps,</b> curved downwards, retrograde, extra delicate, oval cupped jaws, 0.9 mm, working length 10 cm

# ULUG **Instruments**



KARL SIGHZ	unundaning serving and an analysis and a serving and a	
	223483	
223480	ULUG <b>Knife,</b> double-ended, 8 and 5 mm, length 17 cm	
223482	ULUG <b>Elevator,</b> double-ended, blunt, curved, large, 4 and 3 mm, length 17 cm	
223483	ULUG <b>Elevator</b> , double-ended, sharp, curved, small, 2.5 and 2 mm, length 17 cm	
223485	ULUG <b>Micro Dissector</b> , double-ended, curved to right and left, length 17 cm	
223487	ULUG <b>Curette</b> , double-ended, 3.2 x 2.4 and 2.4 x 1.8 mm, length 17 cm	
223490	ULUG <b>Needle,</b> double-ended, straight, length 17 cm	
223491	ULUG <b>Needle,</b> double-ended, slight and strong curved, length 17 cm	
223434	ULUG <b>Micro Hook,</b> 45°, 1.5 and 0.5 mm, length 17 cm	
223436	ULUG <b>Micro Hook</b> , double-ended, 90°, 1.5 and 0.5 mm, length 17 cm	
223438	ULUG <b>Perforator,</b> double-ended, 0.9 mm, length 17 cm	

# Metal Tray, for sterilization NEW and storage of instruments





239728 F

**Metal Tray,** for sterilization and storage of instruments, perforated, base with holder and silicone mat, lid with silicone bridges and handle, external dimensions (w x d x h) 275 x 178 x 36 mm

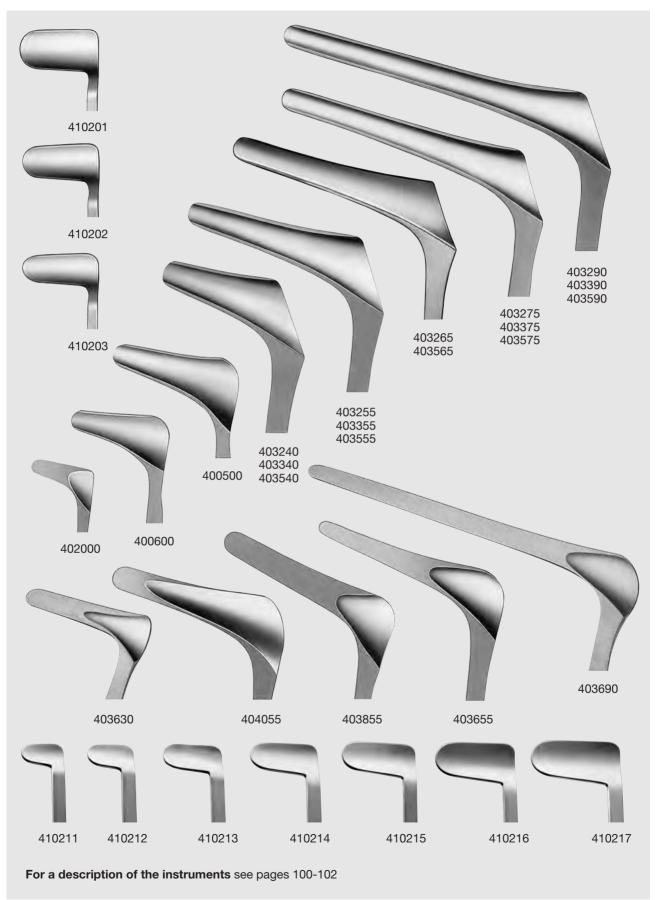
**Base with Lid,** with holders and silicone bridges **Silicone Mat** 



## Nose

#### **Instruments for Rhinology and Rhinoplasty**

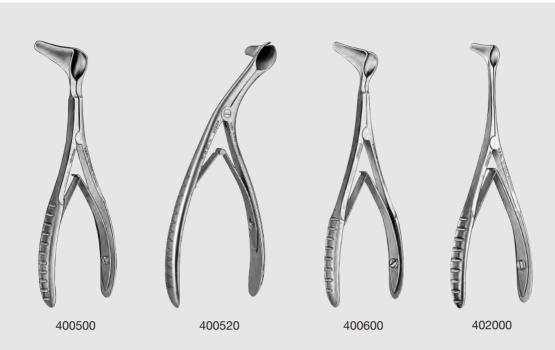


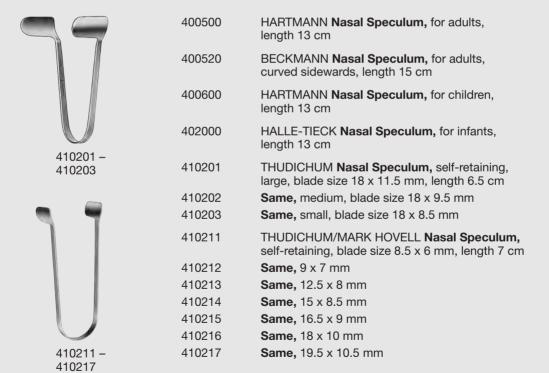


#### Nose

#### Instruments for Rhinology and Rhinoplasty







Components/Spare Parts see chapter 16

100 N 4 C

### **Instruments for Rhinology and Rhinoplasty**











KILLIAN-STRUYCKEN Nasal Speculum, with set rack, blade length 40 mm, length 15 cm
Same, blade length 55 mm
Same, blade length 65 mm
Same, blade length 75 mm
Same, blade length 90 mm



403340 KILLIAN-STRUYCKEN Nasal Speculum, with set screw, blade length 40 mm, length 15 cm
 403355 Same, blade length 55 mm
 403375 Same, blade length 75 mm
 403390 Same, blade length 90 mm



403540 KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 40 mm, length 13.5 cm
403555 Same, blade length 55 mm
403565 Same, blade length 65 mm
403575 Same, blade length 75 mm
403590 Same, blade length 90 mm

Components/Spare Parts see chapter 16

N 5 D

### Instruments for Rhinology and Rhinoplasty









403630	COTTLE <b>Nasal Speculum</b> , blade length 35 mm, length 13 cm
403655	Same, blade length 55 mm
403675	Same, blade length 75 mm
403690	Same, blade length 90 mm
403755	COTTLE <b>Nasal Speculum,</b> with slender blades, with set screw, blade length 55 mm, length 13 cm
403835	COTTLE <b>Nasal Speculum</b> , with set screw, blade length 35 mm, length 13 cm
403855	Same, blade length 55 mm
403865	Same, blade length 65 mm
403875	Same, blade length 75 mm
403890	Same, blade length 90 mm
404040	Nasal Speculum, with fiber optic light carrier, blade length 40 mm, length 13.5 cm
404055	Same, blade length 55 mm

Components/Spare Parts see chapter 16

102 N 6 D









404555 -404575

404455	RUDERT <b>Nasal Speculum,</b> for adults, with set screw and adaptation for Flexible Tension Arm 723018, left blade length 55 mm, right blade shortened with 3 mandrels, length 15 cm
404465	Same, left blade length 65 mm
404475	Same, left blade length 75 mm
404555	RUDERT <b>Nasal Speculum,</b> for adults, with set screw and adaptation for Flexible Tension Arm 723018, right blade length 55 mm, left blade shortened with 3 mandrels, length 15 cm
404565	Same, right blade length 65 mm
404575	Same, right blade length 75 mm

### **Instruments for Rhinology and Rhinoplasty**





### For use with Nasal Specula 404455 – 404475, 404555 – 405575

723017	<b>Rotating Clamp,</b> with holding rod for Flexible Tension Arms 723018 and 28162 FB, attachable to the operating table's sliding rail
723018	Flexible Tension Arm, length 50 cm
723020	<b>Connector,</b> for Flexible Tension Arm 723018, attachable to rods up to diameter 16 mm

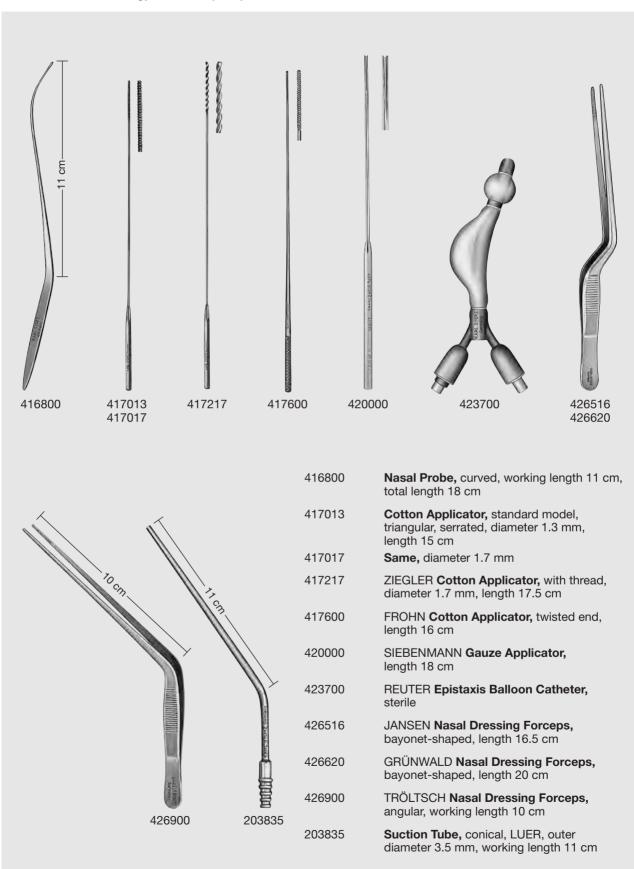
The tension arm can also be attached to an anesthesia frame using the connector in place of the holding rod.

3-99

Components/Spare Parts see chapter 16

### **Instruments for Rhinology and Rhinoplasty**

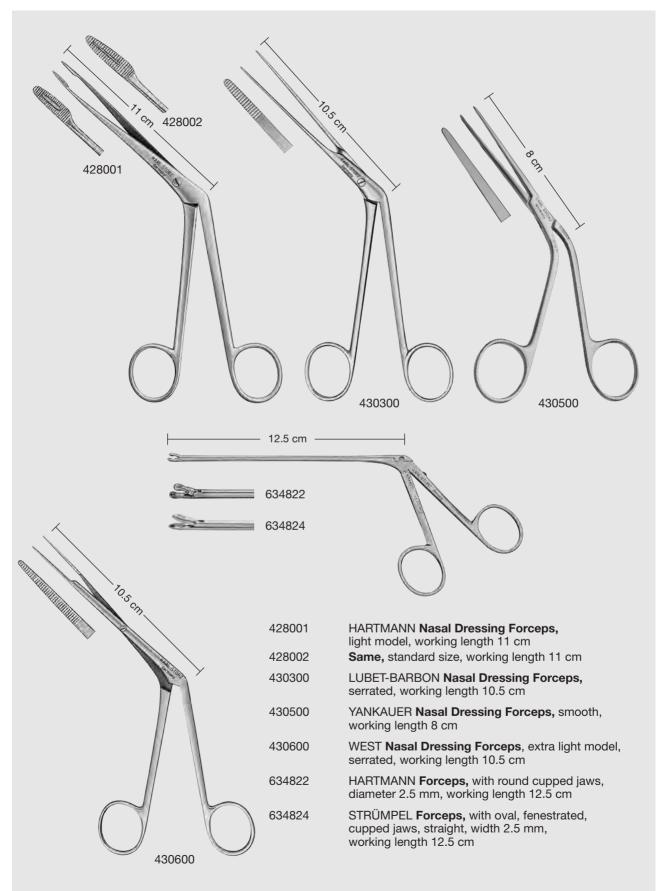




96-9

N 9 D 105





11-0

N 10 C

## Instruments for Rhinology and Rhinoplasty





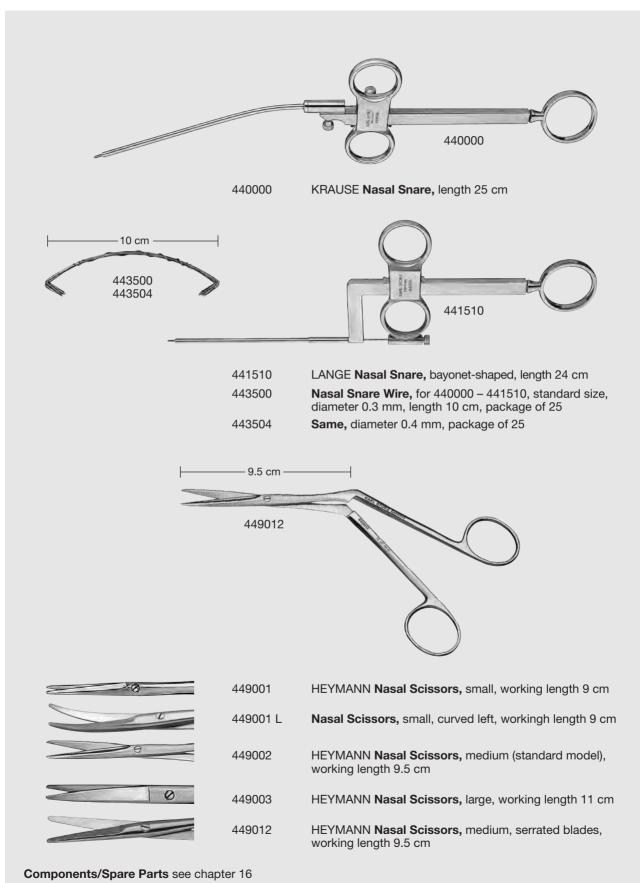


436610	Nasal Atomizer, straight, including graduated Container 10455 for local anaesthetic, for use with Rubber Bulb 437000
437000	Rubber Bulb, for Nasal Atomizer 436610, latex-free
437520	DE VILBIS <b>Nasal Atomizer,</b> with adjustable tip, rubber bulb and large bottle
437600	DE VILBIS <b>Nasal Atomizer</b> , with adjustable tip, rubber bulb, with bottle and rack
439200	GLATZEL <b>Nasal Mirror,</b> (CZERMAK's plate) for verification of nasal ventilation capacity, 13 x 20 cm

Components/Spare Parts see chapter 16

### **Instruments for Rhinology and Rhinoplasty**

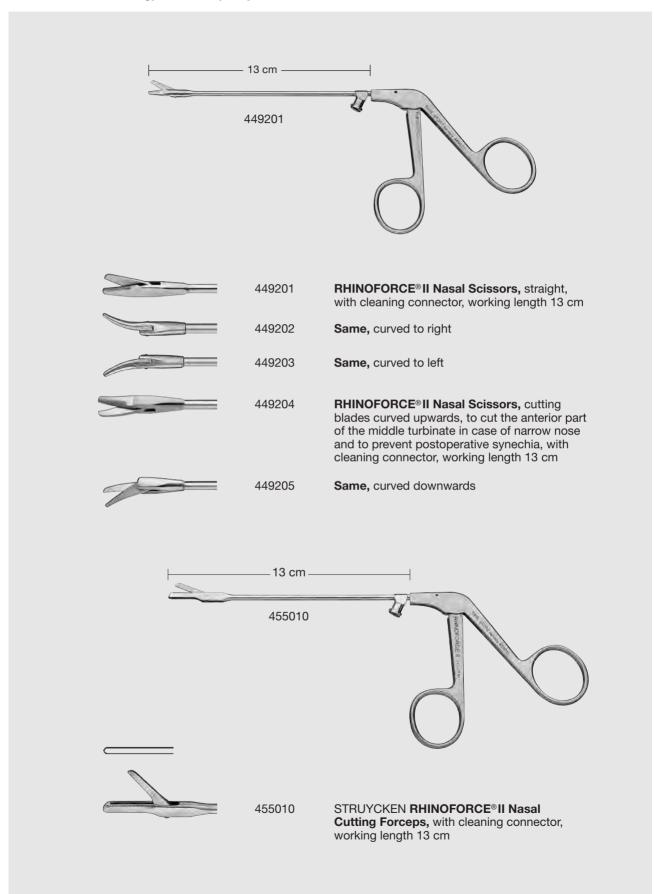




108 N 12 C

### **Instruments for Rhinology and Rhinoplasty**

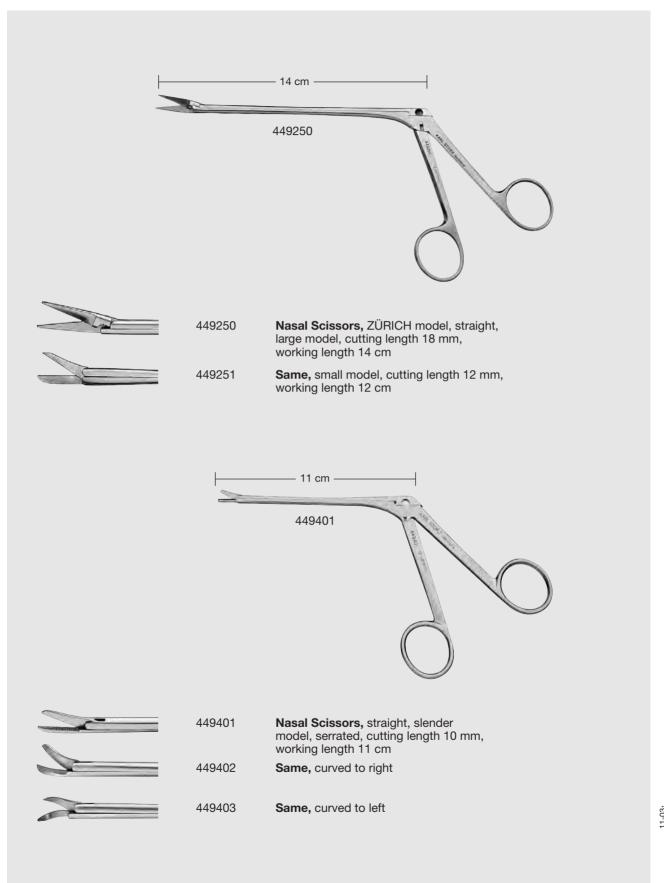




N 13 C

### **Instruments for Rhinology and Rhinoplasty**

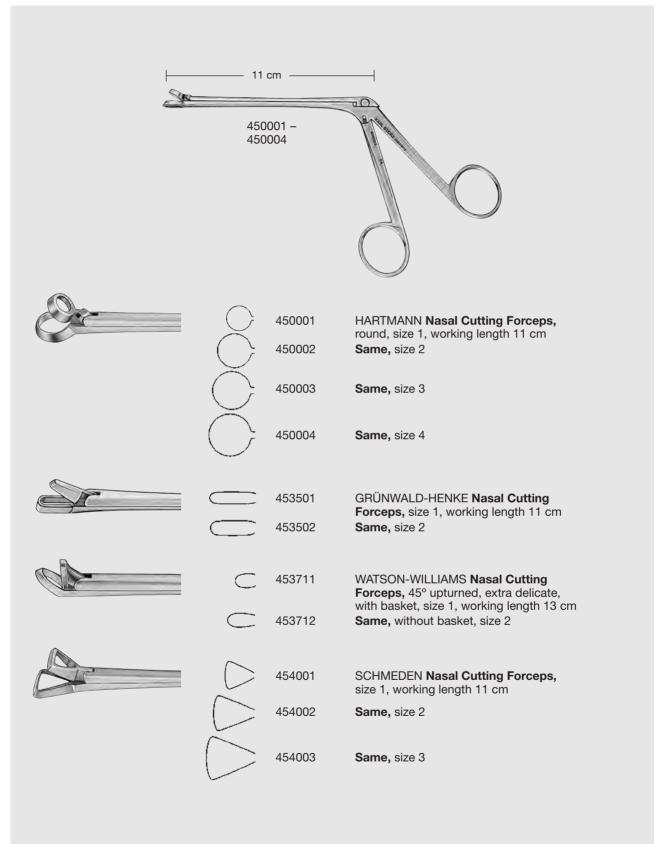




110 N 14 D

### **Instruments for Rhinology and Rhinoplasty**





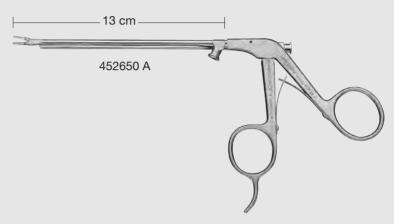
11-982

N 15 D 111



MONTGOMERY-YOUNGS RHINOFORCE® II Clip Applicator, for endonasal endoscopic sphenopalatine artery ligature

# Winner of the Cutler Surgical Prize



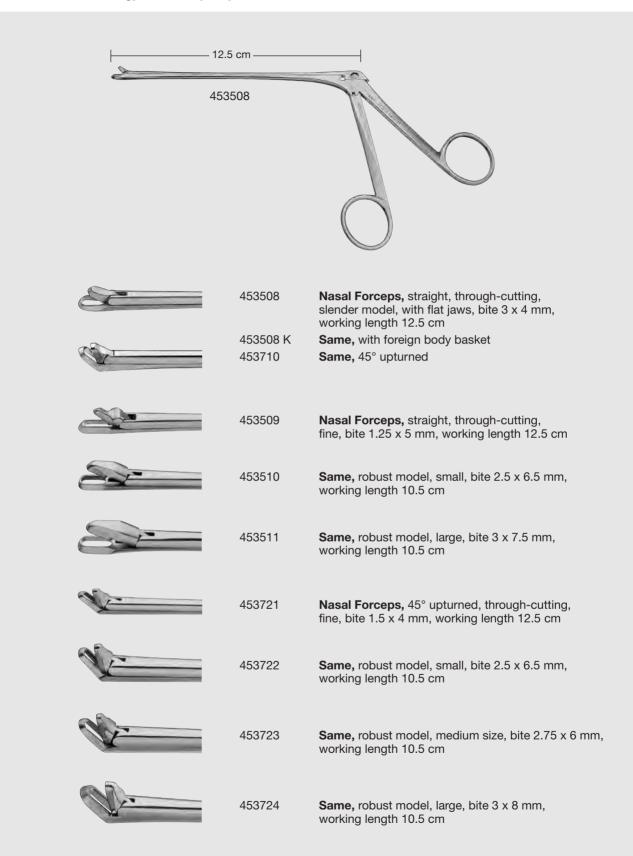


The **Cutlers' Surgical Prize** is one of the most prestigious annual awards for innovation in the design or application of surgical instruments or techniques. The prize as well as the Clarke medal are awarded by the surgical association and the president of the Royal College of Surgeons of England.

	452650 A	MONTGOMERY-YOUNGS RHINOFORCE®II Clip Applicator, for endonasal endoscopic sphenopalatine artery ligature, with suction channel, handle with spring, straight, with cleaning connector, working length 13 cm, for use with Titanium Clips 8665 T
J	452650 C	Same, jaws angled to the right
	452650 D	Same, jaws angled to the left

### **Instruments for Rhinology and Rhinoplasty**



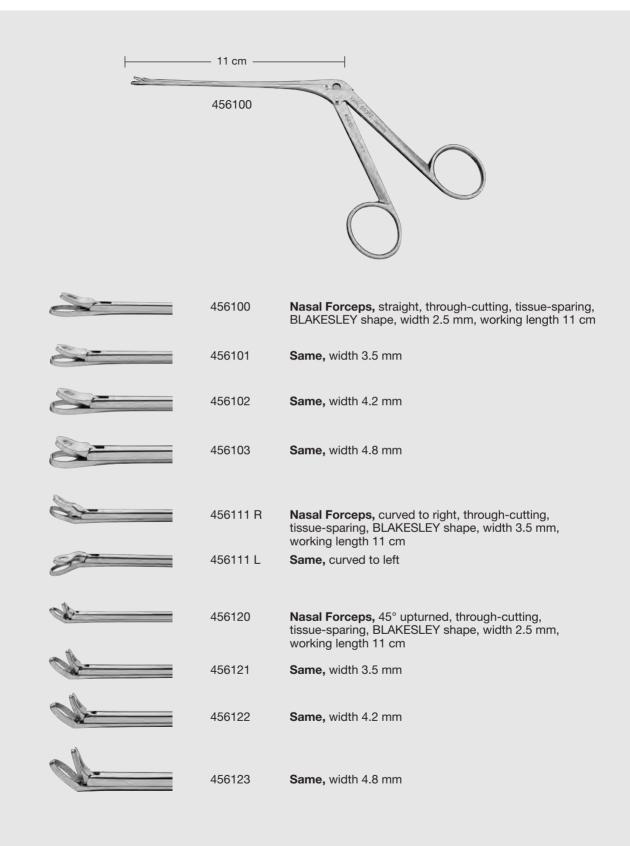


1-031

N 17 D 113

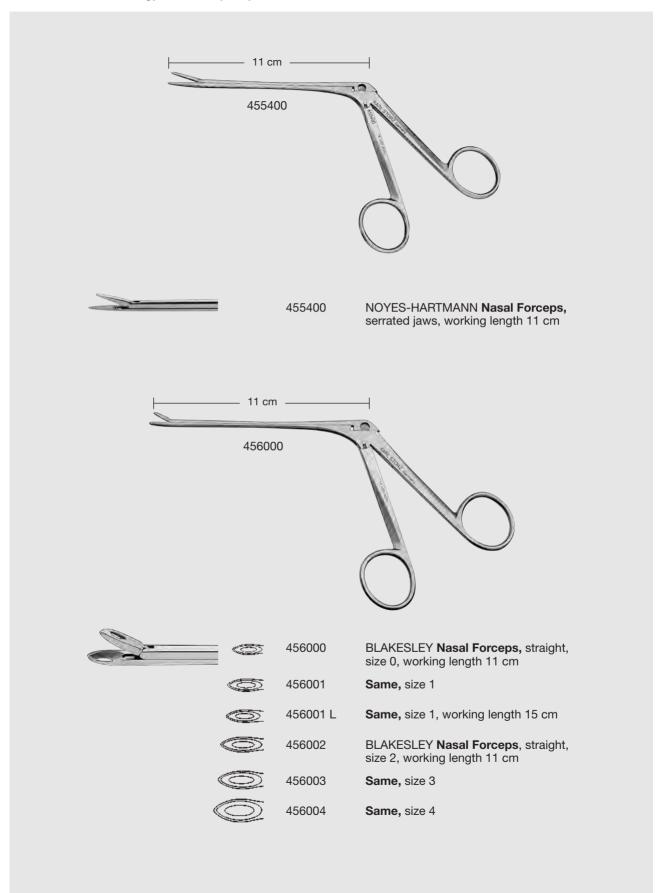
### Instruments for Rhinology and Rhinoplasty





### **Instruments for Rhinology and Rhinoplasty**



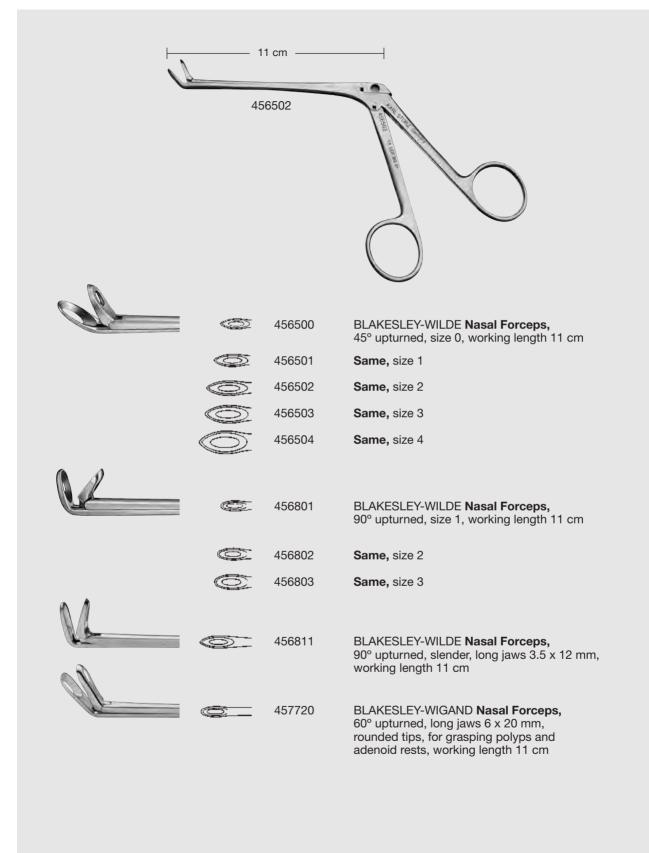


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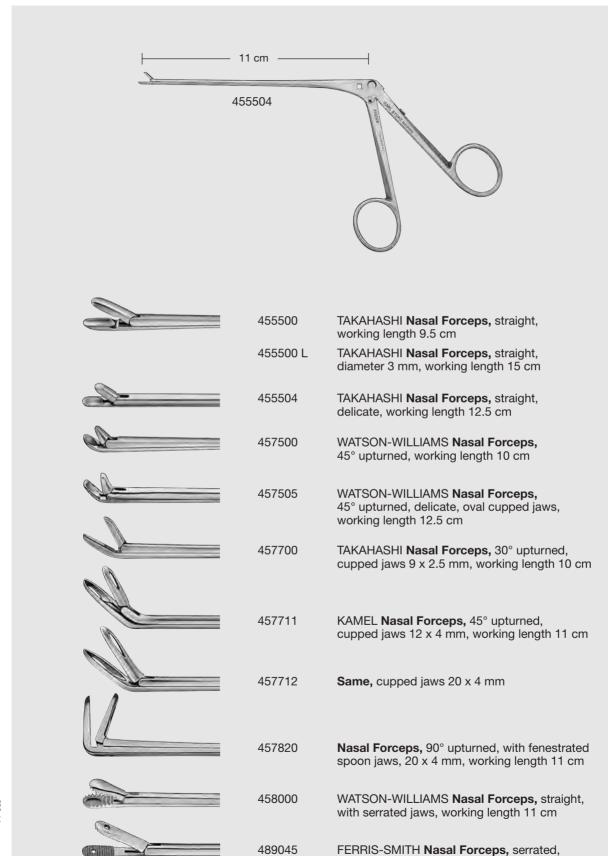
N 19 D 115

### Instruments for Rhinology and Rhinoplasty









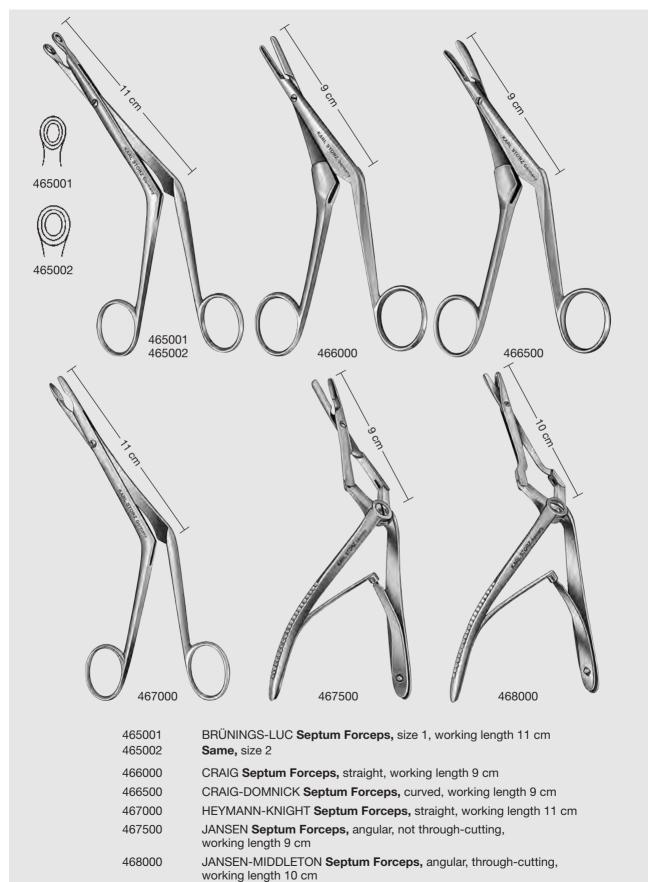
1-032

N 21 D 117

working length 11 cm

### **Instruments for Rhinology and Rhinoplasty**





## Instruments for Rhinology and Rhinoplasty





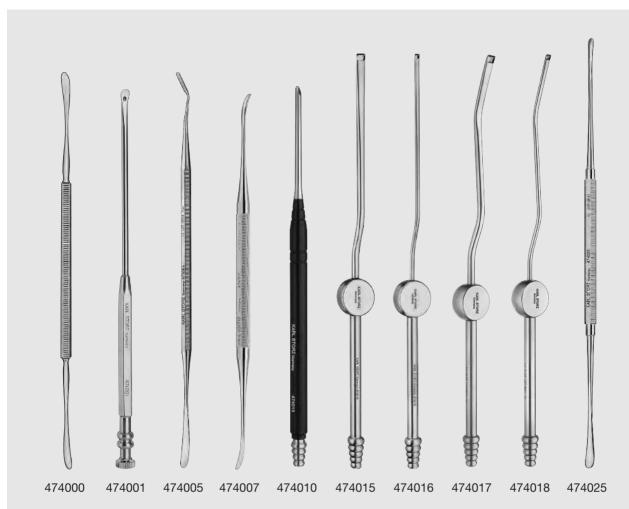
468500	BECKER-CAPLAN <b>Septum Scissors</b> , double action jaws, serrated, working length 9.5 cm
469000	KAZANJIAN Forceps, length 20 cm
469200	ROWLAND-MEYER <b>Nasal Hump Forceps,</b> double action jaws, curved blades, length 20 cm
469600	RUBIN <b>Septum Morcelizer,</b> with double joint, working length 8.5 cm

 $3-99_{2}$ 

N 23 D 119

## Instruments for Rhinology and Rhinoplasty

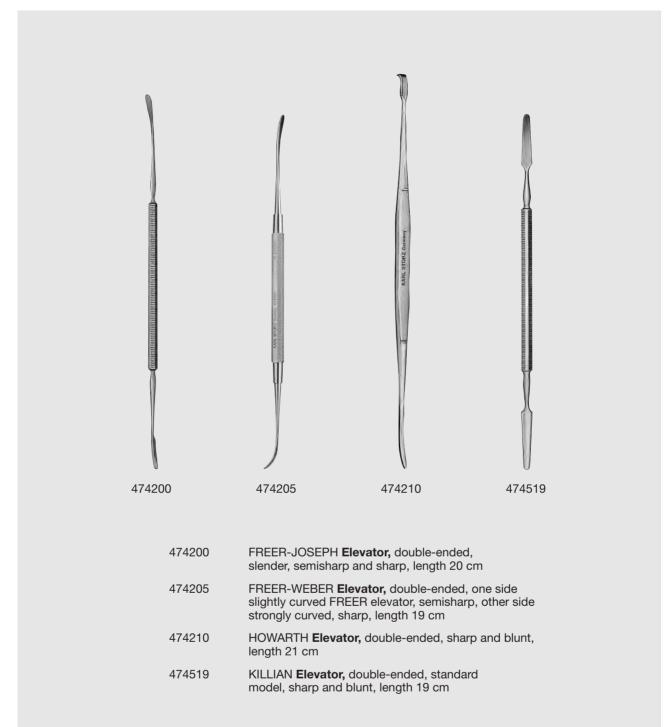




	474000	FREER <b>Elevator</b> , double-ended, semisharp and blunt, length 20 cm
	474001	FREER Suction Elevator, with stylet, length 19 cm
	474005	FREER-JACOBS <b>Elevator</b> , double-ended, semisharp, one side slightly curved FREER elevator, width 5 mm, other side JACOBS elevator, angled 45°, width 2.5 mm, length 20 cm, for infundibulotomy
	474007	FREER-YASARGIL <b>Elevator</b> , double-ended, length 18.5 cm
	474010	HARALDSSON <b>Suction Elevator,</b> with rotatable tube olive, length 19 cm
	474015	CASTELNUOVO <b>Suction Elevator,</b> flat tip, $5 \times 1.8$ mm, lateral suction opening, bayonet-shaped, with grip plate, length 21 cm
	474016	Same, flat tip 3 x 1.8 mm
NEW	474017	CASTELNUOVO <b>Suction Elevator,</b> flat tip 5 x 1.8 mm, lateral suction opening, bayonet-shaped, distal end curved, with grip plate, length 21 cm
NEW	474018	<b>Same,</b> 3 x 1.8 mm
	474025	Elevator, double-ended, both sides sharp, length 22 cm

### **Instruments for Rhinology and Rhinoplasty**



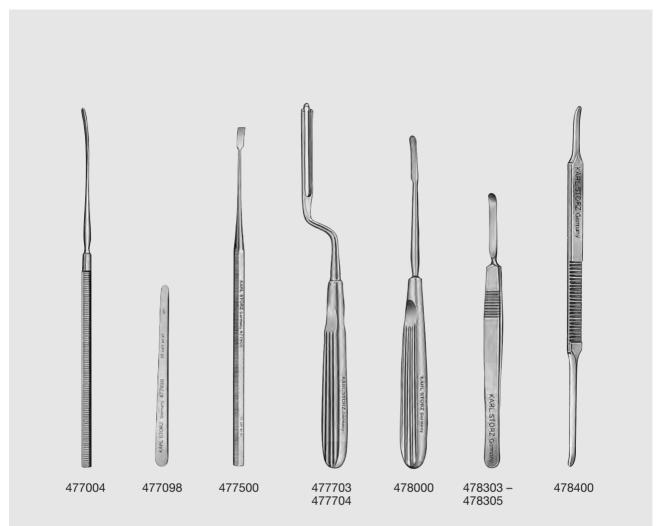


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N 25 D 121

## Instruments for Rhinology and Rhinoplasty



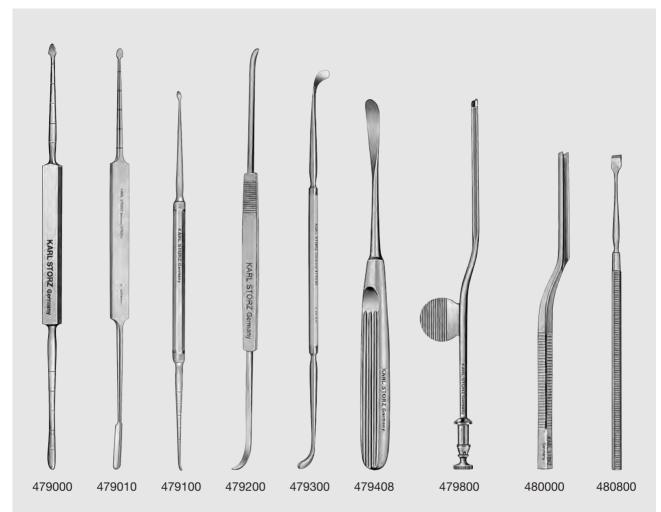


477004	HALLE <b>Elevator</b> , blunt, width 4 mm, length 19 cm
477098	<b>Ala Dilator,</b> for preparation and cutting of nostril cartilage, graduated, width $5 \times 8$ mm, length $9.5 \text{ cm}$
477500	FREER Raspatory, curved, width 4 mm, length 18 cm
477703	BALLENGER <b>Swivel Knife</b> , bayonet-shaped, width 3 mm, length 19.5 cm
477704	Same, width 4 mm
478000	JOSEPH Raspatory, slightly curved, length 17.5 cm
478303	McKENTY Raspatory, width 3 mm, length 14.5 cm
478304	Same, width 4 mm
478305	Same, width 5 mm
478400	McKENTY <b>Elevator</b> , double-ended, width 4.5 and 5 mm, length 19 cm

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## Instruments for Rhinology and Rhinoplasty





	479000	MASING <b>Elevator</b> , double-ended, graduated, sharp and blunt, length 22.5 cm
WBy	479010	FULEIHAN <b>Elevator</b> , double-ended, one end JOSEPH elevator, other end sharp, graduated, length 22.5 cm
	479100	COTTLE <b>Elevator</b> , double-ended, semisharp and blunt, graduated, length 20 cm
	479200	COTTLE Raspatory, double-ended, for tunneling, length 22.5 cm
	479300	PENNINGTON <b>Elevator</b> , double-ended, curved to the right and left, length 21 cm
	479408	COTTLE Raspatory, slightly curved, width 8 mm, length 19.5 cm
	479800	Suction Raspatory, with stylet, length 19.5 cm
	480000	KILLIAN-CLAUS <b>Septum Chisel,</b> V-shaped cutting edge, length 16.5 cm
	480800	FREER Septum Chisel, straight, length 16.5 cm

### **Instruments for Rhinology and Rhinoplasty**





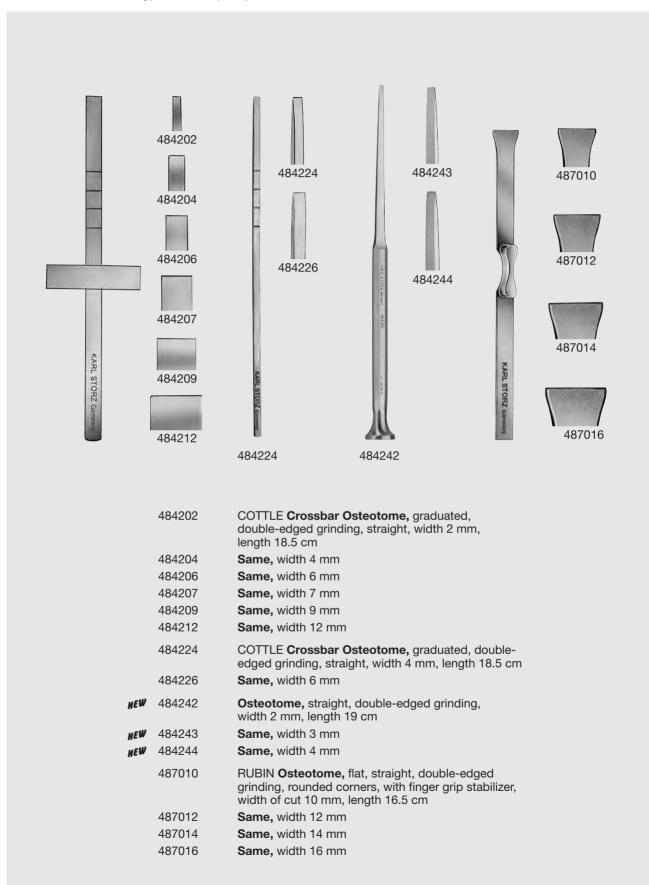
174200	COTTLE Metal Mallet, length 18 cm
174420	Metal Mallet, small model, diameter 20 mm, length 19.5 cm
174426	Metal Mallet, medium model, diameter 26 mm, length 19.5 cm
174430	Metal Mallet, large model, diameter 30 mm, length 19.5 cm
174700	Metal Mallet, with plastic replacement head, small, lightweight model, length 18 cm
174800	Metal Mallet, with plastic replacement head, length 22.5 cm
484003	COTTLE <b>Chisel,</b> flat, graduated, straight, width 3 mm, length 18.5 cm
484004	Same, width 4 mm
484006	Same, width 6 mm
484007	Same, width 7 mm
484009	Same, width 9 mm
484012	Same, width 12 mm
484106	COTTLE <b>Chisel,</b> flat, graduated, curved, width 6 mm, length 18.5 cm

Components/Spare Parts see chapter 16

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### Instruments for Rhinology and Rhinoplasty



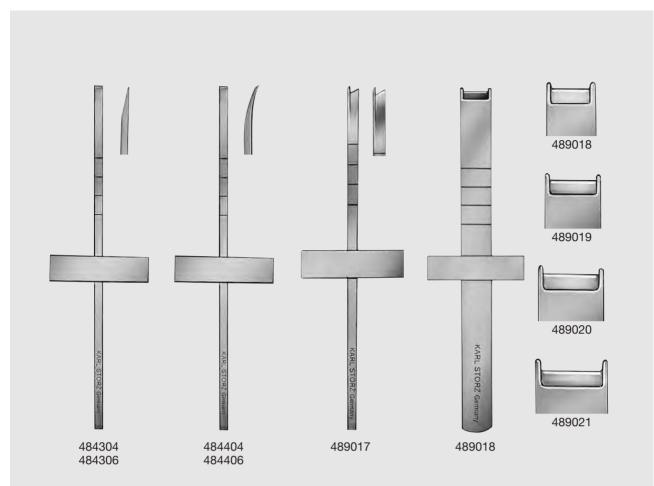


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N 29 D 125

## Instruments for Rhinology and Rhinoplasty



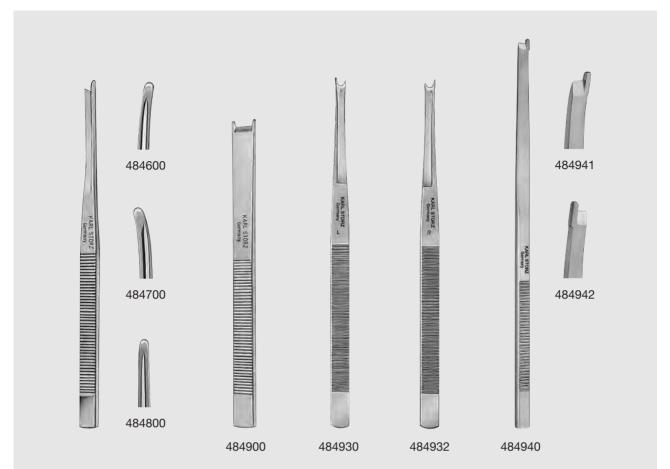


484304 484306	COTTLE <b>Crossbar Chisel,</b> graduated, single-edged grinding, straight, width 4 mm, length 18.5 cm <b>Same,</b> width 6 mm
484404	COTTLE <b>Crossbar Chisel,</b> graduated, single-edged grinding, curved, width 4 mm, length 18.5 cm
484406	Same, width 6 mm
489017	COTTLE <b>Crossbar Osteotome</b> , graduated, double-edged grinding, with guard, width 5 mm, length 18.5 cm
489018	COTTLE <b>Crossbar Osteotome,</b> graduated, double-edged grinding, double-guarded, width of cut 10 mm, length 18.5 cm
489019	Same, width of cut 12 mm
489020	Same, width of cut 14 mm
489021	Same, width of cut 16 mm

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### Instruments for Rhinology and Rhinoplasty





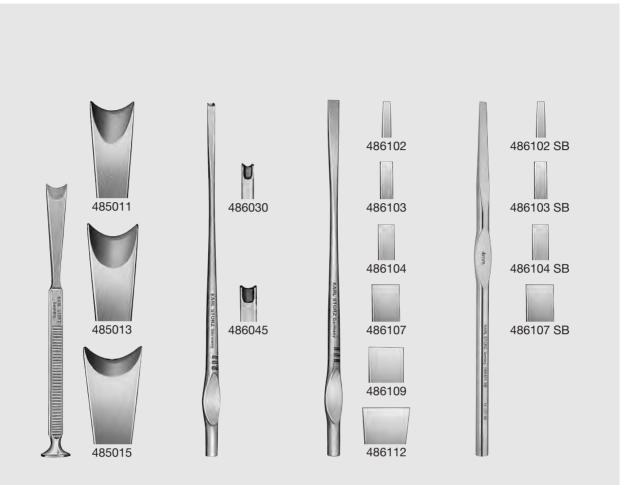
484600	MASING <b>Chisel</b> , slightly curved, with rounded guard right side, length 18 cm
484700	Same, on left
484800	Same, straight
484900	MASING <b>Chisel,</b> straight, double-guarded, width of cut 10 mm, length 16 cm
484930	GUASTELLA-EY <b>Osteotome</b> , for lateral osteotomy, with medial rounded guard to protect tissue, concave polishing to prevent slipping, graduated, slightly curved, lateral guard left, length 18 cm
484932	Same, guard right
484940	Osteotome, with small guard, straight, length 20 cm
484941	Same, right
484942	Same, left

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## Instruments for Rhinology and Rhinoplasty





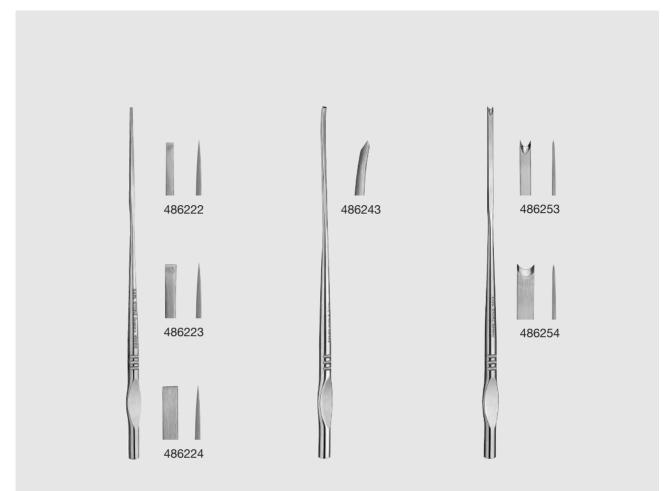
485011 485013 485015	McINDOE <b>Chisel,</b> hollow, width 11 mm, length 14.5 cm <b>Same,</b> width 13 mm <b>Same,</b> width 15 mm
486030 486045	WALTER <b>Gouge,</b> hollow, width 3 mm, length 19 cm <b>Same,</b> width 4.5 mm
486102	WALTER <b>Osteotome</b> , flat, double-edged grinding, width 2 mm, length 19 cm
486103	Same, width 3 mm
486104	Same, width 4 mm
486107	Same, width 7 mm
486109	Same, width 9 mm
486112	Same, width 12 mm
486102 SB	<b>Osteotome,</b> flat, double-edged grinding, with enlarged distal finger grip plate, width 2 mm, length 19 cm
486103 SB	Same, width 3 mm
486104 SB	Same, width 4 mm
486107 SB	Same, width 7 mm

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## Instruments for Rhinology and Rhinoplasty

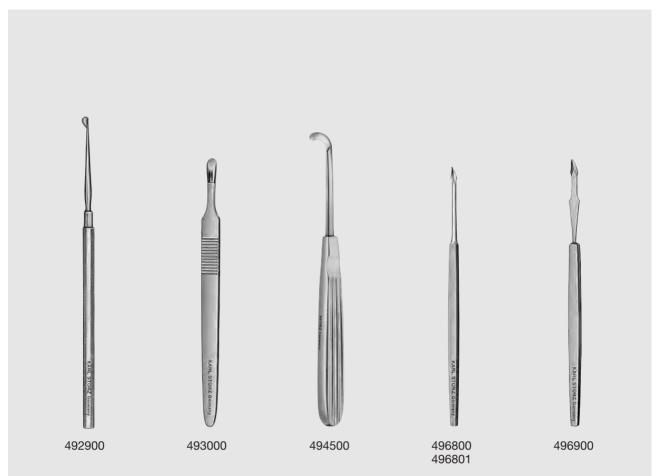




486222	BEHRBOHM-WALTER <b>Micro Osteotome</b> , extra delicate, long flat blade, double-edged grinding, with round ergonomic handle and finger grip plate, width 2 mm, length 19 cm
486223	Same, width 3 mm
486224	Same, width 4 mm
486243	BEHRBOHM-WALTER <b>Micro Osteotome</b> , curved, extra delicate, with special double cut, with round ergonomic handle and finger grip plate, width 3 mm, length 19 cm
486253	BEHRBOHM-WALTER <b>Double Concave Hollow Osteotome</b> , extra delicate, with special double-edged grinding, double-guarded, with round ergonomic handle and finger grip plate, width 3 mm, length 19 cm
486254	Same, width 4.5 mm

## Instruments for Rhinology and Rhinoplasty

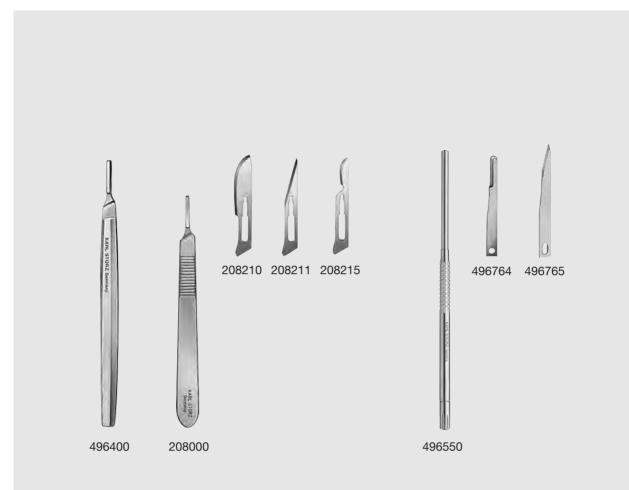




492900	FREER Nasal Knife, rounded edge, length 16.5 cm
493000	COTTLE Nasal Knife, rounded edge, length 14 cm
494500	JOSEPH <b>Knife</b> , curved, backward cutting, double beveled, length 15 cm
496800	<b>Nasal Knife,</b> curved, roundly tipped blade, width 4.5 mm, length 13.5 cm
496801	Same, straight

## Instruments for Rhinology and Rhinoplasty





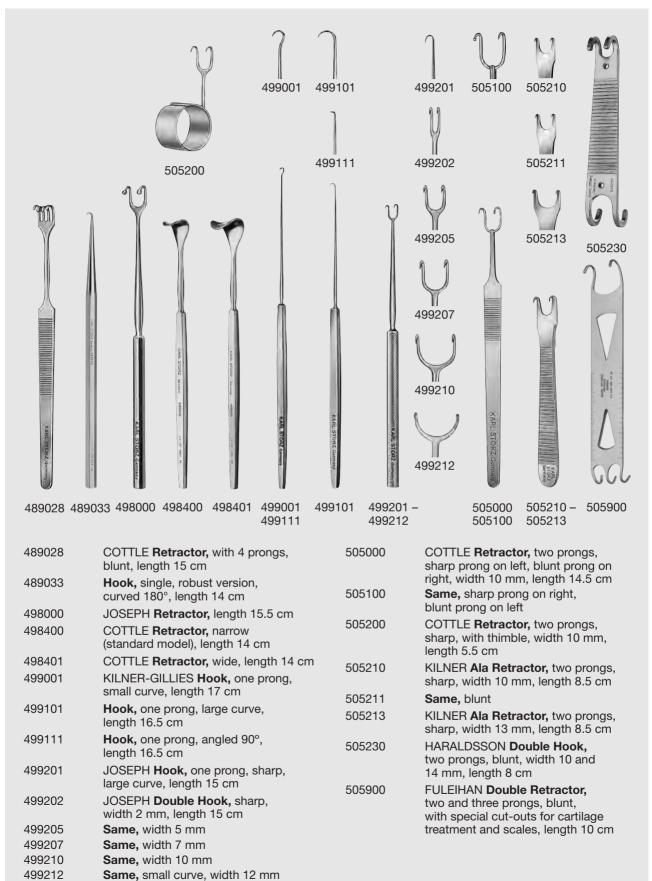
	496400	MASING <b>Surgical Handle,</b> length 14 cm, for Blades 208010 – 15, 208210 – 15
	208000	<b>Surgical Handle,</b> Fig. 3, length 12.5 cm, for Blades 208010 – 15, 208210 – 15
	208210 208211 208215	<b>Blade,</b> Fig. 10, sterile, package of 100 <b>Same,</b> Fig. 11 <b>Same,</b> Fig. 15
NEW	496550	<b>Surgical Handle,</b> for miniature blades, round, length 16.5 cm, for Blades 496764 – 65
	496764	<b>Miniature Blade,</b> Fig. 64, round, sterile, package of 25
	496765	Same, Fig. 65, pointed

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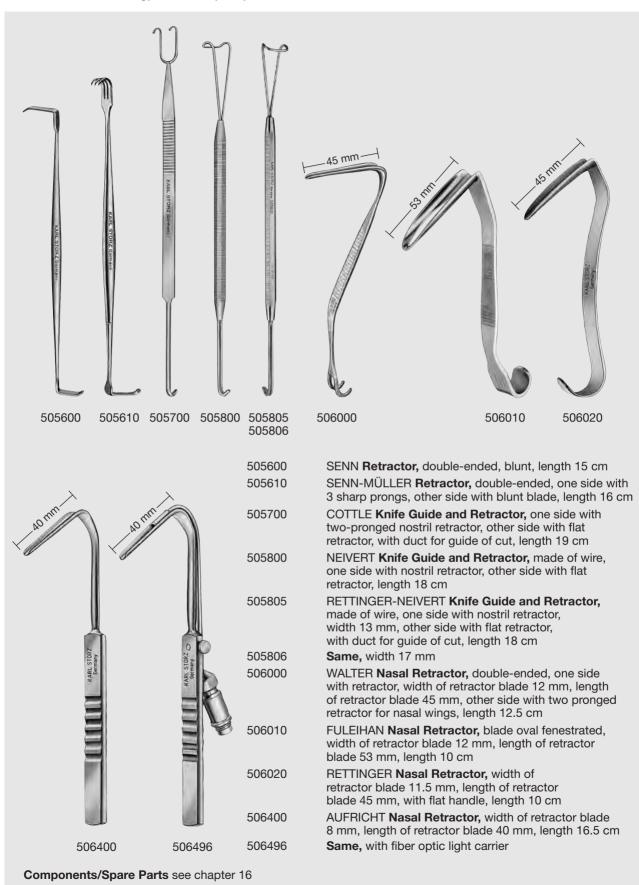
#### Instruments for Rhinology and Rhinoplasty





### Instruments for Rhinology and Rhinoplasty





6.

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### **Instruments for Rhinology and Rhinoplasty**



#### "The Diamond Standard®" Scissors

#### **Special Features:**

- Scissors with ultimate cutting quality
- Very fine-toothed upper blade prevents slipping of cut material
- Razor-sharp lower blade ensures easy and efficient cutting
- Color code: one gold-plated handle ring
- Some models are available with tungsten carbide inserts, color code: one black handle ring, one gold-plated handle ring

### Scissors with titanium nitride coating

#### **Special Features:**

- Enhanced gliding properties
- Increased tool life
- More durable surface
- Color code: copper
- Some models are available with tungsten carbide inserts

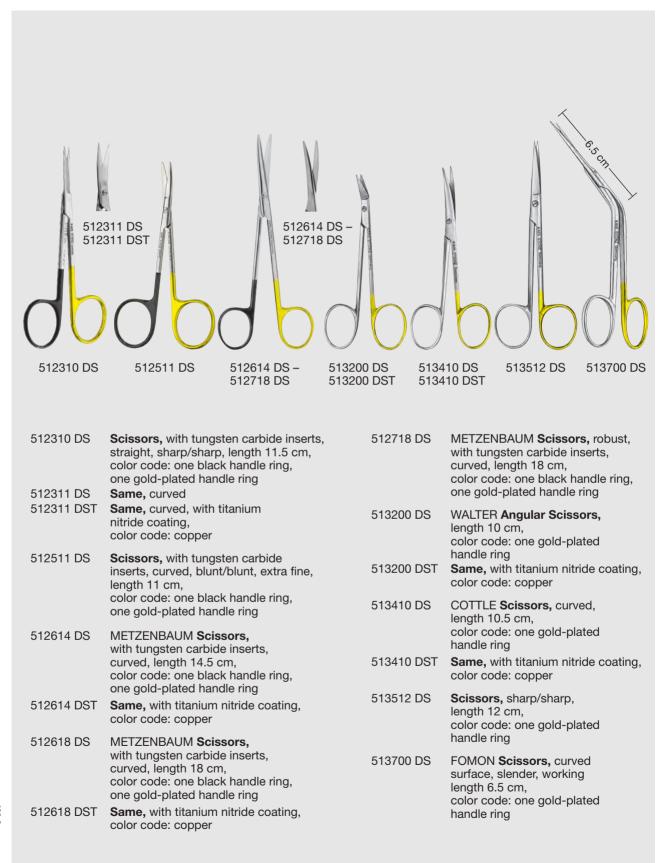
length 12.5 cm, color code: copper



449002 DS	HEYMANN <b>Nasal Scissors</b> , medium (standard model), working length 9.5 cm, color code: one gold-plated handle ring	511414 DS	JOSEPH <b>Scissors</b> , curved, length 14 cm, color code: one gold-plated handle ring
511010 DS	Scissors, extra delicate, straight, sharp/sharp, length 10.5 cm, color code: one gold-plated handle ring	511414 DST	Same, with titanium nitride coating, color code: copper
511010 DST	Same, with titanium nitride coating, color code: copper	511514 DS	METZENBAUM <b>Scissors</b> , curved, length 14.5 cm, color code: one gold-plated handle ring
511210 DS	Scissors, extra delicate, curved, sharp/sharp, length 10.5 cm, color code: one gold-plated handle ring	511514 DST	Same, with titanium nitride coating, color code: copper
511210 DST	Same, with titanium nitride coating, color code: copper	511812 DST	KILNER <b>Scissors</b> , with tungsten carbide inserts, curved, flat end, with titanium nitride coating,

### Instruments for Rhinology and Rhinoplasty

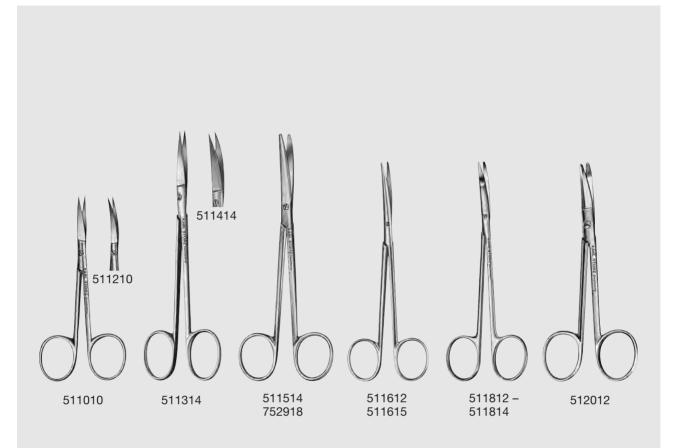




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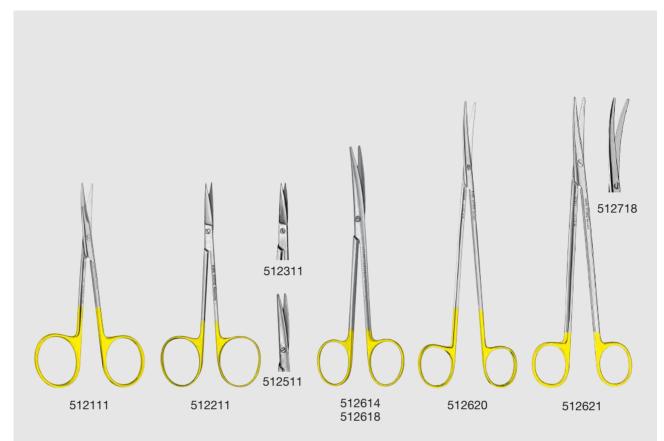




511010 511210	Scissors, extra delicate, straight, length 10 cm Same, curved
511314 511414	JOSEPH <b>Scissors</b> , straight, length 14 cm <b>Same</b> , curved
511514	METZENBAUM <b>Scissors</b> , curved, length 14 cm
752918	Same, length 18 cm
511612	METZENBAUM-LAHEY <b>Scissors</b> , curved, extra slender, length 12 cm
511615	Same, length 15 cm
511812	KILNER <b>Scissors</b> , curved, flat end, length 12.5 cm
511814	Same, length 14 cm
512012	FOMON Scissors, curved, length 12 cm

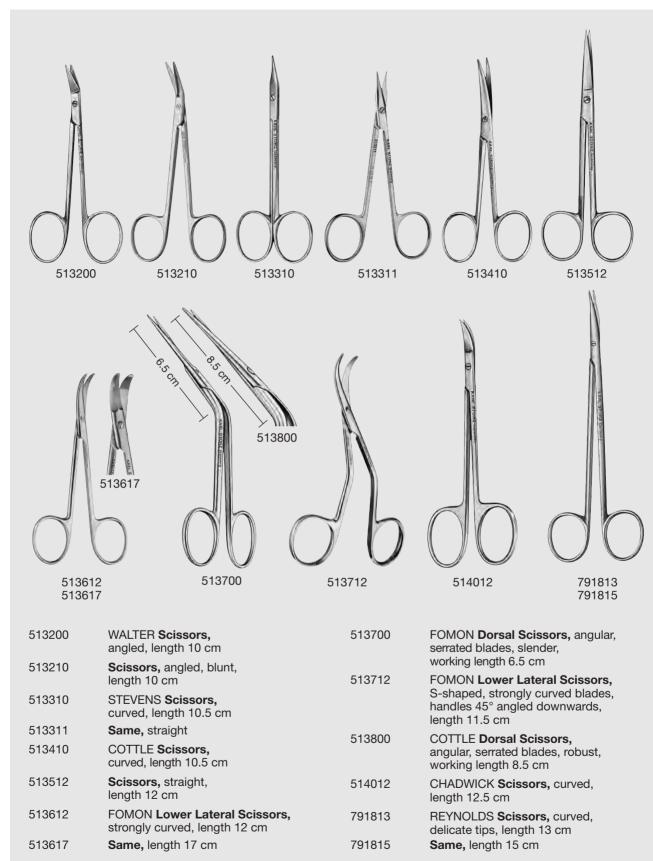
# Instruments for Rhinology and Rhinoplasty





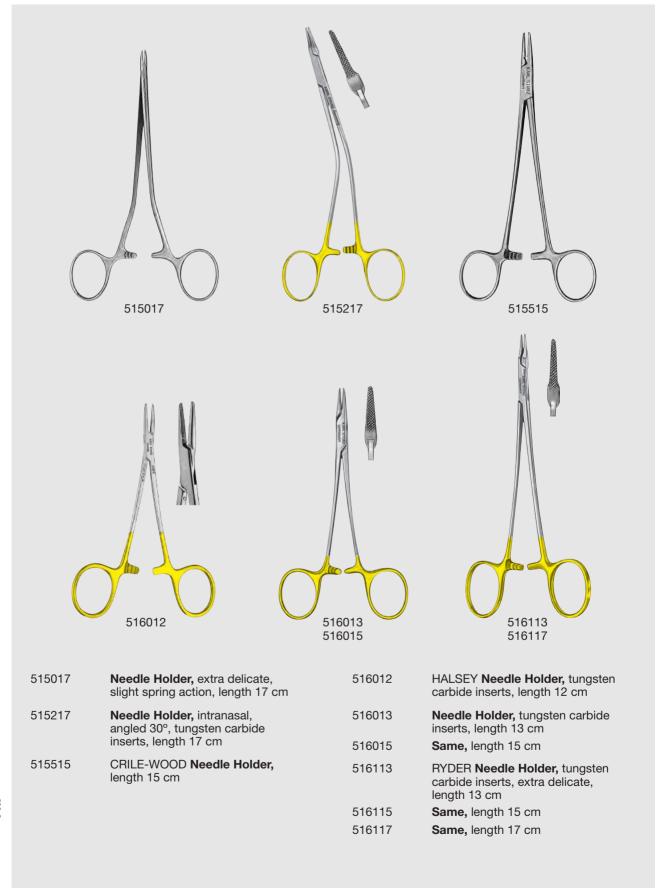
512111	<b>Scissors,</b> with tungsten carbide inserts, blunt/blunt, curved, double-edged grinding, semisharp outer edge for dissection, length 11.5 cm
512211	Scissors, with tungsten carbide inserts, straight, sharp/sharp, length 11 cm
512311	Same, curved
512511	Same, blunt/blunt, curved
512614	METZENBAUM <b>Scissors</b> , with tungsten carbide inserts, curved, length 14 cm
512618	Same, length 18 cm
512620	METZENBAUM <b>Scissors</b> , delicate, with tungsten carbide inserts, curved, length 20 cm
512621	Same, robust model
512718	METZENBAUM <b>Scissors</b> , with tungsten carbide inserts, curved, robust model, length 18 cm





#### **Instruments for Rhinology and Rhinoplasty**

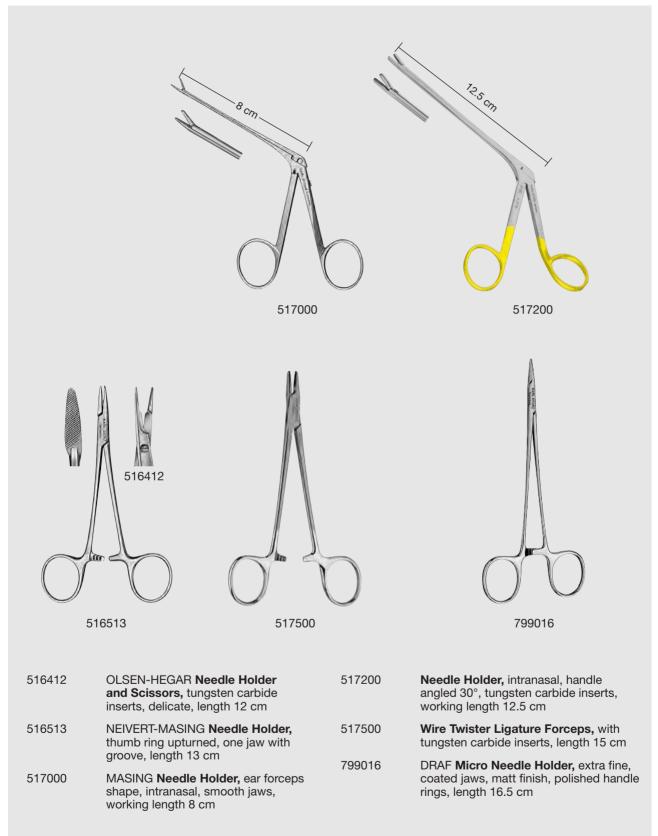




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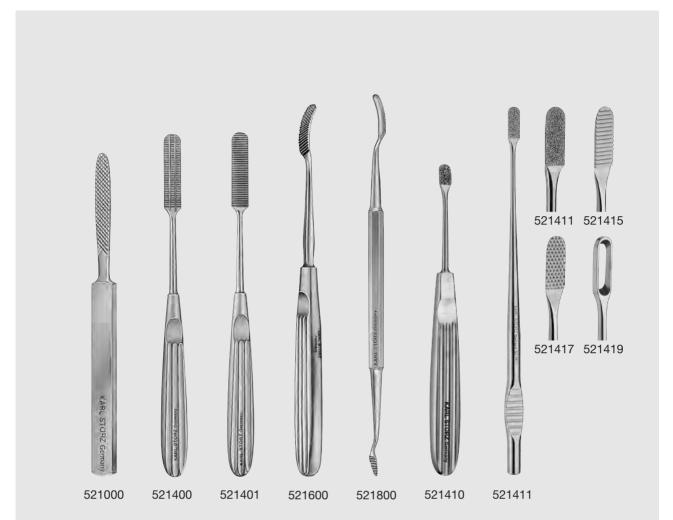
N 43 B 139

# STORZ - ENDOSKOPE



# Instruments for Rhinology and Rhinoplasty





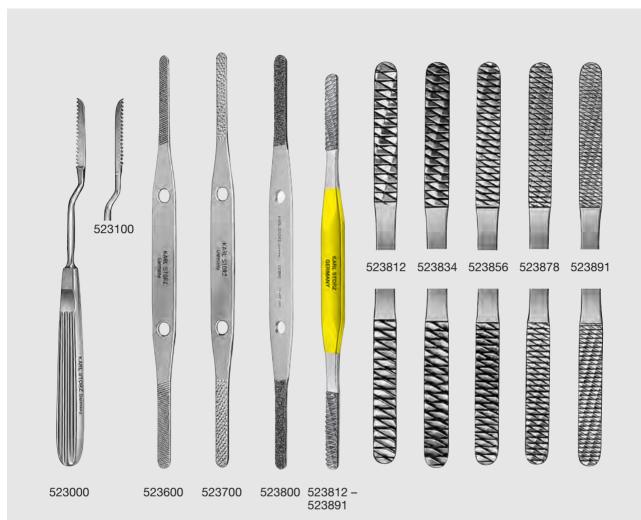
521000	JOSEPH Nasal Rasp, length 17 cm
521400	MALTZ <b>Nasal Rasp,</b> coarse teeth, cuts with traction, with two grooves, length 18.5 cm
521401	Same, without grooves
521600	AUFRICHT <b>Glabella Rasp,</b> curved, cuts with pressure and traction, length 20 cm
521800	<b>Glabella Rasp,</b> double-ended, cuts with traction, length 20.5 cm
521410	RAUNIG <b>Rasp,</b> diamond coated, rasp blade 6 x 10 mm, length 16.5 cm
521411	BEHRBOHM <b>Rasp,</b> diamond coated, rasp blade 6 x 15 mm, length 18 cm
521415	BEHRBOHM <b>Rasp</b> , coarse teeth, cuts with traction, rasp blade 6 x 15 mm, length 18 cm
521417	BEHRBOHM <b>Rasp,</b> crosscut, cuts with traction, rasp blade 6 x 15 mm, length 18 cm
521419	BEHRBOHM Curette, 6 x 15 mm, length 18 cm

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N 45 B 141

# Instruments for Rhinology and Rhinoplasty





	523000 523100	JOSEPH <b>Nasal Saw</b> , crosswise toothed, bayonet-shaped, right, length 18.5 cm <b>Same</b> , left	
	523600 523700	Nasal Rasp, double-ended, fine, length 21.5 cm Same, coarse (rasp)	
RAUNIG <b>Nasal Rasp</b> , double-ended, with diamond coating, length 21.5 cm			
	523812	Nasal Rasp, tungsten carbide, double-ended, rasp blades Fig. 1 and 2, coarse, length 20.5 cm	
	523834	Same, rasp blades Fig. 3 and 4, coarse and medium	
	523856	Same, rasp blades Fig. 5 and 6, medium	
	523878	Same, rasp blades Fig. 7 and 8, medium and fine	
	523891	Same, rasp blades Fig. 9 and 10, fine	

# Instruments for Rhinology and Rhinoplasty







	523900	COTTLE <b>Bone Crusher</b> , with clip, crusher size 5 x 1.5 cm
<b>Bone Crusher,</b> large model, with clip, crusher size 5 x 3 cm		, , , , , , , , , , , , , , , , , , , ,
	523910	TOLSDORFF <b>Bone and Cartilage Crusher,</b> round, to press pieces of bone up to 4 cm diameter evenly extended in all directions
	523920	RETTINGER-TOLSDORFF <b>Same</b> , with coarse surface
	523913	<b>Metal Tray,</b> for preparing cartilage and bone, with hole for towel forceps, size 10 x 15 cm
	524110	<b>Nasal Splint,</b> DENVER model, aluminium, padded, with self-adhesive underside, small, size 56 x 30 mm, package of 10
	524210	Same, medium, size 64 x 36 mm
	524310	Same, large, size 66 x 45 mm
	524302	<b>Nasal Splint</b> , aluminium, padded, with self-adhesive underside, large, with forehead extension, size 83 x 77 mm, package of 5

Components/Spare Parts see chapter 16

# SCHMÄL CARTCUT® Cartilage Cutter



#### **Special Features:**

- For reconstructive rhinoplasty with costal cartilage implantation
- Lowers the surgeon's risk of injury while harvesting the core of the cartilage
- Even cutting of cartilage implants at 1 or 2 mm thickness
- Maximum time-savings due to easy preparation of the costal cartilage



523950

523950

SCHMÄL CARTCUT® Cartilage Cutter,

for preparation of cartilage pieces

including:

**Holding Device** 

**Cleaning Adaptor** 

Holding-down Clamp

Knife, 1 mm

Knife, 2 mm



Fig. 1: The harvested costal cartilage is placed in the CARTCUT® cartilage cutter ...



Fig. 2: ... and fixated with the "holding-down clamp" handle.



Fig. 3: The "knife" handle is placed in the appropriate holder ...





Figs. 4 and 5: ... and the cartilage is carved by pressing down the "knife" handle.

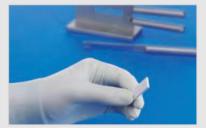


Fig. 6: The resulting cartilage.

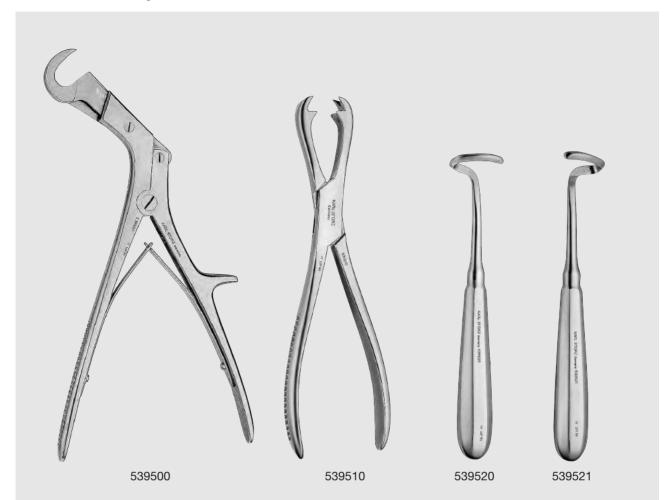
Components/Spare Parts see chapter 16

For optimal storage and processing Tray 39502 ZH and Silicon Mat 39100 SH are recommended. Further accessories for cleaning and sterilization see catalog HYGIENE

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#### **Instruments for Cartilage Removal**





539500 GIERTZ-STILLE Rib Shears, length 25 cm

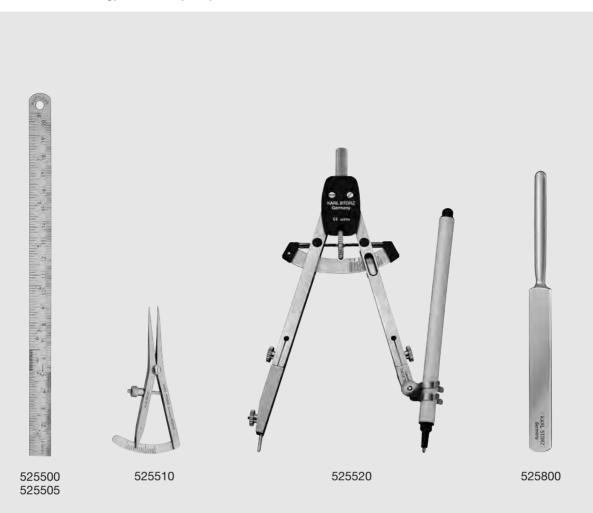
539510 FERGUSON Bone Holding Forceps, width 12 mm,

length 20.5 cm

DOYEN **Raspatory,** for adults, curved to right, length 16.5 cm 539520

539521 Same, curved to left

# STORZ ENDOSKOPE



525500 **Rule,** stainless steel, flexible, length 20 cm 525505 **Same,** length 30 cm

525510 CASTROVIEJO **Skin Measurement Caliper,** measurement range 0 – 15 mm, length 8 cm

525520 BEHRBOHM **Caliper,** for plastic surgery, otoplasty, rhinoplasty, reconstructive and aesthetic surgery, with wheel to set and hold the span, as well as a scale for reading the opening interval, measurement range from 5 – 130 mm, caliper arms have 2 removable attachments with atraumatic measurement points 525523 and 1 holder 525525 for disposable skin

marker, autoclavable, length 18.5 cm

525800 **Elevator,** robust model, for the repositioning

of nasal fractures, length 17 cm

#### Instruments for Rhinology and Rhinoplasty



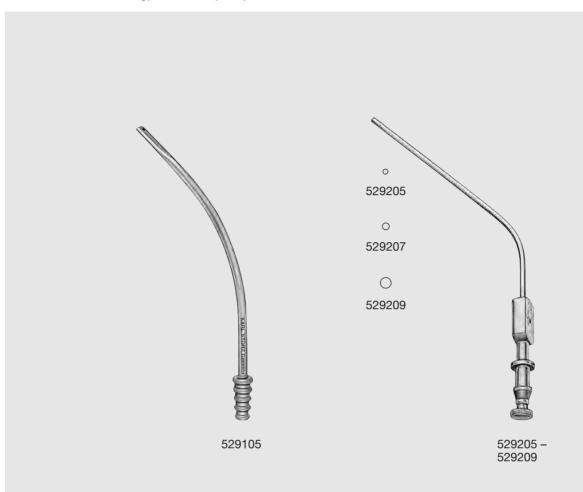


WALSHAM **Septum Straightening Forceps,** dismantling, length 21 cm 528800

ASCH **Septum Straightening Forceps,** angular, length 22 cm 528860

# Instruments for Rhinology and Rhinoplasty



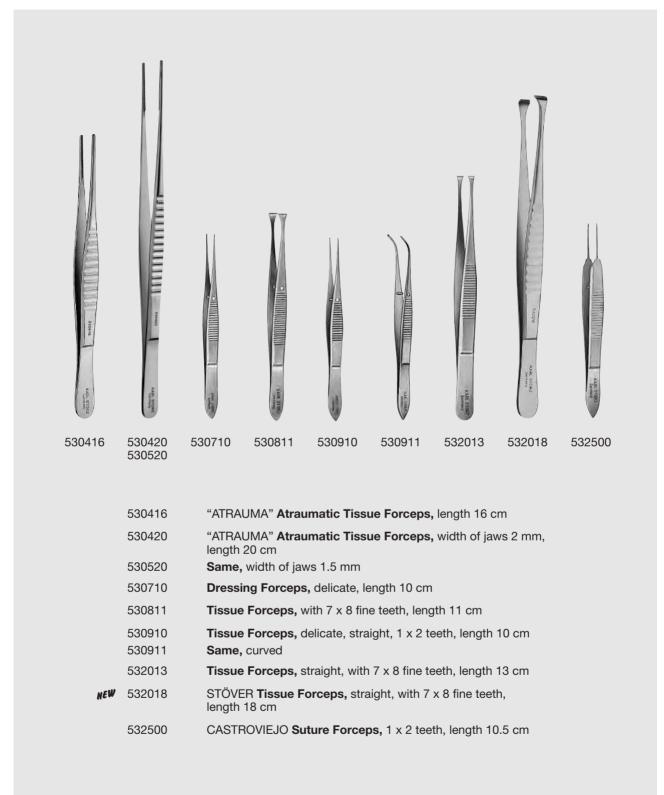


529105	Suction Tube, curved, outer diameter 5 mm, length 16.5 cm
529205	FRAZIER <b>Suction Tube,</b> with cut-off hole and stylet, angled, outer diameter 5 Fr./1.5 mm, working length 10 cm, total length 17.5 cm
529207	Same, outer diameter 7 Fr./2 mm

529207 **Same,** outer diameter 7 Fr./2 mm 529209 **Same,** outer diameter 9 Fr./3 mm

#### **Instruments for Rhinology and Rhinoplasty**





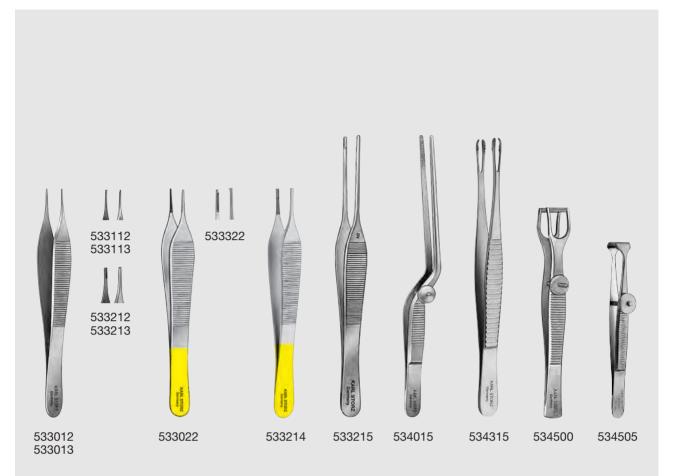
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N 53 149

#### Instruments for Rhinology and Rhinoplasty

533012





533013	Same, micro-model
533022	ADSON Dressing Forceps, serrated, tungsten carbide inserts, length 12 cm
533112 533113	ADSON <b>Tissue Forceps</b> , 1 x 2 teeth, length 12 cm <b>Same</b> , micro-model
533212 533213	ADSON-BROWN <b>Tissue Forceps</b> , atraumatic, fine side grasping teeth, length 12 cm <b>Same</b> , micro-model
533214	ADSON-BROWN <b>Tissue Forceps,</b> atraumatic, fine side grasping teeth, tungsten carbide inserts, width 1.5 mm, length 12 cm
533215	GLANZ <b>Forceps,</b> atraumatic, fine side grasping teeth, with extra long tips for better view and work in the depth, length 15 cm
533322	ADSON <b>Tissue Forceps</b> , serrated, 1 x 2 teeth, tungsten carbide inserts, length 12 cm
534015	COTTLE <b>Lower Lateral Forceps,</b> bayonet-shaped, with set screw, serrated tips and teeth on the inside, length 15 cm
534315	FULEIHAN <b>Forceps,</b> with teeth and open window, width 5 mm, length 15 cm
534500	COTTLE Columella Clamp, length 11 cm
534505	Columella Clamp, for children, width 7.5 mm, length 8.5 cm

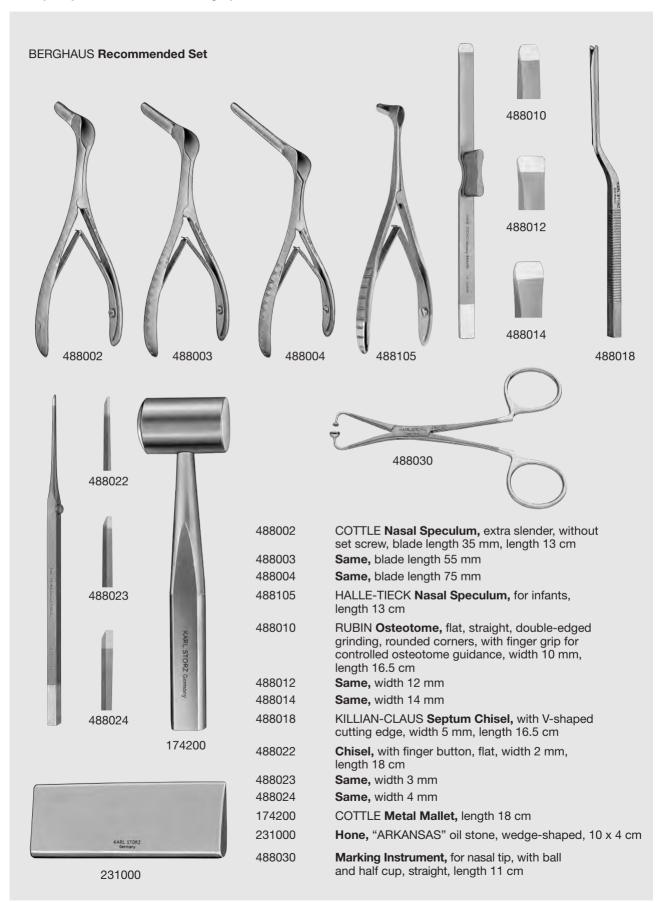
ADSON Dressing Forceps, serrated, length 12 cm

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#### Rhinoplasty - Aesthetic-Plastic Surgery of the Nose

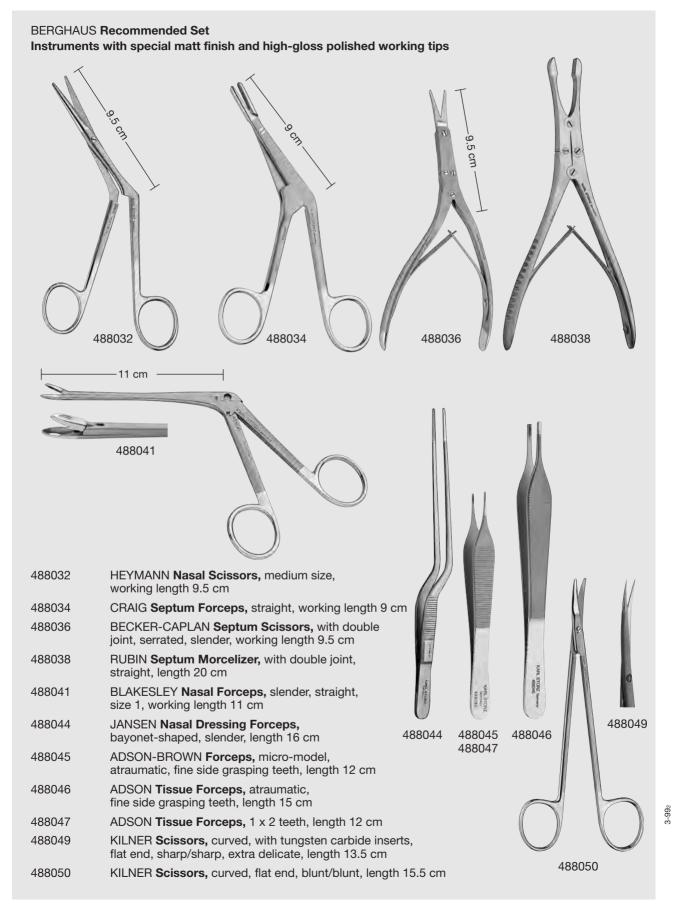




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N 55 A 151





Rhinoplasty - Aesthetic-Plastic Surgery of the Nose



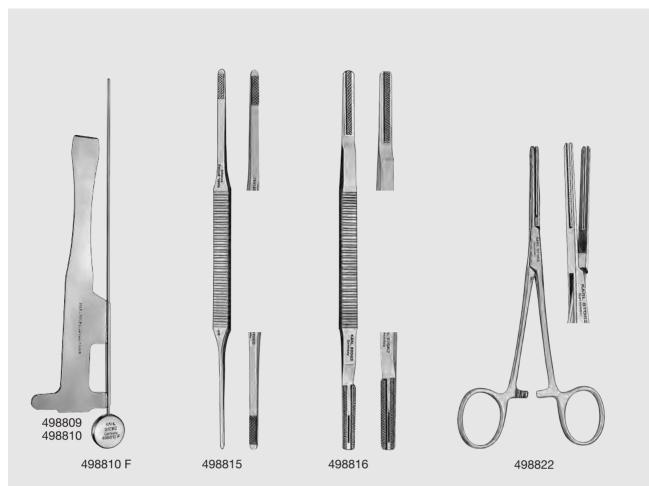


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N 57 A 153

#### **Instruments for Rhinoplasty**







498820



AIACH Osteotome for Hump Removal, 498809 with lateral guiding rod, width 10 mm Same, width 13 mm 498810 Guide Rod, for 498809 and 498810, only 498810 F 498815 AIACH Narrow Rasp, double-ended, medium, width 5 and 3 mm, length 20 cm 498816 AIACH Tenon Mortise Rasp, double-ended, medium, one side with augmented teeth, other side slotted without teeth, length 20 cm 498820 AIACH Grid, for preparation of cartilage, graduated, size 90 x 50 mm 498822 AIACH Cartilage Graft Forceps, for grasping and preparation of cartilage,

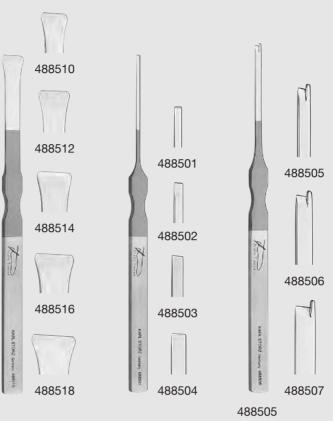
with slotted jaws, length 15 cm

498824 AIACH Cartilage Crusher, crusher size 5 x 1.5 cm

#### **Instruments for Rhinoplasty**



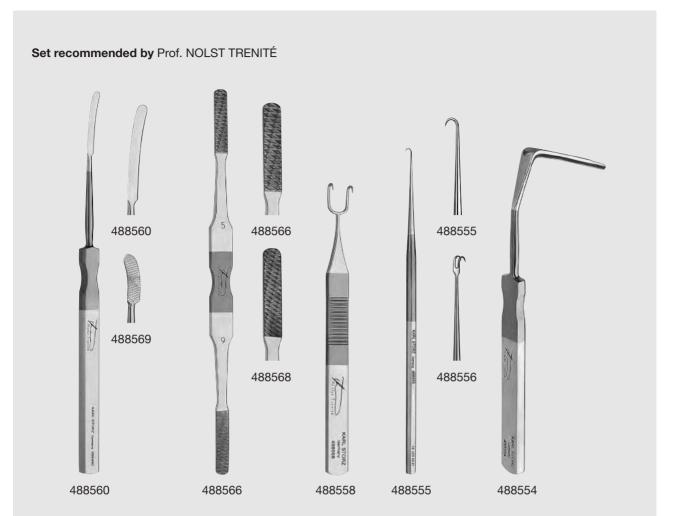
# Set recommended by Prof. NOLST TRENITÉ



488510	Osteotome, straight, double-edged grinding, rounded corners, with recessed grip, width of cut 10 mm, length 18 cm
488512	Same, width of cut 12 mm
488514	Same, width of cut 14 mm
488516	Same, width of cut 16 mm
488518	Same, width of cut 18 mm
488501	<b>Micro Osteotome,</b> straight, double-edged grinding, width 2 mm, length 18 cm
488502	Same, width 2.5 mm
488503	Same, width 3 mm
488504	Same, width 4 mm
488505	Micro Osteotome, straight, with rounded guard, width 2.2 mm, length 18 cm
488506	Same, width 3 mm
488507	Same. width 4 mm

#### **Instruments for Rhinoplasty**

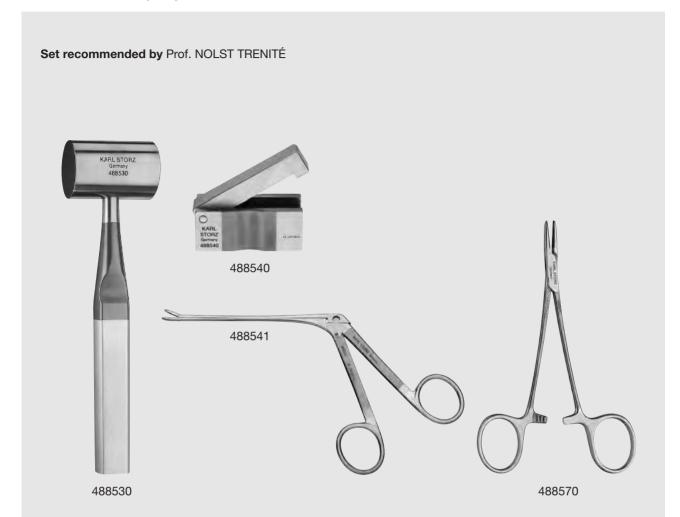




488560	JOSEPH Raspatory, length 20 cm
488569	Glabella Rasp, curved, push-pull cut, length 20 cm
488566	Bone Rasp, tungsten carbide, double-ended, rasp blades fig. 5 and 6, medium, length 21 cm
488568	Bone Rasp, tungsten carbide, double-ended, rasp blades fig. 7 and 8, medium and fine, length 21 cm
488558	Hook, two prongs, sharp, width 10 mm, length 12 cm
488555	Hook, one prong, sharp, length 15 cm
488556	Hook, two prongs, sharp, length 15 cm
488554	AUFRICHT <b>Nasal Retractor,</b> width of retractor blade 8.5 mm, length of retractor blade 45 mm, length 15 cm

# **Instruments for Rhinoplasty**



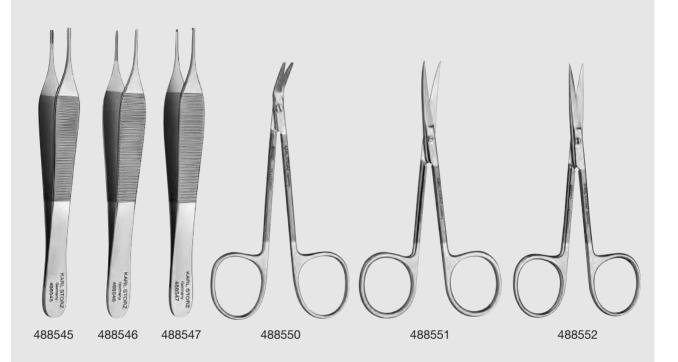


488530	COTTLE Metal Mallet, length 18 cm
488540	COTTLE <b>Bone Crusher,</b> with clip, crusher size 5 x 1.5 cm
488541	BLAKESLEY <b>Nasal Forceps,</b> straight, size 1, working length 11 cm
488570	Needle Holder, tungsten carbide inserts, length 13 cm

#### **Instruments for Rhinoplasty**



#### Set recommended by Prof. NOLST TRENITÉ





ADSON-BROWN Forceps, atraumatic, fine side grasping teeth, length 12 cm

ADSON Forceps, serrated, length 12 cm

ADSON Forceps, 1 x 2 teeth, length 12 cm

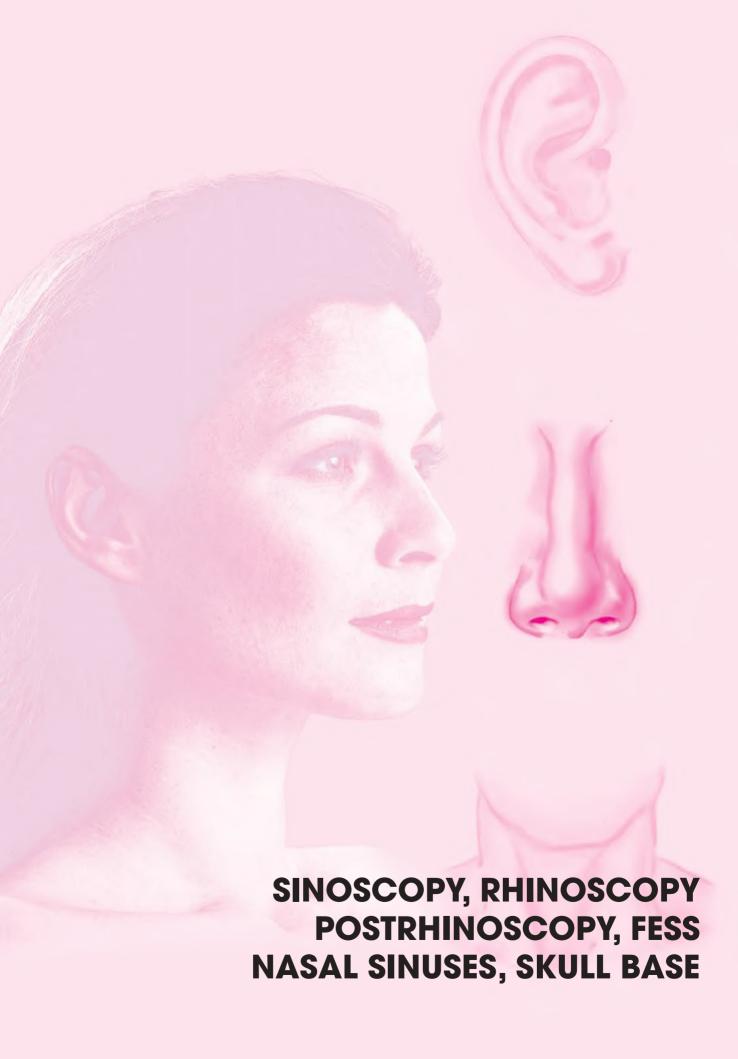
ADSON Forceps, 1 x 2 teeth, length 12 cm

WALTER Angular Scissors, length 10 cm

Scissors, extra delicate, curved, length 10 cm

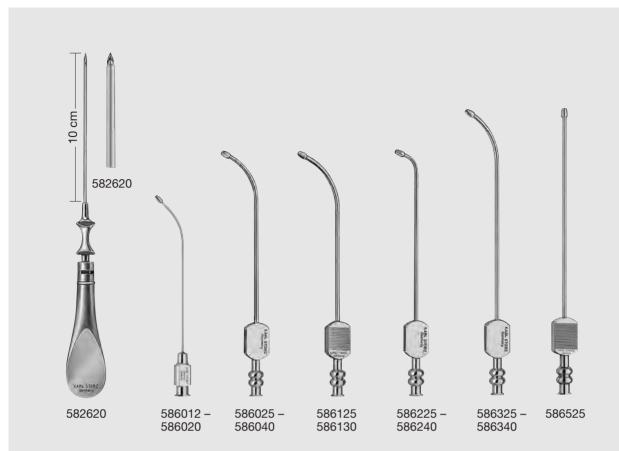
Scissors, extra delicate, straight, length 10 cm

KILNER Scissors, curved, flat end, length 14 cm



#### **Nasal Sinuses**





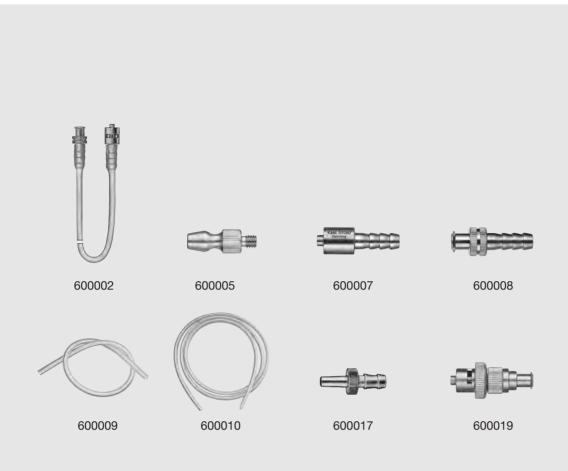
582620	LICHTWITZ <b>Antrum Trocar,</b> LUER-Lock, with lateral holes, outer diameter 2 mm, working length 10 cm	586225	v. EICKEN <b>Antrum Cannula</b> , LUER-Lock, short curved, outer diameter 2.5 mm, length 12.5 cm
586012	Antrum Cannula, LUER-Lock, long	586230	Same, outer diameter 3 mm
000012	curved, with olive, without grip plate,	586240	Same, outer diameter 4 mm
586015	outer diameter 1.2 mm, length 9 cm  Same, with olive diameter 2.7 mm, outer diameter 1.5 mm	586325	v. EICKEN <b>Antrum Cannula</b> , LUER-Lock, long curved, outer diameter 2.5 mm, length 15 cm
586020	Same, outer diameter 2 mm	586330	Same, outer diameter 3 mm
586025	v. EICKEN Antrum Cannula,	586340	Same, outer diameter 4 mm
586030 586040	LUER-Lock, long curved, outer diameter 2.5 mm, length 12.5 cm Same, outer diameter 3 mm Same, outer diameter 4 mm	586525	Antrum Cannula, LUER-Lock, straight, malleable, with serrated grip plate, outer diameter 2.5 mm working length 15 cm
586125	v. EICKEN <b>Antrum Cannula</b> , LUER-Lock, long curved, malleable, serrated grip plate, outer diameter 2.5 mm, length 12.5 cm		
586130	Same, outer diameter 3 mm		

3-994

SI 3 C US 161

#### Nasal Sinuses - Accessories



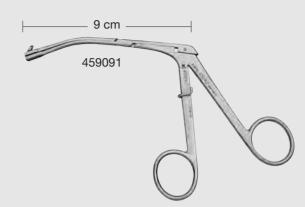


600002	Irrigation Tube, silicone, autoclavable, both ends with LUER-Lock 600007 and 600008, length 30 cm
600005	Record Outer Cone
600007	<b>LUER-Lock Tube Connector,</b> male, tube diameter 6 mm
600008	<b>LUER-Lock Tube Connector,</b> female, tube diameter 6 mm
600009	Silicone Irrigation Tube, only, length 30 cm
600010	Silicone Tube, autoclavable, outer diameter 5 mm, 1 m coil
600017	LUER Cone, male
600019	LUER Cone Connector, male, rotating

#### **Nasal Sinuses**



#### Punches, working length 9 cm





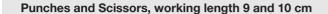
OSTRUM **Pediatric Punch**, for resection of uncinate process, upside backward cutting, sheath slightly curved downwards, small size, bite 2.3 x 4 mm, working length 9 cm

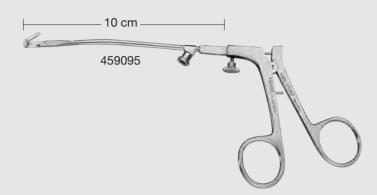


OSTRUM **Pediatric Punch,** for resection of uncinate process, upside backward cutting, sheath slightly curved downwards, large size, bite  $3.5 \times 4.5$  mm, working length 9 cm

OSTRUM **Pediatric Punch**, for resection of uncinate process, upside backward cutting, sheath slightly curved upwards, large size, bite 3.5 x 4.5 mm, working length 9 cm









LASKAWI **Scissors**, for endonasal decompression of the orbita, backward cutting, sheath 360° rotating, with set screw, sheath slightly curved, with cleaning connector, working length 10 cm



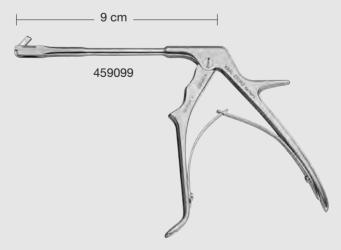
OSTRUM **Antrum Punch**, backward cutting, sheath 360° rotating, with set screw, sheath slightly curved downwards, with cleaning connector, working length 10 cm



OSTRUM-WORMALD **Antrum Punch**, backward cutting, extra slender jaws, sheath 360° rotating, with set screw, sheath slightly curved downwards, with cleaning connector, working length 10 cm



OSTRUM **Punch**, Pediatric, for resection of the uncinate process, backward cutting, sheath 360° rotating, with set screw, sheath slightly curved downwards, small size, bite 2.3 x 4 mm, with cleaning connector, working length 9 cm



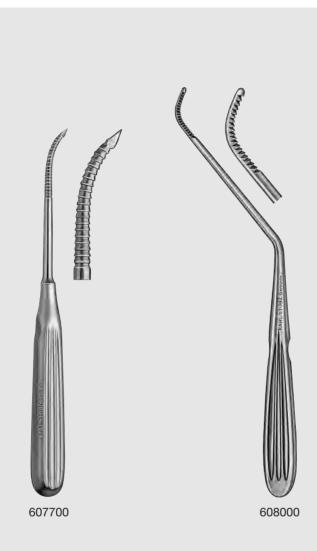
459099

OSTRUM **Antrum Punch,** upside backward cutting, strong model, straight, spring-action handle with horn, working length 9 cm

# Nose **Nasal Sinuses**



165



WIENER **Antrum Rasp,** with trocar tip, length 19.5 cm 607700

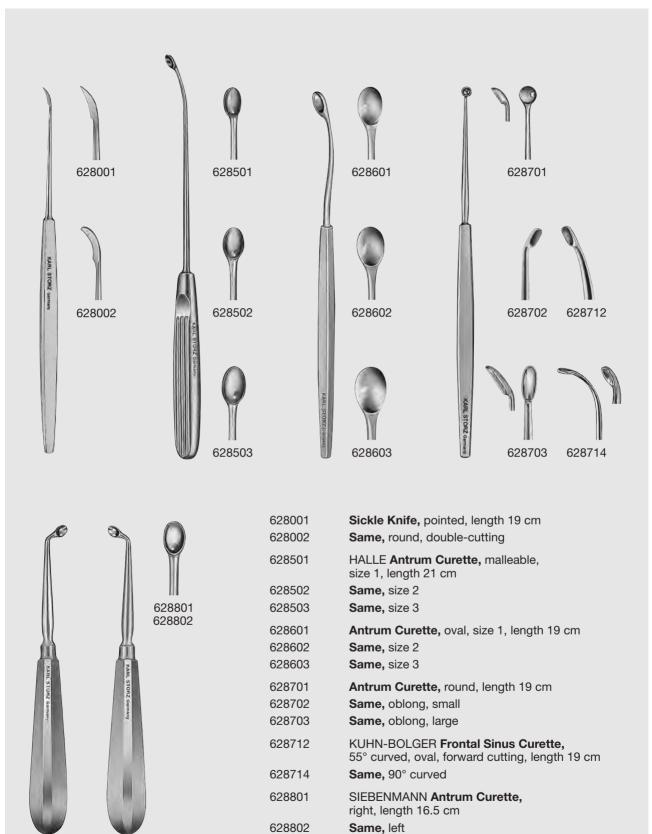
WATSON-WILLIAMS **Antrum Rasp,** blunt, length 23 cm 608000

628801

628802

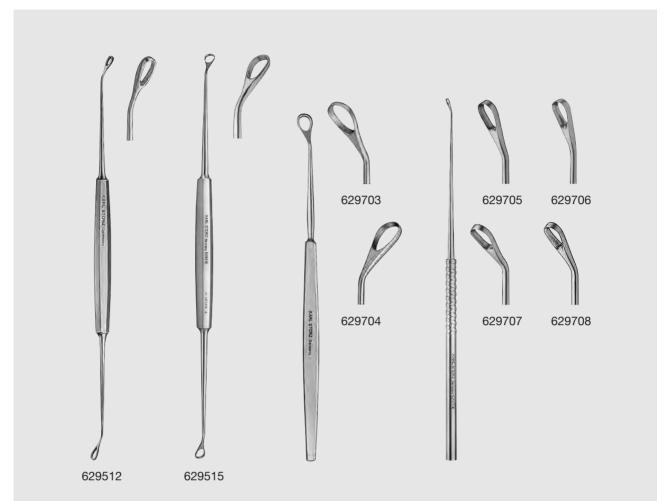
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery



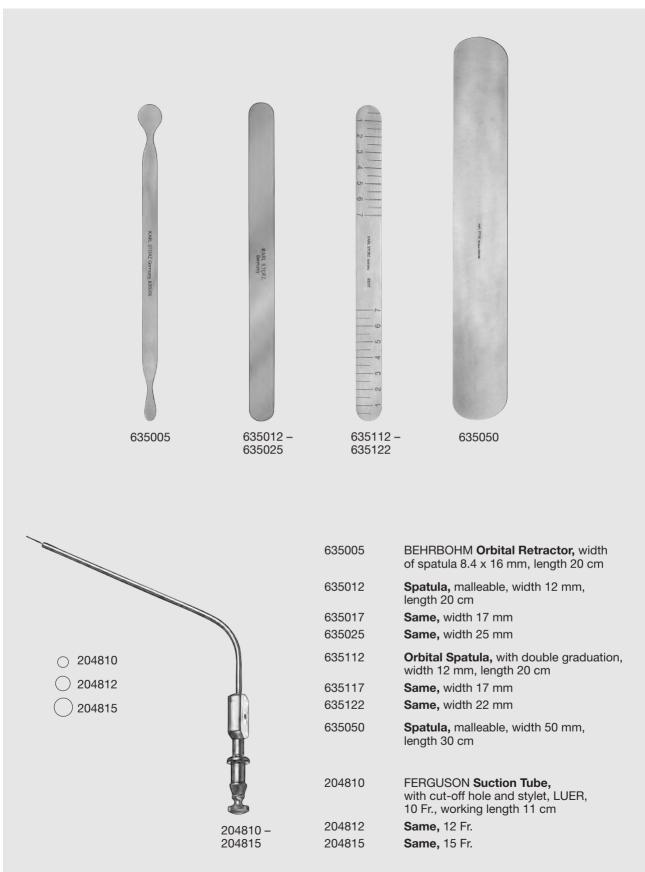


629512	length 24.5 cm
629515	<b>Same,</b> 35° and 65°
629703	Antrum Curette, forward cutting, small, length 19 cm
629704	Same, backward cutting
629705	<b>Curette,</b> forward cutting, angled 20°, large, working length 22 cm
629706	Same, small, working length 20 cm
629707	<b>Curette,</b> forward cutting, angled 45°, large, working length 22 cm
629708	Same, small, working length 20 cm

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SI 9 F US 167

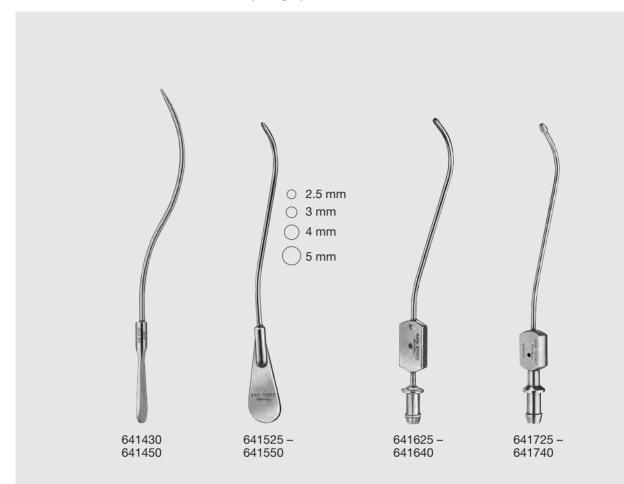




Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery

641430





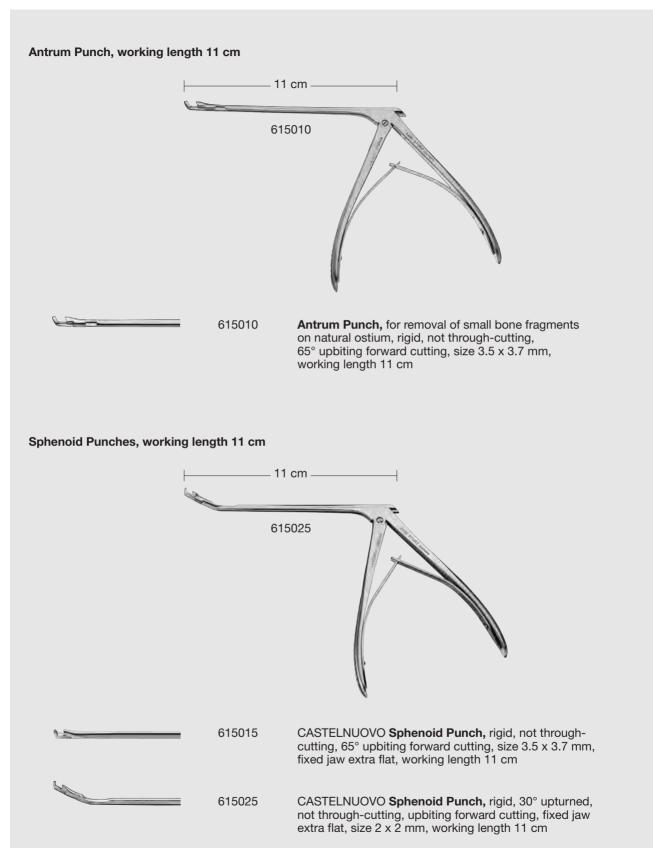
641450	size 2, outer diameter 3 mm, length 16.5 cm  Same, size 4, outer diameter 5 mm
641525	RITTER <b>Frontal Sinus Bougie,</b> size 1, outer diameter 2.5 mm, length 14.5 cm
641530	Same, size 2, outer diameter 3 mm
641540	Same, size 3, outer diameter 4 mm
641550	Same, size 4, outer diameter 5 mm
641625	<b>Suction Tube,</b> for frontal sinus, with cut-off hole, LUER, outer diameter 2.5 mm, length 14.5 cm
641630	Same, outer diameter 3 mm
641640	Same, outer diameter 4 mm
641725	PASQUINI <b>Suction Tube,</b> for frontal sinus, with olive end and cut-off-hole, LUER, outer diameter 2.5 mm, length 14.5 cm
641730	Same, outer diameter 3 mm
641740	Same, outer diameter 4 mm

BEHRBOHM Frontal Sinus Bougie, S-shaped curve,

3-99,

SI 11 F US 169

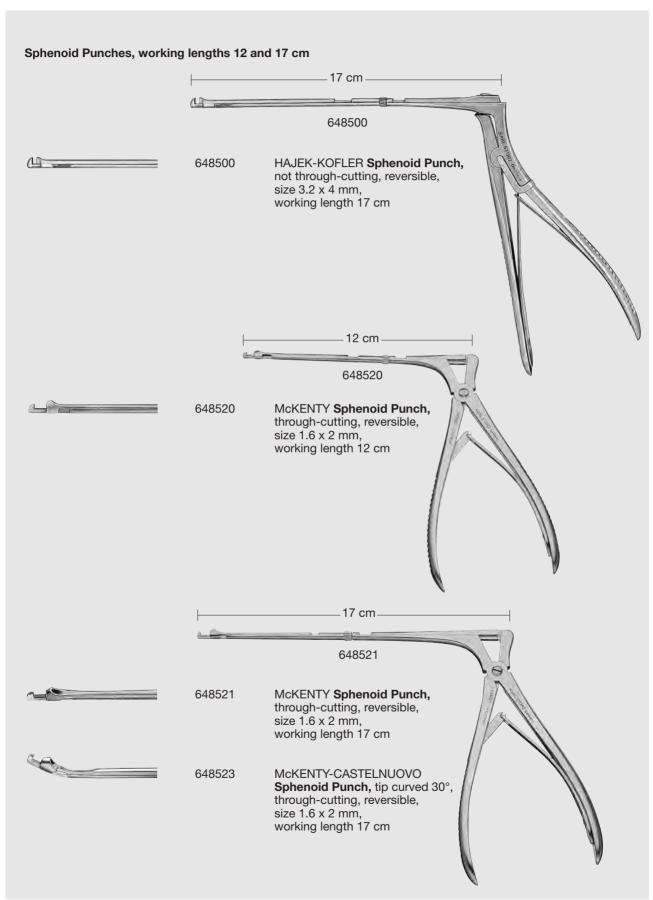




170 SI 12 F US

Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





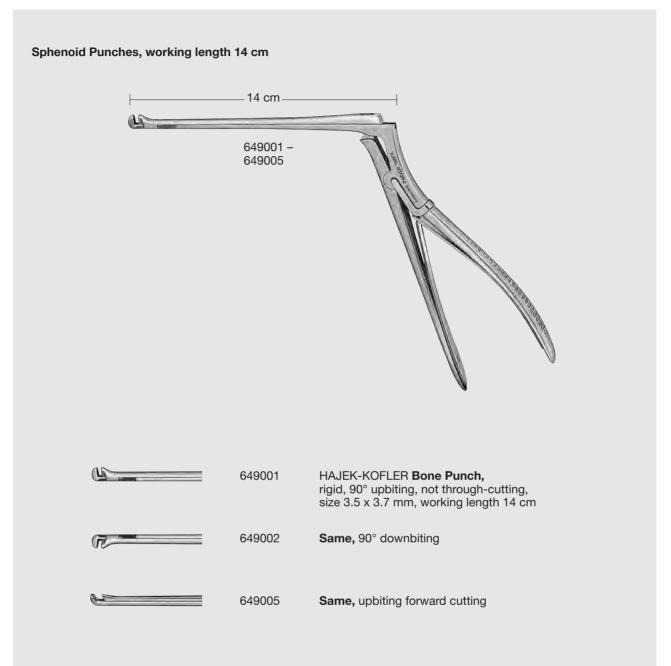
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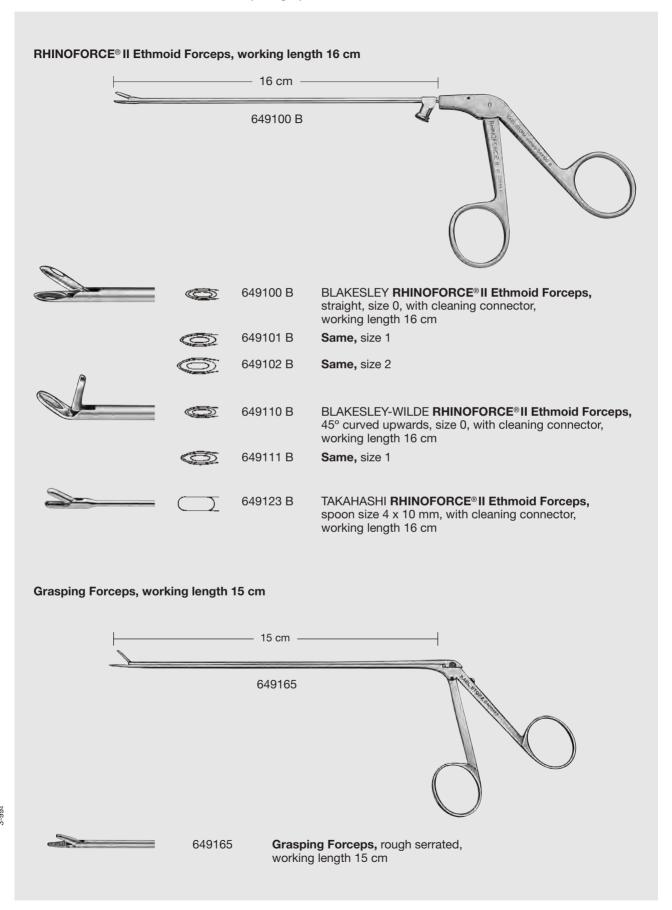
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





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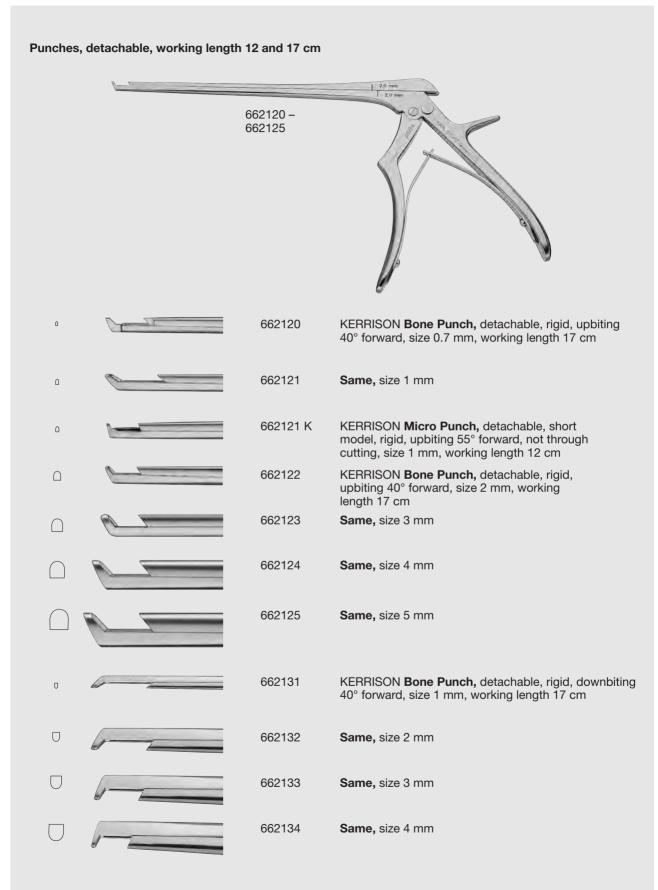
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery



## Bone Punches, detachable, working length 12 and 17 cm 662100 -662105 662100 KERRISON Bone Punch, detachable, rigid, 90° upbiting, not through-cutting, size 0.5 mm, working length 17 cm 662101 Same, size 1 mm Δ 662101 K KERRISON Micro Punch, detachable, short ۵ model, rigid, 90° upbiting, not through-cutting, size 1 mm, working length 12 cm 662102 KERRISON Bone Punch, detachable, rigid, 90° upbiting, not through-cutting, size 2 mm, working length 17 cm 662103 Same, size 3 mm 662104 Same, size 4 mm 662105 Same, size 5 mm KERRISON Bone Punch, detachable, 662111 U rigid, 90° downbiting, not through-cutting, size 1 mm, working length 17 cm $\Box$ 662112 Same, size 2 mm 662113 Same, size 3 mm 662114 Same, size 4 mm

Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery



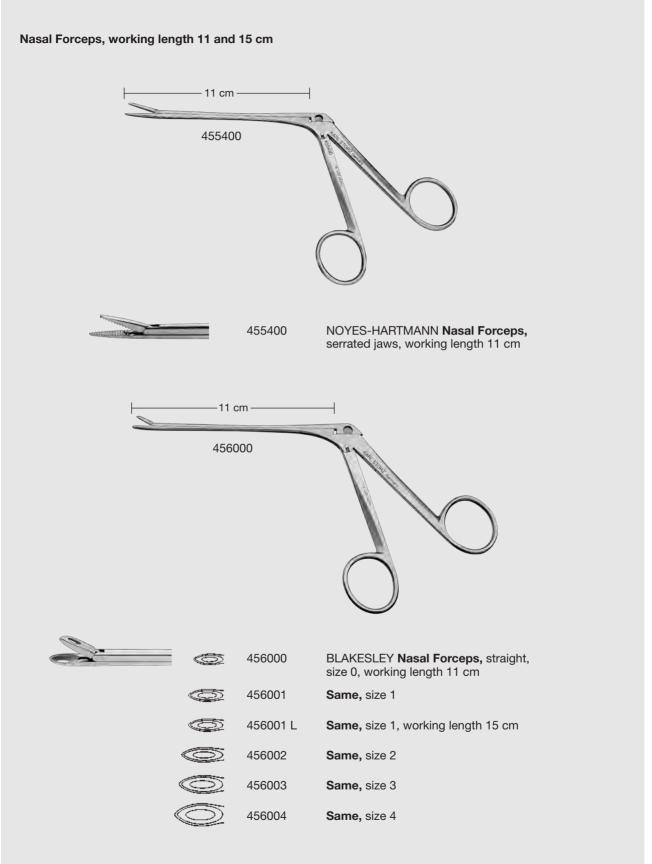


4-03

SI 17 G US 175

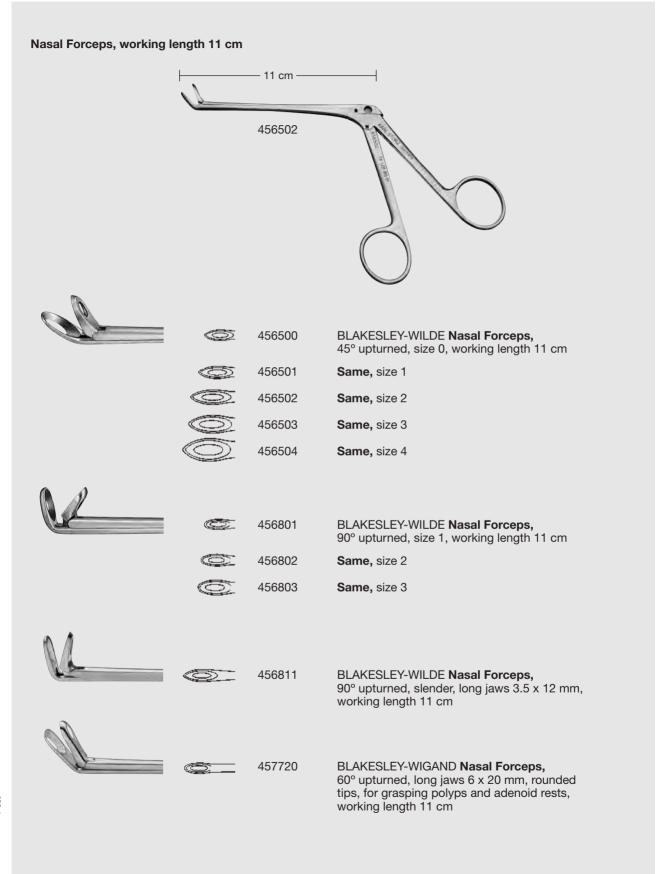
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery



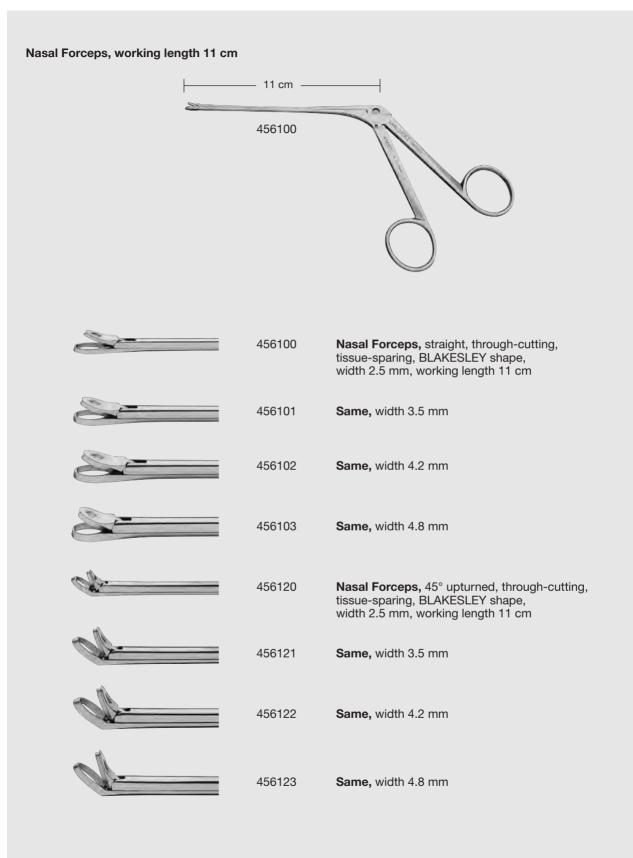


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SI 19 A US 177

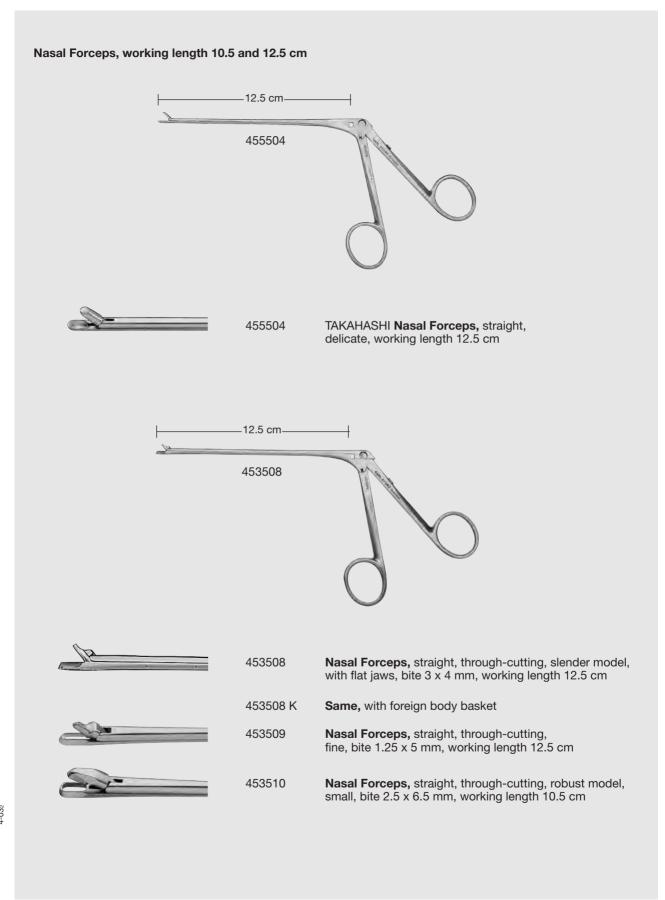
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery

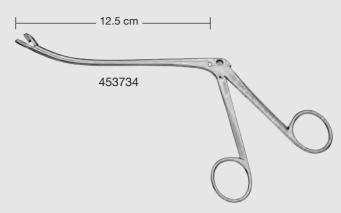




SI 21 B US 179



### Nasal Forceps, working length 10.5 and 12.5 cm



	453710	Nasal Cutting Forceps, 45° upturned, through-cutting, slender model, with flat jaws, bite 3 x 4 mm, working length 12.5 cm
	453721	<b>Nasal Forceps,</b> 45° upturned, through-cutting, fine, bite 1.5 x 4 mm, working length 12.5 cm
<b>1</b> -	453722	<b>Nasal Forceps,</b> 45° upturned, through- cutting, robust model, small, bite 2.5 x 6.5 mm, working length 10.5 cm
	453723	Nasal Forceps, 45° upturned, through- cutting, robust model, medium, bite 2.75 x 6 mm, working length 10.5 cm
	453724	Nasal Forceps, 45° upturned, through- cutting, robust model, large, bite 3 x 8 mm, working length 10.5 cm
	453733	Nasal Forceps, through-cutting, fine, shaft end slightly curved upwards, bite 1.5 x 4.5 mm, working length 12.5 cm

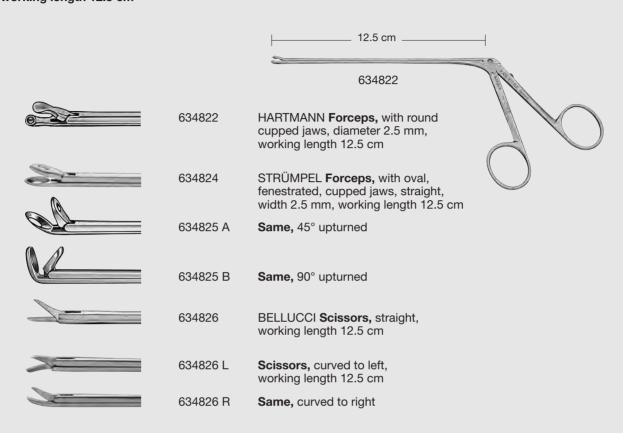
453734

Nasal Forceps, through-cutting, robust model, shaft end slightly curved upwards, working length 12.5 cm

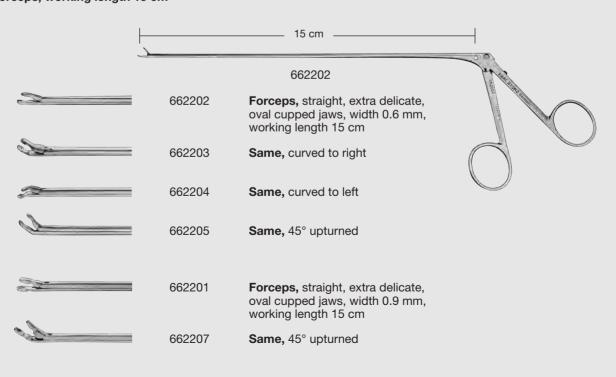
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery



Delicate forceps and scissors – particularly suitable for children and postoperative treatment, working length 12.5 cm



#### Forceps, working length 15 cm

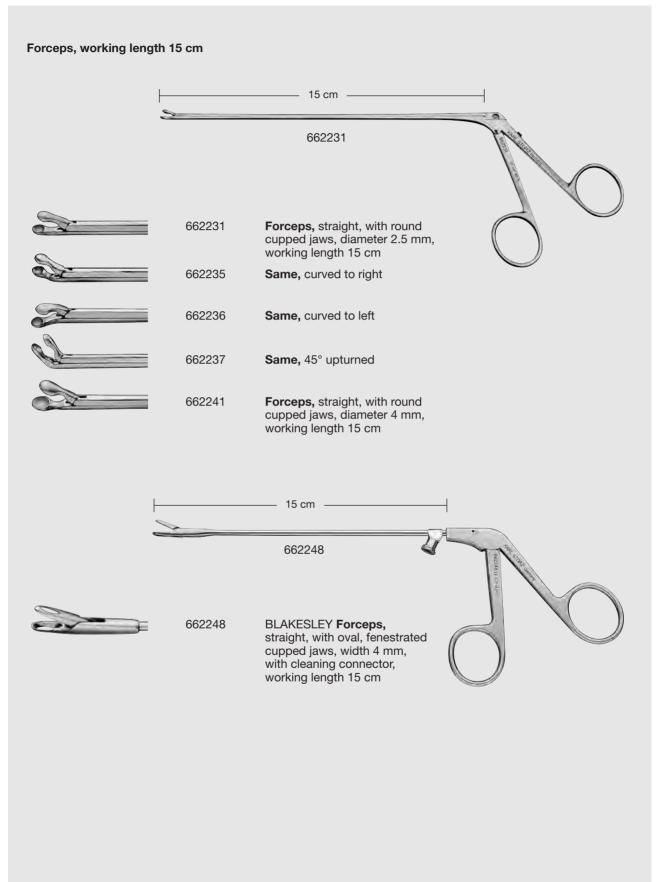


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SI 23 B US 181

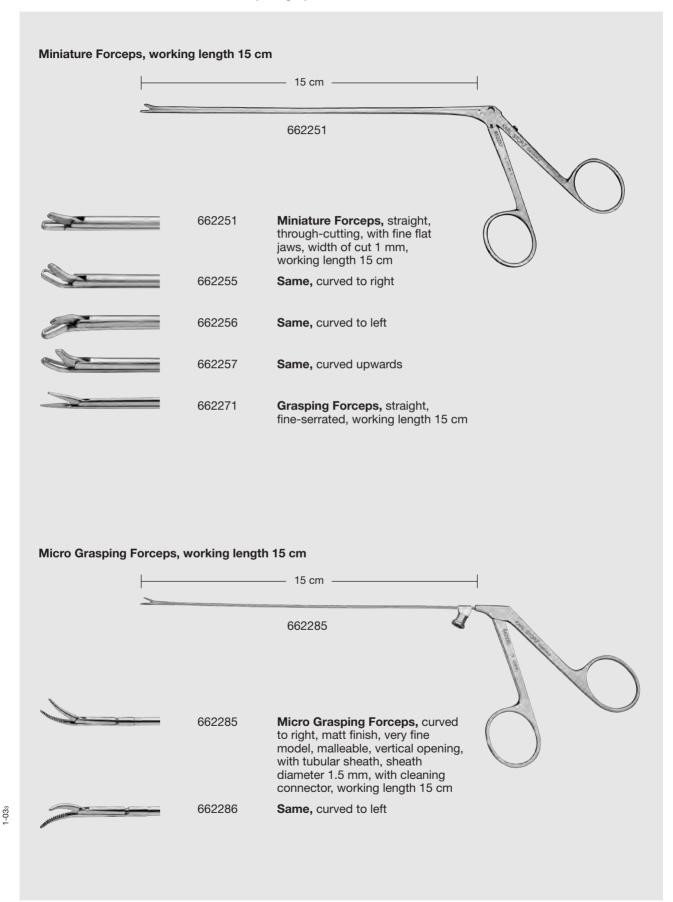
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery

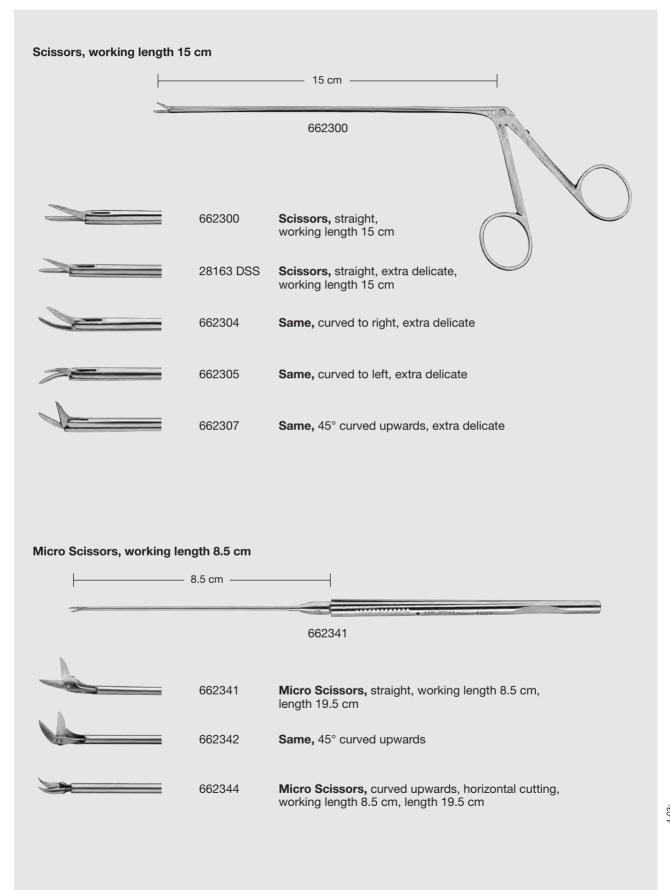




SI 25 B 183

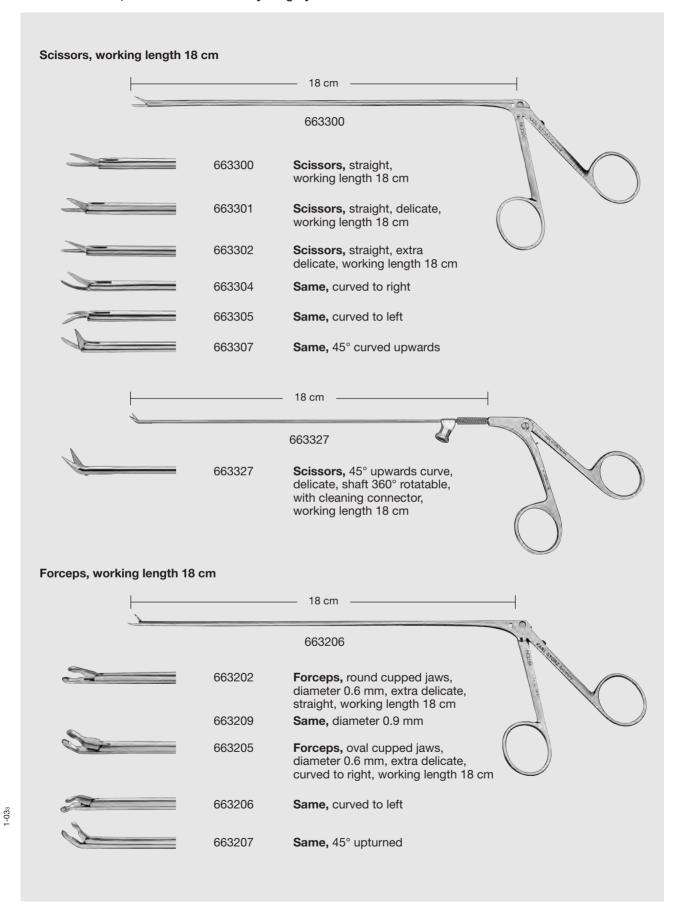
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery

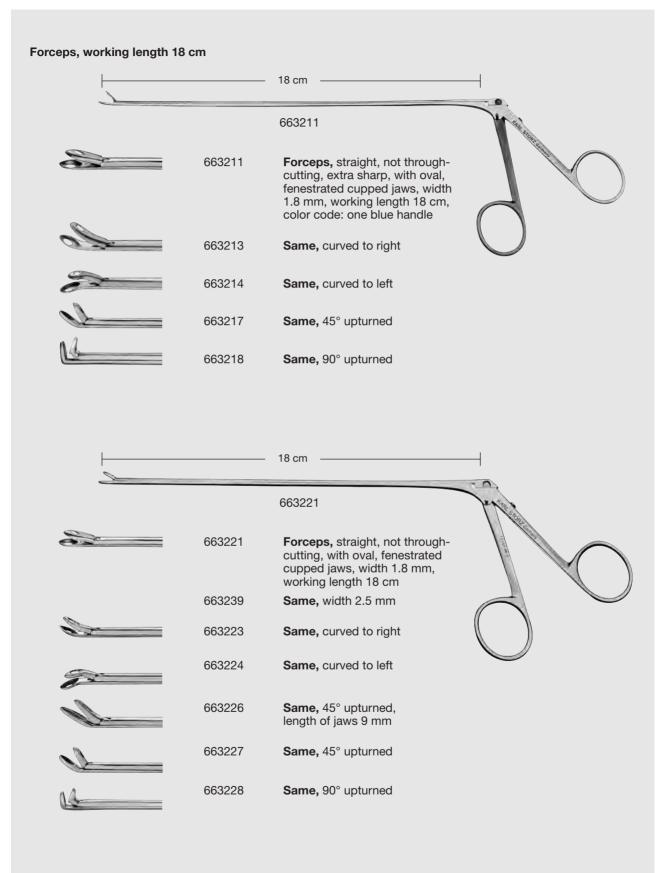




SI 27 B

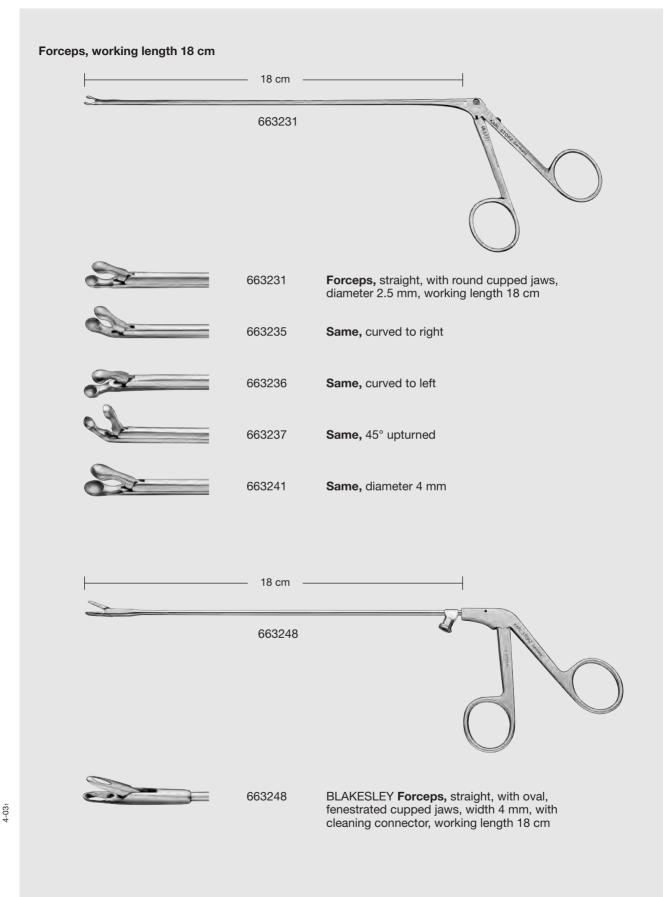
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





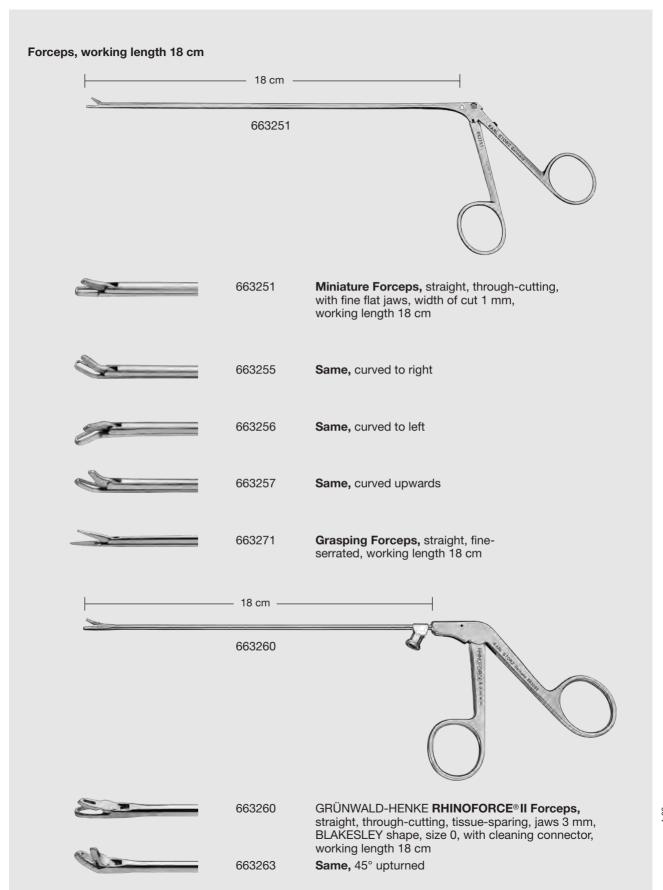
Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





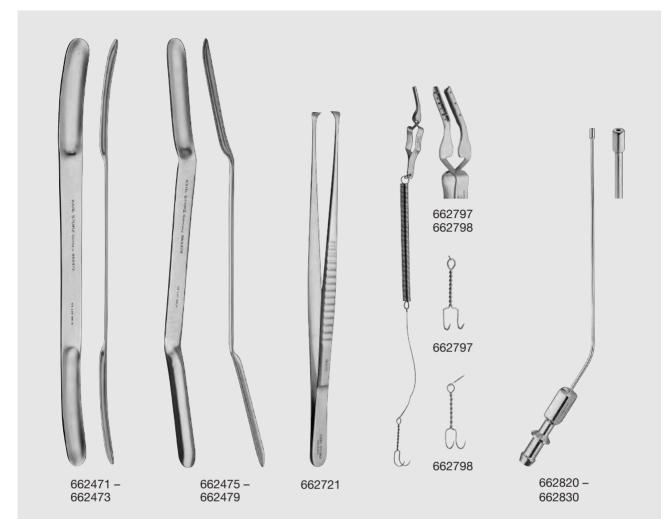
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Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





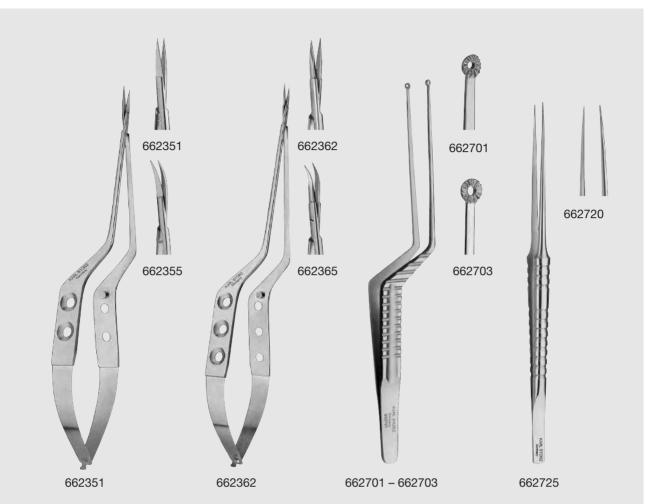
662471 662472 662473	CUSHING <b>Brain Spatula</b> , angled on both sides, convex, malleable, width 11 and 13 mm, length 18 cm <b>Same</b> , width 15 and 18 mm <b>Same</b> , width 18 and 22 mm
662475	OLIVECRONA <b>Brain Spatula</b> , angled on both sides, concave, elastic, width 5 and 6 mm, length 18 cm
662476 662477	Same, width 7 and 9 mm Same, width 11 and 13 mm
662478	Same, width 15 and 18 mm
662479	Same, width 18 and 22 mm
662721	ALLIS Forceps, with fine teeth, length 20 cm
662797	YASARGIL <b>Spring Hook,</b> small, for galea fixation with bulldog clamp, to be fastened to covering drape, diameter of spring 9 mm, total length 31 cm
662798	Same, large, total length 41 cm
662820	FRANK-PASQUINI <b>Suction Tube,</b> angular, tip straight, with grip plate and cut-off hole, diameter 2 mm, working length 12 cm
662825	Same, diameter 2.5 mm
662830	Same, diameter 3 mm

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SI 31 B 189

Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery

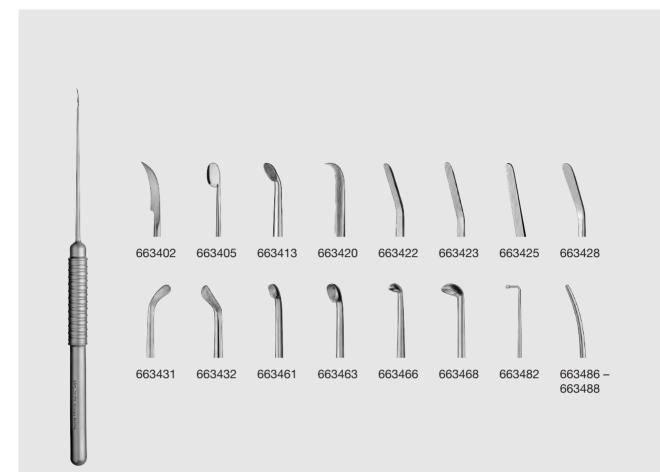




662351	YASARGIL <b>Micro Scissors</b> , spring type, bayonet-shaped, scissor blades straight, length 20 cm
662355	YASARGIL <b>Same</b> , scissor blades curved downwards
662362	VANNAS <b>Micro Scissors,</b> spring type, bayonet-shaped, straight tips, length 20 cm
662365	Same, scissor blades curved upwards
662701	YASARGIL <b>Forceps,</b> for grasping tissue and tumors, round and serrated jaws, bayonet-shaped, diameter 3 mm, length 20 cm
662703	HUNT <b>Same</b> , diameter 5 mm
662720	Micro Forceps, tip 0.2 mm wide, straight, length 17 cm
662725	<b>Micro Forceps,</b> tip 0.5 mm wide, straight with plateau, length 17 cm

Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





663402	Sickle Knife, slightly curved, with round handle, length 21.5 cm	663431	<b>Micro Raspatory,</b> curved to right, length 21.5 cm
663405	Round Knife, vertical, with round	663432	Same, curved to left
	handle, 4.5 x 3 mm, length 21.5 cm	663461	Curette, sharp, oval, angled 55°,
663413	Round Knife, angled 30°, oval, with round handle, 2.1 x 2.5 mm,		1.2 x 2 mm, with round handle, length 21.5 cm
	length 21.5 cm	663463	Same, angled 60°, 2 x 3.2 mm
660400	Department about book about	663466	Same, angled 85°, 1.2 x 2 mm
663420	Raspatory, sharp, hook-shaped, strongly curved, with round handle.	663468	Same, angled 85°, 2 x 3.2 mm
	width 0.6 mm, length 21.5 cm	663482	<b>Hook,</b> with ball end, angled 90°, with round handle, length 21.5 cm
663422	<b>Elevator,</b> angled 25°, sharp,		with found flandle, length 21.5 cm
	with round handle, 6 mm long, width 1 mm, length 21.5 cm	663486	<b>Dissection Probe,</b> medium curve, blunt, with round handle,
663423	Same, angled 20°, 7 mm long		diameter 0.9 mm, length 21.5 cm
663425	Elevator, angled 10°, sharp,	663487	Same, diameter 0.6 mm
	with round handle, 11.5 mm long, width 1.2 mm, length 21.5 cm	663488	Same, diameter 0.5 mm
663428	Same, angled 25°		

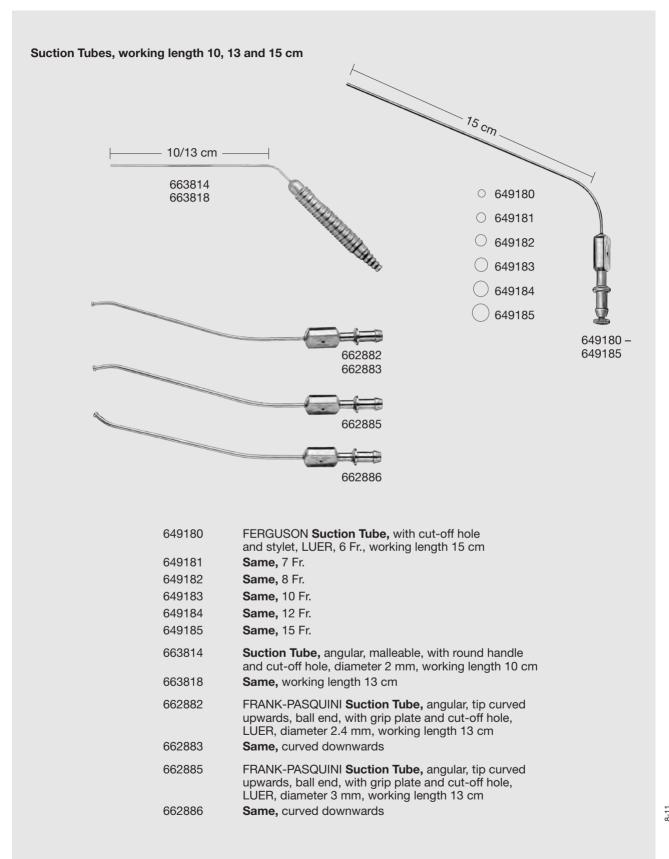
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SI 33 B 191

Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery

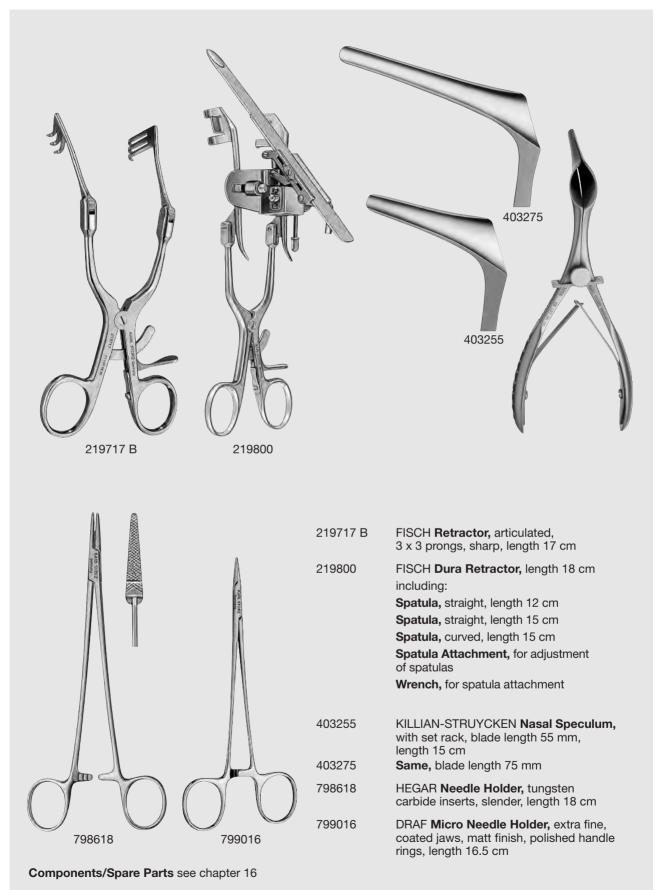
Components/Spare Parts see chapter 16





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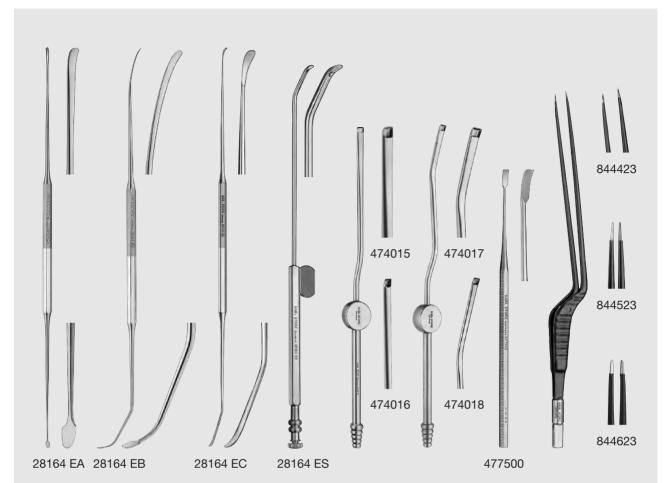


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SI 35 B 193

Nasal Sinuses, Microscopic/Endoscopic Surgery for Nasal Sinuses, Skull Base and Pituitary Surgery





	28164 EA	CASTELNUOVO <b>Elevator</b> , double-ended, semisharp and blunt, length 26 cm
	28164 EB	CASTELNUOVO <b>Elevator</b> , double-ended, angled end shovel-shaped, semisharp, blunt end slightly curved, length 26 cm
	28164 EC	CASTELNUOVO <b>Elevator</b> , double-ended, blunt end angled, semisharp end slightly curved, graduated, length 26 cm
	28164 ES	CASTELNUOVO <b>Suction Elevator,</b> with stylet, curved, length 25 cm
	474015	CASTELNUOVO <b>Suction Elevator,</b> flat tip, 5 x 1.8 mm, lateral suction opening, bayonet-shaped, with grip plate, length 21 cm
	474016	Same, flat tip 3 x 1.8 mm
NEW	474017	CASTELNUOVO <b>Suction Elevator,</b> flat tip 5 x 1.8 mm, lateral suction opening, bayonet-shaped, distal end curved, with grip plate, length 21 cm
NEW	474018	<b>Same,</b> 3 x 1.8 mm
	477500	FREER <b>Raspatory</b> , curved, width 4 mm, length 18 cm
	844423	<b>Bipolar Coagulating Forceps,</b> insulated, bayonet-shaped, tip 0.3 mm, length 23 cm, for use with Bipolar High Frequency Cords 847000 E or 847000 A/F/M/N/S/T/V
	844523	Same, tip 0.7 mm, length 23 cm
	844623	Same, blunt, tip 1.2 mm, length 23 cm

### **FESS Instruments**

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and of Anterior Skull Base



#### **THUMFART Irrigation and Suction Endoscope**

with ergonomic ring handle, with press or push button valve for switching irrigation on and off, for use with HOPKINS® II telescopes diameter 2.7 and 4 mm as well as Irrigation and Suction Sheaths 723527 A – F and 723540 A – F

The suction-irrigation endoscope is used to clear the telescope lens of blood, secretions and condensation. This ensures that there is always a clear view of the surgical field. It is no longer necessary to remove the telescope from the nasal cavity in order to clean the

lens. This eliminates the reorientation and adjustment of the surgical field which was necessary in the past and results in significant time savings and uninterrupted work. To a certain extent, the irrigation jet also makes it possible to clear the surgical field.

#### **Special Features:**

- Handle is easy to hold and operate due to the ergonomic ring handle and finger grip plate
- Irrigation-suction sheaths can be rotated 360° in the handle for use in all fields of view
- Continuous suction
- For use with high pressure irrigation or irrigation bag
- For use with HOPKINS® II telescopes diameter 2.7 and 4 mm

Handle available with 2 different valves:
 Press button valve with lock function:

Pressing down the valve button into the lock position starts irrigation, pressing the valve button again releases the locked position and stops irrigation

Push button valve:

Irrigation is only possible when the valve button is depressed



723620 THUMFART Irrigation and Suction Handle, with ergonomic ring handle,

for use with Irrigation and Suction Sheaths 723527 A - F and 723540 A - F

including:

Press Button Valve, with lock function

723621 THUMFART Irrigation and Suction Handle, with ergonomic ring handle,

for use with Irrigation and Suction Sheaths 723527 A – F and 723540 A – F

including:

Push Button Valve (irrigation only active when the valve button is depressed)

101010-10\* Single Use Push Button Pressure Valve, for switching irrigation on and

off, sterile, package of 10, for use with THUMFART and IRO Suction and

Irrigation Handle 723620 H and 723622 H



mtp medical technical promotion gmbh, Take-Off GewerbePark 46, D-78579 Neuhausen ob Eck

Components/Spare Parts see chapter 16

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SI 37 A 195

### **FESS Instruments**

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and of Anterior Skull Base



**IRO Irrigation and Suction Endoscope** 

with pistol grip handle, with press or push button valve for switching irrigation on and off, for use with HOPKINS® II Telescopes diameter 2.7 and 4 mm as well as Irrigation and Suction Sheaths 723527 A – F and 723540 A – F

In addition to the decisive clinical advantages of using a suction-irrigation device for nasal sinus surgery, IRO handle is distinguished by the following special features:

- Ergonomic pistol-grip handle for enhanced ease of use and comfort
- Irrigation-suction sheaths can be rotated 360° in the handle for use in all fields of view
- On-axis rotation of the sheath can be performed while maintaining the position of the pistol-grip handle. In this way, handling of instruments through the working channel is possible without becoming entangled with the fiber optic light cable.
- For use with HOPKINS® II Telescopes diameter 2.7 and 4 mm

Grip is available with 2 different valves:

Press button valve with lock function: Pressing down the valve button into the lock position starts irrigation, pressing the valve button again releases the locked position and stops irrigation

Push button valve:

Irrigation is only possible when the valve button is depressed

- For use with high pressure irrigation or irrigation bag
- Continuous suction





723527 A - F 723540 A - F

723622 IRO Irrigation and Suction Handle, pistol-

shaped, for use with Irrigation and Suction Sheaths 723527 A – F and 723540 A – F

includina:

Press Button Valve, with lock function

723623 IRO Irrigation and Suction Handle, pistol-

shaped, for use with Irrigation and Suction Sheaths 723527 A – F and 723540 A – F

including:

**Push Button Valve** (irrigation only active when the valve button is depressed)



723622/723623

723527 A – F 723540 A – F

723630 Irrigation and Suction Handle, basic model, without valve, activation and deactivation of irrigation via separate footswitch, for use with

Irrigation and Suction Sheaths 723527 A - F and 723540 A - F

101010-10\* **Single Use Push Button Pressure Valve,** for switching irrigation on and off, sterile, package of 10, for use with THUMFART and IRO

Suction and Irrigation Handle 723620 H and 723622 H



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Components/Spare Parts see chapter 16

on Page 1

723630

1.03,

### **FESS Instruments**

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and of Anterior Skull Base



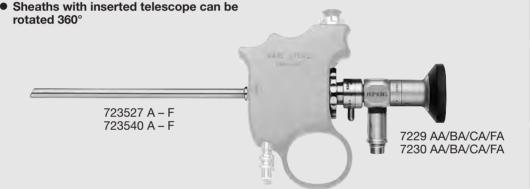
#### **Irrigation and Suction Sheaths**

for endoscopic nasal sinuses surgery, for use with Irrigation and Suction Handles 723620 – 723630 and HOPKINS® II telescopes with diameter 2.7 mm 7219 AA – FA, 7229 AA – FA and HOPKINS® II telescopes with diameter 4 mm 7230 AA – FA

The sheaths 723527 A – F and 723540 A – F represent a new, improved construction with excellent irrigation-suction characteristics:

#### **Special Features:**

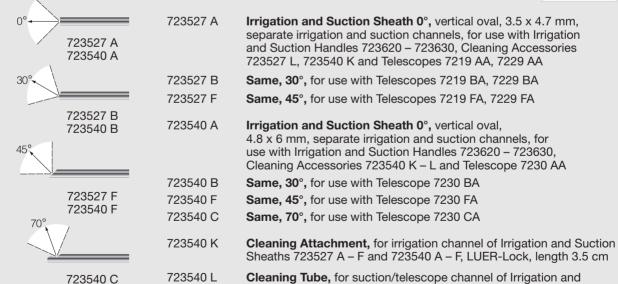
- Completely new design with double channel in a single sheath
- Maintenance free no seal rings
- Robust stability torsion resistant
- Hygienic separate irrigation and suction canals
- Liquid which remains in the sheath cannot be rinsed out in the surgical area
- Slim, vertical oval sheath shapes: 3.5 x 4.7 mm and 4.8 x 6 mm
- 723527 A F for use with 2.7 mm HOPKINS® II Telescopes with 0°, 30° and 45°
- 723540 A F for use with 4 mm HOPKINS® Telescopes with 0°, 30°, 40° and 70°
- Suitable for IRO and THUMFART Irrigation and Suction Handles 723620 – 723623 and for 723630
- Easy preparation with Cleaning Accessories 723540 K/L, 723527 L











723527 L

-033

Cleaning Tube, for suction/telescope channel of Irrigation and Suction Sheaths 723527 A – F and Irrigation and Suction Sheaths 7207 AS/BS, 7219 AS – FS, 7220 AS – FS and 7228 AS – FS, LUER-Lock, length 24 cm

Suction Sheaths 723540 A – F and for Irrigation and Suction

Sheaths 7230 AS - FS, LUER-Lock, length 23 cm

### **CLEARVISION® II**

for Intraoperative Cleaning of the Front Lens



#### **CLEARVISION® II System**

The KARL STORZ CLEARVISION® II System cleans the lens simply and quickly via a pulsating irrigation technique, which provides an unobstructed view during interventions in sinus or neural sinus surgery. The rinsing process is activated by pressing the footswitch. Releasing the footswitch reverses the pump to suction out any remaining irrigation fluid in the tube or irrigation sheath. The duration of the reverse rotation can be set on a switch on the front of the device. Any drops of irrigation liquid on the distal lens is removed to prevent reflections.

The CLEARVISION® II System can be used in conjunction with suitable sheaths for use with KARL STORZ HOPKINS® II Telescopes 7229 AA - FA

and 7230 AA – FA. When designing the construction, particular value was placed on the fact that the intervention would not have to be interrupted during the cleaning phase.

#### **Special Features:**

- The first stage (semi-pressed pedal) cleans the distal lens by means of a pulsating irrigation flow. This ensures the removal of stubborn residues.
- The second stage (fully pressed pedal) activates a continuous irrigation flow. This is suitable for filling cavities (i.e. sphenoid cavities) with water. The resulting vessel compression is suitable for controlling minor bleeding.
- Two-stage footswitch

#### Complete system configuration recommended



**40** 3341 01

**CLEARVISION® II Set,** lens irrigation system for endoscopes, power supply 100 – 240 VAC, 50/60 Hz

including:

**Mains Cord** 

One-Pedal Footswitch

Silicone Tubing Set, sterilizable

#### **Optional accessory:**

031229-10\* Tubing Set, sterile, package of 10

#### Specifications:

Irrigation	min. 30 min with 1 I irrigation liquid	Dimensions w x h x d	100 x 180 x 70 mm
	non-regulated flow (ml/min): 40	Weight	1.5 kg
Power Supply	100-240 VAC, 50/60 Hz	Certified to	IEC 601-1, CE acc. to MDD



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Components/Spare Parts see chapter 16

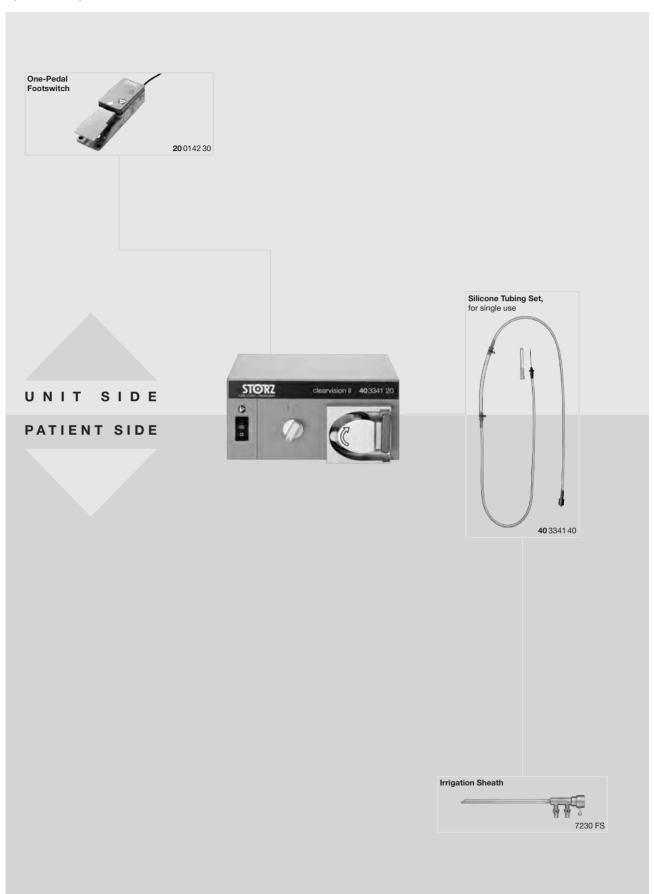
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198 SI 40 A

## **CLEARVISION® II**

**System Components** 





### **CLEARVISION® II**

#### Irrigation Sheaths for use with CLEARVISION® II System



#### Irrigation Sheaths, proximally reinforced for use with Holder 28272 RKB

**Irrigation Sheath,** proximally reinforced for use with Adjustable Holder 28272 RKB

Compatible HOPKINS® Telescopes



			E-Settle				
Detail	Order No.	Outer Diameter	Working length	Order No.	View	Outer Diameter	Length
	7207 AS	3.5 x 4.7 mm	7 cm	7207 AA	0°	2.7 mm	11 cm
	7207 BS	3.5 x 4.7 mm	7 cm	7207 BA	30°	2.7 mm	11 cm
	7207 CS	3.5 x 4.7 mm	7 cm	7207 CA	70°	2.7 mm	11 cm
	7220 AS	4.8 x 3.7 mm	10 cm	7220 AA	0°	3 mm	14 cm
	7220 BS	4.8 x 3.7 mm	10 cm	7220 BA	30°	3 mm	14 cm
	7220 FS	4.8 x 3.7 mm	10 cm	7220 FA	45°	3 mm	14 cm
	7220 CS	4.8 x 3.7 mm	10 cm	7220 CA	70°	3 mm	14 cm
	7228 AS	4.8 x 6 mm	11 cm	7228 AA	0°	4 mm	15 cm
	7228 BS	4.8 x 6 mm	11 cm	7228 BA	30°	4 mm	15 cm
	7228 FS	4.8 x 6 mm	11 cm	7228 FA	45°	4 mm	15 cm
	7228 CS	4.8 x 6 mm	11 cm	7228 CA	70°	4 mm	15 cm
	7230 AS	4.8 x 6 mm	14 cm	7230 AA 28132 AA	0°	4 mm	18 cm
	7230 BS	4.8 x 6 mm	14 cm	7230 BA 28132 BA	30°	4 mm	18 cm
	7230 FS	4.8 x 6 mm	14 cm	7230 FA 28132 FA	45°	4 mm	18 cm
	7230 CS	4.8 x 6 mm	14 cm	7230 CA 28132 CA	70°	4 mm	18 cm
	7219 AS	3.5 x 4.7 mm	14 cm	7219 AA 7229 AA	0°	2.7 mm	18 cm
	7219 BS	3.5 x 4.7 mm	14 cm	7219 BA 7229 BA	30°	2.7 mm	18 cm
	7219 FS	3.5 x 4.7 mm	14 cm	7219 FA 7229 FA	45°	2.7 mm	18 cm
	7219 CS	3.5 x 4.7 mm	14 cm	7219 CA 7229 CA	70°	2.7 mm	18 cm

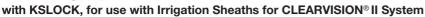
723527 L Cleaning Tube, for suction/telescope channel of Irrigation and Suction Sheaths 723527 A – F and Irrigation and Suction Sheaths 7207 AS/BS, 7219 AS – FS, 7220 AS – FS and 7228 AS – FS, LUED Local Local Research

LUER-Lock, length 24 cm

723540 L Cleaning Tube, for suction/telescope channel of Irrigation and Suction Sheaths 723540 A – F and for Irrigation and Suction Sheaths 7230 AS – FS, LUER-Lock, length 23 cm

Š

## **Holding Systems**









28272 RKB

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

including:

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

**Articulated Stand,** reinforced version, L-shaped, with one central clamp for all five joint functions, height 48 cm, swivel range 52 cm, with quick release coupling KSLOCK (female)

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

3-052

**Further holding systems** see page 202 and chapter 13, MICROSCOPY **Components/Spare Parts** see chapter 16

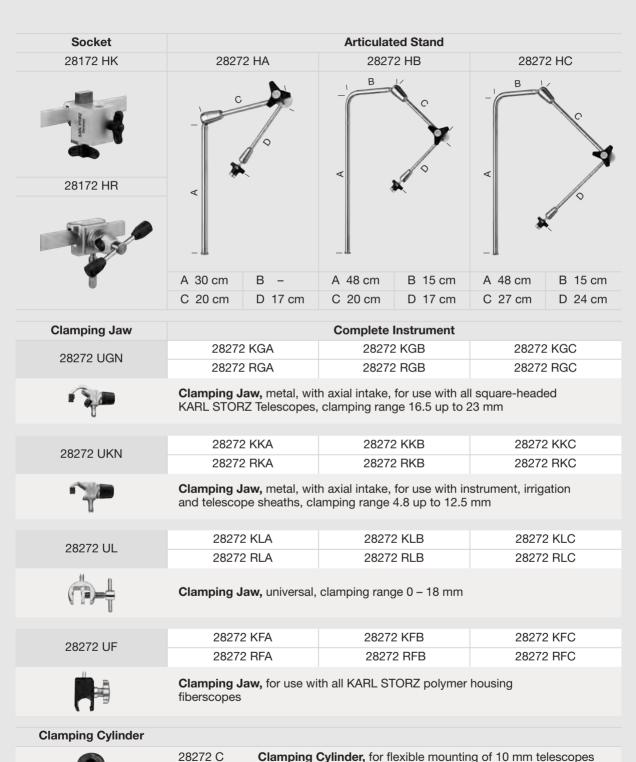
SI 43 A US

## **Holding Systems**

with KSLOCK







to telescope sheath, **autoclavable.** The clamping cylinder allows vertical movement and rotation of the telescope.





### MOTOR SYSTEMS

NEW UNIDRIVE® SIII ENT SCB

NEW UNIDRIVE® SIII ECO

**NEW** High-Performance EC Micro Motor II

**NEW** High-Speed Micro Motor

**NEW** DrillCut-X<sup>®</sup> II Shaver Handpieces

**Shaver Blades** 

**Sinus Burrs** 

**NEW** INTRA Drill Handpieces

Burrs

STAMMBERGER-SACHSE Intranasal Drill

Special Features



### UNIDRIVE® SIII ENT SCB/UNIDRIVE® SIII ECO

### The multifunctional unit for ENT





UNIDRIVE® SIII ENT SCB

UNIDRIVE® S III ECO

Special Features:	UNIDRIVE® SIII	UNIDRIVE® SIII
Touch Screen: Straightforward function selection via touch screen	•	-
Set values of the last session are stored	•	•
Optimized user control due to touch screen	•	-
Choice of user languages	•	-
Operating elements are single and clear to read due to color display	•	-
One unit – multifunctional: – Shaver system for surgery of the paranasal sinuses and anterior skull base – INTRA Drill Handpieces (40,000 rpm and 80,000 rpm) – Sinus Shaver	•	•
Two motor outputs: Two motor outputs enable simultaneous connection of two motors: For example, a shaver and micro motor	•	•
Soft start function	•	-
Formulated error messages	•	-
Integrated irrigation and coolant pump:  – Absolutely homogeneous, micro-processor controlled irrigation rate throughout the entire irrigation range  – Quick and easy connection of the tubing set	•	•
Easy program selection via automated motor recognition	•	•
Continuously variable revolution range	•	•
Maximum number of revolutions and motor torque: Microprocessor-controlled revolutions per minute. Therefore the preselected parameters are maintained all the time during drilling.	•	•
Maximum number of revolutions can be preset	•	•
SCB model with connections to the KARL STORZ Communication Bus (KARL STORZ-SCB)	•	-
Irrigator rod included	•	-

11-03

SI 47 US 205





### **System specifications**

Mode		Order No.	rpm
Shaver mode Operation mode: Max. rev. (rpm):	oscillating in conjunction with Handpiece: DrillCut-X® II Shaver Handpiece	<b>40</b> 7120 50	10,000*
Sinus burr mode Operation mode: Max. rev. (rpm):	rotating in conjunction with Handpiece: DrillCut-X® II Shaver Handpiece	<b>40</b> 7120 50	12,000
High-speed drilling mode Operation mode: Max. rev. (rpm):	counterclockwise or clockwise in conjunction with: High-Speed Micro Motor	<b>20</b> 7120 33	
Drilling mode Operation mode: Max. rev. (rpm):	counterclockwise or clockwise in conjunction with: micro motor and connecting cable	<b>20</b> 7110 33 <b>20</b> 7111 73	40,000
Power supply:	100 – 240 VAC, 50/60 Hz		
Dimensions: (w x h x d)	300 x 165 x 265 mm		

### Two outputs for parallel connection of two motors

### Integrated irrigation pump:

Flow: adjustable in 9 steps

<sup>\*</sup> Approx. 4,000 rpm is recommended as this is the most efficient suction/performance ratio.

	UNIDRIVE® S III ENT SCB	UNIDRIVE® S III ECO
Touch Screen:	6.4" / 300 cd/m <sup>2</sup>	
Weight:	5.2 kg	4.7 kg
Certified to:	IEC 601-1 CE acc. to MDD	IEC 60601-1
Available languages:	English, French, German, Spanish, Italian, Portuguese, Greek, Turkish, Polish, Russian	numerical codes

Special features of high-performance EC micro motor II and of the high-speed micro motor



#### Special features of high-performance EC micro motor II:

- Self-cooling, brushless high-performance EC micro motor
- Smallest possible dimensions
- Autoclavable
- Can be processed in a cleaning machine
- Detachable connecting cable

- INTRA coupling enables a wide variety of applications
- Maximum torque 4 Ncm
- Number of revolutions can be continuously adjusted up to 40,000 rpm



20711033

**20**711033 **High-Performance EC Micro Motor II,** for

use with UNIDRIVE® II/UNIDRIVE® ENT/ECO and Connecting Cable 20 7110 73, or for use with UNIDRIVE® S III ENT/ECO and Connecting Cable 20 7111 73



20711173

Connecting Cable, to connect High-Performance EC Micro Motor 20 7110 33 to UNIDRIVE® S III ENT/ECO

#### Special Features of the high-speed micro motor:

- Brushless high-speed micro motor
- Smallest possible dimensions
- Autoclavable

- Can be processed in a cleaning machine
- Maximum torque 6 Ncm



20712033

**20** 7120 33 **High-Speed Micro-Motor,** max. speed 40,000 rpm, including connecting cable, for use with UNIDRIVE® S III ENT

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SI 49 D US 207

## UNIDRIVE® S III ENT SCB, **UNIDRIVE® S III ECO**

**Recommended System Configuration** 



#### **UNIDRIVE® SIII ENT SCB**

#### **UNIDRIVE® SIII ECO**





40 7016 20-1

40 7014 20

40 7016 01-1 UNIDRIVE® S III ENT SCB, motor control unit with color display, touch screen, two motor outputs, integrated irrigation pump and SCB module, power supply 100 - 240 VAC, 50/60 Hz

includina:

**Mains Cord** 

**Irrigator Rod** 

Two-Pedal Footswitch, two-stage, with proportional function

Clip Set, for use with silicone tubing set 20 7116 40

SCB Connecting Cable, length 100 cm

Single Use Tubing Set\*, sterile, package of 3

#### 40 7014 01

UNIDRIVE® SIII ECO. motor control unit with two motor outputs and integrated irrigation pump, power supply 100 – 240 VAC, 50/60 Hz includina:

**Mains Cord** 

Two-Pedal Footswitch, two-stage, with proportional function

Clip Set, for use with silicone tubing set 20 7116 40

Single Use Tubing Set\*, sterile, package of 3

#### Specifications:

Touch Screen	UNIDRIVE® S III ENT SCB: 6,4"/300 cd/m <sup>2</sup>	Dimensions w x h x d	300 x 165 x 265 mm
Flow	9 steps	Weight	5.2 kg
Power supply	100-240 VAC, 50/60 Hz	Certified to	IEC 601-1, CE acc. to MDD



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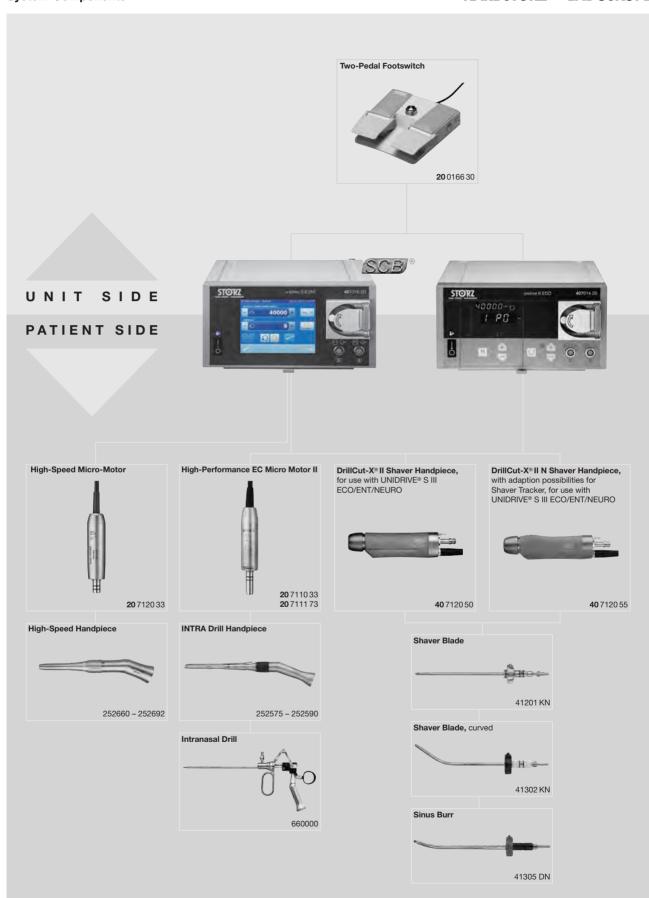
Components/Spare Parts see chapter 16

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# UNIDRIVE® S III ENT SCB, NEW UNIDRIVE® S III ECO

**System Components** 





## Optional Accessories for UNIDRIVE® S III ENT SCB and UNIDRIVE® S III ECO





	280053	Pana Spray, 6x 500 ml bottles – HAZARDOUS GOODS – UN 1950 including: Spray Nozzle
	280053 C	<b>Spray Nozzle,</b> for the reprocessing of INTRA burr handpieces, for use with Pana Spray 280053 B
	031131-10*	<b>Tubing Set,</b> for irrigation, for single use, sterile, package of 10



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## DrillCut-X® Shaver Handpieces





Special Features:	DrillCut-X®11 40 7120 50 DrillCut-X®11 40 7120 55
Max. 10,000 rpm for shaver blades, max. 12,000 rpm for sinus shaver	• •
Straight suction channel	• •
Integrated irrigation channel	• •
Powerful motor, also suitable for harder materials	• •
Absolutely silent running, no vibration	• •
Completely immersible and machine-washable	• •
Rapid coupling allows fixation of shaver blades and sinus shavers	• •
Lightweight design	• •
Optional, ergonomic handle, detachable	• •



40712050

**40**712050 DrillCut-X® II Shaver Handpiece, for use with UNIDRIVE® S III ECO/ENT/NEURO



**40** 7120 55

**40** 7120 55

**DrillCut-X® II N Shaver Handpiece,** with adaption possibilities for Shaver Tracker **40** 8001 22, for use with UNIDRIVE® S III ECO/ENT/NEURO

## DrillCut-X® II Shaver Handpieces



#### **Special Features:**

- Powerful motor
- Absolutely silent running
- Enhanced ergonomics
- Reduced-weight design
- Oscillation mode for shaver blades, max. 10,000 rpm
- Rotation mode for sinus shavers, max. 12,000 rpm

- Straight suction channel and integrated irrigation
- Variable handle allows connection with various handpieces and enables more comfortable work
- Easy hygienic processing, suitable for use in washer and autoclavable at 134° C
- Quick coupling mechanism facilitates more rapid exchange of work inserts
- Proven DrillCut-X® blade portfolios can be used



40712050

**40** 7120 50 **DrillCut-X® II Shaver Handpiece,** for use with UNIDRIVE® S III ECO/ENT



40712090

**40** 7120 90 **Handle,** adjustable, for use with DrillCut-X<sup>®</sup> II **40** 7120 50

#### **Optional Accessory:**



41250 RA

41250 RA Cleaning Adaptor, LUER-Lock, for cleaning DrillCut-X® shaver handpieces

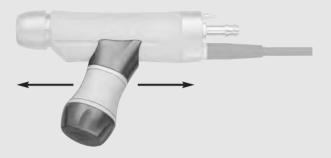
# Handle NEW for DrillCut-X® II Shaver Handpiece

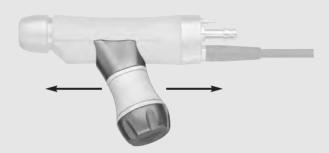
STORZ - ENDOSKOPE

for use with DrillCut-X® II 40 7120 50

#### **Special Features:**

- Ergonomic design
- Ultralight construction
- Easy handle control allows individual adjustment
- Variable mounting options to DrillCut-X® II shaver handpieces
- Easy fixation via rotary lock
- Easy hygienic processing, suitable for use in washer and autoclavable at 134 °C







40712090

**40** 7120 90 **Handle,** adjustable, for use with DrillCut-X<sup>®</sup> II **40** 7120 50

## Shaver Blades, straight

for Nasal Sinuses and Skull Base Surgery



#### For use with DrillCut-X® II





#### Shaver Blades, straight, sterilizable

	for use with	Shaver Blade		
Detail	40 7120 50 DrillCut-X® II Handpiece	length 12 cm		
_	41201 KN	serrated cutting edge, diameter 4 mm, color code: blue-red		
***	41201 KK	double serrated cutting edge, diameter 4 mm, color code: blue-yellow		
	41201 GN	concave cutting edge, oval cutting window, diameter 4 mm, color code: blue-green		
<i></i>	41201 LN	concave cutting edge, oblique cutting window, diameter 4 mm, color code: blue-black		
	41201 SN	straight cutting edge, diameter 4 mm, color code: blue-blue		
	41201 KSA	serrated cutting edge, diameter 3 mm, color code: blue-red		
	41201 KKSA	double serrated cutting edge, diameter 3 mm, color code: blue-yellow		
-	41201 KKSB	double serrated cutting edge, diameter 2 mm, color code: blue-yellow		
	41201 LSA	concave cutting edge, oblique cutting window, diameter 3 mm, color code: blue-black		

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Components/Spare Parts see chapter 16

## **Shaver Blades, straight**







Shaver Blades, straight, for single use, sterile, package of 5

	for use with	Shaver Blade		
Detail	40 7120 50 DrillCut-X® II Handpiece	length 12 cm		
	41301 KN	serrated cutting edge, diameter 4 mm, color code: blue-red		
***	41301 KK	double serrated cutting edge, diameter 4 mm, color code: blue-yellow		
-	41301 GN	concave cutting edge, oval cutting window, diameter 4 mm, color code: blue-green		
<u> </u>	41301 LN	concave cutting edge, oblique cutting window, diameter 4 mm, color code: blue-black		
	41301 SN	straight cutting edge, diameter 4 mm, color code: blue-blue		
	41301 KSA	serrated cutting edge, diameter 3 mm, color code: blue-red		
***	41301 KKSA	double serrated cutting edge, diameter 3 mm, color code: blue-yellow		
-	41301 KKSB	double serrated cutting edge, diameter 2 mm, color code: blue-yellow		
	41301 LSA	concave cutting edge, oblique cutting window, diameter 3 mm, color code: blue-black		

## Shaver Blades, curved for Nasal Sinuses and Skull Base Surgery





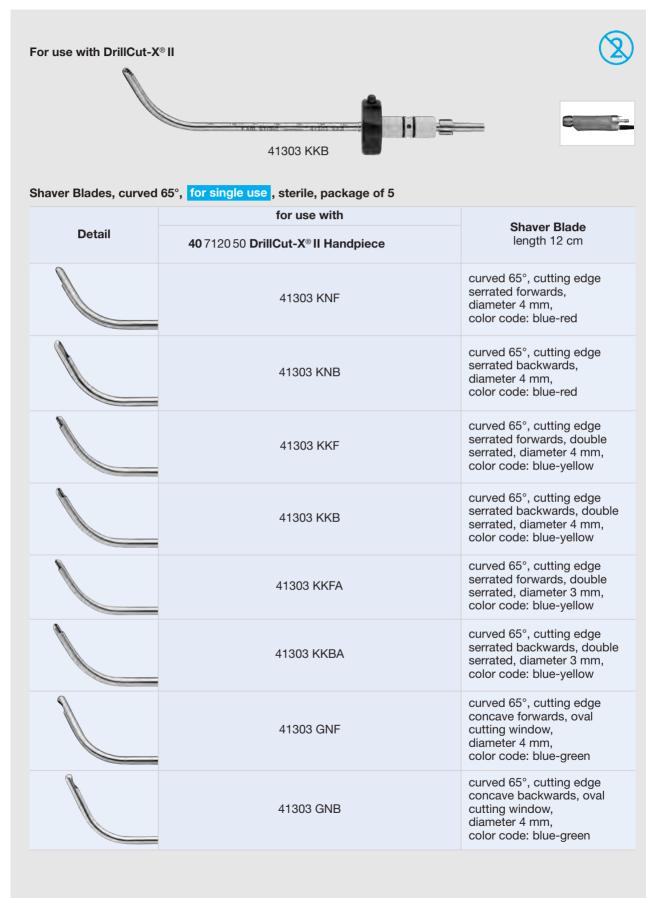
Shaver Blades, curved 35°/40°,	for single use	, sterile, package of 5
--------------------------------	----------------	-------------------------

	for use with	Shaver Blade length 12 cm		
Detail	40 7120 50 DrillCut-X® II Handpiece			
	41302 KN	curved 35°, cutting edge serrated backwards, diameter 4 mm, color code: blue-red		
	41304 KKF	curved 40°, cutting edge serrated forwards, double serrated, diameter 4 mm, color code: blue-yellow		
	41304 KKB	curved 40°, cutting edge serrated backwards, double serrated, diameter 4 mm, color code: blue-yellow		
	41304 KKFA	curved 40°, cutting edge serrated forwards, double serrated, diameter 3 mm, color code: blue-yellow		
	41304 KKBA	curved 40°, cutting edge serrated backwards, double serrated, diameter 3 mm, color code: blue-yellow		

### Shaver Blades, curved

for Nasal Sinuses and Skull Base Surgery





3-13

SI 59 D US 217

## Sinus Burrs, curved

for Nasal Sinuses and Skull Base Surgery



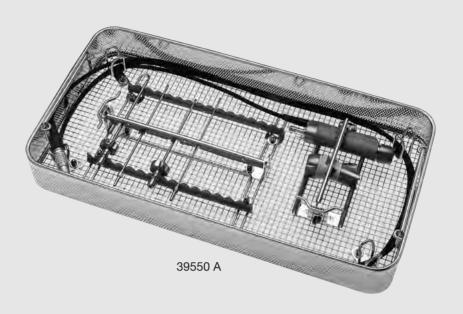


Sinus Burrs, curved 70°/55°/40°/15°, for single use, sterile, package of 5

	for use with	Sinus Burr		
Detail	40 7120 50 DrillCut-X® II Handpiece	length 12 cm		
	41304 W	curved 40°, cylindric, drill diameter 3 mm, shaft diameter 4 mm, color code: red-blue		
	41303 WN	curved 55°, cylindric, drill diameter 3.6 mm, shaft diameter 4 mm, color code: red-blue		
	41305 RN	curved 15°, bud drill, drill diameter 4 mm, shaft diameter 4 mm, color code: red-black		
	41305 DN	curved 15°, diamond head, drill diameter 3 mm, shaft diameter 4 mm, color code: red-yellow		
	41305 D	curved 15°, diamond head, drill diameter 5 mm, shaft diameter 4 mm, color code: red-yellow		
	41305 DW	curved 40°, diamond head, drill diameter 5 mm, shaft diameter 4 mm, color code: red-yellow		
	41303 DT	curved 70°, diamond head, drill diameter 3.6 mm, shaft diameter 4 mm, color code: red-yellow		

## **Accessories for Shaver**





39550 A

**Wire Tray,** provides safe storage of accessories for KARL STORZ paranasal sinus shaver systems during cleaning and sterilization

#### for storage of:

- Up to 7 shaver attachmentsConnecting cable

**Please note:** The instruments displayed are not included in the sterilizing and storage tray.

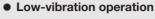
## **INTRA Drill Handpiece**

for Surgery in Ethmoid and Skull Base Area

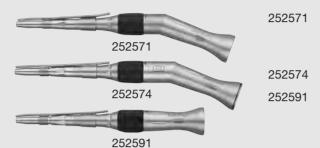


#### **Special Features:**

- Tool-free closing and opening of the drill
- Right/left rotation
- Max. rotating speed up to 40,000 or 80,000 rpm
- Detachable irrigation tubes
- Lightweight construction



- Low maintenance
- Can be processed in a cleaning machine
- Safe grip



9.5 cm

INTRA Drill Handpiece, angled, length 15 cm, transmission 1:1 (40,000 rpm), for use with KARL STORZ high-performance EC micro motor II and straight shaft burrs

Same, transmission 1:2 (80,000 rpm)

INTRA Drill Handpiece, straight, length 13 cm, transmission 1:1 (40,000 rpm), for use with KARL STORZ high-performance EC micro motor II and straight shaft burrs

649600 – 6	649600 – 649770 G								
Detail	Size	Dia. mm	Standard	Diamond	Diamond coarse				
0	014	1.4	649614	649714	_				
0	018	1.8	649618	649718	_				
0	023	2.3	649623	649723	649723 G				
0	027	2.7	649627	649727	649727 G				
0	031	3.1	649631	649731	649731 G				
0====	035	3.5	649635	649735	649735 G				
0====	040	4	649640	649740	649740 G				
0====	045	4.5	649645	649745	649745 G				
0====	050	5	649650	649750	649750 G				
<u></u>	060	6	649660	649760	649760 G				
	070	7	649670	649770	649770 G				

649600 **Standard Straight Shaft Burr,** stainless, size 014 – 070,

length 9.5 cm, set of 11

649700 **Diamond Straight Shaft Burr,** stainless, size 014 – 070,

length 9.5 cm, set of 11

649700 G Rapid Diamond Straight Shaft Burr, stainless, with coarse diamond

coating for precise drilling and abrasion without hand pressure and generating minimal heat, size 023 – 070, length 9.5 cm, set of 9,

color code: gold

280033 Rack, for 36 straight shaft burrs with a length of 9.5 cm,

foldable, sterilizable, size 22 x 14 x 2 cm

High Performance EC Micro Motor II 20711033 and Connecting Cable 20711173 see page 207

3-13

220 SI 62 E US

### **INTRA Drill Handpiece**

for Surgery in Ethmoid and Skull Base Area



#### **Special Features:**

- Tool-free closing and opening of the drill
- Right/left rotation
- Max. rotating speed up to 40,000 or 80,000 rpm
- Detachable irrigation tubes
- Lightweight construction

- Low-vibration operation
- Low maintenance
- Can be processed in a cleaning machine
- Safe grip



**INTRA Drill Handpiece,** angled, length 18 cm, transmission 1:1 (40,000 rpm), for use with KARL STORZ high-performance EC micro motor II and burrs

Same, transmission 1:2 (80,000 rpm)

INTRA Drill Handpiece, straight, length 17 cm, transmission 1:1 (40,000 rpm), for use with KARL STORZ high-performance EC micro motor II and straight shaft burrs



Detail	Size	Dia.	Standard	Diamond	Diamond coarse
	Size	mm mm	sterilizable	sterilizable	sterilizable
0	014	1.4	649614 L	649714 L	-
0	018	1.8	649618 L	649718 L	-
0	023	2.3	649623 L	649723 L	649723 GL
0	027	2.7	649627 L	649727 L	649727 GL
0=-	031	3.1	649631 L	649731 L	649731 GL
0====	035	3.5	649635 L	649735 L	649735 GL
0-1	040	4	649640 L	649740 L	649740 GL
0===	045	4.5	649645 L	649745 L	649745 GL
Ō==I	050	5	649650 L	649750 L	649750 GL
	060	6	649660 L	649760 L	649760 GL
	070	7	649670 L	649770 L	649770 GL

649600 L Standard Straight Shaft Burr, stainless, size 014 – 070,

length 12.5 cm, set of 11

649700 L **Diamond Straight Shaft Burr,** stainless, size 014 – 070,

length 12.5 cm, set of 11

649700 GL Rapid Diamond Straight Shaft Burr, stainless, with coarse diamond

coating for precise drilling and abrasion without hand pressure and generating minimal heat, sizes 023 – 070, length 12.5 cm, set of 9,

color code: gold

280034 **Rack,** for 36 straight shaft burrs with a length of 12.5 cm,

foldable, sterilizable, size 22 x 17 x 2 cm

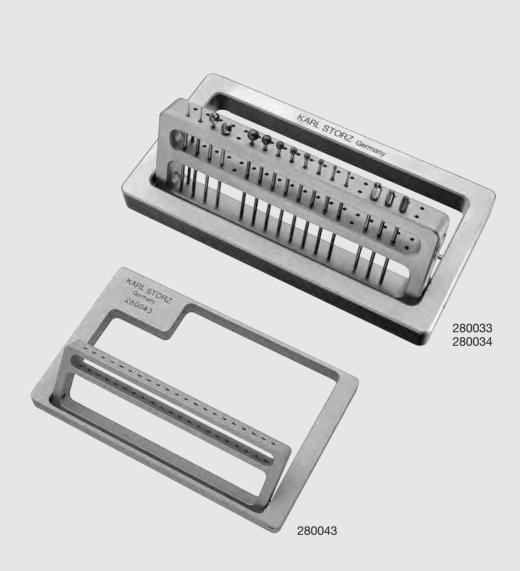
High Performance EC Micro Motor II 20711033 and Connecting Cable 20711173 see page 207

-13

SI 63 E US 221

## **Accessories for Burrs**





280033 Rack, for 36 straight shaft burrs with a length of 9.5 cm, foldable, sterilizable, size 22 x 14 x 2 cm
280034 Rack, for 36 straight shaft burrs with a length of 12.5 cm, foldable, sterilizable, size 22 x 17 x 2 cm

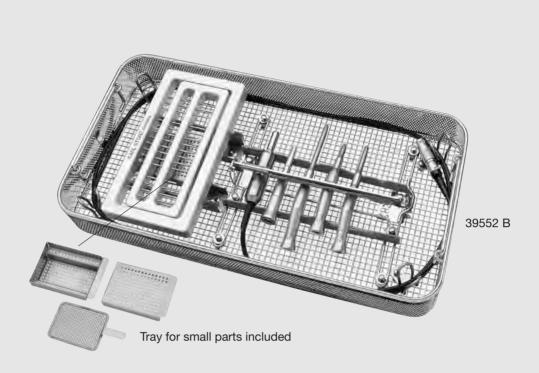
NEW 280043 Rack, flat model, to hold 21 straight shaft burrs

with a length of 7 cm (6 pcs) and 9.5 cm (15 pcs), folding model, sterilizable, size 17.5 x 11.5 x 1.2 cm

**Please note:** The burrs displayed are not included in the racks.

### **Accessories for Burrs**





39552 A Wire Tray, provides safe storage of accessories for KARL STORZ drilling/grinding systems during cleaning and sterilization, includes tray for small parts, for use with Rack 280030, rack not included

#### for storage of:

- Up to 6 drill handpieces
- Connecting cableEC micro motor
- Small parts

39552 B Wire Tray, provides safe storage of accessories for KARL STORZ drilling/grinding systems during cleaning and sterilization, includes tray for small parts, for use with Rack 280030, rack included

#### for storage of:

- Up to 6 drill handpieces
- Connecting cable
- EC micro motor
- Up to 36 drill bits and burrs
- Small parts

Please note: The instruments displayed are not included in the sterilizing and storage tray.

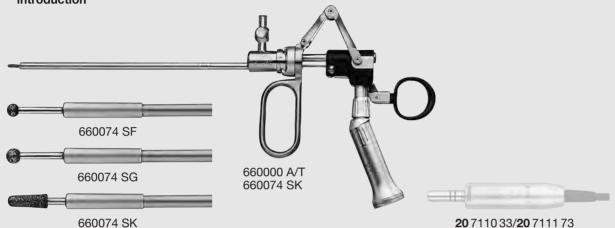
### STAMMBERGER-SACHSE Intranasal Drill

for fine grinding work in Ethmoidal Skull Base Area and for Optic Nerve Decompression



#### **Special Features:**

- Allows atraumatic grinding of the osseous canal of the optic nerve under endoscopic control
- Direct endoscopic view of diamond abradors and operation area
- No fixed coupling to the endoscope makes independent manipulation possible
- The abrador is retracted into the guide sheath for protection of tissue and endoscope during introduction
- Pressure on the sliding handle enables controlled advance of the abrador and precise grinding work under endoscopic control
- The guide sheath remains stationary; only the abradors rotate
- No damage to mucous membrane due to unprotected rotating drive mechanisms



660000

STAMMBERGER-SACHSE **Intranasal Drill,** for decompression of the optic nerve and for fine grinding work in ethmoidal skull base area, for use with EC micro motor

including:

**Double Ring Sliding Handle,** for moving abrador forwards and backwards in the guiding sheath, with fixed INTRA drill handpiece **Guide Sheath,** outer diameter 5 mm, with irrigation stopcock

Diamond Abrador, delicate, spherical, diameter 2.5 mm

Diamond Abrador, delicate, spherical, diameter 3 mm

**Diamond Abrador,** delicate, conical, from diameter 2.5 mm to diameter 3 mm



ica = Arteria carotis internaaep = Arteria ethmoidalis posterior



on = Nervus opticusx = Tuberculum opticum

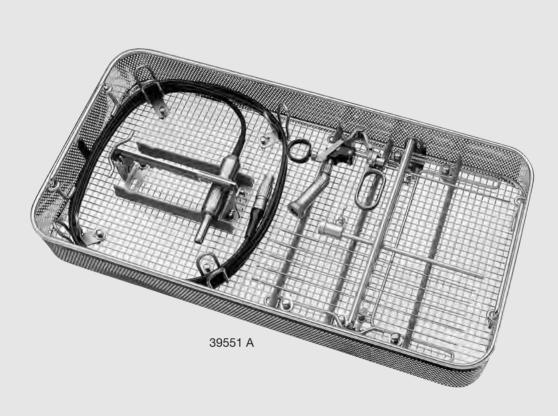


**z** = Anulus zinnii

**High Performance EC Micro Motor II 20711033 and Connecting Cable 20711173** see page 207 **Components/Spare Parts** see chapter 16

### **Accessories for Burrs**





39551 A

**Wire Tray,** provides safe storage of accessories for the KARL STORZ intranasal drill system during cleaning and sterilization

#### for storage of:

- Intranasal drillConnecting cableEC micro motor
- Up to 10 diamond abradors

Please note: The instruments displayed are not included in the sterilizing and storage tray.



### **CMOS Video Rhino-Laryngoscope**



The **CMOS video rhino-laryngoscope** features a compact and mobile solution thanks to its integrated light source and camera control unit.

Combined with the lightweight Monitor 8402 ZX and our

KARL STORZ C-HUB® system, the **CMOS video rhinolaryngoscope** provides a convenient and fast solution for the doctor's office, house calls or consultation purposes.

#### **Special Features:**

- Mobility thanks to all-in-one solution the lightweight monitor combined with the CMOS video rhino-laryngoscope offer quick installation and great flexibility
- CMOS chip technology for good image quality
- Optimal field of view for excellent visualization of pathologies
- Large angle of view for optimal orientation
- Integrated LED light source for optimal illumination
- Bidirectional deflection 140°

#### **Special Features of Monitor:**

- Compact design
- Image can be rotated by 180°
- 7" TFT wide-view angle display with resolution of 800 x 480 pixels
- Impact-resistant ABS plastic housing
- LED illumination
- Documentation of video sequences (MPEG4) and images (JPEG) on SD memory card
- Replay of recorded video sequences and images via monitor

- Function keys on the endoscope enable more comprehensive use. This enables the quick and convenient recording of pictures and video sequences as well as the use of the white balance function for monitoring image quality. These and other functions can be activated on the monitor.
- Can be combined with KARL STORZ C-HUB® system
- Sensitive yet robust control through ergonomic handle
- Waterproof, fully immersible for cleaning and disinfection
- Sterilizable via EtO-Gas, Sterrad<sup>®</sup> 100S, Sterrad<sup>®</sup> NX and Steris<sup>®</sup> System 1/System 1E
- Cinch video output for connecting external monitor
- Operation with line voltage and rechargeable lithium-ion batteries – also possible during charging
- Operating time with batteries for about 2 hours
- VESA 75 norm for connecting and attaching further accessories
- Splash-proof according to IP54



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226 SI 68 E US

## CMOS Video Rhino-Laryngoscope





11101 CMK CMOS Video Rhino-Laryngoscope KIT

for use with Monitor 8402 ZX
Direction of view: 0°
Angle of view: 85°
Working length: 30 cm
Outer diameter: 3.7 mm
Deflection up/down: 140°/140°

#### Following accessories are included:

11101 CM CMOS Video-Rhino-Laryngoskop
 13242 XL Leakage Tester, with bulb and manometer
 11025 E Pressure Compensation Cap, for ventilation during gas sterilization

27677 FV Case

## CMOS Video Rhino-Laryngoscope







8402 ZX

11101 CMM CMOS Video Rhino-Laryngoscope with Monitor

Direction of view: 0°
Angle of view: 85°
Working length: 30 cm
Outer diameter: 3.7 mm
Deflection up/down: 140°/140°

Following accessories are included:

11101 CMK CMOS Video Rhino-Laryngoscope KIT

8402 ZX Monitor für CMOS-Endoskope

#### C-CAM® and C-HUB®



#### Nothing could be easier!

How can a standard doctor's office with table, chair and computer be converted into an effective examination room with an endoscope and a camera? Quite simple: The KARL STORZ C-CAM® can be directly connected to a USB interface on a Medical PC via C-HUB®.

Thanks to its CMOS sensor, the C-CAM® camera head is able to provide a resolution of 640 x 480 pixels. The endoscope can be attached as usual with the proven KARL STORZ grip mechanism.

C-HUB® features an USB interface that can be connected to all Medical PCs, whether desktops or laptops.

It also features an S-Video connection for direct transmission of image data to an external monitor.

If the C-HUB® is connected to a Medical PC, image data or videos can be directly archived on the hard drive and processed with the relevant programs.

All in all, the KARL STORZ C-CAM® in conjunction with C-HUB® offers an effective possibility to perform fast and easy endoscopic examinations in any practice.



#### **20** 2901 01

#### **C-HUB® Camera Control Unit**

for use with C-CAM® **20** 2901 32, Electronic Module 8402 X or compatible CMOS video endoscopes, interfaces: USB 2.0, S-Video output (NTSC), power socket

#### including:

C-HUB® Power Supply S-Video (Y/C) Connecting Cable USB Connecting Cable



#### **20** 2901 32

#### C-CAM® Camera Head, 8-pin

one-chip CMOS camera head, resolution 640 x 480, focal length f=20 mm, compatible with C-HUB® **20** 2901 01 and C-MAC® 8402 ZX

2-11

Further information to C-CAM® and C-HUB® see catalog TELEPRESENCE Components/Spare Parts see catalog TELEPRESENCE

SI 71 D US 229

## **CCD Video Rhino-Laryngoscope**

for use with IMAGE1, TELECAM SL II, TELECAM DX II, TELE PACK and TELE PACK X



#### **Special Features:**

- Large viewing angle and movable distal tip facilitates orientation
- Waterproof, fully immersible for cleaning and disinfection
- Sterilizable with EtO-Gas, Sterrad® 100S and Steris® System 1/System 1E
- Excellent optical quality of both lens system and video chip
- Superior life span due to robust mechanical design
- Sensitive and stable control via ergonomic handle
- Short insertion tip with smooth-running and non-twisting angle mechanism
- Optimally matched, non-rotational insertion sheath



8-11

230 SI 72 E US

## **CCD Video Rhino-Laryngoscope**

for use with IMAGE1, TELECAM SL II, TELECAM DX II, TELE PACK and TELE PACK X





11101 VP CCD Video Rhino-Laryngoscope, PAL, for use with IMAGE1,

TELECAM SL II, TELECAM DX II, TELE PACK and TELE PACK X

Direction of view: 0°
Angle of view: 85°
Deflection up/down: 140°/140°
Working length: 30 cm
Outer diameter: 3.7 mm

#### Following accessories are included:

27677 VC Case

13242 XL Leakage Tester, with bulb and manometer

11025 E **Pressure Compensation Cap,** for ventilation during gas sterilization

Note: The video connecting cables are not included in the set and must be ordered separately!

22 2000 77 Video Endoscope Adaptor, color systems PAL/NTSC,

length 90 cm, for use with GI CCU and IMAGE1

or

**20**2130 70 **Video Connecting Cable,** for all KARL STORZ video

endoscopes and TELECAM SL II, TELECAM DX II, TELE PACK or TELE PACK X, length 60 cm

3-072

SI 73 E US 231

## **TELE PACK X – The Mobile Compact Solution**

**Documentation Terminal for Video Rhino-Laryngoscope** 



TELE PACK X is a compact, portable and flexible system that can be used for a wide range of applications from the doctor's office through to the emergency room.

To enable swift and easy work, TELE PACK X combines all that is needed: monitor, camera and light source.

Consideration has also been given to documentation: Integrated data management enables comprehensive recording of medical examinations or surgical interventions. Multiple USB ports and an SD card slot are available to store the data.

#### Crystal clear display

- 15" LCD display
- Image rotation
- 24-bit color intensity for natural color rendition
- DVI-D video output for connecting HD monitors

#### Flexible storage possibilities

- SD card slot for high storage capacity
- USB ports for external hard drives, USB flash drives and post-script printers
- Picture gallery for records
- Playback of saved videos
- Print-ready patient report documentation

#### **Natural illumination**

- HiLux 50 Watt high-performance light source
- Natural colour rendition close to daylight with a color temperature of 5700 K
- Up to 1000 hours lamp operating time

#### Easy control combined with highest safety

- Membrane keyboard for wipe-down disinfection
- Hot keys for rapid and direct adjustment
- Arrow keys for intuitive control
- Connection socket for pedal control

#### **Additional information**

- Sturdy, portable housing
- Ergonomically designed handle for convenient transport
- Universal power supply unit: 100 240 VAC, 50/60 Hz
- Dimensions (w x h x d): 450 x 350 x 150 mm
- Weight: 7 kg



20 045001-EN

#### **20** 0450 01-FN **TELE PACK X**

endoscopic video unit for use with TELECAM one-chip camera heads and video endoscopes, incl. 50 W HiLux light source, 15" LCD TFT screen, USB/SD memory module, color systems **PAL/NTSC**, with integrated Image Processing Module, power supply 100 – 240 VAC, 50/60 Hz

including:

**USB Silicone Keyboard,** with touchpad, US character set

USB Flash Drive, 4 GB

**Mains Cord** 

Mains Cord, US version

**Technical information** see catalog TELEPRESENCE **Components/Spare Parts** see chapter 16

232 SI 74 E US

3-0/2

## **Rhino-Fiberscopes**



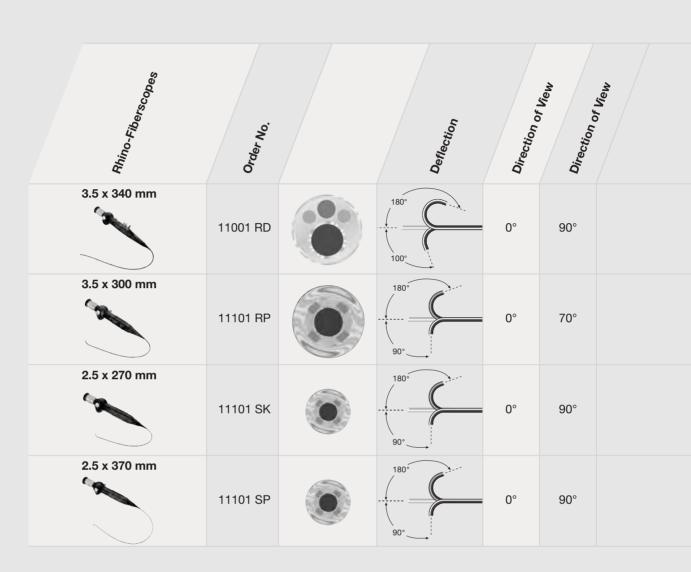
#### **Special Features:**

- Large viewing angle and movable distal tip for better orientation
- Waterproof, fully immersible for cleaning and disinfection
- Simple leakage test takes only a few minutes and requires no additional accessories
- Sterilizable with EtO gas, Steris® and Sterrad®
- Exceptional optical quality of both lens and fiber optic image transmission bundle
- Superior life span due to robust mechanical design



## **Rhino-Fiberscopes**

#### Overview



#### Following accessories are included:





		Accessories included							
Working Length Working Channel Inner Diameter Distal Tip Outer Diameter Case					non Cap			us,	orceos
Working Len	orking Cr ner Diam	istal Tip	Case	Pressure Compensa.	Leakage Test	Mouth Piece	Cleaning Brize	Biopsy Forces	Grasping Forceps
3	<b>3</b> £	96	් ්	43	9	¥	ō	à	Ğ
34 cm	1.5 mm	3.5 mm	27677 BB	11025 E	13242 XL	13272	27651 AK	11003 KA	11003 KB
30 cm	-	3.5 mm	27677 RR	11025 E	13242 XL	-	-	-	-
27 cm	-	2.5 mm	27677 RR	11025 E	13242 XL	-	-	-	-
37 cm	-	2.5 mm	27677 RR	11025 E	13242 XL	-	-	-	-

#### Optional accessories:







15006 B

15006 C

15006 D

"ULTRA STOP" **Antifog Solution,** 25 ml, pipette bottle

"ULTRA STOP" **Antifog Solution,** 30 ml, sterile, pierce bottle

"ULTRA STOP" **Antifog Solution,** 15 ml, atomizer bottle

SI 77 E US 235









#### Lightweight - Ergonomic - Elegant

ENDOCAMELEON® ENT is the newest member of the HOPKINS® family of rod-lens telescopes – and the most versatile.

A simple turn of the adjusting knob enables the user to select the direction of view between 15° and 90°. Consequently, the surgeon can quickly and easily select the desired direction of view for optimal orientation and control. This makes the ENDOCAMELEON® ENT also suitable for diagnosis.

ENDOCAMELEON® ENT significantly enhances orientation during use without the time-consuming change-over of telescopes, thereby ensuring safe and smooth work.

ENDOCAMELEON® ENT combines the user comfort of the proven HOPKINS® endoscopes with unprecedented versatility – in the proven KARL STORZ high quality.



The familiar ergonomics and handling of conventional telescopes is enhanced with the additional convenience of a variable direction of view.



The direction of view is adjusted by a mere turn of the adjusting knob at the proximal end of the ENDOCAMELEON® ENT.





Diameter 4 mm, length 18 cm

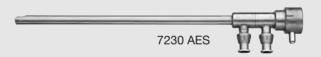
#### **Special Features:**

- Variable direction of view from 15° − 90°
- Easy-to-use adjusting knob selects the desired direction of view
- Lightweight construction and modern design
- HOPKINS® telescope with unique rod-lens system
- Diameter 4 mm, length 18 cm
- Standard eyepiece fits all camera heads



7230 AE

**ENDOCAMELEON® ENT HOPKINS® Telescope,** diameter 4 mm, length 18 cm, **autoclavable,** variable direction of view from 15° – 90°, adjustment knob for selecting the desired direction of view, fiber optic light transmission incorporated, color code: gold



7230 AES

Irrigation and Suction Sheath, outer diameter 4.8 x 6 mm, working length 14 cm, for use with ENDOCAMELEON® ENT HOPKINS® Telescope 7230 AE and KARL STORZ lens irrigation system CLEARVISION® II

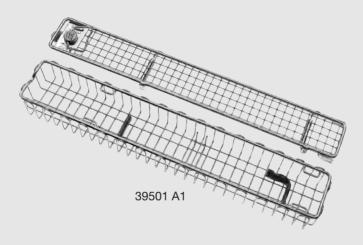


#### Accessories:





495 NA **Fiber Optic Light Cable,** diameter 3.5 mm, length 230 cm



39501 A1 Wire Tray for Cleaning, Sterilization and Storage of one rigid endoscope, including holder for light post adaptors, silicone telescope holders and lid, external dimensions (w x d x h): 290 x 60 x 52 mm, for rigid endoscopes up to diameter 5 mm and working length 20 cm

for Autofluorescence/Photodynamic Diagnosis (PDD) of Nose and Nasal Sinuses, diameter 4 mm, length 18 cm



#### For Diagnosis and Early Detection of Carcinomas



0° → 7230 AP

HOPKINS® II Straight Forward Telescope 0°, enlarged view, for autofluorescence/photodynamic diagnosis (PDD), diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission and filter exchanger incorporated, color code: green



HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, for autofluorescence/photodynamic diagnosis (PDD), diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission and filter exchanger incorporated, color code: red



HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, for autofluorescence/photodynamic diagnosis (PDD), diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission and filter exchanger incorporated, color code; black

#### **Fluid Light Cables**



For high performance D-LIGHT C/AF light system as well as ENDOVISION® TRICAM® SL II PDD video systems for use with HOPKINS® II Telescopes 7230 AP – FP for autofluorescence/photodynamic diagnosis (PDD) see chapter 13, FLUORESCENCE and catalog TELEPRESENCE



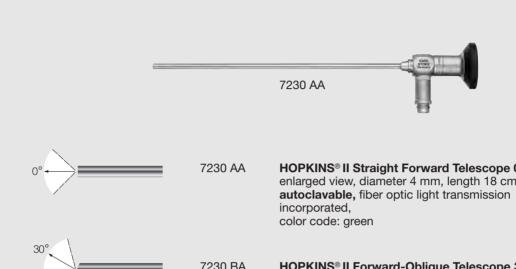
for Diagnosis, Surgery and Treatment of Nose and Nasal Sinuses

## Diameter 4 mm, length 18 cm 7230 AWA 7230 AWA **HOPKINS® II Wide Angle Straight Forward** Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: green 30° 7230 BWA **HOPKINS® II Wide Angle Forward-Oblique** Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red 45° 7230 FWA **HOPKINS® II Wide Angle Forward-Oblique** Telescope 45°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: black 7230 CWA HOPKINS® II Wide Angle Lateral Telescope 70°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: yellow

Diameter 4 mm, length 18 cm





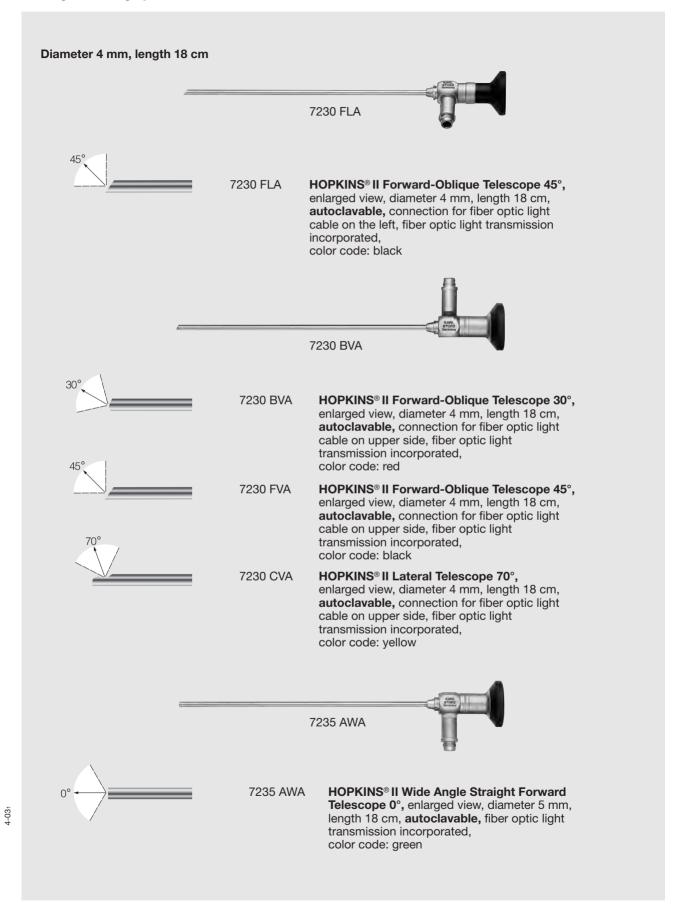


HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red

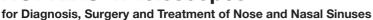
HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated,



for Diagnosis, Surgery and Treatment of Nose and Nasal Sinuses



SI 83 E US 243





Diameter 3 mm, length 14 cm, with extra large image



0° → 7220 AA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 3 mm, length 14 cm, autoclavable, fiber optic light transmission incorporated, color code: green



HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 3 mm, length 14 cm, autoclavable, fiber optic light transmission incorporated, color code: red



HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 3 mm, length 14 cm, autoclavable, fiber optic light transmission incorporated, color code: black



HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 3 mm, length 14 cm, autoklavierbar, connection for fiber optic light cable upwards, fiber optic light transmission incorporated, color code: black

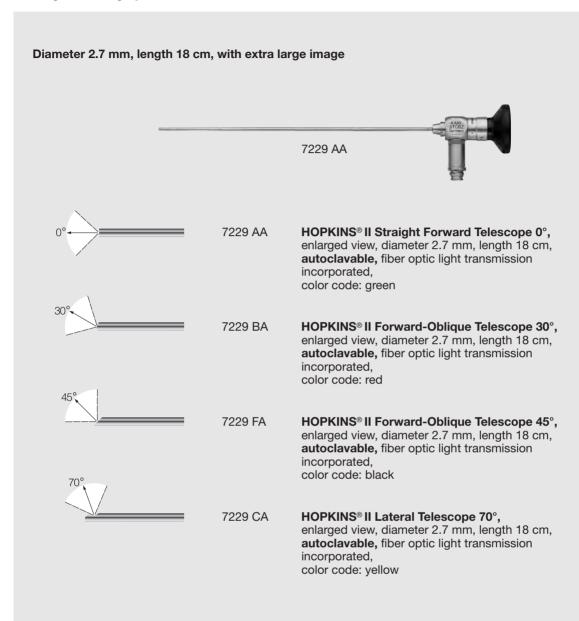


HOPKINS® II Lateral Telescope 70°, enlarged view, diameter 3 mm, length 14 cm, autoclavable, fiber optic light transmission incorporated, color code: yellow

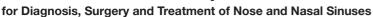
# **HOPKINS® II Telescopes**



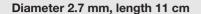
for Diagnosis, Surgery and Treatment of Nose and Nasal Sinuses



# **HOPKINS® II Telescopes**











7207 AA HOPKINS® II Straight Forward Telescope 0°, diameter 2.7 mm, length 11 cm, autoclavable, fiber optic light transmission incorporated, color code: green



7207 BA

HOPKINS® II Forward-Oblique Telescope 30°, diameter 2.7 mm, length 11 cm, autoclavable, fiber optic light transmission incorporated, color code: red

#### Diameter 3 mm, length 11 cm





7209 BA

HOPKINS® Forward-Oblique Telescope 30°, diameter 3 mm, length 11 cm, autoclavable, fiber optic light transmission incorporated, color code: red

#### **Fiber Optic Light Cable**



495 NL

495 NA

**Fiber Optic Light Cable,** diameter 3.5 mm, length 180 cm **Same,** length 230 cm

Additional Light Cables see catalog TELEPRESENCE



# **LED Battery Light Source for Endoscopes**





11301 D4

11301 DG

11301 D4	screw thread, brightness > 110 lm / > 150 klx, burning time > 120 min, weight approx. 150 g ready for use, suitable for wipe disinfection, with 2 Photo Batteries 121306 P
11301 DE	Battery Light Source LED for Endoscopes, rechargeable, with click connection, brightness > 110 lm / >150 klx, color temperature 5500 K, lithium-ion batteries, charging time 60 min, burning time at 100% brightness 40 min, weight approx. 150 g ready for use, suitable for wipe disinfection
11301 DF	Same, with fast screw thread
11301 DG	Charging Unit, for 11301 DE/11301 DF, for two LED battery light sources, with fixed integrated power supply and adaptor for EU, UK, USA and Australia, power supply 110 – 240 VAC, 50/60 Hz, suitable for wipe disinfection
094129	<b>Battery Charger Li-Ion,</b> for charging the rechargeable battery box, power supply 100 – 240 VAC, 50/60 Hz
094127	Mains Cord, for Battery Charger 094129, length 150 cm

Components/Spare Parts see chapter 16

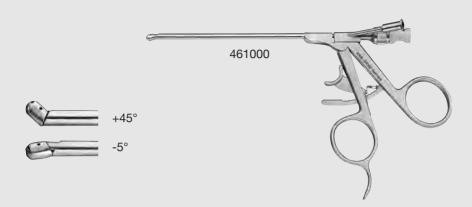
SI 87 E US 247

# **LASER Rhinoscopy**

**LASER Application Sheath** 



#### **LEUNIG-GREVERS LASER Application Instrument**



461000 LEUNIG-GREVERS LASER Application Instrument, for endonasal LASER surgery, forceps-shaped, for endonasal LASER treatment, handle with ratchet, sheath with channel for introduction of LASER probes up to 1 mm in diameter.

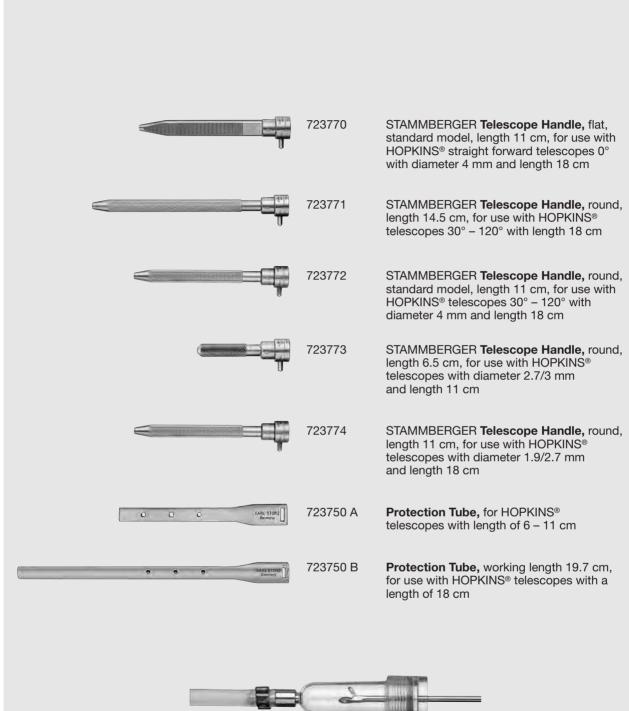
for introduction of LASER probes up to 1 mm in diameter, distal tip continuously articulating from -5° up to +45°, with integrated smoke evacuation channel, working length 10 cm

723527 L **Cleaning Tube,** for telescope channel of LASER Rhinoscope Sheaths 722010 A – B, LUER-Lock, length 24 cm

Components/Spare Parts see chapter 16

#### Accessories



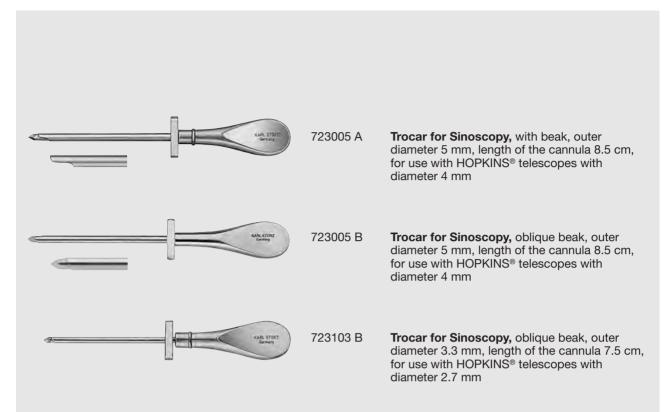




39105 A Cleaning Adaptor, for manual or machine cleaning of instruments without irrigation port from 1.5 to 5 mm diameter

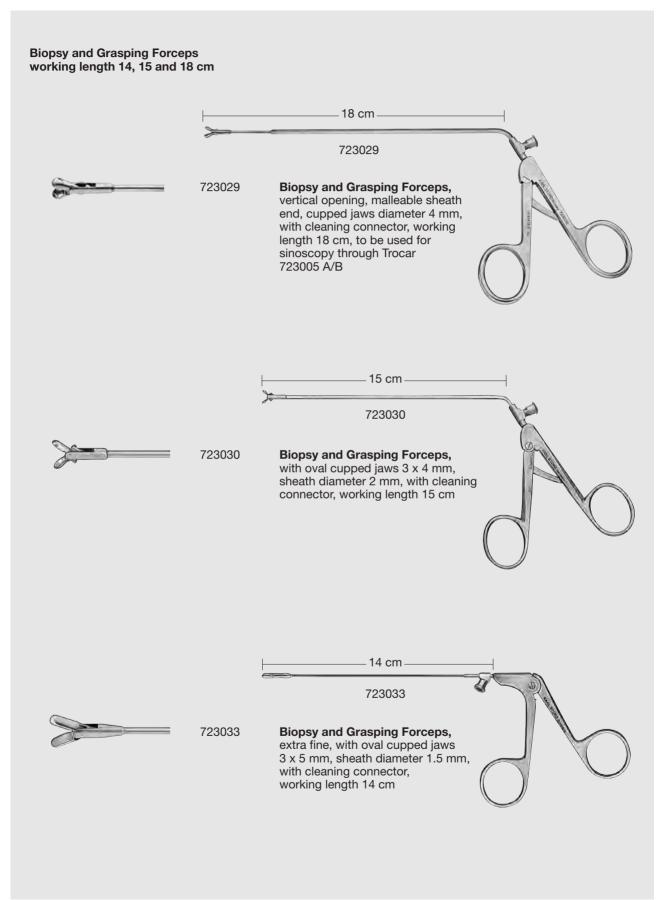
#### Accessories





for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





SI 91 D US 251

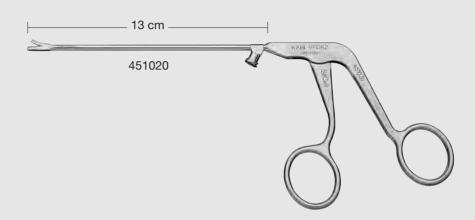
# SilCut® Instruments



#### **Special Features:**

- Tactile instrument feedback
- Uniform patented force transmission
- Powerful resection under precise control
- Accurate incision due to small tolerances
- Large aperture angle

- Special cutting geometry to prevent tissue from slipping
- Flat jaws
- Through-cutting and backward-cutting versions also available



S.	456021	GRÜNWALD-HENKE <b>SilCut® Nasal Forceps</b> , straight, not through-cutting, extremely powerful resection, patented uniform force transmission for gently controlled grasping and removal of tissue, cartilage and bone fragments, new ergonomic handle design, BLAKESLEY shape, size 1, with cleaning connector, working length 13 cm
M.	456521	Same, 45° upturned

451020	GRÜNWALD-HENKE <b>SilCut® Nasal Cutting Forceps</b> , straight, through-cutting, extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, BLAKESLEY shape, size 0, with cleaning connector, working length 13 cm
451021	Same, size 1

451520	GRÜNWALD-HENKE <b>SilCut® Nasal Cutting Forceps</b> , 45° upturned, through-cutting, extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, BLAKESLEY shape,
	cutting, new ergonomic nandle design, BLAKESLEY snape,
	451520

cutting, new ergonomic handle design, BLAKESLEY shape, size 0, with cleaning connector, working length 13 cm

451521

Same, size 1



3-071

SI 93 D US



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452011	MACKAY-GRÜNWALD <b>SilCut® Nasal Cutting Forceps</b> , straight, through-cutting, extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, size 1.8 x 3 mm, with cleaning connector, working length 13 cm
452021	SilCut® Nasal Cutting Forceps, straight, through-cutting, extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, width of cut 1.5 mm, with cleaning connector, working length 13 cm
452022	Same, width of cut 2.7 mm
452023	Same, width of cut 3.4 mm
452031	SilCut® Nasal Cutting Forceps, jaws upturned 15°, through-cutting, extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, width of cut 1.5 mm, with cleaning connector, working length 13 cm
452032	Same, width of cut 2.7 mm
452033	Same, width of cut 3.4 mm
459110	STAMMBERGER <b>SilCut® Antrum Punch</b> , extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, upbiting backward cutting, with cleaning connector, working length 10 cm
459151	Same, right side downward and forward cutting
459152	Same, left side downward and forward cutting
459161	SilCut® Antrum Punch, right side upbiting and forward cutting, sheath distally angled to the right, with cleaning connector, working length 10 cm
459162	SilCut® Antrum Punch, left side upbiting and forward cutting, sheath distally angled to the left, with cleaning connector, working length 10 cm

Recommended stainless steel trays for sterilization 39910 SC see catalog HYGIENE

# SinuF/T® Instruments

completely detachable



The missing piece of the puzzle
The new generation of ENT forceps from KARL STORZ



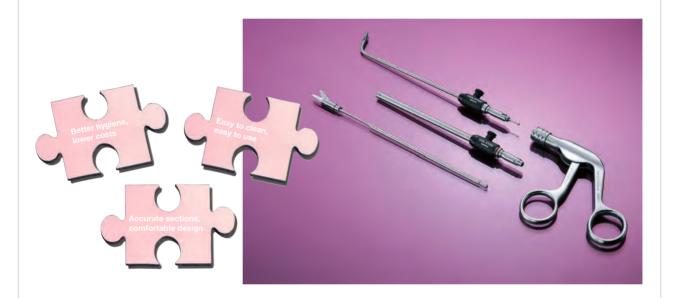
#### Nothing could be more simple!

The preparation of instruments is increasingly in the spotlight. The demand for a perfect hygienic cleaning process which can be validated and recorded is difficult to meet due to the design constraints of conventional instruments.

**Sinu**FIT®, the new ENT forceps from KARL STORZ, on the contrary, make perfect hygiene child's play. One hand

movement is enough to separate the outer sheath from the working insert. You then have 3 or, with particularly delicate instruments, 2 instrument parts without dirt traps or inaccessible channels, which can be cleaned efficiently to a cutting-edge hygienic standard.

Naturally, the instruments can be reassembled as quickly and easily as they can be dismantled.





Dismantling the instrument in 3 simple steps: Push the slide back...



... and pull the outer sheath and the working insert out of the handle.



In the case of instruments with three parts, you then release the bayonet mount by turning it 90° and pulling the working insert out of the sheath. Done!

Machine cleaning of the  $\mathbf{Sinu}FIT^{\otimes}$  instruments is as easy as it is efficient. Specially developed cleaning racks, in which the separate parts of the  $\mathbf{Sinu}FIT^{\otimes}$  can be connected directly to the rinsing system, ensure particularly thorough preparation.

# SinuFIT® Instruments

completely detachable





#### **Special Features:**

- Completely detachable
- Easy dismantling and reassembly
- Easy and efficient cleaning also by means of the LUER-Lock connection
- Economic advantages due to compatibility with all working inserts and outer sheaths
- Well-balanced handle with ergonomic design
- Great variety of working inserts
- Inserts can be locked into three different positions

#### Two-piece design

#### SinuF/T® Instruments, consisting of:

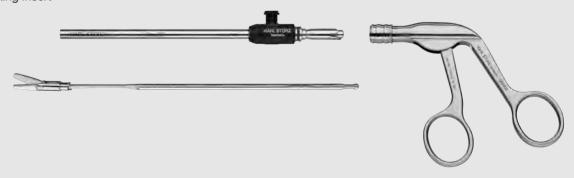
- Handle
- Working attachment



#### Three-piece design

#### SinuF/T® Instruments, consisting of:

- Handle
- Outer sheath
- Working insert



#### Please note:

For  $SinuFIT^{\circledcirc}$  instruments only the **individual component parts** are numbered. The catalog number for the **dismantling working attachment** is **not** on the instrument.

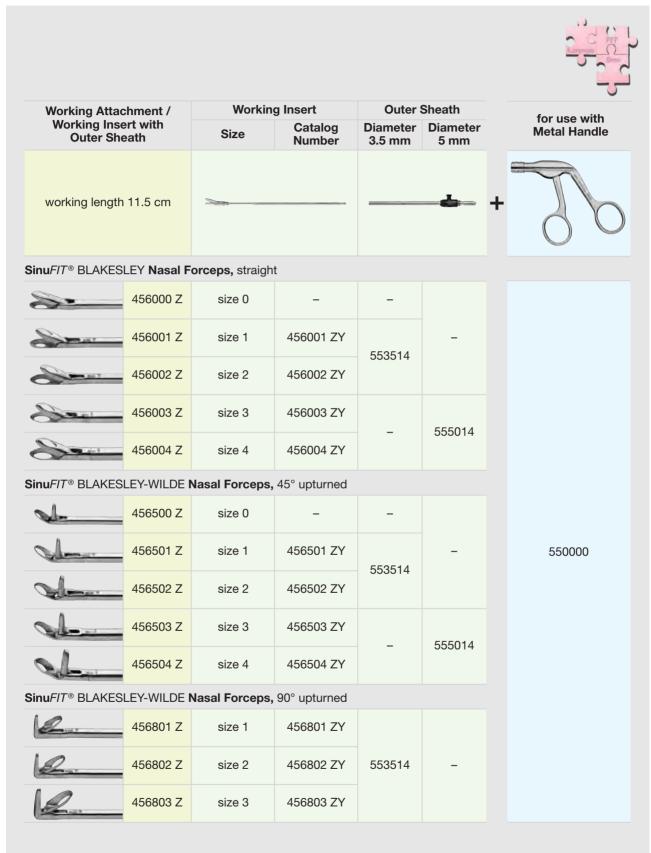
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SI 95 E US 255

# SinuF/T® Instruments

completely detachable





Please note:

The Metal Handle 550000 is **not** included in delivery. Please order separately.

# SinuF/T® Instruments

completely detachable



		\MI-	u luna est	0	Oh o c.t.le	-
Working Attachment / Working Insert with		Working Insert Catalog		Diameter	Sheath Diameter	for use with Metal Handle
Outer Shea	ath	Size	Number	3.5 mm	5 mm	Wetai Handle
working length 11.5 cm						+
<b>Sinu</b> FIT® GRÜNWA BLAKESLEY shape	LD-HENKE	Nasal Forceps	, straight, throu	gh-cutting,		
8	456100 Z	width 2.5 mm	-	_		
2-	456101 Z	width 3.5 mm	456101 ZY	55054.4	_	
8000	456102 Z	width 4.2 mm	456102 ZY	553514		
8-	456103 Z	width 4.8 mm	456103 ZY	_	555014	
SinuFIT® GRÜNWALD-HENKE Nasal Forceps, 45° upturned, through-cutting, BLAKESLEY shape						
	456120 Z	width 2.5 mm	-	_		
	456121 Z	width 3.5 mm	456121 ZY	553514	_	
0	456122 Z	width 4.2 mm	456122 ZY	333314		550000
0	456123 Z	width 4.8 mm	456123 ZY	_	555014	
SinuFIT® MACKAY-	GRÜNWAL	D <b>Nasal Force</b> p	s, straight, thro	ough-cutting		
	152001 BZ	size 1 8 x 3 mm	452001 BZY	55051 <i>A</i>		
	152002 BZ	size 2 11.5 x 3.5 mm	452002 BZY	553514		
inuFIT® MACKAY-	GRÜNWAL	D Nasal Forcep	s, 45° upturne	d, through-c	utting	
W	152501 BZ	size 1 8 x 3 mm	452501 BZY	553514		
	152502 BZ	size 2 11.5 x 3.5 mm	452502 BZY	553514	_	

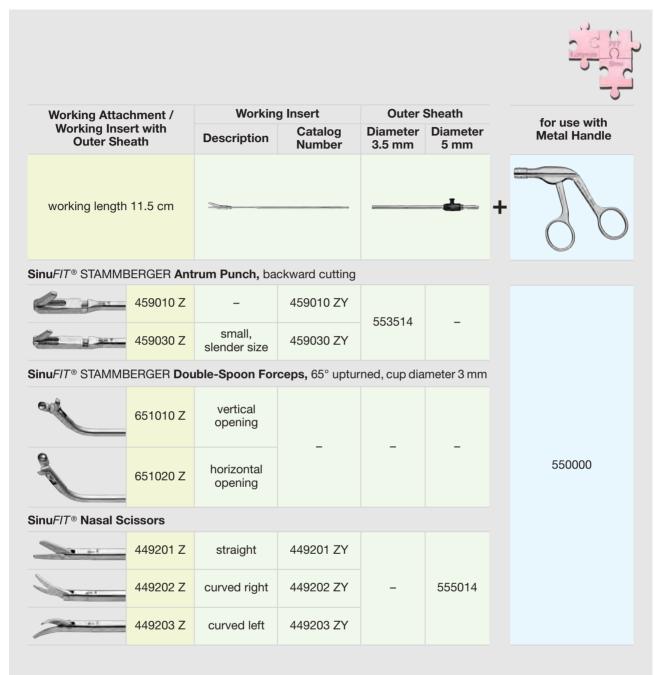
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SI 97 E US 257

# SinuFIT® Instruments

completely detachable





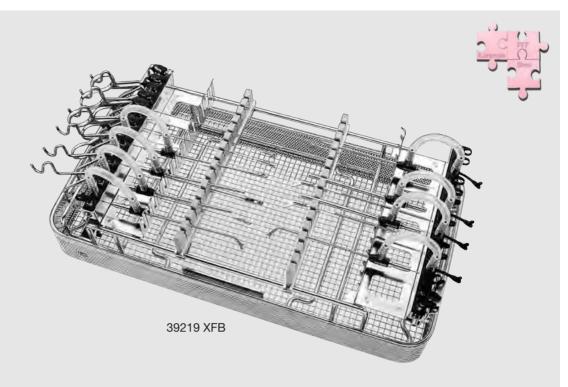
#### Please note:

The Metal Handle 550000 is **not** included in delivery. Please order separately.

# SinuF/T® Instruments

Accessories





39219 XF

**Instrument Rack,** with one irrigation block (standard version) for cleaning, sterilization and storage of up to 15 **Laryngo**  $FIT^{\otimes}$  or 15 **Sinu**  $FIT^{\otimes}$  instrument attachments and 6 handles, incl. variable bars with silicone holder and direct connection of the instrument attachments via a multi-port bridge to the washer-disinfector and Wire Tray 39502 ZB, external dimensions (w x d x h): 480 x 250 x 160 mm

39219 XFB

Same for Cleaning, Sterilization and Storage of up to 15 LaryngoFIT® or 15 SinuFIT® instrument attachments and 6 handles

#### **Optional Accessory**



39502 V

**Wire Tray for Cleaning, Sterilization and Storage** of instruments, with hole plate walls and foldaway handles, external dimensions (w x d x h): 228 x 248 x 45 mm

Components/Spare Parts see chapter 16

Further accessories for cleaning and sterilization see catalog HYGIENE

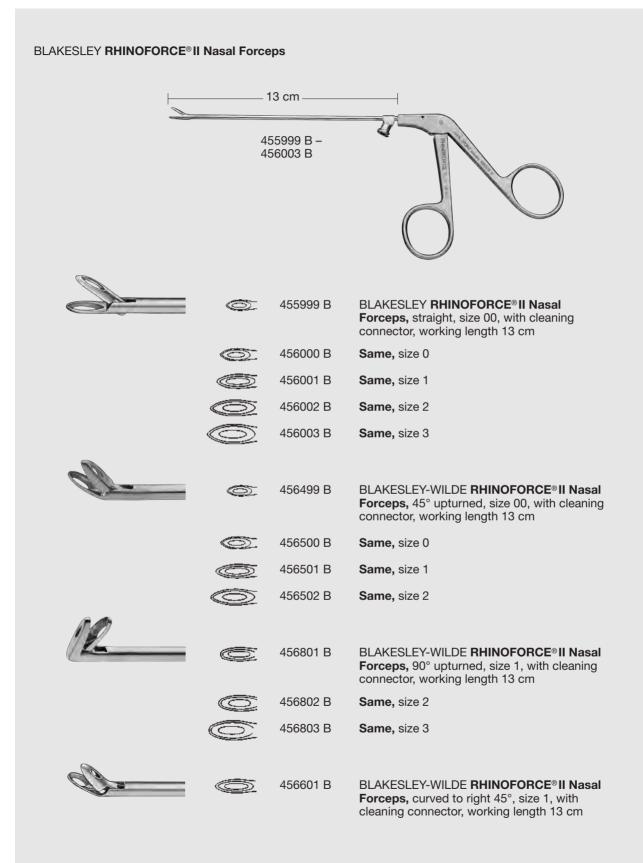
**Please note:** The instruments displayed are not included in the instrument racks.

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SI 99 F US 259

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



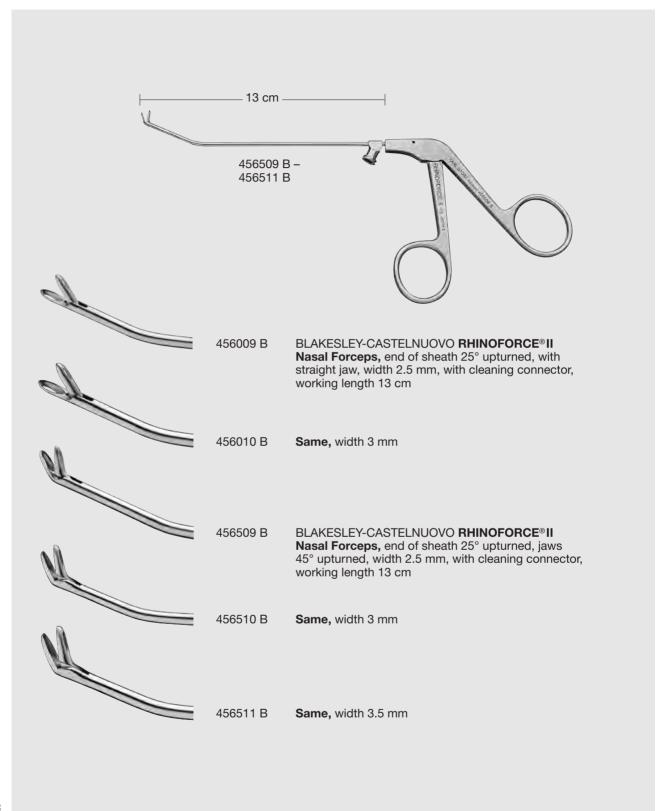


Recommended stainless steel trays for sterilization 39910 SC see catalog HYGIENE

260 SI 100 F US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





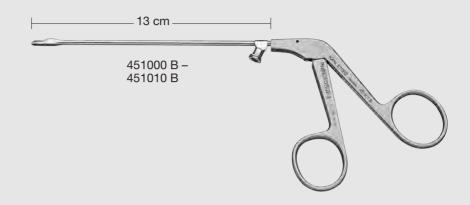
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SI 101 F US 261

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



#### GRÜNWALD-HENKE/CASTELNUOVO RHINOFORCE® II Nasal Forceps, through-cutting



	451000 B	GRÜNWALD-HENKE RHINOFORCE® II Nasal Cutting Forceps, straight, through-cutting, tissue-sparing, BLAKESLEY shape, size 0, width 3 mm, with cleaning connector, working length 13 cm
_	451001 B	Same, size 1, width 3.5 mm
_ ()		
	451002 B	Same, size 2, width 4 mm
	451010 B	CASTELNUOVO RHINOFORCE®II Nasal Cutting Forceps, end of sheath 25° upturned, through-cutting, with straight jaws, BLAKESLEY shape, width 3 mm, with cleaning connector, working length 13 cm
	451500 B	GRÜNWALD-HENKE RHINOFORCE® II Nasal Cutting Forceps, 45° upturned, through-cutting, tissue-sparing, BLAKESLEY shape, size 0, width 3 mm, with cleaning connector, working length 13 cm
	451501 B	Same, size 1, width 3.5 mm
	451502 B	Same, size 2, width 4 mm

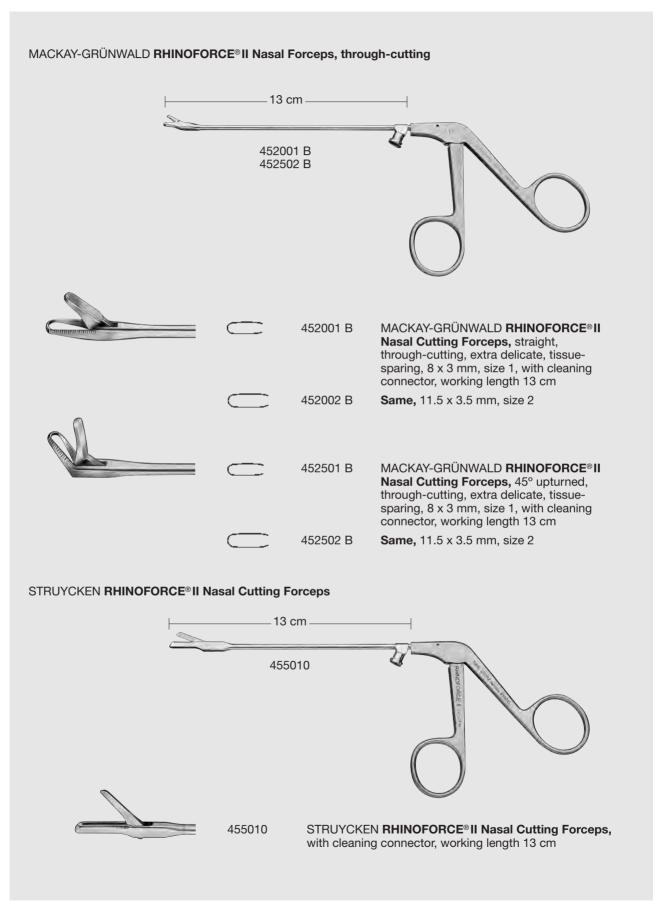
451502 B Same, size 2, width 4 mm

451510 B CASTELNUOVO RHINOFORCE® II Nasal Cutting Forceps, end of sheath 25° upturned, through-cutting, jaws 45° upturned, BLAKESLEY shape, width 3 mm, with cleaning connector, working length 13 cm

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



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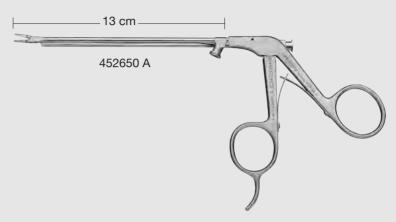
SI 103 F US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



MONTGOMERY-YOUNGS RHINOFORCE® II Clip Applicator, for endonasal endoscopic sphenopalatine artery ligature





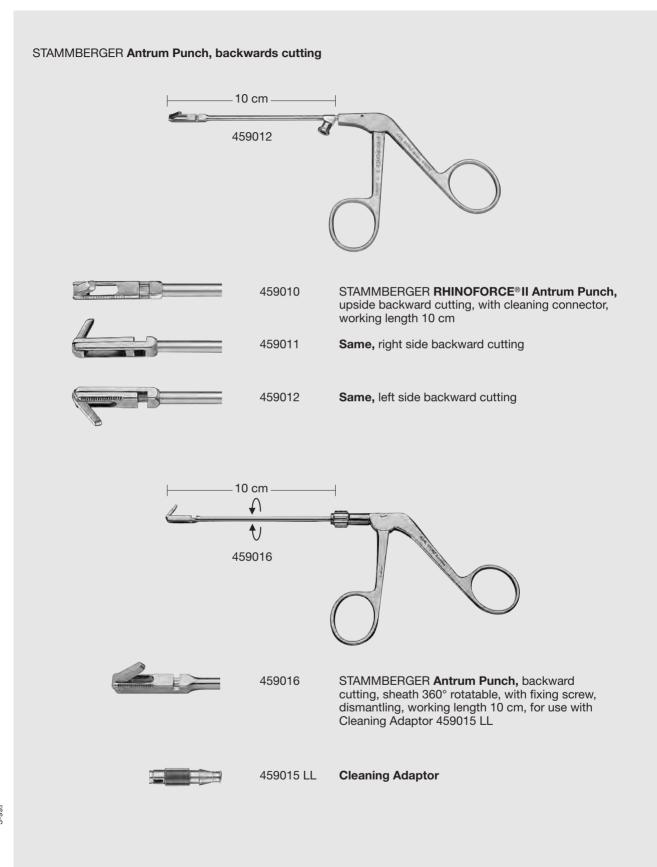


The **Cutlers' Surgical Prize** is one of the most prestigious annual awards for innovation in the design or application of surgical instruments or techniques. The prize as well as the Clarke medal are awarded by the surgical association and the president of the Royal College of Surgeons of England.

	452650 A	MONTGOMERY-YOUNGS RHINOFORCE® II Clip Applicator, for endonasal endoscopic sphenopalatine artery ligature, with suction channel, handle with spring, straight, with cleaning connector, working length 13 cm, for use with Titanium Clips 8665 T
3	452650 C	Same, jaws angled to the right
	452650 D	Same, jaws angled to the left

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



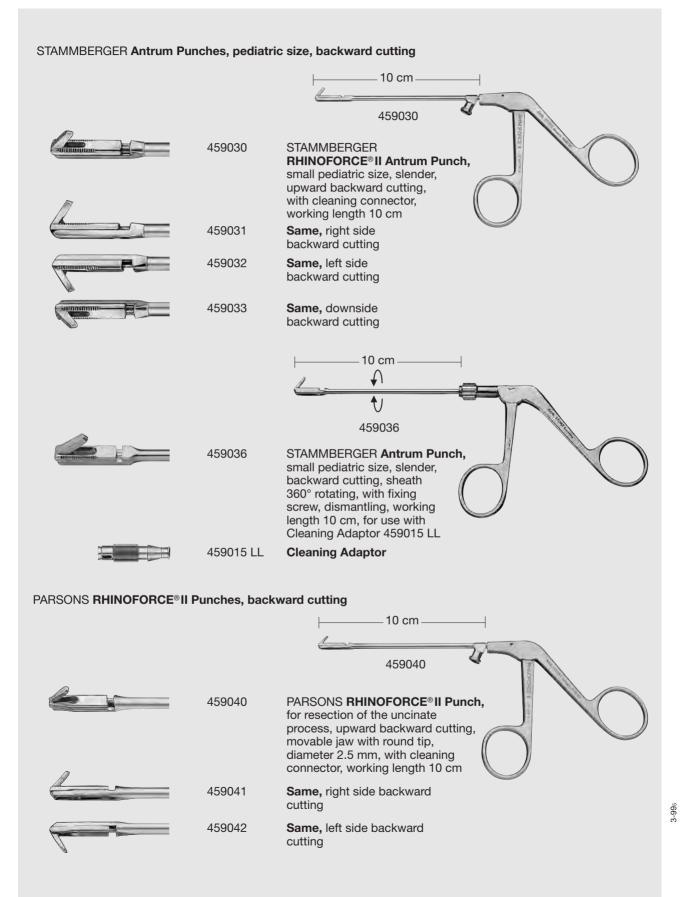


SI 105 E US 265

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for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





SI 106 E US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

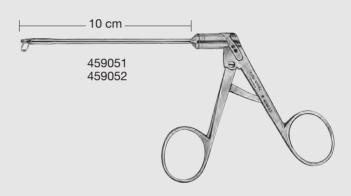


#### STAMMBERGER Antrum Punch, sidebiting downward and forward cutting

The sidebiting antrum punch forceps designed in conjunction with Professor Heinz STAMMBERGER are crucial for removing remnants of the inferior uncinate process. The forceps are available in left and right version, and are designed to cut downward and forward. The innovative forceps design allows individual shaping of the antrostomy opening and

extension of the antrostomy inferiorly and posteriorly. Use of the new sidebiting forceps can help reduce the time required for a middle meatal antrostomy. The sidebiting forceps can also be used to connect an accessory ostium to the natural maxillary ostium, as well as for partial resection of the inferior orbital floor in orbital decompression procedures.







459051 ST

STAMMBERGER **Antrum Punch**, right side downward and forward cutting, working length 10 cm



459052

**Same,** left side downward and forward cutting

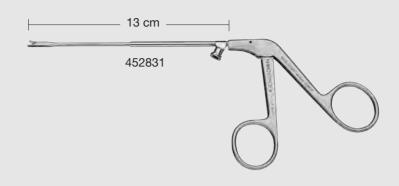
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SI 107 F US 267

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



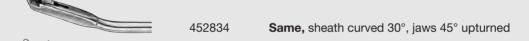
### RHINOFORCE® II Miniature Nasal Forceps, flat jaws, through-cutting



	452831	RHINOFORCE®II Miniature Nasal Forceps, with extra fine flat jaws, through-cutting, tissue-sparing, straight sheath, straight jaws, width of cut 1.5 mm, with cleaning connector, working length 13 cm
<u>a</u>		



452833 **Same,** sheath curved 30°, straight jaws





452841 L Same, left side opening

452841 R **Same,** right side opening

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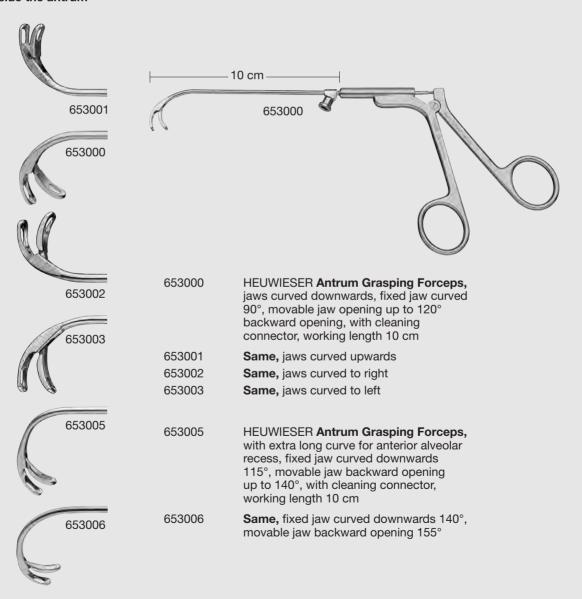
for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



#### **HEUWIESER Antrum Grasping Forceps**

#### **Special Features:**

- Unique concept, completely new design
- Short, sharp-radius curve starting at the joint of the jaws
- Far-reaching jaws open backwards
- For endonasal removal of cysts and polyps
- Specially suitable for out-patient use under local anesthesia where a window already exists, without subjecting the patient to undue stress
- With the telescope introduced separately the slim sheath with a diameter of only 2.5 mm permits good handling and unimpeded view inside the antrum
- Distal end of the forceps is sharply curved like an antrum cannula thus making it possible to introduce the working end far into the antrum; the fundus of the antrum is reached down to the alveolar sinus
- Fenestrated jaws enable unobstructed view of anatomic structures and the position of the jaws, thus particularly facilitating localized work with grasping forceps
- Also suitable for removing fish bones and hairs from the hypopharynx



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SI 109 F US 269

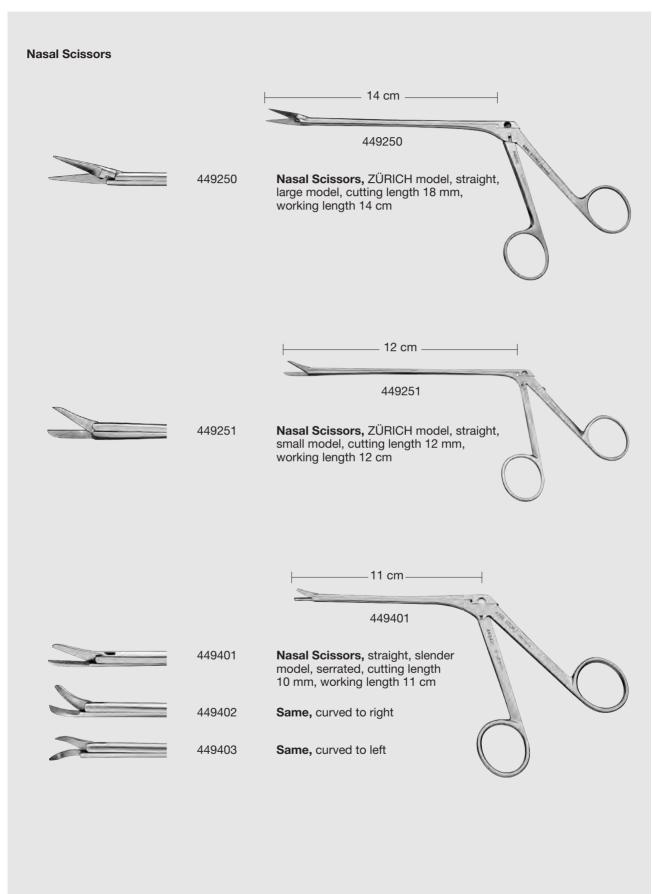
for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



# RHINOFORCE® II Nasal Scissors 13 cm -449201 449201 RHINOFORCE® II Nasal Scissors, straight, with cleaning connector, working length 13 cm 449202 Same, curved to right 449203 Same, curved to left 449204 RHINOFORCE® II Nasal Scissors, cutting blades curved upwards, to cut the anterior part of the middle turbinate in case of narrow nose and to prevent postoperative synechia, with cleaning connector, working length 13 cm 449205 Same, curved downwards 449211 RHINOFORCE® II Nasal Scissors, straight, small model, length of cut 10 mm, with cleaning connector, working length 13 cm 449212 Same, curved to right Same, curved to left 449213

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

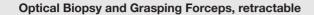


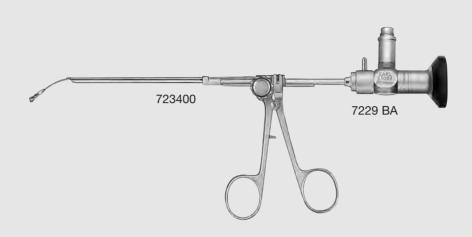


SI 111 F US 271

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base









723400

Optical Biopsy and Grasping Forceps, flexible, for use with HOPKINS® II Telescope 7229 BA and Trocars 723005 A/B



7229 BA

HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 2.7 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red

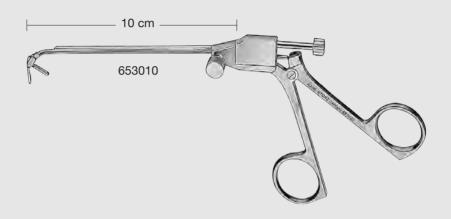
for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



**HEUWIESER Antrum Grasping Forceps, double action jaws** 

#### **Special Features:**

- Enlarged action radius of jaws compared to that of HEUWIESER standard forceps
- Retrograde position of both jaws adjustable: upper jaw up to 120° angle, inferior jaw up to 180°, opens backwards



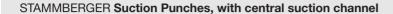


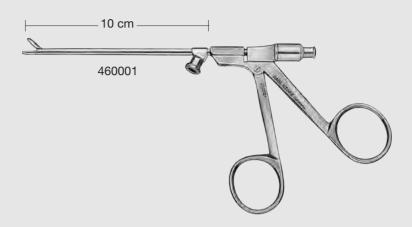
653010

HEUWIESER **Antrum Grasping Forceps**, double action jaws adjustable to retrograde position, working length 10 cm

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base









STAMMBERGER **Suction Punch,** for biopsy and grasping, straight, with central suction channel, with Cleaning Stylet 460001 E, size 1, with cleaning connector, working length 10 cm

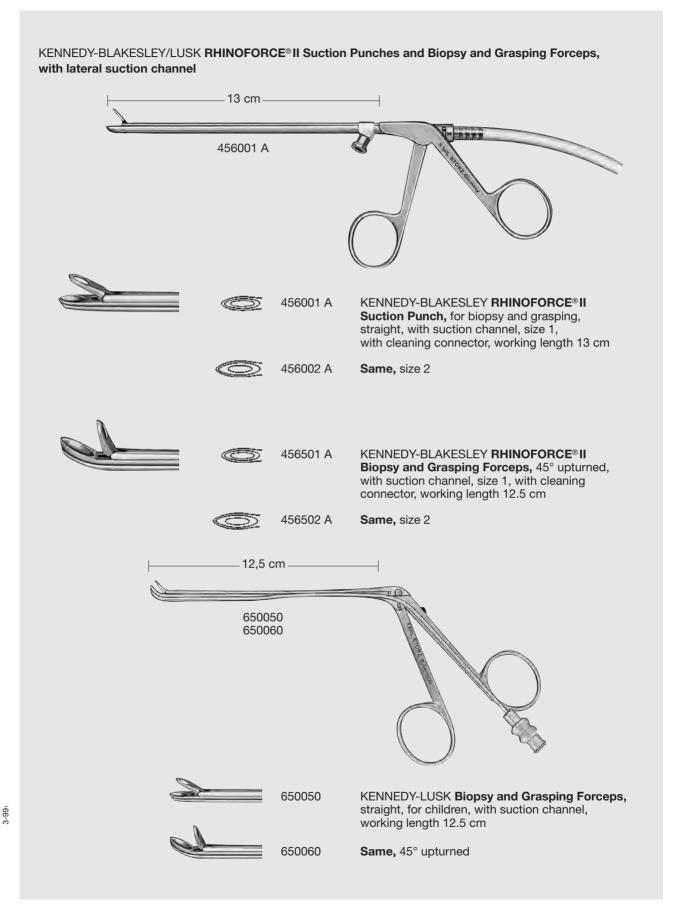


STAMMBERGER **Suction Punch**, for biopsy and grasping, curved upwards, with central suction channel, with Cleaning Stylet 460001 E, size 1, with cleaning connector, working length 10 cm

Components/Spare Parts see chapter 16

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





SI 115 G US 275

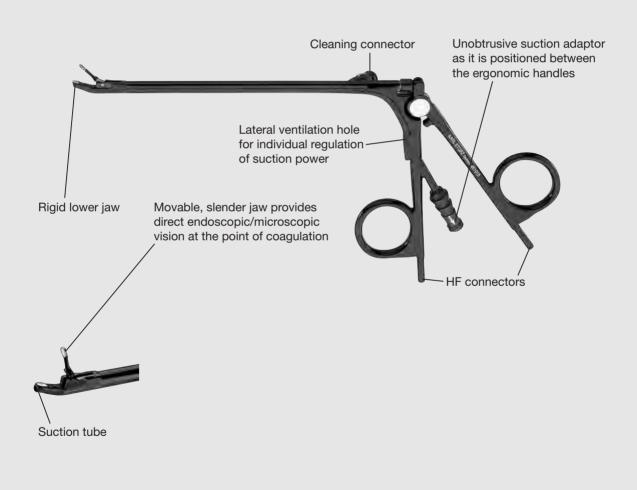




#### **Special Features:**

- Design similar to standard paranasal grasping forceps
- Integrated suction channel
- Individual suction power regulation
- Bipolar coagulation
- Insulated except for small coagulation area on the instrument tip
- Single action jaws
- Distance between cautery poles may be varied, enabling punctual and extensive coagulation
- Special design of the movable jaw provides direct endoscopic/ microscopic vision at the point of coagulation
- Two instrument heads: angled 15° and 45° to the instrument sheath
- Slim design enables good availability of previously hard to reach regions for cauterization





 $3-07_{2}$ 





#### **Indications/Applications:**

- Arterial bleeding (ethmoidal, sphenopalatine and maxillary arteries, turbinate and septum vessels)
- Skull base surgery
- Oozing hemorrhage from the mucosa edges
- Pituitary gland surgery
- Vascular processes, i.e. nasopharyngeal fibroma
- Epistaxis

- Rendu-Osler-Weber disease
- Secondary hemorrhage, i.e. from adenotomes in the nasopharynx
- Edema prevention, shrinkage of mucosa (for example, posterior end of the turbinate)
- Turbinate cauterization







461010

STAMMBERGER **Bipolar Suction Forceps,** 15° upturned, with suction channel, for bipolar coagulation in paranasal areas, working length 12.5 cm, for use with Bipolar High Frequency Cords 847002 E or 847002 A/M/V/U





461015

STAMMBERGER **Bipolar Suction Forceps**, 45° upturned, with suction channel, for bipolar coagulation in paranasal areas, working length 12.5 cm, for use with Bipolar High Frequency Cords 847002 E or 847002 A/M/V/U

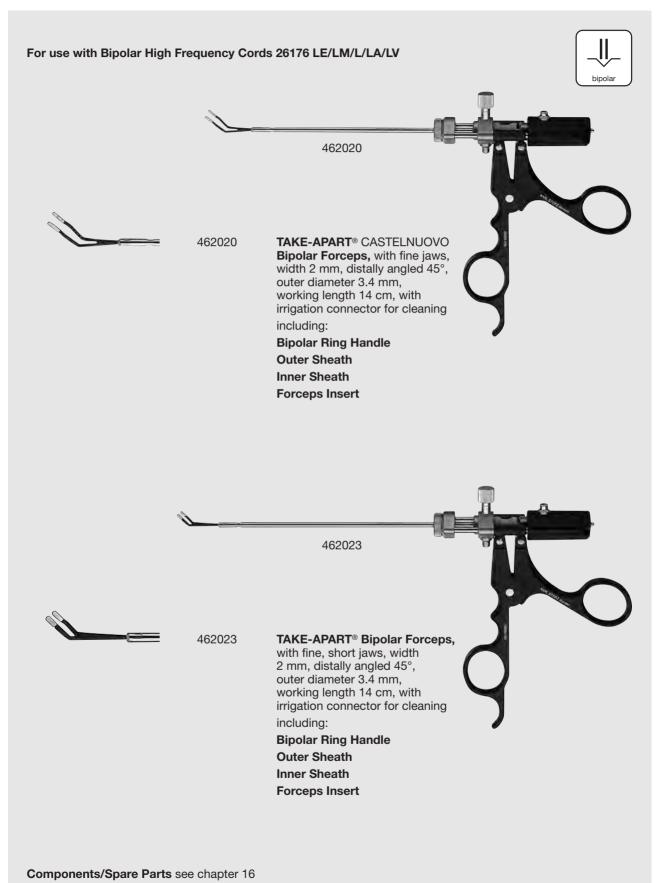
Bipolar High Frequency Cords see page 418

SI 117 G US

277

# TAKE-APART® Bipolar Forceps





278 SI 118 G US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

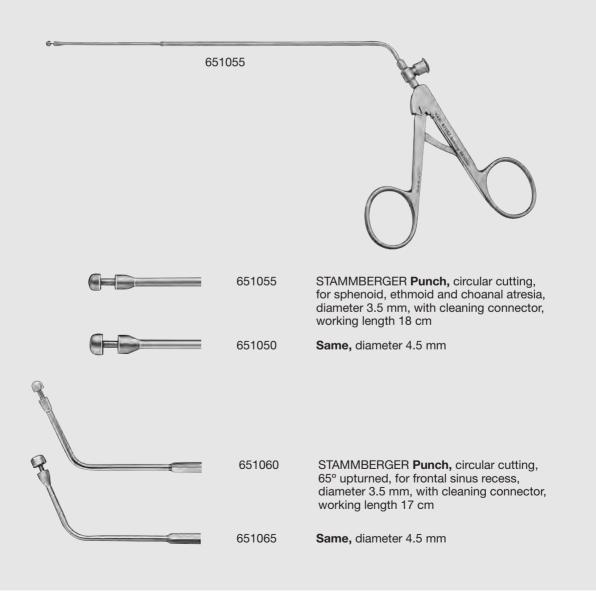


#### STAMMBERGER Circular Cutting Punches

#### **Special Features:**

- Unique design
- For enlarging openings in the sphenoid frontal wall
- Circular cutting punch mechanism allows cutting in a full circle of 360° without rotating the instrument as required with a conventional punch forceps
- No interference with other instruments simultaneously used in the nose (e. g. endoscope, suction tube)
- Available in 2 sizes: diameter 3.5 and 4.5 mm, punch head 4-fold LASER-welded
- With cleaning connector

- Multipurpose use:
- In addition to abrading procedures applied to the sphenoid frontal wall, bony ethmoid septa, pieces of nasal concha and other thin bony bridges can also be cut away
- Extremely useful for treatment of choanal atresia
- Blunt punching head reduces injuries
- If used correctly by punching exclusively in the sagittal axis, traumata of vital structures, e. g. cranium, arteria carotis and optic nerve osseous canal are virtually impossible



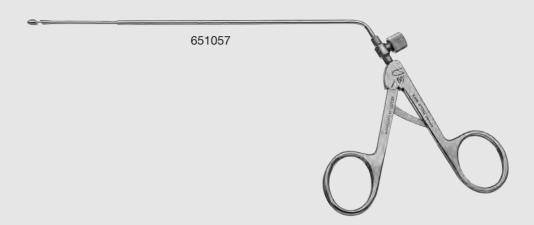
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SI 119 G US 279

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



# STAMMBERGER Punches Egg-shaped tip, for opening the ethmoid cells and the sphenoid sinus



<del></del>	651057	STAMMBERGER <b>Punch</b> , egg-shaped tip, circular cut, 60° cutting direction from distal above to proximal below, tip diameter 3.5 mm, straight sheath, for sphenoid, ethmoid and choanal atresia, with cleaning connector, working length 18 cm
	651058	Same, 120° cutting direction from distal below to proximal above

651052 STAMMBERGER **Punch**, egg-shaped tip, circular cut, 60° cutting direction from distal above to proximal below, tip diameter 4.5 mm, straight sheath, for sphenoid, ethmoid and choanal atresia, with cleaning connector, working length 18 cm

651053 Same, 120° cutting direction from distal below to proximal above



STAMMBERGER **Punch**, egg-shaped tip, circular cut, 90° cutting direction, tip diameter 3.5 mm, sheath 65° upturned, for frontal sinus recess, with cleaning connector, working length 17 cm

651066 **Same,** tip diameter 4.5 mm

3-071

280 SI 120 G US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

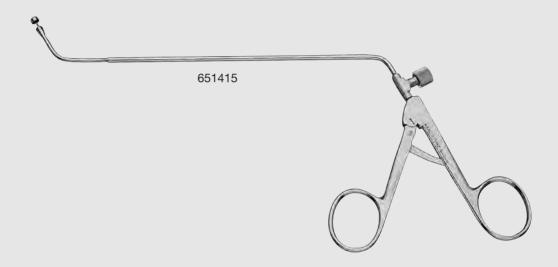


### **KAMEL Antrum Punches**

### **Special Features:**

- Middle meatal antrostomy punch
- Short tip, 30° and 45° upturned
- Punch head diameter 4.5 mm

- Circular cutting
- Working length 13 cm
- With cleaning connector





KAMEL **Punch**, 30° upturned, punch head diameter 4.5 mm, circular cutting, with cleaning connector, working length 13 cm

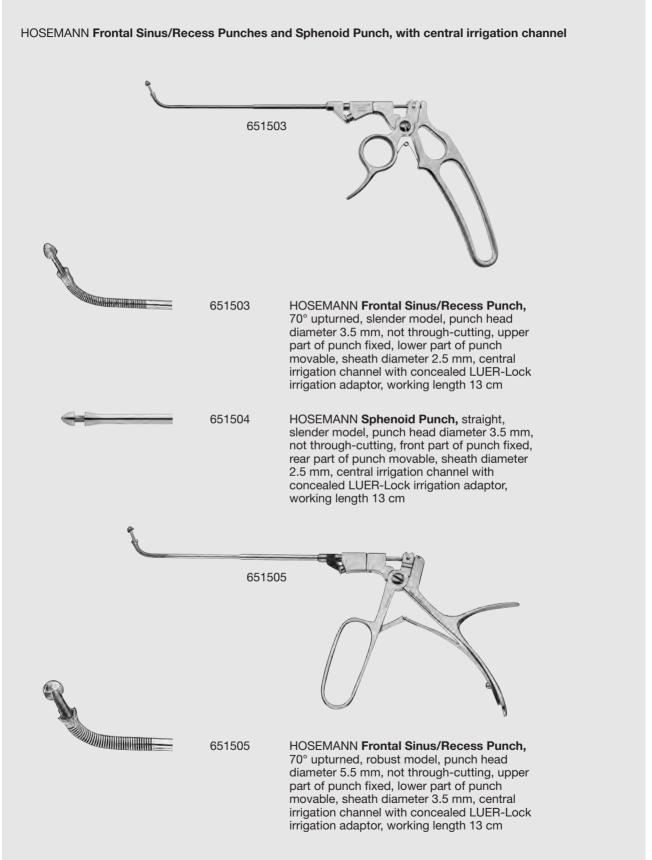


Same, 45° upturned

651415

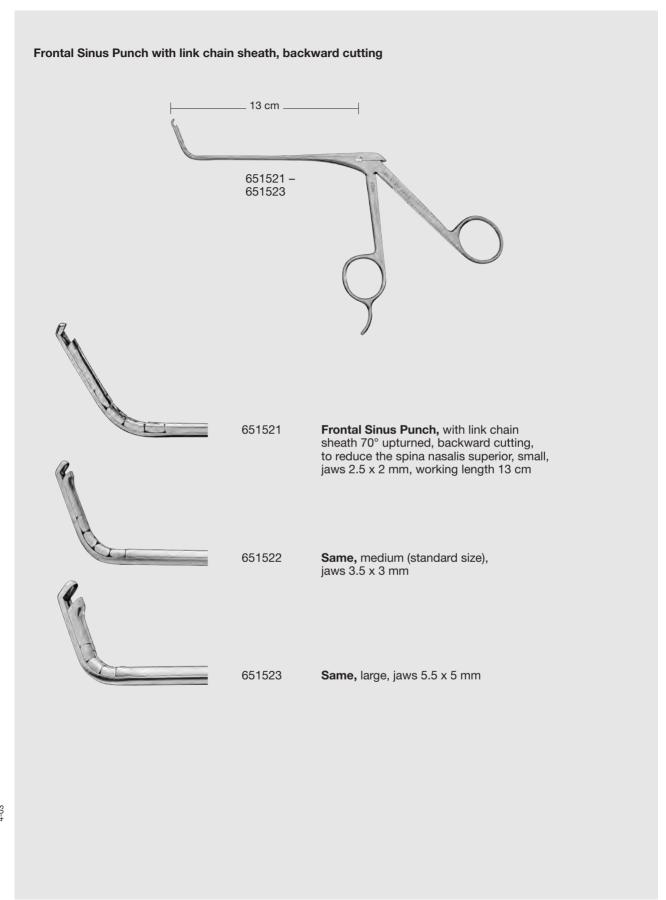
for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

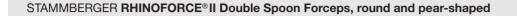


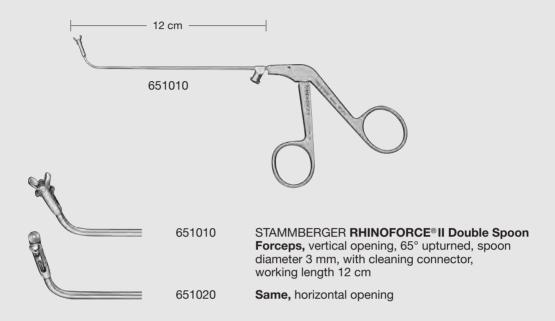


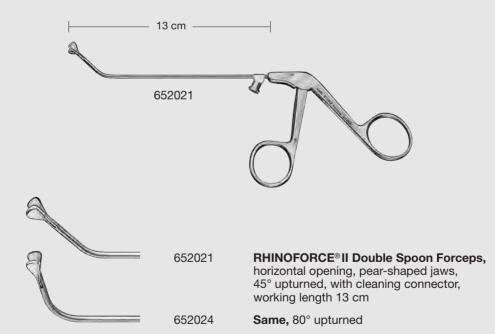
SI 123 D US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





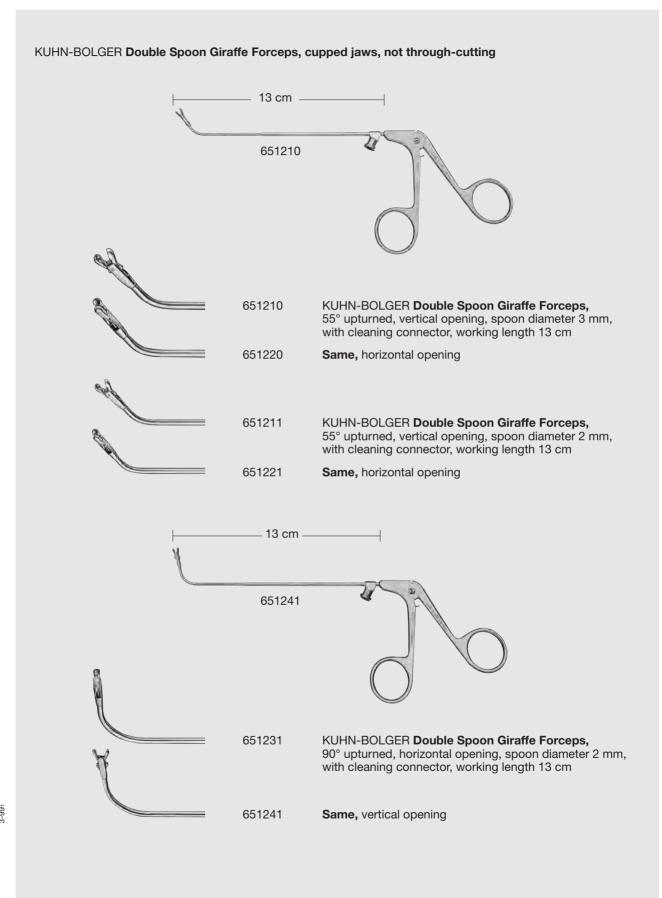




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for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

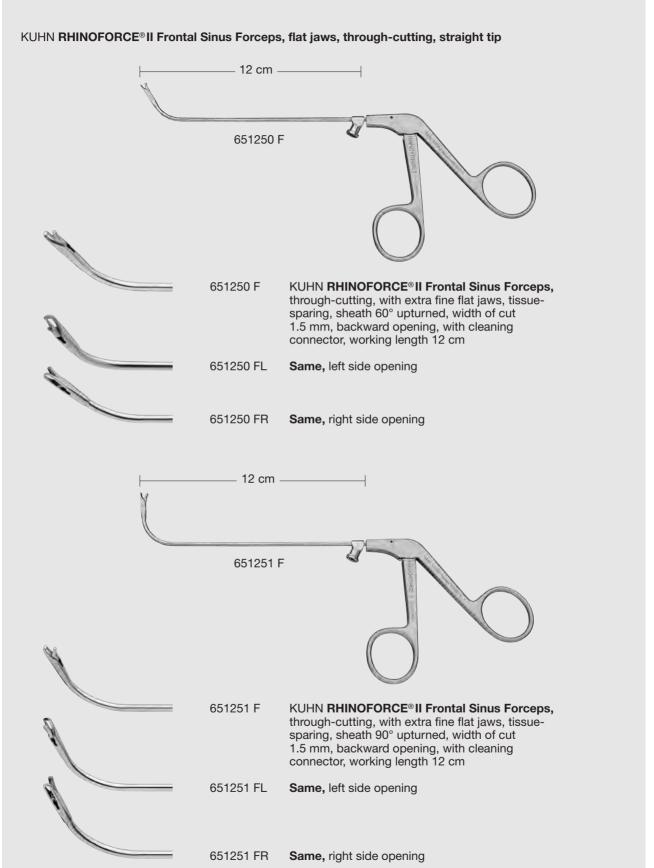




SI 125 G US 285

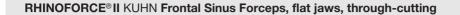
for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



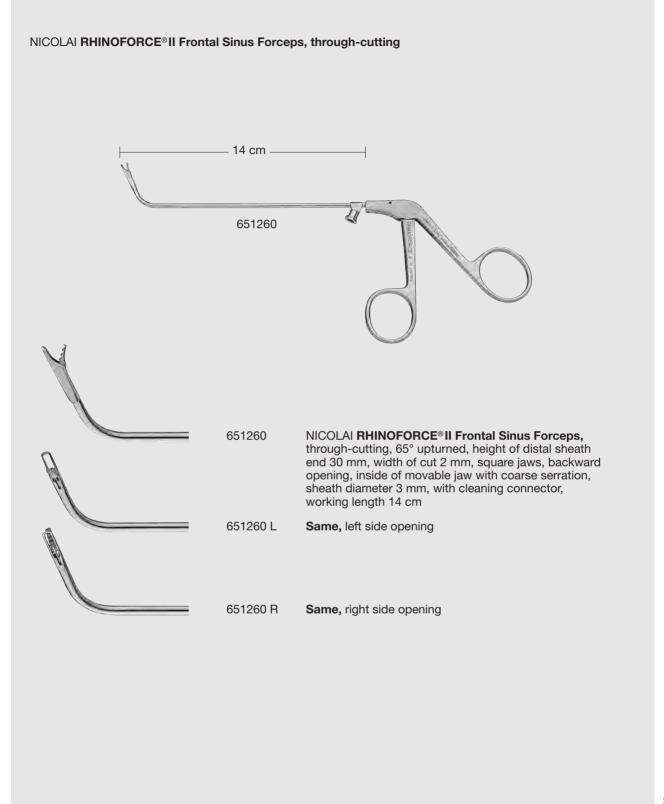




KUHN RHINOFORCE® II Frontal Sinus Forceps, through-cutting, jaws angled 45°, extra fine flat jaws, tissue-sparing, sheath 60° upturned, width of cut 1.5 mm, backward opening, with cleaning connector, working length 12 cm

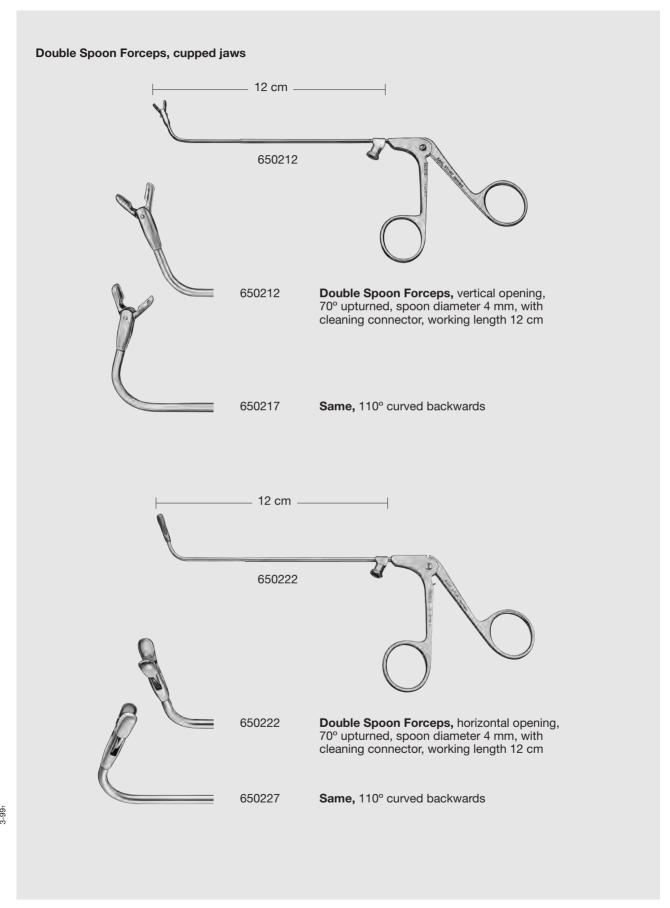
for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

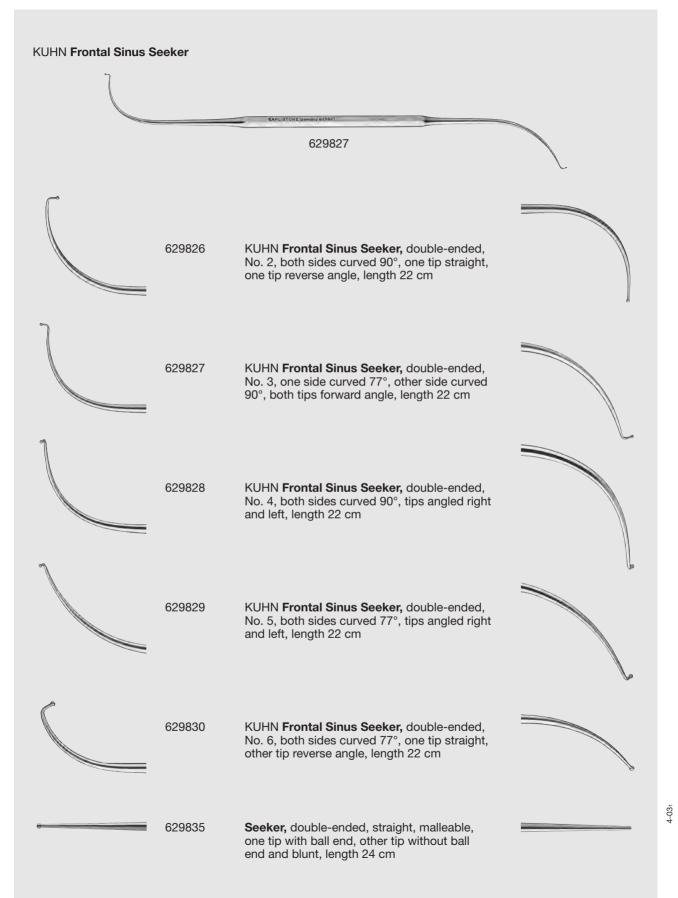




SI 129 G US 289

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base

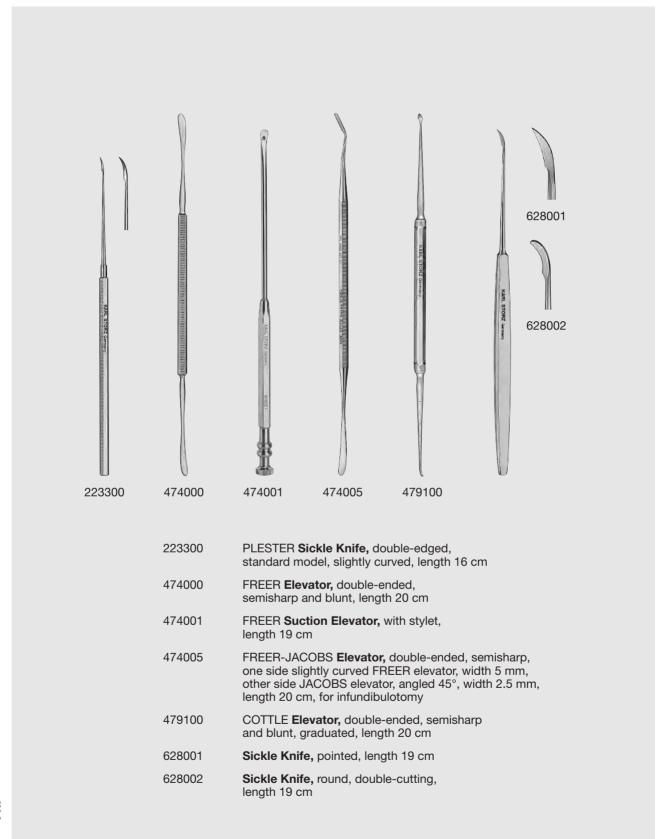




290 SI 130 G US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



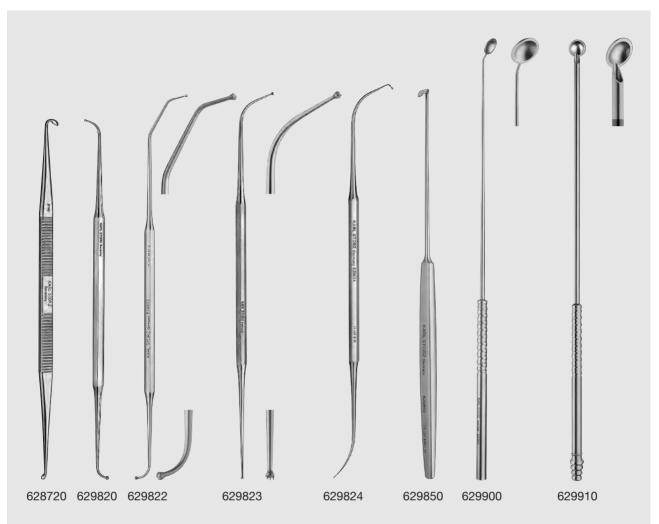


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SI 131 G US 291

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





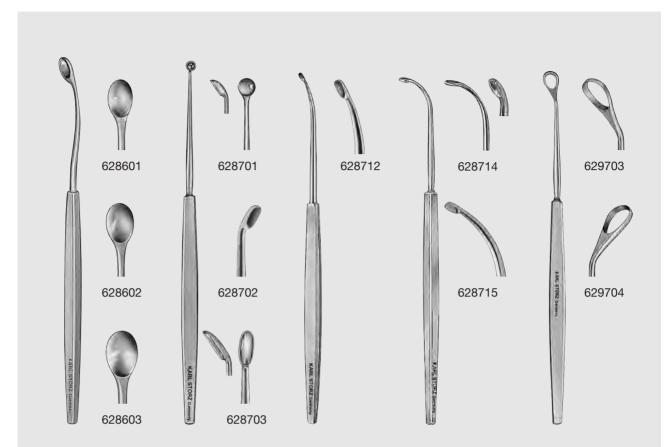
	628720	<b>Curette,</b> double-ended, oval, one side short curved 45°, semisharp, diameter 2.2 mm, other side long curved 90°, sharp, diameter 2.7 mm, length 19 cm
	629820	<b>Probe,</b> double-ended, maxillary sinus ostium seeker, ball-shaped ends diameter 1.2 and 2 mm, length 19 cm
	629822	CASTELNUOVO <b>Positioning Instrument,</b> double-ended, curved 80°/double curved, with 4 spikes, length 22 cm
	629823	CASTELNUOVO <b>Positioning Instrument,</b> double-ended, straight/curved 60°, with 4 spikes, length 22 cm
	629824	CASTELNUOVO <b>Frontal Sinus Probe,</b> double-ended, curved, length 22 cm
NEW	629850	MLADINA <b>Elevator</b> , curved backwards 40°, 6 x 6 mm, for atraumatic retrograde elevation, length 21 cm
	629900	STAMMBERGER <b>Plate Elevator,</b> closed blade diameter 10 mm, tip angled 30°, with round handle, length 25 cm
	629910	Same, with suction channel, LUER

7-01

292 SI 132 G US

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





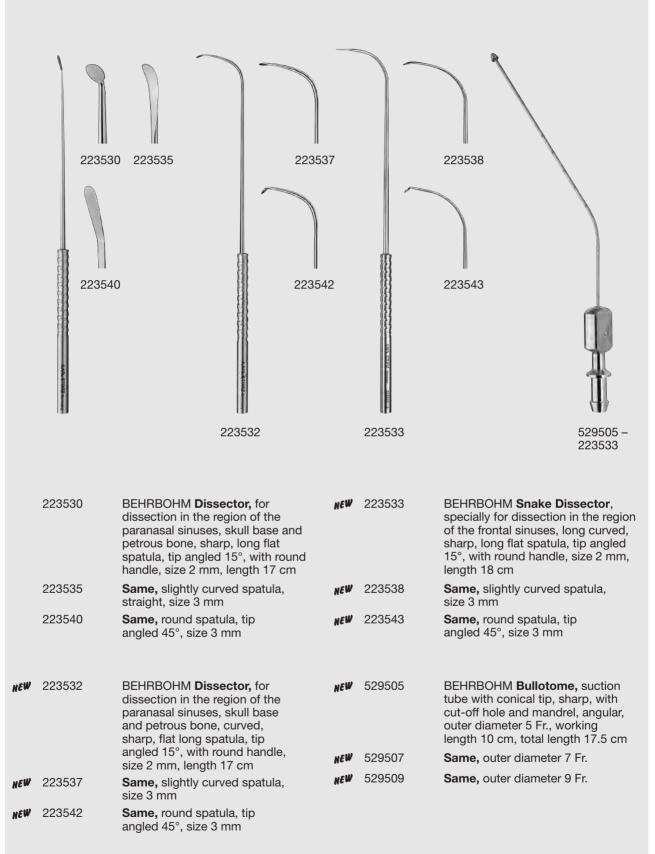
628601	Antrum Curette, oval, size 1, length 19 cm
628602	Same, size 2
628603	Same, size 3
628701	Antrum Curette, round, length 19 cm
628702	Same, oblong, small
628703	Same, oblong, large
628712	KUHN-BOLGER <b>Frontal Sinus Curette</b> , 55° curved, oval, forward cutting, length 19 cm
628714	Same, 90° curved
628715	KUHN-BOLGER <b>Frontal Sinus Curette</b> , elongated 90° curve, oblong, small, length 19 cm
629703	Antrum Curette, forward cutting, small, length 19 cm
629704	Same, backward cutting

3-992

SI 133 G US 293

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





294 SI 134 G US

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for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base



ANALYSE ANALYS	Notes stores	The state of the s		**And a street	*** The state of t	The country of the co	
586012 –	586025 -	586026	586125 586130	586225 -	586226 –	586325 - 586340	586525
586012 586015	curved, with outer diame Same, with	nnula, LUER-L n olive, without eter 1.2 mm, le olive diameter eter 1.5 mm	t grip plate, ngth 9 cm	586225 586230	v. EICKEN Antr LUER-Lock, sh diameter 2.5 m Same, outer di	nort curved, ou nm, length 12.5 iameter 3 mm	ıter
586020		er diameter 2 m	nm	586240	Same, outer di		
586025	LUER-Lock	Antrum Cannu , long curved, 5 mm, length 1	outer	586226	v. EICKEN Anti LUER-Lock, wi short curved, c diameter 2.5 m	ith cut-off hole outer	,
586030	Same, oute	er diameter 3 m	nm	586231	Same, outer di	iameter 3 mm	
586040		er diameter 4 m		586241	Same, outer di		
586026	LUER-Lock	Antrum Cannu , with cut-off h er diameter 2.5 cm	ole, long	586325 586330	v. EICKEN Anti LUER-Lock, loi diameter 2.5 m Same, outer di	ng curved, out nm, length 15 o	ter
586021	J		nm		•		
586031 586125		er diameter 3 m Antrum Cannu		586340 586525	Same, outer di Antrum Cannu		.k
500120	LUER-Lock serrated gri 2.5 mm, ler	i, long curved, p plate, outer on gth 12.5 cm	malleable, diameter	300323	straight, mallea grip plate, oute working length	able, with serra er diameter 2.5	ated
586130	Same, oute	er diameter 3 m	nm				

3-993

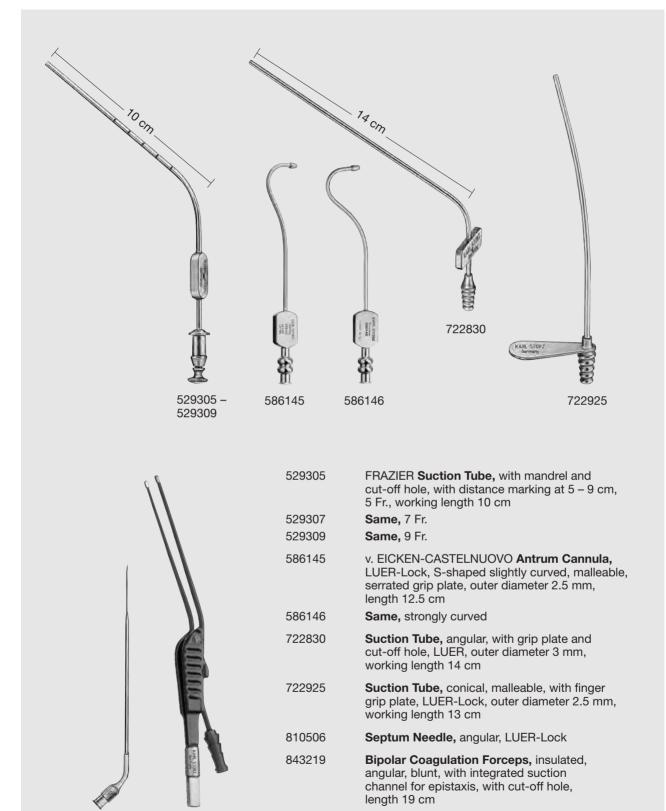
SI 135 F US 295

810506

843219

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base









403240	KILLIAN-STRUYCKEN  Nasal Speculum, with set rack, blade length 40 mm, length 15 cm	404555
403255	Same, blade length 55 mm	
403265	Same, blade length 65 mm	404EGE
403275	Same, blade length 75 mm	404565
403290	Same, blade length 90 mm	404575 404590
404455	RUDERT <b>Nasal Speculum,</b> for adults, with set screw and adaptation for Flexible Tension Arm 723018, left blade length 55 mm, right blade shortened with 3 mandrels, length 15 cm	
404465	Same, left blade length 65 mm	
404475	Same, left blade length 75 mm	

Same, left blade length 90 mm

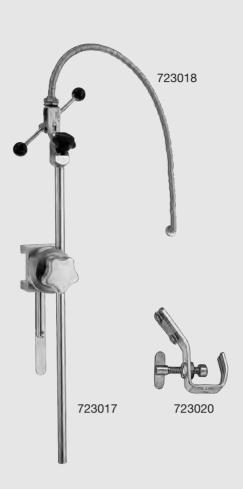
RUDERT Nasal Speculum, for adults, with set screw and adaptation for Flexible Tension Arm 723018, right blade length 55 mm, left blade shortened with 3 mandrels, length 15 cm Same, right blade length 65 mm Same, right blade length 75 mm Same, right blade length 90 mm

-954

404490

for Endoscopic Diagnosis, Surgery and Postoperative Treatment of Nasal Sinuses and Anterior Skull Base





For use with Nasal Specula 404455 - 404475, 404555 - 405575

723017 **Rotating Clamp,** with holding rod for Flexible Tension Arms 723018 and 28162 FB,

attachable to the operating table's sliding rail

723018 Flexible Tension Arm, length 50 cm

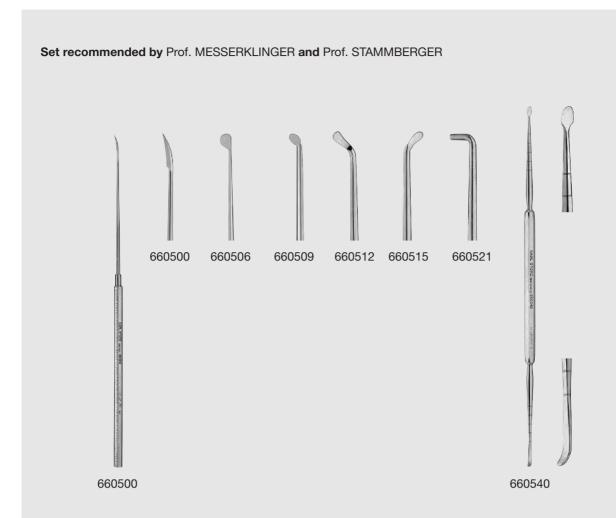
723020 **Connector,** for Flexible Tension Arm 723018,

attachable to rods up to diameter 16 mm

The tension arm can also be attached to an anesthesia frame using the connector in place of the holding rod.

Components/Spare Parts see chapter 16

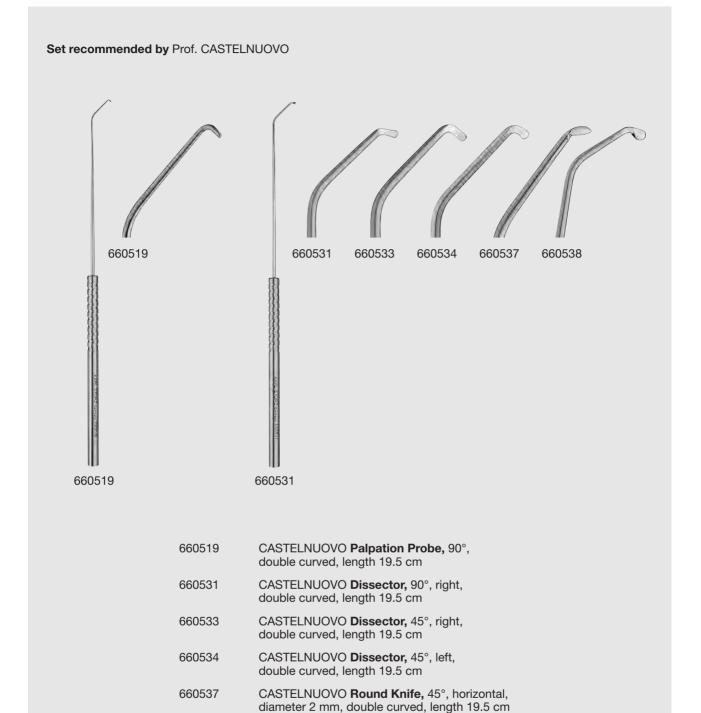




660500	Sickle Knife, slightly curved, pointed, length 18 cm
660506	Round Knife, vertical cutting, 3.5 x 2.5 mm, length 18 cm
660509	Round Knife, angled 45°, diameter 2 mm, length 18 cm
660512	Elevator, sharp, curved to right, length 18 cm
660515	Elevator, sharp, curved to left, length 18 cm
660521	Hook, 90°, blunt, length 18 cm
660540	Elevator, double-ended, blunt, graduated, length 20 cm

660538

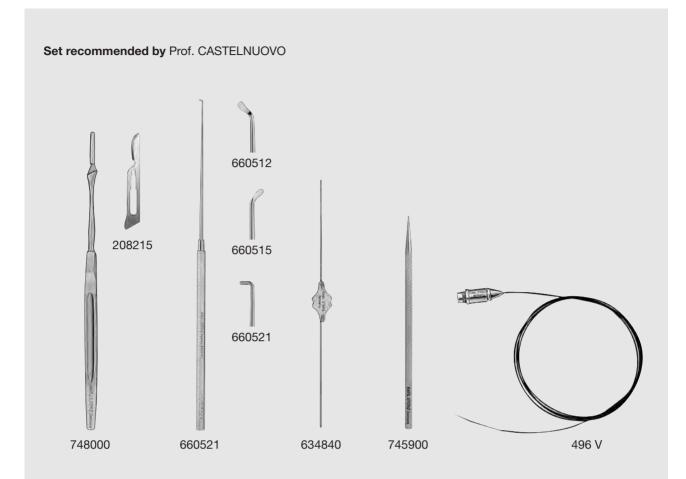




3-11

CASTELNUOVO **Round Knife**, 45°, vertical, diameter 2 mm, double curved, length 19.5 cm





748000	<b>Surgical Handle,</b> Fig. 7, length 16.5 cm, for Blades 208010 – 15, 208210 – 15
208215	Blade, Fig. 15, sterile, package of 100
660521	Hook, 90°, blunt, length 18 cm
660512	Elevator, sharp, curved to right, length 18 cm
660515	Elevator, sharp, curved to left, length 18 cm
634840	BOWMAN Lachrymal Probe, length 13 cm including:  Probe, size 0000 – 000  Probe, size 00 – 0  Probe, size 1 – 2
745900	WILDER <b>Dilator,</b> for salivary duct, length 11 cm
496 V	<b>Lachrymal Probe,</b> for diaphanoscopic localization of the nasolacrimal ducts and fistulae, diameter of distal tip 0.5 mm, sterile, for single use, for use with Fiber Optic Light Cable 495 NL, package of 3

Components/Spare Parts see chapter 16

# STORY ENDOSCODE

# SIEGERT/WEERDA Dacryocystorhinostomy

### **Probe for Diaphanoscopic Localization of the Nasolacrimal Ducts**

### Dacryocystorhinostomy acc. to SIEGERT/WEERDA

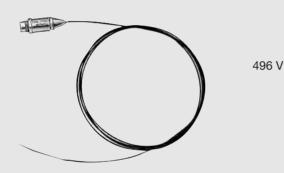
The obstructed nasolacrimal ducts have to be represented intraoperatively for dacryocystorhinostomy. However, intraoperative endonasal localization of the pathologically changed ducts may prove difficult, due to the considerable anatomical variations from one patient to the next. The instruments for representation of the nasolacrimal duct comprise a light source, a light guide and a special optical probe with a distal diameter of 0.5 mm.

For endonasal dacryocystorhinostomy, the sterile distal end of the optical probe is introduced into the lacrimal sac, or up to the point of the blockage, through the upper or lower lacrimal point. The spot of light

visible at the end of the light guide "marks" the nasal end of the clear lacrimal duct. It is advisible to briefly turn down the external lights in the operating room at first in order to locate the nasolacrimal duct while the lacrimal sac is still covered by considerable tissue.

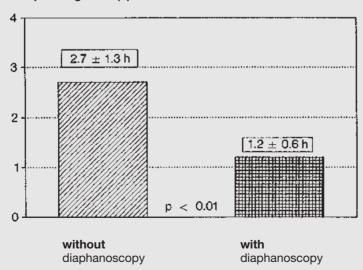
A study on such operations has shown that the times required for surgery can be significantly reduced by around 50% with the aid of diaphanoscopic localization.

On the whole, this is a simple, practical and useful complementary imaging for dacryocystorhinostomy which supports rapid surgery without undue damage to the tissue.



Lachrymal Probe, for diaphanoscopic localization of the nasolacrimal ducts and fistulae, diameter of distal tip 0.5 mm, sterile, for single use, for use with Fiber Optic Light Cable 495 NL, package of 3

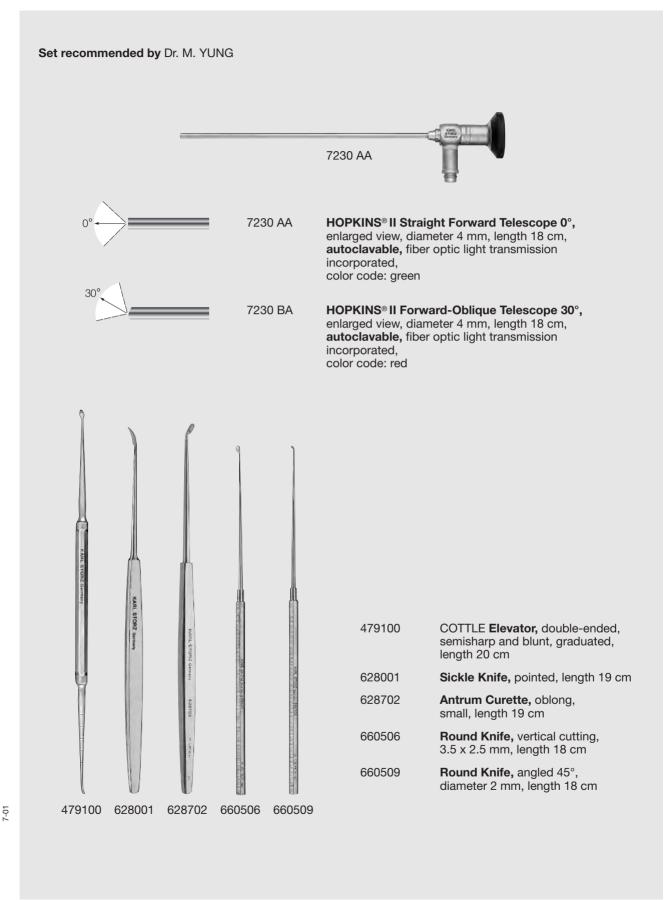
### **Operating Time (h)**



3-991

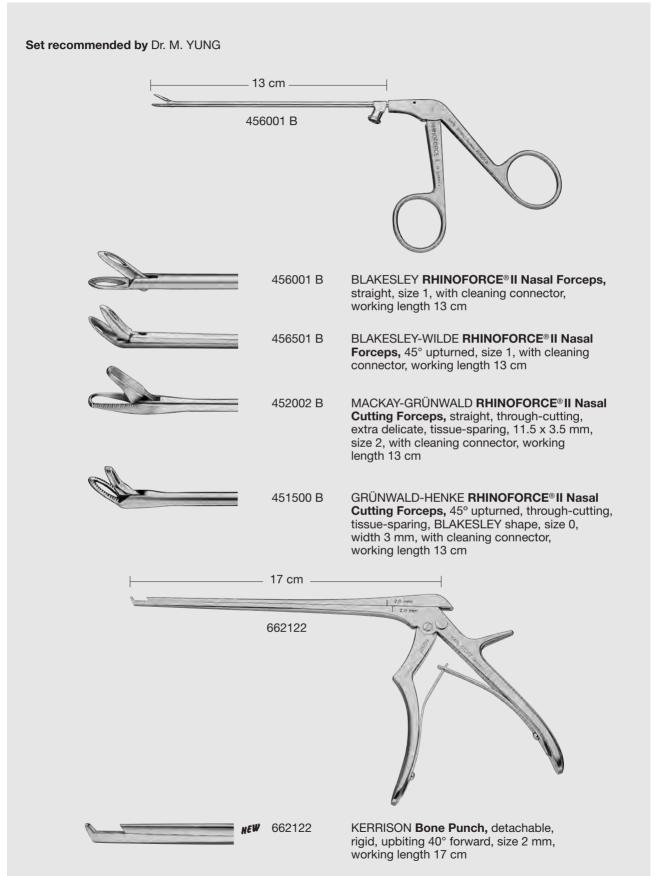
302 SI 142 C US



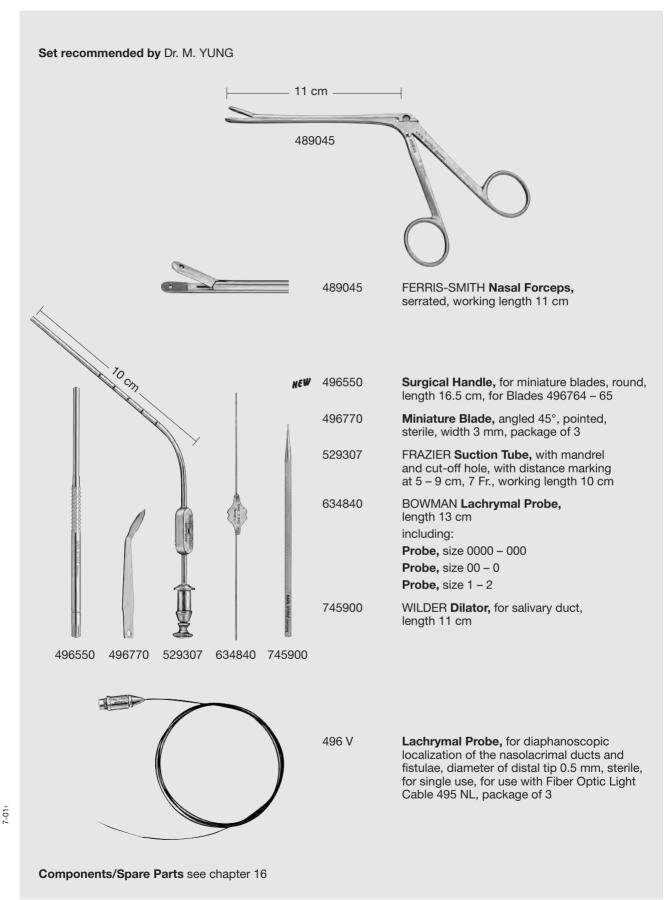


SI 143 C US 303





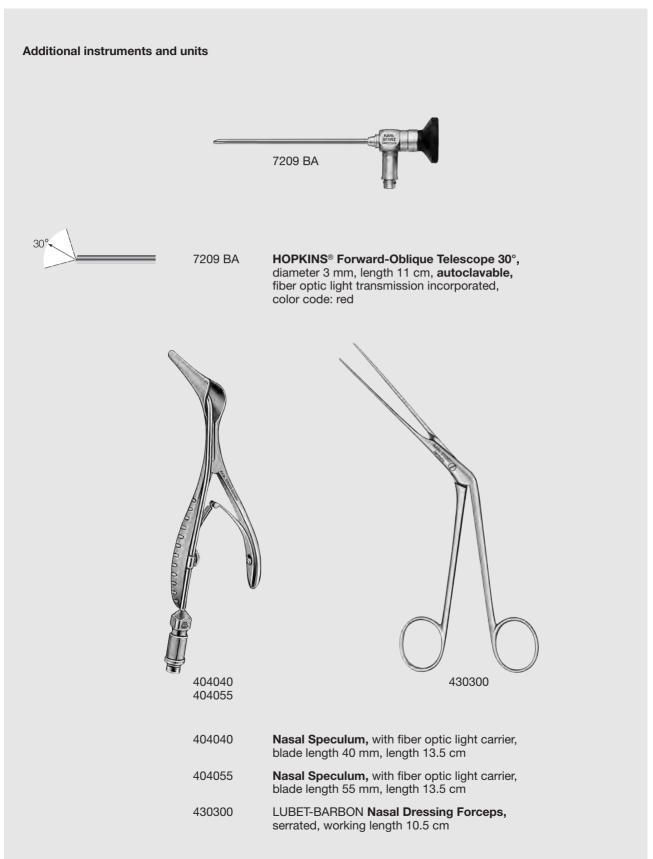




SI 145 B US 305

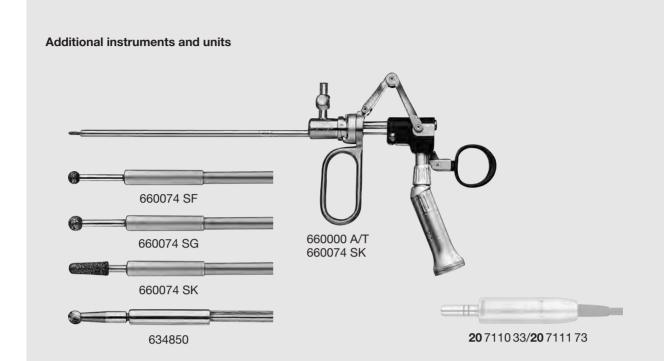
Components/Spare Parts see chapter 16





306 SI 146 B US





660000

STAMMBERGER-SACHSE **Intranasal Drill**, for decompression of the optic nerve and for fine grinding work in ethmoidal skull base area, for use with EC micro motor

includina

Double Ring Sliding Handle, for moving abrador forwards and backwards in the guiding sheath, with fixed INTRA drill handpiece Guide Sheath, outer diameter 5 mm, with irrigation stopcock Diamond Abrador, delicate, spherical, diameter 2.5 mm Diamond Abrador, delicate, spherical, diameter 3 mm Diamond Abrador, delicate, conical, from diameter 2.5 mm

634850 JONES **DCR Cutting Burr,** for endonasal dacryocystorhinostomy, tungsten carbide, diameter 2.7 mm, length 22 cm, for use with

Intranasal Drill 660000

to diameter 3 mm

7-012

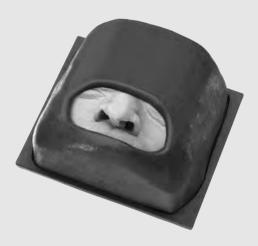
For use with Motor Systems see pages 203-210
High Performance EC Micro Motor II 20711033 and Connecting Cable 20711073 see page 207
Components/Spare Parts see chapter 16

# **FESS Training Model**



### **Special Features:**

- Exact reproduction of the human skull
- Special material provides tactile feedback
- For beginners and advanced levels
- More accessible than human anatomical specimens
- For countries where dissection of corpses is prohibited
- All sections available separately



723128 **Training Model,** for endoscopy of the nose and paranasal sinuses

including:

**Section Plane 1: Front Plate** 

Section Plane 2: Turbinate/Septum Section Plane 3: Maxillary Sinus

Section Plane 4: Ethmoidal Cells Section Plane 5: Sphenoidal Sinus

Base Plate

Mask

Case

**Documentation Atlas** 

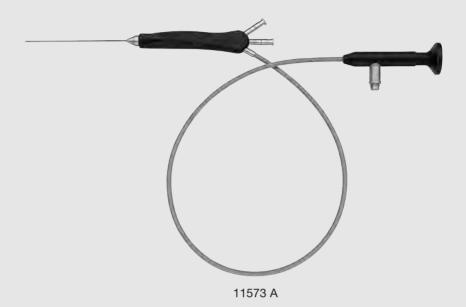


# **ERLANGEN Miniature Endoscopes**

for Diagnostic and Therapeutic Sialendoscopy



### ALL-IN-ONE Miniature Endoscopes, ERLANGEN model



11572 A **Miniature Straight Forward Telescope 0°**, diameter 0.8 mm, working length 10 cm, NiTi, semiflexible, with scale, **autoclavable**, irrigation channel diameter 0.25 mm, length 140 cm, with remote eyepiece, fiber optic light transmission incorporated

11573 A **Miniature Straight Forward Telescope 0°**, diameter 1.1 mm, working length 10 cm, NiTi, semiflexible, with scale, **autoclavable**, working channel diameter 0.45 mm, irrigation channel diameter 0.25 mm, length 140 cm, remote eyepiece, fiber optic light transmission incorporated

### for use with:

- Stone Extractor 11582 M/11573 NP
- Micro Burr 11573 MB
- Guide Wire 745725
- Laser Probe

Miniature Straight Forward Telescope 0°, diameter 1.6 mm, working length 10 cm, NiTi, semiflexible, with scale, autoclavable, working channel diameter 0.85 mm, irrigation channel diameter 0.25 mm, length 140 cm, with remote eyepiece, fiber optic light transmission incorporated

#### for use with:

- Stone Extractor 11582 M/11573 NP
- Micro Burr 11574 MB
- Foreign Body Forceps 11574 TJ
- Biopsy Forceps 11574 ZJ
- Guide Wire 745720
- Laser Probe
- Balloon Catheter 11583 BP

Instruments, Sterilization and Storage Trays see pages 316-322





# MARCHAL ALL-IN-ONE Miniature Endoscopes

11575 A

#### 11575 A

**Miniature Straight Forward Telescope 0°**, diameter 1.3 mm, working length 12 cm, semirigid, **autoclavable**, distal angle 5°, working channel diameter 0.65 mm, irrigation channel diameter 0.25 mm, length 100 cm, remote eyepiece with fiber optic light transmission incorporated, including Protective Tube 11520 P

#### for use with:

- Stone Extractor 11575 K/L
- Guide Wire 745720
- Laser Probe

### 11581 A

**Miniature Straight Forward Telescope 0°**, diameter 0.89 mm, working length 12 cm, semirigid, **autoclavable**, distal angle 5°, irrigation channel 0.2 mm, length 140 cm, remote eyepiece with fiber optic light transmission incorporated, including Protective Tube 11520 P

#### 11582 A

**Miniature Straight Forward Telescope 0°**, diameter 1.1 mm, working length 12 cm, semirigid, **autoclavable**, distal angle 5°, working channel 0.45 mm, irrigation channel 0.2 mm, length 140 cm, remote eyepiece with fiber optic light transmission incorporated

#### for use with

- Stone Extractor 11582 M/11573 NP
- Guide Wire 745725
- Laser Probe

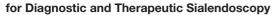
### 11583 A

**Miniature Straight Forward Telescope 0°,** diameter 1.6 mm, working length 12 cm, semirigid, **autoclavable**, distal angle 5°, working channel 0.8 mm, irrigation channel 0.2 mm, length 140 cm, remote eyepiece with fiber optic light transmission incorporated, including Protective Tube 11520 P

### for use with:

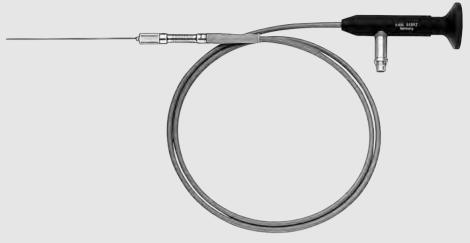
- Stone Extractor 11575 K/L
- Guide Wire 745720
- Grasping Forceps 11583 TJ
- Biopsy Forceps 11583 ZJ
- Laser Probe
- Balloon Catheter 11583 BP

Instruments, Sterilization and Storage Trays see pages 316-322





Miniature Endoscopes for Children and Adolescents Modular System according to Dr. MARCHAL



11576

11576 **Miniature Straight Forward Telescope 0°,** diameter 0.75 mm,

working length 16 cm, semirigid, length 145 cm, with remote eyepiece and light connection, LUER-Lock adaptor, fiber optic light transmission incorporated, including Protective Tube 11576 P

Miniature Straight Forward Telescope 0°, diameter 0.75 mm, working length 16 cm, semirigid, autoclavable, length 145 cm, with

remote eyepiece and light connection, LUER-Lock adaptor, fiber optic light transmission incorporated, including Protective Tube 11576 P

### **Examination Sheath**





11576 KA

**Examination Sheath,** diameter 1.1 mm, working length 16 cm, with blunt obturator, with lateral LUER-Lock adaptor for irrigation, for use with Miniature Straight Forward Telescope 11576 A





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Miniature Endoscopes for Children and Adolescents Modular System according to Dr. MARCHAL

**Operating Sheath** 





11576 KF

**Operating Sheath,** oval, diameter 1.1 and 1.3 mm, working length 16 cm, telescope channel diameter 0.9 mm, working channel diameter 1.15 mm, with 2 obturators, with lateral LUER-Lock adaptor for irrigation

### for use with:

- Miniature Straight Forward Telescope 11576 A
- Stone Extractor 11575 K/L
- Guide Wire 745720
- Balloon Catheter 11577 BP
- Grasping Forceps 11576 TJ
- Biopsy Forceps 11576 ZJ
- Laser Probe



11576 KG

**Operating Sheath,** oval, diameter 1.1 and 0.8 mm, working length 16 cm, telescope channel diameter 0.9 mm, working channel diameter 0.65 mm, with 2 obturators, with lateral LUER-Lock adaptor for irrigation

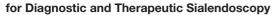
### for use with:

- Miniature Straight Forward Telescope 11576 A
- Stone Extractor 11575 K/L
- Guide Wire 745720
- Laser Probe

Instruments see pages 316-322

7-07

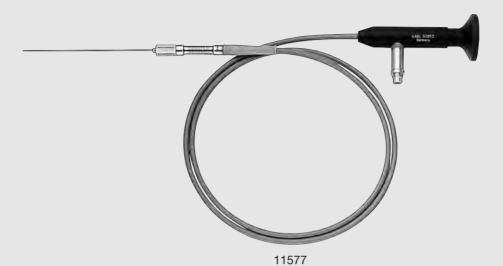
SIAL 3 B US





Miniature Endoscopes for Adults

Modular System according to Dr. MARCHAL



11577

**Miniature Straight Forward Telescope 0°**, diameter 1 mm, working length 16 cm, semirigid, length 145 cm, with remote eyepiece and light connection, LUER-Lock adaptor, fiber optic light transmission incorporated, including Protective Tube 11576 P

11577 A

**Miniature Straight Forward Telescope 0°**, diameter 1 mm, working length 16 cm, semirigid, **autoclavable**, length 145 cm, with remote eyepiece and light connection, LUER-Lock adaptor, fiber optic light transmission incorporated, including Protective Tube 11576 P

### **Examination Sheath**

11577 KA



11577 KA

**Examination Sheath,** diameter 1.3 mm, working length 16 cm, with blunt obturator, with lateral LUER-Lock adaptor for irrigation, for use with Miniature Straight Forward Telescope 11577 A





for Diagnostic and Therapeutic Sialendoscopy

Miniature Endoscopes for Adults

Modular System according to Dr. MARCHAL

**Operating Sheath** 



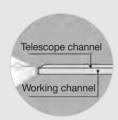


11577 KE

**Operating Sheath,** oval, diameter 1.3 and 1.3 mm, working length 16 cm, telescope channel diameter 1.15 mm, working channel diameter 1.15 mm, with 2 obturators, with lateral LUER-Lock adaptor for irrigation

### for use with:

- Miniature Straight Forward Telescope 11577 A
- Stone Extractor 11575 K/L
- Guide Wire 745720
- Balloon Catheter 11577 BP
- Grasping Forceps 11576 TJ
- Biopsy Forceps 11576 ZJ
- Laser Probe



11577 KD

**Operating Sheath,** oval, diameter 1.3 and 0.8 mm, working length 16 cm, telescope channel diameter 1.15 mm, working channel diameter 0.65 mm, with 2 obturators, with lateral LUER-Lock adaptor for irrigation

#### for use with:

- Miniature Straight Forward Telescope 11577 A
- Stone Extractor 11575 K/L
- Guide Wire 745720
- Laser Probe

SIAL 5 B 315

# **Instruments**

for Sialendoscopy



orceps		
		11576 TJ
niim	11576 TJ	Foreign Body Forceps, flexible, double action jaws, diameter 1 mm, working length 19 cm, for use with Operating Sheaths 11576 KF and 11577 KE
	11576 ZJ	<b>Biopsy Forceps,</b> flexible, double action jaws, diameter 1 mm, working length 19 cm, for use with Operating Sheaths 11576 KF and 11577 KE
(IIIII)	11583 TJ	Foreign Body Forceps, flexible, double action jaws, diameter 0.8 mm, working length 26.5 cm, for use with Miniature Straight Forward Telescope 11583 A
S	11583 ZJ	<b>Biopsy Forceps,</b> flexible, double action jaws, diameter 0.8 mm, working length 26.5 cm, for use with Miniature Straight Forward Telescope 11583 A
		11574 TJ
	11574 TJ	Foreign Body Forceps, flexible, double action jaws, diameter 0.8 mm, working length 30 cm, for use with Miniature Straight Forward Telescopes 11574 A and 11583 A
	11574 ZJ	<b>Biopsy Forceps,</b> flexible, double action jaws, diameter 0.8 mm, working length 30 cm, for use with Miniature Straight Forward Telescopes 11574 A and 11583 A

for Sialendoscopy



### Stone Extractors, Balloon Catheters, Guide Wires, Burrs

	11575 K	Stone Extractor, diameter 0.6 mm, basket with 3 wires, sterile, for single use
	11575 L	Stone Extractor, diameter 0.6 mm, basket with 6 wires, sterile, for single use
	11582 M	Stone Extractor, diameter 0.4 mm, basket with 4 wires, sterile, for single use
NEW	11573 NP	Front-loading Stone Extractor, without handle, diameter 0.4 mm, length 35 cm, basket with 4 wires, sterile, for single use, package of 10
	11577 BP	<b>Balloon Catheter,</b> diameter 0.9 mm, sterile, for single use, package of 10, for use with Operating Sheaths 11576 KF, 11577 B and 11577 KE
NEW NEW	11583 BP	<b>Balloon Catheter,</b> diameter 0.7 mm, sterile, for single use, package of 10, for use with Telescopes 11574 A and 11583 A
	745720	<b>Guide Wire,</b> diameter 0.6 mm, sterile, for single use, package of 10, for use with Bougies 745710 – 745713
	745725	<b>Guide Wire,</b> diameter 0.4 mm, sterile, for single use, package of 10, for use with Bougies 745808 – 745713
WEW	11573 T	<b>Stone Extractor,</b> diameter 0.6 mm, basket with 4 wires, tipless, handle for fixation to endoscope
NEW	11573 M	Stone Extractor, diameter 0.4 mm, basket with 4 wires, handle for fixation to endoscope
NEW	11573 MB	<b>Micro Burr for Salivary Stones,</b> diameter 0.38 mm, for use with Telescopes 11573 A and 11582 A
NEW	11574 MB	Micro Burr for Salivary Stones, diameter 0.8 mm, for use with Telescopes 11574 A and 11583 A

8-11

SIAL 7 B 317

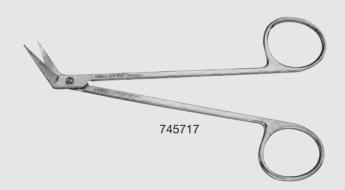
for Sialendoscopy



#### **Forceps and Angled Scissors**







745717 **Angled Scissors for Salivary Gland,** with bulb, length 14 cm

745719 METZENBAUM **Scissors**, for sialolithotomy, curved, sharp/sharp, length 18 cm

for Sialendoscopy







DE BAKEY "Mosquito" Artery Forceps, atraumatic, curved, length 12 cm

### **Mouth Gag**





58194 MOLT **Mouth Gag,** large model, length 14 cm



58195

DEHNHARDT Mouth Gag, length 12.5 cm

for Sialendoscopy



#### **Dilation Instruments**

### **Salivary Duct Probes**

		745847	140	
745847	size 0000		745853	size 3
745848	size 000		745854	size 4
745849	size 00		745855	size 5
745850	size 0		745856	size 6
745851	size 1		745857	size 7
745852	size 2		745858	size 8

#### MARCHAL Bougies

#### 745710

745708	MARCHAL <b>Bougie</b> , diameter 1 mm, for use with Guide Wire 745725
745709	Same, diameter 1.5 mm
745710	MARCHAL <b>Bougie</b> , diameter 2 mm, for use with Guide Wire 745720 and 745725
745711	Same, diameter 2.5 mm
745712	Same, diameter 3 mm
745713	Same, diameter 3.5 mm

#### **Dilators**

### 745910

#### 745920

### 745900

	745900
745905	Dilator, for salivary duct (Wharton duct), very pointed
745910	Dilator, for salivary duct, length 14 cm
745920	<b>Dilator,</b> for salivary duct, size 1, diameter 0.5 – 0.8 mm length 11.5 cm
745921	Same, size 2, diameter 0.7 – 1 mm
745922	Same, size 3, diameter 0.9 – 1.2 mm
745923	Same, size 4, diameter 1 – 1.6 mm
745924	Same, size 5, diameter 1.3 – 1.8 mm
745900	WILDER <b>Dilator,</b> for salivary duct, length 11 cm

MARL STORE CHOR

Ξ

### **Accessories**

**Metal Trays** 





11580 A **Metal Tray,** for sterilization and storage of Salivary Duct Probes 745847 – 745858 and Dilator 745910,

perforated, lid with silicone bridges,

external dimensions (w x d x h): 178 x 135 x 37 mm

11580 B **Metal Tray,** for sterilization and storage of one Miniature Straight Forward Telescope 11575 A,

Miniature Straight Forward Telescope 11575 A, 11581 A, 11582 A, 11583 A, 11578 A or 5800, perforated, lid with silicone bridges, with port for irrigation connector, external dimensions (w x d x h):

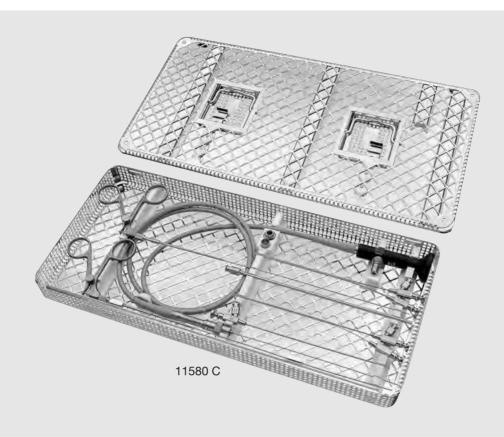
275 x 178 x 35 mm

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

### **Accessories**

**Metal Trays** 





11580 C	Metal Tray, for sterilization and storage of one Miniature Straight Forward Telescope 11576 A or 11577 A and
	two Micro Burrs 11573 MB and 11574 MB, perforated,
	lid with silicone bridges, external dimensions (w x d x h):
	373 x 178 x 35 mm

11580 D **Metal Tray,** for sterilization and storage of one Miniature Straight Forward Telescope 11572 A – 11574 A, perforated, lid with silicone bridges, with port for irrigation adaptor, external dimensions (w x d x h): 275 x 175 x 37 mm

11580 J **Metal Tray,** for sterilization and storage of two Foreign Body Forceps 11574 TJ and 11574 ZJ as well as two Burrs 11573 MB and 11574 MB for sialendoscopy, perforated, lid with silicone bridges, external dimensions (w x d x h): 373 x 178 x 35 mm

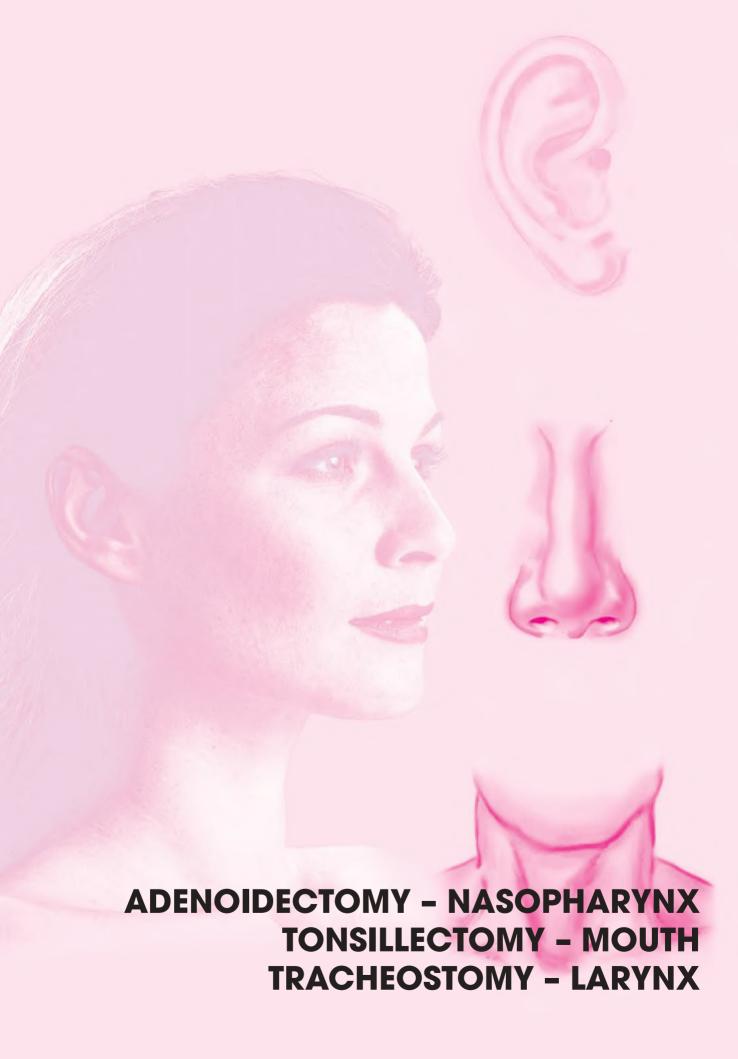
### Cleaning

27651 K1	Cleaning Brush, round, flexible, for working channel diameter 0.4 – 0.6 mm, length 40 cm, for single use, package of 10
27651 K2	Same, for working channel diameter 0.6 – 0.8 mm
27651 K3	Same, for working channel diameter 0.8 – 1.4 mm
27651 K5	Same, for working channel diameter 0.25 – 0.4 mm

**Lithotripsy of Salivary Stones** 

Extracorporal shock wave lithotripsy for salivary stones with STORZ MINILITH SL 1 see catalog Oral and Maxillofacial Surgery

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





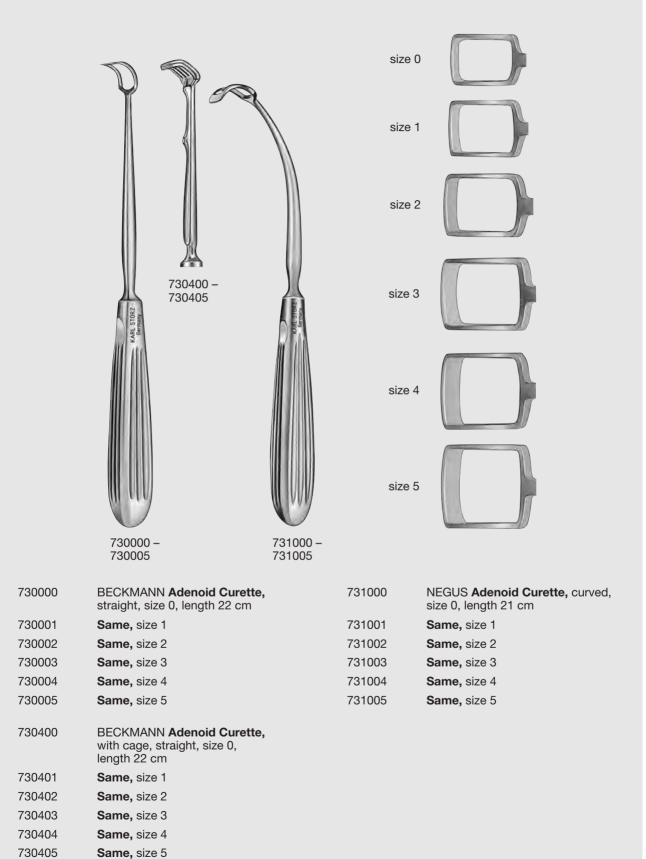




725000 HOPMANN **Uvula Retractor**, length 12.5 cm
 746700 NAGER **Pillar Retractor**, length 21 cm

# Nasopharynx



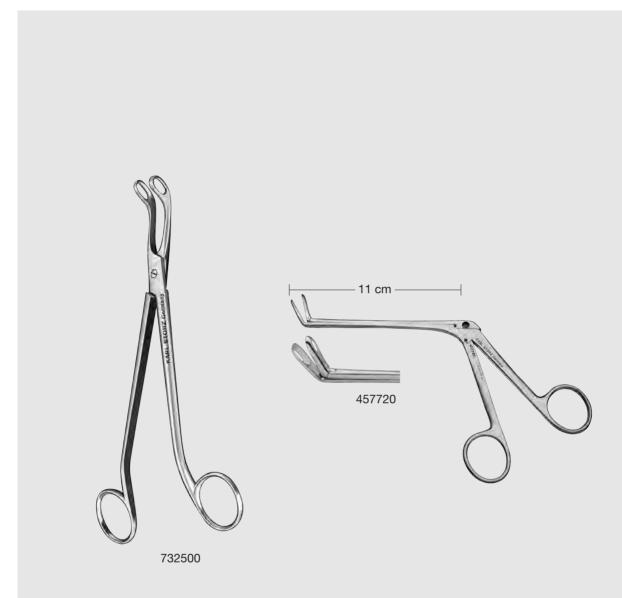


326 ATT 2

2

# Nasopharynx





BLAKESLEY-WIGAND **Nasal Forceps,**  $60^{\circ}$  upturned, long jaws  $6 \times 20$  mm, rounded tips, for grasping polyps and adenoid rests, working length 11 cm 457720

732500 JURACZ Adenoid Forceps, sharp, length 19 cm

# Nasopharynx

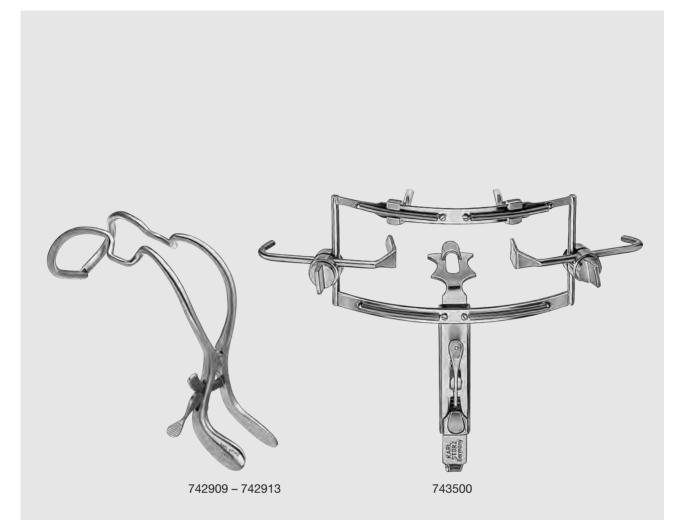




740000	BRUNINGS <b>Tongue Depressor,</b> length 19 cm
740014	Tongue Depressor, width 20 x 25 mm, length 17.5 cm
740200	FRENZEL Tongue Depressor, length 16.5 cm
740500	MORITZ-SCHMIDT Tongue Depressor, length 19 cm
740701	<b>Tongue Depressor,</b> with solid handle, width 88 x 25 mm, length 15 cm
740700	HARTMANN Tongue Depressor, length 17 cm
740800	HARTMANN <b>Tongue Depressor,</b> for children, length 16 cm



329



	length 9 cm	0,	,	,
742911	Same, medium,	standard size	e, length 11	cm

742911 Same, medium, standard size, length 11 cm 742913 Same, large, length 13 cm

743500 DINGMANN **Mouth Gag,** complete including:

Tongue Depressor, size 1, 55 x 25 mm Tongue Depressor, size 2, 60 x 27 mm Tongue Depressor, size 3, 70 x 30 mm 2x Cheek Retractor, adjustable 2x Screw Connection, complete

JENNINGS Mouth Gag, small, for children,

2x **Tooth Hook,** movable

Components/Spare Parts see chapter 16

742909

ATT 5

# DAVIS-MEYER **Tongue Blades**





743910	DAVIS-MEYER <b>Tongue Blade</b> , with anesthetic tube, size 1, 28 x 68 mm
743915	<b>Same,</b> size 11/2, 29 x 73 mm
743920	<b>Same,</b> size 2, 30 x 76 mm
743925	<b>Same,</b> size 21/2, 31 x 83 mm
743930	<b>Same,</b> size 3, 32 x 88 mm
743935	<b>Same,</b> size 3½, 33 x 98 mm
743940	<b>Same,</b> size 4, 34 x 108 mm

Components/Spare Parts see chapter 16







744101 HERBERHOLD **Tongue Blade,** with asymetric recess for guiding the endotracheal tube along the alignment, size 1, 29 x 65 mm

744102 **Same,** size 2, 33 x 73 mm

744103 **Same,** size 3, 38 x 83 mm

744104 **Same,** size 4, 41 x 98 mm





NEW	744200 744201 744202 744203 744204 744205	RUSSEL-DAVIS <b>Tongue Blade,</b> with central groove, size 0, 25 x 60 mm <b>Same,</b> size 1, 30 x 70 mm <b>Same,</b> size 2, 34 x 80 mm <b>Same,</b> size 3, 39 x 84 mm <b>Same,</b> size 4, 42 x 98 mm <b>Same,</b> size 5, 47 x 105 mm
	744201 A 744202 A 744203 A 744204 A 744205 A	RUSSEL-DAVIS <b>Tongue Blade,</b> with central groove, narrow blade, size 1, 19 x 62 mm <b>Same,</b> size 2, 22 x 67 mm <b>Same,</b> size 3, 25 x 75 mm <b>Same,</b> size 4, 27 x 83 mm <b>Same,</b> size 5, 34 x 90 mm
NEW NEW NEW	744251 744252 744253	Tongue Blade, with central groove and lateral opening, size 1, 30 x 70 mm  Same, size 2, 34 x 80 mm  Same, size 3, 39 x 84 mm

8-11

332 ATT 8 C







744301	<b>Tongue Blade,</b> WÜRZBURG model, slotted, size 1, 28 x 69 mm
744302	<b>Same,</b> size 2, 32 x 77 mm
744303	<b>Same,</b> size 3, 34 x 85 mm
744304	<b>Same,</b> size 4, 37 x 98 mm
744305	<b>Same,</b> size 5, 38 x 105 mm
744302 H	HORNBERGER <b>Tongue Blade</b> , slotted, blade size 32 x 70 mm, for use with LMA Classic Larynx Masks, size 2 and 2½
744303 H	<b>Same,</b> blade size 34 x 78 mm, for use with LMA Classic Larvnx Masks, size 3 and 3½





744402 RING **Tongue Blade,** size 2, 25 x 61 mm

744403 **Same**, size 3, 28 x 74 mm 744404 **Same**, size 4, 34 x 88 mm 744405 **Same**, size 5, 37 x 100 mm



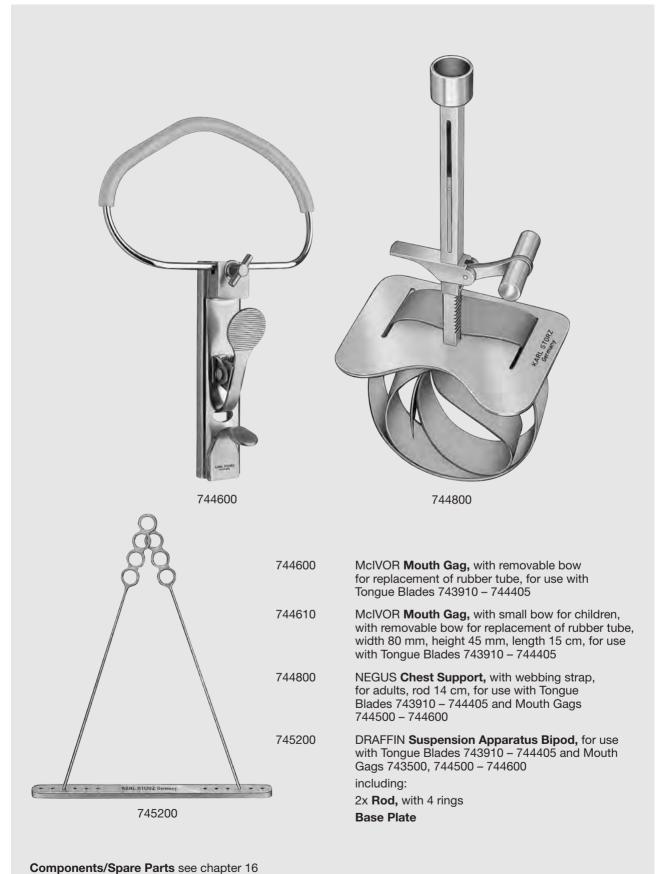


	with sliding Tooth Hook 744501, for use with Tongue Blades 743910 – 744405
744503	Palate Support Blade, for toothless patients, for use with Mouth Gags 744500, 744510

DAVIS-MEYER **Mouth Gag,** special model, reverse opening, with 2 movable Tooth Hooks 744501, for use with 744510 Tongue Blades 743910 - 744505

Components/Spare Parts see chapter 16

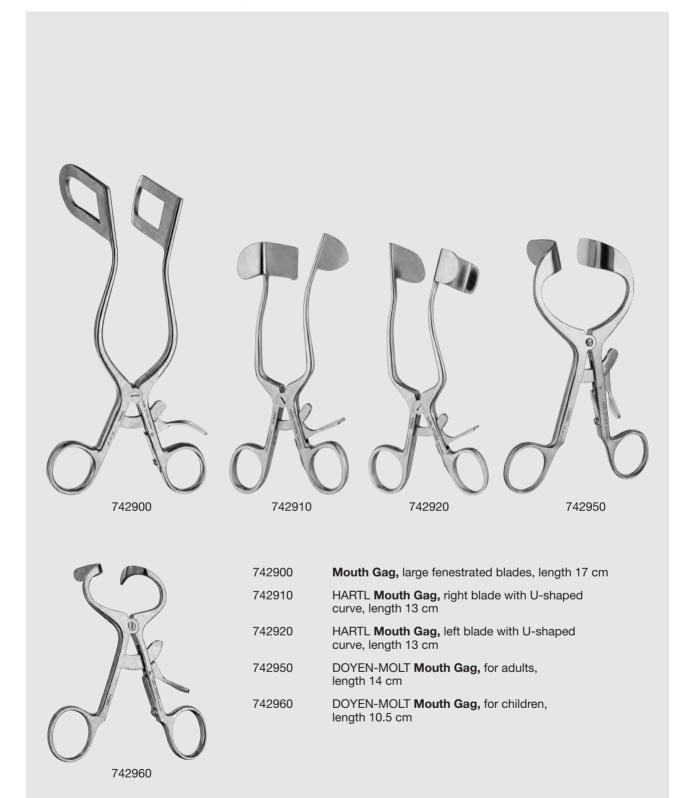




336 ATT 12 B

1



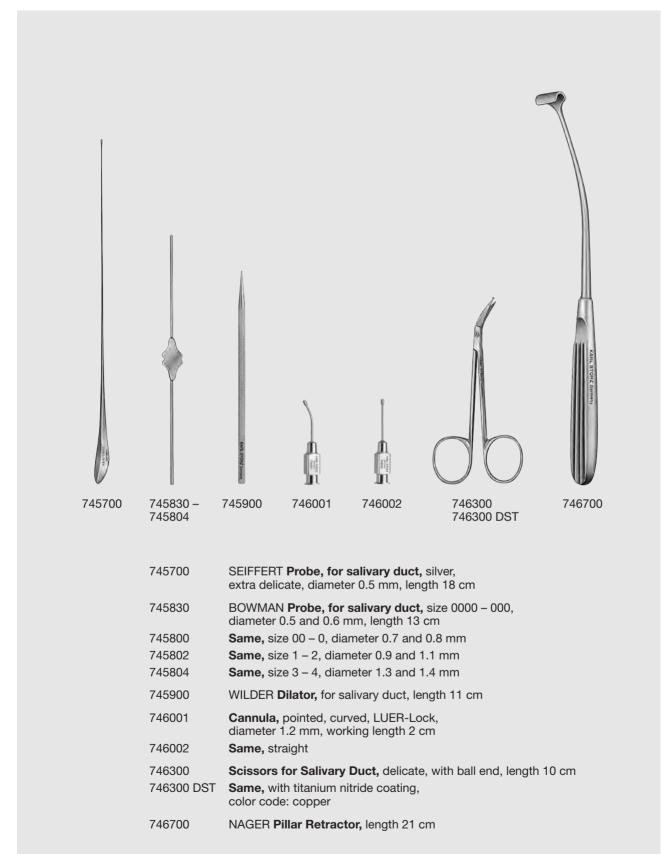


8-11

ATT 13 C 337

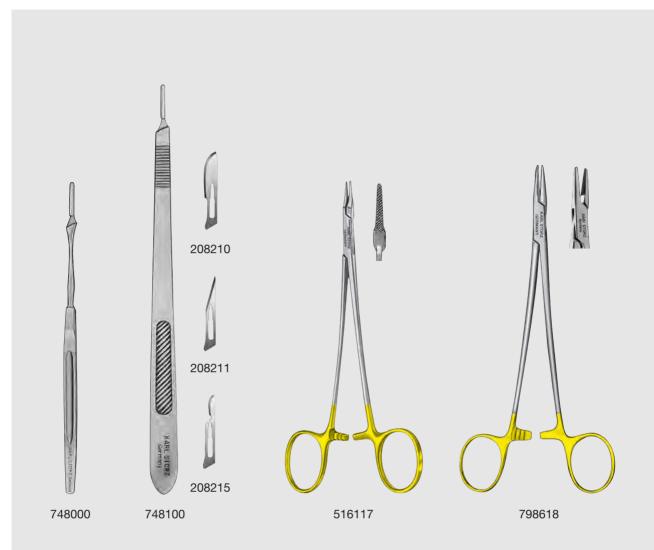






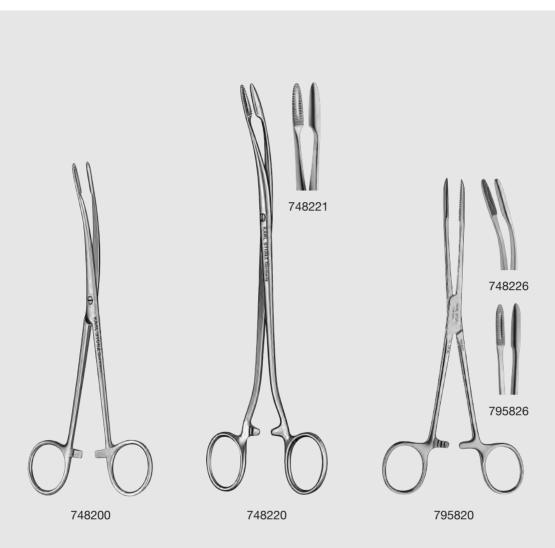






748000	for Blades 208010 – 15, 208210 – 15
748100	Same, Fig. 3L, length 21 cm
208210	Blade, Fig. 10, sterile, package of 100
208211	Same, Fig. 11
208215	Same, Fig. 15
516117	RYDER <b>Needle Holder</b> , tungsten carbide inserts, extra delicate, length 17 cm
798618	HEGAR <b>Needle Holder,</b> tungsten carbide inserts, slender, length 18 cm

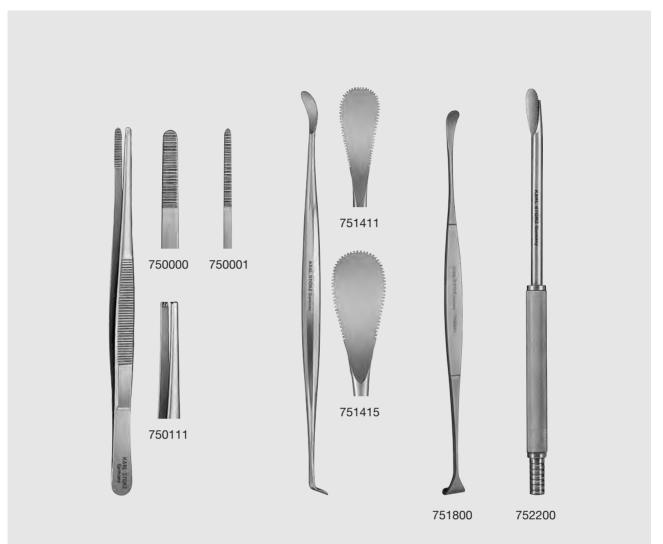




748200	<b>Dressing and Sponge Holding Forceps,</b> slim, curved, with ratchet, length 19 cm
748220	DUPLAY <b>Dressing and Sponge Holding Forceps,</b> curved, with ratchet, length 21 cm
748221	Same, straight
748226	MAIER <b>Dressing and Sponge Holding Forceps</b> , curved, with ratchet, length 26 cm
795820	GROSS <b>Dressing and Sponge Holding Forceps,</b> straight, with ratchet, length 20 cm
795826	MAIER <b>Dressing and Sponge Holding Forceps</b> , straight, with ratchet, length 26.5 cm







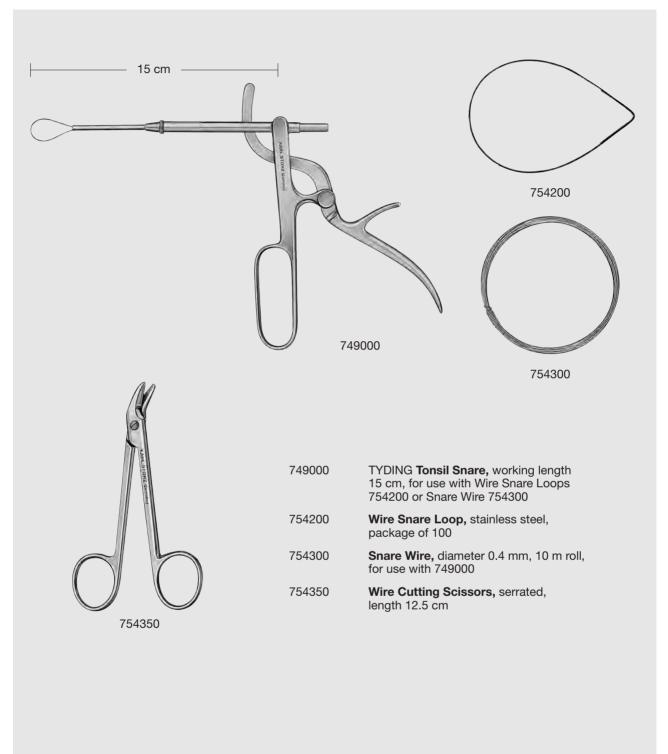
	750000	Forceps, serrated, width 4 mm, length 20 cm
	750001	Same, width 1.8 mm
<b>C</b> - <b>1</b> )	750111	Tissue Forceps, 1 x 2 teeth, width 2 mm, length 20 cm
	750112	Same, width 3.5 mm
	750123	Same, 2 x 3 teeth, width 4.5 mm
	751411	HENKE <b>Elevator</b> , width 11.5 mm, length 23.5 cm (standard size)
	751415	HENKE <b>Elevator,</b> width 15 mm, length 24 cm
	751800	HURD <b>Dissector and Pillar Retractor,</b> width 9 mm, length 22.5 cm
	752200	STIERLEN <b>Suction Dissector,</b> width 13.5 mm, length 24 cm

11-03

ATT 17 C 341



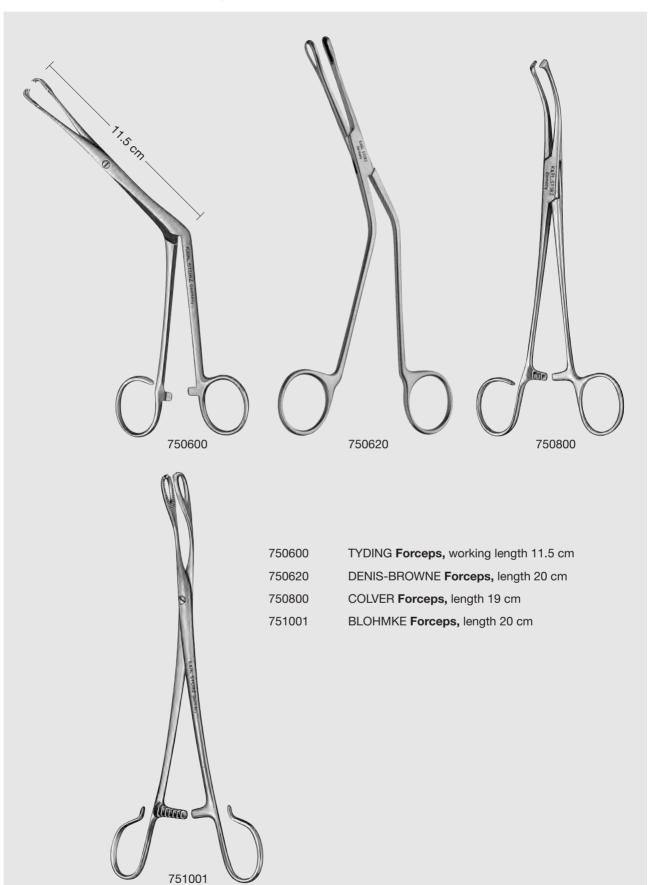




Components/Spare Parts see chapter 16

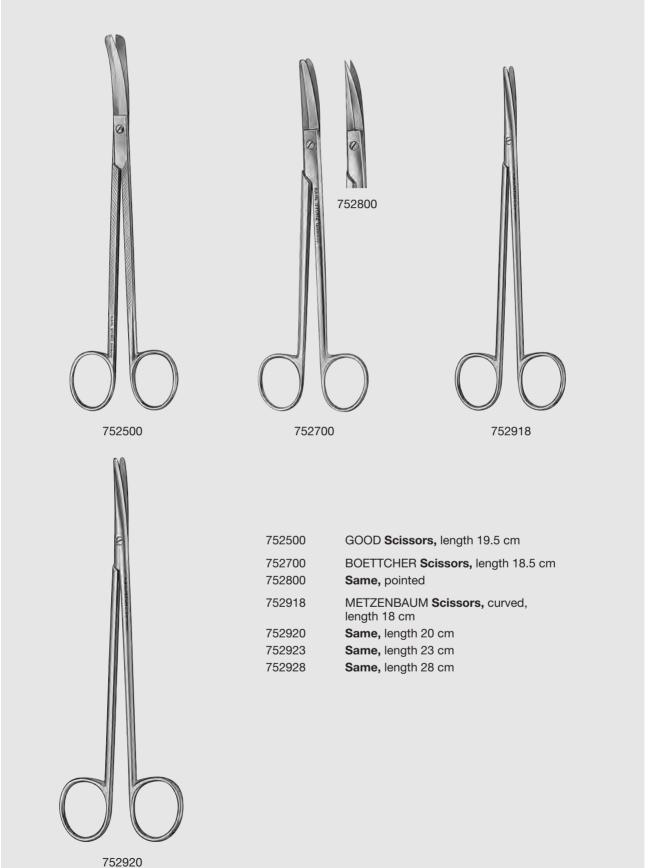






ATT 19 B 343



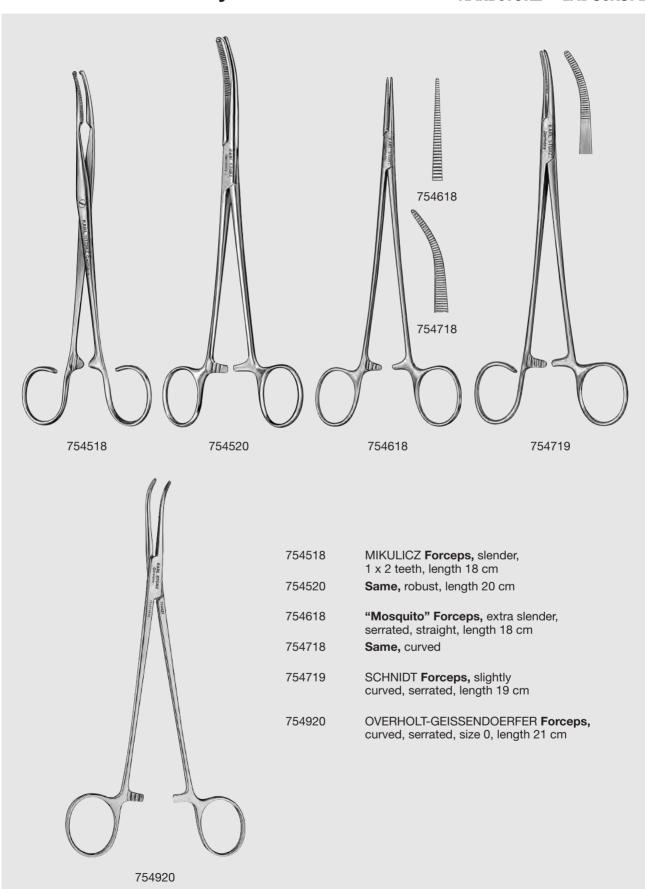


344 ATT 20 B

9

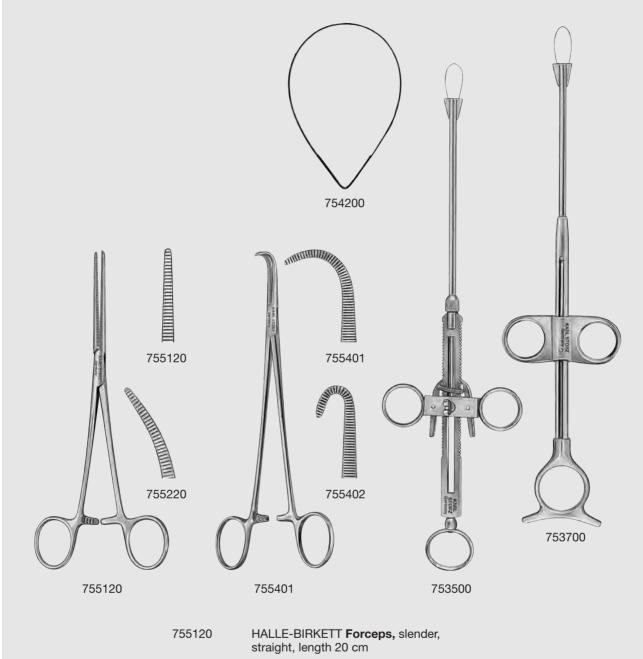






ATT 21 B 345





755220 **Same,** curved

755401 NEGUS **Forceps,** large curve,

length 20 cm

755402 **Same,** small curve

753500 BRÜNINGS Tonsil Snare,

length 29 cm

753700 EVES **Tonsil Snare**, length 27 cm

754200 Wire Snare Loop,

stainless steel, package of 100

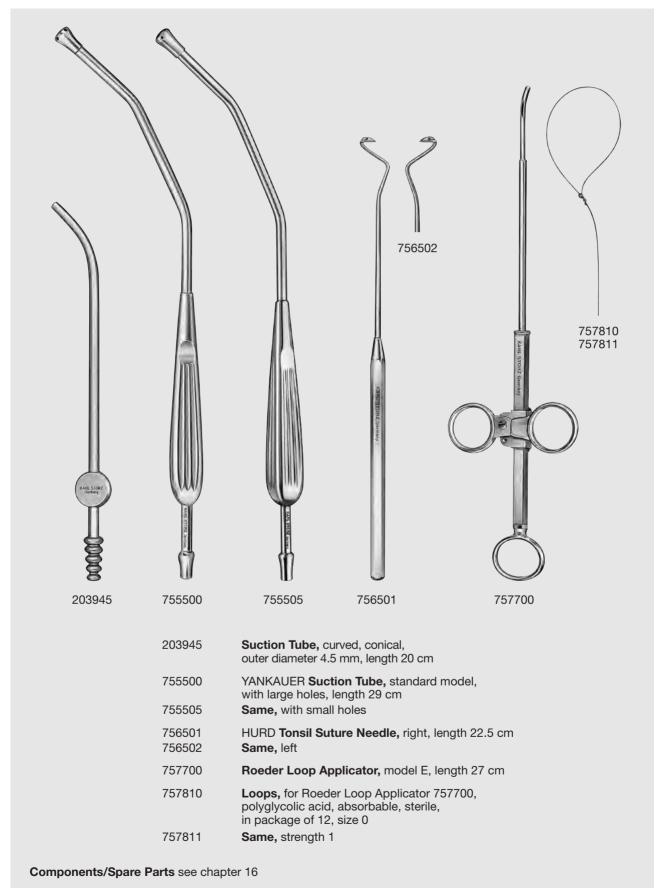
Components/Spare Parts see chapter 16

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6







3-993

ATT 23 B 347

# **Laryngeal Instruments**



#### Laryngeal mirrors illustrated in actual size



Size 00 Diameter 8 mm



Size 0 Diameter 10 mm



Size 1 Diameter 12 mm



Size 2 Diameter 14 mm



Size 3 Diameter 16 mm



Size 4 Diameter 18 mm



Size 5 Diameter 20 mm



Size 6 Diameter 22 mm



Size 7 Diameter 24 mm



Size 8 Diameter 26 mm



Size 9 Diameter 28 mm



Size 10 Diameter 30 mm

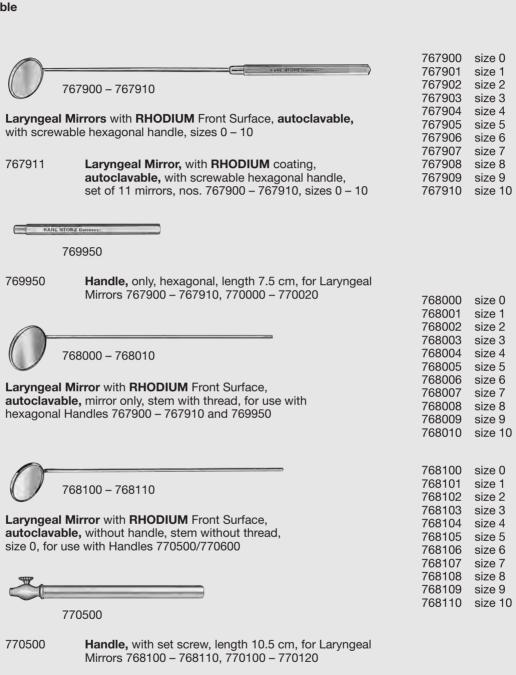
### **Laryngeal Instruments**





#### **Special Features:**

- Autoclavable
- Resistant
- Durable





770600

770600

**Same,** with central screw connection, length 11.5 cm

For the actual size of the laryngeal mirror see page 348

3-99

ATT 25 B US 349

# Laryngeal Instruments Laryngeal Mirrors Standard Version



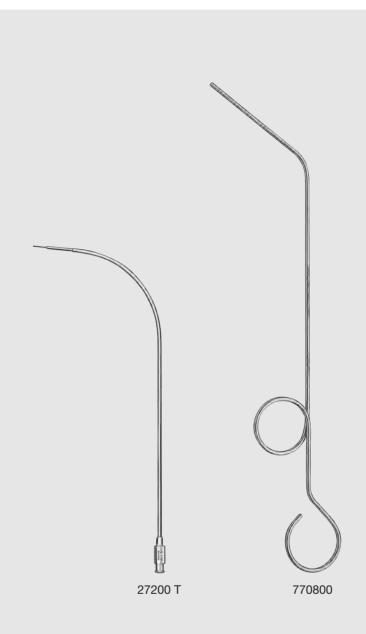
769900 – 769920  Laryngeal Mirror, with screwable hexagonal handle, size 00 – 10  769921  Laryngeal Mirror, with screwable hexagonal handle, set of 12 mirrors, por 769900 769920 sizes 00 – 10	769920 size 00 769900 size 0 769901 size 1 769902 size 2 769903 size 3 769904 size 4 769905 size 5 769906 size 6 769907 size7 769908 size 8 769909 size 9
nos. 769900 – 769920, sizes 00 – 10	769910 size 10
769950	
769950 <b>Handle,</b> only, hexagonal, length 7.5 cm, for Mirrors 767900 – 767910, 770000 – 770020	
Laryngeal Mirror, mirror only, stem with thread, size 00 – 1 can be screwed on Handles 769900 – 769920 and 769950	770006 size 6
770100 – 770120	770120 size 00 770100 size 0 770101 size 1 770102 size 2 770103 size 3 770104 size 4
Laryngeal Mirror, without handle, stem without thread, size 00 – 10	770105 size 5 770106 size 6 770107 size 7 770108 size 8 770109 size 9 770110 size 10
770500	770110 012010
770500 <b>Handle,</b> with set screw, length 10.5 cm, for Mirrors 768100 – 768110, 770100 – 770120	
770600	
770600 <b>Same,</b> with central screw connection, length 11.5 cm	

For the actual size of the laryngeal mirror see page 348

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### **Laryngeal Instruments**



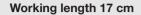
27200 T JOUSSEN **Larynx Cannula**, curved, for single use,

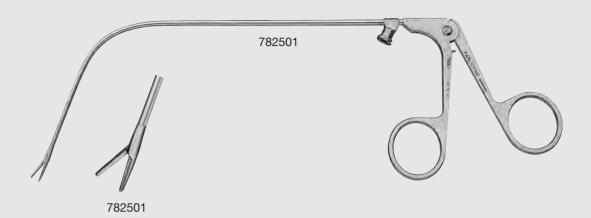
LUER-Lock, outer diameter of tip 0.6 mm, for collagen application, for use with High Pressure Syringe 771400 or Syringe 810002, package of 3

770800 PELTESON Cotton Applicator, working length 27 cm

### **Laryngeal Instruments**

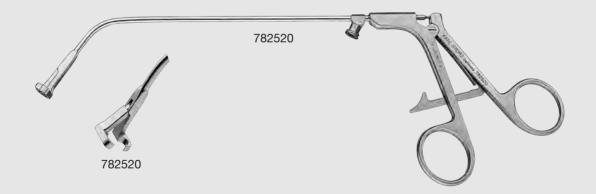






782501

**Indirect Laryngeal Forceps,** for foreign bodies, serrated, straight, open forwards, with cleaning connector, working length 17 cm

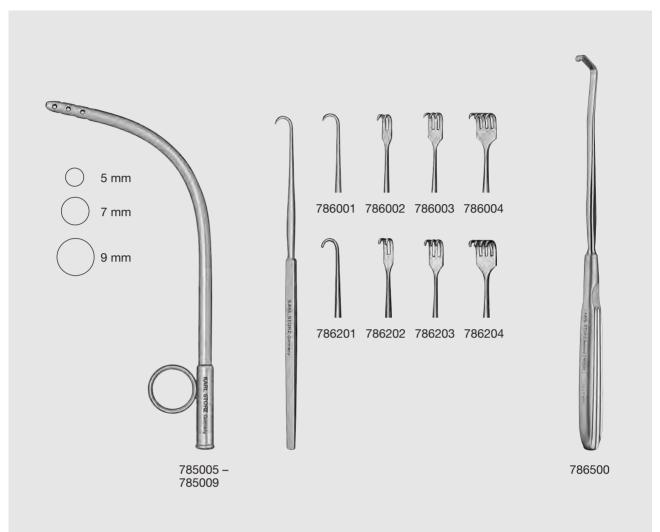


782520

Indirect Laryngeal Forceps, to apply needle electrodes, for electromyographic examination of the vocal cords, with ratchet, with cleaning connector, working length 17 cm





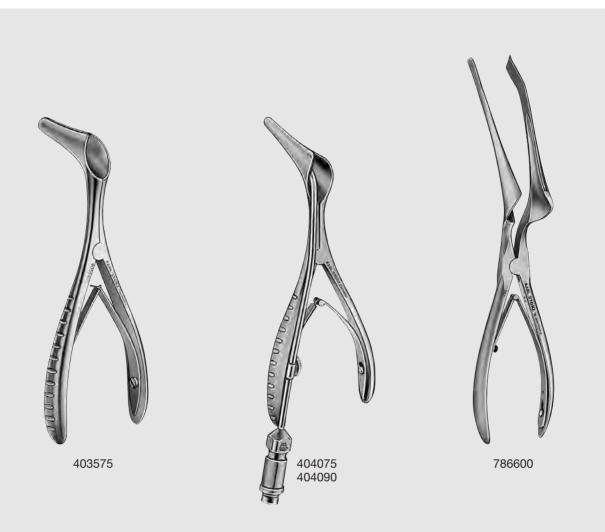


785005	BRÜNINGS <b>Life-Saving Tube</b> , outer diameter 5 mm, length 20 cm
785007	Same, outer diameter 7 mm
785009	Same, outer diameter 9 mm
786001	Retractor, sharp, 1 prong, length 17 cm
786002	Same, 2 prongs
786003	Same, 3 prongs
786004	Same, 4 prongs
786201	Retractor, blunt, 1 prong, length 17 cm
786202	Same, 2 prongs
786203	Same, 3 prongs
786204	Same, 4 prongs
786500	SCHÖNBORN <b>Thymus Retractor</b> , width 5 mm, length 20.5 cm

ATT 29 C 353

## Larynx - Tracheotomy





403575	KILLIAN-STRUYCKEN <b>Nasal Speculum</b> , standard model, blade length 75 mm, length 13.5 cm
404075	Nasal Speculum, with fiber optic light carrier, blade length 75 mm, length 13.5 cm
404090	Same, blade length 90 mm

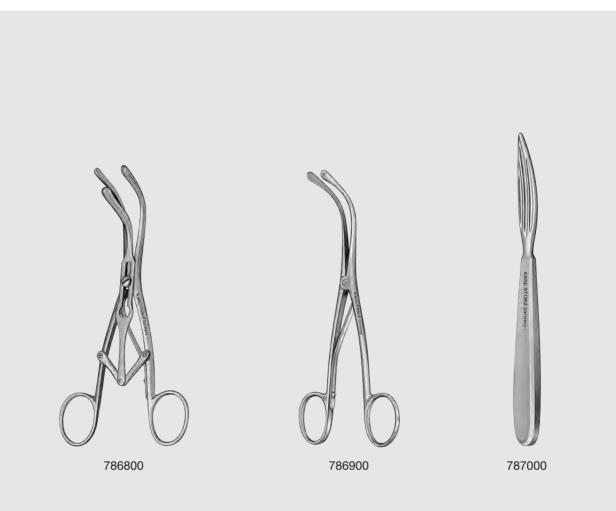
WEERDA Tracheal Speculum, length 19 cm

Please note: LED Battery Light Sources for use with 404075 and 404090 see page 247 Components/Spare Parts see chapter 16

786600







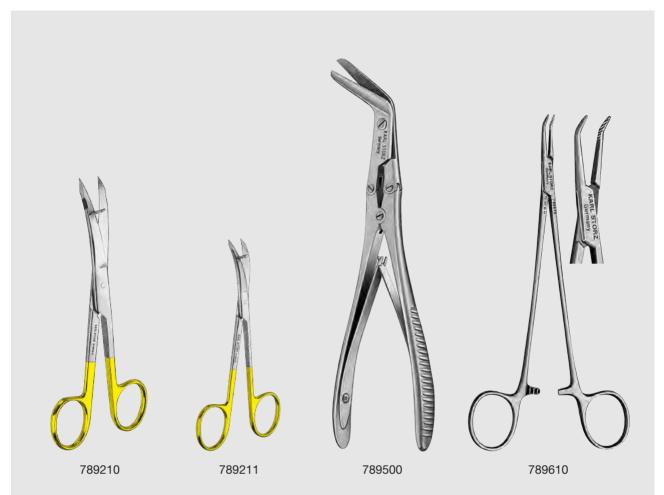
786800 LABORDE **Tracheal Dilator,** length 15 cm, three-bladed

786900 **Same,** two-bladed

787000 KOCHER **Probe**, length 16.5 cm

### **Larynx – Tracheotomy**





789210 SCHEDLER-MAIER **Dagger Dilation Scissors**, for coniotomy and emergency tracheostomy, with limit stop to restrict the depth of insertion, curved, standard model, large, length 14.5 cm

789211 **Same**, small model, length 11.5 cm

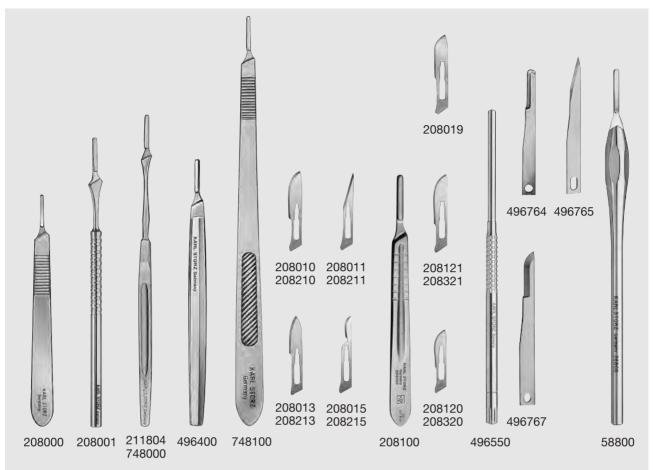
789500 KILLIAN **Laryngectomy Scissors**, double action, length 21.5 cm

789610 **Forceps**, for parotidectomy, KIEL model, angled, length 17 cm



## **Scalpels and Handles**





208000	<b>Surgical Handle,</b> Fig. 3, length 12.5 cm, for Blades 208010 – 15, 208210 – 15		208100	Surgical Handle, Fig. 4, length 13.5 cm, for Blades
208001	<b>Round Surgical Handle,</b> Fig. 3, length 15 cm, for Blades 208010 – 15, 208210 – 15	5	208120	208019, 208120 – 21, 208320 – 21 <b>Blade,</b> for Handle 208100, Fig. 20,
211804	FISCH <b>Dual Purpose Scalpel Handle</b> , elevator on one side, scalpel handle		208121	non-sterile, package of 100 <b>Same,</b> Fig. 21
400400	no. 7 on the other side, length 16 cm		208019	Blade, Fig. 19, sterile, package of 100
496400	MASING <b>Surgical Handle</b> , length 14 cm, for Blades 208010 – 15, 208210 – 15		208320	<b>Blade,</b> for Handle 208100, Fig. 20,
748000	<b>Surgical Handle,</b> Fig. 7, length 16.5 cm, for Blades 208010 – 15, 208210 – 15		208321	sterile, package of 100  Same, Fig. 21
748100	<b>Surgical Handle,</b> Fig. 3L, length 21 cm, for Blades 208010 – 15, 208210 – 15	NEW	496550	Surgical Handle, for miniature blades, round, length 16.5 cm, for Blades 496764 – 65
208010	Blade, Fig. 10, non-sterile, package of 100		496764	Miniature Blade, Fig. 64, round, sterile, package of 25
208011	Same, Fig. 13		496765	Same, Fig. 65, pointed
208015	Same, Fig. 15		496767	Same, Fig. 67, concentrated
208210	package of 100	NEW	58800	Surgical Handle, straight, length 14 cm, for Blades 208010 – 15, 208210 – 15
208211 208213 208215	Same, Fig. 11 Same, Fig. 13 Same, Fig. 15	NEW	58801	<b>Same,</b> angled

-95<sub>5</sub>

358 HS









791001 Scissors, curved, sharp/sharp, length 13 cm
791002 Same, sharp/blunt
791003 Same, blunt/blunt

791201 Scissors, curved, sharp/sharp, length 14.5 cm
791202 Same, sharp/blunt
791203 Same, blunt/blunt

#### **Scissors**





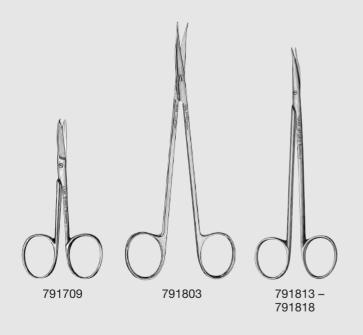
**Scissors,** with tungsten carbide inserts, straight, sharp/blunt, length 14.5 cm

Same, curved

**Stitch Scissors,** straight, sharp/sharp, length 12.5 cm

Same, curved

Ligature Scissors, with tungsten carbide inserts, curved, lower blade serrated, length 18 cm, color code: one black handle ring, one gold-plated handle ring



791709 S

791815

SPENCER **Stitch Scissors**, length 9 cm

791803 JAMESO

JAMESON **Scissors**, curved, pointed, delicate tips, length 15.5 cm

791813 REYNOLDS **Scisso** 

REYNOLDS **Scissors**, curved, delicate tips, length 13 cm

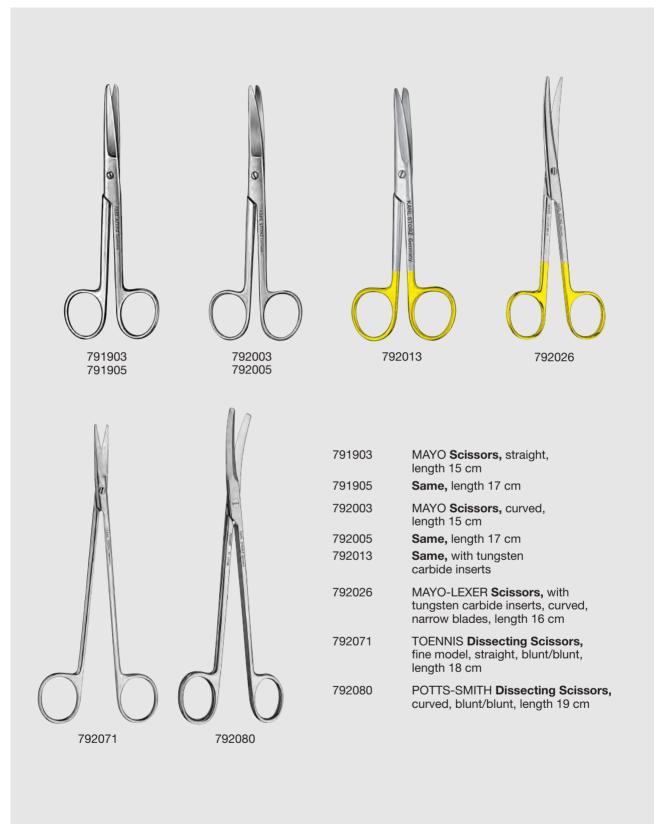
Same, length 15 cm

791818 **Same,** length 18 cm

 $11-03_2$ 

#### **Scissors**





11-03

HS 3 D 361



#### "The Diamond Standard®" Scissors

#### **Special Features:**

- Scissors with ultimate cutting quality
- Very fine-toothed upper blade prevents slipping of cut material
- Razor-sharp lower blade ensures easy and efficient cutting
- Color code: one gold-plated handle ring
- Some models are available with tungsten carbide inserts, color code: one black handle ring, one gold-plated handle ring

#### Scissors with titanium nitride coating

#### **Special Features:**

- Enhanced gliding properties
- Increased tool life
- More durable surface
- Color code: copper
- Some models are available with tungsten carbide inserts



790802 DS Scissors, straight, sharp/blunt,

length 14.5 cm,

color code: one gold-plated handle ring

790902 DS Scissors, with tungsten carbide inserts,

straight, sharp/blunt, length 14.5 cm, color code: one black handle ring, one gold-plated handle ring

one gold-plated flandle fing

791002 DS Scissors, curved, sharp/blunt,

length 13 cm,

color code: one gold-plated handle ring

791003 DS Same, blunt/blunt

791003 DST Same, with titanium-nitride coating,

color code: copper

791202 DS Scissors, curved, sharp/blunt,

length 14.5 cm,

color code: one gold-plated handle ring





791302 DS Scissors, with tungsten carbide inserts,

curved, sharp/blunt, length 14.5 cm, color code: one black handle ring, one gold-plated handle ring

791302 DST Same, with titanium-nitride coating,

color code: copper

791815 DS REYNOLDS Dissecting Scissors,

curved, small tips, length 15 cm, color code: one gold-plated handle ring

792013 DS MAYO **Dissecting Scissors**, with tungsten

carbide inserts, curved, length 15 cm, color code: one black handle ring, one gold-plated handle ring

792013 DST Same, with titanium-nitride

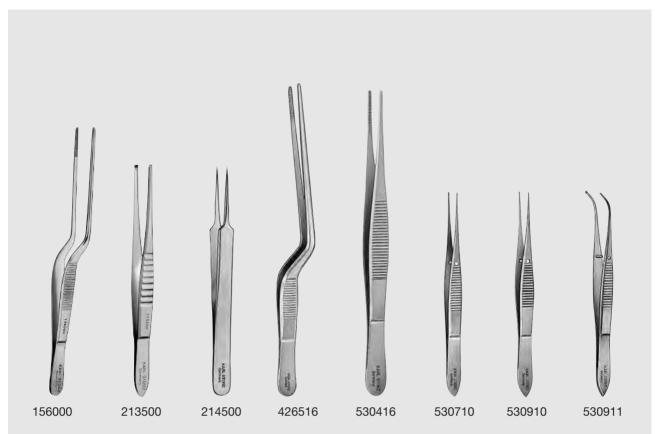
coating, length 14.5 cm, color code: copper

11-031

HS 5 D 363



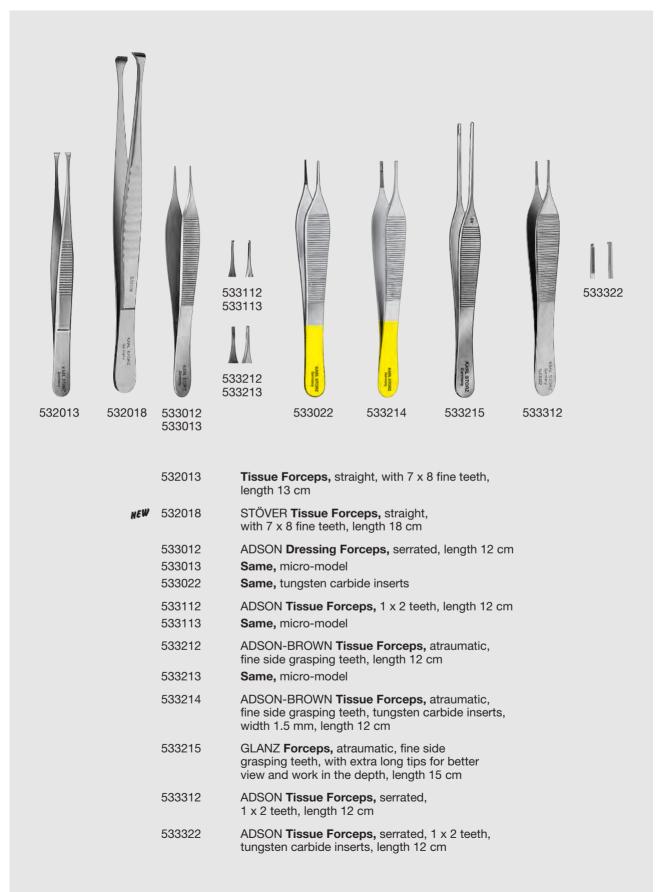




156000	LUCAE <b>Ear Forceps,</b> bayonet-shaped, length 14.5 cm
213500	Tissue Forceps, 1 x 2 teeth, length 11.5 cm
214500	<b>Jeweler Forceps,</b> fine, pointed, length 11 cm
426516	JANSEN <b>Nasal Dressing Forceps,</b> bayonet-shaped, length 16.5 cm
530416	"ATRAUMA" <b>Atraumatic Tissue Forceps,</b> length 16 cm
530710	<b>Dressing Forceps,</b> delicate, length 10 cm
530910	<b>Tissue Forceps,</b> delicate, straight, 1 x 2 teeth, length 10 cm
530911	Same, curved



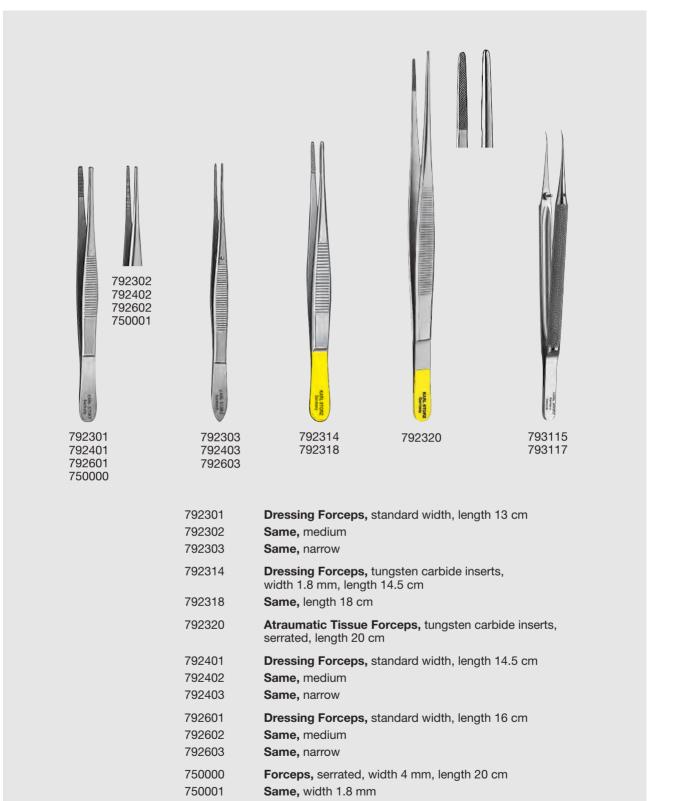
#### **Dressing and Tissue Forceps**



HS 7 D 365

#### **Dressing Forceps**





110

366 HS 8 D

length 15 cm

Same, length 17 cm

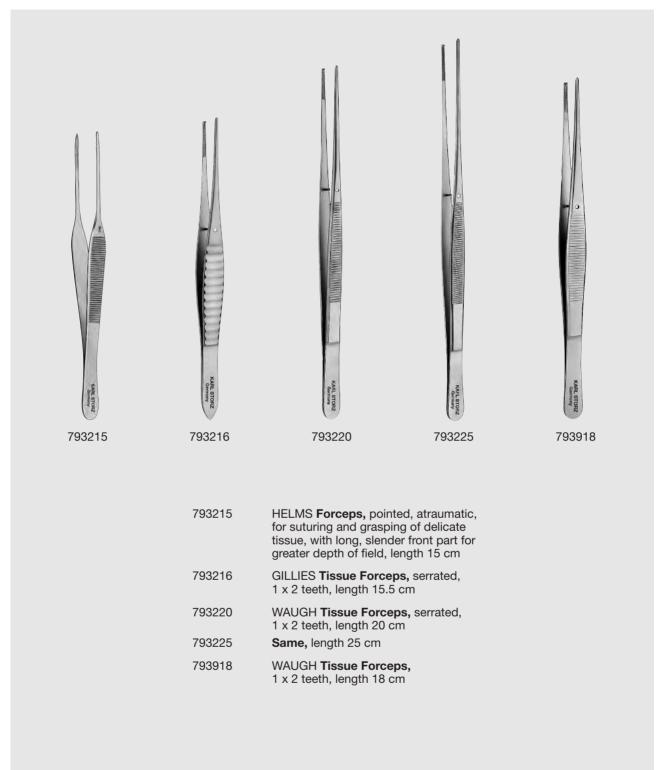
Suture Forceps, short curved, delicate, smooth jaw,

793115

793117

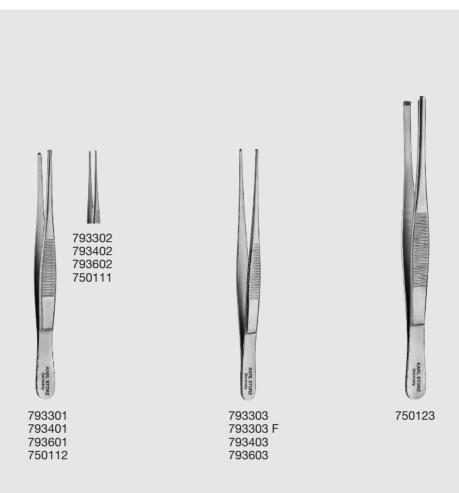






## **Tissue Forceps**



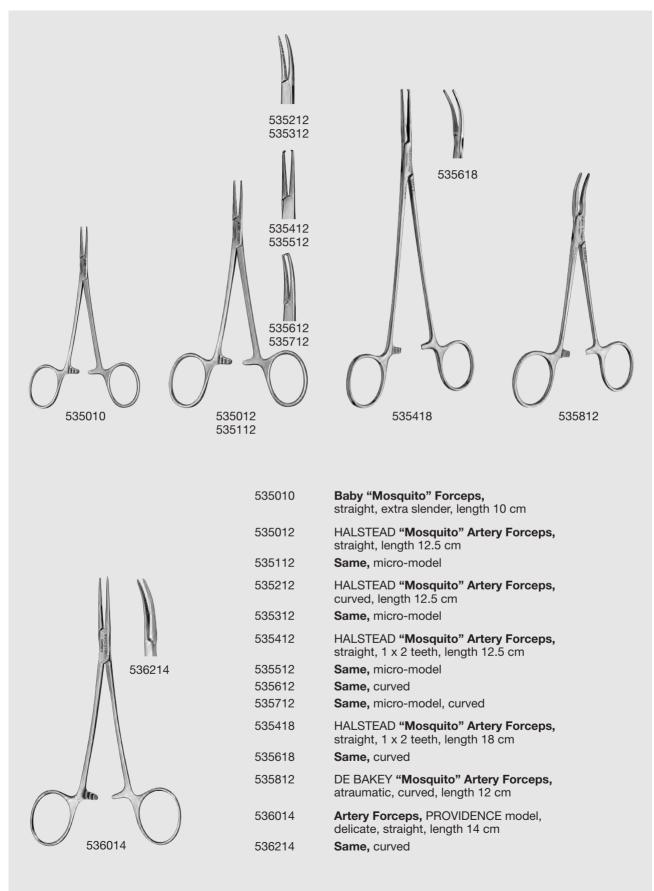


793301 793302 793303 793303 F	<b>Tissue Forceps,</b> 1 x 2 teeth, standard width, length 13 cm <b>Same,</b> medium <b>Same,</b> narrow <b>Same,</b> slender, soft spring
793401 793402 793403	$ \begin{tabular}{ll} \textbf{Tissue Forceps,} 1 \times 2 \ teeth, standard width, length 14.5 \ cm \\ \textbf{Same,} \ medium \\ \textbf{Same,} \ narrow \\ \end{tabular} $
793601 793602 793603	<b>Tissue Forceps,</b> 1 x 2 teeth, standard width, length 16 cm <b>Same,</b> medium <b>Same,</b> narrow
750111 750112	<b>Tissue Forceps,</b> 1 x 2 teeth, width 2 mm, length 20 cm <b>Same,</b> width 3.5 mm
750123	Tissue Forceps, 2 x 3 teeth, width 4.5 mm, length 20 cm
750134	<b>Tissue Forceps,</b> 3 x 4 teeth, width 4.5 mm, length 20 cm

-03%



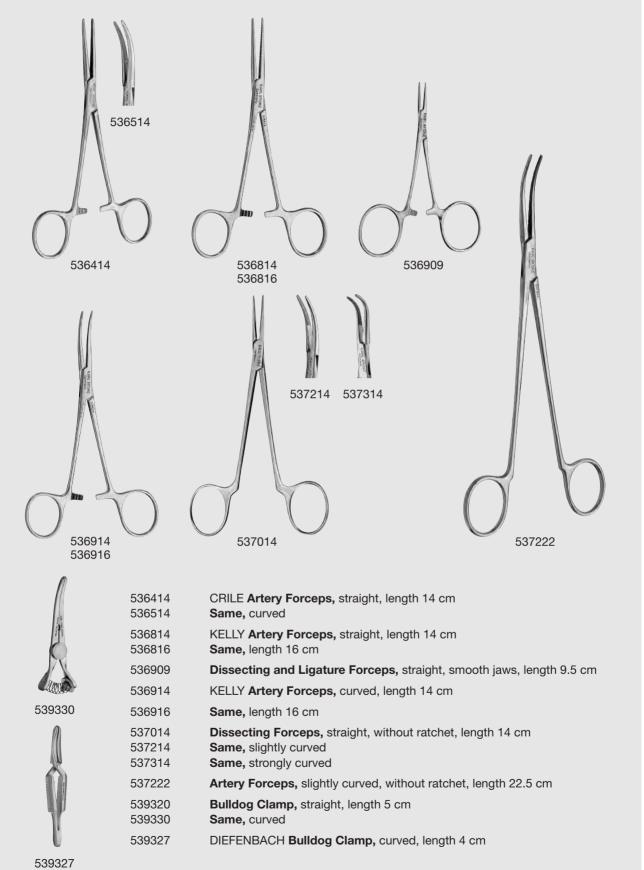




HS 11 D 369

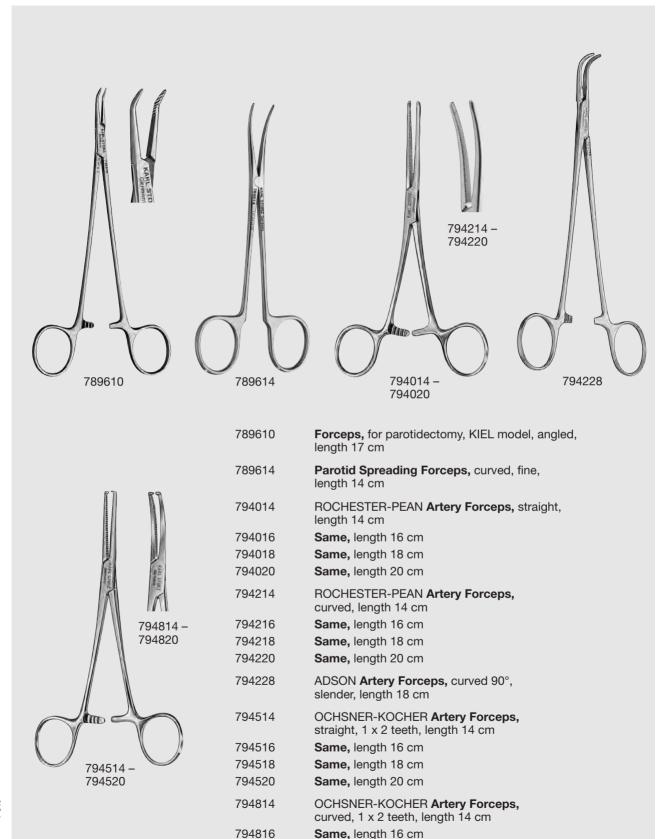
### **Artery Forceps**











HS 13 D 371

Same, length 18 cm

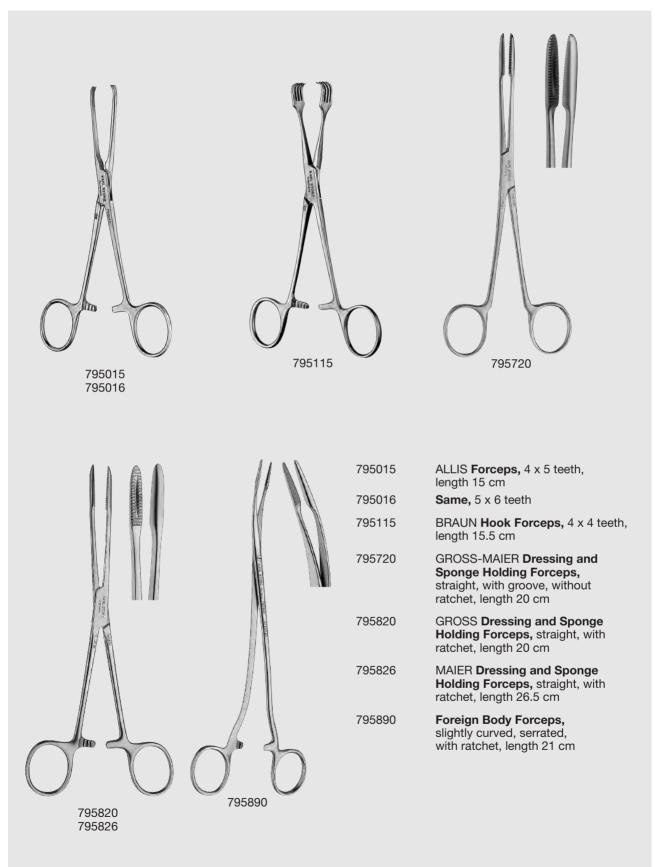
Same, length 20 cm

794818

794820

#### **Forceps**

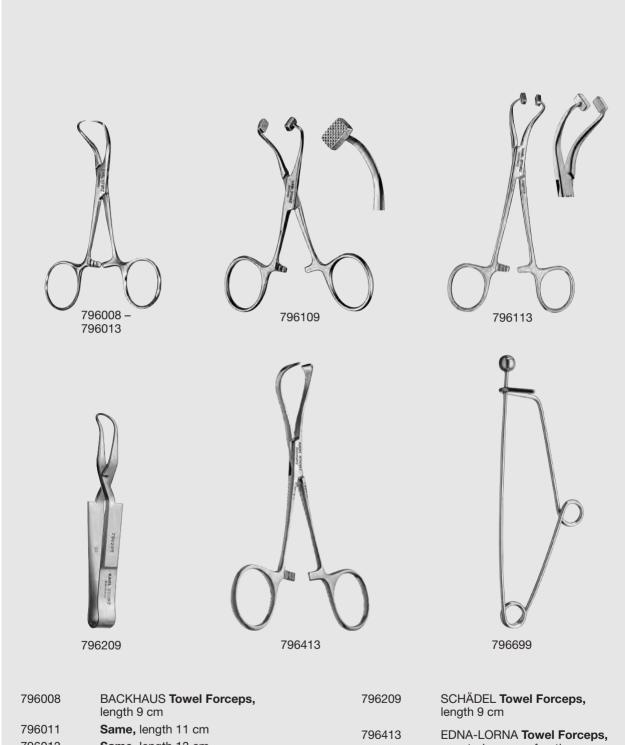




372 HS 14 D





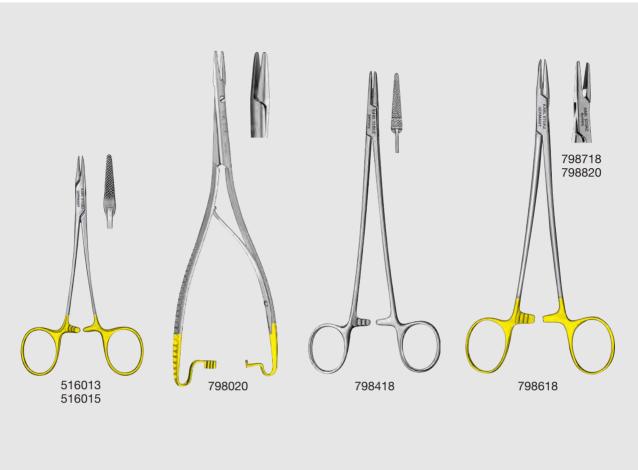


796011 Same, length 11 cm
796013 Same, length 13 cm
796109 Towel Forceps, with serrated inserts, length 9.5 cm, for paper cover sheets
796113 Towel Forceps, with serrated inserts, length 13 cm, for paper cover sheets
796114 Towel Forceps, with serrated inserts, length 13 cm, for paper cover sheets

HS 15 D 373

### **Needle Holders**



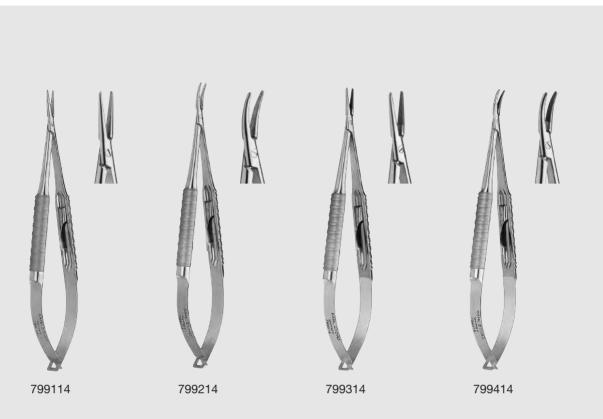




516013	Needle Holder, tungsten carbide inserts, length 13 cm
516015	Same, length 15 cm
798020	MATHIEU <b>Needle Holder,</b> tungsten carbide jaws, slender, length 20 cm
798418	HEGAR <b>Needle Holder</b> , slender, length 18 cm
798618	Same, tungsten carbide inserts
798718	HEGAR-MAYO <b>Needle Holder,</b> tungsten carbide inserts, robust, length 18 cm
798820	HEGAR <b>Needle Holder</b> , tungsten carbide inserts, robust, length 20 cm
799016	DRAF <b>Micro Needle Holder</b> , extra fine, coated jaws, matt finish, polished handle rings, length 16.5 cm
800001	DESCHAMPS <b>Ligature Needle</b> , curved to right, length 20 cm
800002	Same, curved to left
800005	FISCH <b>Aneurysm Needle</b> , curved, length 20 cm

## BARRAQUER Micro Instruments





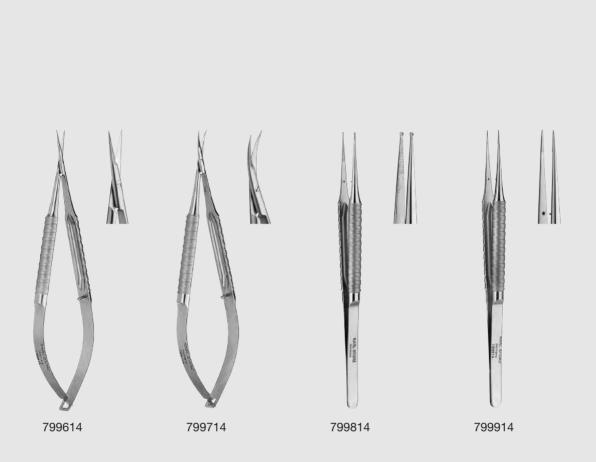
799114	BARRAQUER <b>Micro Needle Holder,</b> with round spring handle, straight, smooth-coated jaws, with ratchet, length 14 cm
799116	Same, length 16 cm
799118	Same, length 18 cm
799214	BARRAQUER <b>Micro Needle Holder,</b> with round spring handle, curved, smooth-coated jaws, with ratchet, length 14 cm
799216	Same, length 16 cm
799218	Same, length 18 cm
799314	BARRAQUER <b>Micro Needle Holder,</b> with round spring handle, straight, serrated, tungsten carbide jaws, with ratchet, length 14 cm
799316	Same, length 16 cm
799318	Same, length 18 cm
799414	BARRAQUER <b>Micro Needle Holder,</b> with round spring handle, curved, serrated, tungsten carbide jaws, with ratchet, length 14 cm
799416	Same, length 16 cm
799418	Same, length 18 cm

8

HS 17 E 375

## Micro Instruments NEW

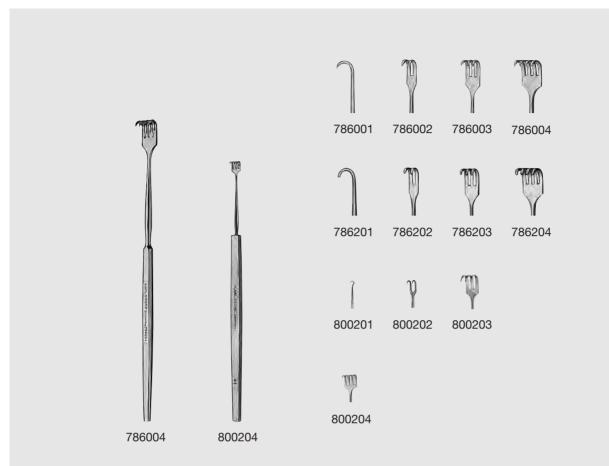




799614	Micro Scissors, with round spring handle, straight, serrated cutting edge, length 14 cm
799616	Same, length 16 cm
799618	Same, length 18 cm
799714	Micro Scissors, with round spring handle, curved, serrated cutting edge, length 14 cm
799716	Same, length 16 cm
799718	Same, length 18 cm
799814	<b>Micro Ring Forceps,</b> with round spring handle, straight, coated, length 14 cm
799816	Same, length 16 cm
799818	Same, length 18 cm
799914	Micro Forceps, with round spring handle, straight, coated, length 14 cm
799916	Same, length 16 cm
799918	Same, length 18 cm





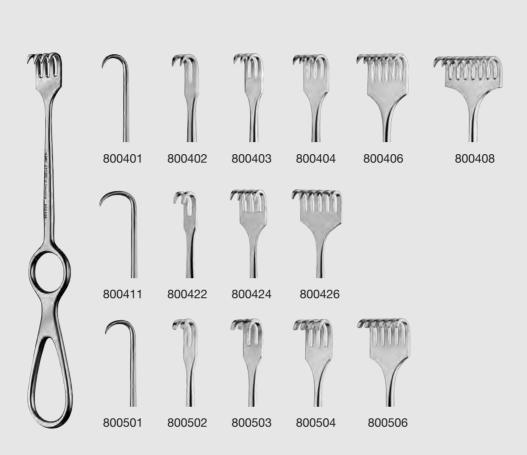


786001	Retractor, sharp, 1 prong, length 17 cm
786002	Same, 2 prongs
786003	Same, 3 prongs
786004	Same, 4 prongs
786201	Retractor, blunt, 1 prong, length 17 cm
786202	Same, 2 prongs
786203	Same, 3 prongs
786204	Same, 4 prongs
800201	Retractor, extra fine, sharp, 1 prong, length 12 cm
800202	Same, 2 prongs
800203	Retractor, extra fine, sharp, 3 prongs, length 13 cm
800204	Retractor, extra fine, sharp, 4 prongs, length 13 cm

HS 19 D 377

#### **Retractors**

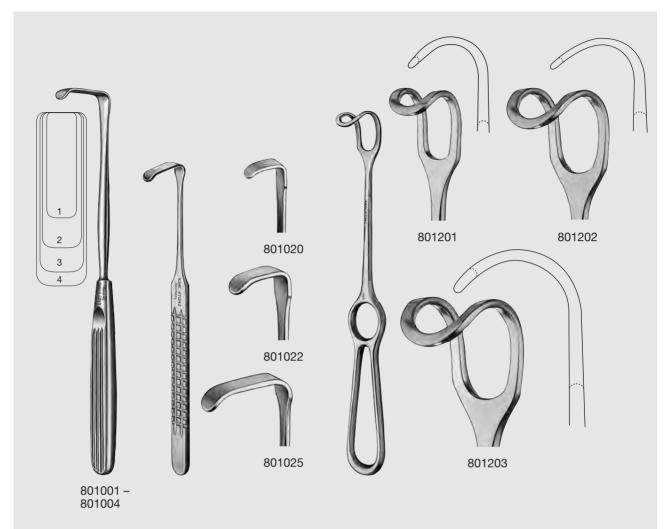




800401	VOLKMANN <b>Retractor</b> , sharp, 1 prong, length 21 cm	800422	VOLKMANN <b>Retractor</b> , semisharp, 2 prongs,
800402	Same, 2 prongs		size 8.5 x 8 mm, length 22 cm
800403	Same, 3 prongs	800424	VOLKMANN Retractor,
800404	Same, 4 prongs		semisharp, 4 prongs,
800406	Same, 6 prongs	000400	length 21 cm
800408	VOLKMANN Retractor,	800426	Same, 6 prongs
000400	sharp, 8 prongs, length 22 cm	800501	VOLKMANN Retractor, blunt, 1 prong, length 21 cm
800411	VOLKMANN <b>Retractor</b> , sharp,	800502	Same, 2 prongs
	1 prong, long curve for cheekbone, length 21 cm	800503	Same, 3 prongs
		800504	Same, 4 prongs
		800506	Same, 6 prongs







801001	LANGENBECK <b>Retractor</b> , size 1, 25 x 7.5 mm, length 22 cm	801201	MIDDELDORPF <b>Retractor</b> , with grid handle, small, size 1, 15 x 15 mm, length 20 cm
801002	<b>Same,</b> size 2, 31 x 9 mm	801202	Same, medium, size 2, 20 x 20 mm
801003	<b>Same,</b> size 3, 37 x 10.5 mm	801203	Same, large, size 3, 28 x 28 mm
801004	<b>Same,</b> size 4, 40 x 12 mm		
801020	LANGENBECK-GREEN Retractor, with flat handle, 10 x 4 mm, length 16 cm		

801022

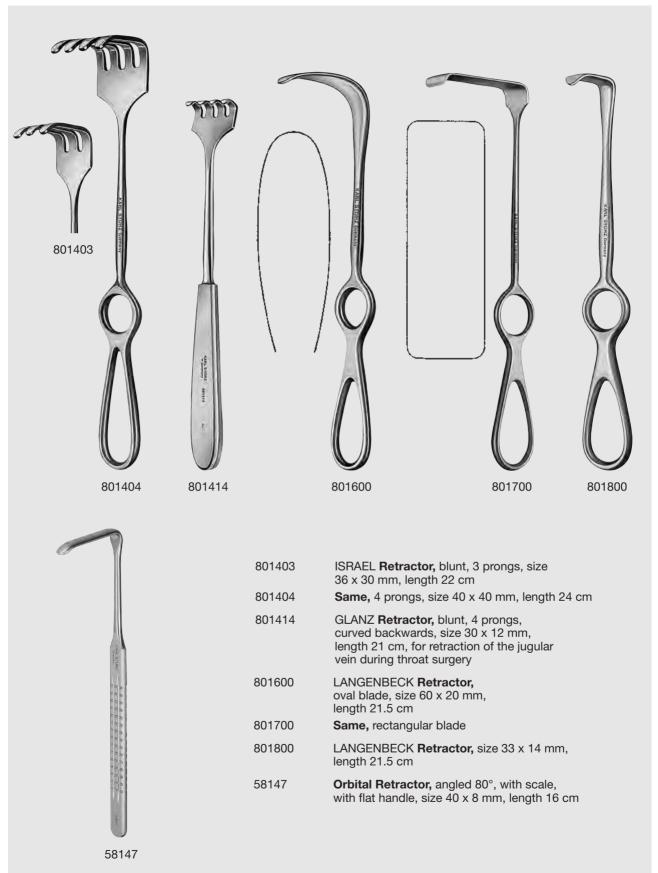
801025

**Same,** 16 x 6 mm

**Same,** 24 x 6 mm

#### **Retractors**



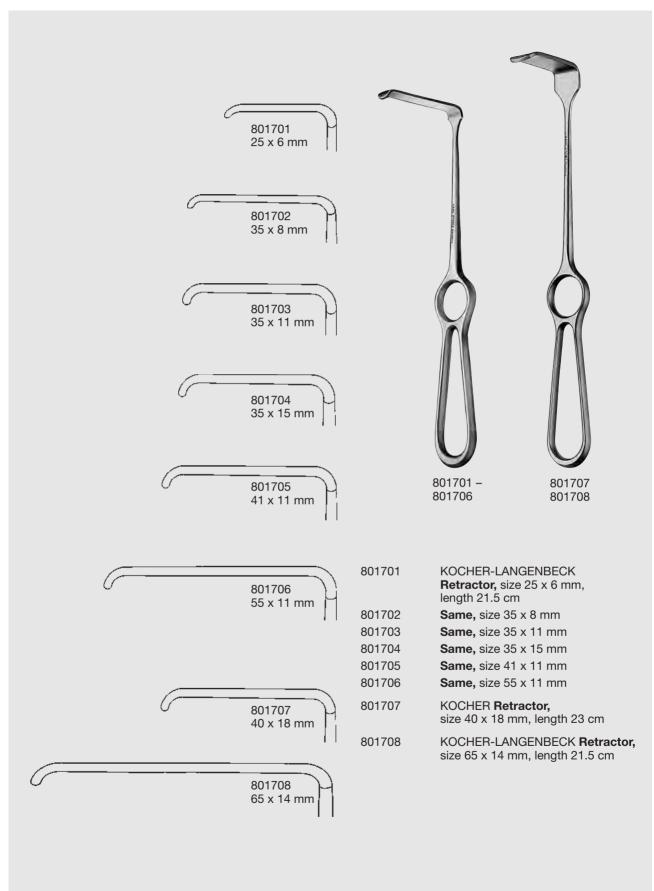


380 HS 22 D

66



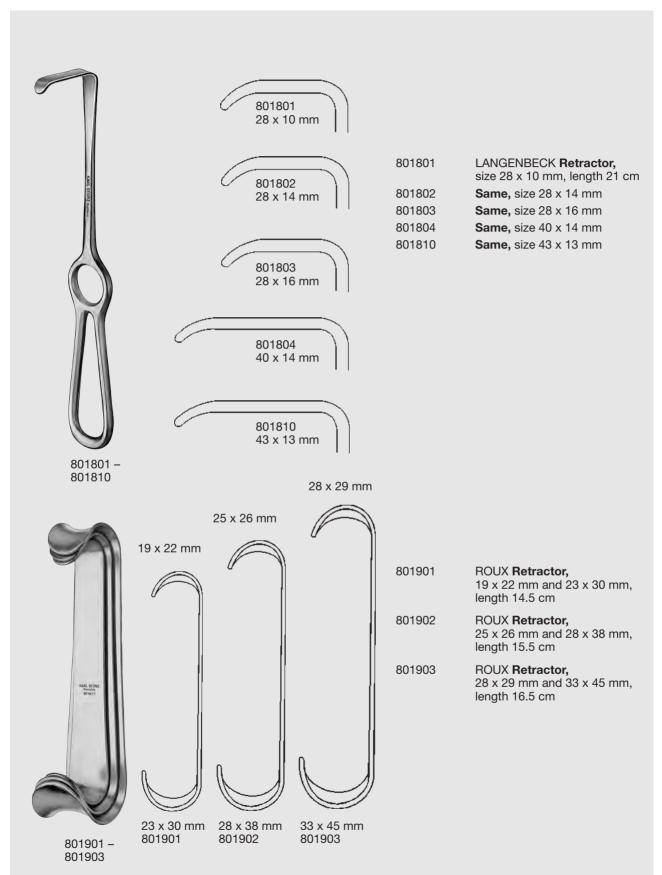




HS 23 D 381

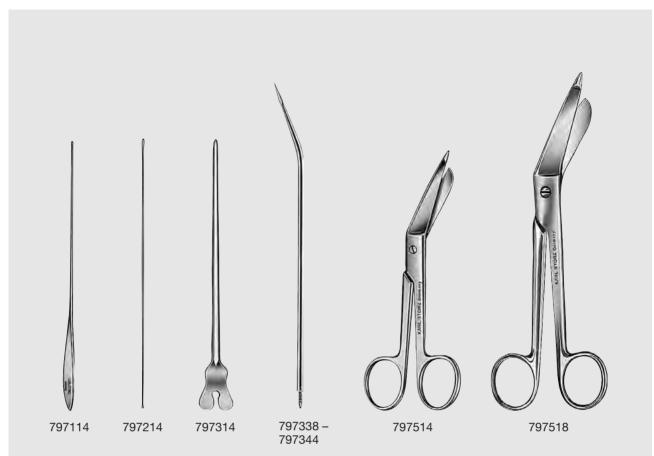
#### **Retractors**











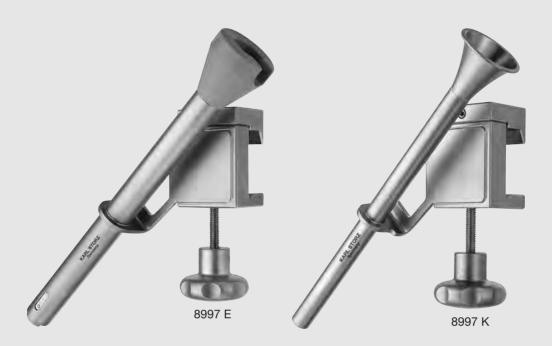
797114	Myrtle Leaf Probe, diameter 1.5 mm, length 14.5 cm
797214	Bulbous Probe, diameter 1.5 mm, length 14.5 cm
797314	Grooved Director, length 14.5 cm
797338	<b>Redon Guide Needle,</b> angled, with lancet tip, 8 Fr.
797340	<b>Same,</b> 10 Fr.
797342	<b>Same,</b> 12 Fr.
797344	Same, 14 Fr.
797514	LISTER Bandage Scissors, length 14 cm
797518	Same, length 18 cm

## Holders for Endoscopes and Suction Tubes



#### **Special Features:**

- Secure, defined resting place during surgical interventions
- Time-saving due to continuous access to endoscopes/suction holders in specific, fixed position
- In ideal cases allows surgeons independent access to instruments
- Holders can be easily mounted to an instrument table



8997 E **Endoscope Holder,** for mounting to the instrument table, for secure and optimized storage of endoscopes up to diameter 5 mm

8997 K **Suction Tube Holder,** for mounting to the instrument table, for secure and optimized storage of suction tubes





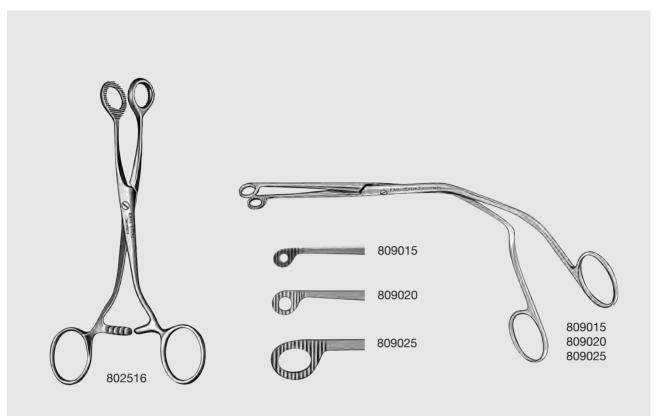


3-99,

HS 27 C 385

### **Hospital Supplies**





802516 COLLIN **Tongue Seizing Forceps,** length 16 cm
809015 MAGILL **Forceps,** for the introduction of endo-tracheal tubes, for infants and small children, length 15 cm
809020 **Same,** for children, length 20 cm
809025 **Same,** for adults, length 25 cm







810803	<b>Cup Medicine,</b> stainless steel, diameter 65 mm, height 20 mm
810850	<b>Cup Medicine,</b> with handle, 350 cm <sup>3</sup> , diameter 70 mm, height 90 mm
815200	Jar, stainless steel, diameter 5 cm, height 17.5 cm
815213	Same, height 13 cm
815500	<b>Lamp, Alcohol,</b> glass, with lateral changing hole, 150 cm <sup>3</sup>
820517	<b>Kidney-Shaped Dressing Tray,</b> stainless steel, length 17 cm
820525	Same, length 25 cm
820527	Same, length 27.5 cm

HS 29 387

## BEHRBOHM/LEITHÄUSER NEW ENT Basic Examination Set

# STORY—ENDOSKOPE

#### **Special Features:**

- Enables basic ENT examinations and function tests
- All instruments are stored securely in a special leather pouch



826201 **ENT Diagnosis Set,** for outpatient basic ENT treatments including:

**Leather Bag for ENT Diagnosis Set,** with divided main compartment and 2 detachable side pockets

Nystagmus Spectacles, small model without illumination

**LED Penlight,** burning time approx. 50 hours in continuous operation with 2 Micro-AAA batteries (included)

Tuning Fork, A1-440, with stand, small model

**Tongue Depressor,** wooden, width 19 mm, length 16 cm, package of 100





1216 AA **HOPKINS® Straight Forward Telescope 0°,** for oto-nasopharyngoscopy,

diameter 4 mm, length 11 cm, autoclavable, fiber optic light

transmission incorporated,

color code: green

11301 D4 Battery Light Source LED for Endoscopes, with fast screw

thread, brightness > 110 lm /> 150 klx, burning time > 120 min, weight approx. 150 g ready for use, **suitable for wipe disinfection**,

with 2 Photo Batteries 121306 P

121300 HEINE **Otoscope**, otoscope head with fiber optic light

transmission incorporated

including:

Ear Specula, outer diameter 2.5 – 5 mm

Battery Handle 2x 1.5 Volt Battery

**Spare Lamp** 

Please note: Image for 826201 also contains optional accessories.

Components/Spare Parts see chapter 16

388 HS 30







826101 ENT Trolley for Visits,

aluminium case, silver, weight: 5.5 kg, with spacious compartments for documents and notebook, inner dimensions (w x h x d): 420 x 360 x 190 mm

#### **Recommended contents:**

094120	<b>LED Headlight,</b> light model, with white light, rechargeable battery box on headband, illumination area adjustable from 10 – 100 mm in diameter with	403555	KILLIAN-STRUYCKEN <b>Nasal Speculum,</b> standard model, blade length 55 mm, length 13.5 cm
	40 cm working distance	423700	REUTER <b>Epistaxis Balloon Catheter</b> , sterile
122003	HARTMANN <b>Ear Speculum,</b> standard model, outer diameter 3 mm, length 3.6 cm	10x 740000	BRÜNINGS <b>Tongue Depressor,</b> length 19 cm
2x 122004 3x 122005	Same, outer diameter 4 mm Same, outer diameter 5 mm	4x 767901 6x 767906	<b>Laryngeal Mirror,</b> with handle, size 1 <b>Same,</b> size 6
3x 122006 122007	Same, outer diameter 6 mm Same, outer diameter 7.5 mm	785005	BRÜNINGS <b>Life-Saving Tube,</b> outer diameter 5 mm, length 20 cm
150100	STACKE <b>Ear Probe</b> , silver,	785007	Same, outer diameter 7 mm
10x 151011	length 10.5 cm  Cotton Applicator, standard model,	791202	Scissors, curved, sharp/blunt, length 14.5 cm
	triangular serrated, diameter 1.1 mm, working length 13 cm	792402	Dressing Forceps, medium, length 14.5 cm
2x 152301	Ear Hook, without ball end, size 1, length 15.5 cm	793402	Tissue Forceps, 1 x 2 teeth, medium, length 14.5 cm
2x 152202	WAGENER <b>Ear Hook,</b> with ball end, size 2, length 15.5 cm	15006 B	"ULTRA STOP" <b>Antifog Solution,</b> 25 ml, pipette bottle
2x 153001	WEBER-LOCH <b>Ear Curette</b> , size 1, length 14.5 cm	1216 AA	HOPKINS® Straight Forward Telescope 0°, for oto-nasopharyng-
2x 153310	BUCK <b>Ear Curette,</b> blunt, size 0, length 14.5 cm		oscopy, diameter 4 mm, length 11 cm, autoclavable, fiber optic light
2x 153301	Same, size 1		transmission incorporated, color code: green
5x 156000	LUCAE <b>Ear Forceps,</b> bayonet-shaped, length 14.5 cm	11301 D4	Battery Light Source LED for Endoscopes, with fast screw thread,
162500	STRÜMPEL <b>Ear Forceps,</b> working length 8 cm		brightness > 110 lm / > 150 klx, burning time > 120 min, weight
5x 400500	HARTMANN <b>Nasal Speculum</b> for adults, length 13 cm		approx. 150 g ready for use, suitable for wipe disinfection, with 2 Photo Batteries 121306 P

3-11

402000

HALLE-TIECK **Nasal Speculum,** for infants, length 13 cm

HS 31 389

## **Accessories for Oto-Rhino-Laryngoscopy**











15006 B

15006 C

15006 D

"ULTRA STOP" Antifog Solution, 25 ml, 15006 B pipette bottle

"ULTRA STOP" **Antifog Solution,** 30 ml, sterile, pierce bottle 15006 C

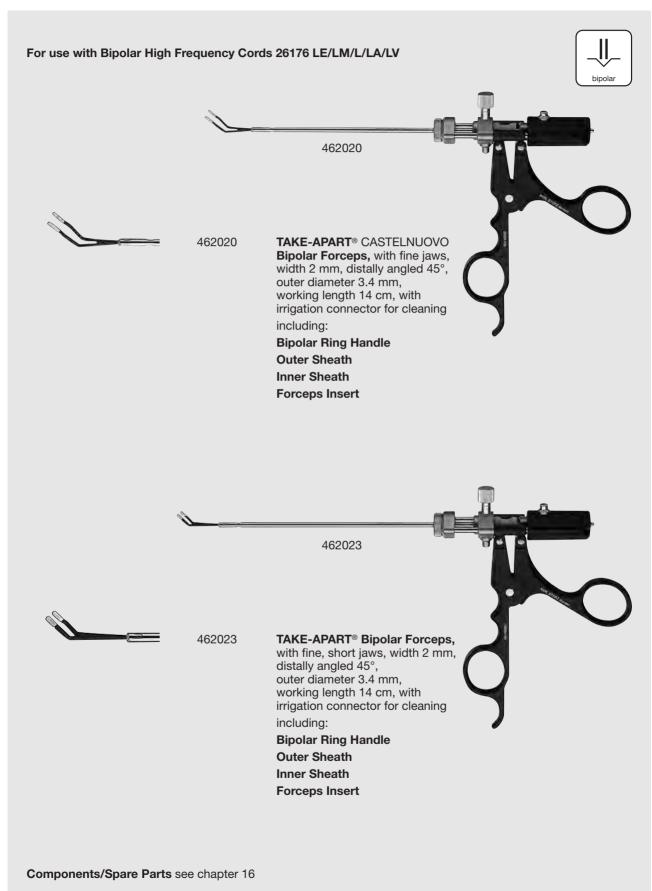
15006 D "ULTRA STOP" Antifog Solution, 15 ml,

atomizer bottle



## TAKE-APART® Bipolar Forceps \*\*





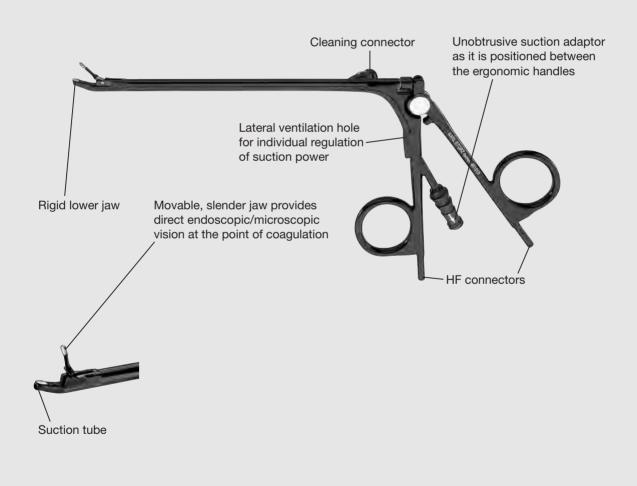




#### **Special Features:**

- Design similar to standard paranasal grasping forceps
- Integrated suction channel
- Individual suction power regulation
- Bipolar coagulation
- Insulated except for small coagulation area on the instrument tip
- Single action jaws
- Distance between cautery poles may be varied, enabling punctual and extensive coagulation
- Special design of the movable jaw provides direct endoscopic/ microscopic vision at the point of coagulation
- Two instrument heads: angled 15° and 45° to the instrument sheath
- Slim design enables good availability of previously hard to reach regions for cauterization





 $3-07_{2}$ 

## STAMMBERGER Bipolar Suction Forceps



#### **Indications/Applications:**

- Arterial bleeding (ethmoidal, sphenopalatine and maxillary arteries, turbinate and septum vessels)
- Skull base surgery
- Oozing hemorrhage from the mucosa edges
- Pituitary gland surgery
- Vascular processes, i.e. nasopharyngeal fibroma
- Epistaxis

- Rendu-Osler-Weber disease
- Secondary hemorrhage, i.e. from adenotomes in the nasopharynx
- Edema prevention, shrinkage of mucosa (for example, posterior end of the turbinate)
- Turbinate cauterization







461010

STAMMBERGER **Bipolar Suction Forceps,** 15° upturned, with suction channel, for bipolar coagulation in paranasal areas, working length 12.5 cm, for use with Bipolar High Frequency Cords 847002 E or 847002 A/M/V/U





461015

STAMMBERGER **Bipolar Suction Forceps**, 45° upturned, with suction channel, for bipolar coagulation in paranasal areas, working length 12.5 cm, for use with Bipolar High Frequency Cords 847002 E or 847002 A/M/V/U

Bipolar High Frequency Cords see page 418

COA 3 E US 395

## **Bipolar Forceps**

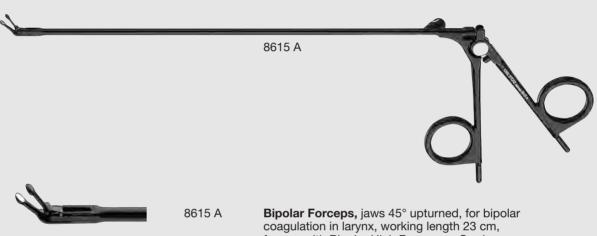


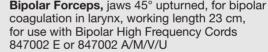
#### **Special Features:**

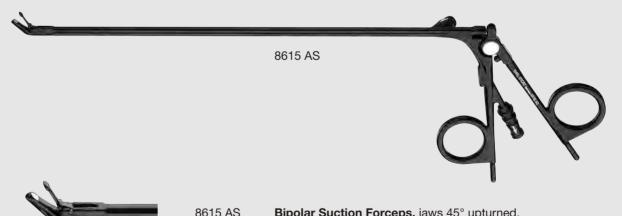
- Bipolar coagulation
- Insulated except for small coagulation area on the instrument tip
- Single action jaws
- Distance between cautery poles may be varied, enabling punctual and extensive coagulation
- With and without suction

- Special design of the movable jaw provides direct endoscopic/microscopic vision at the point of coagulation
- Slim design enables good availability of previously hard to reach regions for cauterization









Bipolar Suction Forceps, jaws 45° upturned, with suction channel, for bipolar coagulation in larynx, working length 23 cm, for use with Bipolar High Frequency Cords 847002 E or 847002 A/M/V/U

Bipolar High Frequency Cords see page 418



## **Bipolar Coagulation Forceps**



COA 5 F 397





Bipolar Coagulation Forceps, insulated for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V



PACE NEXT	843016	<b>Bipolar Coagulation Forceps,</b> insulated, angular, very delicate, tip 0.2 mm, length 16 cm
MAR-STORY STORY	843016 F	Same, grip insulated, front part not insulated, pointed
Clarative .	843116	<b>Bipolar Coagulation Forceps,</b> insulated, angular, pointed, length 16 cm
IAR SIBI forces	843219	Bipolar Coagulation Forceps, insulated, angular, blunt, with integrated suction channel for epistaxis, with cut-off hole, length 19 cm
THE VICE THE COLUMN TWO IS NOT THE COLUMN TW	844116	Bipolar Coagulation Forceps, insulated, bayonet-shaped, pointed, length 16 cm
F-047	844216	Same, blunt, tip 1 mm
	844216 G	Same, blunt, with silver tip, tip 1 mm
	844119	Same, blunt, tip 2 mm, length 19 cm
and another state of the state	844219	Same, blunt, tip 1 mm, length 19 cm
	844219 G	Same, blunt, with silver tip, tip 1 mm, length 19 cm
MAL TOOL	844319	Same, slender, tip 0.5 mm, length 19 cm

-99<sub>5</sub>



## **Bipolar Coagulation Forceps**

Bipolar Coagulation Forceps, insulated for use with Bipolar High Frequency Cords 847000 or 847000 A	A/E/M/V	bipolar
	844320	Bipolar Coagulation Forceps, insulated, bayonet-shaped, blunt, with integrated suction channel and cut-off hole, tip 1.4 mm, length 20 cm
	844321	Same, tip 2 mm, length 20 cm
	844421	Bipolar Coagulation Forceps, insulated, bayonet-shaped, tip 0.3 mm, length 21 cm
MA HOL	844423	Same, length 23 cm
	844521	Same, blunt, tip 0.7 mm, length 21 cm
74 USA	844523	Same, tip 0.7 mm, length 23 cm
	844621	Same, blunt, tip 1 mm, length 21 cm
	844623	Same, blunt, tip 1.2 mm, length 23 cm
	844721	Same, blunt, tip 2 mm, length 21 cm
126-3 1017 (17 mg mg)	845219	Bipolar Coagulation Forceps, insulated, angled tip, bayonet-shaped, blunt, tip 2 mm, length 19 cm
	845219 G	Same, with silver tip





Bipolar Coagulation Forceps, insulated for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V





Bipolar Coagulation Forceps, insulated, for nasopharynx, tip curved 60°, blunt, tip 2 mm, length 18 cm



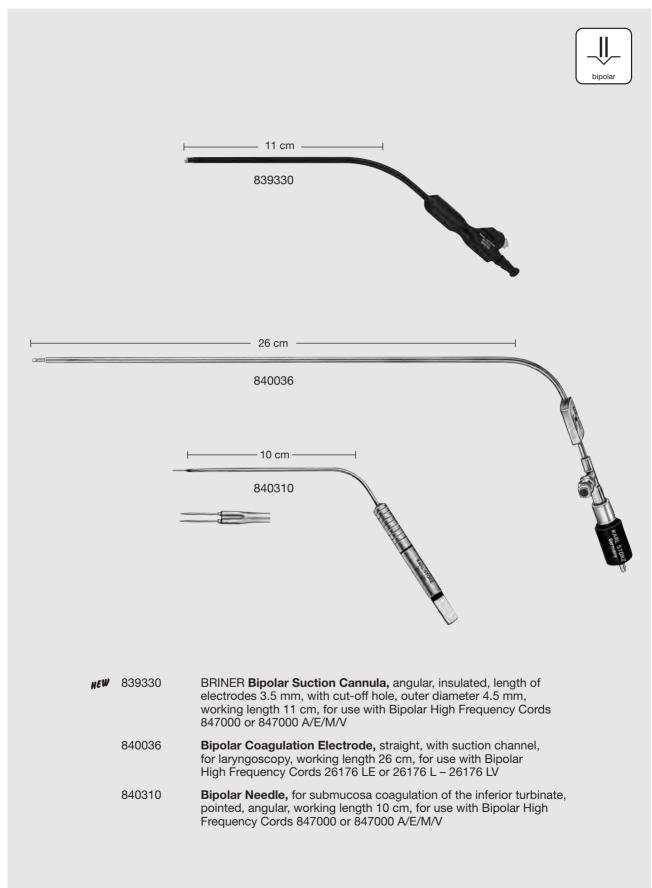
Bipolar Coagulation Forceps, insulated, for nasopharynx and adenoidectomy, tip with long 90° curve, with integrated suction channel, with cut-off hole, length 21 cm



Bipolar Coagulation Forceps, insulated, for oral cavity and tonsillectomy, tip with short 45° curve, with integrated suction channel, with cut-off hole, length 21 cm





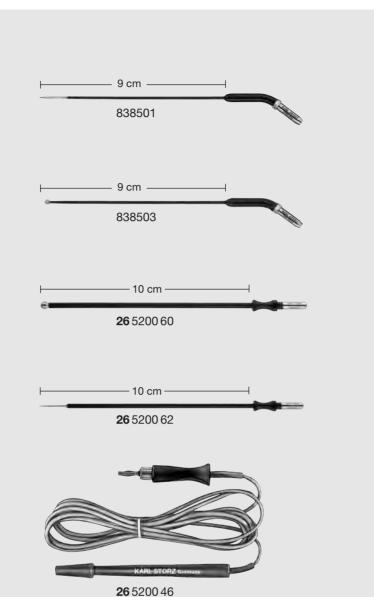


3-99

COA 9 A 401



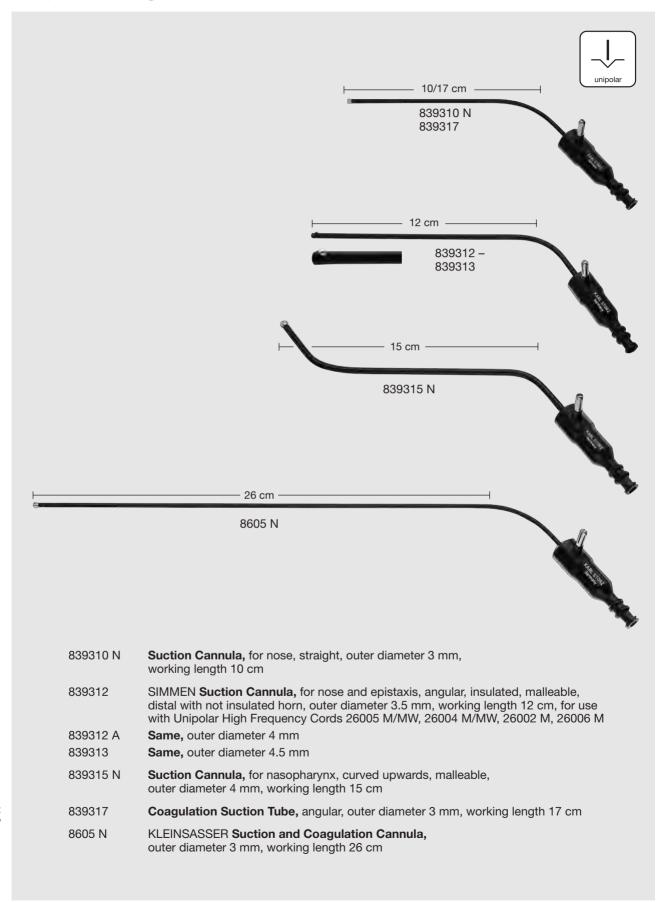




838501	<b>Needle Electrode,</b> for sub mucosa diathermy of the inferior turbinate, working length 9 cm
838503	Ball Electrode, for epistaxis, working length 9 cm
<b>26</b> 5200 60	Ball Electrode, straight, diameter 4 mm, working length 10 cm
<b>26</b> 5200 62	Needle Electrode, straight, working length 10 cm
<b>26</b> 5200 46	Electrode Handle, without buttons, with integrated connecting cable, length 300 cm



## **Unipolar Coagulation**



COA 11 403







## **■ HIGH FREQUENCY SURGERY UNITS**

AUTOCON® II 400 SCB
AUTOCON® 200
AUTOCON® 50

# AUTOCON® II 400 SCB, AUTOCON® 200/50

**Special Features** 



Special Features:	AUTOCON® II 400 SCB	AUTOCON® 200	AUTOCOLL
Degree of coagulation (effect) can be preselected in several steps: The degree of coagulation measures extent of coagulation depth	•	•	•
Soft coagulation and/or standard coagulation: coagulation with unmodulated HF voltage (Up < 200 V); the coagulation electrode can be positioned in direct contact with the tissue without damaging deeper layers of tissue through carbonisation	•	•	•
Forced coagulation: coagulation with modulated HF voltage (Up > 500 V); to reach deeper coagulation zones, electric arcs are generated between the active coagulation electrode and the tissue. Damage to deeper layers of tissue has to be accepted.	•	•	•
Autostart function: manual adjustment of operating time limit for bipolar coagulation	•	-	-
Voltage-regulated cutting	•	•	•
Service port for software updates and HF functionality upgrades	•	-	-
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	•	•	•
Bipolar resection with KARL STORZ bipolar electrotomes	•	-	-
Bipolar application with NaCl irrigation solution	•	-	-
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)	•	-	-
Interdisciplinary use	•	-	-
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	•	-	_

## **AUTOCON® II 400 SCB**





HF-Modes	Effects	P max. at 500 Ohm	V <sub>P</sub> max. at 500 Ohm	Crest-Factor	Arc Control	Voltage Control
Jnipolar						
TOP-Cut	8	300	950	1.4	•	-
POWER-Cut	8	300	740	1.4	-	•
C-Cut	8	200	1450	3.0	-	•
LAP-C-Cut	8	200	1450	3.0 – 3.8	-	•
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-Time-C-Cut	8 time 0.1-1 sec.		770	1.4	-	•
Saline Coag	8	200 (at 50 Ohm)	190	1.4	-	•
Saline-Time-Coag	8 time 0.1-1 sec.	,	190	1.4	-	•
Bipolar Soft Coag	8	120 (at 75 Ohm)	190	1.4	-	•
		120				
Bipolar Soft with Auto-Stop	8	(at 75 Ohm)	190	1.4	-	•

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	<b>20</b> 5352 20-11x: 230 VAC, 50/60 Hz <b>20</b> 5352 20U11x: 115 VAC, 50/60 Hz
Dimensions w x h x d	448 x 164 x 345 mm

Weight

Certified to IEC 601-1, CE acc. to MDD

COA 15 D 407

## **AUTOCON® II SCB 400**

High Frequency Surgery Unit, Recommended System Configurations







AUTOCON® II 400 SCB,

power supply 220 – 240 VAC, 50/60 Hz including:

**Mains Cord** 

SCB Connecting Cable, length 100 cm

	AUTOCON®II 400	400 Socket Position			
SCB, Set	SCB	1	2	3	4
Standard					
<b>20</b> 5352 01-111	<b>20</b> 5352 20-111	Bipolar	Bipolar	Unipolar 3-pin and Erbe	Neutral Electr. 6.3 mm jack
<b>20</b> 5352 01-112	<b>20</b> 5352 20-112	Bipolar US-2-pin	Bipolar US-2-pin	Unipolar 3-pin and Bovie	Neutral Electr. 2-pin
20 3332 01-112	20 3332 20-112				
Bipolar					
<b>20</b> 5352 01-113	<b>20</b> 5352 20-113	Bipolar	Bipolar	Bipolar Multifunction	Blind Socket
20 3332 01-113	20 0002 20-110				
<b>20</b> 5352 01-114	<b>20</b> 5352 20-114	Bipolar US-2-pin	Bipolar US-2-pin	Bipolar Multifunction	Blind Socket
20 3002 01-114	20 0002 20-114				
High-End					
<b>20</b> 5352 01-115	<b>20</b> 5352 20-115	Bipolar	Bipolar Multifunction	Unipolar 3-pin and Erbe	Neutral Electr. 6.3 mm jack
<b>20</b> 3332 01-113	<b>20</b> 0002 20-110				
<b>20</b> 5050 04 440	00 5050 00 412	Bipolar US-2-pin	Bipolar Multifunction	Unipolar 3-pin and Bovie	Neutral Electr. 2-pin
<b>20</b> 5352 01-116	<b>20</b> 5352 20-116				

Optional Accessories for AUTOCON®II 400 SCB see page 414

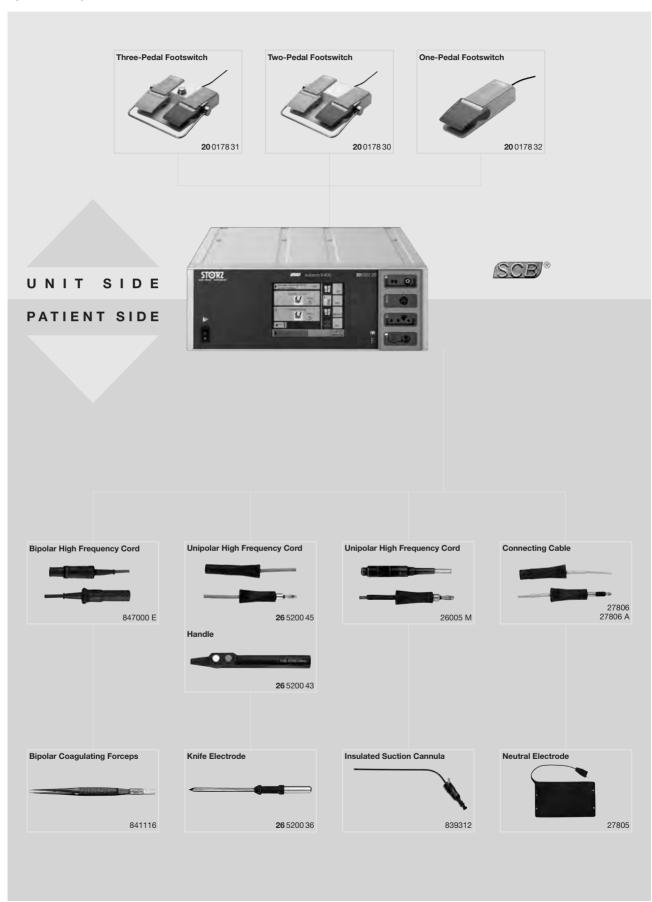
Components/Spare Parts see chapter 16

5

## **AUTOCON® II 400 SCB**







High Frequency Surgery Unit,
Recommended System Configurations





**20** 5225 01 **AUTOCON**® **200**, power supply

200 – 240 VAC, 50/60 Hz including:

Mains Cord

Adaptor, for unipolar HF output,

diameter 4/5 mm

20 5225 01-010 AUTOCON® 200,

with ENDOCUT function,

power supply 200 - 240 VAC, 50/60 Hz

including:

**Mains Cord** 

Adaptor, for unipolar HF output,

diameter 4/5 mm

**20** 5225 01 C **AUTOCON**® **200**, power supply

100 - 120 VAC, 50/60 Hz

including: Mains Cord

Adaptor, for unipolar HF output,

diameter 4/5 mm

20522501C010 AUTOCON® 200,

with ENDOCUT function,

power supply 100 - 120 VAC, 50/60 Hz

including:

**Mains Cord** 

Adaptor, for unipolar HF output,

diameter 4/5 mm

#### Specifications:

HF Rated Power	- Cutting unipolar: 200 Watt/500 Ohm	Degree of Coagulation	Cutting 4 steps	
	- Coagulation unipolar soft: 120 Watt/125 Ohm	Autostart	Coagulation bipolar	
	unipolar standard: 120 Watt/350 Ohm bipolar: 120 Watt/125 Ohm	Autostop	Coagulation unipolar soft	
Max. Voltage	c. Voltage  - Cutting unipolar: Vp=600 Volt - Coagulation unipolar soft: Vp=190 Volt unipolar standard: Vp=1300 Volt		- permanent power control - maldosage - neutral electrode, safety system - automatic self-test	
	bipolar: Vp=190 Volt	Power Supply 100-	100-120 VAC or 200-240 VAC, 50/60 Hz	
Output Control	- Cutting	Dimensions w x h x d	305 x 164 x 345 mm	
	unipolar: automatic voltage control - Coagulation	Weight	7.7 kg	
	unipolar soft: automatic voltage control	Certified to	IEC 601-1, CE acc. to MDD	
	unipolar standard: pulse modulation bipolar: automatic voltage control			

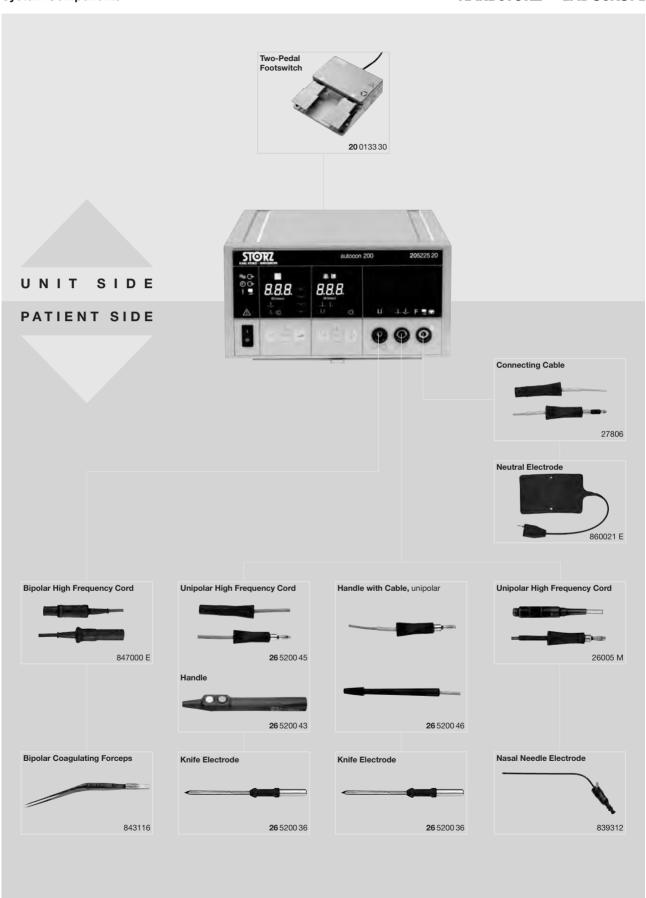
Optional Accessories for AUTOCON® 200 see page 414

Components/Spare Parts see chapter 16

410 COA 18 D US

**System Components** 





High Frequency Surgery Unit, Recommended System Configuration





**20** 5205 01 **AUTOCON® 50,** power supply 100/120/230/240 VAC,

50/60 Hz including: **Mains Cord** 

Adaptor, for unipolar HF output, diameter 4/5 mm

#### Specifications

Specifications:	
HF Rated Power	- Cutting unipolar: 50 Watt/500 Ohm - Coagulation unipolar soft: 50 Watt/200 Ohm unipolar standard: 50 Watt/500 Ohm bipolar: 50 Watt/200 Ohm
Max. Voltage	- Cutting unipolar: Vp=600 Volt - Coagulation unipolar soft: Vp=190 Volt unipolar standard: Vp=900 Volt bipolar: Vp=190 Volt
Output Control	Cutting     unipolar: automatic voltage control     Coagulation     unipolar soft: automatic voltage control     unipolar standard: pulse modulation     bipolar: automatic voltage control

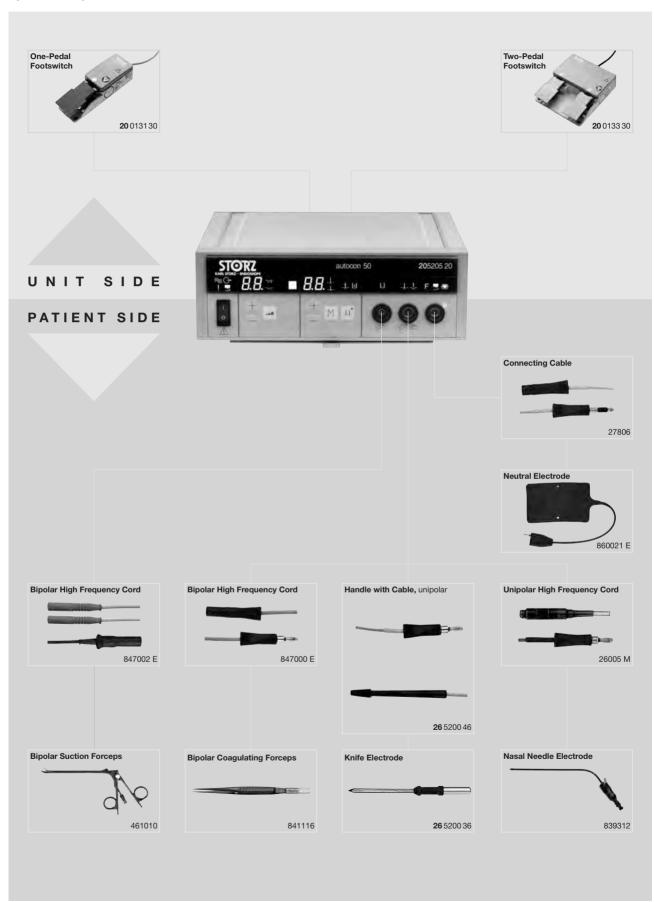
Degree of Coagulation	Cutting 2 steps
Autostop	Coagulation unipolar soft
Safety Systems	<ul><li>maldosage</li><li>neutral electrode, safety system</li><li>automatic self-test</li></ul>
Power Supply	100/120/230/240 VAC, 50/60 Hz
Dimensions w x h x d	305 x 110 x 260 mm
Weight	4.6 kg
Certified to	IEC 601-1, CE acc. to MDD

Optional Accessories for AUTOCON® 50 see page 414

Components/Spare Parts see chapter 16







# Optional Accessories for AUTOCON® II 400 SCB and AUTOCON® 200/50

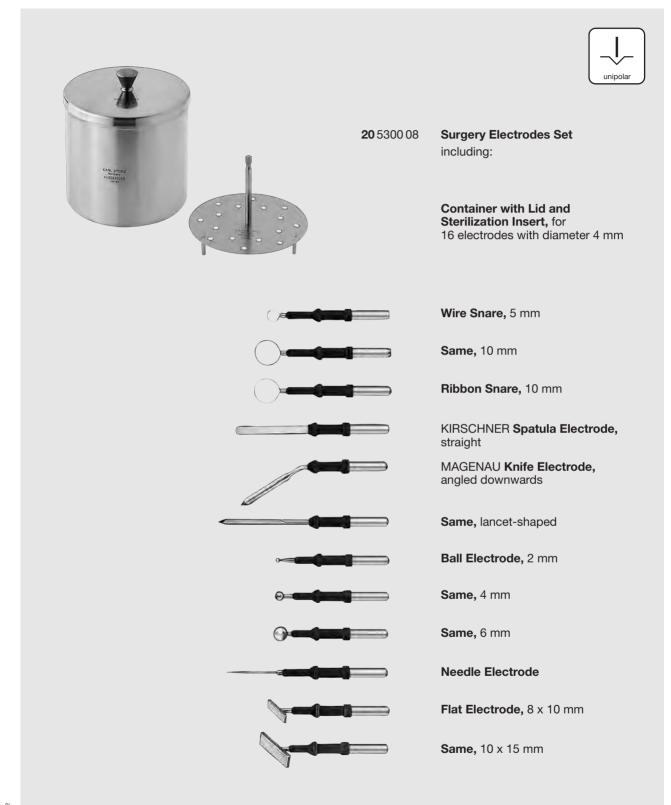


					se with
			AUTOCON® II 400	AUTOCON® 200	AUTOCON® 50
	<b>20</b> 017831	<b>Three-Pedal Footswitch,</b> with switch function for switching between mode levels A and B, for use with AUTOCON® II 400 SCB	•	-	-
	<b>20</b> 0178 30	Two-Pedal Footswitch, for use with AUTOCON® II 400 SCB and AUTOCON® II 200	•	-	-
	<b>20</b> 0178 32	One-Pedal Footswitch, for activating coagulation, for use with AUTOCON® II 400 SCB and AUTOCON® II 200	•	-	-
P	<b>20</b> 0133 30	Two-Pedal Footswitch, for controlling the coagulation and cutting function	-	•	•
	<b>20</b> 0131 30	One-Pedal Footswitch, for controlling the coagulation function	-	•	•
	27805	<b>Neutral Electrode,</b> of conductive silicone with 2 rubber ties for fastening, contact surface A = 500 cm <sup>2</sup> , for use with Connecting Cable 27806	•	•	•
	860021 E	<b>Neutral Electrode,</b> of conductive silicone, with 1 rubber tie for fastening, contact surface $A = 187 \text{ cm}^2$ , for use with Connecting Cable 27806	-	•	•
	27806	<b>Neutral Electrode Connecting Cable,</b> for Neutral Electrodes 27805 and 860021 E, length 400 cm	-111 -115	•	•
	27806 UR	Neutral Electrode Connecting Cable, for Neutral Electrode 27805	-112 -116	-	-
	27806 US	Neutral Electrode Connecting Cable, for Neutral Electrode 27802	-112 -116	-	-
	27802	<b>Neutral Electrode,</b> for single use, contact surface divided into two, A = 169 cm <sup>2</sup> , package of 50, Connecting Cable 27801 required	•	•	•
	27801	Connecting Cable, for connecting Neutral Electrode 27802, length 500 cm	-111 -115	•	•
	<b>26</b> 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)	•	•	•
-	<b>26</b> 5200 45	<b>High Frequency Cable,</b> for Electrode Handle <b>26</b> 5200 43, length 400 cm	-111 -115	•	•
	<b>26</b> 5200 46	Electrode Handle, without buttons, with integrated connecting cable, length 300 cm	-111 -115	•	•

## **Surgery Set**

#### Accessories





For use with Electrode Handles 26 5200 43 and 26 5200 46 Components/Spare Parts see chapter 16

## **Accessories**

## Unipolar and Bipolar High Frequency Cords



#### **Unipolar High Frequency Cords**

KARL STORZ Instrument

High Frequency Surgery Unit



	26002 M	<b>Unipolar High Frequency Cord,</b> with 4 mm plug for models KARL STORZ, Erbe type T, older models and Ellman, length 300 cm
	26004 M	<b>Unipolar High Frequency Cord,</b> with 4 mm plug for models Berchtold and Martin, length 300 cm
	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, KARL STORZ AUTOCON® system (50, 200, 350) and Erbe type ICC
	26006 M	Unipolar High Frequency Cord, with 8 mm plug for models KARL STORZ AUTOCON® II 400 SCB system (112, 116) and Valleylab, length 300 cm

#### **Bipolar High Frequency Cords**

KARL STORZ Instrument

High Frequency Surgery Unit



	26176 LE	Bipolar High Frequency Cord, for AUTOCON® II 400 SCB system (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® system (50, 200, 350), Erbe- Coagulator, T and ICC series, length 300 cm
	26176 LM	Bipolar High Frequency Cord, for Martin and Berchtold coagulators, length 300 cm
	26176 L	<b>Bipolar High Frequency Cord,</b> with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Ellman, length 300 cm
	26176 LA	<b>Bipolar High Frequency Cord,</b> with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm
	26176 LV	<b>Bipolar High Frequency Cord,</b> for KARL STORZ AUTOCON® II 400 SCB system (112, 114, 116, 122, 125) and Valleylab coagulators, length 300 cm

**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**.

### **Accessories**

High Frequency Cords for use with Bipolar Coagulation Instruments



### **Bipolar High Frequency Cords** KARL STORZ High Frequency Surgery Unit Instrument hinola 847000 E Bipolar High Frequency Cord, length 300 cm, for AUTOCON® II 400 SCB systems (111, 113, 115, 122, 125), AUTOCON® II 200, AUTOCON® II 80, KARL STORZ Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® systems (50, 200, 350), Erbe-Coagulator, T and ICC series and KARL STORZ bipolar coagulation forceps 847000 Bipolar High Frequency Cord, with 2x 4 mm banana plug to KARL STORZ Coagulator 26020 XA/XB for KARL STORZ bipolar coagulation forceps, length 300 cm Bipolar High Frequency Cord, length 300 cm, for 847000 A KARL STORZ Coagulator 26020 XA/XB, Bircher, Bovie, Keymed, Mallis, Valleylab, Neomed, Bard and KARL STORZ bipolar coagulation forceps 847000 M Bipolar High Frequency Cord, length 300 cm, for KARL STORZ AUTOCON® systems (50, 200, 400), for Martin and Berchtold coagulators, Aesculap coagulator (latest version) and KARL STORZ bipolar coagulation forceps 847000 V Bipolar High Frequency Cord, length 300 cm, for KARL STORZ AUTOCON® II 400 SCB systems (112, 114, 116, 122, 125), Valleylab coagulators and KARL STORZ bipolar coagulation forceps

Please note:

All high frequency cords on this page are delivered with a length of 300 cm only.

#### **Accessories**

High Frequency Cords for use with Bipolar Forceps



## **Bipolar High Frequency Cords** bipola KARL STORZ High Frequency Instrument Surgery Unit 847002 E Bipolar High Frequency Cord, for KARL STORZ Coagulator 26021 B/C/D, 860021 B/C/D, 27810 B/C/D, 28810 B/C/D, AUTOCON® system (50, 200, 350), AUTOCON® II 400 SCB system (111, 113, 115) and Erbe coagulator, T and ICC series, with two 2 mm cable sockets for KARL STORZ Bipolar Suction Forceps 461010, 461015 and Bipolar Forceps 8615 A/AS, 28164 BGK, length 450 cm 847002 M Bipolar High Frequency Cord, for Martin and Berchtold coagulator, with two 2 mm cable sockets for KARL STORZ Bipolar Suction Forceps 461010. 461015 and Bipolar Forceps 8615 A/AS, 28164 BGK, length 450 cm 847002 A Bipolar High Frequency Cord, with 2x 4 mm banana plug for KARL STORZ coagulator 26020 XA/XB, with two 2 mm cable sockets for KARL STORZ Bipolar Suction Forceps 461010, 461015 and Bipolar Forceps 8615 A/AS, 28164 BGK, length 450 cm 847002 V Bipolar High Frequency Cord, for KARL STORZ AUTOCON® II 400 SCB system (112, 114, 116), Valleylab coagulator, with two 2 mm cable sockets for KARL STORZ Bipolar Suction Forceps 461010, 461015 and Bipolar Forceps 8615 A/AS, 28164 BGK, length 450 cm KARL STORZ Standard Forceps Instrument **Bipolar Cords** 847002 U Bipolar Universal High Frequency Cord, one side with two 2 mm cable sockets for KARL STORZ Bipolar Suction Forceps 461010, 461015 and Bipolar Forceps 8615 A/AS, 28164 BGK, other side with standard pin for connection to all current forceps bipolar cords, length 40 cm for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V see page 417

5

High Frequency Surgery Units see pages 405-414



# **ENT Basic Set I, Endoscopes and Illumination**





# **ENT Basic Set I, Endoscopes and Illumination**

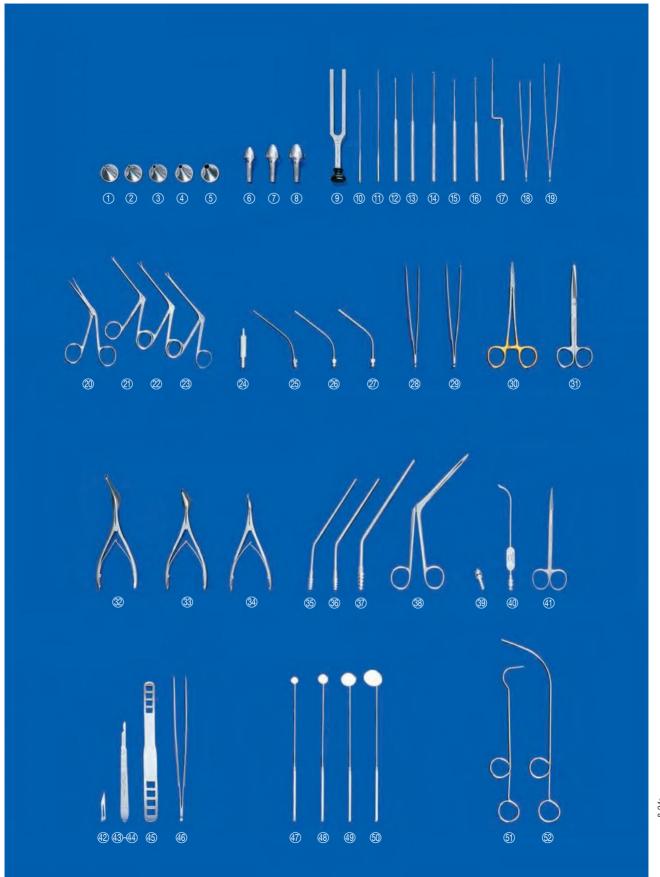


1	310010	Headlight, light model, illuminated area 20 – 80 mm in diameter with 35 cm working distance, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the cold light source including:  Headband Clip with Band
2	1215 AA	<b>Tele-Otoscope</b> with <b>HOPKINS® Straight Forward Telescope 0°</b> , diameter 4 mm, length 6 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: green
3	7230 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red
4	8707 DA	<b>Tele-Laryngo-Pharyngoscope,</b> with integrated HOPKINS® lateral telescope 90°, 4x magnification focusing device, diameter 10 mm, length 15 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: blue
\$	11101 CMM	CMOS Video-Rhino-Laryngoscope with Monitor, Direction of view: 0° Angle of view: 85° Working length: 30 cm Outer diameter: 3.7 mm Deflection up/down: 140°/140° Following accessories included: 11101 CMK CMOS Video Rhino-Laryngoscope KIT 8402 ZX Monitor for CMOS Endoscopes
6	495 NL	Fiber Optic Light Cable, diameter 3.5 mm, length 180 cm
7	<b>20</b> 2901 32	<b>C-CAM® Camera Head, 8-pin,</b> one-chip CMOS camera head, resolution 640 x 480, focal length f = 20 mm, compatible with 8402 ZX
8	<b>20</b> 2901 01	C-HUB® Camera Control Unit, for use with C-CAM® 20 2901 32, Electronic Module 8402 X or compatible CMOS video endoscopes, Interfaces: USB 2.0, S-Video output (NTSC), power socket including: C-HUB® Power Supply S-Video (Y/C) Connecting Cable USB Connecting Cable
9	<b>20</b> 1611 01	Cold Light Fountain LED NOVA 100 twin, with two LED lamps and two light outlets, power supply 110 – 240 VAC, 50/60 Hz including:  Mains Cord

SET 2 C 421

## **ENT Basic Set II, Instrument Set**





# ENT Basic Set II, Instrument Set



```
1
     2x 122003
                    HARTMANN Ear Specula, outer diameter 3 mm
2
     5x 122004
                    Same, outer diameter 4 mm
(3)
(4)
    10x 122005
                    Same, outer diameter 5 mm
    10x 122006
                    Same, outer diameter 6 mm
(5)
     2x 122007
                    Same, outer diameter 7.5 mm
6
                    Nasal Tip, metal, size 18 mm
          142418
7
          142420
                    Same, size 20 mm
                    Same, size 22 mm
          142422
                    POLITZER Air Bag (not illustrated)
          142000
                    Tuning Fork. A1-440 with stand
(9)
          126000
10
                    Cotton Applicators, diameter 1.1 mm, working length 13 cm
    10x 151011
11
     5x 417013
                    Same, diameter 1.3 mm, length 15 cm
12
          152600
                    ZAUFAL Curved Spatula, length 14.5 cm
13
     5x 152301
                    Ear Hooks, without ball end, size 1, length 15.5 cm
(14)
                    WAGENER Ear Hooks, with ball end, size 2, length 15.5 cm
     2x 152202
15
     2x 153310
                    BUCK Ear Curettes, blunt, size 0, length 14.5 cm
(16)
     2x 153301
17)
                    Ear Knife, screw handle, bayonet-shaped, working length 8 cm
          155200
    10x 156000
                    LUCAE Ear Forceps, length 14.5 cm
                    JANSEN Nasal Dressing Forceps, bayonet-shaped, length 16.5 cm
19
     5x 426516
20
          158800
                    HARTMANN Ear Dressing Forceps, extra delicate, working length 6 cm
21)
          221100
                    HARTMANN Ear Forceps, extra delicate, serrated, working length 8 cm
22
          161000
                    HARTMANN Ear Forceps, serrated, working length 8 cm
23
          162500
                    STRÜMPEL Ear Forceps, working length 8 cm
                    FISCH Adaptors, for Suction Tubes 204005 - 204025, 204305 - 204330, with cut-off hole.
24)
     2x 204200
                    LUER-cone, length 5.5 cm
(25)
     3x 204315
                    Suction Tubes, straight, LUER-Lock, flexible, outer diameter 1.5 mm, length 10 cm
26
     6x 204320
                    Same, outer diameter 2 mm
     3x 204325
                    Same, outer diameter 2.5 mm
28
          792401
                    Dressing Forceps, length 14.5 cm
29
          793401
                    Tissue Forceps, 1 x 2 teeth, standard width, length 14.5 cm
30
          516015
                    Needle Holder, tungsten carbide inserts, length 15 cm
31
          790802
                    Scissors, straight, sharp/blunt, length 14.5 cm
32
                    KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 75 mm, length 13.5 cm
          403575
33
    20x 400500
                    HARTMANN Nasal Speculum, for adults, length 13 cm
34)
     5x 400600
                    Same, for children
35)
     2x 203830
                    Suction Tubes, conical, outer diameter 3 mm
36
37
     2x 203835
                    Same, outer diameter 3.5 mm
          203845
                    Same, outer diameter 4.5 mm
38
                    HARTMANN Nasal Dressing Forceps, light model
          428001
39
          600007
                    LUER-Lock Tube Connector, male, tube diameter 6 mm
40
      2x 586025
                    v. EICKEN Antrum Cannulas, LUER-Lock, long curve, outer diameter 2.5 mm, length 12.5 cm
<u>41</u>
          511414
                    JOSEPH Scissors, curved, length 14 cm
42
          208211
                    Blade, Fig. 11, sterile, package of 100
43
          208000
                    Surgical Handle, Fig. 3, length 12.5 cm
(44)
          208215
                    Blade, Fig. 15, sterile, package of 100
(45)
    20x 740000
                    BRÜNINGS Tongue Depressors, length 19 cm
46)
          750000
                    Forceps, serrated, length 20 cm
          815200
                    Jar, made of stainless steel, diameter 5 cm, height 17.5 cm (not illustrated)
47)
     5x 767900
                    Laryngeal Mirror, with removable hexagonal handle, size 0
48
     8x 767902
                    Same, size 2
49
    12x 767906
                    Same, size 6
(50)
     5x 767908
                    Same, size 8
(51)
          726000
                    Postnasal Applicator, working length 22 cm
          770800
                    PELTESON Cotton Applicator, working length 27 cm
                    FRENZEL Nystagmus Spectacles, black frame, with ventilation slot, rubber band and cable with 25 mm
          138805
                    flat-cable plug, including 2 Lamps 138964, 4 V (not illustrated)
                    Spare Lamp, 4 Volt, for 138805 (not illustrated)
          138964
     2x 820525
                    Kidney-Shaped Dressing Tray, stainless steel, length 25 cm (not illustrated)
```

Accessories recommended for containers (not illustrated):

39502 ZH Wire Tray for Cleaning, Sterilization and Storage

39740 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label

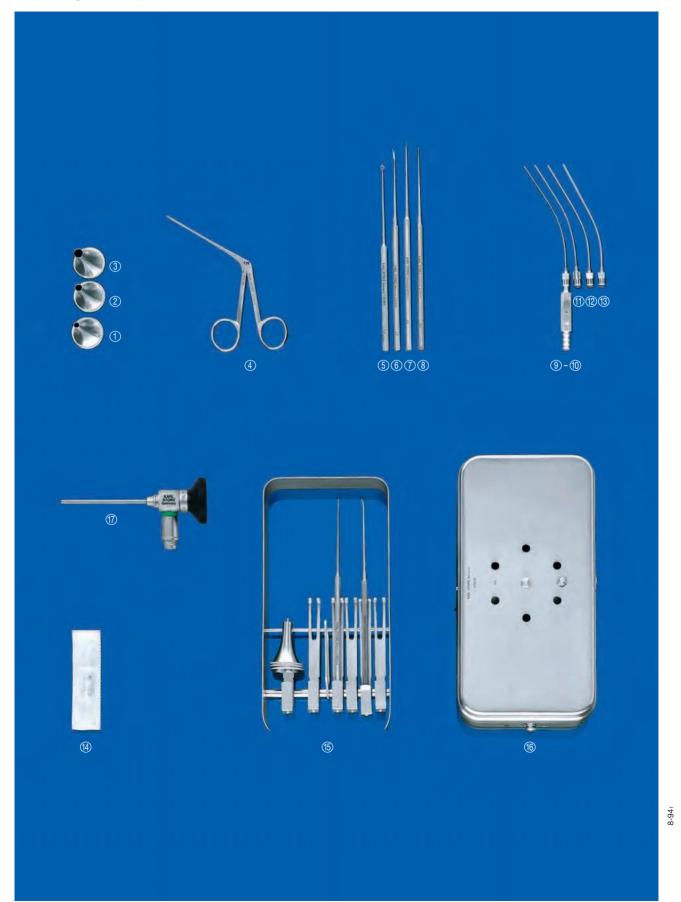
39762 D2 Color Tab, blue

Further accessories for cleaning and sterilization see catalog HYGIENE

SET 4 C 423

## **Myringotomy Set**





424 SET 5



### **Myringotomy Set**

1	122005	HARTMANN Ear Speculum, outer diameter 5 mm
2	122006	Same, outer diameter 6 mm
3	122007	Same, outer diameter 7.5 mm
4	221100	HARTMANN Ear Forceps, extra delicate, serrated, working length 8 cm
5	153301	BUCK Ear Curette, blunt, size 1, length 14.5 cm
6	223300	PLESTER Sickle Knife
7	224303	WULLSTEIN <b>Needle</b> , slight curve, length 16.5 cm
		, 0 , 0
8	225208	Pick 90°, size 0.8 mm
9	204200	FISCH <b>Adaptor</b> , for Suction Tubes 204005 – 204025, 204305 – 204330, with cut-off hole, LUER cone,
		length 5.5 cm
10	204310	Suction Tube, straight, LUER-Lock, malleable, outer diameter 1 mm, length 10 cm
11)	204313	Same, outer diameter 1.3 mm
12	204315	Same, outer diameter 1.5 mm
13	204320	Same, outer diameter 2 mm
14)	230100	TÜBINGEN <b>Ventilation Tube,</b> made of precious metal and gold-plated, sterile, package of 10
(15)	239620	Instrument Rack, for 5 instruments, size 195 x 100 mm, with holder for ear specula
16)	239020	Metal Case, perforated, 200 x 100 x 40 mm (w x d x h), for 239620
(0)	209020	Wetai Case, periorated, 200 x 100 x 40 min (w x d x n), 101 233020

#### As required:

1218 AA Tele-Otoscope, with HOPKINS® Straight Forward Telescope 0°, diameter 3 mm, length 6 cm, autoclavable, fiber optic light transmission incorporated, color code: green

#### Accessories recommended for containers (not illustrated):

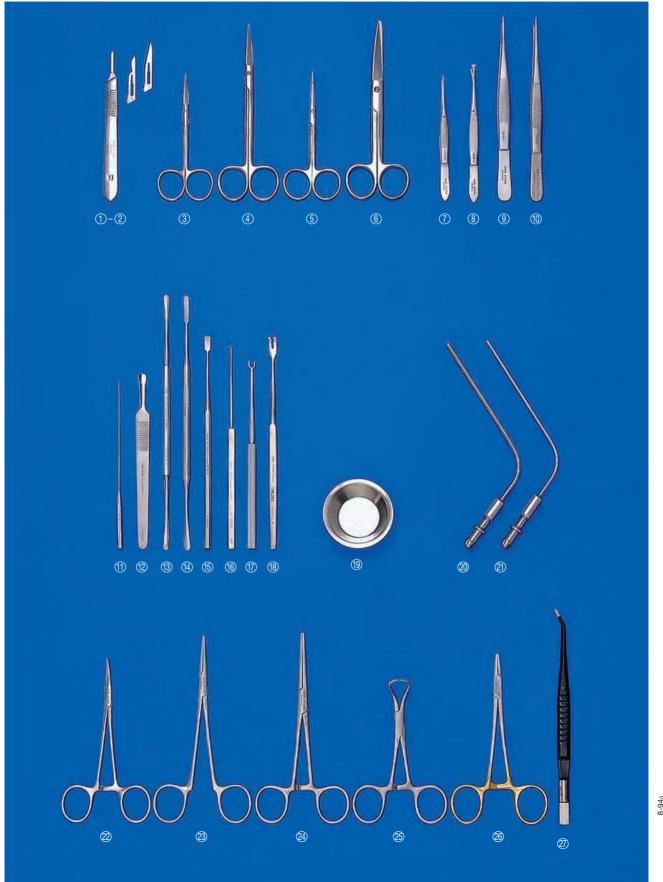
39502 MB Wire Tray for MiniSet Container for Cleaning, Sterilization and Storage

39781 A MiniSet Container, with MicroStop® Coding Label

39762 D2 Color Tab, blue

## **Otoplasty Set**







## **Otoplasty Set**

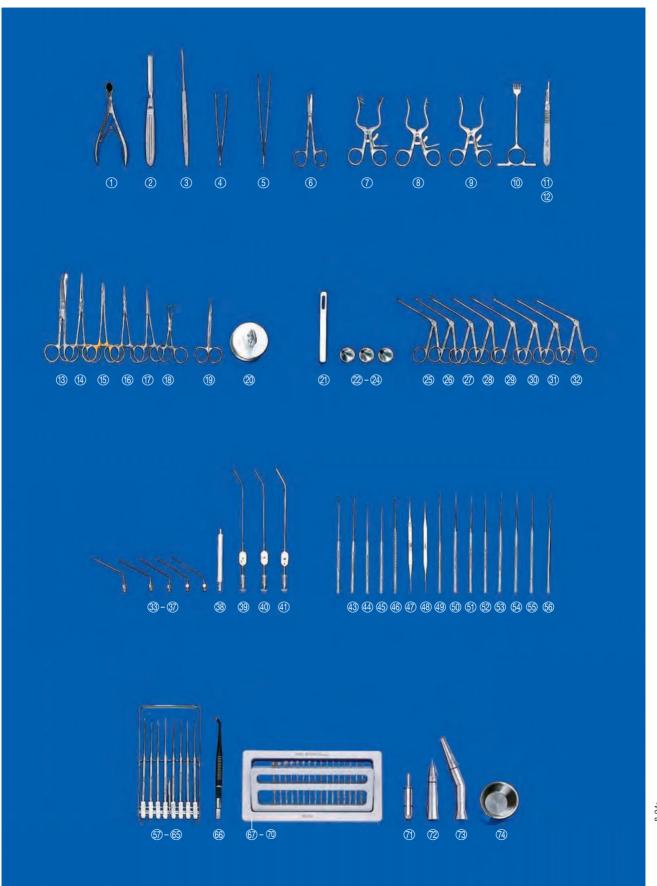
1		208000	Surgical Handle, Fig. 3, length 12.5 cm
2		208015	Blade, Fig. 15, non-sterile, package of 100
		208011	Blade, Fig. 11, non-sterile, package of 100 (not illustrated)
3		511210	Scissors, extra delicate, curved, length 10 cm
(4)		511414	JOSEPH <b>Scissors</b> , curved, length 14 cm
(5)		513410	COTTLE Scissors, curved, length 10.5 cm
6		791202	Scissors, curved, sharp/blunt, length 14.5 cm
7		530910	Tissue Forceps, delicate, 1 x 2 teeth, length 10 cm
8		530811	Tissue Forceps, 7 x 8 fine teeth, length 11 cm
(4) (5) (6) (7) (8) (9)		792402	Dressing Forceps, length 14.5 cm
10		793402	Tissue Forceps, length 14.5 cm
11		151011	Cotton Applicator, triangular serrated, working length 13 cm
12		493000	COTTLE Nasal Knife, rounded edge, length 14 cm
(13)		474000	FREER <b>Elevator</b> , double-ended, length 20 cm
(14)		474200	FREER-JOSEPH <b>Elevator</b> , double-ended, length 20 cm
15)		477500	FREER <b>Raspatory</b> , curved, width 4 mm, length 18 cm
16		499101	Hook, one prong, large curve, length 16.5 cm
17)		499205	JOSEPH <b>Double Hook,</b> sharp, width 5 mm, length 15 cm
18)		786202	Retractor, blunt, 2 prongs, length 17 cm
19		810802	Cup Medicine, 25 ccm
20		204810	FERGUSON Suction Tube, 10 Fr.
21)		204808	Same, 8 Fr.
22	6x	535212	HALSTEAD "Mosquito" Artery Forceps, curved
23		537014	<b>Dissecting Forceps,</b> straight, without ratchet, length 14 cm
24		794014	ROCHESTER-PEAN Artery Forceps, straight, length 14 cm
25	6x	796011	BACKHAUS Towel Forceps, length 11 cm
26		516013	Needle Holder, tungsten carbide inserts, length 13 cm
27)		842116	Bipolar Coagulation Forceps, length 16 cm

Accessories recommended for containers (not illustrated):

39502 ZH Wire Tray for Cleaning, Sterilization and Storage 39740 A2 Sterilization Container, with MicroStop® Coding Label 39762 D2 Color Tab, blue



## PLESTER Basic Set for Ear Micro Surgery



428 SET 9 D



## PLESTER Basic Set for Ear Micro Surgery

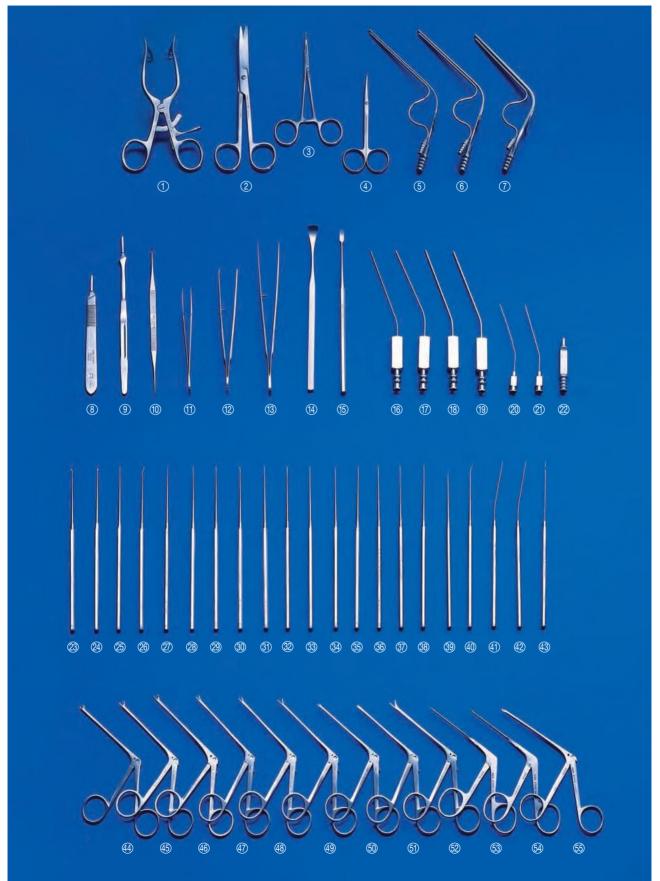
	1		400500	HARTMANN Nasal Speculum,	47)	2x	224001	HOUSE Curette, large
0	2)		213008	length 13 cm PLESTER <b>Elevator,</b> width 8 mm	48 49	2x	224002 225008	Same, small HEERMANN Hook, retrograde
	3		212803	LEMPERT <b>Elevator</b> , width 3 mm	50		225405	Pick 45°, size 0.5 mm
Č	4		213500	Tissue Forceps, 1 x 2 teeth,	<b>(51)</b>		223400	KLEY Knife, footplate
0	5)		214000	length 11.5 cm WULLSTEIN <b>Forceps,</b> serrated,	52	2x	224802	Hooks, footplate, 0.2 mm, length 16 cm
	9)		214000	length 15 cm	(53)	2x	224806	PLESTER <b>Hooks,</b> footplate, 0.6 mm,
(	6		213200	Scissors, curved, sharp/blunt,			000000	length 16 cm
C	7)	2x	220211	length 12 cm PLESTER <b>Retractors,</b> 2 x 2 prongs	54 55		226600 224400	FISCH Perforator PLESTER Guiding Fork
	8		220411	Same, left side with full blade	<b>56</b>		225410	Pick 45°, size 1 mm
(	9 0		220511 220700	Same, right side with full blade	57 58	2x 2x	223100 226820	PLESTER Round Knives, vertical
(1		2x	208000	WILLIGER Retractor, 4 prongs, sharp Surgical Handle, Fig. 3, length 12.5 cm	59	2x 2x	223300	Round Knives 45°, diameter 2 mm PLESTER Sickle Knife
	12)		208015	Blade, Fig. 15, non-sterile,	60	2x	224303	WULLSTEIN <b>Needles</b> , slightly
			208011	package of 100  Same, Fig. 11 (not illustrated)	61)		225204	curved, length 16.5 cm  Pick 90°, size 0.4 mm, length 16 cm
			208010	Same, Fig. 10 (not illustrated)	62		225206	Same, size 0.6 mm
(1	13)		791202	Scissors, curved, pointed/blunt,	63		225208	Same, size 0.8 mm
(1	14)		794014	length 14.5 cm ROCHESTER-PEAN Artery Forceps	64 65		225210 239600	Same, size 1 mm Rack for 8 Instruments,
	<u>15</u>		516013	Needle Holder, tungsten carbide				195 x 100 mm
A	16)		535012	inserts, length 13 cm HALSTEAD "Mosquito" Artery			239212	Magnet Instrument Rack, 180 x 95 mm (not illustrated)
Q	10)		333012	Forceps, straight			239900	Instrument Tray, perforated,
	7	2x	535212	Same, curved			000000	195 x 100 mm (not illustrated)
Q	18)	6x	796008	BACKHAUS <b>Towel Forceps</b> , length 8 cm			239200	Magnet Instrument Rack, 280 x 190 mm (not illustrated)
(1	19)		227600	GUILFORD-WRIGHT Wire Cutter,		2x	239000	<b>Metal Cases,</b> 300 x 200 x 50 mm,
C	20)		227800	length 10 cm				for 239200, 239212, 239600 and
	<u>2</u> 1)	6x	223000	SCHUKNECHT Wire Bending Die TEFLON Instrument Guard,	66)		842216	239900 (not illustrated)  Bipolar Coagulating Forceps,
	_			for micro instruments			·	length 16 cm
(2	22)		122005	HARTMANN <b>Ear Speculum</b> , outer diameter 5 mm			847000 E	<b>Bipolar High Frequency Cord,</b> for Bipolar Forceps 842216, to
	23)		122006	Same, outer diameter 6 mm				KARL STORZ AUTOCON®
6	24) 25)		122007 221100	Same, outer diameter 7.5 mm HARTMANN Ear Forceps,				Coagulator and Erbe Coagulator (not illustrated)
4	-9/		221100	extra delicate	67)		280030	Rack, for 36 straight shaft burrs
(2	26)		221200	FISCH Ear Forceps, extra delicate,	68		261000	Tungsten Carbide Shaft Burrs,
(2	27)		161000	pointed HARTMANN <b>Ear Forceps,</b>	69		262000	set of 15  Diamond Straight Shaft Burrs,
	_			serrated, working length 8 cm				set of 15
(2	28)		221409	WULLSTEIN Ear Forceps, oval cupped jaws, 0.9 mm	70		265060	<b>Diamond Straight Shaft Burr,</b> oblong, cylindrical, diameter 6 mm
(2	29		162020	HARTMANN Ear Forceps, round			<b>40</b> 7016 20-1	UNIDRIVE® S III ENT SCB
6	30)		222600	cupped jaws, diameter 2 mm	(71)		20.7110.00	(not illustrated)
6	30)		222600	BELLUCCI <b>Scissors</b> , delicate standard model	71)		<b>20</b> 711033 <b>20</b> 711173	High Performance EC Micro Motor II Connecting Cable (not illustrated)
(3	31)		222800	HOUSE-DIETER Malleus Nipper	72		252490	INTRA Handpiece, straight
(3)	32) 33)	4x	227400 204007	McGEE Wire Crimper Suction Tubes, angular,	73		252475 280052	Same, angled Pana Spray, for fast, smooth and
6	9	7.	204001	outer diameter 0.7 mm			200002	thorough cleaning and lubrication,
(3	34)	4x	204010	Same, outer diameter 1 mm				for INTRA drill handpieces and
(3	35) 36)	4x 4x	204013 204015	Same, outer diameter 1.3 mm Same, outer diameter 1.5 mm				EC motors, package of 6 sprayers and 1 Spray Diffuser 280052 C –
(3	37)	4x	204020	Same, outer diameter 2 mm				HAZARDOÚS GOODS - UN 1950
(3	38)		204001	Suction Handle, with cut-off hole, length 10 cm	74)		810802	(not illustrated) <b>Cup Medicine,</b> 25 ccm
(3	39		204405	PLESTER <b>Suction Tube,</b> 5 Fr.	(1)		310002	Cap Medicine, 20 com
(4	10		204407	Same, 7 Fr.				
4	1)		204409 152301	Same, 9 Fr. Ear Hook, without ball end,				ended for containers (not illustrated): or Cleaning, Sterilization and Storage
				size 1, length 15.5 cm		502 Z '51 A2	•	with MicroStop®
4	13)		223803	Seeker, with ball end, angled 45°, size 3	397	'63 A2	Coding Lab	el .
4	<u>(4)</u>		153420	BUCK <b>Ear Curette,</b> sharp, size 00			Color Tab,	
(4	15)		153410	Same, size 0			accessories to og HYGIENE	or cleaning and sterilization
(4	16)		224600	PLESTER <b>Hook</b> , to abrade the underside of the tympanic membrane			J	

8-942

SET 10 D 429

# FISCH Special Set for Middle Ear Surgery, Tympanoplasty and Stapedotomy





### FISCH Special Set for Middle Ear Surgery, **Tympanoplasty and Stapedotomy**



	0	000010	FIGORI Petrostore 0 : 0 manus length 10 and
1	2x	220213	FISCH <b>Retractors</b> , 2 x 2 prongs, length 13 cm
2		792003	MAYO Dissecting Scissors, curved, length 15 cm
<ul><li>3</li><li>4</li></ul>		535312 213410	HALSTEAD "Mosquito" Artery Forceps, micro-model, curved, length 12.5 cm FISCH Scissors, extra delicate, curved, sharp/sharp, length 10.5 cm
(5)		206300	FISCH <b>Suction and Irrigation Tube,</b> conical, suction tube outer diameter 3.2 mm, irrigation tube
<b>(</b>		200300	outer diameter 2 mm, working length 9.5 cm
6		206600	FISCH <b>Suction and Irrigation Tube,</b> cylindrical, suction tube outer diameter 2.5 mm, irrigation tube
•		200000	outer diameter 2 mm, working length 9.5 cm
7		206700	Same, outer diameter suction tube 1.9 mm, irrigation tube outer diameter 1.9 mm
8		208000	Surgical Handle, Fig. 3, length 12.5 cm
9		211804	FISCH Dual Purpose Scalpel Handle, elevator on one side, scalpel handle no. 7 on the other side,
			length 16 cm
10		224003	HOUSE Curette, medium
11)		214500 F	Jeweler Forceps, fine, pointed, soft spring, length 11 cm
12			Forceps, 1 x 2 teeth, fine size, soft spring, length 13 cm
13			WULLSTEIN Forceps, soft spring, length 15 cm
14)		213011	FISCH <b>Elevator,</b> sharp, width 10 mm, length 16 cm
15		477500	FREER <b>Raspatory</b> , curved, width 4 mm, length 18 cm
16		204729	FISCH <b>Suction Tube</b> , outer diameter 1.2 mm
17)		204730	Same, outer diameter 1.5 mm
18		204732	Same, outer diameter 2 mm
19		204733	Same, outer diameter 2.2 mm
20 21		204352 204354	Suction Tube, angular, outer diameter 0.7 mm, working length 7 cm Same, outer diameter 1 mm
2		204354	FISCH <b>Adaptor</b> , with cut-off hole, LUER cone
23		226101	FISCH <b>Micro Raspatory,</b> single curved to right, length 16 cm
24)		226101	Same, curved to left
24 25		226810	Round Knife 45°, diameter 1 mm, length 16 cm
26		226301	FISCH <b>Tenotome</b> , extra fine, length 16 cm
27		225405	Pick 45°, size 0.5 mm, length 16 cm
28)		225410	Same, size 1 mm
28 29		225415	Same, size 1.5 mm
30		225425	Same, size 2.5 mm
31)		225205	Pick 90°, size 0.5 mm, length 16 cm
32		225210	Same, size 1 mm
33		225215	Same, size 1.5 mm
34)		225220	Same, size 2 mm
35		226600	FISCH Manual Perforator, diameter 0.3 mm, length 16 cm
36		226604	Same, diameter 0.4 mm
37		226605	Same, diameter 0.5 mm
38		226606	Same, diameter 0.6 mm
39		224812	FISCH <b>Hook,</b> footplate, curved upwards 90°
<b>40</b> <b>41</b>		224813 226514	Same, curved downwards 90° FISCH Measuring Caliper, angled shaft, diameter 0.4 mm, length 16 cm
(D)		226514	Same, diameter 0.6 mm
<b>42</b> <b>43</b>		226500	FISCH <b>Measuring Rod</b> , length 16 cm
44		221409	WULLSTEIN <b>Ear Forceps,</b> extra delicate, oval cupped jaws, 0.9 mm, working length 8 cm
<u>(45)</u>		221406	Same, oval cupped jaws, 0.6 mm
		162020	HARTMANN Ear Forceps, round cupped jaws, diameter 2 mm
46 47		221100	HARTMANN Ear Forceps, extra delicate, serrated, working length 8 cm
<u>48</u>		221201	FISCH <b>Ear Forceps</b> , extra delicate, serrated, 0.4 x 3.5 mm, working length 8 cm
49		221110	FISCH-HARTMANN Ear Forceps, extra delicate, smooth, 1 x 4.5 mm, working length 8 cm
50		222606	FISCH-BELLUCCI Micro Scissors, extra delicate, blade length 3 mm, with thin sheath, working length 8 cm
<b>51</b>		222603	FISCH-BELLUCCI Micro Scissors, extra delicate, blade length 3 mm, working length 8 cm
52		222501	FISCH-BELLUCCI <b>Scissors</b> , extra fine, blade length 7 mm, working length 8 cm
(53)		222710	FISCH Crurotomy Scissors, curved to right, working length 7.5 cm
<b>89 9 5 5 8 3 4 5</b>		222720	Same, curved to left
(55)		222801	FISCH-DIETER Malleus Nipper, width 0.8 mm, working length 8 cm
		239728	Metal Tray, for 20 straight ear micro instruments with octagonal Handle, 275 x 175 x 36 mm
			(not illustrated)

Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage 39751 A2 Sterilization Container, with MicroStop® Coding Label

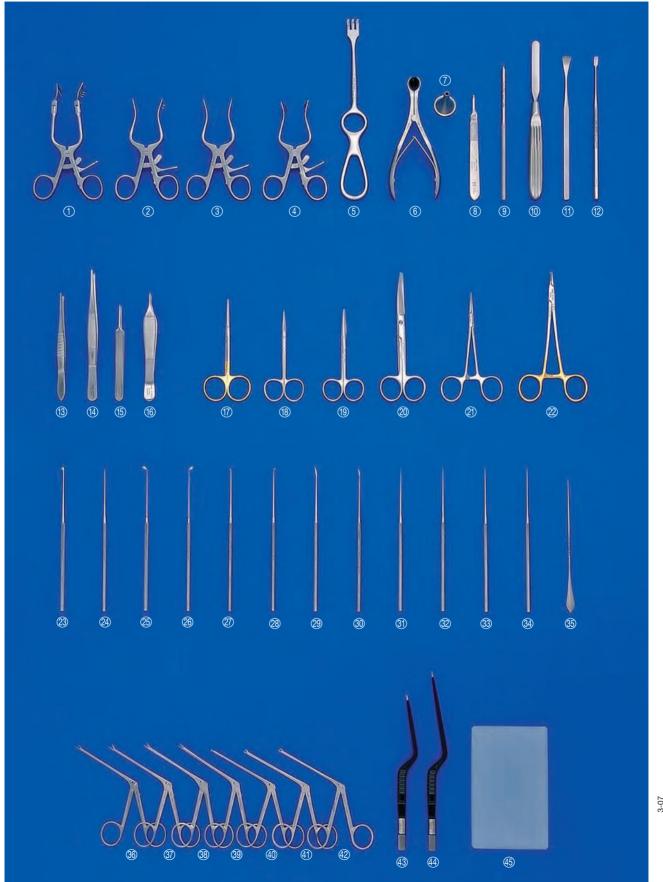
39762 D2 Color Tab, blue

Further accessories for cleaning and sterilization see catalog HYGIENE

SET 12 E 431

### **DALCHOW Instrument Set** for Pediatric Tympanoplasty





## DALCHOW Instrument Set for Pediatric Tympanoplasty



```
1
         219714 K DALCHOW Retractor, 3 x 3 prongs, sharp, with adjustable swivel arms, length 14 cm
2
          220421 K Same, 2 prongs on right, left full blade with atraumatic teeth, length 11 cm
(3)
(4)
(5)
(6)
          220521 K Same, 2 prongs on left, right full blade with atraumatic teeth, length 11 cm
          220211 K Same, 2 x 2 prongs, length 11 cm
          800503
                    VOLKMANN Retractor, blunt, 3 prongs, length 21 cm
          400500
                    HARTMANN Nasal Speculum, length 13 cm
7
          122005
                    HARTMANN Ear Speculum, outer diameter 5 mm
8
          208000
                    Surgical Handle, Fig. 3, length 12.5 cm
                    Surgical Handle, for miniature blades, round, length 15.5 cm
          496500
10
                    PLESTER Raspatory, width 8 mm, length 18 cm
          213008
11 (12)
         213011
                    FISCH Raspatory, width 10 mm, length 16 cm
          477500
                    FREER Raspatory, curved, width 4 mm, length 18 cm
13
          213500
                    Tissue Forceps, 1 x 2 teeth, length 11.5 cm
14
                    Tissue Forceps, 1 x 2 teeth, standard width, length 14.5 cm
          793401
(15)
          214500 F
                    Jeweler Forceps, fine, pointed, soft spring, length 11 cm
16
                    ADSON Dressing Forceps, serrated, length 12 cm
          533012
17
          512511
                    Scissors, with tungsten carbide inserts, blunt/blunt, curved, length 11 cm
18
          511010
                    Scissors, extra delicate, straight, length 10 cm
          513410
                    COTTLE Scissors, curved, length 10.5 cm
20
          791202
                    Dissecting Scissors, curved, sharp/blunt, length 14.5 cm
21
                    HALSTEAD "Mosquito" Artery Forceps, curved, length 12.5 cm
          535212
22
          516015
                    Needle Holder, tungsten carbide inserts, length 15 cm
23
24
                    PLESTER Round Knife, vertical, standard size 3.5 x 2.5 mm, length 16 cm
          223100
          226810
                    Round Knife 45°, diameter 1 mm, length 16 cm
25
26
          226105
                    DALCHOW Micro Raspatory, single curved to right, width 1.5 mm, length 16 cm
          226106
                    Same, single curved to left
27)
          226101
                    FISCH Micro Raspatory, single curved to right, length 16 cm
28
          226102
                    Same, left
                    PLESTER Sickle Knife, double-edged, standard model, slightly curved, length 16 cm
          223300
                    PLESTER Sickle Knife, double-edged, medium curve, length 16 cm
30
          223302
31 32
                    Pick, 90°, size 0.4 mm, length 16 cm
          225204
          225206
                    Same, size 0.6 mm
33
34
          225208
                    Same, size 0.8 mm
          225210
                    Same, size 1 mm
35)
          797114
                    Myrtle Leaf Probe, diameter 1.5 mm, length 14.5 cm
36
          221201
                    FISCH Ear Forceps, extra delicate, serrated, 0.4 x 3.5 mm, working length 8 cm
37)
          221200
                    Same, pointed, 1 x 4.5 mm
33
                    HARTMANN Ear Forceps, extra delicate, serrated, working length 8 cm
          221100
          222600
                    BELLUCCI Scissors, delicate standard model, blade length 8 mm, working length 8 cm
40
                    FISCH-DIETER Malleus Nipper, extra delicate, upbiting, width 0.8 mm, working length 8 cm
          222801
(41)
          221406
                    WULLSTEIN Ear Forceps, extra delicate, oval cupped jaws, 0.6 mm, working length 8 cm
(42)
          221409
(43)
          844116
                    Bipolar Coagulation Forceps, insulated, bayonet-shaped, pointed, length 16 cm
(44)
          844219
                    Same, blunt, width of tip 1 mm, length 19 cm
                    Bipolar High Frequency Cord, for KARL STORZ bipolar instruments, for use with
          847000 E
                    AUTOCON® 50/200/350 and Erbe coagulator (not illustrated)
(45)
          231008
                    Preparation Plate, glass, 10 x 8 cm
```

#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage

39750 A2 Sterilization Container, with MicroStop®

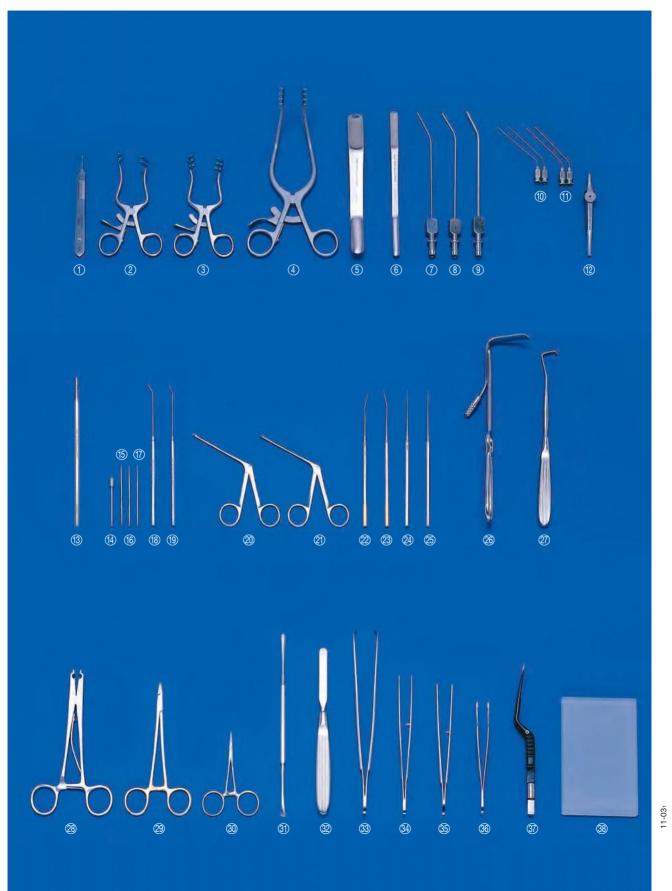
39763 A2 Coding Label

39762 D2 Color Tab, blue

Further accessories for cleaning and sterilization see catalog HYGIENE

# LENARZ Supplement Set for Cochlear Implantation





### LENARZ Supplement Set for Cochlear Implantation



1)	208000	Surgical Handle, Fig. 3, length 12.5 cm
2	220211	PLESTER <b>Retractor</b> , 2 x 2 prongs, length 11 cm
3	219511	WULLSTEIN <b>Retractor</b> , 3 x 3 prongs, length 11 cm
4	2x 214920	ANDERSON-ADSON <b>Retractor</b> , 4 x 4 prongs, sharp, curved, length 20 cm
5	662477	OLIVECRONA <b>Brain Spatula</b> , angled on both sides, concave, elastic, width 11 and 13 mm, length 18 cm
6	662476	Same, width 7 and 9 mm
7	204405	PLESTER <b>Suction Tube</b> , with grip plate, cut-off hole and stylet, LUER, 5 Fr., length 20 cm
8	204407	Same, 7 Fr.
9	204409	Same, 9 Fr.
(10)	2x 204005	Suction Tube, angular, LUER-Lock, outer diameter 0.5 mm, working length 6 cm
11)	2x 204007	Same, outer diameter 0.7 mm
(12)	204004	WULLSTEIN <b>Suction Handle,</b> with cut-off hole, LUER cone, length 10 cm,
		for Suction Tubes 204005 - 204025, 204305 - 204330
(13)	233110	Octagonal Handle, with LUER cone, straight, length 17 cm
(14)	262550	Diamond Burr, barrel-shaped, diameter 5 mm, length 10 mm, for creating a flat bone edge during
		cochlea implantation surgery, blunt tip for protection of the dura, with smooth shaft diameter 2.35 mm,
		length 44 mm
(15)	262506	Diamond Burr, shaft diameter 2.35 mm, diameter 0.6 mm, length 70 mm
16)	262510	Same, diameter 1 mm
17)	262514	Same, diameter 1.4 mm
18)	223891	Seeker, extra delicate, angled 25°, with ball end diameter 1 mm, length 16 cm
19	223892	Same, with ball end diameter 1.5 mm
20	233212	Forceps, for insertion of cochlea electrodes, nucleus 24 contour, curved to left, working length 6 cm
21)	233211	Same, curved to right
22	233105	Micro Guiding Instrument, for electrodes array, claw-shaped, tip angled downwards, length 16 cm
23	233106	Same, tip angled upwards
24)	224802	Footplate Hook, 0.2 mm, length 16 cm
25)	224806	PLESTER Footplate Hook, 0.6 mm, length 16 cm
26	801814	LENARZ <b>Retractor</b> , 43 x 11 mm, slim and flat blade with integrated suction tube, length 21.5 cm
27)	786500	SCHÖNBORN Thymus Retractor, width 5 mm, length 20.5 cm
28	799990	RANEY <b>Applying and Removing Forceps,</b> for scalp haemostasis clips, length 16 cm
	799995	RANEY Scalp Haemostasis Clips, package of 12 (not illustrated)
29	516015	Needle Holder, tungsten carbide inserts, length 15 cm
30	536909	Dissecting and Ligature Forceps, straight, smooth jaws, length 9.5 cm
31)	474000	FREER <b>Elevator,</b> double-ended, semisharp and blunt, length 20 cm
32	213008	PLESTER <b>Raspatory,</b> width 8 mm, length 18 cm
33	662721	ALLIS Forceps, with fine teeth, length 20 cm
34)	214000	WULLSTEIN Forceps, serrated, length 15 cm
35	792403	Dressing Forceps, narrow width, length 14.5 cm
36	533212	ADSON-BROWN Tissue Forceps, atraumatic, fine side grasping teeth, length 12 cm
37	844319	<b>Bipolar Coagulation Forceps,</b> insulated, bayonet-shaped, slender, tip 0.5 mm wide, length 19 cm, for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V
	847000 E	Bipolar High Frequency Cord, for KARL STORZ bipolar instruments,
		for use with AUTOCON® 50/200/350 and Erbe coagulator (not illustrated)
38	231008	Preparation Plate, glass, 10 x 8 cm

#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage

39740 A2 Sterilization Container, with MicroStop®

39763 A2 **Coding Label** 39762 D2 **Color Tab,** blue









### **Basic Set for Septum Surgery**

```
1
         400500
                    HARTMANN Nasal Speculum, for adults, length 13 cm
2
         403655
                    COTTLE Nasal Speculum, blade length 55 mm, length 13 cm
(3)
(4)
(5)
(6)
         403555
                    KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 55 mm, length 13.5 cm
         403575
                    Same, blade length 75 mm
         403590
                    Same, blade length 90 mm
         513410
                    COTTLE Scissors, curved, length 10.5 cm
7
         511210
                    Scissors, extra delicate, curved, length 10 cm
8
         511414
                    JOSEPH Scissors, curved, length 14 cm
         513200
                    WALTER Scissors, angled, length 10 cm
(10)
                    BLAKESLEY Nasal Forceps, size 1
         456001
11
         456003
                    Same, size 3
12
         455500
                    TAKAHASHI Nasal Forceps, working length 9.5 cm
13
         449002
                    HEYMANN Nasal Scissors, medium
14
                    BLAKESLEY-WILDE Nasal Forceps, 45° upturned, size 2
         456502
(15)
         430300
                    LUBET-BARBON Nasal Dressing Forceps
(16)
         204809
                    FERGUSON Suction Tube, 9 Fr.
(17)
         843116
                    Bipolar Coagulating Forceps, angular
         847000 E
                   Bipolar High Frequency Cord, for Coagulation Forceps 843116, suitable
                    for KARL STORZ coagulator AUTOCON® and Erbe coagulator (not illustrated)
                    BRÜNINGS Tongue Depressor, length 19 cm
         740000
19
         534500
                    COTTLE Columella Clamp, length 11 cm
20
         533212
                    ADSON-BROWN Tissue Forceps, atraumatic, fine side grasping teeth, length 12 cm
530811
                    Tissue Forceps, 7 x 8 fine teeth, length 11 cm
         530710
                    Dressing Forceps, delicate, length 10 cm
         530910
                    Same, straight, 1 x 2 teeth
         426516
                    JANSEN Nasal Dressing Forceps, bayonet-shaped, length 16.5 cm
         534015
                    COTTLE Lower Lateral Forceps, bayonet-shaped
26
                    Cotton Applicators, triangular serrated, length 15 cm
    2x
         417013
         496800
                    Nasal Knife, curved
                    COTTLE Nasal Knife, rounded edge, length 14 cm
28
         493000
29
         498400
                    COTTLE Retractor
30
         478304
                    McKENTY Raspatory, width 4 mm
(31)
(32)
         525800
                    Elevator, for reposition
                    COTTLE Chisel, flat, width 4 mm
         484004
33
         484007
                    Same, width 7 mm
                    COTTLE Metal Mallet
         174200
35)
         479800
                    Suction Raspatory, with stylet
36
37
         479200
                    COTTLE Elevator, double-ended
         479000
                    MASING Elevator, double-ended
38
                    Needle Holder, extra delicate, length 17 cm
         515017
39
                    Needle Holder, tungsten carbide inserts, length 13 cm
         516013
(40)
         791202
                    Scissors, curved, sharp/blunt, length 14.5 cm
41)
         796011
                    BACKHAUS Towel Forceps, length 11 cm
    6x
(42)
         440000
                    KRAUSE Nasal Snare, length 25 cm
43
         443500
                    Nasal Snare Wire, for 440000 - 441510, package of 25
(44)
    2x
         810810
                    Cup Medicine, 100 ccm
```

#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage

39751 A2 Sterilization Container, with MicroStop®

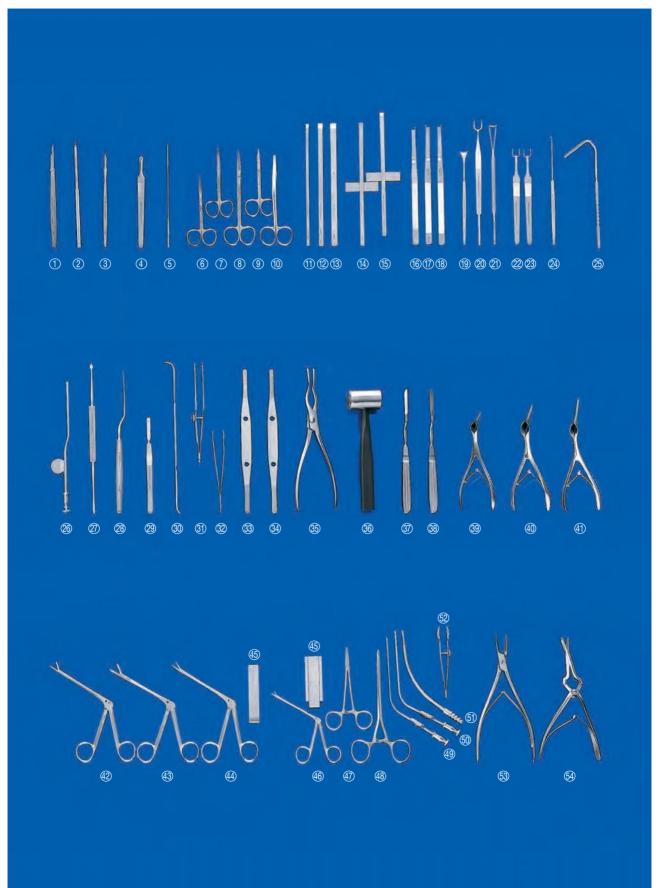
39763 A2 Coding Label

39762 D2 Color Tab, blue

Further accessories for cleaning and sterilization see catalog HYGIENE







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#### **Basic Set for Rhinoplasty**

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(1)
          496400
                    MASING Surgical Handle
          208015
                    Blade, Fig. 15, non-sterile, package of 100 (not illustrated)
          208011
                    Same, Fig. 11 (not illustrated)
2
          496500
                    Surgical Handle, for miniature blades, round, length 15.5 cm
          496764
                    Miniature Blade, Fig. 64, round, sterile, package of 24 (not illustrated)
(3)
         496900
                    MASING Nasal Knife
4
          493000
                    COTTLE Nasal Knife, rounded edge, length 14 cm
(5)
(6)
                    Cotton Applicators, triangular serrated, length 15 cm
    3x
         417013
         511210
                    Scissors, extra delicate, curved, length 10 cm
7
         513410
                    COTTLE Scissors, curved, length 10.5 cm
8
         511414
                    JOSEPH Scissors, curved, length 14 cm
         513200
                    WALTER Scissors, angled, length 10 cm
10
                    FOMON Dorsal Scissors, angular, working length 6.5 cm
         513700
         484004
                    COTTLE Chisel, flat, width 4 mm
12
         484007
                    Same, width 7 mm
         484009
                    Same, width 9 mm
(14)
          484206
                    COTTLE Crossbar Osteotome, graduated, straight
(f)
(f)
         484406
                    Same, curved
         484800
                    MASING Chisel, straight
17
         484700
                    Same, curved to left
18 19
         484600
                    Same, curved to right
          498400
                    COTTLE Retractor
20
         505700
                    COTTLE Retractor, double-ended
          505800
                    NEIVERT Retractor, double-ended, made of wire, length 18 cm
23
          505100
                    COTTLE Retractor, 2 prongs, blunt prong on left
         505000
                    Same, blunt prong on right
24)
         499101
                    Hook, one prong, sharp curve, length 16.5 cm
25
26
         506400
                    AUFRICHT Nasal Retractor
         479800
                    Suction Elevator, with stylet
27)
         479000
                    MASING Elevator, double-ended
28
         478100
                    JOSEPH-MASING Raspatory
29
          478305
                    McKENTY Raspatory, width 5 mm
30
31
         479200
                    COTTLE Elevator, double-ended
         534015
                    COTTLE Lower Lateral Forceps, bayonet-shaped
32
         533212
                    ADSON-BROWN Tissue Forceps, atraumatic, fine side grasping teeth, length 12 cm
         523600
                    Nasal Rasp, double-ended, fine
34)
         523700
                    Nasal Rasp, double-ended, coarse
35
36
         528800
                    WALSHAM Septum Straightening Forceps
          174200
                    COTTLE Metal Mallet
37)
         523000
                    JOSEPH Saw, bayonet-shaped, right
38
                    Same, left
         523100
39
         403655
                    COTTLE Nasal Speculum, blade length 55 mm, length 13 cm
<u>40</u>
          403575
                    KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 75 mm, length 13.5 cm
41
          403590
                    Same, blade length 90 mm
42
          456001
                    BLAKESLEY Nasal Forceps, size 1
43
         456003
                    Same, size 3
(44)
          458000
                    WATSON-WILLIAMS Nasal Forceps, serrated
(45)
         523900
                    COTTLE Bone Crusher, with clip
46
         517000
                    MASING Needle Holder, ear forceps shape
47)
         516513
                    NEIVERT-MASING Needle Holder, length 13 cm
<u>(48)</u>
         515017
                    Needle Holder, extra delicate, length 17 cm
(49)
          529207
                    FRAZIER Suction Tube, outer diameter 7 Fr./2 mm, working length 10 cm, total length 17.5 cm
(50)
         529209
                    Same, outer diameter 9 Fr./3 mm
(51)
          529105
                    Suction Tube, curved, outer diameter 5 mm
(52)
          534500
                    COTTLE Columella Clamp, length 11 cm
(53)
                    KAZANIJAN Nasal Hump Forceps, length 20 cm
         469000
          468000
                    JANSEN-MIDDLETON Septum Forceps, working length 10 cm
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#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage 39751 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label

39762 D2 Color Tab, blue

Further accessories for cleaning and sterilization see catalog HYGIENE

-94

SET 20 E 439

# BERGHAUS Instrument Set for Septo-Rhinoplasty





### **BERGHAUS Instrument Set** for Septo-Rhinoplasty



1	488002	COTTLE <b>Nasal Speculum</b> , extra slender, without set screw, special matt finish, blade length 35 mm,
_		length 13 cm
2	488003	Same, blade length 55 mm
3	488004	Same, blade length 75 mm
<u>(4)</u>	488018	KILLIAN-CLAUS Septum Chisel, with V-shaped cutting edge, special matt finish, width 5 mm, length 16.5 cm
<u>(5)</u>	488010	RUBIN <b>Osteotome</b> , flat, straight, double-edged grinding, rounded corners, with finger grip for controlled osteotome guidance, special matt finish, width 10 mm, length 16.5 cm
6	488012	Same, width 12 mm
7	488014	Same, width 14 mm
	488022	Chisel, with finger button, flat, special matt finish, width 2 mm, length 18 cm
9	488023	Same, width 3 mm
	488024	Same, width 4 mm
11	488030	Marking Instrument, for nasal tip, with ball and half cup, straight, special matt finish, length 11 cm
12	488032	HEYMANN Nasal Scissors, medium size, special matt finish, working length 9.5 cm
13	488034	CRAIG Septum Forceps, straight, special matt finish, working length 9 cm
14)	488041	BLAKESLEY <b>Nasal Forceps,</b> slender, straight, special matt finish, size 1, working length 11 cm
15)	488038	RUBIN <b>Septum Morcelizer</b> , double action, straight, special matt finish, length 20 cm
16)	488036	BECKER-CAPLAN Septum Scissors, double action, serrated, slender, special matt finish,
_		working length 9.5 cm
17)	488044	JANSEN Nasal Dressing Forceps, bayonet-shaped, slender, special matt finish, length 16 cm
18)	488045	ADSON-BROWN Forceps, micro-model, atraumatic, fine side grasping teeth, special matt finish,
		length 12 cm
19	488046	ADSON <b>Tissue Forceps</b> , atraumatic, fine side grasping teeth, special matt finish, length 15 cm
20	488047	ADSON <b>Tissue Forceps</b> , 1 x 2 teeth, length 12 cm
21)	488049	KILNER <b>Scissors</b> , curved, with tungsten carbide inserts, flat end, sharp/sharp, extra delicate,
<u></u>	100010	special matt finish, length 13.5 cm
22	488048	KILNER <b>Scissors</b> , curved, sharp/sharp, special matt finish, length 13.5 cm
23	488050	KILNER <b>Scissors</b> , curved, flat end, blunt/blunt, special matt finish, length 15.5 cm
24) 25)	488054 488060	AUFRICHT Nasal Retractor, with side protector, special matt finish, length 16.5 cm
(23)	400000	Ala Double Hook, with octagonal handle, with 2 sharp points, strongly curved, special matt finish,
<u> </u>	4000EC	width 2 mm, length 16.5 cm
26 27	488056 488058	KILNER <b>Ala Retractor</b> , two sharp points with button, special matt finish, width 10 mm, length 8.5 cm
27) 28)	488084	Same, width 13 mm FERGUSON Suction Tube, with cut-off hole and stylet, LUER, special matt finish, outer diameter 8 Fr.,
60	400004	working length 11 cm
29	488085	Same, outer diameter 10 Fr.
30	488086	Same, outer diameter 12 Fr.
(31)	488065	BERGHAUS Ala Guiding Set
32	488070	JOSEPH <b>Elevator,</b> slightly curved, special matt finish, width 4 mm, length 17.5 cm
(33)	488071	Same, strongly curved, width 3.4 mm
34)	488090	Scalpel Handle, No. 3, special matt finish, length 12.5 cm
35	488074	FREER <b>Elevator</b> , double-ended, sharp and blunt, special matt finish, length 20 cm
36	488078	Nasal Rasp, double-ended, coarse, special matt finish, length 21.5 cm
37	488076	AUFRICHT Glabella Rasp, double-ended, backward cutting, length 20.5 cm
38	488080	RYDER <b>Needle Holder</b> , tungsten carbide inserts, extra delicate and flat, special matt finish, length 18 cm
(39)	439300	BERGHAUS Metal Nasal Mirror
89	174200	COTTLE <b>Metal Mallet</b> , length 18 cm (not illustrated)
	231000	<b>Hone,</b> "ARKANSAS" oil stone, wedge-shaped, size 10 x 4 cm (not illustrated)
	_5.000	Tiene, Tand and the carrier, would enapour, one to A Territor indomination,

#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage 39751 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label

39762 D2 Color Tab, blue

# SIMMEN-BRINER **Special Nasal Instrument Set**





# SIMMEN-BRINER **Special Nasal Instrument Set**



1		7230 AA	HOPKINS® II Straight Forward	36)		486103 SB	Osteotome, flat, double-edged
			Telescope 0°, enlarged view,				grinding, width 3 mm, length 19 cm
			diameter 4 mm, length 18 cm,	37)		486104 SB	Same, width 4 mm
			autoclavable, fiber optic light	38			Same, width 7 mm
			transmission incorporated,	39		174200	COTTLE Metal Mallet
			color code: green	40		844219	Bipolar Coagulating Forceps,
2		723772	STAMMBERGER Telescope Handle,	40		044219	
(2)		123112	the state of the s				insulated, bayonet-shaped, blunt,
		400005	round	(A)		000000	tip 1 mm, length 19 cm
3		403835	COTTLE Nasal Speculum, with set	41)		839330	BRINER Bipolar Suction Cannula,
			screw, blade length 35 mm,				angular, insulated, length of electrodes
			length 13 cm				3.5 mm, with cut-off hole, outer
4		403855	Same, blade length 55 mm				diameter 4.5 mm
5		403875	Same, blade length 75 mm			847000 E	Bipolar High Frequency Cord,
6		403390	KILLIAN-STRUYCKEN Nasal				length 300 cm (not illustrated)
			Speculum, with set screw,	42		839312	SIMMEN Insulated Suction Cannula,
			blade length 90 mm, length 15 cm				distal with not insulated horn, outer
7		810506	Septum Needle, angular, LUER-Lock				diameter 3.5 mm
8		208000	Surgical Handle, Fig. 3, length 12.5 cm	43		839312 A	Same, outer diameter 4 mm
9		208100	Surgical Handle, Fig. 4, length 13.5 cm	44)		839313	Same, outer diameter 4.5 mm
10		748000	Surgical Handle, Fig. 7, length 16.5 cm			26005 M	Unipolar High Frequency Cord,
11)		474000	FREER <b>Elevator</b> , double-ended,				length 300 cm (not illustrated)
			length 20 cm	45)		440000	KRAUSE Nasal Snare, length 25 cm
12		479000	MASING Elevator, double-ended,	_		443500	Nasal Snare Wires, diameter 0.3 mm,
Ŭ			length 22.5 cm				length 10 cm, package of 25
(13)	2x	499001	KILNER-GILLIES <b>Hook,</b> one prong,				(not illustrated)
0			small curve, length 17 cm	46)		523900	COTTLE Bone Crusher, with clip
(14)		499210	JOSEPH <b>Double Hook,</b> sharp,	47	2x	794014	ROCHESTER-PEAN Artery Forceps,
•		400210	width 10 mm, length 15 cm	•	27	704014	straight, length 14 cm
(15)		791815	REYNOLDS <b>Dissecting Scissors</b> ,	48)	2v	535212	HALSTEAD "Mosquito" Artery
		701010	curved, length 15 cm	•	27	000212	Forceps, curved, length 12.5 cm
16		511615	METZENBAUM-LAHEY Scissors,	49	2v	794214	ROCHESTER-PEAN Artery Forceps,
10		311013	curved, length 15 cm	40	27	757217	curved, length 14 cm
17	2v	533113	ADSON <b>Tissue Forceps</b> , micro-	(50)	2٧	535412	HALSTEAD "Mosquito" Artery
W	۷,	333113		00	2.X	333412	
(18)		533112	model, 1 x 2 teeth, length 12 cm				Forceps, straight, 1 x 2 teeth, length 12.5 cm
(10)		333112	ADSON <b>Tissue Forceps</b> , 1 x 2 teeth,	(E)		E1601E	
40		700001	length 12 cm	<b>(51)</b>		516015	Needle Holder, tungsten carbide
19		793301	<b>Tissue Forceps,</b> 1 x 2 teeth, standard	<u>(CO)</u>		C4C447	inserts, length 15 cm
<u></u>		700400	width, length 13 cm	<b>52</b>		515117	Same, length 17 cm
20		793403	<b>Tissue Forceps,</b> 1 x 2 teeth, narrow,	(53)		791903	MAYO <b>Dissecting Scissors</b> , straight,
@	0	500040	length 14.5 cm	<b>6</b>		700000	length 15 cm
21	2X	533212	ADSON-BROWN Tissue Forceps,	54)		792003	Same, curved
			atraumatic, fine side grasping teeth,	<b>(55)</b>		748220	DUPLAY Dressing and Sponge
			length 12 cm				Holding Forceps, length 21 cm
22		792303	Dressing Forceps, narrow,	56	10x	796109	Towel Forceps, length 9.5 cm
			length 13 cm			810805	Cup Medicine, 50 ccm, diameter
23		792301	Dressing Forceps, standard width,				57 mm, height 47 mm (not illustrated)
_			length 13 cm			810810	Cup Medicine, 100 ccm, diameter
24		534015	COTTLE Lower Lateral Forceps, with				80 mm, height 30 mm (not illustrated)
			set screw, with teeth, length 15 cm				
25)		426620	GRÜNWALD <b>Nasal Dressing</b>				
			Forceps, length 20 cm				
26		455500	TAKAHASHI Nasal Forceps,	Acc	esso	ries recomn	nended for containers (not illustrated):
			working length 9.5 cm	395	02 Z	Wire Trav	for Cleaning, Sterilization and Storage
27		456002	BLAKESLEY Nasal Forceps, size 2,			-	on Container, with MicroStop®
			working length 11 cm			Coding La	
28		456003	BLAKESLEY Nasal Forceps, size 3,			Color Tab	
		.0000	working length 11 cm				
29		449002	HEYMANN Nasal Scissors,				for cleaning and sterilization
•		440002	working length 9.5 cm	see	catal	og HYGIENE	
30		188031	CRAIG Septum Forceps,				
00		488034	working length 9 cm				
<u> </u>		204900					
31		204809	FERGUSON Suction Tube, 9 Fr.				
32		204810	Same, 10 Fr.				
33		204812	Same, 12 Fr.				
34		204815	Same, 15 Fr.				
35		479800 SB	Suction Raspatory, length 19.5 cm				

11-0

SET 24 D 443



## SIMMEN-BRINER Special Rhinoplasty Set





## SIMMEN-BRINER Special Rhinoplasty Set

1)		488060	Ala Double Hook, with octagonal handle, with 2 sharp points,
_			width 2 mm, length 16.5 cm
2	2x	477098	Ala Dilator, for preparation and cutting of nostril cartilage, graduated, width 5 x 8 mm, length 9.5 cm
3		506400	AUFRICHT Nasal Retractor, length 16.5 cm
4		488054	AUFRICHT Nasal Retractor, with side protector, length 16.5 cm
(5)		488070	JOSEPH Raspatory, slightly curved, width 4 mm, length 17.5 cm
6		489084	Angular Scissors, extra delicate, length 9.5 cm
7		488048	KILNER Scissors, curved, sharp/sharp, length 13.5 cm
<ul><li>8</li><li>9</li></ul>		513700	FOMON Scissors, curved, working length 6.5 cm
9		498822	AIACH Cartilage Graft Forceps, length 15 cm
10		516115	RYDER Needle Holder, extra delicate, length 15 cm
1		487012	RUBIN <b>Osteotome</b> , width of cut 12 mm, length 16.5 cm
12		487014	Same, width of cut 14 mm
(13)		487016	Same, width of cut 16 mm
14)		486102 SB	Osteotome, width 2 mm, length 19 cm
15)		523834	Nasal Rasp, tungsten carbide, Fig. 3 and 4
16		523856	Same, Fig. 5 and 6
17)		523878	Same, Fig. 7 and 8
(18)		200600	LEMPERT Rongeur, straight, length 15.5 cm
19		469200	ROWLAND-MEYER Nasal Hump Forceps, double joint, curved blades, length 20 cm
20		488038	RUBIN Septum Morcelizer, straight, length 20 cm
21)		498820	AIACH <b>Grid</b> , size 90 x 50 mm
22		231000	Hone, "ARKANSAS" oil stone, wedge-shaped, size 10 x 4 cm
23)		523913	Metal Tray, size 10 x 15 cm

#### Accessories recommended for containers (not illustrated):

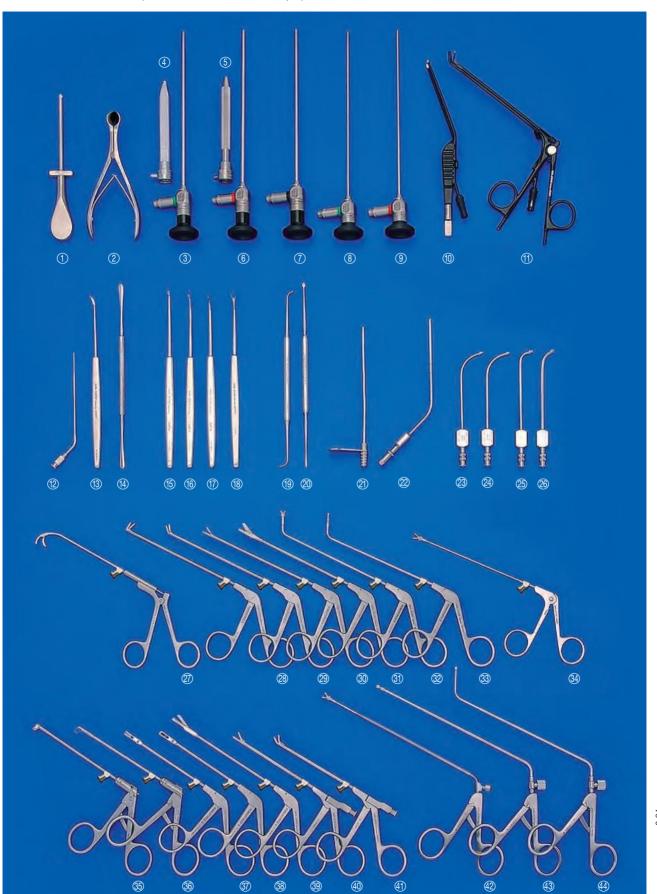
39502 Z Wire Tray for Cleaning, Sterilization and Storage 39740 A2 Sterilization Container, with MicroStop®

39763 A2 **Coding Label** 39762 D2 **Color Tab,** blue

### STAMMBERGER Basic FESS Set

for Endoscopic Diagnosis and Surgery of Nasal Sinuses and Anterior Skull Base (MESSERKLINGER Technique)





### STAMMBERGER Basic FESS Set

for Endoscopic Diagnosis and Surgery of Nasal Sinuses and Anterior Skull Base (MESSERKLINGER Technique)



1		723005 A	Trocar and Cannula for Sinoscopy, fenestrated beak, outer diameter 5 mm
2		400500	HARTMANN <b>Nasal Speculum,</b> for adults, length 13 cm
3		7230 AA	HOPKINS® II Straight Forward Telescope 0, enlarged view, diameter 4 mm, length 18 cm
4		723770	STAMMBERGER <b>Handle</b> , flat
(5)		723772	Same, round
6		7230 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm
7		7230 FA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 4 mm, length 18 cm
8		7229 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 2.7 mm, length 18 cm
9		7229 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 2.7 mm, length 18 cm
	5x	723750 B	Protection Tube for Telescopes (not illustrated)
		15006 B	"ULTRA-STOP" Antifog Solution, 25 ml, pipette bottle (not illustrated)
400		15006 C	Same, 30 ml, sterile pierce bottle (not illustrated)
10		843219	Bipolar Coagulating Forceps, with integrated suction channel for epistaxis, length 19 cm
11)		847000 E 461015	<b>Bipolar High Frequency Cord,</b> length 300 cm (not illustrated) STAMMBERGER <b>Bipolar Suction Forceps,</b> 45° upturned, with suction channel,
•		401013	working length 12.5 cm
		847002 U	Bipolar High Frequency Cord, for connection to all current bipolar cables, length 40 cm
		0 002 0	(not illustrated)
12		810506	Septum Needle, angular, LUER-Lock
(13)		628001	Sickle Knife, pointed, length 19 cm
14)		474000	FREER <b>Elevator,</b> double-ended, semisharp and blunt, length 20 cm
15		628702	Antrum Curette, oblong, small, length 19 cm
16		628712	KUHN-BOLGER Frontal Sinus Curette, curved 55°
17		628714	Same, curved 90°
(B) (19)		629703	Antrum Curette, forward cutting, small, length 19 cm
(19)		629820	Probe, double-ended, maxillary sinus ostium seeker, ball-shaped ends diameter 1.2 and 2 mm, length 19 cm
20		479100	COTTLE <b>Elevator</b> , length 20 cm
21		722925	Suction Tube, conical, malleable, outer diameter 2.5 mm
2		529309	FRAZIER <b>Suction Tube,</b> 9 Fr., working length 10 cm
23		586125	v. EICKEN Antrum Cannula, malleable, outer diameter 2.5 mm
24)		586130	Same, outer diameter 3 mm
25		586231	v. EICKEN <b>Antrum Cannula,</b> outer diameter 3 mm
26		586241	Same, outer diameter 4 mm
27		653000	HEUWIESER Antrum Grasping Forceps, jaws curved downwards, fixed jaw curved 90°,
<u></u>		450001 D	movable jaw opening up to 120°, backward opening, working length 10 cm
28 29		456801 B 456501 B	BLAKESLEY-WILDE <b>RHINOFORCE®II Nasal Forceps,</b> 90° upturned, size 1, working length 13 cm BLAKESLEY-WILDE <b>RHINOFORCE®II Nasal Forceps,</b> 45° upturned, size 1, working length 13 cm
30		456001 B	BLAKESLEY <b>RHINOFORCE</b> II <b>Nasal Forceps</b> , straight, size 1, working length 13 cm
31)		449201	RHINOFORCE® II Nasal Scissors, straight, working length 13 cm
32		651010	STAMMBERGER RHINOFORCE® II Forceps, cupped jaws, vertical opening, 65° upturned,
Ü			cupped jaws diameter 3 mm, working length 12 cm
33		651020	Same, horizontal opening
34)		723033	Biopsy and Grasping Forceps, extra fine, with oval cupped jaws 3 x 5 mm, sheath diameter 1.5 mm,
			working length 14 cm
35		459052	STAMMBERGER Antrum Punch, left side downward and forward cutting
36		459051	Same, right side downward and forward cutting
37		459012 459011	STAMMBERGER RHINOFORCE®II Antrum Punch, left side backward cutting, working length 10 cm
38 39		455010	Same, right side backward cutting STRUYCKEN RHINOFORCE®II Nasal Cutting Forceps, working length 13 cm
40		460001	STAMMBERGER <b>Suction Punch,</b> for biopsy and grasping, straight, with central suction channel,
		100001	working length 10 cm
41)		460501	Same, curved upwards
42		723029	Biopsy and Grasping Forceps, malleable, cupped jaws diameter 4 mm, working length 18 cm
43		651050	STAMMBERGER <b>Punch</b> , circular cutting, for sphenoid, ethmoid and choanal atresia,
		0=10==	diameter 4.5 mm, working length 18 cm
44		651060	STAMMBERGER <b>Punch</b> , circular cutting, 65° upturned, for frontal sinus recess, diameter 3.5 mm,
			working length 17 cm

Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage 39751 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label

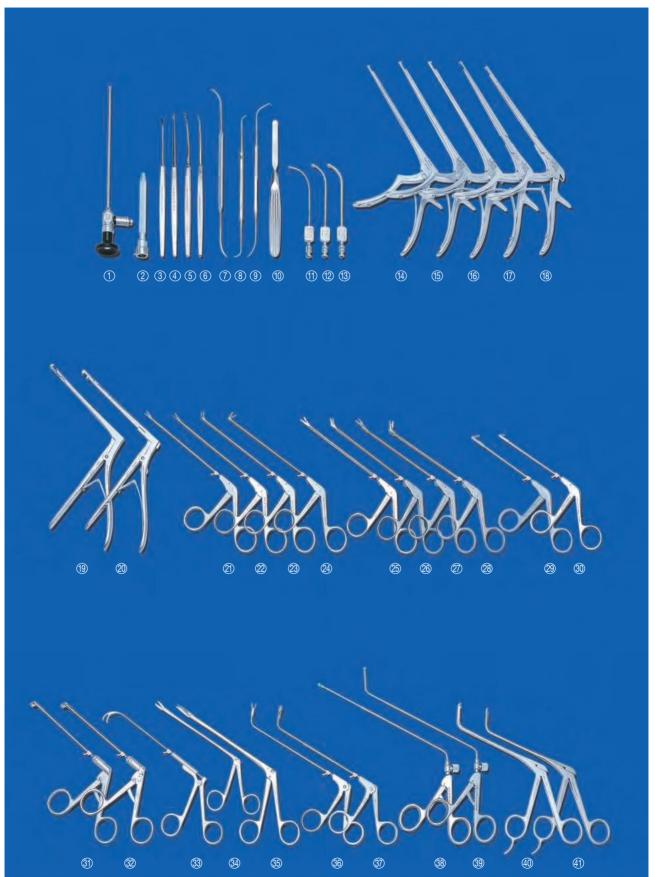
39762 D2 Color Tab, blue

Further accessories for cleaning and sterilization see catalog HYGIENE

SET 28 C 447

# SIMMEN-BRINER **Special Paranasal Sinus Set**





# SIMMEN-BRINER **Special Paranasal Sinus Set**



1)		7230 FLA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 4 mm, length 18 cm,
U		72001121	autoclavable, connection for fiber optic light cable on the left, fiber optic light transmission incorporated,
			color code: black
2		723772	STAMMBERGER Telescope Handle, round
3		628001	Sickle Knife, pointed, length 19 cm
4		628702	Antrum Curette, length 19 cm
(5)		628712	KUHN-BOLGER Frontal Sinus Curette, curved 55°, length 19 cm
6		628714	Same, curved 90°
7		489010	Elevator, double-ended, strongly and slightly curved, length 22 cm
8		629820	<b>Probe,</b> double-ended, maxillary sinus ostium seeker, ball-shaped ends diameter 1.2 and 2 mm,
		000004	length 19 cm
9 10		629824 213008	CASTELNUOVO Frontal Sinus Probe, curved, double-ended, length 22 cm PLESTER Elevator, width 8 mm, length 18 cm
11)	2x	586125	v. EICKEN <b>Antrum Cannula</b> , LUER-Lock, long curved, malleable, serrated grip plate,
•	۷۸	300123	outer diameter 2.5 mm, length 12.5 cm
12		586030	v. EICKEN <b>Antrum Cannula</b> , LUER-Lock, long curved, outer diameter 3 mm, length 12.5 cm
(13)		586040	Same, outer diameter 4 mm
14)		662101	KERRÍSON Bone Punch, rigid, 90° upbiting, not through-cutting, size 1 mm, working length 17 cm
(15)		662102	Same, size 2 mm
16)		662103	Same, size 3 mm
17		662112	Same, 90° downbiting, size 2 mm
18		662113	Same, 90° downbiting, size 3 mm
19		649001	HAJEK-KOFLER <b>Sphenoid Punch</b> , size 3.5 x 3.7 mm, working length 14 cm
20		649002	Same, 90° downbiting
21 22			BLAKESLEY <b>RHINOFORCE® II Nasal Forceps,</b> straight, size 1, working length 13 cm <b>Same,</b> size 2
23			BLAKESLEY-WILDE <b>RHINOFORCE®II Nasal Forceps</b> , 45° upturned, size 1, working length 13 cm
24			BLAKESLEY-WILDE RHINOFORCE® II Nasal Forceps, 90° upturned, size 1, working length 13 cm
25)			GRÜNWALD-HENKE <b>RHINOFORCE® II Nasal Forceps,</b> straight, through-cutting, tissue-sparing,
			BLAKESLEY shape, size 2, width 4 mm, working length 13 cm
26		451502 B	Same, 45° upturned
27)		452002 B	MACKAY-GRÜNWALD RHINOFORCE® II Nasal Forceps, sharp, straight, through-cutting, extra delicate,
_			tissue-sparing, 11.5 x 3.5 mm, size 2, working length 13 cm
28			Same, 45° upturned
29		459010	STAMMBERGER RHINOFORCE® II Antrum Punch, upside backward cutting, working length 10 cm
30		459030	STAMMBERGER RHINOFORCE® II Antrum Punch, small pediatric size, upside backward cutting,
31)		459051	working length 10 cm STAMMBERGER <b>Antrum Punch,</b> right side downward and forward cutting, working length 10 cm
32		459052	Same, left side downward and forward cutting
33		653000	HEUWIESER <b>Antrum Grasping Forceps</b> , jaws curved downwards, fixed jaw curved 90°, movable jaw
•		00000	opening up to 120°, backward opening, working length 10 cm
34)		449251	ZÜRICH <b>Nasal Scissors</b> , straight, small model, cutting length 12 mm, working length 12 cm
35		449250	ZÜRICH Nasal Scissors, straight, large model, cutting length 18 mm, working length 14 cm
36		650212	Forceps, cupped jaws, vertical opening, 70° upturned, cupped jaws diameter 4 mm,
			working length 12 cm
37		650222	Same, horizontal opening
38		651055	STAMMBERGER <b>Punch</b> , circular cutting, for sphenoid, ethmoid and choanal atresia, diameter 3.5 mm,
<b>60</b>		051000	working length 18 cm
(39 (10)		651060	STAMMBERGER <b>Punch</b> , circular cutting, 65° upturned, diameter 3.5 mm, working length 17 cm
40		651522	<b>Frontal Sinus Punch,</b> with link chain sheath 70° upturned, medium (standard size), jaws 3 x 3.5 mm, working length 13 cm
<b>(41)</b>		651521	Same, small, jaws 2.5 x 2 mm
		001021	Carrier, Stricking, James 210 A 2 Hilli

Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage
39751 A2 Sterilization Container, with MicroStop®
39763 A2 Coding Label
39762 D2 Color Tab, blue

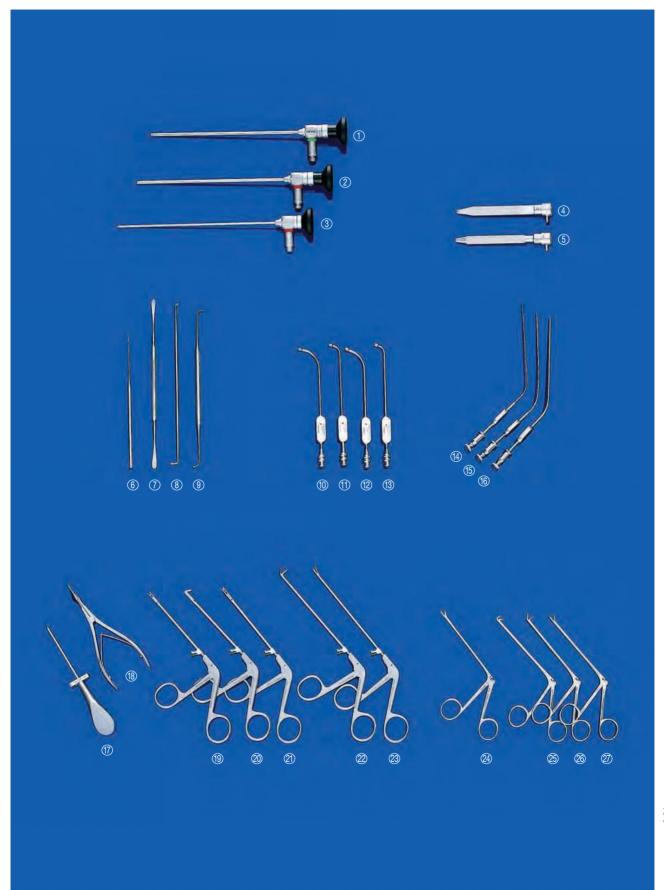
Further accessories for cleaning and sterilization see catalog HYGIENE

SET 30 C 449

### **Basic Pediatric FESS Set**

for Endoscopic Diagnosis and Surgery of Nasal Sinuses and Anterior Skull Base (MESSERKLINGER Technique)





### **Basic Pediatric FESS Set**

for Endoscopic Diagnosis and Surgery of Nasal Sinuses and Anterior Skull Base (MESSERKLINGER Technique)



Ped	Pediatric Set recommended by Prof. WOLF and Prof. STAMMBERGER						
1	7230 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: green					
2	7230 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red					
3	7229 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 2.7 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: red					
4	723770	STAMMBERGER Handle, flat, for use with HOPKINS® II Telescope 7230 AA					
(5)	723772	Same, round, for use with HOPKINS® II Telescopes 7230 BA and 7229 BA					
6	223300	PLESTER Sickle Knife, double-edged, standard model, slightly curved, length 16 cm					
7	474000	FREER <b>Elevator</b> , double-ended, semisharp and blunt, length 20 cm					
8	628720	<b>Curette,</b> double-ended, oval, one side with short 45° curve, semisharp, diameter 2.2 mm, the other side with long 90° curve, sharp, diameter 2.7 mm, length 19 cm					
9	629820	Probe, double-ended, maxillary sinus ostium seeker, ball-shaped ends diameter 1.2 and 2 mm, length 19 cm					
10	586026	v. EICKEN <b>Antrum Cannula</b> , with cut-off hole, long curved, outer diameter 2.5 mm					
11	586226	Same, short curved					
12	586031	v. EICKEN <b>Antrum Cannula,</b> with cut-off hole, long curved, outer diameter 3 mm					
(13)	586231	Same, short curved					
(14)	529305	FRAZIER Suction Tube, with distance markings, 5 Fr.					
15	529307	Same, 7 Fr.					
16	529309	Same, 9 Fr.					
17		Trocar for Sinoscopy, oblique beak, outer diameter 3.3 mm, for use with HOPKINS® II Telescope 7229 BA					
18	400600	HARTMANN Nasal Speculum, for children, length 13 cm					
19	459032	STAMMBERGER <b>RHINOFORCE®II Antrum Punch</b> , small pediatric size, slender, left side backward cutting, with cleaning connector, working length 10 cm					
20	459030	Same, upside backward cutting					
21)	459031	Same, right side backward cutting					
22	456500 B	BLAKESLEY-WILDE <b>RHINOFORCE®II Nasal Forceps</b> , 45° upturned, size 0, with cleaning connector, working length 13 cm					
23	456000 B	BLAKESLEY <b>RHINOFORCE® II Nasal Forceps,</b> straight, size 0, with cleaning connector, working length 13 cm					
24)	634826	BELLUCCI Scissors, straight, working length 12.5 cm					
25	634825 B	STRÜMPEL Forceps, with oval, fenestrated cupped jaws, 90° upturned, working length 12.5 cm					
26		Same, 45° upturned					
27)	634824	Same, straight					

#### Accessories recommended for containers (not illustrated):

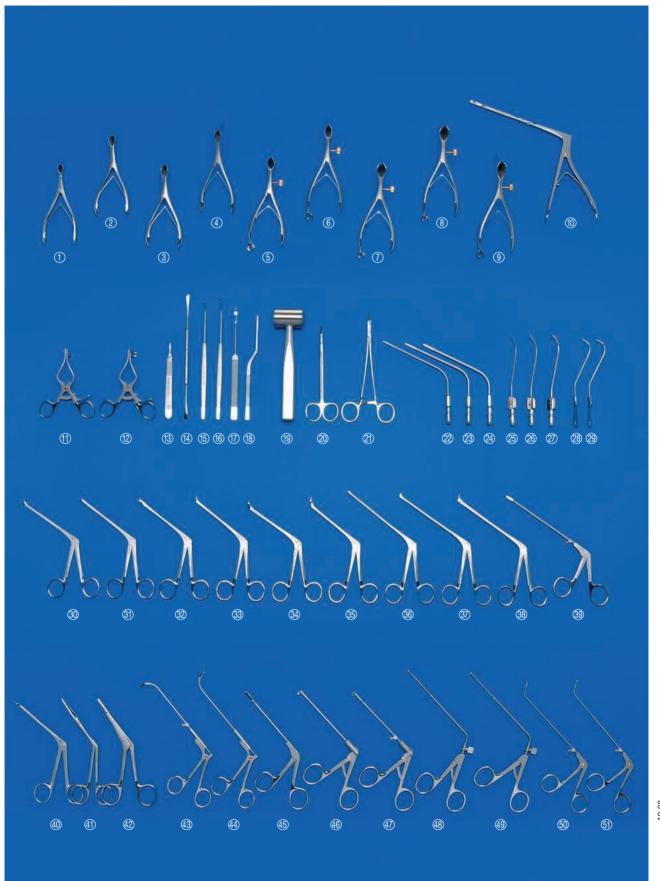
39502 Z Wire Tray for Cleaning, Sterilization and Storage

39740 A2 Sterilization Container, with MicroStop®

39763 A2 **Coding Label** 39762 D2 **Color Tab,** blue

### BERGHAUS Instrument Set for Microscopic **Surgery of the Paranasal Sinuses**





# BERGHAUS Instrument Set for Microscopic Surgery of the Paranasal Sinuses



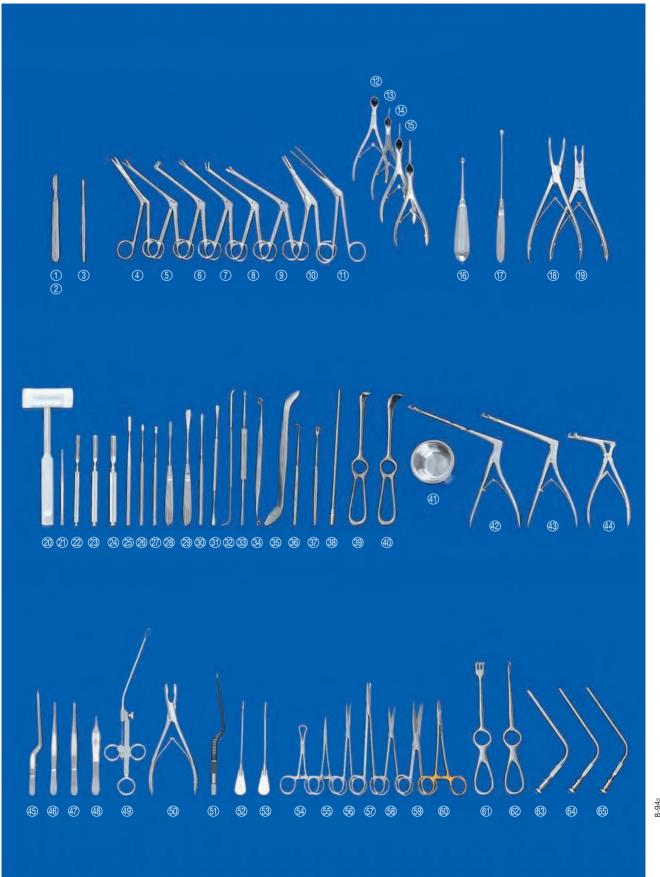
1 2	488005 488002	Nasal Speculum, for children, length 13 cm COTTLE Nasal Speculum, extra slender,	31)	488042	BLAKESLEY <b>Nasal Forceps,</b> straight, size 2, working length 11 cm
		without set screw, special matt finish, blade	32	488043	Same, size 3
3	488003	length 35 mm, length 13 cm  Same, blade length 55 mm	33	488141	BLAKESLEY-WILDE <b>Nasal Forceps</b> , 45° upturned, size 1, working length 11 cm
4	488004	Same, blade length 75 mm	34)	488142	Same, size 2
(5)	488001	KILLIAN-STRUYCKEN Nasal Speculum,	35)	488143	Same, size 3
		with set screw and adaption for Flexible Tension Arm 723018, 75 mm, length 15 cm	36	488137	<b>TAKAHASHI Nasal Forceps,</b> straight, delicate, oval cupped jaws, length 12.5 cm
6	488000	<b>Same,</b> 55 mm	(37)	488135	WATSON-WILLIAMS <b>Nasal Forceps</b> , 45°
7	488007	RUDERT Nasal Speculum, for adults,	Ū		upturned, delicate, oval cupped jaws,
		15 cm, with set screw and adaption for	<u></u>	400400	length 12.5 cm
		Flexible Tension Arm 723018, left blade 65 mm long and 15 mm wide, right blade	38)	488139	Nasal Cutting Forceps, 60° upturned, through-cutting, reverse cutting,
		50 mm long and with 3 mandrels			working length 12.5 cm
8	488006	Same, right blade 65 mm long and 15 mm	39	488152 B	GRÜNWALD-HENKE RHINOFORCE®II
		wide, left blade 50 mm long and with 3 mandrels			Nasal Forceps, straight, through-cutting, tissue-sparing, BLAKESLEY shape, size 2,
(9)	488009	Same, left blade 75 mm long and			width 4 mm, working length 13 cm
O		15 mm wide	40	488133	Nasal Scissors, light model, length of
	488008	Same, right blade 75 mm long and 15 mm			blades 10 mm, serrated, curved to left,
		wide, left blade 50 mm long and with 3 mandrels (not illustrated)		488132	working length 11 cm  Same, curved to right (not illustrated)
	723017	Rotating Clamp (not illustrated)	<b>41</b>	488032	HEYMANN <b>Nasal Scissors</b> , medium size,
	723018	Flexible Tension Arm (not illustrated)	_		special matt finish, working length 9.5 cm
10	488160	HAJEK-KOFLER <b>Sphenoid Punch</b> , not through-cutting, reversible,	42	488034	CRAIG <b>Septum Forceps</b> , straight, special matt finish, working length 9 cm
		size 3.2 mm x 4 mm, working length 17 cm	43)	488180	HEUWIESER <b>Antrum Forceps,</b> fixed jaw
11)	488102	PLESTER Retractor, 2 blades on left, full	_		curved 90°, movable jaw backward opening,
(12)	488101	blade on right, length 11 cm	(44)	488181	working length 10 cm
	400101	Same, 2 prongs on right, full blade on left, length 11 cm	44)	400101	HEUWIESER <b>Grasping Forceps</b> , for paranasal sinuses, fixed jaws, curved
(13)	488090	Scalpel Handle, No. 3, special matt finish,			upwards 90°, movable jaw opening
•	400074	length 12.5 cm	<b>(</b>	400470	backwards up to 120°, working length 10 cm
14)	488074	FREER <b>Elevator</b> , double-ended, sharp and blunt, special matt finish, length 20 cm	45)	488170	STAMMBERGER RHINOFORCE® II Antrum  Punch, upside backward cutting,
(15)	488110	KUHN-BOLGER Frontal Sinus Curette, 90°			working length 10 cm
	100111	curved, oval, forward cutting, length 19 cm	46	488174	STAMMBERGER Antrum Punch, right side
16 17	488111 488071	Same, 55° curved JOSEPH Elevator, strongly curved, special			downward and forward cutting, working length 10 cm
•	400071	matt finish, width 3.4 mm, length 17.5 cm	<b>47</b> )	488175	Same, left side downward and
18	488018	KILLIAN-CLAUS Septum Chisel, with V-			forward cutting
		shaped cutting edge, special matt finish,	48)	488190	STAMMBERGER <b>Punch</b> , circular cutting,
(19)	174200	width 5 mm, length 16.5 cm COTTLE <b>Metal Mallet,</b> length 18 cm	49	488192	diameter 3.5 mm, working length 13.5 cm <b>Same,</b> diameter 4.5 mm
20	488050	KILNER Scissors, curved, flat end,	50	488197	KUHN-BOLGER Forceps, cupped jaws,
		blunt/blunt, special matt finish,			horizontal opening, 55° upturned, jaws
(21)	488080	length 15.5 cm RYDER <b>Needle Holder,</b> tungsten carbide	(51)	488195	diameter 3 mm, working length 12 cm  Same, vertical opening
•	100000	inserts, extra delicate and flat, special matt	•	100100	<b>Jame,</b> vortical opening
		finish, length 18 cm			
22	488084	FERGUSON <b>Suction Tube</b> , with cut-off hole and stylet, LUER, special matt finish, outer	٨٥٥	occorioc ro	ecommended for containers (not illustrated):
		diameter 8 Fr., working length 11 cm			e Tray for Cleaning, Sterilization and Storage
23	488085	Same, outer diameter 10 Fr.			rilization Container, with MicroStop®
24	488086	Same, outer diameter 12 Fr.		63 A2 Coc	· ·
25	488117	<b>Suction Tube,</b> for frontal sinus, with cut-off hole, LUER, outer diameter 2.5 mm,			or Tab, blue
		length 14.5 cm		ther access catalog HY	sories for cleaning and sterilization
26	488118	Same, outer diameter 3 mm	500	oatalog 111	GIEIVE
27 28	488119 488114	Same, outer diameter 4 mm RITTER Frontal Sinus Bougie, size 1.			
60	100114	diameter 2.5 mm, length 14.5 cm			
29	488115	Same, size 2, diameter 3 mm			
30	488041	BLAKESLEY <b>Nasal Forceps</b> , slender, straight, special matt finish, size 1,			
		working length 11 cm			
		0			

0-081

SET 34 C 453

### **CALDWELL-LUC** Basic Set for Paranasal Sinus Surgery





# CALDWELL-LUC Basic Set for Paranasal Sinus Surgery



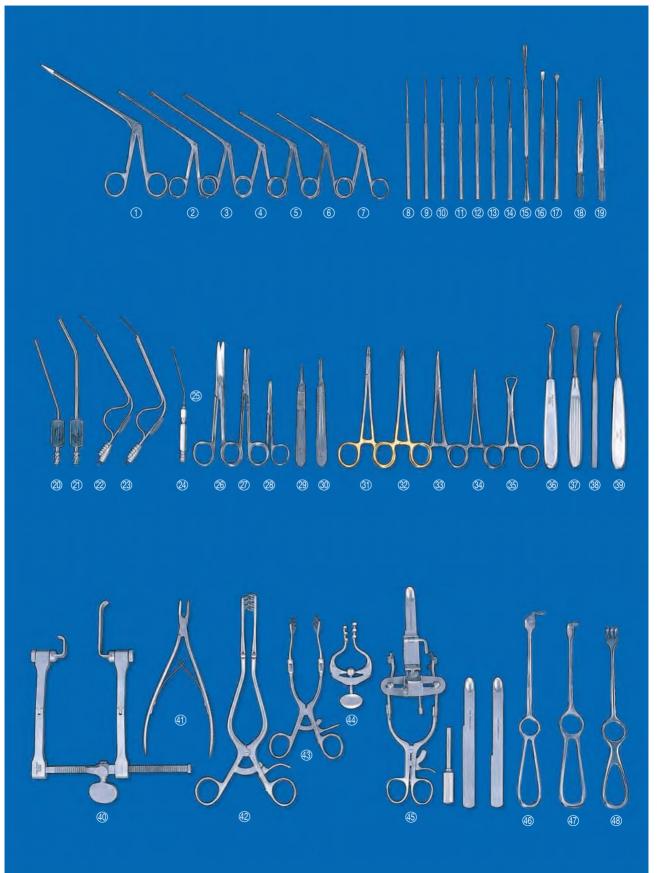
1)	208000	Surgical Handle, Fig. 3, length 12.5 cm	43		649001	HAJEK-KOFLER Sphenoid Punch,
2	208010	<b>Blade,</b> Fig. 10, non-sterile, package of 100				rigid, 90° upbiting, not through-cutting, size 3.5 x 3.7 mm, working length 14 cm
	208011	Same, Fig. 11 (not illustrated)	44		201503	CITELLI Rongeur, size 3
3	208015 496800	Same, Fig. 15 (not illustrated) Nasal Knife, curved, length 13.5 cm	45)	2x	426516	JANSEN <b>Nasal Dressing Forceps</b> , bayonet-shaped, length 16.5 cm
4	449002	HEYMANN Nasal Scissors, medium	<b>46</b>	2x	792402	Dressing Forceps, length 14.5 cm
(5)	456002	BLAKESLEY <b>Nasal Forceps,</b> straight, size 2	47)	2x	793402	<b>Tissue Forceps,</b> 1 x 2 teeth, length 14.5 cm
6	456803	BLAKESLEY-WILDE <b>Nasal Forceps</b> , 90° upturned, size 3	48		533212	ADSON-BROWN <b>Tissue Forceps</b> , atraumatic, fine side grasping teeth
7	456003	BLAKESLEY <b>Nasal Forceps,</b> straight,	49		440000	KRAUSE Nasal Snare, length 25 cm
8	456502	size 3 BLAKESLEY-WILDE <b>Nasal Forceps,</b>			443500	Package of <b>Nasal Snare Wires</b> , for 440000, standard size.
		45° upturned, size 2				diameter 0.3 mm, length 10 cm,
9	450001	HARTMANN <b>Nasal Cutting Forceps,</b> round, size 1	50		200800	package of 25 (not illustrated) LUER-HARTMANN Rongeur
10	466000	CRAIG Septum Forceps, straight	<b>(51)</b>		844219	Bipolar Coagulating Forceps
1	430300	LUBET-BARBON Nasal Dressing Forceps			847000 E	<b>Bipolar High Frequency Cord</b> for 844219, suitable for KARL STORZ
12	400500	HARTMANN <b>Nasal Speculum,</b> length 13 cm				coagulator AUTOCON® and Erbe coagulator (not illustrated)
(13)	403655	COTTLE Nasal Speculum,	52		641525	RITTER Frontal Sinus Bougie, size 1
(14)	403575	blade length 55 mm, length 13 cm KILLIAN-STRUYCKEN <b>Nasal</b>	53 54	8x	641530 796011	Same, size 2 BACKHAUS Towel Forceps,
Ü		Speculum, blade length 75 mm,				length 11 cm
(15)	403590	length 13.5 cm Same, blade length 90 mm	(55)	6x	535212	HALSTEAD "Mosquito" Artery Forceps, curved
16 17	175802 628501	SPRATT <b>Mastoid Curette</b> , size 2 HALLE <b>Antrum Curette</b> , malleable,	56		511615	METZENBAUM-LAHEY <b>Scissors</b> , curved, extra slender
		size 1	<b>57</b>		752918	METZENBAUM Scissors, curved,
(18) (19)	201000 201200	JANSEN <b>Rongeur,</b> bayonet-shaped LUER-RUSKIN <b>Rongeur</b>	(58)		511414	length 18 cm JOSEPH <b>Scissors,</b> curved,
20	174800	Metal Mallet, with plastic surfaces				length 14 cm
21) 22	173202 170505	PASSOW <b>Chisel</b> , hemostatic, 2 x 2 mm TRAUTMANN <b>Mastoid Gauge</b> ,	59		791202	Scissors, curved, pointed/blunt, length 14.5 cm
23	170507	width 5 mm Same, width 7 mm	60	2x	516015	Needle Holder, tungsten carbide inserts, length 15 cm
24)	170507	Same, width 7 mm	<b>61</b>	2x	800403	VOLKMANN Retractors, sharp,
25 26	634100 212000	WEST <b>Chisel</b> , width 4 mm WULLSTEIN <b>Elevator</b>	62		800401	3 prongs, length 21 cm Same, 1 prong
20	477500	FREER Raspatory, curved, width 4 mm,	63		204815	FERGUSON Suction Tube, 15 Fr.
28	478000	length 18 cm JOSEPH <b>Elevator</b>	64 65		204812 204810	<b>Same,</b> 12 Fr. <b>Same,</b> 10 Fr.
29	479408	COTTLE <b>Elevator</b> , width 8 mm	Ü			,
30 31)	477004 474000	HALLE <b>Elevator,</b> width 4 mm FREER <b>Elevator,</b> double-ended				
32	479200	COTTLE Elevator, double-ended				nmended for containers (not illustrated):
33 34	479000 629500	MASING <b>Elevator</b> , double-ended FAULKNER <b>Antrum Curette</b>		502 Z 752 A2		y for Cleaning, Sterilization and Storage tion Container, with MicroStop®
35	635000 786001	Orbital Retractor	397	763 A2	2 Coding	Label
36 2x 37 2x		Retractor, sharp, one prong Same, two prongs			2 Color Ta	nb, blue es for cleaning and sterilization
38 2x	203930	Suction Tube, malleable, LUER, outer diameter 3 mm, length 22.5 cm			log HYGIEN	•
39 2x	801800	LANGENBECK Retractors,				
⊕ 2x	801600	33 x 14 mm <b>Same,</b> 60 x 20 mm				
4) 2x	810806	Cup Medicine, 60 ccm				
	810810	Same, 100 ccm (not illustrated)				
42	648500	HAJEK-KOFLÉR <b>Sphenoid Punch</b> , reversible				
		- CV-OI OI DIO				

8-94

SET 36 B 455

# FISCH Special Set for Lateral Skull Base Surgery





## FISCH Special Set for Lateral Skull Base Surgery



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449250
               Nasal Scissors, ZÜRICH model, straight, working length 14 cm
    221454
               FISCH Ear Forceps, round cupped jaws, diameter 3 mm, working length 12.5 cm
3
    634822
               HARTMANN Forceps, with round cupped jaws, diameter 2.5 mm, working length 12.5 cm
4
    222650
               BELLUCCI Scissors, delicate, straight, working length 12.5 cm
(5)
    162020
               HARTMANN Ear Forceps, round cupped jaws, diameter 2 mm
6
               FISCH-DIETER Malleus Nipper, width 0.8 mm, working length 8 cm
    222801
7
    222501
               FISCH-BELLUCCI Scissors, extra delicate, blade length 7 mm, working length 8 cm
8
    225415
               Hook, 45°, 1.5 mm, length 16 cm
9
               FISCH Tenotome, sickle-shaped, extra delicate, length 16 cm
    226301
(10)
    226102
               FISCH Micro Raspatory, single curved to left, length 16 cm
1
    226101
               Same, single curve, to right
12
    226001
               Same, double curve, to right
(13)
    226002
               Same, double curve, to left
(14)
    499101
               Hook, one prong, sharp curve, length 16.5 cm
               FREER Elevator, double-ended, semisharp and blunt, length 20 cm
    474000
16
    477500
               FREER Raspatory, curved, width 4 mm, length 18 cm
17)
    213005
               FISCH Dura Elevator
               Tissue Forceps, toothed, 1 x 2 teeth, slender, soft spring, length 13 cm
(18)
    793303 F
19
    214000 F
               WULLSTEIN Forceps, serrated, length 15 cm
               FISCH Suction Tube, outer diameter 3 mm
    204735
(21)
    204738
               Same, outer diameter 5 mm
    206600
               FISCH Suction and Irrigation Tube, cylindrical, suction tube outer diameter 2.5 mm,
               irrigation tube outer diameter 2 mm, working length 9.5 cm
    206700
               Same, suction tube outer diameter 1.9 mm, irrigation tube outer diameter 1.9 mm
    204200
               FISCH Adaptor, for Suction Tubes 204005 - 204025, 204305 - 204330, with cut-off hole, LUER cone,
               lenath 5.5 cm
    204354
               Suction Tube, angular, outer diameter 1 mm, working length 7 cm
(26)
    792026
               MAYO-LEXER Scissors, tungsten carbide, length 16 cm
27)
    511514
               METZENBAUM Scissors, curved, length 14 cm
    213410
               FISCH Scissors, extra delicate, curved, sharp/sharp, length 10.5 cm
29
    208000
               Surgical Handle, Fig. 3, length 12.5 cm
30
    208100
               Surgical Handle, Fig. 4, length 13.5 cm
31)
    516015
               Needle Holder, tungsten carbide inserts, length 15 cm
(32)
    516115
               RYDER Needle Holder, extra delicate, length 15 cm
               Artery Forceps, PROVIDENCE model, delicate, curved, length 14 cm
    536214
34)
    535312
               HALSTEAD "Mosquito" Artery Forceps, micro-model, curved, length 12.5 cm
35)
    796011
               BACKHAUS Towel Forceps, length 11 cm
<u>36</u>
    213015
               FISCH Periosteal Elevator, sharp, angled, width 11 mm, length 21 cm
37)
    169027
               JANSEN Elevator, width 9 mm, length 17.5 cm
               FISCH Elevator, sharp, width 10 mm, length 16 cm
    213011
(39)
    800005
               FISCH Aneurysm Needle, length 20 cm
    219900
               FISCH Glomus Retractor, size 21 x 16 cm
    200619
               LEMPERT Rongeur, slender, straight, length 19 cm
(42)
    219724
               Retractor, articulated, 3 x 4 prongs, sharp, length 24 cm
    219717
               FISCH Retractor, semisharp, length 17 cm
(44)
    215001
               JANSEN Retractor, blunt
    219800
               FISCH Dura Retractor, length 18 cm
    801708
               KOCHER-LANGENBECK Retractor, size 65 x 14 mm, length 21.5 cm
47)
    801702
               Same, 35 x 8 mm
    800403
               VOLKMANN Retractor, sharp, 3 prongs, length 21 cm
```

#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage

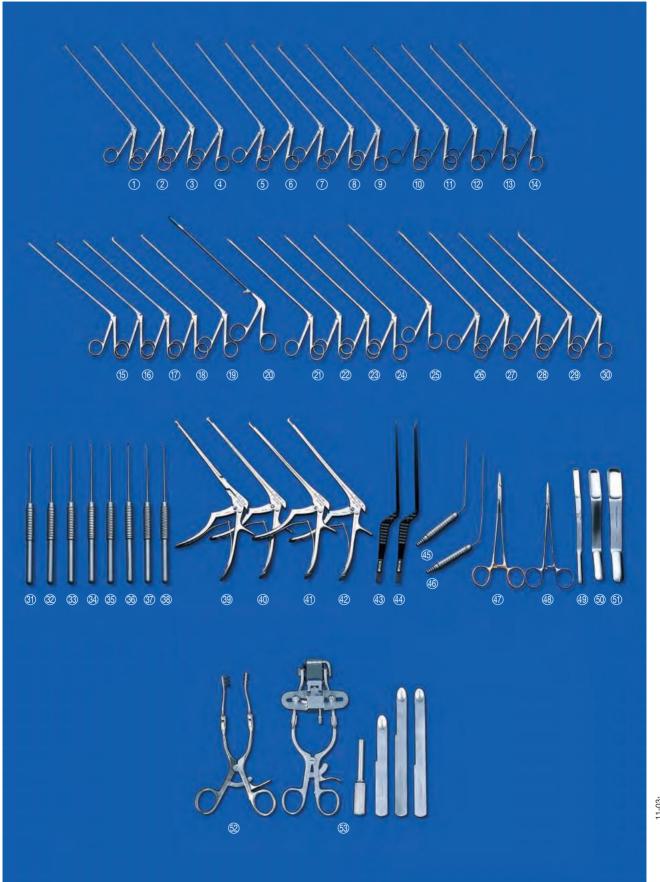
39751 A2 Sterilization Container, with MicroStop®

39763 A2 **Coding Label** 39762 D2 **Color Tab,** blue

Further accessories for cleaning and sterilization see catalog HYGIENE

### DRAF **Special Set** for Lateral Skull Base Surgery





SET 39

### DRAF **Special Set** for Lateral Skull Base Surgery



1	660000	Foregon straight, outre deligate, and approximate a width 0.6 mm, working length 15 cm				
(1)	662202	Forceps, straight, extra delicate, oval cupped jaws, width 0.6 mm, working length 15 cm				
2	662203	Same, curved to right				
	662204	Same, curved to left				
4	662205	Same, 45° upturned				
5	662231	Forceps, straight, with round cupped jaws, diameter 2.5 mm, working length 15 cm				
6	662236	Same, curved to left				
7	662235	Same, curved to right				
8	662237	Same, 45° upturned				
9	662241	Forceps, straight, round cupped jaws, diameter 4 mm, working length 15 cm				
10	662210	Forceps, straight, not through-cutting, extra sharp, width 1.5 mm, working length 15 cm				
11)	662212	Same, curved to right				
12	662213	Same, curved to left				
(13)	662214	Same, 45° upturned				
14	662215	Same, 90° upturned				
15	662221	Forceps, straight, not through-cutting, with oval, fenestrated spoon, width 1.5 mm, working length 15 cm				
16	662223	Same, curved to right				
17	662224	Same, curved to left				
18	662227	Same, 45° upturned				
19	662228	Same, 90° upturned				
20	662248	BLAKESLEY <b>Forceps</b> , straight, with oval, fenestrated cupped jaws, width 4 mm, working length 15 cm				
21)	662251	Miniature Forceps, straight, through-cutting, working length 15 cm				
22	662255	Same, curved to right				
23	662256	Same, curved to left				
24	663257	Same, curved upwards				
<b>25</b>	662271	Grasping Forceps, straight, fine serrated, working length 15 cm				
26	662300	Scissors, straight, working length 15 cm				
27	662301	Scissors, straight, extra delicate, working length 15 cm				
28	662304	Same, curved to right				
29	662305	Same, curved to left				
30 31	662307	Same, 45° curved upwards				
32	663402	Sickle Knife, length 21.5 cm				
33	663486 663482	<b>Dissecting Probe,</b> medium curve, blunt, with round handle, diameter 0.9 mm, length 21.5 cm <b>Hook,</b> with ball end, angled 90°, length 21.5 cm				
34)	663468	Sharp Curette, oval, angled 85°, 2 x 3.2 mm				
35	663413	<b>Round Knife,</b> angled 30°, oval, with round handle, 2.1 x 2.5 mm, length 21.5 cm				
36						
37	663405 663422	Round Knife, vertical, 4.5 x 3 mm, length 21.5 cm Elevator, angled 25°, width 1 mm, length 21.5 cm				
38	663463	Sharp Curette, oval, angled 60°, 2 x 3.2 mm				
39	662111	KERRISON <b>Bone Punch,</b> rigid, 90° downbiting, not through-cutting, size 1 mm, working length 17 cm				
40	662100	Same, 90° upbiting, size 0.5 mm				
41)	662122	Same, upbitting 40° forward, size 2 mm				
42	662120	Same, upbitting 40° forward, size 0.7 mm				
43	844523	Bipolar Coagulating Forceps, insulated, bayonet-shaped, tip 0.7 mm, length 23 cm				
44)	844623	Same, blunt, width of tip 1.2 mm				
	847000 E	Bipolar High Frequency Cord, for 844523 and 844623, to KARL STORZ Coagulator AUTOCON®				
	047000 L	and Erbe Coagulator (not illustrated)				
<b>4</b> 5	663814	Suction Tube, angular, malleable, diameter 2 mm, working length 10 cm				
46	663818	Same, working length 13 cm				
47	798618	HEGAR <b>Needle Holder</b> , slender, tungsten carbide inserts, length 18 cm				
48	799016	DRAF Micro Needle Holder, with diamond coated jaws, length 16.5 cm				
49	662476	OLIVECRONA Brain Spatula, concave, elastic, width 7 and 9 mm, length 18 cm				
50	662477	Same, width 11 and 13 mm				
<u>(51)</u>	662478	Same, width 15 and 18 mm, complete				
Additional instruments for transtemporal surgery						
(52)	219717 B	FISCH Retractor, sharp, length 17 cm				

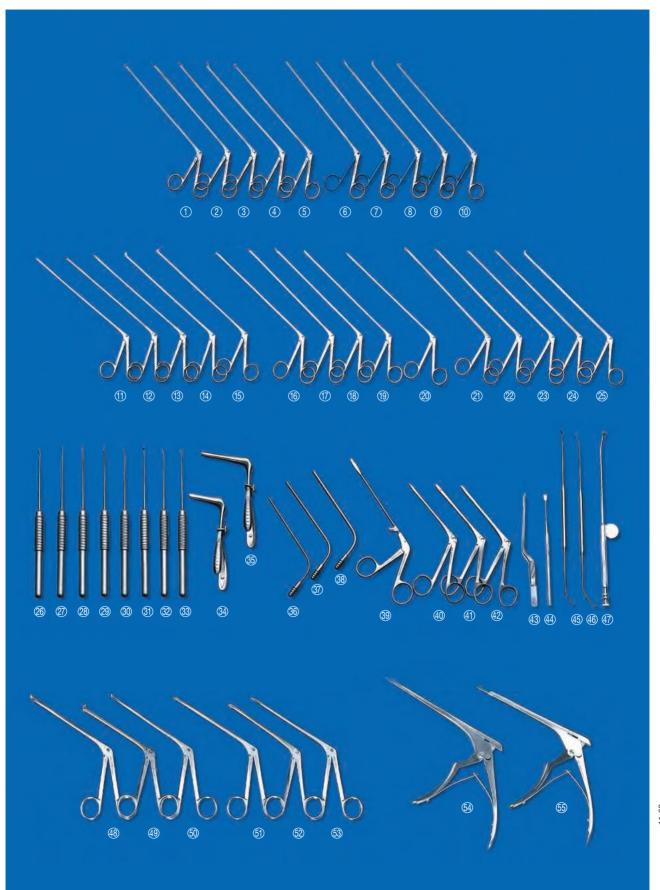
219717 B FISCH **Retractor**, sharp, length 17 cm 53 219800 FISCH Dura Retractor, length 18 cm

#### Accessories recommended for containers (not illustrated):

- 39502 Z Wire Tray for Cleaning, Sterilization and Storage
- 39752 A2 Sterilization Container, with MicroStop®
- 39763 A2 **Coding Label** 39762 D2 **Color Tab,** blue

# DRAF **Special Set for Endonasal Anterior Skull Base Surgery**





## DRAF Special Set for Endonasal Anterior Skull Base Surgery



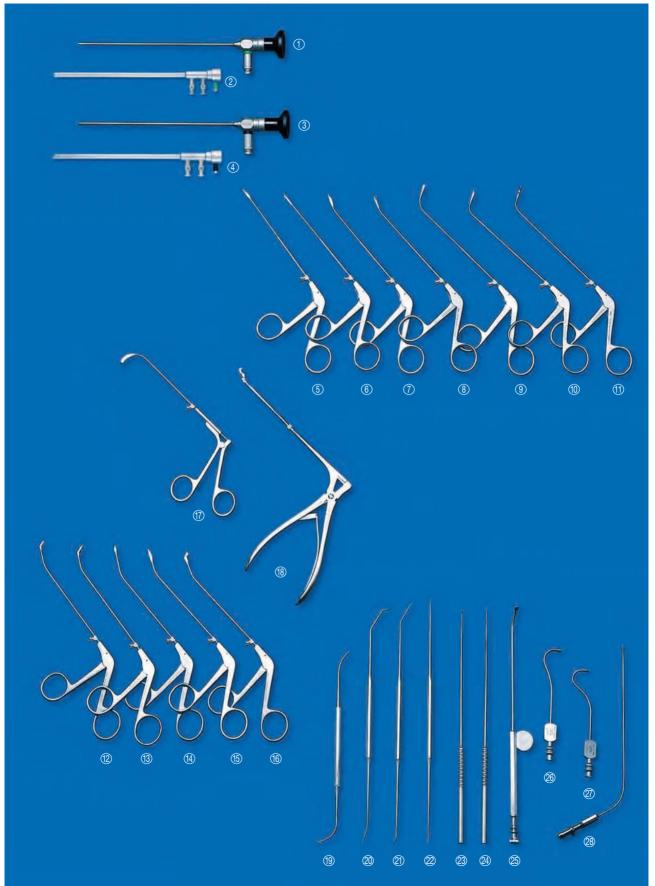
1	662231	Forceps, straight, with round cupped jaws,				truments: through-cutting nasal forceps
2	662235	diameter 2.5 mm, working length 15 cm Same, curved to right	48)	45371	10	Nasal Cutting Forceps, 45° upturned,
3	662236	Same, curved to left				through-cutting, slender model, with flat jaws, bite 3 x 4 mm, working length 12.5 cm
4	662237	Same, 45° upturned	49	45372	2	Nasal Cutting Forceps, 45° upturned,
(5)	662241	Forceps, straight, with round cupped jaws,	49	43012		through-cutting, strong model, medium size,
Ŭ		diameter 4 mm, working length 15 cm				bite 2.75 x 6 mm, working length 10.5 cm
6	662210	Forceps, straight, not through-cutting,	(50)	45372	21	Same, fine, bite 1.5 x 4 mm,
		extra sharp, with oval, fenestrated spoon,	09	40012	- '	working length 12.5 cm
		width 1.5 mm, working length 15 cm	(51)	45350	08	Nasal Cutting Forceps, straight, through-
7	662212	Same, curved to right				cutting, slender model, with flat jaws,
8	662213	Same, curved to left				bite 3 x 4 mm, working length 12.5 cm
9	662214	Same, 45° upturned	(52)	45351	10	Nasal Cutting Forceps, straight, through-
10	662215	Same, 90° upturned				cutting, strong model, small,
11	662221	Forceps, straight, not through-cutting,	_			bite 2.5 x 6.5 mm, working length 10.5 cm
		with oval, fenestrated spoon, width 1.8 mm, working length 15 cm	(53)	45350	)9	Same, fine, bite 1.25 x 5 mm,
12	662223	Same, curved to right	<b>6</b>	00040		working length 12.5 cm
13	662224	Same, curved to left	(54)	66210	)2	KERRISON <b>Bone Punch</b> , rigid, 90° upbiting,
14)	662227	Same, 45° upturned				not through-cutting, size 2 mm,
15	662228	Same, 90° upturned	(55)	66210	าว	working length 17 cm Same, size 3 mm
16	662251	Miniature Forceps, straight, through-cutting,	(00)	00210	)3	Same, Size 3 min
Ŭ		working length 15 cm				
17	662255	Same, curved to right				
18	662256	Same, curved to left	Ac	cessori	ies r	ecommended for containers (not illustrated):
19	662257	Same, curved upwards		502 Z		e Tray for Cleaning, Sterilization and Storage
20	662271	Grasping Forceps, fine serrated,				rilization Container, with MicroStop®
@	000000	working length 15 cm				ding Label
21	662300	Scissors, straight, working length 15 cm				lor Tab, blue
22	662301	Scissors, straight, extra delicate, working length 15 cm				sories for cleaning and sterilization
23	662304	Same, curved to right				GIENE
24	662305	Same, curved to left		outu.o	9	5.2.12
25	662307	Same, 45° upturned				
26	663402	Sickle Knife, length 21.5 cm				
27	663486	Dissecting Probe, medium curve, blunt,				
		with round handle, diameter 0.9 mm,				
28	663482	length 21.5 cm <b>Hook,</b> with ball end, angled 90°,				
69	000402	length 21.5 cm				
29	663468	Curette, sharp, oval, angled 85°, 2 x 3.2 mm				
30	663413	Round Knife, angled 30°, oval, 2.1 x 2.5 mm,				
		length 21.5 cm				
31)	663405	Round Knife, vertical, 4.5 x 3 mm,				
<u></u>	000400	length 21.5 cm				
32	663422	Elevator, angled 25°, width 1 mm,				
33	663463	length 21.5 cm <b>Curette,</b> sharp, oval, angled 60°, 2 x 3.2 mm				
34	403255	KILLIAN-STRUYCKEN Nasal Speculum,				
•	100200	with set rack, blade length 55 mm				
35)	403275	Same, blade length 75 mm				
36	203730	Suction Tube, diameter 3 mm,				
		working length 11 cm				
37)	203740	Same, outer diameter 4 mm				
38	203750	Same, outer diameter 5 mm				
39	449201	RHINOFORCE® II Nasal Scissors, straight,				
(A)	450001	working length 13 cm				
40	456001 456003	BLAKESLEY Nasal Forceps, size 1 Same, size 3				
41) 42)	456003	Same, size 2				
43	426516	JANSEN Nasal Dressing Forceps, bayonet-				
•	120010	shaped, length 16.5 cm				
44	477500	FREER Raspatory, curved, width 4 mm,				
		length 18 cm				
45)	28164 EB	CASTELNUOVO Elevator, double-ended,				
	00464==	blunt end slightly curved, length 26 cm				
46	28164 EC	CASTELNUOVO Elevator, double-ended,				
		semisharp end slightly curved, graduated, length 26 cm				
47)	28164 FS	CASTELNUOVO Suction Elevator,				
		length 25 cm				
		•				

1-031

SET 42 461

## CASTELNUOVO Special Set for Endonasal Endoscopic Anterior Skull Base Surgery





11-03

462 SET 43

### **CASTELNUOVO Special Set for Endonasal Endoscopic Anterior Skull Base Surgery**



(1)	7230 AA	HOPKINS® II Straight Forward Telescope 0, diameter 4 mm, length 18 cm
2	7230 AS	Irrigation Sheath, for 7230 AA, for use with CLEARVISION®II System (see chapter 4, SINOSCOPY)
3	7230 FA	HOPKINS® II Forward-Oblique Telescope 45°, diameter 4 mm, length 18 cm
4	7230 FS	Irrigation Sheath, for 7230 FA, for use with CLEARVISION® II System (see chapter 4, SINOSCOPY)
(5)	452831	RHINOFORCE® II Miniature Nasal Forceps, with extra fine flat jaws, through-cutting, tissue-sparing.
	.0200.	straight jaws, width of cut 1.5 mm, working length 13 cm
6	452832	Same, jaws 45° upturned
7	452833	Same, sheath curved 30°, straight jaws
8	452834	Same, jaws 45° angled upwards
9		CASTELNUOVO RHINOFORCE® II Miniature Nasal Forceps, with extra fine flat jaws, through-cutting,
	.020	tissue-sparing, 65° upturned, right side opening, width of cut 1.5 mm, working length 13 cm
(10)	452841	Same, backward opening
11)		Same, left side opening
(12)		CASTELNUOVO RHINOFORCE® II Nasal Forceps, end of sheath 25° upturned, through-cutting,
_		jaws 45° upturned, BLAKESLEY shape, width 3 mm, working length 13 cm
(13)	456511 B	BLAKESLEY-CASTELNUOVO RHINOFORCE® II Nasal Forceps, end of sheath 25° upturned, jaws 45°
_		upturned, width 3.5 mm, working length 13 cm
14)	456010 B	BLAKESLEY-CASTELNÚOVO RHINOFORCE® II Nasal Forceps, end of sheath 25° upturned,
_		with straight jaws, width 3 mm, working length 13 cm
(15)	451010 B	CASTELNUOVO RHINOFORCE®II Nasal Forceps, end of sheath 25° upturned, through-cutting,
		with straight jaws, BLAKESLEY shape, width 3 mm, working length 13 cm
16)	456510 B	BLAKESLEY-CASTELNUOVO RHINOFORCE® II Nasal Forceps, end of sheath 25° upturned,
		jaw 45° upturned, width 3 mm, working length 13 cm
17)	653000	HEUWIESER Antrum Grasping Forceps, jaws curved downwards, fixed jaw curved 90°,
		movable jaw opening up to 120°, backward opening, working length 10 cm
18)	648523	McKENTY-CASTELNUOVO <b>Sphenoid Punch</b> , tip curved 30°, through-cutting, reversible, size 1.6 x 2 mm,
		working length 17 cm
19	629824	CASTELNUOVO Frontal Sinus Probe, double-ended, curved, length 22 cm
20	28164 EC	CASTELNUOVO Elevator, double-ended, blunt end angled, graduated, length 26 cm
21)	28164 EB	CASTELNUOVO Elevator, double-ended, blunt end slightly curved, length 26 cm
22	28164 EA	CASTELNUOVO Elevator, double-ended, semisharp and blunt, length 26 cm
23	28164 H	CASTELNUOVO <b>Hook,</b> 90°, blunt, with round handle, length 25 cm
24)	28164 MP	Round Knife, vertical, oval, with round handle, 3.5 x 2.5 mm, length 25 cm
25)	28164 ES	
26	586146	v. EICKEN-CASTELNUOVO Antrum Cannula, S-shaped, strongly curved, outer diameter 2.5 mm
27)	586145	Same, slightly curved
28)	649180 N	FERGUSON-CASTELNUOVO <b>Suction Tube</b> , diameter 2 mm, working length 15 cm

#### Accessories recommended for containers (not illustrated):

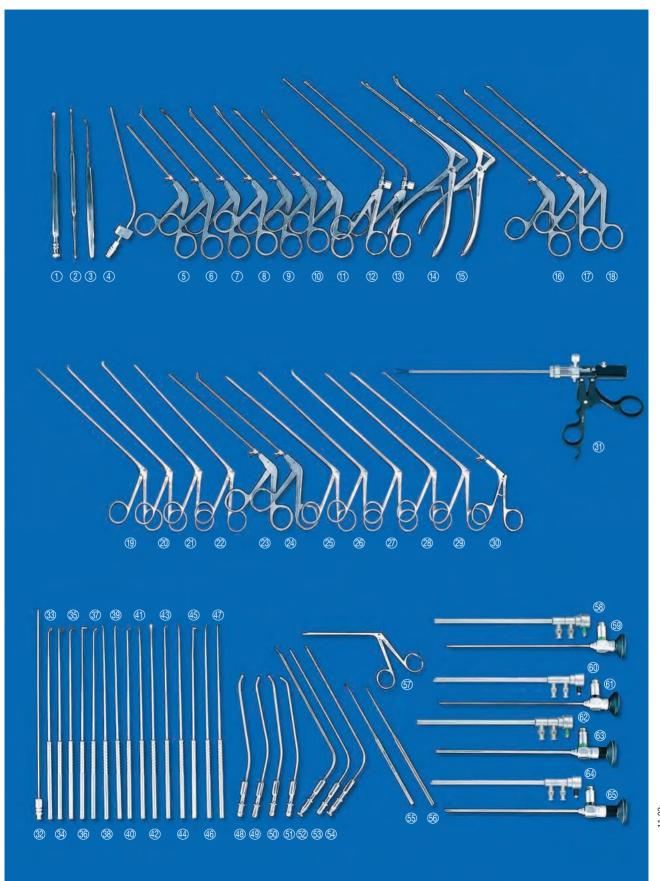
2x 39502 Z Wire Tray for Cleaning, Sterilization and Storage 39751 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label

39762 D2 Color Tab, blue

## CASTELNUOVO-LOCATELLI Special Set for Endonasal Endoscopic Access to Sella Region





# CASTELNUOVO-LOCATELLI Special Set for Endonasal Endoscopic Access to Sella Region



(7)	47.400	r nasal access		0040456	Discoulous de la 1170 de 1
1	474001 479100	FREER Suction Elevator, length 19 cm COTTLE Elevator	41)		<b>Dissector,</b> sharp, tip angled 15°, size 2 mm, length 25 cm
③ ④	628001 722830	Sickle Knife, pointed Suction Tube, outer diameter 3 mm	42	28164 DM	<b>Dissector,</b> sharp, curved, size 3 mm, length 25 cm
3	456000 B	BLAKESLEY RHINOFORCE® II Nasal Forceps, straight	43	28164 KF	Curette, spoon-shaped, size 2 mm, length 25 cm
6	456500 B	BLAKESLEY-WILDE RHINOFORCE® II Nasal Forceps, 45° upturned	44	28164 DA	<b>Dissector,</b> sharp, tip angled 45°, size 2 mm, length 25 cm
7)	451000 B	GRÜNWALD-HENKE RHINOFORCE® II Nasal Forceps, straight, through-cutting	45	28164 RR	CAPPABIANCA-de DIVITIIS Curette, stirrup-shaped, length 25 cm
8)	451500 B	Same, 45° upturned	46)	28164 DE	<b>Dissector,</b> sharp, size 1.5 mm, length 25 cm
9		MACKAY-GRÜNWALD RHINOFORCE®II Nasal Forceps, through-cutting	47	28164 H	CASTELNUOVO <b>Hook</b> , 90°, blunt, with round handle, length 25 cm
10)	452831	RHINOFORCE® II Miniature Nasal Forceps,	48	662885	FRANK-PASQUINI Suction Tube,
<b>a</b>	450000	with extra fine flat jaws, straight			tip curved upwards, diameter 3 mm,
① ②	452832	Same, jaws 45° upturned	(A)	000000	working length 13 cm
12)	651055	STAMMBERGER <b>Punch</b> , circular cutting,	49	662882	Same, diameter 2.4 mm, curved upwards
@	054050	diameter 3.5 mm, working length 18 cm	50	662886	Same, diameter 3 mm, curved downwards
13)	651050	Same, diameter 4.5 mm	<b>(51)</b>	662883	Same, diameter 2.4 mm, curved downwards,
14)	648521	McKENTY <b>Sphenoid Punch</b> , reversible	(52)	649180 N	FERGUSON-CASTELNUOVO Suction Tube
15)	648523	McKENTY-CASTELNUOVO <b>Sphenoid Punch,</b> tip curved 30°, through-cutting,	(53)	649183	diameter 2 mm, working length 15 cm FERGUSON <b>Suction Tube,</b> LUER, 10 Fr.,
		working length 17 cm	•	0.404.00 DI	working length 15 cm
			54)	649182 BU	J FERGUSON-CASTELNUOVO Suction Tube
Ins	truments to	r accessing the sella region			diameter 2.5 mm
16)	28164 UA	RHINOFORCE® II Nasal Forceps, through- cutting, width of cut 1.5 mm, straight jaws,			or removal of septum cartilage material use
		working length 18 cm	TOP	closing the	access to the pituitary gland
17)	28164 UB	Same, jaws angled upwards 45°	(55)	660506	Round Knife, vertical cuttng, length 18 cm
18 19	28164 UE 663202	Same, jaws angled downwards 45° Forceps, round cupped jaws, diameter	56	660509	<b>Round Knife,</b> angled 45°, diameter 2 mm, length 18 cm
		0.6 mm, straight, working length 18 cm	57)	634826	BELLUCCI <b>Scissors</b> , straight,
20	663237	Forceps, 45° upturned, with round cupped jaws, diameter 2.5 mm, working length 18 cm			working length 12.5 cm
21)	663227	Forceps, 45° upturned, not through-cutting,	Tele	escopes	
_		with oval, fenestrated cupped jaws,	(58)	•	Custian and Invigation Chapth 00
		width 1.8 mm, working length 18 cm	(30)	7219 AS	Suction and Irrigation Sheath 0°,
22	663221	Same, straight			for 7229 AA and KARL STORZ lens
23		BLAKESLEY RHINOFORCE® II Ethmoid			irrigation system CLEARVISION®II
٥	043100 D	Forceps, size 0, working length 16 cm			(see chapter 4, SINOSCOPY)
		BLAKESLEY-WILDE RHINOFORCE® II	59	7229 AA	HOPKINS® II Straight Forward Telescope 0
00	640110 D				enlarged view, diameter 2.7 mm, length 18 c
24)	649110 B		_		
		Ethmoid Forceps, 45° upturned	60	7219 FS	Irrigation and Suction Sheath 45°,
	649110 B 663304	<b>Ethmoid Forceps,</b> 45° upturned <b>Scissors,</b> curved to right, extra delicate,	60	7219 FS	Irrigation and Suction Sheath 45°, for 7219 FA and KARL STORZ lens
25	663304	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm	60	7219 FS	
25 26	663304 663305	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left	60	7219 FS	for 7219 FA and KARL STORZ lens
25 26 27	663304 663305 663307	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards	60	7219 FS 7229 FA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)
25 26 27 28	663304 663305 663307 663302	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight			for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY) HOPKINS® II Forward-Oblique Telescope 4
25 26 27 28 29	663304 663305 663307 663302 663300	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm			for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY) HOPKINS® II Forward-Oblique Telescope 4
25 26 27 28 29	663304 663305 663307 663302	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating,	61)	7229 FA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 cm
25 26 27 28 29 30	663304 663305 663307 663302 663300 663327	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm	61)	7229 FA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 clrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system
25 26 27 28 29	663304 663305 663307 663302 663300 663327	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally	©	7229 FA 7230 AS	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 clrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOR
25 26 27 28 29 30	663304 663305 663307 663302 663300 663327 28164 BDL	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm	61)	7229 FA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 clirigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOFHOPKINS® II Straight Forward Telescope
25 26 27 28 29 30	663304 663305 663307 663302 663300 663327 28164 BDL	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord,	©	7229 FA 7230 AS 7230 AA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 of Irrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOFHOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm
25 26 27 28 29 30	663304 663305 663307 663302 663300 663327 28164 BDL	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm	6) 62 63	7229 FA 7230 AS	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 clirigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPHOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and
25 26 27 28 29 30 31 a	663304 663305 663307 663302 663300 663327 28164 BDL	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord,	6) 62 63	7229 FA 7230 AS 7230 AA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 clirigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPHOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system
25 26 27 28 29 30 31 a	663304 663305 663307 663302 663300 663327 28164 BDL 26176 LE	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord, length 300 cm (not illustrated)	60 63 69	7229 FA 7230 AS 7230 AA 7230 FS	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 colored Irrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPHOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPE
25 26 27 28 29 30	663304 663305 663307 663302 663300 663327 28164 BDL 26176 LE 28164 X	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord, length 300 cm (not illustrated) CASTELNUOVO Suction Tube,	6) 62 63	7229 FA 7230 AS 7230 AA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 colored Irrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPHOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPHOPKINS® II Forward-Oblique Telescope 4
25 26 27 28 29 30 31 32 a	663304 663305 663307 663302 663300 663327 28164 BDL 26176 LE 28164 X	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord, length 300 cm (not illustrated) CASTELNUOVO Suction Tube, diameter 2 mm, working length 25 cm CAPPABIANCA-de DIVITIIS Ring Curette,	60 63 64	7229 FA 7230 AS 7230 AA 7230 FS 7230 FA	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 clirigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOFHOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOFHOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 4 mm, length 18 cm
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25 26 27 28 29 30 31 32 a	663304 663305 663307 663302 663327 28164 BDL 26176 LE 28164 X 28164 RO	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord, length 300 cm (not illustrated) CASTELNUOVO Suction Tube, diameter 2 mm, working length 25 cm CAPPABIANCA-de DIVITIIS Ring Curette, with round wire, inner diameter 5 mm, tip angled 45° Same, laterally curved sheath end 90° Same, inner diameter 3 mm, laterally curved	60 62 63 64 65	7229 FA 7230 AS 7230 AA 7230 FS 7230 FA cessories re	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 cl Irrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOFHOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOFHOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 4 mm, length 18 cm ecommended for containers (not illustrate to Tray for Cleaning, Sterilization and Stora
· 39 % 20 39 39 39 39 39 39 39 39 39 39 39 39 39	663304 663305 663307 663302 663300 663327 28164 BDL 26176 LE 28164 X 28164 RO 28164 RD	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord, length 300 cm (not illustrated) CASTELNUOVO Suction Tube, diameter 2 mm, working length 25 cm CAPPABIANCA-de DIVITIIS Ring Curette, with round wire, inner diameter 5 mm, tip angled 45° Same, laterally curved sheath end 90° Same, inner diameter 3 mm, laterally curved sheath end	69 63 64 65 Acc 395 397	7229 FA 7230 AS 7230 AA 7230 FS 7230 FA cessories re 502 Z Wir 753 A2 Ste	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 of Irrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 4 mm, length 18 cm ecommended for containers (not illustrate to Tray for Cleaning, Sterilization and Storarilization Container, with MicroStop®
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- 29 89 89 89 89 89 89 89 89 89 89 89 89 89	663304 663305 663307 663302 663327 28164 BDL 26176 LE 28164 X 28164 RO 28164 RB 28164 RB 28164 RB 28164 RN 28164 RN 28164 KA	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord, length 300 cm (not illustrated) CASTELNUOVO Suction Tube, diameter 2 mm, working length 25 cm CAPPABIANCA-de DIVITIIS Ring Curette, with round wire, inner diameter 5 mm, tip angled 45° Same, laterally curved sheath end 90° Same, inner diameter 3 mm, laterally curved sheath end Same, tip angled 90° Same, inner diameter 3 mm Curette, round spoon, size 1 mm, length 23 cm	60 63 64 65 65 64 65 65 65 65 65 65 65 65 65 65 65 65 65	7229 FA 7230 AS 7230 AA 7230 FS 7230 FA  cessories re 102 Z Wir 153 A2 Ste 163 A2 Coo 162 D2 Col 164 cessories re 165 A2 Coo 165 A2	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 cm Irrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 4 mm, length 18 cm CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 4 mm, length 18 cm ecommended for containers (not illustrate te Tray for Cleaning, Sterilization and Storarilization Container, with MicroStop® ding Label or Tab, blue sories for cleaning and sterilization
- 29 89 89 89 89 89 89 89 89 89 89 89 89 89	663304 663305 663307 663302 663327 28164 BDL 26176 LE 28164 X 28164 RD 28164 RB 28164 RB 28164 RB 28164 RN 28164 KA 28164 KA	Ethmoid Forceps, 45° upturned Scissors, curved to right, extra delicate, working length 18 cm Same, curved to left Same, 45° curved upwards Same, straight Scissors, straight, working length 18 cm Scissors, 45° upwards curve, rotating, working length 18 cm TAKE-APART® Bipolar Forceps, distally angled 45°, working length 20 cm Bipolar High Frequency Cord, length 300 cm (not illustrated) CASTELNUOVO Suction Tube, diameter 2 mm, working length 25 cm CAPPABIANCA-de DIVITIIS Ring Curette, with round wire, inner diameter 5 mm, tip angled 45° Same, laterally curved sheath end 90° Same, inner diameter 3 mm, laterally curved sheath end Same, tip angled 90° Same, inner diameter 3 mm	60 63 64 65 65 64 65 65 65 65 65 65 65 65 65 65 65 65 65	7229 FA 7230 AS 7230 AA 7230 FS 7230 FA  202 Z Wir 253 A2 Ste 263 A2 Coc 262 D2 Col	for 7219 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOPY)  HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 2.7 mm, length 18 cm Irrigation Sheath, for 7230 AA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Straight Forward Telescope enlarged view, diameter 4 mm, length 18 cm Irrigation Sheath, for 7230 FA and KARL STORZ lens irrigation system CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 4 mm, length 18 cm CLEARVISION® II (see chapter 4, SINOSCOF HOPKINS® II Forward-Oblique Telescope 4 enlarged view, diameter 4 mm, length 18 cm ecommended for containers (not illustrate te Tray for Cleaning, Sterilization and Stora rilization Container, with MicroStop® ding Label or Tab, blue sories for cleaning and sterilization

11-033

SET 46 465

## **Basic Set for Tonsillectomy** and **Adenoidectomy**





## **Basic Set for Tonsillectomy** and Adenoidectomy



```
1
         744201
                    RUSSEL-DAVIS Tongue Blade, size 1
2
         744202
                    Same, size 2
3
4
5
6
7
         744203
                    Same, size 3
         744204
                    Same, size 4
         740700
                    HARTMANN Tongue Depressor
         450003
                    HARTMANN Nasal Cutting Forceps, round, size 3
         740000
                    BRÜNINGS Tongue Depressor, length 19 cm
8
         767902
                    Laryngeal Mirror, with unscrewable hexagonal handle, size 2
         767906
                    Laryngeal Mirror, with unscrewable hexagonal handle, size 6
(10)
         810502
                    Needle. Tonsil. straight
1
         810506
                    Septum Needle, angular, LUER-Lock
12
         796011
                    BACKHAUS Towel Forceps, length 11 cm
13
         810806
                    Cup Medicine, 60 ccm
14)
                    DAVIS-MEYER Mouth Gag
         744500
(15)
                    McIVOR Mouth Gag
         744600
16
         753500
                    BRÜNINGS Tonsil Snare
         754200
                    Wire Snare Loop, for 753500, package of 100 (not illustrated)
         751001
17
                    BLOHMKE Forceps
(18)
         750800
                    COLVER Forceps
19
         752500
                    GOOD Scissors
20 21
         755500
                    YANKAUER Suction Tube
         751411
                    HENKE Elevator, width 11.5 mm
23
         754719
                    SCHNIDT Forceps, slightly curved, serrated
         754518
                    MIKULICZ Forceps, small size, 1 x 2 teeth
24)
         750000
                    Dressing Forceps, serrated, length 20 cm
25
         750123
                    Tissue Forceps, 2 x 3 teeth, length 20 cm
26
         757700
                    ROEDER Loop Applicator, model E
         757811
                    Loop, for 757700, absorbable, sterile, package of 12 (not illustrated)
                    BECKMANN Adenoid Curette, straight, size 0
         730000
28
         730001
                    Same, size 1
29
         730002
                    Same, size 2
30
         730003
                    Same, size 3
(31)
(32)
         730004
                    Same, size 4
                    NAGER Pillar Retractor
         746700
33
         732500
                    JURACZ Adenoid Forceps, sharp
34)
         798618
                    HEGAR Needle Holder, slender, tungsten carbide inserts, length 18 cm
         842219
                    Bipolar Coagulation Forceps, length 19 cm
         847000 E Bipolar High Frequency Cord, for 842219, suitable for KARL STORZ coagulator AUTOCON®
                    and Erbe coagulator (not illustrated)
```

#### Accessories recommended for containers (not illustrated):

39502 ZH Wire Tray for Cleaning, Sterilization and Storage

39742 A2 Sterilization Container, with MicroStop®

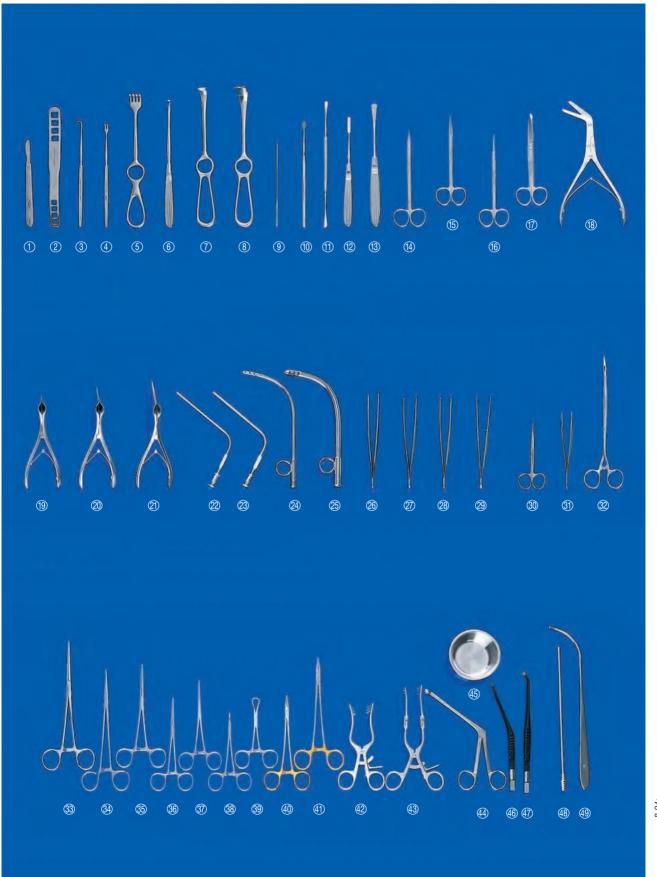
39763 A2 Coding Label

39762 D2 Color Tab, blue

Further accessories for cleaning and sterilization see catalog HYGIENE









### **Basic Tracheostomy Set**

```
(1)
          208000
                    Surgical Handle, Fig. 3, length 12.5 cm
          208010
                    Blade, Fig. 10, non-sterile, package of 100 (not illustrated)
                    Same, Fig. 11, non-sterile, package of 100 (not illustrated)
         208011
         208015
                    Same, Fig. 15, non-sterile, package of 100 (not illustrated)
②
③
④
          740000
                    BRÜNINGS Tonque Depressor, length 19 cm
          786001
                    Retractor, sharp, 1 prong
          786002
                    Same, 2 prongs
(5)
(6)
                    VOLKMANN Retractors, sharp, 4 prongs
    2x
         800404
                    SCHÖNBORN Thymus Retractor, width 5 mm, length 20.5 cm
         786500
7
                    LANGENBECK Retractors, 33 x 14 mm
    2x
         801800
8
         801600
    2x
                    Same, 60 x 20 mm
          151011
                    Cotton Applicators, triangular serrated, working length 13 cm
10
                    WULLSTEIN Elevator
         212000
         474000
                    FREER Elevator, double-ended
12
         478000
                    JOSEPH Elevator
         169009
                    JANSEN Raspatory
14)
         791815
                    REYNOLDS Dissecting Scissors, delicate tips
(f)
(f)
                    JOSEPH Scissors, curved, length 14 cm
METZENBAUM-LAHEY Scissors, extra slender
         511414
         511615
17
         791202
                    Dissecting Scissors, curved, sharp/blunt, length 14.5 cm
18
         789500
                    KILLIAN Laryngectomy Scissors
19
         403555
                    KILLIAN-STRUYCKEN Nasal Speculum, standard model, blade length 55 mm, length 13.5 cm
20
                    Same, blade length 75 mm
         403575
         403590
                    Same, blade length 90 mm
23 24
                    FERGUSON Suction Tube, 9 Fr.
         204809
         204812
                    Same, 12 Fr.
         785005
                    BRÜNINGS Live-Saving Tube, outer diameter 5 mm
25
26
          785009
                    Same, outer diameter 9 mm
          530416
                    "ATRAUMA" Atraumatic Tissue Forceps, length 16 cm
27)
         793401
    2x
                    Tissue Forceps, 1 x 2 teeth, standard width, length 14.5 cm
28
          793402
                    Same, medium
          793403
                    Same, narrow
30
31
         513410
                    COTTLE Scissors, curved, length 10.5 cm
         533212
                    ADSON-BROWN Tissue Forceps, atraumatic, fine side grasping teeth, length 12 cm
(32)
          748220
                    DUPLAY Dressing and Sponge Holding Forceps, curved, length 21 cm
33
         755120
                    HALLE-BIRKET Forceps, straight, length 20 cm
34)
    2x
         754719
                    SCHNIDT Forceps, slightly curved, length 19 cm
35
36
         794016
                    ROCHESTER-PEAN Artery Forceps, straight, length 16 cm
    2x
         794014
                    Same, length 14 cm
37)
         794514
                    OCHSNER-KOCHER Artery Forceps, straight, length 14 cm
    2x
38
         535212
                    HALSTEAD "Mosquito" Artery Forceps, curved, length 12.5 cm
    8x
39
         796011
                    BACKHAUS Towel Forceps, length 11 cm
(40)
         516015
                    Needle Holder, tungsten carbide inserts, length 15 cm
41
         798618
                    HEGAR Needle Holder, slender, tungsten carbide inserts, length 18 cm
42
         219513
                    WULLSTEIN Retractor, 3 x 3 teeth, length 13 cm
43
         219717
                    FISCH Retractor, 3 x 3 teeth, length 17 cm
(44)
         450002
                    HARTMANN Nasal Cutting Forceps, round, size 2
                    Cup Medicine, 100 ccm
(45)
         810810
46
         843116
                    Bipolar Coagulating Forceps, angled
47)
         842219
                    Same, angled tip, length 19 cm
         847000 E Bipolar High Frequency Cord, for 843116 and 842219,
                    suitable for KARL STORZ coagulator AUTOCON® and Erbe coagulator (not illustrated)
         203930
                    Suction Tube, malleable, outer diameter 3 mm
(49)
          771000
                    KILLIAN Laryngeal Applicator, length 25 cm
```

#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage 39741 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label 39762 D2 Color Tab, blue

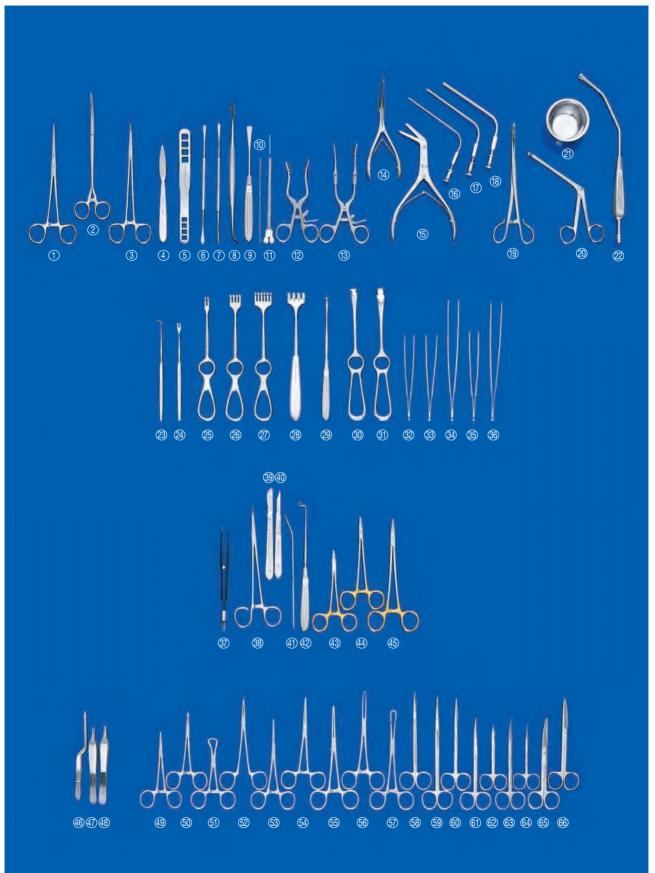
Further accessories for cleaning and sterilization see catalog HYGIENE

8-942

SET 50 469









## **Basic Neck Dissection Set**

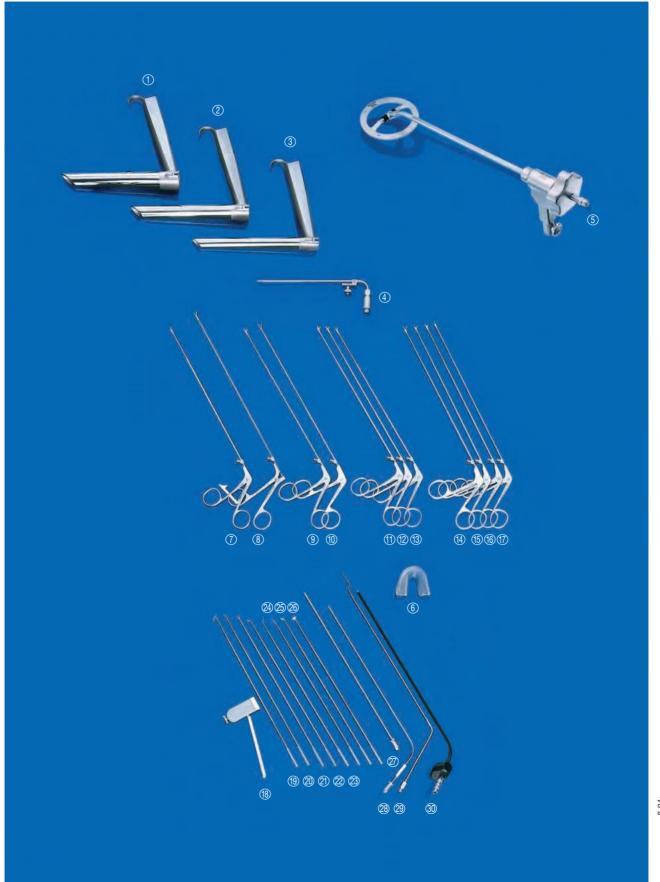
1	2x	755120	HALLE-BIRKETT Forceps, straight			<b>26</b> 5200 46	Electrode Handle, without buttons,
2	2x	748220	DUPLAY Dressing and Sponge				with integrated connection cable
3	27	755401	Holding Forceps, curved NEGUS Forceps, large curve	<u></u>	10.	75 1710	(not illustrated)
4	ZX	787000	KOCHER <b>Probe</b> , length 16.5 cm	38)	12X	754719	SCHNIDT <b>Forceps,</b> slightly curved, length 19 cm
(5)		740000	BRÜNINGS Tongue Depressor,	39		208100	Surgical Handle, Fig. 4
		.=	length 19 cm			208320	Blade, for Handle 208100, Fig. 20,
<b>6</b>		474000 474200	FREER <b>Elevator</b> , double-ended FREER-JOSEPH <b>Elevator</b> ,	(M)		000000	sterile, package of 100
W)		474200	double-ended	40		208000 208210	<b>Surgical Handle,</b> Fig. 3, length 12.5 cm <b>Blade,</b> Fig 10, sterile, package of 100
8		751411	HENKE <b>Elevator</b> , width 11.5 mm				(not illustrated)
9		169009	JANSEN Raspatory, width 9 mm	•		208211	Same, Fig. 11 (not illustrated)
10		797214	<b>Bulbous Probe,</b> diameter 1.5 mm, length 14.5 cm	41)		797340	REDON <b>Guide Needle,</b> angled, with lancet-shaped tip, 10 Fr.
11)		797314	Grooved Director, length 14.5 cm			800001	DESCHAMPS <b>Ligature Needle</b> , curved
12		219513	WULLSTEIN Retractor, length 13 cm	_			to right, length 20 cm (not illustrated)
(3) (4)		219717 403575	FISCH Retractor, length 17 cm KILLIAN-STRUYCKEN Nasal	42 43		800002	Same, curved to left
(14)		403373	Speculum, blade length 75 mm	43)		516013	Needle Holder, tungsten carbide inserts, length 13 cm
15		789500	KILLIAN Laryngectomy Scissors,	44)		516015	Same, length 15 cm
		004000	with double joint, length 21.5 cm	45)		798618	HEGAR Needle Holder, slender,
16 17		204809 204812	FERGUSON Suction Tube, 9 Fr. Same, 12 Fr.	(B)	21/	156000	tungsten carbide inserts, length 18 cm
18		204815	Same, 15 Fr.	46 47	ZX	156000 533012	LUCAE <b>Ear Forceps</b> , length 14.5 cm ADSON <b>Dressing Forceps</b> , serrated,
19		751001	BLOHMKE Forceps, length 20 cm				length 12 cm
20		450002	HARTMANN Nasal Cutting Forceps,			533112	ADSON Tissue Forceps, 1 x 2 teeth,
<b>(21)</b>		810806	round, size 2, working length 11 cm  Cup Medicine, 60 ccm,	48)	2v	533212	length 12 cm (not illustrated) ADSON-BROWN Tissue Forceps,
•		010000	diameter 70 mm	•	27	300212	atraumatic, fine side grasping teeth,
		810810	Cup Medicine, 100 ccm,				length 12 cm
22		755500	diameter 80 mm (not illustrated) YANKAUER <b>Suction Tube,</b>	49	20x	535212	HALSTEAD "Mosquito" Artery
Œ		733300	length 29 cm	(50)	20x	535612	Forceps, curved, length 12.5 cm Same, 1 x 2 teeth
23		786001	Retractor, sharp, 1 prong	<u>(51)</u>		796011	BACKHAUS Towel Forceps,
24 25		786002	Same, 2 prongs			507044	length 11 cm
(2)	ZX	800402	VOLKMANN <b>Retractors,</b> sharp, 2 prongs	52		537014	<b>Dissecting Forceps,</b> straight, without ratchet, length 14 cm
	2x	800502	Same, blunt (not illustrated)	(53)	12x	794514	OCHSNER-KOCHER Artery Forceps,
26	2x	800404	VOLKMANN <b>Retractors</b> , sharp,				straight, 1 x 2 teeth, length 14 cm
	2v	800504	4 prongs Same, blunt (not illustrated)	(54)	12x	794014	ROCHESTER-PEAN <b>Artery Forceps</b> , straight, length 14 cm
27		800406	VOLKMANN <b>Retractors</b> , sharp,	(55)	4x	794016	Same, length 16 cm
			6 prongs	<b>56</b>	2x	795015	ALLIS Forceps, 4 x 5 teeth, length 15 cm
<u></u>	2x	800506 801414	Same, blunt (not illustrated)	57)	2x	795115	BRAUN <b>Hook Forceps,</b> 4 x 4 teeth,
28		001414	GLANZ <b>Retractor</b> , curved backwards, for retracting the jugular vein	(58)		791815	length 15.5 cm REYNOLDS <b>Dissecting Scissors</b> ,
29		786500	SCHÖNBORN Thymus Retractor	•		701010	curved, delicate tips, length 15 cm
30		801800	LANGENBECK Retractor, 33 x 14 mm	59	2x	752918	METZENBAUM Scissors, curved,
31 32		801600 792402	Same, oval blade, 60 x 20 mm Dressing Forceps, medium,	60		511615	length 18 cm METZENBAUM-LAHEY <b>Scissors</b> ,
<i>05</i>		102702	length 14.5 cm	99		011010	curved, extra slender, length 15 cm
		792403	Same, narrrow (not illustrated)	61)	2x	511514	METZENBAUM Scissors, curved,
33		793401	<b>Tissue Forceps,</b> 1 x 2 teeth, length 14.5 cm	62		513310	length 14 cm
		793402	Same, medium (not illustrated)	( <i>U</i> 2)		313310	STEVENS <b>Scissors</b> , curved, length 10.5 cm
		793403	Same, narrow (not illustrated)	63	2x	511414	JOŠEPH <b>Scissors</b> , curved, length 14 cm
34)		750000	Dressing Forceps, serrated,	64)		511210	Scissors, extra delicate, curved,
35)		530416	length 20 cm "ATRAUMA" Atraumatic Tissue	65)		791202	length 10 cm Scissors, curved, pointed/blunt,
		200.10	Forceps, length 16 cm	29		. 0 1202	length 14.5 cm
36		750112	Tissue Forceps, 1 x 2 teeth,	66		790802	Scissors, straight, pointed/blunt,
37)		842216	length 20 cm  Bipolar Coagulating Forceps, angled				length 14.5 cm
(I)		072210	tip, blunt, tip 1 mm, length 16 cm	A =		wioo woo	monded for containors (not illustrate 1)
		842219	Same, tip 2 mm, length 19 cm		cesso 502 Z		mended for containers (not illustrated): for Cleaning, Sterilization and Storage
		947000 F	(not illustrated)				ion Container, with MicroStop®
		847000 E	Bipolar High Frequency Cord, for 842216/842219 (not illustrated)	397	763 A2	Coding L	abel
			Ball Electrode, 4 mm (not illustrated)			Color Tak	
		<b>26</b> 5200 34	KIRSCHNER Spatula Electrode,				for cleaning and sterilization
			straight (not illustrated)	see	catal	og HYGIENE	

8-942

SET 52 471

## KLEINSASSER Basic Adult Laryngoscopy Set





### KLEINSASSER Basic Adult **Laryngoscopy Set**



1		8590 B	KLEINSASSER Operating Laryngoscope, large, length 17 cm
2		8590 C	Same, medium (most commonly used model)
3		8590 DN	Same, small, length 18 cm (for very difficult anatomical circumstances)
4		8590 GF	Fiber Optic Light Carrier, for use with 8590 B – JL
(5)		8575 K	Laryngoscope Holder and Chest Support, GÖTTINGEN model, rod with metal ring,
•		037310	diameter 9 cm, length 34 cm
6	5x	8575 QS	<b>Teeth Protector,</b> silicone, <b>autoclavable,</b> can also be used as inlay in metal teeth protector
7	J.	8660 N	KLEINSASSER <b>Needle Holder,</b> with ratchet, working length 23 cm
8		8660 L	KLEINSASSER <b>Laryngeal Biopsy Forceps</b> , robust, size 3 x 4 mm, working length 23 cm
9		8594 A	KLEINSASSER <b>Scissors</b> , straight, working length 23 cm
10		8593 A	KLEINSASSER <b>Grasping Forceps</b> , without ratchet, serrated, straight, working length 23 cm
11		8594 B	KLEINSASSER <b>Scissors</b> , angled 45°, working length 23 cm
12		8594 C	Same, curved to right
13		8594 D	Same, curved to left
14		8591 A	KLEINSASSER <b>Cutting Forceps</b> , straight, with 2 mm cupped jaws, working length 23 cm
15		8591 B	Same, curved upwards
16		8591 C	Same, curved to right
17		8591 D	Same, curved to left
18		8597	KLEINSASSER Handle, for 8595 A – 8596 T
19		8596 A	KLEINSASSER Hook, blunt, with probe button, working length 23 cm
20		8596 B	Same, sharp
21		8596 T	KLEINSASSER Knot Tier, working length 23 cm
22		8596 F	KLEINSASSER <b>Needle</b> , curved to left, working length 23 cm
23		8596 E	Same, curved to right
24		8595 C	KLEINSASSER Laryngeal Knife, sickle-shaped, working length 23 cm
25)		8595 E	Same, golf club-shaped
26		8595 A	Same, oval, straight
27)		8596 H	KLEINSASSER Suction Elevator, working length 23 cm
28		8603	KLEINSASSER Suction Tube, outer diameter 2.5 mm
29		8598 B	KLEINSASSER Injection Needle, LUER-Lock, straight
30		8605 N	KLEINSASSER Insulated Cannula, for suction and coagulation, outer diameter 3 mm
		26005 M	Unipolar High Frequency Cord, with 5 mm plug, length 300 cm, for KARL STORZ and Erbe units
			(not illustrated)

#### Accessories recommended for containers (not illustrated):

2x 39502 Z Wire Tray for Cleaning, Sterilization and Storage 39753 A2 Sterilization Container, with MicroStop® Coding Label

39762 D2 Color Tab, blue



## **Basic Pediatric Laryngoscopy Set**





## **Basic Pediatric Laryngoscopy Set**

1	8574 J	BENJAMIN Operating Laryngoscope, for children, length 15 cm
2	8574 JH	Fiber Optic Light Carrier, for distal illumination, length 12 cm, for use with 8574 J/JP
(3)	8587 KK	LINDHOLM <b>Operating Laryngoscope</b> , for children, distal end width 16 mm, length 11 cm
(4)	8587 GF	Fiber Optic Light Carrier, for distal illumination, length 7.5 cm, for for use with Laryngoscope 8587 A/AA/KK
(5)	8587 P	BENJAMIN-LINDHOLM <b>Operating Laryngoscope,</b> for newborn babies and infants,
(3)	0001 F	
		inner diameter of proximal end 26 x 16 mm, distal end 14 x 11 mm, length 9.5 cm
6	8587 PF	Fiber Optic Light Carrier, for distal illumination, length 6.5 cm, for use with 8587 P
7		Clip, for proximal illumination
8	8602 KS	KLEINSASSER <b>Suction Tube,</b> ball-shaped end, outer diameter 2 mm, working length 18 cm
9	8603 KS	Same, outer diameter 3 mm
10	8591 MK	Spoon Forceps, jaws open horizontally, distal end malleable, diameter 4 mm, with cleaning connector,
		working length 18 cm
11)	8593 AK	KLEINŠASSER Grasping Forceps, straight, serrated, with cleaning connector, working length 18 cm
(12)		KLEINSASSER Forceps, upturned, with cupped jaws, 2 mm, with cleaning connector,
Ŭ		working length 18 cm
(13)	8591 AK	Same, straight
(14)	8594 DK	KLEINSASSER <b>Scissors</b> , curved to left, with cleaning connector, working length 18 cm
(15)	8594 CK	Same, curved to right
(16)		KLEINSASSER <b>Scissors</b> , straight, with cleaning connector, working length 18 cm
17	8575 KC	BENJAMIN-PARSONS Laryngoscope Holder and Chest Support, rod with metal ring, with 2 lateral screws

### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage
39752 A2 Sterilization Container, with MicroStop®
39763 A2 Coding Label
39762 D2 Color Tab, blue

## STEINER Basic LASER Laryngoscopy Set for Adults





### STEINER Basic LASER **Laryngoscopy Set for Adults**



1	8666 AN	STEINER <b>Distending Operating Laryngoscope</b> , for adults, lightweight construction, channel removing vapor integrated in blade and handle, length 18 cm
2	8666 DN	STEINER <b>Distending Operating Oropharyngoscope</b> , for adults, with right and left side wings to prevent the tongue/soft tissue from obstructing the lumen, channel removing vapor integrated in handle and blade, length 14 cm, for use with Clip 497 AC
3	8661 CN	STEINER <b>Operating Laryngoscope,</b> medium-large, for adults, with integrated channel to remove vapor, length 18 cm
4	8661 DN	Same, small, for adults with difficult anatomical circumstances and for children, length 19 cm
(5)	8663 BH	Grasping Forceps, curved to right, serrated, insulated sheath, working length 23 cm
6	8663 CH	Same, curved to left
Ō	8593 GM	Miniature Grasping Forceps, extra delicate, serrated, with triangular jaws, curved upwards to right, working length 23 cm
8	8593 HM	Same, curved upwards to left
9	8662 D	LARYNGOFORCE®II Grasping Forceps, delicate, serrated, special matt finish, working length 22 cm
10	8662 E	LARYNGOFORCE®II Grasping Forceps, with oval alligator jaws, small, working length 22 cm
11	8662 FL	Same, medium, working length 22 cm
12	8662 GL	LARYNGOFORCE® II Grasping Forceps, with oval, fenestrated alligator jaws, large,
		with suction channel to remove LASER vapors, working length 22 cm
(13)	8665 T	Clips, titanium LT 200, medium, 5 mm, sterile, package of 36 cartridges with 6 clips each
14)	8665 L	LARYNGOFORCE® II Clip Forceps, jaw curved to left, working length 22 cm
15	8665 R	Same, jaw curved to right
16	8606 D	Coagulation Suction Tube, with ergonomic handle, insulated, with connection for unipolar coagulation, outer diameter 2 mm, working length 23 cm
17	8606 E	Same, outer diameter 2.5 mm
18	8606 F	Same, outer diameter 3.5 mm
	26005 M	Unipolar High Frequency Cord, with 5 mm plug, length 300 cm, for KARL STORZ and Erbe units (not illustrated)
19	8596 R	<b>Protector,</b> to protect tissue against unintentional LASER irradiation, oval, diameter 7 mm, working length 23 cm
20	497 AC	Clip, for proximal illumination
21)	8575 K	Laryngoscope Holder and Chest Support, GÖTTINGEN model, rod with metal ring, diameter 9 cm, length 34 cm
If re	equired:	
	8575 L	<b>Support Table,</b> GÖTTINGEN model, for Laryngoscope Holder 8575 K/KC, height adjustable swivel arm with movable plate, can be mounted on operation table equipped with standard sliding rail 25 x 10 mm

### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage 39752 A2 Sterilization Container, with MicroStop®

(not illustrated)

39763 A2 Coding Label

39762 D2 Color Tab, blue

## WERNER Special Pediatric LASER Laryngoscopy Set





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## WERNER Special Pediatric LASER Laryngoscopy Set



1	8590 LL	KLEINSASSER Laryngoscope, modified by RUDERT for CO <sub>2</sub> LASER surgery, for infants, length 13 cm
2	8574 JK	Suction Tube, to remove vapor, for use with Laryngoscope 8590 LL
3	8574 JH	Fiber Optic Light Carrier, for use with Laryngoscope 8590 LL
4	8574 J	BENJAMIN Operating Laryngoscope, for children, length 15 cm
	8574 JK	Suction Tube, to remove vapor, for use with Operating Laryngoscope 8574 J
6	8574 JH	Fiber Optic Light Carrier, for use with Operating Laryngoscope 8574 J
7	8574 JB	BENJAMIN Operating Laryngoscope, for children, small size, length 11.5 cm
	8587 PM	Suction Tube, to remove vapor, for use with Operating Laryngoscope 8574 JB
	8587 PF	Fiber Optic Light Carrier, for use with Operating Laryngoscope 8574 JB
	8587 P	BENJAMIN-LINDHOLM Operating Laryngoscope, for newborn babies and infants, length 9.5 cm
(f)	8587 PM	Suction Tube, to remove vapor, for use with Operating Laryngoscope 8587 P
	8587 PF	Fiber Optic Light Carrier, for use with Operating Laryngoscope 8587 P
	8594 AJ	KLEINSASSER Scissors, straight, with cleaning connector, working length 21 cm
Ŭ	8594 AK	Same, working length 18 cm
(14)	8594 CJ	KLEINSASSER Scissors, curved to right, with cleaning connector, working length 21 cm
Ŭ	8594 CK	Same, working length 18 cm
(15)	8594 DJ	KLEINSASSER Scissors, curved to left, with cleaning connector, working length 21 cm
_	8594 DK	Same, working length 18 cm
(16)	8591 AJ	KLEINSASSER Forceps, straight, with 2 mm cupped jaws, with cleaning connector, working length 21 cm
	8591 AK	Same, working length 18 cm
17)	8591 CJ	KLEINSASSER Forceps, curved to right, with 2 mm cupped jaws, with cleaning connector,
		working length 21 cm
	8591 CK	Same, working length 18 cm
(18)	8591 DJ	KLEINSASSER Forceps, curved to left, with 2 mm cupped jaws, with cleaning connector,
		working length 21 cm
	8591 DK	Same, working length 18 cm
19	8591 RJL	Spoon Forceps, diameter 2 mm, opens horizontally to right, sheath conically reinforced from distal to
		proximal, with suction channel to remove vapor, with cleaning connector, working length 21 cm
		Same, working length 18 cm
20		Same, opens horizontally to left, working length 21 cm
		Same, opens horizontally to left, working length 18 cm
21)	8596 OJ	
		working length 21 cm
	8596 OK	Same, working length 18 cm
	8575 RC	Teeth Protector, metal, small
23	8575 RB	Teeth Protector, metal, medium
24)	8575 QS	Teeth Protector, silicone, autoclavable, can also be used as inlay in metal teeth protector
25)	8606 DJ	Coagulation Suction Tube, with ergonomical handle, insulated, outer diameter 2 mm, working length 21 cm
	8606 DK	Same, working length 18 cm
26)	8606 EJ	Same, outer diameter 2.5 mm, working length 21 cm
	8606 EK	Same, working length 18 cm
	26005 M	Unipolar High Frequency Cord, with 5 mm plug, length 300 cm, for KARL STORZ and Erbe units
_		(not illustrated)
27)	8596 WJ	Cotton Applicator, straight, working length 21 cm
		Same, working length 18 cm
28	8575 K	Laryngoscope Holder and Chest Support, GÖTTINGEN model, rod with metal ring, diameter 9 cm,
		length 34 cm

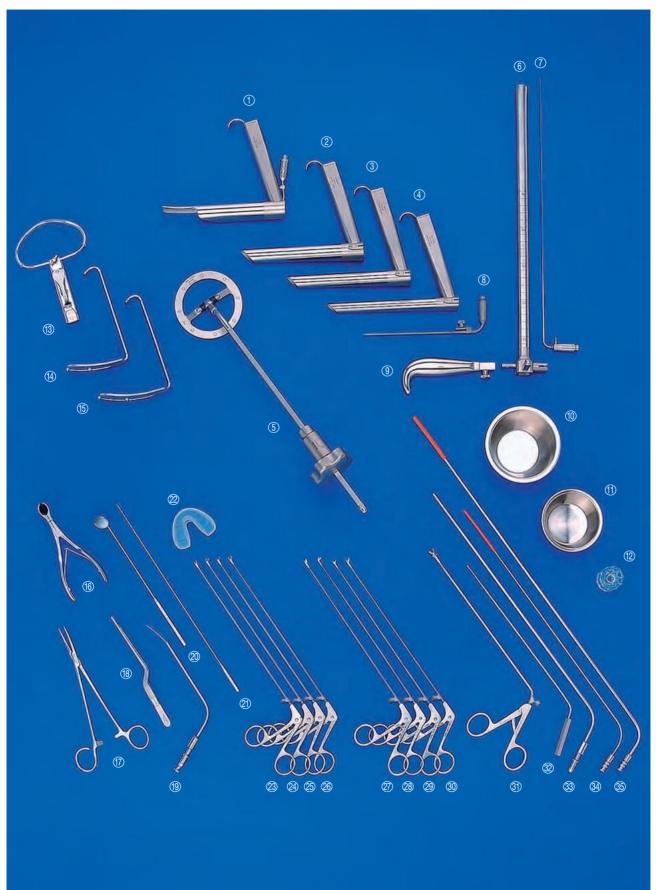
#### Accessories recommended for containers (not illustrated):

39502 Z Wire Tray for Cleaning, Sterilization and Storage 39752 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label 39762 D2 Color Tab, blue







12-08

SET 61



## **Basic Panendoscopy Set**

1	8575 C	RIECKER <b>Laryngoscope</b> , slotted, adult size, with Fiber Optic Light Carrier 8575 CF
2	8590 B	KLEINSASSER Operating Laryngoscope, large, length 17 cm
3	8590 C	KLEINSASSER Operating Laryngoscope, medium, length 17 cm (most commonly used model)
<u>(4)</u>	8590 DN	KLEINSASSER Operating Laryngoscope, small, length 18 cm (for particularly difficult anatomical
0	0000 2.1	circumstances)
(5)	8575 K	Laryngoscope Holder and Chest Support, GÖTTINGEN model
•	007010	including:
		Laryngoscope Holder, GÖTTINGEN model, with adjustment wheel
		Support Rod, movable, with metal ring, diameter 9 cm, length 34 cm
6	12060 AV	ROBERTS-JESBERG <b>Esophagoscope</b> , oval, size 12 x 16, length 40 cm, for use with Fiber Optic
•	12000 AV	Light Carrier 12061 AV and/or Prismatic Light Deflector 10101 FA
7	12061 AV	Fiber Optic Light Carrier, for use with esophagoscopes, length 40 cm
(8)	8590 GF	Fiber Optic Light Carrier, for distal illumination, working length 14 cm
•	495 UD	Fiber Optic Light Cable, with straight connector, 2x diameter 3.5 mm, length 180 cm, for simultaneous light
	400 OD	transmission for 2 instruments (not illustrated)
9	12070	Handle
10	810820	Cup Medicine, 200 ccm, diameter 100 mm, height 50 mm
11)	810810	Cup Medicine, 100 ccm, diameter 80 mm, height 30 mm
12	818500	Medicine Dish, glass, diameter 32 mm, colored
13	744600	McIVOR <b>Mouth Gag,</b> with removable bow for replacement of rubber tube
14	744303	Tongue Blade, WÜRZBURG model, slotted, size 3
(15)	744304	Same, size 4
16	400500	HARTMANN <b>Nasal Speculum,</b> for adults, length 13 cm
17)	754719	SCHNIDT Forceps, slightly curved, serrated, length 19 cm
(18)	426516	JANSEN <b>Nasal Dressing Forceps,</b> bayonet-shaped, length 16.5 cm
19	204810	FERGUSON Suction Tube, with cut-off hole and stylet, LUER, 10 Fr., working length 11 cm
20	769905	Laryngeal Mirror, with unscrewable hexagonal handle, size 5
21	8596 W	Cotton Applicator, straight, working length 25 cm
2	8575 QS	Teeth Protector, silicone, autoclavable
23	8591 A	KLEINSASSER <b>Cutting Forceps,</b> straight, with 2 mm cupped jaws, working length 23 cm
24	8591 B	Same, curved upwards
25	8591 C	Same, curved to right
26	8591 D	Same, curved to left
27	8594 A	KLEINSASSER <b>Scissors</b> , straight, working length 23 cm
28	8594 B	Same, angled 45°
29	8594 C	Same, curved to right
30	8594 D	Same, curved to left
(31)	8591 P	<b>Cutting Forceps,</b> with round 5 mm cupped jaws, robust model, double action jaws, sheath diameter 2.5 mm,
0)	00011	working length 23 cm
(32)	8596 D	Laryngeal Probe, straight, sheath angled, round handle, working length 23 cm
33		Suction Tube, diameter 4 mm, working length 35 cm
34	10381 B	Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm
35)	10381 A	Suction Tube, with rubber tip, straight, diameter 4 mm, working length 50 cm
	100017	Table, marriable up, straight, diameter 4 mm, working length 60 cm

### Accessories recommended for containers (not illustrated):

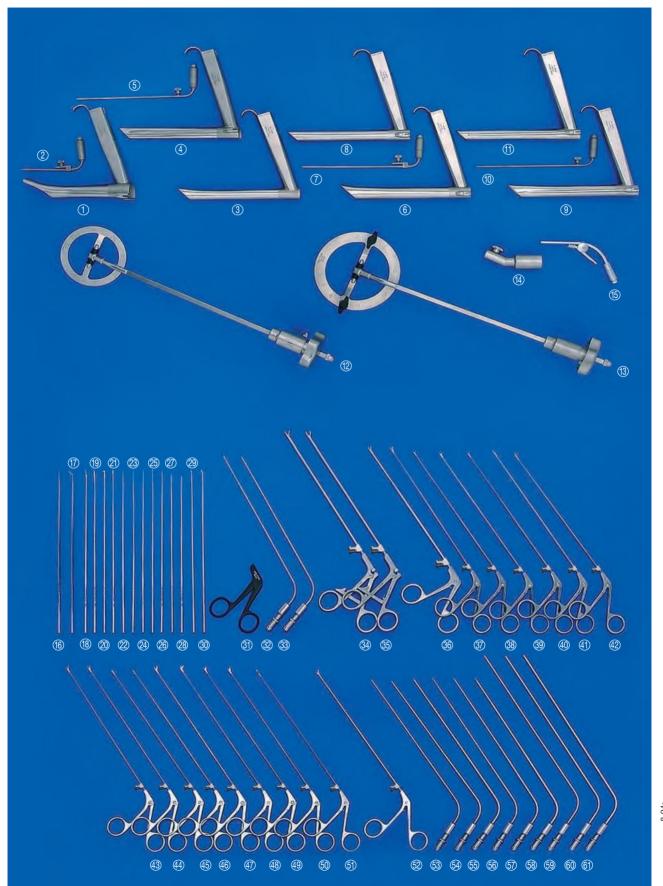
2x 39502 Z Wire Tray for Cleaning, Sterilization and Storage

39753 A2 Sterilization Container, with MicroStop®

39763 A2 Coding Label 39762 D2 Color Tab, blue

## WOO/SHAPSHAY/OSSOFF Microsurgical **Instrument Set for Phonosurgery**





## WOO/SHAPSHAY/OSSOFF Microsurgical Instrument Set for Phonosurgery



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1	8587 A	LINDHOLM <b>Operating Laryngoscope</b> , length 15 cm	34)	8659 C	FEHLAND <b>Needle Holder,</b> angled 90° to right, working length 20 cm
2	8587 GF	Fiber Optic Light Carrier, for use with	35)	8659 D	Same, angled to left
_		Laryngoscope 8587 A	36	8660 P	KLEINSASSER Needle Holder, straight,
(3)	8574 SL	BENJAMIN Slimline Operating			working length 20 cm
		Laryngoscope and Subglottiscope,	37)	8681 A	Micro Forceps, straight, with 1 mm cupped
	0E00 C	for adults, length 17 cm	<u></u>	0601 D	jaws, working length 20 cm
4)	8589 C	RUDERT Anterior Commissure Laryngoscope, medium, universal size,	38 39	8681 B 8681 C	Same, curved upwards Same, curved to right
		triangular spatula shaped, length 17 cm	40	8681 D	Same, curved to left
(5)	8574 LF	Fiber Optic Light Carrier, length 16 cm,	<b>41</b> )	8683 A	Micro Grasping Forceps, straight, serrated,
0	001	for use with Laryngoscopes		000071	working length 20 cm
		8590 AL/BL/CL/DL/JA	<b>42</b>	8683 B	Same, curved upwards
6	8590 J	KLEINSASSER Operating Laryngoscope,	43	8683 C	Same, curved to right
		for anterior commissure, length 18 cm	44	8683 D	Same, curved to left
7	8590 GF	Fiber Optic Light Carrier, for use with	45)	8683 G	SHAPSAY-PERETTI Micro Grasping
_		Laryngoscopes 8590 B – JN			Forceps, curved upwards to right, working
8	8590 C	KLEINSASSER Operating Laryngoscope,	<b>@</b>	000011	length 20 cm
	0500 14	medium, length 17 cm	46	8683 H	Same, curved upwards to left
9	8590 JA	KLEINSASSER Laryngoscope,	47)	8684 A	Micro Scissors, straight,
10)	8574 LF	length 18 cm, for anterior commissure	<b>48</b>	8684 B	working length 20 cm
(1)	0374 LF	Fiber Optic Light Carrier, length 16 cm, for use with Laryngoscopes	49	8684 C	Same, curved upwards Same, curved to right
		8590 AL/BL/CL/DL/JA	50	8684 D	Same, curved to left
11)	8590 CL	KLEINSASSER <b>Laryngoscope</b> , length 17 cm	(51)	8686 A	Micro Grasping Forceps, staight, hollowed
(12)	8575 K	Laryngoscope Holder and Chest Support,			jaws, serrated tips, opens horizontally to
_		GÖTTINGEN model, rod with metal ring,			right, working length 20 cm
		diameter 9 cm, length 34 cm	(52)	8687 A	Micro Alligator Forceps, both jaws open
(13)	8575 KC	BENJAMIN-PARSONS Laryngoscope			vertically, with suction channel to remove
_		Holder and Chest Support			LASER vapors, working length 20 cm
14)	8575 V	Extension, GRONINGEN model, for	53	8691 A	Suction Tube, with cut-off hole, tip with
		enlargement of opening angle of support rod		0004 D	central opening, outer diameter 1 mm
<b>4</b>	107.40	for overweight patients	<u>54</u>	8691 B	Same, outer diameter 1.5 mm
(15) (16)	497 AC 8693 A	Clip, for proximal illumination	(55) (56)	8691 C 8692 A	Same, outer diameter 2 mm
17)	8693 B	<b>Probe,</b> straight, diameter 1 mm <b>Same,</b> angled 45°	00	0032 A	Suction Tube, with cut-off hole, tip closed, with 2 lateral openings, outer diameter 1 mm
18)	8656 A	Sickle Knife, curved, delicate, 3 to 1 mm	<b>67</b>	8692 B	Same, outer diameter 1.5 mm
•	000071	tapered shaft, total length 23 cm	(58)	8692 C	Same, outer diameter 2 mm
19	8656 B	Same, straight cutting	<u>5</u> 9	8602	KLEINSASSER Suction Tube,
20	8656 C	Round Knive, vertical cutting, delicate,			outer diameter 2 mm
		3 to 1 mm tapered shaft, total length 23 cm	60	8603	Same, outer diameter 2.5 mm
21)	8656 D	Lancet Knife, straight, delicate, 3 to 1 mm	61)	8604	Same, outer diameter 3 mm
_		tapered shaft, total length 23 cm			
22	8656 E	Needle, straight, sharp, delicate, 3 to 1 mm			
<u> </u>	06EC F	tapered shaft, total length 23 cm	Α.		recommended for containing fact that the
23	8656 F	Hook 90°, 1 mm, sharp, delicate, 3 to 1 mm			recommended for containers (not illustrated):
24)	8656 G	tapered shaft, total length 23 cm Same, 2 mm	2x	39502 Z	Wire Tray for Cleaning, Sterilization and
25)	8656 J	<b>Dissector,</b> straight, ball end, delicate, 3 to		20752 40	Storage Sterilization Container, with MicroStop®
9	50000	0.6 mm tapered shaft, diameter 1.3 mm, total			Coding Label
		length 23 cm			Color Tab, blue
26	8656 L	<b>Elevator,</b> slightly curved, blunt, delicate, 3 to			essories for cleaning and sterilization
	_	1 mm tapered shaft, total length 23 cm		catalog F	
27)	8656 LS	Same, sharp tip		, caralog .	
28	8656 N	Same, angled 15°			
29	8656 R	Curette, oval spoon, straight, delicate,			
6	0056.0	3 to 1 mm tapered shaft, total length 23 cm			
30	8656 S	Same, angled 35°			
31)	8657 H	Universal Handle, forceps shape, with 2			
30	8656 \/I	handle rings, length 9 cm  Suction Elevator, angular, with grip plate and			
32)	8656 VL	cut-off hole, working length 21 cm, total			
		length 23 cm			
(2)	8656 VR	Same, curved to right			
(33)					

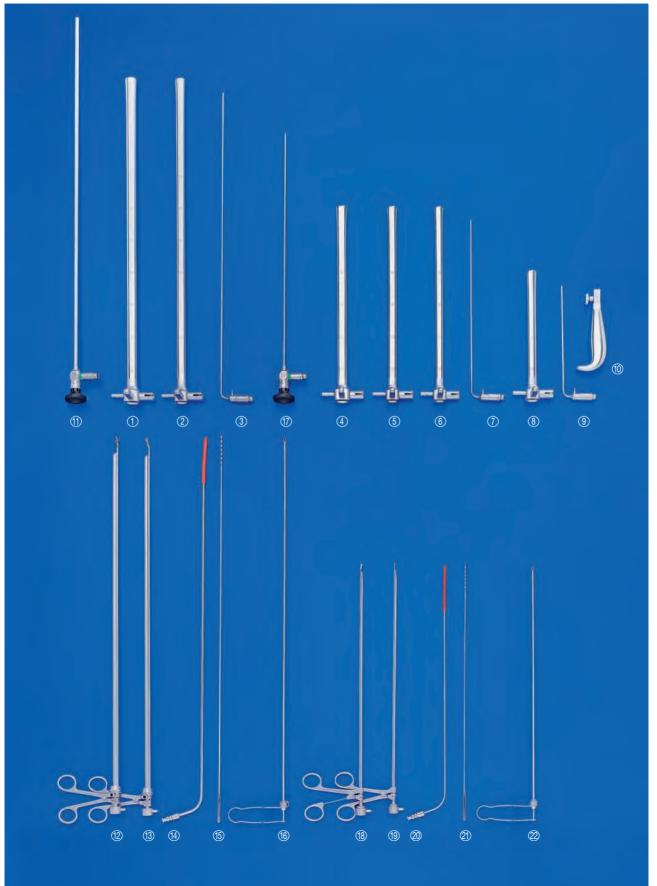
8-94

SET 64 483

## **Esophagoscopy Adult Set**

Basic Set





## **Esophagoscopy Adult Set**





1	12060 A	ROBERTS-JESBERG <b>Esophagoscope</b> , oval, size 12 x 16, length 50 cm
2	12060 C	<b>Same,</b> size 10 x 14
3	12061 A	Fiber Optic Light Carrier, for use with esophagoscopes, length 50 cm
4	12060 B	ROBERTS-JESBERG <b>Esophagoscope</b> , oval, size 12 x 16, length 30 cm
(5)	12060 D	<b>Same,</b> size 10 x 14
6	12060 F	<b>Same,</b> size 8 x 12
7	12061 B	Fiber Optic Light Carrier, for use with esophagoscopes, length 30 cm
8	12060 S	ROBERTS-JESBERG Hypopharyngoscope, oval, size 10 x 14, length 20 cm
9	12061 C	Fiber Optic Light Carrier, for use with hypopharyngoscopes, length 20 cm
(10)	12070	Handle, for esophagoscopes

#### Recommended accessories for esophagoscopes with a length of 50 cm

11)		12015 AA	HOPKINS® Straight Forward Telescope 0°, diameter 5.5 mm, length 53 cm, autoclavable,
			fiber optic light transmission incorporated,
			color code: green
12		12016 M	Optical Forceps, alligator, large jaws, for hard foreign bodies
(13)		12016 L	Optical Forceps, spoon-shaped, round, for biopsy
(14)		10381 AL	Suction Tube, with rubber tip, straight, diameter 4 mm, working length 55 cm
(15)	3x	10384 AL	Cotton Carrier, working length 55 cm
16		10387 AL	Sponge Holder, with spring handle, working length 55 cm

#### Recommended accessories for esophagoscopes with a length of 30 and 20 cm

17)		10324 AA	HOPKINS® Straight Forward Telescope 0°, diameter 2.9 mm, length 36 cm, autoclavable,
			fiber optic light transmission incorporated,
			color code: green
18)		10378 HF	Optical Forceps, alligator, for grasping hard foreign bodies, with spring-action handle
19		10378 L	Optical Forceps, spoon-shaped, for biopsy
20		10381 B	Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm
21)	3x	10384 B	Cotton Applicator, working length 35 cm
22		10387 B	Sponge Holder, with spring handle, working length 35 cm

#### Recommended Wire Trays (not illustrated):

39501 BR Wire Tray for Cleaning, Sterilization and Storage, of telescopes and accessories for bronchoscopy 39501 ES Wire Tray for Cleaning, Sterilization and Storage, of instruments and accessories for bronchoscopy and esophagoscopy

## **Esophagoscopy Pediatric Set** with Proximal Illumination

Basic Set





486

## **Esophagoscopy Pediatric Set** with Proximal Illumination





**Basic Set** 

1		10324 AA	<b>HOPKINS® Straight Forward Telescope 0°</b> , diameter 2.9 mm, length 36 cm, <b>autoclavable</b> , fiber optic light transmission incorporated, color code: green
2		12030 A	Esophagoscope Tube, size 6, length 30 cm
3		12030 B	Same, size 5
4		12030 C	Same, size 4
(5)		10101 FA	Prismatic Light Deflector, autoclavable, with connection to fiber optic light cable
6		10338 N	Rubber Telescope Guide, for use with telescopes and optical forceps
7		10378 KF	Optical Forceps, with KILLIAN bean jaws, for grasping peanuts and soft foreign bodies, with spring-action handle, for use with HOPKINS® Telescope 10324 AA
8		10378 HF	Optical Forceps, alligator, for grasping hard foreign bodies, with spring-action handle, for use with HOPKINS® Telescope 10324 AA
9		10381 B	Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm
10	3x	10384 B	Cotton Applicator, working length 35 cm
(11)		10387 B	Sponge Holder, with spring handle, working length 35 cm

### Accessories recommended for containers (not illustrated):

00750 40	01 11 11	A	2016	N4: O1 @
39753 A2	Sterilization	Container.	with	IVIICroStop®

39219 XU Universal Instrument Rack with Silicone Holders and Tie-downs

39100 S Large Diamond Grid Silicone Insert

39763 A2 Coding Label

Further accessories for cleaning and sterilization see catalog HYGIENE

8-1

SET 68 487

## **Basic Bronchoscopy Adult Set** with Proximal Illumination

Basic Set





## **Basic Bronchoscopy Adult Set** with Proximal Illumination



**Basic Set** 

1		10320 AA	HOPKINS® Straight Forward Telescope 0°, diameter 5.5 mm, length 50 cm, autoclavable, fiber optic light transmission incorporated,
			color code: green
2		10320 BA	HOPKINS® Forward-Oblique Telescope 30°, diameter 5.5 mm, length 50 cm, autoclavable,
•		10020 271	fiber optic light transmission incorporated,
			color code: red
3		10318 B	Universal Bronchoscope, size 8.5, length 43 cm
4		10318 C	Same, size 7.5
(5)		10318 D	Same, size 6.5
6		10315 P	FLUVOG Adaptor, with sliding glass window plug, sealing cap, notched lens and keyhole
			opening, movable
7		10924 D	Adaptors, to respirator
8		10318 S	Instrument Guide, for suction catheter
9		10318 K	Injection Cannula, for positive pressure assisted ventilation, LUER-Lock,
			outer diameter 3.5 mm, for use with Bronchoscopes 10318 B/C/D
10		10350 HF	Optical Forceps, alligator, for hard foreign bodies, large jaws, with spring-action handle
11)		10350 KF	Optical Forceps, for peanuts and soft foreign bodies, with spring-action handle
(12)		10350 L	Optical Biopsy Forceps, spoon-shaped, round, for biopsy
(13)	3x	10384 A	Cotton Carrier, working length 50 cm
(14)		10387 A	Sponge Holder, with spring handle, working length 50 cm
15		10381 A	Suction Tube, with rubber tip, straight, diameter 4 mm, working length 50 cm
16		10382 A	Suction Tube, with rubber tip, curved, diameter 4 mm, working length 50 cm

### Recommended Wire Trays (not illustrated):

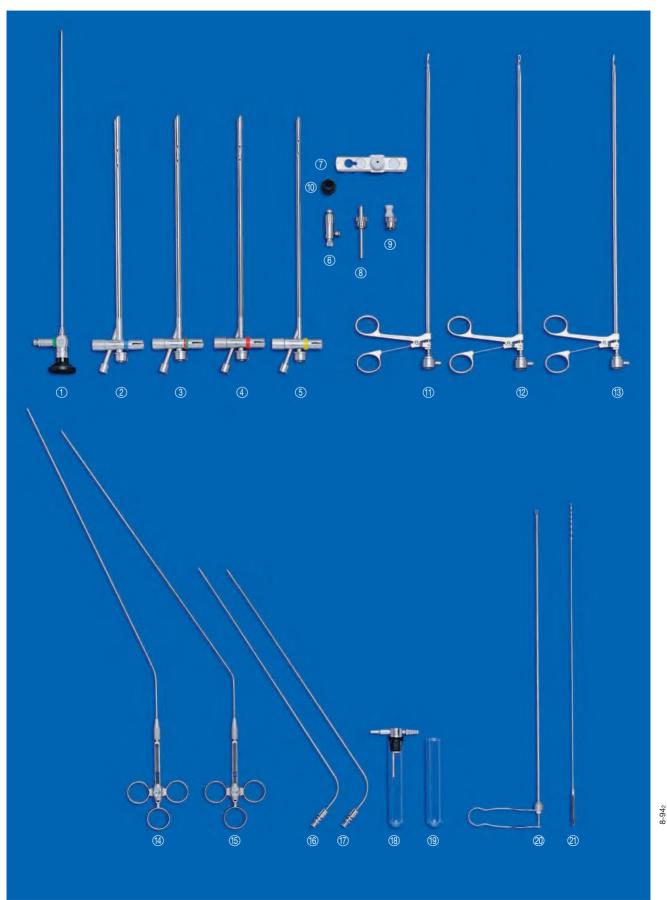
39501 BR Wire Tray for Cleaning, Sterilization and Storage, of telescopes and accessories for bronchoscopy 39501 ES Wire Tray for Cleaning, Sterilization and Storage, of instruments and accessories for bronchoscopy and esophagoscopy

Further accessories for cleaning and sterilization see catalog HYGIENE

## **Basic Bronchoscopy Pediatric Set** with Proximal Illumination

Basic Set





490

### **Basic Bronchoscopy Pediatric Set** with Proximal Illumination



**Basic Set** 

(	1)		10324 AA	HOPKINS® Straight Forward Telescope 0°, diameter 2.9 mm, length 36 cm, autoclavable,
	_			fiber optic light transmission incorporated,
				color code: green
(	2		10339 A	DOESEL-HUZLY Bronchoscope, size 6, length 30 cm
(	3)		10339 BB	Same, size 4.5
(	4)			Same, size 4
(	5)			Same, size 3.5
(	3 4) 5) 6)		10101 FA	Prismatic Light Deflector, autoclavable, with connection to fiber optic light cable
(	7)		10338 P	FLUVOG Adaptor, with sliding glass window plug, sealing cap, notched lens and keyhole opening,
				movable
(	8		10318 K	Injection Cannula, for positive pressure assisted ventilation system, LUER-Lock, outer diameter 3.5 mm
(	9		10338 S	Guide Piece, for suction catheter, short, for bronchoscopes for children and infants
(	10		10924 D	Adaptor, for respirator
(	1		10378 CF	Optical Forceps, 2 x 2 teeth, for grasping coins and flat foreign bodies, with spring-action handle, for
				use with HOPKINS® Telescope 10324 AA and Bronchoscopes 10339 A - DD
(	12)		10378 KF	Optical Forceps, with KILLIAN bean jaws, for grasping peanuts and soft foreign bodies, with spring-
	_			action handle, for use with HOPKINS® Telescope 10324 AA and Bronchoscopes 10339 A - DD
(	13)		10378 HF	Optical Forceps, alligator, for grasping hard foreign bodies, with spring-action handle, for use with
	_			HOPKINS® Telescope 10324 AA and Bronchoscopes 10339 A – DD
(	14)		10386 B	Foreign Body Basket, with ring handle, working length 35 cm
(	15)		10389 B	Cytology Brush, with ring handle, working length 35 cm
(	6 7		10381 B	Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm
(	17)		10382 B	Suction Tube, with rubber tip, curved, diameter 2 mm, working length 35 cm
(	18)	_	10432 N	Aspirator, for collecting secretions, can be connected to suction tubes or suction catheters
(	9	2x	10432 E	Spare Glass, for Aspirator 10432 N
(	20)	2x	10384 B	Cotton Applicator, working length 35 cm
(	21)		10387 B	Sponge Holder, with spring handle, working length 35 cm

### Accessories recommended for containers (not illustrated):

39753 A2 Sterilization Container, with MicroStop®

39219 XU Universal Instrument Rack with Silicone Holders and Tie-downs
39100 S Large Diamond Grid Silicone Insert

39763 A2 Coding Label



### **CCD Video Rhino-Laryngoscope**

for use with IMAGE1, TELECAM SL II, TELECAM DX II, TELE PACK and TELE PACK X



### **Special Features:**

- Large viewing angle and movable distal tip facilitates orientation
- Waterproof, fully immersible for cleaning and disinfection
- Sterilizable with EtO-Gas, Sterrad® 100S and Steris® System 1/System 1E
- Excellent optical quality of both lens system and video chip
- Superior life span due to robust mechanical design
- Sensitive and stable control via ergonomic handle
- Short insertion tip with smooth-running and non-twisting angle mechanism
- Optimally matched, non-rotational insertion sheath



### **CCD Video Rhino-Laryngoscope**

for use with IMAGE1, TELECAM SL II, TELECAM DX II, TELE PACK and TELE PACK X





11101 VP CCD Video Rhino-Laryngoscope, PAL, for use with IMAGE1,

TELECAM SL II, TELECAM DX II, TELE PACK and TELE PACK X

Direction of view: 0°
Angle of view: 85°
Deflection up/down: 140°/140°
Working length: 30 cm
Outer diameter: 3.7 mm

11101 VN Same, color system NTSC

#### Following accessories are included:

27677 VC Case

13242 XL Leakage Tester, with bulb and manometer

11025 E **Pressure Compensation Cap,** for ventilation during gas sterilization

Note: The video connecting cables are not included in the set and must be ordered separately!

22 2000 77 Video Endoscope Adaptor, color systems PAL/NTSC,

length 90 cm, for use with GI CCU and IMAGE1

or

22 2001 77 IMAGE1 Video Endoscope Adaptor, color system NTSC,

length 90 cm, for use with all KARL STORZ video

endoscopes

**20** 2130 70 **Video Connecting Cable,** for all KARL STORZ video

endoscopes and TELECAM SL II, TELECAM DX II,

TELE PACK or TELE PACK X, length 60 cm

3-073

LA-FIB 1 B 495

### **TELE PACK X-The Mobile Compact Solution**

**Documentation Terminal for Video Rhino-Laryngoscope** 



TELE PACK X is a compact, portable and flexible system that can be used for a wide range of applications from the doctor's office through to the emergency room.

To enable swift and easy work, TELE PACK X combines all that is needed: monitor, camera and light source.

Consideration has also been given to documentation: Integrated data management enables comprehensive recording of medical examinations or surgical interventions. Multiple USB ports and an SD card slot are available to store the data.

#### Crystal clear display

- 15" LCD display
- Image rotation
- 24-bit color intensity for natural color rendition
- DVI-D video output for connecting HD monitors

#### Flexible storage possibilities

- SD card slot for high storage capacity
- USB ports for external hard drives, USB flash drives and post-script printers
- Picture gallery for records
- Playback of saved videos
- Print-ready patient report documentation

#### **Natural illumination**

- HiLux 50 Watt high-performance light source
- Natural colour rendition close to daylight with a color temperature of 5700 K
- Up to 1000 hours lamp operating time

### Easy control combined with highest safety

- Membrane keyboard for wipe-down disinfection
- Hot keys for rapid and direct adjustment
- Arrow keys for intuitive control
- Connection socket for pedal control

#### **Additional information**

- Sturdy, portable housing
- Ergonomically designed handle for convenient transport
- Universal power supply unit: 100 240 VAC, 50/60 Hz
- Dimensions (w x h x d): 450 x 350 x 150 mm
- Weight: 7 kg



**20** 045001-EN

#### 20 0450 01-EN TELE PACK X

endoscopic video unit for use with TELECAM one-chip camera heads and video endoscopes, incl. 50 W HiLux light source, 15" LCD TFT screen, USB/SD memory module, color systems **PAL/NTSC**, with integrated Image Processing Module, power supply 100 – 240 VAC, 50/60 Hz

including:

**USB Silicone Keyboard,** with touchpad, US character set

USB Flash Drive, 4 GB

**Mains Cord** 

Mains Cord, US version

**Technical information** see catalog TELEPRESENCE **Components/Spare Parts** see chapter 16

496 LA-FIB 2 D





### **Special Features:**

- Large viewing angle and movable distal tip for better orientation
- Waterproof, fully immersible for cleaning and disinfection
- Simple leakage test takes only a few minutes and requires no additional accessories.
- Sterilizable with EtO-Gas, Steris® and Sterrad®
- Exceptional optical quality of both lens and fiber optic image transmission bundle
- Resistant construction and robust mechanical components ensure long life of the instrument

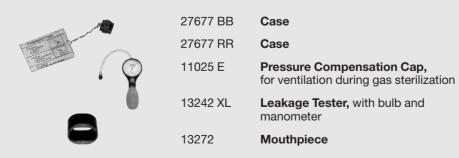


# Laryngo-Fiberscopes

Overview

Laryngo-Fiberscopes	Order No.		$D_{effection}$	Direction of W.	Angle of View	
3.5 x 340 mm	11001 RD	8	180°	0°	90°	
5 x 230 mm	11001 UD		180°	0°	110°	
3.5 x 300 mm	11101 RP		90°	0°	70°	
2.5 x 270 mm	11101 SK		180°	0°	90°	
2.5 x 370 mm	11101 SP		180°	0°	90°	

### Accessories included:



1



						Accesso	ries (includ	led)	
Working Lenan	Working Cher.	Distal End	Jameter Case	Pressure Compens	Leakage Teste.				Grasping Forceps
34 cm	1.5 mm	3.5 mm	27677 BB	11025 E	13242 XL	13272	27651 AK	11003 KA	11003 KB
23 cm	2.3 mm	5.2 mm	27677 RR	11025 E	13242 XL	13272	27651 B	11001 SL	11002 SS
30 cm	-	3.5 mm	27677 RR	11025 E	13242 XL	-	-	-	-
27 cm	-	2.5 mm	27677 RR	11025 E	13242 XL	-	-	-	-
37 cm	-	2.5 mm	27677 RR	11025 E	13242 XL	-	-	-	-

### Accessories included:

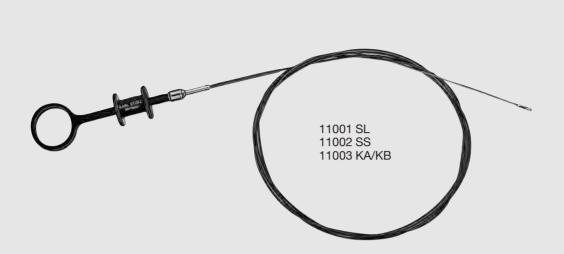
3-07

Children Mil	27651 AK	<b>Cleaning Brush,</b> round, flexible, outer diameter 2 mm, for working channel diameter 1.2 – 1.8 mm, length 75 cm
	27651 B	Cleaning Brush, flexible, for working channel diameter 1.8 – 2.6 mm, length 100 cm
*	11003 KA	<b>Biopsy Forceps,</b> flexible, double action jaws, oval, diameter 1 mm, length 60 cm
	11001 SL	<b>Biopsy Forceps,</b> flexible, double action jaws, oval, 5 Fr., length 60 cm
	11003 KB	<b>Grasping Forceps,</b> flexible, double action jaws, diameter 1 mm, length 60 cm
	11002 SS	<b>Grasping Forceps,</b> flexible, double action jaws, diameter 1.7 mm, length 60 cm

LA-FIB 5 499

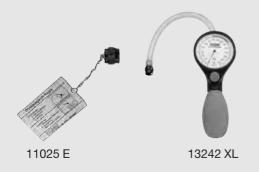
# Additional Accessories for Laryngo-Fiberscopes





### Forceps, Grasping and Biopsy, flexible for Laryngo-Fiberscopes:

Distal Tip	Order No.	Article Description	Diameter	Length
	11003 KA	Biopsy Forceps,	1 mm	60 cm
	11001 SL	double action jaws, oval	1.7 mm	60 cm
	11003 KB	Grasping Forceps,	1 mm	60 cm
	11002 SS	double action jaws	1.7 mm	60 cm



13242 XL

**Leakage Tester,** with bulb and manometer

11025 E

Pressure Compensation Cap, for ventilation during gas sterilization

## **KARL STORZ PULSAR**



## To freeze the moment



# KARL STORZ Stroboscope PULSAR II



With its high-performance LED, the stroboscope PULSAR II generates light for convenient stroboscopy. The frequency of the pulsating light can also be set to continuous light so that it can be used as a position light.

Convenient image documentation involves connecting a camera head to the respective telescope in conjunction with the KARL STORZ documentation system.

The system offers the following features and benefits:

- Compact unit and footswitch design
- Low energy consumption and no lamp change required thanks to cutting-edge LED technology
- No difference between strobe and continuous light in terms of brightniess and color temperature
- Powerful flash even with thin and flexible endoscopes
- No noise generation
- Lightweight
- Text overlay on video image possible
- Display in musical notation



# KARL STORZ Stroboscope PULSAR II



#### System components included:

- LED light source with integrated microphone: In a microphone integrated in the handle, the audio signal is recorded, amplified and analyzed to then synchronize the stroboscope with vocal fold vibration.
- Contact microphone:
   Alternatively, the contact microphone can be used to perform the functions described above.
- The footswitch:

  The footswitch controls phase synchronization in still image mode and slow motion function. It can also be used to control the optional documentation unit.

Additionally available system components

- Camera Control Unit (CCU) and camera heads from KARL STORZ
- Documentation units from KARL STORZ
- Audio equipment for amplification or recording
- KARL STORZ monitors

The system components described above feature these additional functions:

- Automatic brightness control
- Text/data overlay to video image



40 1601 01

**PULSAR II Stroboscope Set,** power supply 100 – 240 V, 50/60 Hz

including:

**Mains Cord** 

**LED Stroboscopy Light Source** 

**Footswitch** 

Contact Sound Microphone, with clip

#### Specifications:

Power Supply	100-240 V, 50/60 Hz
Dimensions w x h x d	305 x 74 x 233 mm
Weight	2.5 kg
Certified to	IEC 601-1, CE acc. to MDD
Power Input	20 VA
Flash light energy level	2.5 Ws (pulse energy)
Triggerable frequency	80 – 1400 Hz

Slow motion frequency	0.5 – 2.5 Hz
Phase shift	0 – 360°
Flash performance	3.5 Ws
Protection class	1
Operating Temperature	10° – 40°
Humidity	5% – 95%
Temperature	20° – 60°
Classification	lla

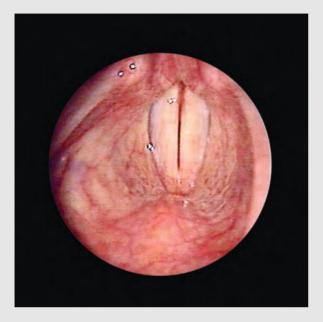
Components/Spare Parts see chapter 16

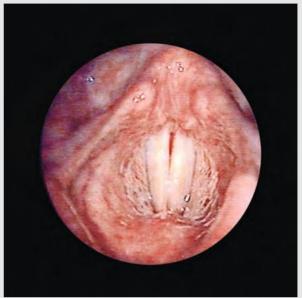
LA-TEL 3 F 503

## KARL STORZ µ-PULSAR



#### Striking detail





With the sensationally handy  $\mu\text{-PULSAR},$  the smallest miniature stroboscopy unit in the world, KARL STORZ offers an "all-in-one" concept for laryngology.

"All-in-one" because, in addition to stroboscopy, it can also be used for documentation; the features of large, cumbersome stroboscopes are complemented by the mobile version; and it's even considerably more costefficient.

Image documentation can normally be carried out by connecting a camera head to the respective telescope in conjunction with the KARL STORZ TELE PACK.

The system, which is based on state-of-the-art microsystem and semiconductor light source technology, can be connected directly to KARL STORZ laryngoscopes independent of the power supply. One of the most important advantages of the power system is therefore its mobility. The small, lightweight and compact KARL STORZ  $\mu\text{-PULSAR}$  can easily be carried in a lab coat and breast pockets or stored in any drawer.

#### Quality/comfort:

- Simple, ergonomic use
- Lightweight (180 g)
- Powerful LED ensures outstanding brightness

#### **Unrestricted mobility:**

- Compact, small, lightweight and portable
- Simple charging system
- Device locks directly onto the endoscope's light port

#### Operative efficiency:

- Considerably more cost-efficient to purchase than a larger system
- Low energy consumption
- No need to change lamp

## KARL STORZ μ-PULSAR



### **Special Features:**

- Easy to operate
- Very good image quality
- Noiseless
- Documentation possible
- Robust housing
- Ideal for consultation work
- Lightweight

- High light intensity
- No separate light source required
- No separate light cable required
- Rechargeable lithium-ion batteries free from memory effect
- All KARL STORZ loupe laryngoscopes can be used



**40** 1500 20

**40** 1500 01 **KARL STORZ μ-PULSAR,** for laryngeal stroboscopy

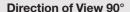
including:

**NEW** Leather Bag for μ-PULSAR

## **HOPKINS®** Telescopes











8700 DKA

**Tele-Laryngo-Pharyngoscope,** with integrated HOPKINS® lateral telescope 90°, diameter 5.8 mm, length 20 cm, **autoclavable,** fiber optic light transmission incorporated, color code: blue

8700 H

**Handle,** for use with Tele-Laryngoscope 8700 CP, 8700 CKA, 8705 CKA and 8700 DKA





8707 DA

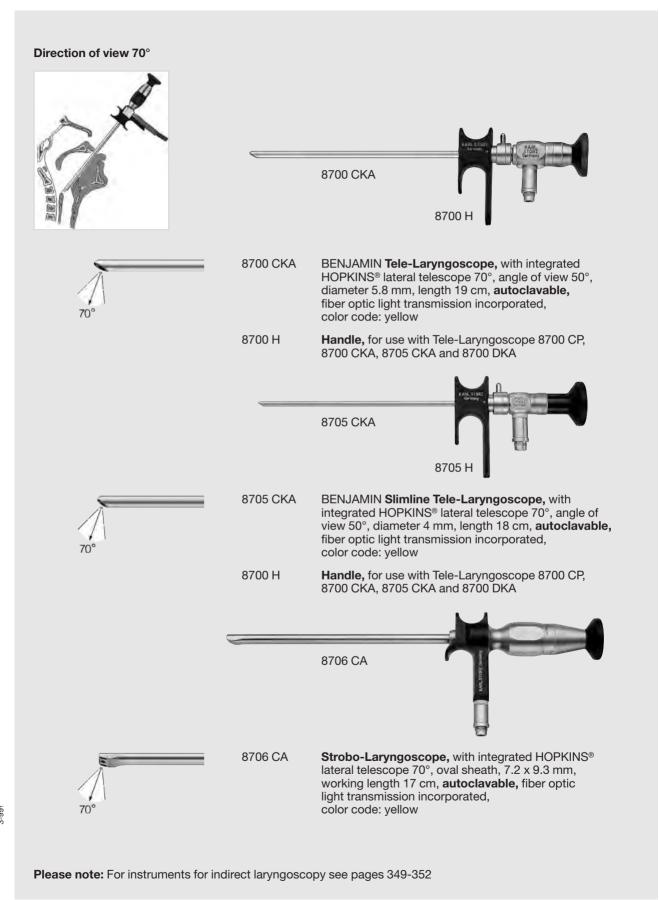
**Tele-Laryngo-Pharyngoscope**, with integrated HOPKINS® lateral telescope 90°, 4x magnification focusing device, diameter 10 mm, length 15 cm, **autoclavable**, fiber optic light transmission incorporated, color code: blue

Please note: For instruments for indirect laryngoscopy see pages 349-352

## **HOPKINS® Telescopes**

for Laryngo-Pharyngoscopy





LA-TEL 7 C US

# Rigid Endoscopy associated with Microlaryngeal Surgery (REMS)

Prof. ANDREA and Prof. DIAS



Endoscopic procedures in general, including techniques carried out in the office and microlaryngoscopy, only enable the observation of the larynx along a vertical axis. This imposes limitations on the diagnosis and physiopathological interpretation of diseases, as well as on treatment and follow-up. Research work on laryngeal microanatomy conducted by the authors reinforced the need to assess the larynx from different perspectives in order to improve the evaluation of pathological findings. This led to the systematic use of rigid endoscopes with different angles of vision (0°, 30°, and 70°) during endotracheal intubation. Rigid Endoscopy associated with Microlaryngeal Surgery (REMS) significantly enhances the ability to assess the larynx and offers high quality imaging, even of regions that are traditionally difficult to explore, such as the inferior surface and free border of the vocal cords, the anterior commissure, the ventricles and the subglottis. Parameters considered important for the evaluation of premalignant and malignant lesions can be analyzed in greater detail, due to the multiperspective assessment offered by the excellent optical quality of the HOPKINS® II telescopes REMS is also beneficial for the assessment of benign pathological indications of the vocal cords and for subsequent excision. REMS is easy to perform and, apart from the rigid telescopes which were specifically designed for this application, it requires no equipment other than that which is required for conventional laryngeal endoscopy.

Prof. M. ANDREA, M. D. and Prof. O. DIAS, M. D., Universidade de Lisboa, Servicio de Otorhinolaringologia, Lisbon, Portugal









Multiperspective assessment of a vocal cord polyp using rigid endoscopes 8712 AA/BA/CA (0°, 30° and 70°). The diameter and length of these endoscopes allow observation of all regions of the larynx with regular endotracheal intubation.

-921

508 LA-TEL 8 D

## **HOPKINS® II Telescopes**

for Rigid Endoscopy associated with Microlaryngeal Surgery (REMS), Prof. ANDREA and Prof. DIAS





## **Accessories**

### for HOPKINS® Telescopes





### **Antifog Solution**

"ULTRA STOP" Antifog Solution, 15006 B

25 ml, pipette bottle

"ULTRA STOP" **Antifog Solution,** 30 ml, sterile, pierce bottle 15006 C

15006 D "ULTRA STOP" Antifog Solution,

15 ml, atomizer bottle



#### **Fiber Optic Light Cables**

495 NL Fiber Optic Light Cable,

diameter 3.5 mm, length 180 cm

495 NA Same, length 230 cm

### Fluid Light Cables

495 FO Fluid Light Cable,

diameter 3 mm, length 180 cm

495 FP Same, length 250 cm

Trays for telescopes see catalog HYGINENE

# White Light Endoscopy (Microlaryngoscopy) vs. Autofluorescence

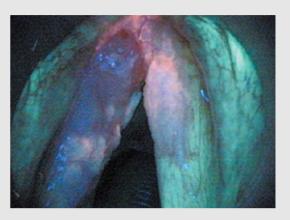


### Diagnosis:

### **White Light**



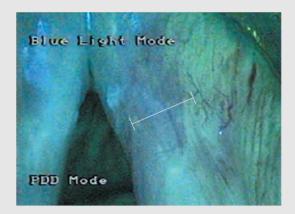
**Autofluorescence** 



Keratinizing squamous cell carcinoma on the left, with moderately dysplastic ramifications towards the right vocal cord









Focal squamous epithelium dysplasia of moderate degree (concomitant with epidermization and focal leucoplasia) only visible in the autofluorescence image by way of of the fluorescence reduction in the marked area (2 patients)



The HAVAS video laryngoscope from KARL STORZ is a significant step forward in endoscopic laryngeal

The HAVAS operating laryngoscope comprises the following components:

Video laryngoscope

surgery.

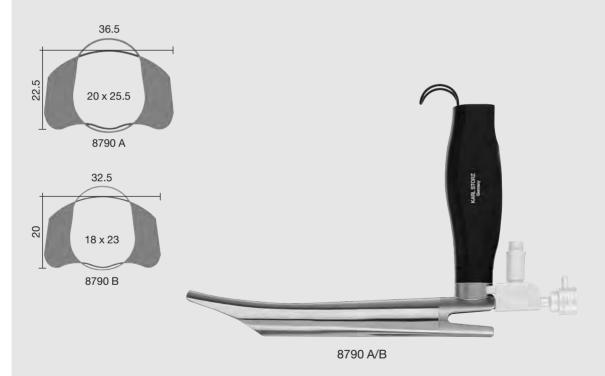
- Integrated light carrier/telescope holder
- Telescopic sheath protector

The laryngoscope enables an optimal visualization of the supraglottic and glottic airway. Furthermore, the angulation of the tip provides a view of areas that are difficult to see such as the anterior commissure and the anterior part of the laryngeal ventricles.

The cut-out lateral ports at the proximal end of the laryngoscope enables the introduction of standard instruments or the new malleable HAVAS **Laryngo***FIT*® instruments for microsurgery. This facilitates endoscopic bimanual surgery using a monitor rather than an operating microscope.

T. HAVAS MB. BS (SYD), MD. (UNSW) FRCSE FRACS FACS A/Professor Conjoint UNSW Suite 506, 1 Newland Street Bondi Junction, NSW, Australia

Dimensions in mm: proximal and distal



8790 A

HAVAS **Operating Laryngoscope**, with extra light handle, large model, length 17 cm, with connector for

Light Carrier 497 HC

8790 B

HAVAS **Operating Laryngoscope**, with extra light handle, medium model, length 17 cm, with connector for

Light Carrier 497 HC

3-11

LA-TEL 13 B US

## HAVAS Operating Laryngoscope \*

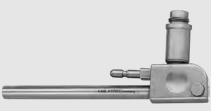
**Accessories** 



The combination of a light carrier with integrated telescope holder facilitates the introduction of the laryngoscope with excellent illumination. The telescopic sheath protector enables the introduction of any 4 mm standard telescope (0/30/45/70/90/120°). The telescope is inserted in the sheath and then anchored in the integrated light source/telescope holder. This enables detailed endo-

scopic examination of all parts of the larynx, such as the laryngeal ventricles or the anterior commissure.

T. HAVAS MB. BS (SYD), MD. (UNSW) FRCSE FRACS FACS A/Professor Conjoint UNSW Suite 506, 1 Newland Street Bondi Junction, NSW, Australia



497 HC

497 HC

HAVAS **Light Carrier**, with integrated telescope channel diameter 5 mm, for proximal illumination, for use with Laryngoscope 8790 A/B



497 HCS

497 HCS

**Telescope Protective Sheath,** outer diameter 5 mm, length 20 cm, for use of Light Carrier 497 HC with Telescopes 7230 AA, BA, CA, DA, EA, FA

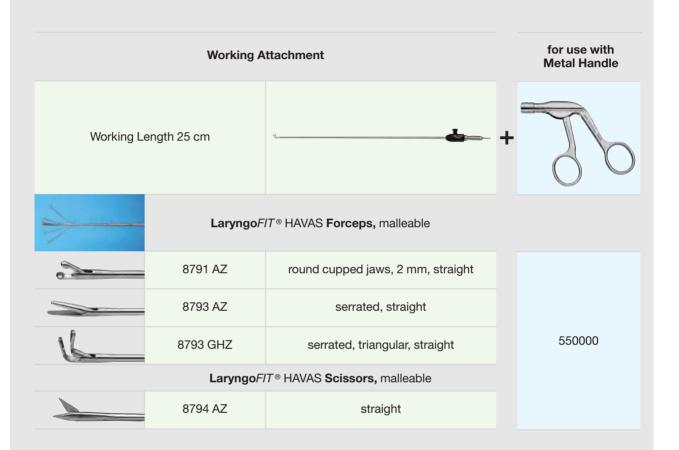
# HAVAS LaryngoFIT® Instruments





### **Special Features:**

- Malleable distal end enables adjustment of the working end according to individual needs
- Can be completely dismantled
- Well-balanced handle with ergonomic design
- Inserts can be locked into three different positions
- Easy and efficient cleaning by means of a **LUER** connector



#### Please note:

Metal Handle 550000 is not included in delivery. Please order separately.

LA-TEL 15 B US

## Video-Laryngoscopy



Advantages of video-laryngoscopes compared to operation microscopes:

- Greater depth focus
- No need to adjust focus
- The laryngoscope spatula does not restrict the field of vision
- The wide angle of view of the HOPKINS® telescope provides a larger overview behind the distal end of the laryngoscope
- No surgical microscope is required

- The magnified image can be observed from the ideal distance
- Better access to the anterior commissure
- No operation fatigue
- Simplifies the work of the assistant
- Images can be documented immediately
- Ideal for training purposes



#### Advantages:

With this method the binocular operation microscope is replaced by the KARL STORZ video system. This system guarantees excellent conditions for:

- operating
- documentation
- teaching of microlaryngological operation techniques

When connected to a video printer, this system enables high quality instant printouts to be made as a source of information for:

- physician referral
- radiologists
- oncologists



Microscope



Microscope



Video-Laryngoscope



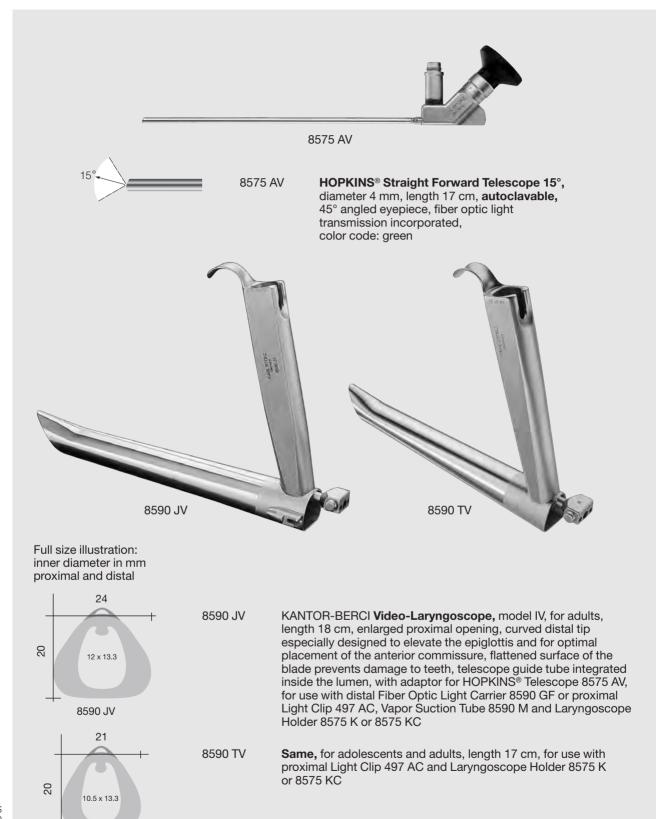
Video-Laryngoscope

For Video Documentation Systems and Light Sources see catalog TELEPRESENCE

## KANTOR-BERCI Video-Laryngoscopes



Model IV

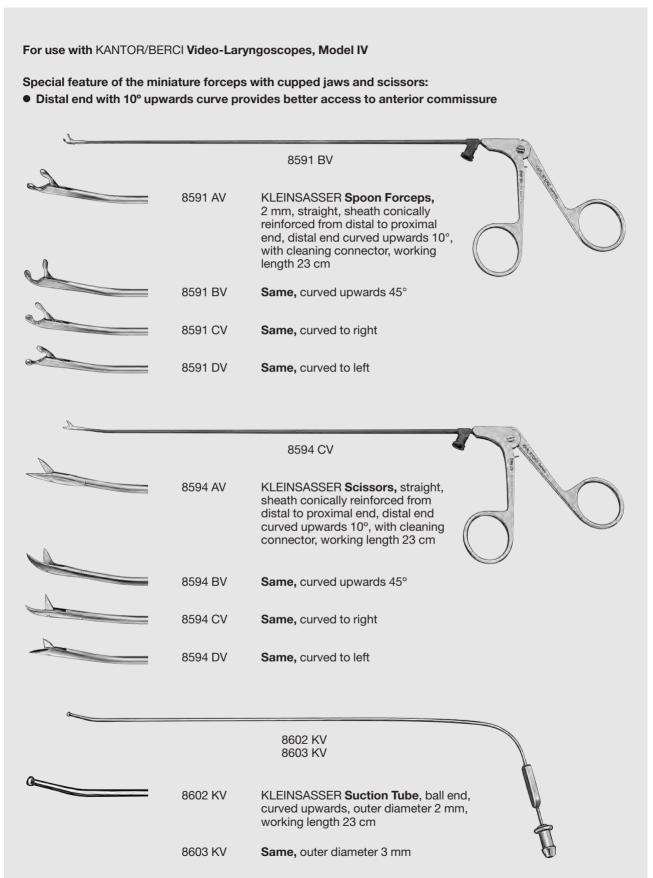


Accessories for KANTOR-BERCI Video-Laryngoscopes see page 584

8590 TV

## KLEINSASSER Instruments





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# **Original** KLEINSASSER **Operating Laryngoscopes**



A complete set of laryngoscopes for adults and children are available. These laryngoscopes allow an excellent view of the laryngeal area, even under difficult anatomical conditions, such as limited oral aperture and short, thick, stiff necks. Uniform pressure distribution with reduced danger of tooth damage is provided by the flat support area of the laryngoscope against the teeth. A tooth guard to help protect the teeth and gums is also available. The laryngoscopes have smooth surfaces and are easy to clean and sterilize.

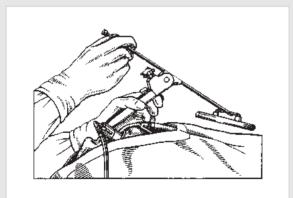
The specially designed laryngoscope holder and chest support can be placed directly against the thorax without affecting respiration. Special tables and support devices are not required with this chest support.

Precision, small diameter grasping and cutting instruments are available. These instruments have a thin, but very rigid sheath which allows excellent control during surgery within the laryngeal area.

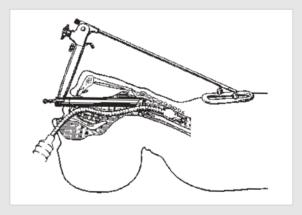








Placement of the chest support after introduction of the laryngoscope.

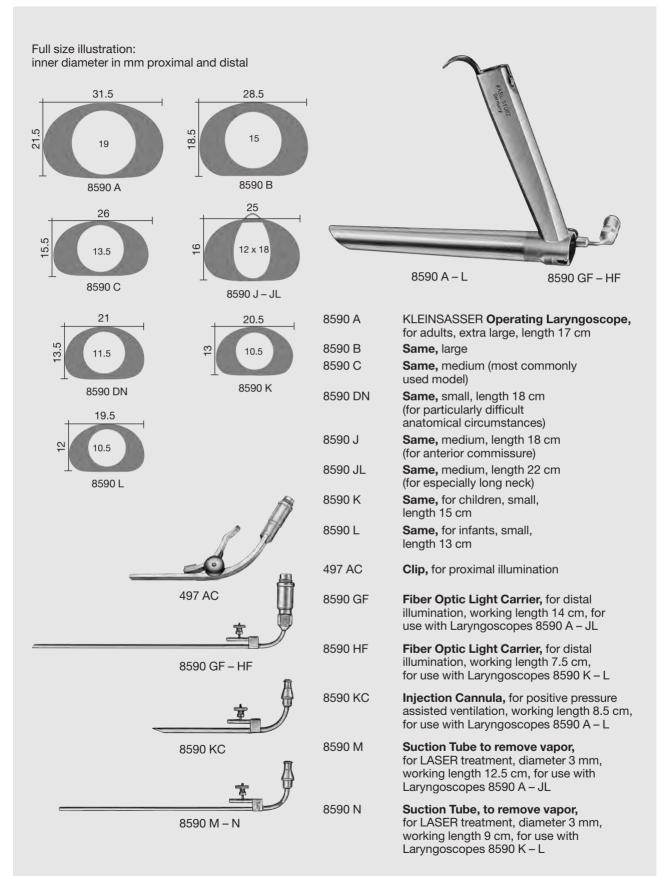


Final adjustment of the laryngoscope before the beginning microlaryngoscopy.

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# **Original** KLEINSASSER **Operating Laryngoscopes**





66

## KLEINSASSER Operating Laryngoscopes

modified by RUDERT

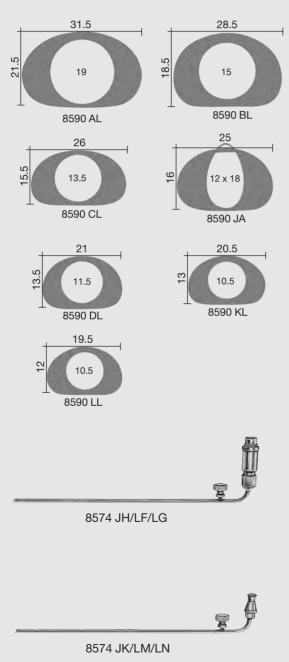


#### **Special Features:**

- Proven conical KLEINSASSER design
- Modified by RUDERT with right and left lateral outer channels used for smoke evacuation and/or for fiber optic light carrier
- Full lumen working capacity, unobstructed view, operating instruments cannot get caught

### Full size illustration:

inner diameter in mm proximal and distal





8574 LF

8590 AL KLEINSASSER Laryngoscope, extra large, modified by RUDERT for CO<sub>2</sub> LASER surgery, for adults, with lateral outer channels for suction tube to remove vapor and/or for fiber optic light carrier, length 17 cm

Same, large

8590 BL

8574 LG

8590 CL
8590 DL
8590 JA
Same, medium
Same, small, length 18 cm
Same, medium, length 18 cm

for anterior commissure

8590 KL Same, for children, length 15 cm

8590 LL Same, for infants, length 13 cm
8574 JH Fiber Optic Light Carrier, for distal illumination, length 12 cm, for use with

Laryngoscopes 8574 J/JP and 8590 LL 8574 LF Same, length 16 cm, for use with Laryngoscopes 8590 AL/BL/CL/DL/JA

Laryngoscopes 8590 AL/BL/CL/DL/JA and 8589 B/C

Same, length 14 cm, for use with

Laryngoscope 8590 KL

8574 JK

Suction Tube, to remove vapor, for LASER

treatment, length 12 cm, for use with Laryngoscopes 8574 J/JP and 8590 LL

8574 LM Same, length 16 cm, for use with Laryngoscopes 8590 AL/BL/CL/DL/JA and 8589 B/C

8574 LN **Same,** length 14 cm, for use with

Laryngoscope 8590 KL

# Triangle Anterior Commissure Laryngoscopes



Most laryngoscopes have a round or oval distal opening, which is not optimally suited to the triangular shaped glottis (Fig. 1, left). It is therefore frequently not possible to focus on the anterior commissure with these laryngoscopes. The so-called "anterior commissure tubes" with upturned distal end shift the larynx and thus the anterior third of the glottis forwards out of the field of view. In addition to this, the curve of the tube end impedes the view of the anterior commissure (Fig. 2).

Taking up the idea of Vaughan, we developed a laryngoscope for examining the anterior commissure. Its

distal end is not upturned, but is shaped like the ridge of a roof. The triangular shape means that the distal opening exactly fits into the similarly triangular shape of the glottis (Fig. 1, right). The laryngoscope offers a good view of the glottis from the anterior commisure right to the arytenoid region.

The laryngoscope is available in 2 sizes. The smaller one is the universal tube. The larger one is suitable for large larynxes in adults with edentulous upper jaws.

Prof. emer. H. RUDERT, M. D., Universitätsklinik Kiel, Germany





Fig. 1. Focus of distal laryngoscope on the glottis: the oval or round laryngoscope (left), our triangular shaped laryngoscope for the anterior commisure (right).





Fig. 2. The upturned distal end of the so-called "anterior commissure tube" impedes the view of the anterior commissure.

34.5 14.5 x 19.5 8589 B 29.5 13 x 16 8589 C

8589 B

RUDERT Anterior Commissure
Laryngoscope, large, triangular spatulashaped, with lateral outer channels for
Fiber Optic Light Carrier 8574 LF or
Suction Tube to remove vapor 8574 LM,
length 17 cm, (version with wide lumen
for special cases)

8589 C

**Same,** medium, universal size, (most commonly used model)

8574 LF

**Fiber Optic Light Carrier,** for distal illumination, length 16 cm, for use with Laryngoscopes 8590 AL/BL/C/CL/DL/JA and 8589 B/C

8574 LM

Suction Tube to remove vapor, for LASER treatment, length 16 cm, for use with Laryngoscopes 8590 AL/BL/CL/DL/JA and 8589 B/C

8574 LM

8574 LF

1-03

522 LA 6 E

## **DEDO Operating Laryngoscope**

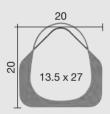


#### **Special Features:**

- The DEDO laryngoscope enables a view of the glottis from the anterior commissure right to the arytenoid region.
- Thin tube diameter allows universal use in adults.
- The distal end of the laryngoscope is shaped like a rounded "V" for optimal visualization.
- Proximal design provides an excellent view of the anterior commissure.
- Comfortable handle design and low overall weight enables convenient handling.



Dimensions in mm: proximal and distal



8890 A

DEDO **Operating Laryngoscope**, with extra light handle, length 18 cm



8574 LG

**Fiber Optic Light Carrier,** for distal illumination, length 14 cm, for use with Laryngoscope 8890 A

8574 LN

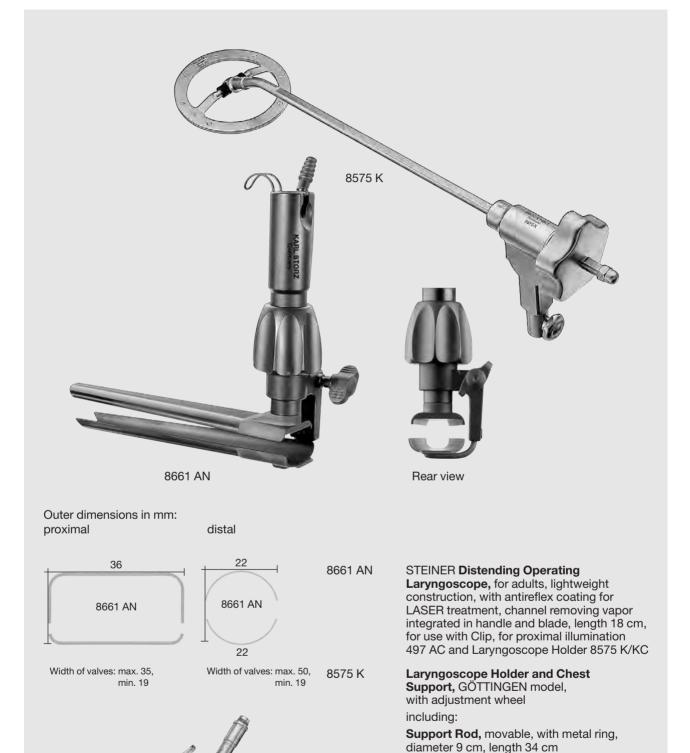
Suction Tube to remove vapor, length 14 cm, for use with

Laryngoscope 8890 A

# STEINER **Distending Operating Laryngoscopes**

for Transoral LASER Microsurgery





497 AC

Components/Spare Parts see chapter 16

497 AC

LA8G

Clip, for proximal illumination

# STEINER **Distending Operating Laryngoscope and Oropharyngoscope**

STORZ ENDOSKOPE

for Transoral LASER Microsurgery



Outer dimensions in mm: proximal

36 8666 AN

Width of valves: max. 30, min. 19

distal



Width of valves: max. 43, min. 21

8666 AN

8666 DN

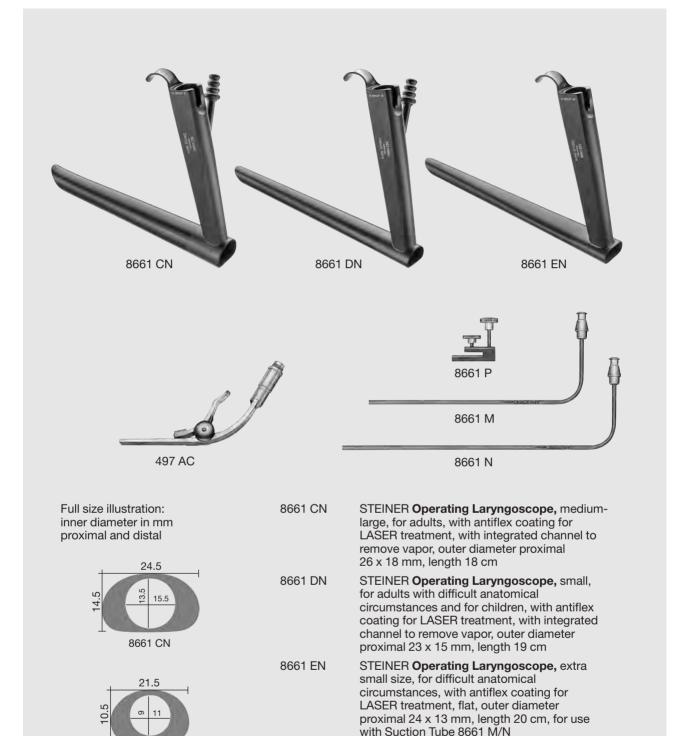
STEINER Distending Operating
Laryngoscope, for adults, lightweight
construction, with antireflex coating for
LASER treatment, with right and left side
wings to prevent the tongue/soft tissue
from obstructing the lumen, channel
removing vapor integrated in handle and
blade, length 18 cm, for use with Clip,
for proximal illumination 497 AC and
Laryngoscope Holder 8575 K/KC

STEINER Distending Operating
Oropharyngoscope, for adults, lightweight
construction, with antireflex coating for
LASER treatment, with right and left side
wings to prevent the tongue/soft tissue
from obstructing the lumen, channel
removing vapor integrated in handle and
blade, length 14 cm, for use with Clip,
for proximal illumination 497 AC and
Laryngoscope Holder 8575 K/KC

## **STEINER Operating Laryngoscopes**

for Transoral LASER Microsurgery with integrated channel to remove vapor





-992

Suction Tube to remove vapor, for LASER treatment,

outer diameter 3 mm, working length 16 cm, for use with operating laryngoscopes and Adaptor 8661 P

Adaptor, for Suction Tube 8661 M/N, attachable

to the laryngoscope's proximal end, allows continuous adjustment of the suction tube within

Same, working length 20 cm

Clip, for proximal illumination

the laryngoscope

526 LA 10 E

8661 M

8661 N

8661 P

497 AC

8661 DN

22

10.5

8661 EN

## WEERDA Distending **Operating Laryngoscopes**



#### **Special Features:**

- Two adjustment screws enable maximal distending and exact adaptation to every anatomy, providing excellent viewing conditions. Lateral adjustment screw allows the lumen to be expanded by 38 - 30 mm. Front adjustment screw enables maximal distal distending of the lower spatula blade.
- Small dimensions of laryngoscope when spatula are closed ease introduction
- Wide lateral slots provide largest possible working area for micro surgical instruments
- Use of additional suction tubes to remove vapor during laser surgery ensures that overview is not obstructed.

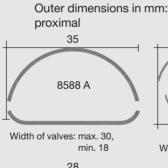


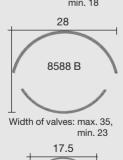
8588 A

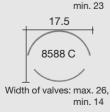
8588 B

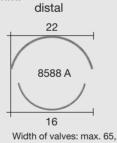
8588 C

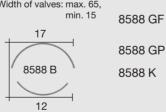
8588 M

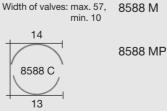












min. 11.5

Width of valves: max. 47,

**WEERDA Distending Operating** Laryngoscope, large, for adults, length 18 cm

Same, for adolescents and adults

**WEERDA Distending Operating** Laryngoscope, for children, length 13.5 cm

Fiber Optic Light Carrier, for use with Laryngoscopes 8588 A/B

Same, for use with Laryngoscopes 8588 C

Injection Cannula, for positive pressure assisted ventilation, for use with 8588 A/B/BV

Suction Tube to remove vapor, for LASER treatment, for use with Laryngoscopes 8588 A/B/BV

Same, for use with Laryngoscope 8588 C

# WEERDA **Distending Video Operating Laryngoscope**



# Transoral partial laryngectomy and pharyngectomy using the WEERDA distending video-laryngoscope

With conventional microlaryngeal surgery, because surgical procedures are performed through a narrow laryngoscope under the guidance of a surgical microscope, the visual field is limited and working space is narrow. In addition, the visual field is often blocked when two hands are used. These disadvantages have limited its indications.

In order to resolve these issues, we have been performing surgery using KARL STORZ's WEERDA distending video laryngoscope (conventional WEERDA distending laryngoscope and HOPKINS® telescope) and the Endovision® TELECAM SL/IPM camera system to achieve a larger visual field and sufficient working space.

#### Characteristics of the WEERDA distending videolaryngoscope

With the present system, because the laryngeal/hypopharyngeal region can be widely opened, a sufficient working space and a wide visual field can be achieved. As a result, surgical procedures that used to require tracheostomy or external cervical incision can now be performed transorally. Supraglottic laryngectomy and partial hypopharyngectomy can be performed with less invasiveness. In addition to such surgical procedures for laryngeal and hypopharyngeal cancers, the present system is useful for various procedures in the laryngeal, hypopharyngeal and lingual root regions. Hence, it is a powerful tool to make surgery in these regions less invasive.

A. SHIOTANI, M. D., Professor and Chairman, Department of Otolaryngology-Head and Neck Surgery, National Defense Medical College, Saitama, Japan



8588 BV WEERDA Distending Video Operating Laryngoscope,

for adolescents and adults, for operation under video control, with channel and holder for Telescope 8575 AV, length 17 cm, for use with Fiber Optic Light Carrier 8590 GF, Suction Tube to remove vapor 8588 M, Injection Cannula 8588 K and Laryngoscope Holder and Chest

Support 8575 K

8575 AV **HOPKINS® Straight Forward Telescope 15°,** 

diameter 4 mm, length 17 cm, **autoclavable**, 45° angled eyepiece, fiber optic light transmission incorporated,

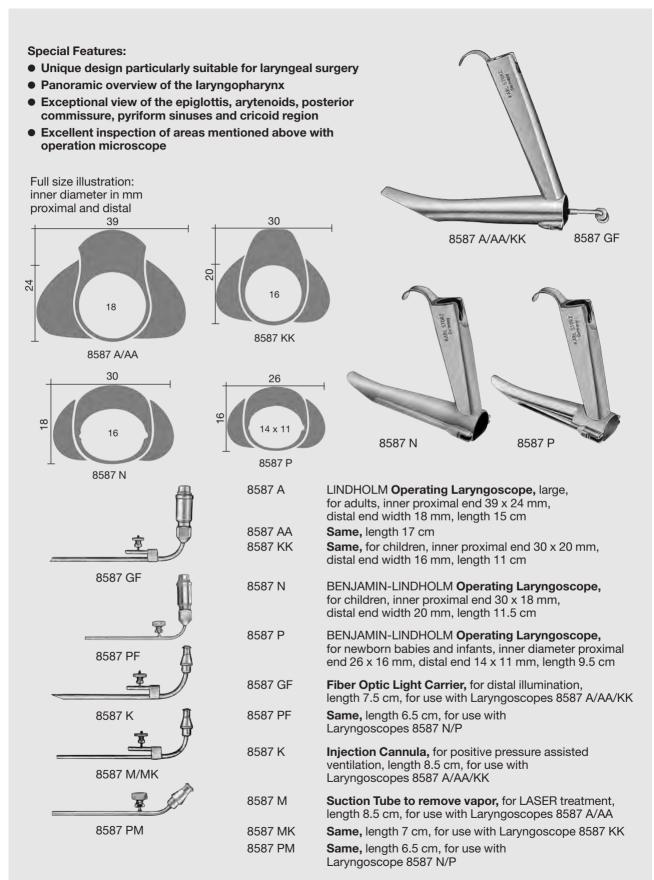
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528 LA 12 F

## Original LINDHOLM and BENJAMIN-LINDHOLM Operating Laryngoscopes





## Original BENJAMIN and BENJAMIN-PARSONS Slimline Operating Laryngoscopes and Subglottiscopes

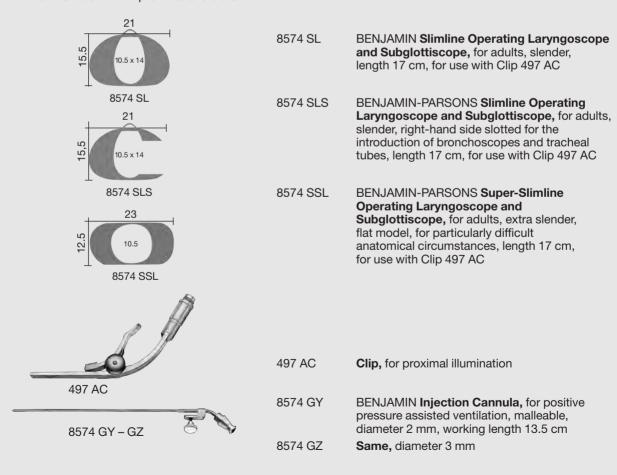


#### **Special Features:**

- Appropriate for patients whose larynx is difficult to inspect
- For micro surgery and LASER surgery
- Light clip for proximal illumination
- Quickly and easily attachable to the laryngoscope



Full size illustration: inner diameter in mm proximal and distal



## **Original PARSONS Adult Operating Laryngoscopes**



#### **Special Features:**

- Wide proximal end highly suitable for binocular inspection
- Superior surface of size 4 and 5 is rough to prevent tongue from sliding into the lumen.
- Easy use of instruments
- Maximum illumination of operation area



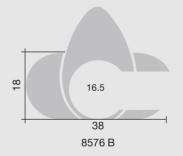




Full size illustration: inner diameter in mm proximal and distal



20 17.5 38 8576 A



8576 AA

PARSONS Operating Laryngoscope, size 6, for adults, large, for anterior commissure, wide proximal opening suitable for binocular viewing, right-hand side slotted for introduction of broncho-oesophagoscopes and operating instruments, left-hand side with insufflation channel for oxygen supply, anesthetic gas or for jet ventilation, length 18 cm, for use with Clip 497 AC for proximal illumination

8576 A

Same, size 5, for adolescents and adults, medium-large,

length 16.5 cm

8576 B

Same, size 4, for children up to age 12, medium,

length 14.5 cm



497 AC

497 AC

Clip, for proximal illumination

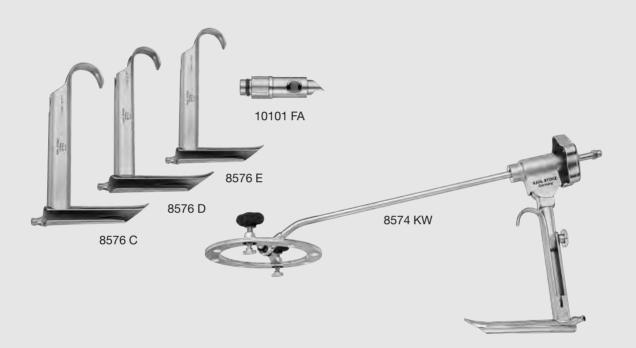
## **Original PARSONS Pediatric** Laryngoscopes

with Proximal Ilumination



#### **Special Features:**

- Enlarged proximal end enables binocular viewing
- Lateral insufflation channel for anesthetic gas and oxygen supply
- Also appropriate for jet ventilation
- Wide lateral slit allows introduction of bronchoscopes and esophagoscopes and enlarges the lumen of the laryngoscope for better binocular inspection
- Flat anterior tip enables better positioning in the anterior commissure or vallecula. Simultaneous use of a telescope enables excellent panoramic view
- Superior surface is rough to prevent tongue from sliding into the lumen, thereby ensuring an unobstructed view of supraglottic structures
- Complete set in 3 sizes for premature babies, newborn babies and infants up to 4 years old



8576 C	PARSONS <b>Laryngoscope</b> , size 3, for toddlers, flat distal end for anterior commisure, wide proximal opening enable binocular viewing, right-hand
	side slotted for introduction of
	broncho-oesophagoscopes and
	operating instruments, left-hand side
	with insufflation channel for oxygen
	supply, anesthetic gas or jet
	ventilation, for use with Prismatic Light

Deflector 10101 FA/JA/JUA and Laryngoscope Holder 8574 KT/KW, length 11 cm

8576 D Same, size 2, for neonates, length 9 cm 8576 E Same, size 1, for premature infants,

length 8 cm

10101 FA **Prismatic Light Deflector,** 

autoclavable, with connection to fiber optic light cable (not to be used with

8574 K/KB/KT/KW)

8574 KW BENJAMIN-PARSONS Laryngoscope

Holder and Chest Support, GÖTTINGEN model, with adjustment wheel

including:

BENJAMIN-PARSONS Support Rod, movable, with metal ring, diameter 12 cm and 2 lateral set screws, length 34 cm

Pediatric Laryngoscopes 8574 B - G and 8576 C - E are for use with the Laryngoscope Holders 8574 KT/KW only. Components/Spare Parts see chapter 16

# **Original** BENJAMIN and BENJAMIN-PARSONS **Pediatric Operating Laryngoscope**



#### **Special Features:**

- Wide proximal end for binocular inspection
- Easy use of instruments due to large access
- Safe use of CO<sub>2</sub> laser

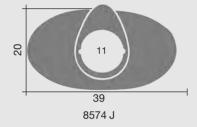
- Lateral channels for suction tubes to remove vapor during LASER surgery and for light carrier for distal illumination
- Maximum illumination of operation area

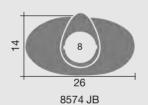


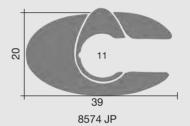


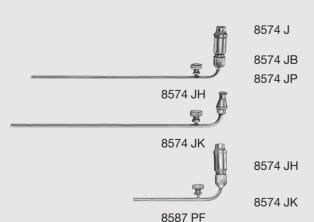


Full size illustration: inner diameter in mm proximal and distal









8587 PM

BENJAMIN **Operating Laryngoscope**, for children, length 15 cm

Same, small size, length 11.5 cm

BENJAMIN-PARSONS **Operating Laryngoscope,** for children, lateral slit for the introduction of pediatric bronchoscopes up to size 6 and tracheal tubes, lower surface of spatula is rough to prevent tongue from slipping off, length 15 cm

Fiber Optic Light Carrier, for distal illumination, length 12 cm, for use with Laryngoscopes 8574 J/JP

**Suction Tube to remove vapor,** for LASER treatment, length 12 cm, for use with 8574 J/JP

**Fiber Optic Light Carrier,** for distal illumination, length 6.5 cm, for use with Laryngoscope 8574 JB

**Suction Tube, to remove vapor,** for LASER treatment, length 6.5 cm, for use with Laryngoscope 8574 JB

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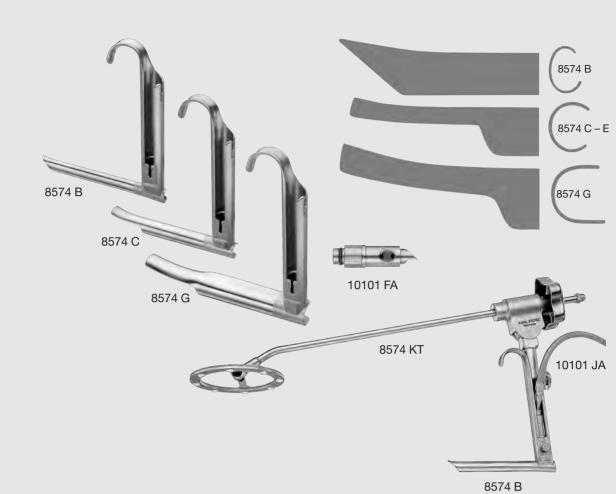
8587 PF

8587 PM

## **Pediatric Laryngoscopes**

with Proximal Illumination





8574 B	HOLINGER-TUCKER Anterior Commissure Laryngoscope, lateral opening, length 11 cm	8574 KT	Laryngoscope Holder and Chest Support, GÖTTINGEN model, with adjustment wheel
8574 C	Slotted Laryngoscope, lateral opening, length 11 cm		including: <b>Support Rod,</b> movable, with metal ring, diameter 9 cm, length 34 cm
8574 D	Same, length 9.5 cm		diameter 5 cm, length 54 cm
8574 E	Same, length 8 cm		or:
8574 G	BENJAMIN <b>Slotted Laryngoscope</b> , lateral opening, especially appropriate for introducing pediatric bronchoscopes, length 13.5 cm	8574 KW	BENJAMIN-PARSONS Laryngoscope Holder and Chest Support, GÖTTINGEN model, with adjustment wheel including:
10101 FA	Prismatic Light Deflector, autoclavable, with connection to fiber optic light cable		BENJAMIN-PARSONS <b>Support Rod,</b> movable, with metal ring, diameter 12 cm and 2 lateral set screws, length 34 cm
10101 JA	Same, fiber optic light cable integrated (for use with 8574 KT/KW)		
10101 JUA	<b>Same,</b> autoclavable, with additional light cable for the simultaneous use of telescopes		

Pediatric Laryngoscopes 8574 B – G and 8576 C – E are for use with the Laryngoscope Holders 8574 KT/KW only. **Components/Spare Parts** see chapter 16

+

## HOLINGER Laryngoscope, **LEWY Laryngoscope Holder**





8575 KT NEW

**LEWY Laryngoscope Holder and Chest** Support

including:

Support Rod, movable, with metal ring,

diameter 9 cm, length 34 cm

8575 KW NEW

**LEWY Laryngoscope Holder and Chest** Support

including:

Support Rod, movable, with metal ring,

diameter 12 cm, length 34 cm

8580 B

**HOLINGER Anterior** 

Commissure Laryngoscope, for adults, length 17 cm, with Fiber Optic Light Carrier 8580 BL

and Handle 8580 H

8580 H Laryngoscope Handle,

detachable, for use with LEWY laryngoscope holder and chest support and with operating

laryngoscopes

Please note:

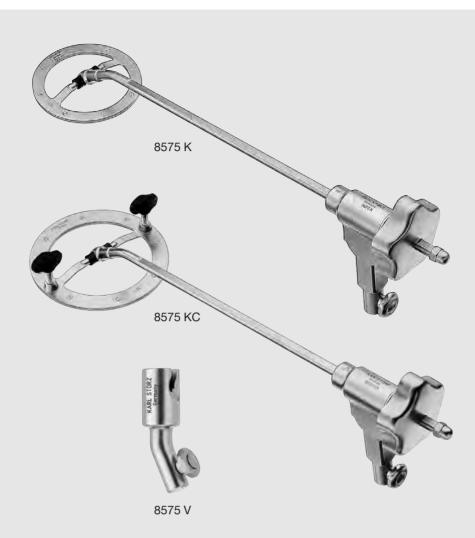
Chest Supports 8575 GL/K/KC are not to be used with Pediatric Laryngoscopes 8576 C - E. Handle 8580 H is detachable for use of Laryngoscope 8580 B, also with Chest Supports 8575 K/KC. LEWY Chest Support 8575 GL can be adapted to Handle 8580 H.

Components/Spare Parts see chapter 16

## Laryngoscope Holders

for Operating Laryngoscopes





8575 K Laryngoscope Holder and Chest Support, GÖTTINGEN model,

with adjustment wheel

including:

Support Rod, movable, with metal ring, diameter 9 cm, length 34 cm

8575 KC BENJAMIN-PARSONS Laryngoscope Holder and Chest Support,

GÖTTINGEN model, with adjustment wheel

BENJAMIN-PARSONS Support Rod, movable, with metal ring, diameter 12 cm and 2 lateral set screws, length 34 cm

8575 V Extension, GRONINGEN model, for enlargement of opening

angle of support rod for overweight patients, angled, length 8 cm, for use with Laryngoscope Holder 8575 K/KC and

Laryngoscopes 8574 J – JP/SL – RB, 8576 AA – B, 8580 – 8590, 8661 – 8666

Components/Spare Parts see chapter 16

536

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## **Chest Support**

for Laryngoscope Holders



#### Chest Support, GÖTTINGEN model

A special **chest support system** has been designed to meet the requirements of transoral tumor surgery in the pharynx and larynx, together with an adjustable platform that can be secured in any of three dimensional positions, allowing effortless changes in the position of the laryngo-pharyngoscope during tumor surgery.

Extremely lateral angles, as are often necessary for work in the pharynx, are easily achieved and maintained.

Prof. emer. W. STEINER, M. D., Universitäts-Hals-Nasen-Ohrenklinik, Göttingen, Germany



8575 L

8575 L Support Table, GÖTTINGEN model,

for Laryngoscope Holders 8575 K/KC, 8574 KT/KW, autoclavable

including:

Swivel Arm, with movable plate

Holding Rod, for height adjustment

**Attachment Blocks**, can be mounted on operation table equipped with standard sliding rail 25 x 10 mm

Components/Spare Parts see chapter 16

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## **Chest Support**

for Laryngoscope Holders

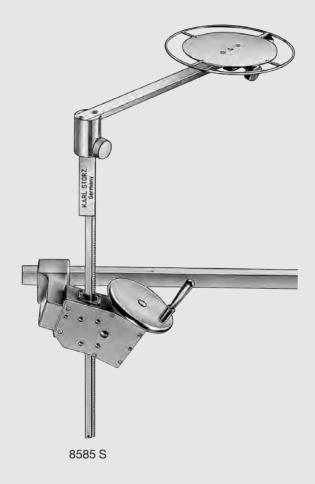


Chest Support, LÜBECK model

#### **Special Features:**

- Movable plate for Chest Supports 8575 K/KC, 8574 KT/KW
- Swivel holding arm
- Fine gear system complements height adjustment of chest support
- Ensures safe mounting of the chest support and the laryngoscope

- Ideal for children and overweight patients
- Support plate with lateral ring for attaching Tongue Spatula 743910 – 744405 for adenoidectomy and tonsillectomy



8585 S

**Chest Support,** LÜBECK model, with gear system for height adjustment and swivel arm with movable plate, for use with Laryngoscope Chest Supports 8575 K/KC, 8574 KT/KW, can be mounted on OR table equipped with standard sliding rail 25 x 10 mm

Components/Spare Parts see chapter 16

## LaryngoF/T® Instruments

completely detachable



The missing piece of the puzzle The new generation of ENT forceps from KARL STORZ



#### Nothing could be more simple!

The preparation of instruments is increasingly in the spotlight. The demand for a perfect hygienic cleaning process which can be validated and recorded is difficult to meet due to the design constraints of conventional instruments.

LaryngoFIT®, the new ENT forceps from KARL STORZ, on the contrary, make perfect hygiene child's play. One

hand movement is enough to separate the working insert from the handle. You then have 2 instrument parts without dirt traps or inaccessible channels, which can be cleaned efficiently to a cutting-edge hygienic standard.

Naturally, the instruments can be reassembled as quickly and easily as they can be dismantled.





Dismantling the instrument in 2 simple steps: Push the slide back... out of the handle.



...and pull the working attachment



Machine cleaning of the LaryngoFIT® instruments is as easy as it is efficient. Specially developed cleaning racks, in which the separate parts of the LaryngoFIT® can be connected directly to the rinsing system, ensure particularly thorough preparation.

539

## **Laryngo***FIT*® **Instruments**

completely detachable





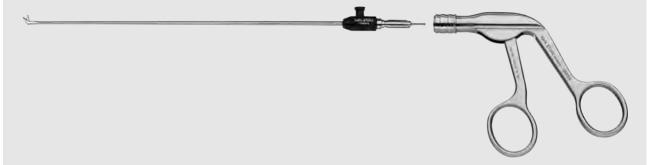
#### **Special Features:**

- Completely detachable
- Easy dismantling and reassembly
- Easy and efficient cleaning also by means of the LUER-Lock connection
- Economic advantages due to compatibility with all working attachments
- Well-balanced handle with ergonomic design
- Great variety of working inserts
- Inserts can be locked into three different positions

#### Two-piece design

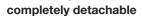
LaryngoF/T® Instruments can be completely disassembled into separate components:

- Handle
- Working attachment

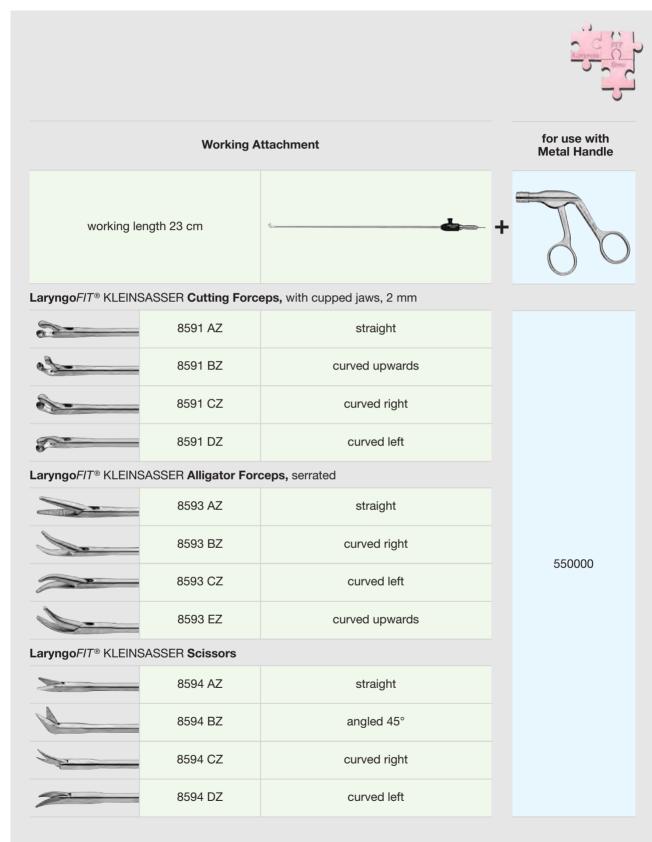


9

# Laryngo*F/T*® Instruments







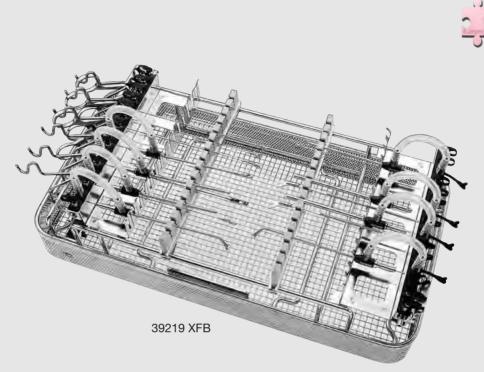
Please note:

Metal Handle 550000 is **not** included. Please order separately.

# LaryngoF/T® Instruments

Accessories





39219 XF Instrument Rack, with one irrigation block (standard version) for

cleaning, sterilization and storage of up to 15 **Laryngo**FIT® or 15 **Sinu**FIT® instrument attachments and 6 handles, incl. variable bars with silicone holder and direct connection of the instrument attachments via a multi-port bridge to the washer-disinfector and Wire Tray 39502 ZB,

external dimensions (w x d x h): 480 x 250 x 160 mm

39219 XFB Same for Cleaning, Sterilization and Storage of up to

15 LaryngoFIT® or 15 SinuFIT® instrument attachments and 6 handles

#### **Optional Accessory**



39502 V Wire Tray for Cleaning, Sterilization and Storage of instruments, with hole plate walls and foldaway handles, external dimensions (w x d x h): 228 x 248 x 45 mm

Components/Spare Parts see chapter 16
Further accessories for cleaning and sterilization see catalog HYGIENE

**Please note:** The instruments displayed are not included in the instrument racks.

6

542 LA 26 H

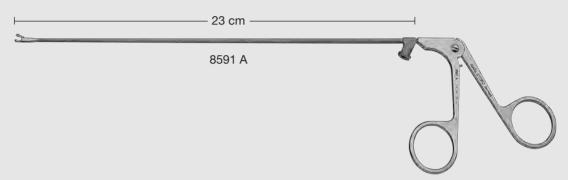


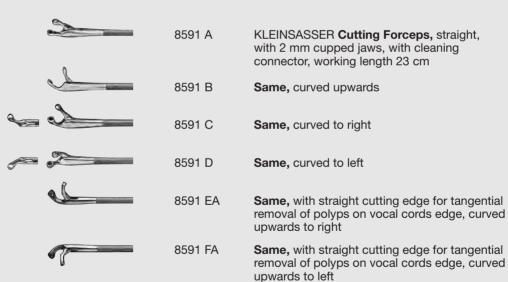


#### Working length 23 cm

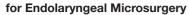
#### **Special Features:**

- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability

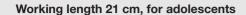


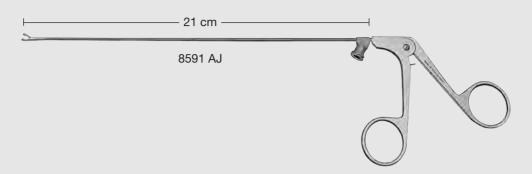


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8591 AJ

KLEINSASSER **Forceps**, straight, with 2 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 21 cm

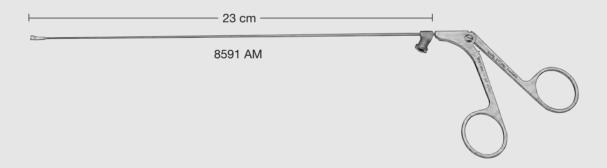


8591 CJ Same, curved to right



Same, curved to left

#### Working length 23 cm



8591 AM

KLEINSASSER **Miniature Forceps**, straight, with 1 mm cupped jaws, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 23 cm

8591 BM

Same, curved upwards

8591 CM

Same, curved to right

8591 DM

8591 EM

Same, curved to left

0.5

Same, curved upwards to right

8591 FM

Same, curved upwards to left

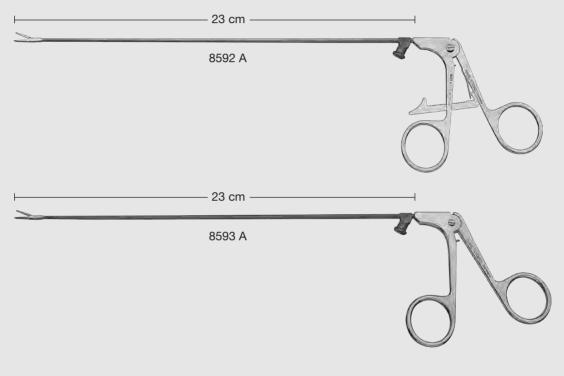




#### Working length 23 cm

#### **Special Features:**

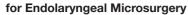
- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability



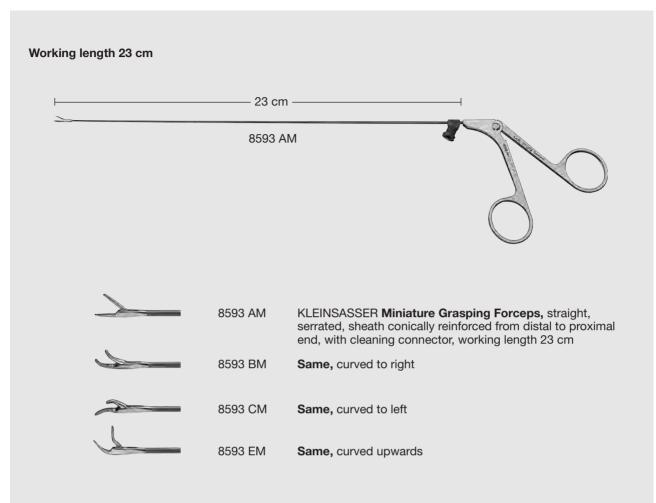
	8592 A	KLEINSASSER <b>Artery Forceps,</b> with ratchet, with cleaning connector, working length 23 cm
	8593 A	KLEINSASSER <b>Grasping Forceps</b> , without ratchet, serrated, straight, with cleaning connector, straight, working length 23 cm
	8593 B	Same, curved to right
	8593 C	Same, curved to left
	8593 E	Same, curved upwards
	8593 G	Same, with triangular jaws, curved upwards to right
05	8593 H	Same, curved upwards to left

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LA 29 I 545

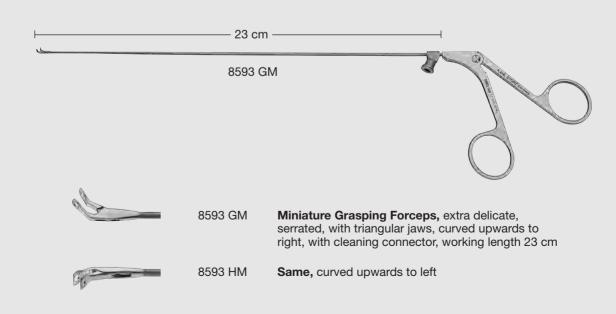






#### **Special Features:**

 Extra fine grasping forceps, with triangular fenestrated jaws, curved upwards to right or left



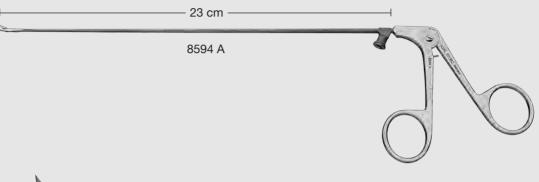


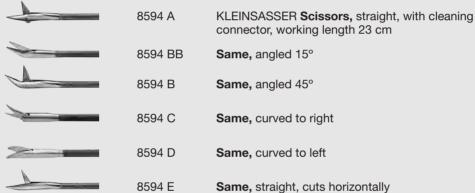


#### **Special Features:**

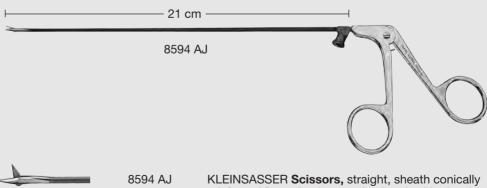
- Excellent cutting performance with optimal transfer of strength
- Due to specially ground surface scissor blades stay sharper much longer
- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability

#### Working length 23 cm





#### Working length 21 cm, for adolescents



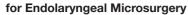
8594 AJ KLEINSASSER **Scissors**, straight, sheath conically reinforced from distal to proximal end, with cleaning connector, working length 21 cm

8594 CJ **Same**, curved to right

8594 DJ Same, curved to left

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LA 31 I 547

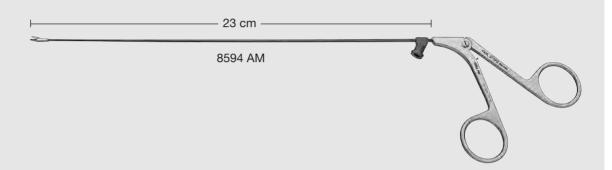




Working length 23 cm

#### **Special Features:**

- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability





# KLEINSASSER LASER Additional Instruments

modified by SHAPSHAY/HEALY

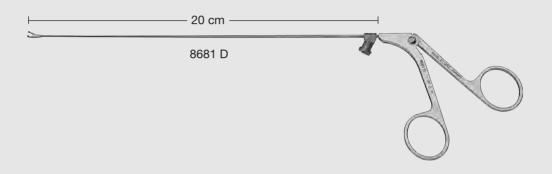
for Laryngoscopy during Micro Spot LASER Treatment

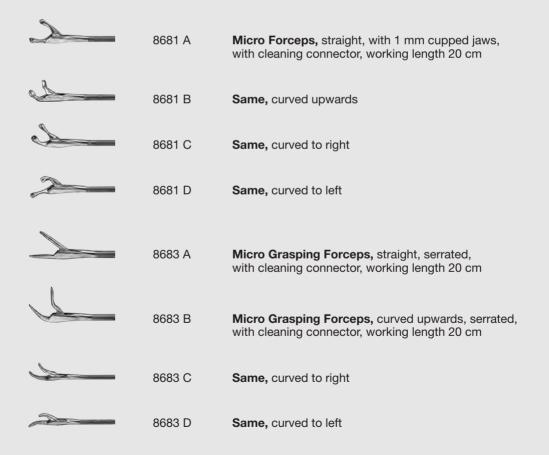


#### Working length 20 cm

#### **Special Features:**

- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability





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# KLEINSASSER LASER Additional Instruments

modified by SHAPSHAY/HEALY

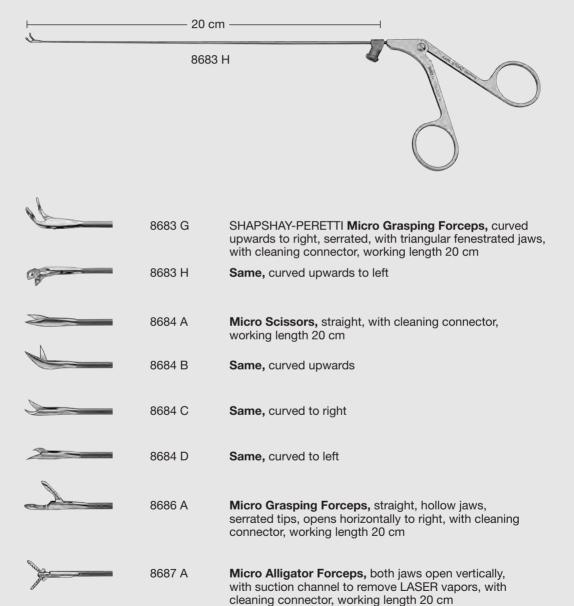
for Laryngoscopy during Micro Spot LASER Treatment



#### Working length 20 cm

#### **Special Features:**

- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability



## KLEINSASSER LASER Additional Instruments

modified by RUDERT

for Laryngoscopy during CO<sub>2</sub> LASER Treatment



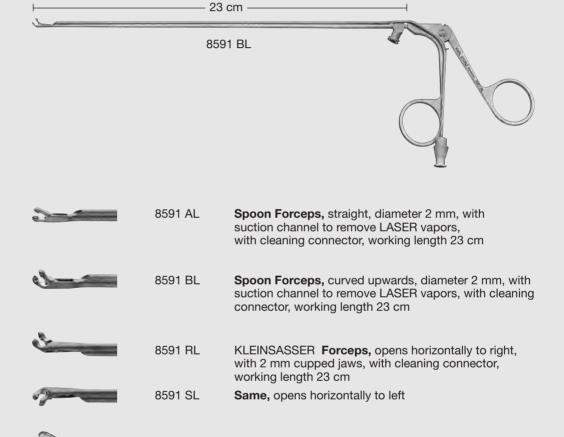
Working length 18 and 23 cm

#### **Special Features:**

- All instruments are equipped with a channel for evacuation of LASER vapors
- Special matt finish for use with CO<sub>2</sub>-LASER
- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability

**Spoon Forceps,** straight, heavy model, diameter 4 mm, with suction channel to remove LASER vapors, with

cleaning connector, working length 22 cm



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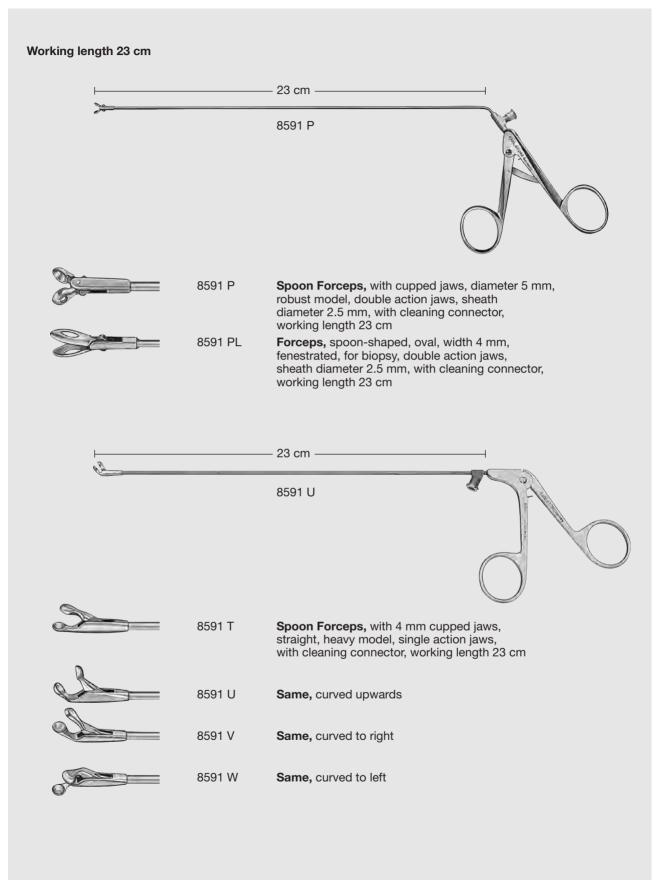
LA 35 H 551

8591 TL

#### **Instruments**

for Endolaryngeal Microsurgery

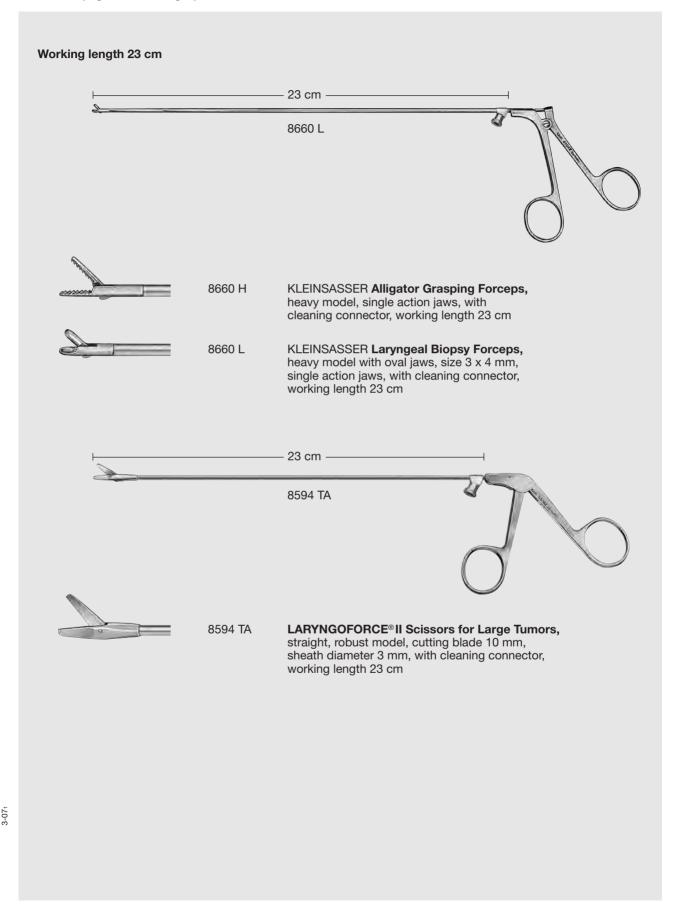




### Instruments

for Endolaryngeal Microsurgery





## **Original STEINER Instruments**

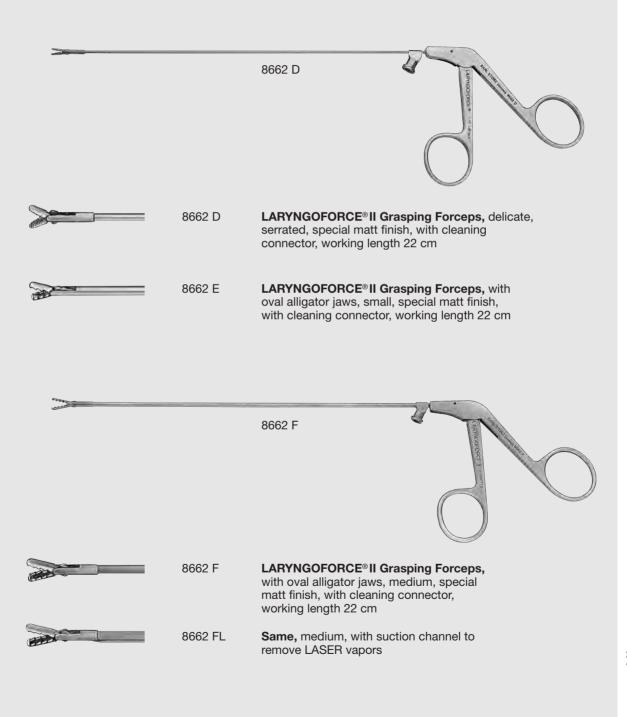
for Transoral LASER Microsurgery



The special laryngoscopes are supplemented by a set of newly developed micro-instruments:

 Grasping Forceps for gentle and yet effective grasping of tissue. They are available in five sizes, four of which feature an integrated smoke evacuation tube. All instruments are manufactured with a special, matt finish, that diffuses the LASER beams. This is particularly advantageous during photo or video documentation, due to the elimination of interfering reflections.

Prof. W. STEINER, M. D., Universitäts-Hals-Nasen-Ohrenklinik, Göttingen, Germany



# Original STEINER Instruments for Transoral LASER Microsurgery





Working length 22 cm		
		8662 G/H
	8662 G	LARYNGOFORCE® II Grasping Forceps, with oval, fenestrated alligator jaws, large, special matt finish, with cleaning connector, working length 22 cm
8	8662 GL	Same, with suction channel to remove LASER vapors
	8662 H	LARYNGOFORCE® II Grasping Forceps, with triangular, fenestrated alligator jaws, extra large, special matt finish, with cleaning connector, working length 22 cm
	8662 HL	Same, with suction channel to remove LASER vapors

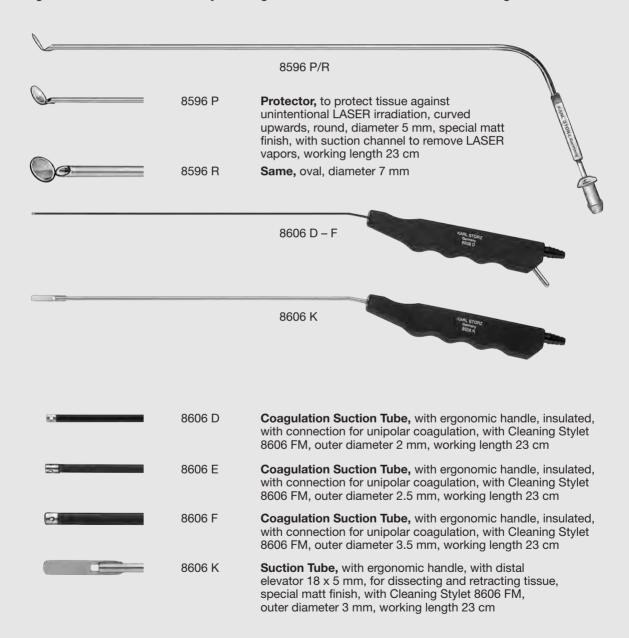
## **Original STEINER Instruments**

for Transoral LASER Microsurgery



#### **Special Features:**

- Protectors to shield distal mucosa from unintentional LASER irradiation, e. g. protection of the subglottis during LASER resection at the free edge of the vocal cord in unintubated patient. Available in diameter 5 mm and 7 mm, each with an integrated suction tube.
- Unipolar cannula for suction and coagulation, ergonomic handle enables steady and targeted
- work. Also suitable for dissecting and retracting tissue, insulated, with cleaning stylet and available in diameter 2, 2.5 and 3.5 mm.
- Suction tube with retractor and ergonomic handle for retracting tissue during LASER incisions. The straight distal end may also be used as a shield e. g. for protection of the contralateral vocal cord during LASER resection.



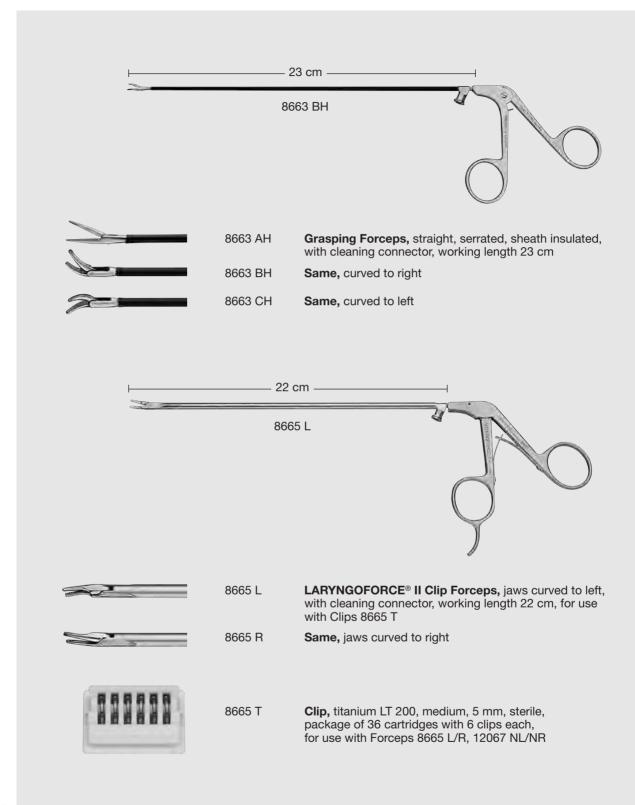
#### Please note:

Simultaneous use of insulated instruments and LASER is prohibited.

## **Original STEINER Instruments**

for Transoral LASER Microsurgery





#### Please note:

Simultaneous use of insulated instruments and LASER is prohibited.

## **Pediatric Instruments**

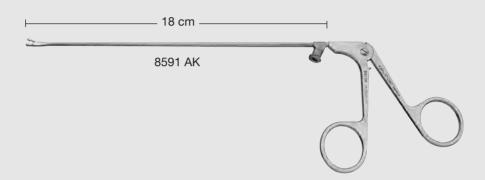
for Endolaryngeal Microsurgery



#### Working length 18 cm

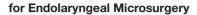
#### **Special Features:**

- Excellent cutting performance with optimal transfer of strength
- Due to specially ground surface scissor blades stay sharper much longer
- Distal end thinner than proximal end to provide better viewing
- Sheath conically reinforced from distal to proximal end to increase mechanical stability

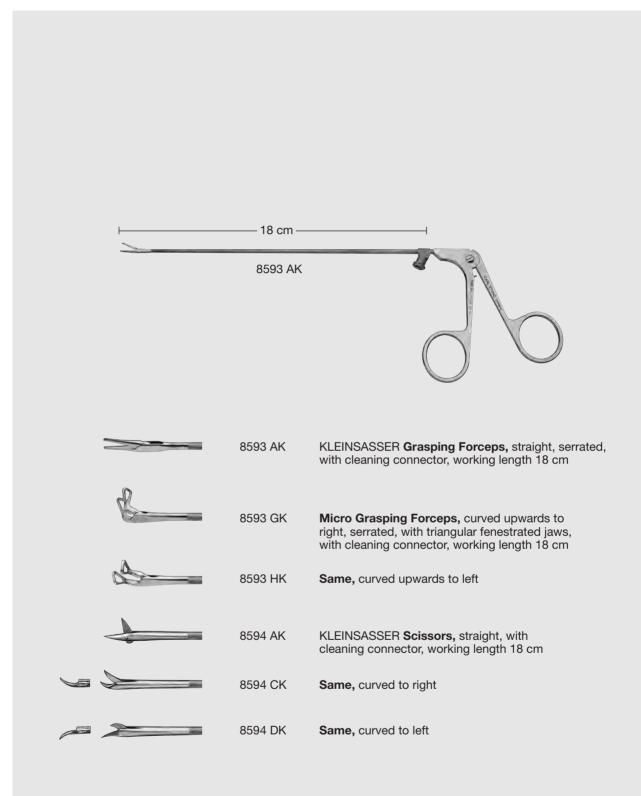


	8591 AK	KLEINSASSER <b>Forceps</b> , straight, with cupped jaws, 2 mm, with cleaning connector, working length 18 cm
de	8591 BK	KLEINSASSER <b>Forceps</b> , upturned, with cupped jaws, 2 mm, with cleaning connector, working length 18 cm
- L	8591 CK	KLEINSASSER <b>Forceps</b> , curved to right, with cupped jaws, 2 mm, with cleaning connector, working length 18 cm
2	8591 DK	Same, curved to left

### **Pediatric Instruments**







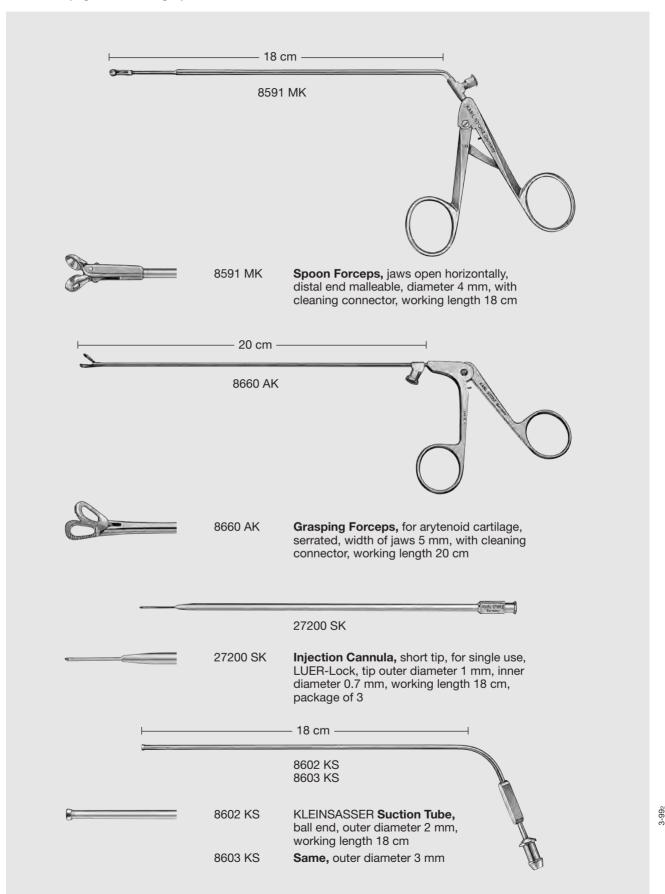
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### **Pediatric Instruments**

for Endolaryngeal Microsurgery





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#### WENDLER Needle Holder





When performing surgical interventions in direct laryngoscopy, any necessary endolaryngeal suture is usually complex because the confined space leaves little room for needle guidance. Particularly in the craniocaudal direction, as is the case with suture at the margins of the vocal cords, it can be difficult to place the needle correctly with a straight needle holder because it only allows parallel gripping by the grasping jaws in the direction of the sheath. It twists slightly and does not remain under adequate control.

The needle holder bent upward grips the needle in an optimal position and permits punctures in the direction of the sheath without any problems. It is recommended that the tissue to be sewn be tensioned with grasping forceps. For punctures to return the thread outward (caudiocranial) both straight and angled needle holders

can be used, depending on specific conditions. A knot pusher for immobilizing the knot is indispensable in all cases.

The new needle holder was initially developed for glottal surgery to shorten the glottis, serving to raise the pitch of the voice in transsexual patients. But also in the case of arytenoidectomy, synechia resections, and traumatic lesions of varying genesis (also during endolaryngeal operations) there is frequently a need for suture in the direction of puncture described.

In all the cases the angled needle holder facilitates puncture guidance to optimally adapt the margins of the mucous membrane in the required plane.

> J. WENDLER, Universitätsklinikum Charité, Abteilung für Phoniatrie, Berlin, Germany





8660 W

WENDLER **Needle Holder**, delicate, curved upwards, for glottal surgery, arytenoidectomy and other endolaryngeal interventions, sheath conically reinforced from distal to proximal end, with ratchet, with serrated round jaws, diameter 1.6 mm, with cleaning connector, working length 23 cm

#### FEHLAND Needle Holder

for Endolaryngeal Microsurgery



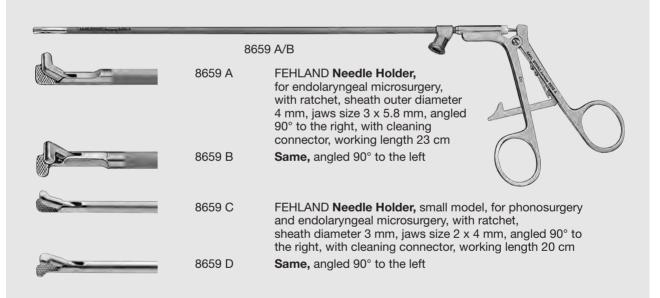
For interventions which require guidance of the needle parallel to the sheath during endolaryngeal microsurgery, locking and guidance of the needle without twisting and tilting is very difficult or impossible with conventional needle holders. Frequent repositioning of the needle with conventional needle holders is very time consuming, technically demanding and can unnecessarily traumatize tissue. A new needle holder was developed by Dr. FEHLAND in cooperation with KARL STORZ for the following applications:

- All suturing procedures particularly when the needle needs to be guided parallel to the needle holder sheath.
- For the creation of endolaryngeal swing flaps, arytenoidectomies, etc.
- For surgical elevation of the middle vocal register with displacement of the frontal vocal cord commissure (glottal graft).
- For vascular purse-string ligature in narrow lumen and hard-to-reach tissue areas.

P. FEHLAND, M. D., Universitätsklinikum Benjamin Franklin, Abteilung für Phoniatrie, Berlin, Germany

#### **Special Features:**

- Available in 2 designs with 90° lateral jaw angle to right or left, providing a uniquely wide useable angle of over 180°
- Specially cross-corrugated jaw surfaces and a locking handle with a ratchet mechanism ensure stable grasping and needle handling without twisting or turning
- Suitable for both straight and curved needles of varying lengths and curvatures, regardless of grasping angle
- Slim and yet very stable sheath, matt finish for low reflection
- Improved view of the operation field with the needle guide parallel to the sheath, e.g. subglottal-glottal and vice versa
- Easy and safe use with less maneuvering and minimized tissue trauma
- Small size with delicate jaws recommended for phonosurgery, working length 20 cm





The first stitch is completed; preparation of the second stitch



The second stitch is also completed



Preparation of the third stitch

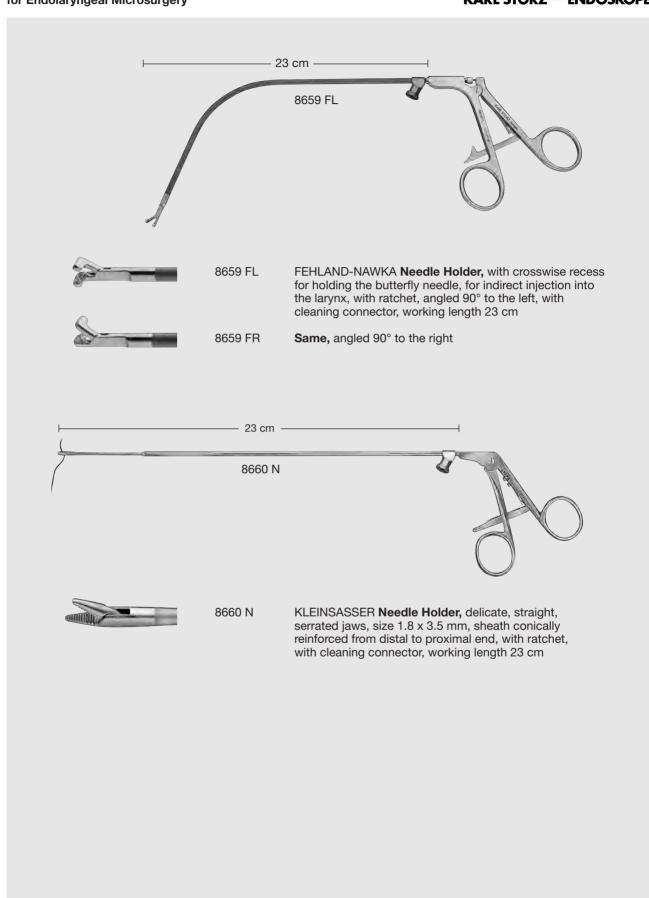
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# FEHLAND-NAWKA and KLEINSASSER Needle Holder



for Endolaryngeal Microsurgery



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## Distending Forceps, LASER Application Instrument

for Endolaryngeal Microsurgery

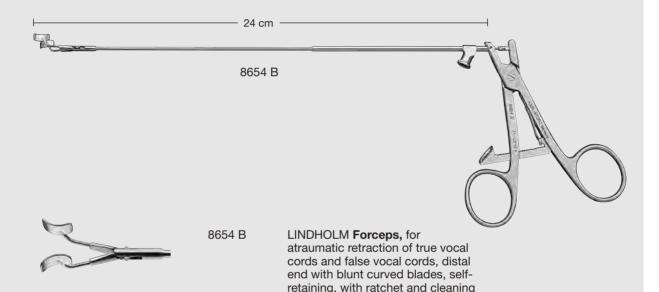


#### LINDHOLM Distending Forceps

In many instances, retraction of the false vocal cords, the true vocal cords or other soft tissue is temporarily needed during an endoscopic procedure. For LASER surgery of limited vocal cord carcinoma it is, for instance, very convenient to be able to visualize more of the upper surface of the vocal cords by retraction of the false vocal cords. Similar retraction of the true vocal cords gives better access to subglottic pathology.

For endoscopic surgery the key problem is often the difficulty of obtaining access to the target. These retractors are a valuable addition to the wide range of new endoscopic instruments which enables further versatility of endoscopic procedures.

C.-E. LINDHOLM, M. D., Uppsala, Sweden



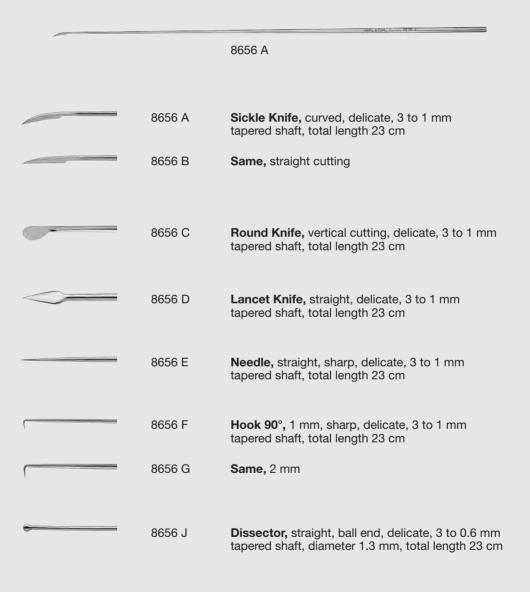
connector, working length 24 cm

# WOO/SHAPSHAY/OSSOFF Microsurgical Instruments for Phonosurgery



#### **Special Features**

- Universal handle is fully adjustable, providing various working lengths
- Slender construction allows direct view without glare
- Instruments can be rotated 360° in the universal handle



# WOO/SHAPSHAY/OSSOFF Microsurgical Instruments for Phonosurgery



	8656 L	Elevator, slightly curved, blunt, delicate, 3 to 1 mm tapered shaft, total length 23 cm
	8656 LS	Same, sharp tipm
	8656 N	Same, angled 15°
	8656 R	Curette, oval spoon, straight, delicate, 3 to 1 mm tapered shaft, total length 23 cm
	8656 S	Same, angled 35°
8657 H	8657 H	Universal Handle, forceps shape, with 2 handle rings, length 9 cm, for use with 3 mm instruments for phonosurgery and endolaryngeal microsurgery 8595 A – 8596 T, 8655 A – K and 8656 A – S
		8656 VL
	8656 VL	Suction Elevator, angular, with grip plate and cut-off hole, LUER, distal end curved to left, delicate, tapered sheath, working length 21 cm, total length 23 cm
	8656 VR	Same, distal end curved to right

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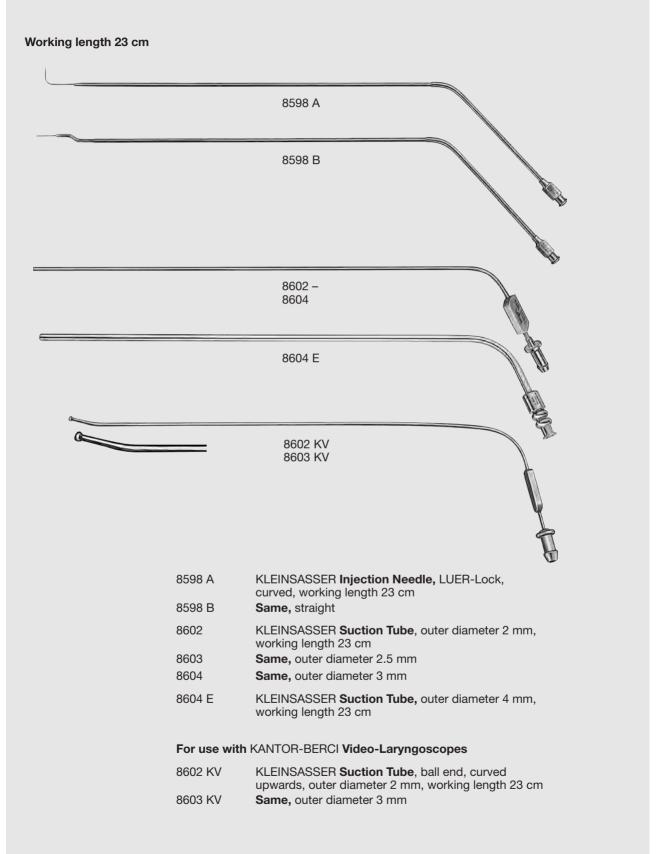




	8595 A	8597
	8595 A	Knife, oval, straight
	8595 B	Same, angled 45°
	8595 C	Same, sickle-shaped, curved, pointed
	8595 D	Same, straight cut, pointed
	8595 E	Same, golf club-shaped, curved, round
	8595 F	Same, round, cuts vertically
	8596 A	Hook, blunt, with probe end
	8596 B	<b>Hook,</b> sharp
	8596 C	Hook, blunt, angled 90°, with probe end, length 5 mi
	8596 E	Needle, curved to right, working length 23 cm
	8596 F	Same, curved to left
	8596 H	Suction Elevator, working length 23 cm
	8596 T	Knot Tier
	8597	KLEINSASSER <b>Handle,</b> for use with 8595 A – 8596 T, 8655 A – K, 8693 A/B
~~~~		8596 W
	8596 W	Cotton Applicator, straight, working length 25 cm
	8596 WJ	Cotton Applicator, for endolaryngeal microsurgery, straight, working length 21 cm
	8596 WK	Same, working length 18 cm



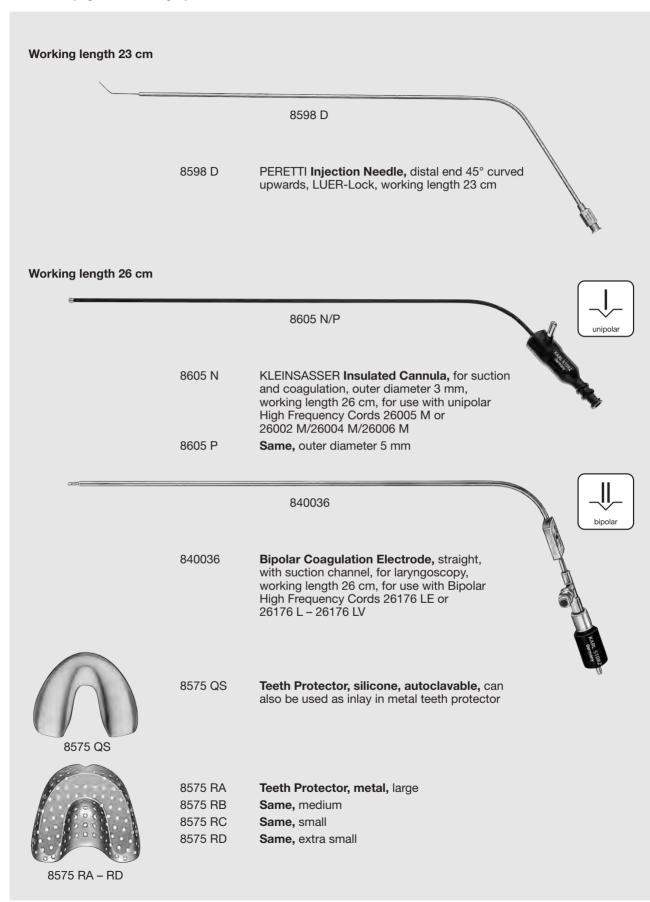




## **Instruments**

for Endolaryngeal Microsurgery



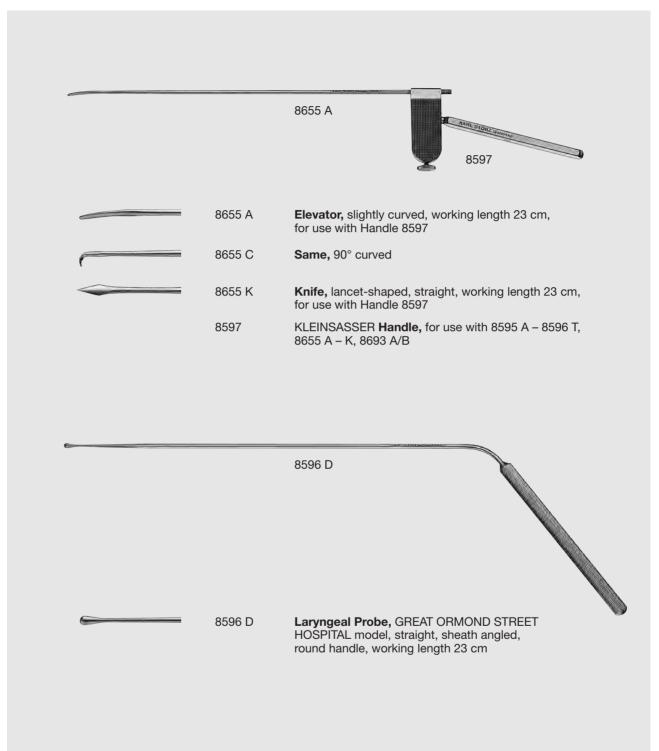


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## **Additional Instruments**

for Endolaryngeal Microsurgery





## KLEINSASSER LASER Additional Instruments

modified by SHAPSHAY/HEALY

for Laryngoscopy during Micro Spot LASER Treatment



orking length 20 cm			
pecial Features:			
Extra fine sheath graduation distal to proximal end	ally reinforced fro	om	
_		8691 A	
	8691 A	Suction Tube, handle with cut-off hole, tip with central opening, outer diameter 1 mm, working length 20 cm	
	8691 B 8691 C	Same, outer diameter 1.5 mm Same, outer diameter 2 mm	
_		8692 A	
	8692 A	Suction Tube, handle with cut-off hole, tip closed, with 2 lateral openings, outer diameter 1 mm,	
	8692 B 8692 C	working length 20 cm  Same, outer diameter 1.5 mm  Same, outer diameter 2 mmn	
		8693 A	
		8693 B	
	8693 A	<b>Probe,</b> straight, diameter 1 mm, working length 20 cm	
	8693 B	Same, angled 45°	
		8597	
	8597	KLEINSASSER <b>Handle</b> , for use with	

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## PERETTI High Pressure Syringe

for Fat Injection



PIAFI = Primary intracordal autologous fat injection following endoscopic chordectomy for glottal laryngeal carcinoma.

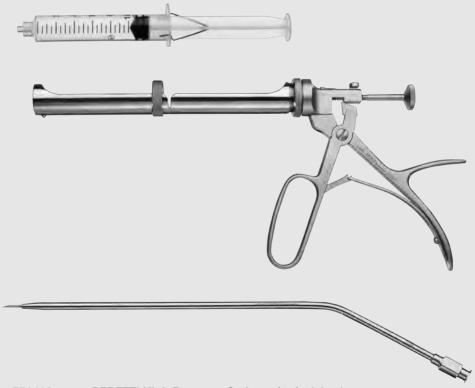
- Chordectomy is the standard treatment for vocal cord carcinoma.
- For voice restoration, it is necessary to reconstruct the vocal cords either with synthetic or autologous material. In the case of the PIAFI technique, fat is injected with the PERETTI-BOLZONI instrument. The syringe for fat harvesting lies in the instrument as in a groove.
- Injection is performed by means of a cogwheel mechanism which releases 0.5 ml fat with each cogwheel click.

#### Operative procedure:

- In the case of the Peretti technique, the surgeon removes subcutaneous abdominal fat.
- Autologous fat is used for the vocal cords after a few minutes.

### Benefits of autologous fat injection:

- No risk of rejection
- No allergic reactions
- Hardly any costs
- Only one operation



771410 PERETTI **High Pressure Syringe**, for fat injection including:

**High Pressure Handle,** for use with Syringe Holder 771412

**Syringe Holder,** for Plastic Syringe 771415, for use with High Pressure Handle 27200

**Pusher,** for use with High Pressure Handle 27200 with Plastic Syringe 771415

**Plastic Syringe,** spring-action, self-retaining, 10 ml, sterile, for single use, package of 25

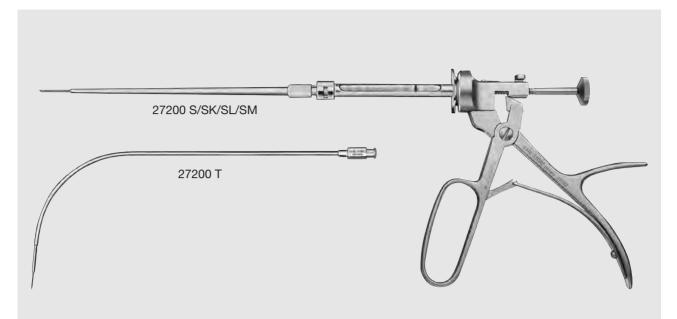
**Injection Cannula,** angular, LUER-Lock, tip outer diameter 1.3 mm, inner diameter 0.8 mm, working length 20 cm, package of 3

Components/Spare Parts see chapter 16

## **High Pressure Syringe**

for Viscous Fluid Injection, for Larynx





771400 **High Pressure Syringe,** for viscous fluid injection

including:

**High Pressure Handle,** for use with Syringe Holder 27201 Q **Adaptor,** for injection of viscous fluid, for filling plastic syringe, package of 3

**Plastic Syringe,** 1 ml, for single use, package of 100 **Syringe Holder,** for plastic syringe, package of 3

**Injection Cannula,** LUER-Lock, outer diameter of syringe 1.3 mm, inner diameter 0.8 mm, working length 23 cm, package of 3

27200 SK Injection Cannula, short tip, for single use, LUER-Lock, tip outer diameter

1 mm, inner diameter 0.7 mm, working length 18 cm, package of 3

27200 SL Injection Cannula, for single use, LUER-Lock, tip outer diameter

1.3 mm, inner diameter 1.1 mm, working length 18 cm, package of 3

27200 SM Same, working length 15 cm, package of 3

27200 T JOUSSEN Larynx Cannula, curved, for single use, LUER-Lock,

outer diameter of tip 0.6 mm, for collagen application, for use with High Pressure Syringe 771400 or Syringe 810002, package of 3

#### Please note:

Collages are injected cool. If the material becomes warm it becomes rigid and can not be made liquid again by recooling.

Components/Spare Parts see chapter 16

## **Bipolar Forceps**

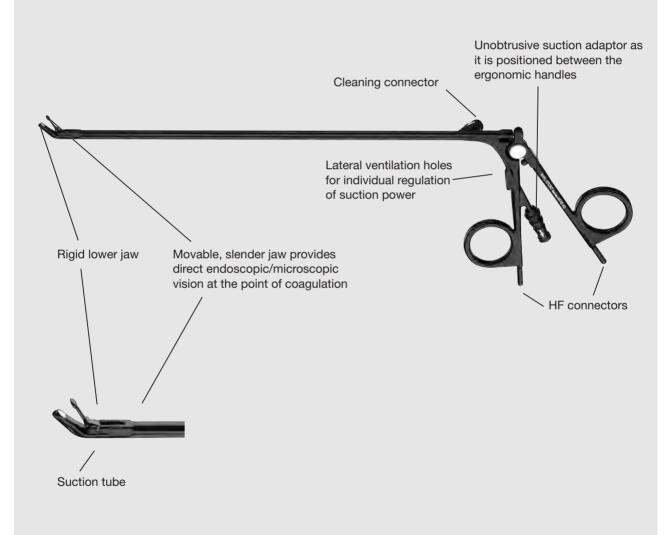


### **Special Features:**

- Bipolar coagulation
- Insulated except for small coagulation area on the instrument tip
- Single action jaws
- Distance between cautery poles may be varied, enabling punctual and extensive coagulation
- With and without suction

- Special design of the movable jaw provides direct endoscopic/microscopic vision at the point of coagulation
- Slim design enables good availability of previously hard to reach regions for cauterization

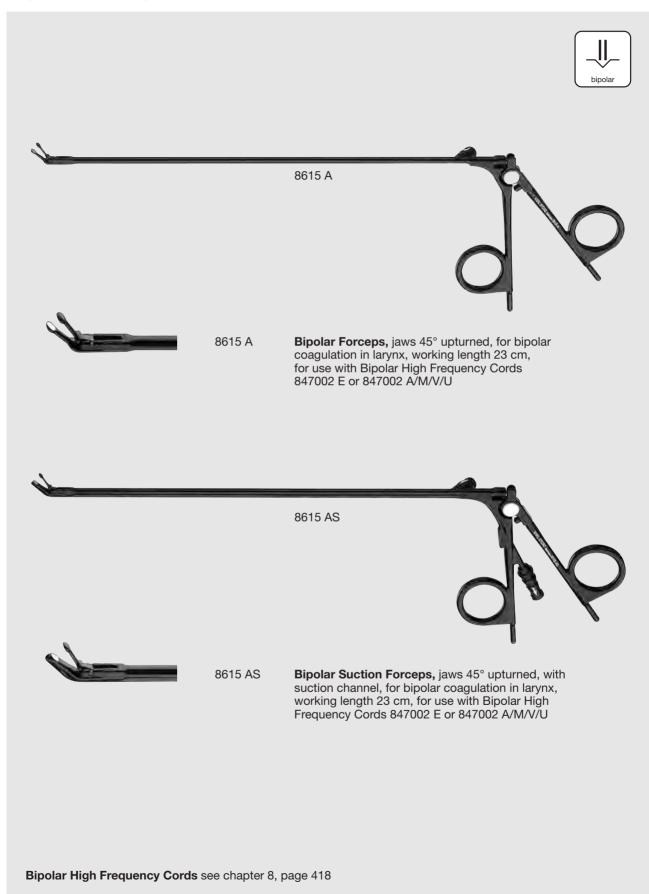




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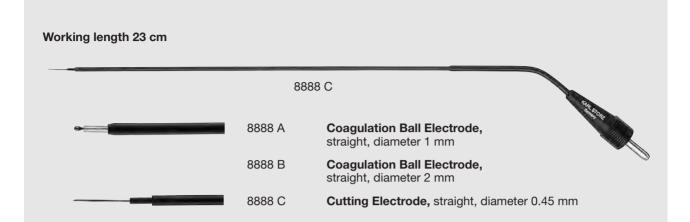


LA 59 D US 575

## **Accessories**

for High Frequency Surgical Units





8603 A - 8604 A

#### **Additional Accessories:**

Suction tubes are protected against contact with high frequency electrodes by insulation

8603 A **Insulated Suction Tube,** outer diameter

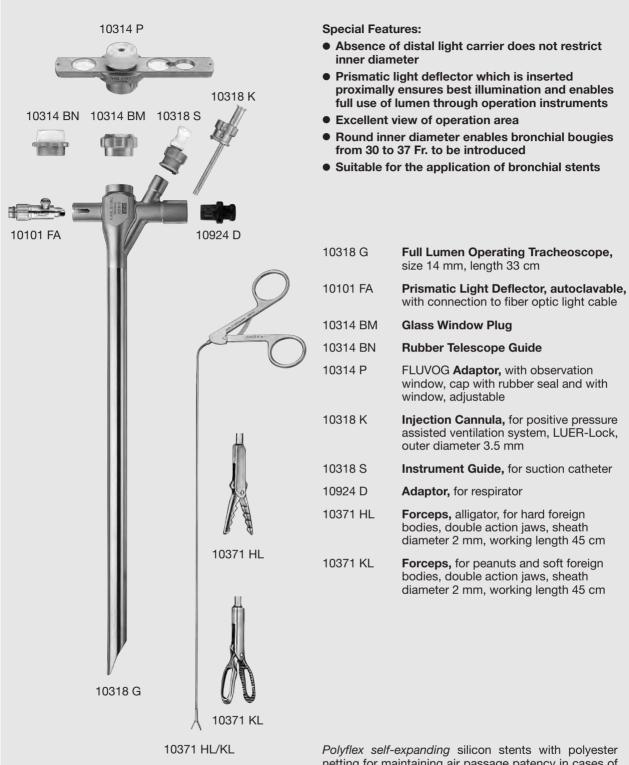
2.5 mm, working length 23 cm

8604 A **Same,** outer diameter 3 mm

**Electrode Handle 26 5200 43 and 26 5200 46** see chapter 8, page 414 **Unipolar and bipolar high frequency cords** see chapter 8, page 416



## **Full Lumen Operating Tracheoscope**



netting for maintaining air passage patency in cases of central airway stenosis and for bridging tracheooesphageal fistulus can be obtained from:

Willy Rüsch AG, P. O. Box 1180, D-72385 Kernen, Germany

For more forceps please see chapter 11-12, ESOPHAGOSCOPY – BRONCHOSCOPY

3-071

LA 61 C 577

## **Dilation Tracheoscopes**

GRONINGEN Model



Some tracheal stenoses can be treated endoscopically. An intubation laryngoscope, a dilation tracheoscope, telescope and suction tubes are required for this procedure.

The tracheoscope is available with a diameter of 8 mm or 12 mm. The size of the instrument is determined by the size of the larynx and the healthy portion of the trachea. There are numerous tiny openings in the distal end of the instrument which enable air to come through the middle of the stenosis. The proximal end of the instrument is designed in such a way that customary ventilation tubes and a telescope (30 cm) can be connected.

The intervention is carried out under general anesthesia. Following the administration of the anesthesia and with ventilation taking place via the anesthesia mask, the dilation tracheoscope is introduced under endoscopic control. The stenosis is visible through the vocal cords. The design of the tip which can be advanced forward

through the stenosis ensures that the ventilation is maintained during this process. The conical construction of the tip enables the instrument to be advanced carefully up to the wider section of the tracheoscope, whereby the tracheoscope remains in place 5-10 minutes. The intervention is then completed.

Fig. 1 corresponds to the view through the telescope and shows the proximal part of the tracheal stenosis. The vocal cords are at the front of the picture. In Fig. 2 the stenosis can be seen in detail. Fig. 3 shows the stenosis following the dilation; Fig. 4 the healthy, distal trachea.

The constellation of instruments is suitable for treating most medium-sized stenoses (Myer-Corton 2nd degree). The intervention can be repeated after 6-24 months without difficulty.

F. G. DIKKERS, M.D., Groningen, The Netherlands

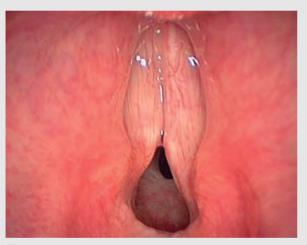






Fig. 2



Fig. 3



Fig. 4

1-03

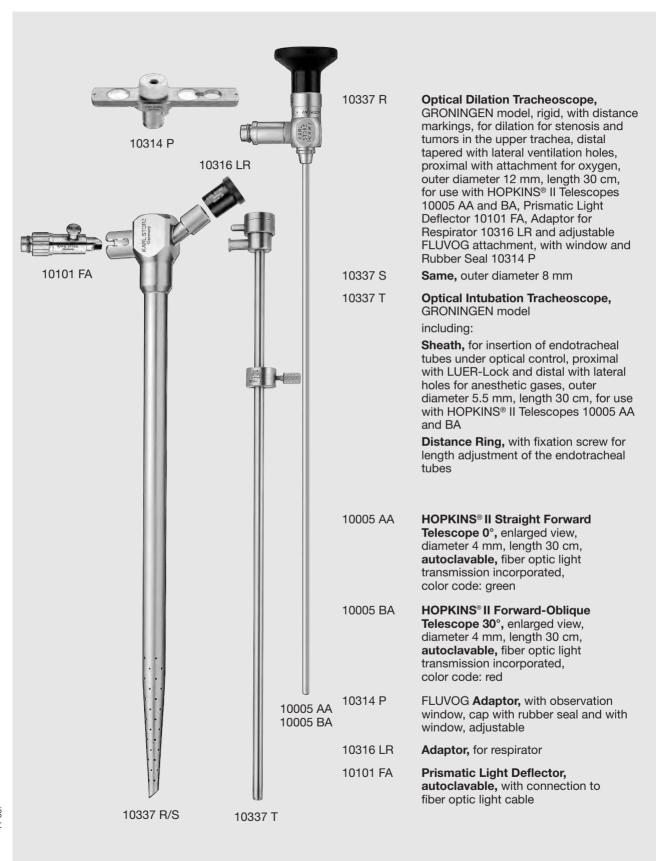
578 LA 62 C

## **Dilation Tracheoscopes**

Components/Spare Parts see chapter 16

GRONINGEN Model





LA 63 B 579



for Functional Diagnostics in Otorhinolaryngology



**CMOS Video Esopharyngoscope** for adults, without working channel, working length 75 cm, diameter 3,7 mm

#### **Special Features:**

- Possibility of inversion up to 200°
- A cm-scale with special markings for every 5 and 10 cm – can be read as distance between the optical window to the vestibule of the nose
- Every 10 cm the distance from the optical window is visible as a figure beside the marking, e. g. 30 cm = 3; 50 cm = 5 or 70 cm = 7. This means that the height and caudal-cranial extent of a pathological process can be determined with an accuracy of up to less than 1 cm in the esophagus. This procedure is suitable for measuring extensive alterations.

#### Fields of application

- Laryngopharynx
- Upper Esophageal Sphincter (UES)
- Cardia or Lower Esophageal Sphincter (LES)

#### **Applications**

- Stress endoscopy
- Polysomnoscopy
- Tracheobronchoscopy
- Combined endoscopy

#### Handling

The video esopharyngoscope is introduced transnasally. It is inserted into the pharynx under visual control. During this maneuver the functions of breathing, speaking, singing, coughing, swallowing water, liquid and solid food, etc. can be examined in the nose, rhinopharynx, velopharynx, oropharynx and larynx or laryngopharynx. This endoscopic procedure can be performed on adults without any medication. Administering decongestant nose drops with the addition of a few drops of e. g. oxybuprocaine (Novosine) is only advisable in the case of allergic patients and children on account of increased sensitivity or the narrower nasal passage.

To aid passage through the upper esophageal sphincter, the patient is given a glass of plain water (non-carbonated) and a straw. Once the optical window of the video esopharyngoscope is positioned above the postcricoidal region, the endoscope passes the upper sphincter after the first sip of water. This takes advantage of the physiological hypesthesia which occurs through the act of swallowing. The patient virtually drinks the endoscope. With the help of the patient, the optical window reaches the lower esophageal sphincter. Drinking plain water enables the endoscope to pass through the cardia. Stomach gas, the stomach's contents and the stomach wall can then be visualized via mucosal relief.

- When the distal end is curved backwards by 200°, a 2.5 mm-scale is visible in the optical window on the sheath. The cm-scale is positioned in inversion beside the pathological process. The extension is read and recorded with the video-endoscope. It allows measuring the length of a change in the esophagus with an accuracy up to ±1 mm, whilst eliminating the parallax error. This procedure is suitable for measuring smaller processes outside the sphincter regions.
- The possibility of long-term endoscopy is comparable to pH-metry or impedancometry.

#### Field of application

#### Stress endoscopy

Following the transnasal introduction of the endoscope into the esophagus, the functions of the stomach, esophagus, pharynx and larynx can be simultaneously recorded with an ECG under the same conditions as a stress electrocardiogram. As the symptoms for cardiac disorders and gastric reflux are similar, differential diagnosis is important in this case. Respiration and reflux disorders in the esophagus, pharynx and larynx or resulting electrocardiographic changes are documented during an exercise stress test.

## Polysomnoscopy (sleep endoscopy in conjunction with polysomnography)

Similar to stress endoscopy, a new diagnostic sleep endoscopy has been developed which combines polysomnography with somnoscopy (sleep endoscopy) on-line. The video esopharyngoscope is introduced as described above. In the sleep laboratory, the mechanisms of obstruction in the velopharynx, oropharynx and larynx regions that are observed and recorded during sleep endoscopy can be correlated on-line with polysomnographic data. This shows that there is a direct correlation between causes recorded by means of sleep registration and polysomnographic findings. Consequently, the significance of laryngeal obstruction mechanisms, which are responsible for 22% of all snoring and OSAHS problems, could be established. For the first time, a pretherapeutic diagnostic technique allows a prognosis on a postoperative outcome. This offers the possibility of objective quality control of the performed therapy during post-therapeutic follow-up.

A C-PAP or B-PAP machine is set up or adjusted under polysomnoscopic control. This ensures that OSAHS patients receive a higher standard of treatment.

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for Functional Diagnostics in Otorhinolaryngology



#### Tracheobronchoscopy

Out-patient tracheobronchoscopy can be performed on patients (including children) in a sitting position. Following administration of decongestant nose drops and nasal decongestion, e.g. 2% oxybuprocaine is inhaled deeply through an atomizer. This maneuver is repeated every 2 minutes. One waits for about 4 minutes until the patient confirms anesthesia. The video esophagoscope is advanced to the vocal cord level and oxybuprocaine is applied as drops to the tracheal mucosa. It is then possible to advance to the tracheobronchial tree.

## Combined endoscopy (Functional analysis under visual control)

Using a Steri-Strip (6 × 50 mm = half-length (3M)), a Sleuth catheter (impedancometry) and a pH meter probe or manometer probe, for example, are placed in parallel (piggyback) on the video esopharyngoscope and mounted on the side of the fiberscope with cmmarkings (up to 70 cm). The tip of the catheter or the probe must be visible in the optical window even when the endoscope is deflected. Following decongestion, the piggyback system is inserted into the side of the nose which offers the most space for maneuver. After reaching the pharynx, the system passes the upper sphincter as described above. The plaster should not be wrapped around the instruments more than twice (max. 50 mm = half-length) so that it comes off easily in the stomach. Gentle counterrotation of both piggyback components enables this fixation to be detached more quickly in the stomach.

#### Benefits of combined endoscopy:

- Introduction of probe or catheter under visual control, i.e. without gagging and without accidentally entering the larynx or the trachea
- Visualization of sensor position (sensor of the pH probe in the gaseous space of the stomach with correct pH values, but false interpretation)
- Visualization of the sensor or catheter position (i. e. kinked catheter in the esophagus)
- Prevention of blind measuring and, consequently, false interpretations via visualization and measurements

This new endoscopic technique offers improved functional diagnostics which is now performed under visualization in contrast to previous blind introduction. This opens up new dimensions and several possibilities for understanding mechanisms and pathomechanisms, for preventive medicine, and to develop more specific therapy plans.

A patient's case history and food diary (when, what, where, how long) – which records the type, time of day, and duration of food and drink consumption as well as any complaints – helps shorten the time required to perform medical examinations. Indications are also provided for, i. e. impedance measurement combined with pH-metry and/or simultaneous endoscopic long-term functional analysis. A more specific diagnosis can prevent the indiscriminate use of antacids and similar medications.

Prof. Dr. I. F. HERRMANN, Düsseldorf, Germany

3-11

ESO 1 B 583

for Functional Diagnostics in Otorhinolaryngology



The **CMOS** video esopharyngoscope features a compact and mobile solution thanks to its integrated light source and camera control unit.

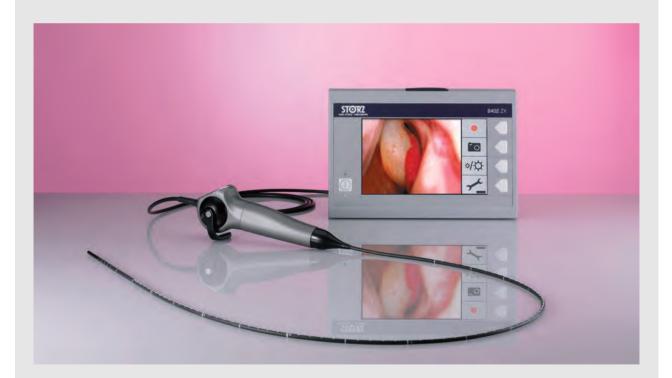
Combined with the lightweight Monitor 8402 ZX and our KARL STORZ C-HUB® System, the **CMOS video** 

**esophagoscope** provides a convenient and fast solution for the doctor's office, house calls or consultation purposes.

### **Special Features:**

- Convenience thanks to all-in-one solution the lightweight monitor combined with the CMOS video esopharyngoscope offer quick installation and great flexibility
- CMOS chip technology for good image quality
- Optimal field of view for excellent visualization of pathologies
- Large angle of view for optimal orientation
- Integrated LED light source for optimal illumination

- Replay of recorded video sequences and images via monitor
- Can be combined with the KARL STORZ C-HUB® system
- Sensitive yet robust control through ergonomic handle
- Waterproof, fully immersible for cleaning and disinfection
- Sterilizable via EtO gas, Sterrad® 100S, Sterrad® NX and Steris® System 1/System 1E

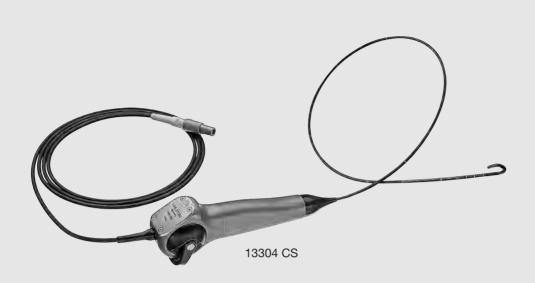


3-11

584 ESO 2 C

for Functional Diagnostics in Otorhinolaryngology







8402 ZX

13304 CSK CMOS Video Esopharyngoscope KIT,

for use with Monitor 8402 ZX
Direction of view: 0°
Angle of view: 85°
Working length: 75 cm
Outer diameter: 3.7 mm
Deflection up/down: 210°/140°

#### Following accessories included:

13304 CS CMOS Video Esopharyngoscope

13242 XL Leakage Tester, with bulb and manometer
11025 E Pressure Compensation Cap, for ventilation

during gas sterilization

27677 FV Case

13304 CSM CMOS Video Esopharyngoscope with Monitor

Direction of view: 0°
Angle of view: 85°
Working length: 75 cm
Outer diameter: 3.7 mm
Deflection up/down: 210°/140°

Following accessories included:

13304 CSK CMOS Video Esopharyngoscope KIT 8402 ZX Monitor for CMOS endoscopes

3-11

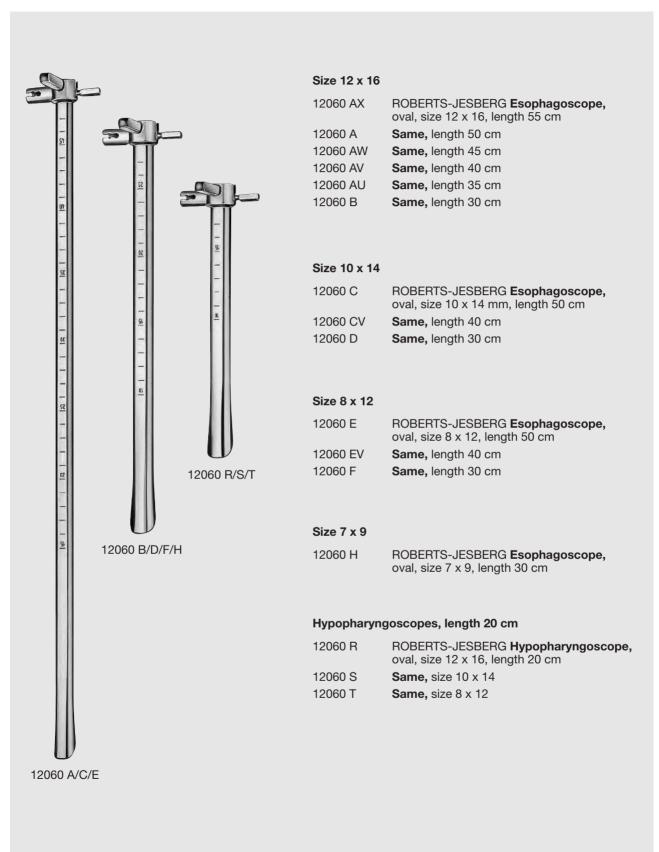
ESO 3 B 585

## **ROBERTS-JESBERG**

## **Esophagoscopes and Hypopharyngoscopes**





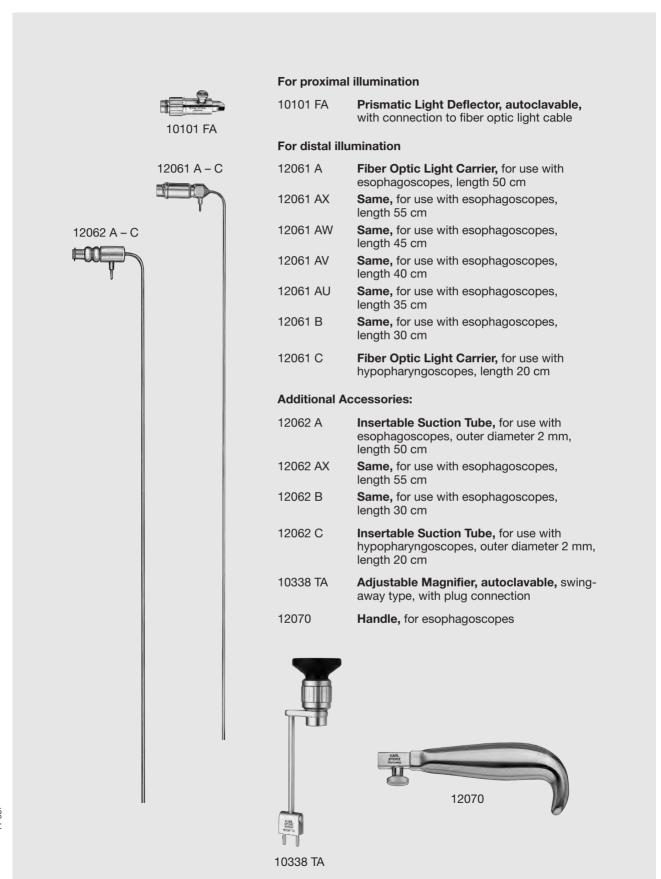


## **ROBERTS-JESBERG**

## **Esophagoscopes and Hypopharyngoscopes**



Accessories

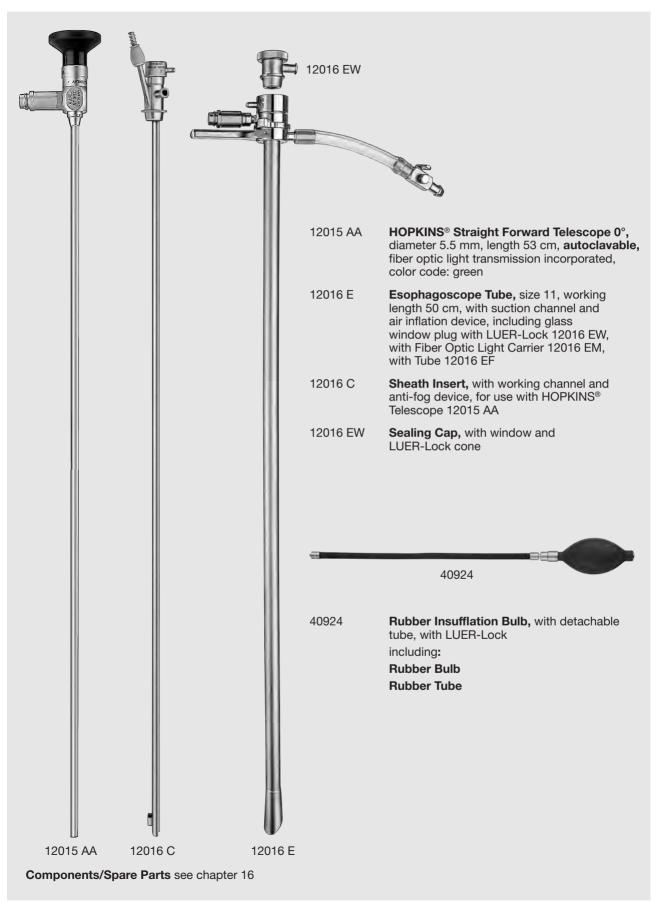


ESO 5 B

## **Optical Esophagoscope**

with Suction Channel and Air Inflation Device

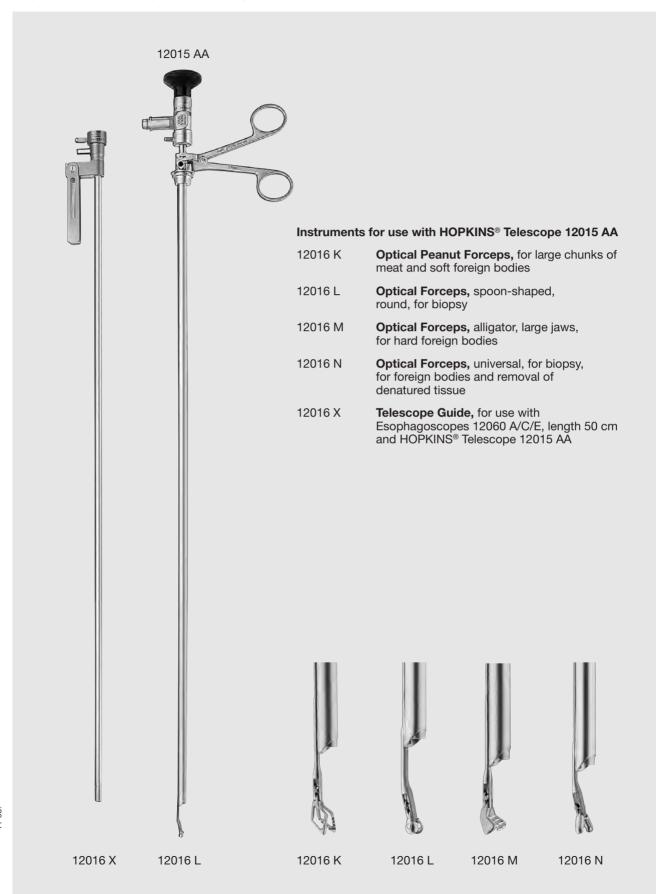




588 ESO 6 A



## **Optical Forceps and Injection Needle**



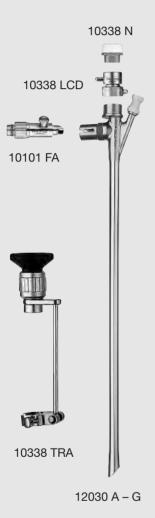
## **Pediatric Esophagoscopes**





### **Special Features:**

- Absence of distal light carrier does not restrict inner diameter
- Prismatic Light Deflector 10101 FA inserted proximally ensures best illumination and enables full use of lumen through operating instruments
- Excellent view of operation area
- Lateral channel for introduction of instruments and catheters



12030 A	Esophagoscope Tube, size 6, length 30 cm
12030 B	Same, size 5
12030 C	Same, size 4
12030 F	Esophagoscope Tube, size 3.5 mm, length 18.5 cm
12030 G	Same, size 3
10101 FA	Prismatic Light Deflector, autoclavable, with connection to fiber optic light cable
10338 TRA	Adjustable Magnifier, autoclavable, swing-away type, with ring adaption
10338 N	<b>Rubber Telescope Guide,</b> for use with telescopes and optical forceps
10338 LCD	<b>Telescope Bridge,</b> for fixed position between bronchoscope and telescope

For use through lateral working channel of esophagoscopes, lengths 30 and 18.5 cm, under control of HOPKINS® Telescopes 10324 AA, 10020 ATA and 10018 AA:

Forceps, alligator, spoon-shaped, single action jaws,

	semiflexible, sheath diameter 1 mm, with cleaning connector, working length 35 cm
10338 X	Forceps, spoon-shaped, for biopsy, single action jaws, semiflexible, width of jaws 1.2 mm, sheath diameter 1 mm, with cleaning connector, working length 35 cm
10468 B	Suction Catheter, 7.5 Fr., with Adaptor 10479 B
10468 B	Suction Catheter, 7.5 Fr., with Adaptor 10479 B
10468 D	Suction Catheter, 4.5 Fr., with Adaptor 10479 F

10338 U

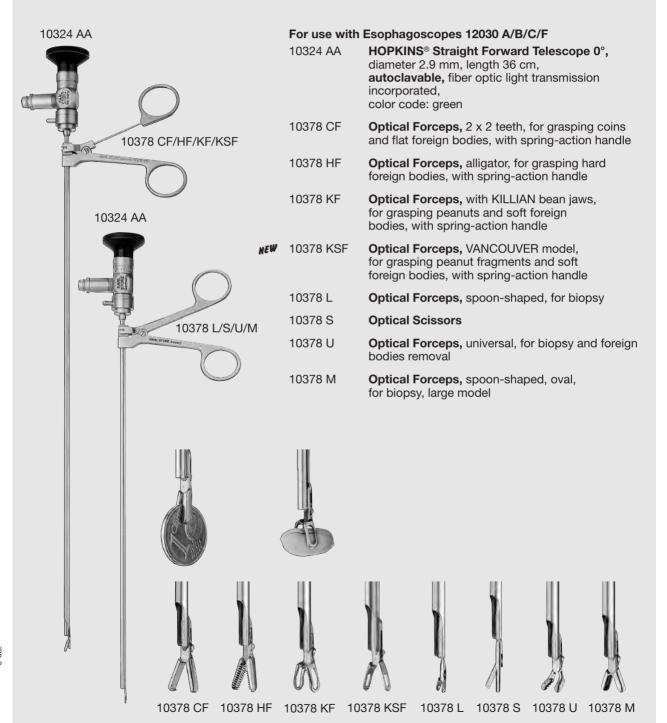
## **Optical Forceps and Scissors**





#### **Special Features:**

- Newly designed forceps for hard and soft foreign bodies enable removal under precise optical control not previously possible
- Small size of forceps allows them to be introduced through pediatric esophagoscopes as of size 3.5 cm and in lengths 30 or 18.5 cm
- Foreign bodies can be removed quickly and with utmost safety
- Better assessment of the depth of cut when taking biopsies



6-03

ESO 9 D 591

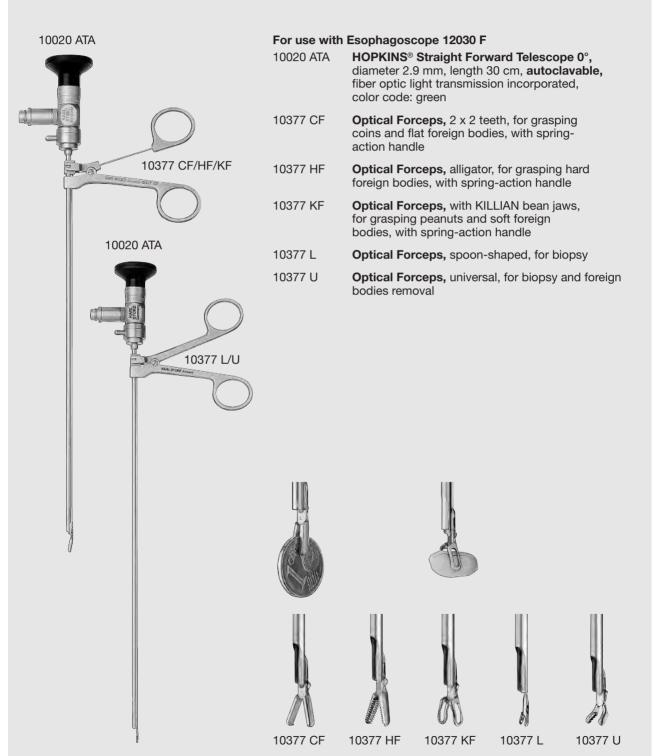
## **Optical Forceps**

for Pediatric Esophagoscopes, size 3.5, length 18.5 cm



#### **Special Features:**

- Newly designed forceps for hard and soft foreign bodies enable removal under precise optical control not previously possible
- Foreign bodies can be removed quickly and with utmost safety
- Better assessment of the depth of cut when taking biopsies



## Optical Forceps NEW

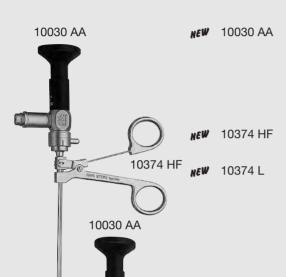
for Pediatric Esophagoscopes, size 3.5 - 3, length 18.5 cm



### **Special Features:**

- Small size of forceps allows them to be introduced through pediatric bronchoscopes as of size 3 and a length of 18.5 cm
- Foreign bodies can be removed quickly and with utmost safety

Better assessment of the depth of cut when taking biopsies



10374 L

Miniature Straight Forward Telescope 0°, semirigid, autoclavable, fiber optic light transmission incorporated

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

**Optical Forceps,** with alligator jaws, for grasping hard foreign bodies, with spring-action handle

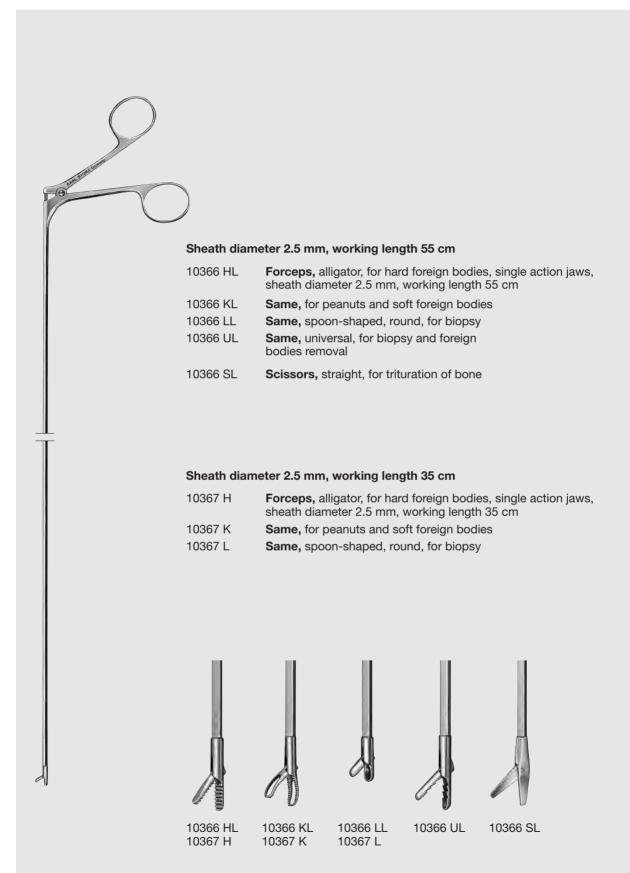
Optical Forceps, spoon-shaped, for biopsy



## Forceps and Scissors for Esophagoscopy

single action jaws





## **Esophagoscopic Forceps**







### Sheath diameter 2.5 mm, working length 55 cm

**Forceps,** alligator, for hard foreign bodies, double action jaws, sheath diameter 2.5 mm, working length 55 cm 10370 HL

10370 JL Same, pointed, serrated, for coins and flat foreign bodies

10370 KL Same, for peanuts and soft foreign bodies 10370 LL Same, spoon-shaped, round, for biopsy









10370 HL

10370 JL

10370 KL

10370 LL

ESO 13 E 595

## **Esophagoscopic Forceps**

double action jaws





### Sheath diameter 2 mm, working length 45 cm

10371 HL Forceps, alligator, for hard foreign bodies, double action jaws, sheath diameter 2 mm, working length 45 cm
 10371 KL Same, for peanuts and soft foreign bodies
 10371 LL Same, spoon-shaped, round, for biopsy

10371 UL Same, universal, for biopsy and foreign bodies removal

#### Sheath diameter 2 mm, working length 35 cm

Forceps, alligator, for hard foreign bodies, double action jaws, sheath diameter 2 mm, working length 35 cm
 Same, pointed, serrated, for coins and flat foreign bodies
 Same, for peanuts and soft foreign bodies
 Same, spoon-shaped, round, for biopsy
 Same, spoon-shaped, oval, fenestrated, for biopsy and foreign bodies removal
 Same, universal, for biopsy and foreign bodies removal



10371 HL 10371 H



10371 J



10371 KL 10371 K



10371 LL 10371 L



LL 10



10371 UL 10371 P 10371 U

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## **Esophagoscopic Forceps**

double action jaws





### Sheath diameter 1.5 mm, working length 35 cm

10372 HL Forceps, alligator, for hard foreign bodies, double action jaws,

sheath diameter 1.5 mm, working length 35 cm

10372 JL Same, pointed, serrated, for coins and flat foreign bodies

10372 KL Same, for peanuts and soft foreign bodies 10372 LL Same, spoon-shaped, round, for biopsy

10372 UL Same, universal, for biopsy and foreign bodies removal

### Sheath diameter 1.5 mm, working length 25 cm

**Forceps,** alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5 mm, working length 25 cm 10372 H

10372 K Same, for peanuts and soft foreign bodies



10372 HL 10372 JL 10372 H



10372 KL 10372 K



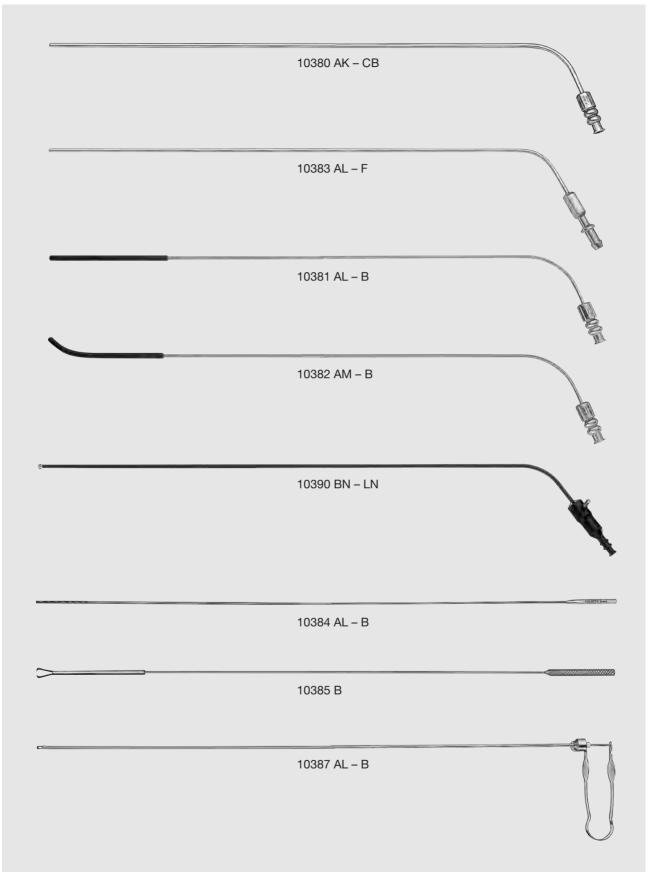
10372 LL 10372 UL

**ESO 15 E** 597

## **Accessories for Esophagoscopy**







## **Accessories for Esophagoscopy**





Working lengt	เท ๒บ	cm
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10380 AX Suction Tube, diameter 4 mm

10384 AX Cotton Carrier

#### Working length 55 cm

10380 AL Suction Tube, diameter 4 mm 10383 AL Same, with cut-off hole

Suction Tube, with rubber tip, straight, diameter 4 mm
 Coagulating Suction Tube, insulated, with connector pin

for unipolar coagulation, diameter 4 mm

10384 AL Cotton Carrier

10387 AL **Sponge Holder,** with spring handle

#### Working length 45 cm

10380 AM Suction Tube, diameter 4 mm

10381 AM **Suction Tube,** with rubber tip, straight, diameter 4 mm

10381 BL Same, diameter 2 mm

10382 AM **Same,** diameter 4 mm, curved

10383 AM Suction Tube, with cut-off hole, diameter 3 mm

#### Working length 35 cm

10380 CB Suction Tube, diameter 2 mm 10380 B Same, diameter 3 mm 10380 AK Same, diameter 4 mm

10383 B **Suction Tube,** with cut-off hole, diameter 3 mm

10383 BL Same, diameter 5.5 mm

10381 B **Suction Tube,** with rubber tip, straight, diameter 2 mm,

working length 35 cm

10382 B Same, curved

10390 BN Coagulation Suction Tube, insulated, with connector pin

for unipolar coagulation, diameter 3 mm

10384 B Cotton Applicator

10385 B Sponge Holder

10387 B **Sponge Holder,** with spring handle

#### Working length 30 cm

10383 DD Suction Tube, with cut-off hole, diameter 2 mm

10383 F Same, diameter 3 mm

### Working length 25 cm

10380 C Suction Tube, diameter 2 mm

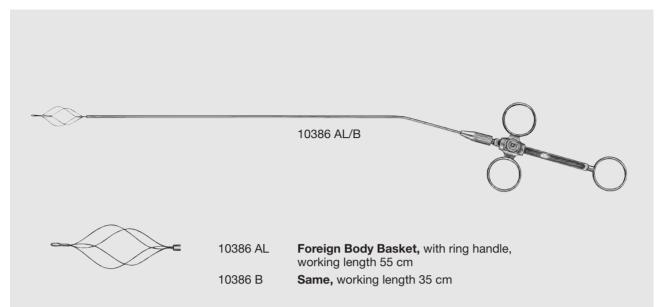
Components/Spare Parts see chapter 16

ESO 17 E 599

## **Accessories for Esophagoscopy**





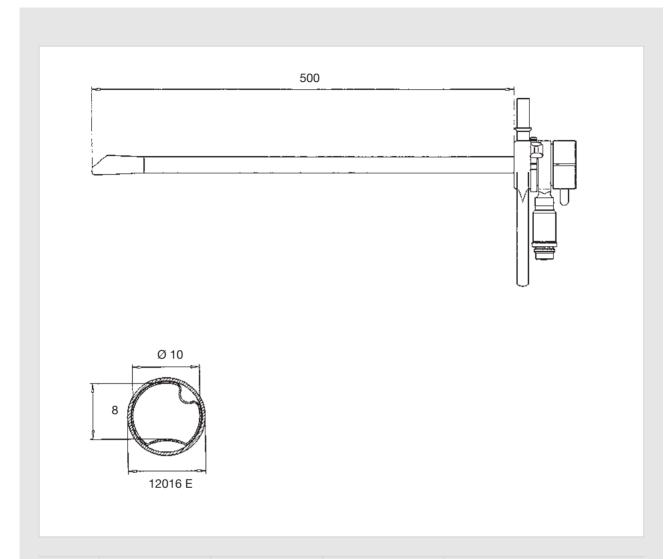


Components/Spare Parts see chapter 16

# Dimensions of Esophagoscopes 12016 E



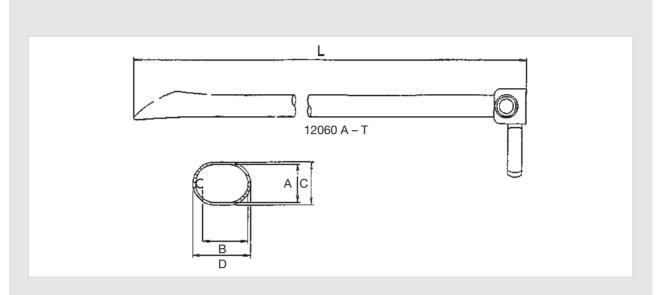
601



Cat. No.	Working Length	Outer Diameter Size	Telescopes	Optical Forceps
12016 E	50 cm	11	12015 AA	12016 K, 12016 L, 12016 M, 12016 N, with 12015 AA

# Dimensions of Esophagoscopes 12060

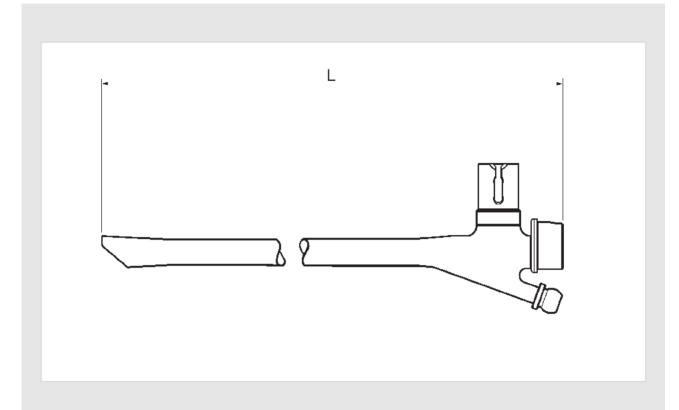




Cat. No.	Total Length - L -	Inner Diameter Size - A x B -	Outer Diameter Size - C x D -	Telescopes	Optical Forceps
12060 A	50 cm	11 x 12	12 x 16	12015 AA with 12016 X	12016 K, 12016 L, 12016 M, 12016 N, with 12015 AA
12060 AU	35 cm	11 x 12	12 x 16	12015 AA	
12060 AV	40 cm	11 x 12	12 x 16	12015 AA	
12060 AW	45 cm	11 x 12	12 x 16	12015 AA	
12060 AX	55 cm	11 x 12	12 x 16	12015 AA	-
12060 B	30 cm	11 x 12	12 x 16	10324 AA	10378 CF, 10378 HF, 10378 KF, 10378 KSF, 10378 L, 10378 U, 10378 S, with 10324 AA
12060 C	50 cm	9 x 10	10 x 14	12015 AA with 12016 X	12016 K, 12016 L, 12016 M, 12016 N, with 12015 AA
12060 CV	40 cm	9 x 10	10 x 14	12015 AA	
12060 CX	55 cm	9 x 10	10 x 14	12015 AA	
12060 D	30 cm	9 x 10	10 x 14	10324 AA	10378 CF, 10378 HF, 10378 KF, 10378 KSF, 10378 L, 10378 U, 10378 S, with 10324 AA
12060 E	50 cm	7 x 8	8 x 12	12015 AA with 12016 X	12016 K, 12016 L, 12016 M, 12016 N, with 12015 AA
12060 EV	40 cm	7 x 8	8 x 12	12015 AA	
12060 F	30 cm	7 x 8	8 x 12	10324 AA	10378 CF, 10378 HF, 10378 KF, 10378 KSF, 10378 L, 10378 U, 10378 S, with 10324 AA
12060 H	30 cm	6 x 6	7 x 9	10324 AA	
12060 R	20 cm	11 x 12	12 x 16	10324 AA	
12060 S	20 cm	9 x 10	10 x 14	10324 AA	
12060 T	20 cm	7 x 8	8 x 12	10324 AA	

# Dimensions of Esophagoscopes 12030

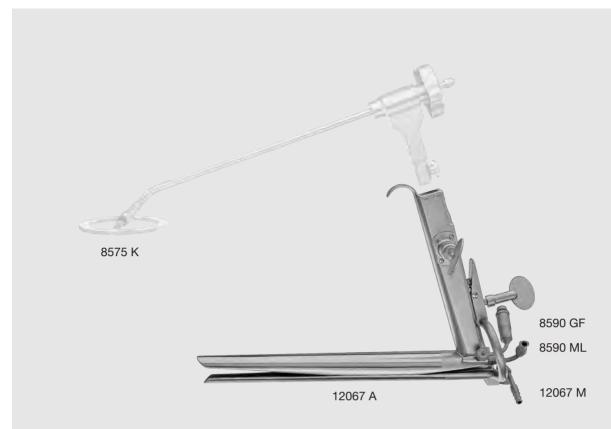




Cat. No.	Size	Total Length -	Telescopes	Optical Forceps
12030 A	6	30 cm	10324 AA	
12030 B	5	30 cm	10324 AA	10378 CF, 10378 HF, 10378 KF, 10378 KSF, 10378 L, 10378 U, 10378 M, 10378 S, with 10324 AA
12030 C	4	30 cm	10324 AA	, , , , , , , , , , , , , , , , , , , ,
12030 F	3.5	18.5 cm	10020 ATA, 10018 AA	10377 CF, 10377 HF, 10377 KF, 10377 L, 10377 U, with 10020 ATA
12030 G	3	18.5 cm	10018 AA	10374 HF, 10374 L with 10030 AA

# WEERDA Distending Diverticuloscope for CO<sub>2</sub> LASER Technique





Outer dimensions in mm: 12067 A WEERDA Distending Diverticuloscope, length 24 cm, with adaptor for Suction Tube 12067 M proximal: Proximal size open: max. 40 x 27 mm 29 x 27 mm min. 65 x 18 mm Distal size open: max. 12067 A min 7 x 18 mm 8590 GF Fiber Optic Light Carrier, for distal illumination, working length 14 cm Spread: max. 40 8590 ML Suction Tube, to remove vapor, for LASER treatment, min. 29 outer diameter 3 mm 12067 M Suction Tube, to remove vapor, flat, size 6 x 3 mm distal: 8575 K Laryngoscope Holder and Chest Support, GÖTTINGEN model, with adjustment wheel 12067 A including: Support Rod, movable, with metal ring, diameter 9 cm, Spread: max. 65 length 34 cm min. 7 8575 KC BENJAMIN-PARSONS Laryngoscope Holder and Chest Support, GÖTTINGEN model, with adjustment wheel

includina:

Components/Spare Parts see chapter 16

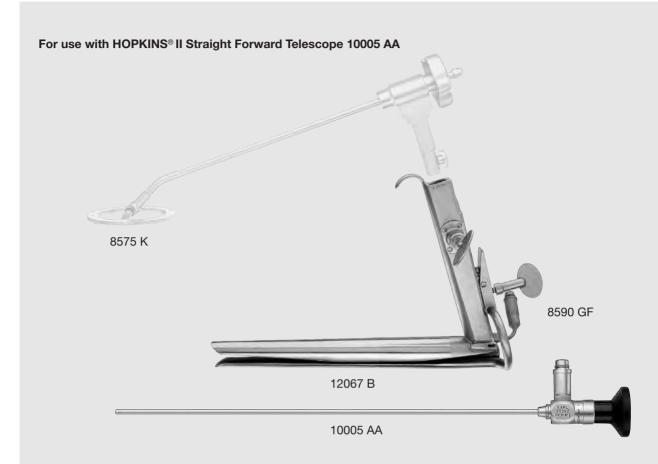
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BENJAMIN-PARSONS Support Rod, movable, with metal ring,

diameter 12 cm and 2 lateral set screws, length 34 cm

# WEERDA Distending Diverticuloscope for Stapling Technique





Outer dimensions in mm: 12067 B

proximal: 12067 B Spread: max. 40

min. 29

distal: 12067 B Spread: max. 65 min. 7

WEERDA Distending Diverticuloscope, length 24 cm, without adaptor for Suction Tube 12067 M

Proximal size open:

max. 40 x 27 mm 29 x 27 mm min. 65 x 18 mm Distal size open: max. min. 7 x 18 mm

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 30 cm, autoclavable, fiber optic light transmission incorporated,

color code: green

Fiber Optic Light Carrier, for distal illumination, working length 14 cm

Laryngoscope Holder and Chest Support, GÖTTINGEN model, with adjustment wheel

Support Rod, movable, with metal ring, diameter 9 cm, length 34 cm

10005 AA

8590 GF

8575 K

BENJAMIN-PARSONS Laryngoscope Holder and Chest 8575 KC

Support, GÖTTINGEN model, with adjustment wheel

including:

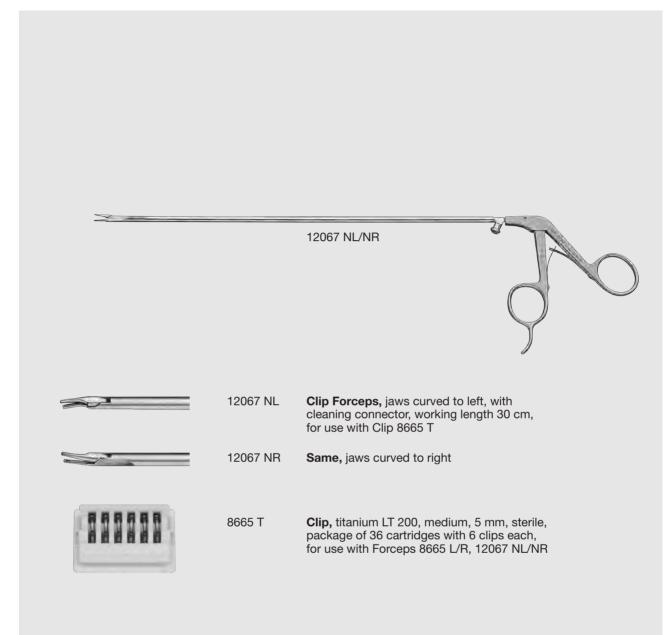
BENJAMIN-PARSONS Support Rod, movable, with metal ring, diameter 12 cm and 2 lateral set screws, length 34 cm

Components/Spare Parts see chapter 16

# **Instruments for Diverticuloscopes**









## **Bronchoscopy**

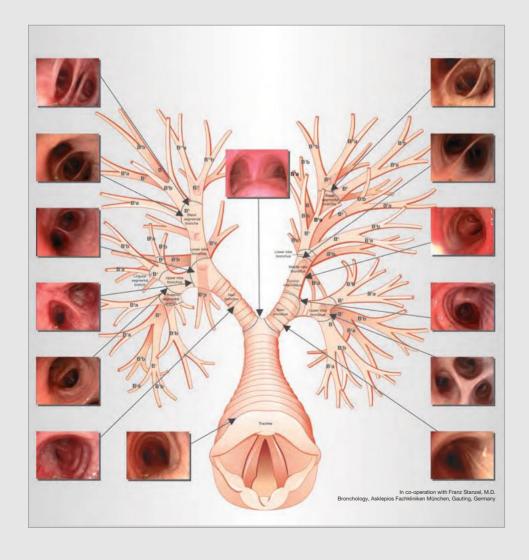


Indications for flexible bronchoscopy:

- For routine examinations
- Treatment of acute respiratory problems in the intensive care unit
- Suction under visual control
- Use of catheters and brushes for cytology
- For obtaining secretions for bacteriological tests
- Localization of bleeding sites in the case of hemoptysis
- Functional examination when respiratory tract is unstable
- Therapeutic suction and irrigation
- Transbronchial lung biopsy
- Selective bronchiography
- Autofluorescence and white light diagnosis

Indications for rigid bronchoscopy:

- Hemoptysis
- Tracheal stenosis
- Foreign body removal
- All bronchological interventions such as bougienage, removal of threads, hemostasis by means of electrocautery or laser
- Laser treatment
- Removal of tumors
- Confirmation of cell type in the case of previous, non-diagnostic fiber-optic bronchoscopy
- Removal of excess fibrin, mucous plugs
- Bronchography
- Autofluorescence and white light diagnosis



# Video Bronchoscope for Autofluorescence

for use with TELECAM SL II FI SCB 20213011U1

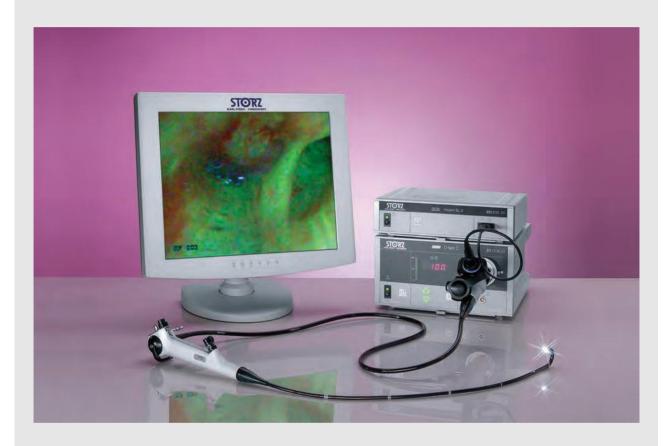


609

KARL STORZ is expanding its line of flexible bronchoscopes with the new video bronchoscope with a distal chip for autofluorescence diagnosis. Users who no longer wish to miss out on the high image quality of videoscopes can now take advantage of the quality products of KARL STORZ in this field, too.

Whereas in the past comparatively heavy fiber optic endoscopes with a separate camera head were used in video endoscopy, this system delivers excellent color fidelity in both the white light and autofluorescence modes. An integrated button on the handle of the video bronchoscope allows rapid switching between the white light and the blue light modes.

In combination with the TELECAM SL II FI SCB control unit and the D-LIGHT C/AF, the new video bronchoscope for autofluorescence diagnosis offers outstanding image sharpness as well as excellent brightness and representation of detail.



# Video Bronchoscope for Autofluorescence

for use with TELECAM SL II FI SCB 20213011U1





11900 AP/AN

Video Bronchoscope for Autofluorescence and White Light Diagnosis, color system PAL, including mounted Suction Unit 11900 AE, for use 11900 AP

with TELECAM SL II FI SCB 20 2130 11U1

2.3 mm Working channel: Direction of view: 0° Angle of view: 120° Deflection up/down: 180°/100° Depth of view: 3 - 50 mm Working length: 61 cm Outer diameter: 6.2 mm

11900 AN Same, color system NTSC

#### Following accessories included:

27677 KV	Case
<b>20</b> 2130 70	Video Connecting Cable
13272	Mouthpiece
11001 KL	<b>Biopsy Forceps,</b> flexible, spoon-shaped, round, double action jaws, diameter 1.8 mm, working length 120 cm
13242 LX	Leakage Tester, with bulb and manometer
11025 XE	<b>Pressure Compensation Cap,</b> for ventilation during gas sterilization
27651 B	<b>Cleaning Brush,</b> flexible, for working channel diameter 1.8 – 2.6 mm, length 100 cm
13991 SS	Irrigation Tube, for working channel
27656 B	Instrument Oil, 50 ml, silicone-free
13990 SFN	Protective Film

Optional accessories see pages 620-623

Further information and accessories for the video bronchoscope for autofluorescence see chapter 13, FLUORESCENCE

# **Video Bronchoscope**

for use with TELECAM SL II SCB 20213011 and TELE PACK X 20 0450 01-EN





11900 BP/BP

**Video Bronchoscope,** color system **PAL,** including mounted Suction Unit 11900 AE, for use with TELECAM® SL II **20** 2130 11 11900 BP

and TELE PACK 20 0430 12-020

Working channel: 2.3 mm Direction of view: 0° Angle of view: 120° Deflection up/down: 180°/100° 3 – 50 mm Depth of view: Working length: 61 cm Outer diameter: 6.2 mm

11900 BN Same, color system NTSC

#### Following accessories included:

27677 KV	Case
<b>20</b> 2130 70	Video Connecting Cable
13272	Mouthpiece
11001 KL	<b>Biopsy Forceps,</b> flexible, spoon-shaped, round, double action jaws, diameter 1.8 mm, working length 120 cm
13242 LX	Leakage Tester, with bulb and manometer
11025 XE	<b>Pressure Compensation Cap,</b> for ventilation during gas sterilization
27651 B	Cleaning Brush, flexible, for working channel diameter 1.8 – 2.6 mm, length 100 cm
13991 SS	Irrigation Tube, for working channel
27656 B	Instrument Oil, 50 ml, silicone-free
13990 SFN	Protective Film

Optional accessories see pages 620-623

Further camera systems and light sources suitable for use with video bronchoscopes see catalog TELEPRESENCE

**BRO-VIDEO 3 A US** 

# **Video Bronchoscope**

for use with TELECAM SL II SCB 20213011 and TELE PACK X 20 0450 01-EN





11900 AE Suction Unit, set for Video Bronchoscopes 11900 AP

and 11900 BP, autoclavable

including:

**Suction Valve** 

**Valve Adaptor** 

Connecting Cable, package of 10

**Suction Cylinder** 

Rubber Leaflet Valve, package of 10

#### Please note:

Further instruments suitable for use with Video Bronchoscopes 11900 AP/AN and 11900 BP/BN with diameter  $\leq$  1.8 mm, see pages 634-639

**TELECAM camera systems** see catalog TELEPRESENCE

Components/Spare Parts see chapter 16

## **TELE PACK X – The Mobile Compact Solution**

**Documentation Terminal for Video Bronchoscope** 



613

TELE PACK X is a compact, portable and flexible system that can be used for a wide range of applications from the doctor's office through to the emergency room.

To enable swift and easy work, TELE PACK X combines all that is needed: monitor, camera and light source.

Consideration has also been given to documentation: Integrated data management enables comprehensive recording of medical examinations or surgical interventions. Multiple USB ports and an SD card slot are available to store the data.

#### Crystal clear display

- 15" LCD display
- Image rotation
- 24-bit color intensity for natural color rendition
- DVI-D video output for connecting HD monitors

#### Flexible storage possibilities

- SD card slot for high storage capacity
- USB ports for external hard drives, USB flash drives and post-script printers
- Picture gallery for records
- Playback of saved videos
- Print-ready patient report documentation

#### Natural illumination

- HiLux 50 Watt high-performance light source
- Natural colour rendition close to daylight with a color temperature of 5700 K
- Up to 1000 hours lamp operating time

#### Easy control combined with highest safety

- Membrane keyboard for wipe-down disinfection
- Hot keys for rapid and direct adjustment
- Arrow keys for intuitive control
- Connection socket for pedal control

#### **Additional information**

- Sturdy, portable housing
- Ergonomically designed handle for convenient transport
- Universal power supply unit: 100 240 VAC, 50/60 Hz
- Dimensions (w x h x d): 450 x 350 x 150 mm
- Weight: 7 kg



2-1

BRO-VIDEO 5

## **TELE PACK X – The Mobile Compact Solution**

**Documentation Terminal for Video Bronchoscope** 





#### 20 045001-EN

#### 20 0450 01-EN TELE PACK X

endoscopic video unit for use with TELECAM one-chip camera heads and video endoscopes, incl. 50 W HiLux light source, 15" LCD TFT screen, USB/SD memory module, color systems **PAL/NTSC**, with integrated Image Processing Module, power supply 100 – 240 VAC, 50/60 Hz

including:

**USB Silicone Keyboard,** with touchpad, US character set **USB Flash Drive,** 4 GB

**Mains Cord** 

Mains Cord, US version

#### Optional accessories in use with video bronchoscopes:

**20** 0450 31

**Light Adaptor for Video Endoscopes,** for TELE PACK X in combination with KARL STORZ Video Bronchoscopes 11900 BP/BN and KARL STORZ video gastroscopes

#### Specifications:

•	
Power input	100 W
Power supply	100-240 VAC
Dimensions w x h x d	450 x 350 x 150
Weight	7 kg
Interfaces	- Video interface: DVI-D (in/out) - Audio: 3.5 mm jack (1x side, 1x rear), Line in, Line out - Footswitch port: 5-pin socket for two-pedal footswitch - Printer port: USB - Printer control language: PostScript
Illumination	- Lamp: Metal-halid 50 Watt - Color temperature 5700 K - Average life span: 1000 h

Image format	JPG
Video codec	MPEG-4
Video format	PAL/NTSC
Storage interface	USB 2.0; SD-memory card (SDHC compatible)
TFT monitor	- screen size: 15" - Resolution: 1024 x 768 - Contrast: 700:1
Loudspeaker	Power: 2 W

Components/Spare Parts see chapter 16

614 BRO-VIDEO 6

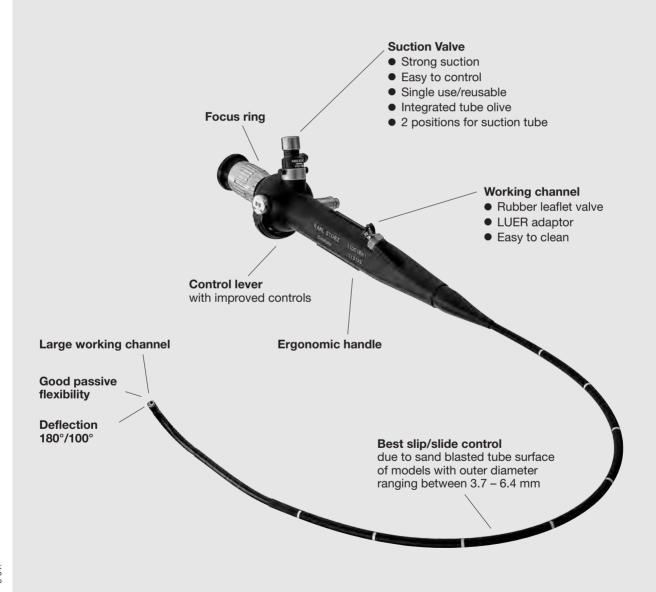




#### **Special Features:**

- Large viewing angle and movable distal tip facilitates orientation
- Working channel for the use of operating instruments
- Functional: simultaneous suction and application of medication via removable suction valve
- Waterproof, fully immersible for cleaning and disinfection
- Simple leakage test takes only a few minutes and requires no additional accessories

- Gas-sterilizable with EtO and FO gas, Steris<sup>®</sup> and Sterrad<sup>®</sup>
- Recommended for use in conjunction with KARL STORZ ENDOVISION® TELECAM SL II PDD SCB System
- Exceptional optical quality of both lens and fiber optic image transmission bundle
- Resistant construction and robust mechanical components ensure long life of the instrument



5-04

BRO-FIB 1 615

# **Broncho-Fiberscopes**

Broncho-Fiberscopes	Art. No.	Deflection up/down	Direction of view	Angle of view	
6.4 mm x 54 cm Broncho-Fiberscope	11004 BC	180°	. 0°	110°	
5.6 mm x 54 cm Broncho-Fiberscope	11009 BC	180°	. 0°	110°	
5 mm x 54 cm Broncho-Fiberscope for Adults	11001 BN	180°	: 0°	110°	
3.7 mm x 54 cm Broncho-Fiberscope for Children	11002 BD	180°	: 0°	90°	
2.8 mm x 54 cm Broncho-Fiberscope	11003 BC	170°	: 0°	90°	
2.8 mm x 70 cm Broncho-Fiberscope, for examining segmental bronchi	11005 BC	170°	: 0°	90°	

1-981

Accessories included in delivery and optional accessories see pages 618-623



		Working			A	ccessories	(included	d in deliver	у)				
Working length	Total length	channel inner diameter	Distal tip outer diameter	Case	Pressure Comp. Cap	Leakage Tester	Mouth Piece	Cleaning Brush	Biopsy Forceps	Grasping Forceps			
54 cm	82 cm	2.8 mm	6.4 mm	27677 BB	11025 E	13242 XL	13272	27651 C	11001 KL	11002 KS			
54 cm	82 cm	2.6 mm	5.5 mm	27677 BB	11025 E	13242 XL	13272	27651 C	11001 KL	11002 KS			
54 cm	82 cm	2.3 mm	5.2 mm	27677 BB	11025 E	13242 XL	13272	27651 B	11001 KL	11002 KS			
54 cm	82 cm	1.5 mm	3.6 mm	27677 BB	11025 E	13242 XL	13272	27651 AL	11003 MA	11003 ME			
54 cm	82 cm	1.2 mm	2.5 mm	27677 BB	11025 E	13242 XL	13272	27651 AK	11003 MA	11003 ME			
70 cm	98 cm	1.2 mm	2.5 mm	27677 BB	11025 E	13242 XL	13272	27651 AL	11003 MA	11003 ME			

11-981

BRO-FIB 3 B 617

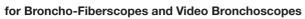
### **Accessories**





							fo	r us	e wit	th
Accessories include	d		Dia- meter	Length	11004 BC	11009 BC	11002 BN	11003 BC	11005 BC	11900 AP 11900 BP
	11003 MB	Grasping Forceps, flexible, double action jaws	1 mm	110 cm	-		•	•	•	
	11002 KS	Grasping Forceps, alligator, flexible, double action jaws	1.8 mm	120 cm	•	•	· -	-	-	• •
	11003 MA	Biopsy Forceps, oval, flexible, double action jaws	1 mm	110 cm	-		•	•	•	-
	11001 KL	Biopsy Forceps, spoon- shaped, round, flexible, double action jaws	1.8 mm	120 cm	•	•	-	-	-	• •
	11025 E	Pressure Compensation C for ventilation during gas ste	<b>ap,</b> erilization		•	•	•	•	•	-   -
	11025 XE	Same			-		_	-	-	•
	13242 XL	<b>Leakage Tester,</b> with bulb a manometer	nd		•	•	•	•	•	
	13242 LX	Same			-		-	-	- (	•
	13272	Mouthpiece			•	•	•	•	•	•

### **Accessories**





				for use with
ccessories include	ed		11004 BC 11009 BC 11001 BA	11002 BD 11003 BC 11005 BC
<b></b>	27651 C	Cleaning Brush, round, flexible, outer diameter 4 mm, for working channel diameter 2.4 – 3.6 mm, length 230 cm	• • -	
6-10000 miles	27651 B	Cleaning Brush, flexible, round, outer diameter 3 mm, for working channel diameter 1.8 – 2.6 mm, length 100 cm	•	• (
O PROPERTY OF THE PROPERTY OF	27651 AL	Cleaning Brush, round, flexible, outer diameter 2 mm, for working channel diameter 1.2 – 1.8 mm, length 150 cm		• - • -
- Francisco	27651 AK	Cleaning Brush, round, flexible, outer diameter 2 mm, for working channel diameter 1.2 – 1.8 mm, length 75 cm		- •
	<b>20</b> 2130 70	Video Connecting Cable		• (
	13991 SS	Irrigation Tube		•
11094 - 11094 - 11094 - 11094	27656 B	Instrument Oil, 50 ml, silicone-free		• (
TIONZ 13390 07M fauluriarium fau endel deservicerie Gerste	13990 SFN	Protective Film	• • •	• • • •

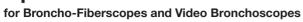
# **Optional Accessories**

for Broncho-Fiberscopes and Video Bronchoscopes



						for use wi	th
			Dia- meter	Length	<sup>1</sup> 1004 BC 11009 BC	11001 BN 11002 BD 11003 BC 11005 BC	11900 AP 11900 BP
	11002 KT	Grasping Forceps, alligator, round, flexible, double action jaws	1.8 mm	120 cm	• •	•	•
	11002 KU	<b>Grasping Forceps,</b> spoonshaped, serrated, flexible, double action jaws	1.8 mm	120 cm	• •	•	•
	11002 KX	Grasping Forceps, alligator, serrated, 3x 4 teeth, flexible, double action jaws	1.8 mm	120 cm	• •	•	• •
	11002 KZ	Grasping Forceps, serrated, 1x 2 teeth, flexible, double action jaws	1.8 mm	120 cm	• •	•	•
\$*************************************	11001 KM	Biopsy Forceps, spoon- shaped, round, with spike, fenestrated, flexible, double action jaws	1.8 mm	120 cm	• •	•	•
	11001 KN	Biopsy Forceps, spoon- shaped, oval, fenestrated, flexible, double action jaws	1.8 mm	120 cm	• •	• (	•
	11001 KP	Biopsy Forceps, spoon- shaped, oval, with spike, fenestrated, flexible, double action jaws	1.8 mm	120 cm	• •	•	•
	13250 KL	Biopsy Forceps, spoon- shaped, round, fenestrated, flexible, double action jaws	2.3 mm	120 cm	• •		-
	13252 KS	<b>Grasping Forceps,</b> alligator, flexible, double action jaws	2.3 mm	120 cm	• •		

# **Optional Accessories**





10770 B  Button Electrode, flexible, with connector pin for unipolar coagulation, diameter 1.7 mm, length 80 cm  11007 BS  Brush, for cytology, outer diameter 1.7 mm, working length 80 cm, with Handle 13266 H and Outer Tube 11007 S  11007 B  Brush, package of 10  11007 S  Outer Tube, outer diameter 1.7 mm, working length 80 cm, for Brush 11007 BS, package of 10  13266 H  Handle, for Brush 11007 BS  11008  Suction Catheter, 4.5 Fr., length 100 cm, with Adaptor 10479 F				11004 BC 11009 BC 11002 BD 11003 BC 11005 BC 11900 AP
working length 80 cm, with Handle 13266 H and Outer Tube 11007 S  11007 E  Brush, package of 10  11007 S  Outer Tube, outer diameter 1.7 mm, working length 80 cm, for Brush 11007 BS, package of 10  13266 H  Handle, for Brush 11007 BS  11008  Suction Catheter, 4.5 Fr., length 100 cm,		10770 B	connector pin for unipolar coagulation,	• • • • •
11007 S  Outer Tube, outer diameter 1.7 mm, working length 80 cm, for Brush 11007 BS, package of 10  13266 H  Handle, for Brush 11007 BS  11008  Suction Catheter, 4.5 Fr., length 100 cm,		11007 BS	working length 80 cm, with Handle 13266 H	• • • • •
working length 80 cm, for Brush 11007 BS, package of 10  13266 H Handle, for Brush 11007 BS  11008 Suction Catheter, 4.5 Fr., length 100 cm,	***************************************	11007 E	Brush, package of 10	• • • • •
11008 Suction Catheter, 4.5 Fr., length 100 cm,		11007 S	working length 80 cm, for	• • • • •
	NAME STORM	13266 H	Handle, for Brush 11007 BS	• • • • •
		11008	Suction Catheter, 4.5 Fr., length 100 cm, with Adaptor 10479 F	• • • • •

# Optional Accessories for Broncho-Fiberscopes





			11004 BC 11009 BC 11001 BN 11002 BD 11003 BC
	11008 E	Catheter, 5 Fr., without adaptor	• • •
	10479 F	<b>Adaptor,</b> for Suction Catheter 10468 D, 10478 D and 11008 E	• • •
-	11301 CA	<b>Leaflet Valve,</b> for single use, package of 20	• • • • •
,	11301 CB	Suction Valve, reusable	• • • • •
	11301 CD	Irrigation Adaptor, for machine cleaning, reusable, for fiberscopes	• • • • •
	11301 CE	Suction Valve, for single use, package of 20	• • • • •
	11301 BM	Adaptor, for leakage test, for Belimed washer-disinfectors	• • • • •

# Optional Accessories for Broncho-Fiberscopes





		tor use with  17004 BC 17007 BN 17002 BD 17003 BC
11301 FF2	Adaptor for MIELE Cleaning Machines, with safety valve, for automatic leakage test of flexible KARL STORZ endoscopes	• • • • •
11301 GG2	Adaptor, for cleaning and disinfecting the irrigation and working channels of flexible endoscopes, for MIELE-ETD washer/disinfectors	• • • • •
11301 HH	Adaptor for BHT Cleaning Machines, for automatic leakage test of flexible KARL STORZ endoscopes	• • • • •
11301 KK2	Adaptor, for working channel of flexible endoscopes, for MIELE-ETD 03 washer/disinfectors Please note: Adaptors 11301 FF2 and 11301 GG2 have to be ordered separately!	• • • • •
11301 D4	Battery Light Source LED for Endoscopes, with fast screw thread, brightness > 110 lm / > 150 klx, burning time > 120 min, weight approx. 150 g ready for use, suitable for wipe disinfection, with 2 Photo Batteries 121306 P  Photo Battery, lithium, 3 V, CR 123 A	• • • • •
121000 F	T Hoto Battery, Humann, 3 v, ON 123 A	

# UNIMAT® 30 NEW

**Suction System** 



#### **Special Features:**

- High suction performance of 30 I/min
- Particularly low noise and vibration
- Fast vacuum build-up to 85 kPa
- Maintenance-free cylinder/piston system
- Very easy to use

- Hydrophobic bacterial filter protects pump
- Problem-free cleaning
- For use in the doctor's office or hospital



**25** 3200 01 **UNIMAT® 30, Suction Pump Set,** 

power supply 230 VAC, 50/60 Hz

including:

**Bacterial Filter** 

Secretion Bottle, 21

Bottle Cap, with grip

Connecting Tube, short

**Patient Tube** 

**Overflow Case** 

Mains Cord, length 300 cm

**VACUsafe Promotion Pack Suction\*** 

**25** 3200 01C **Same,** power supply 115 VAC, 50/60 Hz

#### Specifications:

Suction performance	30 l/min	Rated power/	1A, 100 Watt (115 VAC)	
Vacuum	up to 85kPa, 640 mmHg	power consumption	0.45 A, 100 Watt (230 VAC)	
Power supply	115/230 VAC, 50/60 Hz	Protection class	protection class I, BF, IPX 1	
Dimensions w x h x d	245 x 345 x 282 mm	Inspections & certifications	MDD 93/42 EWG, EN 60601-1, EN 60601-1-2, EN 10079-1, ISO 9001, UL 2601-1	
Weight	7 kg		13O 9001, OL 2001-1	
Certified to	IEC 601-1 CE label acc to MDD			



mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

Optional accessories for UNIMAT® 30 see page 625

Components/Spare Parts see chapter 16

5

# **Optional Accessories**





Accessories		
	for Broncho	
ľ	10432 N	Aspirator, for collecting secretions, with cut-off hole, with Spare Glass 10432 E, can be connected to suction tubes or suction catheters
	10432 T	Same, without cut-off hole
7	<b>25</b> 3200 80	Bacterial Filter
	<b>25</b> 3200 81	Secretion Bottle, 2
	<b>25</b> 3200 82	Bottle Cap, with grip
	<b>25</b> 3200 85	Overflow Case
	<b>25</b> 3200 83	Connecting Tube, short
	<b>25</b> 3200 84	Patient Tube
	400 A	Mains Cord, length 300 cm
	29005 PH	Pump Holder, for attaching suction pump
	23003111	UNIMAT® 30 <b>25</b> 3200 01 to equipment cart, for mounting to 2 Equipment Rails 29003 GS
		mounting to 2 Equipment halls 29003 GS
Single-use accessories fr	om mtp*	
	VACIJaafa (	Senietov 1.5 I. 2 Land 2 L
	VACUSAIE	Canister, 1.5 I, 2 I and 3 I
	VACUsafe S	Suction Bag, 1.5 l, 2 l, 3 l, with filter for single use, green
	Gelling Gra	nulate, in 20 g bag
	VACUsafe Suction Tube, with red and blue multiadaptor for	
	single use, unsterile, length 170 cm	
	VACUsafe Connecting Tube, with green multiadaptors, unsterile, length 30 cm	
	<del>-</del>	Canister Holder, for 25 x 10 mm and 34 x 8 mm rails

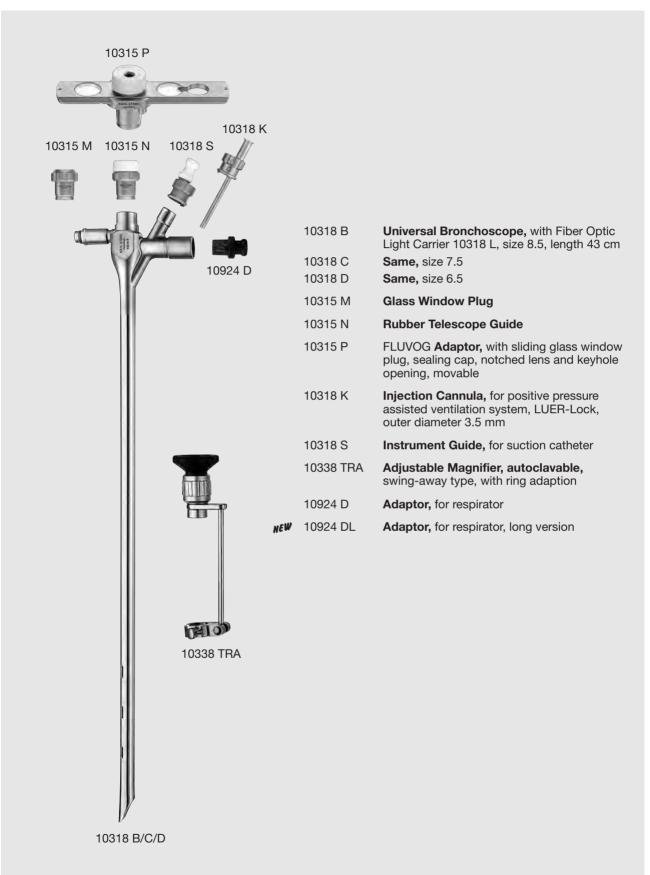
3-11

mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

## **Universal Bronchoscopes for Adults**



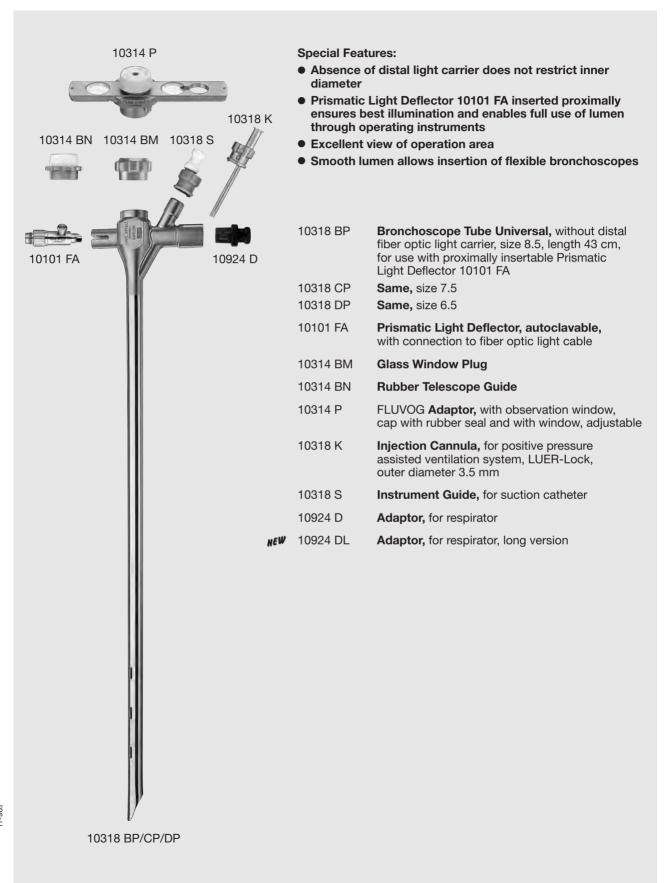
Standard model with fiber optic light carrier for distal illumination



### **Universal Bronchoscopes for Adults**

with proximal illumination



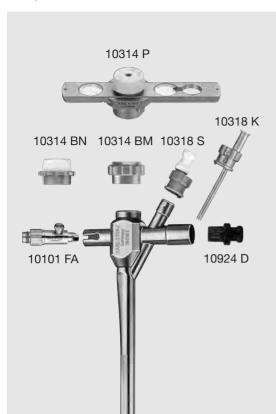


BRO 3 E 627

# **Full Lumen Operating Tracheo-Bronchoscopes**

with proximal illumination





#### **Special Features:**

NEW

- Absence of distal light carrier does not restrict inner diameter
- Proximal diameter enlarged ovally: thus prismatic light deflector 10101 FA can be inserted as far as possible in the lumen to ensure best illumination and full use of inner diameter
- Excellent view of operation area
- Round inner diameter allows insertion of bronchial bougies ranging between 30 up to 37 Fr.
- Distal end of tracheoscopes without lateral holes for more effective oxygen supply in the axial direction, i. e. in case of tumors in the upper tracheal area

10318 F	Full Lumen Operating Tracheoscope, size 12 mm, length 33 cm
10318 FL	Full Lumen Operating Bronchoscope, size 12 mm, length 43 cm
10318 G	Full Lumen Operating Tracheoscope, size 14 mm, length 33 cm
10101 FA	Prismatic Light Deflector, autoclavable, with connection to fiber optic light cable
10314 BM	Glass Window Plug
10314 BN	Rubber Telescope Guide
10314 P	FLUVOG <b>Adaptor</b> , with observation window, cap with rubber seal and with window, adjustable
10318 K	<b>Injection Cannula,</b> for positive pressure assisted ventilation system, LUER-Lock, outer diameter 3.5 mm
10318 S	Instrument Guide, for suction catheter
10924 D	Adaptor, for respirator
10924 DL	Adaptor, for respirator, long version
	10318 FL  10318 G  10101 FA  10314 BM  10314 P  10318 K  10318 S  10924 D

Further tracheoscopes see chapter 10, LARYNGOSCOPY

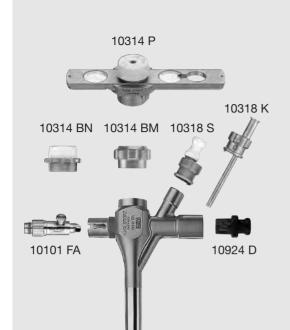
11-983

10318 FL

# **Full Lumen Operating Tracheo-Bronchoscopes**

with proximal illumination





#### **Special Features:**

- Absence of distal light carrier does not restrict inner diameter
- Prismatic Light Deflector 10101 FA inserted proximally ensures best illumination and enables full use of lumen through operating instruments
- Excellent view of operation area
- Round inner diameter allows insertion of bronchial bougies ranging between 30 up to 37 Fr.
- Distal end beveled 45°, round airholes; especially suited for the application of stents.

10318 ER	Full Lumen Operating Bronchoscope, size 11 mm, length 43 cm, modified for application of stents, distal end with lateral airholes and 45° oblique beak, for use with Prismatic Light Deflector 10101 FA, color code: green
10318 GL	Same, size 14 mm, color code: red
10101 FA	Prismatic Light Deflector, autoclavable, with connection to fiber optic light cable
10314 BM	Glass Window Plug
10314 BN	Rubber Telescope Guide
10314 P	FLUVOG <b>Adaptor</b> , with observation window, cap with rubber seal and with window, adjustable
10318 K	<b>Injection Cannula,</b> for positive pressure assisted ventilation system, LUER-Lock, outer diameter 3.5 mm
10318 S	Instrument Guide, for suction catheter
10924 D	Adaptor, for respirator
10924 DL	Adaptor, for respirator, long version

10318 ER/GL

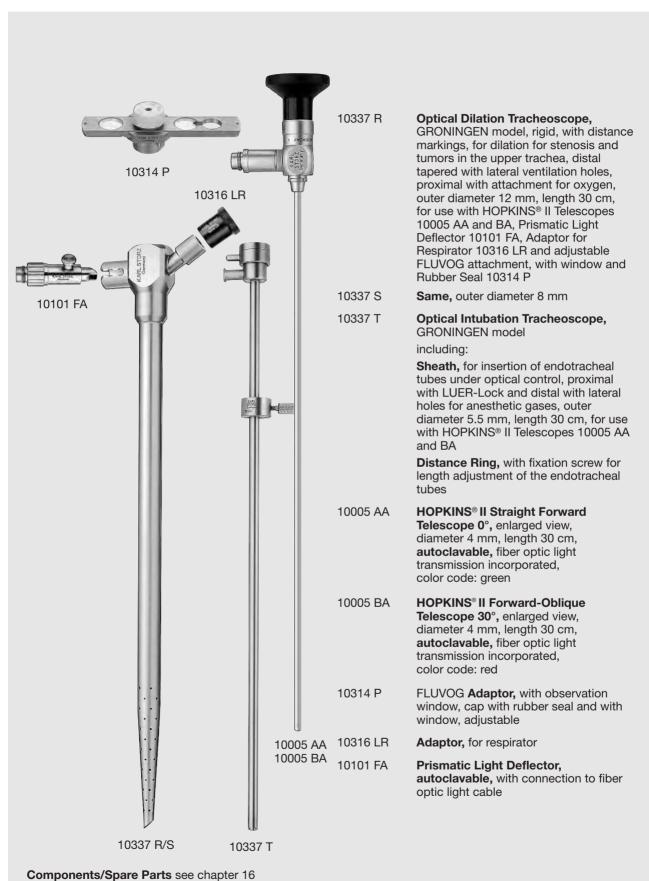
BRO 5 E 629

NEW

## **Dilatation Tracheoscopes**

**GRONINGEN Model** 





630 BRO-TEL 2 D





10320 AA



For use with Bronchoscopes 10318, Optical Forceps 10350 and Deflecting Device 10357

10320 AA **HOPKINS® Straight Forward Telescope 0°**, diameter 5.5 mm, length 50 cm, **autoclavable**,

fiber optic light transmission incorporated,

color code: green

10320 BA HOPKINS® Forward-Oblique Telescope 30°,

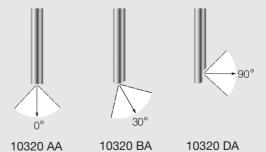
diameter 5.5 mm, length 50 cm, **autoclavable**, fiber optic light transmission incorporated,

color code: red

10320 DA HOPKINS® Lateral Telescope 90°,

diameter 5.5 mm, length 50 cm, **autoclavable**, fiber optic light transmission incorporated,

color code: blue



5-04

BRO-TEL 3 C US 631

# **Optical Forceps**



10320 AA/BA



#### **Special Features:**

- The jaws of the forceps and the region of biopsy are well visualized prior to and during the procedure.
- Foreign bodies can now be removed quickly under optical control.
- The spring-action handle of the grasping forceps prevents excess pressure being applied to the foreign body.
- The depth of cut during biopsy is much easier to assess.

For use with HOPKINS® Telescopes 10320 AA/BA and Universal Bronchoscopes 10318 B – CP, size 8.5 to 7.5

10350 HF	<b>Optical Forceps</b> , alligator, for hard foreign bodies, large jaws, with spring-action handle
10350 KF	<b>Optical Forceps,</b> for peanuts and soft foreign bodies, with spring-action handle
10350 L	Optical Forceps, spoon-shaped, round, for biopsy
10350 U	Optical Forceps, universal, for biopsy, for the removal of foreign bodies and denatured tissue
40050.14	

Optical Forceps, large jaws, sharp, for removing large fragments of tissue, for use with HOPKINS® Telescope 10320 AA

Optical Forceps, large jaws, blunt, serrated, for removing large fragments of tissue, for use with HOPKINS®
Telescope 10320 AA

Optical Forceps, for repositioning and removing stents, one fixed jaw



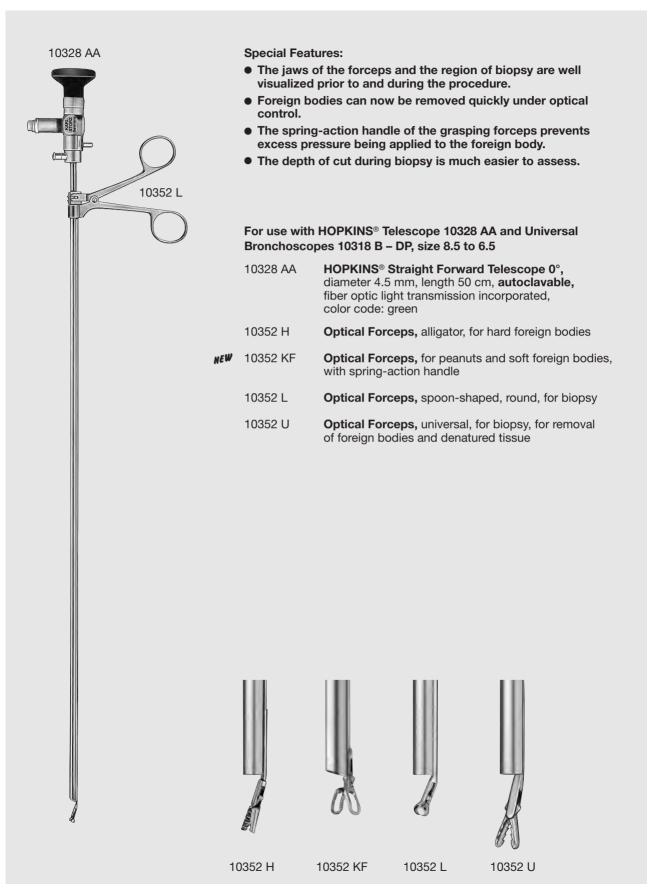
10350 HF 10350 KF 10350 L 10350 U 10350 M 10350 MS 10350 ST

11-983

632 BRO-TEL 4 A







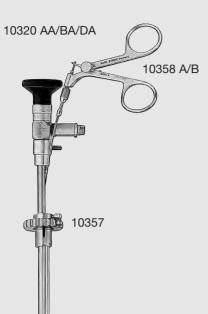
BRO-TEL 5 A 633

## **Steerable Optical Instruments**





#### Working length 43 cm



For use with Universal Bronchoscopes with distal illumination 10318 B/C, size 8.5 and 7.5 and HOPKINS® Telescopes 10320 AA/BA/DA

10357 **Deflecting Device,** with telescope guiding tube from

proximal to distal end

#### Instruments for use with Deflecting Devices 10357:

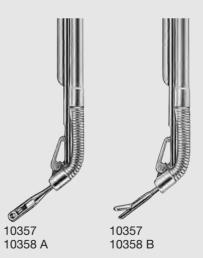
10358 A Flexible Forceps, spoon-shaped, for biopsy,

for removal of denaturated tissue, working

length 60 cm

10358 B Flexible Biopsy Forceps, spoon-shaped, small size,

for perbronchial lung biopsy, working length 65 cm

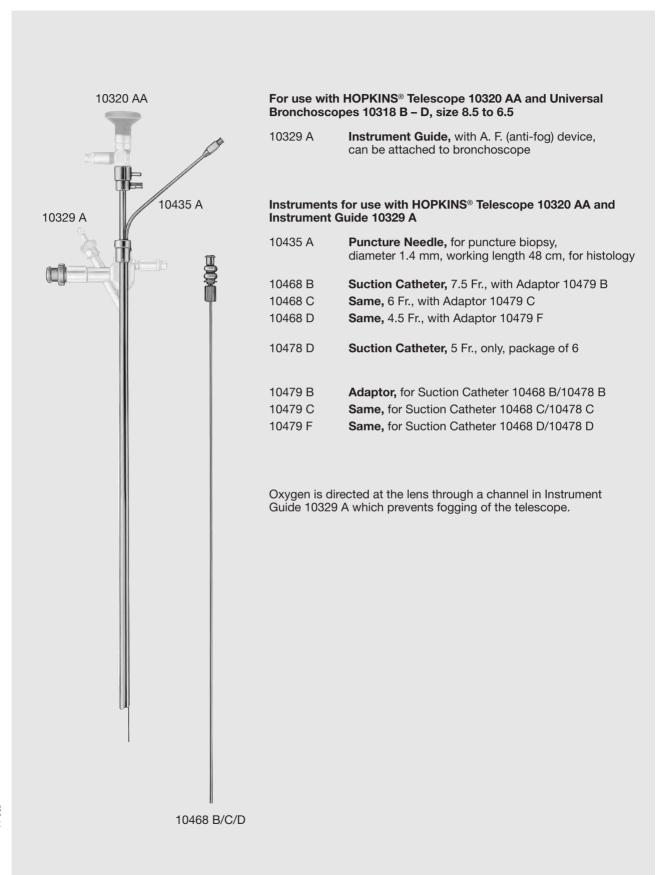


The jaws of the Flexible Biopsy Forceps 10358 A can be mechanically pressed against the intact mucosa. This enables collecting material which would slip off a conventional forceps during tangential grasping.

## **Rigid Instrument Guide**

with Antifog System, Accessories





BRO-TEL 7 A 635

# **TONN Stent Applicator**



Tracheobronchial stents are widely used in bronchology. Indications are primarily malignant and benign tracheobronchial stenoses, but may also include tracheo-esophageal fistula and, to a certain extent, tracheobronchial malacia. It concerns mostly patients who cannot undergo surgery for functional and/or prognostic reasons. Of the three basic stent types available, i.e. polymer, metal and hybrid, the DUMON silicone stent is the most commonly used worldwide<sup>9</sup>. Since the beginning of the 90s, this stent is available in various sizes and diameters, also as bifurcation stent. Within 10 years, the "Dumon stent" has de facto acquired "gold standard" status<sup>9</sup>.

A rigid bronchoscope is required to facilitate stent placement. Not only does this instrument enable insertion of this so-called "foreign body", it also – if necessary – performs repositioning and extraction. Prior to stent placement, all other interventions, such as LASER treatment, tumor resection and stenosis dilatation, are performed.

The stenosis/fistula are then measured. A stent with the appropriate diameter and length is selected on the basis of existing endobronchial conditions. A "rule of thumb" is to select a stent that is approx. two millimeters thicker than the outer diameter of the bronchoscope with the largest diameter, which is to be passed through the stenosis. In the case of malignant stenosis, the distal and proximal end of the stent should be in between 0.5 cm and 1.0 cm longer than the stenosis, in order to pass it successfully.

The silicone stent must be folded before placement in the bronchial system. KARL STORZ has designed a special applicator system for this purpose. The stent to be deployed is first placed in the folding block, folded and then advanced through the applicator system. Care should be taken that the stent and applicator is lubricated with a lubricant suitable for use with endoscopes. The applicator system can then be pushed through the bronchoscope or tracheoscope. The stent is "released" when the applicator system and the broncho/tracheoscope is withdrawn. X-Ray control is often helpful, but not absolutely necessary. Should repositioning be required, the stent can be moved backwards and forwards with an optical foreign body forceps.

Silicone bifurcation stents can also be placed using this applicator system.

Please note: the FREITAG dynamic stents are not suitable for this applicator system. These require a stent forceps<sup>2)</sup> specifically designed by KARL STORZ for this purpose.

#### References:

- <sup>1)</sup> Dumon JF: A dedicated tracheobronchial stent. Chest 1990;97:328-332
- <sup>2)</sup> Freitag L: "Tracheobronchiale Stents" in Interventional Bronchoscopy, 171-185, Karger, Basel, 2000

H. TONN, M.D., Head Physician Klinikum Hannover Oststadt, Klinik für Pneumologie, Hannover, Germany

#### Please note:

The TONN Stent Applicators 10520, 10530, 10540 and 10550 are available from:

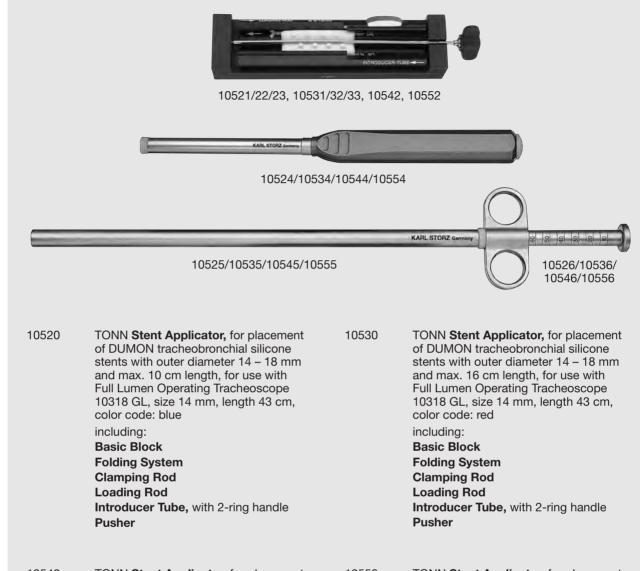
NOVATECH SA Z.I. Athélia III – Voie Antiope 13705 La Ciotat Cédex FRANCE

Tel: +33 (0) 890 710 608 Fax: +33 (0) 890 710 609 041

BRO 6 C

## **TONN Stent Applicator**





10540

TONN **Stent Applicator**, for placement of DUMON tracheobronchial silicone stents with outer diameter 8 - 13 mm and max. 10 cm length, for use with Full Lumen Operating Bronchoscope 10318 ER, size 11 mm, length 43 cm, color code: green

including: **Basic Block Folding System Clamping Rod Loading Rod** 

Introducer Tube, with 2-ring handle

**Pusher** 

10550

TONN Stent Applicator, for placement of DUMON tracheobronchial silicone stents with outer diameter 9 - 12 mm and max. 6 cm length, for use with Bronchoscope Tube Universal 10318 DP, size 6.5 mm, length 43 cm, color code: white

including: **Basic Block Folding System Clamping Rod Loading Rod** 

Introducer Tube, with 2-ring handle

**Pusher** 

Please note: TONN stent applicators are available from NOVATECH see page 636 Full Lumen Operating Tracheo-Bronchoscopes 10318 ER/GL see page 627 Components/Spare Parts see chapter 16

BRO 7 E US

## FREITAG Stent Forceps



# The Placement of Bifurcated Airway Stents – Technique and Instruments

The placement of airway stents has become an increasingly accepted means of palliation for patients with stenoses of the central airways. While straight silicone or metal stents are relatively easy to implant, placement of bifurcated stents seems to be more complicated.

Indications for the use of Dynamic-Stents are strictures and malacia of the trachea, tumor infiltration or compression of the bifurcation, or tracheoesophageal fistulas. The insertion method and the instrument developed especially for this procedure are presented here.

Rigid bronchoscopy is performed under general anesthesia with muscle paralysis. After photoresection of obstructing tissues or dilation of benign strictures the rigid bronchoscope/tracheoscope is removed and the larynx aperture is focused on with a normal laryngoscope.

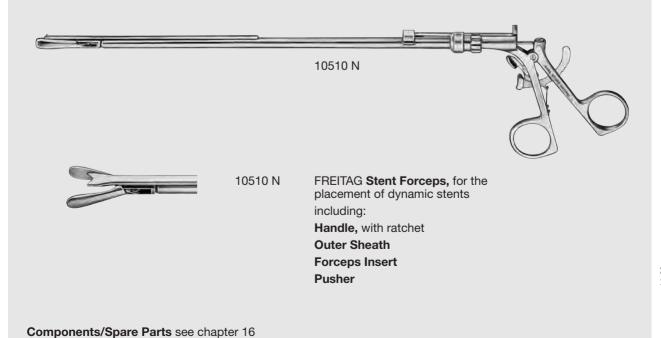
The bifurcated stent is grasped from inside with a stent forceps. By closing the jaws the bronchial limbs of the stent are narrowed to facilitate the passage through the vocal cords and the stenosis. The stent is intubated with the forceps similarly to the intubation of an endotracheal tube. After passing the larynx and the compressed areas of the trachea the ratchet of the handle is released and the forceps is carefully opened. One can easily feel how the bronchial limbs glide into the main bronchi as the forceps saddles the carina.

Then a movable pusher mounted on the instrument is used to anchor the stent while the grasping part of the stent is withdrawn. After complete removal of the forceps the patient is reintubated with a short bronchoscope or tracheoscope and stent position and function are checked. A thin flexible bronchoscope is used to aspirate any mucus and contrast medium if this has been used. Special care is taken that the right upper bronchial lobe is not blocked by the limb of the stent.

Although placement is usually possible without visual control it is further facilitated and safer under x-ray fluoroscopy. For very critical situations with tumor invasion close to the carina we used 4 ml of contrast medium to mark the narrowed trachea and the bifurcation. Under fluoroscopic control all stents could be positioned without complications. We have not seen a single tear or a perforation but one has to be aware of this potential hazard when placing a stent.

Theoretically placement of bifurcated stents with the method described could be performed without rigid bronchoscopy. Using the stent forceps, the whole procedure takes less than a minute. However, because of potential complications, we strongly recommend that only those surgeons and chest physicians should place stents who are familiar with all bronchoscopical techniques including rigid bronchoscopy.

Prof. L. FREITAG, M. D., D. GRESCHUCHNA, M. D.



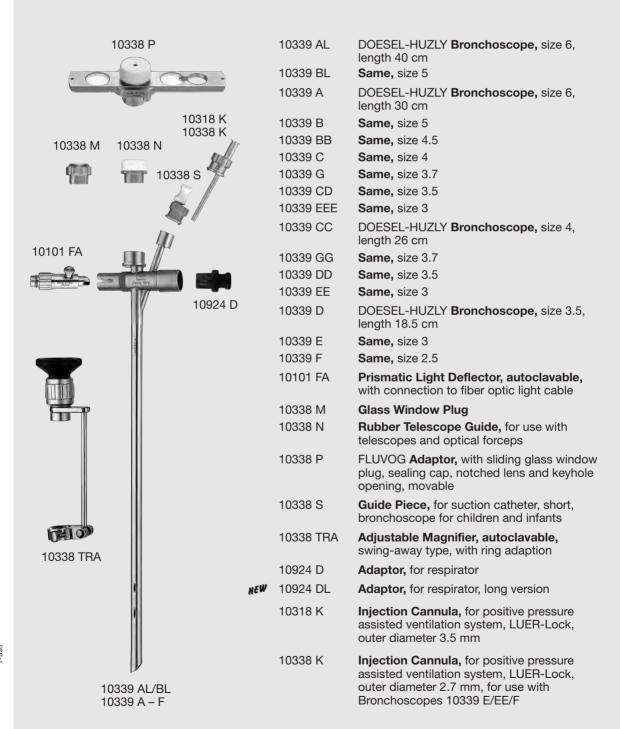
### **Pediatric Bronchoscopes**

with proximal illumination



#### **Special Features:**

- Absence of distal light carrier does not restrict inner diameter
- Prismatic Light Deflector 10101 FA inserted proximally ensures best illumination and enables full use of lumen through operating instruments
- Excellent view of operation area
- Lateral channel for introducing suction catheters and fine instruments



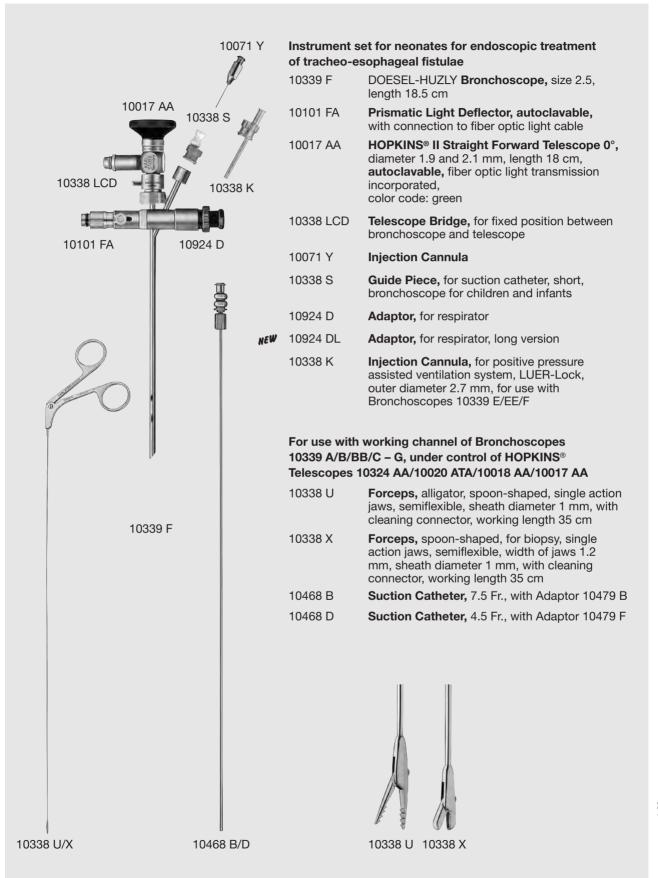
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PED-BRO 1 B 639

#### **Instrument Set for Neonates**

for Endoscopic Treatment of Tracheo-Esophageal Fistulae





1-99

640 PED-BRO 2 B

## **HOPKINS® Telescopes**

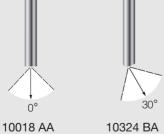






10338 LCD





10018 AA 10020 ATA 10005 AA 10324 AA 10023 ABA

For use with 18.5 cm DOESEL-HUZLY Bronchoscopes 10339 D/E, telescope can be fixed in the bronchoscope when using Telescope Bridge 10338 LCD

10018 AA **HOPKINS® Straight Forward Telescope 0°,** diameter 2.7 mm, length 18 cm, **autoclavable,** fiber optic light transmission incorporated,

color code: green

For use with 30 cm DOESEL-HUZLY Bronchoscopes 10339 A/B/BB/C/CD/G, telescope can be fixed in the bronchoscope when using Telescope Bridge 10338 LCD

10020 ATA **HOPKINS® Straight Forward Telescope 0°**, diameter 2.9 mm, length 30 cm, **autoclavable**,

diameter 2.9 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated,

color code: green

10005 AA HOPKINS® II Straight Forward Telescope 0°,

enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, fiber optic light transmission

incorporated, color code: green

For use with 30 cm DOESEL-HUZLY Bronchoscopes 10339 A/B/BB/C/CD/G, telescope adjustable in the bronchoscope when using Rubber Telescope Guide 10338 N

10324 AA HOPKINS® Straight Forward Telescope 0°,

diameter 2.9 mm, length 36 cm, **autoclavable**, fiber optic light transmission incorporated,

color code: green

10324 BA **HOPKINS® II Forward-Oblique Telescope 30°**,

diameter 2.9 mm, length 36 cm, **autoclavable**, fiber optic light transmission incorporated,

color code: red

For use with 40 cm DOESEL-HUZLY Bronchoscopes 10339 AL/BL, telescope adjustable in the bronchoscope when using Rubber Telescope Guide 10338 N

10023 ABA HOPKINS® Straight Forward Telescope 0°,

diameter 2.8 mm, length 44 cm, **autoclavable**, fiber optic light transmission incorporated,

color code: green

For use with Telescopes 10017/10018/10020/10005 AA

10338 LCD **Telescope Bridge,** for fixed position between

bronchoscope and telescope

For use with Telescope 10324 AA

10338 RK **Telescope Bridge,** for fixed position between

HOPKINS® Telescope 10324 AA and

Bronchoscopes 10339 A/B/BB/C/CD/EEE/G

10338 RL **Telescope Bridge,** for fixed position between

HOPKINS® Telescope 10324 AA and Bronchoscopes 10339 CC/DD/EE/GG

For use with Telescope 10005 AA

10338 R **Telescope Bridge,** for fixed position between

HOPKINS® II Telescope 10005 AA and Bronchoscopes 10339 CC/GG

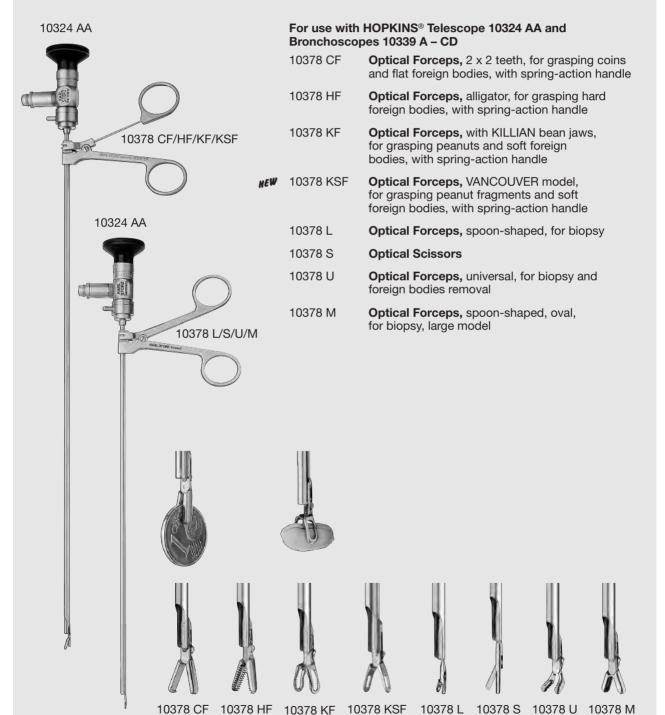
## **Optical Forceps and Scissors**

for Pediatric Bronchoscopes size 6 - 3.5, length 30 cm - 18.5 cm



#### **Special Features:**

- Newly designed forceps enable removing of foreign bodies under precise optical control not previously possible
- Small size of forceps allows them to be introduced through pediatric bronchoscopes as of size 3.5 and larger in lengths ranging from 18.5 up to 30 cm
- Foreign bodies can be removed quickly and with utmost safety
- Better assessment of the depth of cut when taking biopsies



1-992

642 PED-BRO 4 B

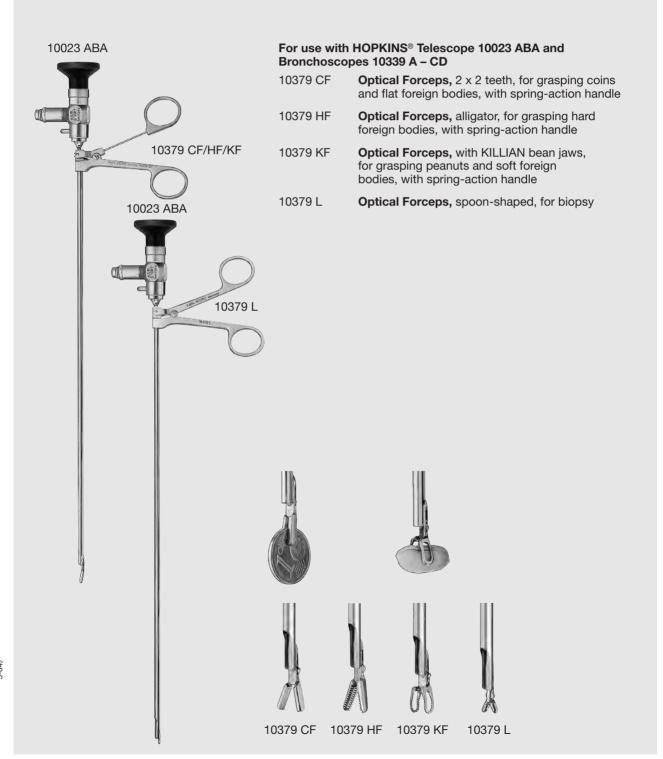
## **Optical Forceps**

for Pediatric Bronchoscopes size 6 and 5, length 40 cm



## **Special Features:**

- Newly designed forceps for hard and soft foreign bodies enable removal under precise optical control not previously possible
- Foreign bodies can be removed quickly and with utmost safety
- Better assessment of the depth of cut when taking biopsies



5.075

PED-BRO 5 B 643

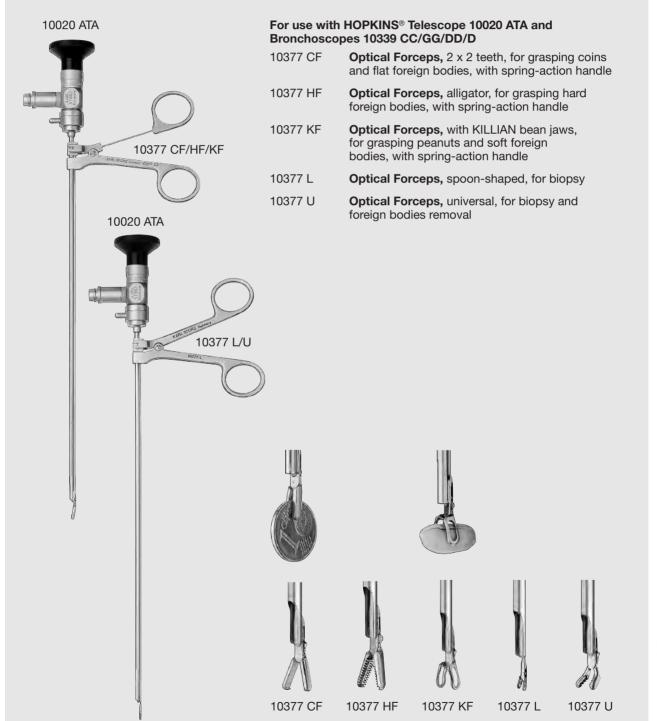
## **Optical Forceps**

for Pediatric Bronchoscopes size 4 - 3.5, length 26 cm - 18.5 cm



#### **Special Features:**

- Newly designed forceps for hard and soft foreign bodies enable removal under precise optical control not previously possible
- Small size of forceps allows them to be introduced through pediatric bronchoscopes as of size 3.5 cm and larger in lengths of 26 cm or 18.5 cm
- Foreign bodies can be removed quickly and with utmost safety
- Better assessment of the depth of cut when taking biopsies



5-041

644 PED-BRO 6 B

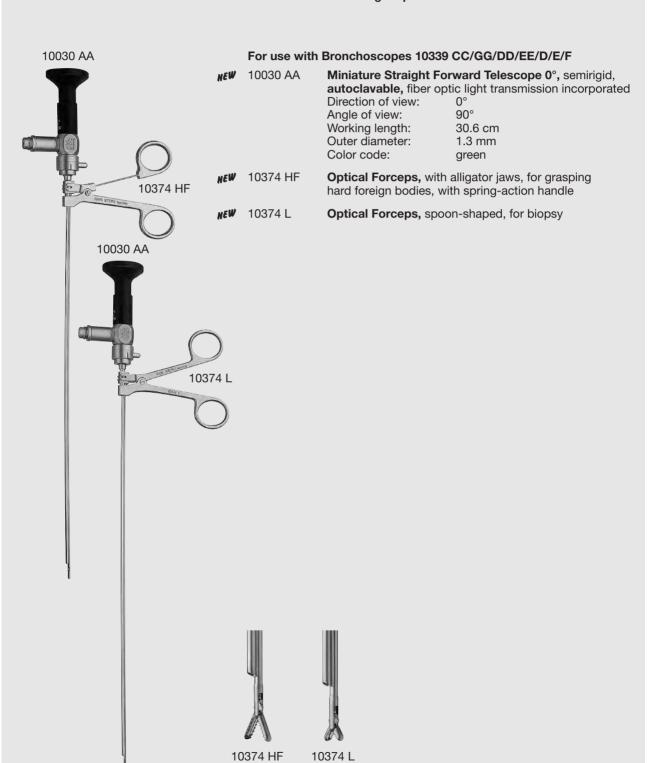
# Optical Forceps NEW

for Pediatric Bronchoscopes size 4 - 2.5, length 26 cm - 18.5 cm



## **Special Features:**

- Small size of forceps allows them to be introduced through pediatric bronchoscopes as of size 2.5 and larger and in lengths ranging from 26 cm or 18.5 cm
- Foreign bodies can be removed quickly and with utmost safety
- Better assessment of the depth of cut when taking biopsies



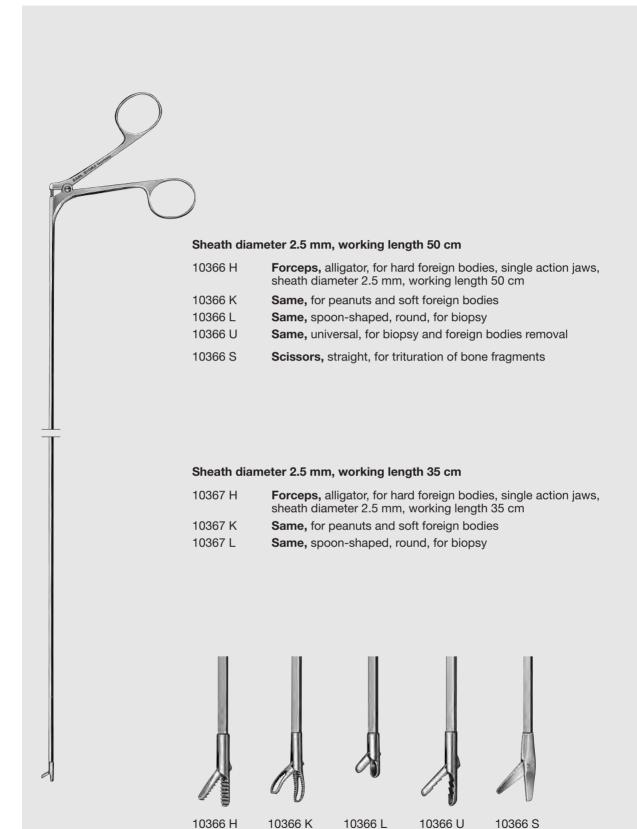
3-11

PED-BRO 7 645

## **Forceps and Scissors for Bronchoscopy**

single action jaws





10367 K

10367 H

10367 L

# **Forceps for Bronchoscopy**

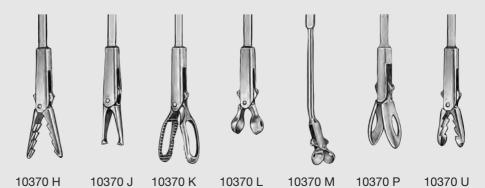
double action jaws





## Sheath diameter 2.5 mm, working length 50 cm

10370 H	<b>Forceps,</b> alligator, for hard foreign bodies, double action jaws, sheath diameter 2.5 mm, working length 50 cm
10370 J	Same, pointed, serrated, for coins and flat foreign bodies
10370 K	Same, for peanuts and soft foreign bodies
10370 L	Same, spoon-shaped, round, for biopsy
10370 M	Same, spoon-shaped, round, for biopsy, malleable
10370 P	<b>Same,</b> with oval cupped jaws, fenestrated, for biopsy and foreign bodies
10370 U	Same, universal, for biopsy and foreign bodies removal



5-041

BRO-ACC 1 B 647

## **Forceps for Bronchoscopy**

double action jaws





## Sheath diameter 2 mm, working length 45 cm

10371 HL Forceps, alligator, for hard foreign bodies, double action jaws, sheath diameter 2 mm, working length 45 cm

Same, for peanuts and soft foreign bodiesSame, spoon-shaped, round, for biopsy

10371 UL Same, universal, for biopsy and foreign bodies removal

#### Sheath diameter 2 mm, working length 35 cm

Forceps, alligator, for hard foreign bodies, double action jaws, sheath diameter 2 mm, working length 35 cm
 Same, pointed, serrated, for coins and flat foreign bodies
 Same, for peanuts and soft foreign bodies
 Same, spoon-shaped, round, for biopsy
 Same, spoon-shaped, oval, fenestrated, for biopsy and foreign bodies removal
 Same, universal, for biopsy and foreign bodies removal



10371 HL 10371 H



10371 J



10371 KL 10371 K



10371 LL 10371 L



10371 P



10371 UL 10371 U

ĽΩ

## **Forceps for Bronchoscopy**

double action jaws





## Sheath diameter 1.5 mm, working length 35 cm

**Forceps,** alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5 mm, working length 35 cm 10372 HL

10372 JL Same, pointed, serrated, for coins and flat foreign bodies

10372 KL Same, for peanuts and soft foreign bodies 10372 LL Same, spoon-shaped, round, for biopsy

10372 UL Same, universal, for biopsy and foreign bodies removal

## Sheath diameter 1.5 mm, working length 25 cm

**Forceps,** alligator, for hard foreign bodies, double action jaws, sheath diameter 1.5 mm, working length 25 cm 10372 H

10372 K Same, for peanuts and soft foreign bodies



10372 HL 10372 H



10372 JL



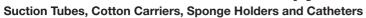
10372 KL

10372 K

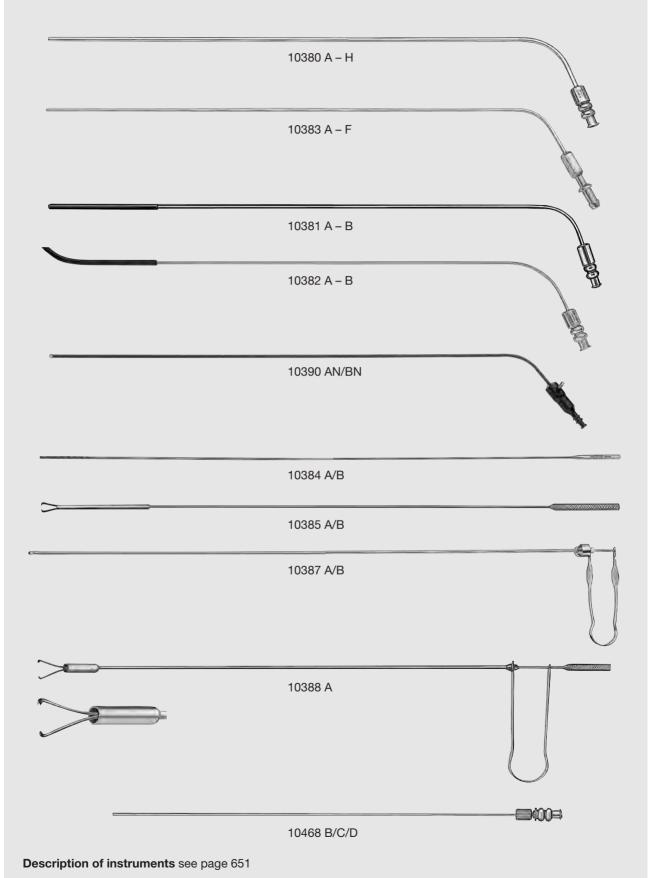




10372 LL 10372 UL







g-1



Suction Tubes, Cotton Carriers, Sponge Holders and Catheters

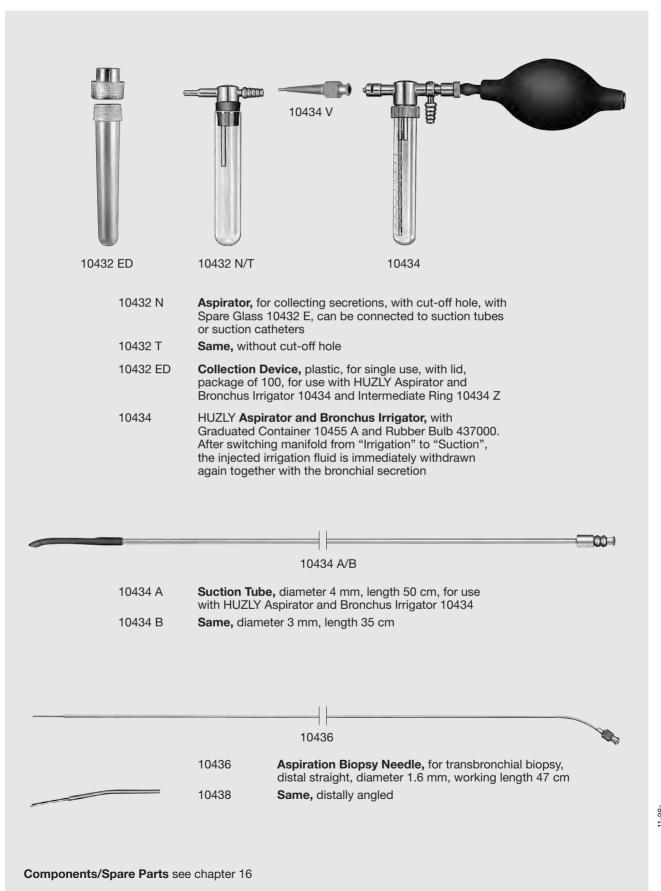
10380 AK 10380 B Same, diameter 3 mm 10380 CB Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10383 B Suction Tube, with cut-off hole, diameter 2 mm 10383 B Same, diameter 5.5 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Vorking length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm  Vorking length 25 cm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 3 mm Same, diameter 4 mm	orking length 50 cm		
10380 H 10383 A Suction Tube, with cut-off hole, diameter 4 mm 10382 A Same, curved 10390 AN Coagulating Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 4 mm 10384 A Cotton Applicator 10385 A Sponge Holder 10387 A Sponge Holder, for sterile smears  Working length 35 cm  10380 AK Suction Tube, diameter 4 mm 10380 B Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10383 B Same, diameter 5.5 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10381 B Cotton Applicator 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD 10387 B Sponge Holder, with spring handle  Working length 25 cm  10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm  Working length 25 cm  10383 C Same, diameter 3 mm  10383 C Same, diameter 3 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Same, 6 Fr., with Adaptor 10479 C Same, 6 Fr., with Adaptor 10479 B Same, 6 Fr., with Adaptor 10479 C			
10383 A Suction Tube, with cut-off hole, diameter 4 mm 10381 A Suction Tube, with rubber tip, straight, diameter 4 mm 10382 A Same, curved 10390 AN Coagulating Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 4 mm 10384 A Cotton Applicator 10385 A Sponge Holder 10387 A Sponge Holder, with spring handle 10388 A Sponge Holder, for sterile smears  Working length 35 cm  10380 AK Suction Tube, diameter 4 mm 10380 B Same, diameter 2 mm 10380 B Suction Tube, with cut-off hole, diameter 3 mm 10383 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10389 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 B Sponge Holder, with spring handle  Working length 25 cm  10380 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm 10383 C Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			
10381 A 10382 A Same, curved  10390 AN  Coagulating Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 4 mm  10384 A Cotton Applicator 10385 A Sponge Holder 10388 A Sponge Holder, for sterile smears  Working length 35 cm  10380 AK 10380 B Same, diameter 3 mm 10380 B Suction Tube, with cut-off hole, diameter 2 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10381 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm  10383 DD Sponge Holder, with spring handle  Working length 25 cm  10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm  Working length 25 cm  10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B Same, diameter 7.5 Fr., with Adaptor 10479 B Same, 6 Fr., with Adaptor 10479 C			•
10382 A Same, curved 10390 AN Coagulating Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 4 mm 10384 A Cotton Applicator 10385 A Sponge Holder 10387 A Sponge Holder, with spring handle 10388 A Sponge Holder, for sterile smears  Working length 35 cm  10380 AK Suction Tube, diameter 4 mm 10380 B Same, diameter 2 mm 10380 B Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm  10383 D Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm 10383 C Same, diameter 1 mm 10383 C Same, diameter 2 mm 10383 C Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			
for unipolar coagulation, diameter 4 mm  10384 A Cotton Applicator  10385 A Sponge Holder  10387 A Sponge Holder, with spring handle  10388 A Sponge Holder, for sterile smears  Working length 35 cm  10380 AK Suction Tube, diameter 4 mm  10380 B Same, diameter 3 mm  10380 B Same, diameter 2 mm  10383 B Suction Tube, with cut-off hole, diameter 3 mm  10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm  10382 B Same, curved  10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm  10384 B Cotton Applicator  10385 B Sponge Holder  10387 B Sponge Holder  10387 B Sponge Holder  10388 C Suction Tube, with cut-off hole, diameter 2 mm  10383 C Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, with cut-off hole, diameter 2 mm  10383 C Same, diameter 3 mm  Working length 25 cm  10383 C Suction Tube, with cut-off hole, diameter 2 mm  10383 C Same, diameter 1 mm  10383 C Same, diameter 1 mm  10383 C Same, diameter 3 mm  10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B  Same, 6 Fr., with Adaptor 10479 C			Same, curved
10385 A Sponge Holder 10387 A Sponge Holder, with spring handle 10388 A Sponge Holder, for sterile smears  Working length 35 cm  10380 AK Same, diameter 3 mm 10380 CB Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10383 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm  10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Same, diameter 1 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 3 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10390 AN	
## Morking length 35 cm    10380 AK		10384 A	Cotton Applicator
Morking length 35 cm  10380 AK Suction Tube, diameter 4 mm 10380 B Same, diameter 3 mm 10380 CB Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 2 mm, working length 35 cm 10382 B Same, diameter 5.5 mm 10382 B Same, diameter 5.5 mm 10383 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm 10383 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 D Same, diameter 3 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10385 A	Sponge Holder
Morking length 35 cm  10380 AK Suction Tube, diameter 4 mm 10380 B Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10383 BL Same, diameter 5.5 mm 10383 BL Same, diameter 5.5 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 1 mm 10383 D Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10387 A	Sponge Holder, with spring handle
10380 AK 10380 B Same, diameter 4 mm 10380 CB Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10383 BL Same, diameter 5.5 mm 10383 BL Same, diameter 5.5 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 3 mm  Working length 25 cm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10388 A	Sponge Holder, for sterile smears
10380 B Same, diameter 3 mm 10380 CB Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10383 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm 10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 C Same, diameter 3 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C	Working length 35 cm		
10380 CB Same, diameter 2 mm 10383 B Suction Tube, with cut-off hole, diameter 3 mm 10383 BL Same, diameter 5.5 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm 10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 C Same, diameter 3 mm 10383 E Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10380 AK	Suction Tube, diameter 4 mm
10383 B 10383 BL Same, diameter 5.5 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm 10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 1 mm 10383 D Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			·
10383 BL Same, diameter 5.5 mm 10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 D Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10380 CB	Same, diameter 2 mm
10381 B Suction Tube, with rubber tip, straight, diameter 2 mm, working length 35 cm 10382 B Same, curved 10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm 10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm 10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm 10383 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			
working length 35 cm  10382 B Same, curved  10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm  10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			
10390 BN Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm  10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			working length 35 cm
for unipolar coagulation, diameter 3 mm  10384 B Cotton Applicator 10385 B Sponge Holder 10387 B Sponge Holder, with spring handle  Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 1 mm 10383 D Same, diameter 3 mm  10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10382 B	Same, curved
Morking length 30 cm  10385 B Sponge Holder, with spring handle  Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10390 BN	Coagulation Suction Tube, insulated, with connector pin for unipolar coagulation, diameter 3 mm
Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 C Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10384 B	Cotton Applicator
Working length 30 cm  10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 CC Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10385 B	Sponge Holder
10383 DD Suction Tube, with cut-off hole, diameter 2 mm 10383 F Same, diameter 3 mm  Working length 25 cm  10380 C Suction Tube, diameter 2 mm 10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 CC Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope: 10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10387 B	Sponge Holder, with spring handle
Morking length 25 cm  10380 C Suction Tube, diameter 2 mm  10383 C Suction Tube, with cut-off hole, diameter 2 mm  10383 CC Same, diameter 1 mm  10383 D Same, diameter 3 mm  10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B  10468 C Same, 6 Fr., with Adaptor 10479 C	Working length 30 cm		
10380 C Suction Tube, diameter 2 mm  10383 C Suction Tube, with cut-off hole, diameter 2 mm  10383 CC Same, diameter 1 mm  10383 D Same, diameter 3 mm  10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B  10468 C Same, 6 Fr., with Adaptor 10479 C			
10383 C Suction Tube, with cut-off hole, diameter 2 mm 10383 CC Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C	Working length 25 cm		
10383 CC Same, diameter 1 mm 10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10380 C	Suction Tube, diameter 2 mm
10383 D Same, diameter 3 mm 10383 E Same, diameter 4 mm  For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C		10383 C	Suction Tube, with cut-off hole, diameter 2 mm
For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			
For use through the working channel under control of HOPKINS® telescope:  10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B 10468 C Same, 6 Fr., with Adaptor 10479 C			
10468 B Suction Catheter, 7.5 Fr., with Adaptor 10479 B Same, 6 Fr., with Adaptor 10479 C		10383 E	Same, diameter 4 mm
10468 C <b>Same,</b> 6 Fr., with Adaptor 10479 C	For use through the w	_	
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Components/Spare Parts see chapter 16

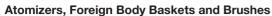
BRO-ACC 5 B 651

Instruments for aspiration, irrigation and puncture biopsy

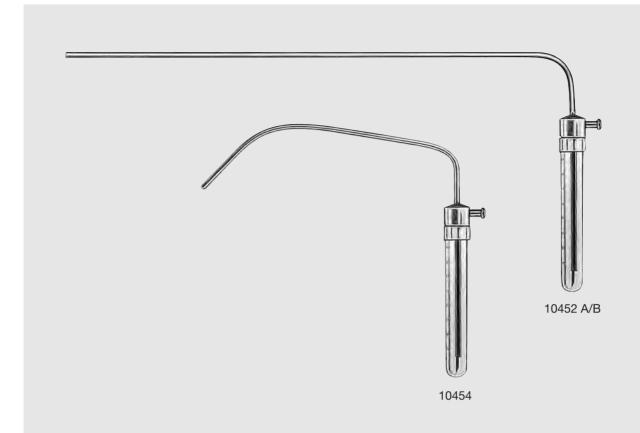




652 BRO-ACC 6 B







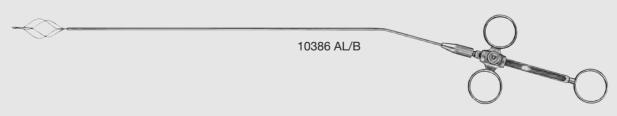
10452 A	Bronc	hial	Atc	mizer,	with	Graduate	ed Container	
	10455	A ar	nd F	Rubber	Bulb	437000,	length 50 cm	
10.150 B	_			4.0				

10452 B Same, length 40 cm

10454 Laryngeal Atomizer, with Graduated Container 10455 A and Rubber Bulb 40924 H

Graduated Container, autoclavable, for HUZLY 10455 A Aspirator and Bronchus Irrigator 10434, Bronchial

Atomizer 10452 A/B and Rubber Bulb 10454





Components/Spare Parts see chapter 16

**Antifog Solution** 





"ULTRA STOP" Antifog Solution, 25 ml, 15006 B pipette bottle

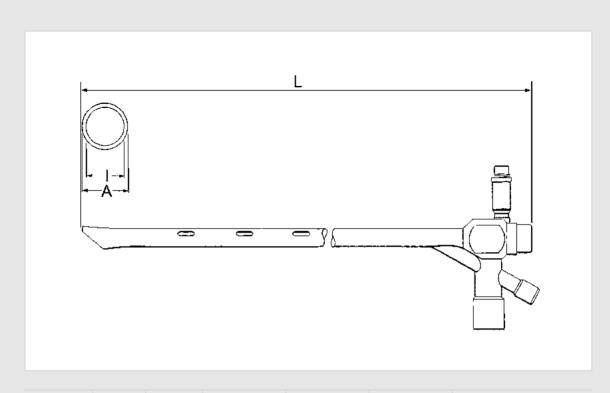
"ULTRA STOP" **Antifog Solution,** 30 ml, sterile, pierce bottle 15006 C

"ULTRA STOP" Antifog Solution, 15 ml, 15006 D

atomizer bottle

# Dimensions of Universal Bronchoscopes

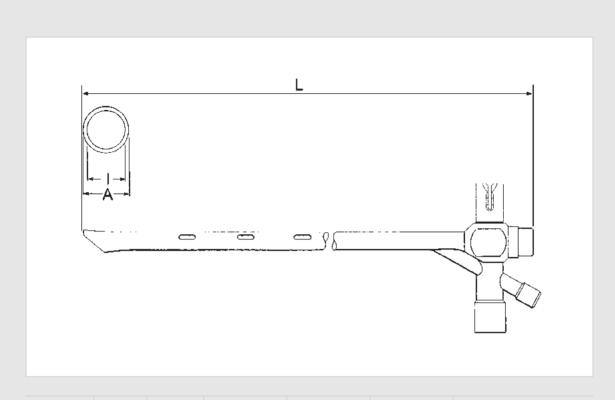




Art. No.	Size	Total Length – L –	Inner Diameter	Outer Diameter - A -	Telescopes	Optical Forceps
10318 B	8.5	43 cm	10 mm	11 mm	10320	10350 HF, 10350 KF, 10350 L, 10350 ST, 10350 U, with 10320 AA, 10320 BA
10318 BP	8.5	43 cm	10 mm	11 mm	10320	10350 HF, 10350 KF, 10350 L, 10350 M, 10350 MS, 10350 ST, 10350 U, with 10320 AA, 10320 BA
10318 C 10318 CP	7.5	43 cm	9 mm	10 mm	10320	10350 HF, 10350 KF, 10350 L, 10350 ST, 10350 U, with 10320 AA, 10320 BA
10318 D 10318 DP	6.5	43 cm	8 mm	9 mm	10320	10352 H, 10352 L, 10352 KF, 10352 U, with 10328 AA, 10328 BA

# **Dimensions** of Universal Bronchoscopes

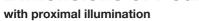




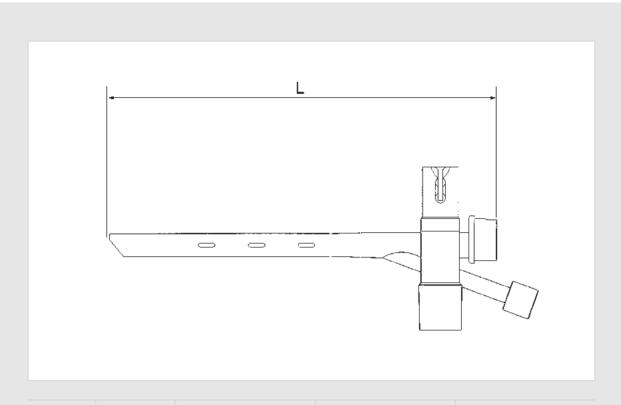
Art. No.	Size	Total Length - L -	Inner Diameter	Outer Diameter - A -	Telescopes	Optical Forceps
10318 G	14	33 cm	13 mm	14 mm	10320	10350 HF, 10350 KF,
10318 GL	14	43 cm	13 mm	14 mm	10320	10350 L, 10350 M, 10350 MS, 10350 ST, 10350 U, with 10320 AA, 10320 BA
10318 ER	11	43 cm	10 mm	11 mm	10320	WILL 10320 AA, 10320 BA

# DOESEL-HUZLY

# **Dimensions of Pediatric Bronchoscopes**







Art. No.	Size	Total Length - L -	Telescopes	Optical Forceps
10339 AL 10339 BL	6 5	40 cm 40 cm	10023 10023	10379 CF, 10379 HF, 10379 KF, 10379 L, with 10023 ABA
10339 A 10339 B 10339 BB 10339 C 10339 G 10339 CD	6 5 4.5 4 3.7 3.5	30 cm 30 cm 30 cm 30 cm 30 cm 30 cm	10324 10020	10378 CF, 10378 HF, 10378 KF, 10378 KSF, 10378 L, 10378 M, 10378 S, 10378 U, 10378 X, with 10324 AA
10339 EEE	3	30 cm	10324 10020	-
10339 CC 10339 GG 10339 DD	4 3.7 3.5	26 cm 26 cm 26 cm	10324 10020	10377 CF, 10377 HF, 10377 KF, 10377 L, 10377 U, with 10020 ATA
10339 EE	3	26 cm	10324 10020	10374 L, 10374 HF
10339 D	3.5	18.5 cm	10018 10020	10377 CF, 10377 HF, 10377 KF, 10377 L, 10377 U, with 10020 ATA
10339 E	3	18.5 cm	10018 10020 10030	10374 L, 10374 HF, with 10030 AA
10339 F	2.5	18.5 cm	10017 10018 10020 10030	10374 L, 10374 HF, with 10030 AA



## **Navigation Panel Unit (NPU)**

Straightforward and Efficient Support for ENT Surgery



Similar to car navigation technology, surgery also requires a tool that provides safe and secure orientation towards a destination by means of a patient roadmap, uncomplicated surgical routes and a clear indication of

danger zones. The system should always enable the surgeon to determine the exact location of an instrument in a patient's body. The KARL STORZ Navigation Panel Unit provides the surgeon with this ability.

## **Special Features:**

- Mobile, space-saving system with intuitive handling
- Easy assembly and flexible use in the OR
- Durable, robust and autoclavable navigation instruments
- Reduced costs through autoclavable accessories and shorter surgery time



8-11

660 NAV

## **Navigation Panel Unit (NPU)**

Straightforward and Efficient Support for ENT Surgery





**40** 8000 01

40 8000 01

KARL STORZ Navigation System NPU,

positioning aid for navigated ENT surgery,

including:

**Panel PC,** including installed ENT navigation software and passive touch pen

**Optical Mouse** 

Camera

**Electronic Box** 

Docking Adaptor, for panel PC,

with CD-RW/DVD-ROM

Stand, mobile, with locking knob for camera

**Data Cable** 

**VGA** Cable

**Camera Cable** 

**Headband with Plastic Holder** 

Patient Tracker II, with glass marker spheres, autoclavable

Case, for panel PC, camera, electronic box, mobile stand and connecting cables

Navigation Probe, with glass marker spheres, autoclavable

**Mains Cord** 

Components/Spare Parts see chapter 16

NAV 1

# **Probe, Patient Tracker and Headband**

for Navigation System (NPU)





40 8001 10

**40** 8001 10 **Navigation Probe,** with 3 fixed glass marker spheres, autoclavable, dimensions: 295 x 15 x 30 mm, for use with KARL STORZ SURGICAL COCKPIT® Navigation Systems



**40** 8000 87 **Patient Tracker II,** with verification adaptor, 3 incorporated glass marker spheres and fixation screw, **autoclavable,** dimensions: 80 x 60 x 12 mm, for use with KARL STORZ SURGICAL COCKPIT® Navigation Systems



40 8000 80

**40** 8000 80 **Headband,** for navigation system NPU, standard size, with plastic holder for Patient Tracker II **40** 8000 87

The autoclavable Probe 40 800110 with glass spheres for position tracking is a versatile, basic instrument for navigation.

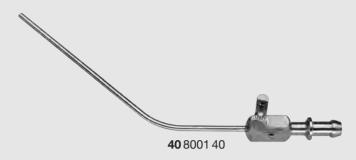
The more user-friendly, autoclavable Patient Tracker II 40 8000 87 ensures position tracking and orientation of the patient.

# **Navigation Suction Tubes**

angular, curved downwards, curved upwards



## Outer diameter 3 mm, working length 9 cm



40 8001 40 FRAZIER Navigated Suction Tube, angular, for right-handed use, with cut-off hole, 9 Fr., working length 10 cm, for use with KARL STORZ SURGICAL COCKPIT® Navigation Systems

#### Outer diameter 3 mm, working length 11 cm



40 8001 50
 v. EICKEN Navigated Suction Tube, curved upwards, for right-handed use, outer diameter 3 mm, length 12.5 cm, for use with KARL STORZ SURGICAL COCKPIT® Navigation Systems



40 8001 60 v. EICKEN Navigated Suction Tube, curved downwards, for right-handed use, outer diameter 3 mm, length 12.5 cm, for use with KARL STORZ SURGICAL COCKPIT® Navigation Systems

# Instrument Tracker

for Navigation System (NPU)



The autoclavable instrument tracker is designed for the navigation of various instruments. The small size of the

instrument tracker reduces the risk of collision and ensures very good instrument maneuvrability.

## **Special Features:**

- User-friendly handling thanks to optimized, miniaturized design
- Can be used for various navigation instruments



**Tool Tracker,** for navigated instruments, with 3 fix-mounted glass spheres, **autoclavable,** dimensions: 70 x 50 x 14 mm, for use with navigated instruments **40** 8001 4x, **40** 8001 5x, **40** 8001 6x and **40** 8001 7x

# Suction Tube Verification Adaptor



The autoclavable verification adaptor enables easy and secure verification testing of various navigation in-

struments. The adaptor is used to verify the proper functioning of navigation suction tubes prior to use.



40 8001 30

**40** 8001 30 **Suction Tube Verification Adaptor, autoclavable,** dimensions: 35 x 4 x 14 mm, for use with Patient Tracker **40** 8000 86

Please note: This adaptor is not required for Patient Tracker II 40 8000 87

# Wire Tray for Navigation Probe and Patient Tracker



The wire tray ensures hygienic and secure sterilization, cleaning and storage of standard navigation instrument sets.



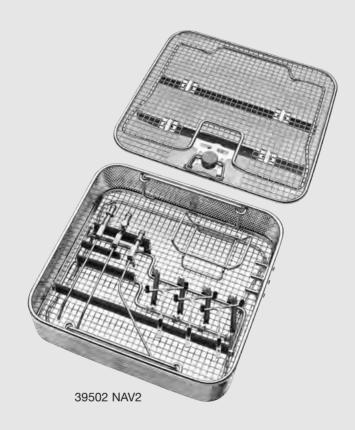
39502 NAV1 Wire Tray for Cleaning, Sterilization and Storage of one navigation probe and one patient tracker, with silicone knob mat, fixation system and lid, stackable, external dimensions (w x d x h): 240 x 250 x 70 mm

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

# **Wire Tray for Suction Tubes** and Instrument Tracker



The wire tray ensures hygienic and secure sterilization, cleaning and storage of the suction tube sets.



39502 NAV2 Wire Tray for Cleaning, Sterilization and Storage of three suction tubes and three instrument trackers, with silicone knob mat and small parts basket, stackable, external dimensions (w x d x h): 240 x 250 x 70 mm

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

## NEW

# **DrillCut-X® II N Shaver Handpiece**



## **Special Features:**

- Powerful motor
- Absolutely silent running
- Enhanced ergonomics
- Reduced-weight design
- Oscillation mode for shaver blades, max. 10,000 rpm
- Rotation mode for sinus shavers, max. 12,000 rpm
- Straight suction channel and integrated irrigation
- Variable handle allows connection with various handpieces and enables more comfortable work

- Easy hygienic processing, suitable for use in washer and autoclavable at 134° C
- Quick coupling mechanism facilitates more rapid exchange of working inserts
- Proven DrillCut-X® blade portfolios can be used
- Adaptation possibilities for Shaver Tracker 40 8001 22
- Allows shaver navigation when used with NPU 40 8000 01



40712055

**40**712055

**DrillCut-X® II N Shaver Handpiece,** with adaption possibilities for Shaver Tracker **40** 8001 22, for use with UNIDRIVE® S III ECO/ENT/NEURO



40 8001 22

40 8001 22

**Shaver Tracker, autoclavable,** with glass marker spheres incorporated, for use with DrillCut-X $^{\odot}$ II N Shaver Handpiece **40** 7120 55 and navigation systems NPU **40** 8000 01 and NBU **40** 8100 01

## NEW Handle for DrillCut-X® II Shaver Handpiece



for use with DrillCut-X® II 40712050 and DrillCut-X® II N 40712055

## **Special Features:**

- Ergonomic design
- Ultralight construction
- Easy handle control allows individual adjustment
- Variable mounting options to DrillCut-X® II or DrillCut-X® II N shaver handpieces
- Easy fixation via rotary lock
- Easy hygienic processing, suitable for use in washer and autoclavable at 134 °C

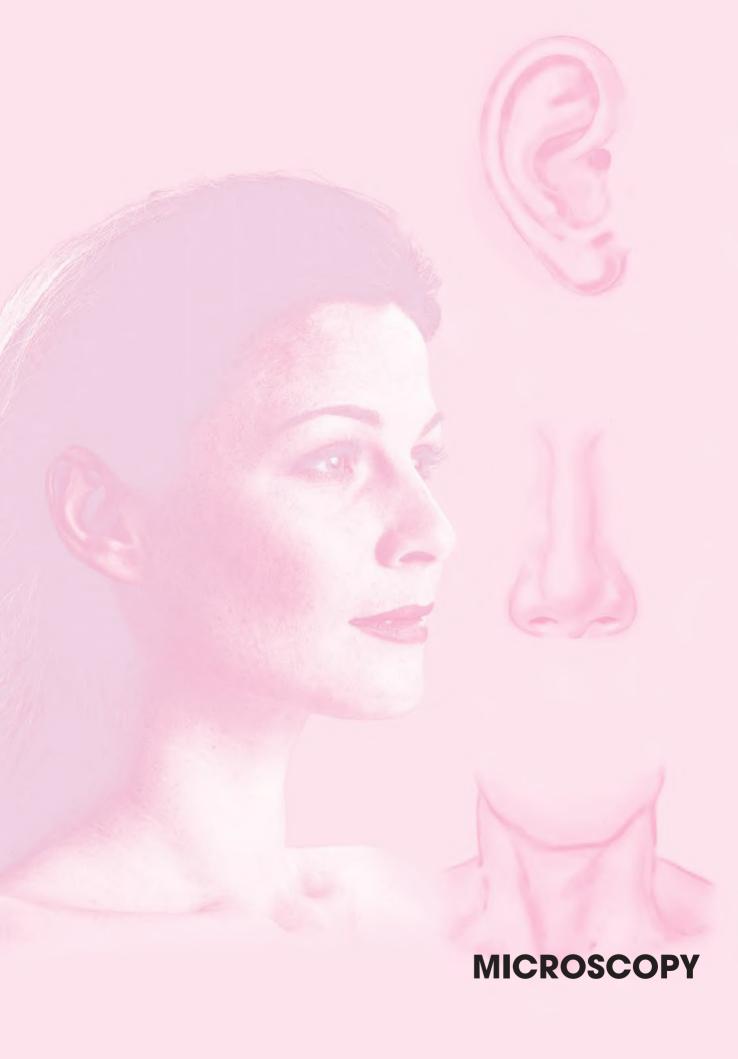
## Positioning Handle 40712090



40712090



40712090 Handle, adjustable, for use with DrillCut-X® II 40 7120 50 and DrillCut-X® II N 40712055



**Direct Adaption** 







Direct adaption to the VARIO operating microscope from Carl Zeiss Meditec

With the operating microscope the surgeon always has a perfect view of the operating field. Assistants, OR nurses and students, however, often experience poor video presentation, especially if FULL HD visualization is not available. KARL STORZ offers solutions from one source that equip operating microscopes 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 microscope is the so-called direct adaption.

Here the H3-M COVIEW® microscope camera and the corresponding QUINTUS® TV adaptor are directly connected to the microscope via the C-MOUNT connection.

**System Overview** 



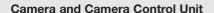




IMAGE 1 HUB™ HD Camera Control Unit



H3-M HD Microscope Camera Head

#### **TV** Adaptors



QUINTUS® TV Adaptor, for CARL ZEISS MEDITEC



QUINTUS® TV Adaptor, for LEICA Microsystems



QUINTUS® TV Adaptor, for Möller Wedel

## **HD Monitor and ZeroWire**



or

FULL HD WIDEVIEW Monitor see catalog TELEPRESENCE



ZeroWire Video Transmission Set see catalog TELEPRESENCE

## **Documentation System**



KARL STORZ AIDA® compact NEO advanced/standard (optional) see catalog TELEPRESENCE

#### Accessories

Equipment Cart 29005 LAP see catalog TELEPRESENCE

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**System Components** 



**H3-M HD Microscope Camera Head** 

For use with IMAGE 1 HUB™ HD Camera Control Unit SCB 22 2010 11U1xx and IMAGE1 HD Camera Control Unit SCB 22202011U1xx





22 22 00 54 - 3 / 22 22 01 54 - 3

NEW 22 2200 54-3 50 Hz IMAGE1 H3-M COVIEW® Three-Chip 60 Hz FULL HD Microscope Camera Head

max. resolution 1920 x 1080 pixels, 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 color systems **PAL/NTSC** 

NEW 22 2201 54-3 60 Hz IMAGE1 H3-M Three-Chip FULL HD Microscope Camera Head

max. resolution 1920 x 1080 pixels, 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 color system  $\mbox{\bf NTSC}$ 

#### Specifications:

IMAGE1 FULL HD Camera Heads	H3-M
50 Hz	<b>22</b> 2200 54-3 (PAL)
60 Hz	22 2201 54-3 (NTSC)
Image sensor	3x ⅓" CCD chip
Pixel output signal H x V	1920 x 1080
Dimensions (w x h x l)	45 x 47 x 87 mm
Weight	260 g
Optical interface	C-MOUNT connection
Min. sensitivity	F 1.9/1.4 Lux
Grip mechanism	C-MOUNT connection
Cable	detachable
Cable length	900 cm

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ENT-MICRO 3 675

**System Components** 



#### IMAGE 1 HUB™ HD Camera Control Unit





## 22 2010 11U1 IMAGE 1 HUB™ HD Camera Control Unit SCB

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated **KARL STORZ-SCB** and integrated digital Image Processing Module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz

including:

**Mains Cord** 

**BNC/BNC Video Cable** 

S-Video (Y/C) Connecting Cable

**Special RGBS Connecting Cable** 

2x Connecting Cable, for controlling peripheral units

**DVI-D Connecting Cable** 

**SCB Connecting Cable** 

Keyboard, with US English character set

# 22 2010 11U102 IMAGE 1 HUB™ HD Camera Control Unit SCB, with SDI Module

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated SDI (Serial Digital Interface) module, KARL STORZ-SCB and digital Image Processing Module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz

including:

**Mains Cord** 

**BNC/BNC Video Cable** 

S-Video (Y/C) Connecting Cable

**Special RGBS Connecting Cable** 

2x Connecting Cables, for controlling peripheral units

**DVI-D Connecting Cable** 

**SCB Connecting Cable** 

Keyboard, with US English character set

Components/Spare Parts see catalog TELEPRESENCE

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# **HD Imaging with Operating Microscopes**

**System Components** 



#### IMAGE 1 HUB™ HD Camera Control Unit





NEW

22 2010 11U112 IMAGE 1 HUB™ HD Camera Control Unit SCB, with SDI/ICM module

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated ICM (Image Capture Module) and SDI (Serial Digital Interface) modules, KARL STORZ-SCB and digital Image Processing Module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz

including:

**Mains Cord** 

**BNC/BNC Video Cable** 

S-Video (Y/C) Connecting Cable

2x Connecting Cable, for controlling peripheral units

**DVI-D Connecting Cable** 

**SCB Connecting Cable** 

Keyboard, with US English character set

2x KARL STORZ USB Stick, 4 GB



NEW

22 2020 11U110 IMAGE1 HD Camera Control Unit SCB, with ICM module

for use with IMAGE1 FULL HD three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated ICM (Image Capture Module), KARL STORZ-SCB and digital Image Processing Module, power supply 100 – 240 VAC, 50/60 Hz

including:

**Mains Cord** 

2x Connecting Cable, for controlling peripheral units

**DVI-D Connecting Cable** 

**SCB Connecting Cable** 

Keyboard, with US-English character set

2x KARL STORZ USB Stick, 4 GB

Components/Spare Parts see catalog TELEPRESENCE

1-1

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# **HD Imaging with Operating Microscopes**

**System Components** 



#### QUINTUS® - High-Performance TV Adaptor for Operating Microscopes

Unleash the full performance of your operating microscope from CARL ZEISS MEDITEC – with FULL HD imaging solutions from KARL STORZ

The new QUINTUS® TV adaptor is the perfect interface between the surgical microscope and the KARL STORZ H3-M FULL HD microscope camera head.

The innovative features of QUINTUS® are easy to use, making it one of the most flexible TV adaptors on the market



#### QUINTUS® stands for 5 main features:

- A rotating C-MOUNT connection at the QUINTUS® TV adaptor allows immediate adaption of the camera orientation during mounting.
- The focus control makes it possible to easily achieve parfocality (perfectly sharp camera and microscope images).
- The iris control provides convenient and optimal adjustment of the depth of field.
- Pan (X) function enables adjustment of the horizontal position of the camera image.
- Tilt (Y) function enables adjustment of the vertical position of the camera image. The pan and tilt functions helps the surgeon to adjust the position of the camera image according to his individual needs.

#### Focal length of the QUINTUS® TV adaptor:

The QUINTUS® TV adaptor for H3-M HD microscope camera head is available in 2 focal lengths (45 and 55 mm). This provides an optimal FULL HD image in 16:9.



Fig. 1: Camera image detail with a focal length of 45 mm



Fig. 2: Camera image detail with a focal length of 55 mm

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# **HD Imaging with Operating Microscopes**





#### **QUINTUS® TV Adaptor**



20 9230 45/20 9230 55

**20** 9230 45

**QUINTUS® Z 45 TV Adaptor,** for CARL ZEISS MEDITEC operating microscopes, f = 45 mm, recommended for IMAGE1 HD H3-M/H3-M COVIEW® camera heads

**20** 9230 55

**QUINTUS® Z 55 TV Adaptor,** for CARL ZEISS MEDITEC operating microscopes, f = 55 mm, ecommended for IMAGE 1 HD H3-M/H3-M COVIEW®, H3, H3-Z as well as S1 and S3 camera heads



20 9330 45/20 9330 55

20 9330 45

**QUINTUS® L 45 TV Adaptor,** for LEICA Microsystems operating microscopes, f = 45 mm, recommended for IMAGE1 H3-M/H3-M COVIEW® HD microscope camera heads

**20** 9330 55

**QUINTUS® L 55 TV Adaptor,** for LEICA Microsystems operating microscopes, f = 55 mm, recommended for IMAGE 1 HD H3-M/H3-M COVIEW®, H3, H3-Z as well as S1 and S3 camera heads



20 9530 45/20 9530 55

20 9530 45

**QUINTUS® M 45 TV Adaptor,** for Möller-Wedel operating microscopes, f = 45 mm, recommended for IMAGE1 HD H3-M/H3-M COVIEW® camera heads

**20** 9530 55

**QUINTUS® M 55 TV Adaptor,** for Möller-Wedel operating microscopes, f = 55 mm, recommended for IMAGE 1 HD H3-M/H3-M COVIEW®, H3, H3-Z as well as S1 and S3 camera heads



20 9250 00

**20** 9250 00

Iris, for ZEISS Pentero®, iris as a necessary extension between the QUINTUS® TV adaptor and the operating microscope ZEISS Pentero®



301513

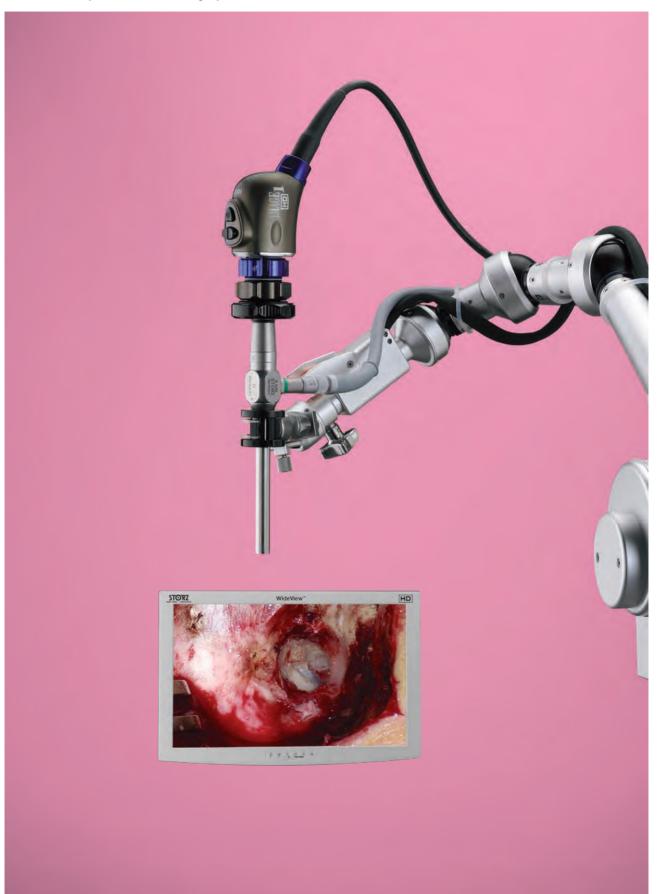
**Optical Beamsplitter 50/50,** for use with ZEISS operating microscope or colposcope

**Note:** Optical beamsplitters for other operating microscopes (i.e. LEICA or Möller-Wedel) are available directly from the manufacturers.

ENT-MICRO 7 679

Visualization System for Microsurgery





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# VITOM® 25

#### Visualization System for Microsurgery



VITOM® 25 from KARL STORZ represents a revolutionary and innovative way of displaying open surgery with minimal access in a high quality and ergonomic manner.

VITOM® 25 is based on the renowned HOPKINS® II rod lens system from KARL STORZ. With the help of a holding system, the VITOM® 25 is placed at a working distance of 25 – 75 cm above the surgical field. This gives the surgeon more room to work.

The small size of the VITOM® 25 reduces space requirements in the OR to a minimum. Due to its slim and compact design, the surgical field is not obstructed and even long instruments can be used with ease. The VITOM® 25 system provides excellent depth of field, optimal magnification, good contrast and excellent color reproduction, which are the requisites for FULL HD display and recording.

The first-class enhanced imaging can be observed via a FULL HD monitor from a convenient distance by the surgeon, the assistant as well as the entire OR team.

The VITOM® 25 system has proven to be an excellent alternative to OR illumination cameras, loupes or operating microscopes in various surgical disciplines.

The VITOM® 25 is equipped with an integrated illumination, which can be supplemented with an optional illuminator.

The system allows further use of existing units. A FULL HD endoscope imaging solution from KARL STORZ can also be used with the VITOM® 25 exoscope.

#### The VITOM® 25 system offers:

- Excellent FULL HD image quality
- Great depth of view
- Large working distance
- Ergonomic monitor work

- Compact design requiring minimal space in the OR
- Use of existing KARL STORZ FULL HD endoscopy system possible



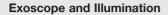
Prof. Dr. G. Strauß, IRDC, Leipzig, Germany

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#### **System Overview**







VITOM® 25 Exoscope and Light Cable



VITOM® 25 Illuminator and Y-Light Cable (optional)



XENON 300 SCB Light Source

#### **Camera and Display**



IMAGE 1 HUB™ HD Camera Control Unit



IMAGE1 H3-Z Three-Chip HD Camera Head



IMAGE 1 HUB™ HD Monitor

#### **Holding System**



ENDOCRANE® Piezoelectric Holding Arm



or

POINT SETTER® Pneumatic Holding Arm



or

Mechanical Holding Arm see chapter 4, pages 201-202

#### **Documentation System**



KARL STORZ AIDA® compact NEO advanced see catalog TELEPRESENCE

#### **Accessories**

Equipment Cart 29005 LAP see catalog TELEPRESENCE



**System Overview** 









**20** 9160 20

**VITOM® 25 Telescope 0°, VITOM® 25 HOPKINS® II straight** forward telescope 0°, working distance 25 – 75 cm, diameter 10 mm, length 11 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

#### Fiber Optic Light Cables 495 NE and NVB recommended



20 9180 20 VITOM® 25 Distance Rod, length 25 cm

#### optional:



**20** 9170 00

**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

Y-Fiber Optic Light Cable 495 UV recommended







Working distance:	25 – 60 cm	
Depth of view at working distance of: Depth of view:	25 cm approx. 3.5 cm	50 cm n approx. 7 cm
Field of view at working distance of: H3-Z camera zoom 1x H3-Z camera zoom 2x	25 cm 5 cm 3.5 cm	50 cm 10 cm 7 cm
Reproduction scale at working distance of:	25 cm	50 cm
<b>26" Monitor:</b> H3-Z camera zoom 1x H3-Z camera zoom 2x	approx. 8x approx. 16x	approx. 4x approx. 8x
<b>42" Monitor:</b> H3-Z camera zoom 1x H3-Z camera zoom 2x	approx. 14x approx. 28x	approx. 7x approx. 14x
<b>52" Monitor:</b> H3-Z camera zoom 1x H3-Z camera zoom 2x	approx. 17x approx. 34x	approx. 8x approx. 16x



Prof. Dr. G. Strauß, IRDC, Leipzig, Germany



**System Components** 









495 NE

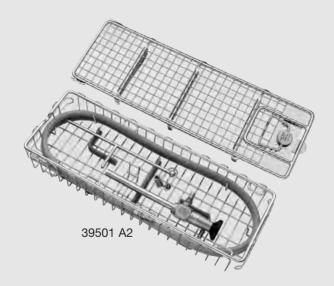
Fiber Optic Light Cable, diameter 4.8 mm, length 300 cm

495 NVB

**Fiber Optic Light Cable,** with 90° deflection to the instrument, 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



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

-



**System Components** 



#### **Cold Light Fountain XENON 300 SCB**

#### **Special Features:**

- Extremely high light intensity due to 300 Watt Xenon lamp
- Built-in antifog pump
- With integrated KARL STORZ Communication Bus (KARL STORZ-SCB)



#### 20 1331 01-1 Cold Light Fountain XENON 300 SCB

power supply 100 – 125/220 – 240 VAC, 50/60 Hz including:

**Mains Cord** 

Silicone Tubing Set, length 250 cm SCB Connecting Cable, length 100 cm

#### Specifications:

Lamp type	XENON 15 V, 300 Watt
Color temperature	6000 K
Light outlets	1
Light intensity adjustment	continuously adjustable via a membrane keyboard or KARL STORZ Communication

Dimensions w x h x d	305 x 165 x 335 mm
Weight	7.96 kg
Certified to	IEC 601-1 and UL 544, protection class 1/CF

Spare Lamps and Spare Lamp Modules for Cold Light Fountains XENON and Components/Spare Parts see catalog TELEPRESENCE

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**System Components** 



#### IMAGE 1 HUB™ HD - HD Camera Control Unit

#### Special Features:

- Maximum resolution and the consistent use of the 16:9 aspect ratio guarantee FULL HD.
- Endoscopic and microscopic camera systems are equipped with three CCD chips that support the 16:9 input format as well as capturing images with a resolution of 1920 x 1080 pixels.

The benefits of FULL HD (High Definition) for medical applications are:

- Up to 6 times higher input resolution of the camera delivers more detail and depth of focus.
- Using 16:9 format during image acquisition enlarges the field of vision and supports ergonomic viewing.
- The brilliance of color enables optimal diagnosis.
- Lateral view is enhanced by 32% when the endoscope is withdrawn slightly, providing the same image enhancement as a standard system.
   Any vertical information loss is restored and the lens remains clean.



# 22 2010 11 U102 IMAGE 1 HUB™ HD Camera Control Unit SCB, with SDI Module

for use with IMAGE1 FULL HD and IMAGE1 standard one- and three-chip camera heads, max. resolution 1920 x 1080 pixels, with integrated SDI (Serial Digital Interface) module, KARL STORZ-SCB and digital Image Processing Module, color systems PAL/NTSC, power supply 100 – 240 VAC, 50/60 Hz

including:

**Mains Cord** 

**BNC/BNC Video Cable** 

S-Video (Y/C) Connecting Cable

**Special RGBS Connecting Cable** 

2x Connecting Cables, for controlling peripheral units

**DVI-D Connecting Cable** 

**SCB Connecting Cable** 

Keyboard, with US English character set

#### Specifications:

Signal-to-noise ratio	IMAGE 1 HUB <sup>TM</sup> HD, three-chip camera systems $\geq$ 60 dB	Control output/input	- KARL STORZ-SCB to 6-pin Mini-DIN socket (2x)	
AGC	Microprocessor-controlled		- 3.5 mm stereo socket (ACC 1, ACC 2), - Serial port at RJ-11	
Video output	- FULL HD signal to DVI-D socket (2x) - SDI signal to BNC socket (only IMAGE 1 HUB™ HD with SDI module) (2x)		- USB Port (only IMAGE 1 HUB™ HD mit ICM) (2x)	
	- RGBS signal to D-Sub socket	Dimensions (w x h x d)	305 x 89 x 335 mm	
	- S-Video to 4-pin Mini-DIN socket (2x)	Weight	3.35 kg	
	- Composite signal to BNC socket	Power supply	100-240 VAC, 50/60 Hz	
Input	Keyboard for title generator, 5-pin DIN socket	Certified to	IEC 601-1, 601-2-18, CSA 22.2 No. 601, UL 2601-1 and CE according to MDD, protection class 1/CE defibrillation-safe	

Optional Accessories for IMAGE 1 HUB™ HD and Components/Spare Parts see catalog TELEPRESENCE

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ENT-MICRO 15 687



#### IMAGE1 FULL HD Camera Head for Endoscopy and Microscopy

For use with IMAGE 1 HUB™ HD Camera Control Unit SCB 22 2010 11U102



NEW 22 2200 55-3 50 Hz IMAGE1 H3-Z

60 Hz Three-Chip FULL HD Camera Head

max. resolution 1920 x 1080 pixels, progressive scan, soakable, gas- and plasma-sterilizable, with integrated Parfocal Zoom Lens, focal length  $f=15-31\,$  mm (2x), 2 freely programmable camera head buttons, for use with color systems **PAL/NTSC** 

#### **Accessories**

040112-40\* Camera Cover, folded inside out, 13 x 242 cm, sterile,

for single use, package of 25, for use with all standard

endoscopic video camera systems

040112-160\* **Same,** package of 160

533 TVA **Adaptor, autoclavable,** permits telescope changing

under sterile conditions



533 TVA

#### Specifications:

IMAGE1 FULL HD Camera Head	Н3-Z
50/60 Hz	<b>22</b> 2200 55-3
Image sensor	3x 1/3" CCD chip
Pixel output signal H x V	1920 x 1080
Dimensions (w x h x d)	39 x 49 x 114 mm
Weight	270 g
Optical interface	Integrated Parfocal Zoom Lens, f = 15-31 mm (2x)
Min. sensitivity	F 1.4/1.17 Lux
Grip mechanism	standard eyepiece adaptor
Cable	non-detachable
Cable length	300 cm

<sup>\*</sup> mtp

mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

Optional Accessories for IMAGE 1 HUB™ HD see catalog TELEPRESENCE

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## VITOM® 25

**System Components** 



#### **KARL STORZ WIDEVIEW™ HD Monitors**







9524 NB/NBO 9526 NB/NBO

KARL STORZ HD Flat Screens	2	4"	2	6"
Desktop with pedestal	9524 N	9524 NO	9526 N	9526 NO
Wall-mounted with VESA 100-adaption	9524 NB	9524 NBO	9526 NB	9526 NBO
Inputs:				
SDI	•	•	•	•
HD-SDI	•	•	•	•
RGBS	•	•	•	•
S-Video	•	•	•	•
Composite	•	•	•	•
SOG	•	•	•	•
DVI-D	•	•	•	•
Fiber Optic	-	•	-	•
VGA	•	•	•	•
Outputs:				
SDI	•	•	•	•
HD-SDI	•	•	•	•
RGBS	•	•	•	•
S-Video	•	•	•	•
Composite	•	•	•	•
DVI-D	•	•	•	•
Displayable Signal Formats:				
4:3	•	•	•	•
5:4	•	•	•	•
16:9	•	•	•	•
16:10	•	•	•	•
Picture-in-Picture	•	•	•	•
PAL/NTSC compatible	•	•	•	•

The following accessories are included:

**Mains Cord** 

External 24VDC Power Supply

Signal Cable

Pedestal (only 9524 N/NO and 9526 N/NO)

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The systems can be operated with KARL STORZ-SCB units. Video Connecting Cables see catalog TELEPRESENCE

#### NEW

# **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.



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#### NEW

# **ENDOCRANE® Holding System**



#### **Product Features**

#### Safety

The fail-safe function of the ENDOCRANE® prevents loss of retention force and ensures that the arm does not collapse in case of malfunction.

#### Accuracy

ENDOCRANE® offers accurate positioning without misalignment. This is indispensable for critical applications such as neurosurgery.

#### Speed

The piezoelectric principle enables the joints of the ENDOCRANE® to close in 30 ms and ensures a holding force of 20 N in all positions.

#### Convenience

The ENDOCRANE® system allows single-handed use via the handle.

#### Flexibility

ENDOCRANE® is equipped with the proven KARL STORZ rapid coupling, which ensures fast and secure mounting of various clamping jaws. The ENDOCRANE® handle also has a manual ball joint to allow convenient fine adjustment.

#### Hygiene

The ENDOCRANE® holding arm is equipped with a sterile cover during use. This guarantees 100% hygiene as well as safety and ensures that the system is in continuous use.







# **ENDOCRANE® Holding System**





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

including stand

including:

Socket, to clamp to the OR table

**Control Unit** 

Cover\*, sterile, package of 25

Spring Balance Mains Cord Case

\* mtp

mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

A clamping jaw is required to complete the ENDOCRANE® holding system. Clamping jaws for the ENDOCRANE® holding system see page 693 Components/Spare Parts see chapter 16

H

# ENDOCRANE® Holding System





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	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 KARL STORZ 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 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)
	28272 C	Clamping Cylinder, for flexible mounting of 10 mm telescopes to telescope sheath, autoclavable. The clamping cylinder allows vertical movement and rotation of the telescope.
* To	040146-25*	Cover, sterile, package of 25

#### Specifications:

Arm:		Control Unit:	
Maximum holding capacity	2 kg/20 N	Power supply	100 – 240 VAC
Working radius	500 mm/19.7"	Mains frequency	50/60 Hz
Swivel range	360°	Weight	5 kg/11.0 lbs
Maximum locking time	30 ms (fail-safe)	Dimensions (w x h x d))	305 x 80 x 305 mm
Weight of holding arm and stand	7 kg/15.4 lbs		
Protection against electric shock	Type B		
Type of protection	IP 40		

mtp medical technical promotion gmbh,
Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

Specifications subject to change.

## NEW

# **POINT SETTER® Holding System**



The POINT SETTER® holding system is the perfect solution for positioning endoscopes as well as cameras, retractors or other instruments.

The POINT SETTER® holding arm is mounted directly to the operating table and features safe, simple and reliable use.

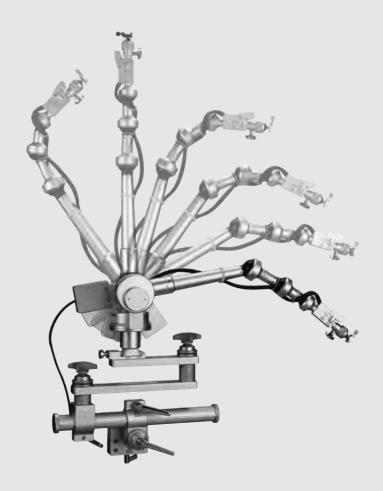
The patented self-locking pneumatic system ensures perfect safety, eliminating the need for additional error-prone electronics.

Furthermore, the POINT SETTER® holding arm allows convenient single-handed use. Pressing and holding the control button on the handle releases the arm for quick and accurate positioning. The POINT SETTER® arm locks as soon as the button is released.

The flexible OR table adaptor and the arm length of 65 cm provides more work space. Combined with a holding capacity of 2 kg this makes the POINT SETTER® an ideal tool for surgical interventions.

#### **Special Features:**

- The self-locking pneumatic system ensures that low, fluctuating or deficient gas pressure does not affect the stability of the arm.
- A press of a control button releases the arm immediately for quick positioning.
- Side guards prevent accidental activation of the POINT SETTER® arm.
- A locking mechanism offers additional safety.
- A manual ball joint at the tip of the handle enables convenient fine-tuning.
- Special surface structure for uniform and smooth movement as well as accurate positioning.
- Precise positioning without forward or backward motion.
- The POINT SETTER® arm is very robust and has high torsional stiffness to ensure low oscillation and high reliability.



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### NEW

# **POINT SETTER® Holding System**



#### **Product Features**

#### Perfect Safety

The POINT SETTER® arm operates according to an innovative, self-locking principle similar to a spring-loaded brake. This makes it totally safe and reliable. Low, fluctuating or deficient gas pressure does not effect arm stability. The arm cannot collapse even if all pressure tubes are cut off.

#### • Recoil-free Positioning

The POINT SETTER® arm enables very precise positioning without recoil or backlash. This is particularly important, especially if the system is used for nerve or brain retraction.

#### Convenient Use

The POINT SETTER® arm was designed for single-handed use. Pressing the control button releases the arm immediately and enables quick positioning. The control button has an elevated side guard that prevents unintentional activation of the POINT SETTER® arm. A locking mechanism offers additional safety.

#### Manual Fine-tuning

A manual ball joint at the tip of the handle enables convenient fine-tuning.

#### Uniform Movement

The connector joints of the POINT SETTER® arm have a special surface structure for uniform and smooth movement.

#### Balanced System

The POINT SETTER® arm is counterbalanced to ensure optimal movement. This is particularly important to ensure that the surgeon's fine-motor control remains unhindered during complex interventions.

#### Robust Design

The POINT SETTER® arm is very robust and has high torsional stiffness for low oscillation and high reliability.







# POINT SETTER® Holding System





28172 WS **POINT SETTER®**, pneumatic holding system with OR table adaptor

including:

**Universal Adaptor,** for use with telescopes diameter 10 - 15 mm **Universal Adaptor,** for use with telescopes diameter 5 - 10 mm

Universal Adaptor, 10 - 15 mm, pediatric

Schrader Pressure Hose, length 600 cm, for USA and Asia

Case, for POINT SETTER® arm

Drape, for single use, sterile, package of 10

28172 WL Same, with OR table adaptor, simplified version

For faster installation and more straightforward handling of the POINT SETTER® holding arm, Set 28172 WL offers a lighter OR table adaptor with less setting options than the standard OR table adaptor.

Specifications subject to change.

F

# POINT SETTER® Holding System Spare Universal Adaptor, for complementing the POINT SETTER® System



28172 WV	Universal Adaptor, 10 – 15 mm, for use with POINT SETTER®
28172 WU	Universal Adaptor, 5 – 10 mm, for use with POINT SETTER®
28172 WX	<b>Universal Adaptor,</b> 10 – 15 mm, pediatric, for use with POINT SETTER <sup>®</sup>
28172 WR	Retractor Blade Holder, for holding spatulas and retractors in ENT and NEURO, for use with POINT SETTER®

# POINT SETTER® Holding System



Alternative and Spare Connecting Tubes	5	
	28172 WA	Connecting Tube, for POINT SETTER®, Dräger, max. pressure 8 bar/115 psi, length 600 cm
4	28172 WB	Connecting Tube, for POINT SETTER®, Dräger air motor, max. pressure 8 bar/115 psi, length 600 cm
	28172 WC	Connecting Tube, for POINT SETTER®, compressor, max. pressure 8 bar/115 psi, length 600 cm
	28172 WN	Connecting Tube, for POINT SETTER®, Schrader, max. pressure 8 bar/115 psi, length 600 cm
	28172 WO	Connecting Tube, for POINT SETTER®, with open end, max. pressure 8 bar/115 psi, length 600 cm
Accessories and Expendable Materials		
	<b>20</b> 0310 02 <b>20</b> 0310 02 C	Air Compressor, for POINT SETTER®, 0 – 8 bar, power supply 230 VAC, 50/60 Hz, dimensions (w x d x h): approx. 500 x 320 x 340 mm, weight approx. 22 kg including:  Fabric Reinforced Tube, for connecting CALCUSPLIT® SCB 27 6300 20  Connecting Tube, length 600 cm, for use with POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar Same, power supply 115 VAC, 50/60 Hz
	2761291	<b>Pressure Regulator,</b> 7 bar, must be used for pressure > 8 bar on supply line! Max. allowed inlet pressure 10 bar. For use with POINT SETTER® arm.
	28272 C	Clamping Cylinder, for flexible mounting of 10 mm telescopes to telescope sheath, autoclavable. The clamping cylinder allows vertical movement and rotation of the telescope. For use with Clamping Jaw 28172 UG and 28272 UGN as well as POINT SETTER® universal adaptor 10 – 15 mm
	28272 ECW	Spring Balance, loading capacity 25 N
	28172 WD	Drape, for single use, sterile, package of 10

Components/Spare Parts see chapter 16

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## **STOR-E® Transport Cart**

for POINT SETTER® Holding Arm



With the aid of the transport cart, the POINT SETTER® holding system can be easily transported into the OR. The components of the POINT SETTER® holding system

are safely suspended from the cart at a convenient height. This enables easy and quick mounting to standard OR table rails.

#### **Special Features:**

- Mobile and safe storage of the POINT SETTER® holding arm
- Faster installation and readiness of the POINT SETTER® for immediate use in the OR
- Offers space for the POINT SETTER® with standard OR table adaptor, connecting tube, sterile covers and small parts



**20** 0200 59

STOR-E® Transport Cart, for the POINT SETTER® holding arm

including:

Attachment Set, for POINT SETTER®

**Wire Basket** 

1-11

Components/Spare Parts see chapter 16



#### Introduction



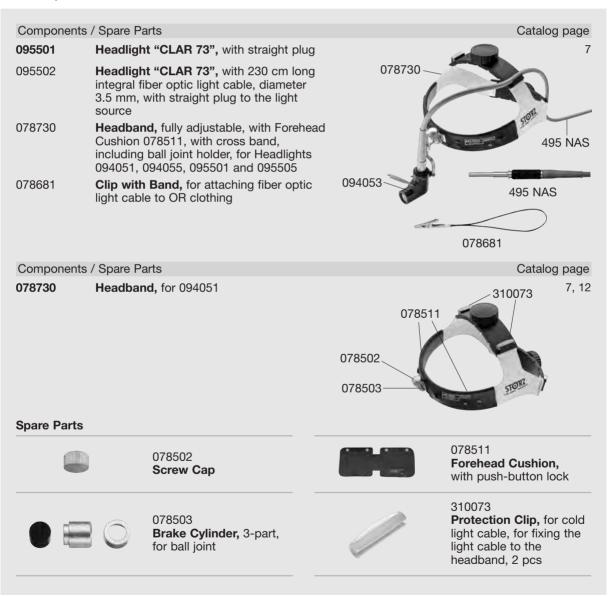
The chapter "Components / Spare Parts" contains detailed information on KARL STORZ instruments.

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.

#### For example:



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

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20711621	SP 83	252590	SP 85	28272 UKN	SP 87
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219805	SP 65	25320083	SP 43	310063	SP 18, SP 19
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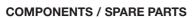
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39219 XFB	SP 68	40701620-1	SP 83	462022	SP 69
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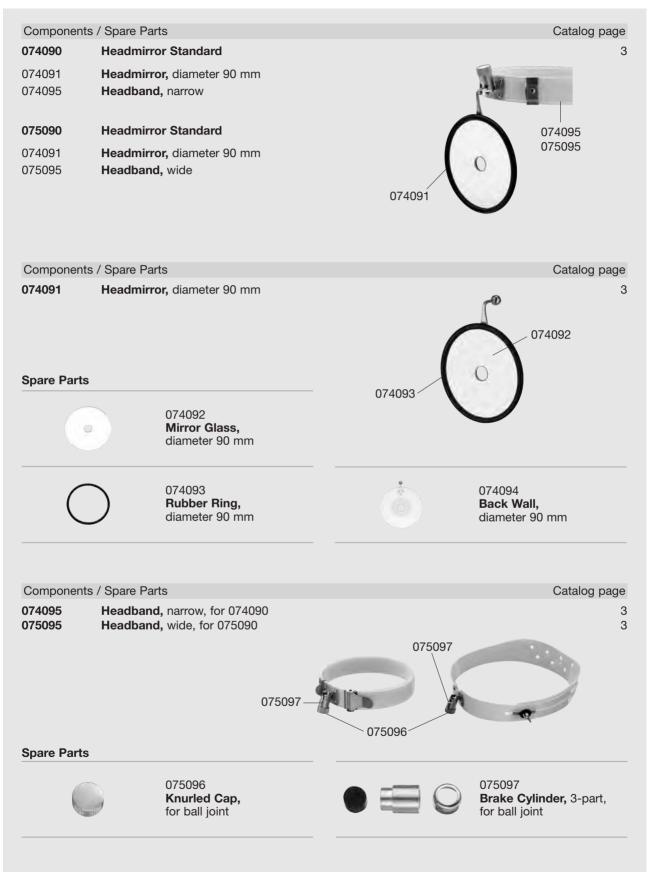


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## **Headmirrors**

Reflectors, Headbands





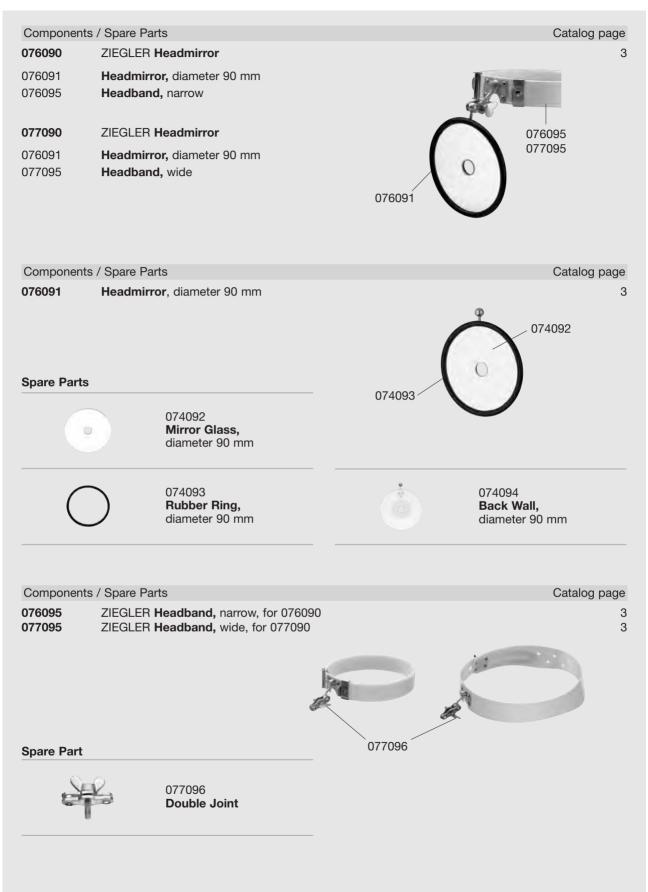
SP 4 ENT-SP

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## **Headmirrors**

Reflectors, Headbands





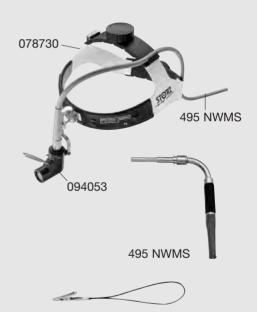
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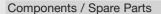
Componen	ts / Spare Parts	Catalog page
094051	Headlight	7
094053	Headlight, with U-shaped suspension and ball joint	078730
078730	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder for Headlights 094051, 094055, 095501 and 095505	5001 495 NAS
495 NAS	Fiber Optic Light Cable, straight plug, diameter 3.5 mm, length 230 cm	
078681	Clip with Band, for attaching the fiber optic light cable to OR clothing	094053 495 NAS
		078681

094055	Headlight
094053	<b>Headlight,</b> with U-shaped suspension and ball joint
078730	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder for Headlights 094051, 094055, 095501 and 095505
495 NWMS	Fiber Optic Light Cable, with 90° deflection to the cold light source, diameter 3.5 mm, length 230 cm
078681	<b>Clip with Band,</b> for attaching the fiber optic light cable to OR clothing



078681





Catalog page

078730

Headband, for 094051 and 094055

7, 12



#### **Spare Parts**



078502 **Screw Cap** 



078511 **Forehead Cushion,** with push-button lock







078503 **Brake Cylinder,** 3-part, for ball joint



310073 **Protection Clip,** for cold light cable, for fixing the light cable to the headband, 2 pcs

Catalog page

#### Components / Spare Parts

094053

Headlight, for 094051 and 094055



#### **Spare Parts**



084508 **Suspension,** with cross connection, for 084500 – 084503



094005 **Handle,** sterilizable, with sleeve



5915702 **Thread Pin,** for lamp head



Componer	nts / Spare Parts	Catalog page
310010	Headlight, with straight plug	8
310011	<b>Headlight,</b> with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source	
310075	<b>Headband,</b> extra light, fully adjustable, with Forehead Cushion 078511, without cross band, including clamp mounting for Headlight 310010/310015	510E
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310075
		310011
		078681
310015	Headlight, with 90° deflection	
310016	<b>Headlight,</b> with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with 90° deflection to the light source	
310075	Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, including clamp mounting for Headlight 310010/310015	5108
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310075
		310016

Components / Spare Parts

Catalog page

**310075 Headband,** for 310010 and 310015

8, 12

#### **Spare Part**



078511 **Forehead Cushion,** with push-button lock



078681

7

SP 8 ENT-SP 4



Componen	ts / Spare Parts	Catalog page
310020	Headlight, with straight plug	8
310011	<b>Headlight,</b> with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source	
310076	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including clamp mounting for Headlight 310020/310025	3708
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310076
		310011
		078681
310025	Headlight, with 90° deflection	
310016	Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with 90° deflection to the light source	
310076	Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including clamp mounting for Headlight 310020/310025	5001
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	310076

Components / Spare Parts

Catalog page

8, 12

**310076 Headband,** for 310020 and 310025



078681

#### **Spare Parts**



078511 **Forehead Cushion,** with push-button lock



310073

Protection Clip, for cold light cable, for fixing the light cable to the headband, 2 pcs





	ts / Spare Parts	Catalog page
094301	Headlight, with straight plug	9, 10
094302	<b>Headlight,</b> lightweight model, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source	
078740	<b>Headband,</b> extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330	- Tol
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	094302 078740
		078681
094305	Headlight, with 90° deflection	
094306	Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with 90° deflection to the light source	
078740	<b>Headband,</b> extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330	094306 078740
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	078681
094320	Headlight, with straight plug	
094322	Headlight, with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source	
078740	Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330	094322 078740
	Clip with Band, for attaching fiber optic	

8-1

078681

SP 10 ENT-SP 6





Componer	nts / Spare Parts	Catalog page
094325	Headlight, with 90° deflection	10
094326	<b>Headlight,</b> with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with 90° deflection to the light source	
078740	<b>Headband,</b> extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330	500
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	094326 078740
		078681

094330	Headlight
094332	<b>Headlight,</b> with connection for use with thin, 230 cm long fiber optic light cable 495 NTAS with straight plug or 495 NTXS with 90° deflection to the light source
078740	<b>Headband,</b> extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301 – 094330
078681	Clip with Band, for attaching fiber optic light cable to OR clothing



Componen	ts / Spare Parts	Catalog page
078740	<b>Headband,</b> for 094301, 094305, 094320, 094325 and 094330	9, 10, 12





078511 Forehead Cushion, with push-button lock



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#### **LED Headlights**



Components / Spare Parts Catalog page

**094100 LED Headlight,** with white light

094103 Headlight, LED technology, white light,

including connecting cable for battery box

094108 **Battery Box,** for use with 2 Photo

Batteries 121306 P, CR 123 A

121306 P Photo Batteries, lithium, 3 V, CR 123 A

078760 **Headband,** for LED headlight, fully

adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 094103/094104 and Holding Band 094109 for Battery Box 094108 or

Rechargeable Battery Box 094124



094103 094104

**094110 LED Headlight,** with yellowish light

094104 Headlight, LED technology, yellowish

light, including connecting cable for

battery box

094108 **Battery Box,** for use with 2 Photo

Batteries 121306 P, CR 123 A

121306 P Photo Batteries, lithium, 3 V, CR 123 A

078760 **Headband,** for LED headlight, fully

adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 094103/094104 and Holding Band 094109 for Battery Box 094108 or Rechargeable Battery Box 094124

Components / Spare Parts

Catalog page

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**094108** Battery Box, for 094100 and 094110



094108 B

#### **Spare Parts**



094108 B **Cover,** for Battery Box 094108



121306 P **Photo Battery,** lithium, 3 V, CR 123 A

Spare parts for headband see SP 14

8

**LED Headlights** 



Componer	nts / Spare Parts	Catalog page
094120	LED Headlight, with white light	5, 389
094103	Headlight, LED technology, white light, including connecting cable for rechargeable battery box	
094124	Rechargeable Battery Box, with 1 Li-lon rechargeable battery	
094129	<b>Battery Charger Li-Ion,</b> for charging the rechargeable battery box, power supply 100 – 240 VAC, 50/60 Hz	STON C
094127	Mains Cord, for Battery Charger 094129, length 150 cm	
078760	<b>Headband,</b> for LED headlight, fully adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 094103/094104 and Holding Band 094109 for Battery Box 094108 or Rechargeable Battery Box 094124	094124 078760 094103 094104
094130	LED Headlight, with yellowish light	
094104	Headlight, LED technology, yellowish light, including connecting cable for rechargeable battery box	
094124	<b>Rechargeable Battery Box,</b> with 1 Li-lon rechargeable battery	
094129	<b>Battery Charger Li-lon,</b> for charging the rechargeable battery box, power supply 100 – 240 VAC, 50/60 Hz	
094127	Mains Cord, for Battery Charger 094129, length 150 cm	
078760	<b>Headband,</b> for LED headlight, fully adjustable, with Forehead Cushion 078511, with cross band,	

Components / Spare Parts

Catalog page

**O94124** Rechargeable Battery Box, for 094120 and 094130

Rechargeable Battery Box 094124

including holder for Headlight 094103/094104 and Holding Band 094109 for Battery Box 094108 or



#### **Spare Parts**



094125 A **Li-Ion Rechargeable Battery Cell,** with key



094127 **Mains Cord,** for Battery Charger 094129, length 150 cm



094129 **Battery Charger Li-lon,** for charging the rechargeable battery box, power supply 100 – 240 VAC, 50/60 Hz



094105
Extension Cable,
for LED Headlights
094100 – 094130, for
carrying the battery box
or rechargeable battery
box in OR clothing

Spare parts for headband see SP 14

8-11

ENT-SP 9 US

**LED Headlights** 



Components / Spare Parts

Catalog page

**078760 Headband,** for 094100, 094110, 094120 and 094130

5, 12



#### **Spare Parts**



078511 **Forehead Cushion,** with push-button lock



310073 **Protection Clip,** for cold light cable, for fixing the light cable to the headband, 2 pcs



094109 **Holding Band,** for Battery Box 094108 or Rechargeable Battery Box 094124, leather, with snap closure

# Headlights Headlights "CLAR 73"



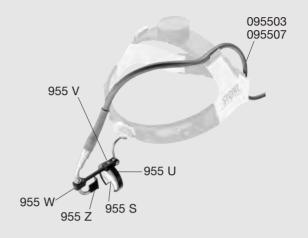
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Compor	nents / Spare Parts	Catalog page
095501	Headlight "CLAR 73", with straight plug	11
095502	Headlight "CLAR 73", with 230 cm long integral fiber optic light cable, diameter 3.5 mm, with straight plug to the light source	
078730	<b>Headband,</b> fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder, for Headlights 094051, 094055, 095501 and 095505	STORE
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	078730
		095502
		078681
095505	Headlight "CLAR 73", with 90° deflection	
095506	Headlight "CLAR 73", with 230 cm long integral fiber optic light cable, diameter 3.5 mm, with 90° deflection to the light source	
078730	<b>Headband,</b> fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder, for Headlights 094051, 094055, 095501 and 095505	, stor
078681	Clip with Band, for attaching fiber optic light cable to OR clothing	078730
		078681

Spare parts for headlights and headband see following pages

Headlights "CLAR 73"



Components / Spare Parts Catalog page **Headlight "CLAR 73",** with straight plug **Headlight "CLAR 73",** with 90° deflection 095502 11 095506 11



#### **Spare Parts**



955 S Mirror



955 U Metal Holder, for mirror



955 V



Fixation Screw, for metal holder (mirror)



955 W Fixation Screw, for fiber optic light cable



955 Z Fixation Screw, set of 2 Spare Part for 095502



095503

**Integral Fiber Optic Light** Cable, with straight plug

Spare Part for 095506



095507

**Integral Fiber Optic Light** Cable, with 90° deflection

Headlights "CLAR 73"



Components / Spare Parts

Catalog page

078730

Headband, for 095501 and 095505

11, 12



#### **Spare Parts**



078502 **Screw Cap** 



078511 **Forehead Cushion,** with push-button lock







078503 **Brake Cylinder,** 3-part, for ball joint



310073 **Protection Clip,** for cold light cable, for fixing the light cable to the headband, 2 pcs

# Headlights Headlights KS60



readilights No	00	KARL SIORZ	LINDOSKOPI
Component	ts / Spare Parts		Catalog page
310060	Headlight KS60		6
310063	Headlight KS60, with removable and sterilizable Focus Handle 310065		310070
310070	<b>Headband</b> , fully adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 310063	100	
495 NY	Y-Fiber Optic Light Cable, with special protective casing for Headlight 310063, length 290 cm		
078681	Clip with Band, for attaching the fiber optic light cable to OR clothing	310063	IY
		495	NY
		078681	
310061	Headlight KS60		
310063	Headlight KS60, with removable and sterilizable Focus Handle 310065		310070
310070	<b>Headband,</b> fully adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 310063	101	
495 NYW	Y-Fiber Optic Light Cable, with special protective casing for Headlight 310063, with 90° deflection to the cold light source, length 290 cm	310063	NYW

Clip with Band, for attaching the fiber optic light cable to OR clothing

495 NYW



078681

Headlights KS60



Components / Spare Parts

**310070 Headband,** for 310060 and 310061

Catalog page 6, 12



#### **Spare Parts**



078511 **Forehead Cushion,** with push-button lock



310073 **Protection Clip,** for cold light cable, for fixing the light cable to the headband, 2 pcs

Components / Spare Parts

Catalog page

**310063 Headlight KS60,** for 310060 and 310061

6



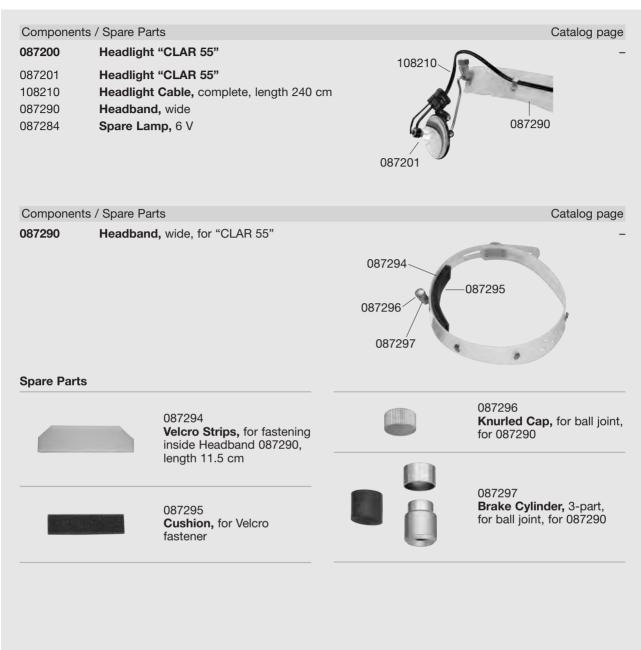
#### **Spare Part**



310065 **Handle,** with focusing screw, sterilizable

Headlight "CLAR 55"

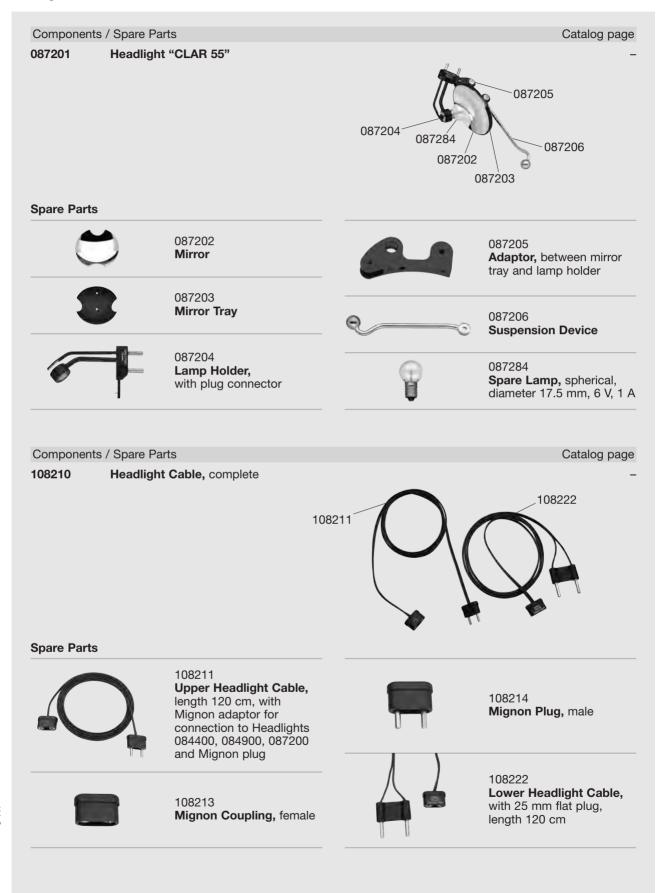




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Headlight "CLAR 55"



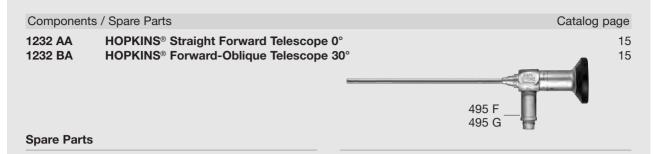


ENT-SP 17

#### **Otoscopes**

**HOPKINS® Telescopes, Tele-Otoscopes** 







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



495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

Component	s / Spare Parts	Catalog page
1218 AA	Tele-Otoscope, with HOPKINS® Straight Forward Telescope 0°	16
1218 BA	Tele-Otoscope, with HOPKINS® Forward-Oblique Telescope 30°	16
1215 AA	Tele-Otoscope, with HOPKINS® Straight Forward Telescope 0°	16
		<b>A</b>



#### **Spare Parts**



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

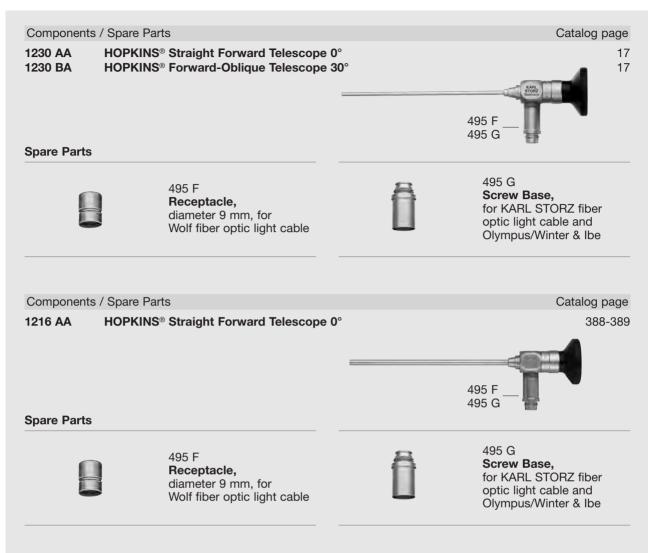


495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

#### **Otoscopes**

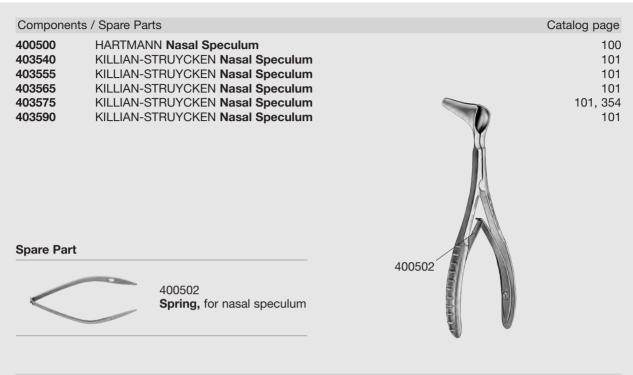
**HOPKINS® Telescopes** 

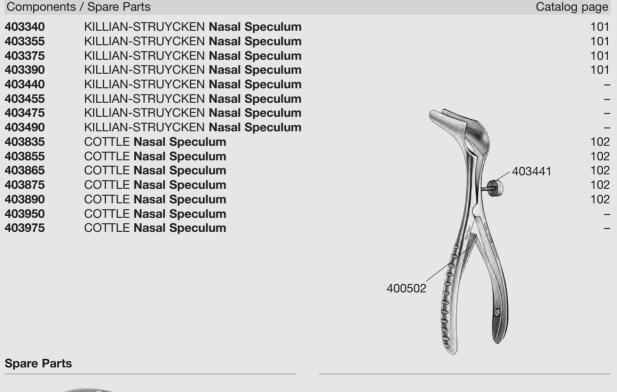




## **Nasal Specula**







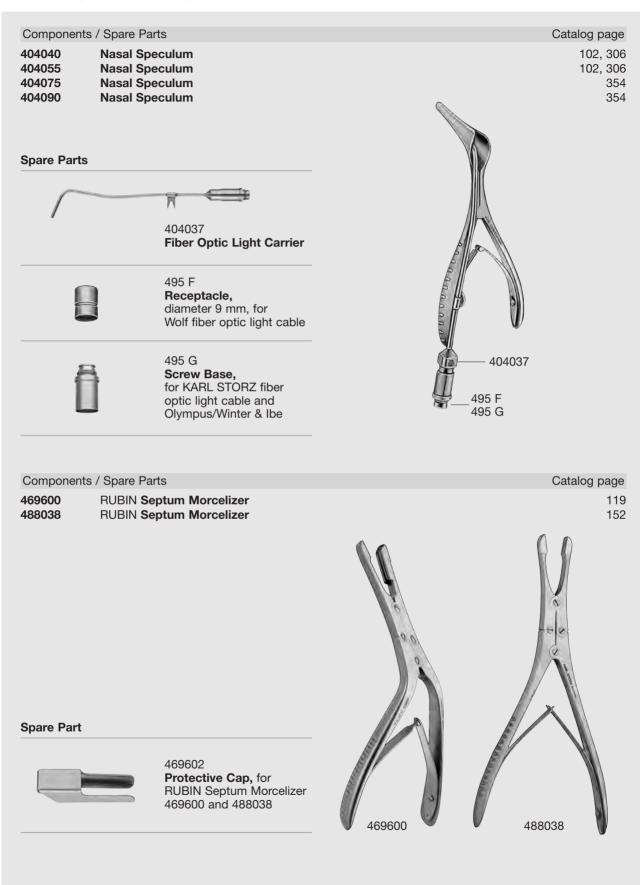


SP 24 ENT-SP 20 A US

7



## Nasal Specula, Septum Morcelizers

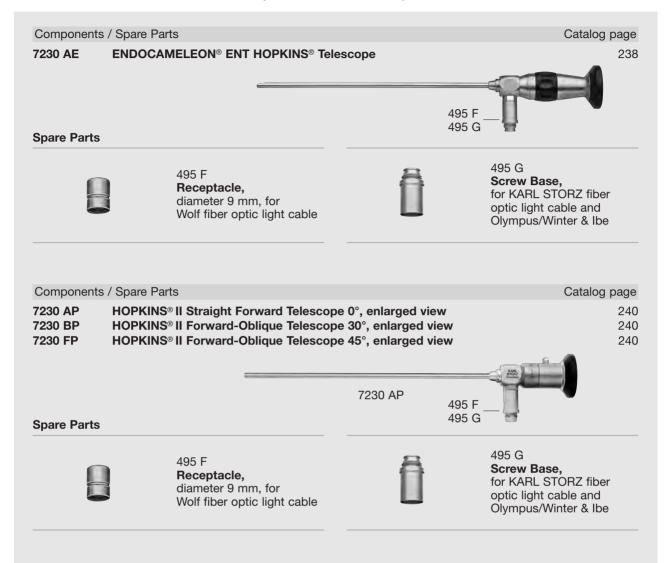


ENT-SP 21 A US SP 25

#### **Sinoscopes**

ENDOCAMELEON® ENT HOPKINS® Telescope, HOPKINS® II Telescopes





## **Sinoscopes**

HOPKINS® II Telescopes



Components	s / Spare Parts	Catalog page
7230 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view	242, 303
7230 AWA	HOPKINS® II Wide Angle Straight Forward Telescope 0°, enlarged view	24
7230 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view	242, 300
7230 BWA	HOPKINS® II Wide Angle Forward-Oblique Telescope 30°, enlarged view	24
7230 CA	HOPKINS® II Lateral Telescope 70°, enlarged view	24
7230 CWA	HOPKINS® II Wide Angle Lateral Telescope 70°, enlarged view	24
7230 DA	HOPKINS® II Lateral Telescope 90°, enlarged view	24
7230 EA	HOPKINS® II Retrograde Telescope 120°, enlarged view	24
7230 FA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view	24
7230 FWA	HOPKINS® II Wide Angle Forward-Oblique Telescope 45°, enlarged view	24

7230 AA

495 F 495 G



#### **Spare Parts**



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



495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

Components	s / Spare Parts	Catalog page
7230 FLA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view	243
7230 BVA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view	243
7230 FVA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view	243
7230 CVA	HOPKINS <sup>®</sup> II Lateral Telescope 70°, enlarged view	243
7235 AWA	HOPKINS® II Wide Angle Straight Forward Telescope 0°, enlarged view	243
7220 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view	244
7220 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view	244
7220 CA	HOPKINS® II Lateral Telescope 70°, enlarged view	244
7220 FA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view	244
7220 FVA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view	244
7229 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view	245
7229 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view	245, 272
7229 FA	HOPKINS® II Forward-Oblique Telescope 45°, enlarged view	245
7229 CA	HOPKINS® II Lateral Telescope 70°, enlarged view	245
7207 AA	HOPKINS® II Straight Forward Telescope 0°	246
7207 BA	HOPKINS® II Forward-Oblique Telescope 30°	246
7209 BA	HOPKINS® Forward-Oblique Telescope 30°	246, 306
		_

7220 CA

495 F \_ 495 G



#### **Spare Parts**



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

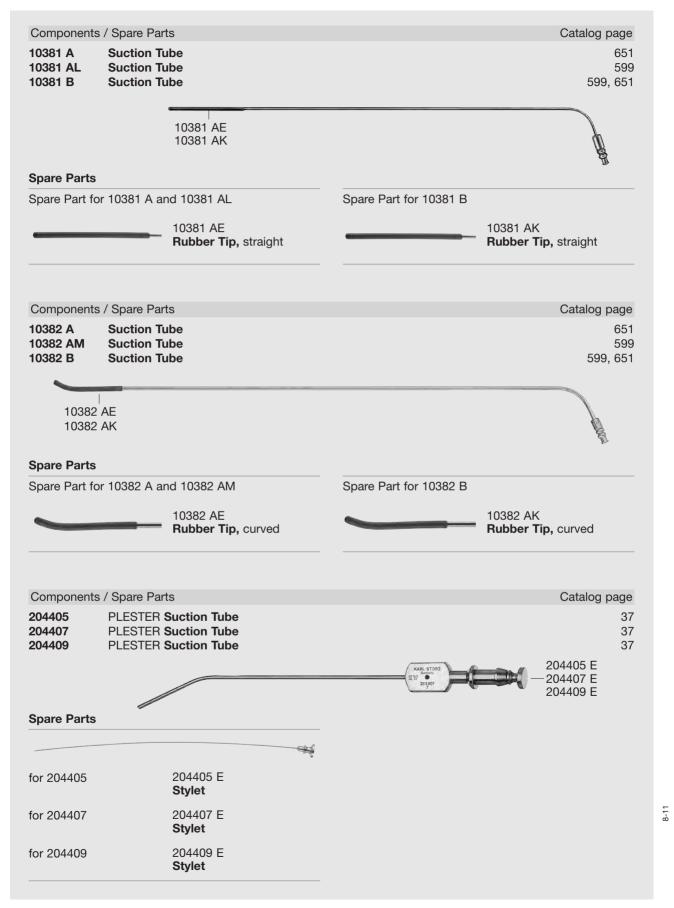


495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

## **Suction and Irrigation Tubes**



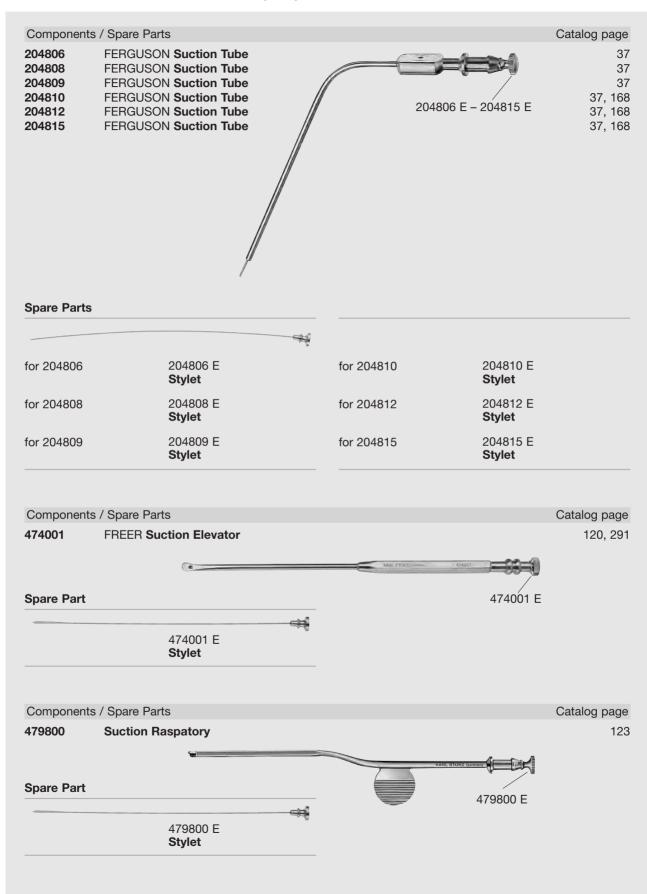




#### **Suction and Irrigation Tubes**



Suction Tubes, Suction Elevator, Suction Raspatory

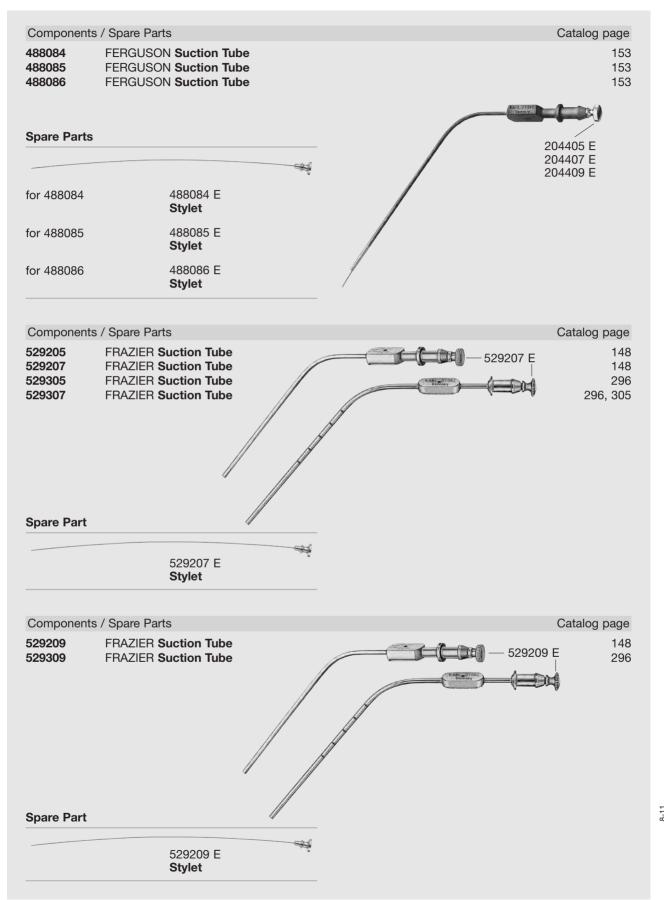


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## **Suction and Irrigation Tubes**



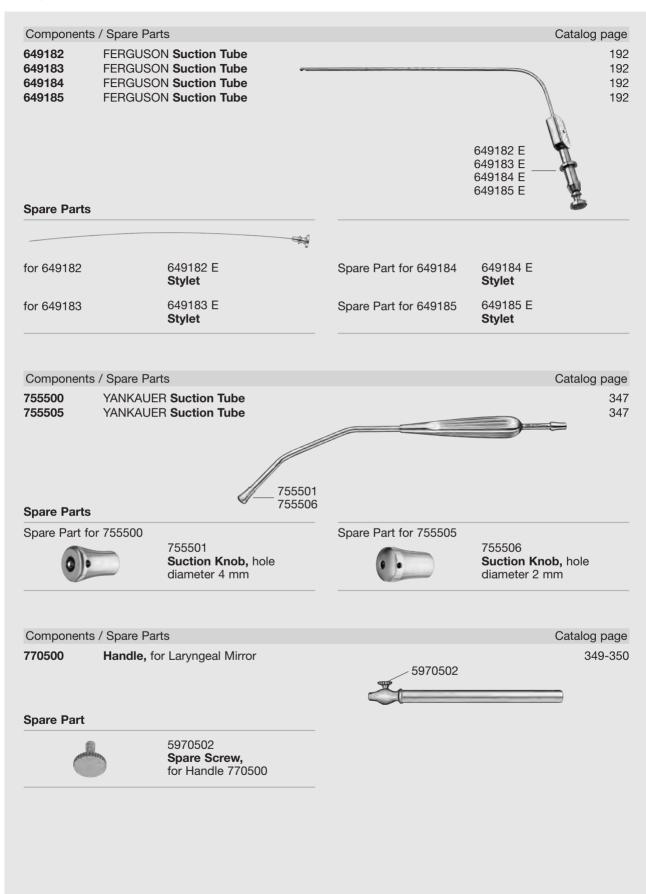




**SP 30** 

# Suction and Irrigation Tubes, Larynx Instruments





ENT-SP 27 A US SP 31

#### **Suction and Irrigation Tube**

7249291

package of 5

**O-Ring Set,** 2 sizes, package of 5

**Irrigation and Suction Handles** 



#### Components / Spare Parts Catalog page 723620 **THUMFART Irrigation and Suction Handle** 195 723620 H THUMFART Handle, with ergonomic ring handle, for use with Irrigation and Suction Sheaths 723527 A - F and 723540 A - F 723620 DV 723621 SV 723620 DV Press Button Valve. with lock function 723621 **THUMFART Irrigation and Suction Handle** 723620 H 723620 H THUMFART Handle, with ergonomic ring handle, for use with Irrigation and Suction Sheaths 723527 A - F and 723540 A - F 723621 SV Push Button Valve (irrigation only active when pressure valve is depressed) 723620 DV **Spare Part**



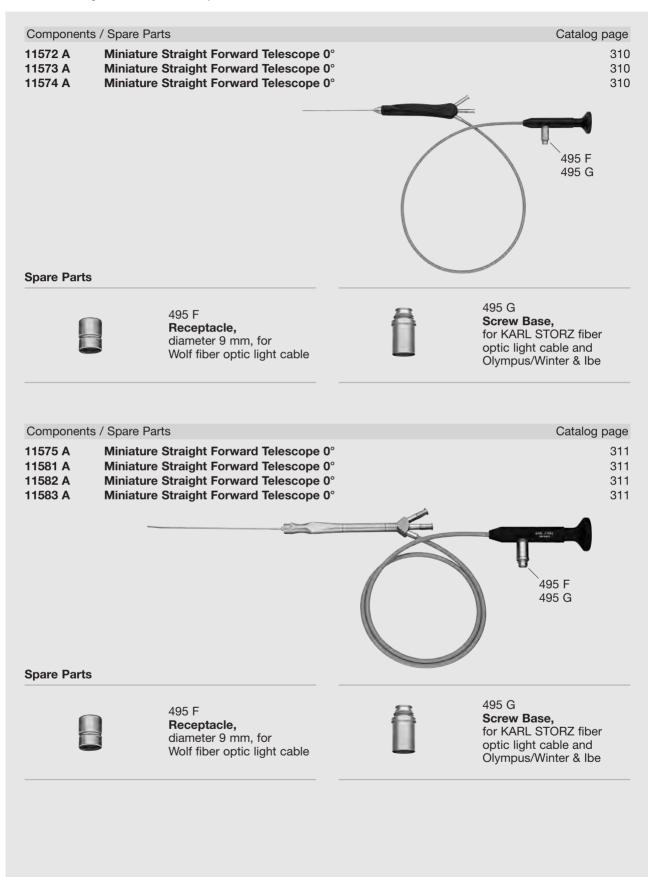
8-11

723621 SV

#### **Sialendoscopes**

**Miniature Straight Forward Telescopes** 



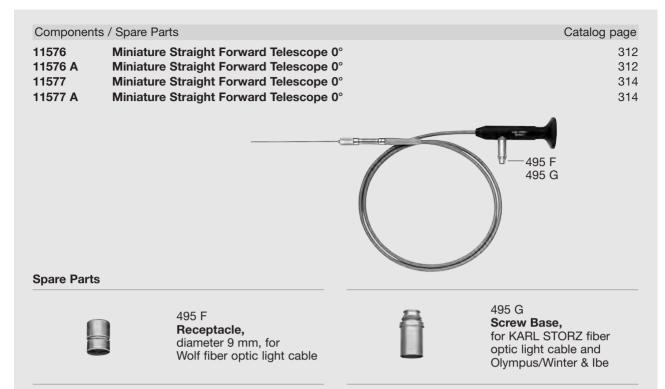


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## **Sialendoscopes**

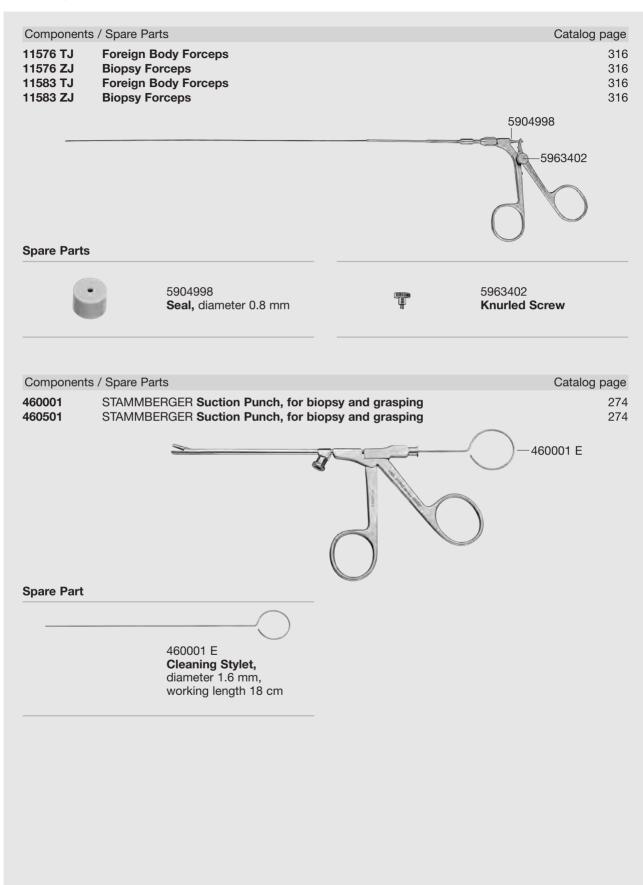
**Miniature Straight Forward Telescopes** 







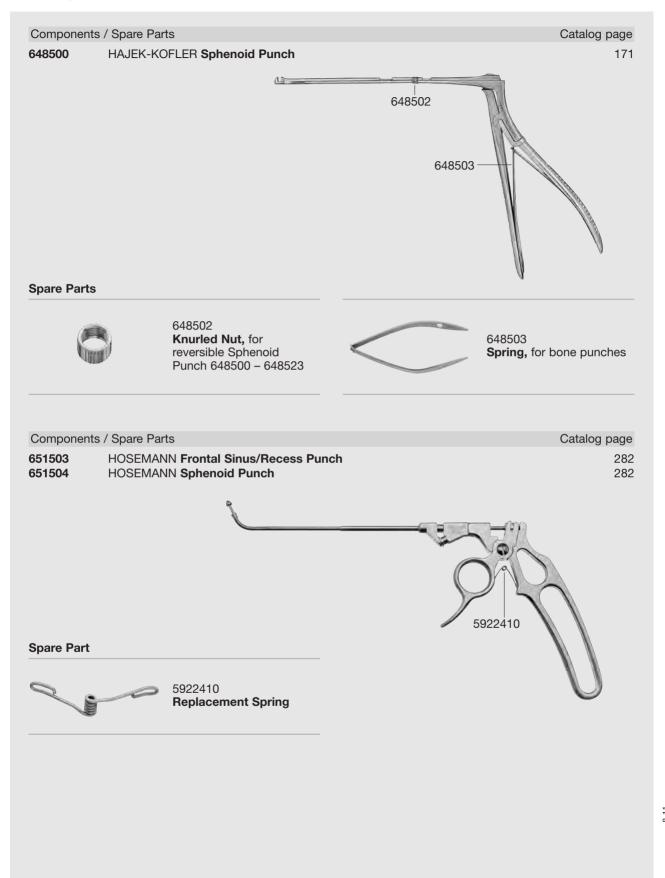
## **Forceps and Punches**



ENT-SP 31 A US SP 35

## **Forceps and Punches**



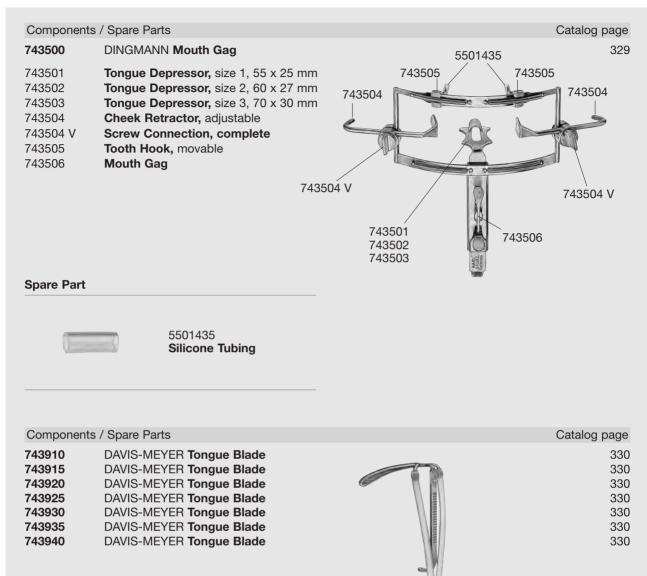


SP 36 ENT-SP 32 A US



7362691

#### **Tongue Blades and Mouth Gags**



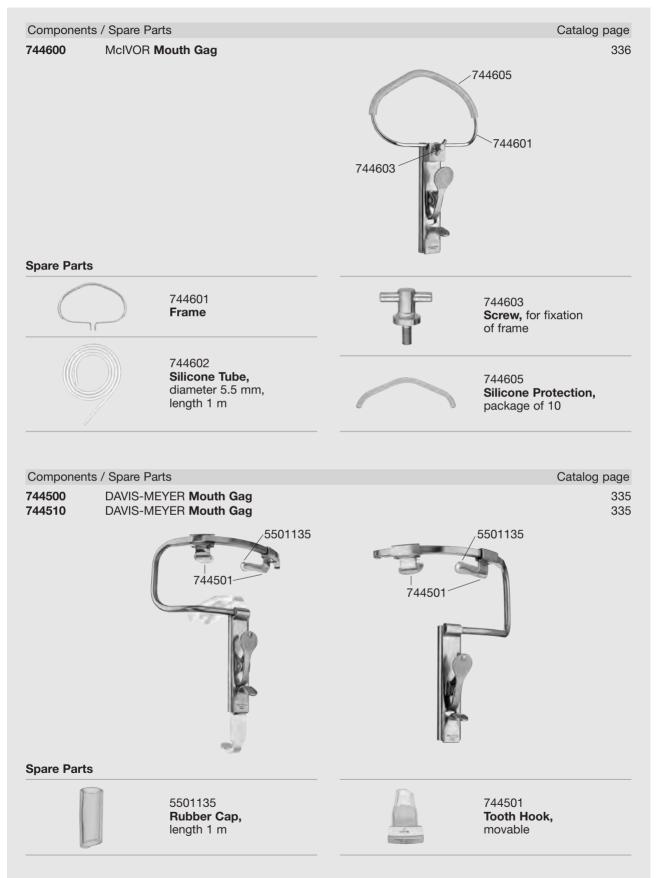




7362691 **Y-Tube,** for tongue blade, length 190 mm

# **Tongue Blades and Mouth Gags**





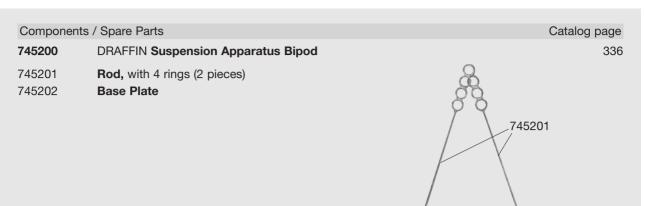
SP 38 ENT-SP 34 A US

# Tongue Blades and Mouth Gags, Stroboscope

Leather Bag for μ-PULSAR



745202



Components / Spare Parts Catalog page 40160101 **PULSAR II Stroboscope Set** 503 40160120 PULSAR II Stroboscope, power supply 100 - 240 V, 50/60 Hz 400 A Mains Cord, length 300 cm 40160021 **LED Stroboscopy Light Source** 40160032 **Footswitch** 40160120 40160030 Contact Sound Microphone, with clip 40160032 400 A 40160021 40160030

Components / Spare Parts

Catalog page

40150001 KARL STORZ μ-PULSAR, for laryngeal stroboscopy

505

KARL STORZ μ-PULSAR, basic unit for use with Battery Charger 40 1500 30



40150020

8-11

826300

#### Flexible Endoscopes

Rhino-Pharyngo-Laryngo-Fiberscope, Adaptor for Two-Way Stopcock







#### **Spare Parts**



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



495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

Catalog page

#### Components / Spare Parts

6927691

Adaptor for Two-Way Stopcock, for 11001 RD



#### **Spare Parts**



6376990 **Stopcock,** for irrigation connector

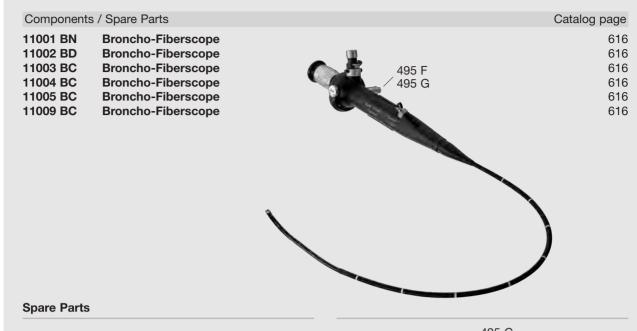


6377091 **Spring Cap** 

## Flexible Endoscopes

Broncho-Fiberscope, TELE PACK X





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



495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

Components /	Spare Parts	Catalog page
20045001-EN	TELE PACK X	232, 496, 614
20040240US	USB Silicone Keyboard, with touchpad, US character set	

20040280 KARL STORZ USB Flash Drive, 4 GB 400 F Mains Cord, length 300 cm

400 B Mains Cord, US version



#### Laryngoscopes

HOPKINS® and HOPKINS® II Telescopes



507

507

Components / Spare Parts

Catalog page

8700 DKA

Tele-Laryngo-Pharyngoscope, with integrated HOPKINS® lateral telescope 90°

Tele-Laryngo-Pharyngoscope, with integrated HOPKINS® lateral telescope 90°

BENJAMIN Tele-Laryngoscope, with integrated HOPKINS® lateral telescope 70°

Soft

8705 CKA

BENJAMIN Slimline Tele-Laryngoscope, with integrated HOPKINS® lateral telescope 70°

8706 CA

Strobo-Laryngoscope, with integrated HOPKINS® lateral telescope 70°

8707 DA 495 F 495 G

#### **Spare Parts**

8575 AV



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



495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

Components / Spare Parts

**HOPKINS® Straight Forward Telescope 15°** 

norking straight rotward telescope is

10005 AA HOPKINS® II Straight Forward Telescope 0°, enlarged view HOPKINS® II Forward-Oblique Telescope 30°, enlarged view

517, 528

Catalog page

579, 605, 630, 641 579, 630

495 F 495 G

Spare Parts 8575 AV



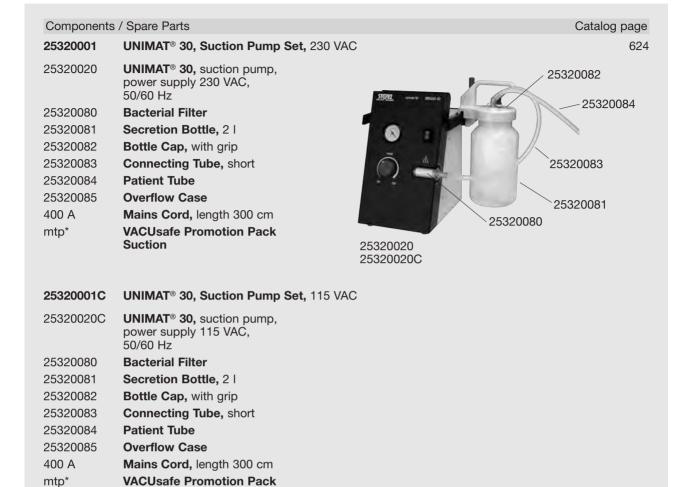
495 F Receptacle, diameter 9 mm, for Wolf fiber optic light cable



495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

#### **UNIMAT® 30**





#### **Spare Parts**

Spare Part for 25320020

Suction



1069400 **Mains Fuse,** T 0.63 A, L 250 V Spare Part for 25320020C



1069500 **Mains Fuse,** T 1.6 A, L 250 V

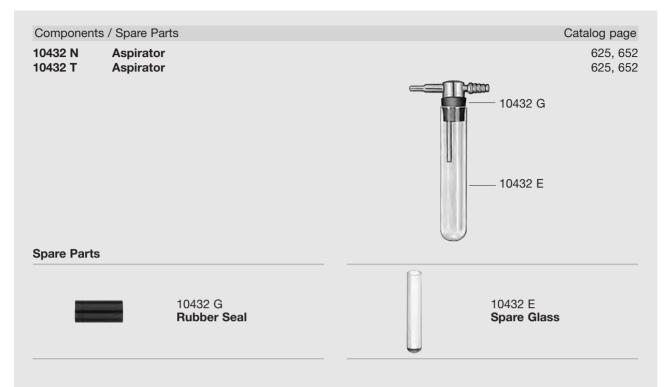


mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

## **UNIMAT® 30**



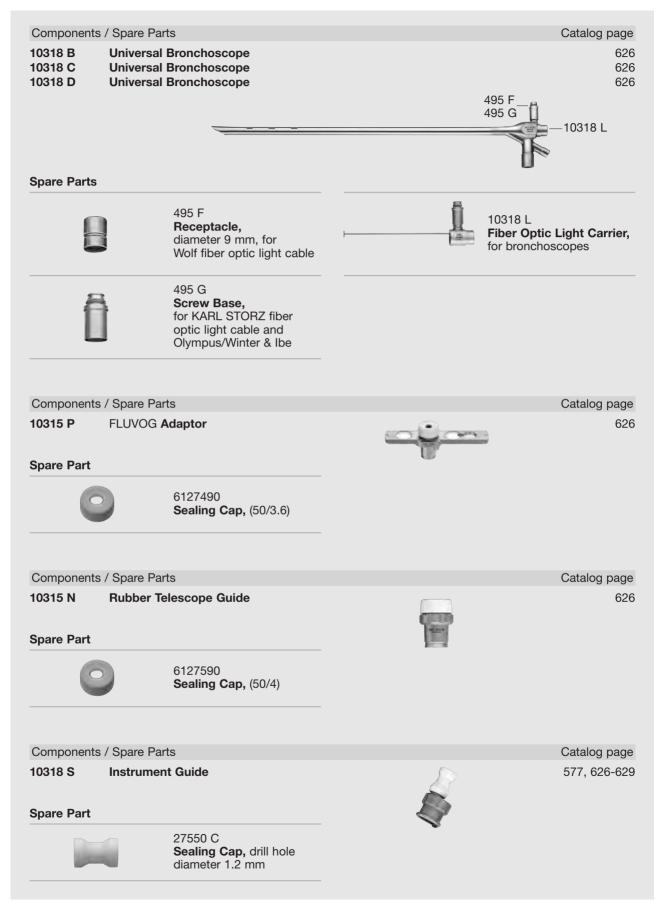




## **Bronchoscopes for Adults**

**Universal Bronchoscopes for Adults** 





ENT-SP 41 A US SP 45

## **Bronchoscopes for Adults**



Components / Spare Parts

10101 FA Prismatic Light Deflector



532, 534, 577, 579, 587, 590, 627-630, 639-640

Catalog page

**Spare Part** 



3430890 Knurled Cap

Components / Spare Parts

10314 P FLUVOG Adaptor



577, 579, 627-629

Catalog page

**Spare Part** 



6127490 **Sealing Cap,** (50/3.6)

Components / Spare Parts

10314 BN Rubber Telescope Guide



Catalog page

577, 627-630

**Spare Part** 



6127590 **Sealing Cap,** (50/4)

## **Bronchoscopes for Adults**

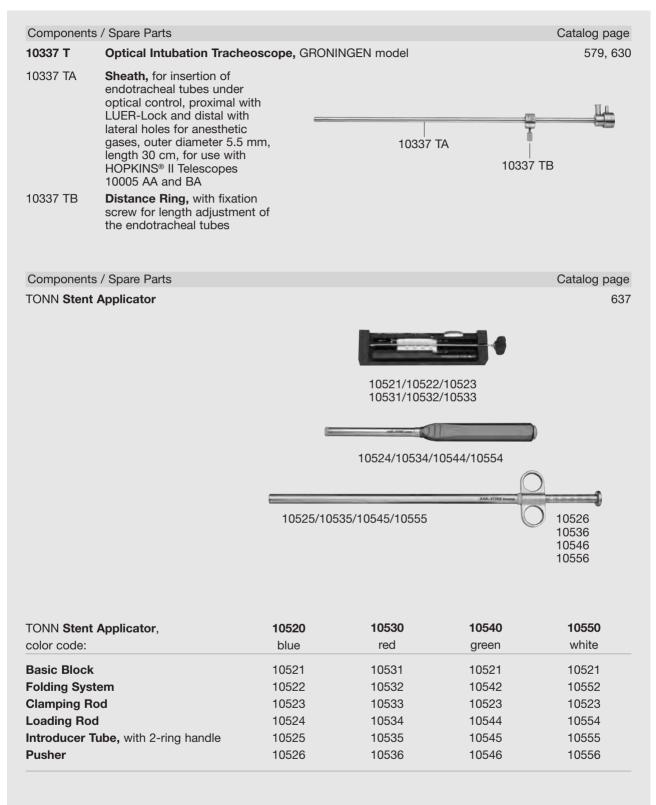


Components / Spare Parts Catalog page 10101 HA **Prismatic Light Deflector Spare Part** 3430890 **Knurled Cap** Components / Spare Parts Catalog page 10317 EF **Insert Sheath Spare Parts** 27550 A 27021 Y Sealing Cap, drill hole **Sealing Cap** diameter 0.8 mm Components / Spare Parts Catalog page 10317 EL **Insert Sheath Spare Parts** 27550 A 27021 Y Sealing Cap, drill hole **Sealing Cap** diameter 0.8 mm Catalog page Components / Spare Parts 10320 AA **HOPKINS® Straight Forward Telescope 0°** 631 10320 BA HOPKINS® Forward-Oblique Telescope 30° 631 10320 DA **HOPKINS® Lateral Telescope 90°** 631 10328 AA **HOPKINS® Straight Forward Telescope 0°** 633 10017 AA **HOPKINS® II Straight Forward Telescope 0°** 640 10018 AA **HOPKINS® Straight Forward Telescope 0°** 641 **HOPKINS® Forward-Oblique Telescope 30°** 641 10324 BA 10023 ABA **HOPKINS® Straight Forward Telescope 0°** 641 495 F 495 G **Spare Parts** 495 G 495 F Screw Base, Receptacle. for KARL STORZ fiber diameter 9 mm, for optic light cable and Wolf fiber optic light cable Olympus/Winter & Ibe

ENT-SP 43 A US SP 47

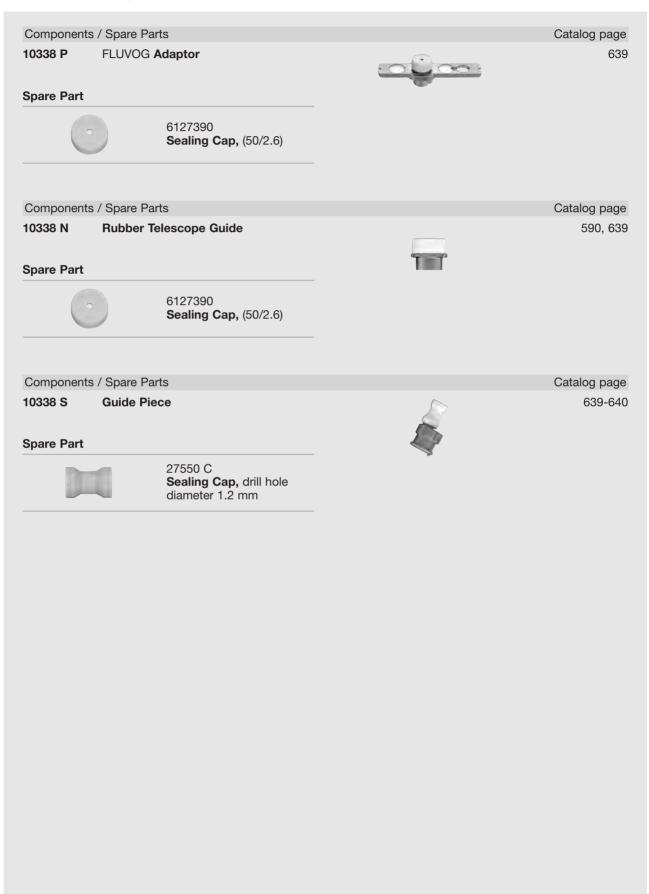
# **Optical Intubation Tracheoscope,** TONN **Stent Applicator**







# **Bronchoscopes for Children**



ENT-SP 45 A US

## **Esophagoscopes**





Components / Spare Parts Catalog page 12015 AA **HOPKINS® Straight Forward Telescope 0°** 588 10324 AA **HOPKINS® Straight Forward Telescope 0°** 591, 641 10020 ATA **HOPKINS® Straight Forward Telescope 0°** 592, 641 Miniature Straight Forward Telescope 0° 10030 AA 593, 645 495 F 495 G

12015 AA

#### **Spare Parts**



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

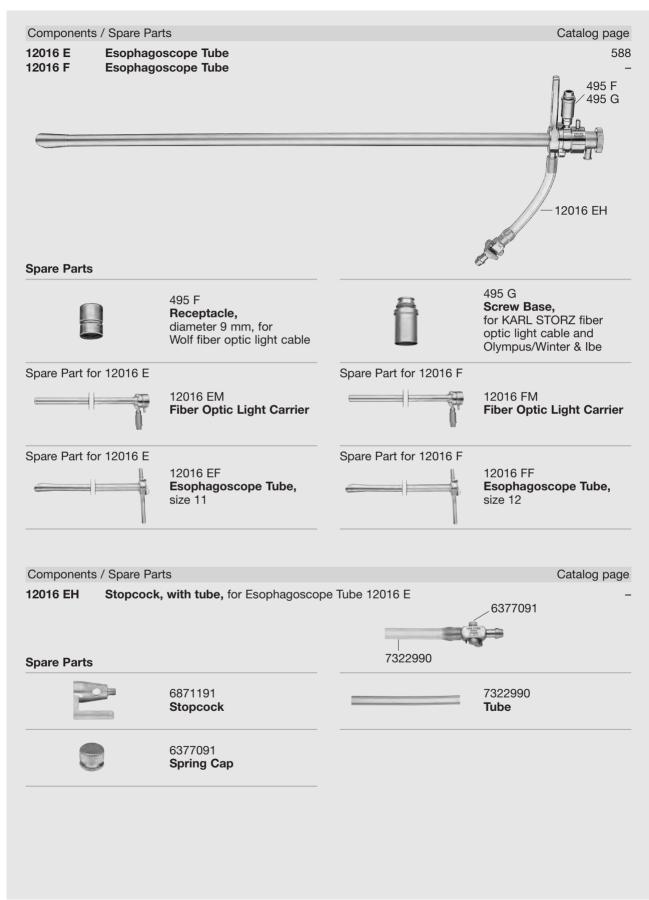


495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe

## **Esophagoscopes**

**Esophagoscope Tubes** 

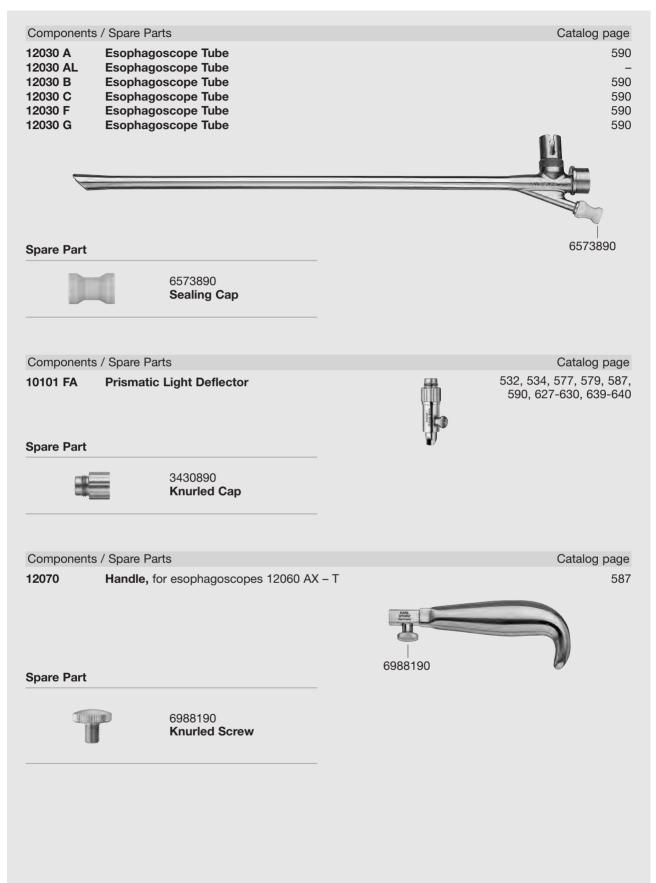




## **Esophagoscopes**

**Esophagoscope Tubes, Handle** 

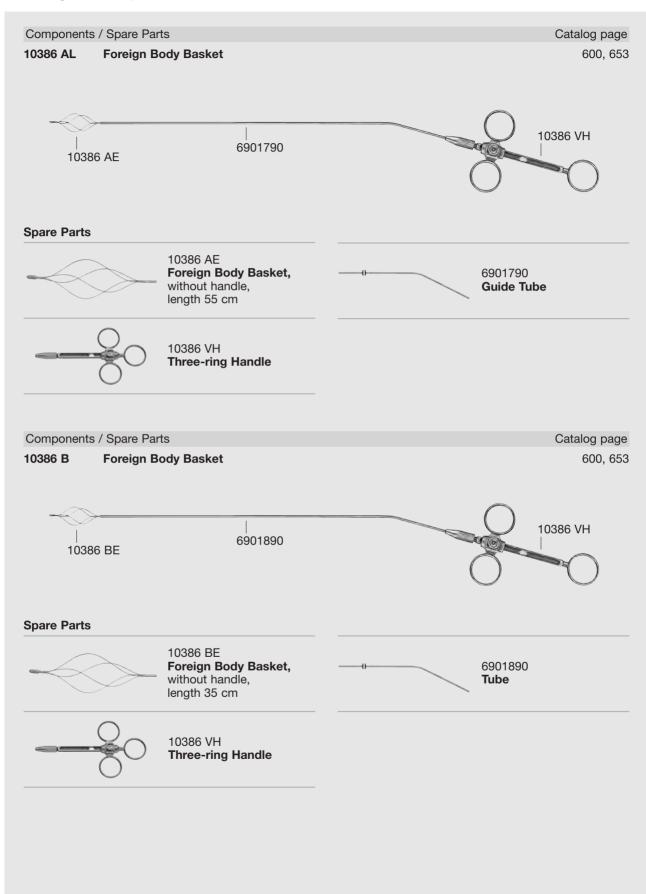




SP 52 ENT-SP 48 A US



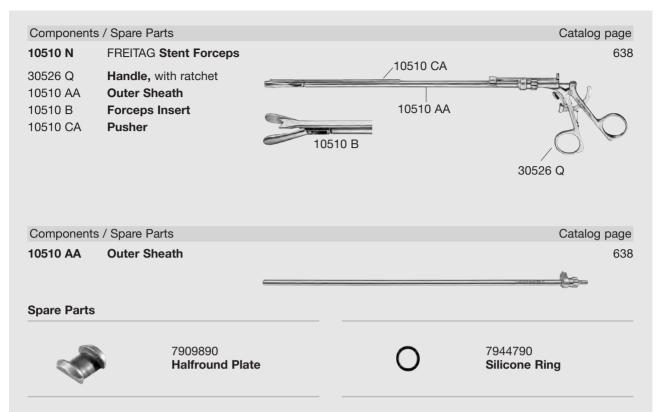
# **Foreign Body Baskets**



ENT-SP 49 A US SP 53

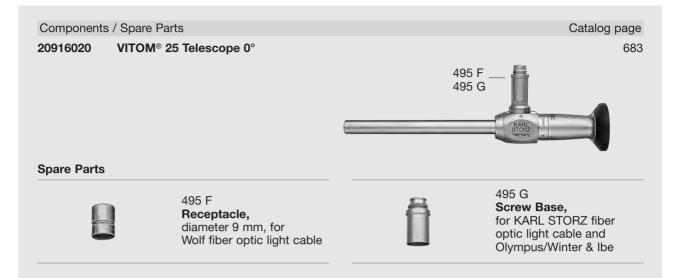
# FREITAG Stent Forceps





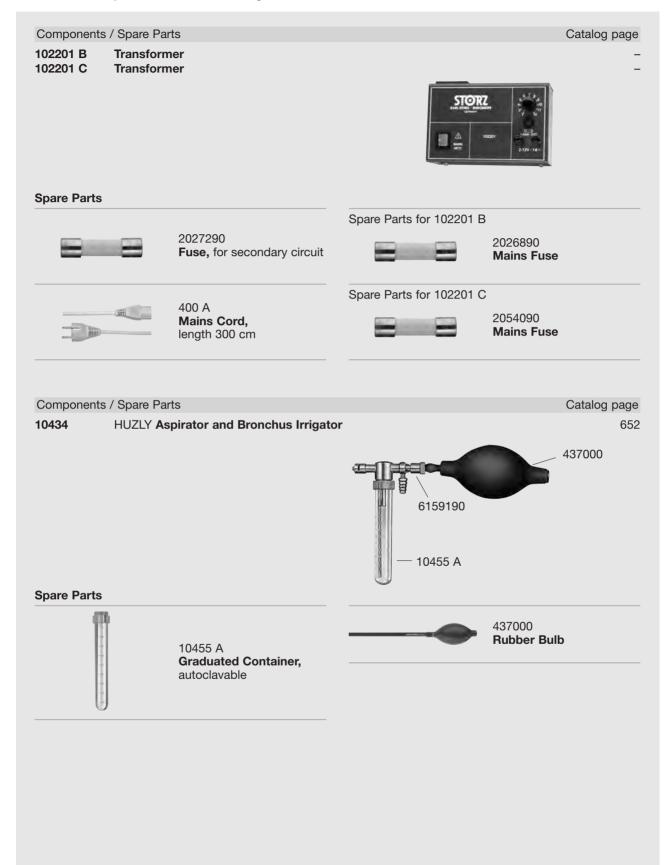
VITOM® 25 Telescope





Transformers, Aspirator and Bronchus Irrigator





SP 56 ENT-SP 52 A US

**ENT Diagnosis Set** 



Components / Spare Parts Catalog page

**826201 ENT Diagnosis Set,** for outpatient basic ENT examinations

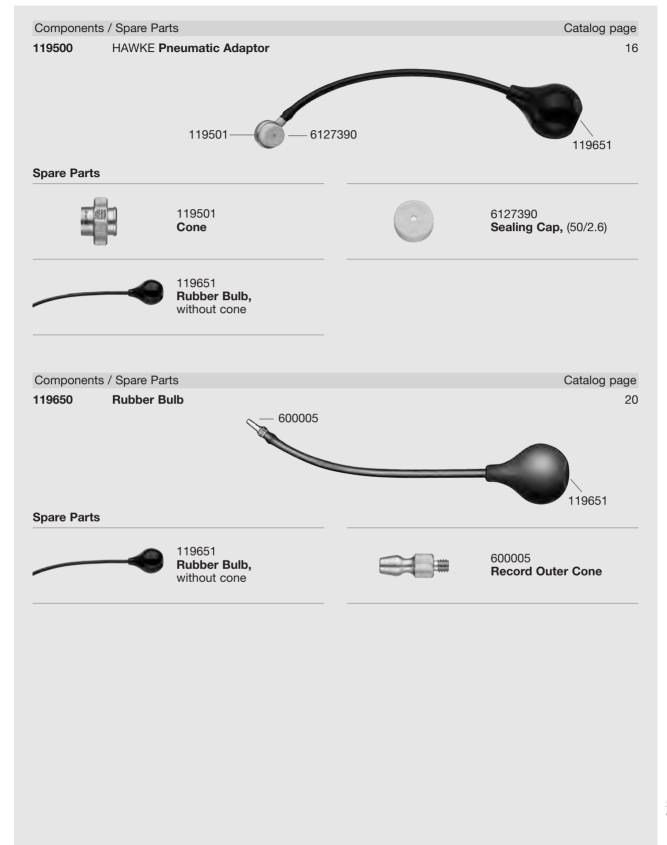
388



826200	Leather Bag for ENT Diagnosis Set, with divided main compartment and 2 detachable side pockets
138700	<b>Nystagmus Spectacles,</b> small model without illumination
826210	LED Penlight, burning time approx. 50 hours in continuous operation with 2 Micro-AAA batteries (included)
126100	<b>Tuning Fork,</b> A¹-440, with stand, small model
740116	<b>Tongue Depressor,</b> wooden, width 19 mm, length 16 cm. package of 100

Pneumatic Adaptor, Rubber Bulb



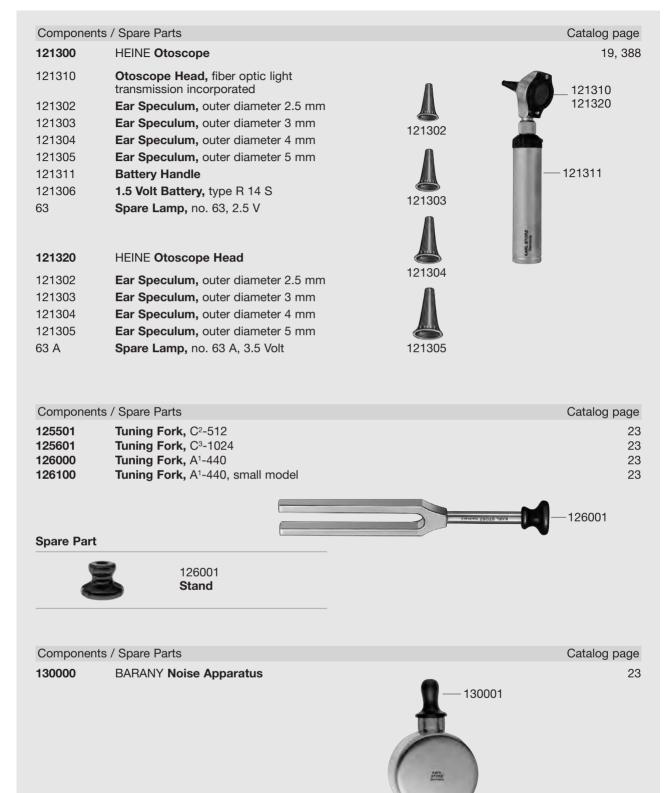


**Spare Part** 

130001 **Ear Olive** 

Otoscope, Tuning Forks, Noise Apparatus





ENT-SP 55 A US SP 59

**Battery Light Source LED for Endoscopes, Nystagmus Spectacles** 



Components / Spare Parts

Catalog page

11301 D4 Battery Light Source LED for Endoscopes

17, 247, 388-389, 623



**Spare Parts** 



094108 B **Cover,** for Battery Box 094108



121306 P **Photo Battery,** lithium, 3 V, CR 123 A

Components / Spare Parts

Catalog page

24

138805 FRENZEL Nystagmus Spectacles



**Spare Parts** 



138806 **Rubber Band,** black, with 2 fasteners



138964 **Spare Lamp,** 4 V



138807 **Glare Shield,** black

Components / Spare Parts

Catalog page

138905

FRENZEL Nystagmus Spectacles, battery version

24



**Spare Parts** 



121306 **1.5 Volt Battery,** Type R 14 S



138807 **Glare Shield,** black



138806 **Rubber Band,** black, with 2 fasteners

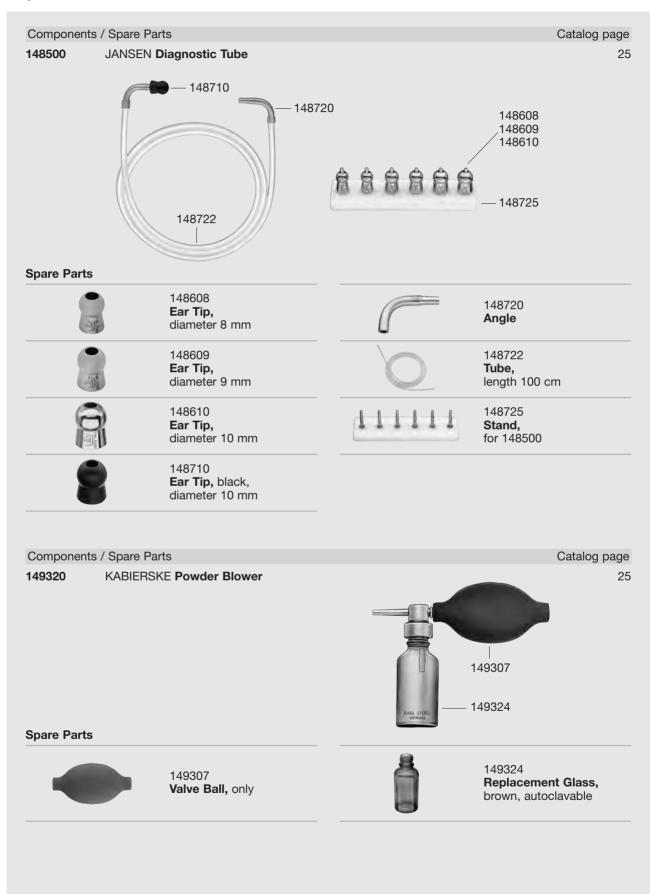


138964 **Spare Lamp,** 4 V 8-1

SP 60 ENT-SP 56 A US

**Diagnostic Tube, Powder Blower** 

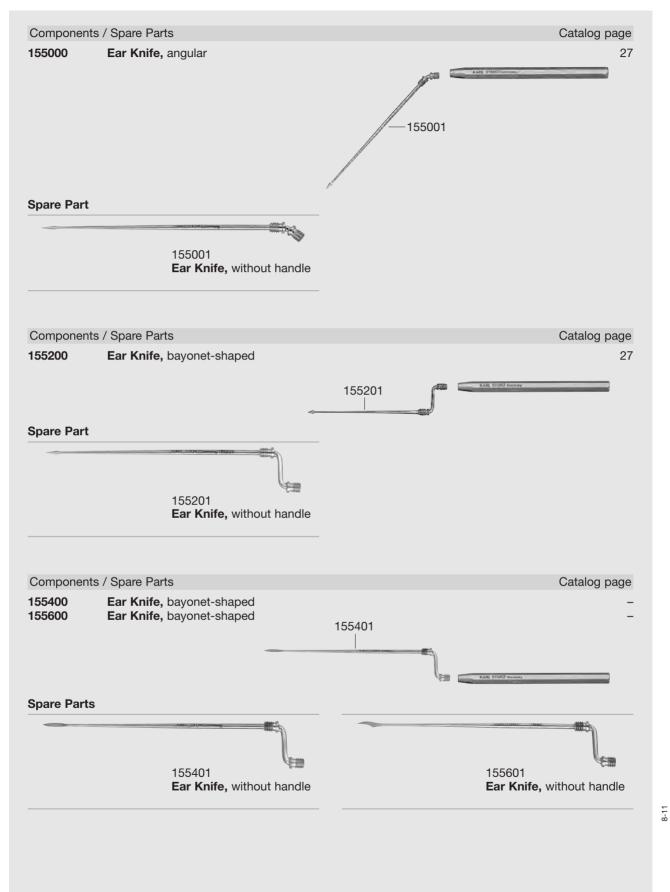




ENT-SP 57 A US SP 61

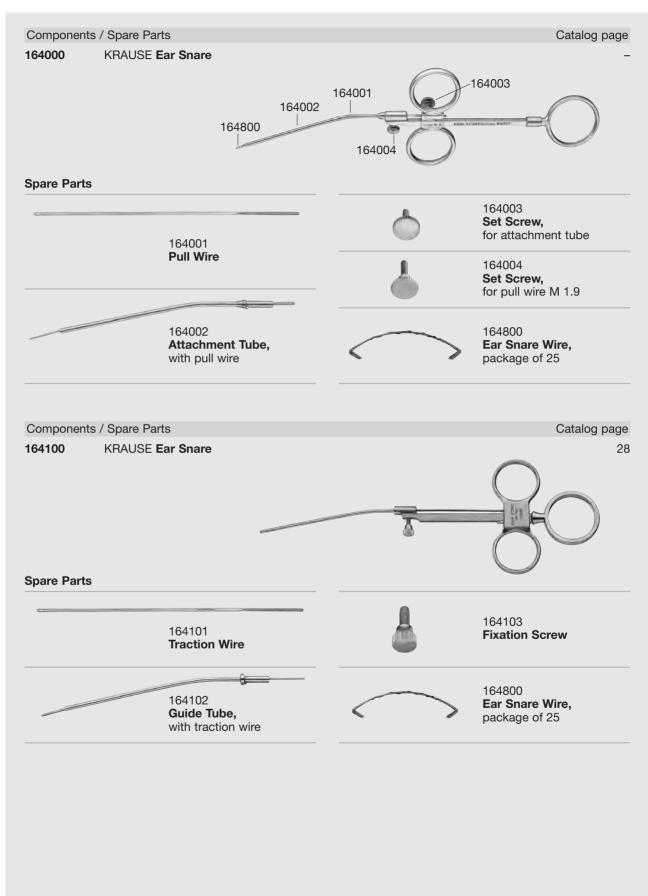
Ear Knife





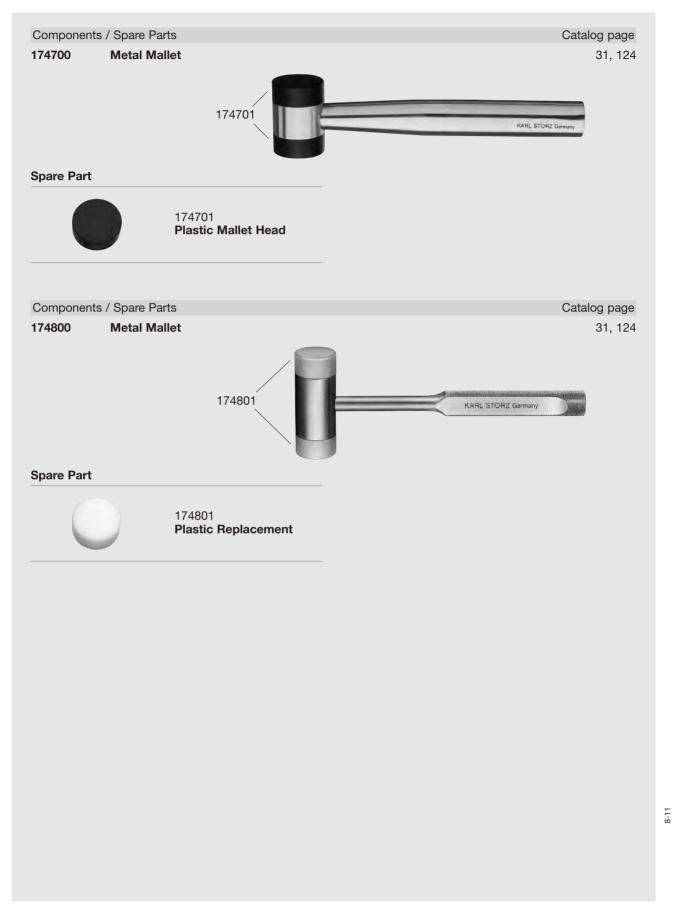
Ear Snares





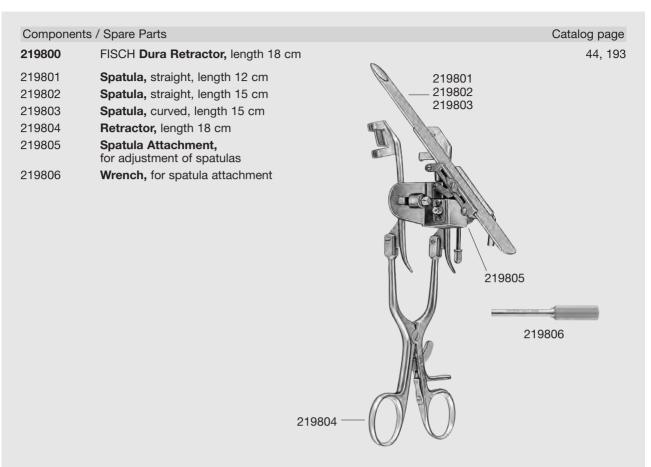
Metal Mallets





**Dura Retractor, Glomus Retractor** 

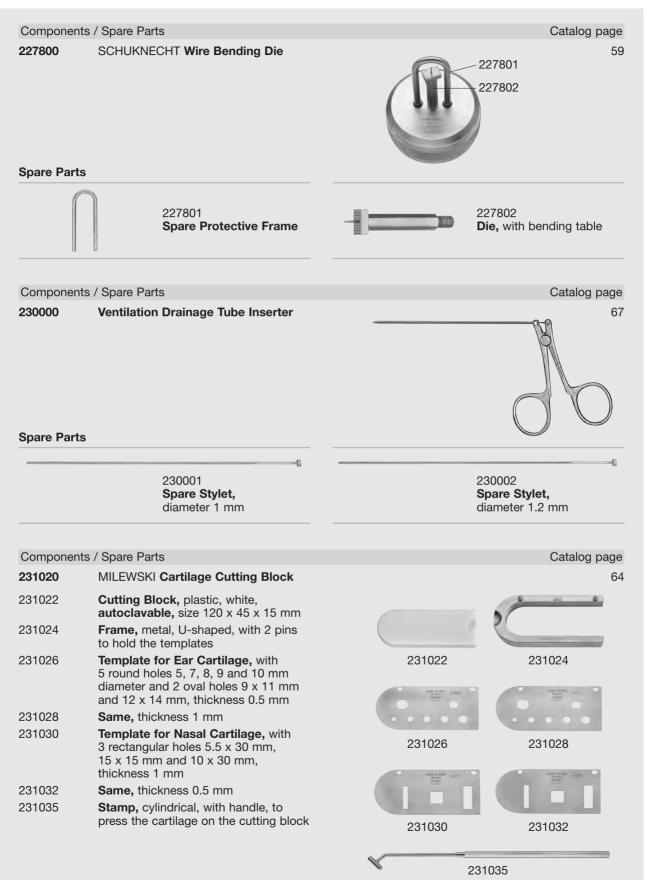




Component	Components / Spare Parts			Catalog page
219900	219900 FISCH Glomus Retractor (infratemporal fossa retractor)			44
219901 219902 219903 219904	Retractor Blade, short Retractor Blade, long Retractor Blade, long and slim, with drill hole Retractor Frame, without blades	219901	219902 219903 ——219904	

Wire Bending Die, Ventilation Drainage Tube Inserter, Cartilage Cutting Block





SP 66 ENT-SP 62 A US







Additional accessories for cleaning and sterilization see catalog HYGIENE

Metal Tray, Instrument Racks



Components / Spare Parts

239728 **Metal Tray**  Catalog page

70



#### **Spare Parts**

0 1

239728-1

Spare Part Set, consisting of 2 short bridges, silicone leaflet valves and assembly materials

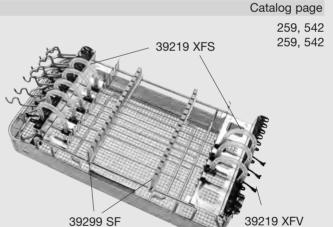


239728-2

Spare Part Set, consisting of 2 long bridges, silicone leaflet valves and assembly materials

#### Components / Spare Parts

39219 XF 39219 XFB **Instrument Rack Instrument Rack** 



#### **Spare Parts**



39219 XFS Irrigation Tube, with two LUER-Lock tube connectors, length 140 mm



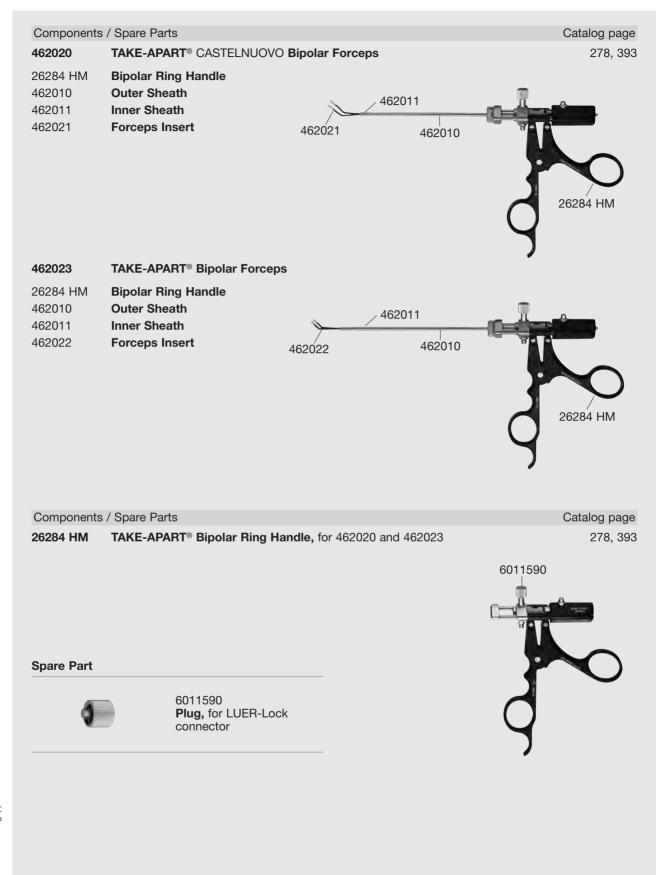
39299 SF **Aluminium Silicone** Holder, for ENT-Instruments, SinuFIT® and LaryngoFIT®, 15 positions



39219 XFV Sealing Cap, package of 15, for multi-port bridge

TAKE-APART® Bipolar Forceps

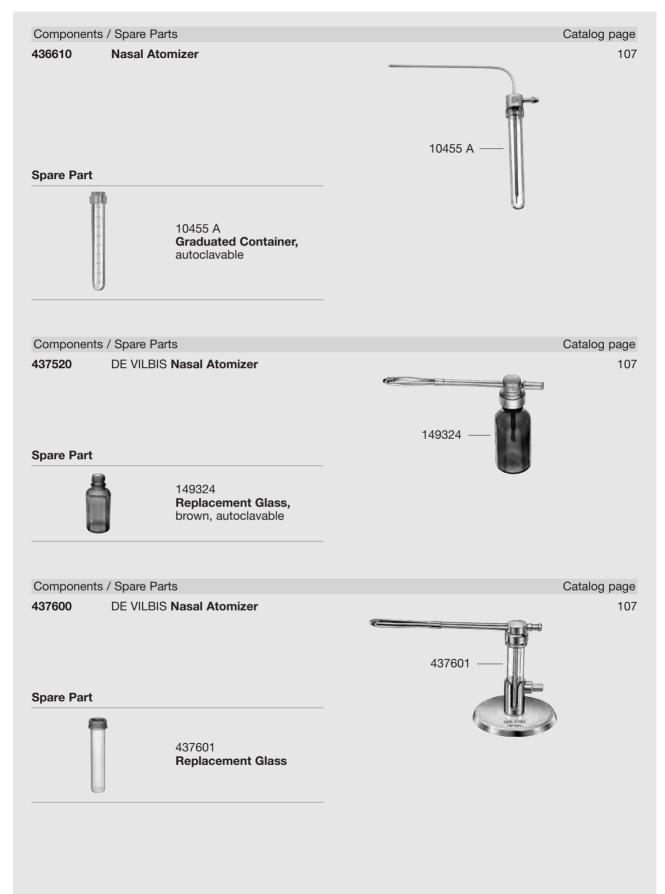




ENT-SP 65 A US

**Nasal Atomizers** 

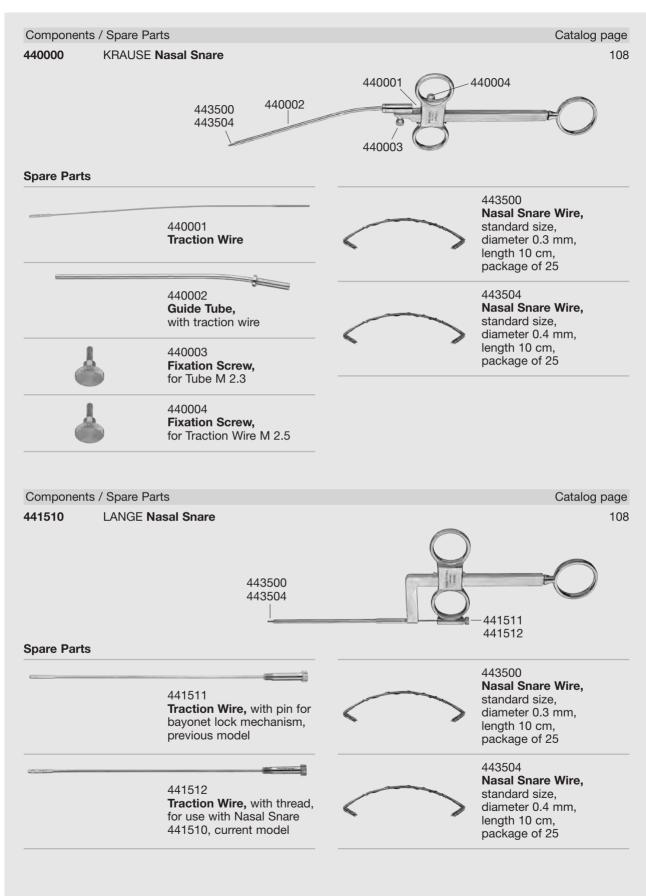




SP 70

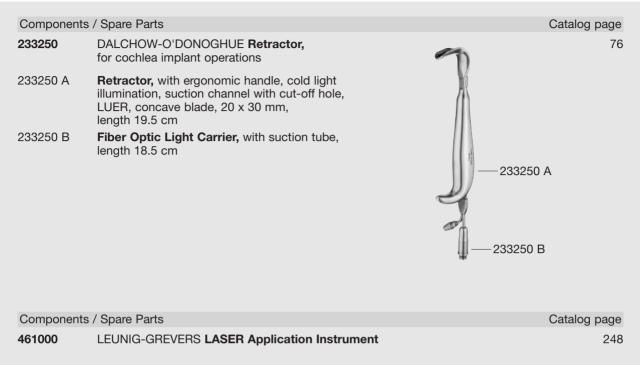
**Nasal Snares** 





#### **Retractor, LASER Application Instrument**







#### **Spare Parts**



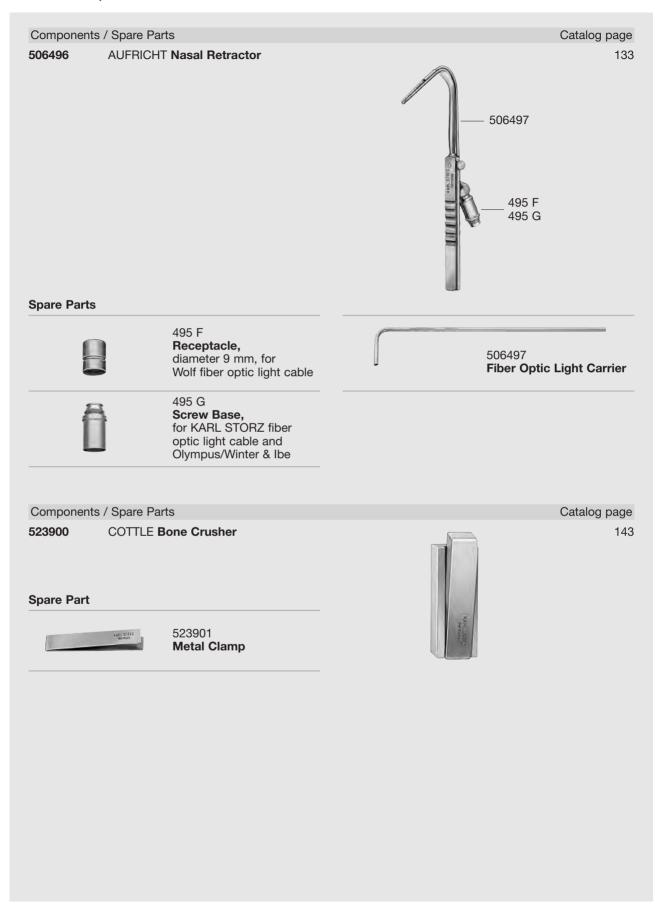
27550 A **Sealing Cap,** drill hole diameter 0.8 mm



6867791 Knurled Screw Cap

Nasal Retractor, Bone Crusher

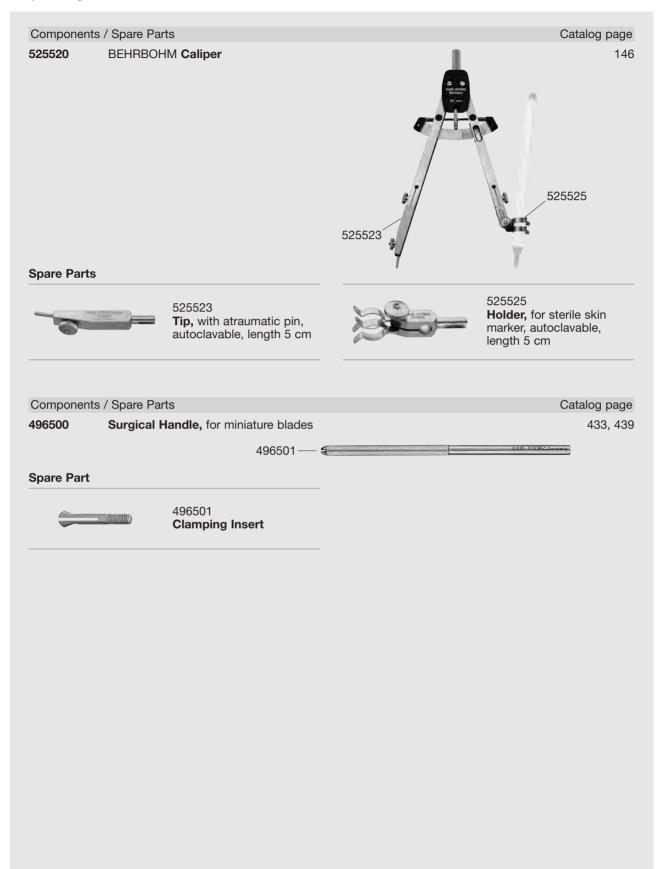




ENT-SP 69 A US SP 73

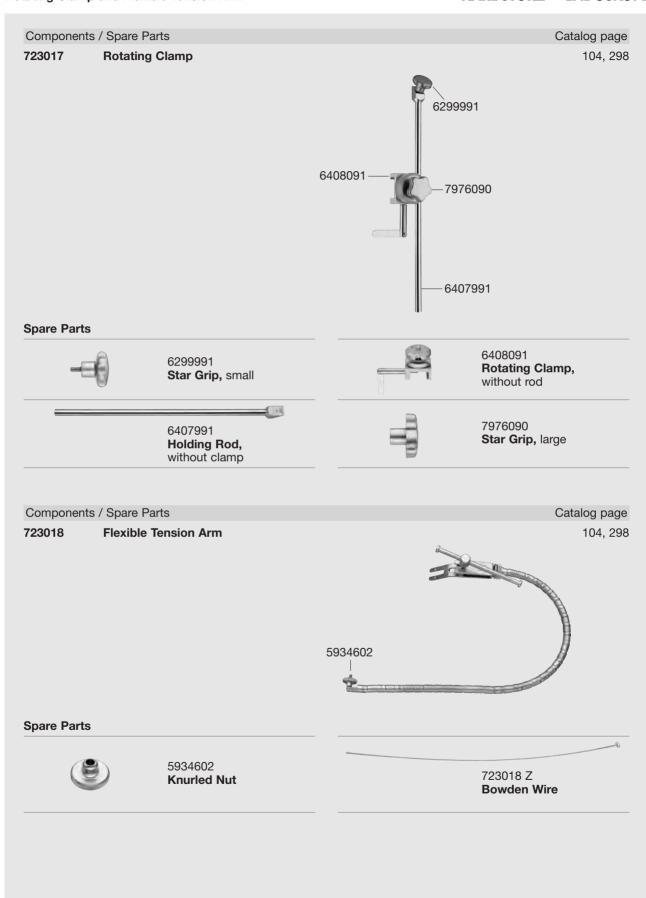
Caliper, Surgical Handle





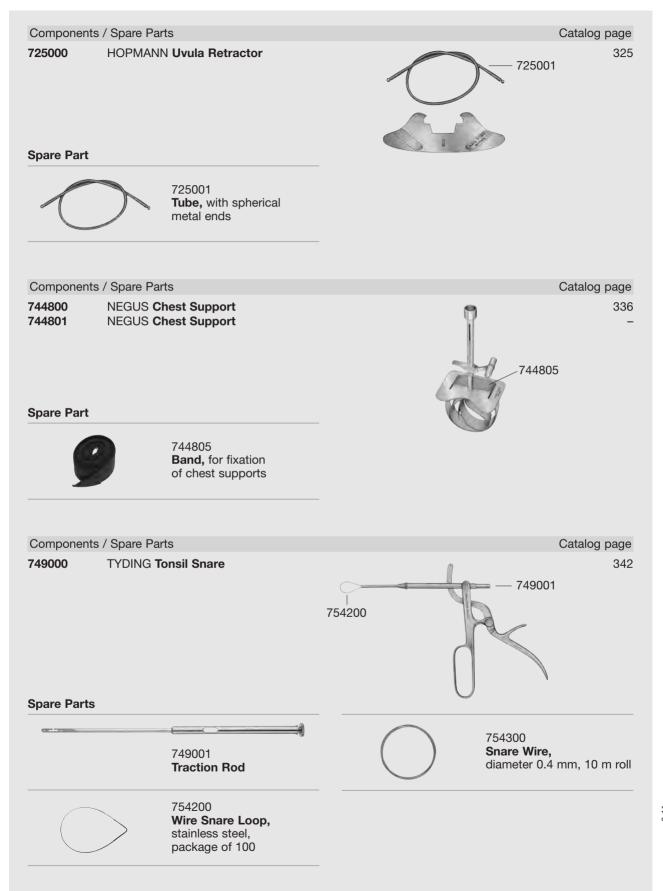
**Rotating Clamp and Flexible Tension Arm** 





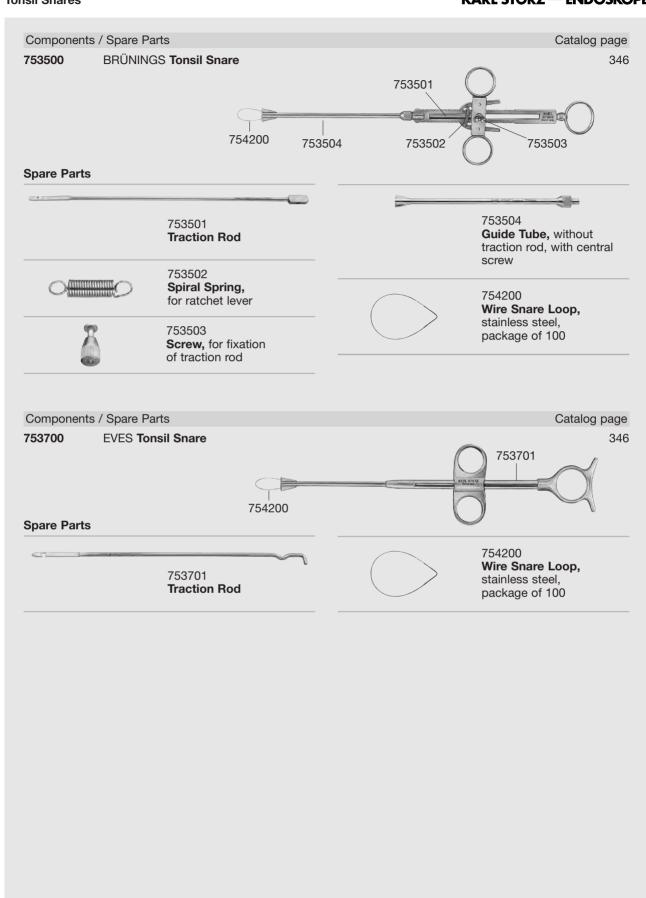
**Uvula Retractor, Chest Supports, Tonsil Snare** 





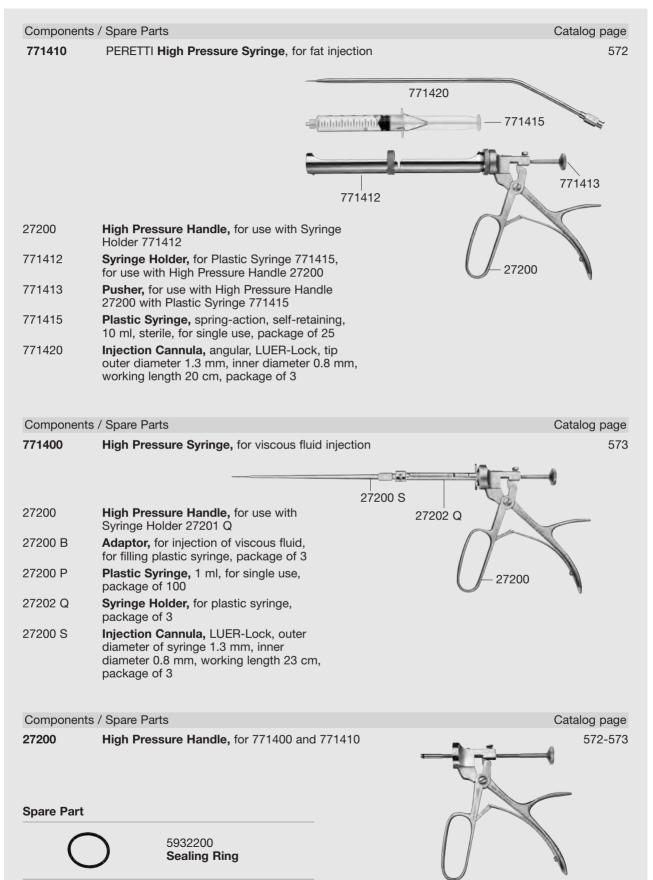
**Tonsil Snares** 





**High Pressure Syringes** 

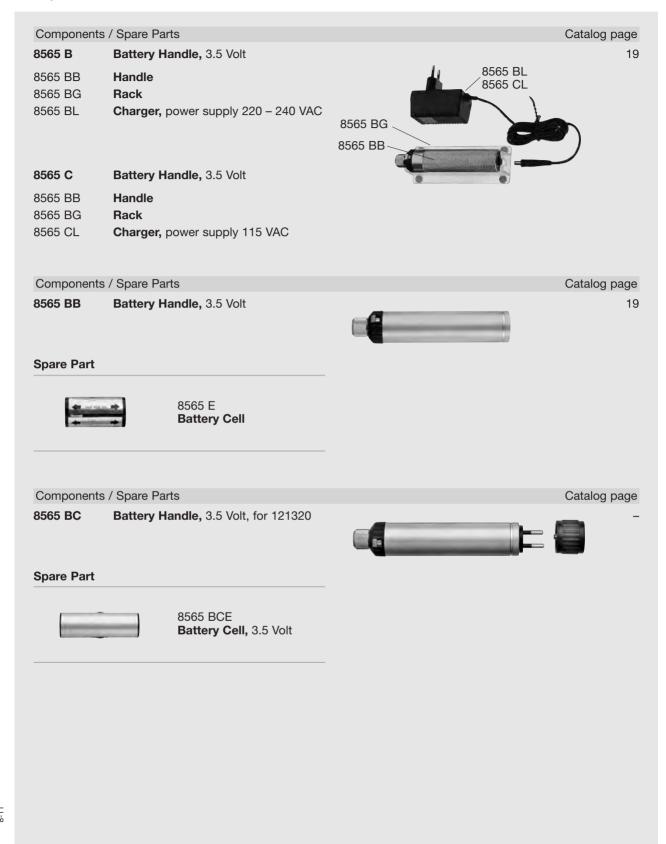




SP 78 ENT-SP 74 A US

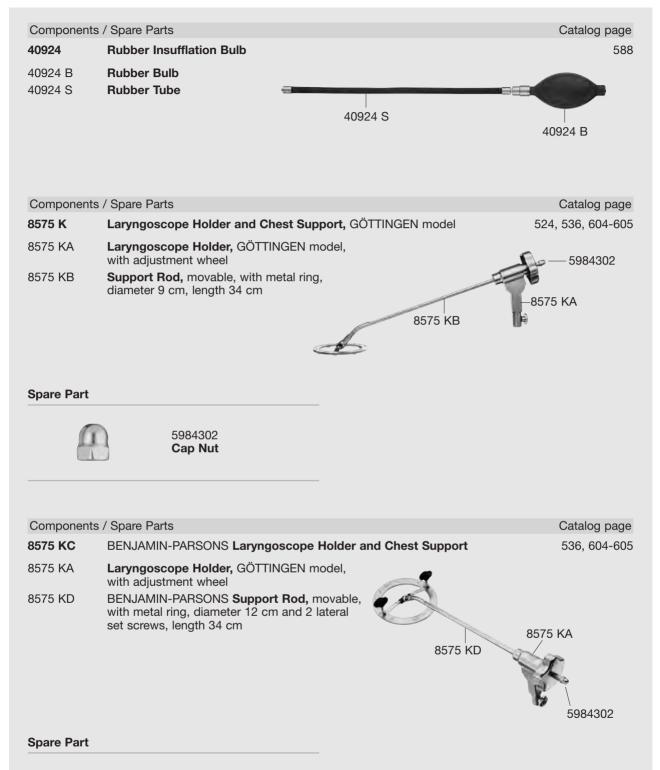






Rubber Insufflation Bulb, Laryngoscope Holders and Chest Supports





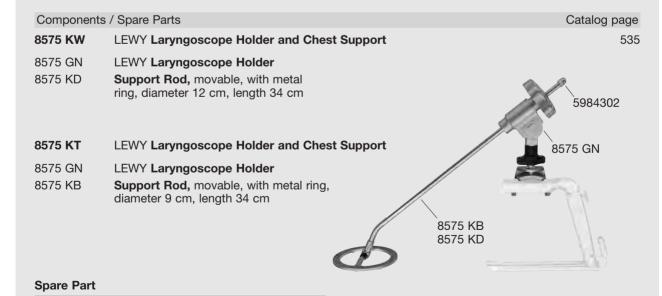


5984302 **Cap Nut** 

**Laryngoscope Holders and Chest Supports** 



Components	s / Spare Parts	Catalog page
8574 KW	BENJAMIN-PARSONS Laryngoscope Holder and Chest Support	532, 534
8574 KU 8575 KD	<b>Laryngoscope Holder,</b> GÖTTINGEN model, with adjustment wheel BENJAMIN-PARSONS <b>Support Rod,</b> moveable, with metal ring, diameter 12 cm and 2 lateral set screws, length 34 cm	
8574 KT	Laryngoscope Holder and Chest Support, GÖTTINGEN model	
8574 KU 8575 KB	Laryngoscope Holder, with adjustment wheel Support Rod, movable, with metal ring, diameter 9 cm, length 34 cm	
	8574 KU 8575 KB 8575 KD	5984302
Spare Part	5984302 Cap Nut	

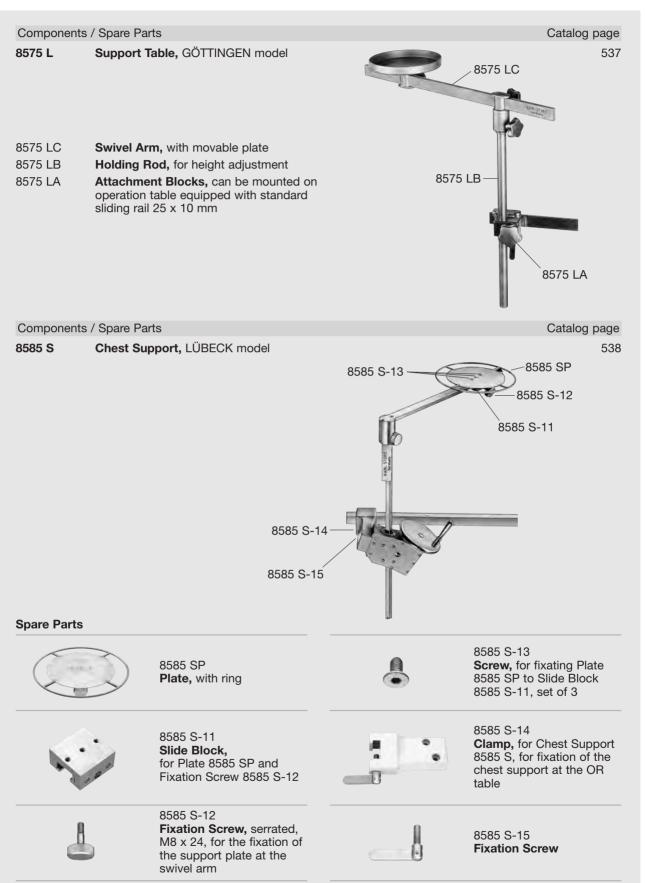


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5984302 Cap Nut

**Support Table, Chest Support** 





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# **Motor Systems**

UNIDRIVE® SIII ENT SCB, UNIDRIVE® SIII ECO, Pana Spray



### Components / Spare Parts

Catalog page

82, 208

40701601-1 UNIDRIVE® S III ENT SCB

40701620-1 UNIDRIVE® S III ENT with KARL STORZ-SCB

400 A Mains Cord 20711680 Irrigator Rod

20016630 **Two-Pedal Footswitch,** two-stage,

with proportional function

20711640 **Silicone Tubing Set,** for irrigation, sterilizable 20711621 **Clip Set,** for use with silicone tubing set 20711640

20090170 SCB Connecting Cable, length 100 cm 031131-03\* Single Use Tubing Set, sterile, package of 3



40701620-1

40701401 UNIDRIVE® S III ECO

40701420 **UNIDRIVE® SIII ECO,** power supply 100 – 120,

230 - 240 VAC, 50/60 Hz

400 A Mains Cord

20016630 **Two-Pedal Footswitch,** two-stage,

with proportional function

20711640 Silicone Tubing Set, for irrigation, sterilizable
20711621 Clip Set, for use with silicone tubing set 20711640
031131-03\* Single Use Tubing Set, sterile, package of 3



40701420

#### **Spare Parts**



2027590 Mains Fuse, T 2.0 AL (SB), package of 10



2107890 **Fuse Holder,** for power supply socket

#### Components / Spare Parts

Catalog page

84, 210

**280053 Pana Spray,** 6x 500 ml bottles

280053 B **Pana Spray,** 500 ml 280053 C **Spray Nozzle** 





280053 B

280053 C



mtp medical technical promotion gmbh, Take-Off GewerbePark 46, 78579 Neuhausen ob Eck, Germany

ENT-SP 79 A US SP 83

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# Motor Systems Suction Shaver Blades



Components / Spare	e Parts	Catalog page
41201 KK Shave 41201 GN Shave 41201 LN Shave 41201 SN Shave 41201 KSA Shave 41201 KKSA Shave 41201 KKSB Shave		214 214 214 214 214 214 214 214
Spare Part		
0000	5920820  O-Ring Set for ENT Shaver Attachments, including: 5x O-Ring, 8 x 1 mm 1x O-Ring, 4 x 1 mm	

# Motor Systems INTRA Drill Handpieces



Spare Part	252512 Irrigation Tube		·
252572 252575 252592	INTRA Drill Handpiece INTRA Drill Handpiece INTRA Drill Handpiece	252575	221 221 221
Component	ts / Spare Parts		Catalog page
	252511 Irrigation Tube		
Spare Part			•
252571 252574 252591	INTRA Drill Handpiece INTRA Drill Handpiece INTRA Drill Handpiece	252574	220 220 220
Component	ts / Spare Parts		Catalog page
	252510 Irrigation Tube		
Spare Part	INTIA DI II Hanapiece	252573	
252570 252573 252590	INTRA Drill Handpiece INTRA Drill Handpiece INTRA Drill Handpiece		85 85 85
Component	ts / Spare Parts		Catalog pag

SCHMÄL CARTCUT® Cartilage Cutter, STAMMBERGER-SACHSE Intranasal Drill, BOWMAN Lachrymal Probe, Training Model





Components	/ Spare Parts		Catalog page
660000	STAMMBERGER-SACHSE Intranasal Dri	II	224, 307
660000 A	Double Ring Sliding Handle, for moving abrador forwards and backwards in the guiding sheath, with fixed INTRA drill handpiece		660000 A
660000 T	<b>Guide Sheath,</b> outer diameter 5 mm, with irrigation stopcock	660000 T	
660074 SF	<b>Diamond Abrador,</b> delicate, spherical, diameter 2.5 mm	660074 SF	
660074 SG	<b>Diamond Abrador,</b> delicate, spherical, diameter 3 mm	660074 SG	
660074 SK	<b>Diamond Abrador,</b> delicate, conical, from diameter 2.5 mm to diameter 3 mm	660074 SK	

Componen	ts / Spare Parts	Catalog page
634840	BOWMAN Lachrymal Probe	301, 305
745830	<b>Probe,</b> size 0000 – 000	Seat Store Co
745800	<b>Probe,</b> size 00 – 0	Innay
745802	<b>Probe,</b> size 1 – 2	

Component	s / Spare Parts	Catalog page
723128	Training Model	308
723128 A	Section Plane 1: Front Plate	
723128 B	Section Plane 2: Turbinate/Septum	
723128 C	Section Plane 3: Maxillary Sinus	
723128 D	Section Plane 4: Ethmoidal Cells	
723128 E	Section Plane 5: Sphenoidal Sinus	
723128 F	Base Plate	
723128 G	Mask	
723128 H	Case	
723128 K	Documentation Atlas	

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**Holding Systems** 



Components	/ Spare Parts	Catalog page
28272 RKB	Holding System, autoclavable, with quick release coupling KSLOCK	201
28172 HR	Rotation Socket, to clamp to the OR table, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand	
28272 HB	Articulated Stand, reinforced version, L-shaped, with one central clamp for all five joint functions, height 48 cm, swivel range 52 cm, with quick release coupling KSLOCK (female)	N
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 HB—
		28172 HR—

Components / Spare Parts 28272 EH ENDOCRANE®, piezoregulated holding arm ENDOCRANE® Arm, including stand 28272 EHS 28172 HG Socket, to clamp to the OR table 20780020 **Control Unit** 040146-25\* Cover, sterile, package of 25 28272 ECW **Spring Balance** 400 A Mains Cord, length 300 cm 27677 BV Case





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27630022

28172 WC

**Holding Systems - Accessories** 

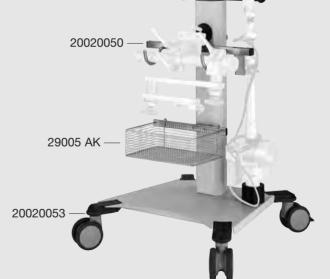


Component	s / Spare Parts	Catalog page
20031002	Air Compressor, for POINT SETTER®	698
20031020	<b>Air Compressor,</b> 0 – 8 bar, power supply 230 VAC, 50/60 Hz, dimensions (w x d x h): approx. 500 x 320 x 340 mm, weight approx. 22 kg	
27630022	Fabric Reinforced Tube, for connecting CALCUSPLIT® SCB 27630020	20031002
28172 WC	Connecting Tube, length 600 cm, for use with for POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar	
Component	s / Spare Parts	Catalog page
20031002 C	Air Compressor, for POINT SETTER®	698
20031020 C	<b>Air Compressor,</b> 0 – 8 bar, power supply 115 VAC, 50/60 Hz, dimensions (w x d x h): approx.	

500 x 320 x 340 mm, weight approx. 22 kg **Fabric Reinforced Tube,** for connecting CALCUSPLIT® SCB 27630020

Connecting Tube, length 600 cm, for use with for POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar

Components	s / Spare Parts	Catalog page
20020059	STOR-E® Transport Cart, for POINT SETTER®	699
20020053 20020050 29005 AK	Mobile Stand, for POINT SETTER® Attachment Set, for POINT SETTER® Wire Basket	20020050 —



20031002 C

Navigation Panel Unit (NPU)



10800001	KARL STORZ Navigation System NPU	66
10800020	Panel PC, including installed ENT navigation software and passive touch pen	
10800028	Optical Mouse	
10800030	Camera	
10800040	Electronic Box	5001
10800050	<b>Docking Adaptor,</b> for panel PC, with CD-RW/DVD-ROM	
10800060	Stand, mobile, with locking knob for camera	
10800072	Data Cable	
10800074	VGA Cable	ll l
10800076	Camera Cable	
10800080	Headband with Plastic Holder	
10800087	Patient Tracker II, with glass marker spheres, autoclavable	
10800090	Case, for panel PC, camera, electronic box, mobile stand and connecting cables	
10800110	Navigation Probe, with glass marker spheres, autoclavable	
100 A	Mains Cord, length 300 cm	

# **Suction and Irrigation Systems**





Components / Spare Parts

Catalog page

40334101 CLEARVISION® II, lens irrigation system for endoscopes 198

40334120 **CLEARVISION® II,** 

power supply 100 - 240 VAC, 50/60 Hz

400 A **Mains Cord** 

20014230 **One-Pedal Footswitch** 

40334140 Silicone Tubing Set, sterilizable



40334120

### **Spare Part**



2027390 Mains Fuse, T 1.0 A (SB), package of 10

Components / Spare Parts

40334140 Silicone Tubing Set, for irrigation



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#### **Spare Parts**



20330088 Puncture Needle, for irrigation bottle



2724190 **LUER-Lock Tube** Connector, male, tube diameter 2 mm



2723091 Connector, large tube diameter



40334180 Pump Tube, for CLEARVISION® II, sterilizable, package of 25



2727291 Connector, small tube diameter

# **High Frequency Surgery Units**

AUTOCON® II 400 SCB, AUTOCON® 200



Components / Spare Parts

Catalog page

408

**AUTOCON® II 400 SCB** 

SCB<sup>®</sup>

20535220-111/20535220-112/20535220-113 20535220-114/20535220-115/20535220-116

AUTOCON® II 400 SCB, Set	20535201-111	20535201-112	20535201-113
AUTOCON® II 400 SCB,	20535220-111	20535220-112	20535220-113
power supply 230 VAC, 50/60 Hz			
Mains Cord, length 300 cm	400 A	400 A	400 A
SCB Connecting Cable, length 100 cm	20090170	20090170	20090170
AUTOCON® II 400 SCB, Set	20535201-114	20535201-115	20535201-116
AUTOCON® II 400 SCB,	20535220-114	20535220-115	20535220-116
power supply 230 VAC, 50/60 Hz			
Mains Cord, length 300 cm	400 A	400 A	400 A
Mains Cold, length 300 Cm			

### **Spare Part**



2027690 Mains Fuse, T 4.0 AL (SB), package of 10

Components / Spare Parts

Catalog page

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**20522501** 20522520

**AUTOCON® 200** 

AUTOCON® 200,

power supply 200 – 240 VAC,

50/60 Hz

400 A 27809 Mains Cord, length 300 cm Adaptor, for unipolar HF output,

diameter 4/5 mm



20522520

### **Spare Part**



2027690 Mains Fuse, T 4.0 AL (SB), package of 10

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# **High Frequency Surgery Units**

**AUTOCON® 200** 



Catalog page

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Components / Spare Parts

20522501 C **AUTOCON® 200** 

20522520 C AUTOCON® 200,

power supply 100 - 120 VAC,

50/60 Hz

400 A Mains Cord, length 300 cm Adaptor, for unipolar HF output, 27809

diameter 4/5 mm



20522520 C

#### **Spare Part**



2028090 Mains Fuse, T 8.0 AL (SB), package of 10

Components / Spare Parts

Catalog page

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20522501-010 AUTOCON® 200

20522520-010 AUTOCON® 200, with ENDOCUT

function, power supply 200 - 240 VAC,

50/60 Hz

400 A Mains Cord, length 300 cm 27809

Adaptor, for unipolar HF output,

diameter 4/5 mm



20522520-010

### **Spare Part**



2027690 Mains Fuse, T 4.0 AL (SB), package of 10

Components / Spare Parts

Catalog page

410

### 20522501C010 AUTOCON® 200

20522520C010 AUTOCON® 200, with ENDOCUT function,

power supply 100 - 120 VAC, 50/60 Hz

400 A Mains Cord, length 300 cm 27809 Adaptor, for unipolar HF output,

diameter 4/5 mm



20522520C010

### **Spare Part**



2028090 Mains Fuse, T 8.0 AL (SB), package of 10

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# **High Frequency Surgery Units**





412

Components / Spare Parts Catalog page

**20520501** AUTOCON® **50** 20520520 AUTOCON® **50**,

power supply 100/120/230/240 VAC,

50/60 Hz

400 A Mains Cord, length 300 cm27809 Adaptor, for unipolar HF output,

diameter 4/5 mm



20520520

### **Spare Part**



2027590 Mains Fuse, T 2.0 AL (SB), package of 10

ENT-SP 89 US SP 93





	s / Spare Parts		Catalog page
20530008 20530031 26520031 26520032 26520033 26520035 26520036 26520037 26520038 26520039 26520040 26520041 26520042	Container with Lid and Sterilizing Insert, for 16 electrodes with diameter 4 mm Wire Snare, 5 mm Wire Snare, 10 mm Ribbon Snare, 10 mm KIRSCHNER Spatula Electrode, straight MAGENAU Knife Electrode, angled MAGENAU Knife Electrode, lancet-shaped Ball Electrode, 2 mm Ball Electrode, 4 mm Ball Electrode, 6 mm Needle Electrode Flat Electrode, 8 x 10 mm Flat Electrode, 10 x 15 mm	20530031	415
			26520031
			26520032
			26520033
			26520034
			26520035
	•		26520036
			26520037
			26520038
			26520039
			26520040
			26520041
			26520042

SP 94 ENT-SP 90 US





### KARL STORZ OR1 NEO® ERGONOMICS, SAFETY AND EFFICIENCY IN THE OR

The KARL STORZ OR1 NEO® objective is to provide an optimal operating room design for performing minimally invasive and conventional surgeries. Customized to meet disciplinary and interdisciplinary needs, the OR1 NEO® operating room concept offers the optimal solution to each requirement for an integrated OR workstation design. The system's modular design allows all components and functionalities to be integrated in the OR1 NEO® operating room solution and, therefore, become part of the workstation system. Once again, KARL STORZ sets new standards in ergonomics, safety and efficiency in the OR.

- System integration
- Data management and documentation
- Telemedicine

The OR1 NEO® components provide a customized system and compatible applications. Each component offers a reliable solution on its own; the sum of all components forms a complete multifunctional system.

#### **TELEPRESENCE**

- Imaging systems
- Illumination



#### FULL HD - New Vision in Medicine

IMAGE 1 HUB® HD offers the user the highest image quality for the precise display of even the finest tissue and vascular structures.

**IMAGE 1 HUB® HD** enables the connection of the latest HD camera heads and all standard IMAGE 1® camera heads.

Existing IMAGE 1® can be updated to enable HD images to be displayed and HD camera heads to be utilized.

KARL STORZ WIDEVIEW® monitors deliver **optimal image display.** Using the 16:10 aspect provides a larger display window and improves the viewing ergonomics.

### **HUMAN MEDICINE DVD**

The KARL STORZ Product Line encompasses Endoscopes, Instruments, Accessories, Units and Imaging Systems for the full range of Human Medicine Specialties:

- Neuro-Endoscopy
- Oral and Maxillofacial Surgery
- Endoscopes and Instruments for ENT, Esophagoscopy & Bronchoscopy
- Plastic Surgery
- Endoscopes for Anesthesiology and Emergency Medicine
- Endoscopes and Instruments for Cardiovascular Surgery
- Thorax
- Gastroenterology
- Laparoscopy
- Gynecology
- Urology
- Proctology
- Arthroscopy, Sports Medicine & Spine Surgery
- Pediatric Surgery
- KARL STORZ OR1®
- Telepresence

### **PROTECTION 1®**

- Field Service Technician Program
- On-Site Services Program
- No-Fault Service Plans
- Custom Service Solutions
- Platform for Staff Training Academy of Clinical Education

PROECTION 1® Services delivers comprehensive solutions to assist you in ensuring optimum surgical performance, asset management, and cost savings. Choose KARL STORZ as your Service Partner and focus on what really matters – patient care.