

NEURO-ENDOSCOPY

9th EDITION 2/2013 US

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THE WORLD OF ENDOSCOPY

NEURO-ENDOSCOPY

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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.

December, 2012

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

Order no.	Description	Section	Page
11161 VK	Video Neuro-Endoscope, flexible, KARL STORZ FLEX-X ^c	NE-FIB 2 D	116
28163 TRX	TENTACLE Spine Retractor	CV-LT 30 CV-EG 11 NE-VIT 17 NEURO-SP 40 US	292 321 367 SP 42
28051 M	Rollable Cuff	CTS 18 B	342
28272 EH	ENDOCRANE®	NE-ACC 6 C NE-ACC 7 C NE-ACC 8 C NEURO-SP 21 US	378 379 380 SP 23
20321008	DUOMAT®	NE-UNITS 4 US NEURO-SP 65 US	U 8 SP 67
20530801	AUTOCON® II 80	NE-UNITS 30 US NEURO-SP 70 US	U 34 SP 72

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 effect 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 returned within 30 days of invoice date and so long as such items are unused, in resalable condition and in their original product container. All products returned after 30 days from the date of invoice are subject to a 15% restocking fee. Shipping charges will be reimbursed, restocking 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 invoice date; (2) sterile packaged products where the package is opened and/or damaged; (3) discontinued products; (4) instruments that are etched or engraved by 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 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. 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

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KARL STORZ Intellectual Property Rights

KARL STORZ SE & Co. KG is the proprietor and/or licensee
of the following US-Patents in the fields of NEURO-ENDOSCOPY



US 6589259
26173 KL, KC

38221 MD, MZ, KL
38222 MD, MZ, KL

US 6917738
11161 C

US 7014649
38310 ON, MD, MM, MS
38321 ON, MD, MM, MS
38322 ON, MD, MM, MS

US 6635010
28162 CKA, BA
US 6618207
26003 BA, AA, FA
7220 AA, BA, CA, FA
26046 AA, BA, FA, BUA

US 6077220
US 6618207
26003BA
US 6397286
20535220-11x

US 6447502
33125 P

US 6641531
7230 AP, BP, FP

US 6419688
26167 FNS

US 6624935
20221039
20221139
20221037
20221137

US 6669696
38310 MT, MZ, MS
38321 MT, MZ, MS
38322 MT, MZ, MS



BASIC SETS

Solutions for Hydrocephalus

The KARL STORZ solutions in the diagnostic and surgical management of obstructive hydrocephalus and ventricular lesions in infants and adults

	DECQ Set	GAAB Set	SCHROEDER Set LOTTA®	OI Set HandyPro®
				
	see page 85	see pages 88, 101	see page 92	see page 104
Visual Diagnosis Shunt Revision	●	●	●	●
Biopsy	●	●	●	●
ETV* Septostomy Cystostomy	●	●	●	●
CPC **	-	-	-	-
Aqueductoplasty 4th Ventricle	-	-	-	-
Laparoscopic Shunt Placing	Sets for Laparoscopy see catalog LAPAROSCOPY			

* ETV – Endoscopic Third Ventriculostomy

** CPC – Choroid Plexus Coagulation

Neuro-Endoscopy – Intracranial Surgery

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 2



Neuro-Endoscopy – Intracranial Surgery

Basic Set

DECQ Recommended Set

Telescopes and Sheaths

- ① 28160 BA **HOPKINS® II Forward-Oblique Telescope 30°**, diameter 2.9 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- ① 28160 GK **Operating Sheath**, small, oval, exterior 3.5 x 4.7 mm, working length 14 cm, with blunt obturator, with stopcock, for use with operating instruments size 1 mm in conjunction with Working Insert 28160 GE
- ③ 28160 GM **Operating Sheath**, medium, oval, exterior 3.5 x 5.2 mm, working length 14 cm, with blunt obturator, with stopcock, for use with operating instruments size 1.7 mm in conjunction with Working Insert 28160 GE
- ④ 28160 G **Operating Sheath**, large, oval, exterior 4 x 7 mm, working length 14 cm, with blunt obturator, with stopcock, for use with operating instruments size 2.5 mm in conjunction with Working Insert 28160 GE
- ⑤ 28160 GE **Working Insert**, with two working channels, with stopcock, for use with Operating Sheaths 28160 G/GK/GM

Instruments for Operating Sheaths, small – size 3.5 x 4.7 mm

- ⑧ 28160 TV **Forceps**, for ventriculostomy, flexible, double action jaws, diameter 1 mm, working length 30 cm
- ⑨ 28160 ZJ **Biopsy Forceps**, flexible, double action jaws, diameter 1 mm, working length 30 cm
- ⑩ 28160 TJ **Grasping Forceps**, flexible, double action jaws, diameter 1 mm, working length 30 cm
- ⑬ 28160 SE **Suction Catheter**, flexible, for single use, diameter 1 mm, working length 45 cm
- ⑯ 28160 KS **Spatula Electrode**, unipolar, flexible, diameter 1 mm, working length 45 cm
- ⑯ 28160 KA **Coagulation Electrode**, unipolar, flexible, diameter 1 mm, length 53 cm

Instruments for Operating Sheaths, medium – size 3.5 x 5.2 mm

- ⑪ 28162 FL **Biopsy Forceps**, double action jaws, diameter 1.3 mm, working length 30 cm
- ⑫ 28160 EK **Scissors**, single action jaws, diameter 1.3 mm, working length 34 cm
- ⑭ 28160 SB **Suction Catheter**, flexible, for single use, diameter 1.5 mm, working length 45 cm
- ⑮ 28160 KM **Bipolar Coagulation Electrode**, semirigid, diameter 1.3 mm, working length 35 cm
- ⑯ 28160 KC **Ball Electrode**, unipolar, flexible, diameter 1.7 mm, working length 45 cm

Instruments for Operating Sheaths, large – size 4 x 7 mm

- ⑥ 28160 ZG **Biopsy Forceps**, flexible, double action jaws, diameter 2.3 mm, working length 40 cm
- ⑦ 28160 TG **Grasping Forceps**, flexible, double action jaws, diameter 2.3 mm, working length 40 cm
- ⑮ 28160 KD **Bipolar Coagulation Electrode**, flexible, diameter 2 mm, working length 35 cm

Holding System

- ⑳ 28272 RKB **Holding System, autoclavable**
including:
Socket, to clamp to the OR table
Articulated Stand, L-shaped
Clamping Jaw, metal, with axial intake

Recommended containers for sterilization:

39360 BK, 39301 B

Please note:

The use of Balloon Catheter 28162 GB with diameter 1 mm is also recommended.

Neuro-Endoscopy – Intracranial Surgery

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 2



Neuro-Endoscopy – Intracranial Surgery

Basic Set

GAAB Recommended Set for Neuro-Endoscopy

Telescopes and Sheaths

- ① 28096 AGA **HOPKINS® Wide Angle Straight Forward Telescope 6°**, angled eyepiece, length 15 cm, **autoclavable**, with fiber optic light transmission and working channel diameter 3 mm incorporated, robust version, color code: green
- ② 28162 BS **Operating Sheath**, graduated, outer diameter 6.5 mm, working length 13 cm, with lateral stopcock and catheter port
- ③ 28162 BO **Obturator**, for use with Operating Sheath 28162 BS

Instruments

- ④ 28162 U **Grasping Forceps**, single action jaws, diameter 2.7 mm, working length 30 cm
- ⑤ 28162 ZE **Biopsy Forceps**, single action jaws, diameter 2.7 mm, working length 30 cm
- ⑥ 28162 EP **Scissors**, pointed, single action jaws, diameter 2.7 mm, working length 30 cm
- ⑦ 28162 EM **Scissors**, pointed, slightly curved, double action jaws, diameter 1.7 mm, working length 30 cm
- ⑧ 28162 Z **Biopsy Forceps**, double action jaws, diameter 1.7 mm, working length 30 cm
- ⑨ 28160 TVX **Forceps**, for ventriculostomy, double action jaws, diameter 1.7 mm, working length 30 cm
- ⑩ 28162 BDL **TAKE-APART® Bipolar Forceps**, with flat jaws, size 2.4 mm, working length 24 cm
including:
Bipolar Ring Handle
Outer Sheath
Working Insert, for single use, package of 5
- ⑪ 28762 KB **Bipolar Coagulation Electrode**, diameter 1.7 mm, working length 30 cm
- ⑫ 28762 K **Coagulation Electrode**, unipolar, semiflexible, diameter 1.7 mm, working length 30 cm
- ⑬ 28160 SF **Suction Catheter**, flexible, for single use, diameter 2.5 mm, working length 45 cm
- ⑭ 28162 SN **Irrigation Tube, autoclavable**, with LUER-Lock connector
- ⑮ 533 TVA **Adaptor, autoclavable**, permits telescope changing under sterile conditions

Holding System

- ⑯ 28272 KKA **Holding System, autoclavable**

including:

- Socket**, to clamp to the OR table
- Articulated Stand**, straight
- Clamping Jaw**, metal, with axial uptake

Optional

- 28162 BB **Obturator**, with central hole 2 mm for stereotactic positioning, for use with Operating Sheath 28162 BS
- 28162 BD **Optical Obturator**, for positioning Operating Sheath 28162 BS under visual control, for use with HOPKINS® Telescope 28018 AA
- 28018 AA **HOPKINS® Straight Forward Telescope 0°**, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 28161 LD **Deflecting Mechanism**, for LASER probes, with bend protection, with adjustment wheel, with ring-grip handle, inner diameter 2.5 mm, outer diameter 2.8 mm, working length 38 cm

For Diagnosis

- 28132 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 28132 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
- 28132 FA **HOPKINS® II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black
- 28162 EA **Telescope Bridge**, for use with HOPKINS® II Telescope 28132 AA through Operating Sheath 28162 BS
- 28162 E **Telescope Bridge**, for use with HOPKINS® II Telescope 28132 BA/BWA/CA/FA through Operating Sheath 28162 BS

Recommended containers for sterilization:

- Telescopes: 39301 A (3x)
- Angled eyepiece: 39314 G
- Instruments: 39360 BK

Please note:

The use of Balloon Catheter 28162 GB with diameter 1 mm is also recommended.

Neuro-Endoscopy – Intracranial Surgery

Basic Set



Neuro-Endoscopy – Intracranial Surgery

Basic Set

SCHROEDER Recommended Set for Neuro-Endoscopy

Telescopes and Sheaths

- ① 28164 LA **LOTTA® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6°**, angled eyepiece, outer diameter 6.1 mm, length 18 cm, working channel diameter 2.9 mm, irrigation/suction channel diameter 1.6 mm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- ② 28164 LS **Operating Sheath**, graduated, rotating, outer diameter 6.8 mm, working length 13 cm
- ③ 28164 LO **Obturator**, for use with Operating Sheath 28164 LS
- ④ 533 TVA **Adaptor, autoclavable**, permits telescope changing under sterile conditions

Instruments

- ⑤ 28164 LB **CLICKline Scissors**, pointed, single action jaws, diameter 2 mm, working length 30 cm
- ⑥ 28164 LC **CLICKline Biopsy Forceps**, double action jaws, diameter 2 mm, working length 30 cm
- ⑦ 28164 LD **CLICKline Forceps**, for ventriculostomy, diameter 2 mm, working length 30 cm
- ⑧ 28164 LE **CLICKline Grasping Forceps**, double action jaws, diameter 2 mm, working length 30 cm
- ⑨ 28164 LF **CLICKline Biopsy Forceps**, single action jaws, diameter 2.7 mm, working length 30 cm
- ⑩ 28762 KB **Bipolar Coagulation Electrode**, diameter 1.7 mm, working length 30 cm
- ⑪ 28160 ZJ **Biopsy Forceps**, flexible, double action jaws, diameter 1 mm, working length 30 cm
- ⑫ 28160 TV **Forceps**, for ventriculostomy, flexible, diameter 1 mm, working length 30 cm
- ⑬ 28164 BDV **TAKE-APART® Bipolar Forceps**, long, with flat jaws, outer diameter 2.4 mm, working length 30 cm
including:
Bipolar Ring Handle
Outer Sheath
Forceps Insert, for single use, package of 5

Holding System

- ⑭ 28272 RKA **Holding System, autoclavable**
including:
Socket, to clamp to the OR table
Articulated Stand, straight
Clamping Jaw, metal, with axial intake

Optional

- 28164 LP **Optical Obturator**, for positioning Operating Sheath 28164 LS under visual control, for use with HOPKINS® II Telescope 28008 AA
- 28008 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 2 mm, length 26 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 28162 EM **Scissors**, pointed, slightly curved, double action jaws, diameter 1.7 mm, working length 30 cm
- 28162 FP **Scissors**, pointed, single action jaws, diameter 1.3 mm, working length 30 cm

For diagnosis

- 28007 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 3.3 mm, length 25 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 28007 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 3.3 mm, length 25 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 28007 FA **HOPKINS® II Telescope 45°**, enlarged view, diameter 3.3 mm, length 25 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

Recommended containers for sterilization:

Angled eyepiece: 39314 G
Instruments: 27717 D

Please note:

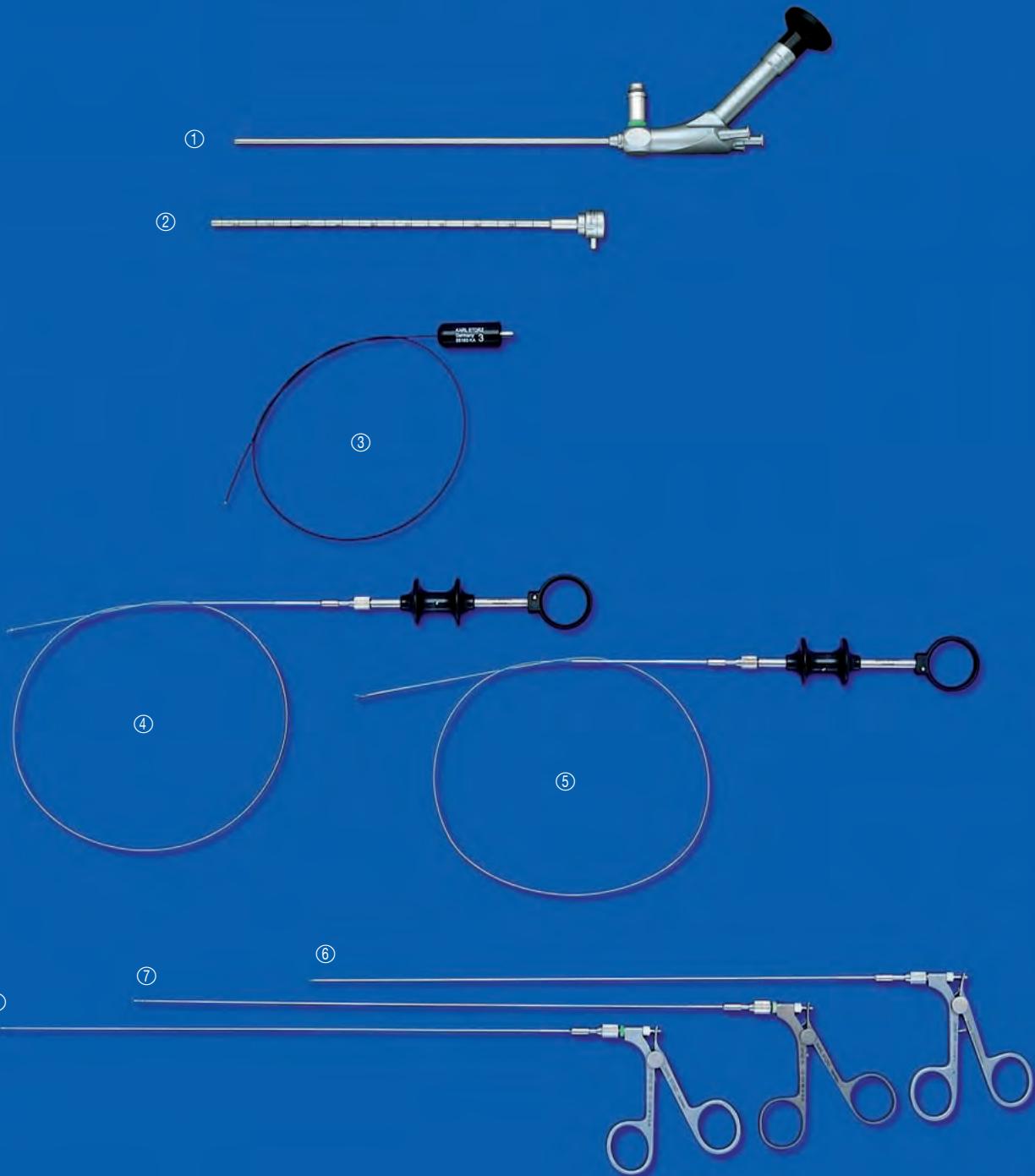
The use of Balloon Catheter 28162 GB with diameter 1 mm is also recommended.

Neuro-Endoscopy – Intracranial Surgery

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 3



1-052

Neuro-Endoscopy – Intracranial Surgery

Basic Set

GAAB Recommended Set for Pediatric Neuro-Endoscopy

- ① 28162 AMA **GAAB Neuro-Endoscope 6°, autoclavable**, diameter 3.8 mm, working length 21 cm, for use with Operating Sheath 28162 CS
- ② 28162 CS **Operating Sheath**, graduated, outer diameter 4.5 mm, length 20 cm, with blunt Obturator 28162 CSO
- ③ 28160 KA **Coagulation Electrode**, unipolar, flexible, diameter 1 mm, working length 53 cm
- ④ 11161 KA **Biopsy Forceps**, flexible, double action jaws, diameter 1 mm, length 60 cm
- ⑤ 11161 KB **Grasping Forceps**, flexible, double action jaws, diameter 1 mm, length 60 cm
- ⑥ 28160 EK **Scissors**, single action jaws, diameter 1.3 mm, working length 34 cm
- ⑦ 28162 FL **Biopsy Forceps**, double action jaws, diameter 1.3 mm, working length 30 cm
- ⑧ 28161 SG **Grasping Forceps**, double action jaws, diameter 1.3 mm, working length 30 cm
- 28160 TVL **Forceps**, for ventriculostomy, flexible, double action jaws, diameter 1 mm, working length 60 cm
(not illustrated)

Recommended container for sterilization:

39360 AK

Please note:

The use of Balloon Catheter 28162 SB with diameter 0.7 mm is also recommended.

Neuro-Endoscopy – Intracranial Surgery

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 3



Neuro-Endoscopy – Intracranial Surgery

Basic Set

OI Recommended Set for Pediatric Neuro-Endoscopy

- | | |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① 28161 S | OI HandyPro® Neuro-Endoscope , with removable handle, for free-hand surgical techniques including:
Operating Sheath , graduated, size 2.6 x 4 mm, working length 15 cm, with three working channels for irrigation/suction and for instruments size 1.3 mm, for use with HOPKINS® II Telescopes 28008 AA and 28008 FA |
| | Handle |
| | Mandrel |
| ② 28008 AA | HOPKINS® II Straight Forward Telescope 0° , enlarged view, diameter 2 mm, length 26 cm, autoclavable , fiber optic light transmission incorporated, color code: green |
| ③ 28008 FA | HOPKINS® II Telescope 12° , enlarged view, diameter 2 mm, length 26 cm, autoclavable , fiber optic light transmission incorporated, color code: black |
| ④ 28161 SC | Scissors , single action jaws, diameter 1.3 mm, working length 30 cm |
| ⑤ 28161 SB | Biopsy Forceps , double action jaws, diameter 1.3 mm, working length 30 cm |
| ⑥ 28161 SG | Grasping Forceps , double action jaws, diameter 1.3 mm, working length 30 cm |
| ⑦ 28161 SE | Coagulation Electrode , unipolar, diameter 1.3 mm, working length 30 cm |
| ⑧ 28161 SF | Bipolar Coagulation Electrode , diameter 1.3 mm, working length 30 cm |
| 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® series (50, 200, 350), Erbe-Coagulator, T and ICC series, length 300 cm |
| 26005 M | Unipolar High Frequency Cord , with 5 mm plug 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, length 300 cm |

Recommended containers for sterilization:

Telescope: 39301 B

Instruments and HandyPro®: 39360 AK

Please note:

The use of Balloon Catheter 28162 SB with diameter 0.7 mm is also recommended.

Neuro-Endoscopy for Children ^{NEW}

Basic Set

STORZ
KARL STORZ — ENDOSCOPE

CHAPTER 3



Neuro-Endoscopy for Children ^{NEW}

Basic Set



JIMENEZ Recommended Set

Telescopes and Retractors:

- ① 28132 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 28132 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 28164 J **JIMENEZ Scalp-Dura Retractor**, for use with HOPKINS® II Telescopes 28132 BVA and 28132 BA including:
Handle
Telescope Sheath
Upper Blade, 10 mm
Lower Blade, 10 mm
Upper Blade, 5 mm
Lower Blade, 5 mm

Optional (not illustrated)

- 28132 BVA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side, fiber optic light transmission incorporated, color code: red

Instruments:

- ④ 839317 **Coagulation Suction Tube**, angular, outer diameter 3 mm, working length 17 cm
- ⑤ 28164 BPB **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, blunt, tip 0.7 mm, working length 14 cm, total length 25 cm
- ⑥ 506496 **AUFRICHT Nasal Retractor**, with fiber optic light carrier, width of retractor blade 8 mm, length of retractor blade 40 mm, length 16.5 cm
- ⑦ 28164 KC **Curette**, round spoon, tip slightly angled, size 3 mm, with round handle, length 25 cm
- ⑧ 484004 **COTTE Chisel**, flat, graduated, straight, width 4 mm, length 18.5 cm
- ⑨ 28163 CM **COTTE Metal Mallet**, with Nylon replacement, length 22.5 cm
- ⑩ 28164 BDG **TAKE-APART® TAN Bipolar Coagulation Forceps**, size 3.4 mm, working length 20 cm including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ⑪ 28164 BDD **TAKE-APART® Bipolar Forceps**, width 2 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ⑫ 28164 BDM **Same**, with fine jaws, width 1 mm
- ⑬ 28164 BDK **Same**, width 4 mm
- ⑭ 28164 BDL **Same**, with fine jaws, width 1 mm, vertical closing
- ⑮ 28164 JC **Bone Scissors**, one blade serrated, length 24 cm
- ⑯ 28164 MKL **KERRISON Bone Punch**, detachable, rigid, upbiting 60° forward, size 5 mm, working length 17 cm
- ⑰ 28164 MKO **Same**, ownbiting 60° forward, size 4 mm
- ⑱ 28164 MZF **Spoon Forceps**, spoon size 3 x 10 mm, single action jaws, working length 17 cm
- ⑲ 452022 **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 2.7 mm, working length 13 cm
- ⑳ 452023 **Same**, width of cut 3.4 mm, working length 13 cm
- ㉑ 28165 SN **Suction Punch**, straight jaws, sheath diameter 4.8 mm, working length 13 cm

Recommended containers for sterilization:

Telescopes: 39301 A (2x)
Instruments: 39351 J

Endoscopically Assisted Micro Neurosurgery – EAM

Basic Set

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KARL STORZ — ENDOSKOPE

CHAPTER 5



Endoscopically Assisted Micro Neurosurgery – EAM

Basic Set



GALZIO Recommended Set

Telescopes and Sheaths

- ① 28162 AUS **Irrigation and Suction Sheath 0°**, oval, 3.5 x 4.7 mm, working length 12 cm, for use with HOPKINS® II Telescope 28162 AUA and KARL STORZ lens irrigation system CLEARVISION® II
- ② 28162 AUA **HOPKINS® II Straight Forward Telescope 0°**, diameter 2.7 mm, length 15 cm, **autoclavable**, proximally angled eyepiece and light connection, fiber optic light transmission incorporated, color code: green
- ③ 28162 BOS **Irrigation and Suction Sheath 30°**, oval, 3.5 x 4.7 mm, working length 12 cm, for use with HOPKINS® II Telescope 28162 BOA and KARL STORZ lens irrigation system CLEARVISION® II
- ④ 28162 BOA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 2.7 mm, length 15 cm, direction of view in 12 o'clock position, **autoclavable**, proximally angled eyepiece and light connection, fiber optic light transmission incorporated, color code: red

Instruments

- ⑤ 28164 XK **Suction Tube**, with grip plate and elongated cut-off hole, distal holes, LUER, diameter 5 Fr., length 15 cm
- ⑥ 28164 XM **Same**, diameter 7 Fr.
- ⑦ 28164 XG **Same**, diameter 9 Fr.
- ⑧ 28164 POA **Dissector**, bayonet-shaped, curved upwards, working length 13.5 cm
- ⑨ 28164 HGA **Micro Hook**, bayonet-shaped, blunt, working length 11.5 cm
- ⑩ 28164 PUA **Dissector**, bayonet-shaped, curved downwards, working length 13.5 cm
- ⑪ 28164 BPC **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, blunt, tip 0.3 mm, working length 12 cm, total length 23 cm
- ⑫ 28164 BPA **Same**, tip 0.7 mm
- ⑬ 662362 **VANNAS Micro Scissors**, spring type, bayonet-shaped, straight tips, length 20 cm
- ⑭ 662365 **Same**, tips curved upwards

Holding System

- ⑮ 28272 RKB **Holding System, autoclavable**
including:
 - Socket**, to clamp to the OR table
 - Articulated Stand**, L-shaped
 - Clamping Jaw**, metal, with axial intake

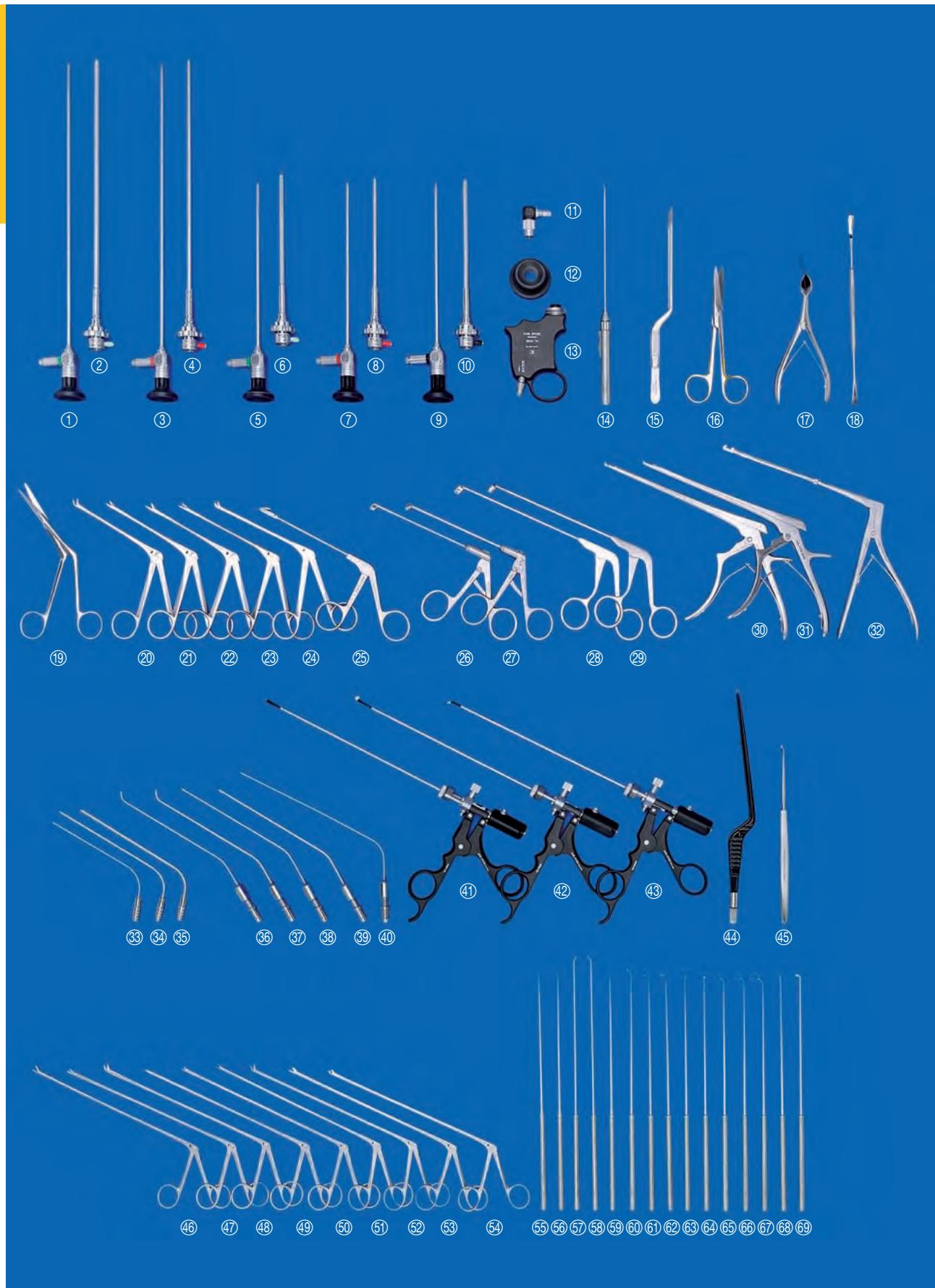
Minimally Invasive Endoscopic Pituitary Surgery

NEW

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 7



Minimally Invasive Endoscopic Pituitary Surgery ^{NEW}



Basic Set

BETTAG/SCHÄFER Recommended Set

- ① 28164 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- ② 28160 TAL **Suction and Irrigation Sheath 0°**, for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, diameter 4.8 x 6 mm, with separate channel for suction and irrigation, for use with Irrigation and Suction Handles 28161 TD/TT/JD/JT, 723630, Cleaning Accessories 28160 TK – TLL and HOPKINS® II Telescope 28164 AA
- ③ 28164 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- ④ 28160 TBL **Suction and Irrigation Sheath 30°**, for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, diameter 4.8 x 6 mm, with separate channel for suction and irrigation, for use with Irrigation and Suction Handles 28161 TD/TT/JD/JT, 723630, Cleaning Accessories 28160 TK – TLL and HOPKINS® II Telescope 28164 BA
- ⑤ 28132 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- ⑥ 28160 TA **Suction and Irrigation Sheath 0°**, for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, diameter 4.8 x 6 mm, with separate channel for suction and irrigation, for use with Irrigation and Suction Handles 28161 TD/TT/JD/JT, 723630, Cleaning Accessories 28160 TK – TL and HOPKINS® II Telescope 28132 AA
- ⑦ 28132 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- ⑧ 28160 TB **Suction and Irrigation Sheath 30°**, for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, diameter 4.8 x 6 mm, with separate channel for suction and irrigation, for use with Irrigation and Suction Handles 28161 TD/TT/JD/JT, 723630, Cleaning Accessories 28160 TK – TL and HOPKINS® II Telescope 28132 BA
- ⑨ 28132 FA **HOPKINS® II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black
- ⑩ 28160 TF **Suction and Irrigation Sheath 45°**, for endoscopic diagnosis and surgery of the paranasal sinuses and anterior skull base, vertical oval, 4.8 mm x 6 mm, with separate channel for suction and irrigation, for use with Irrigation and Suction Handles 28161 TD/TT/JD/JT, 723630, Cleaning Accessories 28160 TK – TL and Telescope 28132 FA
- 28160 TLL **Cleaning Tube**, long, for suction/telescope channels of Suction and Irrigation Sheaths 28160 TAL and 28160 TBL (not illustrated)
- 28160 TK **Cleaning Adaptor**, for irrigation channel of Suction and Irrigation Sheaths 723527 A – F and 28160 TA – TF, LUER-Lock, length 3.5 cm (not illustrated)
- 28160 TL **Cleaning Tube**, for suction/telescope channel of Suction and Irrigation Sheaths 28160 TA – TF, LUER-Lock, length 23 cm (not illustrated)
- ⑪ 495 EW **Light Adaptor**, angled 90°, diameter 4.8 mm, free rotatable, to connect with standard telescopes
- ⑫ 533 TVA **Adaptor, autoclavable**, permits telescope changing under sterile conditions
- ⑬ 28161 TT **THUMFART Irrigation and Suction Handle**, with ergonomic ring handle and finger grip plate, for use with Irrigation and Suction Sheaths 723527 A – F and 28160 TA – TF including:
- Push Button Valve (irrigation only active when pressure valve is depressed)
- ⑭ 628001 **Sickle Knife**, pointed, length 19 cm
- ⑮ 426620 **GRÜNWALD Nasal Dressing Forceps**, bayonet-shaped, length 20 cm
- ⑯ 792013 **MAYO Scissors**, curved, with tungsten carbide inserts, length 15 cm
- ⑰ 403375 **KILLIAN-STRUYCKEN Nasal Speculum**, with set screw, blade length 75 mm, length 15 cm
- ⑱ 488074 **FREER Elevator**, double-ended, sharp and blunt, special matt finish, length 20 cm
- ⑲ 449002 **HEYMANN Nasal Scissors**, medium, (standard model), working length 9.5 cm
- ⑳ 456501 **BLAKESLEY-WILDE Nasal Forceps**, 45° upturned, size 1, working length 11 cm
- ㉑ 456000 **BLAKESLEY Nasal Forceps**, straight, size 0, working length 11 cm
- ㉒ 456001 **Same**, size 1
- ㉓ 456101 **Nasal Forceps**, straight, through-cutting, tissue-sparing, BLAKESLEY shape, width 3.5 mm, working length 11 cm
- ㉔ 456121 **Same**, 45° upturned
- ㉕ 459010 **STAMMBERGER RHINOFORCE® II Antrum Punch**, upside backward cutting, with cleaning connector, working length 10 cm
- ㉖ 459051 **STAMMBERGER Antrum Punch**, right side downward and forward cutting, working length 10 cm
- ㉗ 459052 **Same**, left side downward and forward cutting

Minimally Invasive Endoscopic Pituitary Surgery

NEW

Basic Set



BETTAG/SCHÄFER Recommended Set

- ②8 459151 STAMMBERGER **SilCut® Antrum Punch**, extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, right side downward and forward cutting, with cleaning connector, working length 10 cm
Same, left side downward and forward cutting
- ③0 28164 MKA KERRISON **Bone Punch**, detachable, rigid, upbiting 60° forward, size 1 mm, working length 17 cm
Same, size 2 mm
- ③1 28164 MKB HAJEK-KOFLER **Sphenoid Punch**, not through-cutting, reversible, size 3.2 x 4 mm, working length 17 cm
Suction Tube, cylindrical, LUER, outer diameter 2 mm, working length 9 cm
Same, outer diameter 3 mm, working length 11 cm
Same, outer diameter 4 mm, working length 11 cm
- ③2 648500 FRANK-PASQUINI **Suction Tube**, angular, tip curved upwards, ball end, with grip plate and cut-off hole, LUER, diameter 2.4 mm, working length 13 cm
Same, diameter 3 mm
- ③3 662885 FRANK-PASQUINI **Suction Tube**, angular, tip straight, with grip plate and cut-off hole, diameter 2.5 mm, working length 12 cm
Same, diameter 3 mm
- ③4 662825 **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 6 Fr., working length 15 cm
TAKE-APART® Bipolar Forceps, width 2 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ③5 28164 BDK **TAKE-APART® Bipolar Forceps**, width 4 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ③6 28164 BDM **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ④4 844523 **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, tip 0.7 mm, length 23 cm, for use with Bipolar High Frequency Cords 847000 E or 847000 A/F/M/N/S/T/V
- ④5 28164 KK de DIVITIIS-CAPPABIANCA **Scalpel**, with retractable blade, length 23 cm
including:
Handle
Outer Sheath
Micro Knife, sickle-shaped
- ④6 663239 **Forceps**, straight, not through-cutting, with oval, fenestrated cupped jaws, width 2.5 mm, working length 18 cm
Forceps, straight, with round cupped jaws, diameter 2.5 mm, working length 18 cm
Same, 45° upturned
- ④7 663231 **Scissors**, straight, delicate, working length 18 cm
Same, curved to right, extra delicate
- ④8 663237 **Same**, curved to left, extra delicate
- ④9 663301 **Same**, 45° curved upwards, extra delicate
- ⑤0 663304 **Miniature Forceps**, straight, through-cutting, with fine flat jaws, bite 1 mm, working length 18 cm
Same, curved upwards

Minimally Invasive Endoscopic Pituitary Surgery ^{NEW}

Basic Set



BETTAG/SCHÄFER Recommended Set

- ⑤5 28164 KA **Curette**, round spoon, tip slightly angled, size 1 mm, with round handle, length 25 cm
- ⑤6 28164 KF **Same**, tip highly angled, size 2 mm, length 25 cm
- ⑤7 28164 ER **Micro Raspatory**, single curved to right, width 2 mm, length 27 cm
- ⑤8 28164 EL **Same**, single curved to left
- ⑤9 28164 DS **Dissector**, sharp, tip angled 15°, with round handle, size 2 mm, length 25 cm
- ⑥0 28164 RN CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, tip angled 45°, with round handle, length 25 cm
- ⑥1 28164 RO **Same**, inner diameter 5 mm
- ⑥2 28164 RP **Same**, inner diameter 7 mm
- ⑥3 28164 RI CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, tip angled 90°, with round handle, length 25 cm
- ⑥4 28164 RG **Same**, inner diameter 5 mm
- ⑥5 28164 RB CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, laterally curved sheath end, with round handle, length 25 cm
- ⑥6 28164 RA **Same**, inner diameter 5 mm
- ⑥7 28164 RC **Same**, inner diameter 7 mm
- ⑥8 28164 DA **Dissector**, sharp, tip angled 45°, round spatula, with round handle, size 2 mm, length 25 cm
- ⑥9 28164 DB **Same**, size 3 mm

Optional (not illustrated)

- 7219 AA **HOPKINS® II Straight Forward Telescope 0°**, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- 723527 A **Irrigation and Suction Sheath 0°**, vertical oval, diameter 3.5 x 4.7 mm, separate irrigation and suction channels
- 7219 BA **HOPKINS® II Forward-Oblique Telescope 30°**, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 723527 B **Irrigation and Suction Sheath 30°**, vertical oval, diameter 3.5 x 4.7 mm, separate irrigation and suction channels
- 7219 FA **HOPKINS® II Forward-Oblique Telescope 45°**, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black
- 723527 F **Irrigation and Suction Sheath 45°**, vertical oval, diameter 3.5 x 4.7 mm, separate irrigation and suction channels

Recommended containers for sterilization:

Telescopes: 39301 A (3x)

Telescope, long: 39301 B

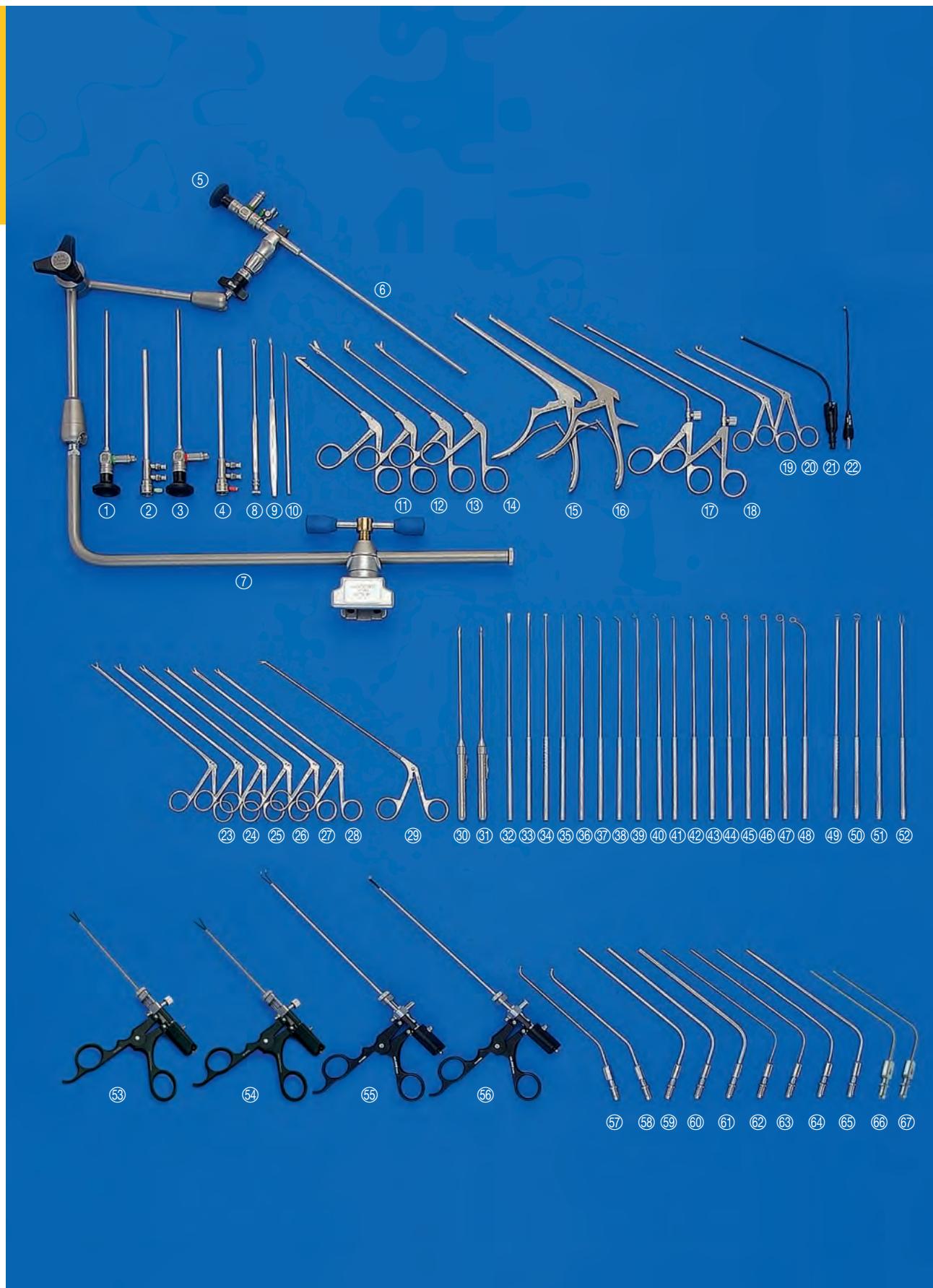
Instruments: 39360 AK

Endoscopic Pituitary and Skull Base Surgery

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 7



Endoscopic Pituitary and Skull Base Surgery

Basic Set



CAPPABIANCA-de DIVITIIS Recommended Set

Telescopes and Sheaths:

- ① 28132 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ② 7230 AS **Suction and Irrigation Sheath 0°**, outer diameter 4.8 x 6 mm, working length 14 cm,
for use with HOPKINS® II Telescope 28132 AA
- ③ 28132 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ④ 7230 BS **Suction and Irrigation Sheath 30°**, outer diameter 4.8 x 6 mm, working length 14 cm,
for use with HOPKINS® II Telescope 28132 BA
- ⑤ 28164 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**
- ⑥ 28164 ASA **Irrigation Sheath**, outer diameter 5 mm, working length 24 cm,
for use with HOPKINS® II Telescope 28164 AA
- ⑦ 28272 RKB **Holding System**, autoclavable

Optional (not illustrated)

- 28132 FA **HOPKINS® II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- 7230 FS **Suction and Irrigation Sheath 45°**, outer diameter 4.8 x 6 mm, working length 14 cm,
for use with HOPKINS® II Telescope 28132 FA
- 7219 AA **HOPKINS® II Straight Forward Telescope 0°**, diameter 2.7 mm, length 18 cm, **autoclavable**
- 28164 CAA **Irrigation Sheath**, outer diameter 3.8 mm, working length 15 cm,
for use with HOPKINS® II Telescope 7219 AA

Nasal and Sphenoid Stage

- ⑧ 474001 **FREER Suction Elevator**, with stylet, length 19 cm
- ⑨ 628702 **Antrum Curette**, oblong, small, length 19 cm
- ⑩ 660500 **Sickle Knife**, slightly curved, pointed, length 18 cm
- ⑪ 459010 **STAMMBERGER RHINOFORCE® II Antrum Punch**, upside backward cutting, with cleaning connector,
working length 10 cm
- ⑫ 449211 **RHINOFORCE® II Nasal Scissors**, straight, small model, length of cut 10 mm, with cleaning connector,
working length 13 cm
- ⑬ 452501 B **MACKAY-GRÜNWALD RHINOFORCE® II Nasal Forceps**, 45° upturned, through-cutting, delicate,
tissue-sparing, 8 x 3 mm, size 1, with cleaning connector, working length 13 cm
- ⑭ 452001 B **Same**, straight
- ⑮ 28164 MKB **KERRISON Bone Punch**, detachable, rigid, upbiting 60° forward, size 2 mm, working length 17 cm
- ⑯ 28164 MKC **Same**, size 3 mm
- ⑰ 651050 **STAMMBERGER Punch**, circular cutting, for sphenoid, ethmoid and choanal atresia, diameter 4.5 mm,
with cleaning connector, working length 18 cm
- ⑱ 651055 **Same**, diameter 3.5 mm
- ⑲ 634824 **STRÜMPPEL Forceps**, with oval, fenestrated cupped jaws, straight, width 2.5 mm, working length 12.5 cm
- ⑳ 634825 A **Same**, 45° upturned
- ㉑ 839310 N **Insulated Suction Cannula**, for nose, straight, outer diameter 3 mm, working length 10 cm
- 28164 ED **Coagulating Ball Electrode**, diameter 2 mm, laterally curved, working length 13 cm (not illustrated)
- ㉒ 28164 EF **Coagulating Ball Electrode**, diameter 4 mm, laterally curved, working length 13 cm

Sellar Stage

- ㉓ 663231 **Forceps**, straight, with round cupped jaws, diameter 2.5 mm, working length 18 cm
- ㉔ 663239 **Forceps**, straight, not through-cutting, with oval, fenestrated cupped jaws, width 2.5 mm,
working length 18 cm
- ㉕ 663301 **Scissors**, straight, delicate, working length 18 cm
- ㉖ 663304 **Scissors**, curved to right, extra delicate, working length 18 cm
- ㉗ 663305 **Same**, curved to left
- ㉘ 663307 **Same**, 45° curved upwards
- ㉙ 28164 SAD **Scissors**, upturned 45°, delicate, sheath 360° rotatable, with cleaning connector, working length 18 cm
de DIVITIIS-CAPPABIANCA **Scalpel**, with retractable blade, length 23 cm
including:
 - Handle**
 - Outer Sheath**
 - Micro Knife**, sickle-shaped
- ㉚ 28164 KK de DIVITIIS-CAPPABIANCA **Scalpel**, with retractable blade, length 23 cm
including:
 - Handle**
 - Outer Sheath**
 - Micro Knife**, pointed
- ㉛ 28164 DM **Dissector**, sharp, straight tip, slightly curved spatula, with round handle, size 3 mm, length 25 cm
- ㉜ 28164 DS **Dissector**, sharp, tip angled 15°, with round handle, size 2 mm, length 25 cm
- ㉝ 28164 DB **Dissector**, sharp, tip angled 45°, round spatula, with round handle, size 3 mm, length 25 cm

Endoscopic Pituitary and Skull Base Surgery

Basic Set



CAPPABIANCA-de DIVITIIS Recommended Set

- ⑤ 28164 H CASTELNUOVO **Hook**, 90°, blunt, with round handle, length 25 cm
- ⑥ 28164 KB **Curette**, round spoon, tip slightly angled, size 2 mm, with round handle, length 25 cm
- ⑦ 28164 RN CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, tip angled 45°, with round handle, length 25 cm
- ⑧ 28164 RE CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, malleable, inner diameter 3 mm, tip angled 45°, with round handle, length 25 cm
- ⑨ 28164 RO CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm
- ⑩ 28164 RJ CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, malleable, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm
- ⑪ 28164 RI CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, tip angled 90°, with round handle, length 25 cm
- ⑫ 28164 RG **Same**, inner diameter 5 mm
- ⑬ 28164 RB CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, laterally curved sheath end, with round handle, length 25 cm
- ⑭ 28164 RA **Same**, inner diameter 5 mm
- ⑮ 28164 RV CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, laterally curved 90° sheath end, with round handle, length 25 cm
- ⑯ 28164 RD **Same**, inner diameter 5 mm
- ⑰ 28164 RW **Same**, inner diameter 7 mm
- ⑱ 28164 RF CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, vertical, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm
- ⑲ 28164 RSB CAPPABIANCA-de DIVITIIS **Suction Curette**, blunt, inner diameter 5 mm, tip angled 45°, LUER, length 25 cm
- ⑳ 28164 RSC **Same**, inner diameter 7 mm
- ㉑ 28164 RT CAPPABIANCA-de DIVITIIS **Suction Curette**, with basket, round, size 5 mm, rotatable tube, LUER, length 25 cm
- ㉒ 28164 RU **Same**, size 6.5 mm
- ㉓ 28164 BDB **TAKE-APART® Bipolar Forceps**, short, rounded tip, width 2 mm, outer diameter 3.4 mm, working length 14 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ㉔ 28164 BDC **TAKE-APART® Bipolar Forceps**, short, pointed tip, width 2 mm, outer diameter 3.4 mm, working length 14 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ㉕ 28164 BDL **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, vertical closing, outer diameter 3.4 mm, working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ㉖ 28164 BDM **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- 28164 MI **Lesion Meter**, to determine the size of transnasal lesions, with wheel handle and scale, width 2 mm, working length 19 cm (not illustrated)
- ㉗ 662882 **FRANK-PASQUINI Suction Tube**, angular, tip curved upwards, ball end, with grip plate and cut-off hole, LUER, diameter 2.4 mm, working length 13 cm
- ㉘ 662885 **Same**, diameter 3 mm

Endoscopic Pituitary and Skull Base Surgery

Basic Set



CAPPABIANCA-de DIVITIIS Recommended Set

- ⑤9 649183 FERGUSON **Suction Tube**, with cut-off hole and stylet, LUER, 10 Fr., working length 15 cm
- ⑥0 649184 **Same**, 12 Fr.
- ⑥1 649185 **Same**, 15 Fr.
- ⑥2 649179 B **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 4 Fr., working length 15 cm
- ⑥3 649180 B **Same**, 6 Fr.
- ⑥4 649182 B **Same**, 8 Fr.
- ⑥5 649183 B **Same**, 10 Fr.
- ⑥6 28164 XA **Suction Tube**, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, 8 Fr., working length 15 cm
- ⑥7 28164 XB **Same**, 6 Fr.

Recommended containers for sterilization:

Telescopes: 39301 B (2x)

Instruments: 39360 AK

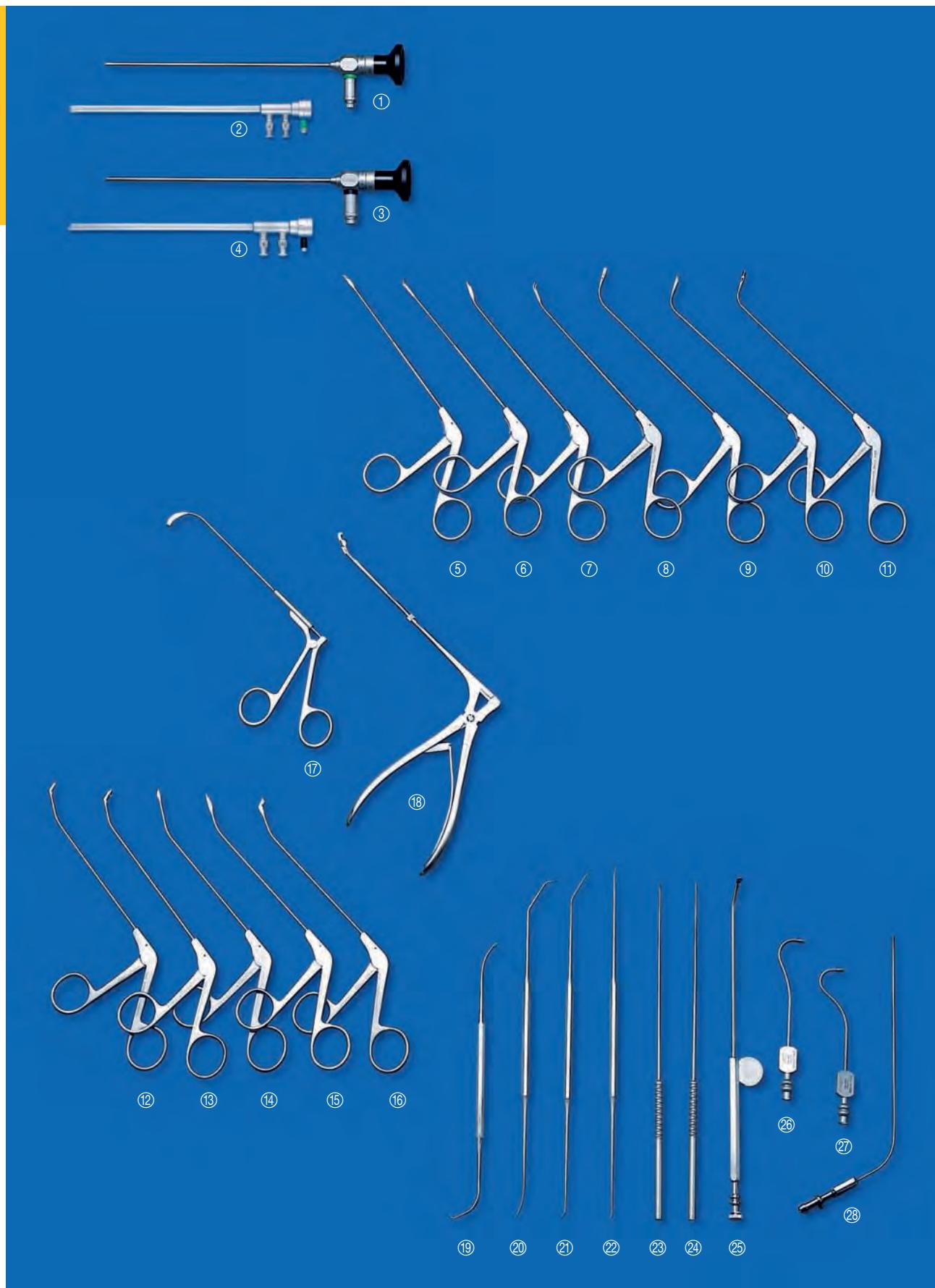
Holding Arm: 39301 J

Endoscopic Anterior Skull Base Surgery

Basic Set

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Endoscopic Anterior Skull Base Surgery

Basic Set

CASTELNUOVO Recommended Set

- ① 7230 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ② 7230 AS **Suction and Irrigation Sheath 0°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® II Telescope 7230 AA
- ③ 7230 FA **HOPKINS® II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ④ 7230 FS **Suction and Irrigation Sheath 45°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® II Telescope 7230 FA
- ⑤ 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
- ⑥ 452832 **Same**, jaws upturned 45°
- ⑦ 452833 **RHINOFORCE® II Miniature Nasal Forceps**, with extra fine, flat jaws, through-cutting, tissue-sparing, sheath curved 30°, straight jaws, width of cut 1.5 mm, with cleaning connector, working length 13 cm
- ⑧ 452834 **Same**, jaws 45° upturned
- ⑨ 452841 R CASTELNUOVO **RHINOFORCE® II Miniature Nasal Forceps**, with extra fine, flat jaws, through-cutting, tissue-sparing, sheath curved 65°, right side opening, width of cut 1.5 mm, with cleaning connector, working length 13 cm
- ⑩ 452841 **Same**, backward opening
- ⑪ 452841 L **Same**, left side opening
- ⑫ 451510 B CASTELNUOVO **RHINOFORCE® II Nasal Forceps**, end of sheath 25° upturned, through-cutting, jaws 45° upturned, BLAKESLEY shape, width 3 mm, with cleaning connector, working length 13 cm
- ⑬ 457011 B STRÜMPPEL-CASTELNUOVO **RHINOFORCE® II Nasal Forceps**, end of sheath 25° upturned, jaws 45° angled upwards, width 3.5 mm, working length 13 cm
- ⑭ 456010 B BLAKESLEY-CASTELNUOVO **RHINOFORCE® II Nasal Forceps**, end of sheath 25° upturned, with straight jaws, width 3 mm, with cleaning connector, 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, with cleaning connector, working length 13 cm
- ⑯ 456510 B BLAKESLEY-CASTELNUOVO **RHINOFORCE® II Nasal Forceps**, end of sheath 25° upturned, jaws 45° upturned, width 3 mm, with cleaning connector, working length 13 cm
- ⑰ 653000 HEUWIESER **Antrum Grasping Forceps**, jaws curved downwards, fixed jaw curved 90°, movable jaw 120° backward opening, with cleaning connector, working length 10 cm
- ⑱ 648523 McKENTY-CASTELNUOVO **Sphenoid Punch**, 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, semisharp end slightly graduated, length 26 cm
- ㉑ 28164 EB CASTELNUOVO **Elevator**, double-ended, angled end shovel-shaped, semisharp, blunt end slightly curved, length 26 cm
- ㉒ 28164 EA CASTELNUOVO **Elevator**, double-ended, semisharp and blunt, length 26 cm
- ㉓ 28164 H CASTELNUOVO **Hook**, 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 CASTELNUOVO **Suction Elevator**, with stylet, curved, length 25 cm
- ㉖ 586145 v. EICKEN-CASTELNUOVO **Antrum Cannula**, LUER-Lock, S-shaped slightly curved, malleable, serrated grip plate, outer diameter 2.5 mm, length 12.5 cm
- ㉗ 586146 **Same**, S-shaped strongly curved
- ㉘ 649180 N FERGUSON-CASTELNUOVO **Suction Tube**, without cut-off hole, LUER, diameter 2 mm, working length 15 cm

Recommended containers for sterilization:

Telescopes: 39301 A (2x)

Instruments: 39360 BK

Endoscopic Anterior Skull Base Surgery

Basic Set

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Endoscopic Anterior Skull Base Surgery

Basic Set

CASTELNUOVO-LOCATELLI Recommended Set

Instruments for Nasal Access

- ① 474001 **FREEER Suction Elevator**, with stylet, length 19 cm
- ② 479100 **COTTELE Elevator**, double-ended, semisharp and blunt, graduated, length 20 cm
- ③ 628001 **Sickle Knife**, pointed, length 19 cm
- ④ 722830 **Suction Tube**, angular, with grip plate and cut-off hole, LUER-Lock, outer diameter 3 mm, working length 14 cm
- ⑤ 456000 B **BLAKESLEY RHINOFORCE®II Nasal Forceps**, straight, size 0, with cleaning connector, working length 13 cm
- ⑥ 456500 B **BLAKESLEY-WILDE RHINOFORCE®II Nasal Forceps**, 45° upturned, size 0, with cleaning connector, working length 13 cm
- ⑦ 451000 B **GRÜNWALD-HENKE RHINOFORCE®II Nasal Forceps**, straight, through-cutting, tissue-sparing, BLAKESLEY shape, size 0, width 3 mm, with cleaning connector, working length 13 cm
- ⑧ 451500 B **Same**, 45° upturned
- ⑨ 452001 B **MACKAY-GRÜNWALD RHINOFORCE®II Nasal Forceps**, straight, through-cutting, extra delicate, tissue-sparing, 8 x 3 mm, size 1, with cleaning connector, working length 13 cm
- ⑩ 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
- ⑪ 452832 **Same**, jaws 45° upturned
- ⑫ 651055 **STAMMBERGER Punch**, circular cutting, for sphenoid, ethmoid and choanal atresia, diameter 3.5 mm, with cleaning connector, working length 18 cm
- ⑬ 651050 **Same**, diameter 4.5 mm
- ⑭ 648521 **McKENTY Sphenoid Punch**, through-cutting, reversible, size 1.6 x 2 mm, working length 17 cm
- ⑮ 648523 **McKENTY-CASTELNUOVO Sphenoid Punch**, tip curved 30°, through-cutting, reversible, size 1.6 x 2 mm, working length 17 cm

Instruments for Access to the Sellar Region

- ⑯ 28164 UA **RHINOFORCE®II Nasal Forceps**, with extra fine flat jaws, through-cutting, tissue-sparing, width of cut 1.5 mm, straight sheath, straight jaws, with cleaning connector, working length 18 cm
- ⑰ 28164 UB **Same**, jaws angled upwards 45°
- ⑱ 28164 UE **Same**, jaws angled downwards 45°
- ⑲ 28164 TD **Forceps**, round cupped jaws, diameter 0.6 mm, straight, extra delicate, working length 18 cm
- ⑳ 28164 TA **Forceps**, oval cupped jaws, diameter 0.9 mm, upturned, extra delicate, working length 18 cm
- ㉑ 663217 **Forceps**, 45° upturned, not through-cutting, extra sharp, with oval, fenestrated cupped jaws, width 1.8 mm, working length 18 cm
- ㉒ 663211 **Forceps**, straight, not through-cutting, extra sharp, with oval, fenestrated cupped jaws, width 1.8 mm, working length 18 cm
- ㉓ 649100 B **BLAKESLEY RHINOFORCE®II Ethmoid Forceps**, straight, size 0, with cleaning connector, working length 16 cm
- ㉔ 649110 B **BLAKESLEY-WILDE RHINOFORCE®II Ethmoid Forceps**, 45° curved upwards, size 0, with cleaning connector, working length 16 cm
- ㉕ 663304 **Scissors**, curved to right, extra delicate, working length 18 cm
- ㉖ 663305 **Same**, curved to left
- ㉗ 663307 **Same**, 45° curved upwards
- ㉘ 663302 **Same**, straight
- ㉙ 663301 **Scissors**, straight, delicate, working length 18 cm
- ㉚ 28164 SAD **Scissors**, upturned 45°, delicate, sheath 360° rotatable, with cleaning connector, working length 18 cm
- ㉛ 28164 BDL **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, vertical closing, outer diameter 3.4 mm, working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert

Endoscopic Anterior Skull Base Surgery

Basic Set

CASTELNUOVO-LOCATELLI Recommended Set

- ③ 28164 X CASTELNUOVO **Suction Tube**, diameter 2 mm, malleable, lateral suction holes, working length 25 cm
- ③ 28164 RO CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm
- ④ 28164 RD CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 5 mm, laterally curved sheath end 90°, with round handle, length 25 cm
- ⑤ 28164 RB CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, laterally curved sheath end, with round handle, length 25 cm
- ⑥ 28164 RG CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 5 mm, tip angled 90°, with round handle, length 25 cm
- ⑦ 28164 RN CAPPABIANCA-de DIVITIIS **Ring Curette**, with round wire, inner diameter 3 mm, tip angled 45°, with round handle, length 25 cm
- ⑧ 28164 KA **Curette**, round spoon, tip slightly angled, size 1 mm, with round handle, length 25 cm
- ⑨ 28164 KB **Curette**, round spoon, tip slightly angled, size 2 mm, with round handle, length 25 cm
- ⑩ 28164 KG **Curette**, round spoon, tip highly angled, size 3 mm, with round handle, length 25 cm
- ⑪ 28164 DS **Dissector**, sharp, tip angled 15°, with round handle, size 2 mm, length 25 cm
- ⑫ 28164 DM **Dissector**, sharp, straight tip, slightly curved spatula, with round handle, size 3 mm, length 25 cm
- ⑬ 28164 KF **Curette**, round spoon, tip highly angled, size 2 mm, with round handle, length 25 cm
- ⑭ 28164 DA **Dissector**, sharp, tip angled 45°, round spatula, with round handle, size 2 mm, length 25 cm
- ⑮ 28164 RR CAPPABIANCA-de DIVITIIS **Curette**, blunt, stirrup-shaped, with round handle, length 25 cm
- ⑯ 28164 DF **Dissector**, sharp, tip angled 15°, flat long spatula, with round handle, size 1.5 mm, length 25 cm
- ⑰ 28164 H CASTELNUOVO **Hook**, 90°, blunt, length 25 cm
- ⑱ 662885 FRANK-PASQUINI **Suction Tube**, angular, tip curved upwards, ball end, with grip plate and cut-off hole, LUER, diameter 3 mm, working length 13 cm
- ⑲ 662882 **Same**, diameter 2.4 mm
- ⑳ 662886 FRANK-PASQUINI **Suction Tube**, angular, tip curved downwards, ball end, with grip plate and cut-off hole, LUER, diameter 3 mm, working length 13 cm
- ㉑ 662883 **Same**, diameter 2.4 mm
- ㉒ 649180 N FERGUSON-CASTELNUOVO **Suction Tube**, without cut-off hole, LUER, diameter 2 mm, working length 15 cm
- ㉓ 649183 FERGUSON **Suction Tube**, with cut-off hole and stylet, LUER, 10 Fr., working length 15 cm
- ㉔ 649182 BU FERGUSON-CASTELNUOVO **Suction Tube**, with cut-off hole and stylet, with calibration markings, lateral opening downwards, diameter 2.5 mm, working length 15 cm

Closure of Septal Cartilage

- ㉕ 660506 **Round Knife**, vertical cutting, 3.5 x 2.5 mm, length 18 cm
- ㉖ 660509 **Round Knife**, angled 45°, diameter 2 mm, length 18 cm
- ㉗ 634826 **BELLUCCI Scissors**, straight, working length 12.5 cm

Telescopes

- ㉘ 28164 CAA **Irrigation Sheath**, outer diameter 3.8 mm, working length 15 cm, for use with HOPKINS® II Telescope 7219 AA
- ㉙ 7219 AA **HOPKINS® II Straight Forward Telescope 0°**, diameter 2.7 mm, length 18 cm, **autoclavable**
- ㉚ 28164 CAF **Irrigation Sheath**, diameter 3.8 mm, working length 15 cm, for use with HOPKINS® II Telescope 7219 FA
- ㉛ 7219 FA **HOPKINS® II Forward-Oblique Telescope 45°**, diameter 2.7 mm, length 18 cm, **autoclavable**
- ㉜ 7230 AS **Suction and Irrigation Sheath 0°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® II Telescope 7230 AA
- ㉝ 7230 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ㉞ 7230 FS **Suction and Irrigation Sheath 45°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS® II Telescope 7230 FA
- ㉟ 7230 FA **HOPKINS® II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**

Recommended containers for sterilization:

Telescopes: 39301 A (4x)
Instruments: 39360 AK

Minimally Invasive Lateral Skull Base Microsurgery

Basic Set

STORZ
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CHAPTER 7



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Minimally Invasive Lateral Skull Base Microsurgery

Basic Set



DRAF Recommended Set

- ① 662202 **Forceps**, straight, extra delicate, with oval cupped jaws, width 0.6 mm, working length 15 cm
② 662203 **Same**, curved to right
③ 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, with round cupped jaws, diameter 4 mm, working length 15 cm
⑩ 662210 **Forceps**, straight, not through-cutting, extra sharp, with oval, fenestrated cupped jaws, width 1.8 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 cupped jaws, width 1.8 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 Forceps**, straight, with oval, fenestrated cupped jaws, width 4 mm, with cleaning connector, working length 15 cm
㉑ 662251 **Miniature Forceps**, straight, through-cutting, with fine flat jaws, width of cut 1 mm, working length 15 cm
㉒ 662255 **Same**, curved to right
㉓ 662256 **Same**, curved to left
㉔ 662257 **Same**, curved upwards
㉕ 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 662307 **Same**, 45° curved upwards
㉛ 663402 **Sickle Knife**, slightly curved, with round handle, length 21.5 cm
㉜ 663486 **Dissecting Probe**, medium curved, blunt, with round handle, diameter 0.9 mm, length 21.5 cm
㉝ 663482 **Hook**, with ball end, angled 90°, with round handle, length 21.5 cm
㉞ 663468 **Curette**, sharp, oval, angled 85°, with round handle, 2 x 3.2 mm, length 21.5 cm
㉟ 663413 **Round Knife**, angled 30°, oval, with round handle, 2.1 x 2.5 mm, length 21.5 cm
㉟ 663405 **Round Knife**, vertical, with round handle, 4.5 x 3 mm, length 21.5 cm
㉞ 663422 **Elevator**, angled 25°, sharp, with round handle, 6 mm long, width 1 mm, length 21.5 cm
㉞ 663463 **Curette**, sharp, oval, angled 60°, with round handle, 2 x 3.2 mm, length 21.5 cm
㉞ 28164 AU **KERRISON Punch**, 30° downbiting, not through-cutting, diameter 1 mm, working length 17 cm
㉞ 662100 **KERRISON Bone Punch**, detachable, rigid, 90° upbiting, not through-cutting, size 0.5 mm, working length 17 cm
㉞ 662122 **KERRISON Bone Punch**, detachable, rigid, upbiting 40° forward, size 2 mm, working length 17 cm
㉞ 662120 **Same**, size 0.7 mm
㉞ 844523 **Bipolar Coagulation Forceps**, bayonet-shaped, tip 0.7 mm, length 23 cm
㉞ 844623 **Bipolar Coagulation Forceps**, bayonet-shaped, tip 1.2 mm, length 23 cm
㉞ 663814 **Suction Tube**, angular, malleable, with round handle and cut-off hole, diameter 2 mm, working length 10 cm
㉞ 663818 **Same**, working length 13 cm
㉞ 798618 **HEGAR Needle Holder**, slender, tungsten carbide inserts, length 18 cm
㉞ 799016 **DRAF Micro Needle Holder**, extra fine, coated jaws, matt finish, polished handle rings, length 16.5 cm
㉞ 662476 **OLIVECRONA Brain Spatula**, angled on both sides, concave, elastic, width 7 and 9 mm, length 18 cm
㉞ 662477 **Same**, width 11 and 13 mm
㉞ 662478 **Same**, width 15 and 18 mm

Additional instruments for transtemporal surgery

- ㉞ 219717 B **FISCH Retractor**, articulated, 3 x 3 prongs, sharp, length 17 cm
㉞ 219800 **FISCH Dura Retractor**, length 18 cm

Recommended Container for Sterilization:

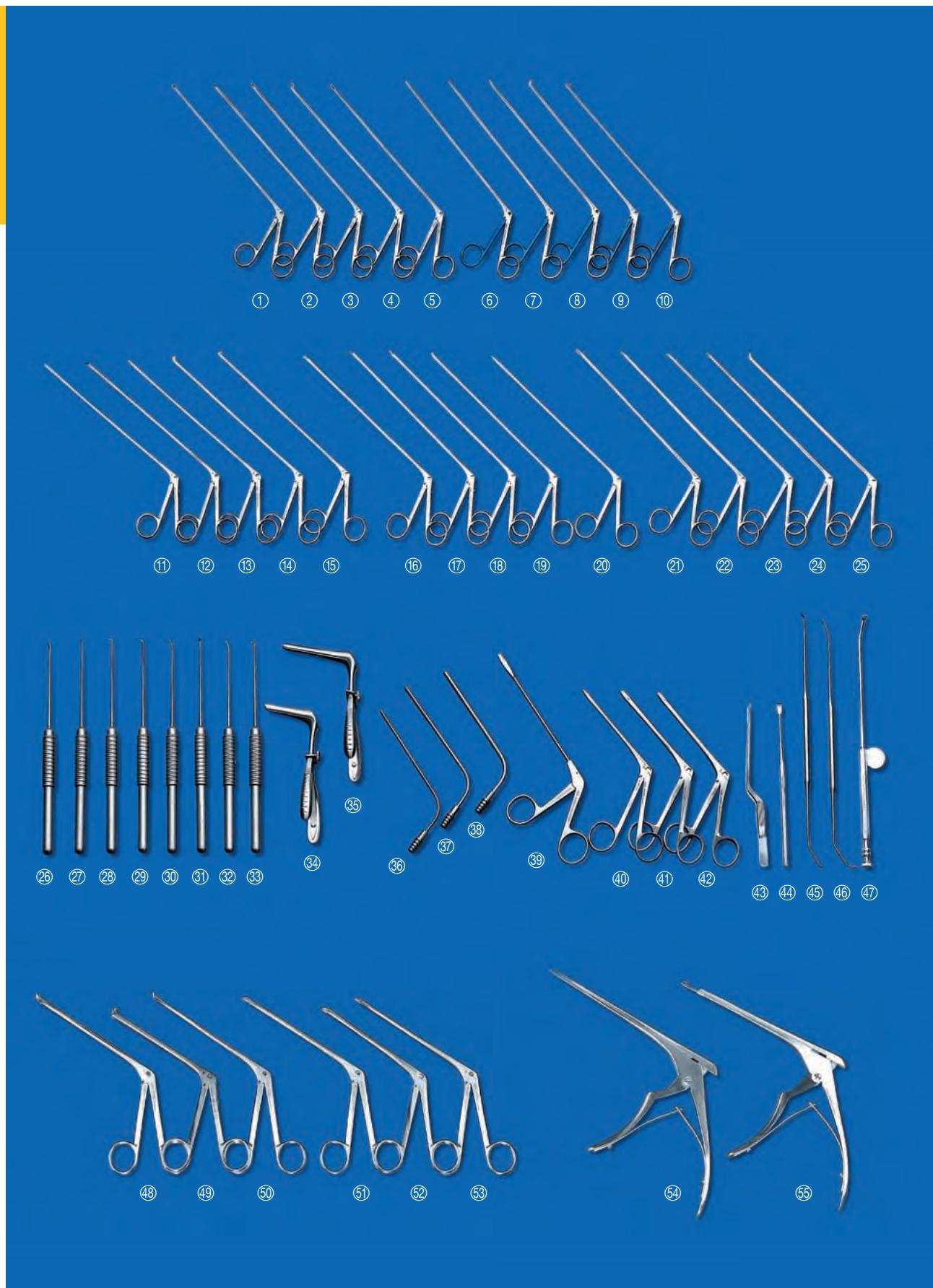
39360 AK

Minimally Invasive Lateral Skull Base Microsurgery

Basic Set

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Minimally Invasive Lateral Skull Base Microsurgery

Basic Set



DRAF Recommended Set

- ① 662231 **Forceps**, straight, with round cupped jaws, diameter 2.5 mm, working length 15 cm
- ② 662235 **Same**, curved to right
- ③ 662236 **Same**, curved to left
- ④ 662237 **Same**, 45° upturned
- ⑤ 662241 **Forceps**, straight, with round cupped jaws, diameter 4 mm, working length 15 cm
- ⑥ 662210 **Forceps**, straight, not through-cutting, extra sharp, with oval, fenestrated cupped jaws, width 1.8 mm, working length 15 cm
- ⑦ 662212 **Same**, curved to right
- ⑧ 662213 **Same**, curved to left
- ⑨ 662214 **Same**, 45° upturned
- ⑩ 662215 **Same**, 90° upturned
- ⑪ 662221 **Forceps**, straight, not through-cutting, with oval, fenestrated cupped jaws, width 1.8 mm, working length 15 cm
- ⑫ 662223 **Same**, curved to right
- ⑬ 662224 **Same**, curved to left
- ⑭ 662227 **Same**, 45° upturned
- ⑮ 662228 **Same**, 90° upturned
- ⑯ 662251 **Miniature Forceps**, straight, through-cutting, width of cut 1 mm, working length 15 cm
- ⑰ 662255 **Same**, curved to right
- ⑱ 662256 **Same**, curved to left
- ⑲ 662257 **Same**, curved upwards
- ⑳ 662271 **Grasping Forceps**, straight, fine serrated, working length 15 cm
- ㉑ 662300 **Scissors**, straight, working length 15 cm
- ㉒ 662301 **Scissors**, straight, extra delicate, working length 15 cm
- ㉓ 662304 **Same**, curved to right
- ㉔ 662305 **Same**, curved to left
- ㉕ 662307 **Same**, 45° curved upwards

Minimally Invasive Lateral Skull Base Microsurgery

Basic Set



DRAF Recommended Set

- (26) 663402 **Sickle Knife**, slightly curved, with round handle, length 21.5 cm
(27) 663486 **Dissecting Probe**, medium curved, blunt, with round handle, diameter 0.9 mm, length 21.5 cm
(28) 663482 **Hook**, with ball end, angled 90°, with round handle, length 21.5 cm
(29) 663468 **Curette**, sharp, oval, angled 85°, with round handle, 2 x 3.2 mm, length 21.5 cm
(30) 663413 **Round Knife**, angled 30°, oval, with round handle, 2.1 x 2.5 mm, length 21.5 cm
(31) 663405 **Round Knife**, vertical, with round handle, 4.5 x 3 mm, length 21.5 cm
(32) 663422 **Elevator**, angled 25°, sharp, with round handle, 6 mm long, width 1 mm, length 21.5 cm
(33) 663463 **Curette**, sharp, oval, angled 60°, with round handle, 2 x 3.2 mm, length 21.5 cm
(34) 403255 **KILLIAN-STRUYCKEN Nasal Speculum**, with set rack, blade length 55 mm, length 15 cm
(35) 403275 **Same**, blade length 75 mm
(36) 203730 **Suction Tube**, cylindrical, LUER, outer 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, with cleaning connector, working length 13 cm
(40) 456001 **BLAKESLEY Nasal Forceps**, straight, size 1, working length 11 cm
(41) 456003 **Same**, size 3
(42) 456002 **Same**, size 2
(43) 426516 **JANSEN Nasal Forceps**, bayonet-shaped, length 16.5 cm
(44) 477500 **FREER Raspatory**, curved, width 4 mm, length 18 cm
(45) 28164 EB **CASTELNUOVO Elevator**, double-ended, angled end shovel-shaped, semisharp, blunt end slightly curved, length 26 cm
(46) 28164 EC **CASTELNUOVO Elevator**, double-ended, blunt end angled, semisharp end slightly curved, graduated, length 26 cm
(47) 28164 ES **CASTELNUOVO Suction Elevator**, with stylet, curved, length 25 cm

Supplement: Through-cutting nasal forceps

- (48) 453710 **Nasal Forceps**, 45° upturned, through-cutting, slender model, with flat jaws, bite 3 x 4 mm, working length 12.5 cm
(49) 453723 **Nasal Forceps**, 45° upturned, through-cutting, robust model, medium size, bite 2.75 x 6 mm, working length 10.5 cm
(50) 453721 **Nasal Forceps**, 45° upturned, through-cutting, fine, bite 1.5 x 4 mm, working length 12.5 cm
(51) 453508 **Nasal Forceps**, straight, through-cutting, slender model, with flat jaws, bite 3 x 4 mm, working length 12.5 cm
(52) 453510 **Nasal Forceps**, straight, through-cutting, robust model, small, bite 2.5 x 6.5 mm, working length 10.5 cm
(53) 453509 **Nasal Forceps**, straight, through-cutting, fine, working length 12.5 cm
(54) 649021 **Antrum Punch**, upbiting 90°, through-cutting, working length 17 cm
(55) 649023 **Antrum Punch**, upbiting 90° backward, through-cutting, working length 14 cm

Sinus Shaver, DrillCut-X® Handpiece (40 7110 40)

- 41303 WN **Sinus Shaver**, curved 55°, cylindric, drill diameter 3.6 mm, shaft diameter 4 mm, length 12 cm, color code: red-blue
41303 DT **Sinus Shaver**, curved 70°, diamond head, drill diameter 3.6 mm, shaft diameter 4 mm, length 12 cm, color code: red-yellow
41304 W **Sinus Shaver**, curved 40°, cylindric, drill diameter 3 mm, shaft diameter 4 mm, length 12 cm, color code: red-blue
41305 RN **Sinus Shaver**, curved 15°, bud drill, drill diameter 4 mm, shaft diameter 4 mm, length 12 cm, color code: red-black
41305 DN **Sinus Shaver**, curved 15°, diamond head, drill diameter 3 mm, shaft diameter 4 mm, length 12 cm, color code: red-yellow
41305 D **Sinus Shaver**, curved 15°, diamond head, drill diameter 5 mm, shaft diameter 4 mm, length 12 cm, color code: red-yellow

Recommended container for sterilization:

39360 AK

Minimally Invasive Lateral Skull Base Microsurgery

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 7



Minimally Invasive Lateral Skull Base Microsurgery

Basic Set



FISCH Recommended Set

- ① 449250 **Nasal Scissors**, ZÜRICH model, straight, large model, cutting length 18 mm, working length 14 cm
② 221454 **FISCH Ear Forceps**, round cupped jaws, diameter 3 mm, working length 12.5 cm
③ 634822 **HARTMANN Forceps**, 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, working length 8 cm
⑥ 222801 **FISCH-DIETER Malleus Nipper**, extra delicate, upbiting, width 0.8 mm, working length 8 cm
⑦ 222501 **FISCH-BELLUCCI Scissors**, extra fine blade, blade length 7 mm, working length 8 cm
⑧ 225415 **Hook**, 45°, size 1.5 mm, length 16 cm
⑨ 226301 **FISCH Tenotome**, sickle-shaped, extra delicate, length 16 cm
⑩ 226102 **FISCH Micro Raspatory**, single curved to left, length 16 cm
⑪ 226101 **Same**, single curved to right
⑫ 226001 **FISCH Micro Raspatory**, double curved to right, length 16 cm
⑬ 226002 **Same**, double curved to left
⑭ 499101 **Hook**, one prong, sharp curve, length 16.5 cm
⑮ 474000 **FREEER Elevator**, double-ended, semisharp and blunt, length 20 cm
⑯ 477500 **FREEER Raspatory**, curved, width 4 mm, length 18 cm
⑰ 213005 **FISCH Dura Elevator**, width 5 mm, length 16 cm
⑱ 793303 F **Tissue Forceps**, toothed, 1 x 2 teeth, fine size, soft spring-action, length 13 cm
⑲ 214000 F **WULLSTEIN Forceps**, serrated, soft spring-action, length 15 cm
⑳ 204735 **FISCH Suction Tube**, with grip plate, angular, outer diameter 3 mm, working length 10 cm
㉑ 204738 **FISCH Suction Tube**, with grip plate, angular, outer diameter 5 mm, working length 12.5 cm
㉒ 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
㉓ 206700 **Same**, suction tube outer diameter 1.9 mm, irrigation tube outer diameter 1.9 mm
㉔ 204200 **FISCH Adaptor**, with cut-off hole, LUER cone, length 5.5 cm
㉕ 204354 **Suction Tube**, angular, malleable, LUER-Lock, outer diameter 1 mm, working length 7 cm
㉖ 792026 **MAYO-LEXER Scissors**, with tungsten carbide inserts, curved, narrow blades, length 16 cm
㉗ 511514 **METZENBAUM Scissors**, curved, length 14 cm
㉘ 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**, tungsten carbide inserts, extra delicate, length 15 cm
㉝ 536214 **Artery Forceps**, PROVIDENCE model, delicate, curved, length 14 cm
㉞ 535312 **HALSTEAD "Mosquito" Artery Forceps**, micro-model, curved, length 12.5 cm
㉟ 796011 **BACKHAUS Towel Forceps**, length 11 cm
㉟ 213015 **FISCH Periosteal Elevator**, angled, width 11 mm, length 21 cm
㉞ 169027 **JANSEN Raspatory**, width 9 mm, length 17.5 cm
㉟ 213011 **FISCH Raspatory**, width 10 mm, length 16 cm
㉟ 800005 **FISCH Aneurysm Needle**, curved, length 20 cm
㉟ 219900 **FISCH Glomus Retractor**, size 21 x 16 cm
㉟ 200619 **LEMPERT Rongeur**, slender, straight, length 19 cm
㉟ 219724 **Retractor**, articulated, 3 x 4 prongs, sharp, length 24 cm
㉟ 219717 **FISCH Retractor**, articulated, 3 x 3 prongs, semisharp, length 17 cm
㉟ 215001 **JANSEN Retractor**, 3 x 3 prongs, blunt, length 10 cm
㉟ 219800 **FISCH Dura Retractor**, length 18 cm
㉟ 801708 **KOCHER-LANGENBECK Retractor**, size 65 x 14 mm, length 21.5 cm
㉟ 801702 **Same**, size 35 x 8 mm
㉟ 800403 **VOLKMANN Retractor**, sharp, 3 prongs, length 21 cm

Recommended containers for sterilization:

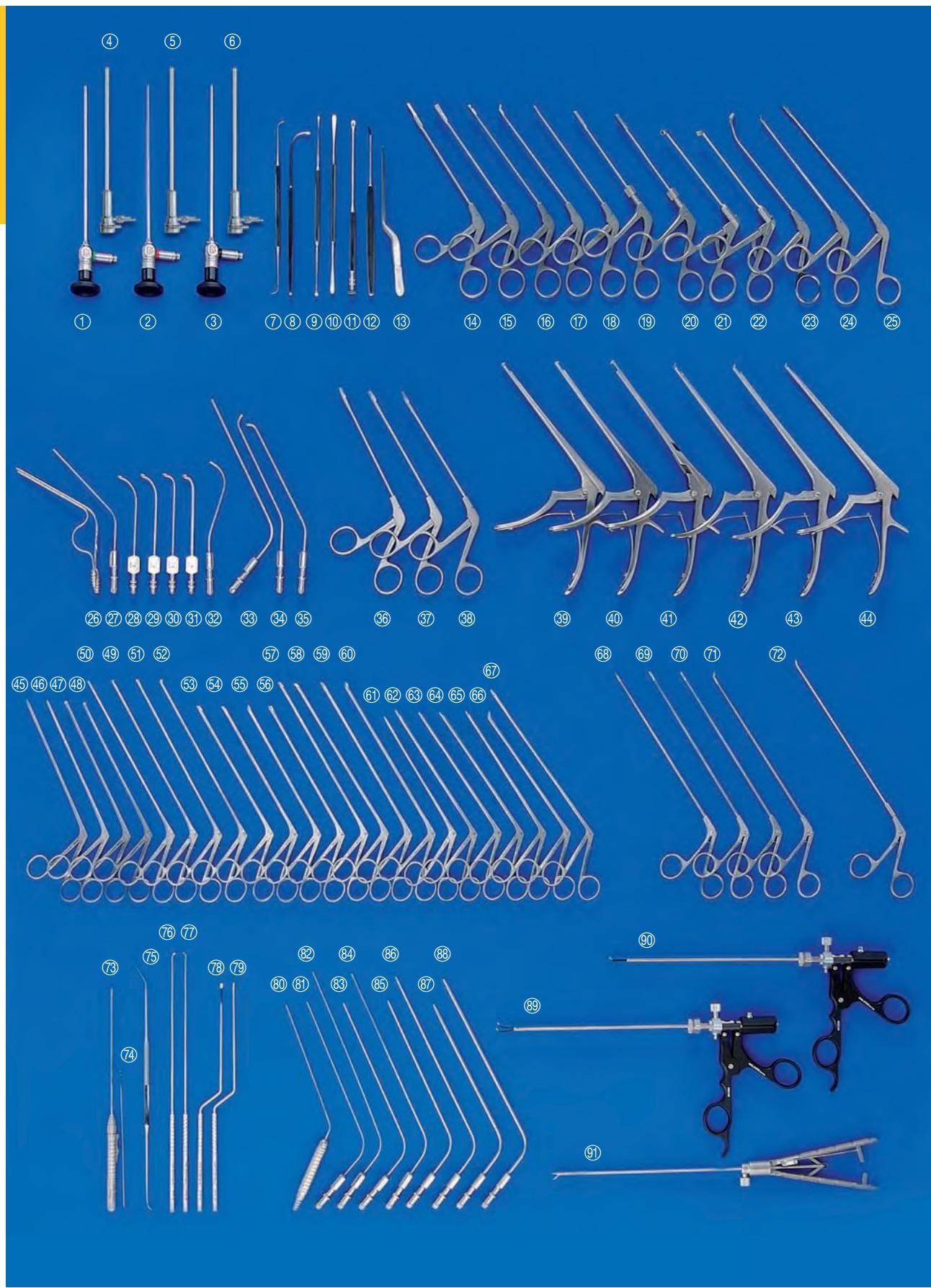
39360 AK

Expanded Endonasal Approach in Ventral Skull Base Surgery

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 7



Expanded Endonasal Approach in Ventral Skull Base Surgery



Basic Set

KASSAM-SNYDERMAN Recommended Set

Advanced Set

Telescopes

- ① 28132 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 28132 FVA **HOPKINS® II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side, fiber optic light transmission incorporated, color code: black
- ③ 28132 CVA **HOPKINS® II Lateral Telescope 70°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side, fiber optic light transmission incorporated, color code: yellow
- 495 ND **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 300 cm (not illustrated)

KARL STORZ CLEARVISION® II System

- 403341 01 **CLEARVISION® II Set**, lens irrigation system for endoscopes, power supply 100 – 240 VAC, 50/60 Hz (not illustrated)
including:
Mains Cord
One-Pedal Footswitch
Silicone Tubing Set, sterilizable
- ④ 28164 CBA **Irrigation Sheath**, outer diameter 5 mm, working length 14 cm, for use with HOPKINS® II Telescope 28132 AA and KARL STORZ lens irrigation system CLEARVISION® and CLEARVISION® II
- ⑤ 28164 CBF **Irrigation Sheath**, outer diameter 5 mm, working length 14 cm, for use with HOPKINS® II Telescope 28132 FA/FVA and KARL STORZ lens irrigation system CLEARVISION® and CLEARVISION® II
- ⑥ 28164 CBC **Irrigation Sheath**, outer diameter 5 mm, working length 14 cm, for use with HOPKINS® II Telescope 28132 CA/CVA and KARL STORZ lens irrigation system CLEARVISION® and CLEARVISION® II

Approach Set – Probes, Elevators

- ⑦ 629820 **Probe**, double-ended, maxillary sinus ostium seeker, ball-shaped ends diameter 1.2 and 2 mm, length 19 cm
- ⑧ 628714 **KUHN-BOLGER Frontal Sinus Curette**, 90° curved, oval, forward cutting, length 19 cm
- ⑨ 479100 **COTTLE Elevator**, double-ended, semisharp and blunt, graduated, length 20 cm
- ⑩ 474000 **FREEER Elevator**, double-ended, semisharp and blunt, length 20 cm
- ⑪ 474001 **FREEER Suction Elevator**, with stylet, length 19 cm
- ⑫ 628001 **Sickle Knife**, pointed, length 19 cm

Forceps

- ⑬ 426516 **JANSEN Nasal Dressing Forceps**, bayonet-shaped, length 16.5 cm
- ⑭ 455010 **STRUYCKEN RHINOFORCE® II Nasal Cutting Forceps**, with cleaning connector, working length 13 cm
- ⑮ 455500 B **TAKAHASHI RHINOFORCE® Nasal Forceps**, straight, working length 13 cm
- ⑯ 451000 B **GRÜNWALD-HENKE RHINOFORCE® II Nasal Forceps**, straight, through-cutting, tissue-sparing, BLAKESLEY shape, size 0, width 3 mm, with cleaning connector, working length 13 cm
- ⑰ 451500 B **Same**, 45° upturned
- ⑱ 456000 B **BLAKESLEY RHINOFORCE® II Nasal Forceps**, straight, size 0, with cleaning connector, working length 13 cm
- ⑲ 459016 **STAMMBERGER Antrum Punch**, backward cutting, sheath 360° rotatable, with fixing screw, dismantling, working length 10 cm
- ⑳ 459036 **STAMMBERGER Antrum Punch**, small pediatric size, slender, backward cutting, sheath 360° rotatable, with fixing screw, dismantling, working length 10 cm
- ㉑ 459051 **STAMMBERGER Antrum Punch**, right side downward and forward cutting, working length 10 cm
- ㉒ 459052 **Same**, left side downward and forward cutting
- ㉓ 456511 B **BLAKESLEY-CASTELNUOVO RHINOFORCE® II Nasal Forceps**, end of sheath 25° upturned, jaws 45° angled upwards, width 3.5 mm, with cleaning connector, working length 13 cm
- ㉔ 452832 **RHINOFORCE® II Miniature Nasal Forceps**, with extra fine flat jaws, through-cutting, tissue-sparing, straight sheath, jaws upturned 45°, width of cut 1.5 mm, with cleaning connector, working length 13 cm
- ㉕ 649123 B **TAKAHASHI RHINOFORCE® II Ethmoid Forceps**, spoon size 4 x 10 mm, working length 16 cm

Suction and Irrigation Tubes

- ㉖ 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
- ㉗ 529207 **FRAZIER Suction Tube**, with cut-off hole and stylet, angled, outer diameter 7 Fr./2 mm, working length 10 cm, total length 17.5 cm

Expanded Endonasal Approach in Ventral Skull Base Surgery

Basic Set



KASSAM-SNYDERMAN Recommended Set

- (28) 586026 v. EICKEN **Antrum Cannula**, LUER-Lock, with cut-off hole, long curved, outer diameter 2.5 mm, length 12.5 cm
(29) 586031 **Same**, outer diameter 3 mm
(30) 586226 v. EICKEN **Antrum Cannula**, LUER-Lock, with cut-off hole, short curved, outer diameter 2.5 mm, length 12.5 cm
(31) 586241 **Same**, outer diameter 4 mm
(32) 641625 **Suction Tube**, for frontal sinus, with cut-off hole, LUER, outer diameter 2.5 mm, length 14.5 cm
(33) 649183 FERGUSON **Suction Tube**, with cut-off hole and stylet, LUER, 10 Fr., working length 15 cm
(34) 662885 FRANK-PASQUINI **Suction Tube**, angular, tip curved upwards, ball end, with grip plate and cut-off hole, LUER, diameter 3 mm, working length 13 cm
(35) 662886 **Same**, tip curved downwards

Scissors

- (36) 449201 **RHINOFORCE® II Nasal Scissors**, straight, with cleaning connector, working length 13 cm
(37) 449202 **Same**, curved to right
(38) 449203 **Same**, curved to left

KERRISON Bone Punches

- (39) 662101 KERRISON **Bone Punch**, detachable, rigid, 90° upbiting, not through-cutting, size 1 mm, working length 17 cm
(40) 662102 **Same**, size 2 mm
(41) 662112 KERRISON **Bone Punch**, detachable, rigid, 90° downbiting, not through-cutting, size 2 mm, working length 17 cm
(42) 28164 MKA KERRISON **Bone Punch**, detachable, rigid, upbiting 60° forward, size 1 mm, working length 17 cm
(43) 28164 MKB **Same**, size 2 mm
(44) 662120 KERRISON **Bone Punch**, detachable, rigid, upbiting 40° forward, size 0.7 mm, working length 17 cm

Resection Phase – Cupped Forceps

- (45) 662202 **Forceps**, straight, extra delicate, oval cupped jaws, width 0.6 mm, working length 15 cm
(46) 662203 **Same**, curved to right
(47) 662204 **Same**, curved to left
(48) 662205 **Same**, 45° upturned
(49) 28164 TD **Forceps**, round cupped jaws, diameter 0.6 mm, straight, extra delicate, working length 18 cm
(50) 28164 TE **Forceps**, oval cupped jaws, diameter 0.6 mm, curved to right, extra delicate, working length 18 cm
(51) 28164 TF **Same**, curved to left
(52) 28164 TA **Forceps**, oval cupped jaws, diameter 0.9 mm, upturned, extra delicate, working length 18 cm

Through-cutting Forceps “Gardeners”

- (53) 662251 **Miniature Forceps**, straight, through-cutting, with fine flat jaws, width of cut 1 mm, working length 15 cm
(54) 662255 **Same**, curved to right
(55) 662256 **Same**, curved to left
(56) 662257 **Same**, curved upwards
(57) 28164 GS **Miniature Forceps**, straight, through-cutting, with fine flat jaws, bite 1 mm, working length 18 cm
(58) 28164 GR **Same**, curved to right
(59) 28164 GL **Same**, curved to left
(60) 28164 GU **Same**, curved upwards
(61) 662271 **Grasping Forceps**, straight, fine serrated, working length 15 cm

Scissors

- (62) 662300 **Scissors**, straight, working length 15 cm
(63) 662301 **Scissors**, straight, extra delicate, working length 15 cm
(64) 662304 **Same**, curved to right
(65) 662305 **Same**, curved to left
(66) 662307 **Same**, 45° curved upwards
(67) 663300 **Scissors**, straight, working length 18 cm
(68) 28164 MZB **Scissors**, straight, with small handle, with cleaning connector, working length 18 cm
(69) 28164 MZC **Same**, curved to right
(70) 28164 MDZ **Same**, curved to left
(71) 28164 MZE **Same**, angled upwards
(72) 28164 SAD **Scissors**, upturned 45°, delicate, sheath 360° rotatable, with cleaning connector, working length 18 cm

Expanded Endonasal Approach in Ventral Skull Base Surgery

Basic Set



KASSAM-SNYDERMAN Recommended Set

Micro Raspatories, Elevators and Scalpel

- ⑦ 28164 KK de DIVITIIS-CAPPABIANCA **Scalpel**, with retractable blade, length 23 cm including:
Handle
Outer Sheath
Micro Knife, sickle-shaped
Micro Knife, pointed
- ⑦ 28164 MC CASTELNUOVO **Elevator**, double-ended, blunt end angled, semisharp end slightly curved, graduated, length 26 cm
- ⑦ 28164 EL **Micro Raspatory**, single curved to left, width 2 mm, length 27 cm
- ⑦ 28164 ER **Same**, single curved to right
- ⑦ 28164 DR **Dissector**, bayonet-shaped, sharp, curved to right, length 24 cm
- ⑦ 28164 DL **Same**, curved to left

Suction Tubes

- ⑩ 663818 **Suction Tube**, angular, malleable, with round handle and cut-off hole, diameter 2 mm, working length 13 cm
- ⑧ 649179 B **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 4 Fr., working length 15 cm
- ⑧ 649179 C **Same**, working length 18 cm
- ⑧ 649180 B **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 6 Fr., working length 15 cm
- ⑧ 649180 C **Same**, working length 18 cm
- ⑧ 649182 B **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 8 Fr., working length 15 cm
- ⑧ 649182 C **Same**, working length 18 cm
- ⑧ 649183 B **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 10 Fr., working length 15 cm
- ⑧ 649183 C **Same**, working length 18 cm

Hemostasis

- ⑨ 28164 BDL **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, vertical closing, outer diameter 3.4 mm, working length 20 cm including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- ⑩ 28164 BDM **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- 28164 BDD **TAKE-APART® Bipolar Forceps**, width 2 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm (not illustrated) including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- 28164 BDG **TAKE-APART® TAN Bipolar Coagulation Forceps**, size 3.4 mm, working length 20 cm (not illustrated) including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- 26176 LA **Bipolar High Frequency Cord**, with 2x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm (not illustrated)
- 28164 BGK **Bipolar Forceps**, jaws curved upwards 45°, for bipolar coagulation of the skull base and pituitary surgery, working length 18 cm (not illustrated)
- 847002 A **Bipolar High Frequency Cord**, with 2x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB, length 450 cm (not illustrated)
- 452650 A **MONTGOMERY-YOUNGS RHINOFORCE® II Clip Applicator**, for endonasal endoscopic sphenopalatine artery ligation, with suction channel, handle with spring, straight, with cleaning connector, working length 13 cm, for use with Titanium Clips 8665 T (not illustrated)
- ⑨ 26167 FNS **KOH Ultramicro Needle Holder**, jaws curved to left, with tungsten carbide insert, straight handle, with disengagable ratchet, size 3 mm, length 20 cm
- 39351 J **Plastic Container for Sterilization and Storage**, perforated, with transparent lid, for two-level storage, external dimensions (w x d x h): 530 x 250 x 145 mm, for use with forceps and instruments. The plastic containers may be used for sterilization with steam, gas and plasma (not illustrated).

Expanded Endonasal Approach in Ventral Skull Base Surgery

Basic Set



KASSAM-SNYDERMAN Recommended Set

Starter Set

Telescopes

- ① 28132 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 28132 FVA **HOPKINS® II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side, fiber optic light transmission incorporated, color code: black
- ③ 28132 CVA **HOPKINS® II Lateral Telescope 70°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side, fiber optic light transmission incorporated, color code: yellow
- 495 ND **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 300 cm (not illustrated)

KARL STORZ CLEARVISION® II System

- 403341 01 **CLEARVISION® II**, lens irrigation system for endoscopes, power supply 100 – 240 VAC, 50/60 Hz (not illustrated)
including:
Mains Cord
One-Pedal Footswitch
Silicone Tubing Set, sterilizable
- ④ 28164 CBA **Irrigation Sheath**, outer diameter 5 mm, working length 14 cm, for use with HOPKINS® II Telescope 28132 AA and KARL STORZ lens irrigation system CLEARVISION® and CLEARVISION® II
- ⑤ 28164 CBF **Irrigation Sheath**, outer diameter 5 mm, working length 14 cm, for use with HOPKINS® II Telescope 28132 FA/FVA and KARL STORZ lens irrigation system CLEARVISION® and CLEARVISION® II
- ⑥ 28164 CBC **Irrigation Sheath**, outer diameter 5 mm, working length 14 cm, for use with HOPKINS® II Telescope 28132 CA/CVA and KARL STORZ lens irrigation system CLEARVISION® and CLEARVISION® II

Approach Set – Probes, Elevators

- ⑦ 629820 **Probe**, double-ended, maxillary sinus ostium seeker, ball-shaped ends diameter 1.2 and 2 mm, length 19 cm
- ⑧ 628714 **KUHN-BOLGER Frontal Sinus Curette**, 90° curved, oval, forward cutting, length 19 cm
- ⑨ 479100 **COTTLE Elevator**, double-ended, semisharp and blunt, graduated, length 20 cm
- ⑩ 474000 **FREEER Elevator**, double-ended, semisharp and blunt, length 20 cm
- ⑪ 474001 **FREEER Suction Elevator**, with stylet, length 19 cm
- ⑫ 628001 **Sickle Knife**, pointed, length 19 cm

Forceps

- ⑬ 426516 **JANSEN Nasal Dressing Forceps**, bayonet-shaped, length 16.5 cm
- ⑭ 455010 **STRUYCKEN RHINOFORCE® II Nasal Cutting Forceps**, with cleaning connector, working length 13 cm
- ⑮ 455500 B **TAKAHASHI RHINOFORCE® Nasal Forceps**, straight, working length 13 cm
- ⑯ 451000 B **GRÜNWALD-HENKE RHINOFORCE® II Nasal Forceps**, straight, through-cutting, tissue-sparing, BLAKESLEY shape, size 0, width 3 mm, with cleaning connector, working length 13 cm
- ⑰ 451500 B **Same**, 45° upturned
- ⑱ 456000 B **BLAKESLEY RHINOFORCE® II Nasal Forceps**, straight, size 0, with cleaning connector, working length 13 cm
- ⑲ 459016 **STAMMBERGER Antrum Punch**, backward cutting, sheath 360° rotatable, with fixing screw, dismantling, working length 10 cm
- ⑳ 459036 **STAMMBERGER Antrum Punch**, small pediatric size, slender, backward cutting, sheath 360° rotating, with fixing screw, dismantling, working length 10 cm
- ㉑ 456511 B **BLAKESLEY-CASTELNUOVO RHINOFORCE® II Nasal Forceps**, end of sheath 25° upturned, jaws 45° angled upwards, width 3.5 mm, with cleaning connector, working length 13 cm
- ㉒ 452832 **RHINOFORCE® II Miniature Nasal Forceps**, with extra fine flat jaws, through-cutting, tissue-sparing, straight sheath, jaws upturned 45°, width of cut 1.5 mm, with cleaning connector, working length 13 cm
- ㉓ 649123 B **TAKAHASHI RHINOFORCE® II Ethmoid Forceps**, spoon size 4 x 10 mm, with cleaning connector, working length 16 cm

Expanded Endonasal Approach in Ventral Skull Base Surgery

Basic Set



KASSAM-SNYDERMAN Recommended Set

Cannulas

- ㉖ 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
㉗ 529207 FRAZIER **Suction Tube**, with cut-off hole and stylet, angled, outer diameter 7 Fr./2 mm, working length 10 cm, total length 17.5 cm
㉙ 586031 v. EICKEN **Antrum Cannula**, LUER-Lock, with cut-off hole, long curved, outer diameter 3 mm, length 12.5 cm
㉚ 586226 v. EICKEN **Antrum Cannula**, LUER-Lock, with cut-off hole, short curved, outer diameter 2.5 mm, length 12.5 cm
㉛ 586241 **Same**, outer diameter 4 mm
㉜ 641625 **Suction Tube**, for frontal sinus, with cut-off hole, LUER, outer diameter 2.5 mm, length 14.5 cm
㉝ 649183 FERGUSON **Suction Tube**, with cut-off hole and stylet, LUER, 10 Fr., working length 15 cm
㉞ 662885 FRANK-PASQUINI **Suction Tube**, angular, tip curved upwards, ball end, with grip plate and cut-off hole, LUER, diameter 3 mm, working length 13 cm
㉟ 662886 **Same**, tip curved downwards

Scissors

- ㉟ 449201 RHINOFORCE® II **Nasal Scissors**, straight, with cleaning connector, working length 13 cm
㉟ 449202 **Same**, curved to right
㉟ 449203 **Same**, curved to left

KERRISON Punches

- ㉟ 662101 KERRISON **Bone Punch**, detachable, rigid, 90° upbiting, not through-cutting, size 1 mm, working length 17 cm
㉟ 662102 **Same**, size 2 mm
㉟ 662112 KERRISON **Bone Punch**, detachable, rigid, 90° downbiting, not through-cutting, size 2 mm, working length 17 cm
㉟ 28164 MKA KERRISON **Bone Punch**, detachable, rigid, upbiting 60° forward, size 1 mm, working length 17 cm
㉟ 28164 MKB **Same**, size 2 mm
㉟ 662120 KERRISON **Bone Punch**, detachable, rigid, upbiting 40° forward, size 0.7 mm, working length 17 cm
㉟ 651521 **Frontal Sinus Punch**, with link chain sheath 70° upturned, backward cutting, to reduce the spina nasalis superior, small, jaws 2.5 x 2 mm, working length 13 cm (not illustrated)
㉟ 651522 **Same**, medium (standard size), jaws 3.5 x 3 mm (not illustrated)

Resection Phase – Cuffed Forceps

- ㉟ 662202 **Forceps**, straight, extra delicate, oval cuffed jaws, width 0.6 mm, working length 15 cm
㉟ 662205 **Same**, 45° upturned
㉟ 28164 TD **Forceps**, round cuffed jaws, diameter 0.6 mm, straight, extra delicate, working length 18 cm

Through-cutting Forceps “Gardeners”

- ㉟ 662251 **Miniature Forceps**, straight, through-cutting, width of cut 1 mm, working length 15 cm
㉟ 662257 **Same**, curved upwards
㉟ 662271 **Grasping Forceps**, straight, fine serrated, working length 15 cm

Scissors

- ㉟ 28164 MZB **Scissors**, straight, with small handle, with cleaning connector, working length 18 cm
㉟ 28164 MZC **Same**, curved to right
㉟ 28164 MZD **Same**, curved to left
㉟ 28164 MZE **Same**, angled upwards
㉟ 28164 SAD **Scissors**, upturned 45°, delicate, sheath 360° rotatable, with cleaning connector, working length 18 cm

Expanded Endonasal Approach in Ventral Skull Base Surgery

Basic Set



KASSAM-SNYDERMAN Recommended Set

Micro Raspatories, Elevators and Scalpels

- (8) 28164 KK de DIVITIIS-CAPPABIANCA **Scalpel**, with retractable blade, length 23 cm including:
Handle
Outer Sheath
Micro Knife, sickle-shaped
- (74) 28164 MC **Micro Knife**, pointed
- (75) 28164 EC CASTELNUOVO **Elevator**, double-ended, blunt end angled, semisharp end slightly curved, graduated, length 26 cm
- (76) 28164 EL **Micro Raspatory**, single curved to left, width 2 mm, length 27 cm
- (77) 28164 ER **Same**, single curved to right
- (78) 28164 DR **Dissector**, bayonet-shaped, sharp, curved to right, length 24 cm
- (79) 28164 DL **Same**, curved to left

Suction Tubes

- (80) 663818 **Suction Tube**, angular, malleable, with round handle and cut-off hole, diameter 2 mm, working length 13 cm
- (81) 649179 B **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 4 Fr., working length 15 cm
- (83) 649180 B **Same**, 6 Fr.
- (85) 649182 B **Same**, 8 Fr.
- (87) 649183 B **Same**, 10 Fr.

Hemostasis

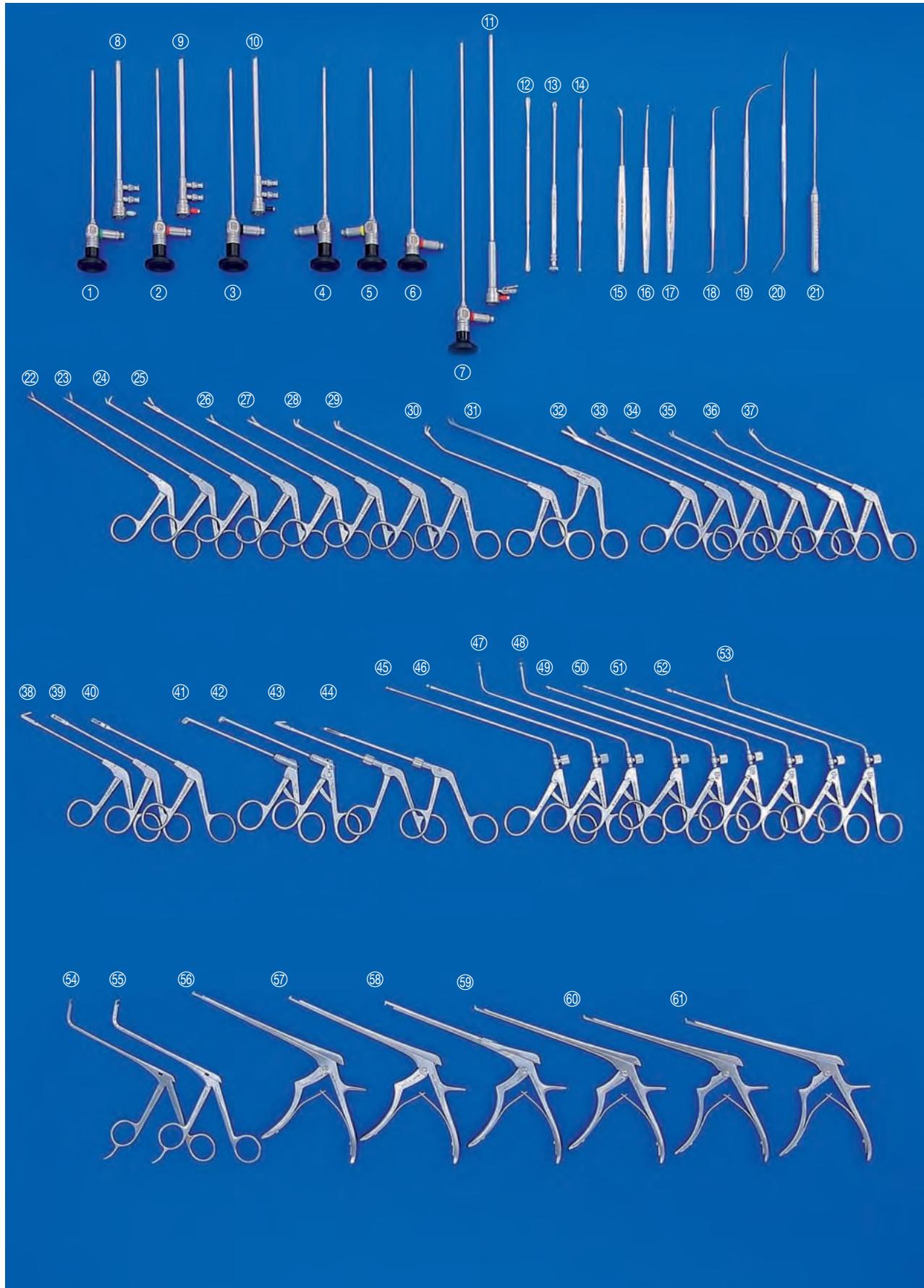
- (88) 28164 BDL **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, vertical closing, outer diameter 3.4 mm, working length 20 cm including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- (90) 28164 BDM **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- 28164 BDD **TAKE-APART® Bipolar Forceps**, width 2 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm (not illustrated) including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- 28164 BDG **TAKE-APART® TAN Bipolar Coagulation Forceps**, size 3.4 mm, working length 20 cm (not illustrated) including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert
- 26176 LA **Bipolar High Frequency Cord**, with 2x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm (not illustrated)
- 28164 BGK **Bipolar Forceps**, jaws curved upwards 45°, for bipolar coagulation of the skull base and pituitary surgery, working length 18 cm (not illustrated)
- 847002 A **Bipolar High Frequency Cord**, with 2x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB, length 450 cm (not illustrated)
- 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 (not illustrated)
- (91) 26167 FNS **KOH Ultramicro Needle Holder**, jaws curved to left, with tungsten carbide insert, straight handle, with disengageable ratchet, size 3 mm, length 20 cm
- 39351 J **Plastic Container for Sterilization and Storage**, perforated, with transparent lid, for two-level storage, external dimensions (w x d x h): 530 x 250 x 145 mm, for use with forceps and instruments. The plastic containers may be used for sterilization with steam, gas and plasma (not illustrated).

Endoscopic Pituitary and Skull Base Surgery

Basic Set (Fig. 1)

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 7

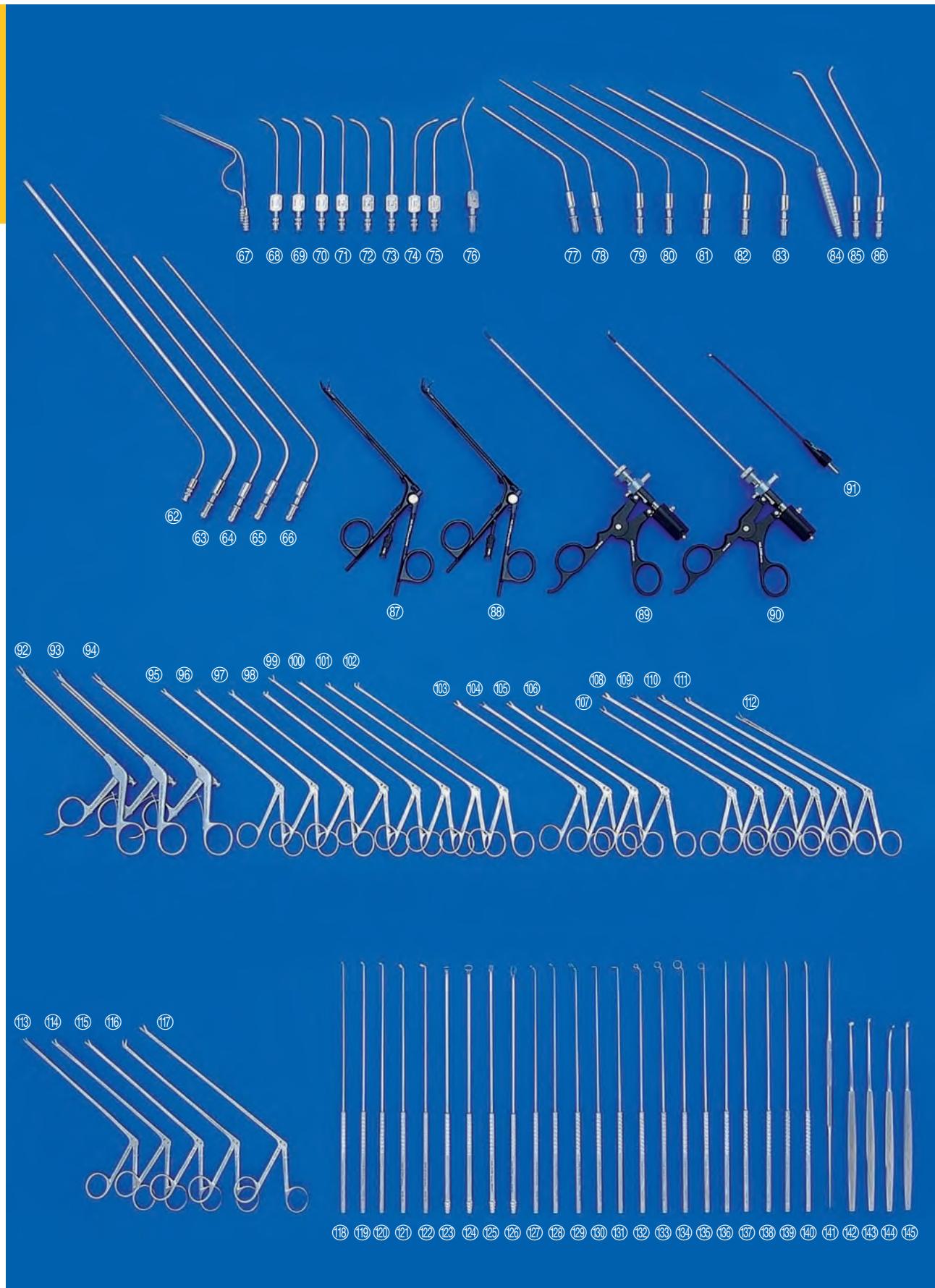


Endoscopic Pituitary and Skull Base Surgery

Basic Set (Fig. 2)

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 7



Endoscopic Pituitary and Skull Base Surgery

Basic Set



SCHWARTZ-ANAND Recommended Set

- ① 28132 AA **HOPKINS®II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ② 28132 BA **HOPKINS®II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ③ 28132 FA **HOPKINS®II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ④ 28132 FVA **HOPKINS®II Forward-Oblique Telescope 45°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side
- ⑤ 28132 CVA **HOPKINS®II Lateral Telescope 70°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side
- ⑥ 7219 BA **HOPKINS®II Forward-Oblique Telescope 30°**, diameter 2.7 mm, length 18 cm, **autoclavable**
- 28164 AA **HOPKINS®II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable** (not illustrated)
- ⑦ 28164 BA **HOPKINS®II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 30 cm, **autoclavable**
- 28272 RKB **Holding System**, **autoclavable** (not illustrated)
- ⑧ 7230 AS **Suction and Irrigation Sheath 0°**, outer diameter 4.8 x 6 mm, working length 14 cm, for use with HOPKINS®II Telescope 28132 AA
- ⑨ 7230 BS **Suction and Irrigation Sheath 30°**, for use with HOPKINS®II Telescope 28132 BA
- ⑩ 7230 FS **Suction and Irrigation Sheath 45°**, for use with HOPKINS®II Telescope 28132 FA/FVA
- ⑪ 28164 BSA **Irrigation Sheath**, outer diameter 5 mm, working length 24 cm, for use with HOPKINS®II Telescope 28164 BA
- ⑫ 474000 **FREEER Elevator**, double-ended, semisharp and blunt, length 20 cm
- ⑬ 474001 **FREEER Suction Elevator**, with stylet, length 19 cm
- ⑭ 479100 **COTTLE Elevator**, double-ended, semisharp and blunt, graduated, length 20 cm
- ⑮ 628001 **Sickle Knife**, pointed, length 19 cm
- ⑯ 628712 **KUHN-BOLGER Frontal Sinus Curette**, 55° curved, oval, forward cutting, length 19 cm
- ⑰ 628714 **Same**, 90° curved
- ⑱ 629820 **Probe**, double-ended, ball-shaped ends diameter 1.2 and 2 mm, length 19 cm
- ⑲ 629830 **KUHN Frontal Ostium Seeker**, double-ended, No. 6, both sides curved 77°, one tip straight, other tip reverse angle, length 22 cm
- ⑳ 28164 EC **CASTELNUOVO Elevator**, double-ended, blunt end angled, semisharp end slightly curved, graduated, length 26 cm
- ㉑ 28164 KK **de DIVITIIS-CAPPABIANCA Scalpel**, with retractable blade, length 23 cm
- ㉒ 649100 B **BLAKESLEY RHINOFORCE®II Ethmoid Forceps**, straight, size 0, with cleaning connector, working length 16 cm
- ㉓ 649101 B **Same**, size 1
- ㉔ 649110 B **BLAKESLEY-WILDE RHINOFORCE®II Ethmoid Forceps**, 45° curved upwards, size 0, with cleaning connector, working length 16 cm
- ㉕ 649123 B **TAKAHASHI RHINOFORCE®II Ethmoid Forceps**, spoon size 4 x 10 mm, with cleaning connector, working length 16 cm
- ㉖ 451000 B **GRÜNWALD-HENKE RHINOFORCE®II Nasal Forceps**, straight, through-cutting, BLAKESLEY shape, size 0, width 3 mm, with cleaning connector, working length 13 cm
- ㉗ 451001 B **Same**, size 1, width 3.5 mm
- ㉘ 451500 B **Same**, 45° upturned
- ㉙ 451501 B **Same**, 45° upturned, size 1, width 3.5 mm
- ㉚ 451510 B **CASTELNUOVO RHINOFORCE®II Nasal Forceps**, end of sheath 25° upturned, through-cutting, jaws 45° upturned, BLAKESLEY shape, width 3 mm, working length 13 cm
- ㉛ 451521 **GRÜNWALD-HENKE SilCut® Nasal Cutting Forceps**, 45° upturned, BLAKESLEY shape, size 1, with cleaning connector, working length 13 cm
- 451021 **Same**, straight (not illustrated)
- ㉜ 455010 **STRUYCKEN RHINOFORCE®II Nasal Cutting Forceps**, with cleaning connector, working length 13 cm
- ㉝ 455500 B **TAKAHASHI RHINOFORCE® Nasal Forceps**, straight, working length 13 cm
- ㉞ 452831 **RHINOFORCE®II Miniature Nasal Forceps**, with extra fine flat jaws, through-cutting, straight sheath, straight jaws, width of cut 1.5 mm, with cleaning connector, working length 13 cm
- ㉟ 452832 **Same**, jaws 45° upturned
- ㉟ 452833 **Same**, sheath curved 30°
- ㉟ 452834 **Same**, sheath curved 30°, jaws 45° upturned
- ㉟ 459010 **STAMMBERGER RHINOFORCE®II Antrum Punch**, upside backward cutting, with cleaning connector, working length 10 cm
- ㉟ 459011 **Same**, right side backward cutting
- ㉟ 459012 **Same**, left side backward cutting
- ㉟ 459051 **STAMMBERGER Antrum Punch**, right side downward and forward cutting, working length 10 cm
- ㉟ 459052 **Same**, left side downward and forward cutting
- ㉟ 459016 **STAMMBERGER Antrum Punch**, backward cutting, sheath 360° rotatable, with fixing screw, dismantling, working length 10 cm, for use with Cleaning Adaptor 459015 LL
- ㉟ 459036 **Same**, small pediatric size, slender
- ㉟ 651055 **STAMMBERGER Punch**, circular cutting, for sphenoid, ethmoid and choanal atresia, diameter 3.5 mm, with cleaning connector, working length 18 cm
- ㉟ 651050 **Same**, diameter 4.5 mm
- ㉟ 651060 **STAMMBERGER Punch**, circular cutting, 65° upturned, for frontal sinus recess, diameter 3.5 mm, with cleaning connector, working length 17 cm
- ㉟ 651065 **Same**, diameter 4.5 mm

Endoscopic Pituitary and Skull Base Surgery

Basic Set



SCHWARTZ-ANAND Recommended Set

- ④9 651057 STAMMBERGER **Punch**, 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
- ⑤0 651058 **Same**, 120° cutting direction from distal below to proximal above
- ⑤1 651053 **Same**, 120° cutting direction from distal below to proximal above, tip diameter 4.5 mm
- ⑤2 651052 **Same**, tip diameter 4.5 mm
- ⑤3 651066 STAMMBERGER **Punch**, egg-shaped tip, circular cut, 90° cutting direction, tip diameter 4.5 mm, sheath 65° upturned, for frontal sinus recess, with cleaning connector, working length 17 cm
- ⑤4 651521 **Frontal Sinus Punch**, with link chain sheath 70° upturned, backward cutting, to reduce the spina nasalis superior, small, jaws 2.5 x 2 mm, working length 13 cm
- ⑤5 651522 **Same**, medium (standard size), jaws 3.5 x 3 mm
- ⑤6 662101 KERRISON **Bone Punch**, detachable, rigid, 90° upbiting, not through-cutting, size 1 mm, working length 17 cm
- ⑤7 662102 **Same**, size 2 mm
- ⑤8 662112 **Same**, 90° downbiting, not through-cutting, size 2 mm
- ⑤9 662120 **Same**, upbiting 40° forward, size 0.7 mm
- ⑥0 28164 MKA KERRISON **Bone Punch**, detachable, rigid, upbiting 60° forward, size 1 mm, working length 17 cm
- ⑥1 28164 MKB **Same**, size 2 mm
- ⑥2 10383 B **Suction Tube**, with cut-off hole, diameter 3 mm, working length 35 cm
- ⑥3 10383 BL **Same**, diameter 5.5 mm
- ⑥4 10380 C **Suction Tube**, diameter 2 mm, working length 25 cm
- ⑥5 10383 D **Suction Tube**, with cut-off hole, diameter 3 mm, working length 25 cm
- ⑥6 10383 E **Same**, diameter 4 mm
- ⑥7 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
- ⑥8 586025 v. EICKEN **Antrum Cannula**, LUER-Lock, long curved, outer diameter 2.5 mm, length 12.5 cm
- ⑥9 586030 **Same**, outer diameter 3 mm
- ⑦0 586040 **Same**, outer diameter 4 mm
- ⑦1 586226 v. EICKEN **Antrum Cannula**, LUER-Lock, with cut-off hole, short curved, outer diameter 2.5 mm, length 12.5 cm
- ⑦2 586031 **Same**, long curved, outer diameter 3 mm
- ⑦3 586241 **Same**, outer diameter 4 mm
- ⑦4 586125 v. EICKEN **Antrum Cannula**, LUER-Lock, long curved, malleable, serrated grip plate, outer diameter 2.5 mm, length 12.5 cm
- ⑦5 586130 **Same**, outer diameter 3 mm
- ⑦6 641625 **Suction Tube**, for frontal sinus, with cut-off hole, LUER, outer diameter 2.5 mm, length 14.5 cm
- ⑦7 529309 FRAZIER **Suction Tube**, with mandrel and cut-off hole, with distance marking at 5 – 9 cm, 9 Fr., working length 10 cm
- ⑦8 529207 FRAZIER **Suction Tube**, with cut-off hole and stylet, angled, outer diameter 7 Fr./2 mm, working length 10 cm, total length 17.5 cm
- ⑦9 649183 FERGUSON **Suction Tube**, with cut-off hole and stylet, LUER, 10 Fr., working length 15 cm
- ⑧0 649179 B **Suction Tube**, malleable, with elongated cut-off hole and stylet, LUER, 4 Fr., working length 15 cm
- ⑧1 649180 B **Same**, 6 Fr.
- ⑧2 649182 B **Same**, 8 Fr.
- ⑧3 649183 B **Same**, 10 Fr.
- ⑧4 663818 **Suction Tube**, angular, malleable, with round handle and cut-off hole, diameter 2 mm, working length 13 cm
- ⑧5 662885 FRANK-PASQUINI **Suction Tube**, angular, tip curved upwards, ball end, with grip plate and cut-off hole, LUER, diameter 3 mm, working length 13 cm
- ⑧6 662886 **Same**, tip curved downwards
- ⑧7 461010 STAMMBERGER **Bipolar Suction Forceps**, 15° upturned, with suction channel, working length 12.5 cm
- ⑧8 461015 **Same**, 45° upturned
- 28164 BDG TAKE-APART® TAN **Bipolar Coagulation Forceps**, size 3.5 mm, working length 20 cm (not illustrated)
- 28164 BDD TAKE-APART® **Bipolar Forceps**, width 2 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm (not illustrated)
- ⑧9 28164 BDL **Same**, with fine jaws, width 1 mm, vertical closing
- ⑨0 28164 BDM **Same**, with fine jaws, width 1 mm
- 28164 ED **Coagulating Ball Electrode**, diameter 2 mm, laterally curved, working length 13 cm (not illustrated)
- ⑨1 28164 EF **Same**, diameter 4 mm
- ⑨2 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
- ⑨3 452650 C **Same**, jaws angled to the right
- ⑨4 452650 D **Same**, jaws angled to the left

Endoscopic Pituitary and Skull Base Surgery

Basic Set



SCHWARTZ-ANAND Recommended Set

- ⑨ 662202 **Forceps**, straight, extra delicate, oval cupped jaws, width 0.6 mm, working length 15 cm
⑩ 662203 **Same**, curved to right
⑪ 662204 **Same**, curved to left
⑫ 662205 **Same**, 45° upturned
⑬ 28164 TD **Forceps**, round cupped jaws, diameter 0.6 mm, straight, extra delicate, working length 18 cm
⑭ 28164 TE **Forceps**, oval cupped jaws, diameter 0.6 mm, curved to right, extra delicate, working length 18 cm
⑮ 28164 TF **Same**, curved to left
⑯ 28164 TA **Forceps**, oval cupped jaws, diameter 0.9 mm, upturned, extra delicate, working length 18 cm
⑰ 662251 **Miniature Forceps**, straight, through-cutting, with fine flat jaws, width of cut 1 mm, working length 15 cm
⑱ 662255 **Same**, curved to right
⑲ 662256 **Same**, curved to left
⑳ 662257 **Same**, curved upwards
㉑ 662271 **Grasping Forceps**, straight, fine serrated, working length 15 cm
㉒ 28164 GS **Miniature Forceps**, straight, through-cutting, with fine flat jaws, width of cut 1 mm, working length 18 cm
㉓ 28164 GR **Same**, curved to right
㉔ 28164 GL **Same**, curved to left
㉕ 28164 GU **Same**, curved upwards
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 662307 **Same**, 45° curved upwards
㉛ 663300 **Scissors**, straight, working length 18 cm
㉜ 28164 KA **Curette**, round spoon, tip slightly angled, size 1 mm, with round handle, length 25 cm
㉝ 28164 KB **Curette**, round spoon, tip slightly angled, size 2 mm, with round handle, length 25 cm
㉞ 28164 KC **Curette**, round spoon, tip slightly angled, size 3 mm, with round handle, length 25 cm
㉟ 28164 KF **Same**, tip highly angled, size 2 mm
㉟ 28164 KG **Same**, tip highly angled
㉟ 28164 RSB **CAPPABIANCA-de DIVITIIS Suction Curette**, blunt, inner diameter 5 mm, tip angled 45°, LUER, length 25 cm
㉟ 28164 RSC **Same**, inner diameter 7 mm
㉟ 28164 RT **CAPPABIANCA-de DIVITIIS Suction Curette**, with basket, round, size 5 mm, rotatable tube, LUER, length 25 cm
㉟ 28164 RU **Same**, size 6.5 mm
㉟ 28164 RN **CAPPABIANCA-de DIVITIIS Ring Curette**, with round wire, inner diameter 3 mm, tip angled 45°, with round handle, length 25 cm
㉟ 28164 RO **Same**, inner diameter 5 mm
㉟ 28164 RP **Same**, inner diameter 7 mm
㉟ 28164 RG **CAPPABIANCA-de DIVITIIS Ring Curette**, with round wire, inner diameter 5 mm, tip angled 90°, with round handle, length 25 cm
㉟ 28164 RH **Same**, inner diameter 7 mm
㉟ 28164 RB **CAPPABIANCA-de DIVITIIS Ring Curette**, with round wire, inner diameter 3 mm, laterally curved sheath end, with round handle, length 25 cm
㉟ 28164 RA **Same**, inner diameter 5 mm
㉟ 28164 RC **Same**, inner diameter 7 mm
㉟ 28164 RD **CAPPABIANCA-de DIVITIIS Ring Curette**, with round wire, inner diameter 5 mm, laterally curved sheath end 90°, with round handle, length 25 cm
㉟ 28164 DA **Dissector**, sharp, tip angled 45°, round spatula, with round handle, size 2 mm, length 25 cm
㉟ 28164 DB **Same**, size 3 mm
㉟ 28164 DF **Dissector**, sharp, tip angled 15°, flat long spatula, with round handle, size 1.5 mm, length 25 cm
㉟ 28164 DS **Dissector**, sharp, tip angled 15°, with round handle, size 2 mm, length 25 cm
㉟ 28164 DM **Same**, straight tip, slightly curved spatula, size 3 mm
㉟ 28164 EA **CASTELNUOVO Elevator**, double-ended, semisharp and blunt, length 26 cm
㉟ 628701 **Antrum Curette**, round, length 19 cm
㉟ 628702 **Antrum Curette**, oblong, small, length 19 cm
㉟ 628703 **Same**, large
㉟ 628712 **KUHN-BOLGER Frontal Sinus Curette**, 55° curved, oval, forward cutting, length 19 cm

Percutaneous Endoscopic Cervical Discectomy

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 8



Percutaneous Endoscopic Cervical Discectomy

Basic Set



HELLINGER Recommended Set

- ① 28163 PK **Puncture Needle**, including stylet, diameter 1.7 mm, working length 9 cm, with 1.4 mm opening for guide wire
- ② 28163 KD **Guide Wire**, unsterile, diameter 1.2 mm, length 31 mm, package of 10
- ③ 2x 28163 LH **Dilation Sleeve**, graduated, diameter 3 mm, working length 18 cm, with 1.5 mm opening for guide wire
- ④ 28163 HG **Dilation Rod**, graduated, diameter 5.3 mm, working length 16 cm, with 3.1 mm opening for Dilation Sleeve 28163 LH
- ⑤ 28163 KAB **Expansion Sheath**, diameter 6.5 mm, with handle and LUER connection, distal two dilation extensions, straight
- ⑥ 28163 KBB **Same**, distal 45° inclination
- ⑦ 28163 KCB **Same**, distal with two dilation extensions, oblique
- ⑧ 28163 KDB **Same**, distal with one dilation extension, oblique
- ⑨ 28163 CM **COTTE Metal Mallet**, with Nylon replacement, length 22.5 cm
- ⑩ 28163 PCD **PECD Endoscope 8°**, angled eyepiece, outer diameter 3.3 x 4.7 mm, working length 12 cm, **autoclavable**, with fiber optic light transmission incorporated and straight working channel diameter 2.5 mm, with Wire Tray 39501 XP
color code: green
- ⑪ 28163 UHK **CLICKliné Spoon Forceps**, rotating, single action jaws, size 2.5 mm, length 25 cm
- ⑫ 28163 UHM **CLICKliné Spoon Forceps**, oval, rotating, single action jaws, size 2 mm, length 25 cm
- ⑬ 28163 EHK **Hook Scissors**, single action jaws, diameter 2.7 mm, working length 25 cm
- ⑭ 28163 ZSH **Biopsy Forceps**, double action jaws, diameter 1.7 mm, working length 25 cm
- ⑮ 28163 FSH **Grasping Forceps**, double action jaws, diameter 1.7 mm, working length 25 cm
- ⑯ 28163 UHH **Palpation Hook**, distally angled 45°, diameter 2 mm, working length 25 cm
- ⑰ 28163 UHO **Palpation Hook**, distally angled 90°, with ball, diameter 2 mm, working length 25 cm
- ⑱ 28163 UOH **Palpation Hook**, distal end 90°, with ball end, hook length 4 mm, diameter 2 mm, working length 26 cm
- ⑲ 28762 KBH **Bipolar Coagulation Electrode**, rigid, diameter 1.7 mm, working length 25 cm
- ⑳ 28163 SRH **Suction Tube**, FREIBURG model, angular, distal end with olive, with cut-off-hole and grip plate, LUER, diameter 2.5 mm, working length 25 cm
- ㉑ 28163 TKS **Trephine**, diameter 2.5 mm, working length 18 cm
- ㉒ 28163 TKK **Same**, diameter 3.5 mm

Recommended Container for Sterilization:

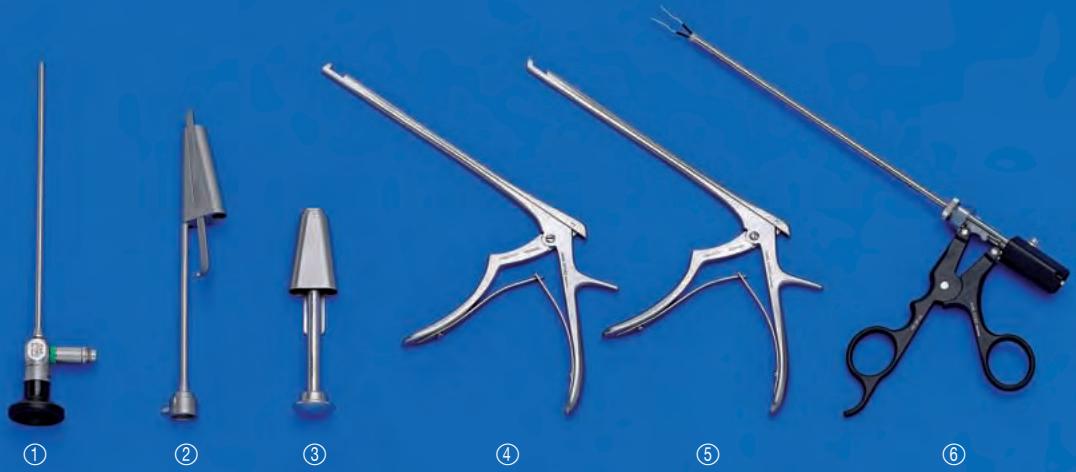
Instruments: 39360 AK

ENDOSPINE® Endoscopic Cervical Discectomy, Anterior/Posterior Access

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 8



ENDOSPINE® Endoscopic Cervical Discectomy, Anterior/Posterior Access

Basic Set



DESTANDAU Recommended Set

- ① 28095 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 28163 DXH DESTANDAU **ENDOSPINE® Working Insert**, with positioning detent, with adjustable Nerve Protector 28163 DPH, for use with ENDOSPINE® Operating Tube 28163 DW, with working channel diameter 8 mm and irrigation channel, for use with HOPKINS® II Telescope 28095 AA
- ③ 28163 DW DESTANDAU **ENDOSPINE® Operating Tube**, oval, with Obturator 28163 DO, for use with Working Insert 28163 DXH
- ④ 28163 DL **Bone Punch**, dismantling, 90° upbiting, not through-cutting, 3 mm, working length 18 cm
- ⑤ 28163 DF **Bone Punch**, dismantling, upbiting 45° forward, not through-cutting, 3 mm, working length 18 cm
- ⑥ 28163 DZ **TAKE-APART® MANHES Coagulation Forceps**, with connector pin for bipolar coagulation, width of jaws 1 mm, diameter 5 mm, working length 20 cm
- ⑦ 28163 DC **Spoon Forceps**, dismantling, robust, oval, single action jaws, spoon size 3 x 10 mm, working length 15 cm
- ⑧ 28163 DSS **Scissors**, straight, extra delicate, working length 15 cm
- ⑨ 2x 755120 **HALLE-BIRKETT Forceps**, slender, straight, length 20 cm
- ⑩ 2x 535212 **HALSTEAD "Mosquito" Artery Forceps**, curved, length 12.5 cm
- ⑪ 515515 **CRILE-WOOD Needle Holder**, length 15 cm
- ⑫ 512618 **METZENBAUM Scissors**, with tungsten carbide inserts, curved, length 18 cm
- ⑬ 792003 **MAYO Scissors**, curved, length 15 cm
- ⑭ 28163 DNN **Elevator**, spatula slightly curved, distal width 5 mm, working length 13 cm
- ⑮ 28163 DHB **Ball Probe**, diameter 4 mm, straight, working length 13 cm
- ⑯ 28163 DHD **Palpation Hook**, blunt, distal double curved, working length 13 cm
- ⑰ 28163 DHN **Palpation Hook**, blunt, distally angled 90°, hook length 5.5 mm, working length 13 cm
- ⑱ 208100 **Surgical Handle**, Fig. 4, length 13.5 cm
- 2x 28163 DRG **ENDOSPINE® Retractor Blade**, conical, length 5 cm, for use with ENDOSPINE® Operating Tube 28163 DW and 28163 DWS (not illustrated)
- ⑲ 2x 801910 **MICCOLI Retractor**, double-ended, size 35 x 10 mm and 21 x 10 mm, length 16 cm
- ⑳ 28163 DU **FERGUSON Suction Tube**, angled, with cut-off hole, diameter 3.7 mm, working length 11 cm
- ㉑ 2x 810820 **Cup Medicine**, 200 cm³, diameter 100 mm, height 50 mm
- ㉒ 28163 DLD **Cervical Localization Device**

Recommended Container for Sterilization:

Instruments: 39771 A and 39360 AK

Thoracoscopic Spondylodesis

Basic Set



Thoracoscopic Spondylodesis

Basic Set

OLINGER-HILDEBRANDT Recommended Set

- ① 26003 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 10 mm, length 31 cm, autoclavable, fiber optic light transmission incorporated, color code: red
- ② 28163 MB **Biopsy and Grasping Forceps**, with central suction channel in the forceps sheath, with cleaning stylet, straight, working length 36 cm, for use with trocar size 6 mm
- ③ 30444 LR **Clip Applicator**, dismantling, rotating, size 10 mm, length 36 cm, for PILLING-WECK Titanium Clips 30460 AL (medium-large), with ratchet to lock the jaw holding the clip
- ④ 40160 CD **Trocar**, size 6 mm
- ⑤ 40103 GD **Plastic Trocar**, size 11 mm
- ⑥ 40103 HX **Plastic Trocar**, size 11 mm
- ⑦ 33321 ML **CLICKliné KELLY Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, long, size 5 mm, length 36 cm
- ⑧ 34321 MA **CLICKliné Scissors**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, serrated, curved, spoon-shaped blades, size 5 mm, length 36 cm
- ⑨ 26276 HD **TAKE-APART® MANHES Bipolar Coagulation Forceps**, width of jaws 3 mm, size 5 mm, length 33 cm
- ⑩ 26775 UF **Coagulation and Dissecting Electrode**, L-shaped, with connector pin for unipolar coagulation, size 5 mm, length 36 cm
- ⑪ 28163 FP **Fan Retractor**, dismantling, distendable, size 10 mm, length 30 cm
- ⑫ 26173 BN **Suction and Irrigation Tube**, with lateral holes, with two-way stopcock for single hand control, size 5 mm, length 36 cm
- ⑬ 28175 YR **OLSEN Suction or Irrigation Tube**, with protective basket, with trumpet valve, size 10 mm, length 36 cm
- ⑭ 28163 PKG **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 90° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm
- ⑮ 28163 PKS **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 40° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm
- ⑯ 28163 PGG **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 90° upbiting, not through-cutting, 5 mm, round sheath diameter 10 mm, working length 30 cm
- ⑰ 28163 RKG **Rongeur**, dismantling, graduated scale at the distal end, jaw 5 mm, round sheath diameter 10 mm, working length 30 cm
- ⑱ 28163 RGG **Same**, jaw 8 mm
- ⑲ 26173 KL **KOH Macro Needle Holder**, with tungsten carbide insert, ergonomic handle with ratchet, ratchet position on top, jaws curved left, size 5 mm, length 33 cm, for use with suture material size 0/0 to 7/0 and needle sizes BV, SH or CT-1
- ⑳ 26173 KC **Same**, ratchet position underneath, jaws curved to right
- ㉑ 28163 MF **Raspatory**, for dissection, size 7 mm, working length 30 cm
- ㉒ 28163 WF **Curette**, sharp, spoon-shaped, oval, 5.5 x 7.5 mm, working length 30 cm
- ㉓ 28163 WC **Curette**, sharp, spoon-shaped, oval, 3.5 x 5 mm, working length 30 cm
- ㉔ 28163 WG **Ring Curette**, graduated, distal end slightly curved, size 10 mm, ring size diameter 6 mm, working length 30 cm
- ㉕ 28163 WN **Same**, ring size diameter 8 mm
- ㉖ 28163 RP **Rasp**, for coarsening the bone surface, size 10 mm, working length 30 cm
- ㉗ 28163 MM **Chisel**, graduated, double-edged grinding, straight, size 10 mm, working length 30 cm
- ㉘ 28163 MN **Same**, size 7 mm
- ㉙ 28163 MS **Tappet**, blunt, grooved, for positioning the bone implant, size 10 mm, working length 30 cm
- ㉚ 28163 WH **Hook**, 90°, blunt, working length 30 cm
- ㉛ 28163 SBK **Clamp**, stirrup-shaped, for straightening end plates, size 10 mm, working length 30 cm
- ㉜ 28163 MK **Collar**, for deflecting the mallet, for use with Chisel 28163 MM
- ㉝ 28163 WZ **Distance Measuring Instrument**, with cm-markings and cm-slots for radiologic measurement, for monosegmental measuring, 5 cm
- ㉞ 28163 WX **Same**, for bisegmental measuring, 8 cm
- ㉟ 495 NCS **Fiber Optic Light Cable**, extremely heat-resistant, diameter 4.8 mm, length 250 cm

Recommended containers for sterilization:

Telescope: 39501 B2

Instruments: 39502 Z with 39100 S, 39100 PS and 39360 AS

Thoracoscopic Spine Surgery

Basic Set



Thoracoscopic Spine Surgery

Basic Set

ROSENTHAL Recommended Set

- ① 26003 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 10 mm, length 31 cm, autoclavable, fiber optic light transmission incorporated, color code: red
- ② 40160 CD **Trocars**, size 6 mm
- ③ 40103 CD **Trocars**, size 11 mm
- ④ 40107 CD **Trocars**, size 13 mm
- ⑤ 30120 NOL **Trocars**, size 6 mm
- ⑥ 30122 NOL **Trocars**, size 9 mm
- ⑦ 30123 NOL **Trocars**, size 11 mm
- ⑧ 33321 ML **CLICKliné KELLY Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, long, size 5 mm, length 36 cm
- ⑨ 33321 UL **CLICKliné REDDICK-OLSEN Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, robust, size 5 mm, length 36 cm
- ⑩ 33321 R **CLICKliné Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, right angled, size 5 mm, length 36 cm
- ⑪ 34321 MS **CLICKliné METZENBAUM Scissors**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, curved, size 5 mm, length 36 cm
- ⑫ 28163 BSN **TAKE-APART® Bipolar Coagulation Suction Tube**, with stopcock, size 5 mm, length 30 cm
- ⑬ 26276 HK **TAKE-APART® SCHNEIDER Bipolar Grasping Forceps**, with connector pin for bipolar coagulation, with movable inner sheath and non-retracting jaws, robust jaws, size 5 mm, length 33 cm
- ⑭ 26276 HD **TAKE-APART® MANHES Bipolar Coagulation Forceps**, width of jaws 3 mm, size 5 mm, length 33 cm
- ⑮ 28163 PKG **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 90° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm
- ⑯ 28163 PGG **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 90° upbiting, not through-cutting, 5 mm, round sheath diameter 10 mm, working length 30 cm
- ⑰ 28163 PKS **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 40° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm
- ⑱ 28163 RGG **Rongeur**, dismantling, graduated scale at the distal end, jaw 8 mm, round sheath diameter 10 mm, working length 30 cm
- ⑲ 28163 RKG **Same**, jaw 5 mm
- ⑳ 28163 UK **Spoon Forceps**, round, single action jaws, diameter 2.5 mm, working length 30 cm
- ㉑ 28162 ZE **Biopsy Forceps**, single action jaws, diameter 2.7 mm, working length 30 cm
- ㉒ 28163 UM **Spoon Forceps**, oval, single action jaws, diameter 2 mm, working length 30 cm
- ㉓ 28163 MS **Tappet**, blunt, grooved, for positioning the bone implant, size 10 mm, working length 30 cm
- ㉔ 28163 MF **Raspatory**, for dissection, size 7 mm, working length 30 cm
- ㉕ 28163 WC **Curette**, sharp, spoon-shaped, oval, 3.5 x 5 mm, working length 30 cm
- ㉖ 28163 GH **Palpation Hook**, hook angled 90°, blunt, diameter 5 mm, working length 36 cm
- ㉗ 28163 GI **Spoon Curette**, sharp, 4 x 6 mm, diameter 5 mm, working length 36 cm
- ㉘ 28163 GK **Same**, 3 x 4 mm
- ㉙ 28163 GL **Spoon Curette**, sharp, 3 x 4 mm, spoon curved 45°, diameter 5 mm, working length 36 cm
- ㉚ 28163 RR **Raspatory**, diameter 5 mm, working length 36 cm
- ㉛ 495 ND **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 300 cm
- ㉜ 28272 RKA **Holding System**, autoclavable

Recommended containers for sterilization:

Telescope: 39501 B2

Instruments: 39502 Z with 39100 S, 39100 PS and 39360 AS

Percutaneous Lumbar ^{NEW} Foraminoscopy System

Basic Set

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KARL STORZ — ENDOSKOPE

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Percutaneous Lumbar ^{NEW} Foraminoscopy System

Basic Set



GORE Recommended Set

- ① 28163 PLT **Puncture Needle**, including stylet, diameter 1.2 mm, working length 25 cm, with 0.8 mm opening for guide wire
- ② 28163 GWT **Guide Wire**, blunt on both sides, diameter 0.7 mm, working length 41 cm, package of 5
- ③ 28163 FHI **Dilation Sleeve**, with two ports, outer diameter 6.5 mm, inner diameter 1.4 mm, length 22 cm, color code: red
- ④ 28163 FTM **Trephine**, with pyramidal handle, inner diameter 1.6 mm, outer diameter 2.7 mm, working length 30 cm
- ⑤ 28163 FTK **Trephine**, with round handle, inner diameter 3.2 mm, outer diameter 4.2 mm, working length 22 cm
- ⑥ 28163 CM **COTTE Metal Mallet**, with Nylon replacement, length 22.5 cm
- ⑦ 28163 FWO **Operating Sheath**, distal 45° oblique, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.5 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red
- ⑧ 28163 FEH **Punch Sleeve**, for use with operating sheaths
- ⑨ 28163 BFA **HOPKINS® II Wide Angle Telescope 25°**, oblique view, length 18 cm, **autoclavable**, fiber optic light transmission incorporated and 3.5 mm working channel, color code: red
 - 495 NA **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 230 cm (not illustrated)
- ⑩ 28163 FBC **Bipolar Electrode**, angled, diameter 2.5 mm, working length 36 cm
- ⑪ 28163 FDW **Dissector**, distally curved 45°, diameter 2.6 mm, working length 36 cm
- ⑫ 28163 UH **Palpation Hook**, distally angled 45°, diameter 2 mm, working length 34 cm
- ⑬ 28163 FBH **CLICKliné Palpation Hook**, rotating, dismantling, not insulated, with distal ball, bendable to 90°, diameter 3.5 mm, working length 36 cm
- ⑭ 28163 FZ **Grasping Forceps**, single action jaws, with 90° angle of view, diameter 3.5 mm, working length 36 cm
- ⑮ 28163 FZI **CLICKliné Raven's Beak Forceps**, rotating, dismantling, insulated, single action jaws, diameter 3.5 mm, length 36 cm
- ⑯ 28163 FAP **Punch**, bendable, single action jaws, diameter 3.5 mm, working length 36 cm
- ⑰ 28163 FAS **Grasping Forceps**, bendable, single action jaws, diameter 3.5 mm, working length 36 cm
- 28163 FSI **CLICKliné BLAKESLEY Grasping Forceps**, rotating, dismantling, insulated, single action jaws, fenestrated, size 3 mm, length 36 cm (not illustrated)
- 28163 FBM **Grasping Forceps**, double action jaws, diameter 2.7 mm, working length 36 cm (not illustrated)
- ⑱ 28163 FPG **SpinoFIT® Punch**, dismantling, 90° downbiting, not through-cutting, working length 30 cm
- ⑲ 28163 FPW **SpinoFIT® Punch**, dismantling, 45° downbiting, not through-cutting, working length 30 cm
- 28163 FRL **X-ray Ruler**, with special marking for midline and 2 mm- and cm-slots for radiologic measurement, total length 30 cm (not illustrated)

Recommended containers for sterilization:

Telescopes: 39314 G
Instruments: 39360 BK

SpineTIP Percutaneous Lumbar Endoscopy System for the Transforaminal Approach

Basic Set

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SpineTIP Percutaneous Lumbar Endoscopy System for the Transforaminal Approach



Basic Set

- ① 28163 PEL **Puncture Needle**, including stylet, diameter 1.7 mm, working length 25 cm, with 1.4 mm opening for guide wire
- ② 5x 28163 GWL **Guide Wire**, blunt, diameter 1.1 mm, working length 45 cm
- ③ 28163 FHT **Dilation Sleeve**, outer diameter 6.5 mm, inner diameter 1.4 mm, length 31 cm, with two ports, for the transforaminal approach, color code: blue
- ④ 28163 CM **COTTE Metal Mallet**, with Nylon replacement, length 22.5 cm
- ⑤ 28163 FEH **Punch Sleeve**, for use with operating sheaths
- 28163 FKD **Fixation Handle**, for adjustment of dilation sleeves with outer diameter 2.5 – 6.5 mm (not illustrated)
- ⑥ 28163 TSG **Operating Sheath**, graduated, distal straight, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.8 mm, length 25 cm, for use with HOPKINS® II Telescope 25° 28163 BTA, color code: blue
- ⑦ 28163 TSN **Operating Sheath**, graduated, with distal beak, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.8 mm, length 25 cm, for use with HOPKINS® II Telescope 25° 28163 BTA, color code: blue
- ⑧ 28163 TSW **Operating Sheath**, graduated, distal oblique, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.8 mm, length 25 cm, for use with HOPKINS® II Telescope 25° 28163 BTA, color code: blue
- ⑨ 28163 BTA **HOPKINS® II Wide Angle Telescope 25°**, angled eyepiece, diameter 6.6 mm, length 25.7 cm, **autoclavable**, with fiber optic light transmission incorporated and working channel for 3.5 mm instruments, color code: blue
- 495 NA **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 230 cm (not illustrated)
- ⑩ 28163 FBC **Bipolar Electrode**, angled, diameter 2.5 mm, working length 36 cm
- ⑪ 28163 UH **Palpation Hook**, distally angled 45°, diameter 2 mm, working length 34 cm
- ⑫ 28163 FDW **Dissector**, distally curved 45°, diameter 2.6 mm, working length 36 cm
- ⑬ 28163 FDG **Dissector**, distally curved 90°, diameter 2.6 mm, working length 36 cm
- ⑭ 28163 FBH **CLICKline Palpation Hook**, rotating, dismantling, not insulated, with distal ball, bendable to 90°, diameter 3.5 mm, working length 36 cm
- ⑮ 28163 FZ **Grasping Forceps**, single action jaws, with 90° angle of view, diameter 3.5 mm, working length 36 cm
- ⑯ 28163 FBM **Grasping Forceps**, double action jaws, diameter 2.7 mm, working length 36 cm
- ⑰ 28163 FZI **CLICKline Raven's Beak Forceps**, rotating, dismantling, insulated, single action jaws, diameter 3.5 mm, length 36 cm
- ⑱ 28163 FSI **CLICKline BLAKESLEY Grasping Forceps**, rotating, dismantling, insulated, single action jaws, fenestrated, size 3 mm, length 36 cm
- ⑲ 28163 FM **Knife**, retractable, diameter 3.5 mm, working length 36 cm

Recommended containers for sterilization:

Telescopes: 39314 G

Instruments: 39360 BK

SpineTIP Percutaneous Lumbar Endoscopy System for the Interlaminar Approach

Basic Set



SpineTIP Percutaneous Lumbar Endoscopy System for the Interlaminar Approach



Basic Set

- ① 28163 PL **Puncture Needle**, including stylet, diameter 1.7 mm, working length 18 cm, with 1.4 mm opening for guide wire
- ② 5x 28163 GWL **Guide Wire**, blunt, diameter 1.1 mm, working length 45 cm
- ③ 28163 FHI **Dilation Sleeve**, with two ports, outer diameter 6.5 mm, inner diameter 1.4 mm, length 22 cm, color code: red
- ④ 28163 CM **COTTE Metal Mallet**, with Nylon replacement, length 22.5 cm
- ⑤ 28163 FEH **Punch Sleeve**, for use with operating sheaths
- 28163 FKD **Fixation Handle**, for adjustment of dilation sleeves with outer diameter 2.5 – 6.5 mm (not illustrated)
- ⑥ 28163 FSG **Operating Sheath**, graduated, distal straight, with clamp mechanism for fixation, integrated irrigation connector, inner diameter 7.2 mm, outer diameter 7.9 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red
- ⑦ 28163 FSN **Operating Sheath**, graduated, with distal beak, with clamp mechanism for fixation, integrated irrigation connector, inner diameter 7.2 mm, outer diameter 7.9 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red
- ⑧ 28163 FSW **Operating Sheath**, graduated, distal oblique, with clamp mechanism for fixation, integrated irrigation connector, inner diameter 7.2 mm, outer diameter 7.9 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red
- ⑨ 28163 BFA **HOPKINS® II Wide Angle Telescope 25°**, angled eyepiece, outer diameter 6.6 mm, working channel diameter 3.6 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 495 NA **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 230 cm (not illustrated)
- ⑩ 28163 FBC **Bipolar Electrode**, angled, diameter 2.5 mm, working length 36 cm
- ⑪ 28163 FM **Knife**, retractable, diameter 3.5 mm, working length 36 cm
- ⑫ 28163 FBH **CLICKliné Palpation Hook**, rotating, dismantling, not insulated, with distal ball, bendable to 90°, diameter 3.5 mm, working length 36 cm
- ⑬ 28163 UH **Palpation Hook**, hook angled 45°, diameter 2 mm, working length 34 cm
- ⑭ 28163 FDW **Dissector**, distally curved 45°, diameter 2.6 mm, working length 36 cm
- ⑮ 28163 FDG **Dissector**, distally curved 90°, diameter 2.6 mm, working length 36 cm
- ⑯ 28163 FBM **Grasping Forceps**, double action jaws, diameter 2.7 mm, working length 36 cm
- ⑰ 28163 FZ **Grasping Forceps**, single action jaws, with 90° angle of view, diameter 3.5 mm, working length 36 cm
- ⑱ 28163 FZI **CLICKliné Raven's Beak Forceps**, rotating, dismantling, insulated, single action jaws, diameter 3.5 mm, length 36 cm
- ⑲ 28163 FSI **CLICKliné BLAKESLEY Grasping Forceps**, rotating, dismantling, insulated, single action jaws, fenestrated, size 3 mm, length 36 cm
- ⑳ 28163 FPW **SpinoFIT® Punch**, 45° downbiting, not through-cutting, working length 30 cm
- ㉑ 28163 FPG **SpinoFIT® Punch**, 90° downbiting, not through-cutting, working length 30 cm
- ㉒ 28163 FTK **Trephine**, with round handle, inner diameter 3.2 mm, outer diameter 4.2 mm, working length 22 cm
- ㉓ 28163 FTG **Trephine**, with round handle, inner diameter 7 mm, outer diameter 8 mm, working length 17.5 cm
- ㉔ 28163 FTM **Trephine**, with pyramidal handle, inner diameter 1.6 mm, outer diameter 2.7 mm, working length 30 cm

Recommended containers for sterilization:

Telescopes: 39314 G

Instruments: 39360 BK

SpineTIP Percutaneous Lumbar Endoscopy System for the Posterolateral Approach

Basic Set

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SpineTIP Percutaneous Lumbar Endoscopy System for the Posterolateral Approach



Basic Set

- ① 28163 PL **Puncture Needle**, including stylet, diameter 1.7 mm, working length 18 cm, with 1.4 mm opening for guide wire
- ② 5x 28163 GWL **Guide Wire**, blunt, diameter 1.1 mm, working length 45 cm
- ③ 28163 FHP **Dilation Sleeve**, outer diameter 6 mm, inner diameter 1 mm, length 22 cm, with two ports, for the posterolateral approach, color code: green
- ④ 28163 CM **COTTE Metal Mallet**, with Nylon replacement, length 22.5 cm
- ⑤ 28163 FEH **Punch Sleeve**, for use with operating sheaths
- 28163 FKD **Fixation Handle**, for adjustment of dilation sleeves with outer diameter 2.5 – 6.5 mm (not illustrated)
- ⑥ 28163 FSG **Operating Sheath**, graduated, distal straight, integrated irrigation connector, inner diameter 6.2 mm, outer diameter 6.9 mm, length 17 cm, for use with HOPKINS® II Telescope 15° 28163 FFA, color code: green
- ⑦ 28163 PSN **Operating Sheath**, graduated, distal beak, integrated irrigation connector, inner diameter 6.2 mm, outer diameter 6.9 mm, length 17 cm, for use with HOPKINS® II Telescope 15° 28163 FFA, color code: green
- ⑧ 28163 PSW **Operating Sheath**, graduated, distal oblique, integrated irrigation connector, inner diameter 6.2 mm, outer diameter 6.9 mm, length 17 cm, for use with HOPKINS® II Telescope 15° 28163 FFA, color code: green
- ⑨ 28163 FFA **HOPKINS® II Wide Angle Straight Forward Telescope 15°**, angled eyepiece, outer diameter 6.1 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated and 2.9 mm working channel, color code: green
- 495 NA **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 230 cm (not illustrated)
- ⑩ 28163 FBC **Bipolar Electrode**, angled, diameter 2.5 mm, working length 36 cm
- ⑪ 28163 UH **Palpation Hook**, distally angled 45°, diameter 2 mm, working length 34 cm
- ⑫ 28163 FDW **Dissector**, distally curved 45°, diameter 2.6 mm, working length 36 cm
- ⑬ 28163 FDG **Dissector**, distally curved 90°, diameter 2.6 mm, working length 36 cm
- ⑭ 28163 SE **BLAKESLEY TAKE-APART® Forceps**, diameter 2.3 mm, working length 30 cm
- ⑮ 28163 SL **TAKE-APART® Grasping Forceps**, diameter 2.3 mm, working length 30 cm
- ⑯ 28163 FBM **Grasping Forceps**, double action jaws, diameter 2.7 mm, working length 36 cm
- ⑰ 28163 FTK **Trephine**, with round handle, inner diameter 3.2 mm, outer diameter 4.2 mm, working length 22 cm
- ⑱ 28163 FTG **Trephine**, with round handle, inner diameter 7 mm, outer diameter 8 mm, working length 17.5 cm
- ⑲ 28163 FTM **Trephine**, with pyramidal handle, inner diameter 1.6 mm, outer diameter 2.7 mm, working length 30 cm

Recommended containers for sterilization:

Telescopes: 39314 G

Instruments: 39360 BK

ENDOSPINE® Endoscopic Discectomy, Decompression of the Spinal Canal

Basic Set

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ENDOSPINE® Endoscopic Discectomy, Decompression of the Spinal Canal

Basic Set



DESTANDAU Recommended Set

- ① 28163 DL **Bone Punch**, dismantling, 90° upbiting, not through-cutting, 3 mm, working length 18 cm
- ② 28163 DF **Same**, upbiting 45° forward, not through-cutting
- ③ 28163 DXH DESTANDAU **ENDOSPINE® Working Insert**, with positioning detent, with adjustable Nerve Protector 28163 DPH, for use with ENDOSPINE® Operating Tube 28163 DW, with working channel diameter 8 mm and irrigation channel, for use with HOPKINS® II Telescope 28095 AA
- ④ 28163 DW DESTANDAU **ENDOSPINE® Operating Tube**, oval, with Obturator 28163 DO, for use with Working Insert 28163 DXH
- 28163 DRG **ENDOSPINE® Retractor Blade**, conical, length 5 cm, for use with ENDOSPINE® Operating Tube 28163 DW and 28163 DWS (not illustrated)
- ⑤ * **Bipolar Cord**, depending on the HF unit used
- ⑥ 28163 DC **Spoon Forceps**, dismantling, robust, oval, single action jaws, spoon size 3 x 10 mm, working length 15 cm
- ⑦ 28163 DZ **TAKE-APART® MANHES Bipolar Coagulation Forceps**, with connector pin for bipolar coagulation, width of jaws 1 mm, diameter 5 mm, working length 20 cm
- ⑧ 28163 DG **Chisel**, flat, straight, with handle, distal width 15 mm, working length 9 cm
- ⑨ 28163 DHN **Palpation Hook**, blunt, hook angled 90°, hook length 5.5 mm, working length 13 cm
- ⑩ 28163 DNN **Elevator**, spatula slightly curved, distal width 5 mm, working length 13 cm
- ⑪ 28163 TK **Trephine**, with round handle, diameter 3 mm, working length 22 cm
- ⑫ 28163 DU **FERGUSON Suction Tube**, angled, with cut-off hole, diameter 3.7 mm, working length 11 cm
- ⑬ 28095 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green
- ⑭ 28163 DD **Localization Device**, for fluoroscopic determination of the point of incision for ENDOSPINE® Operating Tube 28163 DW
- ⑮ 495 NA **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 230 cm

Recommended containers for sterilization:

Instruments: 39771 A

* **HF Cords** see chapter 12

EasyGO!® System – Endoscopic Discectomy, Decompression of the Spinal Canal

Basic Set

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EasyGO!® System – Endoscopic Discectomy, Decompression of the Spinal Canal

Basic Set



GAAB/OERTEL Recommended Set

- ① 28163 CNS **Dilation Sleeve**, graduated, inner diameter 1.5 mm, outer diameter 5.2 mm, length 23 cm, color code: white
- ② 28163 COS **Dilation Sleeve**, graduated, inner diameter 5.3 mm, outer diameter 8.9 mm, length 21 cm, color code: yellow
- ③ 28163 CPS **Dilation Sleeve**, graduated, inner diameter 9 mm, outer diameter 12.7 mm, length 19 cm, color code: orange
- ④ 28163 CQS **Dilation Sleeve**, graduated, inner diameter 12.9 mm, outer diameter 14.9 mm, length 17 cm, color code: red
- ⑤ 28163 CRS **Dilation Sleeve**, graduated, inner diameter 15.1 mm, outer diameter 16.9 mm, length 15 cm, color code: green
- ⑥ 28163 CSS **Dilation Sleeve**, graduated, inner diameter 17.1 mm, outer diameter 18.9 mm, length 14 cm, color code: blue
- ⑦ 28163 CTS **Dilation Sleeve**, graduated, inner diameter 19 mm, outer diameter 20.9 mm, length 13 cm, color code: black
- ⑧ 28163 GAG **EasyGO!® Attachment**, diameter 23 mm, for use with EasyGO!® Trocars 28163 GTG/GTZ
- ⑧ 28163 GAK **EasyGO!® Attachment**, diameter 19 mm, for use with EasyGO!® Trocars 28163 GTK/GTY
- ⑧ 28163 GAM **EasyGO!® Attachment**, diameter 15 mm, for use with EasyGO!® Trocar 28163 GTM
- ⑨ 28163 GGL **EasyGO!® Attachment**, movable inside the trocar, diameter 23 mm, for use with EasyGO!® Trocars 28163 GTG/GTC
- ⑨ 28163 GKL **EasyGO!® Attachment**, movable inside the trocar, diameter 19 mm, for use with EasyGO!® Trocars 28163 GTK/GTB
- ⑨ 28163 GML **EasyGO!® Attachment**, movable inside the trocar, diameter 15 mm, for use with EasyGO!® Trocars 28163 GTM/GTA
- 28163 GTC **EasyGO!® Trocar**, diameter 23 mm, working length 40 mm, for use with EasyGO!® Attachment 28163 GGL, EasyGO!® Telescope Sheath 28163 GKS and HOPKINS® Telescope 30° 28095 BAK, color code: black (not illustrated)
- 28163 GTB **EasyGO!® Trocar**, diameter 19 mm, working length 40 mm, for use with EasyGO!® Attachment 28163 GKL, EasyGO!® Telescope Sheath 28163 GKS and HOPKINS® Telescope 30° 28095 BAK, color code: green (not illustrated)
- 28163 GTA **EasyGO!® Trocar**, diameter 15 mm, working length 40 mm, for use with EasyGO!® Attachment 28163 GML, EasyGO!® Telescope Sheath 28163 GKS and HOPKINS® Telescope 30° 28095 BAK, color code: orange (not illustrated)
- ⑩ 28163 GTG **EasyGO!® Trocar**, diameter 23 mm, working length 76 mm, for use with EasyGO!® Attachment 28163 GAG and HOPKINS® Telescope 30° 28095 BAK or EasyGO!® Attachment 28163 GGL, EasyGO!® Telescope Sheath 28163 GLS and HOPKINS® Telescope 30° 28095 BAL, color code: black
- ⑩ 28163 GTK **EasyGO!® Trocar**, diameter 19 mm, working length 74 mm, for use with EasyGO!® Attachment 28163 GAK and HOPKINS® Telescope 30° 28095 BAK or EasyGO!® Attachment 28163 GKL, EasyGO!® Telescope Sheath 28163 GLS and HOPKINS® Telescope 30° 28095 BAL, color code: green
- ⑩ 28163 GTM **EasyGO!® Trocar**, diameter 15 mm, working length 70 mm, for use with EasyGO!® Attachment 28163 GAM and HOPKINS® Telescope 30° 28095 BAK or EasyGO!® Attachment 28163 GML, EasyGO!® Telescope Sheath 28163 GLS and HOPKINS® Telescope 30° 28095 BAL, color code: orange
- 28163 GTZ **EasyGO!® Trocar**, diameter 23 mm, working length 99 mm, for use with EasyGO!® Attachment 28163 GAG and HOPKINS® Telescope 30° 28095 BAL, color code: black (not illustrated)
- 28163 GTY **EasyGO!® Trocar**, diameter 19 mm, working length 97 mm, for use with EasyGO!® Attachment 28163 GAK and HOPKINS® Telescope 30° 28095 BAL, color code: green (not illustrated)
- ⑪ 28095 BAK **HOPKINS® Forward-Oblique Telescope 30°**, eyepiece angled 45°, diameter 4 mm, length 9.5 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- ⑫ 28095 BAL **HOPKINS® Forward-Oblique Telescope 30°**, eyepiece angled 45°, diameter 4 mm, length 12 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red
- 28163 GKS **EasyGO!® Telescope Sheath**, movable, for use with HOPKINS® Telescope 30° 28095 BAK (not illustrated)
- ⑬ 28163 GLS **EasyGO!® Telescope Sheath**, for use with HOPKINS® Telescope 30° 28095 BAL
- ⑭ 28163 CFB **KERRISON Bone Punch**, dismantling, 40° upbiting, not through-cutting, 4 mm, working length 24 cm
- ⑮ 28163 CFS **KERRISON Bone Punch**, dismantling, 40° upbiting, not through-cutting, 2 mm, working length 24 cm

EasyGO!® System – Endoscopic Discectomy, Decompression of the Spinal Canal

Basic Set



- ⑯ 28163 CC **Spoon Forceps**, dismantling, robust, oval, spoon size 3 x 10 mm, single action jaws, working length 20 cm
Same, curved 30° (not illustrated)
- ⑯ 28163 EHK **Hook Scissors**, single action jaws, diameter 2.7 mm, working length 25 cm
- ⑰ 28163 GBM **Surgical Handle**, bayonet-shaped, working length 15 cm, for blades 208010-15 and 208210-15
- ⑯ 28163 BPL **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, tip 1.2 mm, length 23 cm, for use with Bipolar High Frequency Cord 847000 E or 847000 A/M/T/V
- ⑯ 28164 BDN **TAKE-APART® Bipolar Forceps**, rounded tip, width 2 mm, outer diameter 3.4 mm, working length 20 cm
- ⑯ 28163 GAH **Palpation Hook**, straight, distally 10 mm long and angled 90°, with ball end, with round handle, working length 20 cm
- ㉑ 28164 MDB **MORTINI Dissector**, “dead hand”, bayonet-shaped, sharp, 3 mm, curved upwards, with round handle, working length 16 cm
- ㉒ 28163 GRN **Nerve Retractor**, angled 30°, distal width 5 mm, working length 17 cm
- 28163 CKG **Curette**, small, spoon size (l x w): 2.7 x 4 mm, bayonet-shaped, distally angled 45°, working length 20 cm (not illustrated)
- ㉓ 28163 GX **Suction Tube**, with cut-off hole, LUER, diameter 2.7 mm, working length 15 cm
- 28163 GXN **Suction Tube**, with distal nerve retractor, with cut-off hole, LUER-Lock connector, diameter 2.7 mm, working length 15 cm (not illustrated)
- 28163 KT **FERGUSON Suction Tube**, with cut-off hole and stylet, LUER, diameter 4 mm, working length 15 cm (not illustrated)
- ㉔ 495 NL **Fiber Optic Light Cable**, with straight connector, diameter 3.5 mm, length 180 cm
- ㉕ 28172 HR **Rotation Socket**, to clamp to the operating table, with one mounted Butterfly Nut 28172 HRS, for European and US standard rails, with lateral clamp for height and angle adjustment of the articulated stand
- ㉖ 28272 HA **Articulated Stand**, reinforced version, straight, with one mechanical central clamp for all five joint functions, height 30 cm, swivel range 37 cm

EasyGO!® System – Endoscopic Discectomy, Decompression of the Spinal Canal

Basic Set



GAAB/OERTEL Recommended Set

Additional Instruments for Stenoses (not illustrated)

28163 PL	Puncture Needle , including stylet, diameter 1.7 mm, working length 18 cm, with 1.4 mm opening for guide wire
28163 KD	Guide Wire , unsterile, diameter 1.2 mm, length 31 mm, package of 10
426620	GRÜNWALD Nasal Dressing Forceps , bayonet-shaped, length 20 cm
28163 AH	Palpation Hook , diameter 3.8 mm, distally angled 90°, with ball, blunt, working length 20 cm
28163 GBH	Palpation Hook , bayonet-shaped, distally angled 90°, with ball end, with round handle, working length 20 cm
28163 NBB	Nerve Hook , distal width 5 mm, bayonet-shaped, working length 16 cm
28163 NSB	Nerve Hook , distal width 3 mm, bayonet-shaped, working length 16 cm
28163 RN	Nerve Retractor , hook length 2 mm, diameter 4 mm, angled sheath, working length 20 cm
28164 DS	Dissector , sharp, tip angled 15°, with round handle, size 2 mm, length 25 cm
28163 CLB	KERRISON Bone Punch , dismantling, 90° upbiting, not through-cutting, 4 mm, working length 24 cm
28163 CLS	KERRISON Bone Punch , dismantling, 90° upbiting, not through-cutting, 2 mm, working length 24 cm
28163 BKD	KERRISON Punch , dismantling, bayonet-shaped, fixed, downbiting 40° forward, 2 mm, working length 17 cm
28163 BKU	KERRISON Punch , dismantling, bayonet-shaped, fixed, upbiting 40° forward, 2 mm, working length 17 cm
28163 FB	BLAKESLEY Nucleus Cutting Forceps , single action jaws, opening upwards, diameter 3.5 mm, working length 20 cm
28163 BPS	Bipolar Coagulation Forceps , insulated, bayonet-shaped, tip 0.7 mm, length 23 cm, for use with Bipolar High Frequency Cord 847000 E or 847000 A/M/T/V

Recommended containers for sterilization:

Telescopes: 39301 AS

Instruments: 39360 AK (2x)

Nerve Compression Syndrome, Endoscopic Treatment of the Sulcus Ulnaris Syndrome

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 9



Nerve Compression Syndrome, Endoscopic Treatment of the Sulcus Ulnaris Syndrome



Set recommended by HOFFMANN, M.D.

50600 **HOFFMANN Cubital Tunnel Set**, complete
including:

- ① **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**
- ② **Optical Dissector**, with distal spatula, fenestrated, large, sharp
- ③ **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
- ④ **TAKE-APART® Forceps Insert**, for TAN bipolar coagulation forceps, size 3 mm, length 20 cm
- ⑤ **Speculum**, with fiber optic light carrier, with set screw, blade length 90 mm, length 13.5 cm
- ⑥ **Speculum**, with fiber optic light carrier, with set screw, blade length 110 mm, length 13.5 cm
- ⑦ **COTTLE Speculum**, with fiber optic light carrier, without set screw, special matt finish, blade length 55 mm, length 13 cm
- ⑧ **DUPLAY Dressing and Sponge Holding Forceps**, curved, with ratchet, length 21 cm
- ⑨ **DUPLAY Dressing and Sponge Holding Forceps**, straight, with ratchet, length 21 cm
- ⑩ **METZENBAUM Scissors**, curved, length 28 cm
- ⑪ **METZENBAUM Scissors**, curved, length 23 cm
- ⑫ **METZENBAUM Scissors**, curved, length 18 cm

Endoscopic Treatment of the Nerve Compression Syndrome

STORZ
KARL STORZ — ENDOSCOPE

CHAPTER 9



Endoscopic Treatment of the Nerve Compression Syndrome

Set recommended by KRISHNAN, M.D.

28163 PN **Peripheral Nerve Set**

including:

① **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

② **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

Optical Retractor, with handle, with cut-off hole for suction, width of blade at proximal end 15 mm, at distal end 7.5 mm, with fixation screw for control of penetration depth of endoscope, for use with Irrigation Sheath 28163 RSA/RSB and HOPKINS® telescopes diameter 4 mm

Irrigation Sheath 30°, for 28163 RKB/RKS, for use with HOPKINS® telescopes diameter 4 mm and KARL STORZ lens irrigation system CLEARVISION®II

Irrigation Sheath 0°, for 28163 RKB/RKS, for use with HOPKINS® telescopes diameter 4 mm and KARL STORZ lens irrigation system CLEARVISION®II (not illustrated)

Optical Retractor, with handle, with cut-off hole for suction, width of blade at proximal end 8 mm, at distal end 7.5 mm, with fixation screw for control of penetration depth of endoscope, for use with Irrigation Sheaths 28163 RSA/RSB and HOPKINS® telescopes diameter 4 mm (not illustrated)

③ **FERGUSON Suction Tube**, with cut-off hole and stylet, LUER, diameter 4 mm, working length 15 cm

④ **CASTELNUOVO Elevator**, double-ended, blunt end angled, semisharp end slightly curved, graduated, length 26 cm

⑤ **HALLE Elevator**, width 4 mm, length 19 cm

⑥ **REYNOLDS Dissecting Scissors**, curved, delicate tips, length 18 cm

⑦ **FOMON Angular Scissors**, serrated blades, slender, working length 6.5 cm

⑧ **HEGAR Needle Holder**, slender, length 18 cm

⑨ **ADSON Artery Forceps**, curved 90°, slender, length 18 cm

⑩ **OCHSNER-KOCHER Artery Forceps**, curved, 1 x 2 teeth, length 14 cm

⑪ **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, tip 0.7 mm, length 23 cm, for use with Bipolar High Frequency Cords 847000 E or 847000 A/F/M/N/S/T/V

⑫ **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, slender, blunt, tip 0.5 mm, length 19 cm, for use with Bipolar High Frequency Cord 847000 E or 847000 A/F/M/N/S/T/V

⑬ **Bipolar Coagulation Forceps**, insulated, angled tip, blunt, tip 1 mm, length 19 cm, for use with Bipolar High Frequency Cord 847000 E or 847000 A/M/T/V

⑭ 2x **ADSON Tissue Forceps**, 1 x 2 teeth, length 12 cm

⑮ 2x "ATRAUMA" **Atraumatic Tissue Forceps**, length 16 cm

VITOM® SPINE ^{NEW} for the Lumbar Spine

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 10



VITOM® SPINE ^{NEW} for the Lumbar Spine

Basic Set



ROSENTHAL Recommended Set

VITOM® SPINE and Accessories

- ㉗ 28272 RGB **Holding System, autoclavable**, with quick release coupling KSLOCK
- ① 28095 VA **VITOM® SPINE 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
- ㉙ 209180 20 **495 NCS VITOM® 25 Distance Rod**, length 25 cm
- Fiber Optic Light Cable, with straight connector, extremely heat-resistant, diameter 4.8 mm, length 250 cm (not illustrated)
- 28272 CN **Clamping Cylinder**, folding, for flexible mounting of 10 mm telescopes to telescope sheath, **autoclavable**. The clamping cylinder allows vertical movement and rotation of the telescope (not illustrated)
- Lumbar, Tubular Retractor System**
- ③ 28163 PL **Puncture Needle**, including stylet, diameter 1.7 mm, working length 18 cm, with 1.4 mm opening for guide wire
- ④ 28163 KD **Guide Wire**, unsterile, diameter 1.2 mm, length 31 mm, package of 10
- ⑤ 28163 CNS **Dilation Sleeve**, graduated, inner diameter 1.5 mm, outer diameter 5.2 mm, length 23 cm, color code: white
- ⑤ 28163 COS **Same**, inner diameter 5.3 mm, outer diameter 8.9 mm, length 21 cm, color code: yellow
- ⑤ 28163 CPS **Same**, inner diameter 9 mm, outer diameter 12.7 mm, length 19 cm, color code: orange
- ⑤ 28163 CQS **Same**, inner diameter 12.9 mm, outer diameter 14.9 mm, length 17 cm, color code: red
- ⑤ 28163 CRS **Same**, inner diameter 15.1 mm, outer diameter 16.9 mm, length 15 cm, color code: green
- ⑤ 28163 CSS **Same**, inner diameter 17.1 mm, outer diameter 18.9 mm, length 14 cm, color code: blue
- ⑤ 28163 CTS **Same**, inner diameter 19 mm, outer diameter 20.9 mm, length 13 cm, color code: black
- 28163 GTC **EasyGO!® Trocar**, diameter 23 mm, working length 40 mm (not illustrated)
- 28163 GTB **EasyGO!® Trocar**, diameter 19 mm, working length 40 mm (not illustrated)
- 28163 GTA **EasyGO!® Trocar**, diameter 15 mm, working length 40 mm (not illustrated)
- ㉖ 28163 GTG **EasyGO!® Trocar**, diameter 23 mm, working length 76 mm
- ㉗ 28163 GTK **EasyGO!® Trocar**, diameter 19 mm, working length 74 mm
- ㉘ 28163 GTM **EasyGO!® Trocar**, diameter 15 mm, working length 70 mm
- 28163 GTZ **EasyGO!® Trocar**, diameter 23 mm, working length 99 mm (not illustrated)
- 28163 GTY **EasyGO!® Trocar**, diameter 19 mm, working length 97 mm (not illustrated)
- ㉖ 28163 VBG **Glare Shield**, diameter 23 mm, for use with EasyGO!® Trocars 28163 GTG/GTC/GTZ
- ㉗ 28163 VBK **Glare Shield**, diameter 19 mm, for use with EasyGO!® Trocars 28163 GTK/GTB/GTY
- ㉘ 28163 VBM **Glare Shield**, diameter 15 mm, for use with EasyGO!® Trocars 28163 GTM/GTA
- Articulated Stand**, reinforced version, L-shaped (not illustrated)
- Socket** (not illustrated)
- Suction Tube**, angled, with beaded distal end, diameter 5 mm, working length 23 cm
- ⑩ 28163 BXB **Same**, diameter 2.5 mm
- ⑪ 28163 BXS **Ring Curette**, bayonet-shaped, 45° curved upwards, sharp, diameter 2.5 mm, with round handle, working length 16 cm
- ⑫ 28164 MRA **Same**, diameter 5 mm
- ⑬ 28164 MRC **Same**, diameter 7 mm
- ⑭ 28164 MDB **MORTINI Dissector**, “dead hand”, bayonet-shaped, sharp, 3 mm, curved upwards, with round handle, working length 16 cm
- ㉕ 28163 GBH **Palpation Hook**, bayonet-shaped, distally angled 90°, with ball end, with round handle, working length 20 cm
- ㉖ 28163 NBB **Nerve Hook**, distal width 5 mm, bayonet-shaped, working length 16 cm
- ㉗ 28164 BPA **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, blunt, tip 0.7 mm, working length 12 cm, total length 23 cm
- ㉘ 28164 BPC **Same**, tip 0.3 mm
- ㉙ 28164 BPB **Same**, tip 0.7 mm, working length 14 cm, total length 25 cm
- ㉚ 26184 HCS **TAKE-APART® MANHES Bipolar Coagulation Forceps**, width of jaws 1 mm, size 3 mm, length 20 cm
- ㉛ 30321 MWS **CLICKliné Scissors**, rotating, dismantling, with connector pin for unipolar coagulation, double action jaws, serrated, curved, conical, size 3 mm, length 20 cm
- ㉜ 28163 CC **Spoon Forceps**, robust, oval, spoon size 3 x 10 mm, single action jaws, working length 20 cm
- ㉝ 28163 BKD **KERRISON Punch**, dismantling, bayonet-shaped, fixed, downbiting 40° forward, 2 mm, working length 17 cm
- ㉞ 28163 BKU **Same**, upbiting 40° forward
- ㉟ 28163 CFB **KERRISON Bone Punch**, 40° upbiting, not through-cutting, 4 mm, working length 24 cm
- ㉟ 28163 DF **Bone Punch**, dismantling, upbiting 45° forward, not through-cutting, 3 mm, working length 18 cm

Recommended containers for sterilization:

Telescope: 39501 A2

Instruments: 39360 AK

VITOM® SPINE ^{NEW} for the Thoracic Spine

Basic Set

STORZ
KARL STORZ — ENDOSKOPE

CHAPTER 10



VITOM® SPINE ^{NEW} for the Thoracic Spine

Basic Set



ROSENTHAL Recommended Set

VITOM® SPINE and Accessories

- ② 28272 RGB **Holding System, autoclavable**, with quick release coupling KSLOCK
- ① 28095 VA **VITOM® SPINE 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
- ② 209180 20 **VITOM® 25 Distance Rod**, length 25 cm
- ⑧ 495 NCS **Fiber Optic Light Cable**, with straight connector, extremely heat-resistant, diameter 4.8 mm, length 250 cm (not illustrated)
- ③ 28272 CN **Clamping Cylinder**, for flexible mounting of 10 mm telescopes to telescope sheath, **autoclavable**. The clamping cylinder allows vertical movement and rotation of the telescope.

Thoracic, Modular Retractor System

- ④ 28163 VR **ROSENTHAL Angled Retractor**, with movable retractor blades, in three lengths, can be clamped to the holding arm with the KS-Lock

Recommended Instruments

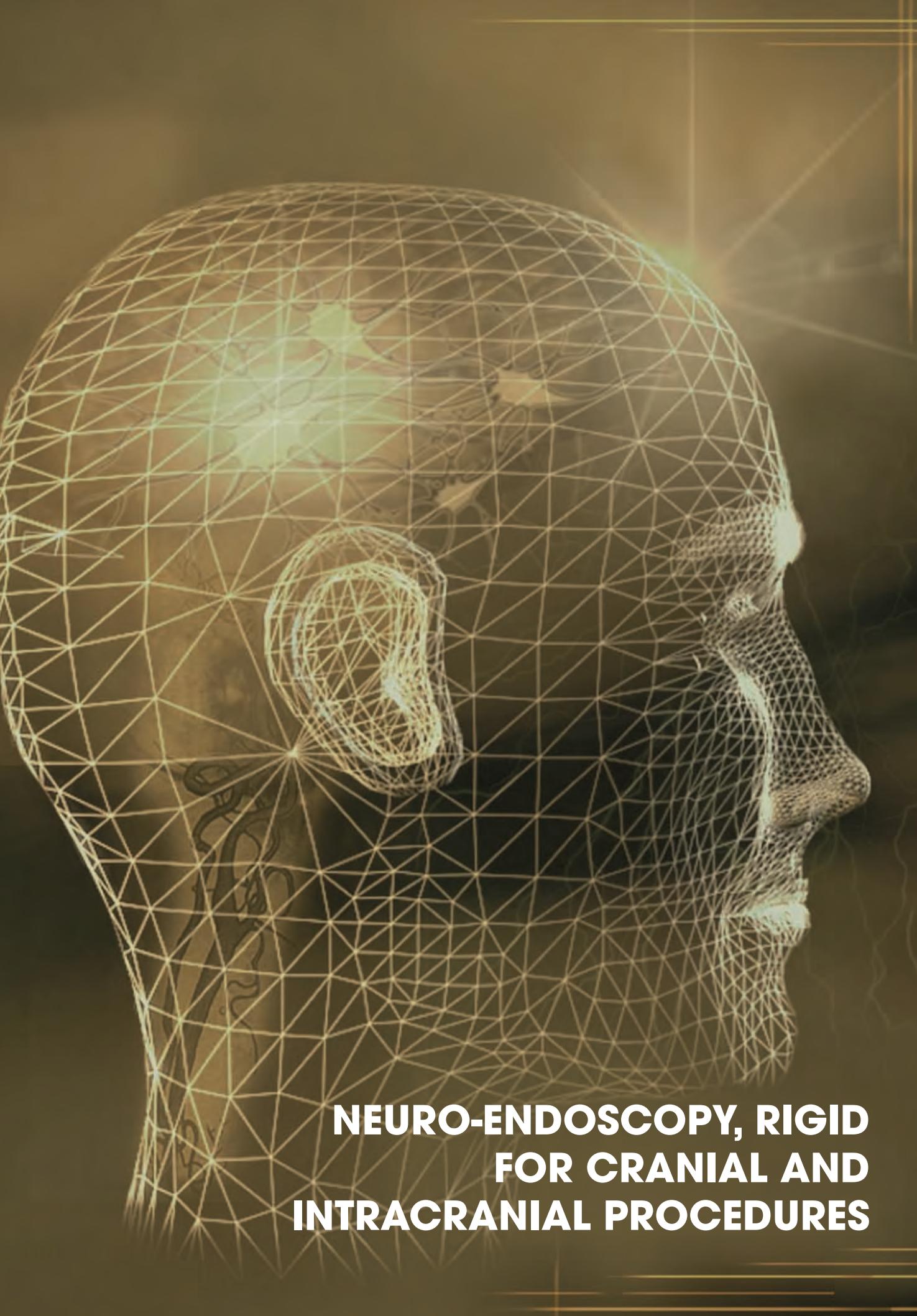
- ⑤ 33321 ML **CLICKliné KELLY Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, long, size 5 mm, length 36 cm
- ⑥ 33321 UL **CLICKliné REDDICK-OLSEN Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, robust, size 5 mm, length 36 cm
- ⑦ 33321 R **CLICKliné Dissecting and Grasping Forceps**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, right angled, size 5 mm, length 36 cm
- ⑧ 34321 MS **CLICKliné METZENBAUM Scissors**, rotating, dismantling, insulated, with connector pin for unipolar coagulation, double action jaws, curved, size 5 mm, length 36 cm
- ⑨ 28163 BSN **TAKE-APART® Bipolar Coagulation Suction Tube**, with stopcock, size 5 mm, length 30 cm
- ⑩ 26276 HK **TAKE-APART® SCHNEIDER Bipolar Grasping Forceps**, with connector pin for bipolar coagulation, with movable inner sheath and non-retracting jaws, robust jaws, size 5 mm, length 33 cm
- ⑪ 26276 HD **TAKE-APART® MANHES Bipolar Coagulation Forceps**, width of jaws 3 mm, size 5 mm, length 33 cm
- ⑫ 28163 PKG **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 90° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm
- ⑬ 28163 PGG **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 90° upbiting, not through-cutting, 5 mm, round sheath diameter 10 mm, working length 30 cm
- ⑭ 28163 PKS **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 40° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm
- ⑮ 28163 RGG **Rongeur**, dismantling, graduated scale at the distal end, jaw 8 mm, round sheath diameter 10 mm, working length 30 cm
- ⑯ 28163 RKG **Rongeur**, dismantling, graduated scale at the distal end, jaw 5 mm, round sheath diameter 10 mm, working length 30 cm
- ⑰ 28163 UK **Spoon Forceps**, round, single action jaws, diameter 2.5 mm, working length 30 cm
- ⑱ 28162 ZE **Biopsy Forceps**, single action jaws, diameter 2.7 mm, working length 30 cm
- ⑲ 28163 UM **Spoon Forceps**, oval, single action jaws, diameter 2 mm, working length 30 cm
- ⑳ 28163 MS **Tappet**, blunt, grooved, for positioning the bone implant, size 10 mm, working length 30 cm
- ㉑ 28163 MF **Raspatory**, for dissection, size 7 mm, working length 30 cm
- ㉒ 28163 WC **Curette**, sharp, spoon-shaped, oval, 3.5 x 5 mm, working length 30 cm
- ㉓ 28163 GH **Palpation Hook**, hook angled 90°, blunt, diameter 5 mm, working length 36 cm
- ㉔ 28163 GI **Spoon Curette**, sharp, 4 x 6 mm, diameter 5 mm, working length 36 cm
- ㉕ 28163 GK **Spoon Curette**, sharp, 3 x 4 mm, diameter 5 mm, working length 36 cm
- ㉖ 28163 GL **Spoon Curette**, sharp, 3 x 4 mm, spoon angled 45°, diameter 5 mm, working length 36 cm
- ㉗ 28163 RR **Raspatory**, diameter 5 mm, working length 36 cm

Recommended containers for sterilization:

Telescope: 39501 A2

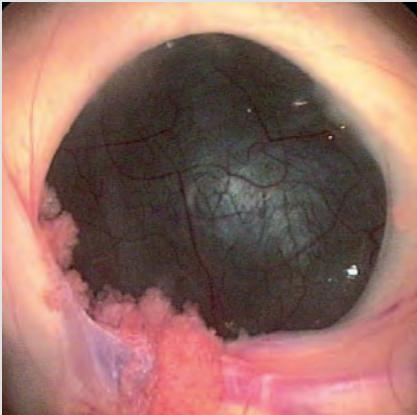
Instruments: 39502 Z with 39100 S, 39100 PS and 39360 AS



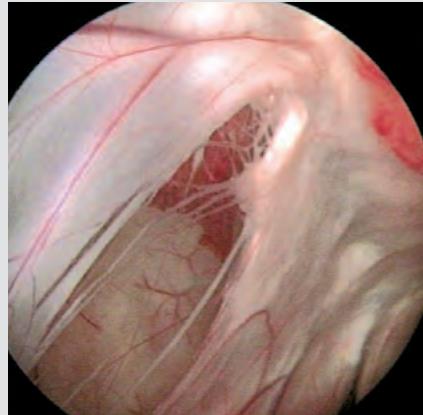


**NEURO-ENDOSCOPY, RIGID
FOR CRANIAL AND
INTRACRANIAL PROCEDURES**

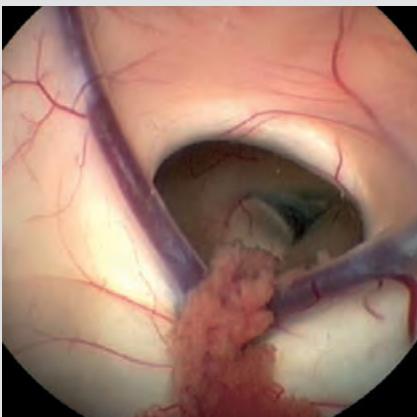
Neuro-Endoscopy



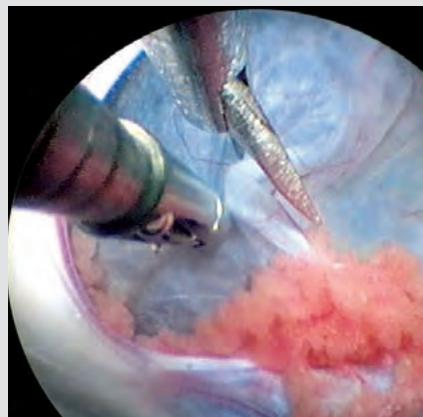
*Craniopharyngioma in the 3rd ventricle,
viewed through the diagnostic endoscope*



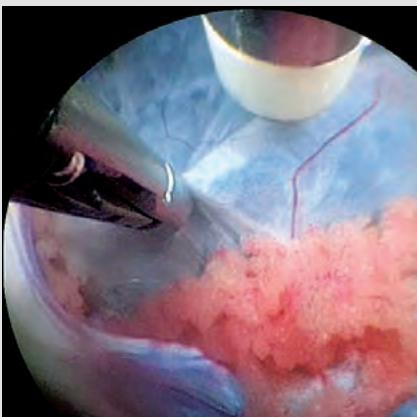
*Septal perforation due to chronic
hydrocephalus*



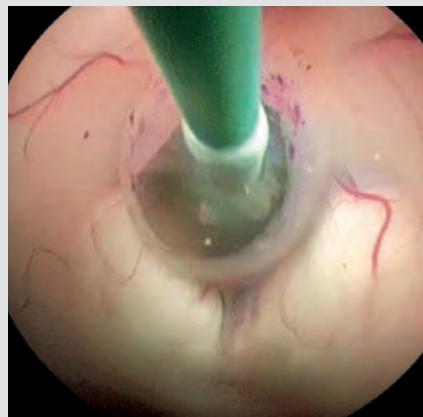
Foramen of Monro



*Bimanual dissection by incising the
membrane of a suprasellar arachnoidal cyst
with a grasping forceps and a scissors*



*Bimanual dissection with a grasping
forceps and a bipolar electrode*

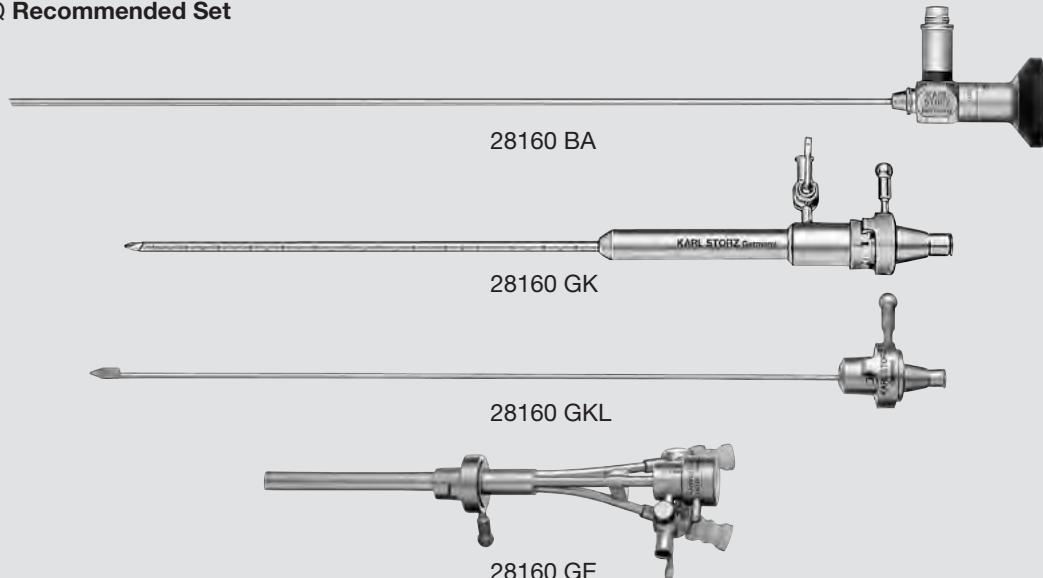


Ventriculostomy with a balloon catheter

Neuro-Endoscope

Operating Sheath, size 3.5 x 4.7 mm

DECQ Recommended Set



28160 BA

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

28160 GK

Operating Sheath, small, oval, exterior 3.5 x 4.7 mm, working length 14 cm, with blunt obturator, with stopcock, for use with operating instruments size 1 mm in conjunction with Working Insert 28160 GE



28160 GKL

Optical Obturator, concave, with channel, for use with Operating Sheath 28160 GK

28160 GE

Working Insert, with 2 working channels, with stopcock, for use with Operating Sheath 28160 G/GK/GM

Operating Instruments for Operating Sheath size 3.5 x 4.7 mm



28160 ZJ

Biopsy Forceps, flexible, double action jaws, diameter 1 mm, working length 30 cm



28160 TJ

Grasping Forceps, flexible, double action jaws, diameter 1 mm, working length 30 cm



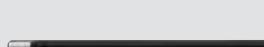
28160 TV

Forceps, for ventriculostomy, flexible, double action jaws, diameter 1 mm, working length 30 cm



28160 SE

Suction Catheter, flexible, for single use, diameter 1 mm, working length 45 cm



28160 KA

Coagulation Electrode, unipolar, flexible, diameter 1 mm, length 53 cm



28160 KS

Spatula Electrode, unipolar, flexible, diameter 1 mm, working length 45 cm

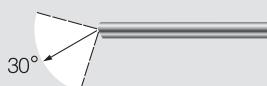
Please note: The use of Balloon Catheter 28162 SB with diameter 0.7 mm is also recommended.
Holding Systems for Fixation of Operating Sheaths see chapter 11
High Frequency Cords and High Frequency Surgical Units AUTOCON® see chapter 12

Neuro-Endoscope

Operating Sheath, size 3.5 x 5.2 mm



DECQ Recommended Set



- | | |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 28160 BA | HOPKINS® II Forward-Oblique Telescope 30°, diameter 2.9 mm, length 30 cm, autoclavable , fiber optic light transmission incorporated, color code: red |
| 28160 GM | Operating Sheath , medium, oval, exterior 3.5 x 5.2 mm, working length 14 cm, with blunt obturator, with stopcock, for use with operating instruments size 1.7 mm, in conjunction with Working Insert 28160 GE |
| 28160 GML | Optical Obturator , concave, with channel, for use with Operating Sheath 28160 GM |
| 28160 GE | Working Insert , with 2 working channels, with stopcock, for use with Operating Sheath 28160 G/GK/GM |

Operating Instruments for Operating Sheath size 3.5 x 5.2 mm

	28160 EK	Scissors , single action jaws, diameter 1.3 mm, working length 34 cm
	28162 FL	Biopsy Forceps , double action jaws, diameter 1.3 mm, working length 30 cm
	28162 FK	Grasping Forceps , semirigid, double action jaws, diameter 1.3 mm, working length 30 cm
	28160 SB	Suction Catheter , flexible, for single use, diameter 1.5 mm, working length 45 cm
	28160 KC	Ball Electrode , unipolar, flexible, diameter 1.7 mm, working length 45 cm
	28160 KM NEW	Bipolar Coagulation Electrode , semirigid, diameter 1.3 mm, working length 35 cm

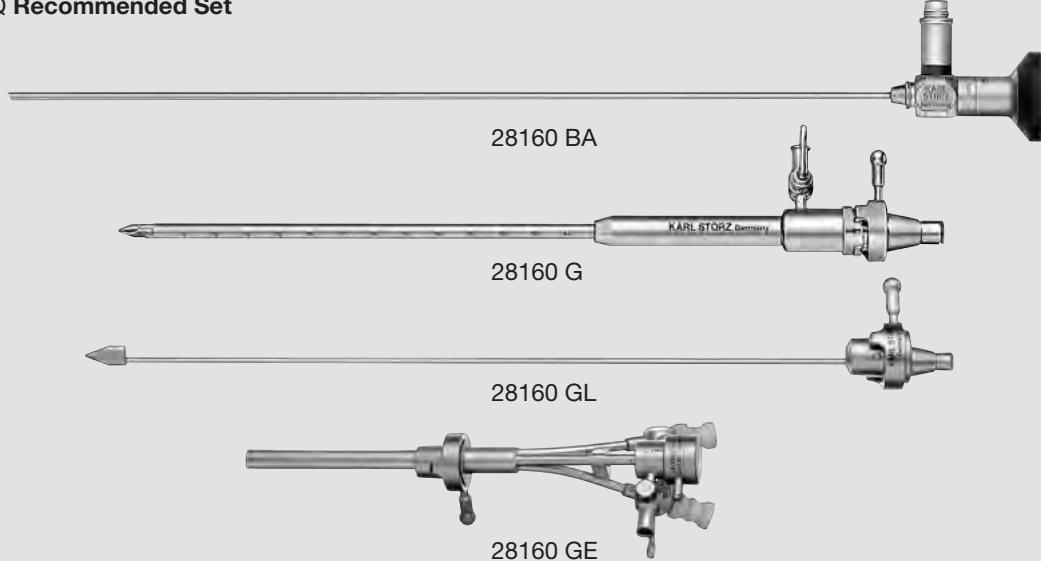
Please note: The use of Balloon Catheter 28162 SB with diameter 0.7 mm is also recommended.
Holding Systems for Fixation of Operating Sheaths see chapter 11
High Frequency Cords and High Frequency Surgical Units AUTOCON® see chapter 12

Neuro-Endoscope

Operating Sheath, size 4 x 7 mm



DECQ Recommended Set



28160 BA

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

28160 G

Operating Sheath, large, oval, exterior 4 x 7 mm,
working length 14 cm, with blunt obturator, with
stopcock, for use with operating instruments size 2.5 mm
in conjunction with Working Insert 28160 GE



28160 GL

Optical Obturator, concave, with channel,
for use with Operating Sheath 28160 G

28160 GE

Working Insert, with 2 working channels, with stopcock,
for use with Operating Sheath 28160 G/GK/GM

Operating Instruments for Operating Sheath size 4 x 7 mm



28160 ZG

Biopsy Forceps, flexible, double action jaws,
diameter 2.3 mm, length 40 cm



28160 TG

Grasping Forceps, flexible, double action jaws,
diameter 2.3 mm, length 40 cm



28160 SF

Suction Catheter, flexible, for single use,
diameter 2.5 mm, working length 45 cm



28160 KD

Bipolar Coagulation Electrode, flexible,
diameter 2 mm, working length 35 cm

Please note: The use of Balloon Catheter 28162 GB with diameter 1 mm is also recommended.
Holding Systems for Fixation of Operating Sheaths see chapter 11
High Frequency Cords and High Frequency Surgical Units AUTOCON® see chapter 12

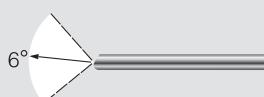
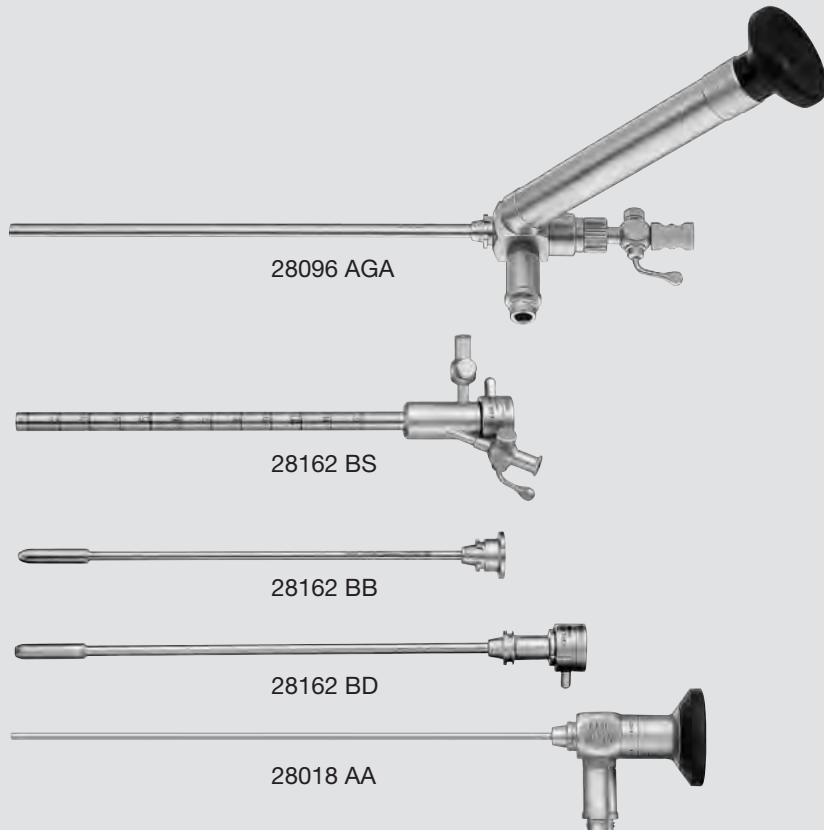
Neuro-Endoscope

Operating Sheath, outer diameter 6.5 mm



GAAB Recommended Set

- For diagnostic orientation in the ventricular system, the cerebellopontine angle, basal cisterns, for arachnoidal cysts, for cystic intracranial tumors
- For therapeutic ventriculostomy, catheterization of the aquaeductus and removal of cysts, tumors and other occlusions in the ventricular region



28096 AGA

HOPKINS® Wide Angle Straight Forward Telescope 6°, angled eyepiece, length 15 cm, autoclavable, with fiber optic light transmission and working channel diameter 3 mm incorporated, robust version, color code: green

28162 BS

Operating Sheath, graduated, outer diameter 6.5 mm, working length 13 cm, with lateral stopcock and catheter port

28162 BB

Obturator, with central hole 2 mm for stereotactic positioning, for use with Operating Sheath 28162 BS

28162 BD

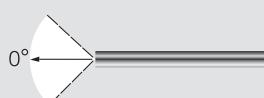
Optical Obturator, for positioning Operating Sheath 28162 BS under visual control, for use with HOPKINS® Telescope 28018 AA

28162 BO

Obturator, for use with Operating Sheath 28162 BS

28018 AA

HOPKINS® Straight Forward Telescope 0°, diameter 2.7 mm, length 18 cm, autoclavable, fiber optic light transmission incorporated, color code: green



Holding Systems for Fixation of Operating Sheaths see chapter 11

Neuro-Endoscope

Operating Instruments

STORZ
KARL STORZ — ENDOSCOPE

GAAB Recommended Set,
for use with HOPKINS® Telescope 28096 AGA and Operating Sheath 28162 BS

Size 2.4 mm, working length 24 cm



28162 BDL



NEW 28162 BDL

TAKE-APART® Bipolar Forceps,
with flat jaws, size 2.4 mm,
working length 24 cm
including:

Bipolar Ring Handle
Outer Sheath
Working Insert,
for single use, package of 5



Diameter 2.7 mm, working length 30 cm

28162 EP



28162 EP

Scissors, pointed, single action jaws,
diameter 2.7 mm, working length 30 cm



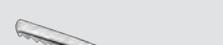
28162 EH

Hook Scissors, single action jaws,
diameter 2.7 mm, working length 30 cm



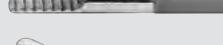
28162 DH

Biopsy Forceps, through-cutting, single action
jaws, diameter 2.7 mm, working length 30 cm



28162 U

Grasping Forceps, serrated, single action jaws, handle
with ratchet, diameter 2.7 mm, working length 30 cm



28162 ZE

Biopsy Forceps, single action jaws, diameter 2.7 mm,
working length 30 cm



Outer diameter 2.8 mm, working length 38 cm

28161 LD



28161 LD

Deflecting Mechanism, for LASER probes,
with bend protection, with adjustment wheel,
with ring-grip handle, inner diameter 2.5 mm,
outer diameter 2.8 mm, working length 38 cm



Neuro-Endoscope

Operating Instruments



**GAAB Recommended Set,
for use with HOPKINS® Telescope 28096 AGA and Operating Sheath 28162 BS**

Diameter 1.7 mm, working length 30 cm

28162 F



28160 TVX

Forceps, for ventriculostomy,
double action jaws, diameter 1.7 mm,
working length 30 cm



28162 F

Grasping Forceps, with teeth, double action
jaws, diameter 1.7 mm, working length 30 cm



28162 Z

Biopsy Forceps, double action jaws,
diameter 1.7 mm, working length 30 cm



28162 EM

Scissors, pointed, slightly curved jaws,
double action jaws, diameter 1.7 mm,
working length 30 cm



28162 EK

Scissors, pointed/blunt, single action jaws,
diameter 1.7 mm, working length 30 cm



28162 ES

Scissors, blunt/blunt, single action jaws,
diameter 1.7 mm, working length 30 cm



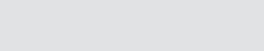
28762 K

Coagulation Electrode, unipolar, semiflexible,
diameter 1.7 mm, working length 30 cm



28762 KB

Bipolar Coagulation Electrode,
diameter 1.7 mm, working length 30 cm



28162 SN

Irrigation Tube, autoclavable,
with LUER-Lock connector



28162 GB

Balloon Catheter, volume 0.20 ml,
diameter 1 mm, length 40 cm, sterile,
for single use, package of 10

High Frequency Cords and High Frequency Surgical Units AUTOCON® see chapter 12

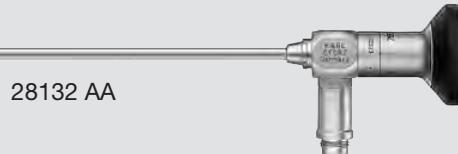
Neuro-Endoscope

Diagnostic Telescopes

STORZ
KARL STORZ — ENDOSKOPE

**GAAB Recommended Set,
for use with Operating Sheath 28162 BS**

Diameter 4 mm, length 18 cm



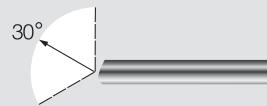
28132 AA

HOPKINS® II Straight Forward Telescope 0°,
enlarged view, diameter 4 mm, length 18 cm,
autoclavable, fiber optic light transmission incorporated,
color code: green



28162 EA

Telescope Bridge, for use with HOPKINS® II Telescope
28132 AA through Operating Sheath 28162 BS



28132 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



28132 FA

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



28132 CA

HOPKINS® II Lateral Telescope 70°, enlarged view,
diameter 4 mm, length 18 cm, **autoclavable**,
fiber optic light transmission incorporated,
color code: yellow



28162 E

Telescope Bridge, for use with HOPKINS® II
Telescope 28132 BA/BWA/CA/FA through
Operating Sheath 28162 BS



533 TVA

Adaptor, **autoclavable**, permits telescope
changing under sterile conditions

Neuro-Endoscope

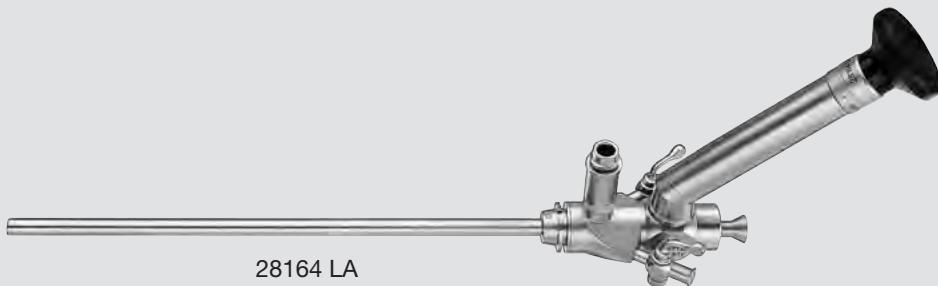
Operating Sheath, outer diameter 6.8 mm



SCHROEDER Recommended Set

- For diagnostic orientation in the ventricular system, the cerebellopontine angle, basal cisterns, arachnoidal cysts and cystic intracranial tumors

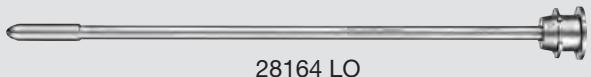
- For therapeutic interventions for ventriculostomies, stent implantations in the aquaduct, septostomies and tumor resections



28164 LA



28164 LS



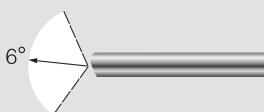
28164 LO



28164 LP



28008 AA



28164 LA

LOTTA® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6°, angled eyepiece, outer diameter 6.1 mm, length 18 cm, working channel diameter 2.9 mm, irrigation/suction channel diameter 1.6 mm, **autoclavable**, fiber optic light transmission incorporated, color code: green

28164 LS

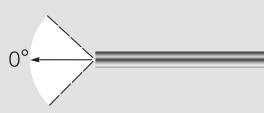
Operating Sheath, graduated, rotating, outer diameter 6.8 mm, working length 13 cm

28164 LO

Obturator, for Operating Sheath 28164 LS

28164 LP

Optical Obturator, for positioning Operating Sheath 28164 LS under visual control, for use with Telescope HOPKINS® II 28008 AA



28008 AA

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

Neuro-Endoscope

Operating Instruments



**SCHROEDER Recommended Set,
for use with LOTTA® Ventriculoscope 28164 LA and Operating Sheath 28164 LS**

CLICK'line Instruments

28164 LB

Diameter 2.7 mm, working length 30 cm



28164 LF

CLICK'line Biopsy Forceps, rotating, dismantling, with LUER-Lock irrigation connector for cleaning, single action jaws, diameter 2.7 mm, working length 30 cm including:

Metal Handle, without ratchet

Outer Sheath, with forceps insert



Diameter 2 mm, working length 30 cm



28164 LB

CLICK'line Scissors, pointed, single action jaws, with Handle 30131, diameter 2 mm, working length 30 cm



28164 LC

CLICK'line Biopsy Forceps, double action jaws, with Handle 30131, diameter 2 mm, working length 30 cm



28164 LD

CLICK'line Ventriculostomy Forceps, with Handle 30131, diameter 2 mm, working length 30 cm



28164 LE

CLICK'line Grasping Forceps, double action jaws, with Handle 30131, diameter 2 mm, working length 30 cm

28160 TV

Diameter 1.7 mm, working length 30 cm



28162 EM

Scissors, pointed, slightly curved jaws, double action jaws, diameter 1.7 mm, working length 30 cm



Diameter 1.3 mm, working length 30 cm



28162 FP

Scissors, pointed, single action jaws, diameter 1.3 mm, working length 30 cm

Diameter 1 mm, working length 30 cm



28160 TV

Forceps, for ventriculostomy, flexible, double action jaws, diameter 1 mm, working length 30 cm



28160 ZJ

Biopsy Forceps, flexible, double action jaws, diameter 1 mm, working length 30 cm

Components/Spare Parts see chapter 13

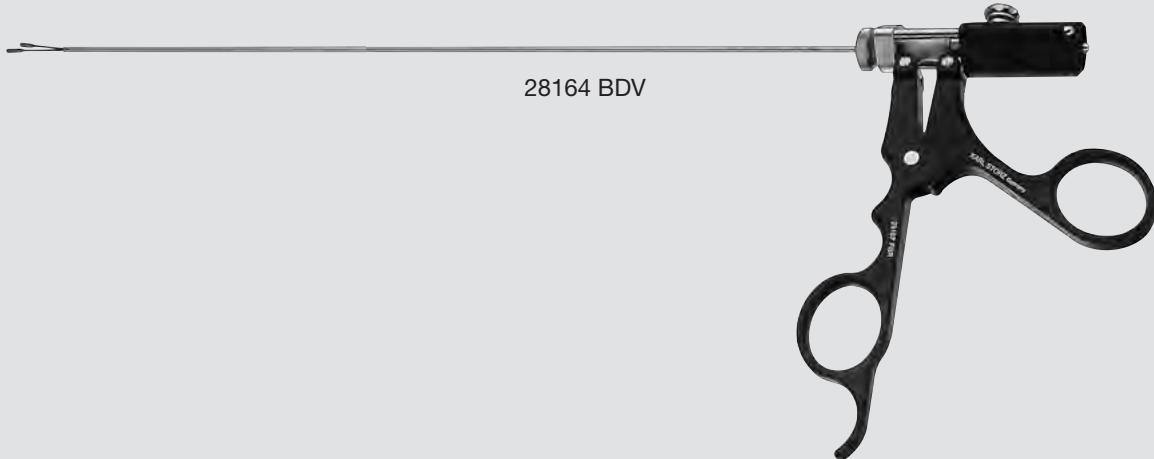
Neuro-Endoscope ^{NEW}

Operating Instruments



SCHROEDER Recommended Set,
for use with LOTTA® Ventriculoscope 28164 LA and Operating Sheath 28164 LS

Outer diameter 2.4 mm, working length 30 cm



28164 BDV



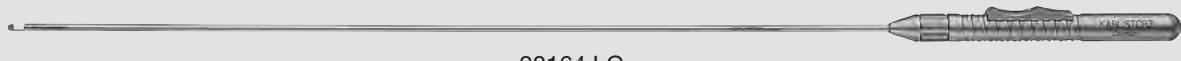
28164 BDV

TAKE-APART® Bipolar Forceps, long, with flat jaws,
outer diameter 2.4 mm, working length 30 cm
including:

Bipolar Ring Handle

Outer Sheath

Forceps Insert, for single use, package of 5



28164 LG



28164 LG

Guillotine Knife, outer diameter 2.7 mm,
working length 30 cm

including:

Handle

Guillotine Knife Insert

Components/Spare Parts see chapter 13

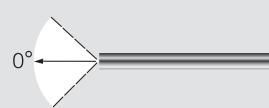
Neuro-Endoscope

Diagnostic Telescopes



**SCHROEDER Recommended Set,
for use with Operating Sheath 28164 LS**

Diameter 3.3 mm, length 25 cm



28007 AA

28007 AA

HOPKINS® II Straight Forward Telescope 0°,
enlarged view, diameter 3.3 mm, length 25 cm,
autoclavable, fiber optic light transmission incorporated,
color code: green



28007 BA

HOPKINS® II Forward-Oblique Telescope 30°,
enlarged view, diameter 3.3 mm, length 25 cm,
autoclavable, fiber optic light transmission incorporated,
color code: red



28007 FA

HOPKINS® II Telescope 45°, enlarged view,
diameter 3.3 mm, length 25 cm, **autoclavable**,
fiber optic light transmission incorporated,
color code: black



533 TVA

Adaptor, autoclavable, permits telescope
changing under sterile conditions



28762 KB

Bipolar Coagulation Electrode,
diameter 1.7 mm, working length 30 cm



28162 GB

Balloon Catheter, volume 0.20 ml,
diameter 1 mm, length 40 cm, sterile,
for single use, package of 10

Neuro-Endoscope NEW

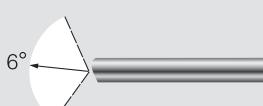
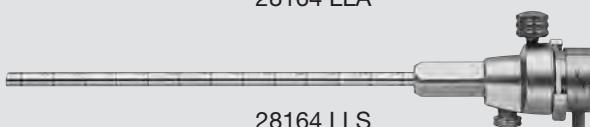
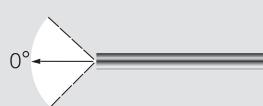
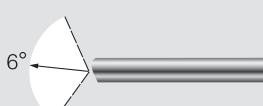
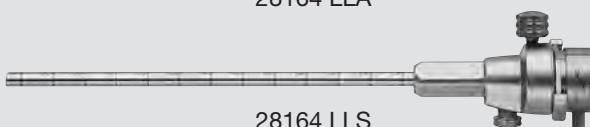
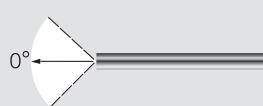
Operating Sheath, outer diameter 4.5 mm



SCHROEDER Recommended Set

- Small outer diameter provides excellent image quality
- Slender sheath (diameter 4.5 mm) enables direct exploration of the prepontine cistern via ventriculostomy – particularly suitable, therefore, for patients with arachnoidal membranes in the interpeduncular and/or prepontine cisterns
- Suitable for all patients with narrow foramen of Monro – both adult and pediatric patients

- Suitable for performing ventriculostomies, septostomies, tumor biopsies and cyst fenestration
- Not suitable for the removal of colloid cysts, tumor resections and stent implantations – the “large” LOTTA® is still recommended in these cases

 28164 LLA	
 28164 LLS	
 28164 LLO	
 28164 LLP	
 28008 AA	
28164 LLA 	Little LOTTA® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6° , small, angled eyepiece, outer diameter 3.6 mm, length 18 cm, with working channel diameter 1.6 mm, irrigation/suction channel diameter 0.8 mm, autoclavable , with cleaning adaptor, fiber optic light transmission incorporated, color code: green
28164 LLS 	Operating Sheath , small, outer diameter 4.5 mm, working length 13.3 cm, for use with Little LOTTA® Ventriculoscope 28164 LLA
28164 LLO 	Obturator , for use with Operating Sheath 28164 LLS
28164 LLP 	Optical Obturator , for use with Operating Sheath 28164 LLS and HOPKINS® II Telescope 28008 AA
28008 AA 	HOPKINS® II Straight Forward Telescope 0° , enlarged view, diameter 2 mm, length 26 cm, autoclavable , fiber optic light transmission incorporated, color code: green

Neuro-Endoscope ^{NEW}

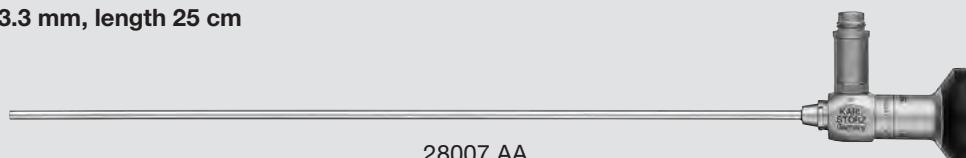
Operating Instruments

STORZ
KARL STORZ — ENDOSCOPE

SCHROEDER Recommended Set,
for use with LOTTA® Ventriculoscope 28164 LLA and Operating Sheath 28164 LLS

	28161 SC	
	28161 SB	
	28161 SG	
	28161 SF	
	28160 TV	
	28162 GB	
	28161 SC	

Diagnostic Telescopes
Diameter 3.3 mm, length 25 cm

	28007 AA	
	28007 AA	
	28007 BA	
	28007 FA	

Neuro-Endoscope

NEW

Shunt Placement under Visual Control



Shuntscope



28164 SS

28164 SS

Shuntscope: Miniature Straight Forward Telescope 0°,
diameter 1 mm, length 16 cm, semirigid, eyepiece and light
connection remote from the instrument, LUER-Lock adaptor,
fiber optic light transmission incorporated, including
Protection Tube 11576 P and Case 27677 C



PEDIATRIC NEURO-ENDOSCOPY

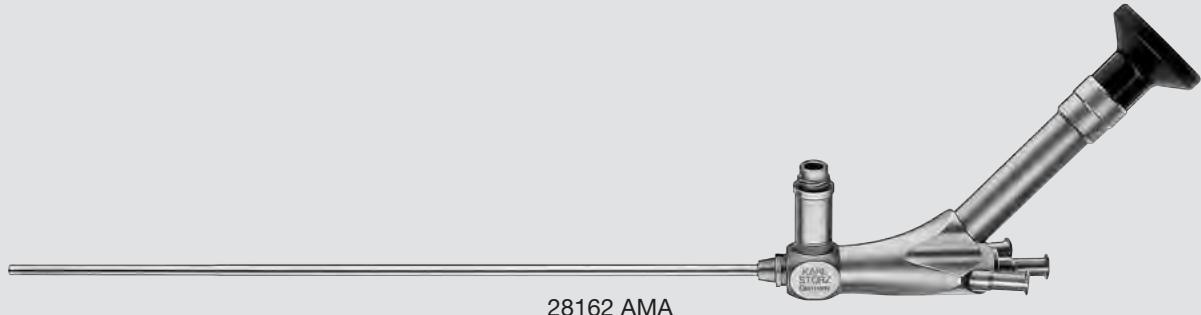
Pediatric Neuro-Endoscope

Operating Sheath, outer diameter 4.5 mm

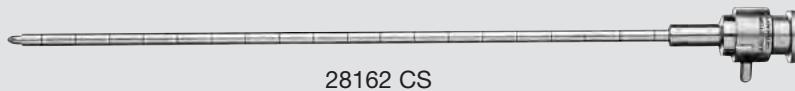
GAAB Recommended Set

Special Features:

- Fiber optic system in proven quality
- Suitable for pediatric interventions
- The physician has both hands free for operating the instruments.
- Large inflow – two separate irrigation channels with diameter of 1 mm for continuous suction and irrigation
- Central working channel with a diameter of 1.3 mm allows use of rigid instruments
- Lateral irrigation channel allows use of additional instruments with a diameter of 1 mm parallel to the working channel.
- Autoclavable



28162 AMA **GAAB Neuro-Endoscope 6°, autoclavable,**
diameter 3.8 mm, working length 21 cm,
for use with Operating Sheath 28162 CS



28162 CS **Operating Sheath**, graduated, outer diameter 4.5 mm,
length 20 cm, with blunt Obturator 28162 CSO

Pediatric Neuro-Endoscope

Operating Instruments – rigid



Instruments for use through the central channel

28161 SG



28162 FL

Biopsy Forceps, double action jaws,
diameter 1.3 mm, working length 30 cm



28161 SG

Grasping Forceps, double action jaws,
diameter 1.3 mm, working length 30 cm



28160 EK

Scissors, single action jaws,
diameter 1.3 mm, working length 34 cm

High Frequency Cords and High Frequency Surgical Units AUTOCON® see chapter 12

Pediatric Neuro-Endoscope

Operating Instruments – flexible



Instruments for use through the lateral channel

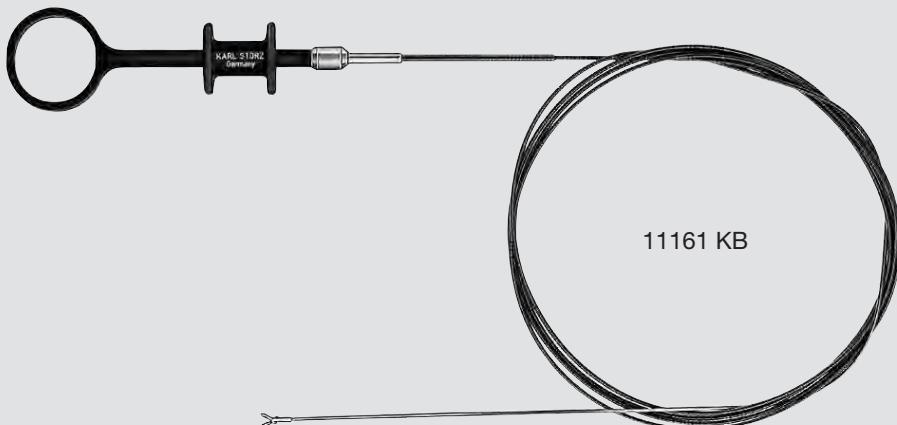
28160 TVL



28160 TVL

Forceps, for ventriculostomy, flexible,
double action jaws, diameter 1 mm,
working length 60 cm

11161 KB



11161 KA

Biopsy Forceps, flexible, double action jaws,
diameter 1 mm, length 60 cm



11161 KB

Grasping Forceps, flexible, double action jaws,
diameter 1 mm, length 60 cm



28160 KA

Coagulation Electrode, unipolar, flexible,
diameter 1 mm, length 53 cm



28162 SB

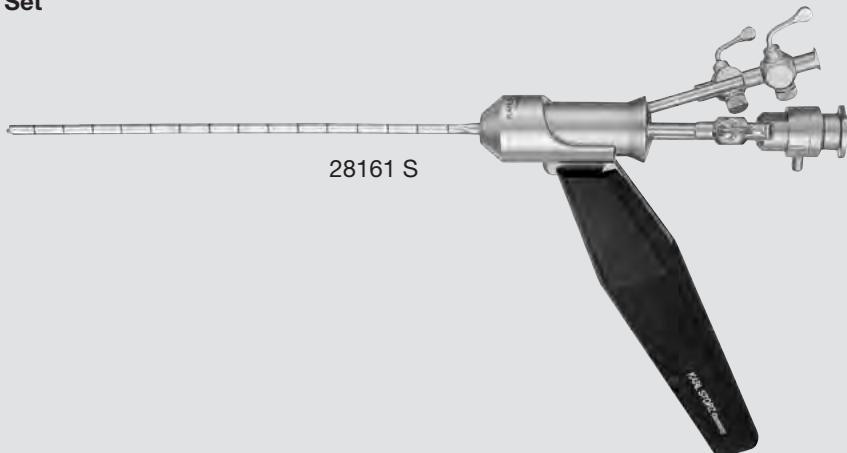
Balloon Catheter, volume 0.05 ml, diameter 0.7 mm,
length 40 cm, sterile, for single use, package of 10

Pediatric Neuro-Endoscope

Operating Sheath, size 2.6 x 4 mm and HOPKINS® II Telescopes



OI Recommended Set



28161 S

OI HandyPro® Neuro-Endoscope, with removable handle, for free-hand surgical techniques including:

Operating Sheath, graduated, size 2.6 x 4 mm, working length 15 cm, with three working channels for irrigation and suction and for instruments size 1.3 mm, for use with HOPKINS® II Telescopes 28008 AA and 28008 FA

Handle

Mandrel

28008 AA



28008 AA

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



28008 FA

HOPKINS® II Telescope 12°, enlarged view, diameter 2 mm, length 26 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

Components/Spare Parts see chapter 13

Pediatric Neuro-Endoscope

Operating Instruments – rigid



OI Recommended Set

Diameter 1.3 mm

28161 SC



28161 SC

Scissors, single action jaws,
diameter 1.3 mm, working length 30 cm



28161 SB

Biopsy Forceps, double action jaws,
diameter 1.3 mm, working length 30 cm



28161 SG

Grasping Forceps, double action jaws,
diameter 1.3 mm, working length 30 cm



28161 SE

Coagulation Electrode, unipolar,
diameter 1.3 mm, working length 30 cm



28161 SF

Bipolar Coagulation Electrode,
diameter 1.3 mm, working length 30 cm



28162 SB

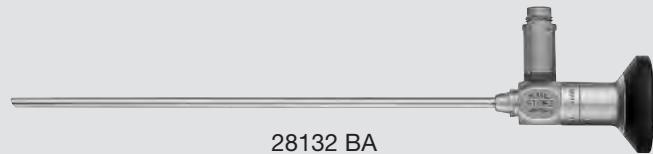
Balloon Catheter, volume 0.05 ml, diameter 0.7 mm,
length 40 cm, sterile, for single use, package of 10

Pediatric Neuro-Endoscopy ^{NEW}

Endoscopic Treatment of Craniosynostosis



JIMENEZ Recommended Set



28132 BA

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



28164 J

JIMENEZ Scalp-Dura Retractor, for use
with HOPKINS® II Telescopes 28132 BVA
and 28132 BA

including:

Handle

Telescope Sheath

Upper Blade, 10 mm

Lower Blade, 10 mm

Upper Blade, 5 mm

Lower Blade, 5 mm

Components/Spare Parts see chapter 13

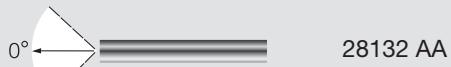
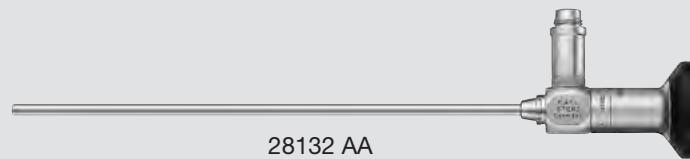
Pediatric Neuro-Endoscopy

Endoscopic Treatment of Craniosynostosis

NEW



JIMENEZ Recommended Set



28132 AA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



28164 KC



28164 KC

Curette, round spoon, tip slightly angled, size 3 mm, with round handle, length 25 cm



484004

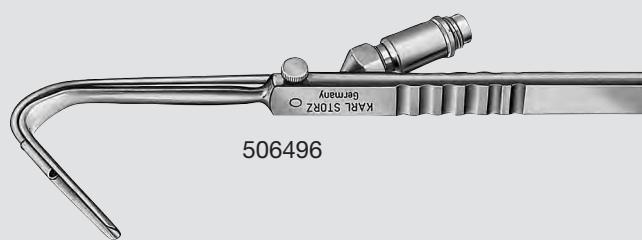
484004

COTTEL Chisel, flat, graduated, straight, width 4 mm, length 18.5 cm



28163 CM

COTTEL Metal Mallet, with plastic replacement head, length 22.5 cm



506496

506496

AUFRICHT Nasal Retractor, with fiber optic light carrier, width of retractor blade 8 mm, length of retractor blade 40 mm, length 16.5 cm

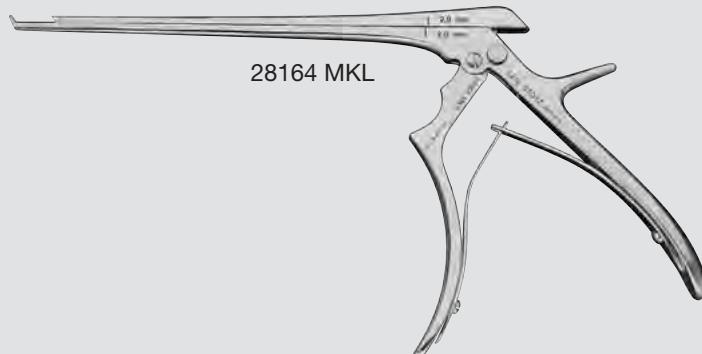
Pediatric Neuro-Endoscopy NEW

Endoscopic Treatment of Craniosynostosis



28164 JC

28164 JC **Bone Scissors**, one blade serrated,
length 24 cm



28164 MKL **KERRISON Bone Punch**, detachable,
rigid, upbiting 60° forward, size 5 mm,
working length 17 cm



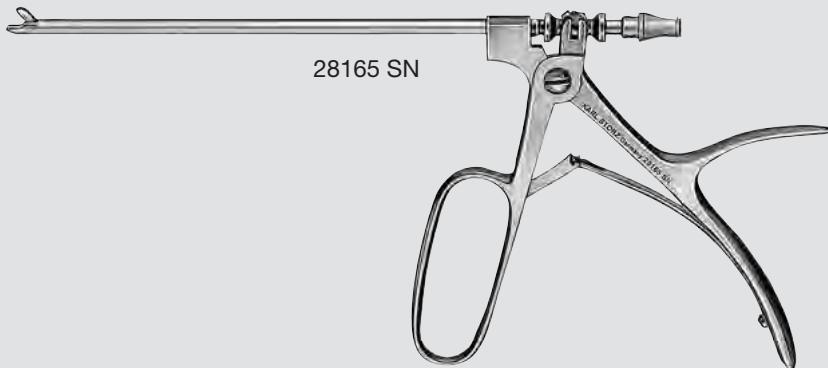
28164 MKO **KERRISON Bone Punch**, detachable,
rigid, downbiting 60° forward, size 4 mm,
working length 17 cm

Pediatric Neuro-Endoscopy

Endoscopic Treatment of Craniosynostosis

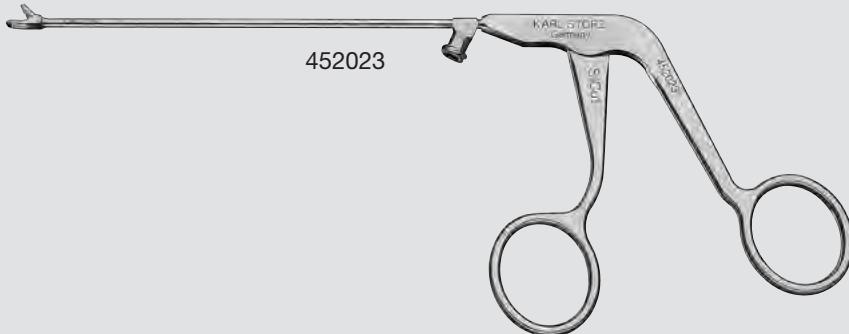
NEW

STORZ
KARL STORZ — ENDOSCOPE



28165 SN

Suction Punch, straight jaws, sheath
diameter 4.8 mm, working length 13 cm



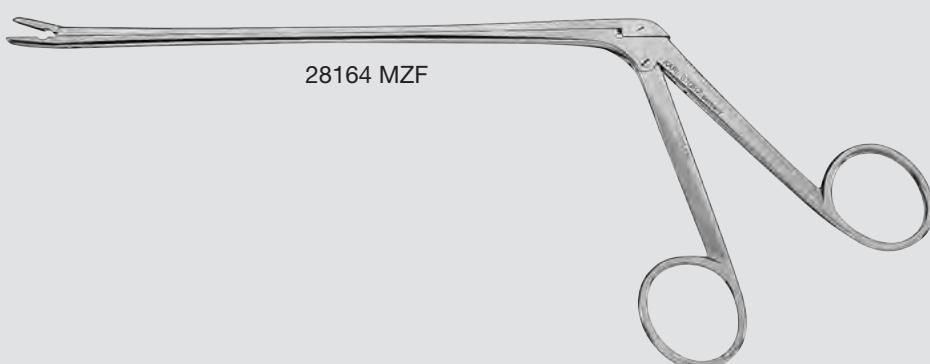
452022

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 2.7 mm, with cleaning
connector, working length 13 cm



452023

Same, width of cut 3.4 mm



28164 MZF

Spoon Forceps, spoon size 3 x 10 mm,
single action jaws, working length 17 cm

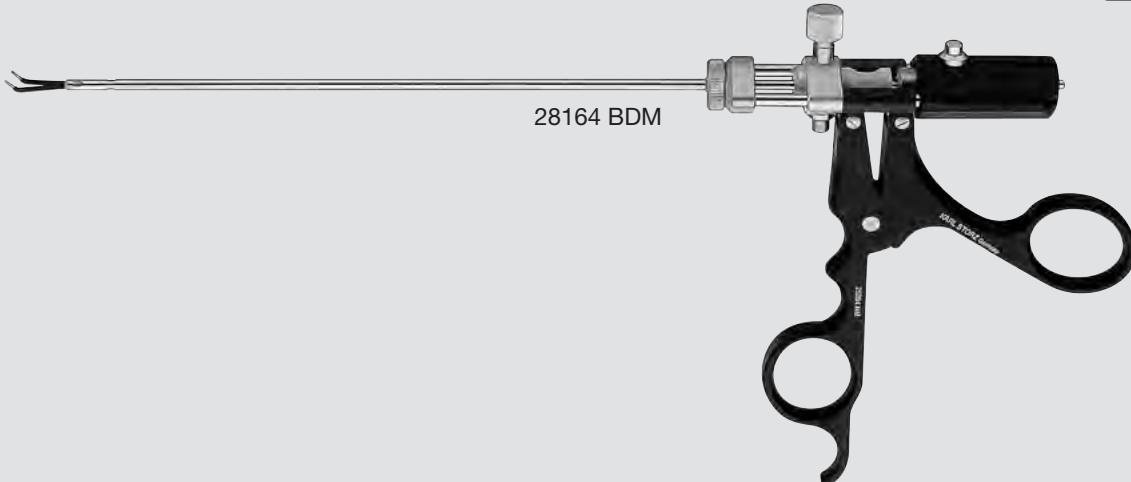
Pediatric Neuro-Endoscopy

NEW

Endoscopic Treatment of Craniosynostosis



For use with Bipolar High Frequency Cords 26176 LE/LM/L/LA/LV



28164 BDM

TAKE-APART® Bipolar Forceps, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



28164 BDD

TAKE-APART® Bipolar Forceps, width 2 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



28164 BDK

TAKE-APART® Bipolar Forceps, width 4 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert

Components/Spare Parts see chapter 13

Pediatric Neuro-Endoscopy ^{NEW}

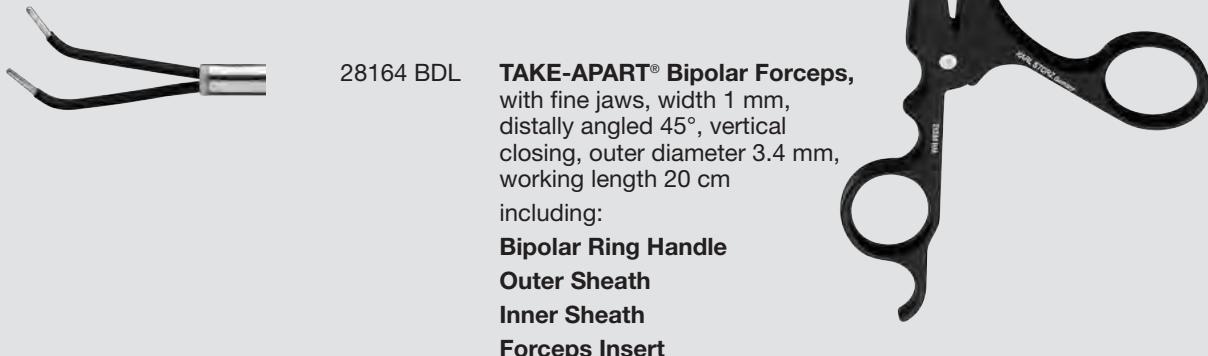
Endoscopic Treatment of Craniosynostosis

STORZ
KARL STORZ — ENDOSCOPE

For use with Bipolar High Frequency Cords 26176 LE/LM/L/LA/LV



28164 BDL



28164 BDL

TAKE-APART® Bipolar Forceps,
with fine jaws, width 1 mm,
distally angled 45°, vertical
closing, outer diameter 3.4 mm,
working length 20 cm

including:

- Bipolar Ring Handle**
- Outer Sheath**
- Inner Sheath**
- Forceps Insert**



28164 BDG

TAKE-APART® TAN Bipolar Coagulation Forceps,
size 3.4 mm, working length 20 cm

including:

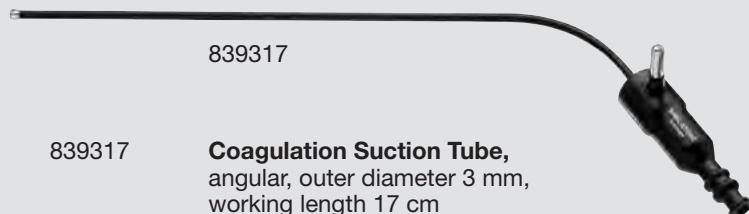
- Bipolar Ring Handle**
- Outer Sheath**
- Inner Sheath**
- Forceps Insert**



28164 BPB

28164 BPB

Bipolar Coagulation Forceps, insulated,
bayonet-shaped, blunt, tip 0.7 mm,
working length 14 cm, total length 25 cm



839317

839317

Coagulation Suction Tube,
angular, outer diameter 3 mm,
working length 17 cm

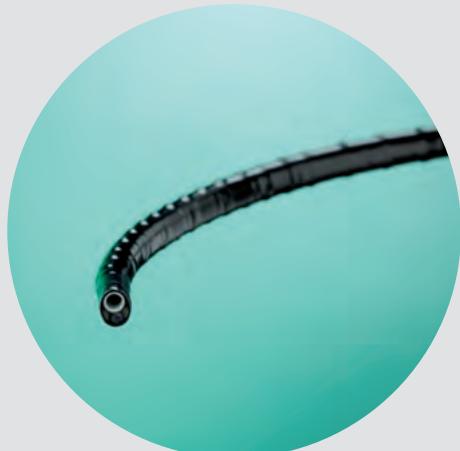
Components/Spare Parts see chapter 13



VIDEO NEURO-ENDOSCOPE

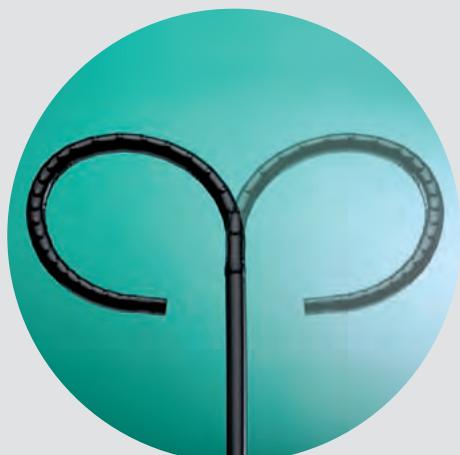
Video Neuro-Endoscope, flexible ^{NEW} KARL STORZ FLEX-X^c

STORZ
KARL STORZ — ENDOSKOPE



Minimum sheath circumference

- Minimal sheath circumference 8.4 Fr.
- Atraumatic tip 8.5 Fr.
- Large working channel 3.6 Fr.
- LASERITE ceramic insert
 - prevents thermal damage and extends service life



Infinitely variable deflection

- Infinitely variable 270° deflection (up/down) for intuitive orientation and visualization of the entire ventricle system
- New deflection mechanism allows instrument use with little or no loss of angulation properties
- Integrated shock absorber system:
 - Offers additional passive deflection components for optimum movement
 - Protects instrument

Excellent image quality

- Excellent image quality for optimal tissue differentiation and reliable diagnosis of pathologies, even in areas that are difficult to access
- Automatic focus and exposure
- Integrated LED light source for:
 - homogeneous illumination
 - ergonomic work
- Full-screen display, also thanks to quadratic imaging
- 50 % magnification of image and significantly improved image resolution

Video Neuro-Endoscope, flexible ^{NEW} KARL STORZ FLEX-X^c

STORZ
KARL STORZ — ENDOSCOPE



1:1 implementation for easy and ergonomic handling

- Innovative sheath materials are characterized by superior resistance
- Direct transmission of hand movements through to the distal end thanks to high torque stability
- Extremely smooth control of the distal tip
- Lightweight
- Allows ergonomic work thanks to integrated LED light source and lightweight handle design



Further Features

- Extremely thin and steerable
- Excellent image quality
- Easy insertion and navigation
- Small outer diameter
- Waterproof and fully immersible in solution
- Sterilizable via EtO and FO gas, Steris® and Sterrad®
- Compatible with IMAGE1
- IMAGE 1 HUB™ HD

Indications

- For direct examination of all cerebral ventricles from caudal to cranial or vice versa including passage of the normally dilated cerebral aqueduct, offering the possibility of manipulations such as biopsy, ventriculostomy and septostomy
- Endoscopy of the subdural and subarachnoid region
- Endoscopy of the spinal canal combined with the possibility of operative manipulations, e. g. extradural, intradural-extramedullary, but also particularly for the treatment of a cystic intramedullary process such as syringomyelia
- Endoscopically assisted micro-neurosurgery in narrow spaces

Video Neuro-Endoscope, flexible ^{NEW} KARL STORZ FLEX-X^c



8.5 Fr.

Order no.	Deflection of distal tip	Direction of view	Angle of view	Working length	Working channel inner diameter	Sheath size
11161 VK		0°	90°	70 cm	3.6 Fr.	8.5 Fr.

Following accessories are included:



27677 X **Case**



13242 XL **Leakage Tester**, with bulb and manometer



27651 AL **Cleaning Brush**, round, flexible, outer diameter 2 mm, for working channel diameter 1.2 – 1.8 mm, length 150 cm



27014 Y **LUER-Adaptor**, with seal

Optional accessories:



11161 MA **Biopsy Forceps**, flexible, double action jaws, diameter 1 mm, working length 100 cm



11161 MB **Grasping Forceps**, flexible, double action jaws, diameter 1 mm, working length 100 cm



26002 M **Unipolar High Frequency Cord**, with 4 mm plug for models KARL STORZ, Erbe type T, older models and Ellman, length 300 cm

27001 RA **Cleaning Adaptor**

Flexible Video Neuro-Endoscope 11161 VK is compatible with IMAGE 1 HUB™ HD Camera Control Unit.

Plastic Container for the Sterilization and Storage of Video Neuro-Endoscopes, flexible



For use with Video Neuro-Endoscope 11161 VK



39405 AS

Plastic Container for Flexible Endoscopes, specially suited for gas and hydrogen peroxide (Sterrad®) sterilization and storage, for use with one flexible endoscope, external dimensions (w x d x h): 550 x 260 x 90 mm

Please note: Video endoscopes stored in this container can only be sterilized with gas or plasma. The instruments displayed are not included in the container.



**EAM – ENDOSCOPICALLY ASSISTED
MICRO NEUROSURGERY**

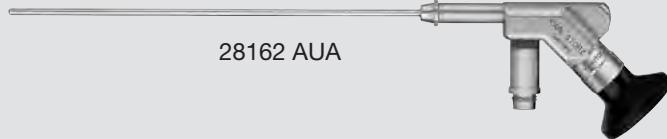
EAM – Endoscopically Assisted Micro Neurosurgery

HOPKINS® II Telescopes



GALZIO Recommended Set

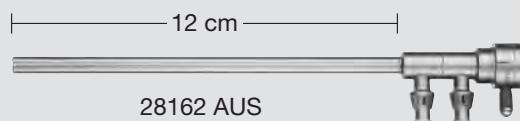
Diameter 2.7 mm, length 15 cm



28162 AUA **HOPKINS® II Straight Forward Telescope 0°**, diameter 2.7 mm, length 15 cm, **autoclavable**, proximally angled eyepiece and light connection, fiber optic light transmission incorporated, color code: green



28162 BOA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 2.7 mm, length 15 cm, direction of view in **12 o'clock** position, **autoclavable**, proximally angled eyepiece and light connection, fiber optic light transmission incorporated, color code: red



28162 AUS **Irrigation and Suction Sheath 0°**, oval, 3.5 x 4.7 mm, working length 12 cm, for use with HOPKINS® II Telescope 28162 AUA and KARL STORZ lens irrigation system CLEARVISION®II

28162 BOS **Irrigation and Suction Sheath 30°**, oval, 3.5 x 4.7 mm, working length 12 cm, for use with HOPKINS® II Telescope 28162 BOA and KARL STORZ lens irrigation system CLEARVISION®II

EAM – Endoscopically Assisted Micro Neurosurgery

Operating Instruments



GALZIO Recommended Set



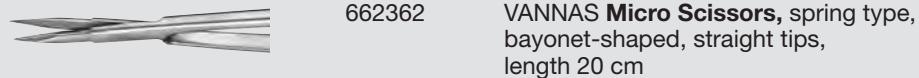
28164 HGB **Micro Hook**, bayonet-shaped, blunt, working length 13.5 cm



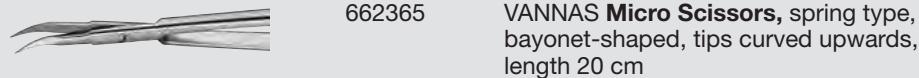
28164 POA **Dissector**, bayonet-shaped, curved upwards, working length 13.5 cm



28164 PUA **Dissector**, bayonet-shaped, curved downwards, working length 13.5 cm



662362 **VANNAS Micro Scissors**, spring type, bayonet-shaped, straight tips, length 20 cm



662365 **VANNAS Micro Scissors**, spring type, bayonet-shaped, tips curved upwards, length 20 cm

EAM – Endoscopically Assisted Micro Neurosurgery

Operating Instruments



GALZIO Recommended Set

Bipolar Coagulation Forceps, insulated,
for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V



28164 BPA **Bipolar Coagulation Forceps**, insulated,
bayonet-shaped, blunt, tip 0.7 mm,
working length 12 cm, length 23 cm

28164 BPC **Same**, tip 0.3 mm

Suction Tubes



28164 XG **Suction Tube**, with grip plate and elongated
cut-off hole, distal holes, LUER, diameter 9 Fr.,
length 15 cm

28164 XM **Same**, 7 Fr.

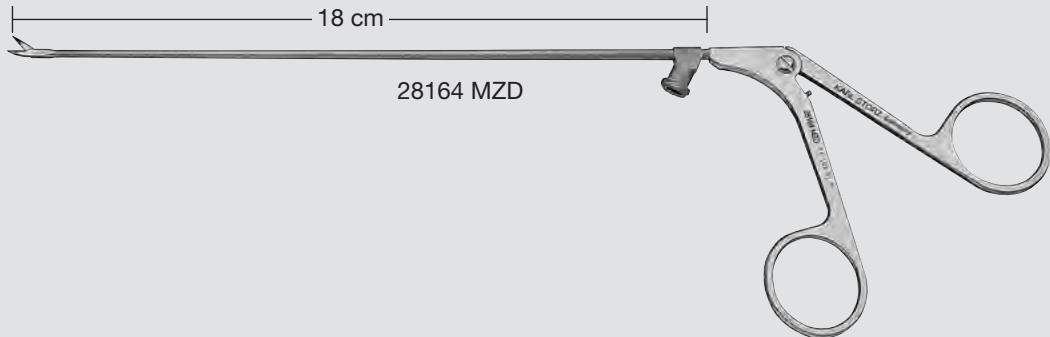
28164 XK **Same**, 5 Fr.

EAM – Endoscopically Assisted Micro Neurosurgery

Operating Instruments



Scissors, working length 18 cm



28164 MZA **Grasping Forceps**, fine serration, straight, with cleaning connector, working length 18 cm



28164 MZB **Scissors**, straight, with small handle, with cleaning connector, working length 18 cm



28164 MZC **Same**, curved to right

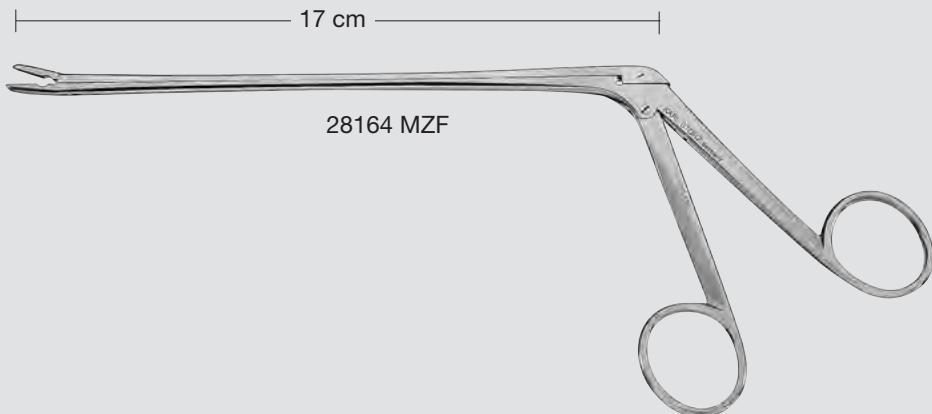


28164 MZD **Same**, curved to left



28164 MZE **Same**, angled upwards

Spoon Forceps, working length 17 cm



28164 MZF **Spoon Forceps**, spoon size 3 x 10 mm, single action jaws, working length 17 cm

EAM – Endoscopically Assisted Micro Neurosurgery

Operating Instruments



SEPEHRNIA Recommended Set



28164 NBB



28164 NBC **Micro Needle Holder**, bayonet-shaped, straight jaws, 2 x 6 mm, working length 10 cm



28164 PBA **Micro Grasping Forceps**, bayonet-shaped, jaws curved to left, 1 x 6 mm, working length 10 cm



28164 PBE



28164 PBA **Micro Grasping Forceps**, bayonet-shaped, straight jaws, smooth, 0.5 mm, working length 10 cm



28164 PBC **Micro Grasping Forceps**, bayonet-shaped, straight jaws, serrated, 3 mm, working length 10 cm



28164 PBD **Micro Grasping Forceps**, bayonet-shaped, jaws curved to left, 0.75 mm, working length 10 cm



28164 PBE



28164 PBB **Micro Forceps**, bayonet-shaped, spoon, 2 mm, working length 10 cm



28164 PBE **Micro Forceps**, bayonet-shaped, spoon, 4 mm, working length 10 cm



28164 PBF **Micro Forceps**, bayonet-shaped, spoon, 6 mm, working length 10 cm



28164 PBG **Micro Forceps**, bayonet-shaped, spoon horizontal, 2 mm, working length 10 cm



28164 PBH **Micro Forceps**, bayonet-shaped, spoon horizontal, 4 mm, working length 10 cm



28164 PBI **Micro Forceps**, bayonet-shaped, spoon horizontal, 6 mm, working length 10 cm

EAM – Endoscopically Assisted Micro Neurosurgery

Operating Instruments



SEPEHRNIA Recommended Set



28164 SBC



28164 SBA

Micro Scissors, bayonet-shaped, sharp/sharp,
cutting edges straight, working length 10 cm



28164 SBB

Micro Scissors, bayonet-shaped, sharp/sharp,
cutting edges curved to left, working length 10 cm



28164 SBC

Micro Scissors, bayonet-shaped, blunt/blunt,
cutting edges straight, working length 10 cm



28164 SBD

Micro Scissors, bayonet-shaped, sharp/sharp,
cutting edges curved to right, working length 10 cm



28164 SBE

Micro Scissors, bayonet-shaped, sharp/sharp,
cutting edges horizontal, working length 10 cm



28164 ZBB



28164 ZBA

Micro Clip Applying Forceps,
Yasargil clips, working length 10 cm



28164 ZBB

Micro Clip Applying Forceps,
Yasargil mini-clips, working length 10 cm

EAM – Endoscopically Assisted Micro Neurosurgery

Operating Instruments



GODANO Recommended Set



28164 GKA



28164 GKA **Micro Grasping Forceps**, straight jaws,
smooth, diameter 1 mm, working length 11 cm

28164 GGA **Same**, diameter 2.2 mm



28164 GKB **Micro Grasping Forceps**, jaws curved upwards 45°,
smooth, diameter 1 mm, working length 11 cm

28164 GGB **Same**, diameter 2.2 mm



28164 GKC **Micro Grasping Forceps**, straight jaws,
serrated, diameter 1 mm, working length 11 cm

28164 GGC **Same**, diameter 2.2 mm



28164 GKD **Micro Scissors**, cutting edges straight,
diameter 1 mm, working length 11 cm

28164 GGD **Same**, diameter 2.2 mm



28164 GKE **Micro Scissors**, cutting edges angled 30°,
diameter 1 mm, working length 11 cm

28164 GGE **Same**, diameter 2.2 mm



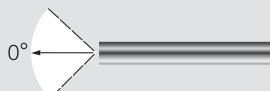
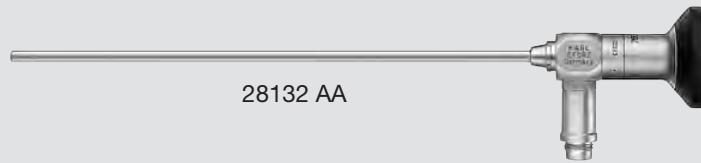
28164 GKF **Micro Scissors**, cutting edges angled 60°,
diameter 1 mm, working length 11 cm

28164 GGF **Same**, diameter 2.2 mm

EAM – Endoscopically Assisted Micro Neurosurgery

MVD (Movement Driven Vision) Sheaths

NEW



28132 AA

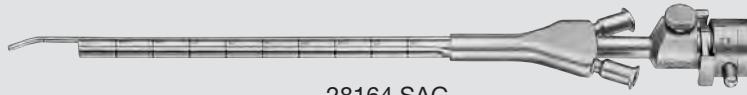
HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



28132 BA

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

ALENCASTRO MVD Sheaths



28164 DAK

Operating Sheath 0°, with curved dissector 1 cm, rotatable, with graduated scale, working length 12 cm, for use with HOPKINS® II Telescope 0° 28132 AA



28164 DAL

Operating Sheath 0°, with curved dissector 2 cm, rotatable, with graduated scale, working length 12 cm, for use with HOPKINS® II Telescope 0° 28132 AA



28164 DBG

Operating Sheath 30°, with curved dissector 2.5 cm, with graduated scale, working length 12 cm, for use with HOPKINS® II Telescope 30° 28132 BA



28164 SAG

Operating Sheath with Angled Suction Tube, diameter 2 mm, length 2 cm, with graduated scale, working length 12 cm, for use with HOPKINS® II Telescope 28132 AA



28164 SAK

Operating Sheath with Suction Tube, diameter 2 mm, length 1 cm, rotating, with graduated scale, working length 12 cm, for use with HOPKINS® II Telescope 28132 AA



28164 SAL

Operating Sheath with Suction Tube, diameter 2 mm, length 2 cm, rotating, with graduated scale, working length 12 cm, for use with HOPKINS® II Telescope 28132 AA



28164 SBG

Operating Sheath with Angled Suction Tube, diameter 2 mm, with graduated scale, working length 12 cm, for use with HOPKINS® II Telescope 28132 BA

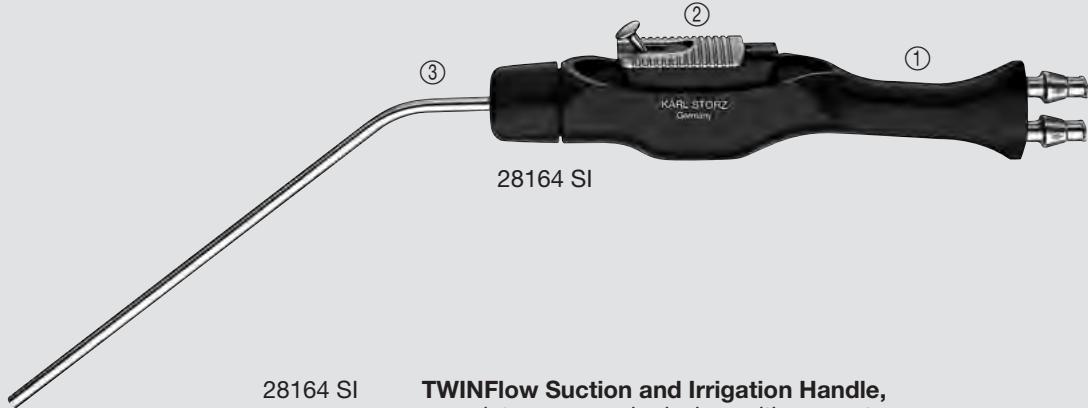
EAM – Endoscopically Assisted ^{NEW} Micro Neurosurgery

TWINFlow Suction and Irrigation Handle



With adjustable continuous suction and infinitely adjustable irrigation, if required

TWINFlow



28164 SI

TWINFlow Suction and Irrigation Handle, complete, ergonomic design, with separate suction/irrigation unit and suction/irrigation tubes including:

- (1) **Suction and Irrigation Handle**
- (2) **Suction and Irrigation Unit**, separate, with adjustable continuous suction and continuously adjustable irrigation function if required

Cleaning Adaptor, for assembly in sterilization trays, for use with Suction-Irrigation Unit 28163 SIU
Set, including loading aid with 8 O-Rings

Cleaning Brush, round, rigid, outer diameter 7 mm, for working channel diameter 2.5 – 5 mm, length 35 cm

- (3) 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 13 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 13 cm

Components/Spare Parts see chapter 13

EAM – Endoscopically Assisted Micro Neurosurgery

FULL HD Imaging Upgrade Kit NEURO for Operating Microscopes ^{NEW}



The “FULL HD Imaging Upgrade Kit NEURO” enables the image of the surgical microscope to be displayed in HD quality on a separate HD monitor. This simplifies co-viewing for the assistants, OR personnel, residents and trainees, providing excellent image quality.

The high-resolution video chain with Full HD technology (1080p) includes a H3-M COVIEW® HD camera head, a HD camera control unit and a HD monitor.



OR recording, courtesy of: Prof. Schroeder, Greifswald (Germany)

The FULL HD Imaging Upgrade Kit NEURO is extremely useful for training and educational purposes. It provides observers inside and outside the OR with an unobstructed view of the surgical field in FULL HD quality. The KARL STORZ AIDA® documentation system combines all the required functions for integrated and precise image and video documentation during surgery.

The FULL HD Imaging Upgrade Kit NEURO is compatible with all standard surgical microscopes offered by the providers Carl Zeiss Meditech, Leica Microsystems and Moeller-Wedel.

EAM – Endoscopically Assisted ^{NEW} Micro Neurosurgery

FULL HD Imaging Upgrade Kit NEURO for Operating Microscopes



The FULL HD Imaging Upgrade Kit NEURO is available in two versions according to the menu language required:

- 22 2200 54-NDE** **HD Upgrade Kit, Neurosurgery**, PAL, keyboard with German character set including:
Equipment Cart
Monitor Arm
Isolation Transformer
Earth Leakage Monitor
Mains Cord, length 100 cm
IMAGE1 H3-M COVIEW® Three-Chip FULL HD Microscope Camera Head,
PAL/NTSC, 50/60 Hz
26" HD Monitor
IMAGE 1 HUB™ HD Camera Control Unit, with SDI, 50/60 Hz, KSI set
KARL STORZ AIDA® compact NEO advanced, German
RS 232 Connecting Cable, length 600 cm
- 22 2200 54-NE** **HD Upgrade Kit, Neurosurgery**, PAL, keyboard with English character set including:
Equipment Cart
Monitor Arm
Isolation Transformer
Earth Leakage Monitor
Mains Cord, length 100 cm
IMAGE1 H3-M COVIEW® Three-Chip FULL HD Microscope Camera Head,
PAL/NTSC, 50/60 Hz
26" HD Monitor
IMAGE 1 HUB™ HD Camera Control Unit, with SDI, 50/60 Hz, KSI set
KARL STORZ AIDA® compact NEO advanced, English
RS 232 Connecting Cable, length 600 cm

Please note:

KARL STORZ offers the QUINTUS® TV adaptor product range exclusively for connecting the H3-M COVIEW® camera to the surgical microscope. QUINTUS® TV adaptors are available for surgical microscopes from Carl Zeiss Meditec, Leica and Moeller-Wedel. We recommend ordering them with the sets described above.

For further details on individual set components and QUINTUS® adaptors as well as further visualization options in neurosurgery with VITOM® Spine see chapter 10

Components/Spare Parts see chapter 13



FLUORESCENCE-ASSISTED TUMOR DIAGNOSIS

D-LIGHT C/AF-System SCB

Special Features:

- For photodynamic diagnosis of brain tumors
- Facility for switching between reduced white light, autofluorescence mode and Protoporphyrin IX fluorescence mode (optional)
- With integrated KARL STORZ Communication Bus (KARL STORZ-SCB)



20 1336 01-133 Cold Light Fountain D-LIGHT C/AF SCB

power supply 100 – 125/220 – 240 VAC, 50/60 Hz

including:

Mains Cord

SCB Connecting Cable, length 100 cm

One-Pedal Footswitch, one-stage, for switch function

Specifications:

Lamp type	XENON 15 V, 300 Watt
Color temperature	approximately 6000 K
Light outlets	1
Light intensity adjustment	continuously adjustable, either via a membrane keyboard or KARL STORZ Communication Bus Signal

Dimensions w x h x d	305 x 165 x 335 mm
Weight	11 kg
Certified to	IEC 601-1 and UL 544, protection class 1/CF

Components/Spare Parts see catalog TELEPRESENCE

TRICAM® SL II

Three-Chip Camera System, Color Systems PAL/NTSC,
Digital Imaging Processor



TRICAM® SL II is the endoscopic video platform offered by KARL STORZ for all endoscopically-assisted applications and video display of the highest image quality.

Thanks to its ergonomic, compact design, this CCD sensor technology separates the optical image of the 3-CCD image sensor into the three primary colors by means of a specially coated color prism.

Each individual CCD sensor receives a specific color with the maximum line representation.

The separate processing of the primary color information red, green, and blue means that all colors can be optimally captured with this process. Furthermore, the use of all three CCD sensors offers up to three times more detail enhancement.

TRICAM® SL II offers a high degree of optoelectronic accuracy and precision.

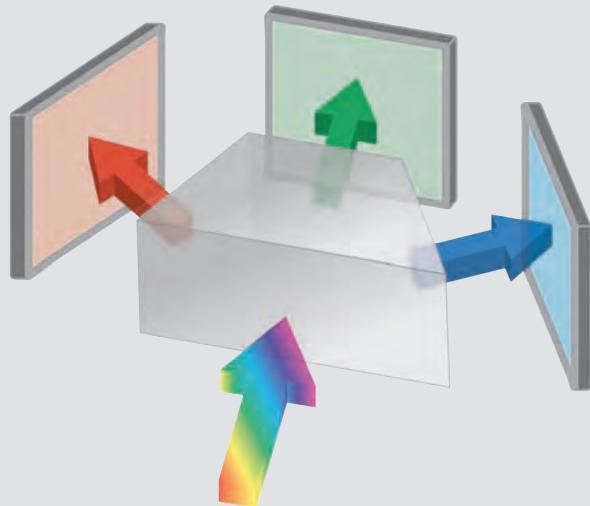
Signals are processed by means of a digital image processor. The endoscopic image is produced true to the original image. The image processor also assumes automatic image optimization during continuously changing illumination and color conditions. Manual adjustment is therefore no longer necessary.

The user has several pre-assigned digital-optimization-filters at his disposal for adjustment to rigid, semi-rigid and flexible endoscopes at the touch of a button.

Video outputs such as Digital-Video (DV) and all analog signal variations are an integral feature of **TRICAM® SL II** standard equipment.

Special Features:

- Best image quality and display due to 3-CCD sensor chip technology
- Enhanced signal quality through Digital Signal Processing (contrast and filter enhancement for rigid, semirigid and flexible endoscopes)
- Optimal image size display, regardless of the telescope used, thanks to patented Parfocal Optical Zoom Lens
- Simplified operation reduces camera movement to, e.g., prevent damage to or soiling of the lens
- Consistent illumination due to the auto-exposure system ensures seamless transitions between images, regardless of imaging area or available light
- Functionality at the touch of a button with easy-to-program operating elements via intuitive control of all functions in the sterile area
- Parameters of the OR equipment used, light sources, etc. can be displayed and controlled (KARL STORZ Communication Bus) on the monitor
- Digital video output (DV) for digital recording
- Digital zoom 1 – 2x can be adjusted to 4 levels
- “Freeze Frame” function can be activated via camera head buttons or an external footswitch
- Fluorescence imaging mode available



TRICAM® SL II

Camera Control Unit SCB



20 2230 11U1 TRICAM® SL II Camera Control Unit SCB

color systems PAL/NTSC, with **KARL STORZ-SCB** and integrated digital Image Processing Module, power supply 100 – 240 VAC, 50/60 Hz including:

Mains Cord

Keyboard, with US English character set

2x **Connecting Cable**, for controlling peripheral units

BNC/BNC Video Cable

S-Video (Y/C) Connecting Cable

Special RGBS Connecting Cable

SCB Connecting Cable

DV Connecting Cable, 6 pin to 4 pin

Specifications:

Video output	- RGBS signal to 4x BNC sockets - S-Video to 4-pin mini-DIN socket (2x) - Composite signal to BNC socket - DV signal to 6-pin DV socket	Camera Control Unit (CCU)	Dimensions: 305 x 88 x 254 mm (w x h x d)
Input	Keyboard input for title generator and control functions to 6-pin mini-DIN socket	Weight	2.7 kg
Control output/input	KARL STORZ-SCB to 6-pin mini-DIN socket (2x), 3.5 mm stereo jack plug (ACC 1, ACC 2)	Power supply	100 – 240 VAC, 50/60 Hz
		Certified to:	IEC 601-1, 601-2-18, CSA 22.2 No. 601, UL 2601 and CE acc. to MDD, protection class 1/BF

Components/Spare Parts see catalog TELEPRESENCE



SKULL BASE AND ENDOSCOPIC PITUITARY SURGERY

Skull Base and Endoscopic Pituitary Surgery

HOPKINS® II Telescopes



Diameter 4 mm, length 20 cm



28162 AVA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 20 cm, **autoclavable, with angled eyepiece**, fiber optic light transmission incorporated, color code: green



28162 AVS

Irrigation Sheath, outer diameter 4.8 mm, working length 18 cm, for use with HOPKINS® II Telescope 0° 28162 AVA and KARL STORZ lens irrigation system CLEARVISION® II

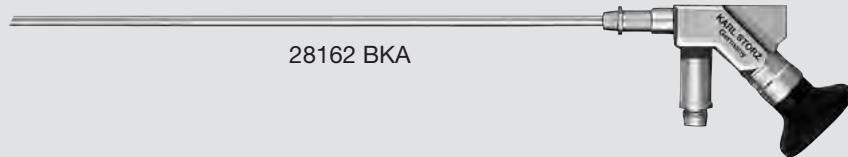
Holding System for the fixation of operating sheaths see chapter 11

Skull Base and Endoscopic Pituitary Surgery

HOPKINS® II Telescopes



Diameter 2.7 mm, length 20 cm



28162 AKA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 2.7 mm, length 20 cm, **autoclavable, with angled eyepiece**, fiber optic light transmission incorporated, color code: green



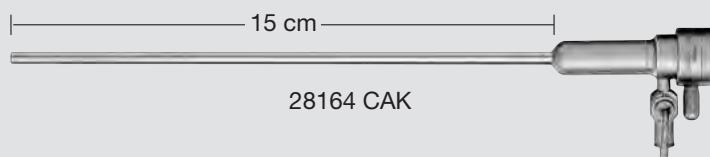
28162 BKA

HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 2.7 mm, length 20 cm, **autoclavable, with angled eyepiece**, fiber optic light transmission incorporated, color code: red



28162 CKA

HOPKINS® II Lateral Telescope 70°, enlarged view, diameter 2.7 mm, length 20 cm, **autoclavable, with angled eyepiece**, fiber optic light transmission incorporated, color code: yellow



28164 CAK

28164 CAK

Irrigation Sheath, outer diameter 3.8 mm, working length 15 cm, for use with HOPKINS® II Telescope 0° 28162 AKA and KARL STORZ lens irrigation system CLEARVISION® II

28164 CBK

Irrigation Sheath, outer diameter 3.8 mm, working length 15 cm, for use with HOPKINS® II Telescope 30° 28162 BKA and KARL STORZ lens irrigation system CLEARVISION® II

28164 CCK

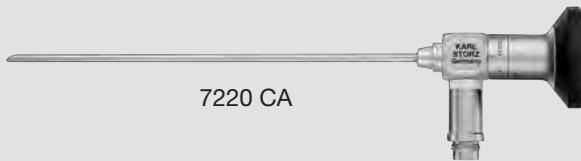
Irrigation Sheath, outer diameter 3.8 mm, working length 15 cm, for use with HOPKINS® II Telescope 70° 28162 CKA and KARL STORZ lens irrigation system CLEARVISION® II

Skull Base and Endoscopic Pituitary Surgery

HOPKINS® II Telescopes



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



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



7220 BA

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



7220 FA

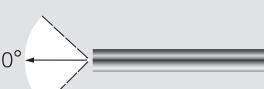
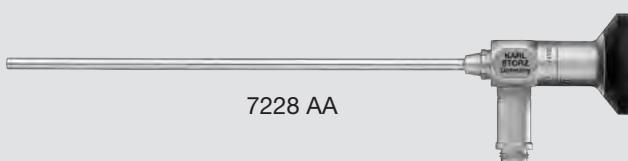
HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 3 mm, length 14 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black



7220 CA

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

Diameter 4 mm, length 15 cm



7228 AA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 15 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



7228 BA

HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 15 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



7228 FA

HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 4 mm, length 15 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black



7228 CA

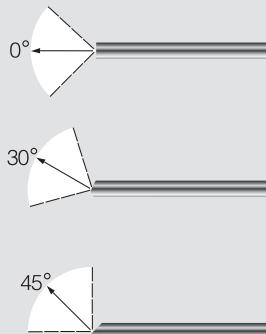
HOPKINS® II Lateral Telescope 70°, enlarged view, diameter 4 mm, length 15 cm, **autoclavable**, fiber optic light transmission incorporated, color code: yellow

Skull Base and Endoscopic Pituitary Surgery

HOPKINS® II Telescopes

STORZ
KARL STORZ — ENDOSCOPE

Diameter 2.7 mm, length 18 cm



7219 AA

7219 AA



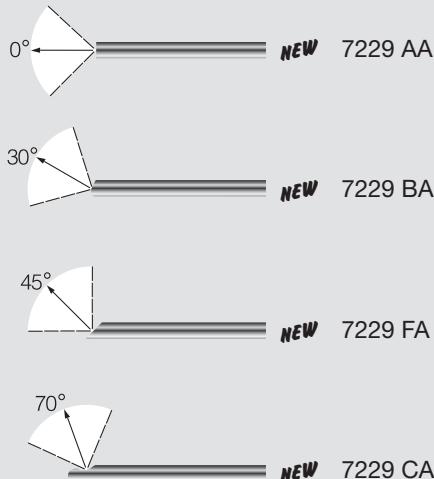
HOPKINS® II Straight Forward Telescope 0°, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

7219 BA

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

7219 FA

HOPKINS® II Forward-Oblique Telescope 45°, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black



NEW 7229 AA

NEW 7229 BA

NEW 7229 FA

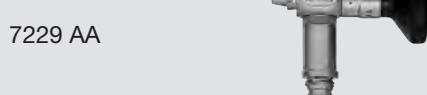
NEW 7229 CA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

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

HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

HOPKINS® II Lateral Telescope 70°, enlarged view, diameter 2.7 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: yellow

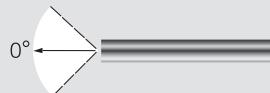
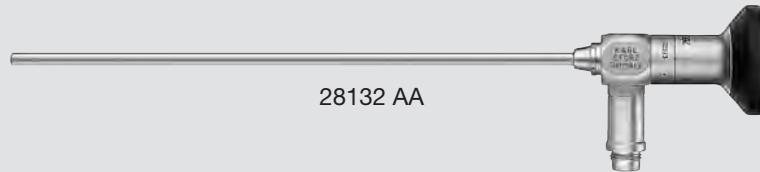


Skull Base and Endoscopic Pituitary Surgery

HOPKINS® II Telescopes



Diameter 4 mm, length 18 cm



28132 AA

28132 AA

HOPKINS® II Straight Forward Telescope 0°,

enlarged view, diameter 4 mm, length 18 cm,
autoclavable, fiber optic light transmission incorporated,
color code: green



28132 BA

HOPKINS® II Forward-Oblique Telescope 30°,

enlarged view, diameter 4 mm, length 18 cm,
autoclavable, fiber optic light transmission incorporated,
color code: red



28132 FA

HOPKINS® II Forward-Oblique Telescope 45°,

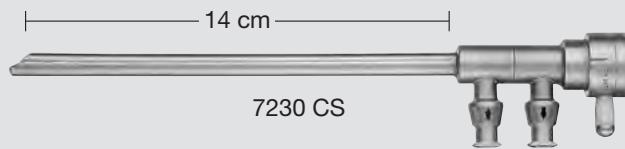
enlarged view, diameter 4 mm, length 18 cm,
autoclavable, fiber optic light transmission incorporated,
color code: black



28132 CA

HOPKINS® II Lateral Telescope 70°, enlarged view,

diameter 4 mm, length 18 cm, **autoclavable**,
fiber optic light transmission incorporated,
color code: yellow



7230 AS

Suction and Irrigation Sheath 0°, outer diameter

4.8 x 6 mm, working length 14 cm, for use with
HOPKINS® II Telescope 7230 AA and 28132 AA and
KARL STORZ lens irrigation system CLEARVISION®II

7230 BS

Suction and Irrigation Sheath 30°, outer diameter

4.8 x 6 mm, working length 14 cm, for use with
HOPKINS® II Telescope 7230 BA and 28132 BA and
KARL STORZ lens irrigation system CLEARVISION®II

7230 FS

Suction and Irrigation Sheath 45°, outer diameter

4.8 x 6 mm, working length 14 cm, for use with
HOPKINS® II Telescope 7230 FA/FLA and 28132 FA/FVA
and KARL STORZ lens irrigation system CLEARVISION®II

7230 CS

Suction and Irrigation Sheath 70°, outer diameter

4.8 x 6 mm, working length 14 cm, for use with
HOPKINS® II Telescope 7230 CA and 28132 CA/CVA
and KARL STORZ lens irrigation system CLEARVISION®II

Skull Base and Endoscopic Pituitary Surgery

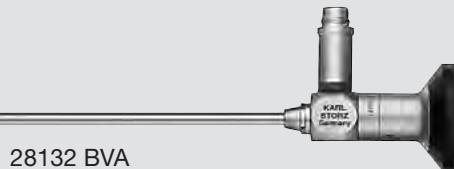
HOPKINS® II Telescopes



Diameter 4 mm, length 18 cm, connection for fiber optic light cable on upper side



28132 BVA

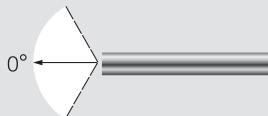


28132 FVA

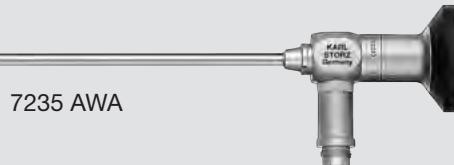
HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side, fiber optic light transmission incorporated, color code: red

HOPKINS® II Forward-Oblique Telescope 45°, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, connection for fiber optic light cable on upper side, fiber optic light transmission incorporated, color code: black

Diameter 5 mm, length 18 cm



7235 AWA



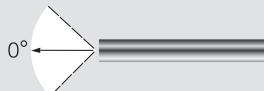
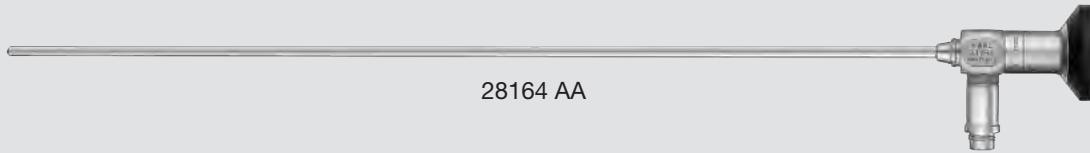
HOPKINS® II Wide Angle Straight Forward Telescope 0°, enlarged view, diameter 5 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

Skull Base and Endoscopic Pituitary Surgery

HOPKINS® II Telescopes

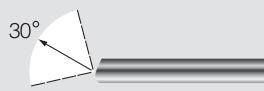


Diameter 4 mm, length 30 cm



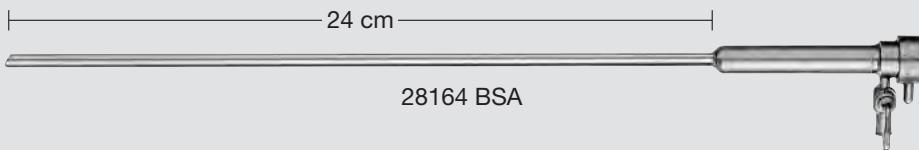
28164 AA

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



28164 BA

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



28164 ASA

Irrigation Sheath, outer diameter 5 mm, working length 24 cm, for use with HOPKINS® II Telescope 28164 AA and KARL STORZ lens irrigation system CLEARVISION® II

28164 BSA

Irrigation Sheath, outer diameter 5 mm, working length 24 cm, for use with HOPKINS® II Telescope 28164 BA and KARL STORZ lens irrigation system CLEARVISION® II

723750 E

Protection Tube, for HOPKINS® II telescope with length 30 cm

Holding Systems see chapter 11

Skull Base and Endoscopic Pituitary Surgery

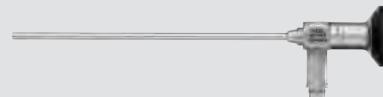
Suction and Irrigation Sheaths for use with the CLEARVISION® II System



Suction and Irrigation Sheaths, proximally reinforced,
for use with Clamping Jaw 28272 UK

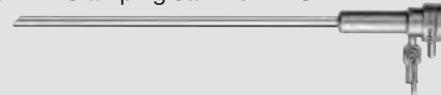


Compatible HOPKINS® II Telescopes



Detail	Order No.	Outer Diameter	Working Length	Order No.	Direction of View	Diameter	Length
	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 28163 RSA	4.8 x 6 mm	14 cm	7230 AA 28132 AA	0°	4 mm	18 cm
	7230 BS 28163 RSB	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

Irrigation Sheaths, proximally reinforced,
for use with Clamping Jaw 28272 UK



Compatible HOPKINS® II Telescopes



Detail	Order No.	Outer Diameter	Working Length	Order No.	Direction of View	Diameter	Length
	28164 ASA	5 mm	24 cm	28164 AA	0°	4 mm	30 cm
	28164 BSA	5 mm	24 cm	28164 BA	30°	4 mm	30 cm
	28164 CBA	5 mm	14 cm	28132 AA	0°	4 mm	18 cm
	28164 CBB	5 mm	14 cm	28132 BA	30°	4 mm	18 cm
	28164 CBF	5 mm	14 cm	28132 FA	45°	4 mm	18 cm
	28164 CBC	5 mm	14 cm	28132 CA	70°	4 mm	18 cm

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



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 28160 TA – TBL

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

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



Irrigation and Suction Handles



28161 TD **THUMFART Irrigation and Suction Handle**, with ergonomic ring handle and finger grip plate, for use with Irrigation and Suction Sheaths 723527 A – F and 28160 TA – TBL

including:

Press Button Valve, with lock function

28161 TT **THUMFART Irrigation and Suction Handle**, with ergonomic ring handle and finger grip plate, for use with Irrigation and Suction Sheaths 723527 A – F and 28160 TA – TBL

including:

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

101010-10* **Single Use Push-Button Pressure Valve**, for irrigation, sterile, package of 10, for use with THUMFART Handle 28161 TH

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



Irrigation and Suction Sheaths

for endoscopic sinus surgery, for use with Irrigation and Suction Handles 28161 TD/TT, 723630 and HOPKINS® II telescopes diameter 2.7 mm 7219 AA – FA and HOPKINS® II telescopes diameter 4 mm 28132 AA – BA and 28164 AA – BA

Sheaths 723527 A – F and 28160 TA – TBL feature a new, improved construction with excellent irrigation-suction properties:

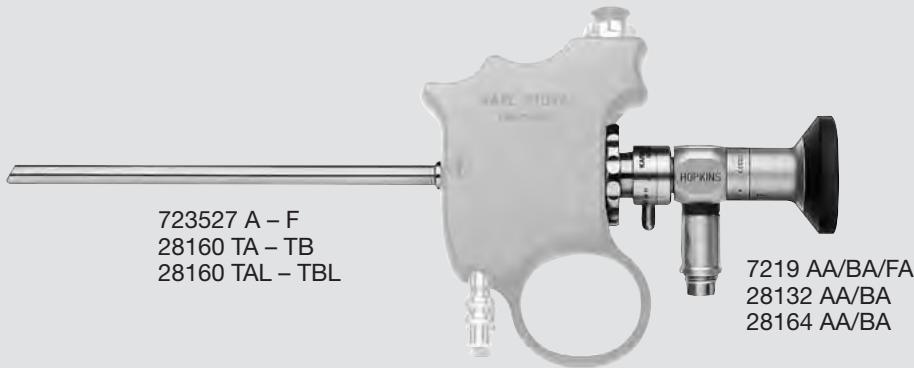
- Completely new design with double channel in a single sheath
- Maintenance free – no seal rings
- Robust stability – torsion resistant
- Hygienic – separate irrigation and suction channels
- Liquid which remains in the sheath cannot be rinsed out in the surgical area
- Slim, vertical oval sheath shapes: 3.5 x 4.7 mm and 4.8 x 6 mm
- Sheaths with inserted telescope can be rotated 360°
- 723527 A – F for use with 2.7 mm HOPKINS® II telescopes with 0°, 30° and 45°
- 28160 TA – TB for use with 4 mm HOPKINS® II telescopes with 0° and 30° with a length of 18 cm; long sheaths 28160 TAL – TBL for use with 4 mm HOPKINS® II telescopes with 0° and 30° with a length of 30 cm
- Suitable for THUMFART Irrigation and Suction Handles 28161 TD/TT and for 723630
- Easy processing with Cleaning Attachments 28160 TK/TL/TLL, 723527 L

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSCOPE

Irrigation and Suction Sheaths



	Order No.	Diameter	Compatible Telescope	Cleaning Accessories
	723527 A	3.5 x 4.7 mm	7219 AA	723527 L, 28160 TK
	723527 B	3.5 x 4.7 mm	7219 BA	723527 L, 28160 TK
	723527 F	3.5 x 4.7 mm	7219 FA	723527 L, 28160 TK
	28160 TA	4.8 x 6 mm	28132 AA	28160 TL, 28160 TK
	28160 TB	4.8 x 6 mm	28132 BA	28160 TL, 28160 TK
NEW 	28160 TAL	4.8 x 6 mm	28164 AA	28160 TLL, 28160 TK
NEW 	28160 TBL	4.8 x 6 mm	28164 BA	28160 TLL, 28160 TK

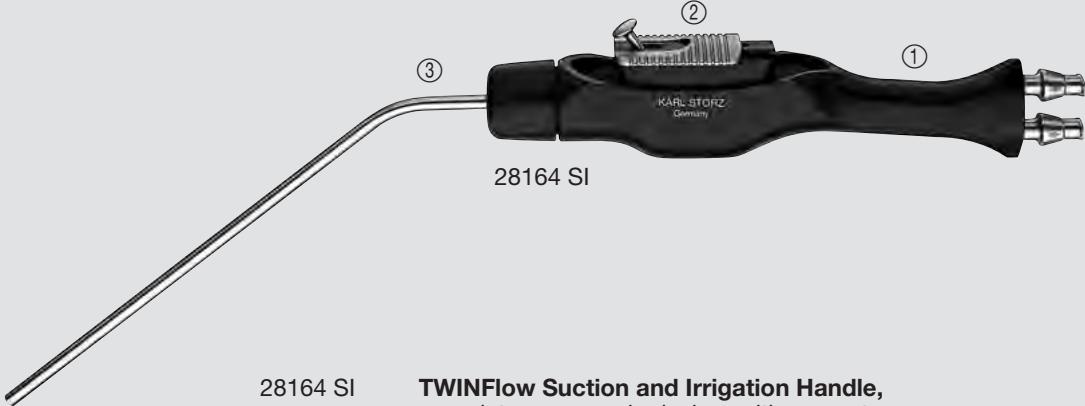
Skull Base and Endoscopic Pituitary Surgery ^{NEW}

TWINFlow Suction and Irrigation Handle



With adjustable continuous suction and infinitely adjustable irrigation, if required

TWINFlow



28164 SI

TWINFlow Suction and Irrigation Handle, complete, ergonomic design, with separate suction/irrigation unit and suction/irrigation tubes including:

- ① **Suction and Irrigation Handle**
- ② **Suction and Irrigation Unit**, separate, with adjustable continuous suction and continuously adjustable irrigation function if required
- Cleaning Adaptor**, for assembly in sterilization trays, for use with Suction-Irrigation Unit 28163 SIU
- Set**, including loading aid with 8 O-Rings
- Cleaning Brush**, round, rigid, outer diameter 7 mm, for working channel diameter 2.5 – 5 mm, length 35 cm
- ③ 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 13 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 13 cm

Components/Spare Parts see chapter 13

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments

STORZ
KARL STORZ — ENDOSKOPE



169027



213011



213015



800005

169027 JANSEN **Raspatory**, width 9 mm,
length 17 cm

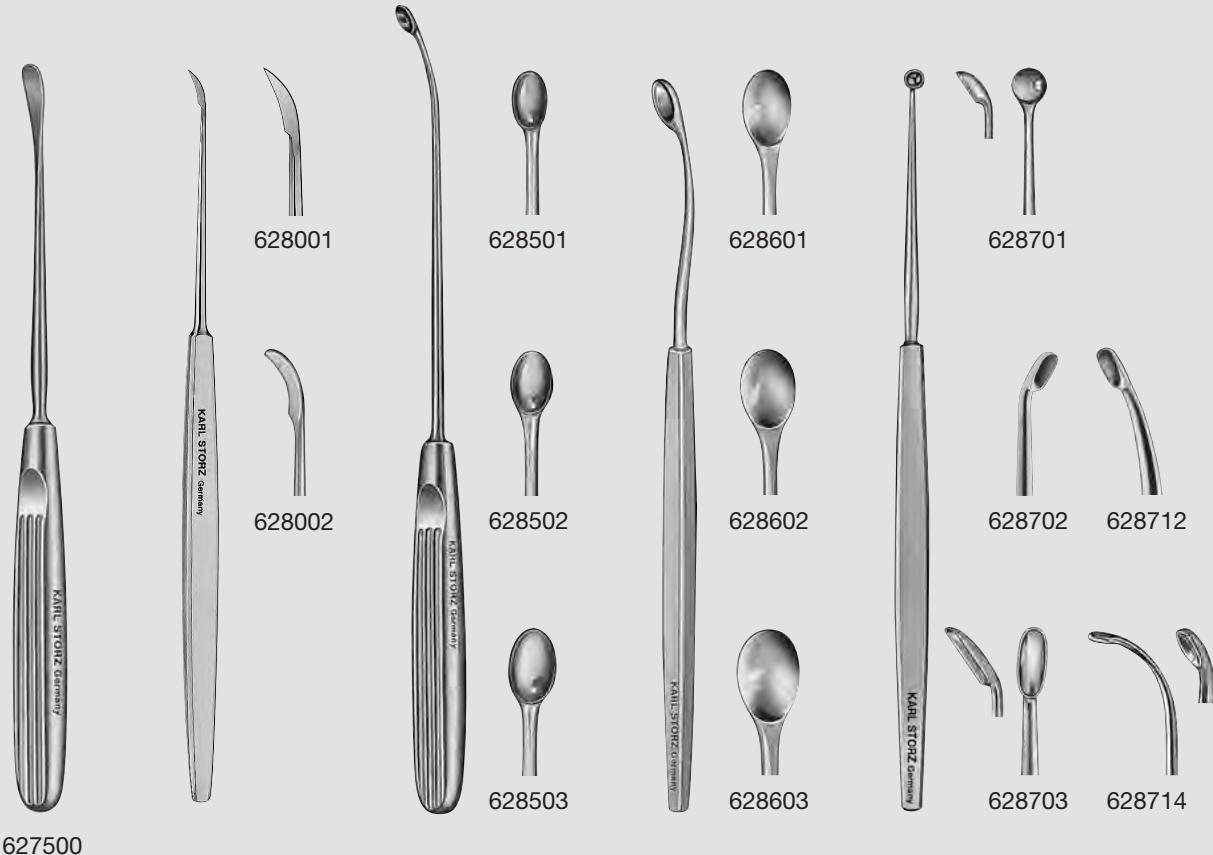
213011 FISCH **Raspatory**, width 10 mm,
length 16 cm

213015 FISCH **Periosteal Raspatory**,
angled, width 11 mm, length 21 cm

800005 FISCH **Aneurysm Needle**,
curved, length 20 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



- 627500 **SEWALL Antrum Elevator,**
length 19.5 cm
- 628001 **Sickle Knife**, pointed, length 19 cm
628002 **Same**, round, double-cutting
- 628501 **HALLE Antrum Curette**, malleable,
size 1, length 21 cm
Same, size 2
Same, size 3
- 628601 **Antrum Curette**, oval, size 1, length 19 cm
Same, size 2
Same, size 3
- 628701 **Antrum Curette**, round, length 19 cm
Same, oblong, small
Same, oblong, large
- 628712 **KUHN-BOLGER Frontal Sinus Curette**,
55° curved, oval, forward cutting, length 19 cm
Same, 90° curved
- 628801 **SIEBENMANN Antrum Curette**, right,
length 16.5 cm
Same, left

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



629512



629703



629705

629706

629707

629708

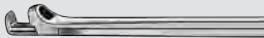
- | | |
|--------|------------------------------------------------------------------------------|
| 629512 | HALLE Antrum Curette , oval,
length 24.5 cm |
| 629703 | Antrum Curette , forward cutting,
small, length 19 cm |
| 629704 | Same , backward cutting |
| 629705 | Curette , forward cutting, angled 20°,
large, working length 22 cm |
| 629706 | Same , small, working length 20 cm |
| 629707 | Curette , forward cutting, angled 45°,
large, working length 22 cm |
| 629708 | Same , small, working length 20 cm |

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Antrum Punches, working lengths 9.5 and 11 cm



615000

9.5 cm



615000

BEYER Antrum Punch,
through-cutting, for endonasal
fenestration with children,
working length 9.5 cm



615010

11 cm



615010

Antrum Punch, for removal of
small bone fragments on natural
ostium, rigid, not through-
cutting, 65° upbiting forward
cutting, size 3.5 x 3.7 mm,
working length 11 cm

Sphenoid Punch, working length 17 cm



648500

17 cm



648500

**HAJEK-KOFLER Sphenoid
Punch,** not through-cutting,
reversible, size 3.2 x 4 mm,
working length 17 cm

Skull Base and Endoscopic Pituitary Surgery

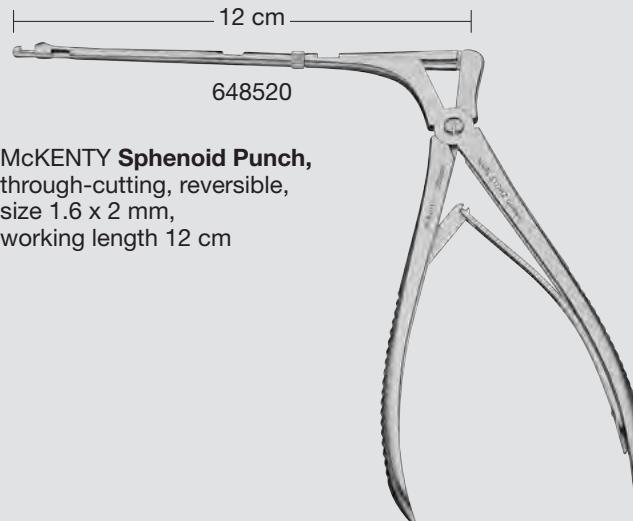
Operating Instruments



Sphenoid Punches, working lengths 12 and 17 cm



648520



McKENTY Sphenoid Punch,
through-cutting, reversible,
size 1.6 x 2 mm,
working length 12 cm



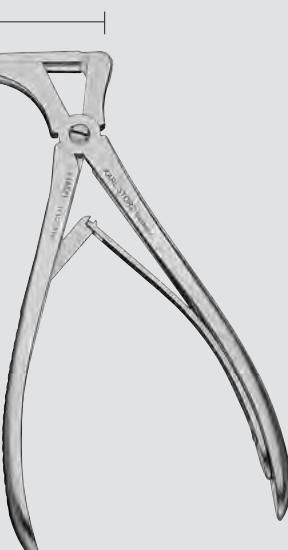
648521

McKENTY Sphenoid Punch,
through-cutting, reversible,
size 1.6 x 2 mm,
working length 17 cm



648523

**McKENTY-CASTELNUOVO
Sphenoid Punch,** tip curved 30°,
through-cutting, reversible,
size 1.6 x 2 mm,
working length 17 cm

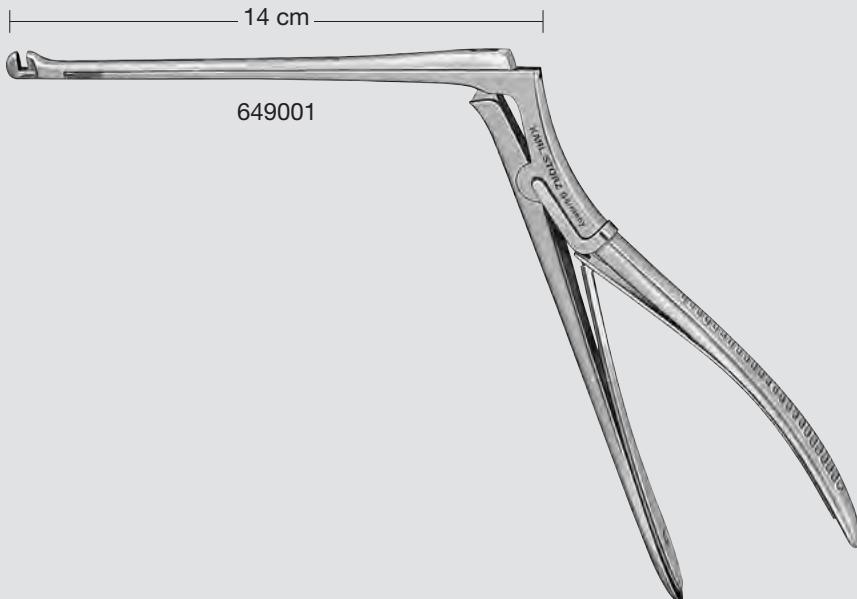


Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Bone Punches, working length 14 cm



649001 HAJEK-KOFLER **Bone Punch**,
rigid, 90° upbiting, not through-cutting,
size 3.5 x 3.7 mm, working length 14 cm



649002 **Same**, 90° downbiting



649003 **Same**, upbiting backward cutting



649004 **Same**, downbiting backward cutting



649005 **Same**, upbiting forward cutting



649006 **Same**, upbiting forward cutting,
size 2 x 2 mm



649011 **Same**, 90° upbiting,
size 4.2 x 5.5 mm



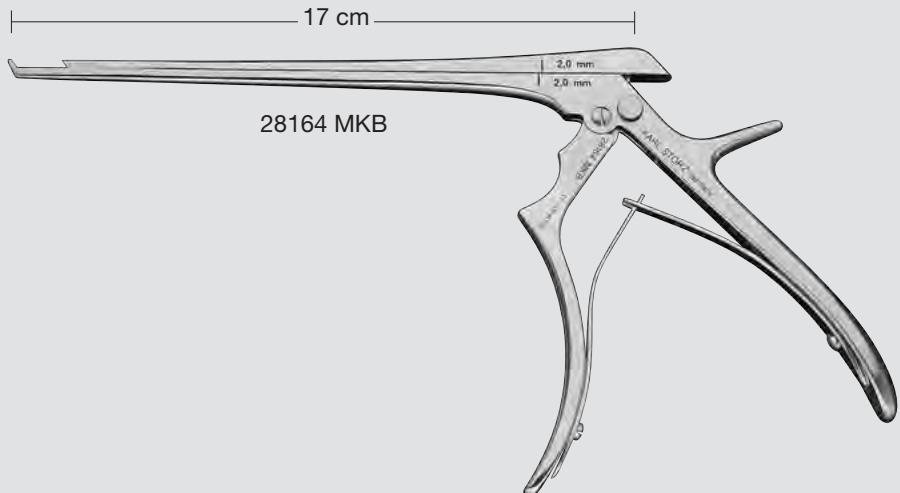
649015 **Same**, upbiting forward cutting,
size 4.2 x 5.5 mm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Bone Punches, detachable, working length 17 cm



28164 MKA **KERRISON Bone Punch**, detachable, rigid, upbiting 60° forward, size 1 mm, working length 17 cm



28164 MKB **Same**, size 2 mm



28164 MKC **Same**, size 3 mm



28164 MKK **Same**, size 4 mm



28164 MKL **Same**, size 5 mm



28164 MKD **KERRISON Bone Punch**, detachable, rigid, downbiting 60° forward, size 1 mm, working length 17 cm



28164 MKE **Same**, size 2 mm



28164 MKF **Same**, size 3 mm



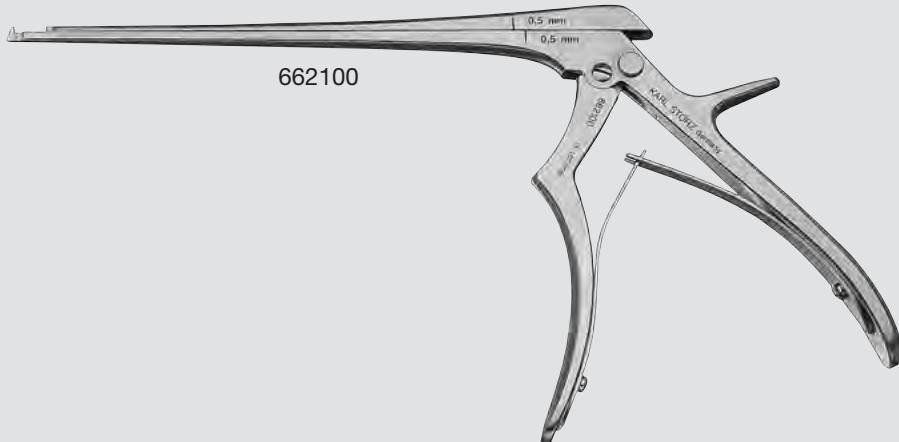
28164 MKO **Same**, size 4 mm

Skull Base and Endoscopic Pituitary Surgery ^{NEW}

Operating Instruments

STORZ
KARL STORZ — ENDOSKOPE

Bone Punches, detachable, working lengths 12 and 17 cm



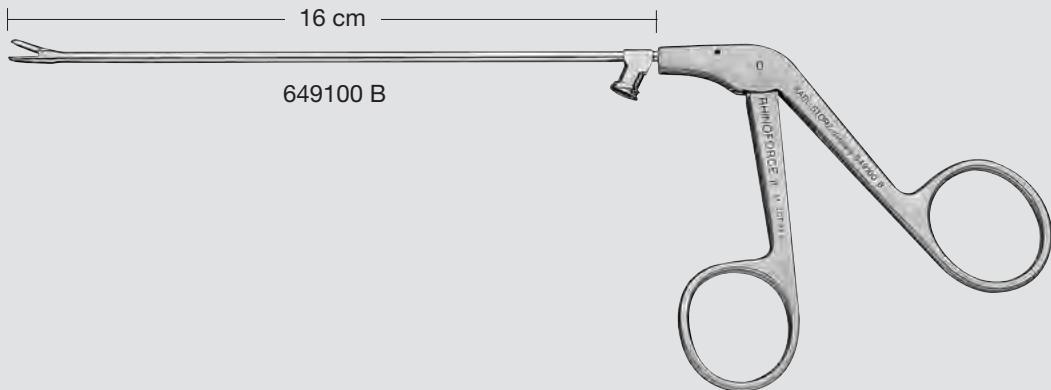
<input type="checkbox"/>		662100	KERRISON Bone Punch , detachable, rigid, 90° upbiting, not through-cutting, size 0.5 mm, working length 17 cm
<input type="checkbox"/>		662101	Same , size 1 mm
<input type="checkbox"/>		662101 K	KERRISON Micro Punch , detachable, short model, rigid, 90° upbiting, not through-cutting, size 1 mm, working length 12 cm
<input type="checkbox"/>		662102	KERRISON Bone Punch , detachable, rigid, 90° upbiting, not through-cutting, size 2 mm, working length 17 cm
<input type="checkbox"/>		662103	Same , size 3 mm
<input type="checkbox"/>		662104	Same , size 4 mm
<input type="checkbox"/>		662105	Same , size 5 mm
<input type="checkbox"/>		662111	KERRISON Bone Punch , detachable, rigid, 90° downbiting, not through-cutting, size 1 mm, working length 17 cm
<input type="checkbox"/>		662112	Same , size 2 mm
<input type="checkbox"/>		662113	Same , size 3 mm
<input type="checkbox"/>		662114	Same , size 4 mm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments

STORZ
KARL STORZ — ENDOSKOPE

RHINOFORCE®II Ethmoid Forceps, working length 16 cm



649100 B

BLAKESLEY RHINOFORCE®II Ethmoid Forceps,
straight, size 0, with cleaning connector,
working length 16 cm



649101 B

Same, size 1



649102 B

Same, size 2



649110 B

BLAKESLEY-WILDE RHINOFORCE®II Ethmoid Forceps,
45° curved upwards, size 0, with cleaning connector,
working length 16 cm



649111 B

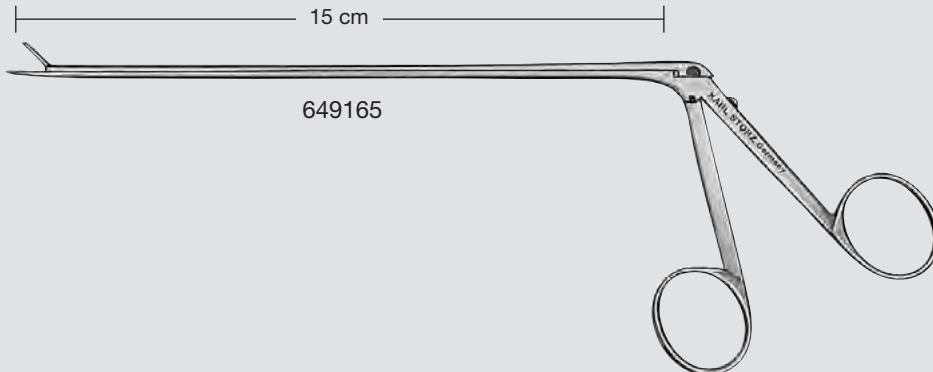
Same, size 1



649123 B

TAKAHASHI RHINOFORCE®II Ethmoid Forceps,
spoon size 4 x 10 mm, with cleaning connector,
working length 16 cm

Grasping Forceps, working length 15 cm



649165

Grasping Forceps, rough serrated,
working length 15 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Nasal Forceps, working lengths 11 and 15 cm

11 cm

455400



455400

NOYES-HARTMANN Nasal Forceps,
serrated jaws, working length 11 cm

11 cm

456000



456000

BLAKESLEY Nasal Forceps, straight,
size 0, working length 11 cm



456001

Same, size 1



456001 L

Same, size 1, working length 15 cm



456002

Same, size 2



456003

Same, size 3



456004

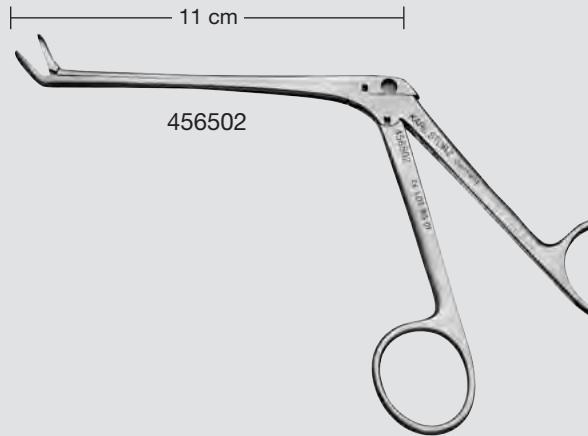
Same, size 4

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Nasal Forceps, working length 11 cm



	456500	BLAKESLEY-WILDE Nasal Forceps, 45° upturned, size 0, working length 11 cm
	456501	Same , size 1
	456502	Same , size 2
	456503	Same , size 3
	456504	Same , size 4



	456801	BLAKESLEY-WILDE Nasal Forceps, 90° upturned, size 1, working length 11 cm
	456802	Same , size 2
	456803	Same , size 3



	456811	BLAKESLEY-WILDE Nasal Forceps, 90° upturned, slender, long jaws 3.5 x 12 mm, working length 11 cm
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	457720	BLAKESLEY-WIGAND Nasal Forceps, 60° upturned, long jaws 6 x 20 mm, rounded tips, for grasping polyps and adenoid rests, working length 11 cm
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Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Nasal Forceps, working length 11 cm

11 cm

456100



456100

Nasal Forceps, straight, through-cutting, tissue-sparing, BLAKESLEY shape, width 2.5 mm, working length 11 cm



456101

Same, width 3.5 mm



456102

Same, width 4.2 mm



456103

Same, width 4.8 mm



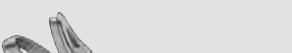
456120

Nasal Forceps, 45° upturned, through-cutting, tissue-sparing, BLAKESLEY shape, width 2.5 mm, working length 11 cm



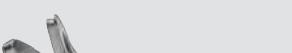
456121

Same, width 3.5 mm



456122

Same, width 4.2 mm



456123

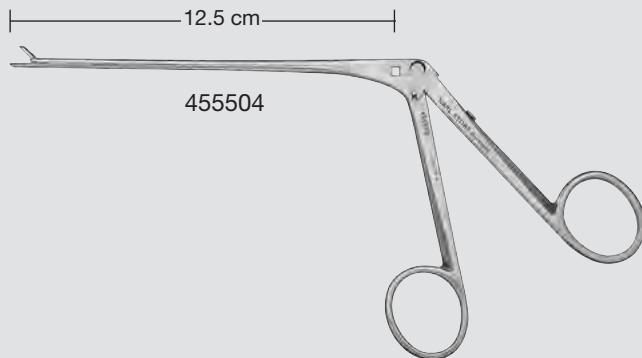
Same, width 4.8 mm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Nasal Forceps, working lengths 10.5 and 12.5 cm



455504

TAKAHASHI Nasal Forceps, straight,
delicate, working length 12.5 cm



453508

Nasal Forceps, straight, through-cutting,
slender model, with flat jaws, bite 3 x 4 mm,
working length 12.5 cm

453508 K

Same, with foreign body basket



453509

Nasal Forceps, straight, through-cutting,
fine, bite 1.25 x 5 mm, working length 12.5 cm



453510

Nasal Forceps, straight, through-cutting,
robust model, small, bite 2.5 x 6.5 mm,
working length 10.5 cm

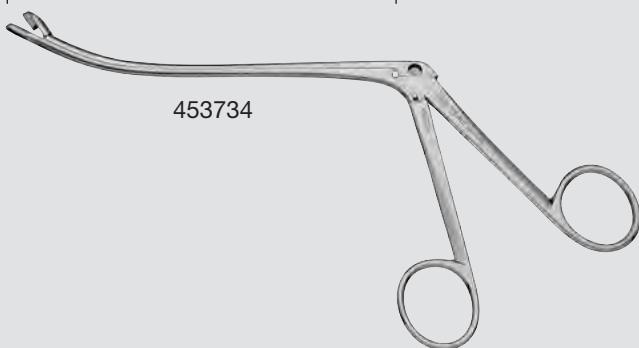
Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Nasal Forceps, working lengths 10.5 and 12.5 cm

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

Nasal Forceps, 45° upturned, through-cutting, fine, bite 1.5 x 4 mm, working length 12.5 cm



453722

Nasal Forceps, 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



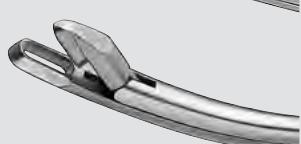
453724

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

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



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

12.5 cm



634822



634822

HARTMANN Forceps, with round cupped jaws, diameter 2.5 mm, working length 12.5 cm



634824

STRÜMPPEL Forceps, with oval, fenestrated, cupped jaws, straight, width 2.5 mm, working length 12.5 cm



634825 A

Same, 45° upturned



634825 B

Same, 90° upturned



634826

BELLUCCI Scissors, straight, working length 12.5 cm



634826 L

Scissors, curved to left, working length 12.5 cm



634826 R

Same, curved to right



Forceps, working length 15 cm

15 cm

662202



662202

Forceps, straight, extra delicate, oval cupped jaws, width 0.6 mm, working length 15 cm



662203

Same, curved to right



662204

Same, curved to left



662205

Same, 45° upturned



662201

Forceps, straight, extra delicate, oval cupped jaws, width 0.9 mm, working length 15 cm



662207

Same, 45° upturned



Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Forceps, working length 15 cm

15 cm



662210

Forceps, straight, not through-cutting,
extra sharp, with oval, fenestrated cupped
jaws, width 1.8 mm, working length 15 cm,
color code: one blue handle



662212

Same, curved to right



662213

Same, curved to left



662214

Same, 45° upturned



662215

Same, 90° upturned



15 cm



662221

Forceps, straight, not through-cutting,
with oval, fenestrated cupped jaws,
width 1.8 mm, working length 15 cm



662223

Same, curved to right



662224

Same, curved to left



662227

Same, 45° upturned



662228

Same, 90° upturned



662211

Forceps, straight, not through-cutting,
with oval, fenestrated cupped jaws,
width 2.5 mm, working length 15 cm



662217

Same, 45° upturned



662218

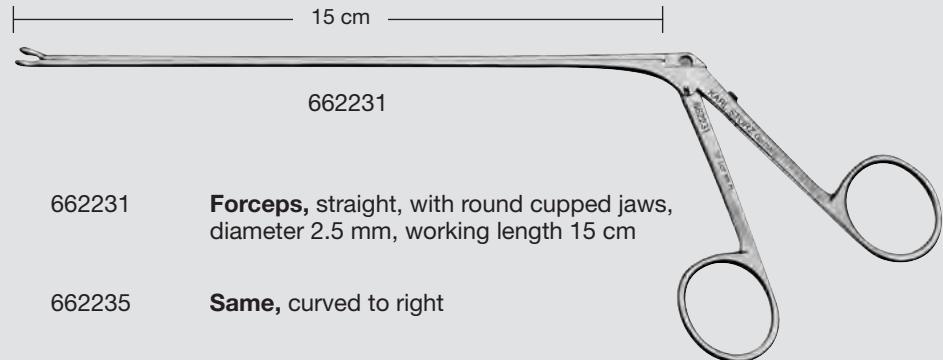
Same, 90° upturned

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Forceps, working length 15 cm



662231

Forceps, straight, with round cupped jaws,
diameter 2.5 mm, working length 15 cm



662235

Same, curved to right



662236

Same, curved to left



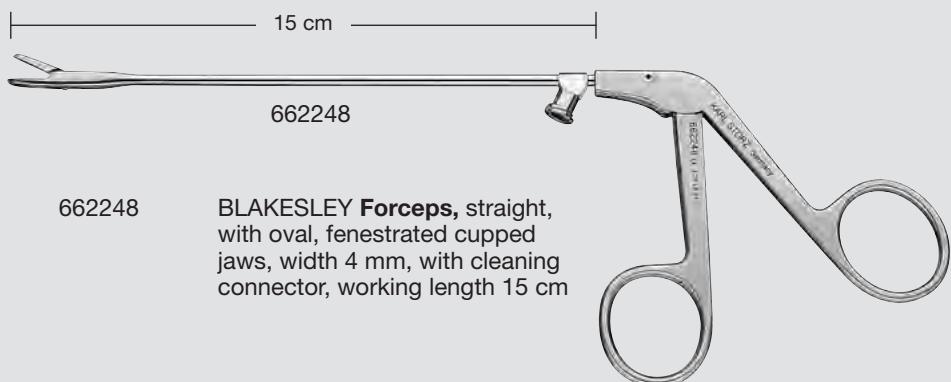
662237

Same, 45° upturned



662241

Forceps, straight, with round cupped jaws,
diameter 4 mm, working length 15 cm



662248

BLAKESLEY Forceps, straight,
with oval, fenestrated cupped
jaws, width 4 mm, with cleaning
connector, working length 15 cm

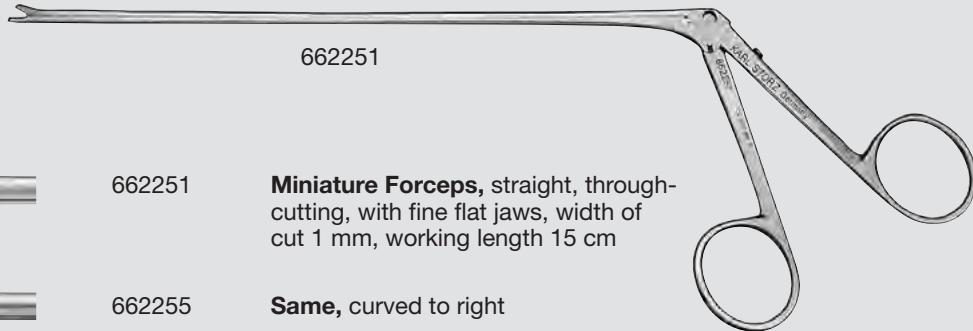
Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Miniature Forceps, working length 15 cm

15 cm



662251

Miniature Forceps, straight, through-cutting, with fine flat jaws, width of cut 1 mm, working length 15 cm



662255

Same, curved to right



662256

Same, curved to left



662257

Same, curved upwards

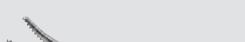


662271

Grasping Forceps, straight, fine-serrated, working length 15 cm

Micro Grasping Forceps, working length 15 cm

15 cm



662285

Micro Grasping Forceps, curved to right, matt finish, very fine model, malleable, vertical opening, with tubular sheath, sheath diameter 1.5 mm, with cleaning connector, working length 15 cm



662286

Same, curved to left



Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Scissors, working length 15 cm

15 cm



662300

Scissors, straight,
working length 15 cm



662301

Same, extra delicate



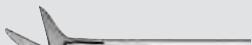
662304

Same, curved to right, extra delicate



662305

Same, curved to left, extra delicate



662307

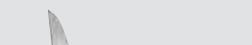
Same, 45° curved upwards, extra delicate

Micro Scissors, working length 8.5 cm

8.5 cm

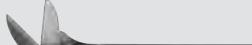


662341



662341

Micro Scissors, straight, working length 8.5 cm,
length 19.5 cm



662342

Same, 45° curved upwards



662344

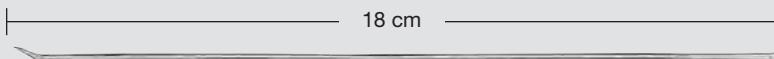
Micro Scissors, curved upwards, horizontal
cutting, working length 8.5 cm, length 19.5 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Scissors, working length 18 cm



663300

18 cm

663300

Scissors, straight,
working length 18 cm



663301

Scissors, straight, delicate,
working length 18 cm



663302

Scissors, straight, extra delicate,
working length 18 cm



663304

Same, curved to right



663305

Same, curved to left

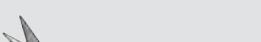
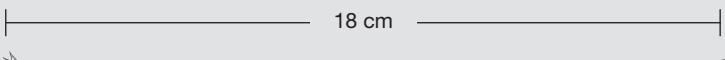


663307

Same, 45° curved upwards



Scissors, working length 18 cm



28164 SAD

18 cm

28164 SAD

Scissors, upturned 45°, delicate,
sheath 360° rotatable, with cleaning
connector, working length 18 cm



Forceps, working length 18 cm

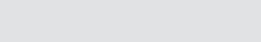


28164 TD

18 cm

28164 TD

Forceps, round cupped jaws,
diameter 0.6 mm, straight, extra
delicate, working length 18 cm



28164 T

Same, oval cupped jaws,
diameter 0.9 mm



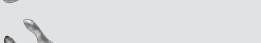
28164 TE

Forceps, oval cupped jaws,
diameter 0.6 mm, curved to right,
extra delicate, working length 18 cm



28164 TF

Same, curved to left



28164 TA

Same, diameter 0.9 mm, upturned

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Forceps, working length 18 cm

	663211	Forceps , straight, not through-cutting, extra sharp, with oval, fenestrated cupped jaws, width 1.8 mm, working length 18 cm, color code: one blue handle	
	663213	Same , curved to right	
	663214	Same , curved to left	
	663217	Same , 45° upturned	
	663218	Same , 90° upturned	

	663221	Forceps , straight, not through-cutting, with oval, fenestrated cupped jaws, width 1.8 mm, working length 18 cm	
	663239	Same , width 2.5 mm	
	663223	Same , curved to right	
	663224	Same , curved to left	
	663226	Same , 45° upturned, length of jaws 9 mm	
	663227	Same , 45° upturned	
	663228	Same , 90° upturned	

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Forceps, working length 18 cm

18 cm



663231

Forceps, straight, with round cupped jaws, diameter 2.5 mm, working length 18 cm



663235

Same, curved to right



663236

Same, curved to left



663237

Same, 45° upturned



663241

Same, diameter 4 mm



18 cm

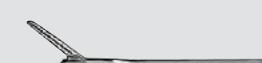


663248

BLAKESLEY Forceps, straight, with oval, fenestrated cupped jaws, width 4 mm, with cleaning connector, working length 18 cm



18 cm



NEW 28164 GF

Miniature Grasping Forceps, serrated, straight, working length 18 cm



Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Forceps, working length 18 cm

18 cm

28164 GS



28164 GS

Miniature Forceps, straight,
through-cutting, with fine flat jaws,
bite 1 mm, working length 18 cm



28164 GR

Same, curved to right



28164 GL

Same, curved to left



28164 GU

Same, curved upwards



663271

Grasping Forceps, straight, fine-serrated,
working length 18 cm

18 cm

663260



663260

GRÜNWALD-HENKE RHINOFORCE® II Forceps,
straight, through-cutting, tissue-sparing,
jaws 3 mm, BLAKESLEY shape, size 0,
with cleaning connector, working length 18 cm



663263

Same, 45° upturned

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



663402



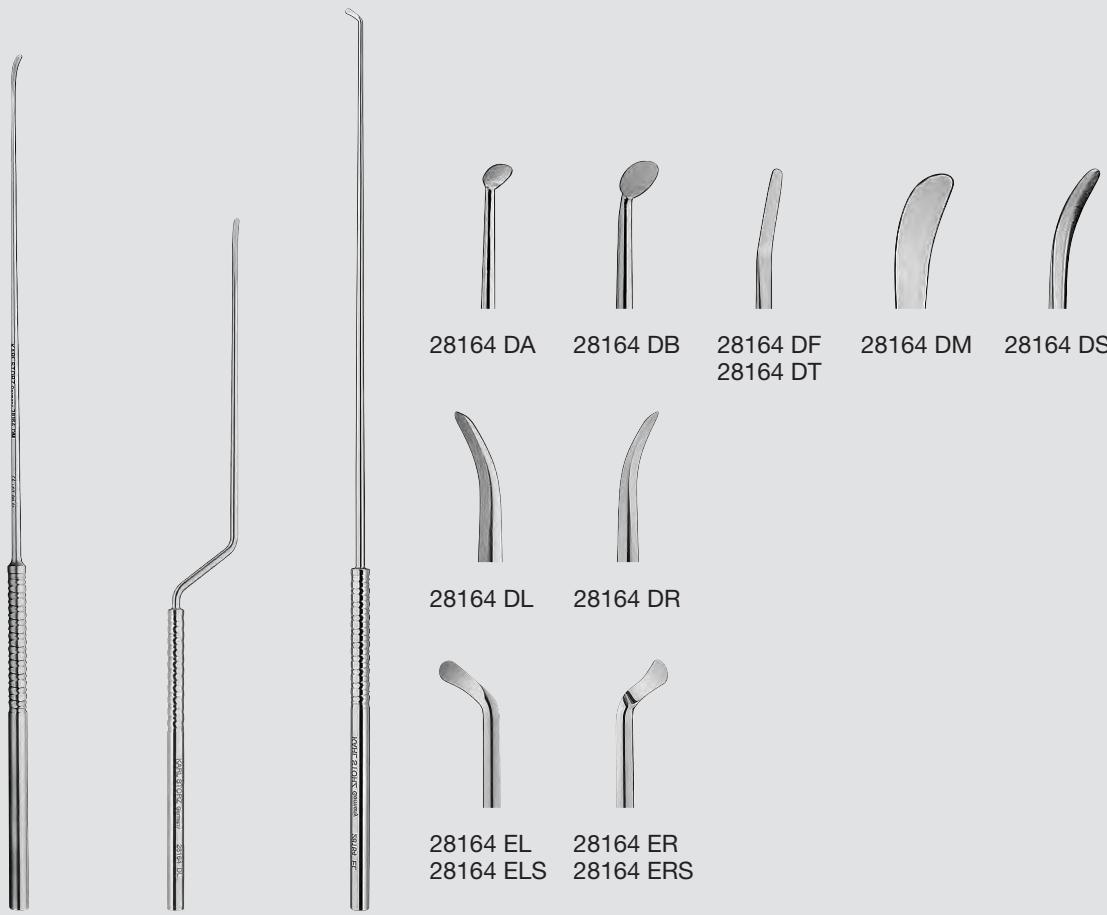
663402 663405 663413 663420 663422 663423 663425 663428
 663431 663432 663461 663463 663466 663468 663482 663486 –
 663488

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

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments

STORZ
KARL STORZ — ENDOSKOPE



28164 DM

28164 DL

28164 EL

28164 DA **Dissector**, sharp, tip angled 45°, round spatula, with round handle, size 2 mm, length 25 cm

28164 DB **Same**, size 3 mm

28164 DF **Dissector**, sharp, tip angled 15°, flat long spatula, with round handle, size 1.5 mm, length 25 cm

NEW 28164 DT **Dissector**, sharp, slightly curved spatula, angled 15°, with round handle, size 1 mm, length 25 cm

28164 DM **Dissector**, sharp, straight tip, slightly curved spatula, with round handle, size 3 mm, length 25 cm

28164 DS **Dissector**, sharp, tip angled 15°, with round handle, size 2 mm, length 25 cm

28164 DL **Dissector**, bayonet-shaped, sharp, curved to left, length 24 cm

28164 DR **Same**, curved to right

28164 EL **Micro Raspatory**, single curved to left, width 2 mm, length 27 cm

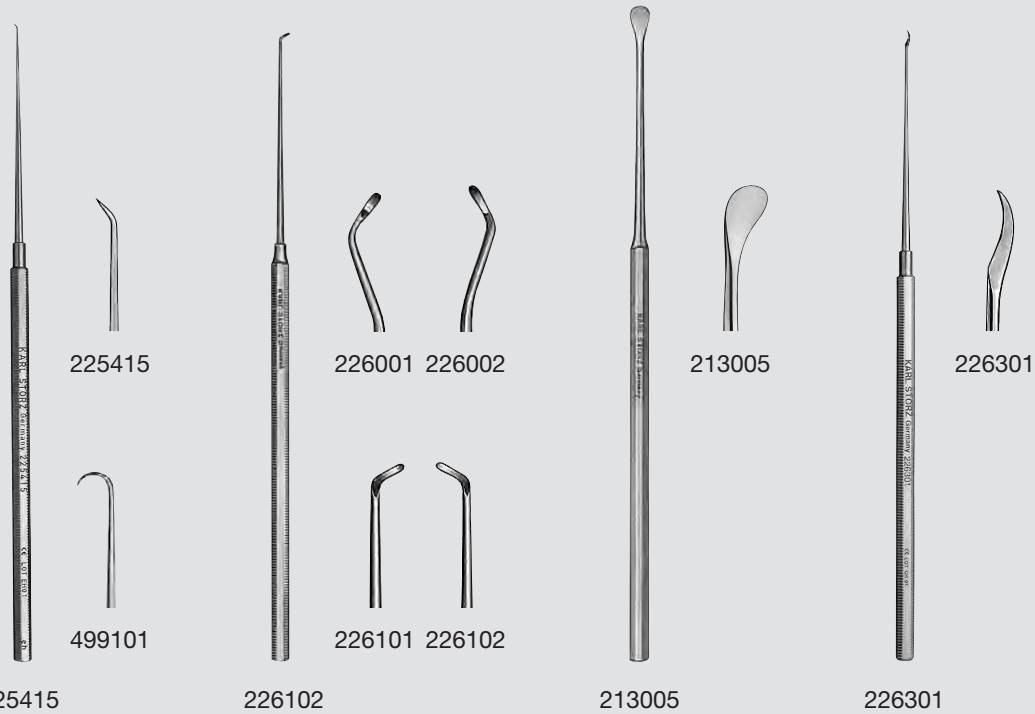
28164 ER **Same**, right

NEW 28164 ELS **Micro Raspatory**, single curved to left, width 2 mm, length 25 cm

NEW 28164 ERS **Same**, right

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



225415 **Hook**, 45°, size 1.5 mm, length 16 cm

499101 **Hook**, one prong, large curve,
length 16.5 cm

226001 **FISCH Micro Raspatory**, double curved to right,
length 16 cm

226002 **Same**, left

226101 **FISCH Micro Raspatory**, single curved to right,
length 16 cm

226102 **Same**, left

213005 **FISCH Dura Elevator**, width 5 mm,
length 16 cm

226301 **FISCH Tenotome**, sickle-shaped,
extra delicate, length 16 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments

STORZ
KARL STORZ — ENDOSKOPE



662701



662701



662721

- | | |
|--------|--------------------------------------------------------------------------------------------------------------------------------------|
| 662701 | YASARGIL Forceps , for grasping tissue and tumors,
round and serrated jaws, bayonet-shaped,
diameter 3 mm, length 20 cm |
| 662703 | HUNT Same , diameter 5 mm |
| 662721 | ALLIS Forceps , with fine teeth, length 20 cm |

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



662472



662478



662798



662797



662798

- | | |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 662471 | CUSHING Brain Spatula , angled on both sides,
convex, malleable, width 11 and 13 mm, length 18 cm |
| 662472 | Same , width 15 and 18 mm |
| 662473 | Same , width 18 and 22 mm |
| 662475 | OLIVECRONA Brain Spatula , angled on both sides,
concave, elastic, width 5 and 6 mm, length 18 cm |
| 662476 | Same , width 7 and 9 mm |
| 662477 | Same , width 11 and 13 mm |
| 662478 | Same , width 15 and 18 mm |
| 662479 | Same , width 18 and 22 mm |
| 662797 | YASARGIL Spring Hook , 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 |

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments

STORZ
KARL STORZ — ENDOSCOPE



635000



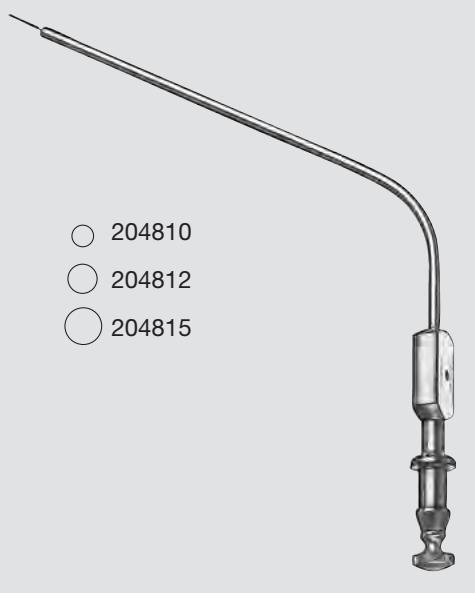
635005



635012



635050



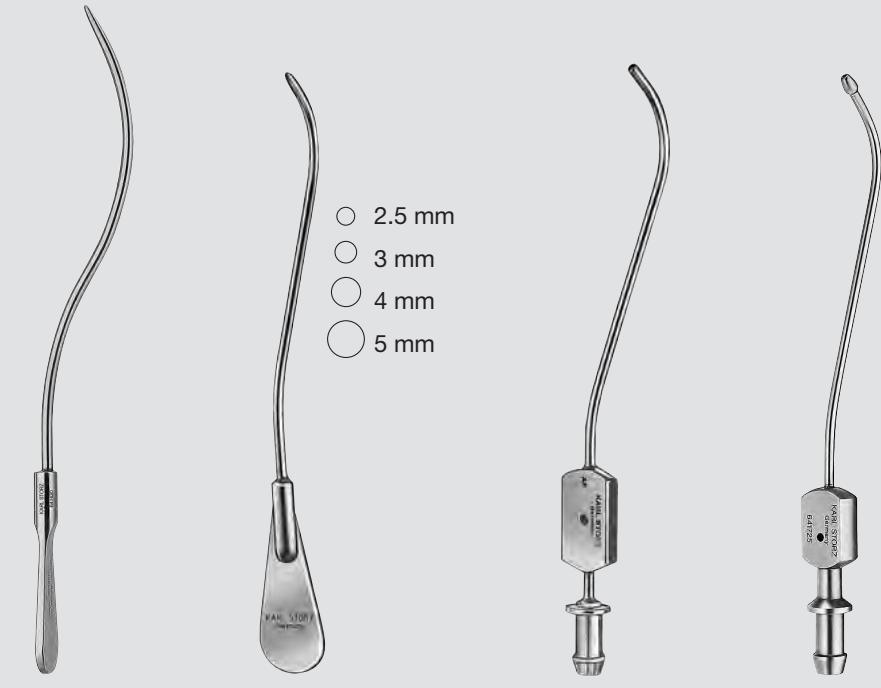
204810

- 204810
- 204812
- 204815

635000	Orbital Retractor , length 23.5 cm
635005	BEHRBOHM Orbital Retractor , width of spatula 8.4 x 16 mm, length 20 cm
635012	Spatula , malleable, width 12 mm, length 20 cm
635017	Same , width 17 mm
635025	Same , width 25 mm
635050	Spatula , malleable, width 50 mm, length 30 cm
204810	FERGUSON Suction Tube , with cut-off hole and stylet, LUER, 10 Fr., working length 11 cm
204812	Same , 12 Fr.
204815	Same , 15 Fr.

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



641430 BEHRBOHM **Frontal Sinus Bougie**, S-shaped curve,
size 2, outer diameter 3 mm, length 16.5 cm

641450 **Same**, size 4, outer diameter 5 mm

641525 RITTER **Frontal Sinus Bougie**, 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 **Suction Tube**, 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 **Suction Tube**, 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

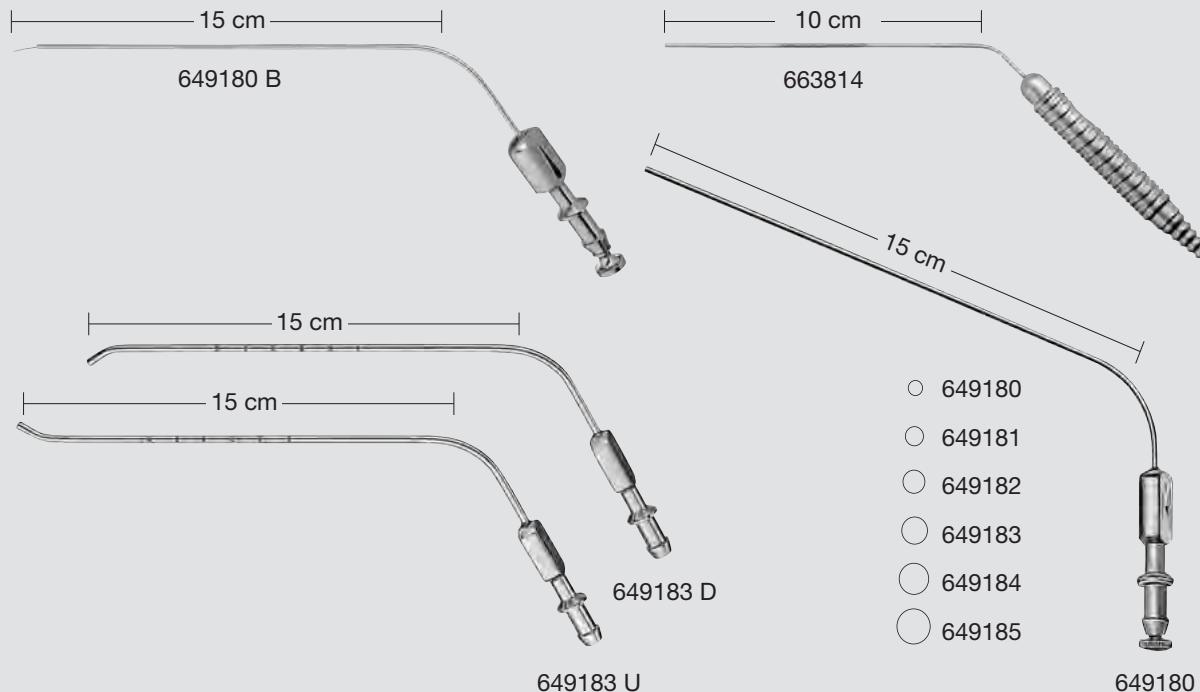
641740 **Same**, outer diameter 4 mm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Suction Tubes, working lengths 10, 13, 15 and 18 cm



- 649180
- 649181
- 649182
- 649183
- 649184
- 649185

649179 B	Suction Tube , malleable, with elongated cut-off hole and stylet, LUER, 4 Fr., working length 15 cm	649180	FERGUSON Suction Tube , with cut-off hole and stylet, LUER, 6 Fr., working length 15 cm
649179 C	Same , working length 18 cm	649181	Same , 7 Fr.
649180 B	Suction Tube , malleable, with elongated cut-off hole and stylet, LUER, 6 Fr., working length 15 cm	649182	Same , 8 Fr.
649180 C	Same , working length 18 cm	649183	Same , 10 Fr.
649182 B	Suction Tube , malleable, with elongated cut-off hole and stylet, LUER, 8 Fr., working length 15 cm	649184	Same , 12 Fr.
649182 C	Same , working length 18 cm	649185	Same , 15 Fr.
649183 B	Suction Tube , malleable, with elongated cut-off hole and stylet, LUER, 10 Fr., working length 15 cm	649183 D	FERGUSON Suction Tube , with cut-off hole and stylet, with distance markings, curved downwards, diameter 3 mm, working length 15 cm
649183 C	Same , working length 18 cm	649183 U	Same , curved upwards
		663814	Suction Tube , angular, malleable, with round handle and cut-off hole, diameter 2 mm, working length 10 cm
		663818	Same , working length 13 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Suction Tubes, working length 15 cm

15 cm



28164 XA

NEW 28164 XA

Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, 8 Fr., working length 15 cm

NEW 28164 XB

Same, 6 Fr.

NEW 28164 XD

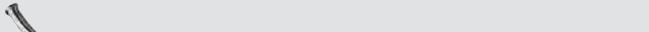
Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, malleable, 8 Fr., working length 15 cm

NEW 28164 XE

Same, 6 Fr.



15 cm



28164 XC

NEW 28164 XC

Suction Tube, with cut-off hole, drop-shaped, with distance markings, LUER, conical distal end, tip curved upwards, ball end, 2.4 mm, working length 15 cm



Suction Tubes, with olive

13.5 cm



649203

649202

Suction Tube, curved, with olive, outer diameter 2 mm, working length 17.5 cm

649203

Same, outer diameter 3 mm, working length 13.5 cm

649204

Same, outer diameter 4 mm, working length 17 cm

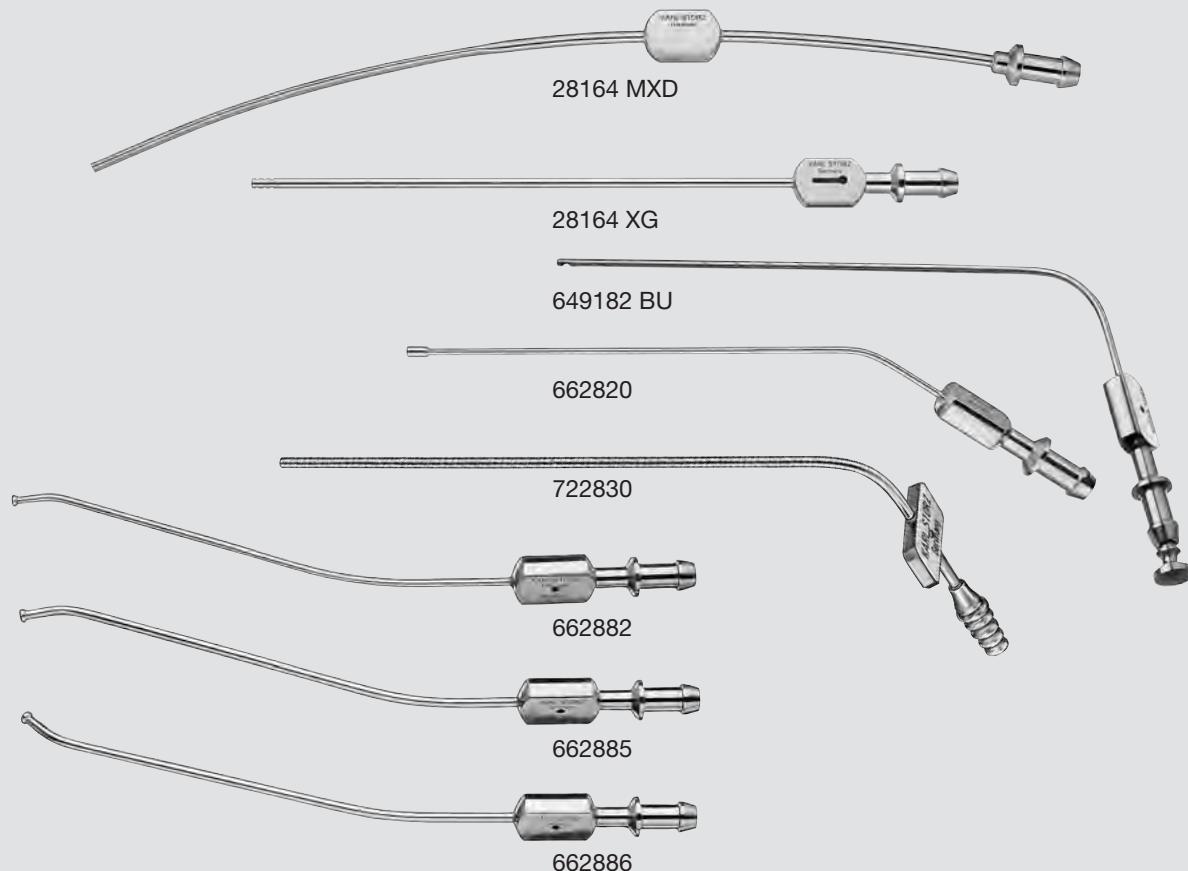
649213

Same, outer diameter 3 mm, working length 16 cm



Skull Base and Endoscopic Pituitary Surgery

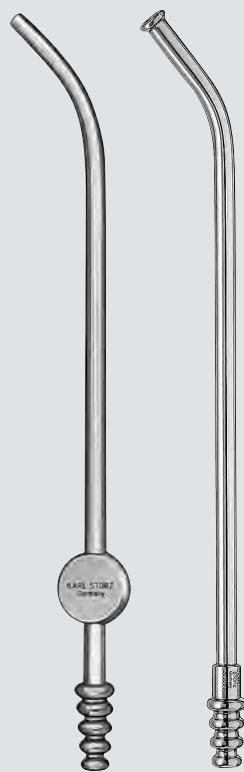
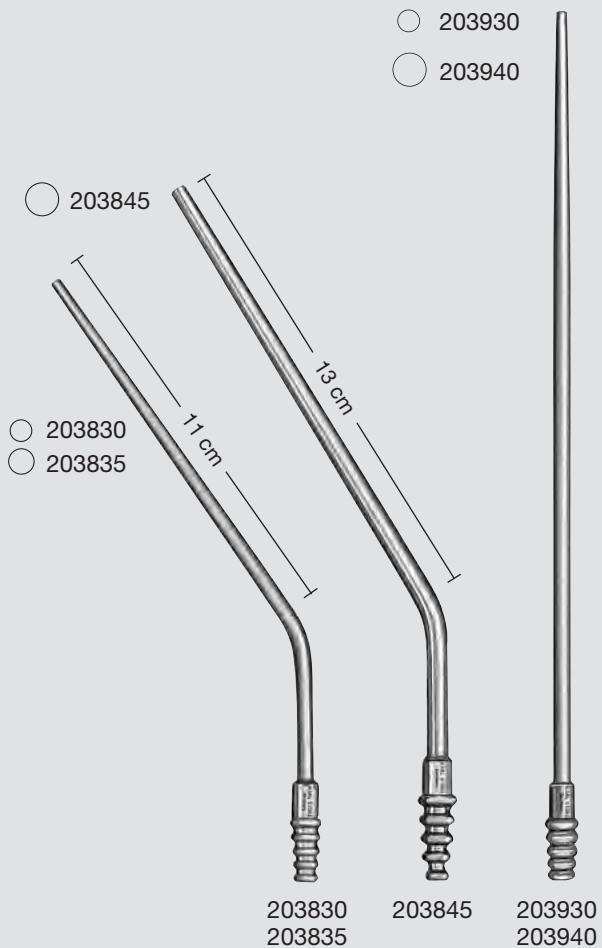
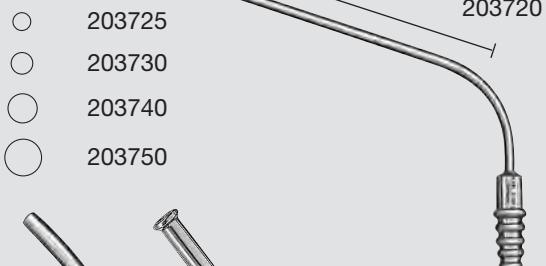
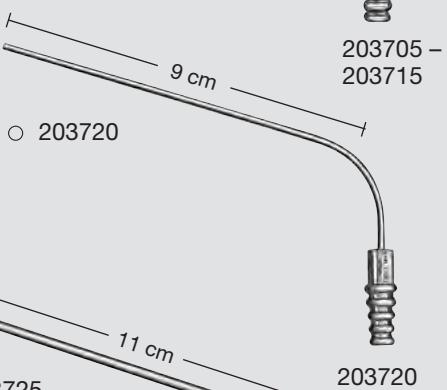
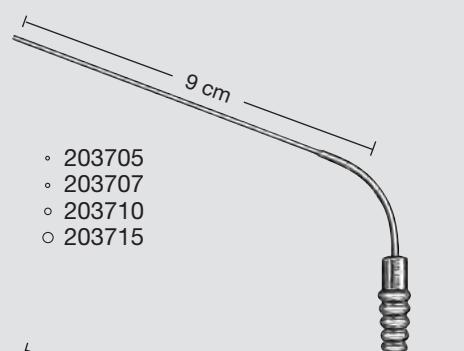
Operating Instruments



28164 MXD	Suction Tube , curved, distal end oval 4 x 2 mm, with finger plate, with stylet, diameter 3.3 mm, working length 10 cm	662820	FRANK-PASQUINI Suction Tube , angular, tip straight, with grip plate and cut-off hole, diameter 2 mm, working length 12 cm
28164 XG	Suction Tube , with grip plate and elongated cut-off hole, distal holes, LUER, diameter 9 Fr., length 15 cm	662825 662830	Same , diameter 2.5 mm Same , diameter 3 mm
28164 XM 28164 XK	Same , 7 Fr. Same , 5 Fr.	662882	FRANK-PASQUINI Suction Tube , angular, tip curved upwards, ball end, with grip plate and cut-off hole, LUER, diameter 2.4 mm, working length 13 cm
649182 BU	FERGUSON-CASTELNUOVO Suction Tube , with cut-off hole and stylet, with calibration markings, lateral opening downwards, diameter 2.5 mm, working length 15 cm	662885 662883	Same , diameter 3 mm
649183 BLL	de DIVITIIS-CAPPABIANCA Suction Tube , with cut-off hole and mandrel, with calibration markings, lateral opening curved to left, diameter 3 mm, working length 15 cm	662886	FRANK-PASQUINI Suction Tube , angular, tip curved downwards, ball end, with grip plate and cut-off hole, LUER, diameter 2.4 mm, working length 13 cm
649183 BRR	Same , curved to right	722830	Same , diameter 3 mm
			Suction Tube , angular, with grip plate and cut-off hole, LUER, outer diameter 3 mm, working length 14 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



- | | |
|--------|--------------------------------------------------------------------------------------|
| 203705 | Suction Tube , cylindrical, LUER, outer diameter 0.5 mm, working length 9 cm |
| 203707 | Same , outer diameter 0.7 mm |
| 203710 | Same , outer diameter 1 mm |
| 203715 | Same , outer diameter 1.5 mm |
| 203720 | Same , outer diameter 2 mm |
| 203725 | Suction Tube , cylindrical, LUER, outer diameter 2.5 mm, working length 11 cm |
| 203730 | Same , outer diameter 3 mm |
| 203740 | Same , outer diameter 4 mm |
| 203750 | Same , outer diameter 5 mm |
| 203830 | Suction Tube , conical, LUER, outer diameter 3 mm, working length 11 cm |
| 203835 | Same , outer diameter 3.5 mm |
| 203845 | Suction Tube , conical, LUER, outer diameter 4.5 mm, working length 13 cm |
| 203930 | Suction Tube , malleable, LUER, outer diameter 3 mm, length 22.5 cm |
| 203940 | Suction Tube , straight, cylindrical, outer diameter 4 mm, length 22.5 cm |
| 203945 | Suction Tube , curved, conical, outer diameter 4.5 mm, length 20 cm |
| 203960 | Suction Tube , curved, with olive, outer diameter 6 mm, length 19 cm |

Skull Base and Endoscopic Pituitary Surgery

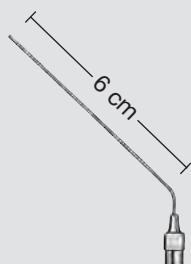
Operating Instruments



204001



204004



204005



204200



204250



204305



204354

204001 **Suction Handle**, with cut-off hole, LUER cone, length 10 cm, for use with Suction Tubes 204005 – 204025, 204305 – 204330

204004 **WULLSTEIN Suction Handle**, with cut-off hole, LUER cone, length 10 cm, for use with Suction Tubes 204005 – 204025, 204305 – 204330

204005 **Suction Tube**, angular, LUER-Lock, outer diameter 0.5 mm, working length 6 cm

204007 **Same**, outer diameter 0.7 mm

204008 **Same**, outer diameter 0.8 mm

204010 **Same**, outer diameter 1 mm

204013 **Same**, outer diameter 1.3 mm

204015 **Same**, outer diameter 1.5 mm

204020 **Same**, outer diameter 2 mm

204025 **Same**, outer diameter 2.5 mm

204200 **FISCH Suction Handle**, with cut-off hole, LUER cone, length 5.5 cm, for use with Suction Tubes 204005 – 204025, 204305 – 204330

204250 **FISCH Suction Handle**, 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

204305 **Suction Tube**, straight, LUER-Lock, malleable, outer diameter 0.5 mm, length 10 cm

204307 **Same**, outer diameter 0.7 mm

204310 **Same**, outer diameter 1 mm

204313 **Same**, outer diameter 1.3 mm

204315 **Same**, outer diameter 1.5 mm

204320 **Same**, outer diameter 2 mm

204325 **Same**, outer diameter 2.5 mm

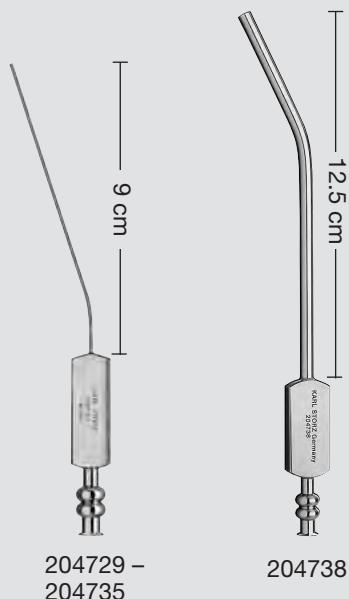
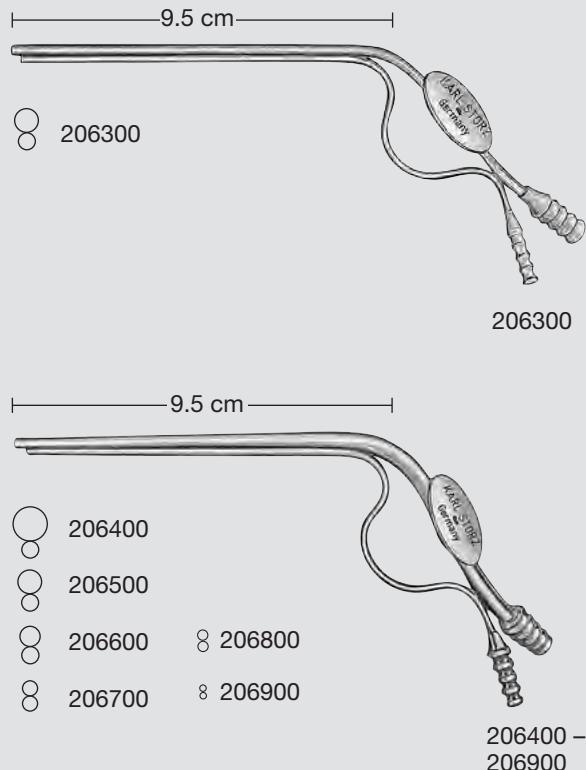
204330 **Same**, outer diameter 3 mm

204352 **Suction Tube**, angular, malleable, LUER-Lock, outer diameter 0.7 mm, working length 7 cm, for use with Handle 204250

204354 **Same**, outer diameter 1 mm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



206300	FISCH Suction and Irrigation Tube, conical, suction tube outer diameter 3.2 mm, irrigation tube outer diameter 2 mm, working length 9.5 cm	207000	Silicone Tubing, autoclavable, coil length 100 cm, outer diameter 8 mm
206400	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	FISCH Suction Tube, angular, with grip plate, outer diameter 1.2 mm, working length 9 cm
206500	Same, suction tube outer diameter 3 mm, irrigation tube outer diameter 2 mm	204730	Same, outer diameter 1.5 mm
206600	Same, suction tube outer diameter 2.5 mm, irrigation tube outer diameter 2 mm	204732	Same, outer diameter 2 mm
206700	Same, suction tube outer diameter 1.9 mm, irrigation tube outer diameter 1.9 mm	204733	Same, outer diameter 2.2 mm
206800	Same, suction tube outer diameter 1.5 mm, irrigation tube outer diameter 1.5 mm	204735	Same, outer diameter 3 mm, working length 10 cm
206900	Same, suction tube outer diameter 1 mm, irrigation tube outer diameter 1 mm	204738	Same, outer diameter 5 mm, working length 12.5 cm

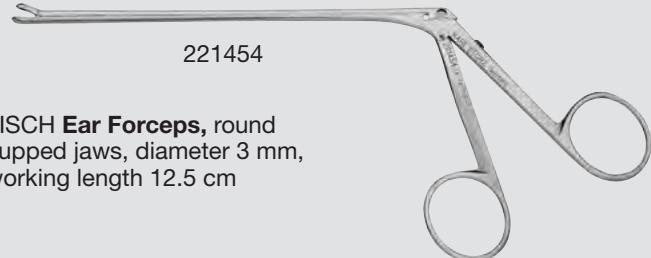
Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



221454

12.5 cm



221454

FISCH **Ear Forceps**, round cupped jaws, diameter 3 mm, working length 12.5 cm



222501

8 cm

222501

FISCH-BELLUCCI **Scissors**, extra fine blade, blade length 7 mm, working length 8 cm



222650

12.5 cm

222650

BELLUCCI **Scissors**, delicate, straight, working length 12.5 cm



222801

8 cm

222800

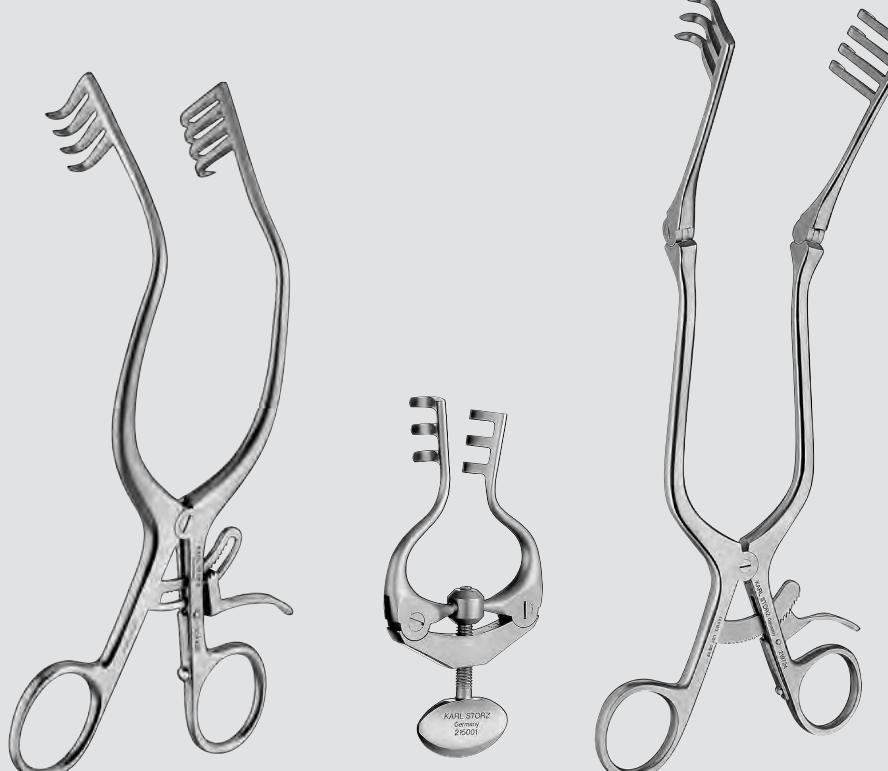
FISCH-DIETER **Malleus Nipper**, extra delicate, upbiting, width 0.8 mm, working length 8 cm



Skull Base and Endoscopic Pituitary Surgery

Operating Instruments

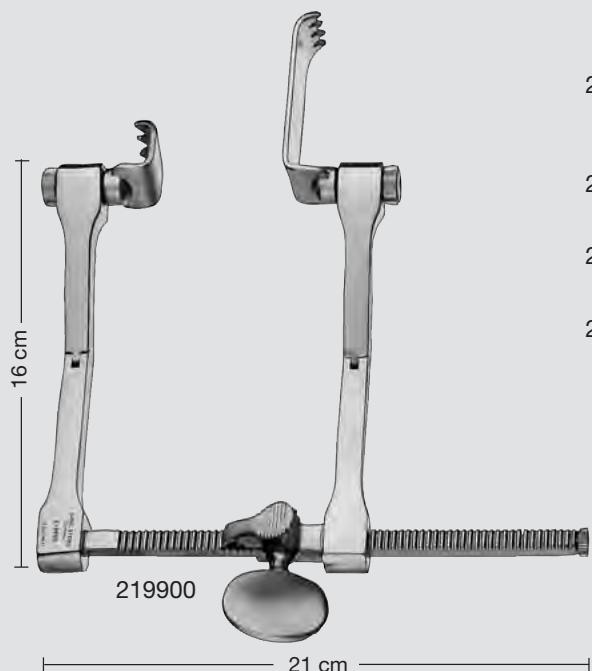
STORZ
KARL STORZ — ENDOSKOPE



214920

215001

219724



214920

ANDERSON-ADSON Retractor,
4 x 4 prongs, sharp, curved,
length 20 cm

215001

JANSEN Retractor, 3 x 3 prongs,
blunt, length 10 cm

219724

Retractor, articulated,
3 x 4 prongs, sharp, length 24 cm

219900

FISCH Glomus Retractor
(infratemporal fossa retractor),
size 21 x 16 cm

including:

Retractor Blade, short

Retractor Blade, long

Retractor Blade, long and slim,
with drill hole

Retractor Frame, without blades

Components/Spare Parts see chapter 13

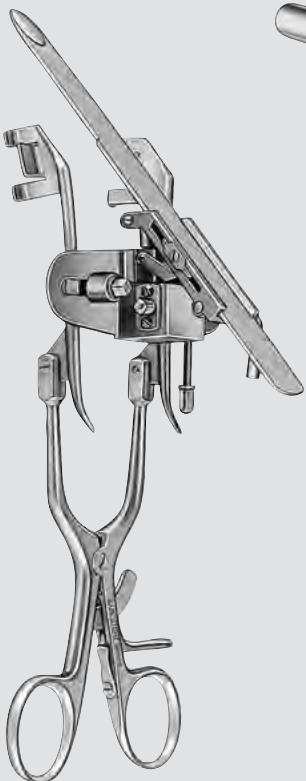
Skull Base and Endoscopic Pituitary Surgery

Operating Instruments

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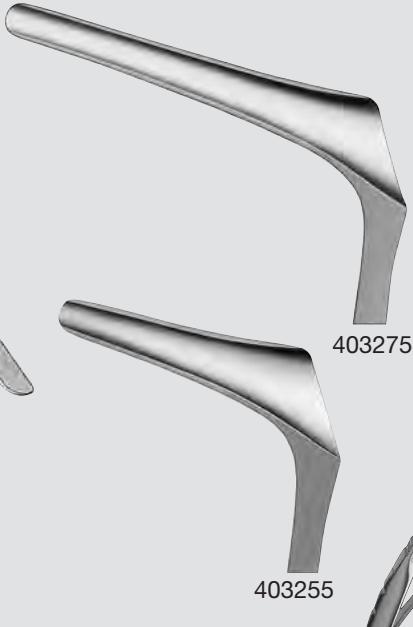
219717



219717 B



219800



403255

FISCH Retractor, articulated,
3 x 3 prongs, semisharp, length 17 cm

FISCH Retractor, articulated,
3 x 3 prongs, sharp, length 17 cm

FISCH Dura Retractor, length 18 cm
including:
Spatula, straight, length 12 cm
Spatula, straight, length 15 cm
Spatula, curved, length 15 cm
Spatula Attachment, for adjustment
of spatulas
Wrench, for spatula attachment

403255

KILLIAN-STRUYCKEN Nasal Speculum,
with set rack, blade length 55 mm,
length 15 cm

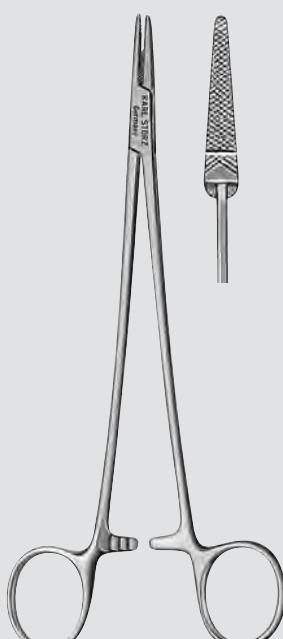
Same, blade length 75 mm

403275

HEGAR Needle Holder, tungsten
carbide inserts, slender, length 18 cm

798618

DRAF Micro Needle Holder, extra fine,
coated jaws, matt finish, polished handle
rings, length 16.5 cm



798618



799016

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



28164 EA CASTELNUOVO **Elevator**, double-ended, semisharp and blunt, length 26 cm

28164 EB CASTELNUOVO **Elevator**, double-ended, angled end shovel-shaped, semisharp, blunt end slightly curved, length 26 cm

28164 EC CASTELNUOVO **Elevator**, double-ended, blunt end angled, semisharp end slightly curved, graduated, length 26 cm

28164 ES CASTELNUOVO **Suction Elevator**, with stylet, curved, length 25 cm

474015 CASTELNUOVO **Suction Elevator**, 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

477500 **FREER Raspatory**, curved, width 4 mm, length 18 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



CAPPABIANCA-de DIVITIIS Ring Curettes

	28164 RP	
	28164 RN	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 3 mm, tip angled 45°, with round handle, length 25 cm Same , malleable
	28164 RE	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm Same , malleable
	28164 RO	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm Same , malleable
	28164 RJ	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 7 mm, tip angled 45°, with round handle, length 25 cm Same , malleable
	28164 RI	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 3 mm, tip angled 90°, with round handle, length 25 cm Same , inner diameter 5 mm
	28164 RG	Same , inner diameter 7 mm
	28164 RH	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 3 mm, laterally curved sheath end, with round handle, length 25 cm Same , inner diameter 5 mm
	28164 RB	Same , inner diameter 7 mm
	28164 RA	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 3 mm, laterally curved 90° sheath end, with round handle, length 25 cm Same , inner diameter 5 mm
	28164 RC	Same , inner diameter 7 mm
	28164 RV	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, inner diameter 3 mm, laterally curved 90° sheath end, with round handle, length 25 cm Same , inner diameter 5 mm
	28164 RD	Same , inner diameter 7 mm
	28164 RW	CAPPABIANCA-de DIVITIIS Curette , blunt, stirrup-shaped, with round handle, length 25 cm
	28164 RF	
	28164 RF	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, vertical, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm
	28164 RM	CAPPABIANCA-de DIVITIIS Ring Curette , with round wire, horizontal, inner diameter 5 mm, tip angled 45°, with round handle, length 25 cm

Skull Base and Endoscopic Pituitary Surgery

Operating Instruments



Instruments recommended by CAPPABIANCA-de DIVITIIS



28164 RT



28164 RT CAPPABIANCA-de DIVITIIS **Suction Curette**, with basket, round, size 5 mm, rotatable tube, LUER, length 25 cm



28164 RU **Same**, size 6.5 mm



28164 RSB CAPPABIANCA-de DIVITIIS **Suction Curette**, blunt, inner diameter 5 mm, tip angled 45°, LUER, length 25 cm



28164 RSC **Same**, inner diameter 7 mm



28164 KF



28164 KB **Curette**, round spoon, tip slightly angled, size 2 mm, with round handle, length 25 cm



28164 KC **Curette**, round spoon, tip slightly angled, size 3 mm, with round handle, length 25 cm



28164 KF **Curette**, round spoon, tip highly angled, size 2 mm, with round handle, length 25 cm



28164 H



28164 H CASTELNUOVO **Hook**, 90°, blunt, with round handle, length 25 cm



28164 HA



NEW 28164 HA **Seeker**, angled 45°, with ball end, diameter 1 mm, length 25 cm



NEW 28164 HB **Seeker**, angled 90°, with ball end, diameter 4 mm, length 25 cm



NEW 28164 HC **Same**, with ball end, diameter 1 mm

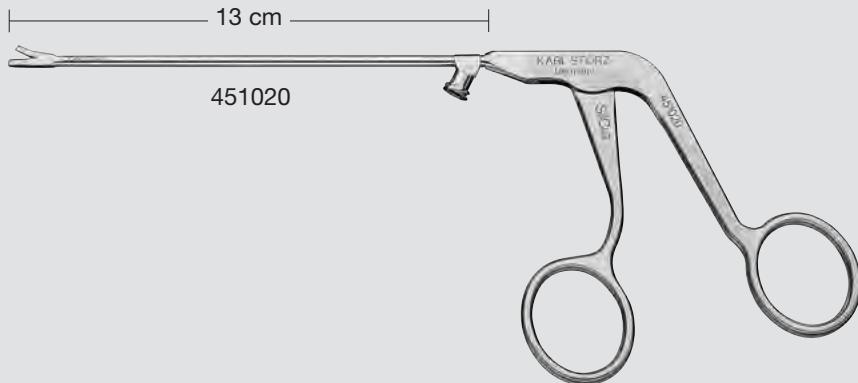
Skull Base and Endoscopic Pituitary Surgery

SilCut® Instruments

STORZ
KARL STORZ — ENDOSKOPE

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



456021

GRÜNWALD-HENKE **SilCut® Nasal Forceps**, 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



456521

Same, 45° upturned



451020

GRÜNWALD-HENKE **SilCut® Nasal Cutting Forceps**, 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 **SilCut® Nasal Cutting Forceps**, 45° upturned, 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



451521

Same, size 1

Skull Base and Endoscopic Pituitary Surgery

SilCut® Instruments



452011 MACKAY-GRÜNWALD **SilCut® Nasal Cutting Forceps**, 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



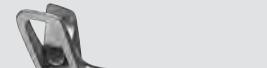
459110 STAMMBERGER **SilCut® Antrum Punch**, extremely powerful resection, patented uniform force transmission for gently controlled cutting, new ergonomic handle design, upbiting backward cutting, with cleaning connector, working length 10 cm



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

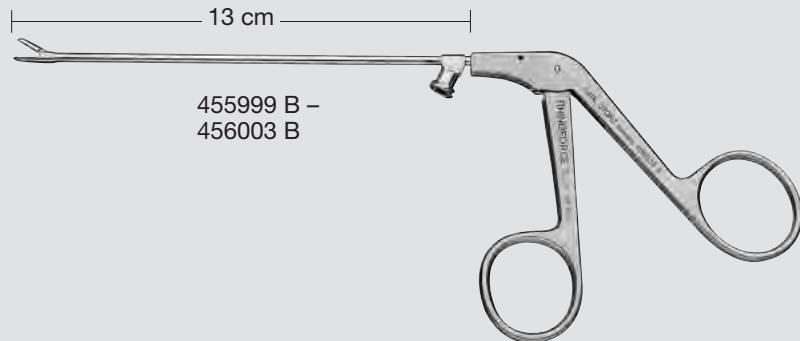
Recommended Container for Sterilization 39910 SC see catalog HYGIENE

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



BLAKESLEY RHINOFORCE®II Nasal Forceps



 455999 B BLAKESLEY RHINOFORCE®II Nasal Forceps, straight, size 00, with cleaning connector, working length 13 cm

 456000 B Same, size 0

 456001 B Same, size 1

 456002 B Same, size 2

 456003 B Same, size 3



 456499 B BLAKESLEY-WILDE RHINOFORCE®II Nasal Forceps, 45° upturned, size 00, with cleaning connector, working length 13 cm

 456500 B Same, size 0

 456501 B Same, size 1

 456502 B Same, size 2



 456801 B BLAKESLEY-WILDE RHINOFORCE®II Nasal Forceps, 90° upturned, size 1, with cleaning connector, working length 13 cm

 456802 B Same, size 2

 456803 B Same, size 3



 456601 B BLAKESLEY-WILDE RHINOFORCE®II Nasal Forceps, curved to right 45°, size 1, with cleaning connector, working length 13 cm

Recommended Container for Sterilization 39910 SC see catalog HYGIENE

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



BLAKESLEY-CASTELNUOVO RHINOFORCE®II Nasal Forceps

13 cm

456509 B –
456511 B



456009 B BLAKESLEY-CASTELNUOVO RHINOFORCE®II
Nasal Forceps, end of sheath 25° upturned,
with straight jaw, width 2.5 mm, with cleaning
connector, working length 13 cm



456010 B **Same**, width 3 mm



456509 B BLAKESLEY-CASTELNUOVO RHINOFORCE®II
Nasal Forceps, end of sheath 25° upturned,
jaws 45° upturned, width 2.5 mm, with cleaning
connector, working length 13 cm



456510 B **Same**, width 3 mm



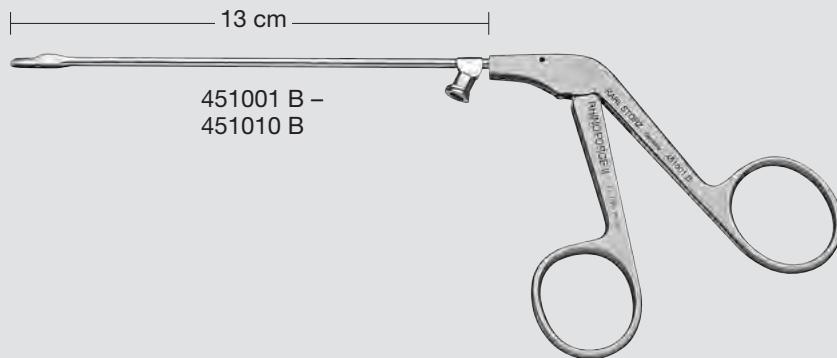
456511 B **Same**, width 3.5 mm

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

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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



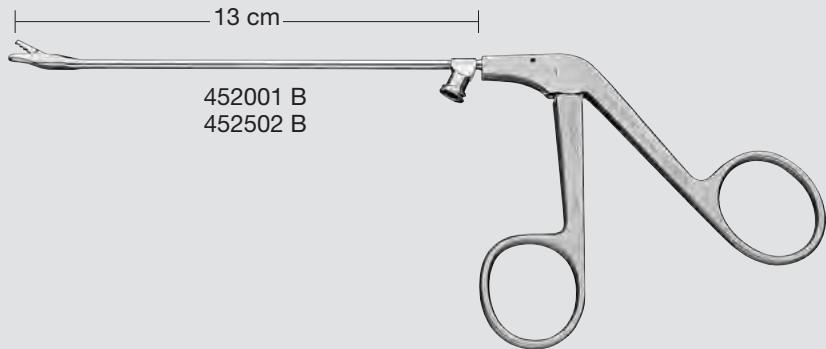
451510 B CASTELNUOVO **RHINOFORCE®II Nasal Cutting Forceps**, end of sheath 25° upturned, through-cutting, jaws 45° upturned, BLAKESLEY shape, width 3 mm, with cleaning connector, working length 13 cm

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

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MACKAY-GRÜNWALD RHINOFORCE®II Nasal Forceps, through-cutting



452001 B

MACKAY-GRÜNWALD **RHINOFORCE®II**
Nasal Cutting Forceps, straight, through-cutting, extra delicate, tissue-sparing, 8 x 3 mm, size 1, with cleaning connector, working length 13 cm



452002 B

Same, 11.5 x 3.5 mm, size 2



452501 B

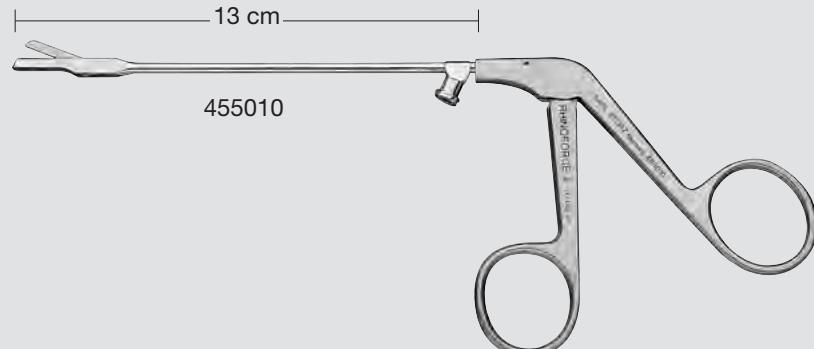
MACKAY-GRÜNWALD **RHINOFORCE®II**
Nasal Cutting Forceps, 45° upturned, through-cutting, extra delicate, tissue-sparing, 8 x 3 mm, size 1, with cleaning connector, working length 13 cm



452502 B

Same, 11.5 x 3.5 mm, size 2

STRUYCKEN RHINOFORCE®II Conchotome



455010

STRUYCKEN **RHINOFORCE®II Nasal Cutting Forceps**, with cleaning connector, working length 13 cm

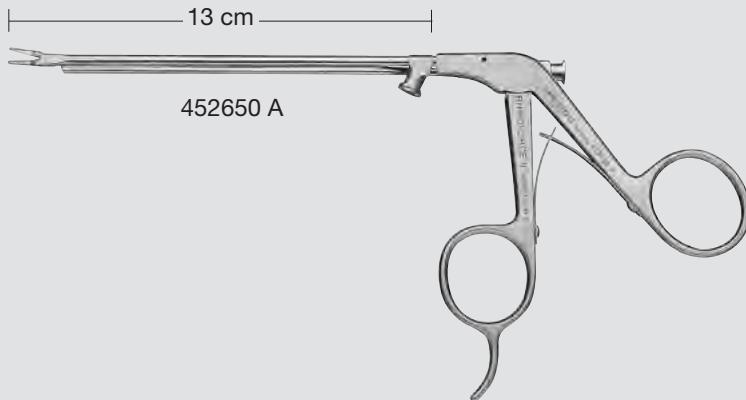
Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



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

Winner of the **2006**
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



452650 C

Same, jaws angled to the right



452650 D

Same, jaws angled to the left

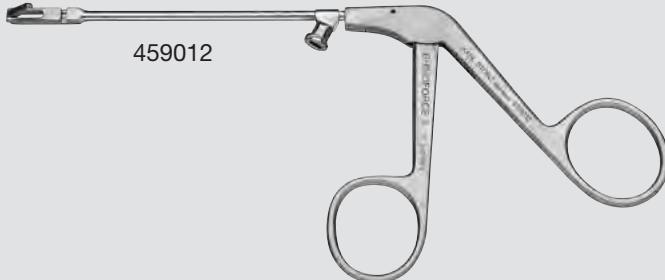
Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



STAMMBERGER Antrum Punches, backward cutting

10 cm



459010

STAMMBERGER RHINOFORCE®II Antrum Punch,
upside backward cutting, with cleaning connector,
working length 10 cm



459011

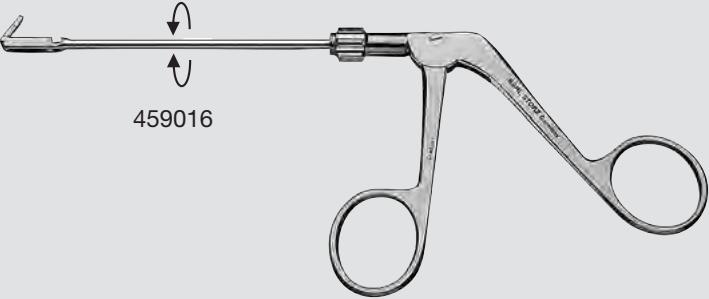
Same, right side backward cutting



459012

Same, left side backward cutting

10 cm



459016

STAMMBERGER Antrum Punch, backward
cutting, sheath 360° rotatable, with fixing screw,
dismantling, working length 10 cm, for use with
Cleaning Adaptor 459015 LL



459015 LL

Cleaning Adaptor

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSCOPE

STAMMBERGER Antrum Punches, pediatric size, backward cutting



459030



STAMMBERGER RHINOFORCE® II Antrum Punch, small pediatric size, slender, upward backward cutting, with cleaning connector, working length 10 cm



459031

Same, right side backward cutting



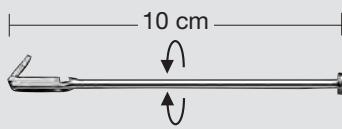
459032

Same, left side backward cutting



459033

Same, downside backward cutting



459036



459036

STAMMBERGER Antrum Punch, small pediatric size, slender, backward cutting, sheath 360° rotating, with fixing screw, dismantling, working length 10 cm, for use with Cleaning Adaptor 459015 LL



459015 LL

Cleaning Adaptor

PARSONS RHINOFORCE® II Punches, backward cutting



459040



459040

PARSONS RHINOFORCE® II Punch, for resection of the uncinate process, upward backward cutting, movable jaw with round tip, diameter 2.5 mm, with cleaning connector, working length 10 cm



459041

Same, right side backward cutting



459042

Same, left side backward cutting

Skull Base and Endoscopic Pituitary Surgery

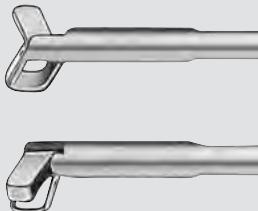
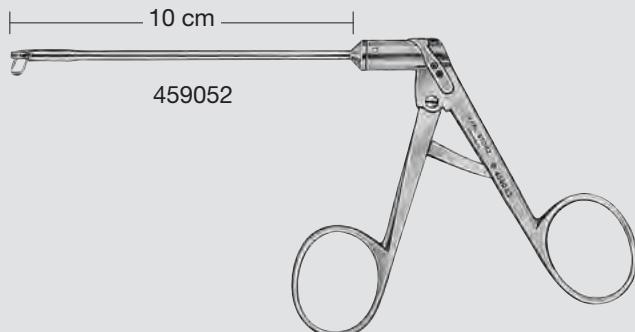
FESS Instruments



STAMMBERGER Antrum Punches, 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 antro-

stomy 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

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

459052

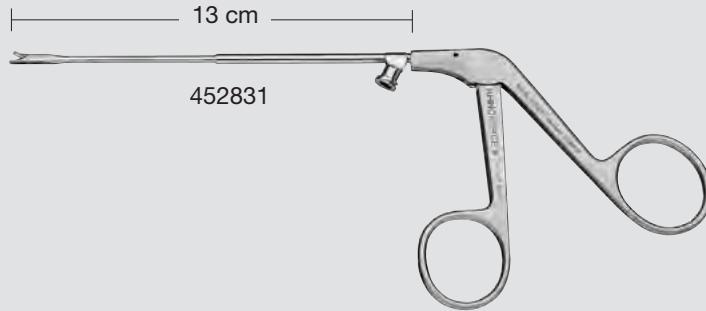
Same, left side downward and
forward cutting

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



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



452832

Same, jaws 45° upturned



452833

Same, sheath curved 30°, straight jaws



452834

Same, sheath curved 30°, jaws 45° upturned



452841

CASTELNUOVO RHINOFORCE®II Miniature Nasal Forceps, with extra fine flat jaws, through-cutting, tissue-sparing, 65° upturned, backward opening, width of cut 1.5 mm, with cleaning connector, working length 13 cm



452841 L

Same, left side opening



452841 R

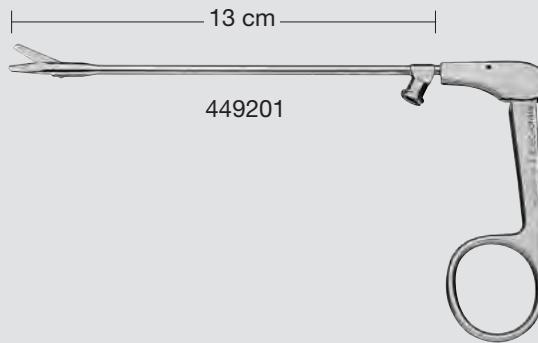
Same, right side opening

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



RHINOFORCE®II Nasal Scissors



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



449213 **Same**, curved to left

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSCOPE

Nasal Scissors



449250

14 cm



449250

Nasal Scissors, ZÜRICH model,
straight, large model,
cutting length 18 mm,
working length 14 cm



449251

12 cm



449251

Nasal Scissors, ZÜRICH model,
straight, small model,
cutting length 12 mm,
working length 12 cm



449401

11 cm



449401

Nasal Scissors, straight,
slender model, serrated,
cutting length 10 mm,
working length 11 cm



449402

Same, curved to right



449403

Same, curved to left

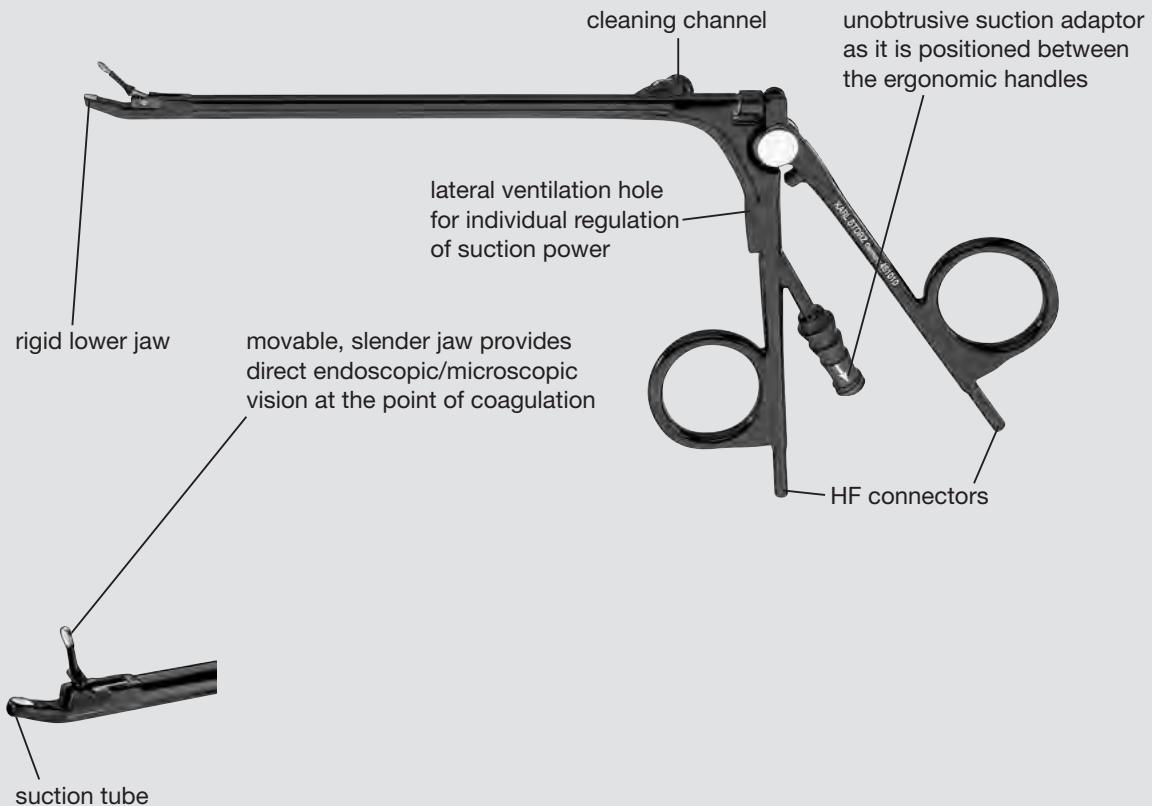
Skull Base and Endoscopic Pituitary Surgery

STAMMBERGER Bipolar Suction Forceps

STORZ
KARL STORZ — ENDOSCOPE

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



Skull Base and Endoscopic Pituitary Surgery

STAMMBERGER Bipolar Suction Forceps

STORZ
KARL STORZ — ENDOSKOPE

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



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



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

Skull Base and Endoscopic Pituitary Surgery

Bipolar Forceps



Special Features:

- Design similar to standard paranasal grasping forceps
- Bipolar coagulation
- Insulated except for small coagulation area on the instrument tip
- Single action jaws
- Special design of the movable jaw provides direct endoscopic/microscopic vision at the point of coagulation

Applications:

- Skull base surgery
- Pituitary gland surgery
- Oozing hemorrhage from the mucosa edges



28164 BGK

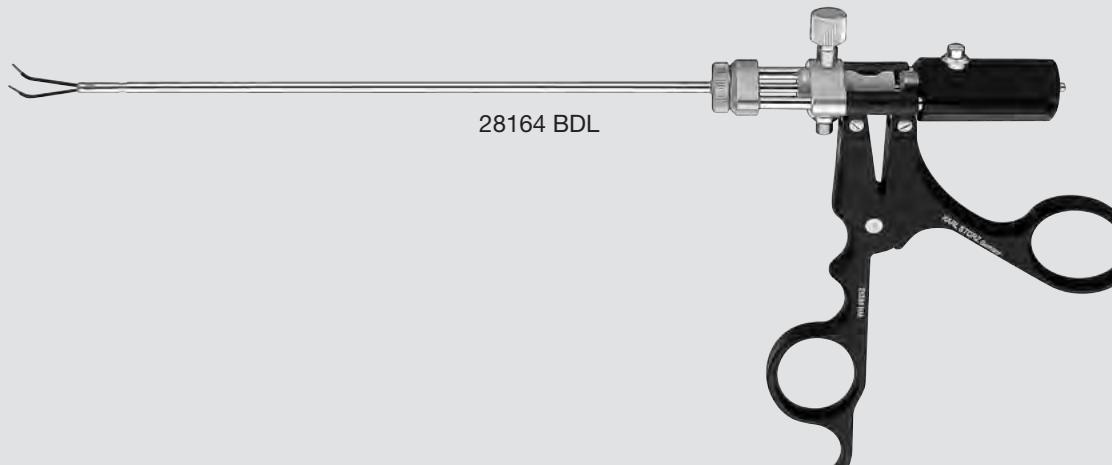
Bipolar Forceps, jaws curved upwards 45°, for bipolar coagulation in skull base and pituitary surgery, working length 18 cm, for use with Bipolar High Frequency Cords 847002 A/M/V/U

Skull Base and Endoscopic Pituitary Surgery

TAKE-APART® Bipolar Forceps

STORZ
KARL STORZ — ENDOSKOPE

For use with Bipolar High Frequency Cords 26176 LE/LM/L/LA/LV



28164 BDL

TAKE-APART® Bipolar Forceps, with fine jaws, width 1 mm, distally angled 45°, vertical closing, outer diameter 3.4 mm, working length 20 cm
including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



28164 BDM

TAKE-APART® Bipolar Forceps, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



28164 BDD

TAKE-APART® Bipolar Forceps, width 2 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
including:

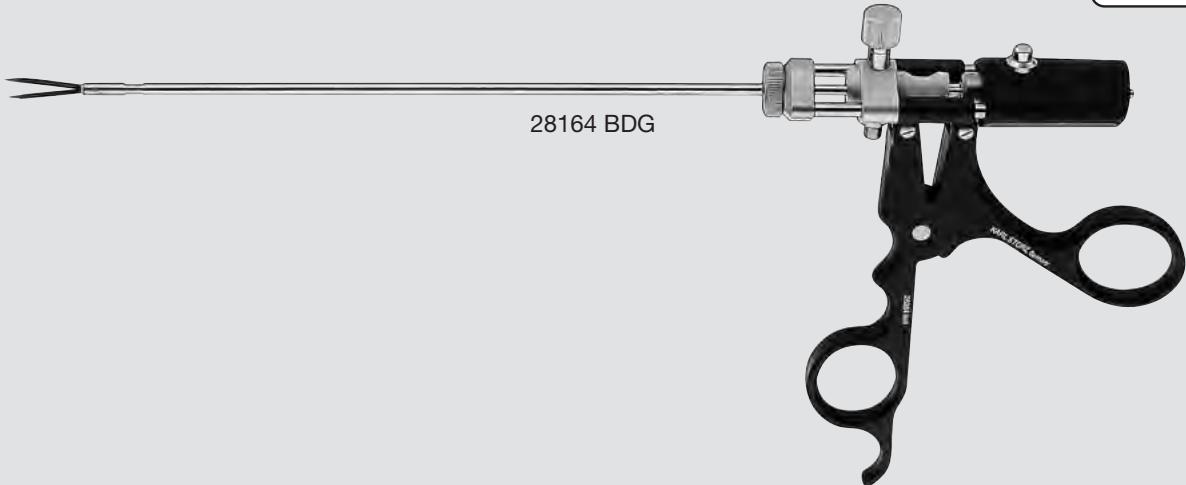
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert

Skull Base and Endoscopic Pituitary Surgery

TAKE-APART® Bipolar Forceps



For use with Bipolar High Frequency Cords 26176 LE/LM/L/LA/LV



28164 BDG

TAKE-APART® TAN Bipolar Coagulation Forceps,
size 3.4 mm, working length 20 cm
including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



NEW 28164 BDK

TAKE-APART® Bipolar Forceps, width 4 mm,
distally angled 45°, horizontal closing, outer
diameter 3.4 mm, working length 20 cm
including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



28164 BG

TAKE-APART® Bipolar Forceps, with fine jaws,
width 1 mm, distally angled 30°, with irrigation
connector for cleaning, size 5 mm,
working length 15 cm
including:

Bipolar Ring Handle
Outer Sheath
Forceps Insert



28164 BDN

TAKE-APART® Bipolar Forceps, rounded tip,
width 2 mm, outer diameter 3.4 mm,
working length 20 cm
including:

Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert

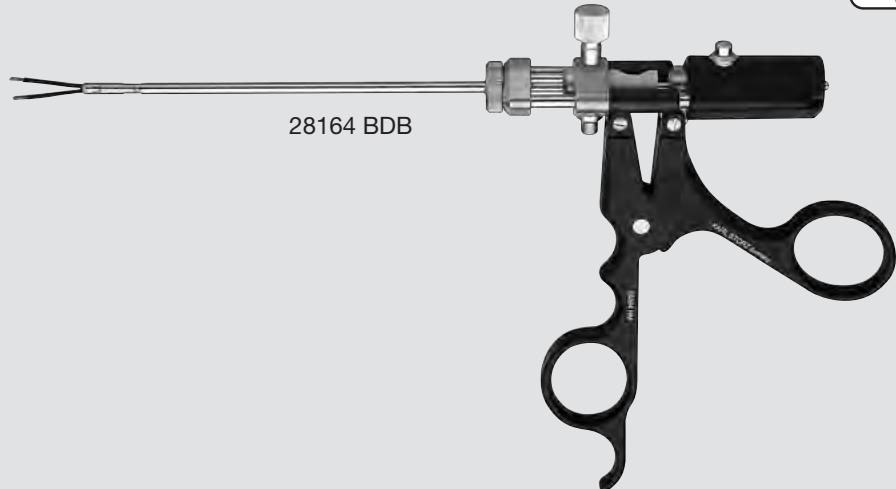
Components/Spare Parts see chapter 13

Skull Base and Endoscopic ^{NEW} Pituitary Surgery

TAKE-APART® CAVALLO/CAPPABIANCA Bipolar Forceps



For use with Bipolar High Frequency Cords 26176 LE/LM/L/LA/LV



28164 BDB

TAKE-APART® Bipolar Forceps, short, rounded tip, width 2 mm, outer diameter 3.4 mm, working length 14 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



28164 BDC

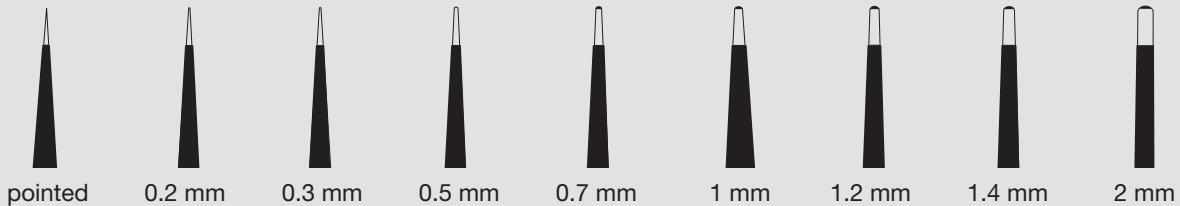
TAKE-APART® Bipolar Forceps, short, pointed tip, width 2 mm, outer diameter 3.4 mm, working length 14 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert

Skull Base and Endoscopic Pituitary Surgery

Forceps for Bipolar Coagulation



**Bipolar Coagulation Forceps, insulated,
for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V**



841116

**Bipolar Coagulation Forceps,
insulated, straight, pointed,
length 16 cm**



841216

**Same, blunt, tip 1 mm,
length 16 cm**



841219

**Same, blunt, tip 1 mm,
length 19 cm**



842016

**Bipolar Coagulation Forceps,
insulated, angled tip,
very delicate, tip 0.5 mm, length 16 cm**



842116

**Bipolar Coagulation Forceps,
insulated, angled tip,
tip 0.5 mm, length 16 cm**



842216

**Bipolar Coagulation Forceps,
insulated, angled tip, blunt,
tip 1 mm, length 16 cm**



842219

**Same, blunt, tip 2 mm,
length 19 cm**



842319

**Same, blunt, tip 1 mm,
length 19 cm**

Skull Base and Endoscopic Pituitary Surgery

Forceps for Bipolar Coagulation



**Bipolar Coagulation Forceps, insulated,
for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V**



843016

Bipolar Coagulation Forceps,
insulated, angular, very delicate,
tip 0.2 mm, length 16 cm



843016 F

Same, grip insulated, front
part not insulated, pointed,
length 16 cm



843116

Bipolar Coagulation Forceps,
insulated, angular, pointed,
length 16 cm



843219

Bipolar Coagulation Forceps,
insulated, angular, blunt, with
integrated suction channel for
epistaxis, with cut-off hole,
length 19 cm



844116

Bipolar Coagulation Forceps,
insulated, bayonet-shaped,
pointed, length 16 cm



844216

Same, blunt, tip 1 mm,
length 16 cm



844119

Same, blunt, tip 2 mm,
length 19 cm



844219

Same, blunt, tip 1 mm,
length 19 cm



844319

Same, slender, tip 0.5 mm,
length 19 cm

Skull Base and Endoscopic Pituitary Surgery

Forceps for Bipolar Coagulation



Bipolar Coagulation Forceps, insulated,
for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V



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



844423

Same, length 23 cm



844521

Same, blunt, tip 0.7 mm,
length 21 cm



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



845219

Bipolar Coagulation Forceps,
insulated, angled tip, bayonet-
shaped, blunt, tip 2 mm,
length 19 cm

Skull Base and Endoscopic Pituitary Surgery

Forceps for Bipolar Coagulation

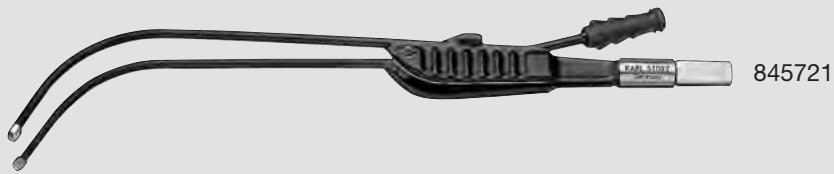
STORZ
KARL STORZ — ENDOSKOPE

Bipolar Coagulation Forceps, insulated,
for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V



845518

Bipolar Coagulation Forceps,
insulated, for nasopharynx,
tip curved 60°, blunt, tip 2 mm,
length 18 cm



845721

Bipolar Coagulation Forceps,
insulated, for nasopharynx
and adenoidectomy, tip
with long 90° curve, with
integrated suction channel,
with cut-off hole, length 21 cm



845821

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

Skull Base and Endoscopic Pituitary Surgery

Bipolar Coagulation

STORZ
KARL STORZ — ENDOSCOPE



11 cm

839330

26 cm

840036

10 cm

840310

NEW 839330

BRINER Bipolar Suction Cannula, angular, insulated, length of electrodes 3.5 mm, with cut-off hole, outer diameter 4.5 mm, working length 11 cm, for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V

840036

Bipolar Coagulation Electrode, straight, with suction channel, for laryngoscopy, working length 26 cm, for use with Bipolar High Frequency Cords 26176 LE or 26176 L – 26176 LV

840310

Bipolar Needle, for submucosa coagulation of the inferior turbinate, pointed, angular, working length 10 cm, for use with Bipolar High Frequency Cords 847000 or 847000 A/E/M/V

Skull Base and Endoscopic Pituitary Surgery

Unipolar Coagulation



26 5200 46

838501 **Needle Electrode**, for sub mucosa diathermy
of the inferior turbinate, working length 9 cm

838503 **Ball Electrode**, for epistaxis, working length 9 cm

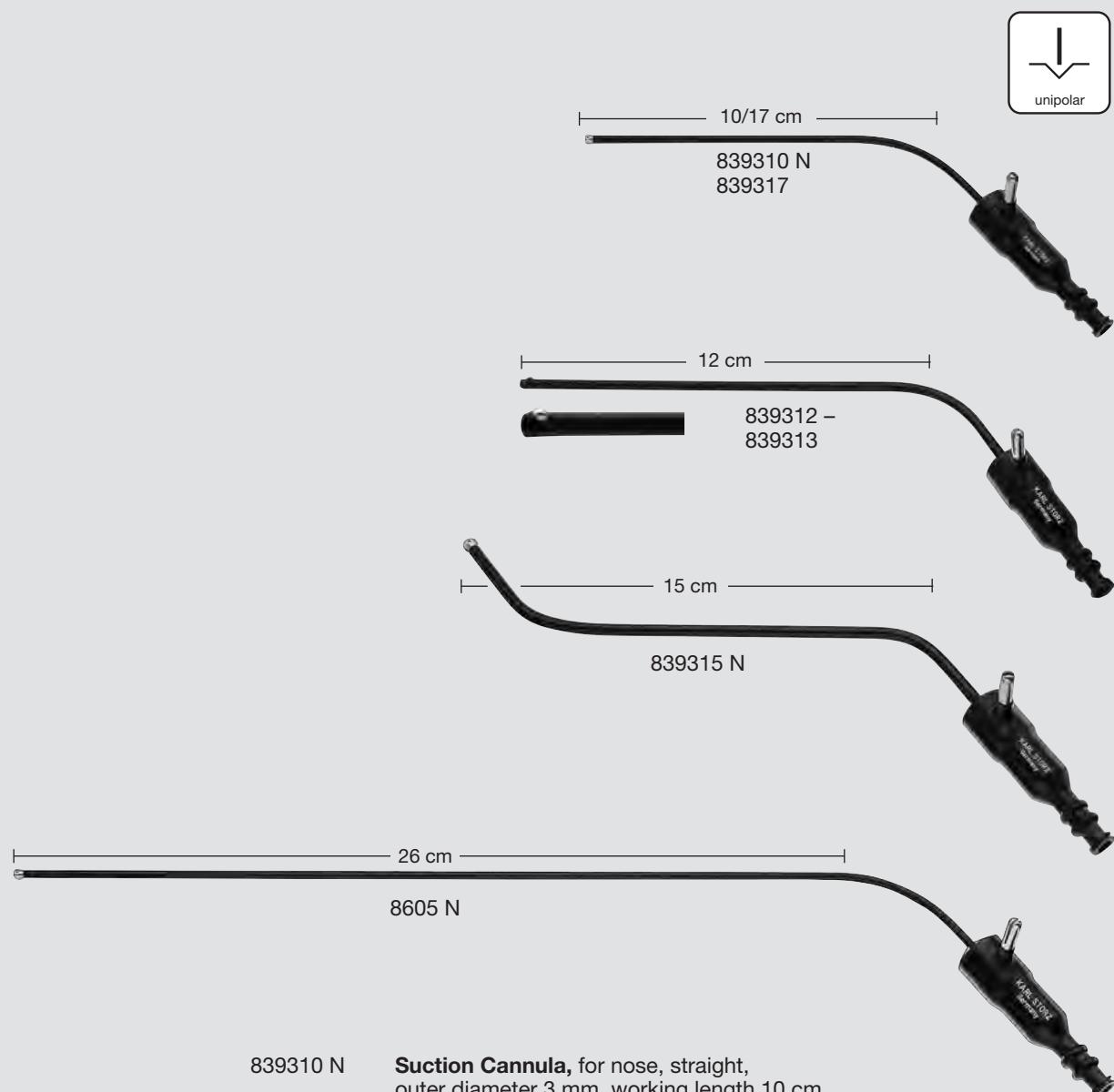
26 5200 60 **Ball Electrode**, straight, diameter 4 mm, working length 10 cm

26 5200 62 **Needle Electrode**, straight, working length 10 cm

26 5200 46 **Electrode Handle**, without buttons, with
integrated connecting cable, length 300 cm

Skull Base and Endoscopic Pituitary Surgery

Unipolar Coagulation



839310 N **Suction Cannula**, for nose, straight,
outer diameter 3 mm, working length 10 cm

839312 **SIMMEN Suction Cannula**, for nose and epistaxis,
angular, insulated, malleable, distal with not insulated
horn, outer diameter 3.5 mm, working length 12 cm, for
use with Unipolar High Frequency Cords 26005 M/MW,
26004 M/MW, 26002 M, 26006 M

839312 A **Same**, outer diameter 4 mm

839313 **Same**, outer diameter 4.5 mm

839315 N **Suction Cannula**, for nasopharynx, curved upwards,
malleable, outer diameter 4 mm, working length 15 cm

839317 **Coagulation Suction Tube**, angular,
outer diameter 3 mm, working length 17 cm

8605 N **KLEINSASSER Suction and Coagulation Cannula**,
outer diameter 3 mm, working length 26 cm

Skull Base and Endoscopic Pituitary Surgery

Unipolar Coagulation



28164 ED



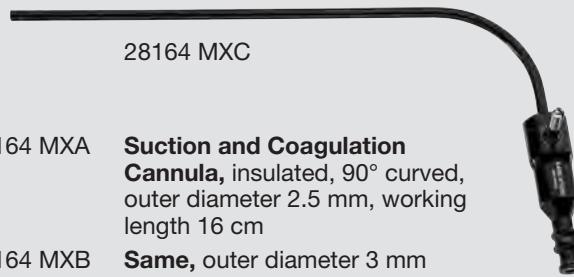
28164 ED

Coagulating Ball Electrode, diameter 2 mm,
laterally curved, working length 13 cm



28164 EF

Coagulating Ball Electrode, diameter 4 mm,
laterally curved, working length 13 cm



28164 MXC

28164 MXA

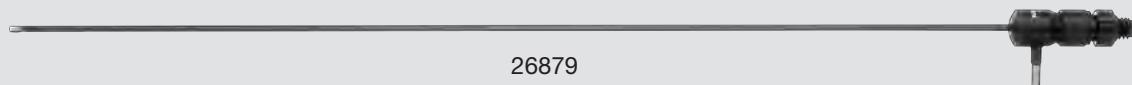
Suction and Coagulation Cannula, insulated, 90° curved,
outer diameter 2.5 mm, working length 16 cm

28164 MXB

Same, outer diameter 3 mm

28164 MXC

Same, outer diameter 3.6 mm



26879

26879

Suction Cannula, size 3 mm,
length 30 cm

Skull Base and Endoscopic Pituitary Surgery

Accessories, High Frequency Cords,
for use with bipolar forceps with or without suction channels



Bipolar High Frequency Cords

KARL STORZ Instruments High Frequency Surgical Units



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 Instrument Standard Forceps 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

High Frequency Surgical Units AUTOCON® see chapter 12

Skull Base and Endoscopic Pituitary Surgery

Accessories, High Frequency Cords,
for use with TAKE-APART® bipolar forceps



Bipolar High Frequency Cords

KARL STORZ High Frequency
Instrument Surgical Units



	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	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Ellman, length 300 cm
	26176 LA	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm
	26176 LV	Bipolar High Frequency Cord , for KARL STORZ AUTOCON® II 400 SCB system (112, 114, 116, 122, 125) and Valleylab coagulators, length 300 cm

Skull Base and Endoscopic Pituitary Surgery

Accessories, High Frequency Cords,
for use with bipolar coagulation forceps



Bipolar High Frequency Cords

KARL STORZ High Frequency
Instruments Surgical Units



A single black cable with a black handle at each end.	847000 E	Bipolar High Frequency Cord , 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, length 300 cm
A black cable with two banana plug connectors at the ends.	847000 A	Bipolar High Frequency Cord , with 2x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm
Two black cables, one with a black handle and one with a black handle and a straight connector.	847000 M	Bipolar High Frequency Cord , for Martin and Berchtold coagulators, length 300 cm
A black cable with a black handle and a Siemens Radiotom connector.	847000 T	Bipolar High Frequency Cord , for Siemens coagulator from model Radiotom 804 upwards, for KARL STORZ bipolar coagulation forceps, length 300 cm
A black cable with a black handle and a Valleylab connector.	847000 V	Bipolar High Frequency Cord , for KARL STORZ AUTOCON® II 400 SCB systems (112, 114, 116, 122, 125) and Valleylab coagulators, length 300 cm

High Frequency Surgical Units AUTOCON® see chapter 12

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



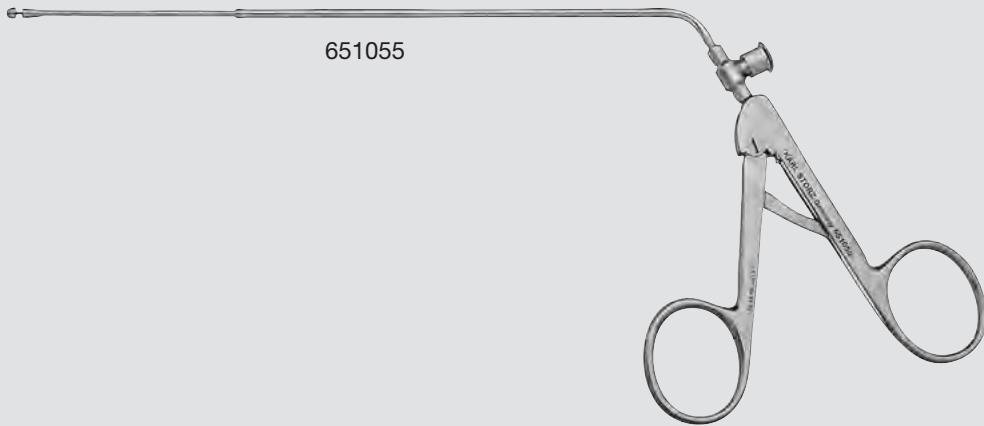
STAMMBERGER Circular Cutting Punches

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



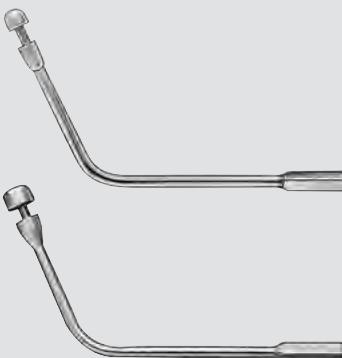
651055

STAMMBERGER **Punch**, circular cutting, for sphenoid, ethmoid and choanal atresia, diameter 3.5 mm, with cleaning connector, working length 18 cm



651050

Same, diameter 4.5 mm



651060

STAMMBERGER **Punch**, circular cutting, 65° upturned, for frontal sinus recess, diameter 3.5 mm, with cleaning connector, working length 17 cm

651065

Same, diameter 4.5 mm

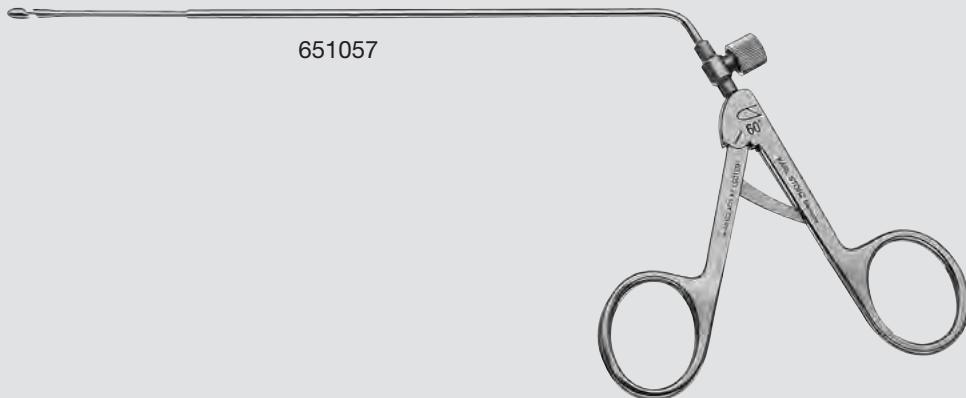
Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



STAMMBERGER Punches

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



651057

STAMMBERGER **Punch**, 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



651061

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

Skull Base and Endoscopic Pituitary Surgery

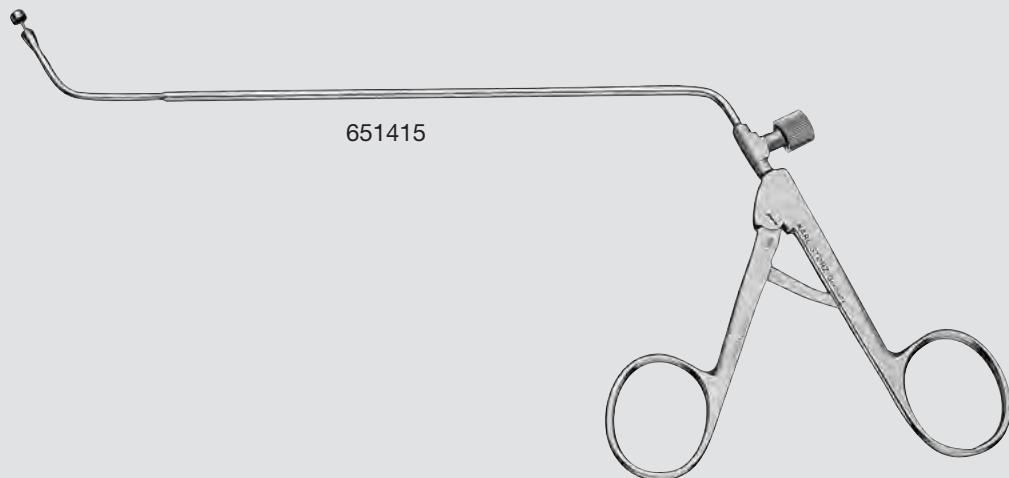
FESS Instruments



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



651410

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



651415

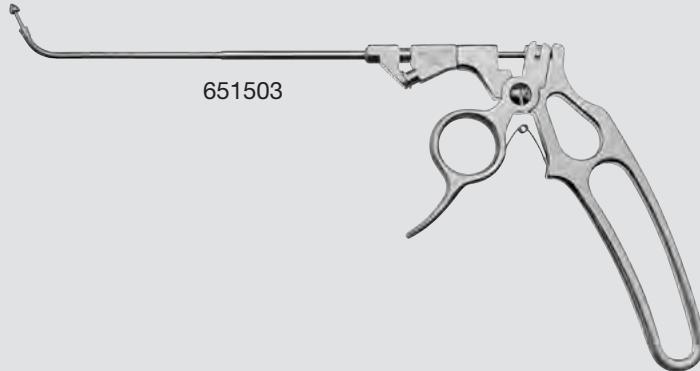
Same, 45° upturned

Skull Base and Endoscopic Pituitary Surgery

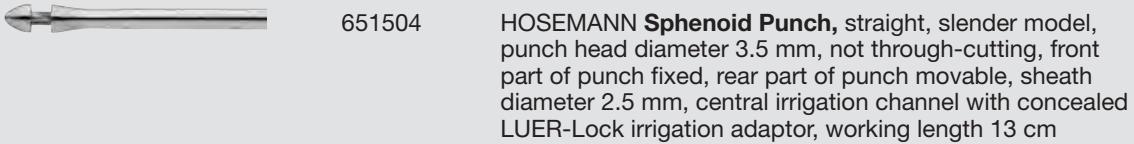
FESS Instruments



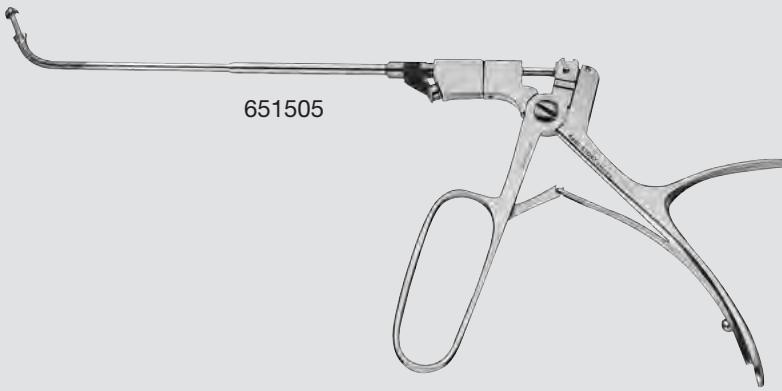
HOSEMANN Frontal Sinus/Recess Punches and Sphenoid Punch, with central irrigation channel



651503 HOSEMANN **Frontal Sinus/Recess Punch**, 70° upturned, slender model, punch head diameter 3.5 mm, not through-cutting, upper part of punch fixed, lower part of punch movable, sheath diameter 2.5 mm, central irrigation channel with concealed LUER-Lock irrigation adaptor, working length 13 cm



651504 HOSEMANN **Sphenoid Punch**, straight, slender model, punch head diameter 3.5 mm, not through-cutting, front part of punch fixed, rear part of punch movable, sheath diameter 2.5 mm, central irrigation channel with concealed LUER-Lock irrigation adaptor, working length 13 cm



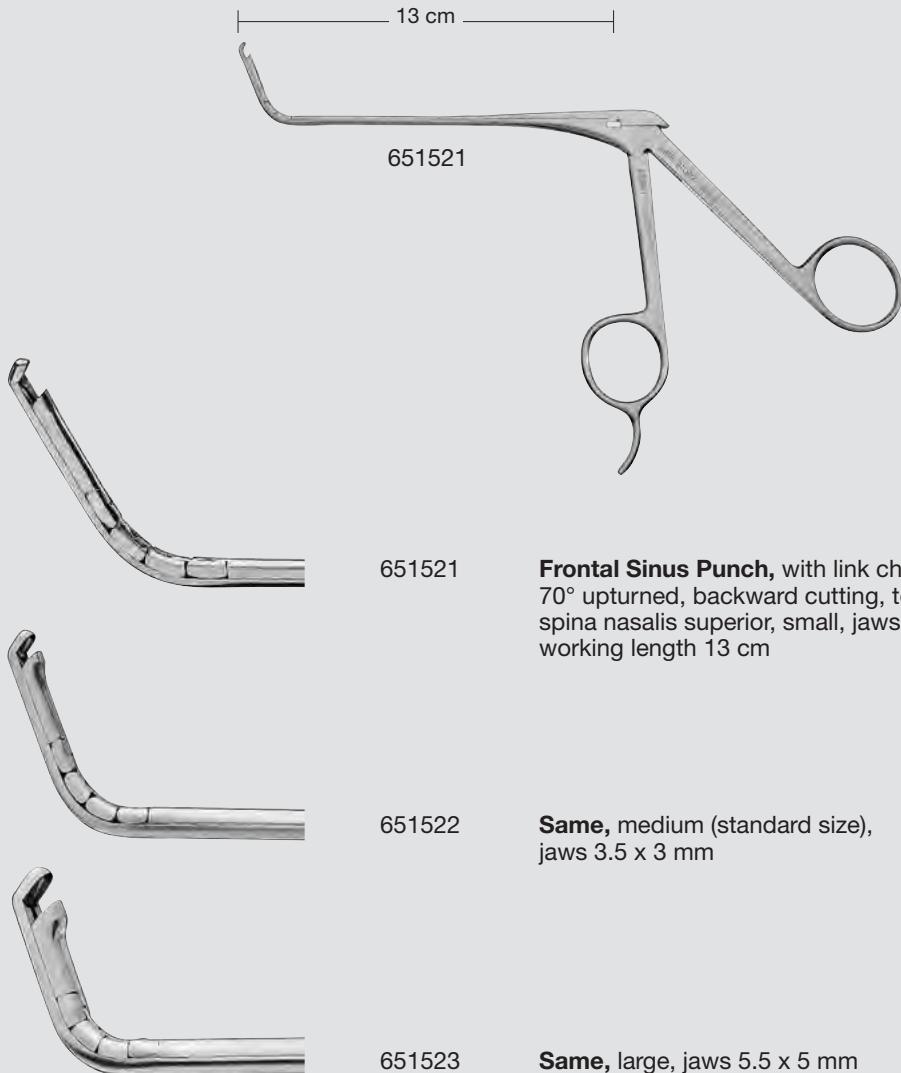
651505 HOSEMANN **Frontal Sinus/Recess Punch**, 70° upturned, robust model, punch head diameter 5.5 mm, not through-cutting, upper part of punch fixed, lower part of punch movable, sheath diameter 3.5 mm, central irrigation channel with concealed LUER-Lock irrigation adaptor, working length 13 cm

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



Frontal Sinus Punch with link chain sheath, backward cutting



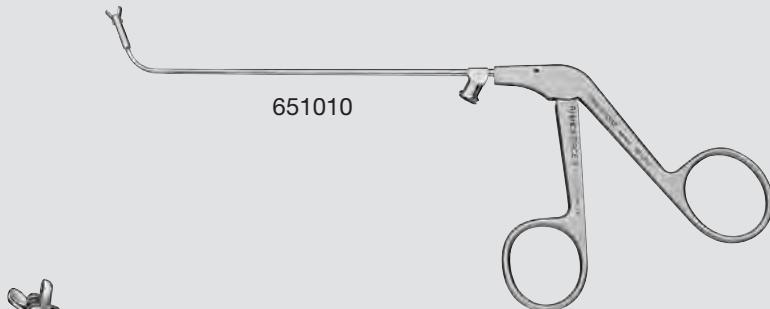
Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



STAMMBERGER RHINOFORCE® II Double Spoon Forceps, round and pear-shaped

12 cm



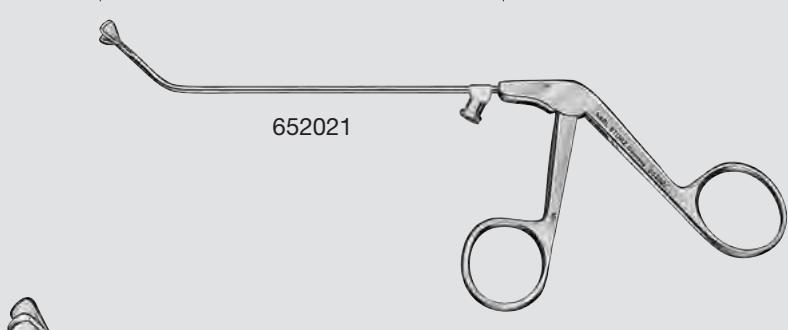
651010

STAMMBERGER RHINOFORCE® II Double Spoon Forceps, vertical opening, 65° upturned, spoon diameter 3 mm, with cleaning connector, working length 12 cm

651020

Same, horizontal opening

13 cm



652021

RHINOFORCE® II Double Spoon Forceps, horizontal opening, pear-shaped jaws, 45° upturned, with cleaning connector, working length 13 cm

652024

Same, 80° upturned

Skull Base and Endoscopic Pituitary Surgery

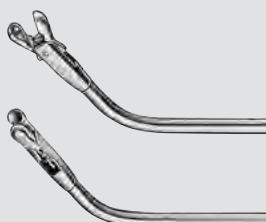
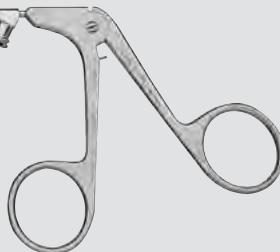
FESS Instruments



KUHN-BOLGER Double Spoon Giraffe Forceps, not through-cutting

13 cm

651210

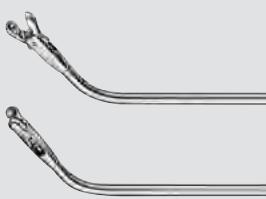


651210

KUHN-BOLGER Double Spoon Giraffe Forceps,
55° upturned, vertical opening, spoon diameter 3 mm,
with cleaning connector, working length 13 cm

651220

Same, horizontal opening



651211

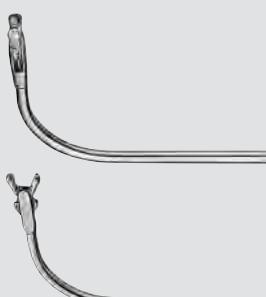
KUHN-BOLGER Double Spoon Giraffe Forceps,
55° upturned, vertical opening, spoon diameter 2 mm,
with cleaning connector, working length 13 cm

651221

Same, horizontal opening

13 cm

651241



651231

KUHN-BOLGER Double Spoon Giraffe Forceps,
90° upturned, horizontal opening, spoon diameter 2 mm,
with cleaning connector, working length 13 cm

651241

Same, vertical opening

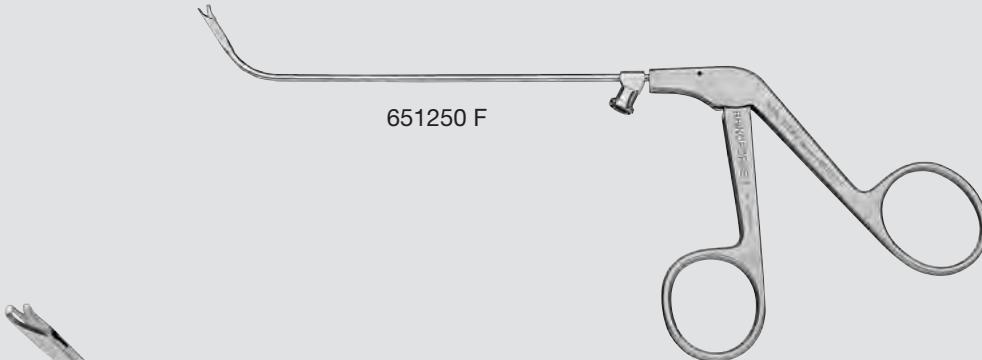
Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



KUHN RHINOFORCE®II Frontal Sinus Forceps, flat jaws, through-cutting, straight tip

12 cm

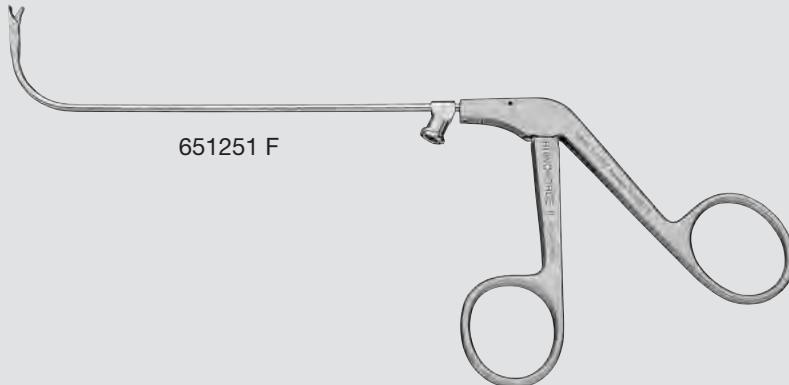


651250 F KUHN RHINOFORCE®II Frontal Sinus Forceps, through-cutting, with extra fine flat jaws, tissue-sparing, sheath 60° upturned, width of cut 1.5 mm, backward opening, with cleaning connector, working length 12 cm

651250 FL Same, left side opening

651250 FR Same, right side opening

12 cm



651251 F KUHN RHINOFORCE®II Frontal Sinus Forceps, through-cutting, with extra fine flat jaws, tissue-sparing, sheath 90° upturned, width of cut 1.5 mm, backward opening, with cleaning connector, working length 12 cm

651251 FL Same, left side opening

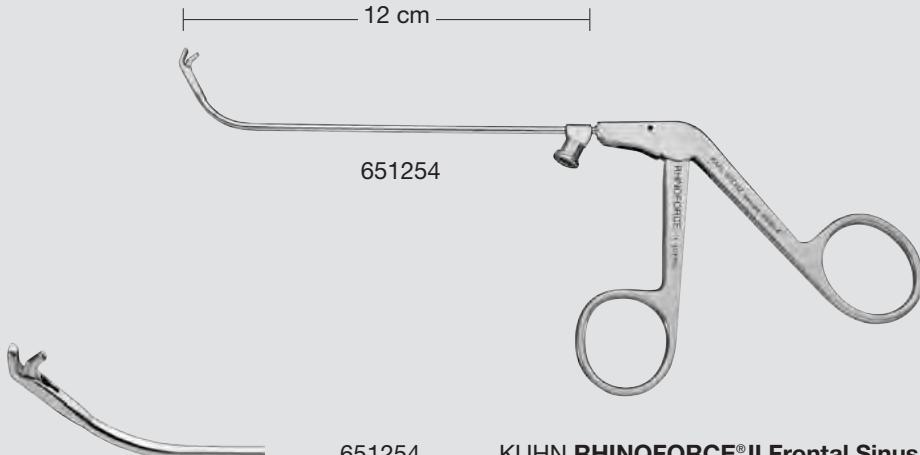
651251 FR Same, right side opening

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



RHINOFORCE®II KUHN Frontal Sinus Forceps, flat jaws, through-cutting



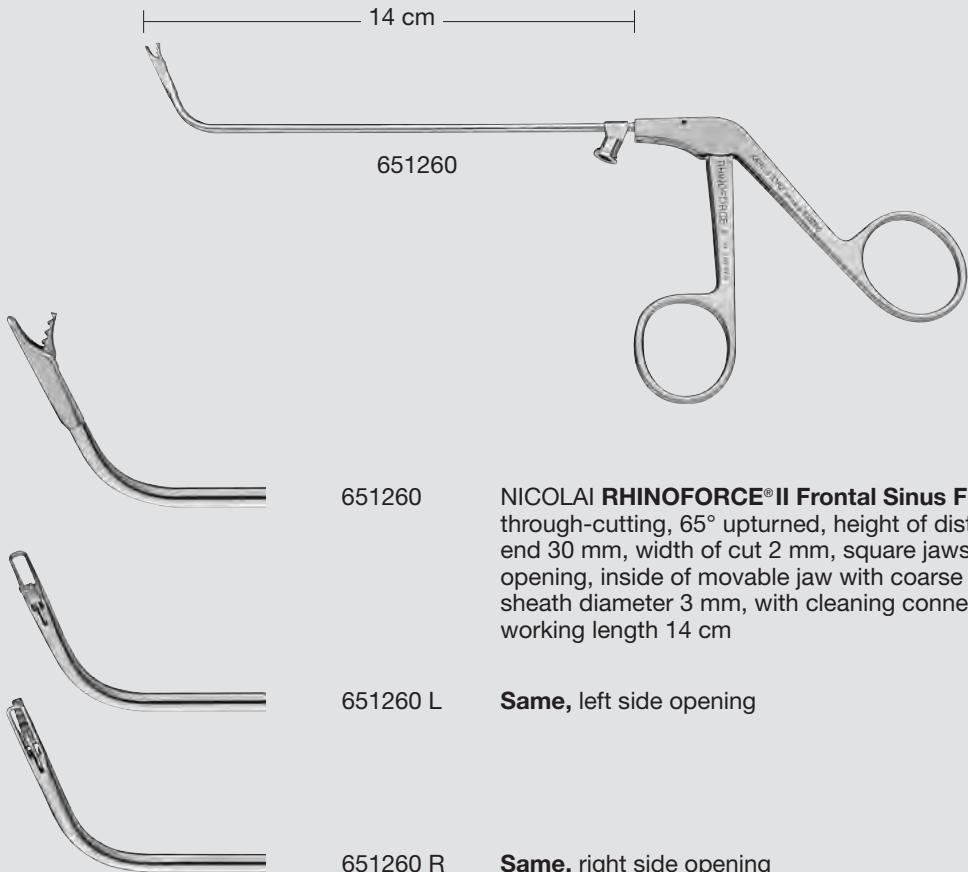
651254 **KUHN RHINOFORCE®II Frontal Sinus Forceps,**
through-cutting, jaws angled 45°, extra fine flat jaws,
tissue-sparing, sheath 60° upturned, width of cut 1.5 mm,
backward opening, with cleaning connector,
working length 12 cm

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



NICOLAI RHINOFORCE®II Frontal Sinus Forceps, through-cutting



651260 NICOLAI **RHINOFORCE®II Frontal Sinus Forceps**, through-cutting, 65° upturned, height of distal sheath end 30 mm, width of cut 2 mm, square jaws, backward opening, inside of movable jaw with coarse serration, sheath diameter 3 mm, with cleaning connector, working length 14 cm

651260 L **Same**, left side opening

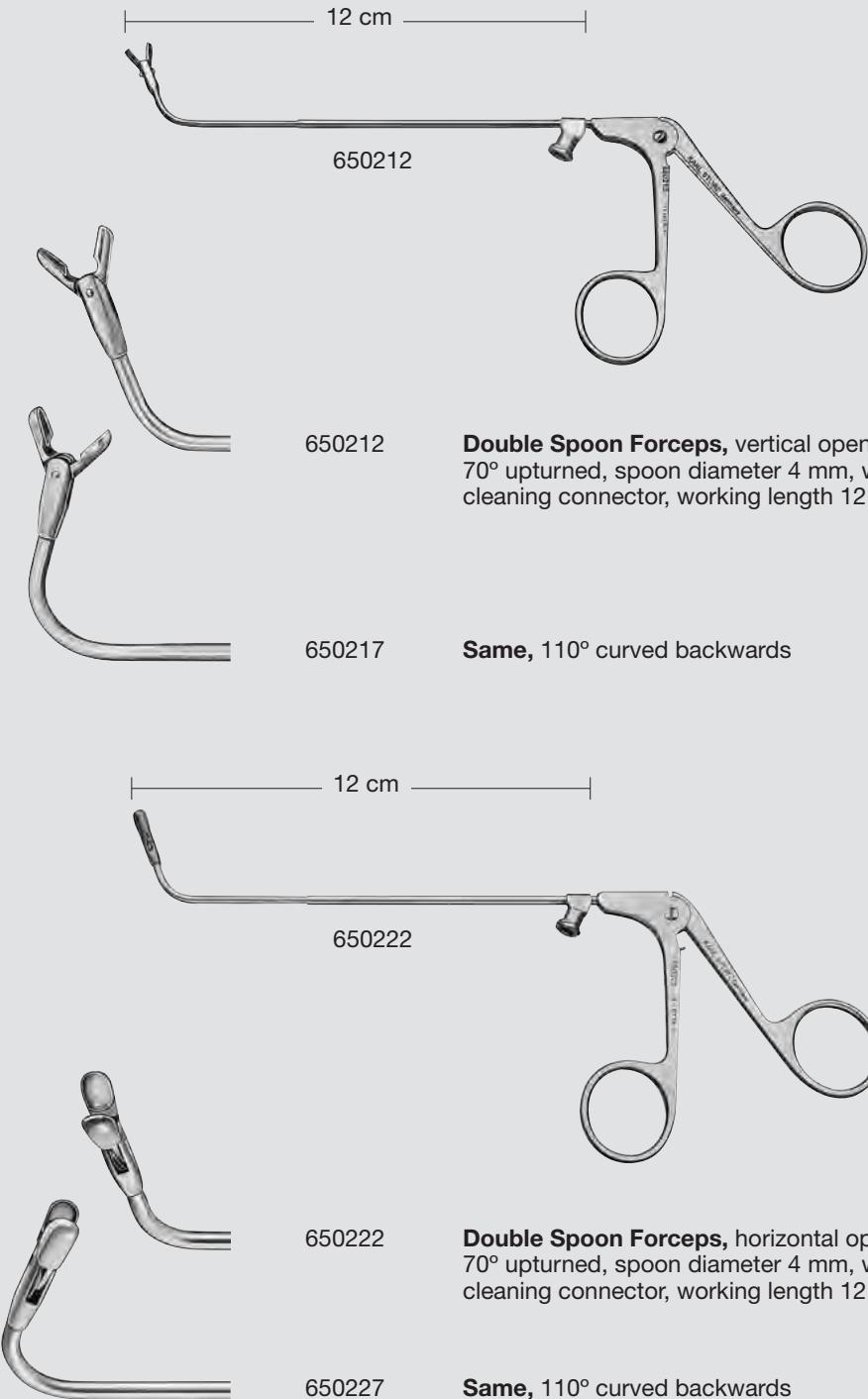
651260 R **Same**, right side opening

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



Double Spoon Forceps

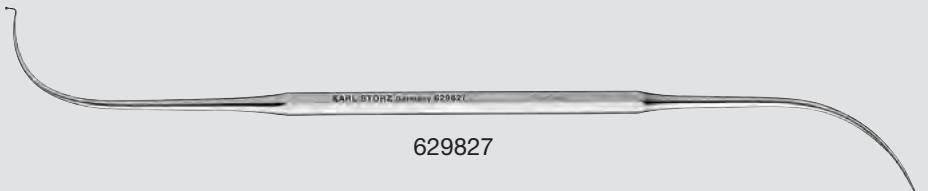


Skull Base and Endoscopic Pituitary Surgery

FESS Instruments



KUHN Frontal Sinus Seeker



629826

KUHN Frontal Sinus Seeker, double-ended,
No. 2, both sides curved 90°, one tip straight,
one tip reverse angle, length 22 cm

629827

KUHN Frontal Sinus Seeker, double-ended,
No. 3, one side curved 77°, other side curved
90°, both tips forward angle, length 22 cm

629828

KUHN Frontal Sinus Seeker, double-ended,
No. 4, both sides curved 90°, tips angled right
and left, length 22 cm

629829

KUHN Frontal Sinus Seeker, double-ended,
No. 5, both sides curved 77°, tips angled right
and left, length 22 cm

629830

KUHN Frontal Sinus Seeker, double-ended,
No. 6, both sides curved 77°, one tip straight,
other tip reverse angle, length 22 cm

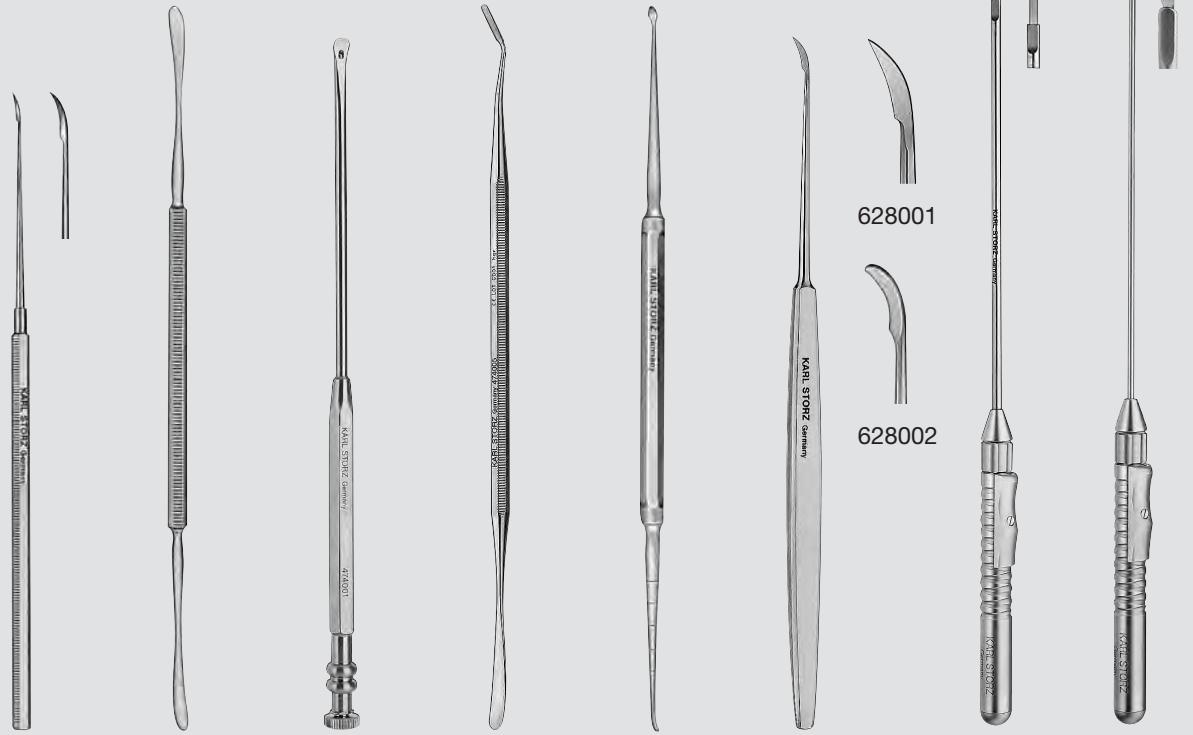
629835

Seeker, double-ended, straight, malleable,
one tip with ball end, other tip without ball
end and blunt, length 24 cm

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSKOPE



223300	474000	474001	474005	479100	628001	628002	28164 M	28164 KK
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223300 PLESTER **Sickle Knife**, double-edged, standard model, slightly curved, length 16 cm

474000 FREER **Elevator**, double-ended, semisharp and blunt, length 20 cm

474001 FREER **Suction Elevator**, with stylet, length 19 cm

474005 FREER-JACOBS **Elevator**, 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

479100 COTTE **Elevator**, double-ended, semisharp and blunt, graduated, length 20 cm

628001 **Sickle Knife**, pointed, length 19 cm

628002 **Sickle Knife**, round, double-cutting, length 19 cm

28164 M de DIVITIIS-CAPPABIANCA **Scalpel**, with retractable blade including:

Handle

Outer Sheath

Micro Knife, pointed

28164 KK **Same**

including:

Handle

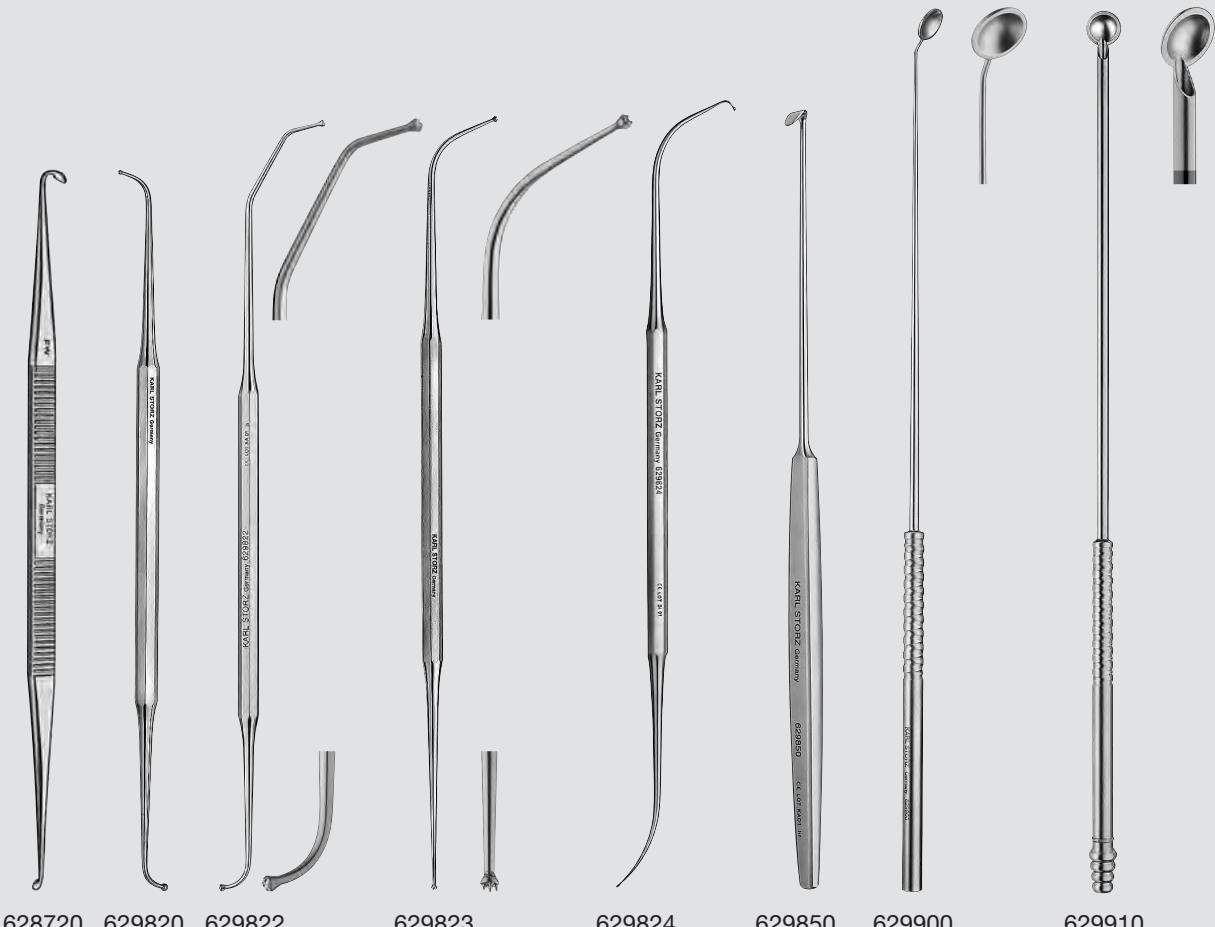
Outer Sheath

Micro Knife, sickle-shaped

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSKOPE



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

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSKOPE

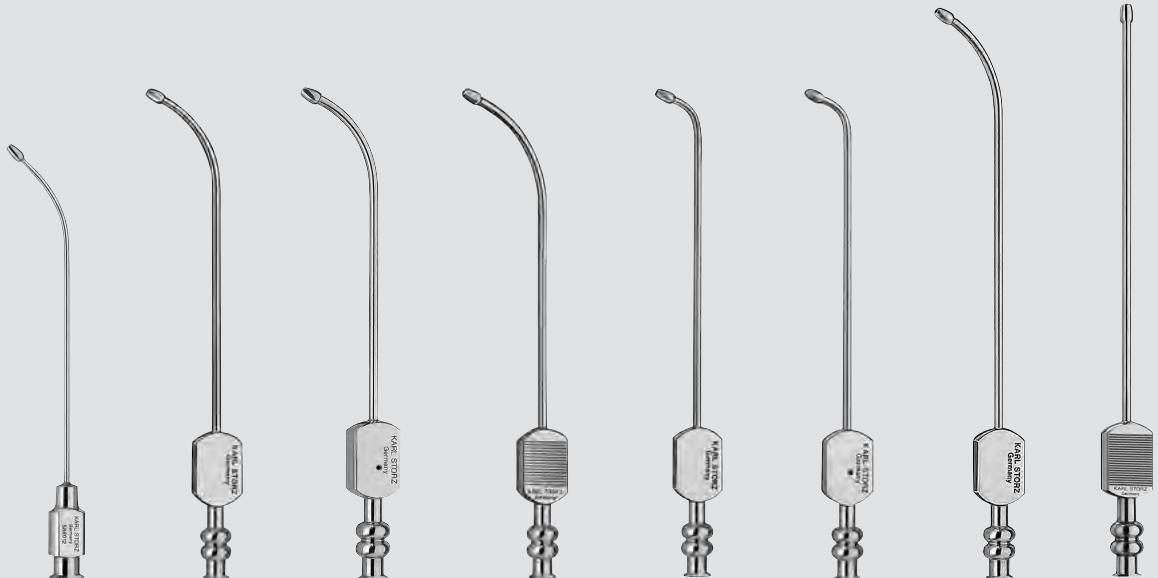


628601	Antrum Curette , oval, size 1, length 19 cm
628602	Same , size 2
628603	Same , size 3
628701	Antrum Curette , round, length 19 cm
628702	Same , oblong, small
628703	Same , oblong, large
628712	KUHN-BOLGER Frontal Sinus Curette , 55° curved, oval, forward cutting, length 19 cm
628714	Same , 90°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

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSCOPE



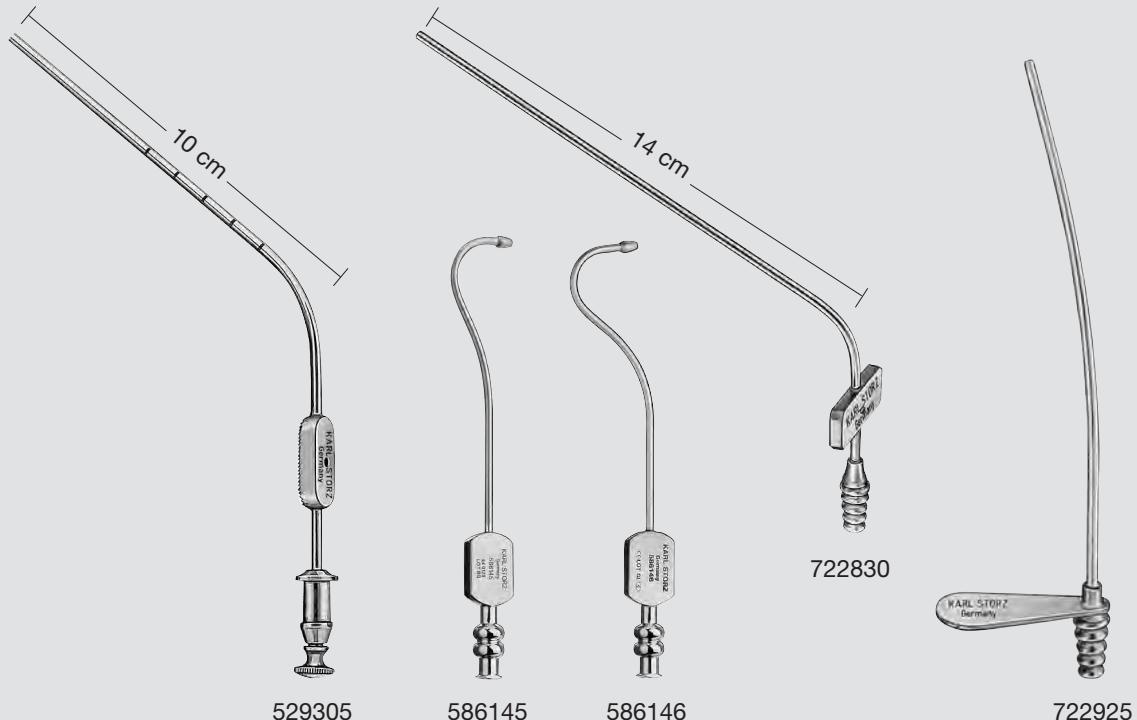
586012 - 586020	586025 - 586040	586026 586031	586125 586130	586225 - 586240	586226 - 586241	586325 - 586340	586525
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586012	Antrum Cannula , LUER-Lock, long curved, with olive, without grip plate, outer diameter 1.2 mm, length 9 cm	586225	v. EICKEN Antrum Cannula , LUER-Lock, short curved, outer diameter 2.5 mm, length 12.5 cm
586015	Same , with olive diameter 2.7 mm, outer diameter 1.5 mm	586230	Same , outer diameter 3 mm
586020	Same , outer diameter 2 mm	586240	Same , outer diameter 4 mm
586025	v. EICKEN Antrum Cannula , LUER-Lock, long curved, outer diameter 2.5 mm, length 12.5 cm	586226	v. EICKEN Antrum Cannula , LUER-Lock, with cut-off hole, short curved, outer diameter 2.5 mm, length 12.5 cm
586030	Same , outer diameter 3 mm	586231	Same , outer diameter 3 mm
586040	Same , outer diameter 4 mm	586241	Same , outer diameter 4 mm
586026	v. EICKEN Antrum Cannula , LUER-Lock, with cut-off hole, long curved, outer diameter 2.5 mm, length 12.5 cm	586325	v. EICKEN Antrum Cannula , LUER-Lock, long curved, outer diameter 2.5 mm, length 15 cm
586031	Same , outer diameter 3 mm	586330	Same , outer diameter 3 mm
		586340	Same , outer diameter 4 mm
586125	v. EICKEN Antrum Cannula , LUER-Lock, long curved, malleable, serrated grip plate, outer diameter 2.5 mm, length 12.5 cm	586525	Antrum Cannula , LUER-Lock, straight, malleable, with serrated grip plate, outer diameter 2.5 mm, working length 15 cm
586130	Same , outer diameter 3 mm		

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSCOPE

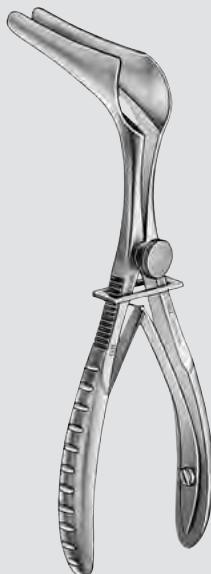


- | | |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 529305 | FRAZIER Suction Tube , with mandrel and cut-off hole, with distance marking at 5 – 9 cm, 5 Fr., working length 10 cm |
| 529307 | Same , 7 Fr. |
| 529309 | Same , 9 Fr. |
| 586145 | v. EICKEN-CASTELNUOVO Antrum Cannula , LUER-Lock, S-shaped slightly curved, malleable, serrated grip plate, outer diameter 2.5 mm, length 12.5 cm |
| 586146 | Same , strongly curved |
| 722830 | Suction Tube , angular, with grip plate and cut-off hole, LUER, outer diameter 3 mm, working length 14 cm |
| 722925 | Suction Tube , conical, malleable, with finger grip plate, LUER-Lock, outer diameter 2.5 mm, working length 13 cm |
| 810506 | Septum Needle , angular, LUER-Lock |
| 843219 | Bipolar Coagulation Forceps , insulated, angular, blunt, with integrated suction channel for epistaxis, with cut-off hole, length 19 cm |

Skull Base and Endoscopic Pituitary Surgery

FESS Instruments

STORZ
KARL STORZ — ENDOSKOPE



403240 –
403290



404455 –
404490

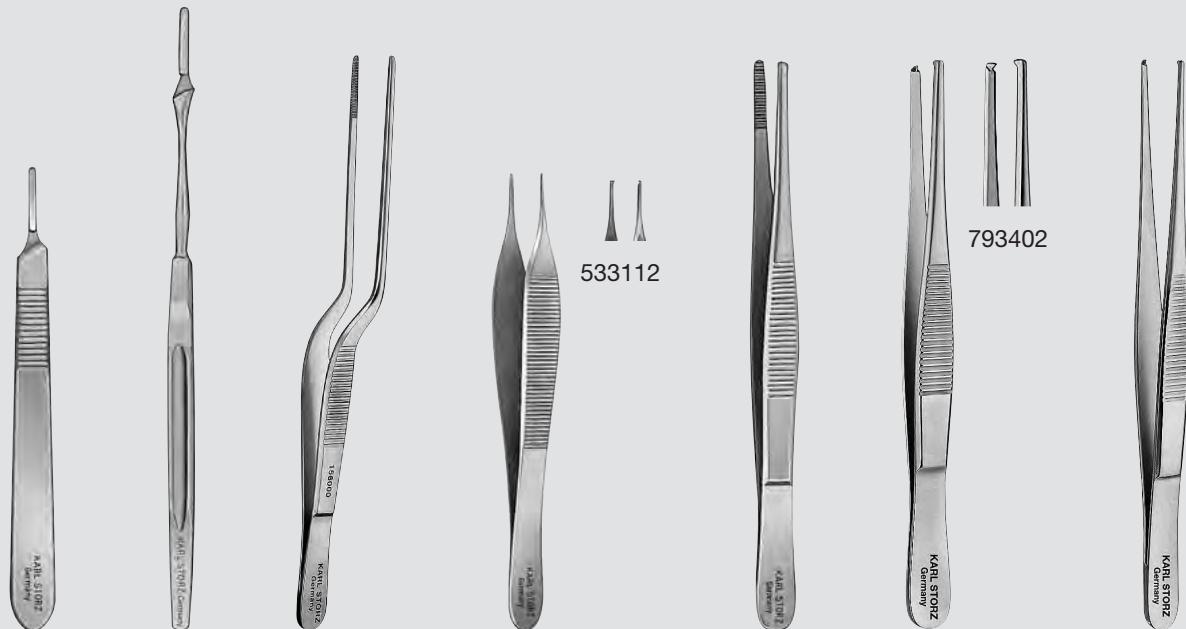


404555 –
404590

403240	KILLIAN-STRUYCKEN Nasal Speculum , with set rack, blade length 40 mm, length 15 cm	404555	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
403255	Same , blade length 55 mm		Same , right blade length 65 mm
403265	Same , blade length 65 mm		Same , right blade length 75 mm
403275	Same , blade length 75 mm	404565	Same , right blade length 90 mm
403290	Same , blade length 90 mm	404575	
		404590	
404455	RUDERT Nasal Speculum , 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		
404490	Same , left blade length 90 mm		

Surgical Handles, Dressing and Tissue Forceps

STORZ
KARL STORZ — ENDOSCOPE



208000

748000

156000

533012

792401

793401

793403

208000 **Surgical Handle**, Fig. 3, length 12.5 cm,
for Blades 208010 – 15, 208210 – 15

748000 **Surgical Handle**, Fig. 7, length 16.5 cm,
for Blades 208010 – 15, 208210 – 15

156000 **LUCAE Ear Forceps**, bayonet-shaped,
length 14.5 cm

533012 **ADSON Dressing Forceps**, serrated, length 12 cm

533112 **ADSON Tissue Forceps**, 1 x 2 teeth, length 12 cm

792401 **Dressing Forceps**, standard width, length 14.5 cm

793401 **Tissue Forceps**, 1 x 2 teeth, standard width,
length 14.5 cm

793402 **Same**, medium

793403 **Same**, narrow

Scissors



790802

791201

791500

791813

792003

790802 **Scissors**, straight, sharp/blunt,
length 14.5 cm

791201 **Scissors**, curved,
sharp/sharp, length 14.5 cm

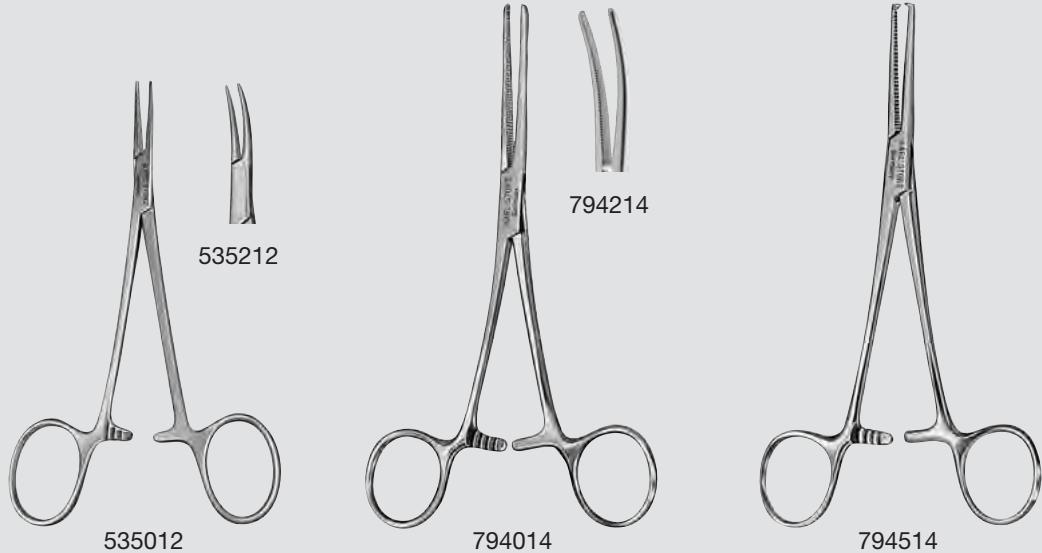
791500 **Stitch Scissors**, straight,
sharp/sharp, length 12.5 cm

791600 **Same**, curved

791813 REYNOLDS **Scissors**, curved,
delicate tips, length 13 cm

792003 MAYO **Scissors**, curved, length 15 cm

Artery Forceps



535012 HALSTEAD "Mosquito" Artery Forceps,
 straight, length 12.5 cm

535212 HALSTEAD "Mosquito" Artery Forceps,
 curved, length 12.5 cm

794014 ROCHESTER-PEAN Artery Forceps,
 straight, length 14 cm

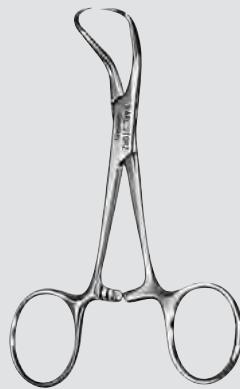
794214 ROCHESTER-PEAN Artery Forceps,
 curved, length 14 cm

794514 OCHSNER-KOCHER Artery Forceps,
 straight, 1 x 2 teeth, length 14 cm

Needle Holders, Towel Forceps, Forceps



516013



796008



795015

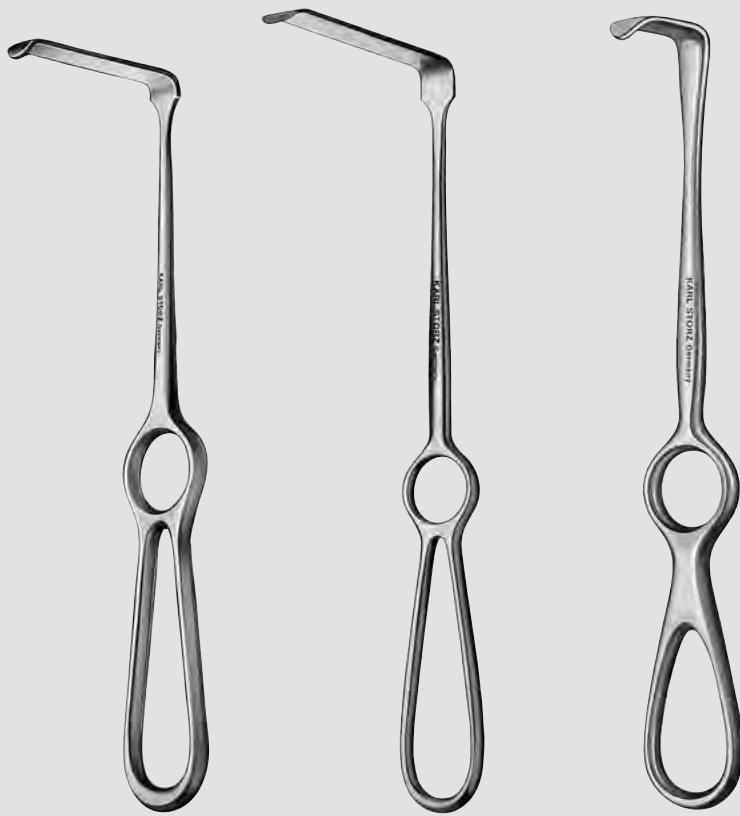
516013 **Needle Holder**, tungsten carbide inserts, length 13 cm

796008 **BACKHAUS Towel Forceps**, length 9 cm

796011 **Same**, length 11 cm

795015 **ALLIS Forceps**, 4 x 5 teeth, length 15 cm

Retractors



801701 –
801703

801708

801800

- | | |
|--------|-----------------------------------------------------------------|
| 801701 | KOCHER-LANGENBECK Retractor,
size 25 x 6 mm, length 21.5 cm |
| 801702 | Same , size 35 x 8 mm |
| 801703 | Same , size 35 x 11 mm |
| 801708 | KOCHER-LANGENBECK Retractor,
size 35 x 14 mm, length 21.5 cm |
| 801800 | LANGENBECK Retractor, size 33 x 14 mm,
length 21.5 cm |

Cup Medicine



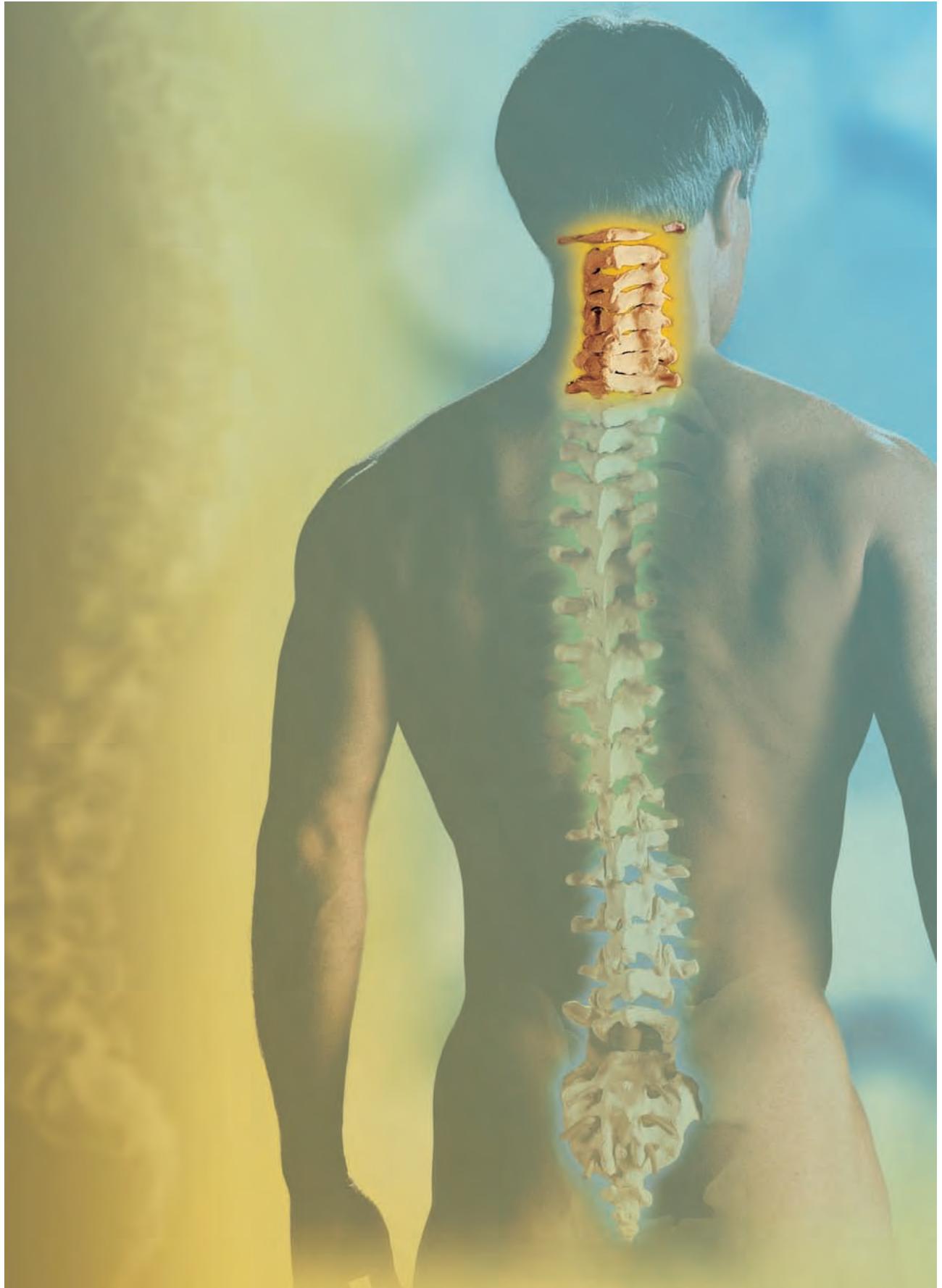
- | | |
|--------|---------------------------------------------------------------------------|
| 810802 | Cup Medicine , 25 cm ³ , diameter 60 mm, height 28 mm |
| 810805 | Cup Medicine , 50 cm ³ , diameter 57 mm, height 47 mm |
| 810806 | Cup Medicine , 60 cm ³ , diameter 70 mm, height 33 mm |
| 810810 | Cup Medicine , 100 cm ³ , diameter 80 mm, height 30 mm |
| 810820 | Cup Medicine , 200 cm ³ , diameter 100 mm, height 50 mm |
| 810830 | Cup Medicine , 300 cm ³ , diameter 95 mm, height 65 mm |
| 810840 | Cup Medicine , 400 cm ³ , diameter 130 mm, height 65 mm |



SPINE SURGERY

Spine Surgery Cervical

STORZ
KARL STORZ — ENDOSCOPE



Percutaneous Endoscopic Cervical Discectomy

Telescope and Surgical Access Instruments



HELLINGER Recommended Set



28163 PCD **PECD Endoscope 8°**, angled eyepiece, outer diameter 3.3 x 4.7 mm, working length 12 cm, **autoclavable**, with fiber optic light transmission incorporated and straight working channel diameter 2.5 mm, with Wire Tray 39501 XP, color code: green



28163 PK



28163 KD



28163 LH



28163 HG

28163 PK **Puncture Needle**, including stylet, diameter 1.7 mm, working length 9 cm, with 1.4 mm opening for guide wire

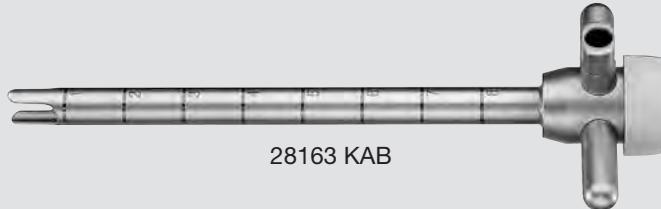
28163 KD **Guide Wire**, unsterile, diameter 1.2 mm, length 31 cm, package of 10

28163 LH **Dilation Sleeve**, graduated, diameter 3 mm, working length 18 cm, with 1.5 mm opening for guide wire

28163 HG **Dilation Rod**, graduated, diameter 5.3 mm, working length 16 cm, with 3.1 mm opening for Dilation Sleeve 28163 LH

Percutaneous Endoscopic Cervical Discectomy

Telescope and Surgical Access Instruments



28163 KAB **Expansion Sheath**, diameter 6.5 mm, with handle and LUER connection, distal two dilation extensions, straight



28163 KBB **Expansion Sheath**, diameter 6.5 mm, with handle and LUER connection, distal 45° inclination



28163 KCB **Expansion Sheath**, diameter 6.5 mm, with handle and LUER connection, distal two dilation extensions, oblique



28163 KDB **Expansion Sheath**, diameter 6.5 mm, with handle and LUER connection, distal with one dilation extension, oblique



27502

27502 **LUER-Lock Tube Connector**,
with stopcock, dismantling



28163 CM

28163 CM **COTTE Metal Mallet**, with plastic replacement head, length 22.5 cm

Percutaneous Endoscopic Cervical Discectomy

Palpation Hooks, Trepines, Bipolar Electrode and Suction Tube



HELLINGER Recommended Set



28163 UHH



28163 UHH **Palpation Hook**, distally angled 45°, diameter 2 mm, working length 25 cm



28163 UHO **Palpation Hook**, distally angled 90°, with ball, diameter 2 mm, working length 25 cm

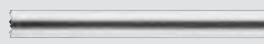


28163 UOH

28163 UOH **Palpation Hook**, distal end 90°, with ball end, hook length 4 mm, diameter 2 mm, working length 26 cm



28163 TKK



28163 TKK **Trephine**, diameter 3.5 mm, working length 18 cm
28163 TKS **Same**, diameter 2.5 mm



28762 KBH



28762 KBH **Bipolar Coagulation Electrode**, rigid, diameter 1.7 mm, working length 25 cm



28163 SRH



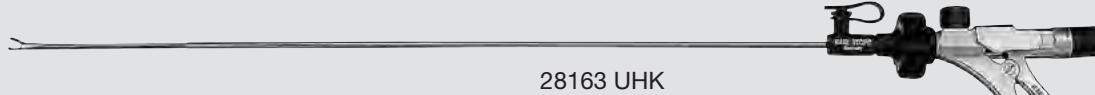
28163 SRH **Suction Tube**, FREIBURG model, angular, distal end with olive, with cut-off-hole and grip plate, LUER, diameter 2.5 mm, working length 25 cm

Percutaneous Endoscopic Cervical Discectomy

Spoon Forceps, Grasping Forceps and Biopsy Forceps



HELLINGER Recommended Set



28163 UHK



28163 UHK

CLICKline® Spoon Forceps, rotating, with LUER-Lock irrigation connector for cleaning, single action jaws, size 2.5 mm, length 25 cm including:

Metal Handle, without ratchet, without overload protection, for use with overload protection, **autoclavable**

Forceps Insert

Overload Protection



28163 UHM

CLICKline® Spoon Forceps, oval, rotating, with LUER-Lock connector for cleaning, single action jaws, size 2 mm, length 25 cm including:

Metal Handle, without ratchet, without overload protection, for use with overload protection, **autoclavable**

Forceps Insert

Overload Protection



28163 FSH



28163 FSH

Grasping Forceps, double action jaws, diameter 1.7 mm, working length 25 cm



28163 ZSH

Biopsy Forceps, double action jaws, diameter 1.7 mm, working length 25 cm



Endoscopic Cervical Discectomy, Anterior/Posterior Foraminotomy and Foraminal Corporectomy



Use of ENDOSPINE® at cervical level

The degenerative cervical pathology entails radicular, medullar or radiculomedullar compression.

Soft cervical hernia occurs in young patients in their forties, whereas osteophytic compressions – whether radicular or medullar – occur in old and, therefore, more fragile patients.

Life span extension gives ground to the theory that this pathology is going to continue to develop and that a minimal-invasive technique, such as Endospine, will make it possible to treat a greater number of patients, enabling a more simple post-operative course and a quicker return to normal life.

ENDOSPINE® can be used for three types of operations: posterior endoscopic foraminotomy and anterior endoscopic foraminotomy as well as anterior endoscopic foraminotomy with partial vertebrectomy according to JHO's technique.

1. Posterior endoscopic foraminotomy

Its main indication is the soft cervical hernia which occurs at C7-T1 or T1-T2 levels, levels that are difficult to approach anteriorly.

Using a posterior approach, the ENDOSPINE® operating tube is inserted along the spine and positioned on the facets under fluoroscopic control. We then achieve a posterior lamino-foraminotomy either with a small KERRISON forceps or with the help of a drill. The relief is immediate, the post-operative course extremely simple, and no special precautions are necessary during the post-operative period.

2. Anterior endoscopic foraminotomy following JHO's technique

This is indicated for soft and/or hard foraminal hernia. The technique consists of a classical antero-lateral approach, sliding between the vascular bundle on the outside and the visceral bundle on the inside to expose the desired level. We leave the longus colli aponeurosis intact in order to avoid a sympathetic lesion, but we remove the medial side of the muscle a little above the disc level.

We perform a complete anterior foraminotomy with the use of a drill, which exposes the nerve root from the spinal canal to the point at which it passes behind the vertebral artery. Once again, the relief is immediate and the post-operative course extremely simple without any particular post-operative precautions.

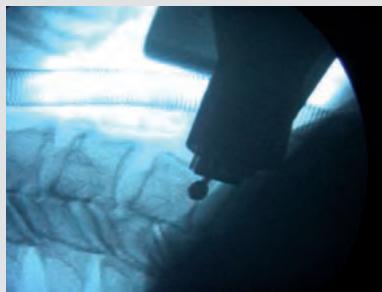
3. Endoscopic foraminotomy and partial vertebrectomy following JHO's technique

In the case of cervicarthroscopic myelopathy in elderly patients with a pinched or nonexistent disc, anterior endoscopic foraminotomy can easily be extended towards the midline to remove the compressive osteophytic bar. The decompression can be extended to the opposite side where the foramen begins and can be done at several levels if needed.

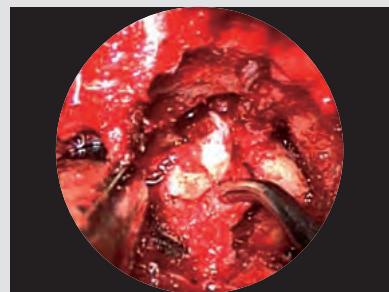
The advantages of these techniques lie in their minimal invasiveness and in the fact that they do not require immobilisation or fixation with plates, screws, spacers or disc prothesis.

This reduces costs which benefits our countries known as developed, where health costs are exponentially rising, as well as other cost-sensitive countries.

J. DESTANDAU, M. D.
Bordeaux, France



Drilling and anterior foraminotomy starts in this area at the disk level including a small part of the superior vertebra



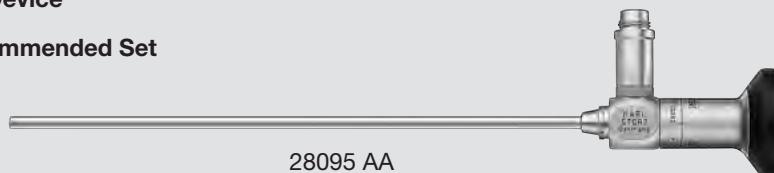
cervical hernia

Endoscopic Cervical Discectomy, Anterior/Posterior Foraminotomy and Foraminal Corporectomy



HOPKINS® II Telescope, ENDOSPINE® Operating Tube, Working Insert, Retractor Blade and Localization Device

DESTANDAU Recommended Set



28095 AA

28095 AA

HOPKINS® II Straight Forward Telescope 0°,

enlarged view, diameter 4 mm, length 18 cm,
autoclavable, fiber optic light transmission incorporated,
color code: green



28163 DW

28163 DO

28163 DW

DESTANDAU ENDOSPINE® Operating Tube,
oval, with Obturator 28163 DO, for use with
Working Insert 28163 DXH



28163 DXH

28163 DPH

28163 DXH

DESTANDAU ENDOSPINE® Working Insert, with positioning
detent, with adjustable Nerve Protector 28163 DPH, for use
with ENDOSPINE® Operating Tube 28163 DW, with working
channel diameter 8 mm, with irrigation channel for use with
HOPKINS® II Telescope 28095 AA



NEW 28163 DRG

28163 DRG

ENDOSPINE® Retractor Blade, conical, length 5 cm,
for use with ENDOSPINE® Operating Tube 28163 DW
and 28163 DWS



NEW 28163 DLD

28163 DLD

Cervical Localization Device, for fluoroscopic
determination of the point of incision of the
ENDOSPINE® operating tube

Endoscopic Cervical Discectomy, Anterior/Posterior Foraminotomy and Foraminal Corporectomy



Bipolar Coagulation Forceps, Elevators, Palpation Hook, Ball Probe and Suction Tube

DESTANDAU Recommended Set



28163 DZ

28163 DZ **TAKE-APART® MANHES Bipolar Coagulation Forceps**, with connecting pin for bipolar coagulation, width of jaws 1 mm, diameter 5 mm, working length 20 cm including:
Handle
Outer Sheath, diameter 5 mm
MANHES Forceps Insert



28163 DNN

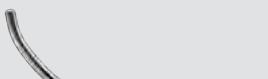
28163 DNN **Elevator**, spatula slightly curved, distal width 5 mm, working length 13 cm



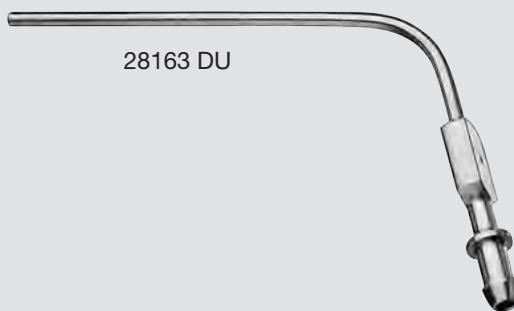
28163 DHN **Palpation Hook**, blunt, hook angled 90°, hook length 5.5 mm, working length 13 cm



28163 DHB **Ball Probe**, diameter 4 mm, straight, working length 13 cm



28163 DHD **Palpation Hook**, blunt, distal double curved, working length 13 cm



28163 DU **Ferguson Suction Tube**, angled, with cut-off hole, diameter 3.7 mm, working length 11 cm

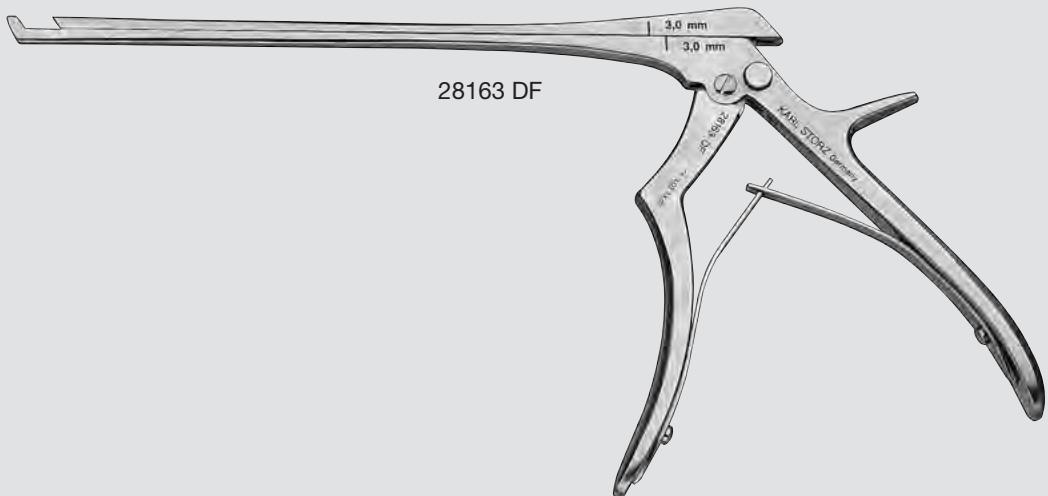
Components/Spare Parts see chapter 13

Endoscopic Cervical Discectomy, Anterior/Posterior Foraminotomy and Foraminal Corporectomy

STORZ
KARL STORZ — ENDOSKOPE

Bone Punches, Forceps and Scissors

DESTANDAU Recommended Set



28163 DL

Bone Punch, dismantling, 90° upbiting,
not through-cutting, 3 mm, working length 18 cm



28163 DF

Bone Punch, dismantling, upbiting 45° forward,
not through-cutting, 3 mm, working length 18 cm



28163 DC

Spoon Forceps, dismantling,
robust, oval, single action
jaws, spoon size 3 x 10 mm,
working length 15 cm



NEW 28163 DSS

Scissors, straight, extra delicate,
working length 15 cm

Endoscopic Cervical Discectomy, Anterior/Posterior Foraminotomy and Foraminal Corporectomy



Forceps, Needle Holder, Scissors, Surgical Handle and Retractor

DESTANDAU Recommended Set



755120



535212



515515



512618



792003



208100



801910

755120 **HALLE-BIRKETT Forceps**,
slender, straight, length 20 cm

535212 **HALSTEAD "Mosquito" Artery
Forceps**, curved, length 12.5 cm

515515 **CRILE-WOOD Needle Holder**,
length 15 cm

512618 **METZENBAUM Scissors**,
with tungsten carbide inserts,
curved, length 18 cm

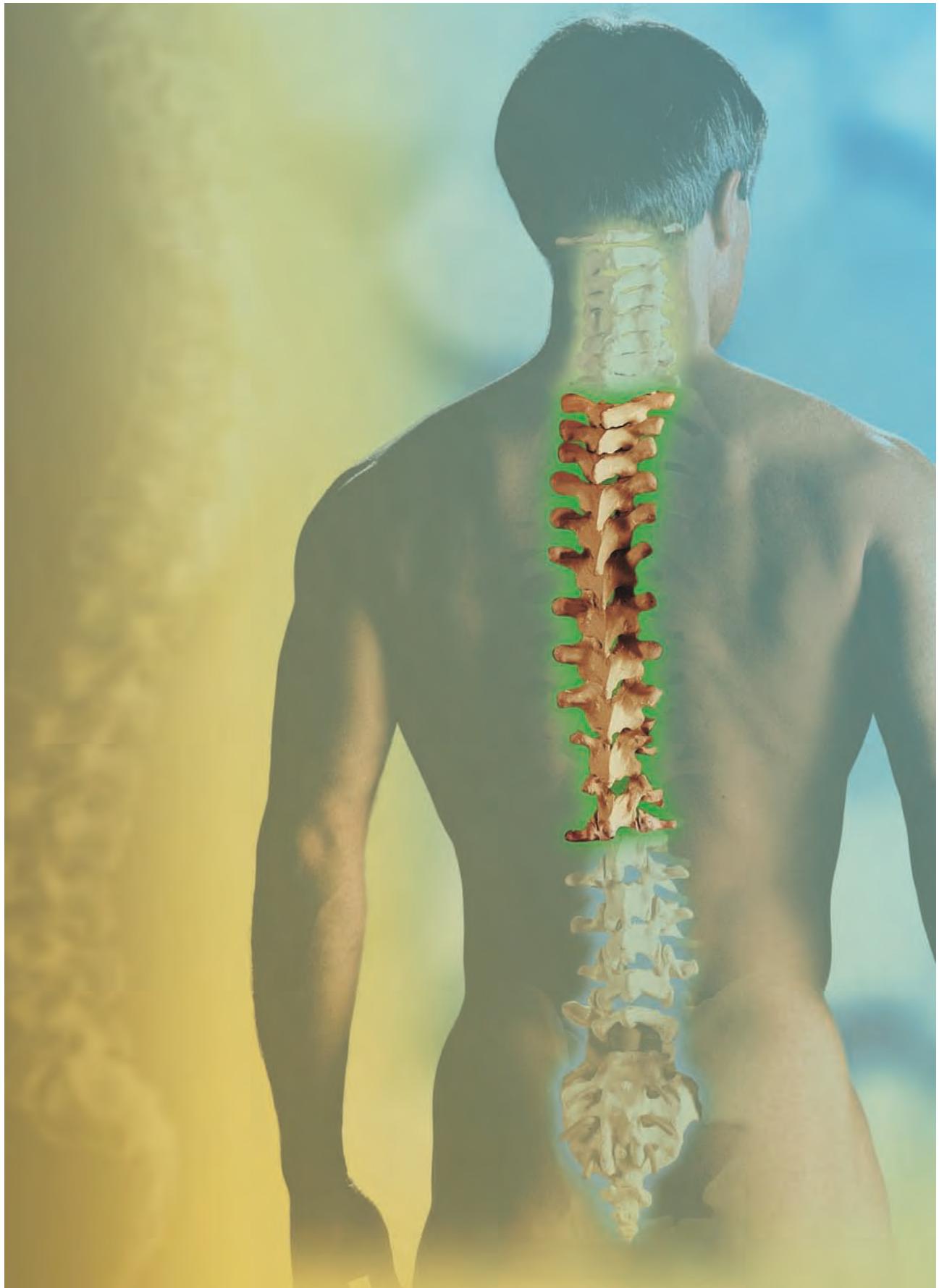
792003 **MAYO Scissors**, curved,
length 15 cm

208100 **Surgical Handle**, Fig. 4,
length 13.5 cm, for Blades 208019,
208120 – 21, 208320 – 21

801910 **MICCOLI Retractor**, double-ended,
size 35 x 10 mm and 21 x 10 mm,
length 16 cm

Spine Surgery Thoracic

STORZ
KARL STORZ — ENDOSKOPE



Laparoscopic and Thoracoscopic Spine Surgery



Laparoscopic and thoracoscopic approaches to the intervertebral disc and the vertebral bodies are becoming increasingly prevalent and preferred due to their atraumatic nature.

Specially designed curettes, rongeurs, rasps, osteotomes and punches were developed to meet the needs of surgeons applying these surgical techniques in laparoscopy and thoracoscopy.

Indications and thoracoscopic surgical possibilities:

Scoliosis	Ventral release Intercorporeal spondylodesis, hemivertebrectomy Convex epiphyseodesis
Kyphosis	Ventral release Intercorporeal spondylodesis
Spondylodiscitis	Biopsy, interlesional cleaning Filling the defect
Herniated disc	Discectomy
Fractures	

Indications and laparoscopic surgical possibilities:

Intervertebral disc generation	Ventral laparoscopic fusion
---------------------------------------	-----------------------------

The Advantages of the Method:

- Less invasiveness due to the avoidance of large abdominal incisions
- 4 to 5 trocar approaches
- Reduced postoperative pain
- High primary stability
- Reduced hospital stay

Advantages of the instrument set:

- **KARL STORZ complete system**
 - Instrument set for the approach
 - Optical components
 - Specially configurated instrument set for intervention on the spine
 - Units and accessories
- Reusable and autoclavable instruments
- All system components are optimally harmonized to each other, ensuring functional and safe handling during the intervention

Laparoscopic and Thoracoscopic Spine Surgery

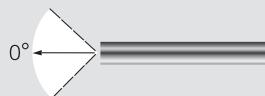
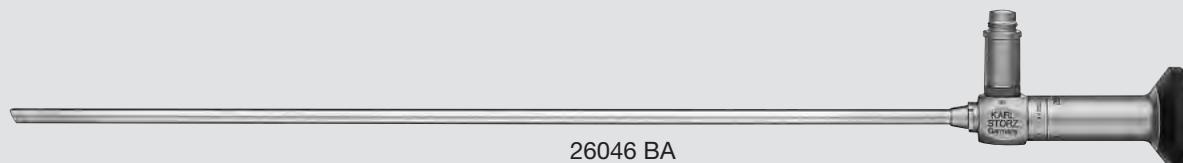
HOPKINS® II Telescopes



Diameter 5 mm, length 29 cm,
for use with trocar size 6 mm

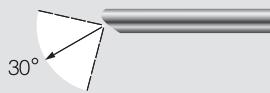
Benefits of the new HOPKINS® II laparoscopic telescopes:

- 2.5-fold increased brightness
- Evenly distributed brightness: No decrease of brightness from center to margins
- Superior precision



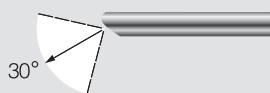
26046 AA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



26046 BA

HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



26046 BUA

HOPKINS® II Forward-Oblique Telescope 30°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, **connection for fiber optic light cable offset by 90°**, color code: red



26046 FA

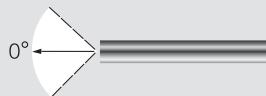
HOPKINS® II Telescope 45°, enlarged view, diameter 5 mm, length 29 cm, **autoclavable**, fiber optic light transmission incorporated, color code: black

Laparoscopic and Thoracoscopic Spine Surgery

HOPKINS® II Telescopes

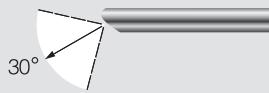


Diameter 10 mm, length 31 cm,
for use with trocar size 11 mm



26003 AA

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



26003 BA

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

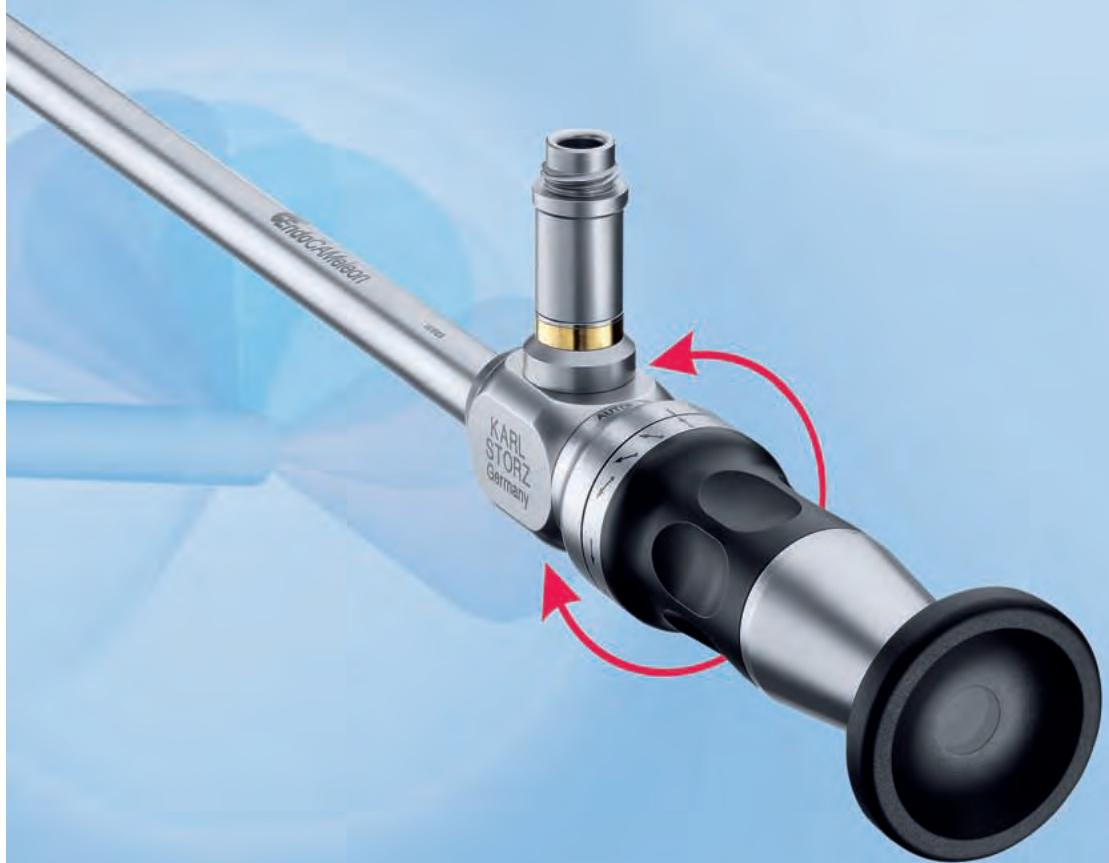


26003 FA

HOPKINS® II Teoscope 45°, enlarged view,
diameter 10 mm, length 31 cm, **autoclavable**,
fiber optic light transmission incorporated,
color code: black

ENDOCAMELEON® *NEW*

STORZ
KARL STORZ — ENDOSKOPE





Telescope with variable direction of view

Until now, surgeons had to choose in advance which telescope or direction of view to use in a procedure. Moreover, surgeons were restricted to the selected direction of view throughout the surgery or had to make an intraoperative telescope change.

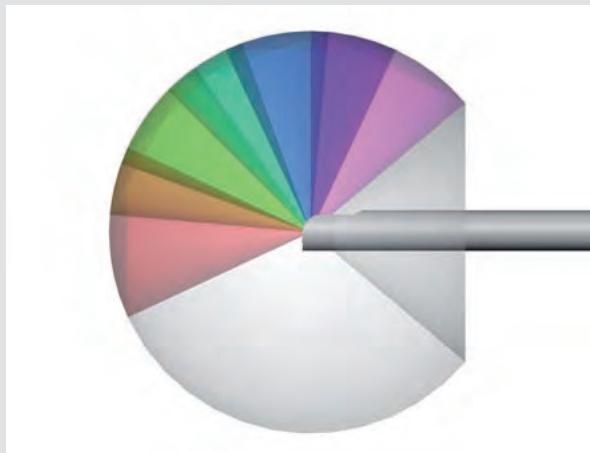
To prevent this predicament in the future, we developed the ENDOCAMELEON®: a telescope that allows you to adjust the desired direction of view – also during surgery – between 0° and 120°.

The ENDOCAMELEON® combines the user comfort of the proven 0° HOPKINS® telescope with the advantages and potential of a telescope featuring a variable direction of view – offering you the quality you expect from KARL STORZ telescopes.

The innovative ENDOCAMELEON® technology is not difficult to use and, due to the external moving parts, does not take up extra intracorporeal space. Handling remains straightforward and ergonomic. Image alignment is the same as rigid telescopes: the direction of view is selected by simply turning the adjustment knob, making the system very intuitive to use. As the ENDOCAMELEON® is equipped with a standard eyepiece, the variable direction of view benefits all standard camera systems. Thanks to the HOPKINS® rod lens system, ENDOCAMELEON® also offers image quality that enables a useful application of three-chip cameras or HD camera systems.

To have the direction of view best suited for each situation available at all times offers the surgeon a higher degree of safety. With the ENDOCAMELEON®, visual inspection of the entire surgical field is easily achieved. Instrument movement can be controlled throughout the entire procedure and hemorrhages in

previously inaccessible areas can be detected and controlled. With a simple turn of the adjusting knob, the ENDOCAMELEON® enables the user to easily select the direction of view between 0° and 120° to suit all OR requirements.



ENDOCAMELEON® with variable direction of view,
lateral view



ENDOCAMELEON® with variable direction of view,
isometric view

ENDOCAMELEON®

NEW

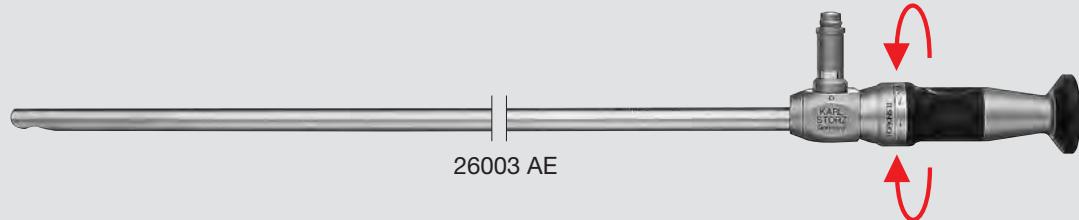
Diameter 10 mm, length 32 cm

Trocars size 11 mm

Recommended Fiber Optic Light Cables: 495 NB, 495 NCS or 495 NE

Special Features:

- Variable direction of view 0° – 120°
- HOPKINS® telescope with unique rod lens system
- Easy-to-use adjusting knob for selecting the direction of view
- Rigid sheath with a diameter of 10 mm



26003 AE

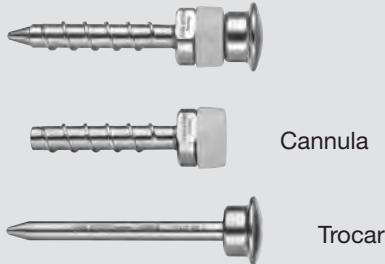
ENDOCAMELEON® HOPKINS® Telescope,
 diameter 10 mm, length 32 cm, autoclavable,
 variable direction of view from 0° – 120°,
 adjustment knob for selecting the desired direction
 of view, fiber optic light transmission incorporated,
 color code: gold

Laparoscopic and Thoracoscopic Spine Surgery

Trocars

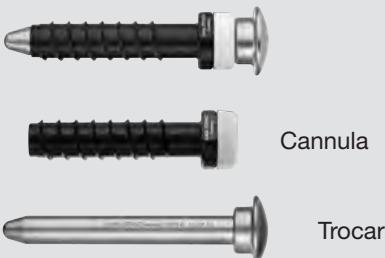


Trocars, size 6 mm, for use with instruments size 5 mm
 Trocars, size 11 mm, for use with instruments size 10 mm



Size:		6 mm	
Working length:		4 cm	6 cm
	Trocar , with blunt tip including: Cannula , with thread Trocar	40160 AB 40160 A 40160 B	40160 CD 40160 C 40160 D

Size:		11 mm	
Working length:		4 cm	6 cm
	Trocar , with blunt tip including: Cannula , with thread Trocar	40103 AB 40103 A 40103 B	40103 CD 40103 C 40103 D



Size:		11 mm	
Working length:		6 cm	8.5 cm
	Plastic Trocar , with blunt tip including: Plastic Cannula , with thread Trocar	40103 GD 40103 G 40103 D	40103 HX 40103 H 40103 X

Note: Instruments with curved jaws or distally angled sheaths must be used with trocars with flexible cannulas!

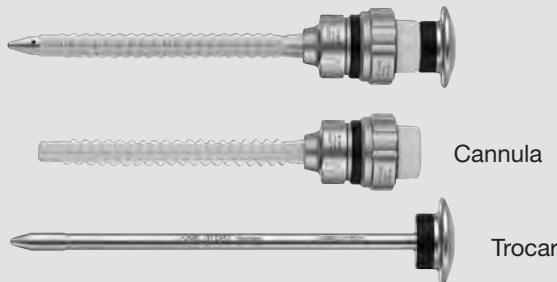
For **KARL STORZ trocars** only the individual components are numbered.
 The catalog number for the **entire assembled trocar**, as shown above in **bold** print, does not appear on the instrument.

Laparoscopic and Thoracoscopic Spine Surgery

Trocars, flexible



Trocars, size 6 mm, for use with instruments size 5 mm
 Trocars, size 11 mm, for use with instruments size 10 mm

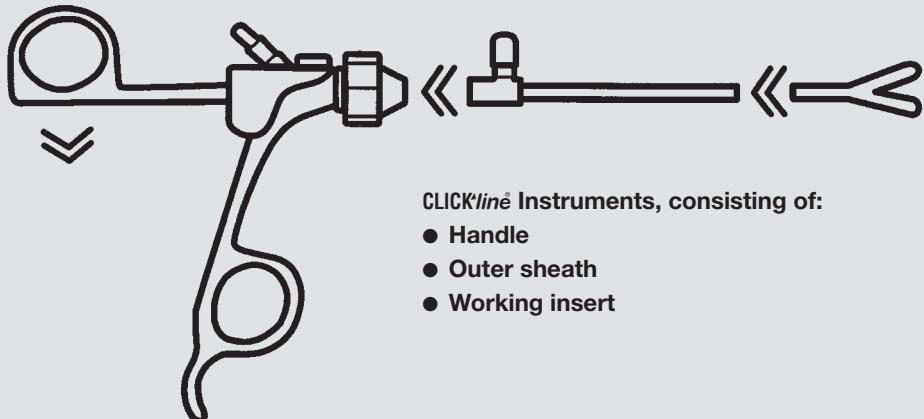


Size:		6 mm	11 mm
Working length:		8.5 cm	8.5 cm
Color code:		black	green
	Trocar, with blunt tip including: Cannula, flexible, with silicone leaflet valve Trocar	30120 NOL 30120 NL 30120 NO	30123 NOL 30123 NL 30123 O
Accessories	Plastic Cannula, autoclavable, for flexible trocars, package of 5	30120 X	30123 X

Note: Instruments with curved jaws or distally angled sheaths must be used with trocars with flexible cannulas!

For **KARL STORZ trocars** only the individual components are numbered.

The catalog number for the **entire assembled trocar**, as shown above in **bold** print, does not appear on the instrument.

**CLICKline® Instruments, consisting of:**

- Handle
- Outer sheath
- Working insert

Nothing could be simpler!

The CLICKline® series continues the development of instruments which have proven their value for years. The simplicity of handling and ease with which the instruments can be cleaned has been improved, in particular with respect to assembly and disassembly. When the rear handle is positioned horizontally, the

handle can be separated from the outer sheath and the working insert at the press of a button. Reassembly is equally reliable and quick. The high frequency connection is mounted in a 45° angle on the upper side of the handle, thereby ergonomically guiding the high frequency cable away from the field of operation.

Available in size 2 to 10 mm, CLICKline instruments can be completely disassembled into separate components:

- Handle
- Outer sheath/outer sheath with working insert
- Working insert

This unique, reusable two/three-piece design offers the surgeon the following benefits:

- Available in sizes 2, 3, 3.5, 5 and 10 mm and lengths 20, 30, 36 and 43 cm
- Choice of handle styles
- Fully rotational 360° sheath facilitates easy access in all clinical situations
- No hidden spaces that can trap blood or tissue debris
- Can be dismantled at the press of a button – reducing instrument cleaning time considerably
- Completely autoclavable design

- Cost-effective – reusable instruments reduce O.R. costs per case and simplify inventory management, eliminating the need to store large quantities of disposable instruments
- Environmentally correct, i.e., if damage occurs, only the component with the defect needs to be replaced – not the entire instrument
- Convenient and ergonomic handling
- Cleaning port allows the instrument to be cleaned without disassembly

Due to the modular CLICKline system, the user can individually assemble the desired instrument at any time.

User Information

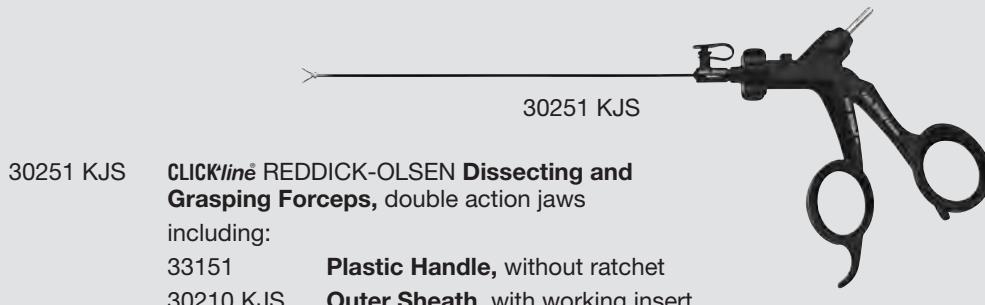
For easy location of the correct catalog number
for the required CLICK'line instrument



How to find the required instrument:

- Select the required **instrument size** and the required **type of jaws**
- Select the required **handle style**
 - Metal handles:** without connector pin for unipolar coagulation, against a **blue background** in the table
 - Handles, insulated:** with connector pin for unipolar coagulation, against a **red background** in the table
- The catalog number for the fully assembled instrument can be found at the point where the horizontal line of the respective working length (see below) intersects with the vertical column of the required handle.

Example:



Dissecting and Grasping Forceps

CLICK'line – rotating, dismantling,
with and without connector pin for unipolar coagulation



Length	Handle				
	33151	(b)	33152	33153	33161
20 cm					
Double action jaws					
Outer Sheath with Working Insert					
30210 KJS	30251 KJS	(c)	30252 KJS	30253 KJS	-
	CLICK'line REDDICK-OLSEN Dissecting and Grasping Forceps				
—	Length of jaws in mm (approx. measurements)				

6-12

Please note:

For CLICK'line instruments only the **individual component parts** are numbered. The catalog number for the **complete instrument** does **not** appear on the instrument. Instruments with **insulated handles with connector pin** for unipolar coagulation are shown against the **red background**. Instruments with **handles without connector pin** for unipolar coagulation are shown against the **blue background**. The color **green** indicates the lengths.

Plastic Handles NEW

for Dissecting and Grasping Forceps, insulated,
CLICK'line® – rotating, with connector pin for unipolar coagulation



Plastic Handles, with and without ratchets, with larger contact area at the finger ring
made of high-quality plastics – meeting the highest safety requirements for both
patient and user



The anatomy of the hand varies in size from person to person. With the new CLICK'line handles, KARL STORZ meets this particular challenge. Wider contact areas at the finger and thumb ring and a more ergonomic design ensures comfortable handling, preventing pres-

sure marks even after hours of use. Due to their ergonomic shape, the new handles can be used in various holding positions and, therefore, meet a wide range of demands.

Special Features:

- Comfortable handling
- Prevention of pressure marks
- Variable holding positions due to ergonomic shape
- Appropriate design



33151 CLICK'line® Plastic Handle,
without ratchet, with
larger contact area
at the finger ring



33152 CLICK'line® Plastic Handle,
with MANHES style
ratchet



33153 CLICK'line® Plastic Handle,
with hemostat style
ratchet



33156 CLICK'line® Plastic Handle,
with disengageable
ratchet

Metal Handles with larger contact area see page 270

Plastic Handles

for Dissecting and Grasping Forceps, insulated,
CLICK'line® – rotating, with connector pin for unipolar coagulation

Plastic Handles, with and without ratchets, made of high-quality plastics –
meeting the highest safety requirements for both patient and user



33121 CLICK'line® Plastic Handle,
without ratchet



33122 CLICK'line® Plastic Handle,
with MANHES style
ratchet



33123 CLICK'line® Plastic Handle,
with hemostat
ratchet



33126 CLICK'line® Plastic Handle,
with disengageable
ratchet

Metal Handles

for Dissecting and Grasping Forceps,

CLICK^{line} – without connector pin for unipolar coagulation



Metal Handles, with and without ratchets



33161 **CLICK^{line} Metal Handle**,
NEW rotating, **without** ratchet,
with plastic rings **with**
larger contact area



33131 **CLICK^{line} Metal Handle**,
rotating, **without** ratchet



33132 **CLICK^{line} Metal Handle**,
rotating, **with** MANHES
style ratchet



33133 **CLICK^{line} Metal Handle**,
rotating, **with** hemostat
style ratchet



33139 **CLICK^{line} Metal Handle**,
rotating, **with** ratchet



33143 **CLICK^{line} MOURET Metal Handle**,
rotating, **with** hemostat **style** ratchet



33141 P **CLICK^{line} Metal Handle**,
NEW non-rotating, **with**
disengageable ratchet,
with 4 locking positions



33141 **CLICK^{line} Metal Handle**,
rotating, **with**
disengageable ratchet

CLICK'line® Metal Outer Sheaths

Size 5 mm

Metal Outer Sheaths, insulated



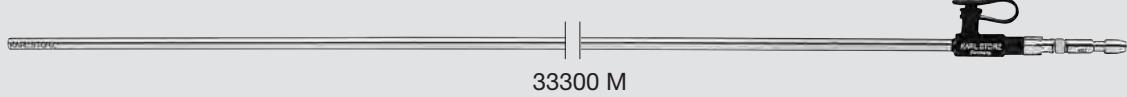
33200	CLICK'line® Metal Outer Sheath, insulated, with LUER-Lock connector for cleaning, size 5 mm, length 30 cm	33200 W	CLICK'line® Metal Outer Sheath, insulated, without LUER-Lock connector, size 5 mm, length 30 cm
33300	Same, length 36 cm	33300 W	Same, length 36 cm
33400	Same, length 43 cm	33400 W	Same, length 43 cm

with cm-marking



33300 CM	CLICK'line® Metal Outer Sheath, with cm-marking, insulated, with LUER-Lock connector for cleaning, size 5 mm, length 36 cm
33400 CM	Same, length 43 cm

Metal Outer Sheaths



33200 M	CLICK'line® Metal Outer Sheath, with LUER-Lock connector for cleaning, size 5 mm, length 30 cm
33300 M	Same, length 36 cm
33400 M	Same, length 43 cm

with cm-marking



33300 CMM	CLICK'line® Metal Outer Sheath, with cm-marking, with LUER-Lock connector for cleaning, size 5 mm, length 36 cm
33400 CMM	Same, length 43 cm

Please note:

The metal outer sheaths may only be used in conjunction with handles without a connector pin for unipolar coagulation.

Dissecting and Grasping Forceps

CLICK^{line} – rotating, dismantling, insulated,
with connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **lengths 30 and 36 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel and trocars size 6 mm



Length	Handle						
	33151	33152	33153	33156	33121	33125	33127
30 cm	NEW 	NEW 	NEW 	NEW 			
36 cm							
43 cm							

Double action jaws

Working Insert	Complete Instrument							
	33210 R	33251 R	33252 R	33253 R	33256 R	33221 R	33225 R	33227 R
33210 R	33251 R	33252 R	33253 R	33256 R	33221 R	33225 R	33227 R	
33310 R	33351 R	33352 R	33353 R	33356 R	33321 R	33325 R	33327 R	
33410 R	33451 R	33452 R	33453 R	33456 R	33421 R	33425 R	33427 R	



CLICK^{line} Dissecting and Grasping Forceps, right-angled

— 16 —

33210 UL	33251 UL	33252 UL	33253 UL	33256 UL	33221 UL	33225 UL	33227 UL
33310 UL	33351 UL	33352 UL	33353 UL	33356 UL	33321 UL	33325 UL	33327 UL
33410 UL	33451 UL	33452 UL	33453 UL	33456 UL	33421 UL	33425 UL	33427 UL



CLICK^{line} REDDICK-OLSEN Dissecting and Grasping Forceps, robust

— 13 —

33210 ML	33251 ML	33252 ML	33253 ML	33256 ML	33221 ML	33225 ML	33227 ML
33310 ML	33351 ML	33352 ML	33353 ML	33356 ML	33321 ML	33325 ML	33327 ML
33410 ML	33451 ML	33452 ML	33453 ML	33456 ML	33421 ML	33425 ML	33427 ML



CLICK^{line} KELLY Dissecting and Grasping Forceps, long

— 22 —

33210 HM	33251 HM	33252 HM	33253 HM	33256 HM	33221 HM	33225 HM	33227 HM
33310 HM	33351 HM	33352 HM	33353 HM	33356 HM	33321 HM	33325 HM	33327 HM
33410 HM	33451 HM	33452 HM	33453 HM	33456 HM	33421 HM	33425 HM	33427 HM



CLICK^{line} Dissecting and Grasping Forceps, "alligator jaws"

— 18 —

Dissecting and Grasping Forceps

CLICK^{line} – rotating, dismantling,
without connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **lengths 30 and 36 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel and trocars size 6 mm

Length	Handle						
	33161	33131	33132	33133	33141	33146	33147
30 cm	NEW 					NEW 	NEW
36 cm							
43 cm							

Double action jaws

Working Insert	Complete Instrument							
	33210 R	33261 R	33231 R	33232 R	33233 R	33241 R	33246 R	33247 R
33210 R	33261 R	33231 R	33232 R	33233 R	33241 R	33246 R	33247 R	
33310 R	33361 R	33331 R	33332 R	33333 R	33341 R	33346 R	33347 R	
33410 R	33461 R	33431 R	33432 R	33433 R	33441 R	33446 R	33447 R	



CLICK^{line} Dissecting and Grasping Forceps, right-angled

— 16 —

33210 UL	33261 UL	33231 UL	33232 UL	33233 UL	33241 UL	33246 UL	33247 UL
33310 UL	33361 UL	33331 UL	33332 UL	33333 UL	33341 UL	33346 UL	33347 UL
33410 UL	33461 UL	33431 UL	33432 UL	33433 UL	33441 UL	33446 UL	33447 UL



CLICK^{line} REDDICK-OLSEN Dissecting and Grasping Forceps, robust

— 13 —

33210 ML	33261 ML	33231 ML	33232 ML	33233 ML	33241 ML	33246 ML	33247 ML
33310 ML	33361 ML	33331 ML	33332 ML	33333 ML	33341 ML	33346 ML	33347 ML
33410 ML	33461 ML	33431 ML	33432 ML	33433 ML	33441 ML	33446 ML	33447 ML



CLICK^{line} KELLY Dissecting and Grasping Forceps, long

— 22 —

33210 HM	33261 HM	33231 HM	33232 HM	33233 HM	33241 HM	33246 HM	33247 HM
33310 HM	33361 HM	33331 HM	33332 HM	33333 HM	33341 HM	33346 HM	33347 HM
33410 HM	33461 HM	33431 HM	33432 HM	33433 HM	33441 HM	33446 HM	33447 HM



CLICK^{line} Dissecting and Grasping Forceps, "alligator jaws"

— 18 —

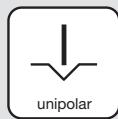
Dissecting and Grasping Forceps

CLICK'line® – rotating, dismantling, insulated,
with connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **lengths 30 and 36 cm**,
for use with trocars size 6 mm



Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel and trocars size 6 mm

Length	Handle					
	33151	33152	33153	33156	33125	33127
30 cm	NEW 	NEW 	NEW 	NEW 		
36 cm						
43 cm						

Single action jaws

Working Insert	Complete Instrument						
33310 MF	33351 MF	33352 MF	33353 MF	33356 MF	33325 MF	33327 MF	
24	CLICK'line® MANHES Dissecting and Grasping Forceps ,atraumatic, specially designed for grasping and removal of hollow organs						
33310 MR	33351 MR	33352 MR	33353 MR	33356 MR	33325 MR	33327 MR	
20	CLICK'line® MANHES Dissecting and Grasping Forceps , “duckbill jaws”, blunt, specially designed for extended clinching of tissue to effect mechanical hemostasis						
33310 MS	33351 MS	33352 MS	33353 MS	33356 MS	33325 MS	33327 MS	
33410 MS	33451 MS	33452 MS	33453 MS	33456 MS	33425 MS	33427 MS	
14	CLICK'line® MANHES Dissecting and Grasping Forceps , “duckbill jaws”, blunt, specially designed for extended clinching of tissue to effect mechanical hemostasis						
33210 MT	33251 MT	33252 MT	33253 MT	33256 MT	33225 MT	33227 MT	
33310 MT	33351 MT	33352 MT	33353 MT	33356 MT	33325 MT	33327 MT	
33410 MT	33451 MT	33452 MT	33453 MT	33456 MT	33425 MT	33427 MT	
20	CLICK'line® MANHES Dissecting and Grasping Forceps , “duckbill jaws”, blunt, specially designed for partial clinching of tissue to effect mechanical hemostasis						

Dissecting and Grasping Forceps

CLICK'line® – rotating, dismantling,
without connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **lengths 30 and 36 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel and trocars size 6 mm

Length	Handle				
	33161	33132	33133	33141	33144
30 cm					
36 cm					
43 cm					

Single action jaws

Working Insert	Complete Instrument					
	33310 MF	33361 MF	33332 MF	33333 MF	33341 MF	33344 MF
24	CLICK'line® MANHES Dissecting and Grasping Forceps ,atraumatic, specially designed for grasping and removal of hollow organs					
CLICK'line® MANHES Dissecting and Grasping Forceps , “duckbill jaws”, blunt, specially designed for extended clinching of tissue to effect mechanical hemostasis						
33310 MR	33361 MR	33332 MR	33333 MR	33341 MR	33344 MR	
20	CLICK'line® MANHES Dissecting and Grasping Forceps , “duckbill jaws”, blunt, specially designed for extended clinching of tissue to effect mechanical hemostasis					
33310 MS	33361 MS	33332 MS	33333 MS	33341 MS	33344 MS	
33410 MS	33461 MS	33432 MS	33433 MS	33441 MS	33444 MS	
14	CLICK'line® MANHES Dissecting and Grasping Forceps , “duckbill jaws”, blunt, specially designed for extended clinching of tissue to effect mechanical hemostasis					
33210 MT	33261 MT	33232 MT	33233 MT	33241 MT	33244 MT	
33310 MT	33361 MT	33332 MT	33333 MT	33341 MT	33344 MT	
33410 MT	33461 MT	33432 MT	33433 MT	33441 MT	33444 MT	
20	CLICK'line® MANHES Dissecting and Grasping Forceps , “duckbill jaws”, blunt, specially designed for partial clinching of tissue to effect mechanical hemostasis					

Scissors

CLICK^{line} – rotating, dismantling,
with and without connector pin for unipolar coagulation



Size 5 mm

Operating instruments, **lengths 30, 36 and 43 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel



Length	Handle						
	33151	33121	33125	33127	33161	33131	33147
30 cm	<i>NEW</i> 				<i>NEW</i> 		<i>NEW</i>
36 cm							
43 cm							

Double action jaws

Working Insert	Complete Instrument							
	34210 MS	34251 MS	34221 MS	34225 MS	34227 MS	34261 MS	34231 MS	34247 MS
34310 MS	34351 MS	34321 MS	34325 MS	34327 MS	34361 MS	34331 MS	34347 MS	
34410 MS	34451 MS	34421 MS	34425 MS	34427 MS	34461 MS	34431 MS	34447 MS	
		CLICK ^{line} METZENBAUM Scissors, curved						
— 15 —								
34210 MA	34251 MA	34221 MA	34225 MA	34227 MA	34261 MA	34231 MA	34247 MA	
34310 MA	34351 MA	34321 MA	34325 MA	34327 MA	34361 MA	34331 MA	34347 MA	
34410 MA	34451 MA	34421 MA	34425 MA	34427 MA	34461 MA	34431 MA	34447 MA	
		CLICK ^{line} Scissors, serrated, curved, spoon-shaped blades						
— 20 —								
34210 MW	34251 MW	34221 MW	34225 MW	34227 MW	34261 MW	34231 MW	34247 MW	
34310 MW	34351 MW	34321 MW	34325 MW	34327 MW	34361 MW	34331 MW	34347 MW	
34410 MW	34451 MW	34421 MW	34425 MW	34427 MW	34461 MW	34431 MW	34447 MW	
		CLICK ^{line} Scissors, serrated, curved, conical						
— 15 —								
34210 MD	34251 MD	34221 MD	34225 MD	34227 MD	34261 MD	34231 MD	34247 MD	
34310 MD	34351 MD	34321 MD	34325 MD	34327 MD	34361 MD	34331 MD	34347 MD	
34410 MD	34451 MD	34421 MD	34425 MD	34427 MD	34461 MD	34431 MD	34447 MD	
		CLICK ^{line} Scissors, straight						
— 15 —								

RoBi® Bipolar Grasping Forceps

rotating, dismantling, with connector pin for bipolar coagulation,
CLERMONT-FERRAND Model

STORZ
KARL STORZ — ENDOSKOPE

Size 5 mm



Special Features:

- Jaws with robust hinge for optimized bipolar grasping
- Fully rotational 360° sheath
- Top mounted 45° high frequency connector pin leads the cable away from the operative field

- Can be completely disassembled into separate components:
 - Handle
 - Outer sheath
 - Working insert
- Cleaning port
- Autoclavable



38161 **RoBi® Metal Handle,**
NEW with larger contact area
 at the finger ring

RoBi® Metal Outer Sheaths, insulated



38300

- 38300 **RoBi® Metal Outer Sheath, insulated,**
 with LUER-Lock connector for cleaning,
 size 5 mm, length 36 cm
- 38400 **Same,** length 43 cm

Please note: RoBi® instruments, length 43 cm, for use with HOPKINS® Straight Forward Telescopes 26034 AA, 26038 AA and HOPKINS® Wide Angle Straight Forward Telescope 26075 AA

RoBi® Bipolar Grasping Forceps

rotating, dismantling, with connector pin for bipolar coagulation,
CLERMONT-FERRAND Model



Size 5 mm

Operating instruments, **lengths 36 and 43 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel



Outer Sheath

Handle

38161



Length 36 cm

Length 43 cm

Single action jaws

Working Insert

Complete Instrument

38310 CS

38361 CS

38410 CS

38461 CS



— 16 —

RoBi® Grasping Forceps, CLERMONT-FERRAND model, narrow jaws,
for fine dissection, grasping and bipolar coagulation

38310 CL

38361 CL



— 12 —

RoBi® Grasping Forceps, CLERMONT-FERRAND model, wide jaws, for
dissection, grasping and bipolar coagulation of large vessels and tissue layers

38310 KL

38361 KL

38410 KL

38461 KL



— 19 —

RoBi® Grasping Forceps, CLERMONT-FERRAND model, flat jaws,
for dissection, grasping and bipolar coagulation

38310 KF

38361 KF



— 14 —

RoBi® Grasping Forceps, CLERMONT-FERRAND model, flat jaws,
fenestrated, for dissection, grasping and bipolar coagulation

Please note:

For the instrument only the **individual component parts** are numbered. The catalog number for the complete **instrument** is not on the instrument. Please take this number from the numbers indicated in the **red** background of the table above. The color **green** indicates the working inserts.

RoBi® Bipolar Grasping Forceps

rotating, dismantling, with connector pin for bipolar coagulation,
CLERMONT-FERRAND Model



Size 5 mm

Operating instruments, **lengths 36 and 43 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel



Outer Sheath

Length 36 cm

Length 43 cm

Handle

38161



Double action jaws

Working Insert

38310 ON

38410 ON



38310 MM



38310 WA



Complete Instrument

38361 ON

38461 ON

38361 MM

RoBi® Grasping Forceps, CLERMONT-FERRAND model, fenestrated,
with especially fine atraumatic serration

38361 WA

RoBi® MANHES Grasping Forceps, CLERMONT-FERRAND model,
especially suitable for tying intracorporeal knots

RoBi® WATTIEZ Grasping Forceps, with multiple teeth, for atraumatic
and accurate grasping

RoBi® Bipolar Grasping Forceps

rotating, dismantling, with connector pin for bipolar coagulation,
CLERMONT-FERRAND Model



Size 5 mm

Operating instruments, **lengths 36 and 43 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel



Outer Sheath

Handle

38161



Length 36 cm

Length 43 cm

Double action jaws

Working Insert

Complete Instrument

38310 MD

38361 MD

38410 MD

38461 MD



19

RoBi® KELLY Dissecting and Grasping Forceps,
CLERMONT-FERRAND model, especially suitable for dissection

38310 ML

38361 ML



24

RoBi® KELLY Dissecting and Grasping Forceps,
CLERMONT-FERRAND model, especially suitable for dissection

38310 MA

38361 MA

38410 MA

38461 MA

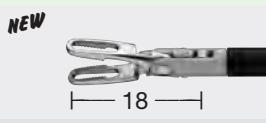


24

RoBi® MALZONI Dissecting and Grasping Forceps,
especially suitable for dissection

38310 OM

38361 OM



18

RoBi® Grasping Forceps, CLERMONT-FERRAND model, with especially
fineatraumatic serration, fenestrated jaws, with large proximal recess

38310 H

38361 H



19

RoBi® HESSELING Grasping Forceps,
especially suitable for point coagulation

RoBi® Bipolar Scissors

rotating, dismantling, with connector pin for bipolar coagulation,
CLERMONT-FERRAND Model



Size 5 mm

Operating instruments, **lengths 36 and 43 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**,
for use with telescopes with inbuilt
working channel



Outer Sheath

Length 36 cm

Length 43 cm

Handle

38161



Single action jaws

Working Insert

38310 MT



— 23 —

Complete Instrument

38361 MT

RoBi® Scissors, CLERMONT-FERRAND model, straight,
for cutting and bipolar coagulation of vessels and tissue layers

38310 MZ



— 23 —

38361 MZ

RoBi® Scissors, CLERMONT-FERRAND model, straight, serrated,
for cutting and bipolar coagulation

Double action jaws

38310 MW

38361 MW

38410 MW

38461 MW

NEW



— 20 —

RoBi® METZENBAUM Scissors, CLERMONT-FERRAND model,
curved, slender blades, for cutting and bipolar coagulation

Laparoscopic and Thoracoscopic Spine Surgery

Bipolar and Unipolar Operating Instruments



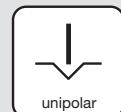
Multiple puncture approach
Operating instruments, length 33 cm,
for use with trocars size 6 mm



TAKE-APART® MANHES Bipolar Coagulation Forceps,
width of jaws 3 mm, size 5 mm,
length 33 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



TAKE-APART® SCHNEIDER Bipolar Grasping Forceps, with connector pin for bipolar coagulation, with movable inner sheath and non-retracting jaws, robust jaws, size 5 mm, length 33 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



Coagulation and Dissection Electrode,
L-shaped, with connector pin for unipolar coagulation, size 5 mm, length 36 cm



Coagulation and Dissection Electrode, insulated sheath, with connector pin for unipolar coagulation, spatula-shaped, blunt, size 5 mm, length 36 cm

High Frequency Cords and High Frequency Surgical Units AUTOCON® see chapter 12, UNITS
Components/Spare Parts see chapter 13

Laparoscopic and Thoracoscopic Spine Surgery

Suction and Irrigation Tubes, Bipolar Operating Instruments and Dismantling Fan Retractor



Sizes 5 and 10 mm

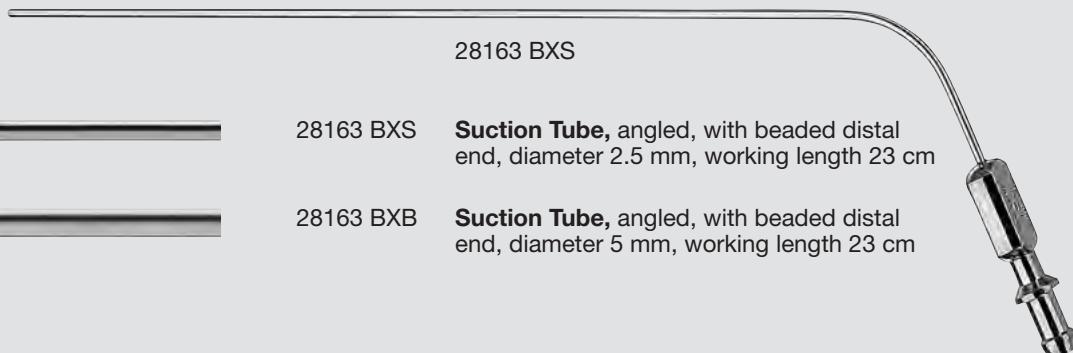
Multiple puncture approach

Operating instruments, **length 36 cm**,
for use with trocars size 6 mm



26173 BN

Suction and Irrigation Tube, with lateral holes,
with two-way stopcock for single hand control,
size 5 mm, length 36 cm



28163 BXS

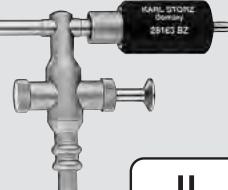
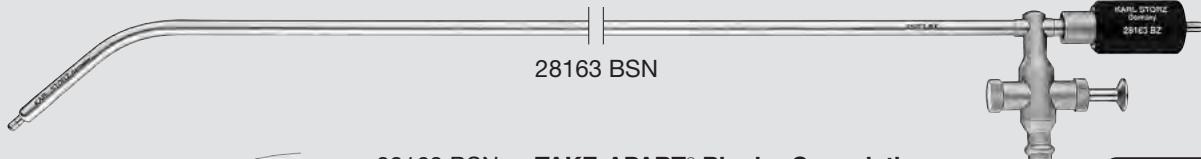
28163 BXS

Suction Tube, angled, with beaded distal
end, diameter 2.5 mm, working length 23 cm



28163 BXB

Suction Tube, angled, with beaded distal
end, diameter 5 mm, working length 23 cm



28163 BSN

TAKE-APART® Bipolar Coagulation Suction Tube, with stopcock, size 5 mm, length 30 cm

including:

Suction Tube

Coagulation Electrode, curved



28163 FP

28163 FP

Fan Retractor, dismantling, distendable,
size 10 mm, length 30 cm

Simple opening of the fan by axial movement of the outer sheath. Wide retraction area with a sturdy platform. Easy to use and to clean.

Components/Spare Parts see chapter 13

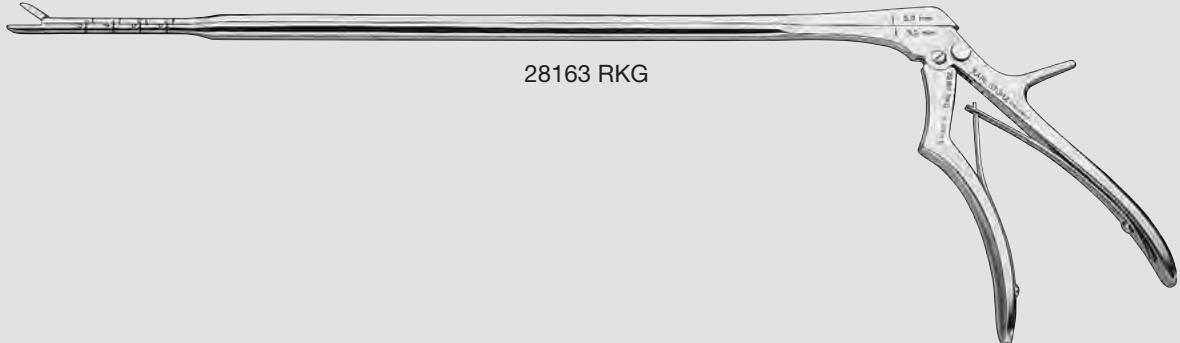
Laparoscopic and Thoracoscopic Spine Surgery

Rongeurs and Bone Punches



Size 10 mm

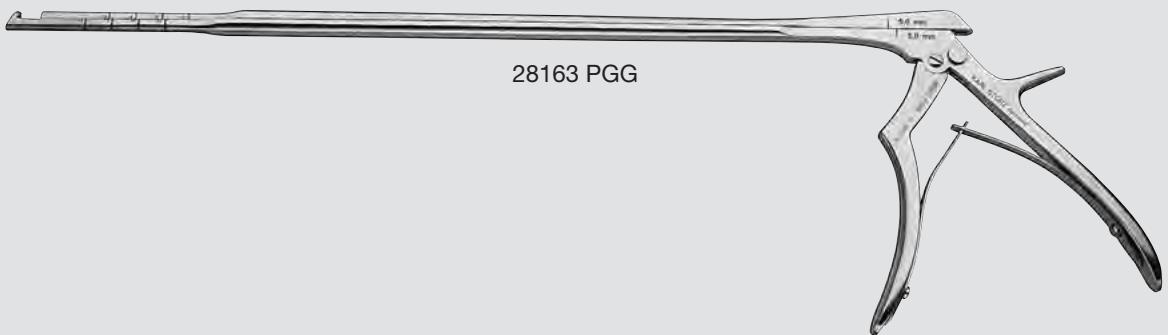
Operating instruments, **working length 30 cm**,
for use with trocars size 11 mm



28163 RKG **Rongeur**, dismantling, graduated scale at the distal end, jaw 5 mm, round sheath diameter 10 mm, working length 30 cm



28163 RGG **Same**, jaws 8 mm



28163 PKS **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 40° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm



28163 PKG **KERRISON Bone Punch**, dismantling, graduated scale at the distal end, 90° upbiting, not through-cutting, 3 mm, round sheath diameter 10 mm, working length 30 cm



28163 PGG **Same**, 5 mm

Laparoscopic and Thoracoscopic Spine Surgery

Sharp Curettes and Hook



Size 10 mm

Operating instruments, **working length 30 cm**,
for use with trocars size 11 mm



28163 WC



28163 WC **Curette**, sharp, spoon-shaped, oval, 3.5 x 5 mm



28163 WD **Same**, 3.5 x 9 mm



28163 WE **Same**, 5 x 6.5 mm



28163 WF **Same**, 5.5 x 7.5 mm



28163 WK **Same**, round, diameter 5 mm



28163 WL **Same**, oblong, 2.5 x 6 mm



28163 WM **Same**, oblong, 3.5 x 9 mm



28163 WH **Hook**, 90°, blunt

Laparoscopic and Thoracoscopic Spine Surgery

Spoon Curettes, Palpation Hook and Raspatories



Size 5 mm

Operating instruments, **working length 36 cm**,
for use with trocars size 6 mm



28163 GI



28163 GL **Spoon Curette**, sharp, 4 x 6 mm,
diameter 5 mm, working length 36 cm



28163 GK **Same**, 3 x 4 mm



28163 GL **Spoon Curette**, sharp, 3 x 4 mm,
spoon angled 45°, diameter 5 mm,
working length 36 cm



28163 GH



28163 GH **Palpation Hook**, hook angled 90°, blunt,
diameter 5 mm, working length 36 cm



28163 RR



28163 RR **Raspatory**, diameter 5 mm,
working length 36 cm
28163 KR **Same**, diameter 2 mm

Laparoscopic and Thoracoscopic Spine Surgery

Ring Curettes, Raspatory, Tappet, Rasp, Curette, Chisels and Collar



Sizes 7 and 10 mm

Operating instruments, **working length 30 cm**,
for use with trocars size 11 mm



28163 WN

Ring Curette, graduated, distal end slightly curved, size 10 mm, ring size diameter 8 mm, working length 30 cm



28163 WG

Ring Curette, graduated, distal end slightly curved, size 10 mm, ring size diameter 6 mm, working length 30 cm



28163 MF

Raspatory, for dissection, size 7 mm, working length 30 cm



28163 MS

Tappet, blunt, grooved, for positioning the bone implant, size 10 mm, working length 30 cm



28163 RP

Rasp, for coarsening the bone surface, size 10 mm, working length 30 cm



28163 SBK

Curette, stirrup-shaped, for straightening end plates, size 10 mm, working length 30 cm



28163 MN



28163 MN

Chisel, graduated, double-edged grinding, straight, size 7 mm, working length 30 cm

28163 MM **Same**, size 10 mm



28163 MK

28163 MK

Collar, for deflecting the mallet, for use with Chisel 28163 MM

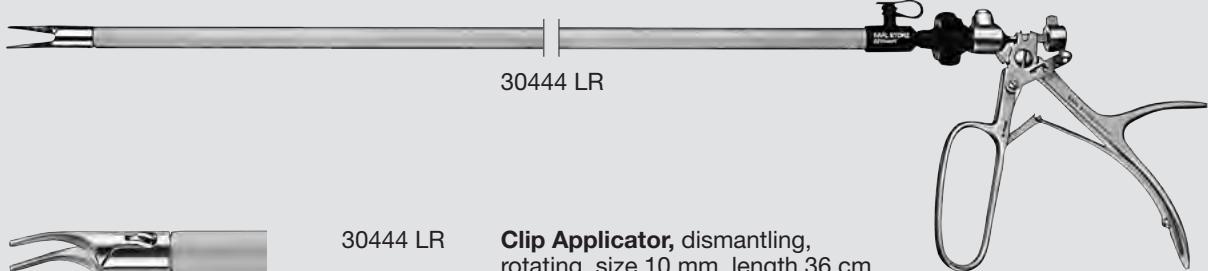
Laparoscopic and Thoracoscopic Spine Surgery

Clip Applicator and Distance Measuring Instruments



Size 10 mm

Operating instruments, **length 36 cm**,
for use with trocars size 11 mm



30444 LR

Clip Applicator, dismantling,
rotating, size 10 mm, length 36 cm,
for PILLING-WECK Titanium Clips
30460 AL (medium-large), with ratchet
to lock the jaw holding the clip
including:

Metal Handle, with ratchet

Metal Outer Sheath

Insert



30460 AL

PILLING-WECK **Titanium Clips**, medium-large,
box with 16 sterile cartridges, 10 clips each,
for use with Clip Applicator 30444 LR



28163 WZ

28163 WZ

Distance Measuring Instrument, with cm-markings
and cm-slots for radiologic measurement,
for monosegmental measuring, 5 cm

28163 WX

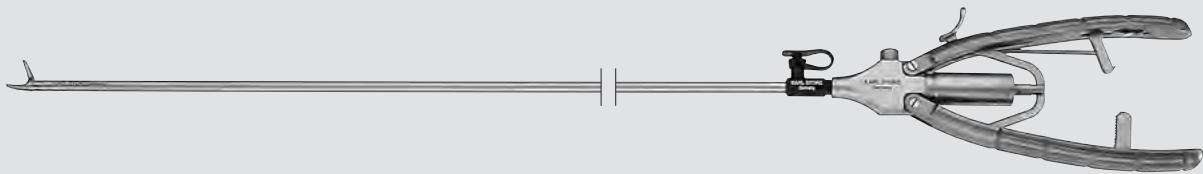
Distance Measuring Instrument, with cm-markings
and cm-slots for radiologic measurement, long,
for bisegmental measuring, 8 cm

Components/Spare Parts see chapter 13

KOH Macro Needle Holders ^{NEW}

dismantling

STORZ
KARL STORZ — ENDOSCOPE



KOH Macro Needle Holder, size 5 mm, dismantling, consisting of:

- Handle
- Outer sheath
- Working insert

Cleaning and sterilization are gaining increasing importance for KARL STORZ as a manufacturer of surgical instruments.

Similar to all our surgical instruments, the cleaning and hygiene of our needle holders also play an important

role. Our KOH macro needle holders feature consistent effectiveness and precision, with significantly improved cleaning results achieved by dismantling the instrument. The handle, outer sheath and inner part can be cleaned and sterilized separately for perfect results.

The reusable dismantling design offers the user the following benefits:

- Can be disassembled into three separate components
- Fully autoclavable
- Cleaning connector
- Choice of six different handles and three different working inserts
- With tungsten carbide inserts
- Environmentally correct: In the event of damage, only the component with the defect needs to be replaced
- User-friendly and ergonomic handling

KOH Macro Needle Holders ^{NEW}

dismantling



Size 5 mm

Operating instruments, **lengths 33 and 43 cm**,
with axial handle for use with trocars size 6 mm

Length	Handle		
	30173 AR	30173 AL	30173 AO
33 cm			
43 cm			

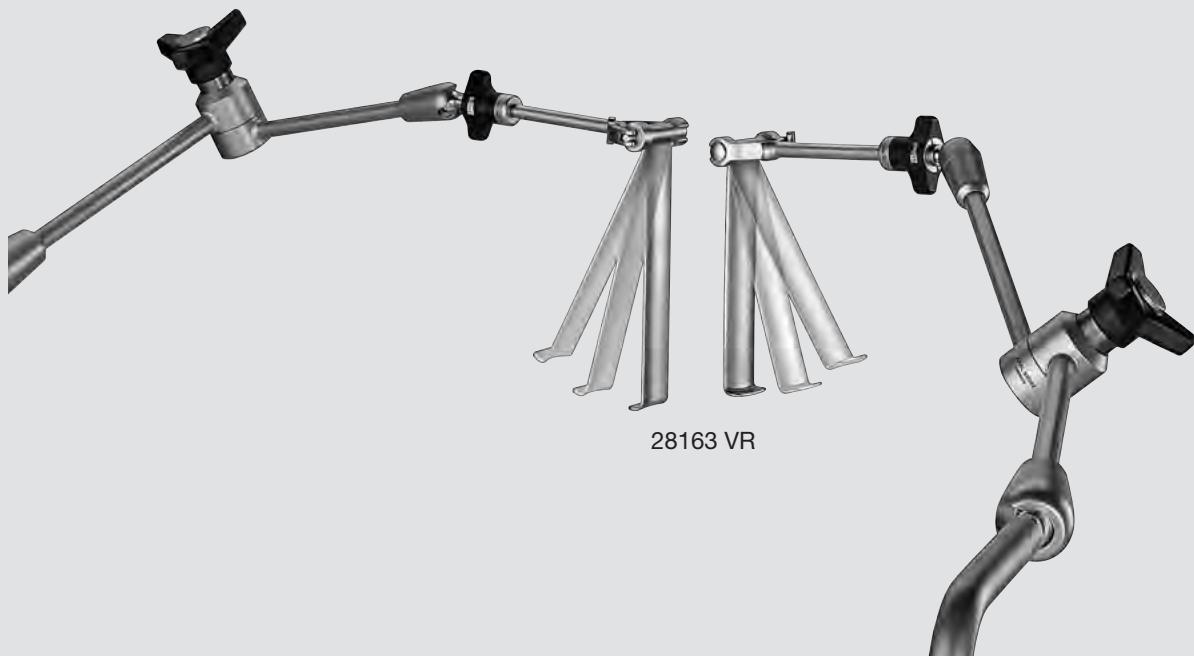
Single action jaws

Working Insert	Complete Instrument		
	30173 RAR	30173 RAL	30173 RAO
30173 R			
30178 R			
KOH Macro Needle Holder, dismantling, jaws curved to right, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0			
30173 L			
30178 L			
KOH Macro Needle Holder, dismantling, jaws curved to left, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0			
30173 F			
30178 F			
KOH Macro Needle Holder, dismantling, straight jaws, with tungsten carbide inserts, for use with suture material size 0/0 to 7/0			

ROSENTHAL Angled Retractor ^{NEW}

ROSENTHAL retractor blades are suitable for any application. These have been specially designed for "mini-open" surgical approaches. The lateral arresting lever enables the flexible angling of the blades without releasing the holding arm. This enables optimal preparation and exposure of deep-lying areas. The

retractor blades are particularly suitable for the atraumatic exposure of all spinal segments and for maintaining the ventral or dorsal intercostal access. The VITOM® telescope enables the retractor system to be used to its fullest advantage.



28163 VR

ROSENTHAL Angled Retractor, with movable retractor blades, in three lengths, can be clamped to the holding arm with the KS-Lock

including:

2x **Retractor Blade**, length 12 cm, width 2.5 cm,
distally atraumatically angled, lockable in 20 positions

2x **Same**, length 14 cm

2x **Same**, length 18 cm

2x **Articulated Stand**, reinforced version, L-shaped,
with one central clamp for all five joint functions,
height 48 cm, operating range 52 cm

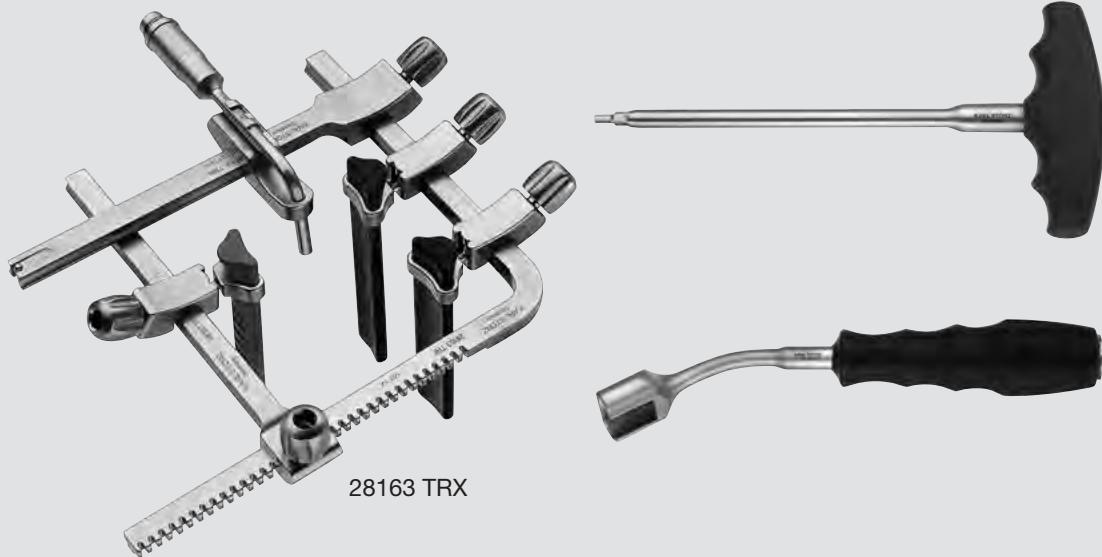
2x **Rotation Socket**, to clamp to the operating table

Spine Retractor NEW

Illuminated Spine Retractor with Radiolucent Retractor Blades
in Various Lengths



The retractor system can be used for minimally invasive surgeries on the thoracic or lumbar spine and is used for all indications in this area.



28163 TRX

28163 TRX

TENTACLE Spine Retractor, complete, with retractor frame, 2 retractor arms, X-ray transparent blades in 3 different lengths, light carrier with corresponding tools including:

Retractor Frame

Retractor Arm

2x Drive Screw

2x Retractor Arm, extra

4x PEEK Retractor Blade, length 70 mm, width 16 mm,
color: black

4x PEEK Retractor Blade, length 50 mm, width 16 mm,
color: blue

4x PEEK Retractor Blade, length 30 mm, width 16 mm,
color: green

6x Holder, for retractor blades

Light Carrier

Holder, for light carriers

Screwdriver

Positioning Instrument, for fine adjustment of
PEEK retractor blades

Sterilization Container



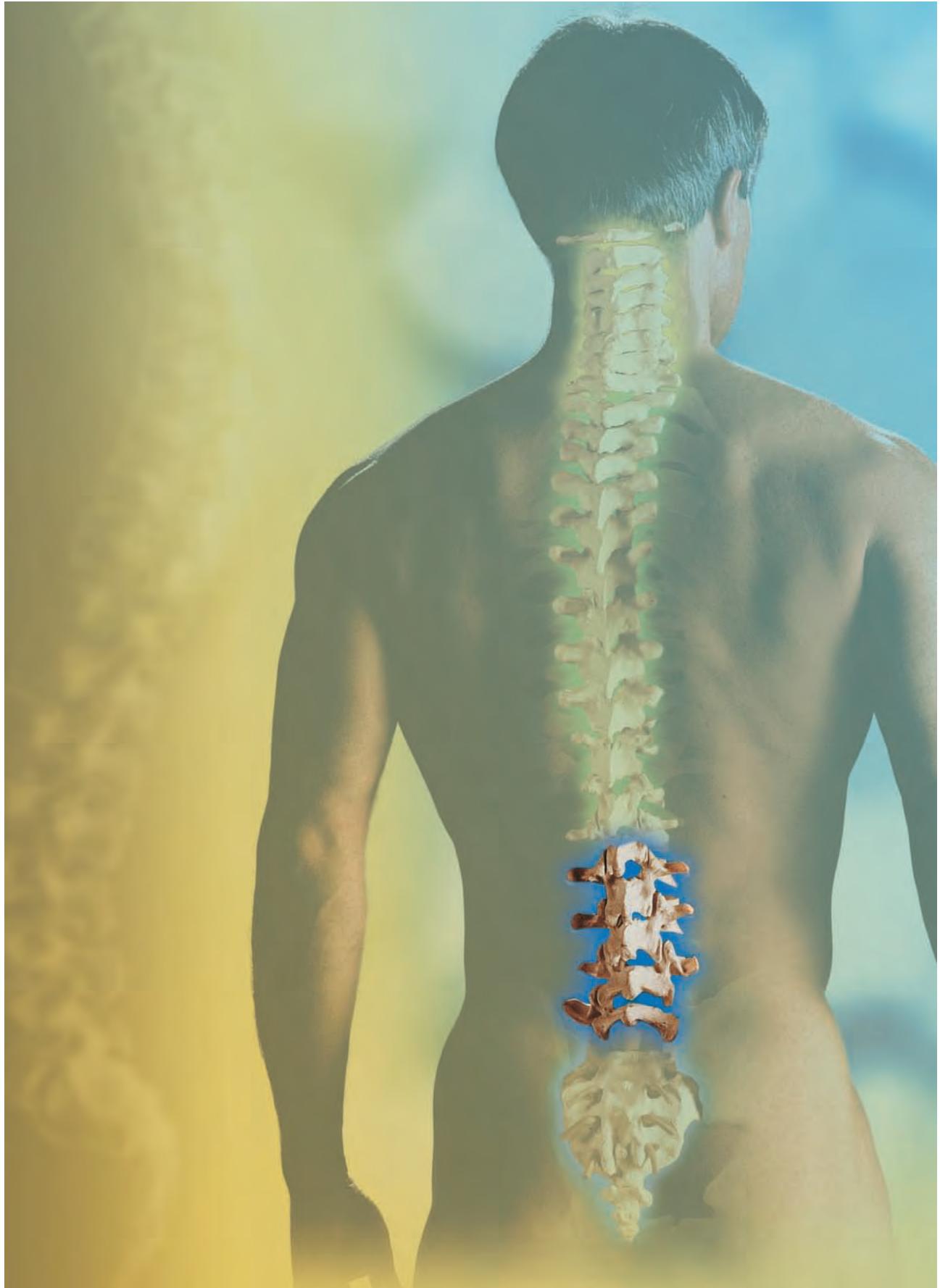
495 NA

Fiber Optic Light Cable, diameter 3.5 mm, length 230 cm

Components/Spare Parts see chapter 13

Spine Surgery Lumbar

STORZ
KARL STORZ — ENDOSCOPE



Percutaneous Lumbar Transforaminal, ^{NEW} Interlaminar and Posterolateral Endoscopy System



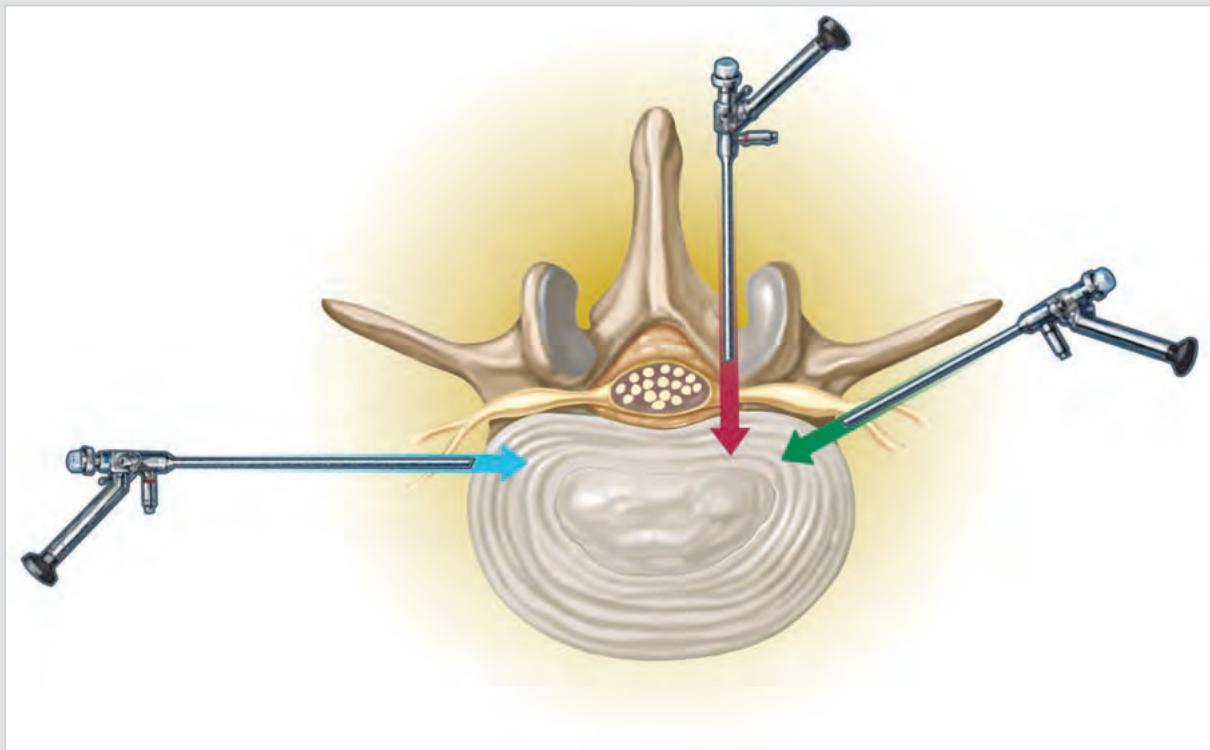
The **SpineTIP** system offers various possibilities for treating herniated discs as well as other spinal pathologies in the lumbar and thoracic regions, i.e. spondylo-diskitis or spinal tumors.

Endoscopic systems that combine a high-resolution telescope, a light source as well as working and irrigation channels in one instrument make it possible to perform minimally invasive interventions via a single port under excellent visual control. The term Percutaneous

Endoscopic Lumbar Discectomy (PELD) is also used to describe the application of these systems and techniques in lumbar spinal surgery.

The **SpineTIP** system provides an endoscope and instruments that are optimized for 3 standard approaches: **transforaminal**, **interlaminar** and **posterolateral**.

T. LÜBBERS, M. D.,
Head of Wirbelsäulenzentrum Ludmillenstift Meppen,
Germany



Percutaneous Lumbar Transforaminal, ^{NEW} Interlaminar and Posterolateral Endoscopy System

Puncture Needles, Guide Wires and Dilation Sleeves with two ports



T = Instrument for the transforaminal approach with HOPKINS® II Telescope 28163 BTA

I = Instrument for the interlaminar approach with HOPKINS® II Telescope 28163 BFA

P = Instrument for the posterolateral approach with HOPKINS® II Telescope 28163 FFA



28163 PLT

28163 PEL

Puncture Needle, including stylet, diameter 1.7 mm, working length 25 cm, with 1.4 mm opening for guide wire



28163 PLT

Puncture Needle, including stylet, diameter 1.2 mm, working length 25 cm, with 0.8 mm opening for guide wire



28163 PL

Puncture Needle, including stylet, diameter 1.7 mm, working length 18 cm, with 1.4 mm opening for guide wire



28163 GWL

28163 GWL

Guide Wire, blunt, diameter 1.1 mm, working length 45 cm



28163 GWT

Guide Wire, blunt on both sides, diameter 0.7 mm, working length 41 cm, package of 5



28163 FHI



28163 FHT

Dilation Sleeve, outer diameter 6.5 mm, inner diameter 1.4 mm, length 31 cm, with two ports, for the transforaminal approach, color code: blue



28163 FHI

Dilation Sleeve, with two ports, outer diameter 6.5 mm, inner diameter 1.4 mm, length 22 cm, color code: red



28163 FHP

Dilation Sleeve, outer diameter 6 mm, inner diameter 1 mm, length 22 cm, with two ports, for the posterolateral approach, color code: green



For creating a surgical approach using HOPKINS® II Telescope 28163 BFA, Suction Burr 41201 FD with DrillCut-X® II handpiece is recommended

Percutaneous Lumbar Transforaminal, **NEW** Interlaminar and Posterolateral Endoscopy System

Sequential Dilation, Punch Devices, Mallet and X-ray Ruler



28163 FD



28163 FD

Dilation Sleeve, outer diameter 2.5 mm, inner diameter 1.2 mm, working length 29 cm, color code: red-green



28163 FE

Dilation Sleeve, outer diameter 3.9 mm, inner diameter 2.6 mm, working length 27 cm, color code: red-green



28163 FF

Dilation Sleeve, outer diameter 5.4 mm, inner diameter 4 mm, working length 25 cm, color code: red



28163 FG

Dilation Sleeve, outer diameter 6.5 mm, inner diameter 5.5 mm, working length 23 cm, color code: red



28163 FDH

28163 FDH

Punch Device, kidney-shaped, for Dilation Sleeves diameter 2 – 6 mm



28163 FEH

28163 FEH

Punch Sleeve, for use with operating sheaths



28163 FKD

28163 FKD

Fixation Handle, for adjustment of dilation sleeves with outer diameter 2.5 – 6.5 mm



28163 CM

28163 CM

COTTELE Metal Mallet, with plastic replacement head, length 22.5 cm



28163 FRL

28163 FRL

X-ray Ruler, with special marking for midline and 2 mm- and cm-slots for radiologic measurement, total length 30 cm



Percutaneous Lumbar Transforaminal,^{NEW} Interlaminar and Posterolateral Endoscopy System

HOPKINS® II Telescope and Operating Sheaths



For the **transforaminal** approach



HOPKINS® II Wide Angle Telescope 25°, angled eyepiece, outer diameter 6.6 mm, working channel diameter 3.6 mm, length 25.7 cm, **autoclavable**, fiber optic light transmission incorporated, color code: blue



Operating Sheath, graduated, distal straight, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.8 mm, length 25 cm, for use with HOPKINS® II Telescope 25° 28163 BTA, color code: blue



Operating Sheath, graduated, with distal beak, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.8 mm, length 25 cm, for use with HOPKINS® II Telescope 25° 28163 BTA, color code: blue



Operating Sheath, graduated, distal oblique, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.8 mm, length 25 cm, for use with HOPKINS® II Telescope 25° 28163 BTA, color code: blue



Percutaneous Lumbar Transforaminal, **NEW** Interlaminar and Posterolateral Endoscopy System

HOPKINS® II Telescope and Operating Sheaths



For the **interlaminar** approach



28163 BFA **HOPKINS® II Wide Angle Telescope 25°**, angled eyepiece, outer diameter 6.6 mm, working channel diameter 3.6 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



28163 FSG



28163 FSG **Operating Sheath**, graduated, distal straight, with clamp mechanism for fixation, integrated irrigation connector, inner diameter 7.2 mm, outer diameter 7.9 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red



28163 FSN **Operating Sheath**, graduated, with distal beak, with clamp mechanism for fixation, integrated irrigation connector, inner diameter 7.2 mm, outer diameter 7.9 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red



28163 FSW **Operating Sheath**, graduated, distal oblique, with clamp mechanism for fixation, integrated irrigation connector, inner diameter 7.2 mm, outer diameter 7.9 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red



28163 FWO



28163 FWO **Operating Sheath**, distal 45° oblique, integrated irrigation connector, inner diameter 6.8 mm, outer diameter 7.5 mm, length 17 cm, for use with HOPKINS® II Telescope 25° 28163 BFA, color code: red

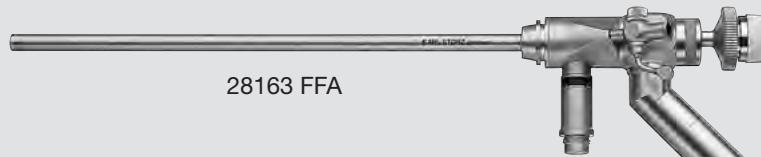
For creating a surgical approach using HOPKINS® II Telescope 28163 BFA, Suction Burr 41201 FD with DrillCut-X® II handpiece is recommended

Percutaneous Lumbar Transforaminal,^{NEW} Interlaminar and Posterolateral Endoscopy System

HOPKINS® II Telescope and Operating Sheaths



For the **posterolateral** approach



TIP

28163 FFA **HOPKINS® II Wide Angle Telescope 15°**, angled eyepiece, outer diameter 6.1 mm, working channel diameter 2.9 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



TIP

28163 PSG **Operating Sheath**, graduated, distal straight, integrated irrigation connector, inner diameter 6.2 mm, outer diameter 6.9 mm, length 17 cm, for use with HOPKINS® II Telescope 15° 28163 FFA, color code: green

TIP

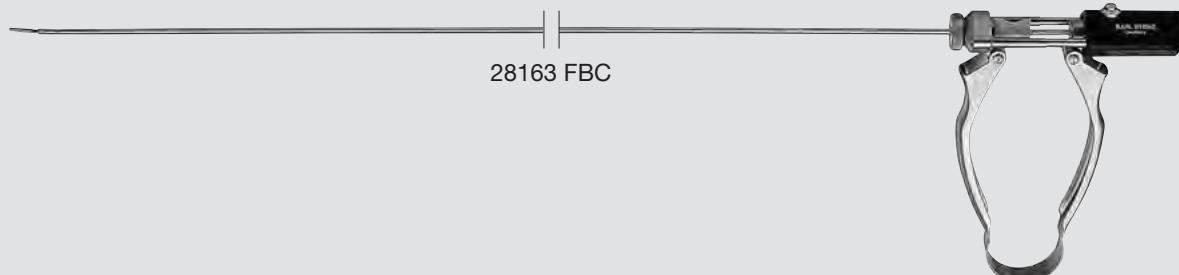
28163 PSN **Operating Sheath**, graduated, distal beak, integrated irrigation connector, inner diameter 6.2 mm, outer diameter 6.9 mm, length 17 cm, for use with HOPKINS® II Telescope 15° 28163 FFA, color code: green

TIP

28163 PSW **Operating Sheath**, graduated, distal oblique, integrated irrigation connector, inner diameter 6.2 mm, outer diameter 6.9 mm, length 17 cm, for use with HOPKINS® II Telescope 15° 28163 FFA, color code: green

Percutaneous Lumbar Transforaminal, *NEW* Interlaminar and Posterolateral Endoscopy System

Bipolar Electrode, Dissectors and Palpation Hooks



28163 FBC



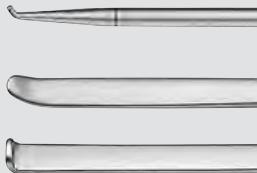
28163 FBC

Bipolar Electrode, angled, diameter 2.5 mm, working length 36 cm
including:

- ***Bipolar Electrode Insert**
- Electrode Sheath**
- Bipolar Spring Handle**

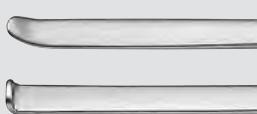


28163 UH



28163 UH

Palpation Hook, distally angled 45°, diameter 2 mm, working length 34 cm



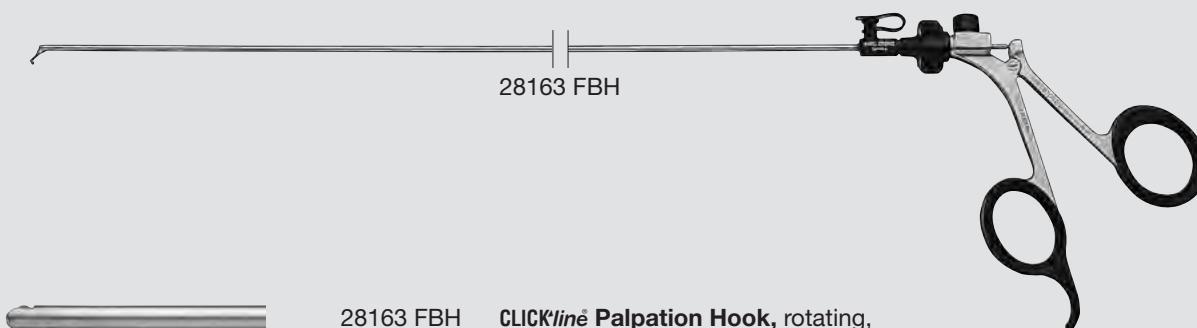
28163 FDW

Dissector, distally curved 45°, diameter 2.6 mm, working length 36 cm



28163 FDG

Dissector, distally curved 90°, diameter 2.6 mm, working length 36 cm



28163 FBH



28163 FBH

CLICKline® Palpation Hook, rotating, dismantling, not insulated, without connector pin for unipolar coagulation, with LUER-Lock irrigation connector for cleaning, with distal ball, bendable to 90°, diameter 3.5 mm, working length 36 cm
including:

- Metal Handle**, without ratchet, with plastic rings with larger contact area
- Outer Sheath**, with working insert



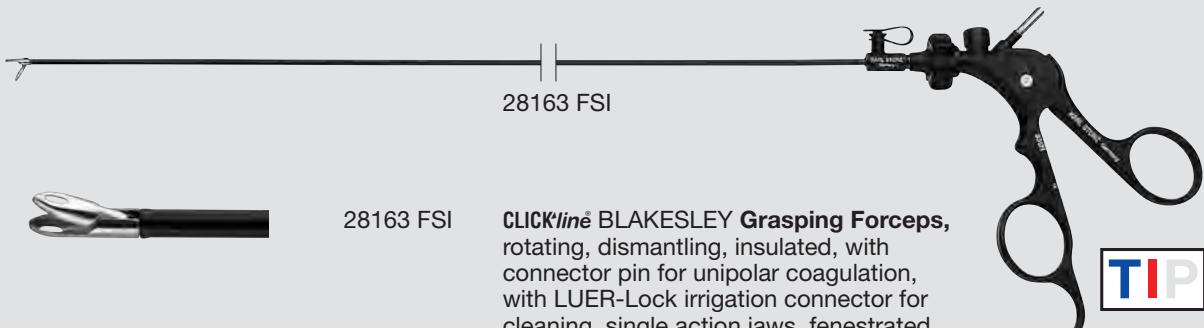
*The bipolar electrode insert is available separately under order no. 28163 FBE.

Components/Spare Parts see chapter 13

Percutaneous Lumbar Transforaminal, **NEW** Interlaminar and Posterolateral Endoscopy System

Grasping Forceps

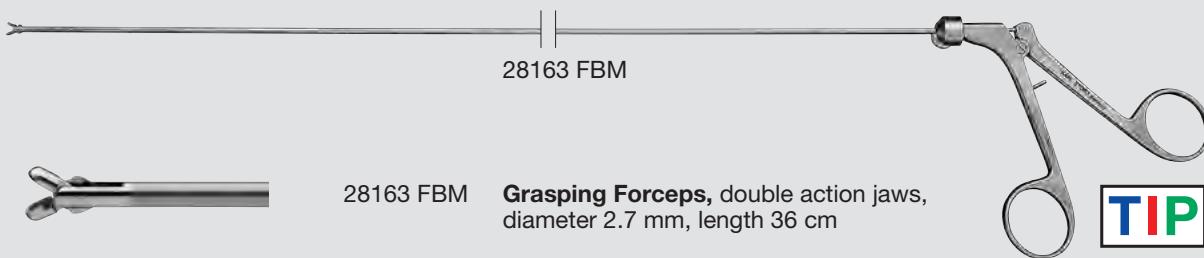
STORZ
KARL STORZ — ENDOSKOPE



28163 FSI

CLICKline® BLAKESLEY Grasping Forceps,
rotating, dismantling, insulated, with
connector pin for unipolar coagulation,
with LUER-Lock irrigation connector for
cleaning, single action jaws, fenestrated,
size 3 mm, length 36 cm
including:
Plastic Handle, without ratchet
Outer Sheath, with forceps insert

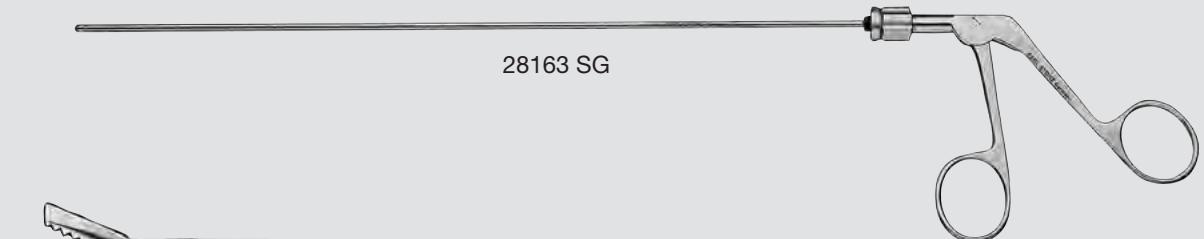
TIP



28163 FBM

Grasping Forceps, double action jaws,
diameter 2.7 mm, length 36 cm

TIP



28163 SL

TAKE-APART® Grasping Forceps,
serrated, diameter 2.3 mm,
working length 30 cm
including:

Handle
Working Attachment

TIP



28163 SG

TAKE-APART® Spoon Forceps, oval,
diameter 2.3 mm, working length 30 cm
including:

Handle
Working Attachment

TIP



28163 SE

TAKE-APART® BLAKESLEY Forceps,
diameter 2.3 mm, working length 30 cm
including:

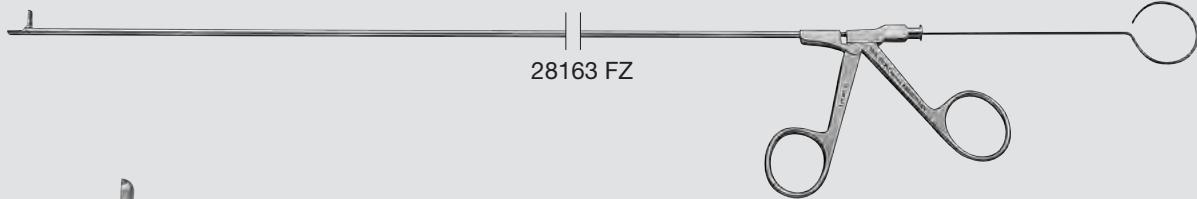
Handle
Working Attachment

TIP

Components/Spare Parts see chapter 13

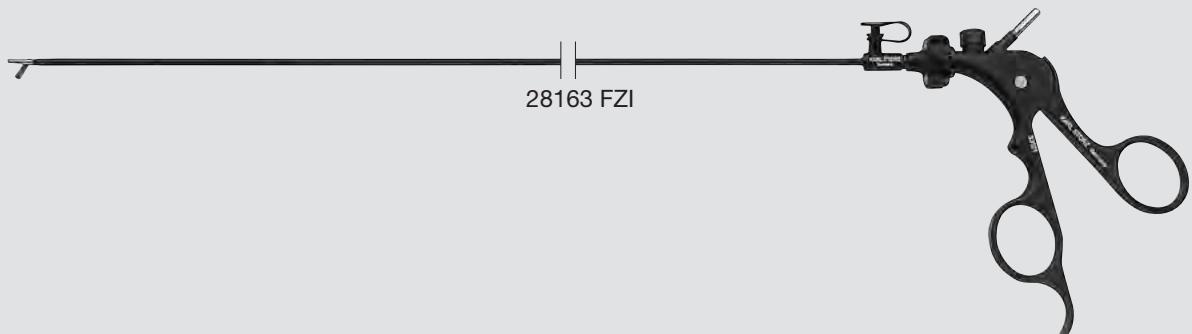
Percutaneous Lumbar Transforaminal, *NEW* Interlaminar and Posterolateral Endoscopy System

Grasping Forceps, Raven's Beak Forceps and Angled Instruments



28163 FZ

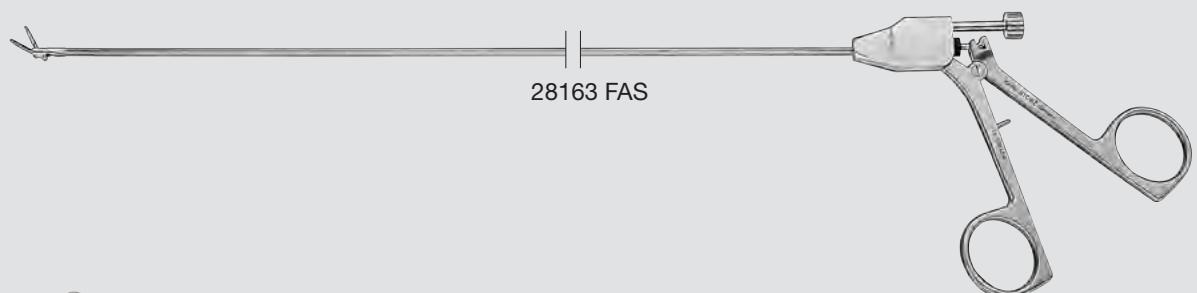
Grasping Forceps, single action jaws,
with 90° angle of view, diameter 3.5 mm,
working length 36 cm



28163 FZI

CLICK'line® Raven's Beak Forceps,
rotating, dismantling, insulated, with
connector pin for unipolar coagulation,
with LUER-Lock irrigation connector
for cleaning, single action jaws,
diameter 3.5 mm, working length 36 cm
including:

Plastic Handle, without ratchet
Forceps Insert, with raven's beak



28163 FAS

Grasping Forceps, bendable, single action
jaws, diameter 3.5 mm, working length 36 cm

28163 FAP

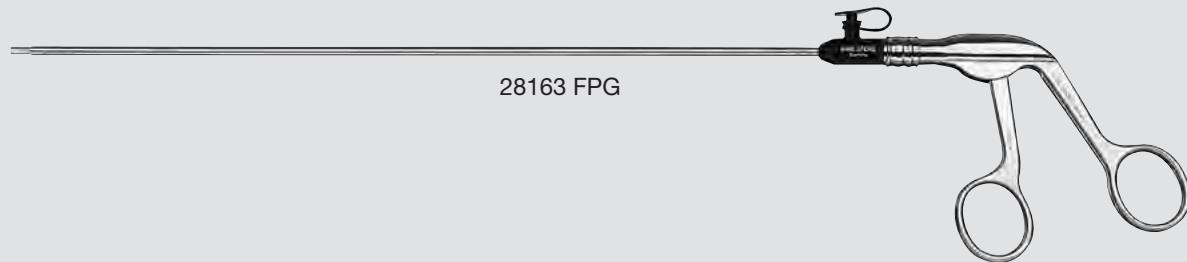
Punch, bendable, single action jaws,
diameter 3.5 mm, working length 36 cm



Components/Spare Parts see chapter 13

Percutaneous Lumbar Transforaminal, **NEW** Interlaminar and Posterolateral Endoscopy System

Sidebiting Punches, Trepines and Retractable Knife



28163 FPG



28163 FPW

SpinoFIT® Punch, dismantling, 45° downbiting,
not through-cutting, working length 30 cm
including:

Punch Insert
Outer Sheath
Handle



28163 FPG

SpinoFIT® Punch, dismantling, 90° downbiting,
not through-cutting, working length 30 cm
including:

Punch Insert
Outer Sheath
Handle



28163 FTM



28163 FTM

Trephine, with pyramidal handle, inner
diameter 1.6 mm, outer diameter 2.7 mm,
working length 30 cm



28163 FTK



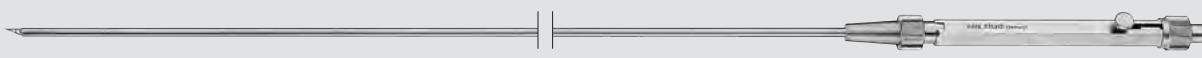
28163 FTK

Trephine, with round handle, inner
diameter 3.2 mm, outer diameter 4.2 mm,
working length 22 cm



28163 FTG

Trephine, with round handle, inner
diameter 7 mm, outer diameter 8 mm,
working length 17.5 cm



28163 FM



28163 FM

Knife, retractable, diameter 3.5 mm,
working length 36 cm



Components/Spare Parts see chapter 13

Endoscopic Discectomy, Decompression of the Spinal Canal

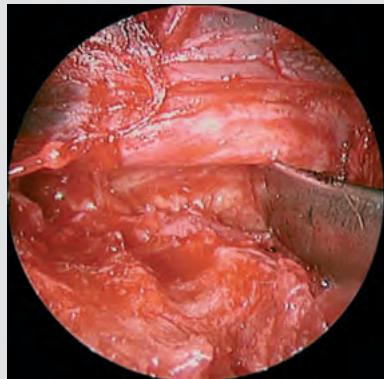


Endoscopic discectomy and decompression of the lumbar canal with the ENDOSPIRE® offers the following advantages:

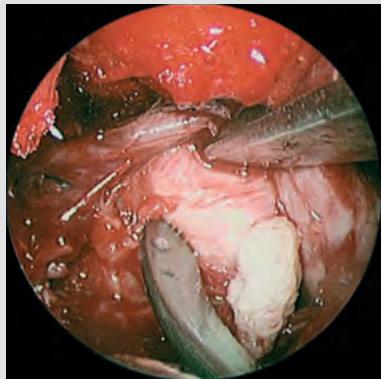
- A mobile trocar allowing image-guided targeting of bilateral and around-the-corner lumbar-thoracic anatomy
- A powerful surgical multifunction device: 5 instruments in two working hands
- Continuous visual monitoring of the working instruments and a simultaneous close view of the anatomical details
- An outstanding image quality 4 mm HOPKINS® rod lens system – “a microscope that is always at your fingertips”
Scope of use: medial, lateral and foraminal herniations – lumbar canal decompression

J. DESTANDAU, M. D.,
Bordeaux, France

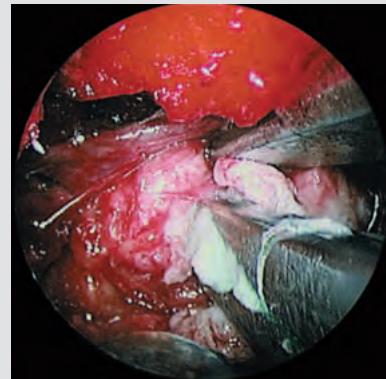
Surgical technique:



Dissection of the nerve root

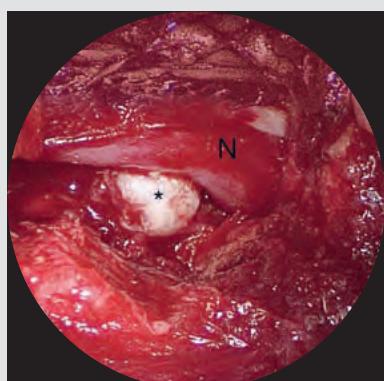


By applying pressure with the raspatorium the prolapsed hernia is eased out...

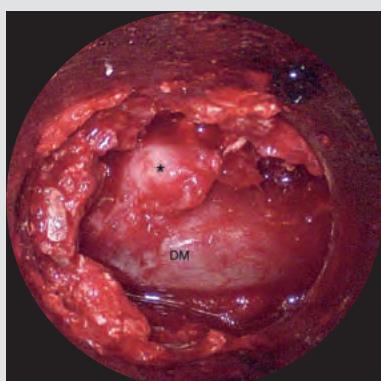


...and removed with the rongeur.

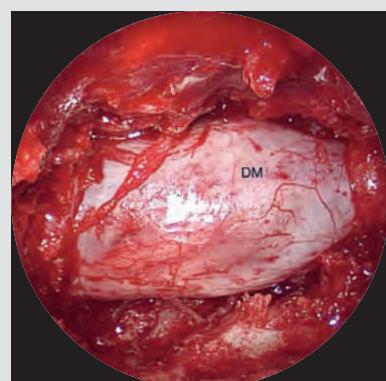
Further indications for surgery using the ENDOSPIRE® system:



Compression of left S1 nerve root (N) due to extruded lumbar disc herniation (*)



Compression of the thecal sac (DM) and the underlying right L5 nerve root due to a synovial cyst (*) that developed in the facet joint



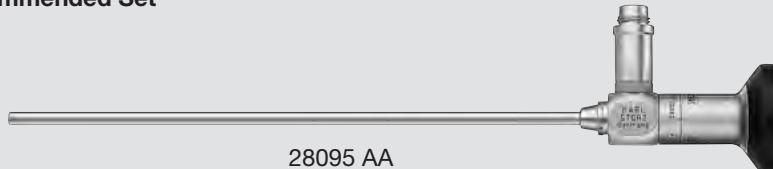
Thecal sac with excellent extension following bilateral decompression via a unilateral approach

Endoscopic Discectomy, Decompression of the Spinal Canal

HOPKINS® II Telescope, ENDOSPINE® Operating Tube and Working Insert



DESTANDAU Recommended Set



28095 AA

28095 AA

HOPKINS® II Straight Forward Telescope 0°, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green

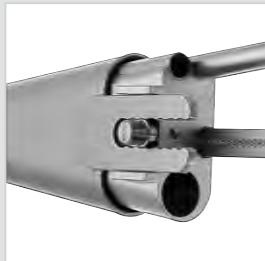


28163 DO

28163 DW

28163 DW

DESTANDAU ENDOSPINE® Operating Tube, oval, with Obturator 28163 DO, for use with Working Insert 28163 DXH

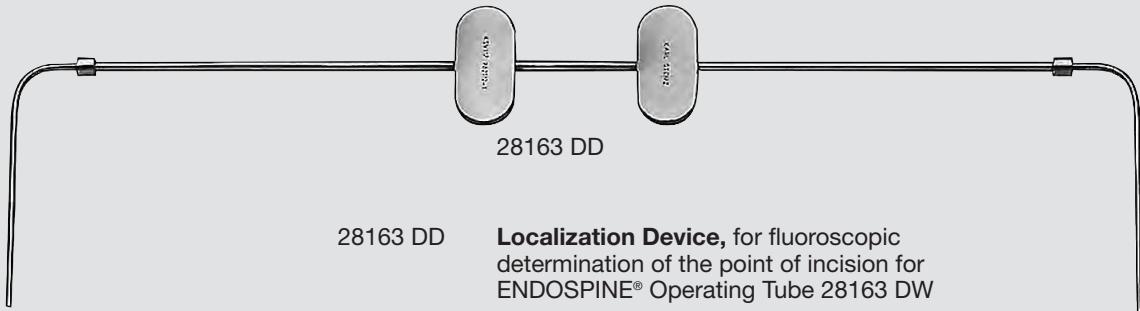


28163 DPH

28163 DXH

28163 DXH

DESTANDAU ENDOSPINE® Working Insert, with positioning detent, with adjustable Nerve Protector 28163 DPH, for use with ENDOSPINE® Operating Tube 28163 DW, with working channel diameter 8 mm, with irrigation channel for use with HOPKINS® II Telescope 28095 AA



28163 DD

Localization Device, for fluoroscopic determination of the point of incision for ENDOSPINE® Operating Tube 28163 DW

Endoscopic Discectomy, Decompression of the Spinal Canal



ENDOSPINE® DUO, alternative for smaller skin incisions, for experienced users



28163 DWS DESTANDAU **ENDOSPINE® Operating Tube**, short, oval, with ENDOSPINE® Obturator 28163 DOS and ENDOSPINE® Tube Attachment 28163 DVS, for use with ENDOSPINE® Working Insert 28163 DXS

28163 DVS DESTANDAU **ENDOSPINE® Tube Attachment**, oval, for use with ENDOSPINE® Operating Tube 28163 DWS

28163 DOS **ENDOSPINE® Obturator**, blunt, for use with short ENDOSPINE® Operating Tube 28163 DWS and ENDOSPINE® Tube Attachment 28163 DVS



28163 DXS DESTANDAU **ENDOSPINE® Working Insert**, short version, with positioning detent, for use with ENDOSPINE® Operating Tube 28163 DWS, with working channel diameter 8 mm and irrigation channel, for use with HOPKINS® II Telescope 28095 AA, with adjustable ENDOSPINE® Nerve Protector 28163 DPS

28163 DPS **ENDOSPINE® Nerve Protector**, adjustable, width 5.5 mm, length 112 mm, for use with ENDOSPINE® Working Insert 28163 DXS



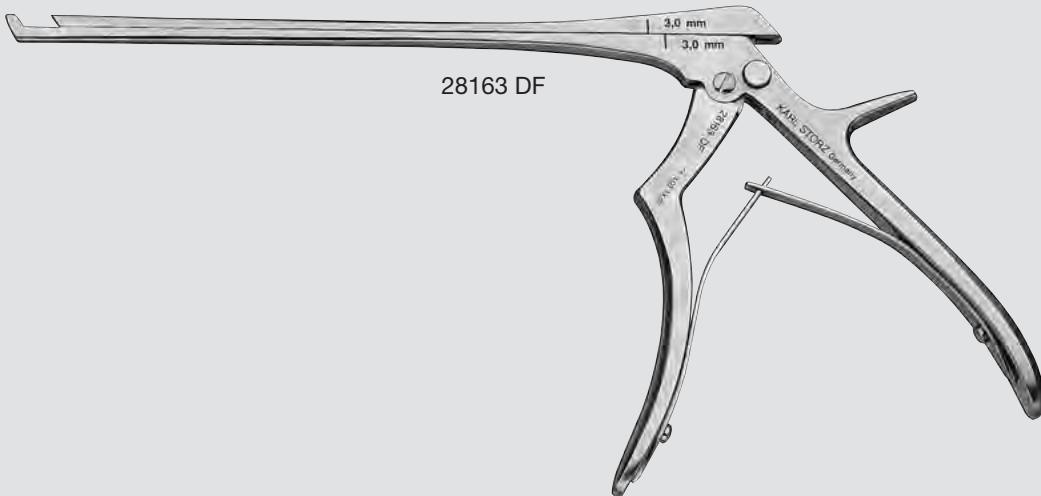
28163 DRG **ENDOSPINE® Retractor Blade**, conical, length 5 cm, for use with ENDOSPINE® Operating Tube 28163 DW and 28163 DWS

Endoscopic Discectomy, Decompression of the Spinal Canal

Bone Punches, Trepine and Spoon Forceps



DESTANDAU Recommended Set



28163 DL

Bone Punch, dismantling, 90° upbiting,
not through-cutting, 3 mm, working length 18 cm



28163 DF

Bone Punch, dismantling, upbiting 45° forward,
not through-cutting, 3 mm, working length 18 cm



28163 TK



28163 TK

Trepine, with round handle, diameter 3 mm,
working length 22 cm



28163 DC



28163 DC

Spoon Forceps, dismantling,
robust, oval, single action
jaws, spoon size 3 x 10 mm,
working length 15 cm

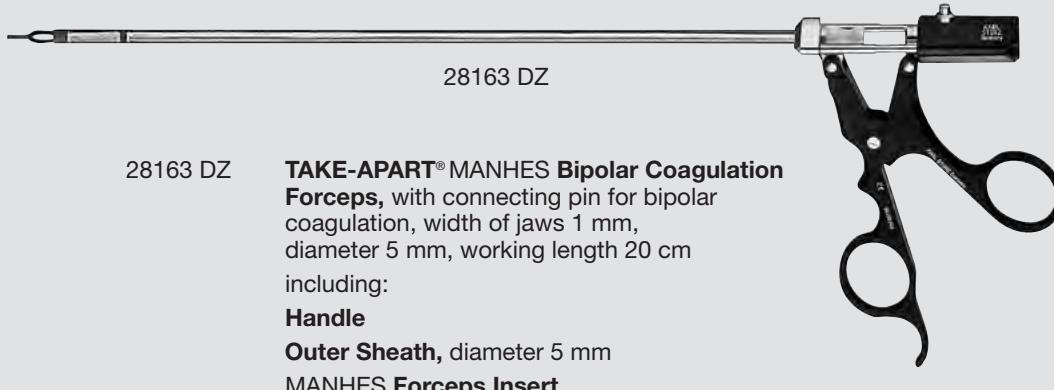


Endoscopic Discectomy, Decompression of the Spinal Canal

Bipolar Forceps, Chisel, Elevator, Hook and Suction Tube

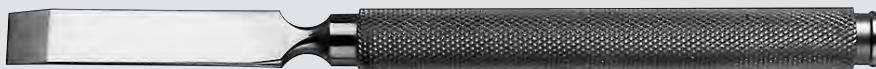


DESTANDAU Recommended Set



28163 DZ

28163 DZ **TAKE-APART® MANHES Bipolar Coagulation Forceps**, with connecting pin for bipolar coagulation, width of jaws 1 mm, diameter 5 mm, working length 20 cm
including:
Handle
Outer Sheath, diameter 5 mm
MANHES Forceps Insert



28163 DG

28163 DG **Chisel**, flat, straight, with handle, distal width 15 mm, working length 9 cm



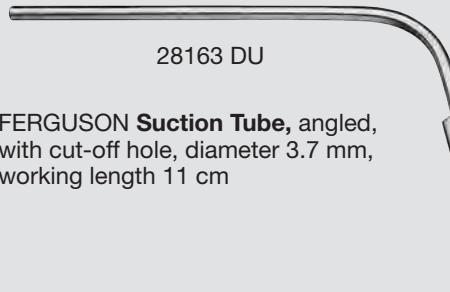
28163 DNN

28163 DNN **Elevator**, spatula slightly curved, distal width 5 mm, working length 13 cm



28163 DHN

28163 DHN **Palpation Hook**, blunt, hook angled 90°, hook length 5.5 mm, working length 13 cm



28163 DU

28163 DU **FERGUSON Suction Tube**, angled, with cut-off hole, diameter 3.7 mm, working length 11 cm

Endoscopic Discectomy, Decompression of the Spinal Canal

STORZ
KARL STORZ — ENDOSKOPE

We developed a new universal system for minimally-invasive lumbar and dorsal cervical disc and spinal surgery. The EasyGO!® system combines all the advantages of microsurgery and spinal endoscopy. As micro-surgical techniques are already firmly established in neurosurgical spinal surgery, most surgeons require only brief training in order to perform endoscopic lumbar disc surgery with EasyGO!®. The use of a dilator system in conjunction with various trocars (15, 19 and 23 mm) affords the main advantage of minimal incisions and muscle trauma. Lumbar disc procedures can be performed with EasyGO!® using small trocars via a skin incision of 1 cm. When larger trocars are used, all decompression procedures can be performed with minimal damage to the spinal structures. With adjustable height and rotatable by 360° in the trocar, the 30°

HOPKINS® wide angle telescope delivers excellent image quality. This allows for visualization and intervention at the far lateral and to the opposite side of the spine (i.e. resection of the lateral recess in the foramen along the nerve roots as well as bilateral decompression of the spinal canal via a unilateral approach). The application of pedicle screws is also possible.

*Prof. Dr. med. habil. Michael R. GAAB,
Neurosurgical Clinic,
KRH-Klinikum NORDSTADT, Hanover,
Germany*

*Prof. Dr. med. Joachim OERTEL,
Neurosurgical Clinic,
Universitätsklinikum des Saarlandes, Homburg/Saar,
Germany*



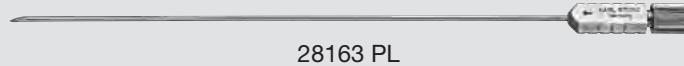
6-12

Endoscopic Discectomy, Decompression of the Spinal Canal

Puncture Needle, Guide Wire and Dilation Sleeves



GAAB/OERTEL Recommended Set



- 28163 PL **Puncture Needle**, including stylet, diameter 1.7 mm, working length 18 cm, with 1.4 mm opening for guide wire

28163 KD

- 28163 KD **Guide Wire**, unsterile, diameter 1.2 mm, length 31 cm, package of 10



28163 CPS

- 28163 CNS **Dilation Sleeve**, graduated, inner diameter 1.5 mm, outer diameter 5.2 mm, length 23 cm, color code: white

- 28163 COS **Dilation Sleeve**, graduated, inner diameter 5.3 mm, outer diameter 8.9 mm, length 21 cm, color code: yellow

- 28163 CPS **Dilation Sleeve**, graduated, inner diameter 9 mm, outer diameter 12.7 mm, length 19 cm, color code: orange

- 28163 CQS **Dilation Sleeve**, graduated, inner diameter 12.9 mm, outer diameter 14.9 mm, length 17 cm, color code: red

- 28163 CRS **Dilation Sleeve**, graduated, inner diameter 15.1 mm, outer diameter 16.9 mm, length 15 cm, color code: green

- 28163 CSS **Dilation Sleeve**, graduated, inner diameter 17.1 mm, outer diameter 18.9 mm, length 14 cm, color code: blue

- 28163 CTS **Dilation Sleeve**, graduated, inner diameter 19 mm, outer diameter 20.9 mm, length 13 cm, color code: black

Endoscopic Discectomy, Decompression of the Spinal Canal

EasyGO!® Trocars, EasyGO!® Attachments and EasyGO!® Telescope Sheaths



GAAB/OERTEL Recommended Set



28163 GKL

28163 GLS

Diameter 15 mm

NEW 28163 GTA **EasyGO!® Trocar**, diameter 15 mm, working length 40 mm, for use with EasyGO!® Attachment 28163 GML, EasyGO!® Telescope Sheath 28163 GKS and HOPKINS® Telescope 30° 28095 BAK, color code: orange

NEW 28163 GTM **EasyGO!® Trocar**, diameter 15 mm, working length 70 mm, for use with EasyGO!® Attachment 28163 GAM and HOPKINS® Telescope 30° 28095 BAK or EasyGO!® Attachment 28163 GML, EasyGO!® Telescope Sheath 28163 GLS and HOPKINS® Telescope 30° 28095 BAL, color code: orange

NEW 28163 GAM **EasyGO!® Attachment**, diameter 15 mm, for use with EasyGO!® Trocar 28163 GTM

NEW 28163 GML **EasyGO!® Attachment**, movable inside the trocar, diameter 15 mm, for use with EasyGO!® Trocars 28163 GTM/GTA

NEW 28163 GKS **EasyGO!® Telescope Sheath**, movable, for use with HOPKINS® Telescope 30° 28095 BAK

28163 GLS **EasyGO!® Telescope Sheath**, for use with HOPKINS® Telescope 30° 28095 BAL

Diameter 19 mm

NEW 28163 GTB **EasyGO!® Trocar**, diameter 19 mm, working length 40 mm, for use with EasyGO!® Attachment 28163 GKL, EasyGO!® Telescope Sheath 28163 GKS and HOPKINS® Telescope 30° 28095 BAK, color code: green

28163 GTK **EasyGO!® Trocar**, diameter 19 mm, working length 74 mm, for use with EasyGO!® Attachment 28163 GAK and HOPKINS® Telescope 30° 28095 BAK or EasyGO!® Attachment 28163 GKL, EasyGO!® Telescope Sheath 28163 GLS and HOPKINS® Telescope 30° 28095 BAL, color code: green

NEW 28163 GTY **EasyGO!® Trocar**, diameter 19 mm, working length 97 mm, for use with EasyGO!® Attachment 28163 GAK and HOPKINS® Telescope 30° 28095 BAL, color code: green

28163 GAK **EasyGO!® Attachment**, diameter 19 mm, for use with EasyGO!® Trocars 28163 GTK/GTY

28163 GKL **EasyGO!® Attachment**, movable inside the trocar, diameter 19 mm, for use with EasyGO!® Trocars 28163 GTK/GTB

Diameter 23 mm

NEW 28163 GTC **EasyGO!® Trocar**, diameter 23 mm, working length 40 mm, for use with EasyGO!® Attachment 28163 GGL, EasyGO!® Telescope Sheath 28163 GKS and HOPKINS® Telescope 30° 28095 BAK, color code: black

28163 GTG **EasyGO!® Trocar**, diameter 23 mm, working length 76 mm, for use with EasyGO!® Attachment 28163 GAG and HOPKINS® Telescope 30° 28095 BAK or EasyGO!® Attachment 28163 GGL, EasyGO!® Telescope Sheath 28163 GLS and HOPKINS® Telescope 30° 28095 BAL, color code: black

NEW 28163 GTZ **EasyGO!® Trocar**, diameter 23 mm, working length 99 mm, for use with EasyGO!® Attachment 28163 GAG and HOPKINS® Telescope 30° 28095 BAL, color code: black

28163 GAG **EasyGO!® Attachment**, diameter 23 mm, for use with EasyGO!® Trocars 28163 GTG/GTZ

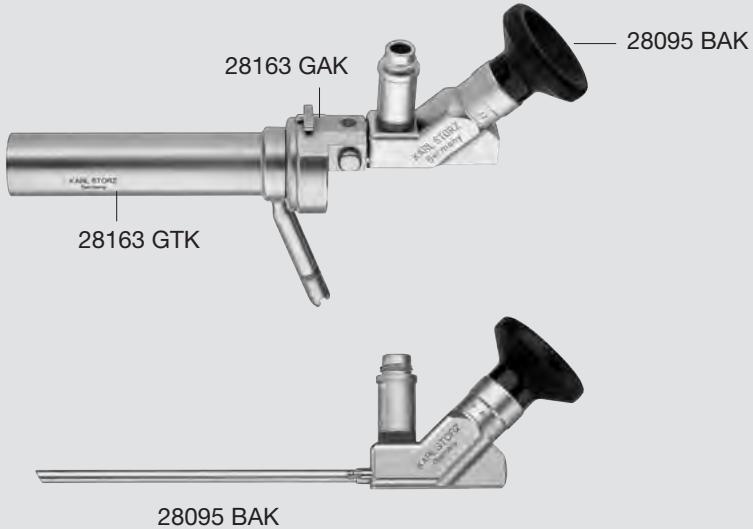
28163 GGL **EasyGO!® Attachment**, movable inside the trocar, diameter 23 mm, for use with EasyGO!® Trocars 28163 GTG/GTC

Endoscopic Discectomy, Decompression of the Spinal Canal

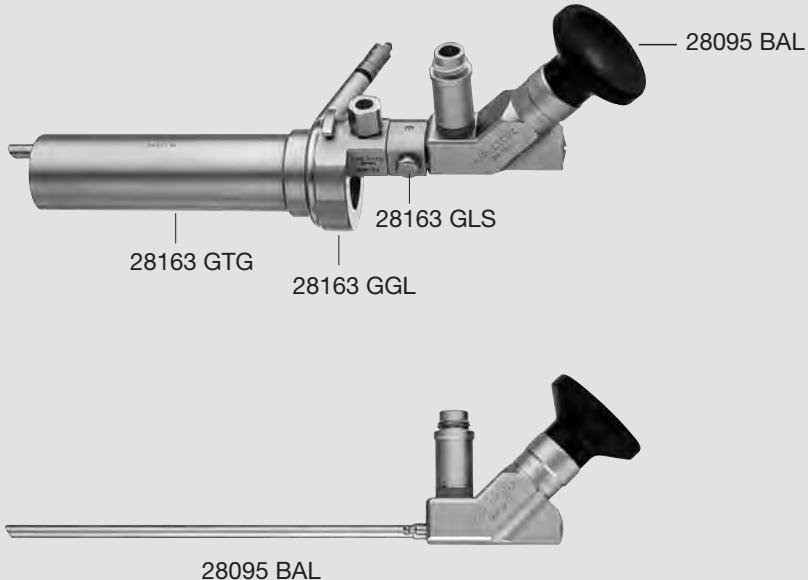
Forward-Oblique Telescopes



GAAB/OERTEL Recommended Set



- 28095 BAK **HOPKINS® Forward-Oblique Telescope 30°**, eyepiece angled 45°, diameter 4 mm, length 9.5 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red



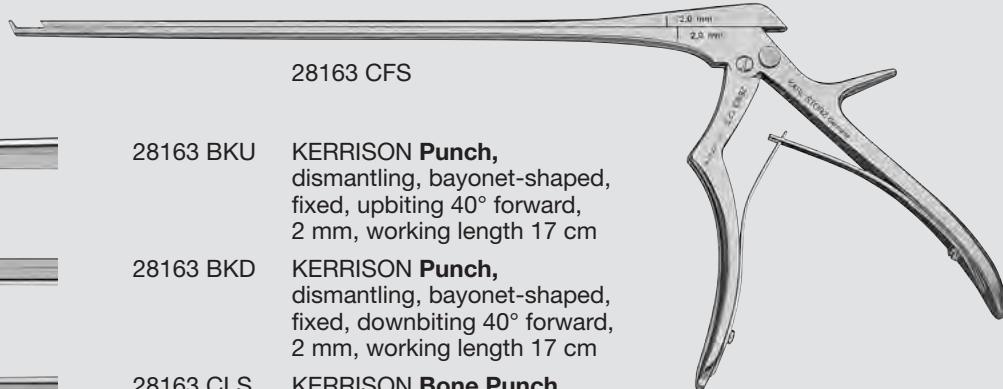
- 28095 BAL **HOPKINS® Forward-Oblique Telescope 30°**, eyepiece angled 45°, diameter 4 mm, length 12 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

Endoscopic Discectomy, Decompression of the Spinal Canal

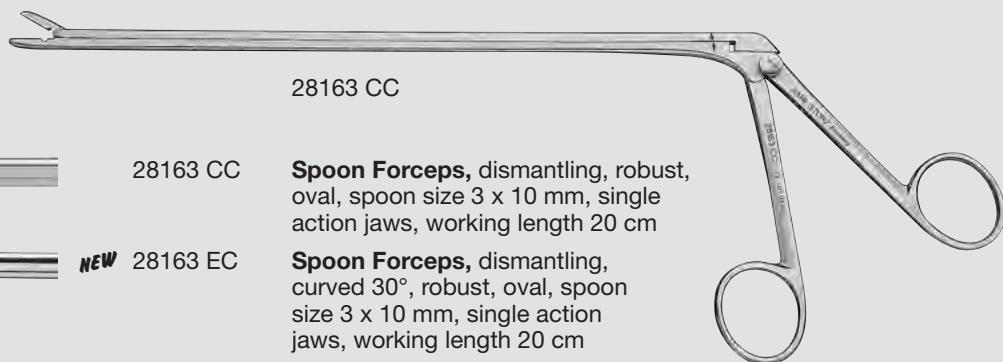
Punches and Grasping Forceps



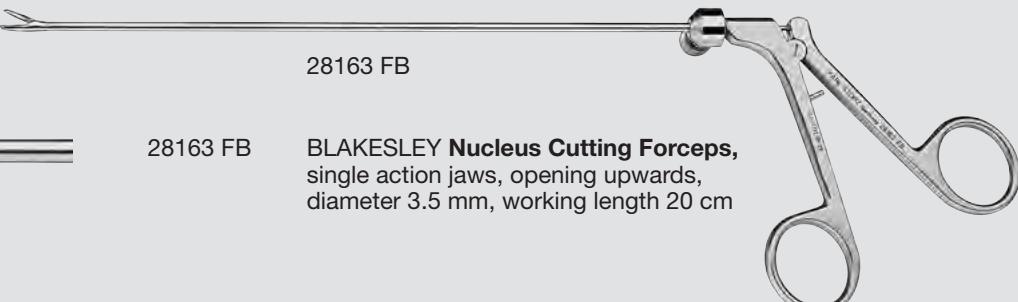
GAAB/OERTEL Recommended Set



- | | |
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|       | <p>28163 CFS</p> <p>28163 BKU KERRISON Punch, dismantling, bayonet-shaped, fixed, upbiting 40° forward, 2 mm, working length 17 cm</p> <p>28163 BKD KERRISON Punch, dismantling, bayonet-shaped, fixed, downbiting 40° forward, 2 mm, working length 17 cm</p> <p>28163 CLS KERRISON Bone Punch, dismantling, 90° upbiting, not through-cutting, 2 mm, working length 24 cm</p> <p>28163 CLB KERRISON Bone Punch, dismantling, 90° upbiting, not through-cutting, 4 mm, working length 24 cm</p> <p>28163 CFS KERRISON Bone Punch, dismantling, 40° upbiting, not through-cutting, 2 mm, working length 24 cm</p> <p>28163 CFB KERRISON Bone Punch, dismantling, 40° upbiting, not through-cutting, 4 mm, working length 24 cm</p> |
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|   | <p>28163 CC</p> <p>28163 CC Spoon Forceps, dismantling, robust, oval, spoon size 3 x 10 mm, single action jaws, working length 20 cm</p> <p>28163 EC Spoon Forceps, dismantling, curved 30°, robust, oval, spoon size 3 x 10 mm, single action jaws, working length 20 cm</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



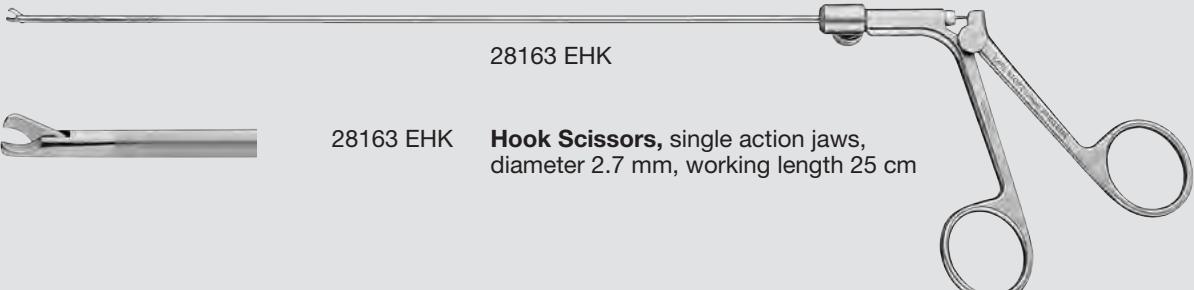
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|  | <p>28163 FB</p> <p>28163 FB BLAKESLEY Nucleus Cutting Forceps, single action jaws, opening upwards, diameter 3.5 mm, working length 20 cm</p> |
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Endoscopic Discectomy, Decompression of the Spinal Canal

Hook Scissors, Surgical Handle, Suction Tubes and Nasal Forceps



GAAB/OERTEL Recommended Set



28163 EHK

28163 EHK

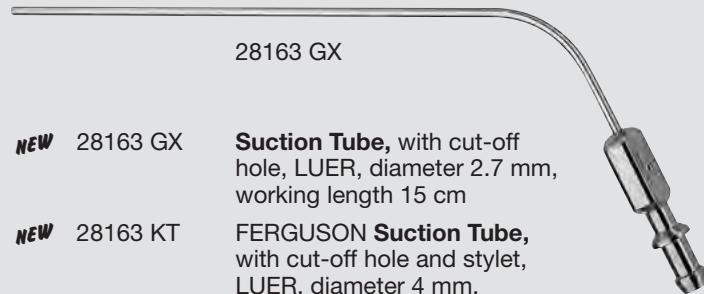
Hook Scissors, single action jaws,
diameter 2.7 mm, working length 25 cm



28163 GBM

NEW 28163 GBM

Surgical Handle, bayonet-shaped,
working length 15 cm, for Blades
208010-15 and 208210-15



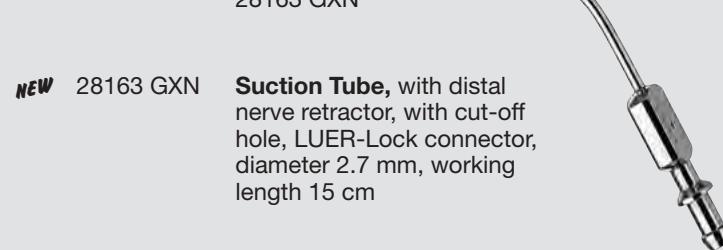
28163 GX

NEW 28163 GX

Suction Tube, with cut-off
hole, LUER, diameter 2.7 mm,
working length 15 cm

NEW 28163 KT

FERGUSON Suction Tube,
with cut-off hole and stylet,
LUER, diameter 4 mm,
working length 15 cm



28163 GXN

NEW 28163 GXN

Suction Tube, with distal
nerve retractor, with cut-off
hole, LUER-Lock connector,
diameter 2.7 mm, working
length 15 cm



426620

426620

GRÜNWALD Nasal Dressing Forceps,
bayonet-shaped, length 20 cm

Endoscopic Discectomy, ^{NEW} Decompression of the Spinal Canal

Palpation Hooks and Dissectors



GAAB/OERTEL Recommended Set



28163 GAH **Palpation Hook**, straight, distally 10 mm long and angled 90°, with ball end, with round handle, working length 20 cm



28163 GBH **Palpation Hook**, bayonet-shaped, distally angled 90°, with ball end, with round handle, working length 20 cm



28164 DS **Dissector**, sharp, tip angled 15°, with round handle, size 2 mm, length 25 cm



28164 MDB **MORTINI Dissector**, “dead hand”, bayonet-shaped, sharp, 3 mm, curved upwards, with round handle, working length 16 cm

Endoscopic Discectomy, Decompression of the Spinal Canal

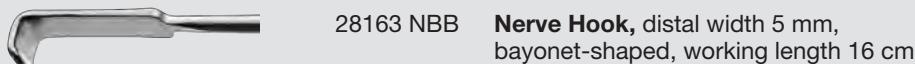
Nerve Hooks, Nerve Retractors and Curette



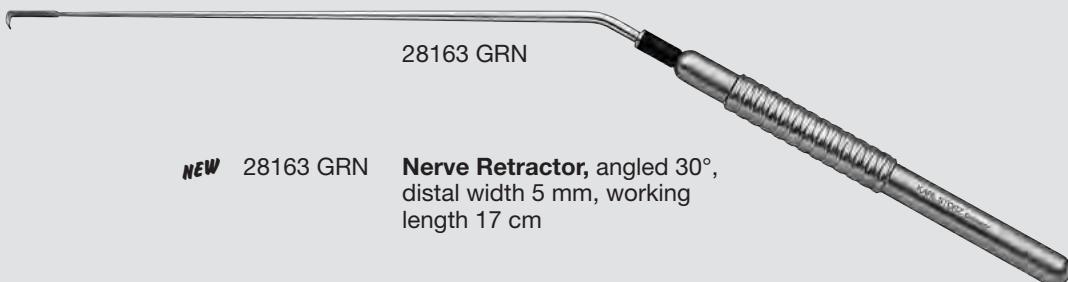
GAAB/OERTEL Recommended Set



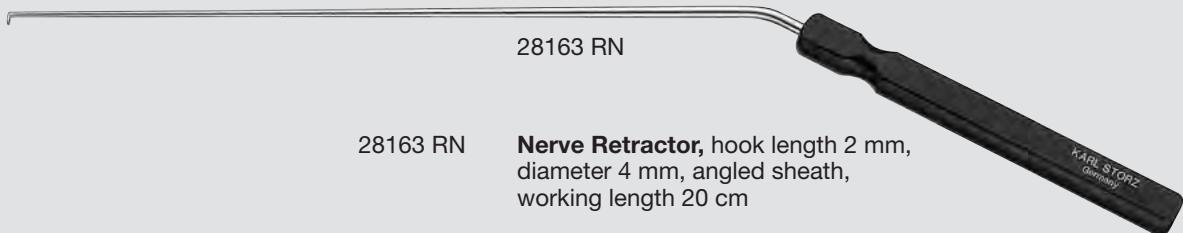
28163 NSB **Nerve Hook**, distal width 3 mm,
bayonet-shaped, working length 16 cm



28163 NBB **Nerve Hook**, distal width 5 mm,
bayonet-shaped, working length 16 cm



NEW 28163 GRN **Nerve Retractor**, angled 30°,
distal width 5 mm, working
length 17 cm



28163 RN **Nerve Retractor**, hook length 2 mm,
diameter 4 mm, angled sheath,
working length 20 cm



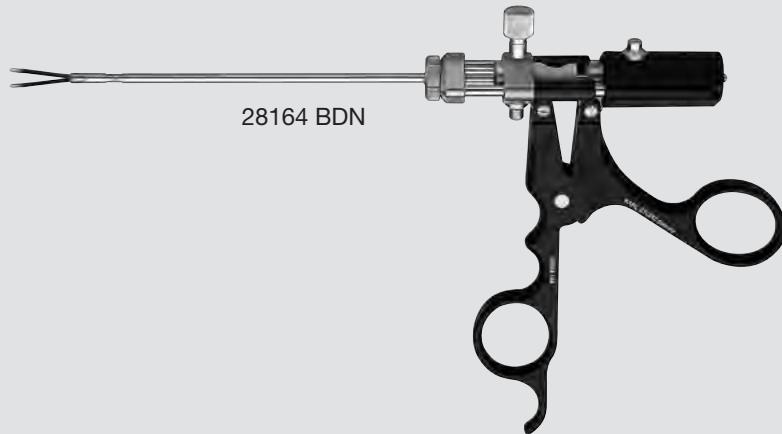
28163 CKG **Curette**, small, spoon size (l x w): 2.7 x 4 mm,
bayonet-shaped, distally angled 45°,
working length 20 cm

Endoscopic Discectomy, Decompression of the Spinal Canal

TAKE-APART® Bipolar Forceps and Bipolar Coagulation Forceps



GAAB/OERTEL Recommended Set



28164 BDN

TAKE-APART® Bipolar Forceps, rounded tip,
width 2 mm, outer diameter 3.4 mm,
working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



28163 BPS

Bipolar Coagulation Forceps, insulated,
bayonet-shaped, tip 0.7 mm, length 23 cm, for
use with Bipolar High Frequency Cord 847000 E
or 847000 A/M/T/V



28163 BPL

Bipolar Coagulation Forceps, insulated,
bayonet-shaped, tip 1.2 mm, length 23 cm, for
use with Bipolar High Frequency Cord 847000 E
or 847000 A/M/T/V

Components/Spare Parts see chapter 13

Accessories

Bipolar High Frequency Cords,
for use with Bipolar Coagulation Forceps



Bipolar High Frequency Cords



KARL STORZ High Frequency
Instrument Surgical Unit

A single bipolar high frequency cord with a black handle and a straight probe tip.	847000 E	Bipolar High Frequency Cord , 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, length 300 cm
A bipolar high frequency cord with two banana plug connectors at the ends.	847000 A	Bipolar High Frequency Cord , with 2x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm
Two separate bipolar high frequency cords, each with a black handle and a straight probe tip.	847000 M	Bipolar High Frequency Cord , for Martin and Berchtold coagulators, length 300 cm
A bipolar high frequency cord with a black handle and a straight probe tip, featuring a different connector style.	847000 T	Bipolar High Frequency Cord , for Siemens coagulator from model Radiotom 804 upwards, for KARL STORZ bipolar coagulation forceps, length 300 cm
A bipolar high frequency cord with a black handle and a straight probe tip, featuring a different connector style.	847000 V	Bipolar High Frequency Cord , for KARL STORZ AUTOCON® II 400 SCB systems (112, 114, 116, 122, 125) and Valleylab coagulators, length 300 cm

Accessories

Bipolar High Frequency Cords,
for use with TAKE-APART® Bipolar Forceps



Bipolar High Frequency Cords



KARL STORZ High Frequency
Instrument Surgical Unit

A photograph of a bipolar high frequency cord with a single black handle and a straight probe tip.	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
A photograph of a bipolar high frequency cord with a single black handle and a straight probe tip.	26176 LM	Bipolar High Frequency Cord , for Martin and Berchtold coagulators, length 300 cm
A photograph of a bipolar high frequency cord with two black handles and two probe tips, one straight and one angled.	26176 L	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Ellman, length 300 cm
A photograph of a bipolar high frequency cord with two black handles and two probe tips, one straight and one angled.	26176 LA	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm
A photograph of a bipolar high frequency cord with a single black handle and a straight probe tip, designed for Valleylab coagulators.	26176 LV	Bipolar High Frequency Cord , for KARL STORZ AUTOCON® II 400 SCB system (112, 114, 116, 122, 125) and Valleylab coagulators, length 300 cm

Spine Retractor ^{NEW}

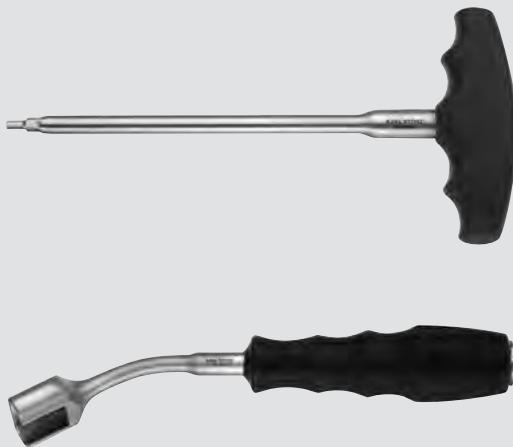
Illuminated Spine Retractor with Radiolucent Retractor Blades
in Various Lengths



The new retractor system is suitable for minimally invasive surgeries on the thoracic or lumbar spine and is used for all indications in this area.



28163 TRX



28163 TRX

TENTACLE Spine Retractor, complete, with retractor frame, 2 retractor arms, X-ray transparent blades in 3 different lengths, light carrier with corresponding tools including:

Retractor Frame

Retractor Arm

2x Drive Screw

2x Retractor Arm, extra

4x PEEK Retractor Blade, length 70 mm, width 16 mm,
color: black

4x PEEK Retractor Blade, length 50 mm, width 16 mm,
color: blue

4x PEEK Retractor Blade, length 30 mm, width 16 mm,
color: green

6x Holder, for retractor blades

Light Carrier

Holder, for light carriers

Screwdriver

Positioning Instrument, for fine adjustment of
PEEK retractor blades

Sterilization Container



495 NA

Fiber Optic Light Cable, diameter 3.5 mm, length 230 cm

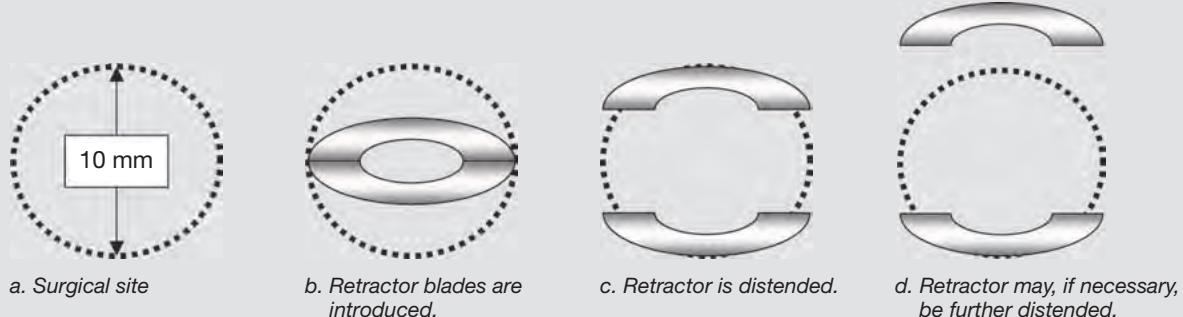
Cold-Light Retractor for Spine Surgery

Wide opening, autostatic retractor with two adjustable valves,
with built-in light delivery systems at distal ends



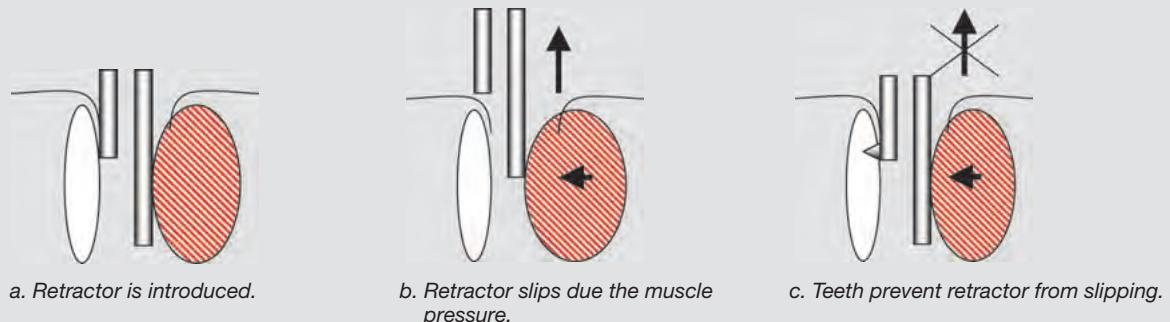
Specially designed for lumbar disc surgery, the spine retractor is based on three principles:

1. **Standard Approach (minimal to wide distension):** open tube principle. The retractor blades act like the two sides of an optimal operating tube with a diameter of 10 mm. They remain closed during insertion and, once introduced, can then be distended as required.



2. Stable Retraction

- a. Two small teeth at the distal end of the medial blade prevent the retractor from slipping.



- b. The retractor cannot move accidentally, as it is clamped in the retractor arm.**
The retractor arm can be moved as required.

3. **Optimal Lighting Conditions:** High light intensity. Fiber optic light cables are incorporated at the distal end of both retractor blades to provide an optimal view of the surgical site. The surgeon, therefore, does not need a headlight and is thus able to operate with or without an enlarged view (even if loupe/microscope is switched off).

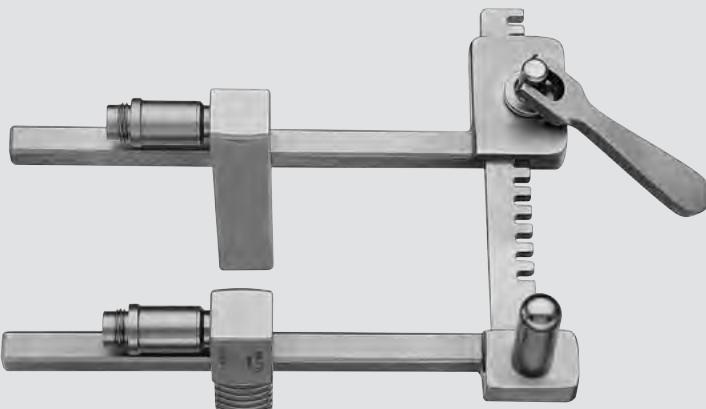
P. DECQ, M. D.
Hôpital Henri Mondor
Creteil, France

Cold-Light Retractor for Spine Surgery

Wide opening, autostatic retractor with two adjustable valves,
with built-in light delivery systems at distal ends



Spine Retractor with Cold Light for distending and retaining an opening, mainly in lumbar disc surgery



28163 R

28163 R

Spine Retractor, complete, with integrated light transmission and changeable valves including:

Retractor Blade, short, length 70 mm, with two teeth, with integrated light transmission

Retractor Blade, long, length 85 mm, with integrated light transmission

Retractor Frame, serrated, length 140 mm, width 106 mm

Retractor Arm, adjustable, length 140 mm

Turning Handle

28272 RKB

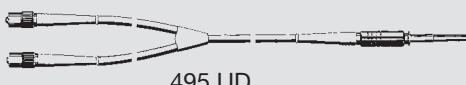
Holding System, autoclavable, with quick release coupling KSLOCK

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



495 UD

495 UD

Fiber Optic Light Cable, 2x diameter 3.5 mm, length 180 cm, for simultaneous light transmission for 2 instruments

3-983

Components/Spare Parts see chapter 13

TWINFlow Suction and Irrigation Handle ^{NEW}

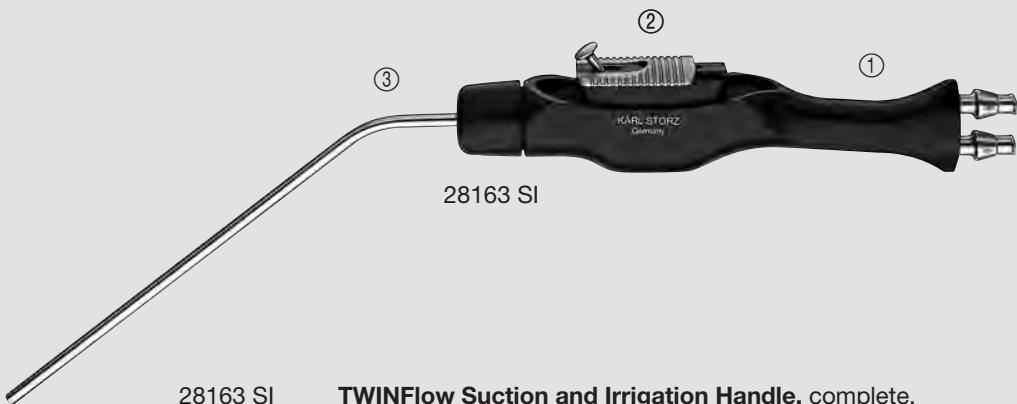
with adjustable continuous suction and continuously adjustable irrigation function if required



TWINFlow

The new suction and irrigation handle from KARL STORZ combines suction and irrigation functions in one instrument and, consequently, ensures an optimal view of the surgical field. An outstanding feature of the new system is the ergonomic handle design which prevents hand fatigue after extended use. The suction and irrigation handle allows simultaneous suction and irrigation and enables the intensity of each function to be regulated separately. The instrument is easy to use, providing

enhanced user comfort and a long service life. Fully dismantling and autoclavable, the handle is suitable for reuse. The corresponding single-use suction-irrigation handles are available in various designs and diameters. Furthermore, the handle can be used with all standard suction/irrigation pumps. The suction and irrigation handle is suitable for use in various open and endoscopic interventions in the fields of neurosurgery, skull base and spine surgery.



28163 SI

TWINFlow Suction and Irrigation Handle, complete, ergonomic design, with separate suction-irrigation unit and suction-irrigation tubes

including:

- ① **Suction and Irrigation Handle**
- ② **Suction and Irrigation Unit**, separate, with adjustable continuous suction and continuously adjustable irrigation function if required
- ③ **Cleaning Adaptor**, for assembly in sterilization trays, for use with Suction-Irrigation Unit 28163 SIU
- Set**, including loading aid with 8 O-Rings
- Cleaning Brush**, round, rigid, outer diameter 7 mm, for working channel diameter 2.5 – 5 mm, length 35 cm
- ③ 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 13 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 13 cm

Components/Spare Parts see chapter 13



PERIPHERAL NERVE SURGERY

Instruments for Endoscopic Treatment of the Carpal Tunnel Syndrome

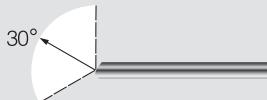
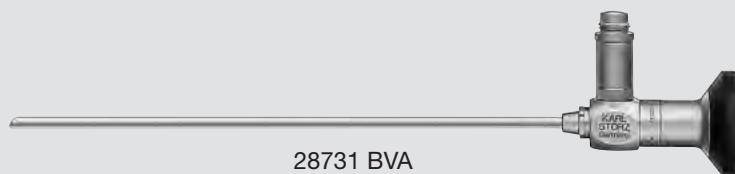
2-Portal Technique



Compared to open operating procedures, endoscopic cutting of the carpal ligament greatly reduces discomfort resulting from skin incision.

In this method, endoscope and instruments are introduced simultaneously from proximal and distal into the carpal tunnel and the carpal ligament is then severed

under optical control. The clear and detailed picture from the HOPKINS® telescope allows precise optical control of the operation. All instruments can be sterilized and reused and therefore also help to reduce instrument costs.



28731 BVA

HOPKINS® II Wide Angle Forward-Oblique Telescope 30°, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light connector in line of sight, fiber optic light transmission incorporated, color code: red

28216 BVA

HOPKINS® Forward-Oblique Telescope 30°, diameter 4 mm, length 11 cm, **autoclavable**, fiber optic light connector in line of sight, fiber optic light transmission incorporated, color code: red

Instruments for Endoscopic Treatment of the Carpal Tunnel Syndrome

2-Portal Technique – Long and Short Version



28147 C



28147 CO

28147 C **GILBERT Operating Sheath**, continuously slotted, diameter 5.5 mm, working length 9 cm, for use with Obturator 28147 CO, HOPKINS® Telescopes 28731 BVA, 28216 BVA and Telescope Sheaths 28147 CL/CK

28147 CO **Obturator**, blunt, with attached segment, for use with Operating Sheath 28147 C



28147 E



28147 E **GILBERT Rasp**, for preparation of the carpal ligament

Instruments for Endoscopic Treatment of the Carpal Tunnel Syndrome

2-Portal Technique



28147 SA – SD

28147 S

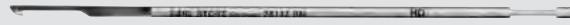
Dilator Set

including:

- Dilator**, diameter 4 mm
- Dilator**, diameter 5 mm
- Dilator**, diameter 6 mm
- Dilator**, diameter 7 mm



28147 R



28147 RM



28147 R

Knife, retractable, backward cutting,
with exchangeable knife attachment,
diameter 3.5 mm, working length 9 cm



28147 RM

Knife Attachment, backward cutting,
for use with 28147 R

Components/Spare Parts see chapter 13

Endoscopic Treatment of the Sulcus Ulnaris Syndrome

Cubital Tunnel Syndrome



Apart from the carpal tunnel syndrome, the cubital tunnel syndrome (sulcus ulnaris syndrome) is the second most frequent peripheral nerve compression syndrome.

Standard surgical techniques require a skin incision of between 8 – 12 cm and, in many cases, are projected on the nerve in an unphysiological manner.

The endoscopic technique, however, only requires a skin incision of 1.5 – 2 cm and a longer neurolysis path (15 – 20 cm). This allows the transection of all fibrous arcades between the heads of the flexor carpi ulnaris muscle and thus provides better nerve decompression compared to previous methods.

With the endoscopic technique, a subcutane pocket is formed using a dressing and sponge holding forceps as a tunnel forceps where first an illuminating speculum is inserted and then a 4 mm endoscope with a dissector at its tip. Dissection is then performed under visual control.

The benefits of endoscopic surgery over previous methods are as follows:

- **Lower morbidity (> 90 % of patients can move their elbow freely within 24 hours)**
- **Rapid pathological improvement (> 95 % of patients within 24 hours)**
- **More rapid recovery**

Our experience shows that this technique has been successful in over 100 interventions, is safe and easy to learn and provides an excellent alternative to conventional open procedures.

The instrument set has also proved particularly valuable in endoscopic and minimally invasive surgery for radiohumeral and medial humeral epicondylitis, radial compression of the forearm (Wartenberg's syndrome) and the pronator syndrome.

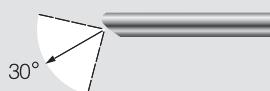
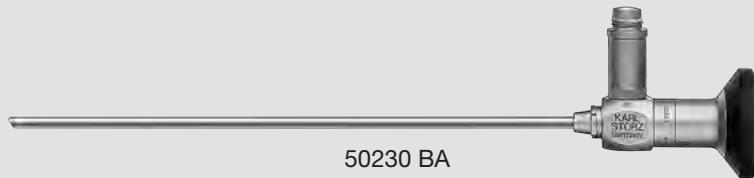
*R. HOFFMANN, M.D.,
Oldenburg, Germany*

Endoscopic Treatment of the Sulcus Ulnaris Syndrome

Cubital Tunnel Syndrome

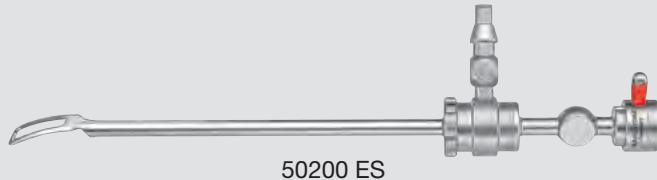


Set recommended by HOFFMANN, M.D.



50230 BA

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



50200 ES

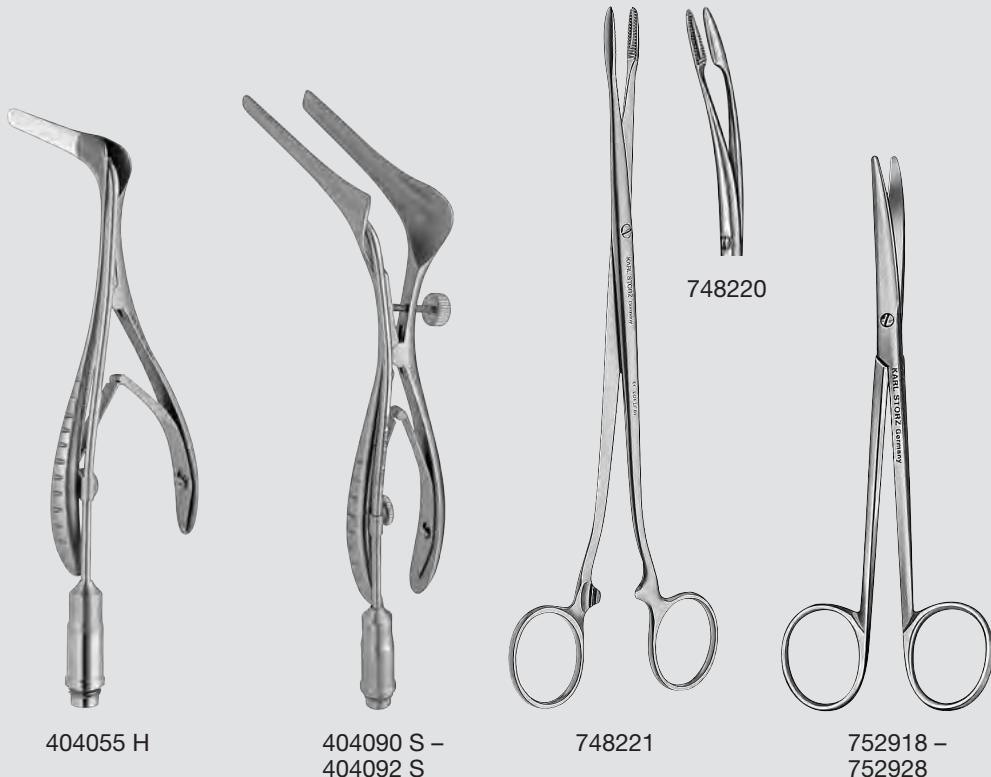
Optical Dissector, with distal spatula,
fenestrated, large, sharp, for use with
HOPKINS® II telescopes 30°

Endoscopic Treatment of the Sulcus Ulnaris Syndrome

Cubital Tunnel Syndrome

STORZ
KARL STORZ — ENDOSKOPE

Set recommended by HOFFMANN, M.D.



NEW 404055 H COTTE Speculum, with fiber optic light carrier, without set screw, special matt finish, blade length 55 mm, length 13 cm

404090 S Speculum, with fiber optic light carrier, with set screw, blade length 90 mm, length 13.5 cm

404092 S Same, blade length 110 mm

748220 DUPLAY Dressing and Sponge Holding Forceps, curved, with ratchet, length 21 cm

748221 Same, straight

752918 METZENBAUM Scissors, curved, length 18 cm

752923 Same, length 23 cm

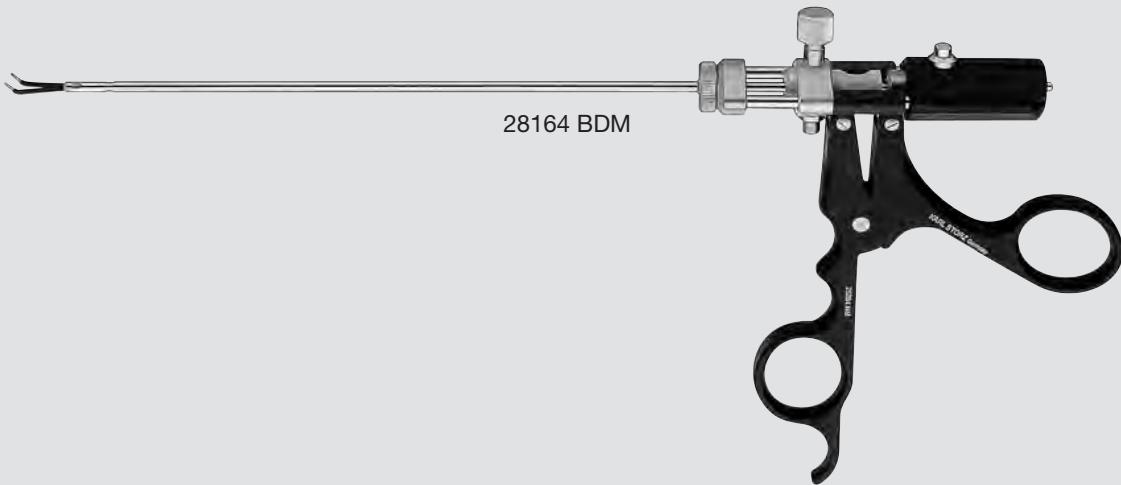
752928 Same, length 28 cm

Endoscopic Treatment of the Sulcus Ulnaris Syndrome

Cubital Tunnel Syndrome



Set recommended by HOFFMANN, M.D.



28164 BDM **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
including:
Bipolar Ring Handle
Outer Sheath
Inner Sheath
Forceps Insert



Additonal Forceps Insert:

26184 PTS **TAKE-APART® TAN Forceps Insert**, size 3 mm, length 20 cm

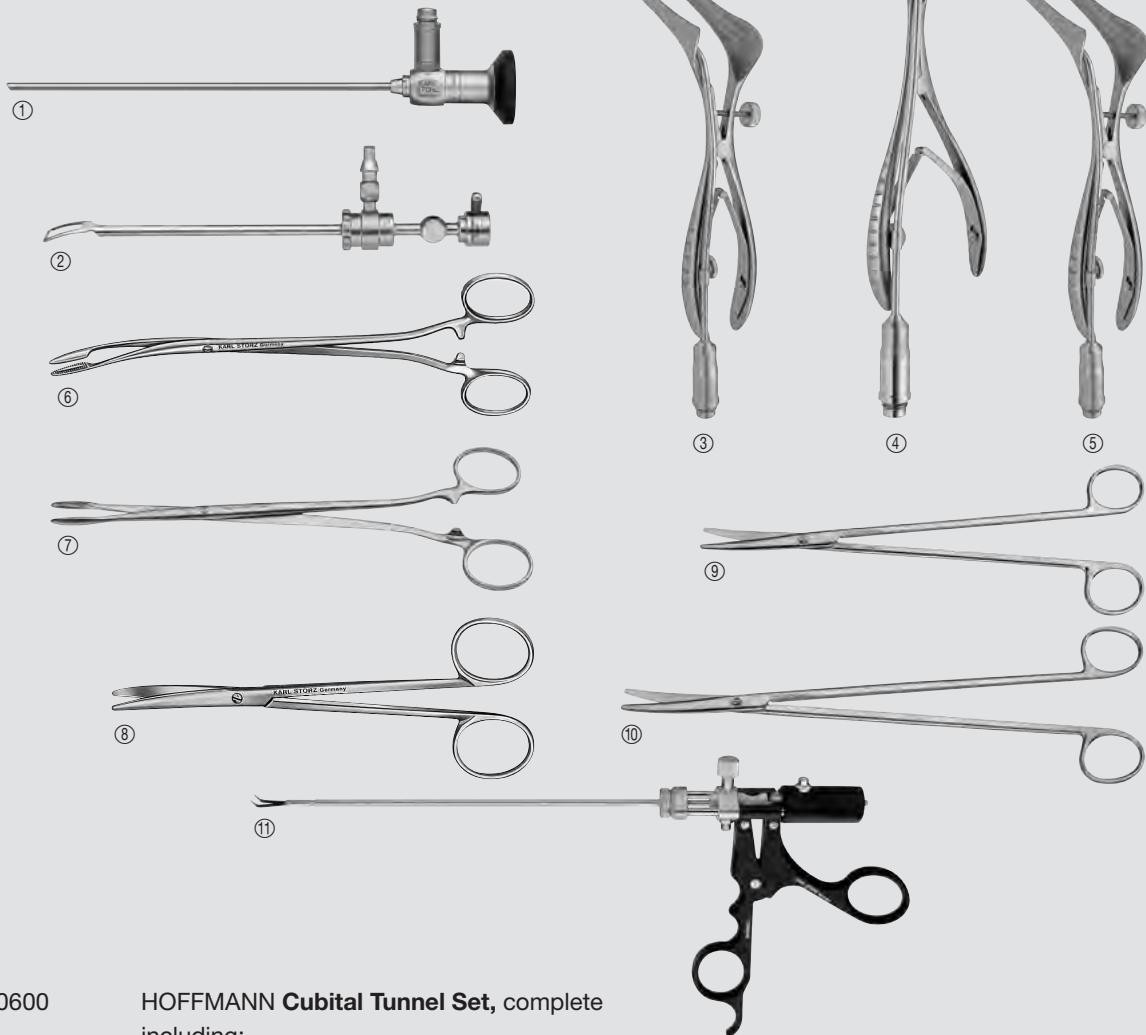
Components/Spare Parts see chapter 13

Endoscopic Treatment of the Sulcus Ulnaris Syndrome

Cubital Tunnel Syndrome

STORZ
KARL STORZ — ENDOSCOPE

Set recommended by HOFFMANN, M.D.



50600 **HOFFMANN Cubital Tunnel Set, complete**
 including:

- ① **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, autoclavable
- ② **Optical Dissector**, with distal spatula, fenestrated, large, sharp
- ③ **Speculum**, with fiber optic light carrier, with set screw, blade length 90 mm, length 13.5 cm
- NEW** ④ **COTTE Speculum**, with fiber optic light carrier, without set screw, special matt finish, blade length 55 mm, length 13 cm
- ⑤ **Speculum**, with fiber optic light carrier, with set screw, blade length 110 mm, length 13.5 cm
- ⑥ **DUPLAY Dressing and Sponge Holding Forceps**, curved, with ratchet, length 21 cm
- ⑦ **DUPLAY Dressing and Sponge Holding Forceps**, straight, with ratchet, length 21 cm
- ⑧ **METZENBAUM Scissors**, curved, length 18 cm
- ⑨ **METZENBAUM Scissors**, curved, length 23 cm
- ⑩ **METZENBAUM Scissors**, curved, length 28 cm
- ⑪ **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm

Additional Forceps Insert:

TAKE-APART® Forceps Insert, for TAN bipolar Coagulation Forceps, size 3 mm, length 20 cm

Components/Spare Parts see chapter 13

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Compression Syndrome



Endoscopic techniques have come to play an increasingly important role in the surgical treatment of various nosological entities, facilitated and accelerated through the sustained development and commercial availability of surgical tools. Minimally invasive techniques represent the contemporary gold standard in many surgical conditions, whereas in others, they remain an ancillary option for assisting an open procedure for cosmetic reasons. Decompressive surgery for solitary neuropathies without a concomitant pathology should be governed by the following principles: release all (including potential) compression sites at the given anatomical location, preserve the neural vascularity, if possible (relating to the ulnar nerve) transpose the nerve to a more favorable site, where a recurrent compression is discouraged, and permit early mobilization of the associated joint. These goals are elegantly achieved in a safe manner using the minimally invasive endoscopic technique we have evolved.

This technique principally differs from the contemporarily advocated endoscopic carpal tunnel release (ECTR). In the ECTR the space between the median

nerve and the transverse carpal ligament is dilated by a bougie. Later the endoscope is introduced into this dilated space to cut the overlying ligament. The nerve itself is not visualized herewith. Similar principles have been applied to release entrapments of the ulnar nerve in the cubital canal and the tibial nerve in the tarsal tunnel. Concerns have been shown in regards to the blind introduction of a dilator into an already crammed space between the nerve and the compressing ligament, making potential nerve injury or inappropriate introduction probable, especially in inexperienced hands. Moreover, transposition of nerves is excluded. The technique we have evolved, on the contrary, does not call for the introduction of a dilator, offers a bird-eye's view of the manipulated structures and all its branches and nourishing vessels, is easy in handling and the learning curve is without the potential hazards listed above.

K. G. KRISHNAN, M. D.,
Abteilung Neurochirurgie,
Universitätsklinikum Carl Gustav Carus, Dresden,
Germany

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Compression Syndrome

STORZ
KARL STORZ — ENDOSCOPE

Set recommended by KRISHNAN, M.D.



28163 RKS **Optical Retractor**, with handle, with cut-off hole for suction, width of blade at proximal end 8 mm, at distal end 7.5 mm, with fixation screw for control of penetration depth of endoscope, for use with Irrigation Sheath 28163 RSA/RSB and HOPKINS® II telescopes diameter 4 mm

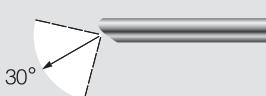
28163 RKB **Same**, width of blade at proximal end 15 mm

28163 RSA **Irrigation Sheath 0°**, outer diameter 4.8 x 6 mm, working length 14 cm, for Optical Retractors 28163 RKB/RKS, for use with HOPKINS® II telescopes diameter 4 mm and KARL STORZ lens irrigation system CLEARVISION® II

28163 RSB **Same, 30°**



28132 AA **HOPKINS® II Straight Forward Telescope 0°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: green



28132 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, **autoclavable**, fiber optic light transmission incorporated, color code: red

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Compression Syndrome



Set recommended by KRISHNAN, M.D.



28163 BP

28163 BP **Bipolar Coagulation Forceps**, insulated, angled tip, blunt, tip 1 mm, length 19 cm, for use with Bipolar High Frequency Cords 847000 E or 847000 A/M/T/V



28163 BPB

28163 BPB **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, slender, blunt, tip 0.5 mm, length 19 cm, for use with Bipolar High Frequency Cords 847000 E or 847000 A/F/M/N/S/T/V



844523

844523 **Bipolar Coagulation Forceps**, insulated, bayonet-shaped, tip 0.7 mm, length 23 cm, for use with Bipolar High Frequency Cords 847000 E or 847000 A/F/M/N/S/T/V

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Compression Syndrome

STORZ
KARL STORZ — ENDOSKOPE

Set recommended by KRISHNAN, M.D.



28163 EK

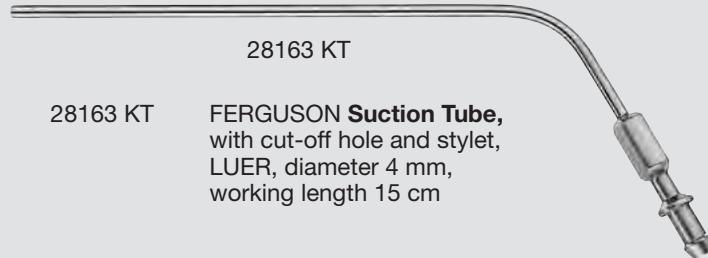


28163 EK **HALLE Elevator,**
width 4 mm, length 19 cm



28164 EC

28164 EC **CASTELNUOVO Elevator**, double-ended,
blunt end angled, semisharp end slightly
curved, graduated, length 26 cm



28163 KT

28163 KT **FERGUSON Suction Tube**,
with cut-off hole and stylet,
LUER, diameter 4 mm,
working length 15 cm



530416

530416 **"ATRAUMA" Atraumatic Tissue Forceps**,
length 16 cm



533112

533112 **ADSON Tissue Forceps**, 1 x 2 teeth,
length 12 cm

Nerve Compression Syndrome

Endoscopic Decompression and Nerve Transposition for the Treatment of the Peripheral Nerve Compression Syndrome



Set recommended by KRISHNAN, M. D.



28163 SC

28163 SCD

794228

794814

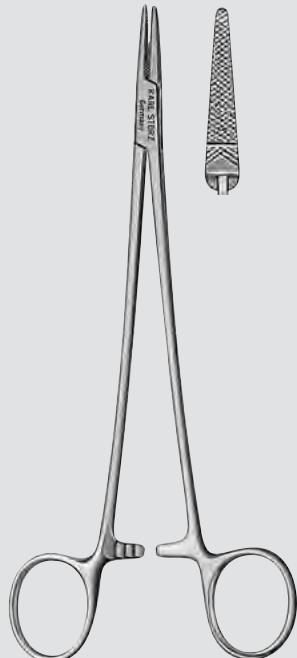
28163 SC FOMON **Angular Scissors**, serrated blades, slender, working length 6.5 cm

28163 SCD REYNOLDS **Dissecting Scissors**, curved, delicate tips, length 18 cm

794228 ADSON **Artery Forceps**, curved 90°, slender, length 18 cm

794814 OCHSNER-KOCHER **Artery Forceps**, curved, 1 x 2 teeth, length 14 cm

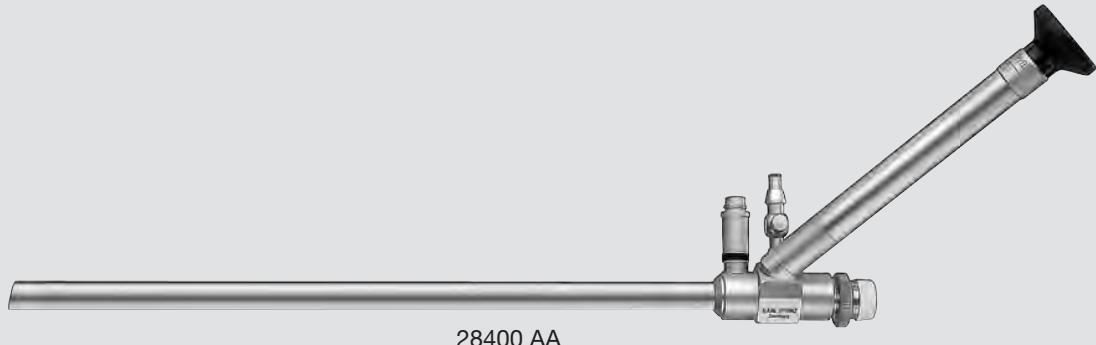
798418 HEGAR **Needle Holder**, slender, length 18 cm



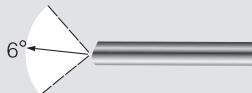
798418

Endoscopic Nerve Harvest

HOPKINS® Straight Forward Telescope, Operating Sheath



28400 AA



28400 AA

HOPKINS® Straight Forward Telescope 6°, angled eyepiece, diameter 11 mm, length 27 cm, **autoclavable**, fiber optic light transmission incorporated, 7.5 mm working channel, for use with Operating Sheath 28400 EE/EH



28400 V

28400 V

Adaptor, with silicone leaflet valve for working channel of HOPKINS® Telescope 28400 AA



28400 EE

28400 EE

SATTLER Operating Sheath, oval, distal end reinforced, for perforating vein dissection, diameter 12 mm, length 22 cm, for use with HOPKINS® Telescope 28400 AA

Endoscopic Nerve Harvest

Scissors, Dissecting and Grasping Forceps, CLICK'line® – rotating, dismantling, insulated, with connector pin for unipolar coagulation



Size 5 mm, length 43 cm

Operating instruments, **length 43 cm**,
for use with trocars size 6 mm

Operating instruments, **length 43 cm**, for
use with telescopes with inbuilt working
channel and trocars size 6 mm



Length	Handle					
	33151	33152	33153	33156	33121	33122
43 cm	NEW	NEW	NEW	NEW		

Double action jaws

Working Insert	Complete Instrument					
34410 MA	34451 MA	-	-	-	34421 MA	-



CLICK'line® Scissors, spoon-shaped jaws, serrated, curved

— 20 —

33410 ML 33451 ML 33452 ML 33453 ML 33456 ML 33421 ML 33422 ML



CLICK'line® KELLY Dissecting and Grasping Forceps, long

— 22 —

33410 KJ 33451 KJ 33452 KJ 33453 KJ 33456 KJ 33421 KJ 33422 KJ



CLICK'line® REDDICK-OLSEN Dissecting and Grasping Forceps

— 13 —

Single action jaws

34410 EH	34451 EH	-	-	-	34421 EH	-
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CLICK'line® Hook Scissors

— 10 —

High Frequency Cords for unipolar coagulation see chapter 12, UNITS

Endoscopic Harvest of Nerves and the Fascia Lata

Fascial Knives



28400 E



28400 E

Fascial Knife, retrograde cutting, for endoscopic paratibial fasciotomy, working length 42 cm, for use with HOPKINS® Telescope 28400 AA



28400 F

Fascial Knife, antegrade cutting, for extending the endoscopic fasciotomy into the retromalleolar region, working length 42 cm, for use with HOPKINS® Telescope 28400 AA



28405 FP



28405 FP

Fascial Knife, antegrade cutting, distal end 90° angled, working length 31 cm, for use with Optical Retractors 50251 LC/LD/LH/LG

Instrument Set for Establishing ^{NEW} a Blood Barrier

STORZ
KARL STORZ — ENDOSKOPE



28051 M

Rollable Cuff, 55 x 9 cm, for restricting
the blood flow, including manometer



VISUALIZATION IN NEURO- AND SPINE SURGERY

HD Imaging with Operating Microscopes

Direct Adaption



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.



Direct adaption to the VARIO operating microscope from Carl Zeiss Meditec

HD Imaging with Operating Microscopes

HD Upgrade Kit NEURO for Operating Microscopes

NEW



The “FULL HD Imaging Upgrade Kit NEURO” enables the image of the surgical microscope to be displayed in HD quality on a separate HD monitor. This simplifies co-viewing for the assistants, OR personnel, residents and trainees, providing excellent image quality.

The high-resolution video chain with Full HD technology (1080p) includes a H3-M COVIEW® HD camera head, a HD camera control unit and a HD monitor.



OR recording courtesy of: Prof. Schroeder, Greifswald (Germany)

The FULL HD Imaging Upgrade Kit NEURO is extremely useful for training and educational purposes. It provides observers inside and outside the OR with an unobstructed view of the surgical field in FULL HD quality. The KARL STORZ AIDA® documentation system combines all the required functions for integrated and precise image and video documentation during surgery.

The FULL HD Imaging Upgrade Kit NEURO is compatible with all standard surgical microscopes offered by the providers Carl Zeiss Meditech, Leica Microsystems and Moeller-Wedel.

HD Imaging with Operating Microscopes

HD Upgrade Kit NEURO for Operating Microscopes



The FULL HD Imaging Upgrade Kit NEURO is available in two versions according to the menu language required:

- 22 2200 54-NDE** **HD Upgrade Kit, Neurosurgery, PAL**, keyboard with German character set including:
Equipment Cart
Monitor Arm
Isolation Transformer
Earth Leakage Monitor
Mains Cord, length 100 cm
IMAGE1 H3-M COVIEW® Three-Chip FULL HD Microscope Camera Head, PAL/NTSC, 50/60 Hz
26" HD Monitor
IMAGE 1 HUB™ HD Camera Control Unit, with SDI, 50/60 Hz, KSI set
KARL STORZ AIDA® compact NEO advanced, German
RS 232 Connecting Cable, length 600 cm
- 22 2200 54-NE** **HD Upgrade Kit, Neurosurgery, PAL**, keyboard with English character set including:
Equipment Cart
Monitor Arm
Isolation Transformer
Earth Leakage Monitor
Mains Cord, length 100 cm
IMAGE1 H3-M COVIEW® Three-Chip FULL HD Microscope Camera Head, PAL/NTSC, 50/60 Hz
26" HD Monitor
IMAGE 1 HUB™ HD Camera Control Unit, with SDI, 50/60 Hz, KSI set
KARL STORZ AIDA® compact NEO advanced, English
RS 232 Connecting Cable, length 600 cm

Please note:

KARL STORZ offers the QUINTUS® adaptor product range exclusively for connecting the H3-M-COVIEW® camera to the surgical microscope. QUINTUS® adaptors are available for surgical microscopes from Carl Zeiss Meditec, Leica and Moeller-Wedel. We recommend ordering them with the sets described above (see also page 353).

HD Imaging with Operating Microscopes

System Components



IMAGE
1
HD

H3-M COVIEW® HD Microscope Camera Head

For use with IMAGE 1 HUB™ HD Camera Control Unit SCB 22 2010 11-1xx and
IMAGE1 HD Camera Control Unit SCB 22 2020 11-1xx



22 2200 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

Specifications:

IMAGE1 FULL HD Camera Heads	H3-M COVIEW®
50/60 Hz	22 2200 54-3 (PAL/NTSC)
Image sensor	3x 1/3" CCD chip
Pixel output signal H x V	1920 x 1080
Dimensions (w x h x l)	45 x 50 x 60 mm
Weight	240 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

HD Imaging with Operating Microscopes

System Components



QUINTUS® TV Adaptors



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, recommended for IMAGE1 HD H3-M/H3-M COVIEW®, H3, H3-Z as well as IMAGE1 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 IMAGE1 HD H3-M/H3-M COVIEW®, H3, H3-Z and S1, S2 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 IMAGE1 HD H3-M/H3-M COVIEW®, H3, H3-Z and S1, S2 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

301513

Optical Beamsplitter 50/50, for use with ZEISS operating microscope or colposcope

Note: Optical beamsplitters for other operating microscopes (e.g. LEICA or Möller-Wedel) are available directly from the manufacturers.

HD Imaging with Operating Microscopes

System Components



Accessories – Equipment Cart



29005 DRS

Equipment Cart

including:

Basic equipment cart, rides on 4 antistatic dual wheels, 2 equipped with locking brakes (front), 3 fixed shelves, 1 with push handles, mains switch in side boom, 2 push handles on the side, 1x drawer unit with lock, integrated cable conduits in both side booms, 1x set of non-sliding stands for units, double rear panel with integrated electrical subdistributors with 12 sockets, holder for power supplies, potential earth connectors and cable manager on the outside, 1x camera mount, 2x equipment rails on the side

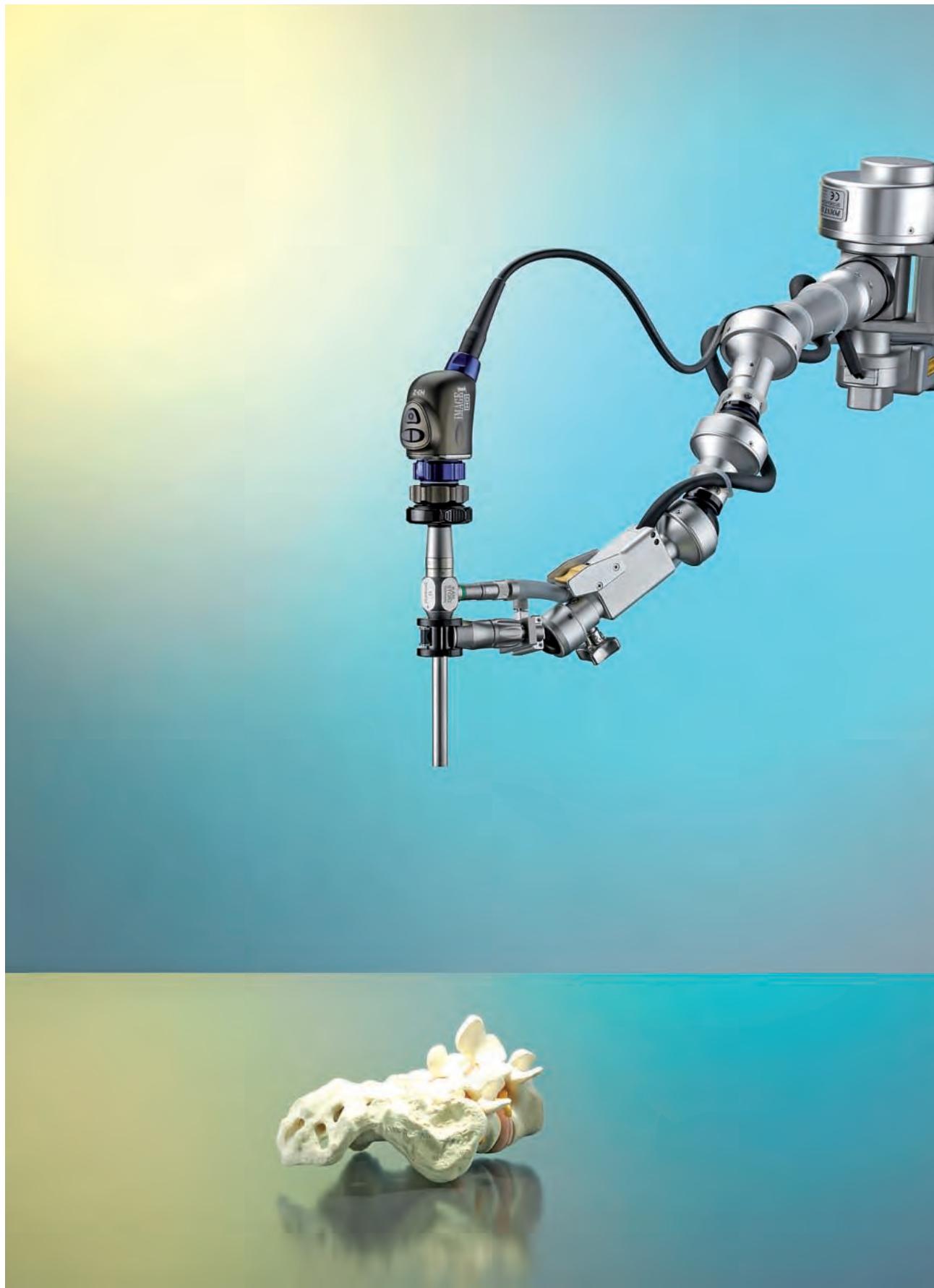
Dimensions:

Equipment Cart: 530 x 1455 x 645 mm (w x h x d),

Shelf: 430 x 480 mm (w x d),

Caster diameter: 125 mm

Spine Surgery – VITOM® SPINE ^{NEW}



Spine Surgery – VITOM® SPINE NEW

Visualization System for Open Surgery with Minimal Access



The VITOM® SPINE system from KARL STORZ represents a revolutionary and innovative way of displaying surgical procedures in a **high quality and ergonomic** manner.

VITOM® SPINE is based on the renowned HOPKINS® II rod lens system from KARL STORZ.

With the help of a holding system, the VITOM® SPINE system is placed at a **working distance of 25 – 60 cm** above the surgical field. This gives the surgeon more **room to work**.

The **small size** of the VITOM® SPINE 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® SPINE system provides **excellent depth of field, magnification, contrast and 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® SPINE system is, therefore, ideal for training and educational purposes.

The VITOM® SPINE system has proven to be an excellent alternative to OR illumination cameras, loupes or operating microscopes in various surgical disciplines. The VITOM® SPINE 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 for this extracorporeal optical system.



VITOM® SPINE NEW

System Overview

STORZ
KARL STORZ — ENDOSCOPE

Telescope and Illumination



VITOM® SPINE Telescope
and Light Cable



VITOM® SPINE Illuminator
and Y-Light Cable (optional)



XENON 300 SCB
Light Source

Camera and Monitor



IMAGE 1 HUB™ HD
Camera Control Unit



IMAGE1 H3-Z Three-Chip
HD Camera Head



IMAGE 1 HUB™ HD
Monitor

Holding Systems



POINT SETTER®
Pneumatic Holding Arm

or



ENDOCRANE®
Piezoelectric Holding Arm

or



Mechanical Holding Arm

Data Management and Documentation System



KARL STORZ AIDA® compact NEO advanced

Accessories and Expendables

- Clamping Cylinder
- Tray, for VITOM® SPINE Straight Forward Telescope
- Drape, for single use, for FULL HD Camera
- Drape, for single use, for POINT SETTER® Holding Arm
- STOR-E® Transport Cart

Holding Arms, Clamping Cylinders, Single-Use Drapes for the POINT SETTER® Holding Arm and STOR-E® Transport Cart see chapter 11, HOLDING SYSTEMS

Retractor Systems



Lumbar Tubular
Retractor System



TENTACLE Retractor



ROSENTHAL
Angled Retractor

Instruments



Recommended Instruments
VITOM® SPINE for the
lumbar spine



Recommended Instruments
VITOM® SPINE for the
thoracic spine

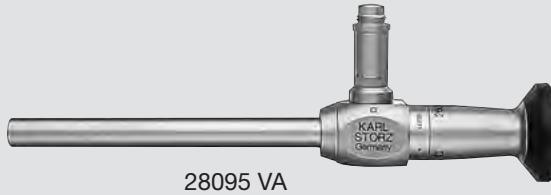
VITOM® SPINE ^{NEW}

System Components

STORZ
KARL STORZ — ENDOSCOPE

Telescope and Illumination

Diameter 10 mm, length 11 cm



28095 VA

VITOM® SPINE 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, 495 NVB or 495 NVC recommended



495 NE



495 NVB



495 NVC

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



20918020

20918020 **VITOM® 25 Distance Rod**, length 25 cm

optional:



28163 VI

28163 VI

VITOM® SPINE Illuminator, with 2 adjustable lenses and holding fixture for VITOM® scopes, **autoclavable**, for use with VITOM® scopes (28095 VA and equivalent models) and Y-Fiber Optic Light Cable 495 UV.
Not suitable for use with VITOM® scopes of the 2nd generation with integrated illuminator.

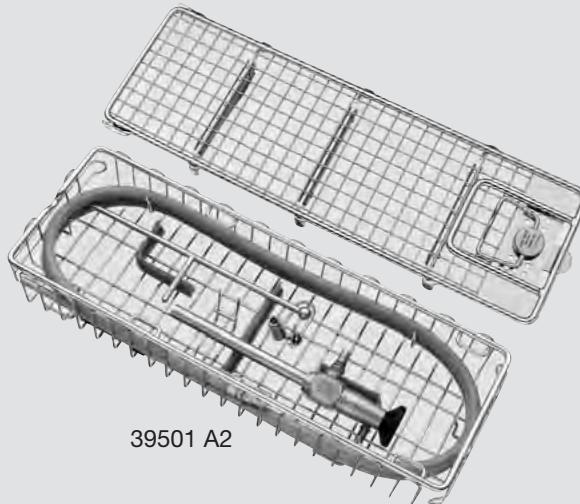
Y-Fiber Optic Light Cable 495 UV recommended



495 UV

495 UV

Y-Fiber Optic Light Cable, 2x diameter 3.5 mm, length 230 cm, for simultaneous connection of two instruments



39501 A2

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

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	Dimensions w x h x d	305 x 165 x 335 mm
Color temperature	6000 K	Weight	7.96 kg
Light outlets	1	Certified to	IEC 601-1 and UL 544, protection class 1/CF
Light intensity adjustment	continuously adjustable via a membrane keyboard or KARL STORZ Communication Bus Signal		

Spare Lamps and Spare Lamp Modules for Cold Light Fountains XENON and Components/Spare Parts
see catalog TELEPRESENCE

IMAGE1 FULL HD Camera Head for Endoscopy and Microscopy

For use with IMAGE 1 HUB™ HD Camera Control Unit SCB 22 2010 11U102



22 2200 55-3

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



533 TVA

- | | |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 040112-40* | Camera Cover , folded inside out, 13 x 242 cm, sterile, 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 |

Specifications:

IMAGE1 FULL HD Camera Head	H3-Z
50/60 Hz	22 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

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

Optional Accessories for IMAGE 1 HUB™ HD see catalog TELEPRESENCE

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.



222010 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

Specifications:

Signal-to-noise ratio	IMAGE 1 HUB™ HD, three-chip camera systems ≥ 60 dB	Control output/input	- KARL STORZ-SCB to 6-pin Mini-DIN socket (2x) - 3.5 mm stereo socket (ACC 1, ACC 2) - Serial port at RJ-11 - USB Port (only IMAGE 1 HUB™ HD with ICM) (2x)
AGC	Microprocessor-controlled	Dimensions (w x h x d)	305 x 89 x 335 mm
Video output	- FULL HD signal to DVI-D socket (2x) - SDI signal to BNC socket (only IMAGE 1 HUB™ HD with SDI module) (2x) - RGBS signal to D-Sub socket - S-Video to 4-pin Mini-DIN socket (2x) - Composite signal to BNC socket	Weight	3.35 kg
Input	Keyboard for title generator, 5-pin DIN socket	Power supply	100-240 VAC, 50/60 Hz
		Certified to	IEC 601-1, 601-2-18, CSA 22.2 No. 601, UL 2601-1 and CE according to MDD, protection class 1/CF, defibrillation-safe

Optional Accessories for IMAGE 1 HUB™ HD and Components/Spare Parts see catalog TELEPRESENCE

KARL STORZ FULL HD Monitors



9619 NB



9626 NB/NB-2

KARL STORZ HD and FULL HD Monitors	19"	26"	26"
Wall-mounted with VESA 100-adaption	9619 NB	9626 NB	9626 NB-2
Inputs:			
DVI-D	1x	1x	2x
Fiber Optic	optional	optional	optional
RGBS/VGA	1x	1x	2x
S-Video	1x	1x	2x
Composite	1x	1x	2x
Outputs:			
DVI-D	●	●	●
S-Video	●	●	●
Composite	●	●	●
Displayable Signal Formats:			
4:3	●	●	●
5:4	●	●	●
16:9	●	●	●
Picture-in-Picture	●	●	●
PAL/NTSC compatible	●	●	●

The following accessories are included:

Mains Cord

External 24VDC Power Supply

Signal Cables: DVI-D, VGA, S-Video, BNC

Optional accessories:

9626 SF **Pedestal**, for 96xx monitor series

Larger KARL STORZ FULL HD Monitors see catalog KARL STORZ OR1 NEO®
 Video Connecting Cables see catalog TELEPRESENCE

KARL STORZ WIDEVIEW HD Monitors



9524 N/NO
9526 N/NO



9524 NB/NBO
9526 NB/NBO

KARL STORZ HD Flat Screens		24"		26"	
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)

KARL STORZ AIDA® compact NEO advanced/standard

The Compact Documentation Solution

The new KARL STORZ AIDA® compact NEO advanced/standard system combines all the required functions for integrated and precise documentation in a single system. All functions are centrally controlled via touch screen, footswitch, camera head buttons or voice control directly from the sterile area.



AIDA compact NEO advanced/standard: Review screen



AIDA compact NEO advanced/standard: Automatic creation of standard reports



AIDA compact NEO advanced/standard: Efficient archiving

Data Acquisition

AIDA compact NEO advanced/standard records still images, video sequences (in HD quality) and spoken comments of findings and intraoperative procedures directly from the sterile area. Recordings are activated via touch screen, footswitch or camera head buttons.

Live display of camera images on the touch screen enables immediate monitoring and selection of the recorded data.

Flexible Review

Before final archiving, the saved data can be viewed or listened to on the review screen. Data no longer required can be simply deleted.

Individual images, video and audio sequences can be renamed and given more meaningful names. A pre-defined selection list with keywords simplifies and speeds up data entry.

A voice entry of the case report can even be recorded while viewing video and image files.

Automated Data Archiving

Once a treatment is completed, AIDA compact NEO advanced/standard automatically stores the data on a DVD, creates a standard report and prints it as an overview, if required.

Multipatient

Efficient data archiving is assured as the data of several patients can be saved on a DVD.

KARL STORZ AIDA® compact NEO advanced/standard

Special Features:

- Digital storage of still images with a resolution of 1920 x 1080 in both systems (advanced/standard) possible. Video sequences to 1080p with advanced and to 720p with standard variant possible (via HD-SDI)
- Audio files can be archived in both systems
- DICOM/HL7 interface package included
- Printing from review area (individual images with meta-data)
- DVD burning, Blu-ray reading capabilities
- AIDA Restore Configuration supports simple import and export of system settings
- Reference screen with new QuickView (favorites folder)
- Video settings (e.g. contrast, ...) separate for all channels
- Adaptation options for GUI
- Compressed DICOM
- Supports OR1™ Checklist V1.1
- Enhanced support of 15" monitors with OR1™ checklist installation
- Scalable watermark
- High-quality function and switching of image/video quality without additional settings
- Sterile, ergonomic operation via touch screen, camera head buttons and/or footswitch
- Data export to DVD, CD-ROM or USB flash drive, multi-session and multi-patient
- Network storage possible
- Automatic creation of standard reports
- Systems for use in the OR area certified according to EN 60601-1
- Compatible with KARL STORZ Communication Bus (SCB) and KARL STORZ OR1™ AV NEO
- KARL STORZ AIDA® compact advanced/standard as an attractive, digital alternative to video printers, video recorders and dictating machines



KARL STORZ AIDA® compact NEO advanced/standard

20 0409 13-EN* KARL STORZ AIDA® compact NEO advanced

Documentation system for digital storage of still images, video sequences and audio files, power supply 115/230 VAC, 50/60 Hz including:

KARL STORZ AIDA® control NEO, with integrated DVD/CD writer, Blu-ray reading possible

AIDA compact HD Frame Grabber Card

PS/2 Compact Keyboard, US English, with cover

KARL STORZ AIDA® compact NEO Software, with voice control and software protection

KARL STORZ USB Flash Drive

2x **Connecting Cables**, for controlling peripheral units

BNC/BNC Video Cable

BNC Connecting Cable

DVI-D Connecting Cable

Mains Cord

Connecting Cable, Mini-DIN plug to BNC socket

20 0409 12-EN* KARL STORZ AIDA® compact NEO standard

Documentation system for digital storage of still images, video sequences and audio files, power supply 115/230 VAC, 50/60 Hz

Specifications:

Video systems	- PAL, NTSC	Video formats	- MPEG2
Signal inputs	<ul style="list-style-type: none"> - S-Video (Y/C) - Composite - RGB (standard only) - SD-SDI (standard only) - HD-SDI (standard only) - DVI-D (standard only) 	Audio formats	- WAV
Image formats	<ul style="list-style-type: none"> - JPG - BMP 	Storage media	<ul style="list-style-type: none"> - DVD+R - DVD+RW - DVD-R - DVD-RW - CD-R - CD-RW - USB-Stick

* Available in the following languages: DE, ES, FR, IT, PT, PL, RU, DK, SE, JP, CN

Components/Spare Parts see catalog KARL STORZ OR1 NEO®

Documentation System



20 0904 01

15" KARL STORZ Touch Screen,
wall mounting, VGA/SVGA/XGA, resolution
max. 1024 x 768 (XGA mode), power supply
100 – 240 VAC, 50/60 Hz, with mains adaptor,
CD driver and 3 touch screen covers
including:
Touch Pen
Adaptor, VESA 75
Signal Cables: RS 232, SVGA



29005 MSK

Monitor Holding Arm, height and side adjustable,
tilting, can be mounted either on the left or on
the right side, swivel range 190°, reach 300 mm,
loading capacity max. 15 kg, with monitor holder
VESA 75/100, for Equipment Carts 29005 xx

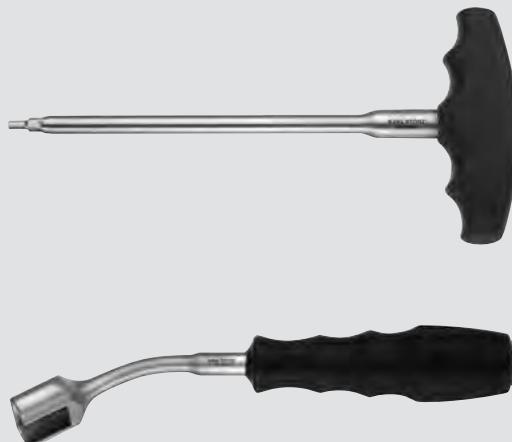
Lumbar Tubular Retractor System



28163 PL	Puncture Needle , including stylet, diameter 1.7 mm, working length 18 cm, with 1.4 mm opening for guide wire	28163 GTA	EasyGO!® Trocar , diameter 15 mm, working length 40 mm
28163 KD	Guide Wire , unsterile, diameter 1.2 mm, length 31 cm, package of 10	28163 GTB	EasyGO!® Trocar , diameter 19 mm, working length 40 mm
28163 CNS	Dilation Sleeve , graduated, inner diameter 1.5 mm, outer diameter 5.2 mm, length 23 cm, color code: white	28163 GTC	EasyGO!® Trocar , diameter Ø 23 mm, working length 40 mm
28163 COS	Same , inner diameter 5.3 mm, outer diameter 8.9 mm, length 21 cm, color code: yellow	28163 GTM	EasyGO!® Trocar , diameter 15 mm, working length 70 mm
28163 CPS	Same , inner diameter 9 mm, outer diameter 12.7 mm, length 19 cm, color code: orange	28163 GTK	EasyGO!® Trocar , diameter 19 mm, working length 74 mm
28163 CQS	Same , inner diameter 12.9 mm, outer diameter 14.9 mm, length 17 cm, color code: red	28163 GTG	EasyGO!® Trocar , diameter 23 mm, working length 76 mm
28163 CRS	Same , inner diameter 15.1 mm, outer diameter 16.9 mm, length 15 cm, color code: green	28163 GTY	EasyGO!® Trocar , diameter 19 mm, working length 97 mm
28163 CSS	Same , inner diameter 17.1 mm, outer diameter 18.9 mm, length 14 cm, color code: blue	28163 GTZ	EasyGO!® Trocar , diameter 23 mm, working length 99 mm
28163 CTS	Same , inner diameter 19 mm, outer diameter 20.9 mm, length 13 cm, color code: black	28163 VBM	Glare Shield , diameter 15 mm, for use with EasyGo!® Trocars 28163 GTM/GTA
		28163 VBK	Glare Shield , diameter 19 mm, for use with EasyGo!® Trocars 28163 GTK/GTB/GTY
		28163 VBG	Glare Shield , diameter 23 mm, for use with EasyGo!® Trocars 28163 GTG/GTC/GTZ

The tubular retractor system is part of the VITOM® SPINE set recommended by ROSENTHAL for the lumbar spine.

The retractor system is suitable for minimally invasive surgeries on the thoracic or lumbar spine and is used for all indications in this area.



28163 TRX

TENTACLE Spine Retractor, complete, with retractor frame, 2 retractor arms, X-ray transparent blades in 3 different lengths, light carrier with corresponding tools including:

Retractor Frame

Retractor Arm

2x Drive Screw

2x Retractor Arm, extra

4x PEEK Retractor Blade, length 70 mm, width 16 mm,
color: black

4x PEEK Retractor Blade, length 50 mm, width 16 mm,
color: blue

4x PEEK Retractor Blade, length 30 mm, width 16 mm,
color: green

6x Holder, for retractor blades

Light Carrier

Holder, for light carriers

Screwdriver

Positioning Instrument, for fine adjustment of
PEEK retractor blades

Sterilization Container



495 NA

Fiber Optic Light Cable, diameter 3.5 mm, length 230 cm

ROSENTHAL retractor blades are suitable for any application. These have been specially designed for “mini-open” surgical approaches. The lateral arresting lever enables the flexible angling of the blades without releasing the holding arm. This enables optimal preparation and exposure of deep-lying areas. The

retractor blades are particularly suitable for the atraumatic exposure of all spinal segments and for maintaining the ventral or dorsal intercostal access. The VITOM® telescope enables the retractor system to be used to its fullest advantage.



28163 VR

ROSENTHAL Angled Retractor, with movable retractor blades, in three lengths, can be clamped to the holding arm with the KS-Lock including:

2x **Retractor Blade**, length 12 cm, width 2.5 cm, distally atraumatically angled, lockable in 20 positions

2x **Same**, length 14 cm

2x **Same**, length 18 cm

2x **Articulated Stand**, reinforced version, L-shaped, with one central clamp for all five joint functions, height 48 cm, operating range 52 cm

2x **Rotation Socket**, to clamp to the operating table

This retractor system is part of the VITOM® SPINE set recommended by ROSENTHAL for the thoracic spine.

Components/Spare Parts see chapter 13

TWINFlow Suction and Irrigation Handle ^{NEW}

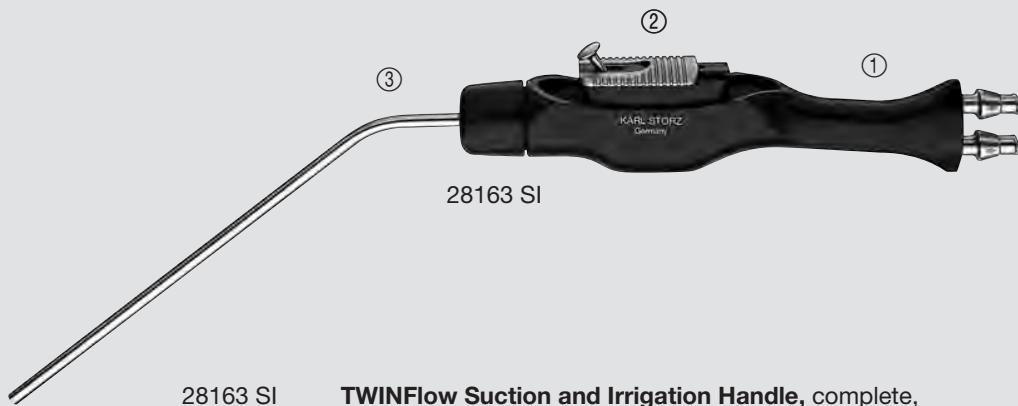
with adjustable continuous suction and continuously adjustable irrigation function if required



TWINFlow

The new suction and irrigation handle from KARL STORZ combines suction and irrigation functions in one instrument and, consequently, ensures an optimal view of the surgical field. An outstanding feature of the new system is the ergonomic handle design which prevents hand fatigue after extended use. The suction and irrigation handle allows simultaneous suction and irrigation and enables the intensity of each function to be regulated separately. The instrument is easy to use, providing

enhanced user comfort and a long service life. Fully dismantling and autoclavable, the handle is suitable for reuse. The corresponding single-use suction-irrigation handles are available in various designs and diameters. Furthermore, the handle can be used with all standard suction/irrigation pumps. The suction and irrigation handle is suitable for use in various open and endoscopic interventions in the fields of neurosurgery, skull base and spine surgery.



28163 SI

TWINFlow Suction and Irrigation Handle, complete, ergonomic design, with separate suction-irrigation unit and suction-irrigation tubes

including:

- ① **Suction and Irrigation Handle**
- ② **Suction and Irrigation Unit**, separate, with adjustable continuous suction and continuously adjustable irrigation function if required
- ③ **Cleaning Adaptor**, for assembly in sterilization trays, for use with Suction-Irrigation Unit 28163 SIU
- Set**, including loading aid with 8 O-Rings
- Cleaning Brush**, round, rigid, outer diameter 7 mm, for working channel diameter 2.5 – 5 mm, length 35 cm
- ③ 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 2 mm, working length 13 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 9 cm
- 5x **Suction and Irrigation Tube**, with connector for 28163 SIH, angled, diameter 4 mm, working length 13 cm



**HOLDING ARMS – TRAINING MODELS
HEADLIGHTS**

Holding Systems

Special Features:

- Simple, fast and accurate positioning
- New, reinforced versions of various articulated stands
- Five joint functions enable a large number of different positions
- All five joint functions can be fixed by means of a mechanical central clamp
- Additional height adjustment by using the socket 28172 HR
- Additional angle adjustment by using the socket 28172 RKB
- Socket for use with European and United States standard rails
- Ergonomical positioning at the operating table
- Eases the work routine of the assistant
- Instruments and telescopes are clamped securely
- Steady imaging of the operation field
- Modular composition using individual elements
- Maintenance-free solid construction
- Autoclavable



28272 RKB

Neuro-Endoscopes	Clamping Jaws			
	28272 UGN	28272 UKN	28272 UL	28272 UF
DECQ Recommended Instruments				
28160 G, 28160 GM, 28160 GK	-	●	●*	-
GAAB Recommended Instruments				
28162 BS	-	●	-	-
28162 CS	-	●	●*	-
SCHROEDER Recommended Instruments				
28164 LS	-	●	-	-
OI HandyPro® Neuro-Endoscope				
28161 S	●	●*	●*	-

* limited use only

Mechanical Holding Systems

with KSLOCK

STORZ
KARL STORZ — ENDOSCOPE

KSlock[®]

Special Features:

- Simple, fast and accurate positioning
- New, reinforced versions of various articulated stands
- Five joint functions enable a large number of different positions
- All five joint functions and instruments can be fixed by means of the mechanical central clamp KSLOCK.
- Variable height adjustment by using the socket
- Socket for use with European and United States standard rails of OR table

- Ergonomical positioning at the operating table
- Eases the work routine of the assistant
- Instruments and telescopes are clamped securely
- Steady imaging of the operation field
- Modular composition using individual components
- Maintenance-free solid construction
- Autoclavable



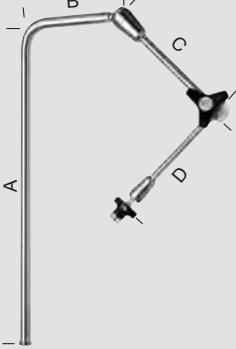
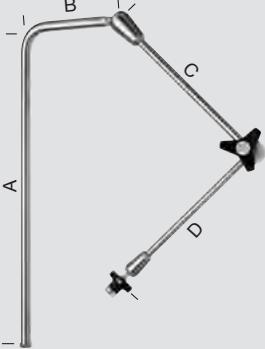
28272 RLC

Mechanical Holding Systems

with KSLOCK

STORZ
KARL STORZ — ENDOSCOPE

KSlock

Socket	Articulated Stand					
28172 HK	28272 HA	28272 HB	28272 HC			
						
28172 HR	A 30 cm C 20 cm	B - D 17 cm	A 48 cm C 20 cm	B 15 cm D 17 cm	A 48 cm C 27 cm	B 15 cm D 24 cm
Clamping Jaw	Catalog number for the complete holding system					
28272 UGN	28272 KGA 28272 RGA	28272 KGB 28272 RGB	28272 KGC 28272 RGC			
	Clamping Jaw , metal, with axial intake, for use with all square-headed KARL STORZ telescopes, clamping range 16.5 – 23 mm					
28272 UKN	28272 KKA 28272 RKA	28272 KKB 28272 RKB	28272 KKC 28272 RKC			
	Clamping Jaw , metal, with axial intake, for use with instrument, irrigation and telescope sheaths, clamping range 4.8 – 12.5 mm					
28272 UL	28272 KLA 28272 RLA	28272 KLB 28272 RLB	28272 KLC 28272 RLC			
	Clamping Jaw , universal, clamping range 0 – 18 mm					
28272 UF	28272 KFA 28272 RFA	28272 KFB 28272 RFB	28272 KFC 28272 RFC			
	Clamping Jaw , for use with all KARL STORZ polymer housing fiberscopes					
Clamping Cylinder						
	28272 CN	Clamping Cylinder , folding, for flexible mounting of 10 mm telescopes on the telescope sheath, autoclavable . The clamping cylinder allows vertical movement and rotation of the telescope.				

Holding System

U-shaped



Special Features:

- Simple, fast and accurate positioning
- New, reinforced versions of various articulated stands
- Five joint functions enable a large number of different positions
- All five joint functions can be fixed by means of a mechanical central clamp
- Variable height adjustment by using the socket
- Additional angle adjustment by using socket 28172 HR
- Sockets for use with European and United States standard rails of OR table
- Ergonomical positioning at the operating table
- Instruments and telescopes are clamped securely
- Steady imaging of the operation field
- Modular composition using individual components
- Maintenance-free solid construction
- Autoclavable



Holding System

U-shaped

STORZ
KARL STORZ — ENDOSCOPE

Socket

28172 HK

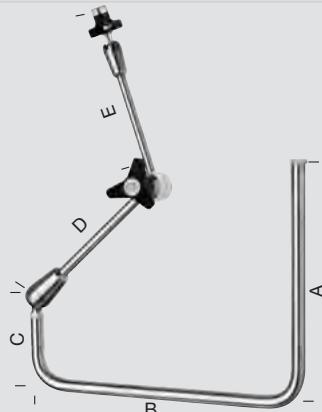


28172 HR



Articulated Stand

28272 HD



A 25 cm

B 31 cm

C 10 cm

D 20 cm

E 17 cm

Clamping Jaw

28272 UL

Catalog number for the complete holding system

28272 KLD

28272 RLD



Clamping Jaw, universal, clamping range 0 to 18 mm,
with quick release coupling KSLOCK (male)

ENDOCRANE® Holding System ^{NEW}

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

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

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

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

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

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

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

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



28272 EH

ENDOCRANE® Holding System

NEW

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

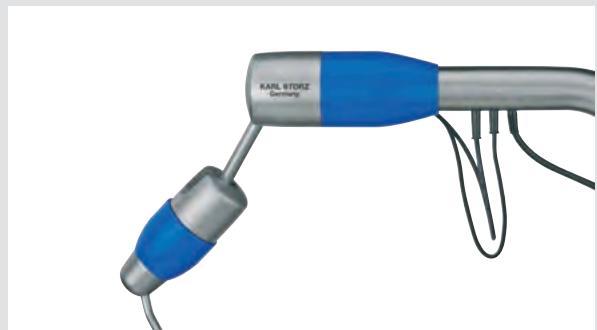
The ENDOCRANE® system allows single-handed use via the handle.

● 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 ^{NEW}

STORZ
KARL STORZ — ENDOSKOPE



28272 EH

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

Components/Spare Parts see chapter 13

ENDOCRANE® Holding System

Accessories

NEW

STORZ
KARL STORZ — ENDOSCOPE



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 CN **Clamping Cylinder**, folding, for flexible mounting of 10 mm telescopes on the telescope sheath, **autoclavable**. The clamping cylinder allows vertical movement and rotation of the telescope.



040146-25* **Cover**, sterile, package of 25

Specifications:

Arm:	Control Unit:
Maximum holding capacity	2 kg/20 N
Working radius	500 mm/19.7"
Swivel range	360°
Maximum locking time	30 ms (fail-safe)
Weight of holding arm and stand	7 kg/15.4 lbs
Protection against electric shock	Type B
Type of protection	IP 40
	Power supply 100 – 240 VAC Mains frequency 50/60 Hz Weight 5 kg/11 lbs Dimensions (w x h x d) 305 x 80 x 305 mm

8-12

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

Specifications subject to change.

POINT SETTER® Holding System NEW

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.

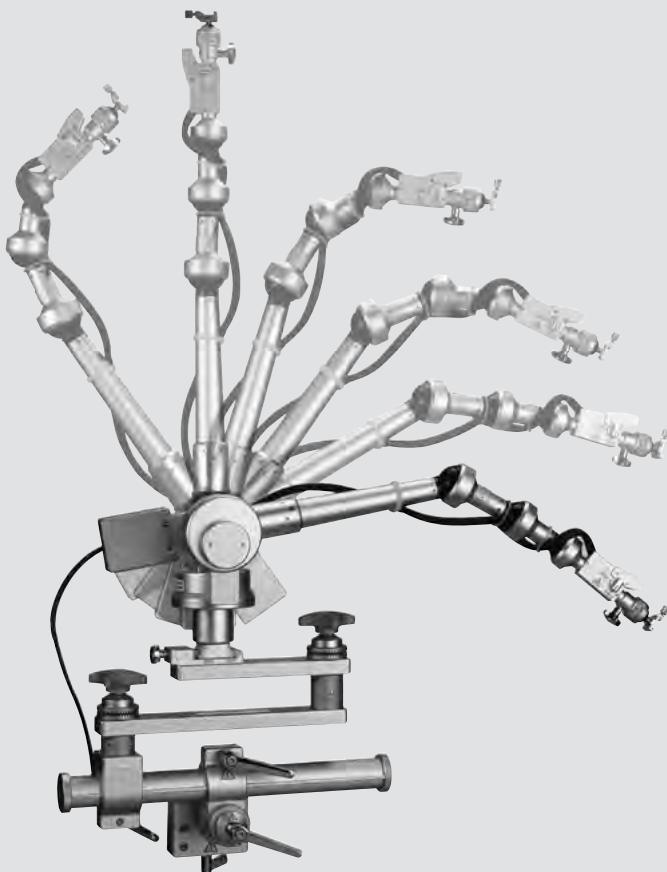
The patented self-locking pneumatic system ensures perfect safety, eliminating the need for additional error-prone electronics.

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.

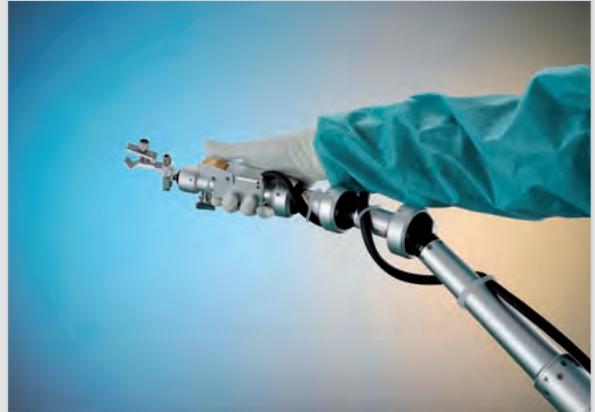


POINT SETTER® Holding System NEW

Product Features

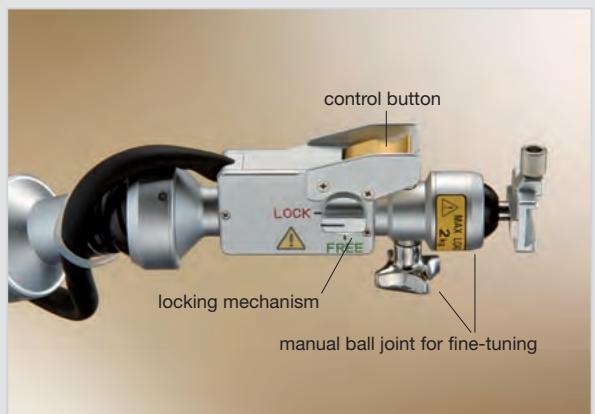
● Perfect Safety

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

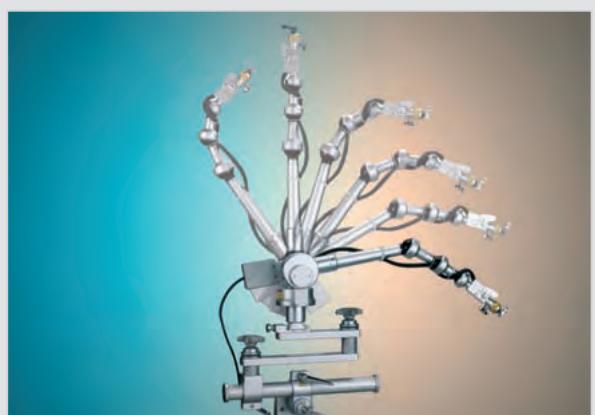
The connector joints of the POINT SETTER® arm have a special surface structure for uniform and smooth movement.

● 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 *NEW*



28163 WS

28163 WS **POINT SETTER®**, pneumatic holding arm, set including:
POINT SETTER® Arm
OR Table Adaptor
KSLOCK Adaptor, for KARL STORZ clamping jaws
KARL STORZ Clamping Jaw, large
KARL STORZ Clamping Jaw, small
KARL STORZ Clamping Jaw, for fiberscopes
Pressure Regulator, 7 bar
Drape, for single use, sterile, package of 10

Note: Compressed air tubing is required to operate the POINT SETTER® arm.
Please select the appropriate tubing from page 391 and add it to your order.

Specifications subject to change.

Components/Spare Parts see chapter 13

POINT SETTER® Holding System

NEW

Spare Parts and Accessories

STORZ
KARL STORZ — ENDOSCOPE



28172 T

OR Table Adaptor, light version for POINT SETTER® holding arm, no POINT SETTER® arm included



28272 UA

POINT SETTER® KSLOCK Adaptor, for POINT SETTER® holding system, for connecting KARL STORZ clamping jaws and accessories



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 UF

Clamping Jaw, for use with all KARL STORZ polymer housing fiberscopes, with quick release coupling KSLOCK (male)

POINT SETTER® Holding System

Spare Parts and Accessories

NEW



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

Universal Adaptor, 10 – 15 mm, pediatric,
for use with POINT SETTER®



28172 WR

Retractor Blade Holder, for holding spatulas
and retractors in ENT and NEURO, for use
with POINT SETTER®

POINT SETTER® Holding System ^{NEW}

Pressure Hoses



28172 WA **Connecting Tube**, for POINT SETTER®, Dräger, max. pressure 8 bar/115 psi, length 600 cm



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



20031002 **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

20031002 C **Same**, power supply 115 VAC, 50/60 Hz



2761291 **Pressure Regulator**, 7 bar, for POINT SETTER®, must be used for pressure > 8 bar on supply line



28272 CN **Clamping Cylinder**, folding, for flexible mounting of 10 mm telescopes on the telescope sheath, **autoclavable**. The clamping cylinder allows vertical movement and rotation of the telescope. For use with Clamping Jaw 28272 UGN and 28272 UGK and 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 13

STOR-E® Transport Cart ^{NEW}

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 83 STOR-E® Transport Cart, for POINT SETTER® holding arm
including:
Subrack, for POINT SETTER®
Accessory Set, for POINT SETTER®
Top Cover
Wire Basket

Components/Spare Parts see chapter 13

Holding Systems



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

723019 S **Connector**, for Flexible Tension Arm 723018,
for use with Brain Spatula 662471 – 662479
and 635012 – 635025

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

723020 **Connector**, for Flexible Tension Arm 723018,
attachable to rods up to diameter 16 mm

723025 **Flexible Holding Arm**, complete, for fixation
at the operating table
including:

Flexible Tension Arm

Holding Device, for Specula 404850 – 85

Rotating Clamp

LED Headlights

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 Headlights

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-Ion rechargeable battery
Battery Charger Li-Ion
Mains Cord
- 094130 **Same,**
with yellowish light

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



310061

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



Components/Spare Parts see chapter 13

Headlights

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



310010/310015



310020/310025

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

Headlights

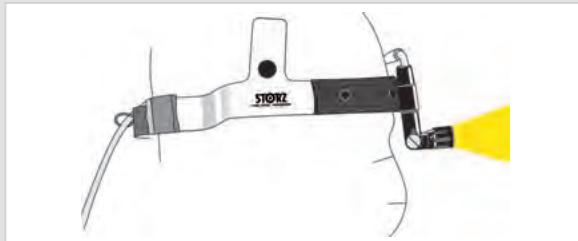
with Cold Light Illumination

Special Features:

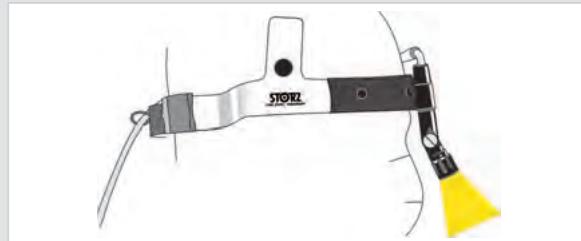
- Headlight can be adjusted in 3 dimensions: height adjustment on the headband, front can be turned 45° to the right or left and also tilted horizontally downwards to a max. of 165°
- Headlight is self-retaining in all positions; no deviation from the selected position
- Protective ring for the front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



094301/094305



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 13

Headbands

for Cold Illumination



310070

310070

Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including holder, for Headlight 310060/310061



310075

310075

Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, including clamp mounting, for Headlight 310010/310015



310076

310076

Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including clamp mounting, for Headlight 310020/310025



078730

078730

Headband, fully adjustable, with Forehead Cushion 078511, with cross band, including ball joint holder, for Headlights 094051, 094055, 095501 and 095505



078740

078740

Headband, extra light, fully adjustable, with Forehead Cushion 078511, without cross band, with clamp mounting, for Headlights 094301, 094305, 094320, 094325 and 094330



078760

078760

Headband, for LED headlight, fully adjustable, with Forehead Cushion 078511, with cross band, including holder, for Headlights 094100, 094110, 094120 and 094130, including Holding Band 094109 for Battery Box 094108 or Rechargeable Battery Box 094124



078681

078681

Clip with Band, for attaching fiber optic light cable to OR clothing



094105

094105

Extension Cable, for LED Headlights 094100 – 094130, for carrying the battery box or rechargeable battery box in OR clothing

Components/Spare Parts see chapter 13

Training Models

Spine Model

STORZ
KARL STORZ — ENDOSKOPE



28198 LA

Spine Model, complete
including:
Holder
Vertebrae L1-L3, fixed
Vertebrae L4-L5, with sacrum
Muscle Layer
Artificial Skin

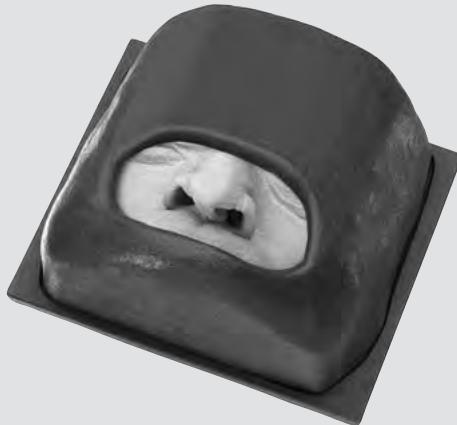
Components/Spare Parts see chapter 13

Training Models

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**

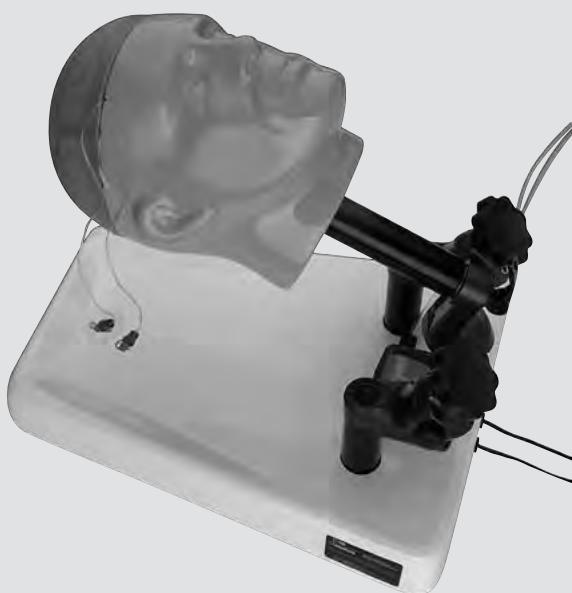
Training Models **NEW**

Head Model for Learning Intracranial Endoscopic Procedures



Special Features:

- Exact reproduction of the anatomy of the human skull – particularly the ventricular system – for training intracranial endoscopic procedures
- The integrated pump system enables simulation of the cerebrospinal fluid circulation to create the most realistic surgical conditions possible. Furthermore, intracranial hemorrhage can be simulated by using a marker dye.
- Head holder allows the training model to be fixated in various positions
- Special material provides tactile feedback
- Access to the ventricular system as a human anatomical specimen is very restricted; this training model provides an ideal alternative.
- Particularly suitable for countries where the use of human anatomical specimens is prohibited for ethical reasons
- Consumables can be replaced after use or when worn



28199 LC **S.I.M.O.N.T Head Model**, cranial,
including:

Insert
Head
Power Supply
Base
Joystick
Pump
Head Support

28199 LCA **S.I.M.O.N.T Insert**, cranial, for use with
S.I.M.O.N.T Head Model 28199 LC

Components/Spare Parts see chapter 13

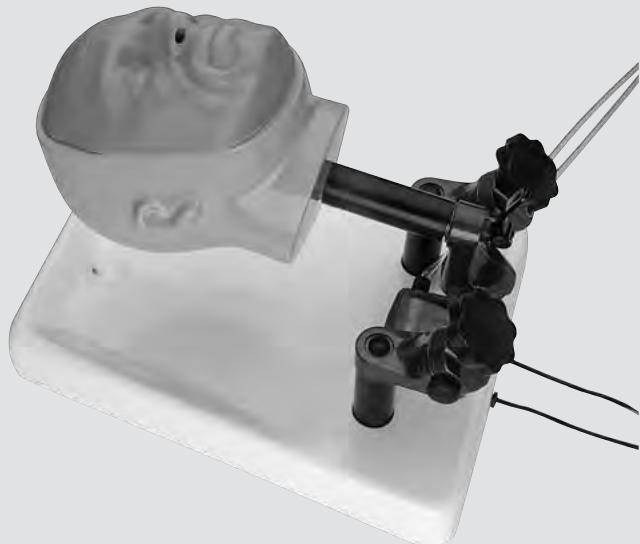
Training Models ^{NEW}

Head Model for Learning Transnasal Approaches to the Pituitary Gland



Special Features:

- Exact reproduction of the anatomy of the human skull – particularly the nasal and sphenoidal regions – for practicing transnasal approaches to the pituitary gland
- The pump system provided enable structures such as, for example, blood vessels to be filled, thereby simulating realistic OR conditions
- Head holder allows the training model to be fixated in various positions
- Special material provides tactile feedback
- More accessible than human anatomical specimens
- Particularly suitable for countries where the use of human anatomical specimens is prohibited for ethical reasons
- Consumables can be replaced after use or when worn

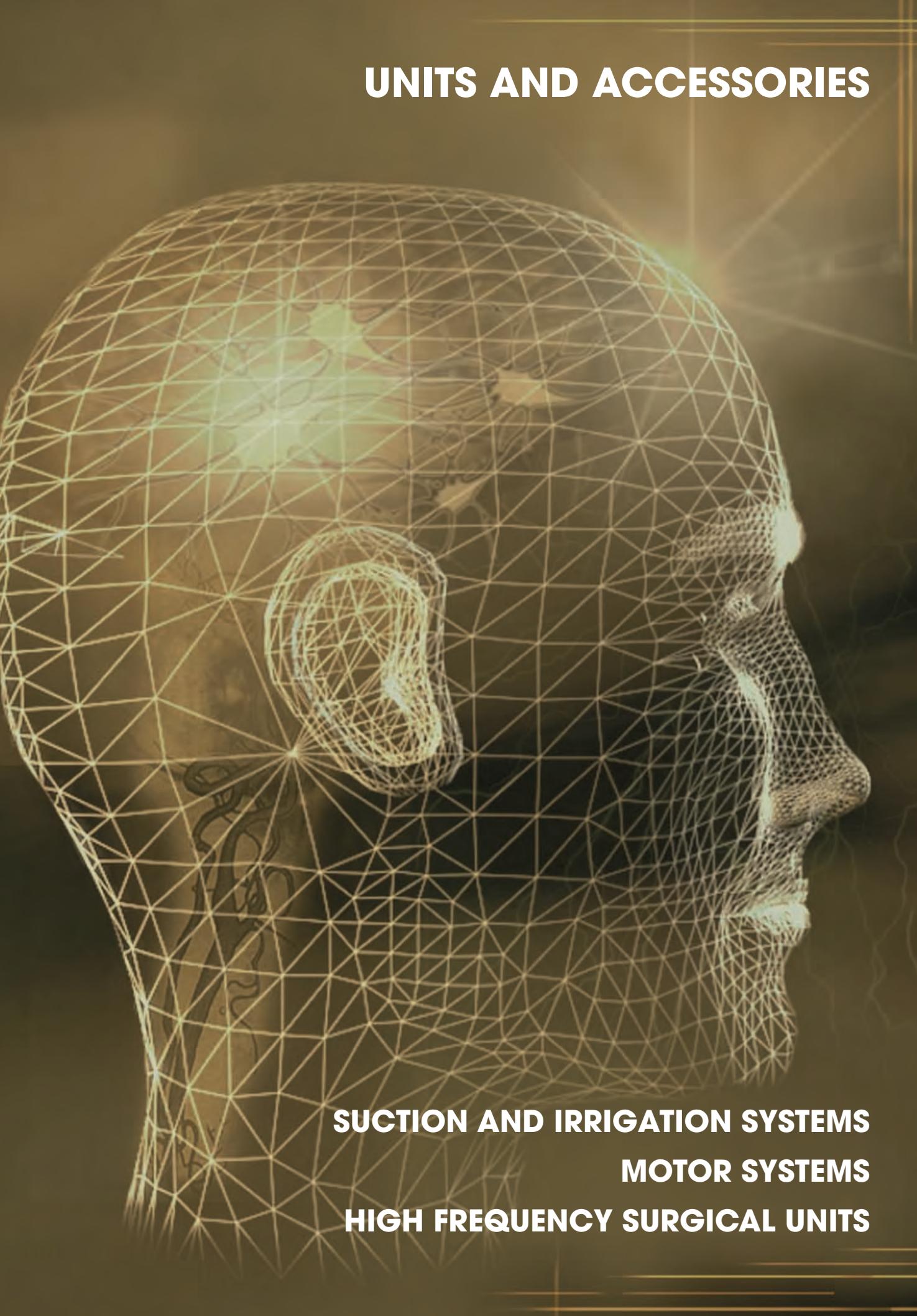


28199 LS **S.I.M.O.N.T Head Model**, for otorhino and skull base including:

Insert
Head
Power Supply
Base
Joystick
Pump
Head Support

28199 LSA **S.I.M.O.N.T Insert**, for otorhino and skull base, for use with S.I.M.O.N.T Head Model 28199 LS

UNITS AND ACCESSORIES



SUCTION AND IRRIGATION SYSTEMS
MOTOR SYSTEMS
HIGH FREQUENCY SURGICAL UNITS



■ SUCTION AND IRRIGATION SYSTEMS

■ MOTOR SYSTEMS

■ HIGH FREQUENCY SURGICAL UNITS

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

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

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

- Insufflators
- Suction and Irrigation Systems
- Motor Systems
- Lithotripsy
- HF Surgical Units

Suction and Irrigation Systems



■ SUCTION AND IRRIGATION SYSTEMS

CLEARVISION® II

DUOMAT®



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. Depressing the footswitch reverses the pump to suction 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 with KARL STORZ HOPKINS® II Telescopes 7219 AA/BA/FA and 28132 AA/BA/FA/CA in conjunction with suitable

sheaths. 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

Recommended System Configuration



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 Accessories:

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

Specifications:

Irrigation	min. 30 min with 1 l irrigation liquid, non-regulated flow (ml/min): 40	Dimensions w x h x d	100 x 180 x 70 mm
Power supply	100-240 VAC, 50/60 Hz	Weight	1.5 kg

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

Components/Spare Parts see chapter 13

CLEARVISION® II

System Components

STORZ
KARL STORZ — ENDOSCOPE

SUCTION AND IRRIGATION SYSTEMS



UNIT SIDE

PATIENT SIDE



DUOMAT®

Suction and Irrigation System,
Recommended Standard Set Configurations



Special Features:

- Simple, powerful suction and irrigation system for universal use
- Suction bottle with overflow protection
- Low noise level



20 3210 08

DUOMAT®,
power supply 100 – 120, 230 – 240 VAC, 50/60 Hz
including:
Mains Cord
VACUsafe Promotion Pack Suction*, 2 l

Specifications:

Pressure, non-regulated	max. 400 mmHg (53.2 kPa)
Suction pressure	non-regulated: max. (-)0.75 bar (-75 kPa)
Power supply	100-120, 230-240 VAC, 50/60 Hz

Dimensions w x h x d	305 x 110 x 260 mm
Weight	5 kg
Certified to	IEC 601-1, CE acc. to MDD

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

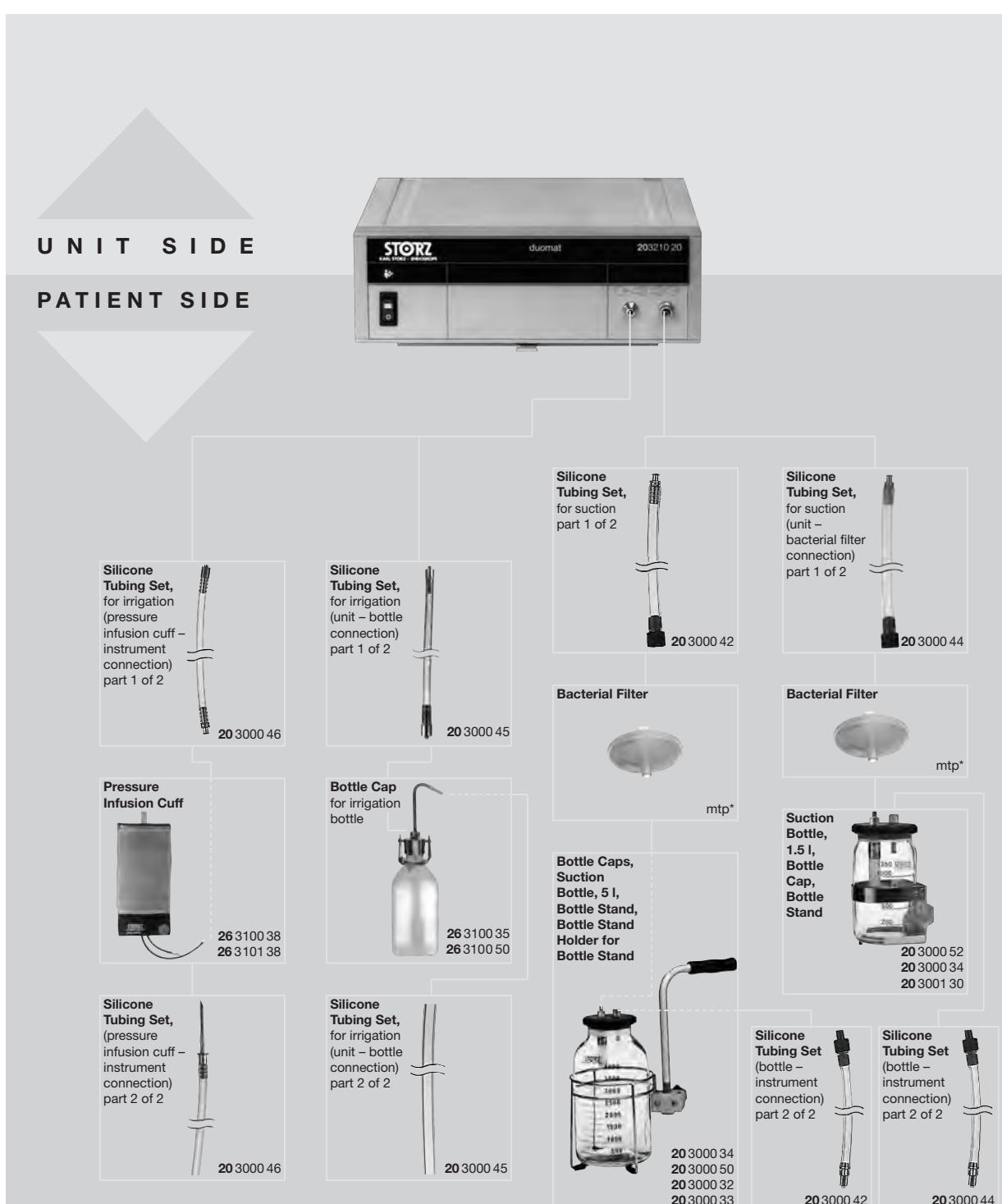
Optional accessories for DUOMAT® see pages U 10-U 11

Components/Spare Parts see chapter 13

DUOMAT®

System Components

STORZ
KARL STORZ — ENDOSKOPE



Optional Accessories

for DUOMAT®

STORZ
KARL STORZ — ENDOSKOPE

	26 3100 38 Pressure Infusion Cuff, 1.5 l
	26 3101 38 Pressure Infusion Cuff, 3 l
	26 3100 35 Bottle Cap , sterilizable, for use with irrigation bottles 1 l and 1.5 l, sterile (cylindrical and square) type Abbott and Baxter Laboratories
	26 3102 35 Bottle Cap , sterilizable, for use with irrigation bottle 1 l, sterile (round), type Fresenius and B. Braun (old type), Delta Pharma (round)
	26 3103 35 Bottle Cap , sterilizable, for use with irrigation bottle 1 l, sterile (round or square), type B. Braun (old type) and Delta Pharma
	20 3000 52 Suction Bottle , 1.5 l, sterilizable
	20 3000 34 Bottle Cap , for suction bottles 1.5 l and 5 l, sterilizable
	20 3001 30 Bottle Stand , for suction bottle 1.5 l or irrigation bottle 1 l
	26173 VG Puncture Needle , for sterile infusion solution 1 l, sterilizable, working length 22 cm
	860015 B Puncture Needle , for sterile infusion solution 500 ml, sterilizable, working length 18 cm
	26 3100 50 Irrigation Liquid Bottle , 1 l, sterilizable
	20 3000 50 Suction Bottle , 5 l, sterilizable
	20 3000 34 Bottle Cap , for suction bottles 1.5 l and 5 l, sterilizable
	20 3000 32 Bottle Stand , for suction bottle 5 l
	20 3000 33 Bottle Stand Holder , for Bottle Stand 20 3000 32

Optional Accessories

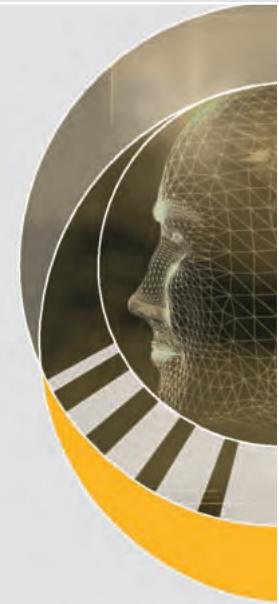
for DUOMAT®



	20 3000 42 Silicone Tubing Set , for suction, sterilizable
	20 3000 44 Silicone Tubing Set , for suction, sterilizable, short
	20 3000 46 Silicone Tubing Set , sterilizable, for use with Pressure Infusion Cuff 26 3100 38 , 26 3101 38
	20 3000 45 Silicone Tubing Set , for irrigation, sterilizable, for use with Bottle Caps 26 3100 35 , 26 3102 35 , 26 3103 35 and Puncture Needle 26173 VG
	20 3001 45 Silicone Tubing Set , sterilizable, for irrigation/insufflation, for use with Puncture Needle 860015 B
	031124-10* Filter , to block fluid during suction, for single use, unsterile, package of 10
mtp*	Receptacle , reusable, 2 l Suction bag , with filter, for single use
mtp*	Tubing Set , for suction, sterile, for single use



Motor Systems



■ MOTOR SYSTEMS

STAMMBERGER-SACHSE **Intranasal-Drill**

Saws

Dermatomes



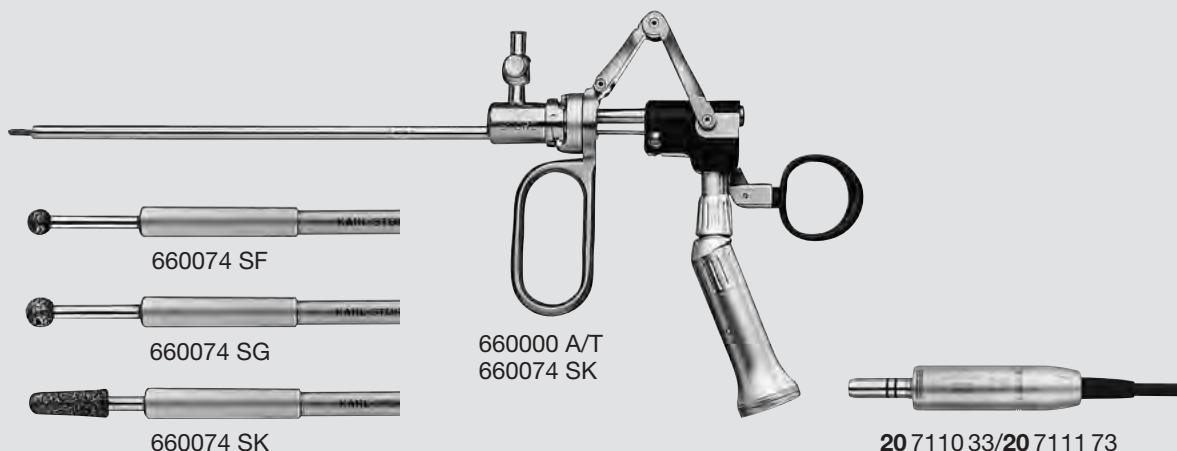
STAMMBERGER-SACHSE Intranasal Drill

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 abradores 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 abradores 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:

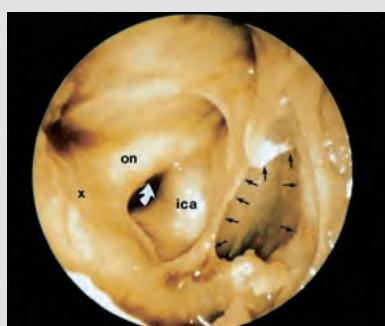
Double Ring Sliding Handle, for moving abrador forwards and backwards in the guiding sheath, with fixed INTRA drill handpiece

Guide Sheath, outer diameter 5 mm, with irrigation stopcock

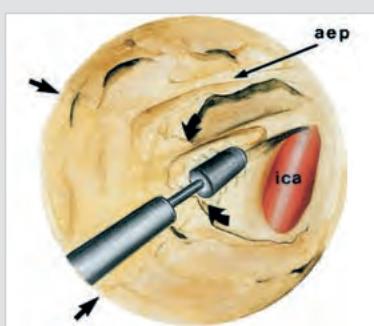
Diamond Abrador, delicate, spherical, diameter 2.5 mm

Diamond Abrador, delicate, spherical, diameter 3 mm

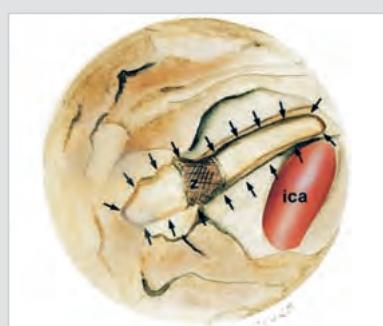
Diamond Abrador, delicate, conical, from diameter 2.5 mm to diameter 3 mm



ica = Arteria carotis interna
aep = Arteria ethmoidalis posterior



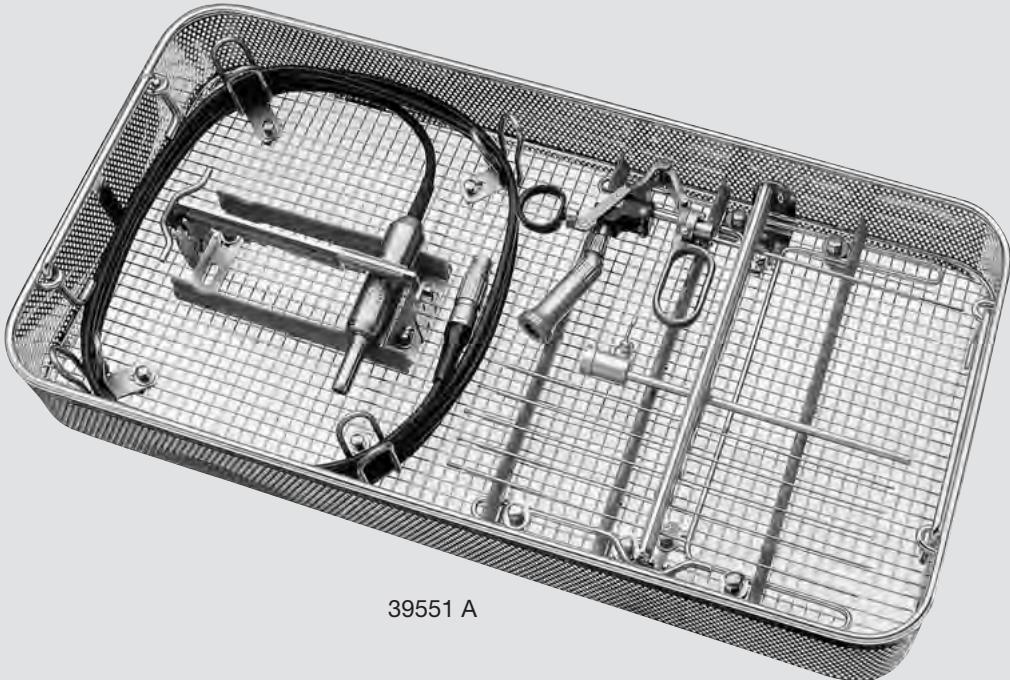
on = Nervus opticus
x = Tuberculum opticum



z = Anulus zinnii

Components/Spare Parts see chapter 13

Burrs Accessories



39551 A

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

for storage of:

- Intranasal drill
- Connecting cable
- EC micro motor
- Up to 10 diamond abradors

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

Oscillating Micro Saws



254000



20 7110 32/20 711172

254000

Oscillating Micro Saw, inbuilt irrigation tube,
recommended maximum speed 15,000 rpm
corresponds to 15,000 oscillations/min.,
without saw blades, with fork wrench

Saw blades, short shaft, for use with 254000



254024

Saw Blade, short shaft, blade thickness 0.3 mm,
width of blade 6 mm, working length 11 mm,
package of 1, for use with 254000



254025

Same, width of blade 10 mm



254026

Same, width of blade 15 mm



254030

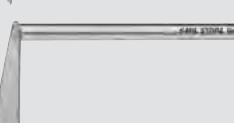
Same, blade thickness 0.15 mm, width of blade 6 mm

Saw blades, long shaft, for use with 254000



254027

Saw Blade, long shaft, blade thickness 0.3 mm,
width of blade 6 mm, working length 26 mm,
package of 1, for use with 254000



254028

Same, width of blade 10 mm



254029

Same, width of blade 15 mm



254031

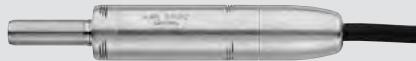
Same, blade thickness 0.15 mm, width of blade 6 mm

Components/Spare Parts see chapter 13

Micro Sagittal Saw, Osseo Scalpel



254100



20 7110 32/20 7111 72

254100

Micro Sagittal Saw, integrated irrigation tube, recommended maximum speed 20,000 rpm, without saw blades, with fork wrench

Saw Blades, for use with 254100



254170

Saw Blade, blade thickness 0.35 mm, width of blade 4 mm, working length 10 mm, package of 12, for use with Micro Sagittal Saw 254100



254171

Same, width of blade 6 mm, working length 10 mm



254172

Same, width of blade 6 mm, working length 15 mm



254173

Same, width of blade 10 mm, working length 15 mm



254174

Same, width of blade 12 mm, working length 27 mm



254175

Same, width of blade 6 mm, working length 10 mm



254200



20 7110 32/20 7111 72

254200

Osseo Scalpel, Micro Saw, with axial/sagittal cut, pendulum stroke, especially appropriate for 3-dimensional incision guiding, integrated irrigation tube, recommended maximum speed 20,000 rpm, without saw blades, with fork wrench

Saw Blades, for use with 254200



254235

Saw Blade, blade thickness 0.35 mm, working length 12 mm, package of 12, for use with Osseo Scalpel, Micro Saw 254200



254236

Same, working length 18 mm



254237

Same, working length 24 mm

Micro Compass Saws



254300



20 7110 32/20 7111 72

254300

Micro Compass Saw, detachable irrigation tube,
recommended maximum speed 15,000 rpm,
without saw blades, with fork wrench

Saw Blades, for use with 254300



254312

Saw Blade, blade thickness 0.25 mm, working
length 11 mm, package of 12, for use with 254300



254313

Same, working length 14 mm



254314

Same, working length 18 mm



254315

Same, working length 22 mm

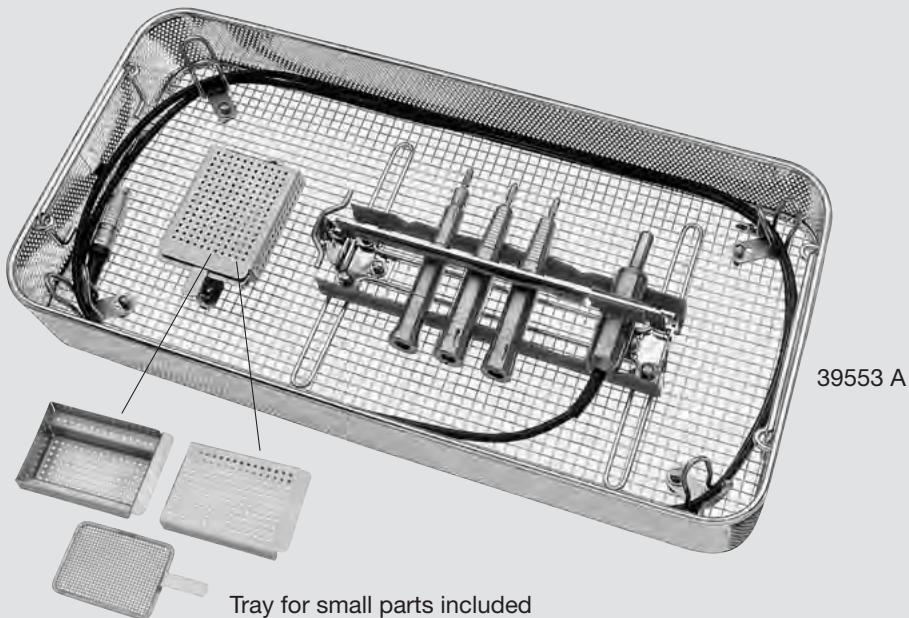


254316

Same, working length 26 mm

Components/Spare Parts see chapter 13

Saw Accessories



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 sterilization and storage tray.

Dermatomes

Special Features:

- For removing skin and mucosa
- Dermplaning for obtaining small pieces of skin from behind the ear
- Can be easily adapted to motor
- Optimal setting of the incision depth
- Lightweight construction



20 7110 32/20 7111 72



253000

253000

Dermatome, with INTRA coupling, width of incision 12 mm, recommended maximum speed 8000 rpm

253001

Replacement Blade, for Dermatome 253000, width of incision 12 mm, sterile, package of 10



253100

253100

Dermatome, with INTRA coupling, width of incision 25 mm, recommended maximum speed 8000 rpm

253101

Replacement Blade, for Dermatome 253100, width of incision 25 mm, sterile, package of 10



253200

253200

Dermatome, with INTRA coupling, width of incision 50 mm, recommended maximum speed 8000 rpm

253201

Replacement Blade, for Dermatome 253200, width of incision 50 mm, sterile, package of 10



253300

253300

Dermatome, with INTRA coupling, width of incision 75 mm, recommended maximum speed 8000 rpm

253301

Replacement Blade, for Dermatome 253300, width of incision 75 mm, sterile, package of 10

Accessories for Dermatomes



39554 A

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 dermatomes
- Connecting cable
- EC micro motor with INTRA coupling

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

High Frequency Surgical Units



■ HIGH FREQUENCY SURGICAL UNITS

NEW AUTOCON®II 400 SCB

NEW AUTOCON®II 200

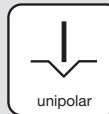
NEW AUTOCON®II 80



AUTOCON® II 400 SCB ^{NEW}

Special Features:

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



Integrated voltage stability control or arc control

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

TOP Cut mode

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

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

POWER Cut mode with constant HF voltage and power

This mode ensures a uniform surgical effect and consistent cutting efficiency over a wide impedance range and many different tissue types.

RAM system – return electrode application monitoring

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

Gastro Cut and Papillo Cut

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

LF/HF leakage currents

Stray currents and the associated risk of burns are minimized by design measures.

SCB- and OR1™-compatible

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

C-Cut® mode and LAP-C-Cut mode – the intermittent coagulation-cutting mode with AUTOCON®II 400 SCB

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

Bipolar generator with 370 W HF power

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

Unipolar generator with 300 W HF power

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

AUTOCON® II 400 SCB ^{NEW}

Safety and Special Features

STORZ
KARL STORZ — ENDOSCOPE

Precise power setting and power limitation

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

Up to 8 hemostatic effects

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

Forceps auto-start function

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

6.5" touch screen

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

100 program memories

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

Bipolar coagulation auto-stop function

Automatic power shutdown when the coagulation procedure has been ended.

Self-test program

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

Software upgrade

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



AUTOCON® II 400 SCB, AUTOCON® II 200/80

NEW

Special Features



Special Features:

	AUTOCON® II 400 SCB	AUTOCON® II 200	AUTOCON® II 80
Degree of coagulation (effect) can be preselected in several steps: The degree of coagulation measures extent of coagulation depth	●	●	-
Bi-Vascular-Safe mode for bipolar coagulation and thermofusion of large-lumen vessels	●	-	-
Easy to use due to automatic mode selection thanks to recognition of instrument-cable connection	●	-	-
Spray coagulation: Coagulation with modulated HF voltage (Up > 500 V); very long arcs enable coagulation of large and bleeding areas of tissue without contact to tissue	●	-	-
Autostart function: Manual adjustment of operating time limit for bipolar coagulation	●	●	-
Voltage-regulated cutting	●	●	-
Arc-controlled cutting, unipolar	●	-	-
Separate papillo-cut and gastro-cut functions enable fractionated cutting with regulated HF current at different cutting speeds for flexible endoscopy	●	●	-
Autostart function for bipolar coagulation: Automatic activation of coagulation current as soon as coagulation electrode touches tissue with both branches	●	●	-
Activation of HF functions possible via footswitch or manual control switch for unipolar or bipolar	●	●	-
Bipolar resection with KARL STORZ bipolar electrotomes	●	-	-
Bipolar application with NaCl irrigation solution	●	-	-
Modular connecting sockets for unipolar and bipolar applications can be selected according to individual requirements	●	●	●
100 applications with text can be stored	●	-	-
Convenient use via 6.5" Touch Screen	●	-	-
Switchover function enables switching between two modes within a user program via a footswitch from the sterile OR area	●	-	-
Compatible with KARL STORZ Communication Bus (KARL STORZ-SCB)	●	-	-
Service port for software updates and HF functionality upgrades	●	-	-

AUTOCON® II 400 SCB ^{NEW}

Specifications



HF Modes	Effects	P max. at 500 Ohm	V _p max. at 500 Ohm	Crest Factor	Arc Control	Voltage Control
Unipolar						
TOP-Cut	8	300	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-C-Cut ++*	8	300 (at 750 Ohm)	490	1.4	-	●
Saline-Time-C-Cut	8 time 0.1-1 sec.	370	770	1.4	-	●
Saline-Time-C-Cut ++*	8	300 (at 750 Ohm)	490	1.4	-	●
Saline Coag	8	200 (at 50 Ohm)	190	1.4	-	●
Saline Coag ++*	8	200 (at 50 Ohm)	190	1.4	-	●
Saline-Time-Coag	8 time 0.1-1 sec.	200 (at 50 Ohm)	190	1.4	-	●
Saline-Time-Coag ++*	8 time 0.1-1 sec.	200 (at 50 Ohm)	190	1.4	-	●
Bipolar Soft Coag	8	120 (at 75 Ohm)	190	1.4	-	●
Bipolar Soft with Auto-Stop	8	120 (at 75 Ohm)	190	1.4	-	●
Bi-Vascular-Safe**	8	300 (at 25 Ohm)	220	1.4	-	●

*Only for units with additional resection module

**with software package "Bi-Vascular-Safe"

Specifications:

Safety Systems	<ul style="list-style-type: none"> - Automatic Self-Test - Maldosage - Neutral Electrode Safety System (dynamic, two-part, one- and two-part NE) - LF/HF Leakage Current Monitor - Activation Time - Deactivatable HF 	Power Supply	20 5352 2x-12x: 220-240 VAC, 50/60 Hz 20 5352 2xU12x: 100-120 VAC, 50/60 Hz
		Dimensions w x h x d	448 x 164 x 345 mm
		Weight	10 kg
		Certified to	IEC 60601-1, CE acc. to MDD

AUTOCON® II 400 SCB ^{NEW}

High Frequency Surgical Unit,
Recommended Standard Set 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 SCB,
power supply 100 – 120 VAC, 50/60 Hz
including:
Mains Cord
SCB Connecting Cable, length 100 cm

Application	Standard: Unipolar/Bipolar	High-End
Unit version	-122 (220 – 240 VAC) U122 (100 – 120 VAC)	-125 (220 – 240 VAC) U125 (100 – 120 VAC)
Order no.	20 5352 01-122 20 5352 01U122	20 5352 01-125 20 5352 01U125 basic unit
	–	20 5352 02-125 20 5352 02U125 basic unit, incl. additional resection module
	–	20 5352 03-125 20 5352 03U125 basic unit, incl. Bi-Vascular-Safe mode
	–	20 5352 04-125 20 5352 04U125 basic unit, incl. Bi-Vascular-Safe mode

Socket Position

1	Bipolar Combination 	Bipolar Combination
2	Bipolar Combination 	Bipolar Multifunction
3	Unipolar 3-pin and Erbe 	Unipolar 3-pin and Erbe
4	NE 6.3 mm jack and 2-pin 	NE 6.3 mm jack and 2-pin

Optional Accessories for AUTOCON® II 400 see pages U 36-U 39
Components/Spare Parts see chapter 13

AUTOCON® II 400 SCB ^{NEW}

System Components

STORZ
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UNIT SIDE

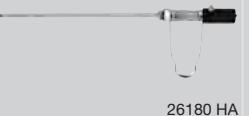
PATIENT SIDE



Bipolar High Frequency Cord



TAKE-APART®
Bipolar Grasping Forceps



Unipolar High Frequency Cord



Handle



Unipolar High Frequency Cord



Connecting Cable



Knife Electrode



Neutral Electrode



AUTOCON® II 200 *NEW*

High Frequency Surgical Unit,
Recommended Standard Set Configurations



20 5322 01 **AUTOCON® II 200**, power supply
200 – 240 VAC, 50/60 Hz

including:

Mains Cord

20 5322 01 C **AUTOCON® II 200**, power supply
100 – 120 VAC, 50/60 Hz

including:

Mains Cord, US version

20 5322 01-010 **AUTOCON® II 200**, with GASTRO-Cut,
power supply 200 – 240 VAC, 50/60 Hz

including:

Mains Cord

205322 01C010 **AUTOCON® II 200**, with GASTRO-Cut,
power supply 100 –120 VAC, 50/60 Hz

including:

Mains Cord, US version

Specifications:

HF rated power	<ul style="list-style-type: none"> - Cutting Power-Cut (unipolar): 220 Watt/500 Ohm GASTRO-Cut (unipolar): 200 Watt/75 Ohm - Coagulation Standard-Coag (unipolar): 120 Watt/50 Ohm Forced-Coag (unipolar): 120 Watt/500 Ohm Standard-Coag (bipolar): 120 Watt/75 Ohm 	Autostart	Coagulation bipolar
Max. voltage	<ul style="list-style-type: none"> - Cutting Power-Cut (unipolar): 740Vp GASTRO-Cut (unipolar): 550Vp - Coagulation Standard-Coag (unipolar): 190Vp Forced-Coag (unipolar): 1800Vp Standard-Coag (bipolar): 190Vp 	Autostop	Coagulation unipolar standard
Degree of coagulation	<ul style="list-style-type: none"> Power-Cut: 8 GASTRO-Cut: 4 Standard-Coag: 8 Forced-Coag: 4 Bipolar Standard-Coag: 8 	Safety systems	<ul style="list-style-type: none"> - permanent power control - maldosage - neutral electrode safety system - automatic Self-Test
		Power supply	100-120 VAC or 200-240 VAC, 50/60 Hz
		Dimensions w x h x d	410 x 165 x 385 mm
		Weight	10 kg
		Certified to	IEC 60601-1, CE acc. to MDD

Optional Accessories for AUTOCON® II 200 see pages U 36-U 39
Components/Spare Parts see chapter 13

AUTOCON® II 200 ^{NEW}

System Components

STORZ
KARL STORZ — ENDOSCOPE



AUTOCON® II 80 *NEW*
 High Frequency Surgical Unit,
 Recommended Standard Set Configurations



205308 01 AUTOCON® II 80,
 power supply 100 – 240 VAC,
 50/60 Hz
 including:
Mains Cord

Specifications:

HF rated power	- Dry Cut: 80 Watt/500 Ohm - Forced Coag: 50 Watt/500 Ohm - Soft Coag: 80 Watt/100 Ohm - Auto Cut: 80 Watt/500 Ohm - Bipolar Soft: 80 Watt/100 Ohm	Safety systems	- permanent power control - maldosage - neutral electrode safety system - automatic self-test
Max. voltage	- Dry Cut: 830Vp - Forced Coag: 1200Vp - Soft Coag: 180Vp - Auto Cut: 500Vp - Bipolar Soft: 180Vp	Power supply	100-240 VAC, 50/60 Hz
		Dimensions w x h x d	280 x 135 x 300 mm
		Weight	4 kg
		Certified to	IEC 60601-1, CE nach MDD

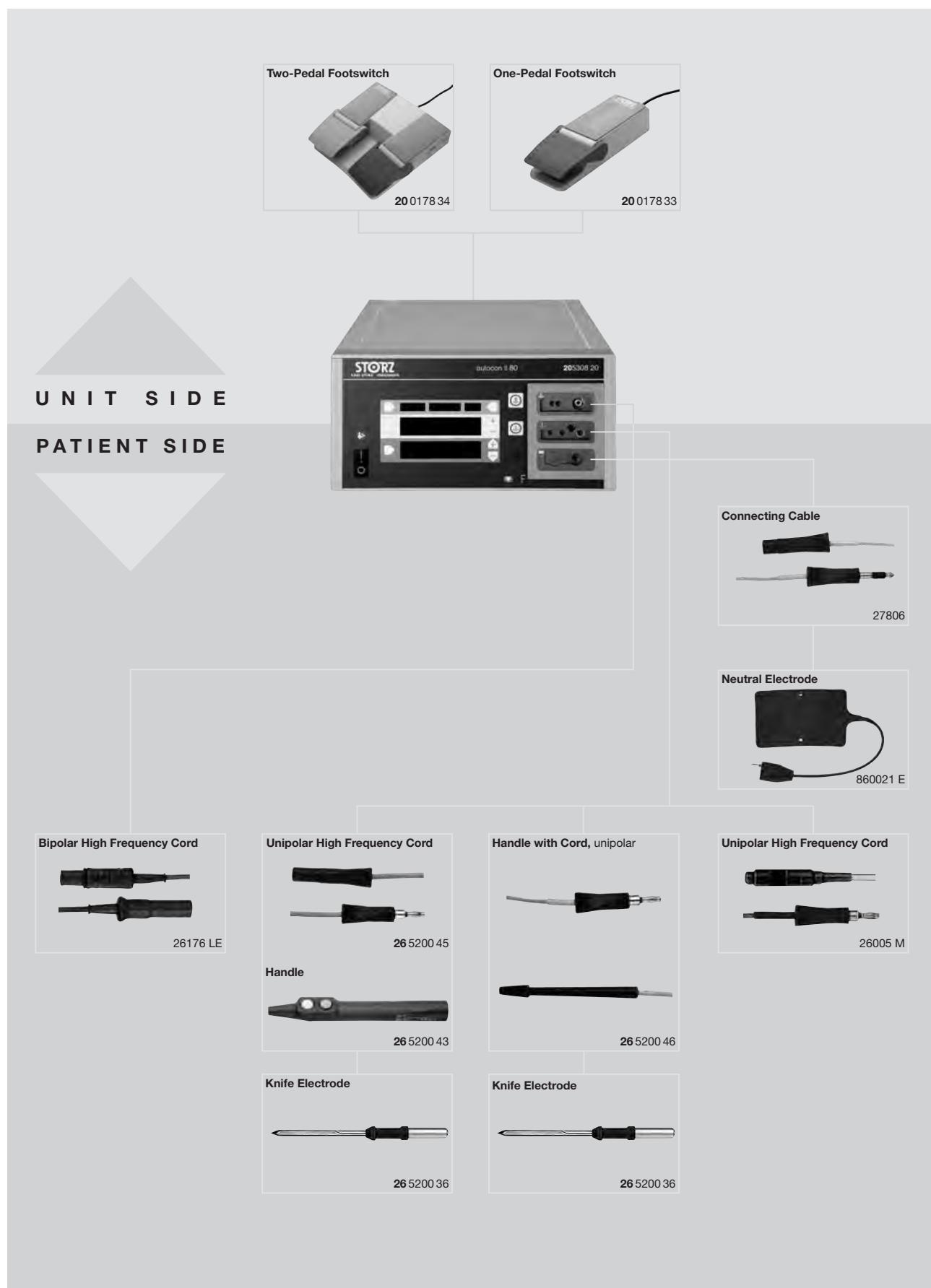
Optional Accessories for AUTOCON® II 80 see pages U 36-U 39
 Components/Spare Parts see chapter 13

AUTOCON® II 80

System Components

NEW

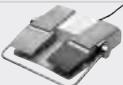
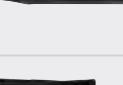
STORZ
KARL STORZ — ENDOSCOPE



Optional Accessories

for AUTOCON® II 400 SCB and AUTOCON® II 200/80

STORZ
KARL STORZ — ENDOSCOPE

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

Surgery Electrodes Set

Accessories



20 5300 08

Surgery Electrodes Set
including:

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



Wire Snare, 5 mm



Same, 10 mm



Ribbon Snare, 10 mm



KIRSCHNER Spatula Electrode, straight



MAGENAU Knife Electrode, angled



Same, lancet-shaped



Ball Electrode, 2 mm



Same, 4 mm



Same, 6 mm



Needle Electrode



Flat Electrode, 8 x 10 mm



Same, 10 x 15 mm

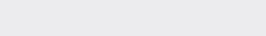
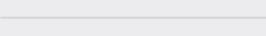
Accessories

Unipolar High Frequency Cords

Unipolar High Frequency Cords



KARL STORZ High Frequency
Instrument Surgical Units

	26002 M	Unipolar High Frequency Cord , with 4 mm plug for models KARL STORZ, Erbe type T, older models and Ellman, length 300 cm
	26004 M	Unipolar High Frequency Cord , with 4 mm plug for models Berchtold and Martin, length 300 cm
	26005 M	Unipolar High Frequency Cord , with 5 mm plug 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, length 300 cm
	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

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 **ML**, 26176 **LVL**.

Accessories

Bipolar High Frequency Cords

Bipolar High Frequency Cords



KARL STORZ High Frequency
Instruments Surgical Units

	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	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Ellman, length 300 cm
	26176 LA	Bipolar High Frequency Cord , with 2 x 4 mm banana plug for KARL STORZ Coagulator 26020 XA/XB and Valleylab, length 300 cm
	26176 LV	Bipolar High Frequency Cord , for KARL STORZ AUTOCON® II 400 SCB system (112, 114, 116, 122, 125) and Valleylab coagulators, length 300 cm

Compatibility

High Frequency Cords to AUTOCON® HF Surgical Units

AUTOCON® II 80	20 5308 20	-	20 5308 20	-	-
AUTOCON® II 200	20 5225 20 20 5225 20C 20 5225 20-010 20 5225 20C010	-	20 5225 20 20 5225 20C 20 5225 20-010 20 5225 20C010	-	-
AUTOCON® II 400 SCB	20 5352 20-111 20 5352 20-115	20 5352 20-112 20 5352 20-116	20 5352 20-122	20 5352 20-125 20 5352 21-125	20 5352 22-125 20 5352 23-125

Unipolar High Frequency Cords

27806	●	-	●	●	●
27801	●	-	●	●	●
27806 UR	-	●	●	●	●
27806 US	-	●	●	●	●
26 5200 45	●	-	●	●	●
26 5200 46	●	-	●	●	●
26002 M	●	●	●	●	●
26005 M	●	-	●	●	●
26006 M	-	●	-	-	-

Bipolar High Frequency Cords

26176 LE	●	-	●	●	●
26176 LV	-	●	●	●	●

Bipolar High Frequency Cords/Instruments to Multifunction Socket

AUTOCON® II 400 SCB	20 5352 20-115	20 5352 20-116	-	20 5352 20-125 20 5352 21-125	20 5352 22-125 20 5352 23-125
20 5400 21	-	-	-	-	●
20 5400 22	-	-	-	-	●
20 5400 23	-	-	-	-	●



COMPONENTS SPARE PARTS



Introduction

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

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

Hotline

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

Example:

Components / Spare Parts		Catalog page
28164 LA	LOTTA® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6°	92
28164 LLA	Little Lotta® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6°	96

Spare Parts	
 <p>495 F Receptacle, diameter 9 mm, for Wolf fiber optic light cable</p>	 <p>6985691 Spring Cap</p>
 <p>495 G Screw Base, for KARL STORZ fiber optic light cable and Olympus/Winter & Ibe</p>	 <p>8515090 Stopcock, for working channel</p>

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

Table of Contents

COMPONENTS / SPARE PARTS

SPARE PARTS FOR NEURO-ENDOSCOPY

HOPKINS® Telescopes	SP 4
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Spare Parts for Neuro-Endoscopy

**SPARE PARTS
FOR NEURO-ENDOSCOPY**

**SPARE PARTS
FOR SPINE SURGERY**

**SPARE PARTS
FOR PERIPHERAL NERVE SURGERY**

SPARE PARTS FOR UNITS

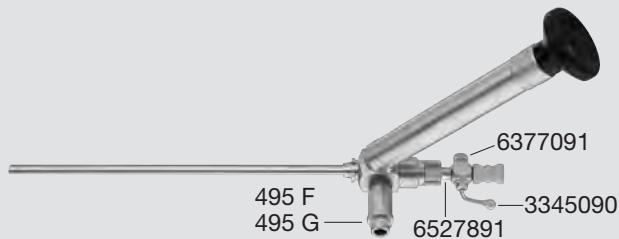
HOPKINS® Telescopes

Components / Spare Parts

28096 AGA HOPKINS® Wide Angle Straight Forward Telescope 6°

Catalog page

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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



3345090
Stopcock



6377091
Spring Cap



6527891
Stopcock

Components / Spare Parts

Catalog page

28164 LA LOTTA® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6° 92

28164 LLA Little LOTTA® Ventriculoscope with HOPKINS® Wide Angle Straight Forward Telescope 6° 96



Spare parts



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



6985691
Spring Cap



495 G
Screw Base,
for KARL STORZ fiber
optic light cable and
Olympus/Winter & Ibe

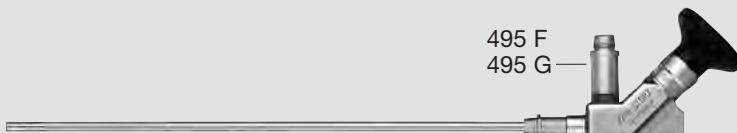


8515090
Stopcock,
for working channel

HOPKINS® II Telescopes, Operating Sheaths

STORZ
KARL STORZ — ENDOSKOPE

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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

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Spare parts



6377091
Spring Cap

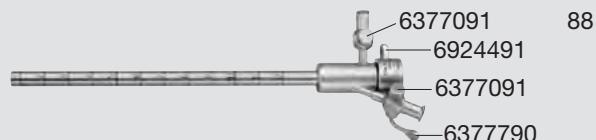


6377790
Stopcock, for
working channel

Operating Sheaths

Components / Spare Parts

28162 BS Operating Sheath



Spare parts



6377091
Spring Cap



6377790
Stopcock, for working channel

6924491
Locking Lever

Components / Spare Parts

6002000 LUER Cone Set



Spare parts



27500
LUER-Lock Tube Connector, male, tube diameter 9 mm



27502
LUER-Lock Tube Connector, with stopcock, dismantling

Components / Spare Parts

28164 LS Operating Sheath



Spare parts



5917300
O-Ring, large



6924491
Locking Lever



5918800
O-Ring, small



7132795
Locking Screw

Components / Spare Parts

28160 GE Working Insert



Spare parts



6376990
Stopcock, for irrigation connector



6377790
Stopcock, for working channel



6377091
Spring Cap



6924491
Locking Lever

TAKE-APART® Bipolar Forceps

Components / Spare Parts Catalog page

28162 BDL TAKE-APART® Bipolar Forceps

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Components / Spare Parts Catalog page

28164 BDV TAKE-APART® Bipolar Forceps

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Components / Spare Parts Catalog page

26167 FGR Bipolar Ring Handle, for 28162 BDL and 28164 BDV

89, 94



Spare parts



6588190
Sealing Cap



7280890
Spring Washer

Deflecting Mechanism, Guillotine Knife, Forceps, Scissors



Components / Spare Parts

Catalog page

28161 LD Deflecting Mechanism

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Spare part

28161 LF
Anti-buckling Device,
for deflection device

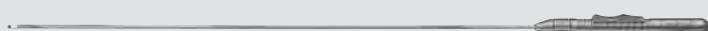
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28164 LG Guillotine Knife

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28164 MA Handle



28164 LGS Guillotine Knife Insert

Components / Spare Parts

Catalog page

28164 LF CLICKline® Biopsy Forceps

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30131 Metal Handle, without ratchet



28164 LFA Outer Sheath, with forceps insert

28164 LB CLICKline® Scissors

30131 Metal Handle, without ratchet

28164 LBA Outer Sheath, with scissors insert

28164 LC CLICKline® Biopsy Forceps

30131 Metal Handle, without ratchet

28164 LCA Outer Sheath, with forceps insert

28164 LD CLICKline® Forceps

30131 Metal Handle, without ratchet

28164 LDA Outer Sheath, with forceps insert

28164 LE CLICKline® Grasping Forceps

30131 Metal Handle, without ratchet

28164 LEA Outer Sheath, with forceps insert

Components / Spare Parts

Catalog page

28160 TG Grasping Forceps

87

28160 TJ Grasping Forceps

85, 93, 97

28160 TV Forceps

85

28160 ZG Biopsy Forceps

87

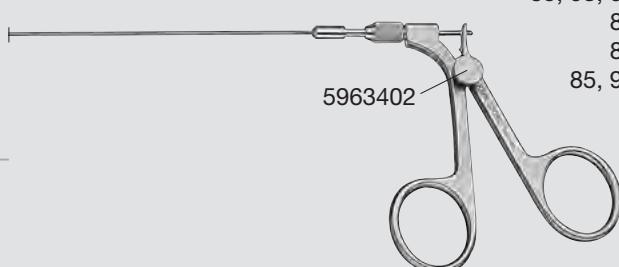
28160 ZJ Biopsy Forceps

85, 93

Spare part



5963402
Knurled Screw



Forceps, Scissors

Components / Spare Parts		Catalog page
28160 TVX	Forceps	90
28161 SB	Biopsy Forceps	97, 105
28161 SC	Scissors	97
28161 SG	Grasping Forceps	97, 102, 105
28162 EM	Scissors	90, 93
28162 Z	Biopsy Forceps	90
28160 EK	Scissors	86, 102
28162 FK	Grasping Forceps	86
28162 FL	Biopsy Forceps	86, 102
28162 FP	Scissors	93
28160 TVL	Biopsy Forceps	103

Spare part



5963402
Knurled Screw



Components / Spare Parts		Catalog page
28162 EK	Scissors	90
28162 ES	Scissors	90
28162 F	Grasping Forceps	90

Spare part



5908202
Knurled Screw

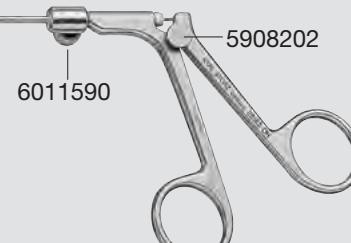


Components / Spare Parts		Catalog page
28162 DH	Biopsy Forceps	89
28162 EH	Hook Scissors	89
28162 EP	Scissors	89
28162 U	Grasping Forceps	89
28162 ZE	Biopsy Forceps	89

Spare parts



5908202
Knurled Screw



6011590
Plug, for LUER-Lock connector

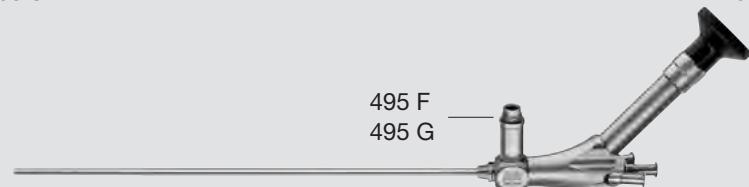
Neuro-Endoscopy for Children

Components / Spare Parts

28162 AMA GAAB Neuro-Endoscope 6°

Catalog page

101



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 / Spare Parts

Catalog page

28161 S OI HandyPro® Neuro-Endoscope

104

28161 SS **Operating Sheath**, graduated, size 2.6 x 4 mm,
working length 15 cm, with three working channels
for irrigation/suction and for instruments size
1.3 mm, for use with HOPKINS® II Telescopes
28008 AA and 28008 FA

28161 SH **Handle**
28161 SO **Mandrel**

28161 SS



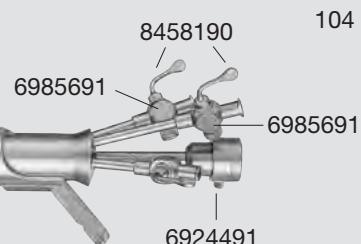
28161 SH —

Components / Spare Parts

Catalog page

28161 SS **Operating Sheath**

104



Spare parts



6924491
Locking Lever



8458190
Stopcock,
for irrigation connector



6985691
Spring Cap

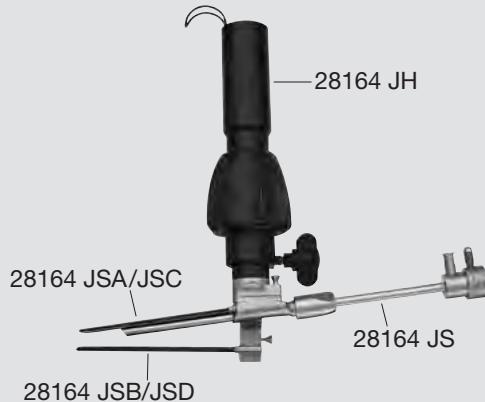
Neuro-Endoscopy for Children, Irrigation Sheaths



Components / Spare Parts

Catalog page

28164 J	JIMENEZ Scalp-Dura Retractor	
28164 JH	Handle	106
28164 JS	Telescope Sheath	
28164 JSA	Upper Blade, 10 mm	
28164 JSB	Lower Blade, 10 mm	
28164 JSC	Upper Blade, 5 mm	
28164 JSD	Lower Blade, 5 mm	



Spare parts for 28164 JSA and 28164 JSC:



7921091
Nut with Pin

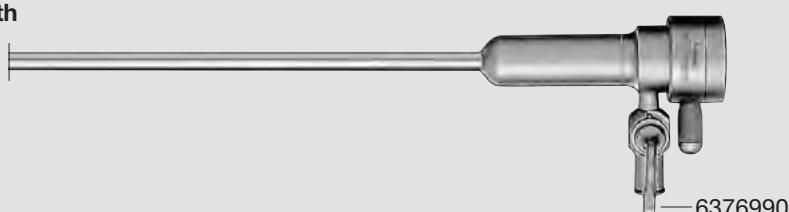


6753495
Nut

Components / Spare Parts

Catalog page

28162 AVS	Irrigation Sheath	136
28164 ASA	Irrigation Sheath	142
28164 BSA	Irrigation Sheath	142
28164 CAK	Irrigation Sheath	137
28164 CBK	Irrigation Sheath	137
28164 CCK	Irrigation Sheath	137



Spare parts



6376990
**Stopcock, for
irrigation connector**



6377091
Spring Cap

Punches

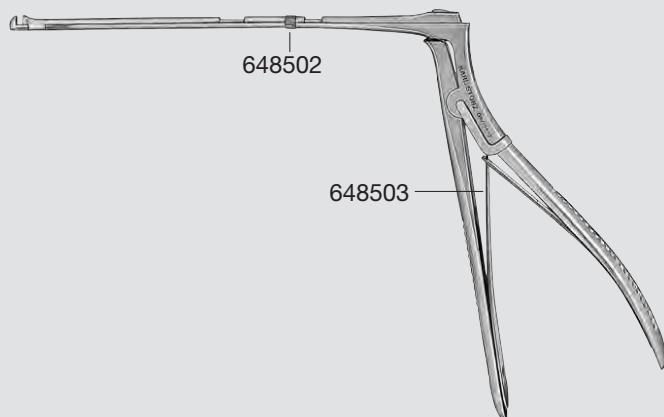
Sphenoid Punches, Frontal Sinus/Recess Punch

Components / Spare Parts

648500 HAJEK-KOFLER Sphenoid Punch

Catalog page

152



Spare parts



648502
Knurled Nut, for
reversible Sphenoid
Punch 648500 – 648523



648503
Spring, for bone punches

Components / Spare Parts

Catalog page

651503 HOSEMAN Frontal Sinus/Recess Punch 224
651504 HOSEMAN Sphenoid Punch 224



Spare part



5922410
Replacement Spring

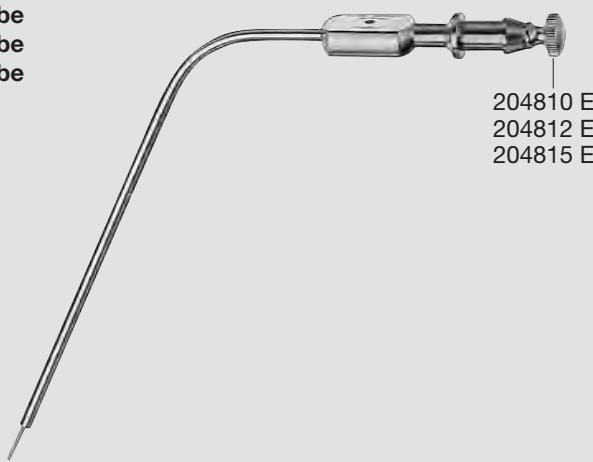
Suction Tubes

Components / Spare Parts

204810	FERGUSON Suction Tube
204812	FERGUSON Suction Tube
204815	FERGUSON Suction Tube

Catalog page

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Spare parts

for 204810	204810 E Stylet
for 204812	204812 E Stylet
for 204815	204815 E Stylet

Components / Spare Parts

474001	FREER Suction Elevator
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Catalog page

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Spare part

474001 E	Stylet
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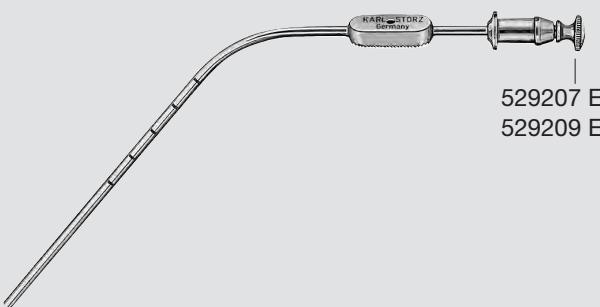
Suction Tubes

Components / Spare Parts

529305	FRAZIER Suction Tube
529307	FRAZIER Suction Tube
529309	FRAZIER Suction Tube

Catalog page

237
237
237



529207 E
529209 E

Spare parts

for 529305 and 529307 529207 E
Stylet

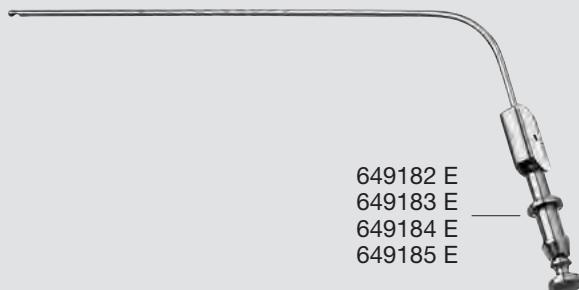
for 529309 529209 E
Stylet

Components / Spare Parts

649182	FERGUSON Suction Tube
649183	FERGUSON Suction Tube
649184	FERGUSON Suction Tube
649185	FERGUSON Suction Tube

Catalog page

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179



649182 E
649183 E
649184 E
649185 E

Spare parts

for 649182 649182 E
Stylet

Spare part for 649184 649184 E
Stylet

for 649183 649183 E
Stylet

Spare part for 649185 649185 E
Stylet

FISCH Dura Retractor and Glomus Retractor

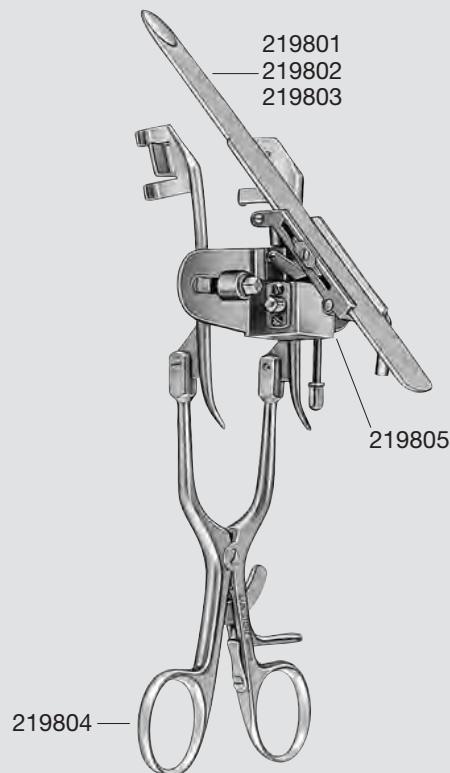
STORZ
KARL STORZ — ENDOSKOPE

Components / Spare Parts

Catalog page

219800	FISCH Dura Retractor , length 18 cm	
219801	Spatula , straight, length 12 cm	
219802	Spatula , straight, length 15 cm	
219803	Spatula , curved, length 15 cm	
219804	Retractor , length 18 cm	
219805	Spatula Attachment , for adjustment of spatulas	
219806	Wrench , for spatula attachment	

187

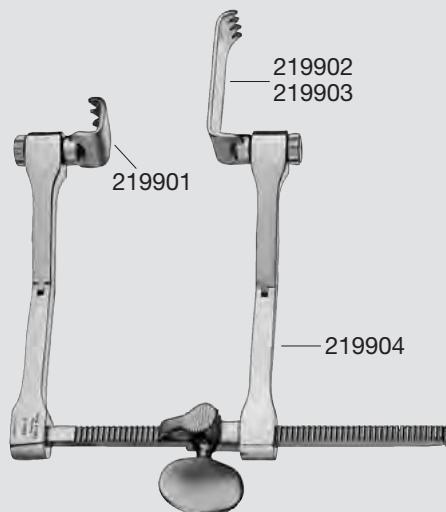


Components / Spare Parts

Catalog page

219900	FISCH Glomus Retractor (infratemporal fossa retractor)	
219901	Retractor Blade , short	
219902	Retractor Blade , long	
219903	Retractor Blade , long and slim, with drill hole	
219904	Retractor Frame , without blades	

186



Irrigation and Suction Handles

Components / Spare Parts

- 28161 TD THUMFART **Irrigation and Suction Handle**
- 28161 TH THUMFART **Handle**, with ergonomic ring handle and finger grip plate, for use with Irrigation and Suction Sheaths 723527 A – F and 28160 TA – TF
- 28161 DV **Press Button Valve**, with lock function
-
- 28161 TT THUMFART **Irrigation and Suction Handle**
- 28161 TH THUMFART **Handle**, with ergonomic ring handle and finger grip plate, for use with Irrigation and Suction Sheaths 723527 A – F and 28160 TA – TF
- 28161 TV **Press Button Valve** (irrigation only active when pressure valve is depressed)

Catalog page

145



Spare parts



- 7249291
O-Ring Set, 2 sizes,
package of 5

- 101010-10*
Single Use Push-Button Pressure Valve, sterile,
package of 10

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

TAKE-APART® Bipolar Forceps

Components / Spare Parts

28164 BDL TAKE-APART® Bipolar Forceps

Catalog page

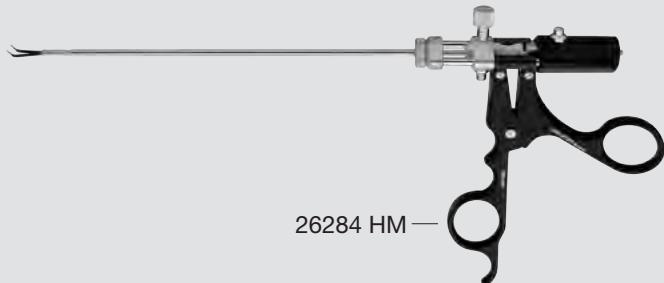
111, 207

26284 HM Bipolar Ring Handle

26284 AS Outer Sheath

26284 BS Inner Sheath

28164 FGL Forceps Insert



26284 HM —

Components / Spare Parts

Catalog page

28164 BDM TAKE-APART® Bipolar Forceps

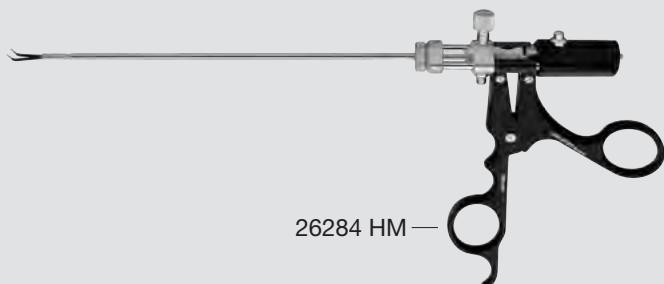
110, 207

26284 HM Bipolar Ring Handle

26284 AS Outer Sheath

26284 BS Inner Sheath

28164 FGM Forceps Insert



26284 HM —

Components / Spare Parts

Catalog page

28164 BDD TAKE-APART® Bipolar Forceps

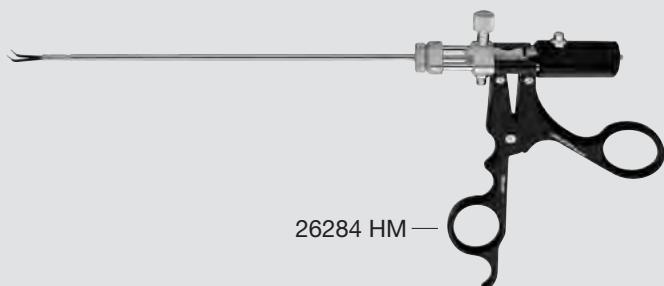
110, 207

26284 HM Bipolar Ring Handle

26284 AS Outer Sheath

26284 BS Inner Sheath

28164 FGD Forceps Insert



26284 HM —

Components / Spare Parts

Catalog page

28164 BDG TAKE-APART® TAN Bipolar Coagulation Forceps

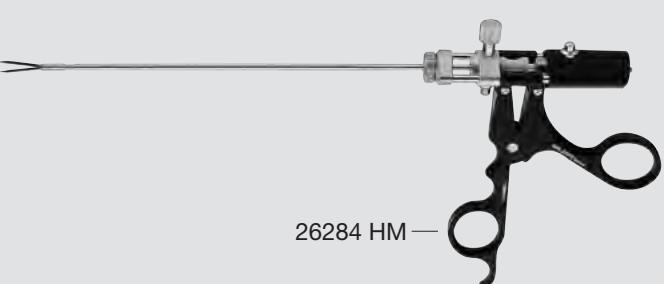
111, 208

26284 HM Bipolar Ring Handle

26284 AS Outer Sheath

26284 BS Inner Sheath

28164 FDG Forceps Insert



26284 HM —

TAKE-APART® Bipolar Forceps

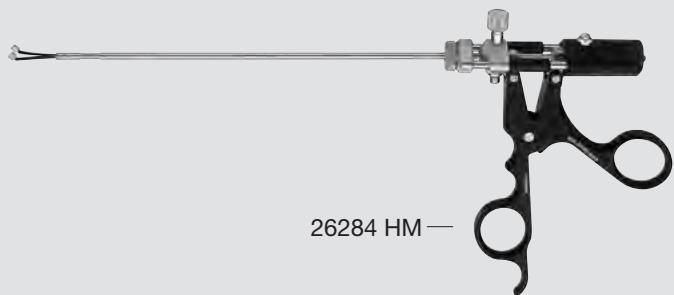
Components / Spare Parts

Catalog page

28164 BDK **TAKE-APART® Bipolar Forceps**

110, 208

- 26284 HM **Bipolar Ring Handle**
- 26284 AS **Outer Sheath**
- 26284 BS **Inner Sheath**
- 28164 FGK **Forceps Insert**



26284 HM —

Components / Spare Parts

Catalog page

28164 BDB **TAKE-APART® Bipolar Forceps**

209

- 26284 HM **Bipolar Ring Handle**
- 462010 **Outer Sheath**
- 462011 **Inner Sheath**
- 28164 FGB **Forceps Insert**



26284 HM —

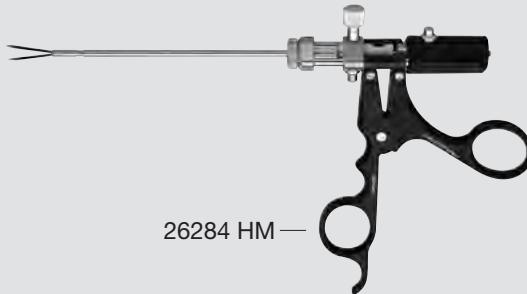
Components / Spare Parts

Catalog page

28164 BDC **TAKE-APART® Bipolar Forceps**

209

- 26284 HM **Bipolar Ring Handle**
- 462010 **Outer Sheath**
- 462011 **Inner Sheath**
- 28164 FGC **Forceps Insert**



26284 HM —

Components / Spare Parts

Catalog page

28164 BDN **TAKE-APART® Bipolar Forceps**

208

- 26284 HM **Bipolar Ring Handle**
- 26284 AS **Outer Sheath**
- 26284 BS **Inner Sheath**
- 28164 FDN **Forceps Insert**



26284 HM —

TAKE-APART® Bipolar Forceps

Components / Spare Parts

26284 HM **TAKE-APART® Bipolar Ring Handle,**
for 28164 BDL/BDM/BDD/BDG/BDK/BDB/BDC/BDN

Catalog page
110-111, 207-209



Spare parts



7280890
Spring Washer



7072390
Sealing Cap,
diameter 1.8 mm



6011590
Plug, for LUER-Lock
connector



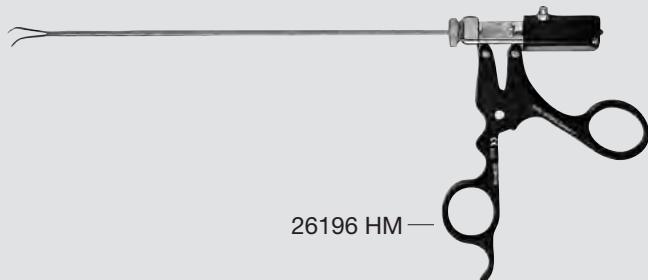
5917800
O-Ring

Components / Spare Parts

28164 BG **TAKE-APART® Bipolar Forceps**

Catalog page
208

26196 HM **Bipolar Ring Handle**
50203 BS **Outer Sheath**
50203 RB **Forceps Insert**



Components / Spare Parts

26196 HM **Bipolar Ring Handle, for 28164 BG**

Catalog page
208



Spare part



6875990
Sealing Cap,
diameter 2.6 mm

de DIVITIIS-CAPPABIANCA Scalpels, Irrigation Tube



Components / Spare Parts

Catalog page

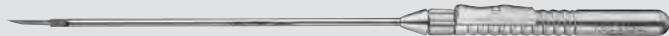
28164 M de DIVITIIS-CAPPABIANCA Scalpel

233

28164 MA Handle

28164 MB Outer Sheath

28164 MC Micro Knife, pointed



Components / Spare Parts

Catalog page

28164 KK de DIVITIIS-CAPPABIANCA Scalpel

233

28164 MA Handle

28164 MB Outer Sheath

28164 MS Micro Knife, sickle-shaped



Components / Spare Parts

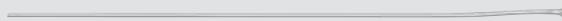
Catalog page

28162 SN Irrigation Tube

90



Spare parts



28162 SE
Spare Tube, autoclavable



6599091
Tube Olive

TWINFlow Suction and Irrigation Handle, HD Upgrade Kit



Components / Spare Parts

Catalog page

28164 SI	TWINFlow Suction and Irrigation Handle	128, 148
28163 SIH	Suction and Irrigation Handle	
28163 SIU	Suction and Irrigation Unit , separate, with adjustable continuous suction and continuously adjustable irrigation function if required	
28163 SIR	Cleaning Adaptor , for assembly in sterilization trays, for use with Suction-Irrigation Unit 28163 SIU	
8101591	Set , including loading aid with 8 O-rings	
27650 B	Cleaning Brush , round, rigid, outer diameter 7 mm, for working channel diameter 2.5 – 5 mm, length 35 cm	
28164 SIA	Suction and Irrigation Tube , with connector for 28163 SIH, angled, diameter 2 mm, working length 9 cm	
28164 SIB	Suction and Irrigation Tube , with connector for 28163 SIH, angled, diameter 2 mm, working length 13 cm	
28164 SIC	Suction and Irrigation Tube , with connector for 28163 SIH, angled, diameter 4 mm, working length 9 cm	
28164 SID	Suction and Irrigation Tube , with connector for 28163 SIH, angled, diameter 4 mm, working length 13 cm	



Spare parts



8101591
Set, including loading aid with 8 O-Rings



5916900
O-Ring



7189295
Loading Aid

Components / Spare Parts

Catalog page

22220054-NDE	HD Upgrade Kit, Neurosurgery	130
29005 DRS	Equipment Cart	
29005 MH	Monitor Arm	
29003 TBK	Isolation Transformer	
29003 IW	Earth Leakage Monitor	
29005 KKM	Mains Cord , length 100 cm	
22220054-3	IMAGE1 H3-M COVIEW® Three-Chip FULL HD Microscope Camera Head , PAL/NTSC, 50/60 Hz	
9526 NB	26" HD Monitor	
22201011-102	IMAGE 1 HUB™ HD Camera Control Unit , with SDI, 50/60 Hz, KSI set	
20040913-DE	KARL STORZ AIDA® compact NEO advanced , German character set	
20040073	RS 232 Connecting Cable , length 600 cm	
22220054-NE	Same	
20040913-EN	KARL STORZ AIDA® compact NEO advanced , English	

Rotating Clamp, Flexible Tension Arm

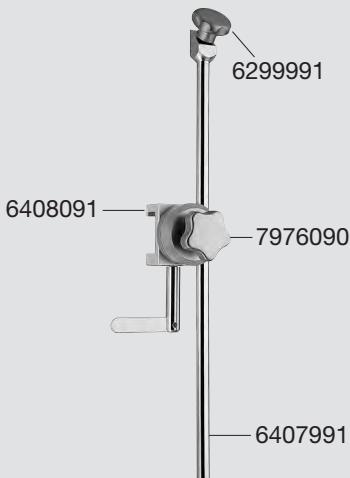
STORZ
KARL STORZ — ENDOSKOPE

Components / Spare Parts

723017 **Rotating Clamp**

Catalog page

389



Spare parts



6299991
Star Grip, small



6408091
Rotating Clamp, without
rod



6407991
Holding Rod, without
clamp



7976090
Star Grip, large

Components / Spare Parts

723025 **Flexible Holding Arm**

Catalog page

389

723026 **Flexible Tension Arm**

723027 **Holding Device**

723028 **Rotating Clamp**



Spare part



7976090
Star Grip, large



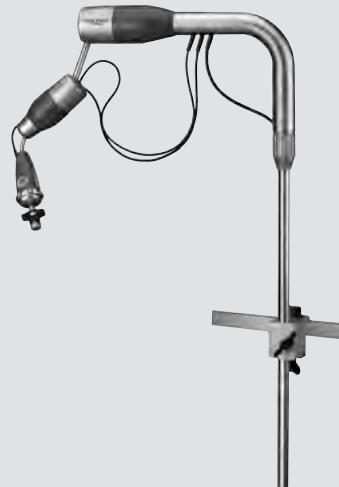
ENDOCRANE® Holding System, POINT SETTER® Holding System



Components / Spare Parts

Catalog page

28272 EH	ENDOCRANE® , piezoregulated holding arm	380
28272 EHS	ENDOCRANE® Arm , including stand	
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	



28272 EHS

Components / Spare Parts

Catalog page

28163 WS	POINT SETTER® , pneumatic holding arm, set	384
28172 P	POINT SETTER® Arm	
28172 O	OR Table Adaptor	
28272 UA	KSLOCK Adaptor , for KARL STORZ clamping jaws	
28272 UGN	KARL STORZ Clamping Jaw , large	
28272 UKN	KARL STORZ Clamping Jaw , small	
28272 UF	KARL STORZ Clamping Jaw , for fiberscopes	
2761291	Pressure Regulator , 7 bar	
28172 WD	Drape , for single use, sterile, package of 10	



Air Compressors, STOR-E® Transport Cart



Components / Spare Parts

Catalog page

20031002	Air Compressor , for POINT SETTER®	387
20031020	Air Compressor , 0 – 8 bar, power supply 230 VAC, 50/60 Hz, dimensions (w x d x h): appr. 500 x 320 x 340 mm, weight appr. 22 kg	
27630022	Fabric Reinforced Tube , for connecting CALCUSPLIT® SCB 27 6300 20	
28172 WC	Connecting Tube , length 600 cm, for use with for POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar	20031002



Components / Spare Parts

Catalog page

20031002 C	Air Compressor , for POINT SETTER®	387
20031020 C	Air Compressor , 0 – 8 bar, power supply 115 VAC, 50/60 Hz, dimensions (w x d x h): appr. 500 x 320 x 340 mm, weight appr. 22 kg	
27630022	Fabric Reinforced Tube , for connecting CALCUSPLIT® SCB 27 6300 20	
28172 WC	Connecting Tube , length 600 cm, for use with for POINT SETTER® holding system, required pressure setting min. 6 to max. 8 bar	20031002 C



Components / Spare Parts

Catalog page

20020083	STOR-E® Transport Cart , for POINT SETTER® holding arm	388
20020061	Subrack , for POINT SETTER®	
20020055	Accessory Set , for POINT SETTER®	
20020057	Top Cover	20020055
29005 AK	Wire Basket	29005 AK



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

Headlights

LED Headlights

Components / Spare Parts

Catalog page

- | | | |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 094100 | LED Headlight , with white light | 391 |
| 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 | |
| 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

- | | | |
|--------|--------------------------------------------|-----|
| 094108 | Battery Box , for 094100 and 094110 | 391 |
|--------|--------------------------------------------|-----|



Spare parts



- | | |
|----------|--------------------------------|
| 094108 B | Cover , for Battery Box |
| | 094108 |



- | | |
|----------|---------------------------------|
| 121306 P | Photo Battery , lithium, |
| | 3 V, CR 123 A |

Headlights

LED Headlights



Components / Spare Parts

Catalog page

094120	LED Headlight , with white light	391
--------	-----------------------------------------	-----

094103	Headlight , LED technology, white light , including connecting cable for rechargeable battery box
--------	-----------------------------------------------------------------------------------------------------------------

094124	Rechargeable Battery Box , with 1 Li-Ion rechargeable battery
--------	----------------------------------------------------------------------

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
--------	---------------------------------------------------------------

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
--------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



094130	LED Headlight , with yellowish light
--------	---------------------------------------------

094104	Headlight , LED technology, yellowish light , including connecting cable for rechargeable battery box
--------	---------------------------------------------------------------------------------------------------------------------

094124	Rechargeable Battery Box , with 1 Li-Ion rechargeable battery
--------	----------------------------------------------------------------------

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
--------	---------------------------------------------------------------

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

094124	Rechargeable Battery Box , for 094120 and 094130	391
--------	---------------------------------------------------------	-----



Spare parts



094125 A
**Li-Ion Rechargeable
Battery Cell**, with key



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



094105
Extension Cable,
for LED Headlights
094100 – 094130, for
carrying the battery box
or rechargeable battery
box in OR clothing

Spare parts for Headbands see page SP 27

Headlights

LED Headlights

Components / Spare Parts

078760 **Headband**, for 094100, 094110, 094120 and 094130

Catalog page

391, 395



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

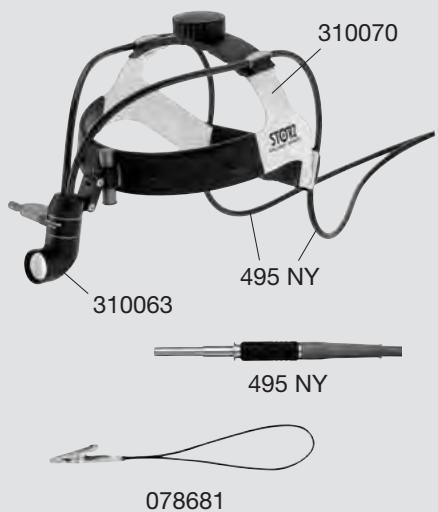
Headlights KS60

Components / Spare Parts

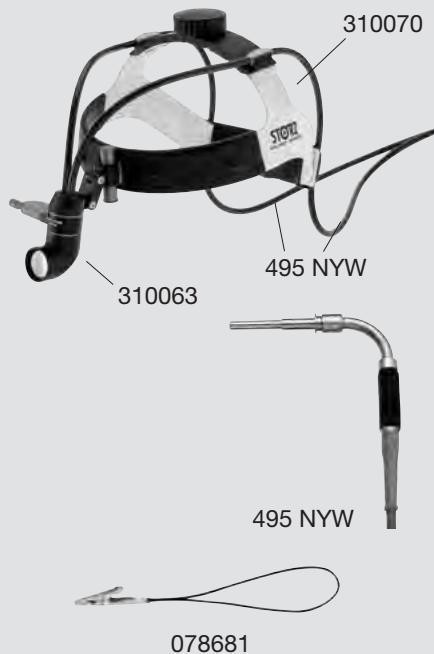
310060	Headlight KS60	
310063	Headlight KS60 , with removable and sterilizable Focus Handle 310065	
310070	Headband , fully adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 310063	
495 NY	Y-Fiber Optic Light Cable , with special protective casing for Headlight 310063, length 290 cm	
078681	Clip with Band , for attaching the fiber optic light cable to OR clothing	

Catalog page

392



310061	Headlight KS60	
310063	Headlight KS60 , with removable and sterilizable Focus Handle 310065	
310070	Headband , fully adjustable, with Forehead Cushion 078511, with cross band, including holder for Headlight 310063	
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	
078681	Clip with Band , for attaching the fiber optic light cable to OR clothing	



Headlights

Headlights KS60

Components / Spare Parts

310070 Headband, for 310060 and 310061

Catalog page

392, 395



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

310063 Headlight KS60, for 310060 and 310061

Catalog page

392



Spare part



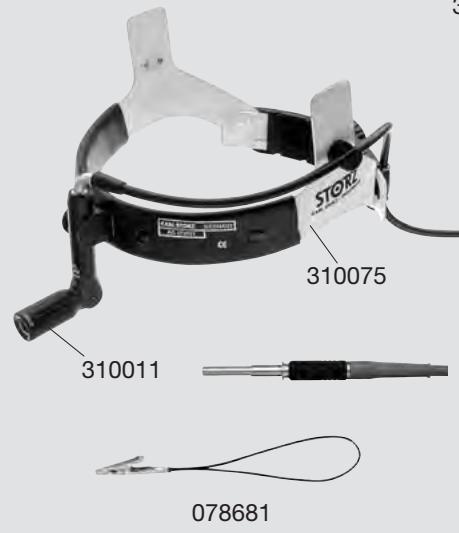
310065
Handle, with focusing
screw, sterilizable

Headlights

Components / Spare Parts

Catalog page

- | | | |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 310010 | Headlight , with straight plug | 393 |
| 310011 | Headlight , with thin, 230 cm long integral fiber optic light cable, diameter 2.5 mm, with straight plug to the light source | |
| 310075 | Headband , extra light, fully adjustable, with Forehead Cushion 078511, without cross band, including clamp mounting for Headlight 310010/310015 | |
| 078681 | Clip with Band , for attaching fiber optic light cable to OR clothing | |



- | | | |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 310015 | 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 | |
| 310075 | Headband , extra light, fully adjustable, with Forehead Cushion 078511, without cross band, including clamp mounting for Headlight 310010/310015 | |
| 078681 | Clip with Band , for attaching fiber optic light cable to OR clothing | |



Components / Spare Parts

Catalog page

- | | | |
|---------------|-----------------------------------------|----------|
| 310075 | Headband , for 310010 and 310015 | 393, 395 |
|---------------|-----------------------------------------|----------|

Spare part



078511
Forehead Cushion,
with push-button lock



Headlights

Components / Spare Parts Catalog page

310020 Headlight, with straight plug 393

310011 Headlight, 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

078681 Clip with Band, for attaching fiber optic light cable to OR clothing



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

078681 Clip with Band, for attaching fiber optic light cable to OR clothing



Components / Spare Parts Catalog page

310076 Headband, for 310020 and 310025 393, 395



Spare parts

8-12



078511
Forehead Cushion,
with push-button lock



310073
Protection Clip, for cold
light cable, for fixing the
light cable to the
headband, 2 pcs

Headlights

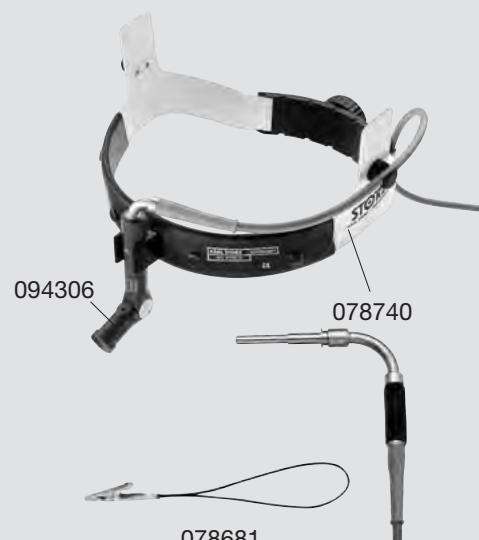
Components / Spare Parts

Catalog page

- | | | |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 094301 | Headlight , with straight plug | 394 |
| 094302 | Headlight , lightweight model, 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 | |
| 078681 | Clip with Band , for attaching fiber optic light cable to OR clothing | |



- | | | |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 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 | Headband , 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 | |



Components / Spare Parts

Catalog page

- | | | |
|---------------|-----------------------------------------|----------|
| 078740 | Headband , for 094301 and 094305 | 394, 395 |
|---------------|-----------------------------------------|----------|

Spare part



078511
Forehead Cushion,
with push-button lock

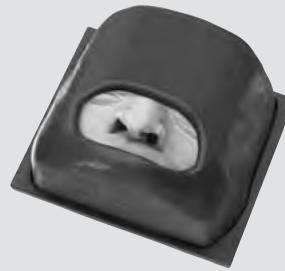


Training Model, S.I.M.O.N.T Head Model, S.I.M.O.N.T Otorhino Head Model



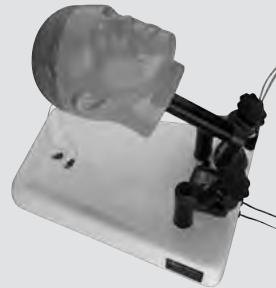
Components / Spare Parts Catalog page

723128	Training Model	397
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	



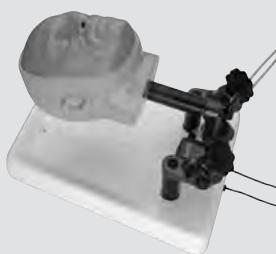
Components / Spare Parts Catalog page

28199 LC	S.I.M.O.N.T Head Model, cranial	398
28199 LCA	Insert	
28199 LCB	Head	
28199 LN	Power Supply	
28199 LB	Base	
28199 LJ	Joystick	
28199 LP	Pump	
28199 LH	Head Support	



Components / Spare Parts Catalog page

28199 LS	S.I.M.O.N.T Head Model, for otorhino and skull base	399
28199 LSA	Insert	
28199 LSB	Head	
28199 LN	Power Supply	
28199 LB	Base	
28199 LJ	Joystick	
28199 LP	Pump	
28199 LH	Head Support	





Spare Parts for Spine Surgery



Telescopes

HOPKINS® II Telescopes

Components / Spare Parts

26003 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view	260
26003 BA	HOPKINS® II Forward-Obllique Telescope 30°, enlarged view	260
26003 FA	HOPKINS® II Telescope 45°, enlarged view	260
28095 VA	VITOM® SPINE HOPKINS® II Straight Forward Telescope 0°	355



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 / Spare Parts

26046 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view	259
26046 BA	HOPKINS® II Forward-Obllique Telescope 30°, enlarged view	259
26046 BUA	HOPKINS® II Forward-Obllique Telescope 30°, enlarged view	259
26046 FA	HOPKINS® II Telescope 45°, enlarged view	259
28095 AA	HOPKINS® II Straight Forward Telescope 0°, enlarged view	253, 306



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

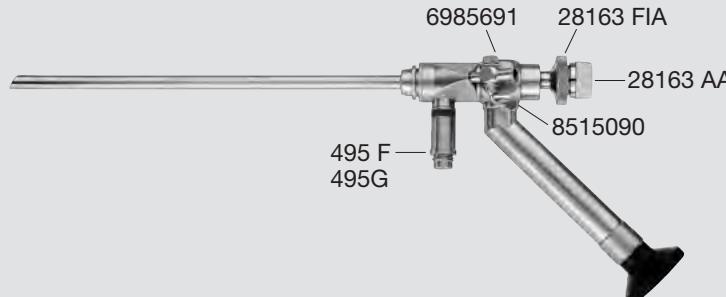
Telescopes

HOPKINS® II Telescopes

Components / Spare Parts

Catalog page

28163 BFA	HOPKINS® II Wide Angle Telescope 25°	299
28163 BTA	HOPKINS® II Wide Angle Telescope 25°	298
28163 FFA	HOPKINS® II Wide Angle Telescope 15°	300



Spare parts



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



6985691
Spring Cap



495 G
Screw Base,
for KARL STORZ fiber
optic light cable and
Olympus/Winter & Ibe



8515090
Stopcock,
for working channel



28163 AA
Adaptor, for
working channel



28163 FIA
Irrigation Adaptor

Components / Spare Parts

Catalog page

28163 AA	Adaptor , for working channel	-
----------	--------------------------------------	---



Spare part



6747695
Sealing Cap, slotted

Telescopes

HOPKINS® Telescopes, PECD Endoscope

Components / Spare Parts

26003 AE ENDOCAMELEON® HOPKINS® Telescope

495 F
495 G

263



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 / Spare Parts

28095 BAK HOPKINS® Forward-Oblique Telescope 30°

313

28095 BAL HOPKINS® Forward-Oblique Telescope 30°

313



Spare parts



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



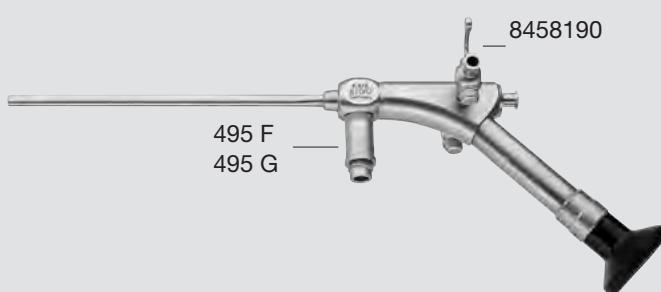
495 G
Screw Base,
for KARL STORZ fiber
optic light cable and
Olympus/Winter & Ibe

Components / Spare Parts

28163 PCD PECD Endoscope 8°

Catalog page

248



Spare parts



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



8458190
Stopcock,
for irrigation connector



495 G
Screw Base,
for KARL STORZ fiber
optic light cable and
Olympus/Winter & Ibe

CLICK'line® Spoon Forceps, TAKE-APART® Bipolar Coagulation Forceps



Components / Spare Parts

Catalog page

28163 UHK CLICK'line® Spoon Forceps

251

33131 K Metal Handle, without ratchet,
without overload protection,
for use with overload protection,
autoclavable



28163 UCK Forceps Insert

33131 A Overload Protection

28163 UHM CLICK'line® Spoon Forceps

33131 K Metal Handle, without ratchet,
without overload protection,
for use with overload protection,
autoclavable

28163 UCM Forceps Insert

33131 A Overload Protection

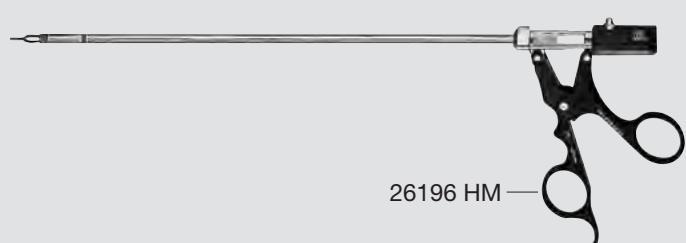
Components / Spare Parts

Catalog page

28163 DZ TAKE-APART® MANHES Bipolar Coagulation Forceps

254, 309

26196 HM Bipolar Ring Handle



26180 HS Outer Sheath, diameter 5 mm

26180 HV MANHES Forceps Insert

Components / Spare Parts

Catalog page

26196 HM Bipolar Ring Handle, for 28164 BG

254, 309

Spare part



6875990
Sealing Cap,
diameter 2.6 mm



TAKE-APART® Bipolar Coagulation Forceps

Components / Spare Parts

28164 BDN **TAKE-APART® Bipolar Forceps**

26284 HM **Bipolar Ring Handle**

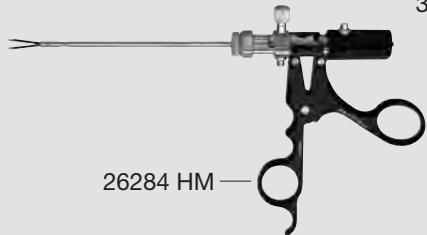
26284 AS **Outer Sheath**

26284 BS **Inner Sheath**

28164 FDN **Forceps Insert**

Catalog page

318



26284 HM —

Components / Spare Parts

26276 HD **TAKE-APART® MANHES Bipolar Coagulation Forceps**

26296 HM **Bipolar Ring Handle**

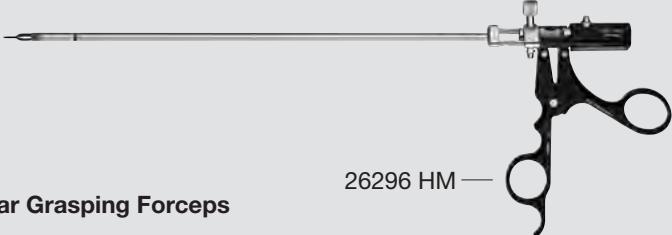
26276 A **Outer Sheath**

26276 B **Inner Sheath**

26176 HW **Forceps Insert**

Catalog page

282



26296 HM —

26276 HK **TAKE-APART® SCHNEIDER Bipolar Grasping Forceps**

26296 HM **Bipolar Ring Handle**

26276 A **Outer Sheath**

26276 B **Inner Sheath**

26176 HN **Forceps Insert**

Components / Spare Parts

26284 HM **TAKE-APART® Bipolar Ring Handle**

26296 HM **TAKE-APART® Bipolar Ring Handle**

Catalog page

282

282



6011590

5917800

Spare parts



6011590
Plug, for LUER-Lock
connector

Spare parts for 26284 HM



5910600
O-Ring, 3 x 1.5 mm



5917800
O-Ring

Spare parts for 26284 HM



7072390
Sealing Cap,
diameter 1.8 mm



6875990
Sealing Cap,
diameter 2.6 mm

Spare part for 26296 HM



Spare part for 26296 HM



TAKE-APART® Bipolar Coagulation Suction Tube, Clip Applicator, Fan Retractor

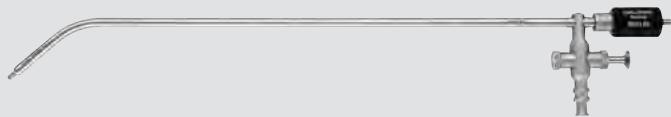
STORZ
KARL STORZ — ENDOSCOPE

Components / Spare Parts Catalog page

28163 BSN TAKE-APART® Bipolar Coagulation Suction Tube 283

28163 BX Suction Tube

28163 BZ Coagulation Electrode, curved



Components / Spare Parts Catalog page

30444 LR Clip Applicator 288

30444 H Metal Handle, with ratchet

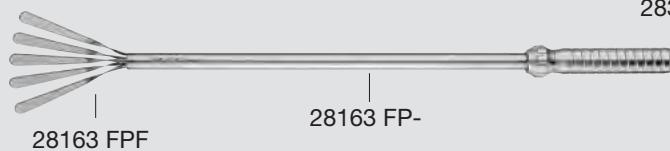
30444 A Metal Outer Sheath

30440 LR Insert



Components / Spare Parts Catalog page

28163 FP Fan Retractor 283



Spare parts

28163 FP- Outer Sheath



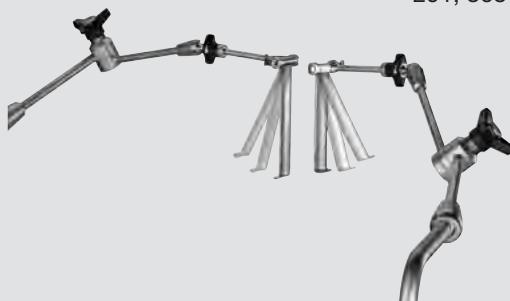
ROSENTHAL Angled Retractor, TENTACLE Spine Retractor, Spine Retractor



Components / Spare Parts

Catalog page

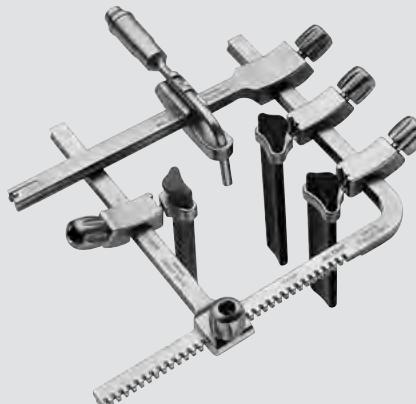
28163 VR	ROSENTHAL Angled Retractor	291, 368
28163 VRM	Retractor Blade, 12 cm	
28163 VRK	Retractor Blade, 14 cm	
28163 VRG	Retractor Blade, 18 cm	
28272 HB	Articulated Stand, L-shaped	
28172 HR	Rotation Socket, to clamp to the operating table	



Components / Spare Parts

Catalog page

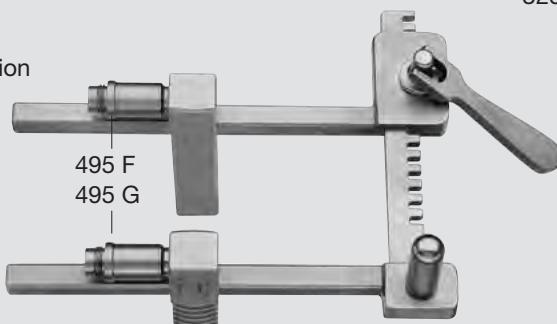
28163 TRX	TENTACLE Spine Retractor	292, 321, 367
28163 TRF	Retractor Frame	
28163 TRA	Retractor Arm	
28163 TRD	Drive Screw	
28163 TRB	Retractor Arm, extra	
28163 TBB	PEEK Retractor Blade, 70 mm	
28163 TBS	PEEK Retractor Blade, 50 mm	
28163 TBM	PEEK Retractor Blade, 30 mm	
28163 TSB	Holder, for retractor blades	
28163 TRL	Light Carrier	
28163 TSL	Holder, for light carriers	
28163 TSD	Screwdriver	
28163 TSH	Positioning Instrument	
39260 TRC	Sterilization Container	



Components / Spare Parts

Catalog page

28163 R	Spine Retractor	323
28163 RBS	Retractor Blade, short, length 70 mm, with two teeth, with integrated light transmission	
28163 RBL	Retractor Blade, long, length 85 mm, with integrated light transmission	
28163 RF	Retractor Frame, serrated, length 140 mm, width 106 mm	
28163 RFA	Retractor Arm, adjustable, length 140 mm	
28163 RH	Turning Handle	



Spare parts



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



495 G
Screw Base,
for KARL STORZ fiber
optic light cable and
Olympus/Winter & Ibe

Holding System, TWINFlow Suction and Irrigation Handle

Components / Spare Parts

Catalog page

28272 RKB Holding System, autoclavable, with quick release coupling KSLOCK

323

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)

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



Components / Spare Parts

Catalog page

28163 SI TWINFlow Suction and Irrigation Handle

324, 369

28163 SIH Suction and Irrigation Handle

28163 SIU Suction and Irrigation Unit, separate, with adjustable continuous suction and continuously adjustable irrigation function if required

28163 SIR Cleaning Adaptor, for assembly in sterilization trays, for use with Suction-Irrigation Unit 28163 SIU

8101591 Set, including loading aid with 8 O-rings

27650 B Cleaning Brush, round, rigid, outer diameter 7 mm, for working channel diameter 2.5 – 5 mm, length 35 cm

28164 SIA Suction and Irrigation Tube, with connector for 28163 SIH, angled, diameter 2 mm, working length 9 cm

28164 SIB Suction and Irrigation Tube, with connector for 28163 SIH, angled, diameter 2 mm, working length 13 cm

28164 SIC Suction and Irrigation Tube, with connector for 28163 SIH, angled, diameter 4 mm, working length 9 cm

28164 SID Suction and Irrigation Tube, with connector for 28163 SIH, angled, diameter 4 mm, working length 13 cm



Spare parts



8101591
Set, including loading aid
with 8 O-Rings



5916900
O-Ring



7189295
Loading Aid

Operating Sheaths

Components / Spare Parts

28163 FSG	Operating Sheath	299
28163 FSN	Operating Sheath	299
28163 FSW	Operating Sheath	299

Catalog page



Spare parts



9985990
Cover Cap



9983890
Pusher



9986290
Collet



9986090
Seal

Components / Spare Parts

28163 FWO	Operating Sheath	299
28163 TSG	Operating Sheath	298
28163 TSW	Operating Sheath	298
28163 TSN	Operating Sheath	298

Catalog page



Spare parts



6692195
Cover Cap



29100
Plug, for LUER-Lock connector for cleaning, black, autoclavable, package of 10



9986090
Seal

Operating Sheaths, Knife

Components / Spare Parts Catalog page

28163 PSG	Operating Sheath	300
28163 PSN	Operating Sheath	300
28163 PSW	Operating Sheath	300



Spare parts



6692195
Cover Cap



29100
Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10



6643595
Seal

Components / Spare Parts Catalog page

28163 FM	Knife	304
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28163 FMI

28163 FMH

28163 FMS

Spare parts



28163 FMH
Handle

28163 FMI
Knife Insert

28163 FMS Sheath

Bipolar Electrodes, Palpation Hook, Grasping Forceps



Components / Spare Parts

Catalog page

28163 FBC **Bipolar Electrode**

301

28163 FBE **Bipolar Electrode Insert**

28163 FBS **Electrode Sheath**

26184 HR **Bipolar Spring Handle**



Components / Spare Parts

Catalog page

28163 FBH **CLICK'line® Palpation Hook**

301

33161 **Metal Handle**, without ratchet

28163 FBI **Outer Sheath**, with working insert



Spare part

29100

Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10



Components / Spare Parts

Catalog page

28163 FSI **CLICK'line® BLAKESLEY Grasping Forceps**

301

33121 **Plastic Handle**, without ratchet

28163 FSE **Outer Sheath**, with forceps insert



Spare part

29100

Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10



TAKE-APART® Forceps, CLICK'line® Forceps, Grasping Forceps



Components / Spare Parts

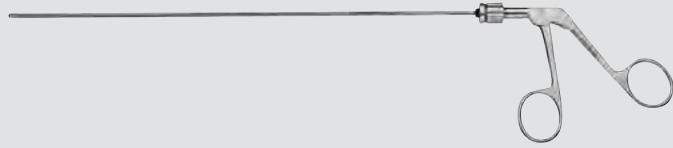
Catalog page

28163 SL TAKE-APART® Grasping Forceps

302

28169 A Handle

28063 SL Working Attachment



28163 SG TAKE-APART® Spoon Forceps

28169 A Handle

28063 SG Working Attachment

28163 SE TAKE-APART® BLAKESLEY Forceps

28169 A Handle

28063 SE Working Attachment

Components / Spare Parts

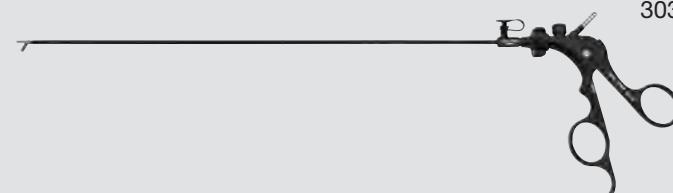
Catalog page

28163 FZI CLICK'line Raven's Beak Forceps

303

33121 Plastic Handle, without ratchet

28163 FZE Forceps Insert, with raven's beak



Spare part



29100

Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10

Components / Spare Parts

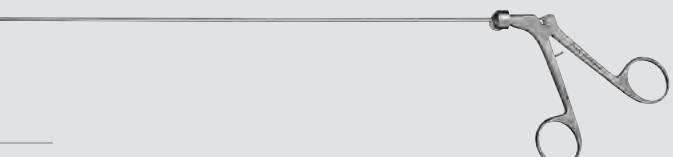
Catalog page

28163 FBM Grasping Forceps

302

28163 FB BLAKESLEY Nucleus Cutting Forceps

314



Spare part



6011590

Plug, for LUER-Lock
connector

Hook Scissors, Grasping Forceps, SpinoFIT® Punches

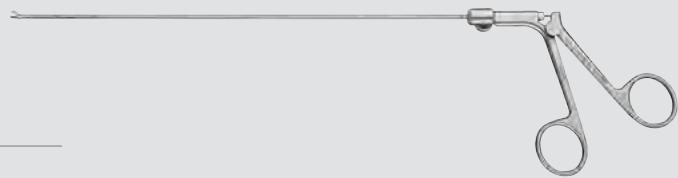


Components / Spare Parts

28163 EHK Hook Scissors

Catalog page

315



Spare part



6011590
Plug, for LUER-Lock
connector

Components / Spare Parts

28163 FZ Grasping Forceps

Catalog page

303



Spare part

28163 MBW
Stylet, diameter 1.6 mm,
working length 18 cm

Components / Spare Parts

28163 FPW SpinoFIT® Punch

Catalog page

304

28163 FPA Punch Insert

29100

28163 FPS Outer Sheath

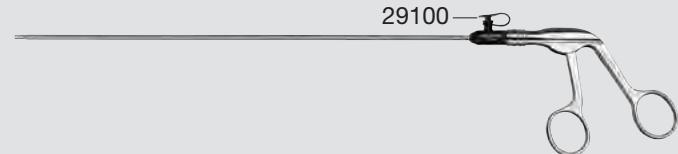
550000 Handle

28163 FPG SpinoFIT® Punch

28163 FPB Punch Insert

28163 FPS Outer Sheath

550000 Handle



Spare part



29100
Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10

Spine Model

Components / Spare Parts

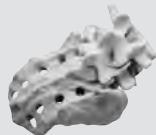
28198 LA Spine Model, complete

Catalog page

396



Spare parts



28198 LB
Vertebrae L4-L5,
with sacrum



28198 LC
Muscle Layer



28198 LD
Artificial Skin

COTTLÉ Metal Mallet, DESTANDAU ENDOSPIRE® Operating Tube



Components / Spare Parts

28163 CM COTTLÉ Metal Mallet

Catalog page

107, 249, 297



Spare part



174801
Plastic Replacement

Components / Spare Parts

28163 DW DESTANDAU ENDOSPIRE® Operating Tube

Catalog page

253, 306



Spare part



28163 DO
Obturator, blunt

Components / Spare Parts

28163 DWS DESTANDAU ENDOSPIRE® Operating Tube

Catalog page

307



Spare parts



28163 DVS
DESTANDAU
ENDOSPIRE® Tube
Attachment, oval



28163 DOS
ENDOSPIRE® Obturator,
blunt

DESTANDAU ENDOSPINE® Working Inserts

Components / Spare Parts

28163 DXH DESTANDAU ENDOSPINE® Working Insert

Catalog page

253, 306



Spare parts



**6924491
Locking Lever**

**28163 DPH
ENDOSPINE® Nerve
Protector**

Components / Spare Parts

28163 DXS DESTANDAU ENDOSPINE® Working Insert

Catalog page

307



Spare parts



**6924491
Locking Lever**

**28163 DPS
ENDOSPINE® Nerve
Protector**

Cannulas

Components / Spare Parts

40160 A **Cannula**
40160 C **Cannula**

Catalog page

264
264



6127590

Spare part



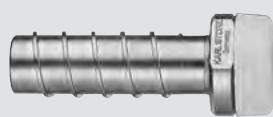
6127590
Sealing Cap, (50/4)

Components / Spare Parts

40103 A **Cannula**
40103 C **Cannula**

Catalog page

264
264



7228790

Spare part



7228790
Sealing Cap, (60/11)

Components / Spare Parts

40103 G **Plastic Cannula**
40103 H **Plastic Cannula**

Catalog page

264
264



7228790

Spare part



7228790
Sealing Cap, (60/11)

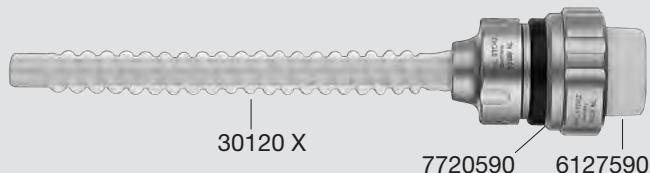
Cannulas

Components / Spare Parts

30120 NL **Cannula**

Catalog page

265



Spare parts



30120 X
Plastic Cannula,
autoclavable, package of 5



6127590
Sealing Cap, (50/4)



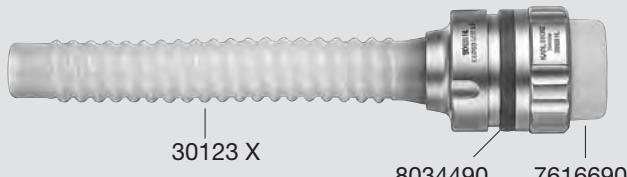
7720590
Silicone Leaflet Washer

Components / Spare Parts

Catalog page

30123 NL **Cannula**

265



Spare parts



30123 X
Plastic Cannula,
autoclavable, package of 5



8034490
Silicone Leaflet Washer



7616690
Sealing Cap, (60/10)

CLICK'line® Metal Outer Sheaths

Components / Spare Parts

33200	CLICK'line® Metal Outer Sheath , insulated	271
33300	CLICK'line® Metal Outer Sheath , insulated	271
33400	CLICK'line® Metal Outer Sheath , insulated	271
33300 CM	CLICK'line® Metal Outer Sheath , insulated	271
33400 CM	CLICK'line® Metal Outer Sheath , insulated	271
33200 W	CLICK'line® Metal Outer Sheath , insulated	271
33300 W	CLICK'line® Metal Outer Sheath , insulated	271
33400 W	CLICK'line® Metal Outer Sheath , insulated	271

Catalog page



Spare parts



29100
Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10



7909890
Halfround Plate



7944790
Silicone Ring

Components / Spare Parts

33200 M	CLICK'line® Metal Outer Sheath	271
33300 M	CLICK'line® Metal Outer Sheath	271
33400 M	CLICK'line® Metal Outer Sheath	271
33300 CMM	CLICK'line® Metal Outer Sheath	271
33400 CMM	CLICK'line® Metal Outer Sheath	271
30444 A	CLICK'line® Metal Outer Sheath	288

Catalog page



Spare parts



29100
Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10



7909890
Halfround Plate



7944790
Silicone Ring

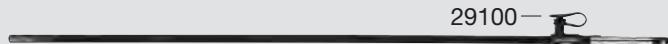
RoBi® Metal Outer Sheaths, KOH Macro Needle Holders

STORZ
KARL STORZ — ENDOSCOPE

Components / Spare Parts

Catalog page

38300	RoBi® Metal Outer Sheath, insulated	277
38400	RoBi® Metal Outer Sheath, insulated	277



Spare part

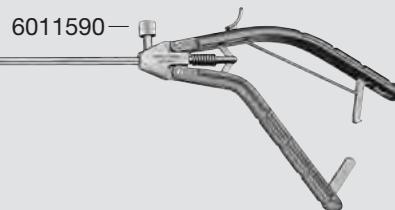


29100
Plug, for LUER-Lock
connector for cleaning,
black, autoclavable,
package of 10

Components / Spare Parts

Catalog page

26173 KL	KOH Macro Needle Holder	57
26173 KC	KOH Macro Needle Holder	57



Spare part



6011590
Plug, for LUER-Lock
connector



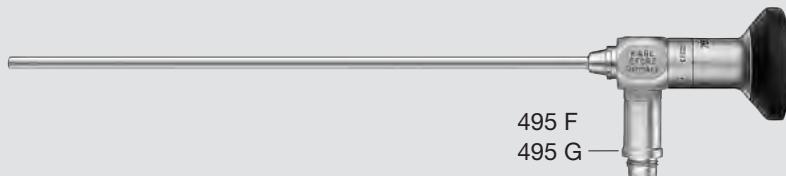
Spare Parts for Peripheral Nerve Surgery



HOPKINS® and HOPKINS® II Telescopes

Components / Spare Parts

		Catalog page
28132 AA	HOPKINS® II Straight Forward Telescope 0°	93, 107, 127, 140, 335
28132 BA	HOPKINS® II Forward-Oblique Telescope 30°	106, 127, 140, 335
28132 BWA	HOPKINS® II Wide Angle Forward-Oblique Telescope 30°	91
28007 AA	HOPKINS® II Straight Forward Telescope 0°	95
28007 BA	HOPKINS® II Forward-Oblique Telescope 30°	95
28007 FA	HOPKINS® II Telescope 45°	95
28008 AA	HOPKINS® II Straight Forward Telescope 0°	92
28008 FA	HOPKINS® II Telescope 12°	104
28162 AUA	HOPKINS® II Straight Forward Telescope 0°	120



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 / Spare Parts

		Catalog page
28216 BVA	HOPKINS® Forward-Oblique Telescope 30°	326
28731 BVA	HOPKINS® II Wide Angle Forward-Oblique Telescope 30°, enlarged view	326
50230 BA	HOPKINS® II Forward-Oblique Telescope 30°, enlarged view	330

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

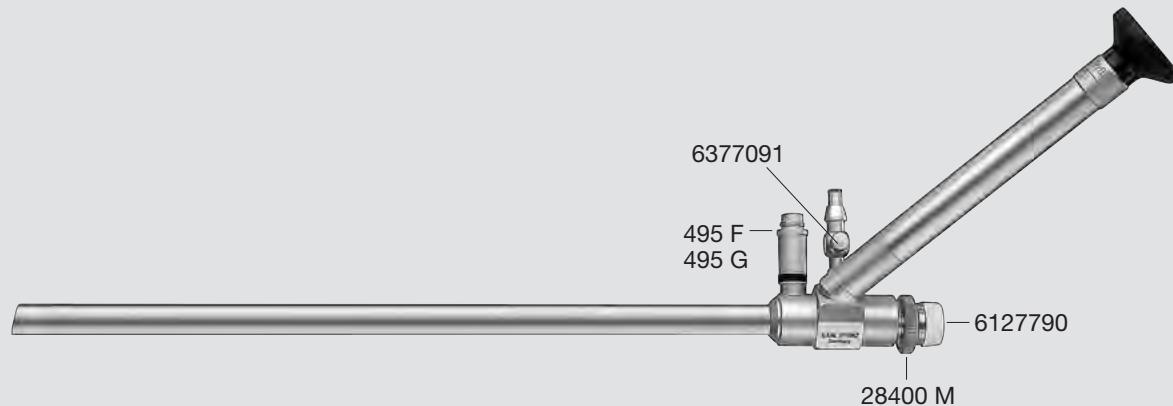
HOPKINS® and HOPKINS® II Telescopes

Components / Spare Parts

Catalog page

28400 AA HOPKINS® Straight Forward Telescope 6°

339



Spare parts



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



6127790
Sealing Cap, (50/6)



495 G
Screw Base,
for KARL STORZ fiber
optic light cable and
Olympus/Winter & Ibe



6376990
Stopcock, for
irrigation connector



28400 M
Adaptor, for working
channel with sealing cap



6377091
Spring Cap

Knife, Dilator Set, Optical Dissector

Components / Spare Parts

28147 R **Knife**



Catalog page

328

Spare parts



28147 RM
Knife Attachment,
backward cutting



7342490
Cap



5903010
Spring

Components / Spare Parts

Catalog page

28147 S **Dilator Set**

328

- 28147 SA** **Dilator**, diameter 4 mm
- 28147 SB** **Dilator**, diameter 5 mm
- 28147 SC** **Dilator**, diameter 6 mm
- 28147 SD** **Dilator**, diameter 7 mm

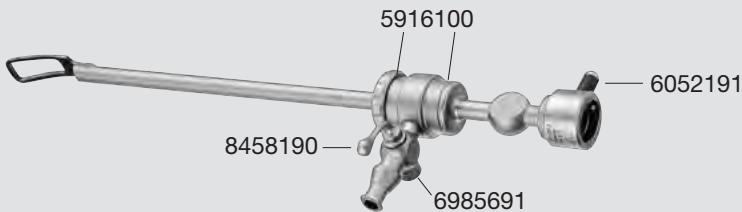


Components / Spare Parts

Catalog page

50200 ES **Optical Dissector**

330



Spare parts



5916100
O-Ring



6985691
Spring Cap



6052191
Locking Lever, red



8458190
Stopcock,
for irrigation connector

TAKE-APART® Bipolar Forceps

Components / Spare Parts

Catalog page

28164 BDM TAKE-APART® Bipolar Forceps

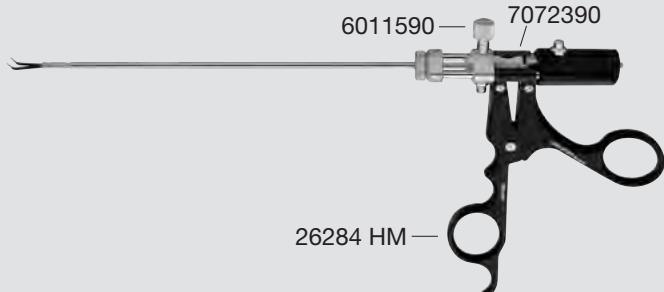
332

26284 HM **Bipolar Ring Handle**

26284 AS **Outer Sheath**

26284 BS **Inner Sheath**

28164 FGM **Forceps Insert**



Spare parts



**6011590
Plug, for LUER-Lock
connector**



**7072390
Sealing Cap,
diameter 1.8 mm**

Components / Spare Parts

Catalog page

26284 HM TAKE-APART® Bipolar Ring Handle

332



Spare parts



**7280890
Spring Washer**



**7072390
Sealing Cap,
diameter 1.8 mm**



**6011590
Plug, for LUER-Lock
connector**



**5917800
O-Ring**

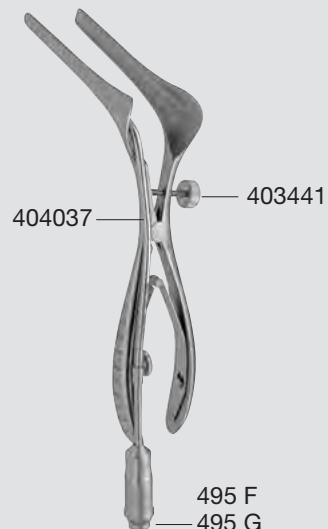
Specula

Components / Spare Parts

- 404090 S Speculum
404092 S Speculum

Catalog page

331



Spare parts



403441
Set Screw



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



404037
Fiber Optic Light Carrier



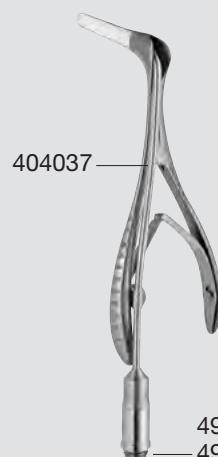
495 G
Screw Base,
for KARL STORZ fiber
optic light cable and
Olympus/Winter & Ibe

Components / Spare Parts

- 404055 H COTTE Speculum

Catalog page

331



Spare parts



404038
Fiber Optic Light Carrier



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

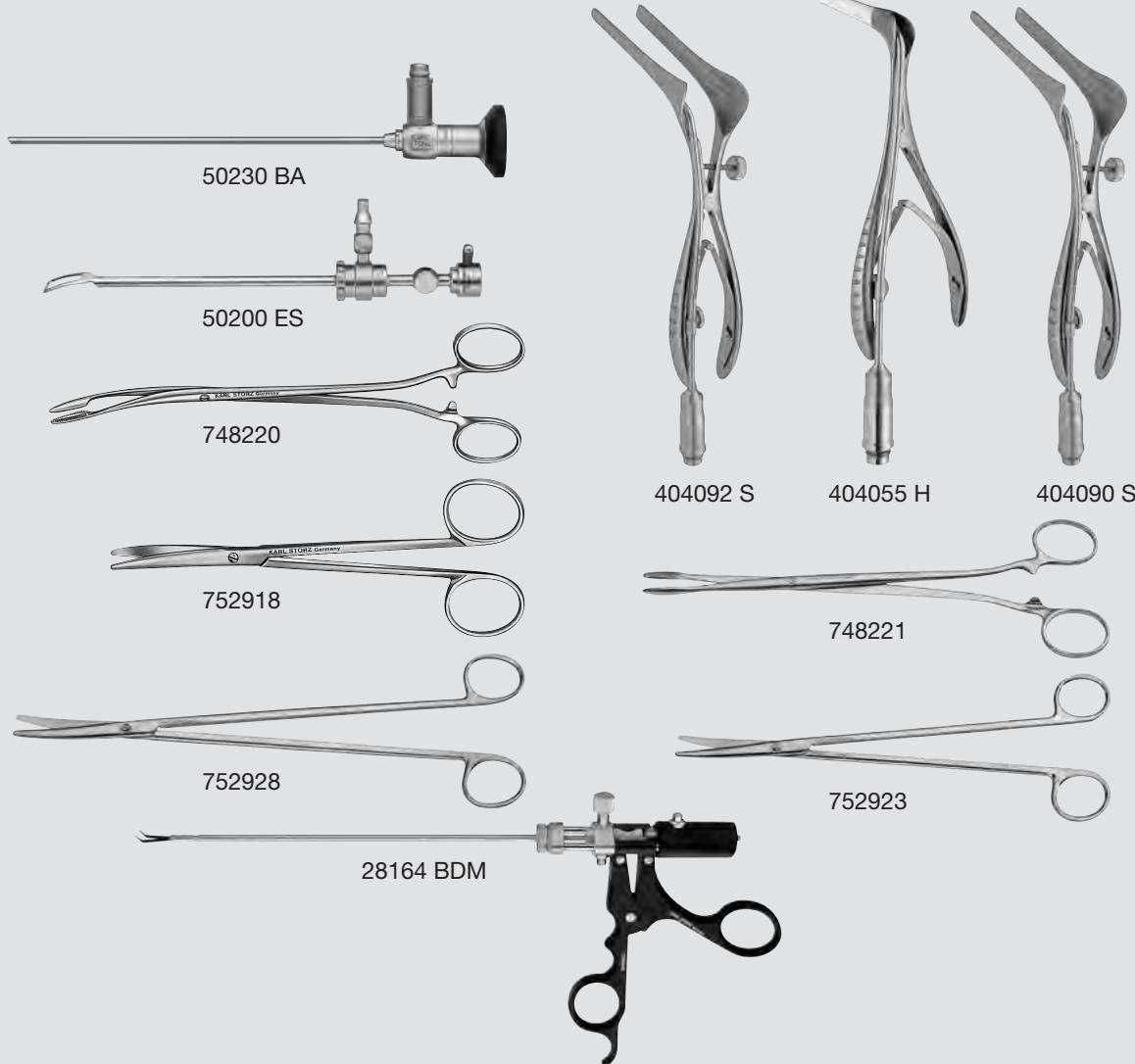
Cubital Tunnel Set

Components / Spare Parts

Catalog page

50600 HOFFMANN Cubital Tunnel Set

75, 333



- 50230 BA **HOPKINS® II Forward-Oblique Telescope 30°**, enlarged view, diameter 4 mm, length 18 cm, autoclavable
- 50200 ES **Optical Dissector**, with distal spatula, fenestrated, large, sharp
- 404090 S **Speculum**, with fiber optic light carrier, with set screw, blade length 90 mm, length 13.5 cm
- 404055 H **COTTLE Speculum**, with fiber optic light carrier, without set screw, special matt finish, blade length 55 mm, length 13 cm
- 404092 S **Speculum**, with fiber optic light carrier, with set screw, blade length 110 mm, length 13.5 cm
- 748220 **DUPLAY Dressing and Sponge Holding Forceps**, curved, with ratchet, length 21 cm
- 748221 **DUPLAY Dressing and Sponge Holding Forceps**, straight, with ratchet, length 21 cm
- 752918 **METZENBAUM Scissors**, curved, length 18 cm
- 752923 **METZENBAUM Scissors**, curved, length 23 cm
- 752928 **METZENBAUM Scissors**, curved, length 28 cm
- 28164 BDM **TAKE-APART® Bipolar Forceps**, with fine jaws, width 1 mm, distally angled 45°, horizontal closing, outer diameter 3.4 mm, working length 20 cm
Additional Forceps Insert:
- 26184 PTS **TAKE-APART® Forceps Insert**, for TAN bipolar coagulation forceps, size 3 mm, length 20 cm

Adaptor, Operating Sheath

Components / Spare Parts

28400 V Adaptor

Catalog page

339



Spare parts



6127790
Sealing Cap, (50/6)



8621790
Cover



7720590
Silicone Leaflet Washer

Components / Spare Parts

28400 EE SATTLER Operating Sheath

Catalog page

339

Spare parts



7391190
Sealing Cap, (60/14)



6926091
**Fixation Device,
for telescopes**

Spare Parts for Units



Suction and Irrigation Systems

CLEARVISION® II



Components / Spare Parts

Catalog page

40334101 **CLEARVISION® II**, lens irrigation system for endoscopes

U 6

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

Catalog page

40334140 **Silicone Tubing Set**, for irrigation

U 6



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

Suction and Irrigation Systems

DUOMAT®



Components / Spare Parts

Catalog page

20321008 DUOMAT®

U 8

20321020 DUOMAT®, power supply 100 – 120,
230 – 240 VAC, 50/60 Hz

400 A Mains Cord, length 300 cm

mtp* VACUsafe Promotion Pack Suction, 2 l



20321020

Spare parts



1067800
Mains Fuse,
T 0.2 A (SB), package of 10



2084290
Mains Fuse,
T 0.5 A (SB), package of 10

Components / Spare Parts

Catalog page

20300045 Silicone Tubing Set, for irrigation

U 11



Spare part



600008
LUER-Lock Tube
Connector, female, tube
diameter 6 mm

Components / Spare Parts

Catalog page

20300046 Silicone Tubing Set

U 11



Spare parts



20330088
Puncture Needle,
for irrigation bottle



600007
LUER-Lock Tube
Connector, male,
tube diameter 6 mm

Suction and Irrigation Systems

DUOMAT®



Components / Spare Parts

- 20300042 **Silicone Tubing Set**, for suction
20300044 **Silicone Tubing Set**, for suction

Catalog page

U 11



Spare parts



- 27500 **LUER-Lock Tube Connector**, male,
tube diameter 9 mm



- 20300180 **Tubing Connector Set**,
for Bottle Cap 20300034



- 20300181 **LUER-Lock Tube Connector**, female,
tube diameter 8 mm

Components / Spare Parts

- 26310035-335 **Irrigation Bottle**
26310035 **Bottle Cap**
26310050 **Irrigation Liquid Bottle**

Catalog page

U 10



Components / Spare Parts

- 26310035 **Bottle Cap**

Catalog page

U 10



Spare part



- 26310087 **Seal Set**, for bottle caps

Motor Systems

STAMMBERGER-SACHSE Intranasal Drill

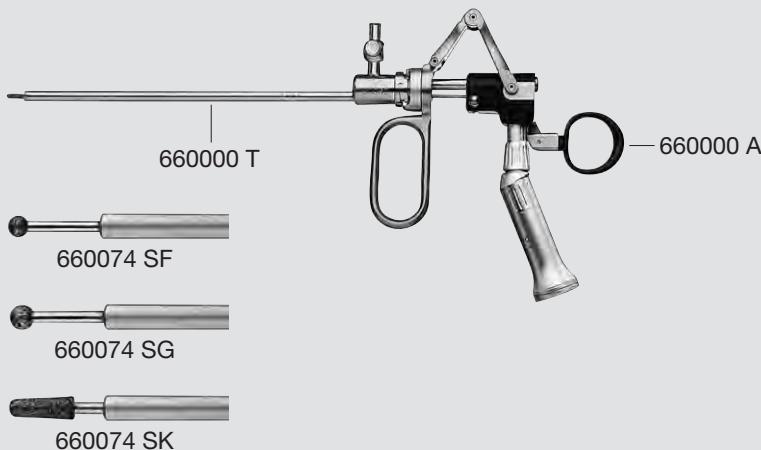
Components / Spare Parts

Catalog page

U 14

660000 STAMMBERGER-SACHSE Intranasal Drill

- 660000 A **Double Ring Sliding Handle**, for moving abradora forwards and backwards in the guiding sheath, with fixed INTRA drill handpiece
- 660000 T **Guide Sheath**, outer diameter 5 mm, with irrigation stopcock
- 660074 SF **Diamond Abrador**, delicate, spherical, diameter 2.5 mm
- 660074 SG **Diamond Abrador**, delicate, spherical, diameter 3 mm
- 660074 SK **Diamond Abrador**, delicate, conical, from diameter 2.5 mm to diameter 3 mm



Motor Systems

Micro Saws

Components / Spare Parts

254000 Oscillating Micro Saw

Catalog page

U 16



254021

Spare parts



**254020
Fork Wrench**



**254021
Swivel Nut**

Components / Spare Parts

254100 Micro Sagittal Saw

Catalog page

U 17



254021

Spare parts



**254020
Fork Wrench**



**254021
Swivel Nut**

Components / Spare Parts

254200 Osseo Scalpel, Micro Saw

Catalog page

U 17



254021

Spare parts



**254020
Fork Wrench**



**254021
Swivel Nut**

Components / Spare Parts

254300 Micro Compass Saw

Catalog page

U 18



254021

Spare parts



**254020
Fork Wrench**



**254021
Swivel Nut**

High Frequency Surgical Units

AUTOCON® II 400 SCB

Components / Spare Parts

2053520x-12x AUTOCON® II 400 SCB

Catalog page

U 30

2053522x-12x AUTOCON® II 400 SCB,
power supply 220 – 240 VAC, 50/60 Hz

400 A Mains Cord

20090170 SCB Connecting Cable, length 100 cm



2053522x-12x
2053522xU12x

2053520xU12x AUTOCON® II 400 SCB

2053522xU12x AUTOCON® II 400 SCB,
power supply 100 – 120 VAC, 50/60 Hz

400 A Mains Cord

20090170 SCB Connecting Cable, length 100 cm

Spare part for use at 230 V:



2027690

Mains Fuse,
T 4.0 AL (SB),
package of 10

Spare part for use at 110 V:



2028090

Mains Fuse,
T 8.0 AL (SB),
package of 10

High Frequency Surgical Units

AUTOCON® II 200, AUTOCON® II 80



Components / Spare Parts

Catalog page

20532201 **AUTOCON® II 200**

U 32

20532220 **AUTOCON® II 200,**

power supply 200 – 240 VAC, 50/60 Hz

400 A **Mains Cord,** length 300 cm



20532220

20532220-010

20532220C

20532220C010

20532201-010 **AUTOCON® II 200**

20532220-010 **AUTOCON® II 200,** with GASTRO-Cut,
power supply 200 – 240 VAC, 50/60 Hz

400 A **Mains Cord,** length 300 cm

20532201 C **AUTOCON® II 200**

20532220C **AUTOCON® II 200,**

power supply 100 – 120 VAC, 50/60 Hz

400 B **Mains Cord,** US version, length 200 cm

20532201C010 **AUTOCON® II 200**

20532220C010 **AUTOCON® II 200,** with GASTRO-Cut,
power supply 100 – 120 VAC, 50/60 Hz

400 B **Mains Cord,** US version, length 200 cm

Spare part for use at 230 V:



2027690
Mains Fuse,
T 4.0 AL (SB),
package of 10

Spare part for use at 110 V:



2028090
Mains Fuse,
T 8.0 AL (SB),
package of 10

Components / Spare Parts

Catalog page

20530801 **AUTOCON® II 80**

U 34

20530820 **AUTOCON® II 80,**

power supply 100 – 240 VAC, 50/60 Hz

400 A **Mains Cord,** length 300 cm



20530820

Spare part



2027690
Mains Fuse,
T 4.0 AL (SB),
package of 10

Surgery Electrodes Set

Components / Spare Parts

Catalog page

U 37

20530008 Surgery Electrodes Set

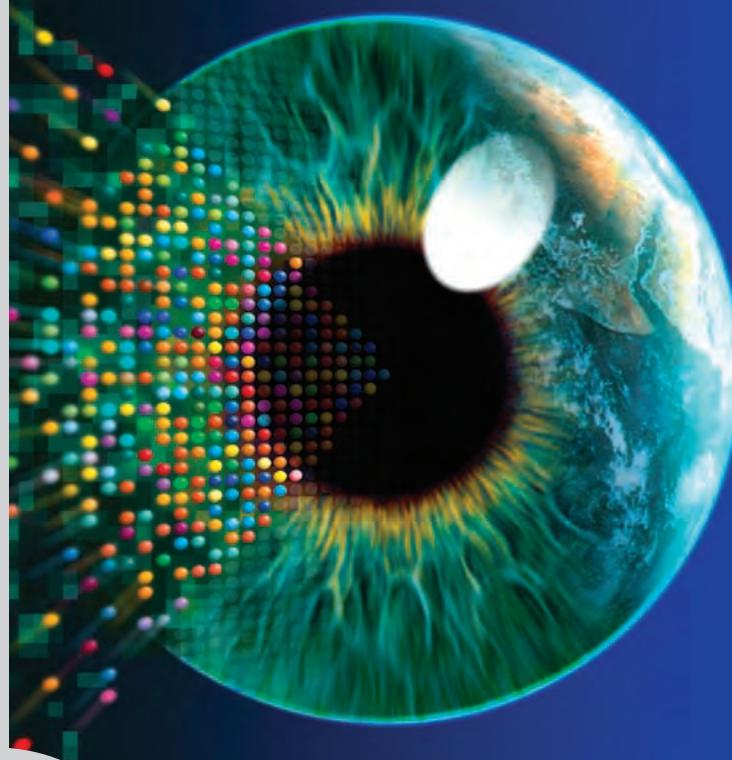
- 20530031 Container with Lid and Sterilizing Insert, for 16 electrodes with diameter 4 mm
- 26520031 Wire Snare, 5 mm
- 26520032 Wire Snare, 10 mm
- 26520033 Ribbon Snare, 10 mm
- 26520034 KIRSCHNER Spatula Electrode, straight
- 26520035 MAGENAU Knife Electrode, angled
- 26520036 MAGENAU Knife Electrode, lancet-shaped
- 26520037 Ball Electrode, 2 mm
- 26520038 Ball Electrode, 4 mm
- 26520039 Ball Electrode, 6 mm
- 26520040 Needle Electrode
- 26520041 Flat Electrode, 8 x 10 mm
- 26520042 Flat Electrode, 10 x 15 mm



KARL STORZ OR1 NEO®
ERGONOMICS, SAFETY AND EFFICIENCY IN THE OR



TELEPRESENCE
IMAGING SYSTEMS - ILLUMINATION



PROTECTION 

We've Got
You Covered



STORZ
KARL STORZ - ENDOSCOPE

PRODUCT CATALOGS

HUMAN MEDICINE
EDITION 1/2012



STORZ
KARL STORZ - ENDOSCOPE

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.

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

TELEPRESENCE

- Imaging systems
- Illumination



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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.

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.